SPECIAL HOW-TO! Upgrade your PC into a gaming powerhouse

PC GAMER

The World's Best-Selling PC Games Magazine

CD-ROM Edition

ON THE CD

Battle beasties in...

Hexen II

Plus *Dark Rift, Dungeon Keeper, War Wind II, G-Police, Virtua Fighter 2,* and more!

DUKE NUKEM FOREVER

Come Get Some!

Biggest Issue Ever! 448 Packed Pages!

EXCLUSIVE! 10-PAGE PREVIEW AND FIRST-EVER SCREENSHOTS INSIDE

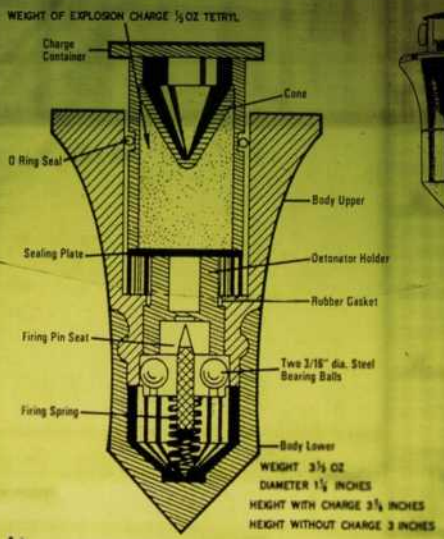
Strategy

- X-COM: APOCALYPSE
- WARLORDS III
- THE SPACE BAR AND MORE

Reviews

- STARFLEET ACADEMY
- OUTPOST 2
- RESIDENT EVIL AND MORE

www.pcgamer.com
Vol. 4 No. 11 • NOVEMBER 1997
$7.99 U.S. and $8.99 Canada
0 09281 02326 5 11>
imagine
a new way of publishing



Blood vessels and wires should never have been crossed.
Souls and circuitry, brain stems and processors.

19:11

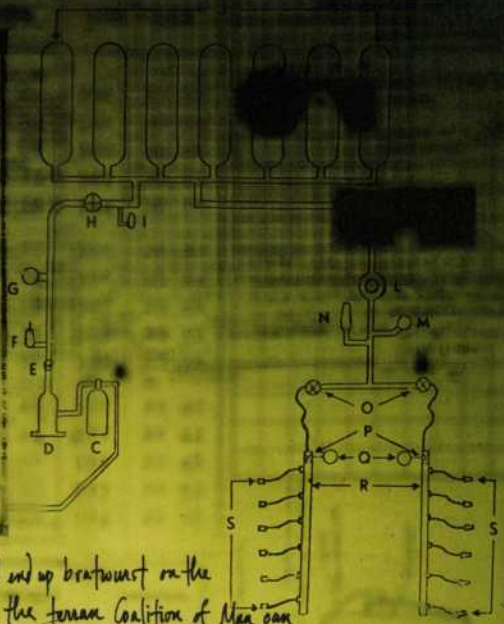
THE LINE BETWEEN MAN AND MACHINE SHOULD NEVER HAVE BEEN ERASED.

U.S. MARINE CORPS TARGET

U.S. MARINE CORPS 25-METER ZEROING PROCEDURES

(BY FOLLOWING THE STEPS BELOW AND ESTABLISHING A ZERO AT 25 METERS, YOUR M16A2 RIFLE SIGHTS WILL BE SET WITH A 300-METER BATTLESIGHT.)

1. DO NOT MOVE FRONT SIGHT POST AT THIS TIME. IT WAS SET AT THE FACTORY OR BY A PREVIOUS SHOOTER AND SHOULD BE VERY CLOSE TO YOUR ZERO.
2. CENTER THE REAR SIGHT APERTURE BY TURNING THE WINDAGE KNOB LEFT OR RIGHT. (THIS IS CALLED MECHANICAL ZERO WINDAGE.)
3. THE UNMARKED APERTURE SHOULD BE UP.
4. ROTATE ELEVATION KNOB IN THE DOWN DIRECTION (COUNTER-CLOCKWISE) THE ELEVATION KNOB SHOULD STOP THREE CLICKS PAST THE 300 METER MARK. THE REAR SIGHT SHOULD BE ALL THE WAY DOWN ON THE LAST WHOLE "CLICK" BEFORE IT BOTTOMS OUT. THIS IS CALLED MECHANICAL ZERO ELEVATION FOR THE REAR SIGHT. IF YOUR RANGE SCALE WILL NOT LINE UP IN THE ABOVE MANNER, AN ARMORER WILL BE REQUIRED TO ADJUST THE RANGE SCALE FOR YOU.



17:05 It's either us or them this time. We lose, and we all end up bratwurst on the grill of some unholy mechanized carnivore. We win, and the Terran Coalition of Man can start rebuilding the cities on Mars, Olympus, even Earth. Who knows - they might even get the old interplanetary football league going again.
God, I miss Monday Night Football.

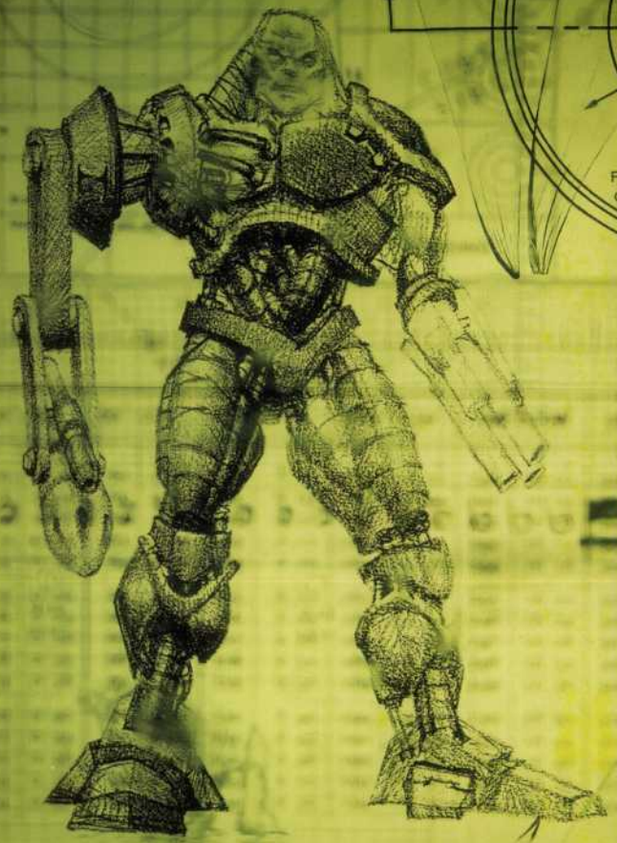
18:03 Grotesque images of Strogg have been filling my sleep at night. Their metallic spines jutting awkwardly through muscle, skin and connective tissue, masks of human facial skin smeared and bonded to their cyber-alloy heads, crude but powerful weapons jammed into oozing, gaping sockets. Thank God the endless sleep ahead is dreamless.

19:42 You learn the hard way in the outer sectors... Like never get into a drinking match with a flukk-headed Vukar. Never assume a Strogg is dead even when he's nothing but bloody scraps of shrapnel. And never go to bed with a Kabaal no matter how many breasts she has.

QUAKE II

Product Information Number 89

"Quake II, without a doubt, the game of E3."
—Computer Gaming World



5-19-47 14:35 ALIEN SCUM CAN KISS THE BUTT OF MY RAIL GUN. Orders came in from the brass this morning. Tonight, I'll be on the C-30K Marine Carrier with the rest of 101st Spaceborne. A little hypersleep, a couple thousand gallons of rationed I.V. Nourishment, a few hundred light years, and we'll be knee-deep in Strogg blood.

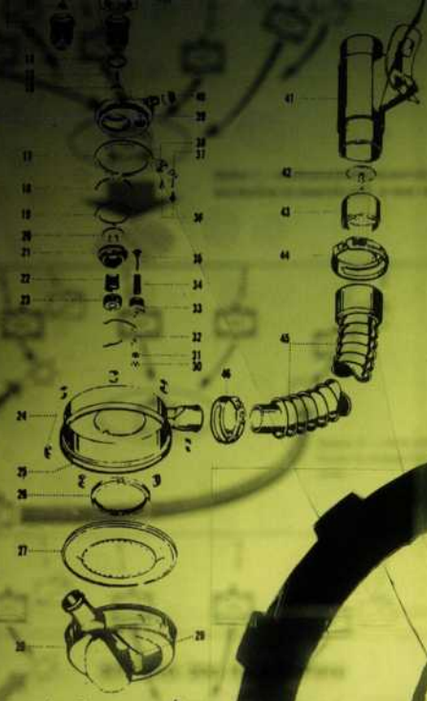
Coming Soon on Windows® 95 CD-ROM

id

ACTIVISION

QUAKE II™ © 1997 Id Software, Inc. All Rights Reserved. Distributed by Activision, Inc. under license. QUAKE® is a registered trademark of Id Software, Inc. QUAKE II™, the Id Software name, the "Q II" logo and the id logo are trademarks of Id Software, Inc. Activision® is a registered trademark of Activision, Inc. All other trademarks and trade names are properties of their respective owners.

www.idsoftware.com



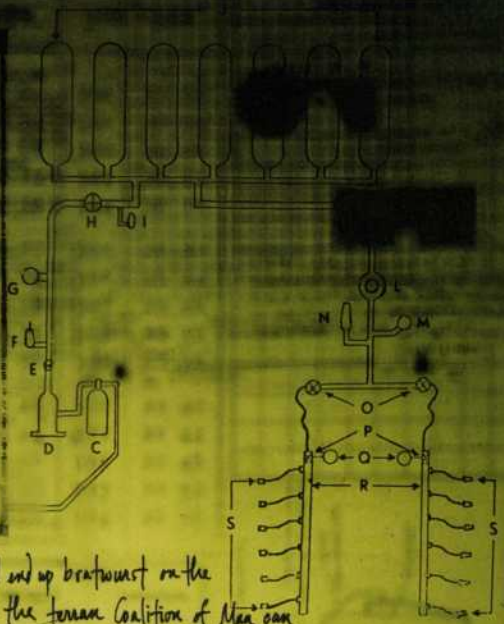
20:16 I'm now on the carrier and next in line for my goodnight kiss. When I awake from the icy hypersleep, there will be only hell. And there will be hell to pay. My rail gun and BFG will make sure of that. The Stroggs killed my parents and my only sister.

NEEDLESS TO SAY, I AM NOT A PACIFIST.

"Quake II will establish id as the pre-eminent blast-masters more than ever before."
—PC Gamer

QUAKE II™

	LINE NO.	EVALUATION
1	Large, complex missions	What you do in one level could affect another. One false move and you could alert security, flood a passageway, or worse.
2	Superior artificial intelligence	The enemy is far from stupid. They will evade attacks, maneuver into strategic attack locations, and hunt your ass down.
3	Intense environments	Man gun turrets. Blow up subways. Smash glass. Toss grenades with perfect control. Duck to evade hits. Give them Hell.



17:05 It's either us or them this time. We lose, and we all end up bratwurst on the grill of some unholy mechanized carnivore. We win, and the Terran Coalition of Man can start rebuilding the cities on Mars, Olympus, even Earth. Who knows - they might even get the old interplanetary football league going again.
God, I miss Monday Night Football.

18:03 Grotesque images of Strogg have been filling my sleep at night. Their metallic spines jutting awkwardly through muscle, skin and connective tissue, masks of human facial skin smeared and bonded to their cyber-alloy heads, crude but powerful weapons jammed into oozing, gaping sockets. Thank God the endless sleep ahead is dreamless.

19:42 You learn the hard way in the outer sectors... Like never get into a drinking match with a flukk-headed Vukar. Never assume a Strogg is dead even when he's nothing but bloody scraps of shrapnel. And never go to bed with a Kabaal no matter how many breasts she has.

QUAKE II

Product Information Number 89

PC GAMER

VOLUME 4 • NUMBER 11 • NOVEMBER 1997

Cover Story

Hail to the King, Baby!

Those no-good alien invaders are back, bent on taking a chunk out of our beloved Earth — and only one man can stop them. Yes, Duke Nukem is back for another frenzy of guns, ammo, slapstick humor, and sexual controversy, and *PC Gamer* has the exclusive first-ever look at the game, plus the rest of Apogee's 1998 line-up. 98

Features

Dominance 118

After the resounding success of *EF2000*, England's Digital Image Design is back with *F-22 Air Dominance Fighter*, a state-of-the-art sim that may just blow Interactive Magic's and NovaLogic's sims out of the water.

Mavericks

PC Gamer profiles four superstar game developers who are making waves by starting over...

Peter Molyneux 154
LionHead

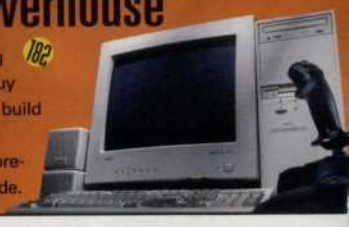
Chris Roberts 160
Digital Anvil

Sid Meier 166
Firaxis Games

John Romero 172
ION Storm

TRANSFORM YOUR PC INTO A Gaming Powerhouse

If it's the perfect PC gaming system you're after, why buy ready-made when you can build your dream machine from scratch? Just use our comprehensive, easy-to-follow guide. 182



JSF: Joint Strike Fighter 46

Eidos Interactive jumps into the air-combat simulation fray head-on with a graphically intensive sim that's a real treat for the eyes.

The Journeyman Project 3 52

The popular adventure game series gets a long-awaited third installment, complete with plenty of new gameplay twists.

Scoops

Jagged Alliance 2 56

The sequel to one of the PC's most popular strategy games packs an even bigger punch than the original.

Redline 62

A long-lost gaming classic is reborn on the PC courtesy of its original creators.

iPanzer '44 68

Interactive Magic's latest sim is a warts-and-all recreation of World War Two tank combat.

Dark Vengeance 72

Hexen II meets *Tomb Raider* in this gorgeous-looking new third-person fantasy action game.

Hardware

231 The Hard Stuff

All you need to know about Windows 98, plus Rendition's new chips, Microsoft's force feedback stick, oodles of new speakers and controllers, and (gulp!) 3D glasses.

Reviews

291 Atlantis: The Lost Tales
230 Circuit Racer
250 Crush! Deluxe
235 Dark Colony
303 Dragon Dice
297 Imperialism
289 Jimmy Houston's Bass Tournament USA 97
241 Lose Your Marbles
232 Machine Hunter
225 Outpost 2
312 Pacific General
246 Pandemonium
308 The Puzzle Collection
215 Resident Evil
255 Star Trek: Starfleet Academy
238 Time Warriors
210 XCar: Experimental Racing

Disc Pages

Installing and playing the funky game demos and other stuff on our CD couldn't be any easier!

Departments

80 Eyewitness
The first word on *Diablo II*, the latest rumblings at 3Dfx, and the death of Lord British are just some of the stories heading up another news-packed month in gaming.

361 Extended Play — T. Liam McDonald
McDonald finally gets his hands on version 1.5 of the excellent *Su-27 Flanker* and takes in a handful of new add-ons for Monolith's *Blood*.

366 The Learning Game — Heidi E. H. Aycock
Heidi starts writing her holiday wish-list — but what to buy the woman who has everything?

371 Multi-Play — Jason Bates
Jason's first foray into the beta-test world of Origin's *Ultima Online* reveals a bunch of troublesome gameplay issues still to be ironed out.

374 Alternate Lives — Michael Wolf
It's about time we started to appreciate how much work goes into the average (and even the below-average) roleplaying game.

377 The Desktop General — William R. Trotter
Trotter opens his column to his readers, who have a lot to say about some of his recent comments.

382 Sim Column — Dan Bennett
Digital Image Design's awesome sim *EF2000* has finally made it to the USA. Dan is pleased.

390 Strategy Central
Another mammoth section, including comprehensive hints for *X-COM Apocalypse, 688[I] Hunter/Killer, Warlords III, Ecstatica II,* and *The Space Bar*, plus a bumper batch of readers' requests.

437 Letters
Go on then, have your say. We're listening to you, really we are. We're just resting our eyes at the moment.

416 Subscription
Why are you reading this at a magazine rack? You know that there's a much better way to get your monthly dose of *PC Gamer*. Subscribe!

448 Next Issue
Here's a sneak preview of what you can expect from our upcoming mammoth Holiday Issue...

PC Gamer (ISSN-1080-4471) is published monthly by Imagine Publishing, Inc., 150 North Hill Dr., Brisbane, CA 94005. Periodicals Class postage paid at Brisbane, CA, and additional mailing offices. Newsstand distribution is handled by the Curtis Circulation Company. Subscriptions: One year basic rate (12 issues): US: $35.00; Canada: $43.95; Foreign: $53.95. Canadian price includes postage and GST (GST #126230688). Outside US and Canada: Add $2.00 per issue. For customer service, write: *PC Gamer* Customer Service, P.O. Box 54163, Boulder, CO 80322, or call: (800) 898-7159 in the U.S., (415) 468-2500 outside the U.S. **Postmaster:** please send change of address to: *PC Gamer*, P.O. Box 54163, Boulder, CO 80322. Corporate, advertising sales, circulation, editorial and production offices: 150 North Hill Dr., Brisbane, CA 94005. Phone: (415) 468-4684. Fax: (415) 468-4686. Editorial product information should be addressed to Editor, *PC Gamer*, 150 North Hill Dr., Brisbane, CA 94005. Overnight delivery parcels should be addressed to *PC Gamer*, 150 North Hill Dr., Brisbane, CA 94005. Unsolicited manuscripts cannot be returned or acknowledged. Imagine Publishing, Inc., also publishes *Game Players, Next Generation, Boot, MacAddict, The Net,* and *PlayStation Magazine*. Entire contents copyright 1997. Imagine Publishing, Inc. *All rights reserved.* Reproduction in whole or in part without permission is prohibited. Game Players, Game Players Guide, and Game Players Encyclopedia are tradenames of Imagine Publishing, Inc. Products named in these pages are tradenames or trademarks of their respective companies. Imagine Publishing, Inc., is not affiliated with the companies or products covered in *PC Gamer*. IPM# 0781118. **Produced in U.S.A.**

Standard Mail enclosed in the following editions: B, B1, B2, B3, B4, C, C1, C2.

Bulk Rate
U.S. Postage Paid
Waseca, MN
Permit No. 261

PC GAMER ONLINE: WWW.PCGAMER.COM

The Year of Living Dangerously

How good a year has 1997 been to us PC gamers so far? I'd say it's been a mixed bag — the advent of cheap and easy 3D acceleration technology this year has been a huge leap forward for gaming, while the explosion and acceptance of the Internet by gamers and game companies has allowed multi-player gaming to come to the forefront like never before. These trends are tremendously encouraging — but peel all of that away and look a little closer, and you may find yourself wondering where the really great *games* have been so far this year. We've had our share of goodies, but more than our fair share of disappointments, too. Where have been the real standouts? Last year gave us *Quake, Red Alert, Tomb Raider,* and *Diablo,* among others — what have we seen this year of similar caliber? However, it should be noted that of the four games I just mentioned, the last three appeared right at the end of the year, so maybe all is not lost for 1997. *Jedi Knight, Quake II, StarCraft, Sid Meier's Gettysburg,* and *Wing Commander Prophecy* are among the games scheduled to appear before this year is out, with many more holiday hopefuls in tow. The gaming scene is never better than during the holidays — just one more reason to keep an eye out for our humongous Holiday Special Issue, now just a short month away...

Gary Whitta, Editor-in-Chief

BEAUTY VS BEAST

Modern supercars battle the power of the past!

6 Exotic Tracks San Francisco, England's Lake District, Swiss-Italian Alps, German Autobahn, Kyoto City in Japan, and Washington D.C.

True Driving Physics let you really feel what it's like to be behind the wheel of a '70 Hemi Cuda or Jaguar XJ220!

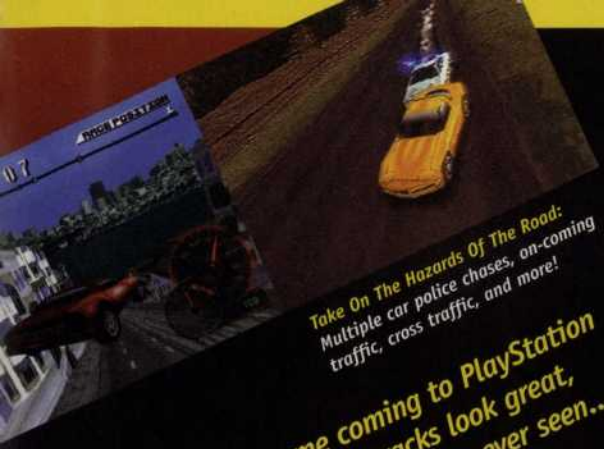
More ways to race! Challenge the world in Single Race, Ghost Car Mode, World Circuit, Masters Cup and a variety of multi-player tournaments.

"Test Drive 4's exquisite graphics make it an instant contender in the crowded racing genre... visually stunning and entertaining racing game"
-Ultra Game Players

Modern supercars:
- Jaguar XJ 220™
- Dodge® Viper GTS
- TVR® Cerbera™
- Chevrolet® Corvette®
- Nissan 300ZX®

Power of the past:
- Shelby Cobra™ 427
- '69 Chevrolet® Corvette® 427
- '70 Chevrolet® Chevelle® SS 454
- '69 Chevrolet® Camaro® ZL1
- '70 Plymouth® Hemi Cuda

Test Drive and Test Drive 4 are registered trademarks of Accolade, Inc. 1997 Accolade, Inc. All rights reserved. Developed by Pitbull Syndicate. All other trademarks are of their respective companies. 3Dfx is a trademark of 3Dfx, Inc. PowerVR is a trademark of NEC, Inc. Rendition is a trademark of Rendition, Inc. Dodge Viper, Dodge Challenger, Dodge Charger, Plymouth Cuda and the Plymouth GTX are registered trademarks of Chrysler Corporation, U.S.A. and are used under license. © Chrysler Corporation 1997. "Nissan" and the "300ZX" are registered trademarks of Nissan. Reproduced by permission. The word "Jaguar", the leaping cat device, and the characters "XJ220" are the trademarks of Jaguar Cars Ltd., England and are used under license. Chevrolet Corvette, Chevelle, Camaro and Body Designs are trademarks of Chevrolet Motor Division, General Motors Corporation, used under license to Accolade, Inc. Pontiac GTO and Body Design are a trademark of Pontiac Division, General Motors Corporation, used under license to Accolade, Inc. "Shelby Cobra" and associated logos and symbols are used under license. TVR is a trademark of TVR Engineering Limited. The TVR Cerbera and 12/8 are under license.



Take On The Hazards Of The Road:
Multiple car police chases, on-coming traffic, cross traffic, and more!

"...the best racing game coming to PlayStation this holiday season... the tracks look great, the car models are the best we've ever seen... gameplay and control are peerless"
-PSXtreme

"...one smokin' racing game"
-GamePro

"Test Drive 4 is the clear choice for BEST RACING GAME OF 1997!"
Official E3 Best Of Show Awards
-Gamepen

Hot Soundtrack
Featuring The Music Of
Orbital
&
The Younger, Younger 28s

TEST DRIVE® 4

Download the demo today at www.accolade.com

TO ORDER DIRECT CALL 1.800.245.7744
Product Information Number 86

ACCOLADE

KIDS TO ADULTS
CONTENT RATED BY ESRB

Available November '97 For Sony PlayStation and PC CD-ROM!

More levels than a Tokyo skyscraper

Tanks, bulldozers, boats, forklifts: Drive to kill

Hand to face combat mode: Kick butt karate-style

WHO WANTS SOME WANG?

Shadow Warrior is here. Lo Wang.

#1 Assassin. #1 Yakuza abuser.

#1 Freak fragger. #1 Mutant mutilator.

#1 reason to be scared of the dark.

#1 Son-of-a-Bitch. So say Sayonara to all the Ninja wannabes that have gone before and put on your combat sandals...

Lo Wang is coming to the Land of the Rising Sun to turn out the lights. Shadow Warrior.

The Zen is going to hit the fan.

"There's no doubt that Shadow Warrior cremates the competition."
GameSlice Weekly

Fog, multi-colored lighting, transparent water...total immersion.

More hi-jinks, Lo-Wang speak, and total interaction than Duke Nukem 3D

8-Player Wanghang (deathmatch), Co-Op and Team Play modes with all-new Handicapping option.

Throwing stars, Uzis, 4-Barrel shotguns and more

Swim, climb, drive, go anywhere, do anything!

Rotating 3D gun turrets to mow down enemies

FRESH FROM THE CREATORS OF DUKE NUKEM 3D™

Lo Wang™ is

Shadow Warrior™

All-new Build Editor for designing and destroying your own environments

GET YOURSELF A SLICE OF THE ACTION IN STORES...NOW!

or download the shareware at www.shadowwarrior.com

RATING PENDING RP ESRB

PLAY IT ONLINE ten — www.ten.net

developed by 3D REALMS — www.3drealms.com

GT Interactive Software — www.gtinteractive.com

Shadow Warrior™ © 1997 3D Realms Entertainment, Inc. Lo Wang and his likeness are trademarks of 3D Realms Entertainment, Inc. All rights reserved. Published and distributed by GT Interactive Software Corp. TEN™ and the TEN™ logo are trademarks of the TEN Network, Inc. All other trademarks are the property of their respective companies.

Product Information Number 154

Changing of the Guard

This month's edition of *The CD* is a special one. It's the last one produced by Disc Editor Joseph Novicki, who left us this month to return to North Carolina. Joe was with *PC Gamer* from its very first issue; he was part of the motley crew that moved across country from Greensboro, NC, to the San Francisco Bay area back in 1995, and he's been with us through some trying times. It's like losing a war buddy. We'll miss him — especially the endearing way he would blow an artery when someone bumped his desk while he was using the CD-ROM burner. Worse still, with Joe gone, we're down to just one staff member who really knows how to cook catfish. Don't be a stranger, Joe!

From this screen, you can go straight to the demos, the main menu, or click the Start Here button to view the intro.

Entering Paradise

Your exploration begins with a panoramic view of Coconut Monkey's Island. You can move the mouse around the screen to scroll left or right. When your mouse scrolls over an area that contains information, it will turn into an arrow. Just click on the highlighted site to enter.

There are also control buttons on the bottom of the screen that will take you directly to any one of the many usable sites. The control buttons can be clicked on to enter and exit each site.

Quick Start for The CD

1. Insert the CD.
2. From the Windows RUN option (found under the File Menu in Windows 3.1 or Start Menu under Windows 95) type X:START31.EXE or X:START95.EXE, depending on your version of Windows (where X is the letter of your CD-ROM drive).
3. This will run *The CD*.

FINDING YOUR WAY AROUND

REVIEWS INDEX

The Reviews Index contains info on every review we've ever run, including the Highs, Lows, and Bottom Line. The arrows will scroll through the index, and there's a search button to help you find any review by title.

PATCHES

The Patches & Updates section shows a description and location for each of the patches on *The CD*, as well as all of the add-on levels we've included for *Quake*, *WarCraft II*, *Duke Nukem 3D*, and *Doom II*.

TECH SUPPORT

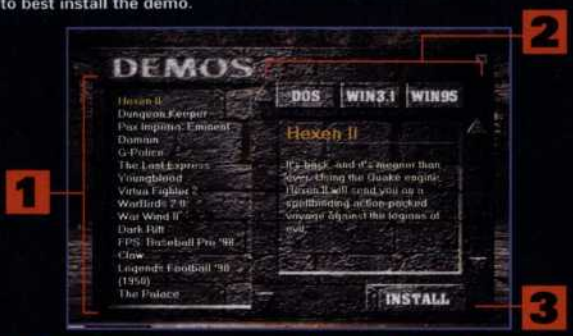
Our Technical Support database includes contact information for many game companies. The arrows will let you scroll through the selections, plus there's a search button so you can find any company by name.

INTERNET

At the Internet Hut, you can install any of the online services on *The CD*. You can also select your web browser to connect to the Internet — very handy for getting online info if you have problems with a demo.

PLAYING THE DEMOS

This is where you go to install the many demos on *The CD*. When you first enter this screen, a list of all the demos will appear in the left column. 1 Click on the DOS, WIN 3.1, and WIN 95 buttons. 2 This will break the demos down into their respective categories. The INSTALL button 3 will allow you to install a demo and, if applicable, connect to that company's web site (you'll have to first select your browser from the Internet Hut). Occasionally, some of these demos won't install from our front end. In these cases, a message will appear instructing you on how to best install the demo.



System Requirements

486/33; 4MB RAM; Mouse

NOTE: These requirements are for loading our front-end program only. Each game demo will have its own additional requirements, so be sure to read them carefully.

Attention Win95 Users

The *PC Gamer* front end should work fine in Windows. To install and run DOS games, you will need to reboot into a DOS session.

Free Demos!

Newsstand buyers have the choice of purchasing either the CD-ROM Edition of *PC Gamer* for $7.99, or *PC Gamer* without a CD-ROM for $3.99. If you purchase the edition without a disc, you can still get free game demos because all *PC Gamer* readers have the opportunity to get demos and other goodies in a couple of different ways:

1. You can download demos and check out *PC Gamer's* World Wide Web site at *www.pcgamer.com* on the Internet. Our Web site also features a special Strategy Plus section, links to other hot Web pages, and daily gaming news.

2. You can call our Customer Service department at (415) 468-2500 (between the hours of 9 a.m. and 5 p.m. PST) to have *The CD* mailed to you for only $7.95 shipping and handling.

Disc Editors' Note

Many of the Windows 95 demos require Microsoft's DirectX to run properly. To save room, we've put a single copy of the latest version of DirectX into its own directory on *The CD*. To install it, simply run the program DXSETUP.EXE in the \REDIST\DIRECTX directory, or install it through our front end. If you have any problems with DirectX, you can contact Microsoft's technical support at (206) 637-9308.

CONTENTS / MANUAL INSTALLATION COMMANDS

Installation Shortcuts

In the event our front end doesn't load or run properly on your machine, you can still install each demo, bypassing our front end altogether.

To manually install a demo, take a look at the Command Box located to the right. This box contains a list of demos along with their directories and installation commands.

To get up and running using the Command Box, first switch to your CD-ROM drive and change to the appropriate directory by typing CD\DIRECTORY, where DIRECTORY is the one listed in the Command Table next to the game you're trying to install. Once in the right directory, type the Install Command, then press Enter.

For example, to install the *Comanche 3* demo, at the DOS Prompt, type "X:" where X is the name of your CD drive. Then type "CD\C3DEMO". Then type INSTALL.EXE and press Enter. The demo of *Comanche 3* will then be installed on your computer. If you're running Windows 95 or Windows 3.1, you can instead use the File Manager or Explorer to find the appropriate directory on *The CD*, and then double-click on the installation command for a Windows-based demo.

For help with our DOS demos, we've added a menu system that will install them for you. Simply switch to your CD-ROM drive and type "MENU". It's a simple as that.

Demo	Directory	Install Command	Page	OS
Hexen II	\H2DEMO\INSTALL	SETUP.EXE	10	WIN95
Dungeon Keeper	\DKMAGDEM\KEEPER\WINSETUP	SETUP.EXE	13	WIN95
Pax Imperia II	PAXIMPER	SETUP.EXE	14	WIN95
G-Police	\GPDEMO	SETUP.EXE	18	WIN95
The Last Express	\TLEDEMO	INSTALL.EXE	19	WIN95/DOS
Youngblood	\YOUNGBLD	YOUNG95.EXE	21	WIN95
Virtua Fighter 2	\VF2DEMO	VF2_DEMO.EXE	22	WIN95
WarBirds 2.0	\WB2DEMO	WB2DEMO.EXE	22	WIN95
War Wind II	\WARWIND2	SETUP.EXE	26	WIN95
Dark Rift	\DR_DEMO	DR_DEMO.EXE	27	WIN95
FPS: Baseball Pro '98	\FPSBASEB	BB98DML.EXE	29	WIN95
Claw	\CLAW	CLAWDINS.EXE	32	WIN95
Legends Football '98	LEGEND98\DEMO	DEM050.EXE (for 1950) DEM097.EXE (for 1997)	33	WIN95
Comanche 3	\C3DEMO	INSTALL.EXE	35	DOS
The Palace	\PALACE	SETUP.EXE	36	WIN95
Retail Store	Various	Various	36	WIN95
MindSpring	\MSPRING	SETUP.EXE	38	WIN95
EarthLink	\EARTHL\14DAY\TA \EARTHL\3DAY\TA\	SETUP.EXE SETUP.EXE	38 38	WIN31/95 WIN31/95
HEAT Software	\HEAT	KATALYST1_2.EXE	38	WIN31/95
Patches	\PATCHES		362	
DirectX 5.0	\REDIST\DIRECTX	DXSETUP.EXE		WIN95
Doom 2 WADs	\DOOM2			
Quake BSPs	\QUAKE			
Duke Nukem 3D MAPs	\DUKE3D			
C&C: Red Alert MPRs	\REDALERT			
Warcraft 2 PUDs	\WAR2			

Hexen II

Win95

Company: Activision
Tech Support: (310) 479-5644
Category: Action
Required: Windows 95; Pentium 90; 16MB RAM; 27MB hard-drive space; SVGA
Install: \HEXEN2\INSTALL.EXE

The long wait is over. *Hexen II*, built on id Software's *Quake* engine, pits you against the last of the evil forces you encountered in *Heretic* and *Hexen*. This time, though, there's more involved than just killing creatures and finding keys.

The demo lets you play with two of four different classes available in the full version — the Paladin, a warrior with tremendous strength and power; and the Assassin, a deadly woman with killer speed and agility. The other two classes — the Necromancer and Crusader — are available in the full version.

One of the tricks you can use against your enemies is to lure them into the water, where they'll drown.

You can use this catapult for more than just launching sheep, if you know how to make it work.

You can explore two levels in this demo, fighting your way through spiders and archers and puzzling your way through devious traps. The entire game world is interactive, so you can destroy tombstones, chop down trees, and even knock down some walls. Expect to meet some stiff opposition; the creatures you'll face are tough to beat, especially when they're shooting at you with lightning-fast arrows. Some of the puzzles are rather tricky, too — bars that block your path may be simpler to get through than you might think, and catapults are good for more than just launching sheep.

Since it uses the *Quake* engine, *Hexen II* is completely configurable. Most of the console commands that work in *Quake* will work for *Hexen II* as well. For more detail on the console, check out the *Hexen II* documentation — it's in HTML form so you can read it with your favorite web browser. Just double-click on HEXEN2.HTM file in the \H2DEMO\HELP directory on *The CD*.

Check the control box here for quick instructions on how to play the game. It's pretty standard fare; if you know how to play *Quake*, you know how to play *Hexen II*. Multi-player games are supported for as many as eight players, and you can play cooperatively in teams, or go head-to-head in a deathmatch. The full version will contain all four characters, as well as more than 30 levels to battle your way through.

CONTROL KEYS

Forward	↑
Back	↓
Turn Left	←
Turn Right	→
Attack	Ctrl
Jump	/
Run	Shift
Sidestep	Alt
Crouch	Spacebar
Look Up	A
Look Down	Z
Center View	End
Inventory Move Left	[
Inventory Move Right	]
Use Inventory Item	Enter

The updated engine in *Hexen II* means that water is now transparent if you've got a 3Dfx accelerator.

The environment in *Hexen II* is full of movement. Don't ask us how this windmill gets power when it's in an enclosed courtyard...must be a magic windmill.

Why merely possess a game when you can OWN IT?

Simply put, games are meant to be dominated, not merely played. And though practice may eventually get you to perfection, the Microsoft® SideWinder® Precision Pro will get you there a lot quicker.

And with the new ergonomically designed stick, buttons are at your fingertips and right under your thumb. You know, the same place you wish your games were.

With Microsoft SideWinder Precision Pro you get:

- patented digital-optical technology
- unbeatable accuracy and reliability with no actual wear and tear
- shift button to double functions
- map specific keystrokes, maneuvers, and strings
- 30 pre-loaded game profiles
- on-handle rotation control

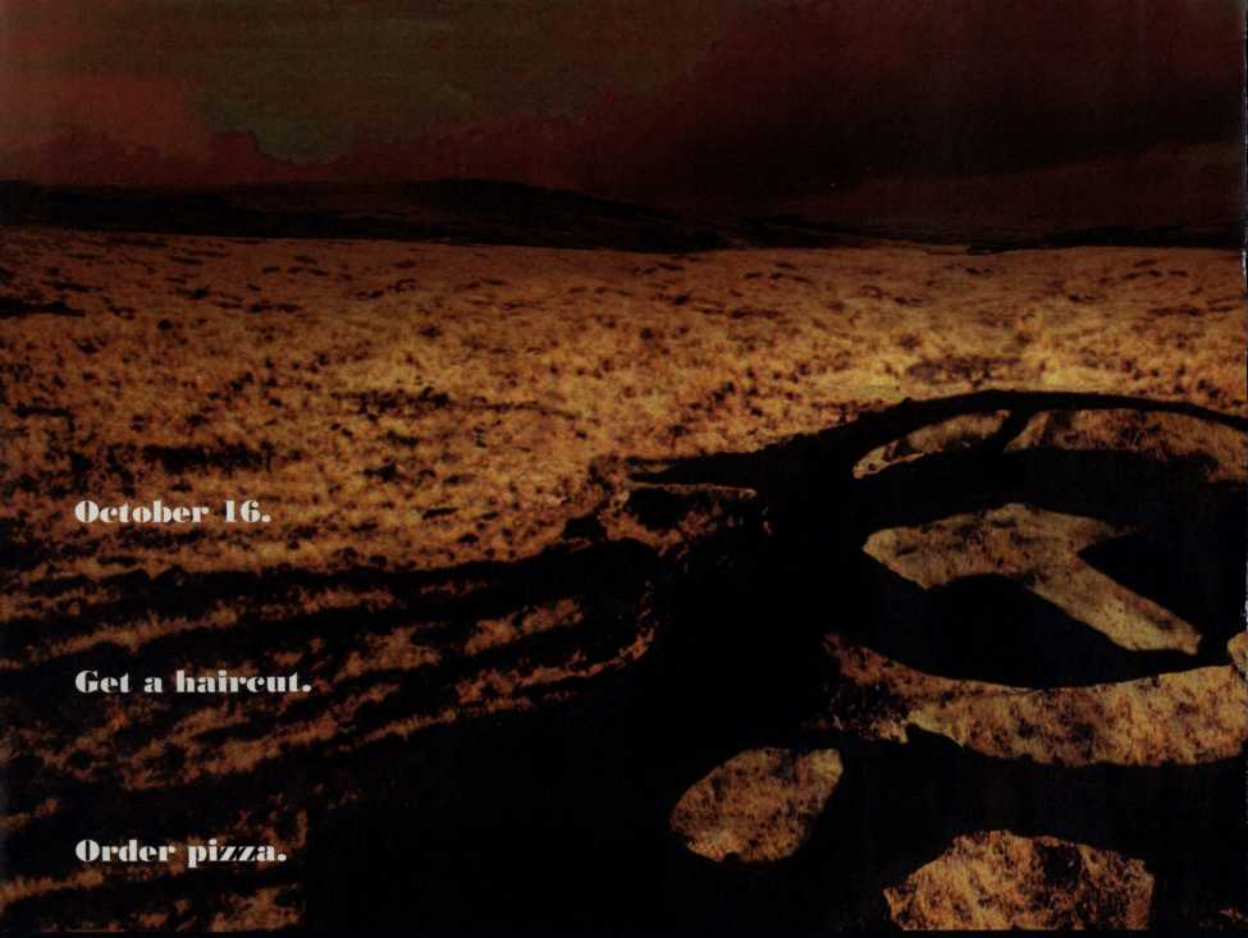
Microsoft

Where do you want to go today?®

www.microsoft.com/sidewinder

MICROSOFT SIDEWINDER Precision Pro

© 1997 All rights reserved. Microsoft, SideWinder and Where do you want to go today? are registered trademarks of Microsoft Corporation.



Form alliance with Russian Mafia.

Red Storm Entertainment

YOUR REIGN OF RUSSIA
BEGINS AT
WWW.REDSTORM.COM

Tom Clancy's
POLITIKA
The Web is Red. October 16.

Product Information Number 293

©1997 Red Storm Entertainment Inc. All rights reserved.

Dungeon Keeper

Win95

Company: Electronic Arts
Tech Support: (415) 572-2787
Category: Strategy
Required: Win95; Pentium; 16MB RAM; 46MB hard-drive space; SVGA; Mouse
Install: \DKMAGDEM\KEEPER\WINSETUP\SETUP.EXE

Part of the fun of *Dungeon Keeper* is the fact that you can "possess" any of your creatures and control it from a first-person perspective.

You know you've yearned for it — that secret longing you've had ever since you played your first dungeon-crawl roleplaying game. You knew you could make a better dungeon. You knew you could make your evil servants work harder and better. Well, now's your chance to prove that you could be more evil than any dark overlord could hope to be. Because in *Dungeon Keeper,* you're the one in charge of making sure those grotesque goodie-goodies don't mess up your evil plans.

Electronic Arts' real-time strategy will have you creating a lair of pure evil, with imps acting on your commands and demons patrolling your corridors. You need to care for your creatures, discipline them when necessary, and make sure they've got plenty of room to sleep, enough food to eat, and that they get all the pay they deserve on payday. You'll expand your dungeon by having your imps dig through the earth, and you'll discover new territories that you can claim for your own evil purposes.

The game takes some practice to play. Things tend to happen quickly, but once you get the hang of it, you'll easily keep up. Use your mouse to navigate and interact with your creatures — a left-click on a monster will pick it up, and a right-click will drop it in any desired location. Click on the Creature Panel (see diagram) to see a list of your creatures, and you can left-click on the numbers to pick the creatures up as well. Click on the Room Panel to go into building mode, where you can designate cleared areas for different purposes, like a treasure room or training facility to make your creatures stronger.

You'll have to build a bridge across this lake of lava to continue wiping out the enemy.

You can pick up your creatures and move them around to perform tasks like beating down this door.

In most cases, a left-click will perform an action, and a right-click will clear the action. Moving the mouse to the sides of the screen will scroll in that direction. To re-orient your view, press the Delete key to rotate counter-clockwise, and Page Down to rotate clockwise. Press End to zoom in on the map and Home to zoom out. You can also enter the dungeon through the eyes of one of your minions. Just click on the Research Panel and cast the Possess spell, then click on the monster you wish to possess. The arrow keys will move you forward and back and step side-to-side, while your point of view is controlled by your mouse. Attack by pressing the left mouse button. To jump out of your minion, click the right mouse button.

Consult the diagram below for more information. The demo contains a single level, and your task is to annihilate any presence of good in the area. Build up your forces well before challenging the final opponents — they can be tough. When the demo starts, it will walk you through some of the basics of the game. Follow directions, and you'll soon be the most fearsomely evil ruler the Underworld has ever encountered.

SPECIAL NOTE: Although the demo of *Dungeon Keeper* only works with Windows 95, the full version will function with DOS as well.

Dungeon Design

1. Radar
2. Full Screen Map
3. Options
4. Zoom In
5. Zoom Out
6. Money
7. Information Panel
8. Room Panel
9. Research Panel
10. Workshop Panel
11. Creature Panel
12. Main Play Window
13. Information
14. Objective

Pax Imperia: Eminent Domain

Win95

Company: THQ
Tech Support: www.paximperia.com
Category: Strategy
Required: Windows 95; 486DX/100; 16MB RAM; 58MB hard-drive space; SVGA; Mouse
Install: \PAXIMPER\SETUP.EXE

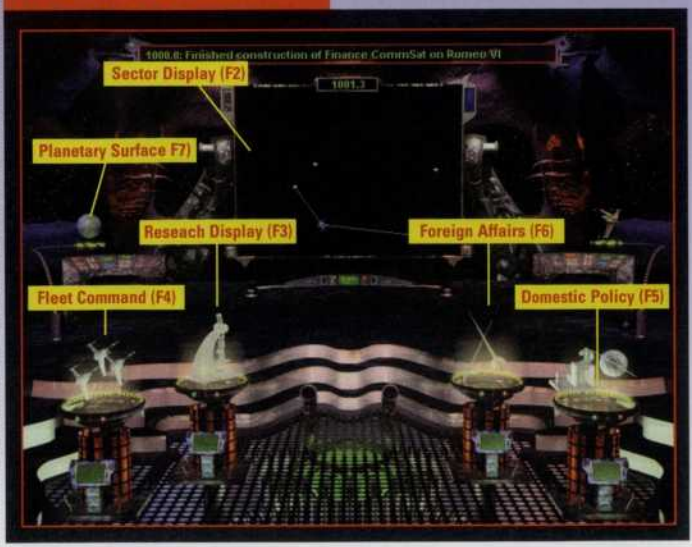
The Planet View lets you get up close and personal with your colonies, where you can modify their economics to your hearts' content.

The Sector Display will give you access to other star systems and let you move your fleets to where you need them.

Pax Imperia was an award-winner on the Macintosh. Now it comes to the PC as *Pax Imperia: Eminent Domain*. It's a space strategy game that puts you in the role of a galactic conqueror.

The demo lets you play one of the game's eight available species, the Kar'Tsoran. As a race, they're very economically oriented and have great skill in maximizing resources. After selecting your species (the full version will let you create your own custom species), you can see what game options are available. The demo gives you five stars to explore, but the full version will contain as many as 80. Similarly, the demo pits you against one opponent, while the full version will contain 15.

The Control Room



Once you start the game, you'll be in the Control Room, where you can access all the aspects of galactic control. The Sector Display will let you move ships and look at colonies. The Research section lets you adjust the direction of your research in five different areas — Weapons, Shielding, Ship, Colonial, and Space. Fleet Command is where you can move ships from fleet to fleet and play with your new technology as you discover it. The Domestic Policy screen lets you adjust your economic situation as you examine all the planets you've discovered. Foreign Affairs is just that — it lets you set up negotiations with other species, a hugely important aspect of the strategy in the game. The Planetary Surface screen is where you can take a close look at individual planets and adjust your strategy accordingly. And, finally, the Ship Design screen lets you tinker with your ships, adding new technology as it becomes available.

Each of these screens has many parts, so we highly recommend you read the README.TXT file located in the \PAXIMPER directory on *The CD*. It will give you an overview of what's in the demo, as well as clues regarding how to most effectively play the game. To quit the demo, press F9 to get to the Options screen, and choose Quit.

The demo may limit your technological research and only provide five star systems to explore, but you'll get a taste for the grand adventure that awaits anyone willing to conquer the galaxy.

ATI Takes Xcitement to Xtremes

If you can see it, you can be it - when you're an ATI XPERT@Play.

- No-compromise 3D, 2D and video acceleration, with TV out
- More critical 3D features including bilinear filtering, alpha blending and special effects than any other card
- Non-stop 3D acceleration with over 1.2 million triangles per second and 60fps gameplay
- DVD-quality, full-screen, full-motion video
- Take gameplay to new heights by connecting to a large screen TV or record scores to a VCR
- Includes hot 3D games like Formula 1 and Terracide
- Prices start at just $249
- Check out www.atitech.com or call (905)882-2600

MORE FEATURES

FEATURE	XPERT@Play	Matrox Mystique	Diamond Monster 3D
Triangle Setup Engine	•		
Bilinear/Trilinear Filtering	•		•
Texture Decompression	•		
Alpha Blending/Fog	•		•
Standard Max. Memory	8MB	4MB	4MB
DVD-Quality Video	•		
2D Acceleration (Win 95)	220M	105M	n/a

Copyright 1997, ATI Technologies Inc. ATI, XPERT@Play, and 3D RAGE PRO and ATI-TV are trademarks and/or registered trademarks of ATI Technologies Inc. All other company and/or product names are trademarks and/or registered trademarks of their respective manufacturers. Features, performance, and specifications may vary by operating environment and are subject to change without notice. Products may not be as exactly shown. 1 Winbench 97 and 3D Winbench 97, on a Pentium II 266MHz, 512K cache, 32MB SDRAM memory at 1024x768x16bpp@75Hz and 640x480x16bpp@75Hz respectively. Hardware and driver versions used: ATI XPERT@Play 4MB, driver v4.30; Matrox Mystique 4MB SGRAM v1.2, driver v3.14; Creative 3D Blaster 4MB SGRAM v1.21, driver v4.02.0201; Creative Graphics Blaster 3D 4MB RAM BUS, driver v4.03.00.2101. 2 Screen shot examples from FORMULA 1. FORMULA 1 is the creation of PSYGNOSIS. Licensed by FOCA to Fuji Television. Used with permission. Terracide is a registered trademark of Eidos Interactive. WRL is a registered trademark of PLATINUM Technology Inc. *Suggested retail price for 4MB upgradeable version.

Now You See It.

Product Information Number 90

FULLY-CONFIGURABLE,
EASY-TO-USE INTERFACE

SEQUEL TO THE HIGHLY-ACCLAIMED
LANDS OF LORE:
THE THRONE OF CHAOS

EPIC STORY UNFOLDS ON FOUR CDS
PACKED WITH 80 HOURS OF GAMEPLAY

COMING SOON TO RETAILERS EVERYWHERE
OR CALL 1-800-874-4607

Lands of Lore is a registered trademark of, and Lands of Lore: Guardians of Destiny and Westwood Studios are a trademarks of, Westwood Studios, Inc. © 1997 Westwood Studios, Inc. All rights reserved.

WESTWOOD STUDIOS INTRODUCES THE MOST FANTASTIC EXPERIENCE IN THE HISTORY OF ROLE PLAYING GAMES.

LANDS OF LORE
GUARDIANS OF DESTINY

HIGHLY REACTIVE ENVIRONMENT, FULL 360° MOVEMENT & DYNAMIC LIGHTING

AN AWESOME ARRAY OF SPELLS AND INVENTORY ITEMS FEATURED IN 15 CHALLENGING AND ENCHANTING REALMS

FULL SCREEN 256 COLOR HIGH RESOLUTION GAME PLAY

INCREDIBLE MONSTER AI - THEY FIGHT, HIDE AND SUMMON REINFORCEMENTS

Westwood™
STUDIOS
www.westwood.com

RP

Product Information Number 362

Call 1-800-771-3772 for Game Rating Information

G-Police

Win95

Company: Psygnosis
Tech Support: (415) 655-5683
Category: Action
Required: Windows 95; Pentium 166; 16MB RAM; 20MB hard-drive space; SVGA; Mouse
Install: \GPDEMO\SETUP.EXE

In the far future, large corporations control most of civilized space. Unfortunately, these corporations are cruel and deadly. To keep them from ruling the galaxy, the governments of several worlds joined forces to create the Government Police force, or G-Police. As a member of this highly-trained force, your job is to make sure the corporations don't get out of line. It won't be easy.

The demo introduces you to the game, with one training mission and one modified full mission. Take a look at the control keys for a quick description of how to play the game, but keep in mind that you can configure the game to use a joystick or gamepad from the Options menu. You can change your views by hitting the spacebar; they'll rotate through a normal cockpit view, virtual cockpit, top-down (for bombing strikes), fly-by, and third-person. Pay close attention to the radar at the top of the screen — the Krakov enemies are red dots, Nanosoft units are green, your fellow G-Police pilots are blue, and civilians are white.

The training mission will test your skills by having you fly through a series of gates. You must pass through them in order, since each gate is blocked by a force-field that won't drop until you've passed through the previous gate. You goal is to simply fly through them, but the bonus goal is to make it in less than one minute and 30 seconds.

It'll take practice and quick maneuvering to keep a bead on the enemy ships.

CONTROL KEYS

Pitch Down	↑
Pull Up	↓
Turn Right	→
Turn Left	←
Fire	LEFT CTRL
Air Brake	LEFT ALT
Weapon Select Up	A
Weapon Select Down	Z
Hover Up	S
Hover Down	X
Target Lock	C
Cycle View	Spacebar

The combat mission is tougher. You need to locate and destroy some Krakov airborne units and some ground units. You'll have some devastating weapons at your fingertips, and you'll need to learn to use them well. Make sure you know how to lock on to your target, and practice the training mission to get proficient with controlling your ship.

The full version of the game will have many more missions. Your involvement with the G-Police force isn't entirely selfless, since you're also investigating the murder of your little sister.

The third-person view comes in handy when you want to see more of your surroundings.

CHALLENGE

The objective of the training mission is simple — fly through the course in a pre-determined path. However, getting through quickly and just getting through are two different things. We managed to make it through the whole course in one minute and five seconds. If you can top that, you're ready for anything *G-Police* can throw at you.

The enemies aren't the only vehicles susceptible to your weapons — if civilians get in the way, they'll also go up in flame.

The Last Express

Company: Red Orb Entertainment
Tech Support: (415) 382-4700
Category: Adventure
Required: Pentium; 8MB RAM; 57MB hard-drive space; SVGA; Mouse
Install: \TLEDEMO\INSTALL.EXE

In 1914, the Orient Express, the ultimate in luxury and decadence, made its way from Paris to Constantinople. A train filled with mystery and intrigue, it's home to an adventure involving death and betrayal. You play the role of Robert Cath, a man summoned to the train at the request of your friend Tyler Whitney. You come to discover that Tyler has been killed, and, taking your friend's identity, you attempt to uncover his murderer and discover his reasons for calling for your aid.

The demo shows off some of the style of this unique adventure game. It plays out in real-time, so characters come and go about their own business while you're trying to solve the mystery. Your task in the demo is to prevent a murder that will occur about 15 minutes into the action.

When you start the demo, you'll see the main menu screen with a large antique egg. Click on the clock face in the middle to enter the demo. If you choose to leave or pause the game, you can click on the egg at the bottom right-hand corner of the play screen to return to the main menu. The game automatically saves your game as you go, so if you exit, you'll be able to start again where you left off.

The combat segment of the demo isn't too complicated, but it'll require some quick reflexes.

Try to move quickly when someone's using a knife against you, or things might get gruesome.

If you can hold out long enough against the knife-wielding thug, you'll get some help.

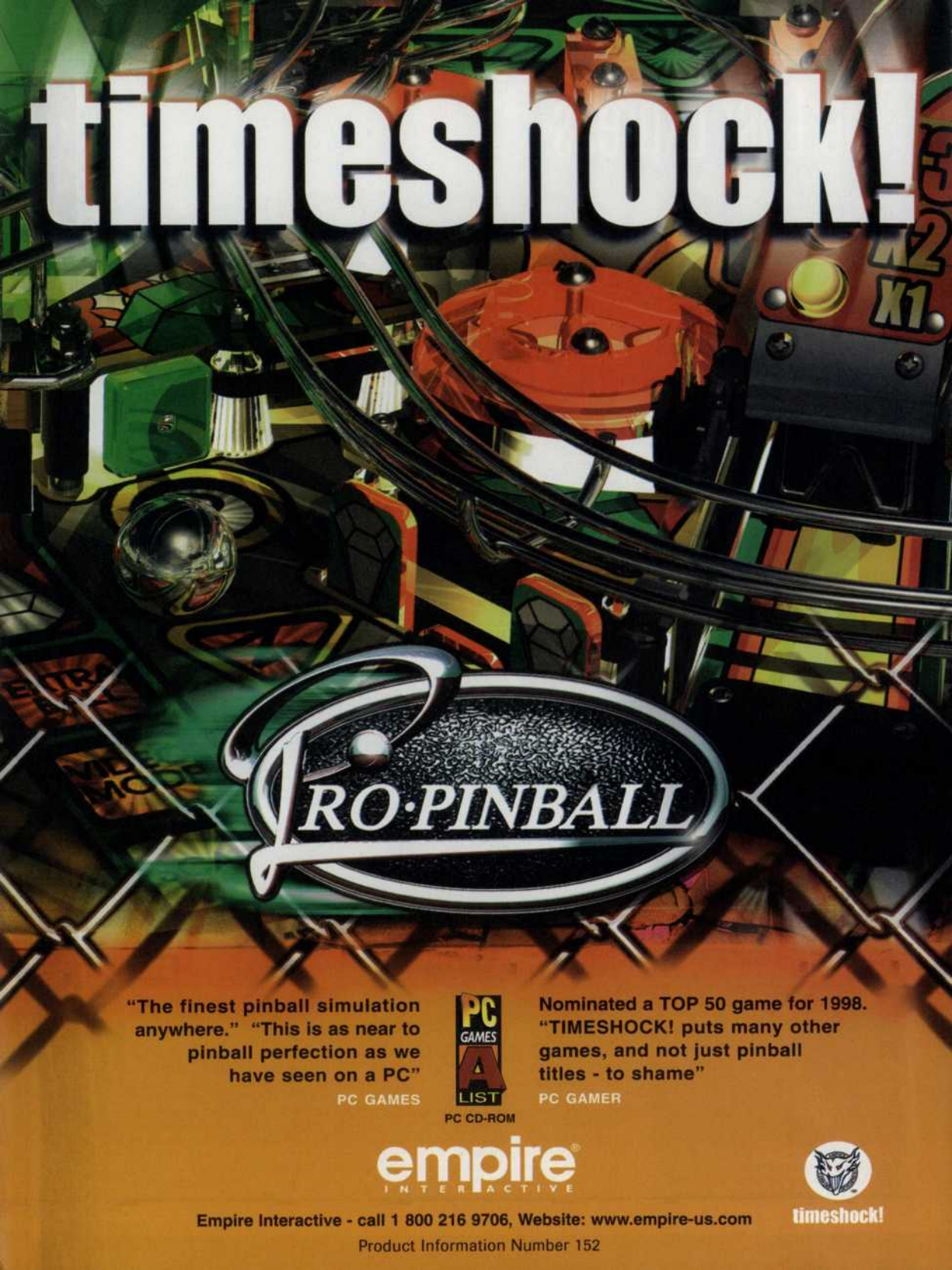
Once you enter the game, everything is controlled via the mouse. You can access your inventory by clicking on your portrait at the top left-hand corner of the screen, and click the items to examine them more closely. In the play screen itself, the mouse is mostly used as a movement cursor — clicking when the cursor is an arrow pointing in a certain direction will move you in that direction. At one point you might face combat; when that happens, clicking the mouse will make you move in different ways. You can't fight back, so just try to stay alive.

As you wander around the train, you can listen in on other people's conversations. Sneaky, but necessary.

If you're killed, or if you want to try a different strategy, you can "rewind" by clicking the red jewel at the top left-hand corner of the clock. Fast-forward back to where you were by clicking the right-hand jewel. You can't fast forward to a time you haven't experienced yet — so don't get any funny ideas.

The full version of the game spans three CDs, and contains many more characters, and much more to explore than the demo. The demo takes place during day two of your journey on the train, just before your arrival in Vienna.

SPECIAL NOTE: *The Last Express* demo runs in either Windows 95 or DOS. To install the program in either operating system, run the INSTALL.EXE file located in the \TLEDEMO directory on *The CD*. If you have Windows 95, run the EXPRESSW.EXE file in the directory the game created on your hard drive (the default is \EXPDEMO). To run the DOS version, run the EXPRESS.EXE file from the same directory.



"The finest pinball simulation anywhere." "This is as near to pinball perfection as we have seen on a PC"
PC GAMES

PC GAMES A LIST
PC CD-ROM

Nominated a TOP 50 game for 1998. "TIMESHOCK! puts many other games, and not just pinball titles - to shame"
PC GAMER

empire INTERACTIVE

timeshock!

Empire Interactive - call 1 800 216 9706, Website: www.empire-us.com

Product Information Number 152

Youngblood

Win95

Company: GT Interactive
Tech Support: (800) 434-2637
Category: Strategy
Required: Windows 95; Pentium 133; 16MB RAM; SVGA; Mouse
Install: \YOUNGBLD\YOUNG95.EXE

A well-placed grenade will do wonders to clear out the vermin in your way.

The evil Dr. Leviticus is close to getting his hands on the Drachma Codex, a book that will allow him to complete the creation of a monstrous race of mutants, and the Youngblood team must go in after him to make sure he doesn't succeed. They'll have to face his minions, and they must make sure he doesn't recover the Codex, or the world is doomed.

If it sounds like the plot for a superhero comic, its should. The Youngblood team is made up of mutants that fight for the cause of good, and each has his or her special abilities to add to the fight. The demo puts you in charge of three of them — Diehard, Chapel, and Badrock — out of the full game's eleven heroes. Each of them alone is a force to be reckoned with, but with these three, very little can stand in your way.

HINT

To get to the Drachma Codex, you'll have to use all three of your heroes. Take a look at this picture to get an idea of what you have to do. Getting your heroes into position, though, is something you'll have to figure out on your own.

The secret to getting to the Codex lies in positioning your heroes intelligently.

You control your team with the mouse. With no superhero selected, you can left-click and hold to drag a selection box around one or more of the heroes you want to maneuver. When you've selected your heroes, a left-click on a map location or an enemy will command them to move or attack. Right-click to deselect the units.

Take a gander at illustration for an explanation of what you're looking at on the computer screen. You can also press the H key at any time during the demo for additional help. Each of the superheroes has a special ability, like Badrock's tremendous jump that damages anything in the immediate area. To use it, click on the Power icon and highlight the power to use, then click a target for the power. Your job is to work your way through the maze of Hell to reach the Drachma Codex before Dr. Leviticus does. You'll have to figure out some devious puzzles on the way, so keep your wits about you.

These transporters will move you instantly to a new location somewhere on the map.

The Heroes Way

1. Map
2. Special Powers
3. Weapons
4. Inventory
5. Unknown
6. Hero Selection
7. Message Area
8. Main Screen

Virtua Fighter 2

Win95

Company: Sega
Tech Support: (415) 802-4400
Category: Action
Required: Windows 95; Pentium; 16MB RAM; 47MB hard-drive space; SVGA
Install: \VF2DEMO\VF2_DEMO.EXE

Probably the most popular fighting game in the arcades and on those young teeny-boppers' videogame machines, *Virtua Fighter 2* is an out-and-out 3D battle between two opponents intent on killing each other. The plot is negligible, since no one needs a reason to play an action game like this. But the action's hot, the graphics excellent, and the special moves tricky.

The thought behind the game is simple — beat your opponent into a thin paste. Look at the control keys listed here for a description of how to go about that. The demo lets you choose from two of the game's ten characters. Sarah Bryant is a college student who was kidnapped, brainwashed, and trained in the lethal art of hand-to-hand combat for the sole purpose of destroying her own brother. Lion Rafale, son of the richest family on the planet, has a chip on his shoulder and something to prove — mostly to his is inattentive father. Each has special moves and packs quite a punch. You can play in Arcade mode, where a single player will battle the computer and rise through the ranks of the elite, or in VS. mode, where you can challenge another human opponent on the same computer. The full version will also support VS. mode through a Local Area Network (LAN), Internet connection, modem, or serial link.

Part of playing rough is kicking your opponent when he — or she — is down.

CONTROL KEYS

Action	Player 1	Player 2
Jump	W	↑
Crouch	S	↓
Back	A	→
Forward	D	←
Guard	V	del
Punch	G	end
Kick	H	page down
Start/Pause/Resume	Z	Enter
Quit Game	alt + F4	

Sarah Bryant is a worthy opponent and not afraid to mock the fighters she beats.

WarBirds 2.0

Win95

Company: Interactive Magic
Tech Support: (817) 424-5683
Category: Simulation
Required: Windows 95; Pentium; 16MB RAM; 33MB hard-drive space; SVGA; Mouse; Joystick
Install: \WB2DEMO\WB2DEMO.EXE

Multi-player games take on a new meaning in Interactive Magic's online flight simulator. You can fly authentic World War Two aircraft in an online battle against hundreds of other pilots. Whether you want to fly in a huge airborne dogfight or work together as a team with other pilots, *WarBirds* lets you control the action.

Go online and fly World War Two fighter planes in a huge world with hundreds of other pilots.

This demo gets you setup and ready to fly the game. You can choose to fly Offline (a good way to get practice) or jump into Online flight. In order to set up an account on the iMagic Online (IMOL) service, you'll need to telnet to *icigames. com.* If you have a true TCP/IP connection to the Internet (supplied by most Internet Service Providers), establish a connection, then click your Windows 95 Start button and choose "Run." Type "telnet icigames. com" and follow the directions that show up. If you have any problems, contact the technical support number listed above. The service plan is simple — you get five free hours in the first 30 days following your signup of a new account, and thereafter the service costs $10 a month, plus charges for any hours that exceed the initial $10. Hourly charges vary depending on your ISP, from $1.75 to $2.00.

Learning the game is relatively simple, but it'll take some practice to get it down right. The online help will be invaluable to you as you get used to the commands available in the game. There's a lot ot learn, but for some of the basics, look at the keys listed here.

Even when you get the keystrokes down, there's still the matter of learning the strategies and tactics you'll need to survive in *WarBirds.* If you're playing with a team of other pilots, you'll all have to look out for one another. You can also fly with more than one human player in an airplane, such as a bomber, with one person flying the ship, and other players manning gun turrets.

For more information, go to *www. imagiconline.com,* and you'll find links that will take you to a multitude of player pages, as well as a *WarBirds* FAQ (Frequently Asked Questions) document.

SPECIAL NOTE: *WarBirds* requires that you use a joystick to control your plane. If you try to use the keyboard, you won't stay airborne for long.

CONTROL KEYS

Flight Control	Joystick
Fire Gun	Joystick Button One
Start/Stop Engine	E
Throttle Up	=
Throttle Down	-
Left Rudder	A
Right Rudder	D
Center Rudder	S
Gear Up/Down	G
Wheel Brakes	spacebar

PLAY LIKE THERE'S NO TOMORROW

Limited Time Offer
FREE STRATEGY GUIDE and $10.00 REBATE
to owners of KKnD™, C&C™ and Warcraft™ owners, while supplies last. Details inside each box.

After a nuclear apocalypse, two bands of stragglers battle for control of the wasteland. Mutants. Survivors. Lots of killin'. The future rules!

90% Rating—PC Gamer, UK Edition
Game of Distinction Award Winner

Master tough AI to survive 50 missions

20 new XTREME 'Producer's Cut' missions

Full multiplayer gameplay with 15 multiplayer maps

XTREME KAOS-skirmish with computer opponents and allies

Fight on 3-D rendered landscapes in hi-resolution 640x480 SVGA

KKND™

KRUSH KILL 'N DESTROY

XTREME

COMING THIS FALL ON WINDOWS® 95 CD-ROM

DOWNLOAD THE DEMO!
www.ea.com/ead

Product Information Number 143

Melbourne House

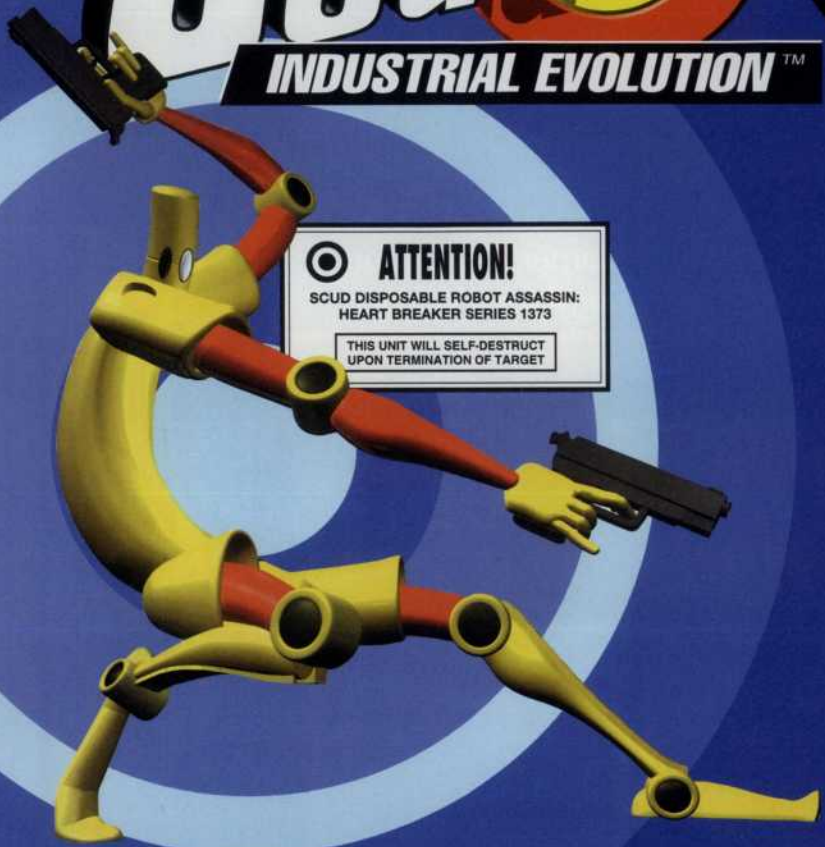
EAD ELECTRONIC ARTS DISTRIBUTION

TEEN T AGES 13+ CONTENT RATED BY ESRB

KKND ©1997 Beam Software PTY LTD. KKND is a trademark and Melbourne House is a registered trademark of Beam Software. All rights reserved. Electronic Arts and the Electronic Arts logo are trademarks or registered trademarks of Electronic Arts. All rights reserved. Actual screens may vary. Made in the USA. All other trademarks are property of their respective owners.

Scud

INDUSTRIAL EVOLUTION™



Disposable, like a diaper. But he doesn't take any crap.

Multiple Missions pit Scud against a bizarre collection of villains and enemy Scuds.

Obliterate up to 16 opponents over LAN or HEAT.NET.

Top down view and easy to master controls keep action fast and furious.

www.scud.com

Scud is the coolest robot assassin to ever be dispensed from a vending machine. He's programmed to self destruct, but intent on sticking around quite a bit longer. He's a coin operated killer hellbent on customer satisfaction, but there's always one sick, twisted freak who won't listen to reason.

"Illustration by Edvis"

• Tons of powerups! • Multiple Weapons!
•Single player, multiplayer, or compete on HEAT.NET!

COMPETE ON HEAT HEAT.NET

Includes 3 months free premium membership on HEAT.NET

Stop by WWW.segasoft.com or call 1-888-SEGASOFT

RP RATING PENDING ESRB

Designed for Microsoft Windows 95

SEGASOFT

© 1997 SegaSoft Inc. All rights reserved. Scud character © 1997 Rob Schrab. SegaSoft and the SegaSoft logo are trademarks of SegaSoft Inc. Scud: Industrial Evolution and the Scud characters are trademarks of Rob Schrab. Windows is a trademark of Microsoft Corp.

Product Information Number 300

War Wind II

Win95

Company: SSI
Tech Support: (408) 737-6850
Category: Strategy
Required: Windows 95; Pentium; 16MB RAM; 48MB hard-drive space; SVGA; Mouse
Install: \WARWIND2\SETUP.EXE

In the years following the great conflict depicted in *War Wind*, there have been many changes on the planet Yavaun. Two factions have grown out of the native populace — the Overlord Faction, comprised of the Tha'Roon and Obblinox, and the SUN (Servants Under NagaRom), made up of the Shama'Li and Eaggra. And there's a new species on the block — those nasty humans. They're broken into two factions themselves: the Descendants, mostly scientists and academics; and the militaristic Marines.

This sequel to SSI's complex and challenging real-time strategy game promises even more depth than the original. You control any of the factions in a series of missions. You must train your troops, recruit new soldiers, and balance resource management with tactical combat. In any given scenario, you'll control one leader who can influence your army in different ways. In the demo, your leader is Malcolm, a human war veteran who commands great loyalty from his troops. Like most *War Wind* leaders, Malcolm can sing a War Song that gives each of his troops greater strength, speed, and healing. He's also very persuasive, so he can get civilians to join the military with a minimum of fuss.

You play the game with the mouse. Left-click on a unit to select it, and then left-click on a map location or an enemy to get your unit to move or attack. To deselect a unit, right-click on it or on an empty piece of ground. You can command several units at once by holding down the left mouse button and dragging a square around the group of units you want to control, or left-clicking on several units (unlike most real-time strategies, you don't deselect a unit when you click on another one).

These civilians will come in handy if you can recruit them to your cause.

Use the pop-up menu for each unit to perform special tasks like harvesting or flying.

Each unit contains a menu of commands you can issue, as well. Left-click a unit to select it, then left-click on it again to make the menu pop up. You use the pop up menus to give specialized commands, like directing the helicopters or having your enlistees build new structures.

As you build structures, you'll open up access to new ones, and you'll be able to upgrade your units. To upgrade an Enlistee to a Grunt, for instance, you have to build a barracks, then select the barracks, select the Train Grunt icon, and then select the Enlistee you want to train. You can also use the buildings to increase your units' skill, making them even tougher opponents on the battlefield. To recruit civilians to your cause, select the thumbs-up icon from their pop-up menu.

In the full version, you'll also get to carry particularly useful or well-trained units on to the next mission. Just choose which units you want after you win the battle.

For more details on how to play the game and a complete explanation of all the different structures you can build and units you can train, check out the README.TXT file located in the \WW2 directory created on your hard drive when you installed the game.

Your task in the demo is to kill the Tha'Roon Prime Minister located in the southeastern quadrant of the map.

When you finish a scenario, you can select certain skilled units to take with you into the next mission.

Dark Rift

Win95

Company: Vic Tokai
Tech Support: (310) 326-8880
Category: Arcade
Required: Windows 95; Pentium 100; 16MB RAM; 2MB PCI video card
Install: \DR_DEMO\DR_DEMO

Dark Rift is a 3D fighting game that debuted on the Nintendo 64, and should soon be available for the PC. The game is set in a bleak, apocalyptic world in which you battle fearsome demonic creatures in a tournament to win the mysterious Prime Element, which controls an ancient portal between good and evil. Neat, huh?

Graphically, *Dark Rift* is pretty impressive; it supports 3D accelerators compatible with Direct3D, so it looks sharp. Contestants battle with fierce-looking weapons in awesome 3D arenas. In typical fighting game fashion, there are a number of different maneuvers and combos you can perform, including grabs and using projectile weapons.

Aaron and Gore are two powerful opponents, so you'll need to control them well to win a bout.

The demo lets you try your hand at playing two of the contestants: Aaron, a tough-as-nails humanoid who carries a powerful rifle, and Gore, a towering purple beast with a nasty-looking ax. You can play against the computer on three different levels of difficulty or take on a human opponent. Control your fighter with the keyboard, a Gravis GamePad Pro, or a Microsoft SideWinder gamepad. The full game will feature eight different gladiators and two bosses to pummel.

The *Dark Rift* demo requires Windows 95 to be set for 16-bit color. If your video card does not support Direct3D, you may want to turn off D3D support through your DirectX setup program; see the README.TXT file in the \DR_DEMO directory on *The CD* for more details.

CONTROL KEYS

Action	Player 1	Player 2
Left	A	num 4
Jump	W	num 8
Right	D	num 6
Crouch	S	num 2
Sidestep In	Q	num 7
Sidestep Out	F	num 9
Horizontal Attack	G	num 4
Vertical Attack	H	num 5
Kick	B	num 1
Block	Spacebar	num 2
Grab	V	num 3
Game Pause	Esc	Esc

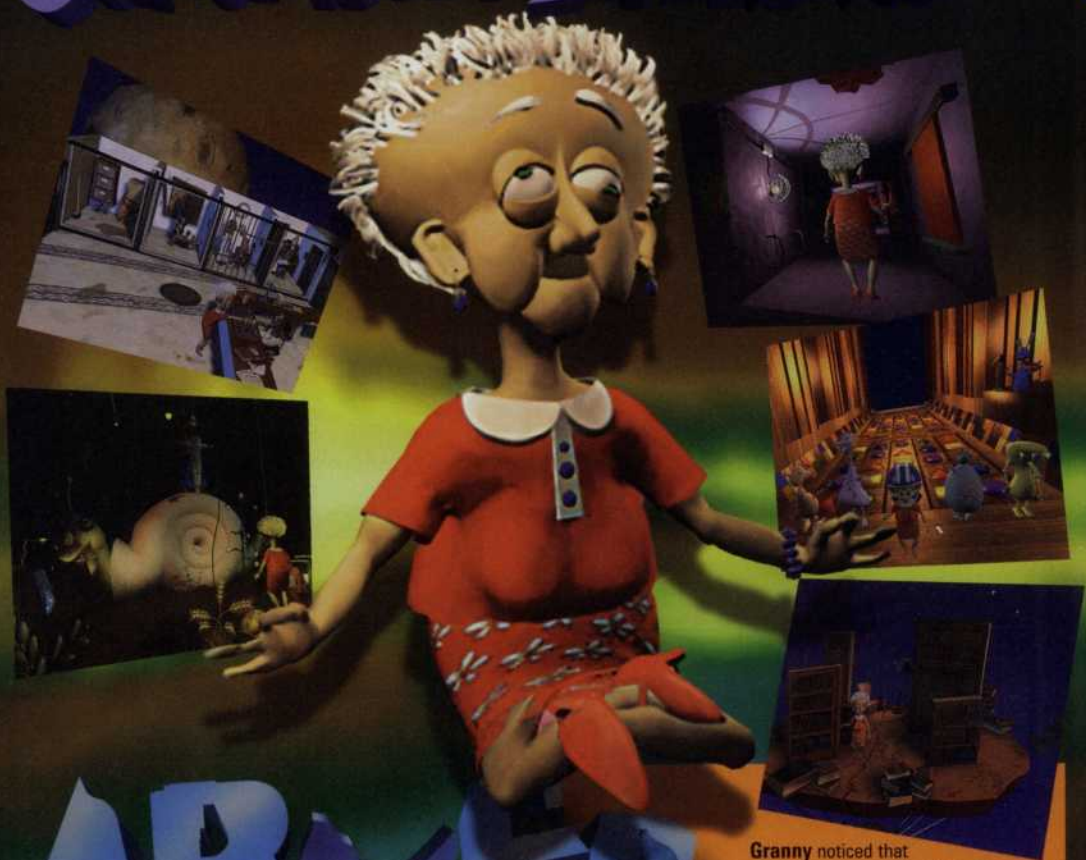
Player 1	Player 2
Projectile (L)	
S, A + N	num 4, num 8 + 2
Projectile (R)	
S, D + N	num 4, num 6 + 2
Bonus Projectile (L)	
A, A + H	num 8, num 8 + 5
Bonus Projectile (R)	
D, D + H	num 6, num 6 + 5

STARSHIP TITANIC.
It's *meant* to be full of water.

reserve your berth now at http://www.starshiptitanic.com

NOT YOUR EVERY DAY OUT-OF-BODY EXPERIENCE

COMING THIS FALL



ARMED delirious

Granny noticed that things were getting, well, a **little strange**. Even her **loyal sausage** could tell that something was wrong. When she found out her family had been swallowed into space by the **Mad Rabbit**, she decided that enough was enough. No more games: it was time to **kick some lepine butt**. And so this **delirious** but determined lady set out on the **adventure of a lifetime**.

- Visit five planets and fourteen worlds in a huge, hilarious graphic adventure that spans 5 CDs.
- Solve scads of ingenious puzzles, each with its own illogical logic. Order leads to chaos, sense turns to nonsense, credible becomes... well, you get the drift.
- Meet dozens of curious characters. Wander the reaches of inner space. Defy the laws of time and space. Go shopping with aliens. And be back in time for tea.

You have to PLAY it to DISBELIEVE it.

To order, visit your retailer or call 1 800 447 1230

TELSTAR Electronic Studios

Official Release USA BOBSLED

SIRTECH

Tel: (315) 393 6633 Fax: (315) 393 1525
E-mail: webmaster@sir-tech.com **www.sir-tech.com**
Product Information Number 333

Front Page Sports: Baseball Pro '98

Win95

Company: Sierra
Tech Support: (206) 644-4343
Category: Sports
Required: Windows 95; Pentium; 8MB RAM; 46MB hard-drive space; SVGA; Mouse
Install: \FPSBASEB\BB98DML.EXE

In this latest addition to Sierra's The Front Page Sports series of sports simulations, you can manage all aspects of your baseball team, from your choice of players, batting lineup, and positions down to the most nitty-gritty aspects of batting or pitching. You can have as much or as little control over your players' actions as you want by setting the computer to control whatever actions you like.

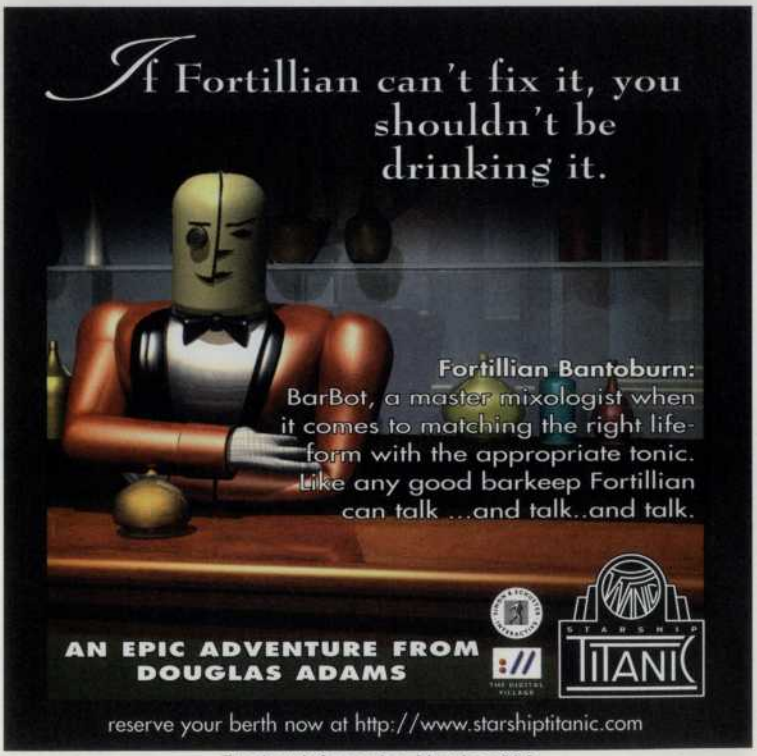
The demo lets you play Atlanta against New York for three innings. When you're at bat, you simply use the joystick or gamepad to choose the type of swing you'd like — move the directional pad in the direction of the arrow next to the swing you'd like to make, and press button one to choose the swing. If you're not using a joystick, you can choose your swing with the mouse and swing with the spacebar. Pitching works much the same way — select your pitch and either use the spacebar or button one on the joystick to throw it.

Depending on the computer settings, you can either let the computer control fielding, or you can do it yourself. Press F2 to change any options you'd like from how much control you have to the weather. If you decide to do your own fielding, the bases correspond to a direction of the joystick — right is first base, up is second base, left is third base, and down is home. Move the joystick in the direction of the base you want to throw to, and press button one to throw the ball. As soon as you hit the button, you'll be in control of the receiving player, so take care not to move him too far from the bag.

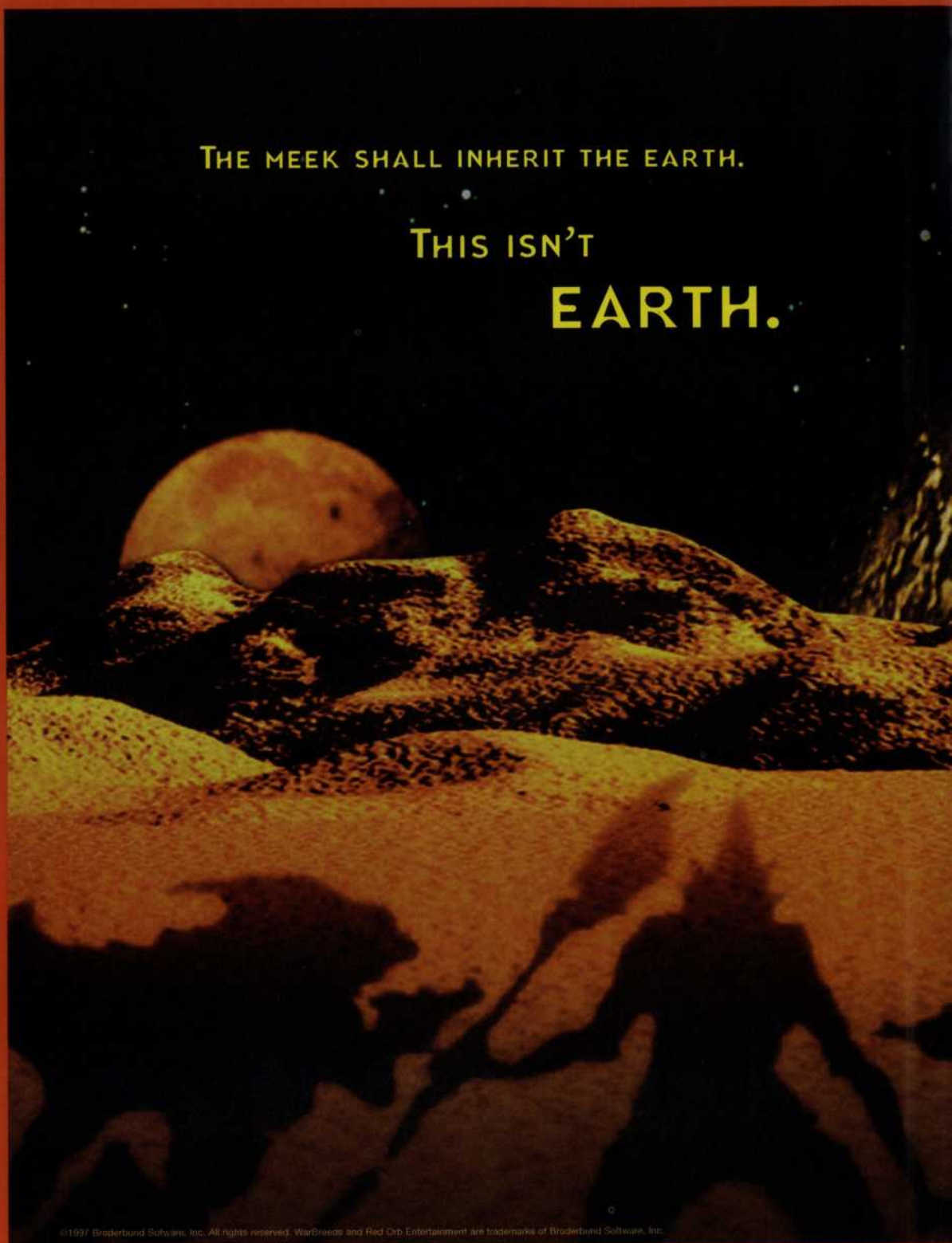
If you set the demo's difficulty to the most advanced level, you'll have several other options to play with for both pitching and hitting. You can also go into the Manager Menu, where you can change your lineup and rotate your players when they get tired.

A helpful square will pop up indicating the location of the ball when you're up to bat, making it easier to hit.

Nothing gets the crowd on its feet like a home run — especially when you've got men on base.



Product Information Number 332



©1997 Broderbund Software, Inc. All rights reserved. WarBreeds and Red Orb Entertainment are trademarks of Broderbund Software, Inc.

WARBREEDS™

Spectacular animation. Leaders of the fallen Yedda Empire describe the events leading to their downfall.

Customize your units. Acquire genetic knowledge from conquered enemies to create new, better-equipped fighting units.

View more terrain. Place units in formation and monitor strategic movement with the unique zoom mode.

Centuries ago, in another world, a great civilization crumbles. And in the ensuing void, four former slave clans are set free to battle for rule of the planet. Now you command one of the alien clans and create your own customized units in a brutal struggle for power. In this real-time strategy game, the strong survive. The meek die. Coming winter 1998.

www.warbreeds.com

REDORB

Claw

Win95

Company: Monolith Productions
Tech Support: (425) 739-1550
Category: Arcade
Required: Windows 95; Pentium; 16MB RAM; 18MB hard-drive space; SVGA
Install: \CLAW\CLAWDINS.EXE

Claw is a fast-paced arcade-style game that puts you in the paws of Captain Claw, a swashbuckling adventurer who just happens to be a cat. At the start of the game, the feline hero has been imprisoned by the evil LeRauxe. By a stroke of luck, it's there that he discovers a cryptic clue to the whereabouts of the Amulet of Nine Lives — and the hunt is on!

It's up to you to guide the captain through a daring escape from LeRauxe's prison and the two levels you're offered in the demo. Along the way, you'll face nasty dogs, bomb throwing mice, slime pits, and other pitfalls. You fight back with hand to hand and projectile attacks. Hit the melee button (see the picture for keyboard commands), and Captain Claw will kick, claw, or slash with a sword. Ranged weapons include a dueling-style pistol, a magical pulse of deadly energy, and bundled explosives you can hurl at your enemies. Keep an eye on your health meter in the upper right hand corner; 100 is the maximum, and when it reaches zero, you're one dead kitty.

Got 'im! That cloaked fox is sorry he messed with Captain Claw!

Sometimes you'll have to risk your neck to go for the gold.

You'll have opportunities to grab a variety of valuable treasures. Coins are everywhere and worth a mere 100 points, but keep your eyes open for golden skulls; they're rare and very valuable. There are also a few power-ups to be found: extra lives, food, and first aid to raise your health; flaming swords that let you hurl fireballs at your targets for a few seconds; and shimmering toy mice full of catnip that give you extra jumping ability for a short time.

Claw has other subtle elements. Scattered throughout the platforms are barrels which explode when shot, causing serious harm to anyone nearby. You'll also see plenty of crates containing treasures or power-ups; open them by kneeling down and slashing with your sword.

Claw can be controlled with the keyboard or a gaming controller. We suggest a comfy gamepad for the best experience. The full version, available only through mail order, has 14 levels, dozens of enemies, bosses, 20 minutes of animated, cinematic cut-scenes, and multi-player support for as many as 64 players. You can also make your own levels with a custom level editor.

CHALLENGE

Throughout the demo, you'll find many secret areas full of treasure for the taking, but you'll have to stray off the beaten path. By exploring as much of the world of *Claw* as possible, we were able to rack up a score of more than 1,250,000 points! Can you beat that?

Use the explosive barrels to your advantage by shooting them from a safe distance.

You can control Captain Claw with the keys above or with a game controller.

Legends Football '98

Win95

Company: Accolade
Tech Support: (408) 296-8400
Category: Sports
Required: Windows 95; Pentium; 16MB RAM; SVGA
Install: \LEGEND98\DEMO50\DEMO50.EXE (for 1950 era) DEMO97.EXE (for 1997 era)

The way we play football has changed gradually over the years. Not only have the shoulder-pads gotten bigger, the helmets stronger, and the goal-posts farther apart, but the rules have changed, too. Today, hash marks are drawn 70 feet, nine inches from the sidelines, and two-point conversions are a strategic part of the game. In 1932, there were no hash marks (the ball was snapped where the carrier fell on the last play), and two-point conversions didn't exist.

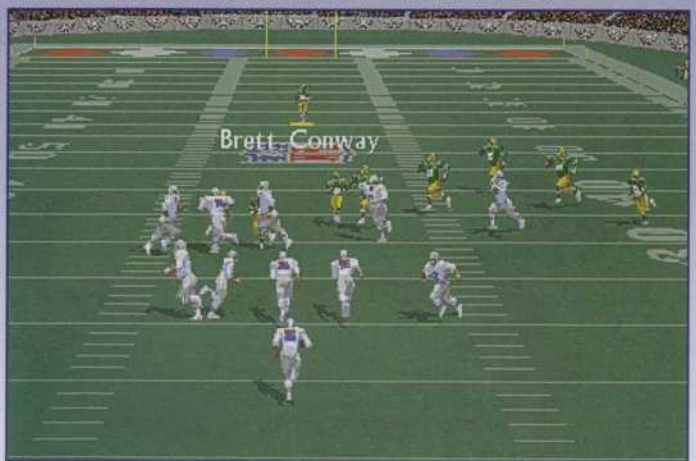
Accolade's new football simulation will let you play in all the major eras of American football — 1932, 1950, 1968, and 1997. This five-minute demo lets you play as either the New England Patriots or the Green Bay Packers in two eras — 1950 and 1997. The rules fit the time period, as do the style of field and equipment. In the full version, you can even pit modern players against those of many years ago.

If you have a joystick or gamepad connected to your computer, the demo will automatically detect it. Joystick control is a bit tricky, though, so it might be in your best interest to turn it off from the control panel and use the keyboard. To shut off your joystick, go to the Windows 95 Control Panel and double-click the Joysticks icon. Then choose "None" as your joystick type. When the action begins, you'll see four plays on the side of your screen. Choose a play by pressing the letter on your keyboard for the play you want to run. You can cycle through more plays by using the arrow keys to page up and down and from left to right. If you're on offense, you'll hike and throw the ball by pressing the W key. When kicking, press the W key to start the strength meter moving, then press it again to select the power of your kick. You control the active player (he'll always be the one with a yellow circle under his feet) with the arrow keys. Take a look at the README.TXT file located in the \LEGEND98 directory on *The CD* for more information on how to play the demo, and the differences in rules between the various eras.

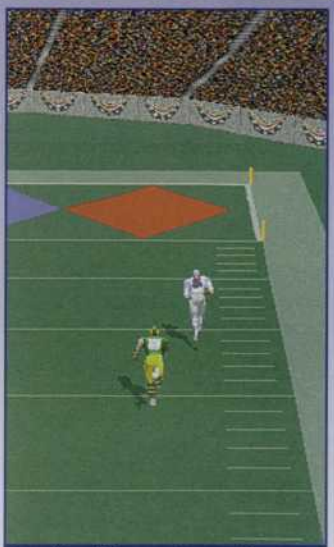
Choose the right play and run it well, and you might just lead your players to victory.

CHALLENGE

You might think five minutes isn't enough time to score more than one touchdown, but we managed to pull off three TDs in the demo. See if you can top us!



The complete game contains players from many eras of play, including 1936 and 1950.



It's really satisfying to make a breakaway run into the end zone — unless the computer opponent is the one doing it.

WAR WIND™ II
HUMAN ONSLAUGHT

It's Not Just For Aliens Anymore.

WINDOWS® 95 CD-ROM
WWW.WARWIND.COM

Many years after the great conflict, much has changed on Yavaun. Humans, reluctant colonists, are now part of the cultural diversity of this alien world.

WAR WIND™ II: HUMAN ONSLAUGHT offers new, larger vehicular and mechanized units. All-new maps with improved terrain graphics. Streamlined game play in building and promoting your units. All this, plus the unpredictable human element, makes WAR WIND II much more than just a sequel.

It's a whole new game.

To Order: Visit your retailer or call 1-800-234-3088 (USA & Canada) with Visa or MasterCard.

TEEN T AGES 13+ ESRB

Developed by DREAMFORGE

SSI

A MINDSCAPE® COMPANY

War Wind is a trademark of Strategic Simulations, Inc. ©1997 Strategic Simulations, Inc., a Mindscape Company. All rights reserved. Windows is a registered trademark of Microsoft Corporation.

Product Information Number 307

Comanche 3

Company: NovaLogic
Tech Support: (818) 878-0325
Category: Action
Required: Pentium; 16MB RAM; 58MB hard-drive space; SVGA
Install: \C3DEMO\INSTALL.EXE

Comanche 3 is the latest in NovaLogic's line of helicopter action games, putting you in the cockpit of the most advanced combat chopper in the world.

The demo lets you fly a single mission into the Ukraine to force a halt in hostilities between the Ukraine and Russia. There's a battery of SAM missile sites out there, and your task is to destroy them, along with any SCUD missile launchers you come across.

The game is relatively simple to play in the Easy Flight mode, so experienced helo jockeys might want to hit Escape and select Advanced Flight Model from the Options menu. You can also set other game parameters and exit the game from the menu bar. Take a look at the control keys to get an idea of what you'll be doing in the cockpit. We recommend a joystick for the best control. For in-game help, hold down the shift key and the question mark key.

Your goal in the demo is simply to destroy everything in your path. Once you've accomplished your mission, you can keep flying around or hit the E key to exit back to the main menu. The full version contains more than 30 combat missions, with varying goals (like lightning-quick strikes or night "creeps"). You can also fly multi-player games with as many as seven other pilots on a local-area network (LAN) or TCP/IP connection and two players over a serial cable or modem.

NovaLogic says *Comanche 3*'s physics model is pretty realistic, with every trajectory subject to complicated algorithms that take wind velocity and friction into account. And the whole thing supports Dolby Surround Sound speaker systems, so smoke 'em if you've got 'em!

Try the function keys to get a good look at your chopper from the outside.

The advanced flight model is tricky, so be careful — unless you want to become a smoking hole in the ground.

Your objective is this plateau. Destroy everything on it to complete your mission.

CONTROL KEYS

Movement	↑ → ← ↓
Adjust Collective	1 - 0
Middle Collective Setting	*
Fantail Left	A
Fantail Right	S
Cycle Target	Enter
Break Target	Backspace
Cycle Weapons Left	U
Cycle Weapons Right	I
Target Mode	O
Bay Doors	F
Landing Gear	G
Engine	Alt + E

Try Before You Buy

Win95

Tech Support: (800) 210-5517
Install: Bricks: \STORE\BRICKS\BRICKS.EXE
Eudora Pro 3.0: \STORE\EUDORA\EGEUDMAW.EXE
Lose Your Marbles: \STORE\MARBLES\MARBLES.EXE
Monologue '97: \STORE\MONOLOG\MONO.EXE

Not only is *PC Gamer* the best place to go to get the latest and greatest in gaming demos, now we can help you buy games and other software products directly from their publishers via *The CD*! It's the first incarnation of Imagine Publishing's Try Before You Buy store, where you can find full versions of games and utility software that you can purchase with a few clicks of the mouse. Each month, we'll bring you full copies of games and utility software; if you like what you see, they're yours to buy without setting foot in a software store.

Most of the retail products on *The CD* will let you install and use the program with full functionality, so you don't have to rely on the publisher's hype — you can get an idea of what it's like before you blow your hard-earned cash on it. However, there will also be some "wrapped" products that require payment prior to use, like their software-store counterparts.

The try-before-you-buy products featured in the store will run with all their functionality for a limited number of days. If you decide to buy the program, the trial-period prompts will stop nagging you, and you'll have the full retail package. There are only four products on the store's shelves this month, but we hope to bring you more games and utilities to test-drive in the future. Meanwhile, rest assured that the Try Before You Buy store will only take up a fraction of *The CD*; free game demos, shareware, add-ons, and patches are still what *The CD* is really about!

If you find something you like in the store, buying it is pretty easy. All you have to do is run *The CD* the way you always do. When you're at the Main Menu, you'll see a banner in the center of the menu bar. Its message changes occasionally; when it says "Try Before You Buy," click on it to enter the store. The four products available right now are — *Bricks, Eudora Pro 3.0, Lose Your Marbles,* and *Monologue '97*. The only "wrapped" product is *Eudora Pro 3.0*; the rest you can try for a few days before you decide to purchase them. Move your mouse cursor over the picture of the box to see a brief description of each title. To try one out, just click on the "Try Me" button to launch the installer. You can also launch the installers by running the install programs listed in the box above.

SPECIAL NOTE: If you have difficulties running the Try Before You Buy program, call the technical support number listed above. If you make a purchase, your money goes to the software's publishers, so please contact them if you have questions about your order.

The Try Before You Buy store will let you try full versions of games and utility software; and if you like what you see, you can purchase it with a few clicks of your mouse.

The Palace

Win95

Company: The Palace, Inc.
Tech Support: (800) 798-6110
Category: Online Chat
Required: Windows 95; 386; 4MB RAM; 6MB hard-drive space; SVGA; Mouse; 16-bit Internet connection
Install: \PALACE\SETUP.EXE

Enter a world where everyone shares the same love you do — computer games. *The Palace* is an online chat program that lets you meet with other gamers via the Internet. To get started, simply run SETUP.EXE in the \PALACE directory on *The CD*. With this latest version of *The Palace*, you will automatically connect to the Imagine Games Network Palace site, at *palace.imaginegames.com*. All of the backgrounds are provided, so you don't have to wait for them to download as you go from area to area.

To chat, type your message on the line at the bottom of the screen and smack the Enter key; you'll see your words appear next to your smiling face where everyone can read and reply to them in real-time. To head to the *PC Gamer* area, click the appropriate TV screen. Until you register the software for $25 by calling The Palace, Inc. at the phone number listed above, you won't be able to change your name, and you'll have limited options for customizing your smiley-face with props.

When you visit the *PC Gamer* Chat Spot, be sure to drop in on Coconut Monkey's Island Paradise.

The Windows 95 version supports the Auditorium plug-in, which lets registered users participate in organized conferences with game developers, *PC Gamer* staffers, and other nifty people. For information on what conferences we're having and when we'll have them, check out our web site at *www.pcgamer.com*. Since the *PC Gamer* palace site is a part of the entire Imagine Games Network palace, you can interact with readers and editors of other magazines that are a part of Imagine Publishing, like *Next Generation, Ultra Game Players*, and our web 'zines, *N64.com, PSX Power*, and *Saturn World*. They'll also have special events on the site, so make sure you check out their web pages for details.

Category: Drop the Herring, Dirtbag!

Q: Because of the origin of the phrase "Five-O," what would be a logical name for "Hawaii Five-O" in Alaska?

A: THINK YOU KNOW THE ANSWER? CALL **1-888-NEW-JACK** GAME #201

Forget the book, Danno. Dial that little number there, and we'll give you a peek at our latest edition, YOU DON'T KNOW JACK® Television. No cheesy salespeople, no B.S. It's just a game.

Like what you hear? Drop the phone, and pick up the CD-ROM, wherever irreverent software is sold.

BERKELEY SYSTEMS

Jellyvision

YOU DON'T KNOW JACK and the Jellyvision logo are registered trademarks of Jellyvision, Inc. The Berkeley Systems logo is a registered trademark of Berkeley Systems, Inc. All other trademarks are trademarks and registered trademarks of their respective owners.

HEAT

Company: SegaSoft
Tech Support: (888) 262-4328
Category: Online Service
Required: Windows 95; Pentium; 16MB RAM; 20 hard-drive space; SVGA; 16-bit Internet Connection; Java Enabled Internet Browser (Netscape 3.01+ or Internet Explorer 3.02+)
Install: \HEAT\KATALYST1_2.EXE

Welcome to HEAT, SegaSoft's new multi-player gaming service. As of press time for this issue, HEAT was currently in beta test, so if you want to get online and play games with people all across the country for free, now's your chance.

Go online with SegaSoft's HEAT and set yourself up to battle living, breathing opponents all over the country.

All you have to do is install the software, connect to HEAT using a Java-enabled web browser (like Netscape Navigator 3.01 or higher, or Microsoft Internet Explorer 3.02 or higher), and sign on. You can play just about any multi-player PC game on the market, including *Quake, WarCraft II, Diablo, Red Alert,* and *Duke Nukem 3D.*

When the service goes online officially, expect to pay a one-year fee of about $49.95. HEAT says prices aren't locked in yet, though, so it's subject to change, but the free test period should help you decide whether or not it's worth the money.

Since the service is still being tested, you can expect to encounter some bugs. But if you log on and play frequently, you can earn points and win prizes, as well as compete against other HEAT members for special recognition. All you need is Windows 95, a fast computer, and a online service provider that gives you a genuine TCP/IP connection to the Internet — currently, HEAT doesn't support America Online, CompuServe, or Prodigy.

HAVING PROBLEMS?

We cannot provide technical support for problems you may encounter with the demos on *The CD*. Please use the tech support numbers listed with the demos. You can also go to *http:\\support.imagine-inc.com* or *www.pcgamer.com* for a FAQ.

***The CD* is rigorously tested by the *PC Gamer* staff and certified virus-free. *PC Gamer* cannot be held responsible for any incompatibility problems caused by the use of *The CD*. However, should your copy fail to run, with error messages that indicate your CD drive cannot read the disc, return it to the following address: PC Gamer Customer Service, The November Disc 3.8 Replacement, 150 North Hill Dr., Brisbane, CA 94005. Please indicate any error message you receive.**

MindSpring

Tech Support: (800) 719-4660
Category: Online Service
Required: 486; 8MB RAM; 25MB hard-drive space; SVGA; Windows 3.1 or higher; 14.4Kbps or faster modem
Install: \MSPRING\SETUP.EXE

Log on to MindSpring, and you can cruise the Internet in many different ways.

MindSpring will launch you onto the Internet with all sorts of goodies at your disposal — you can use E-mail, the World Wide Web, read the Usenet newsgroups, and even gain access to free news, stock information, and web support.

The pricing is competitive, too: the Light service gives you 5 hours of service a month for $6.95 and $2 per each additional hour, along with 5MB of web space for your own web page. The Standard plan is $14.95 a month for 20 hours, with each additional hour costing one dollar. You also get 5MB of web space with this one. The Unlimited service gives you unlimited hours for $19.95 a month (without web space), while The Works service gives you unlimited hours, along with two extra E-mail boxes and ten megabytes of web space for $26.95 a month!

If you use Microsoft's Dial-Up Networking rather than the default Pipeline software, you can also have a TCP/IP connection to the Internet, a necessary component for all those multi-player games that use TCP/IP connections, like *Quake, X-Wing vs. TIE Fighter,* and *Interstate '76.* You can also opt to use any utilities that use TCP/IP connections, like *The Palace* online chat.

With its realistic pricing and a whole slew of services available, MindSpring is a good jumping-off point for anyone wanting to get onto the Internet. Best of all, if you install the software from *The CD*, the $25 launching fee will be waived.

Talk about service!

EarthLink

Tech Support: (800) 395-8410
Category: Online Service
Required: 486; 8MB RAM; 15MB hard-drive space; SVGA; Windows 3.1 or higher; 9600bps or higher modem
Install: \EARTHL\14DAY\TA\SETUP.EXE (for 14-day trial) \EARTHL\3DAY\TA\SETUP.EXE (for 3-day trial)

EarthLink puts you on the Internet quickly and easily, opening huge doors of information and entertainment.

The EarthLink TotalAccess network supports all kinds of Internet games and utilities — Netscape Navigator, RealAudio, Kesmai games for Windows 95 (including *Air Warrior* and *Casino Poker*), Surf Watch, QuickTime for Windows — anything and everything you could want in an online service provider. We've got two ways for you to connect to EarthLink — a standard three-day trial, and a special two-week trial with a low-rate subscription to *PC Gamer*!

Here's how it works: for the three-day trial, just install the software, and enter all the information it prompts you for, including a credit card number. You can test drive the service for three days; after that, your credit card will be billed for $19.95 a month unless you cancel. That includes full service, and unlimited connect time.

The 14-day trial is a bit different. Subscribe to *PC Gamer* at a special low price, and you'll get two weeks to check out EarthLink. If you've already got a subscription and you take advantage of this offer, you'll get an extra 12 issues added to your account. You can't beat a deal like this! Online gaming and your guide to the best gaming in the world, all for special low prices!

In either case, if you're not satisfied with how EarthLink works, you can cancel your account with them and your credit card will never be charged. Also, because EarthLink is offering it as a special deal to our readers, they're waiving the $25 setup fee! $19.95 a month gives you unlimited time online and 2MB of space for your own personal web page (you may not challenge the big commercial sites with that much space, but it's a start). And all this can be yours by simply clicking a few buttons. What are you waiting for? No, seriously — what are you waiting for?

Big game. Bigger weapons.

VARIABLE AGGRESSION PROFILES MAKE EACH ENEMY BEHAVE UNIQUELY!

UNRIVALED DEXTERITY AND CONTROL! RUN, JUMP, CLIMB, SWIM AND AIM IN ANY DIRECTION!

14 WEAPONS FROM THE GRENADE LAUNCHER AND PLASMA RIFLE TO THE ATOMIC FUSION CANNON!

TUROK DINOSAUR HUNTER

REQUIRES A 3-D ACCELERATOR CARD
SUPPORTS DIRECT3D
SEE BOX FOR DETAILS

DEMO AVAILABLE ON www.acclaimnation.com

MATURE M AGES 17+ ESRB

TUROK DINOSAUR HUNTER © 1997 Acclaim Entertainment, Inc. All rights reserved. TUROK ™ & © 1997 GBPC, a subsidiary of Golden Books Family Entertainment. All rights reserved. All other characters, names and the distinctive likenesses thereof are trademarks of Acclaim Comics, Inc. All rights reserved. Acclaim is a division of Acclaim Entertainment, Inc. All rights reserved. Windows is a registered trademark of Microsoft Corporation. © 1996 Microsoft Corporation. The PowerVR Logo ™ Imagination Technologies Ltd. is a trademark or registered trademark of Videologic (UK) LTD (U.K.). All rights reserved. NEC Electronics Inc. is an authorized licensee of the "PowerVR Extreme" trademark. Used with permission. Copyright 1997, 3Dfx Interactive, Inc. The 3Dfx interactive logo, Voodoo Graphics and Voodoo Rush are trademarks of 3Dfx Interactive, Inc. ATI is a trademark of ATI Technologies, Inc.

Acclaim
www.acclaimnation.com

Product Information Number 91

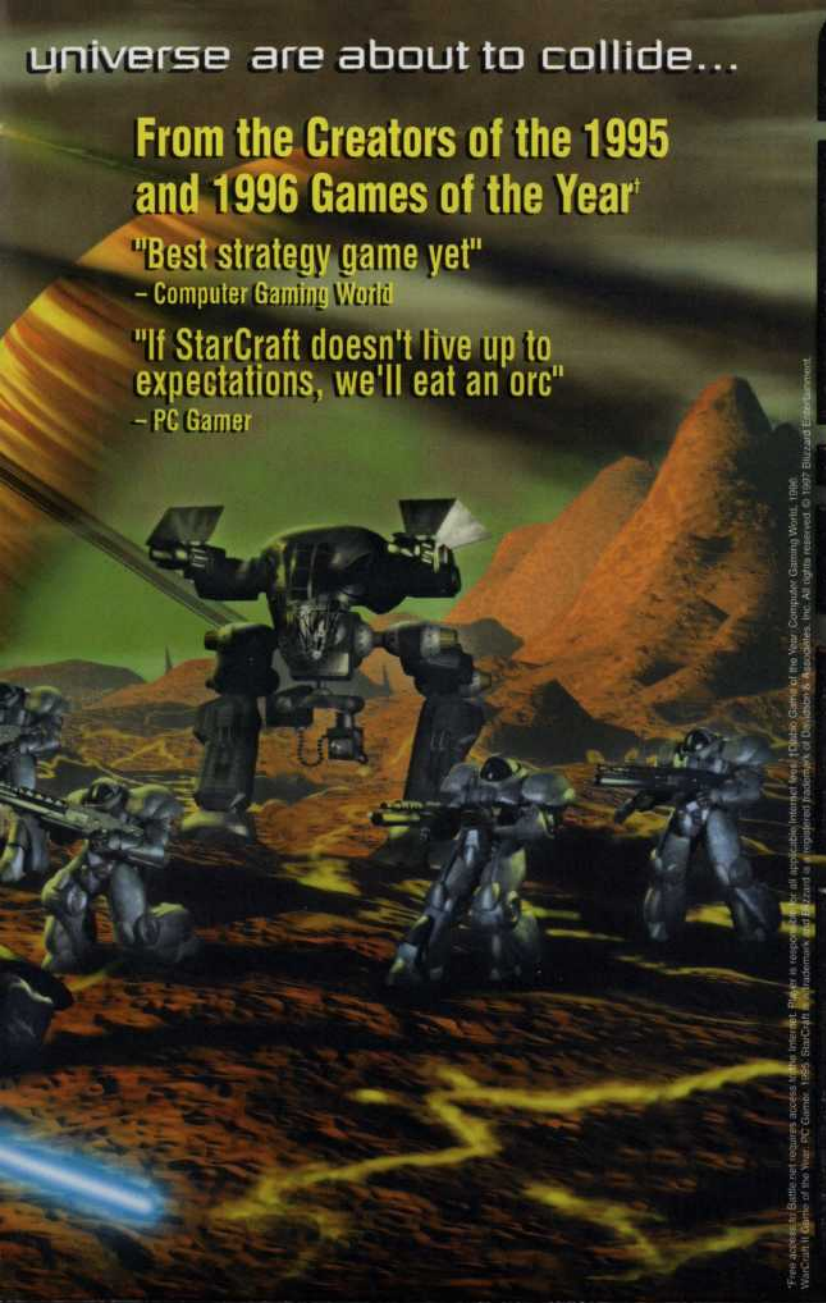
3 of the most powerful forces in the

universe are about to collide...

From the Creators of the 1995 and 1996 Games of the Year†

"Best strategy game yet"
– Computer Gaming World

"If StarCraft doesn't live up to expectations, we'll eat an orc"
– PC Gamer



Free* Internet Competition
Battle alone or challenge up to 8 players with one-click, free access to Battle.net. Enhanced Internet features include: worldwide player rankings, tournaments and player handicapping

3 Alien Races
Command any of 3 alien races – each boasting a unique set of skills and abilities

3 Theaters of Battle
A deadly mix of space combat, planetary assault and covert base infiltration

3 Epic Chapters
3 separate storylines intertwine within 30 scenarios to tell the epic saga of a universe on the brink of destruction

Spectacular Special Effects
Real-time light-sourcing, environmental effects, and interactive terrain are only the beginning

Campaign Editor
Create full campaigns from custom designed scenarios. Define victory conditions, record voices and much, much more...

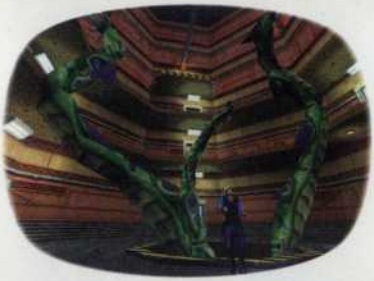
BLIZZARD ENTERTAINMENT

www.blizzard.com
1-800-953-SNOW

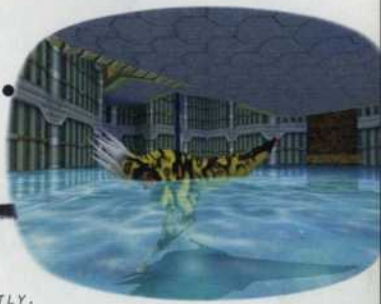
STARCRAFT™

*Free access to Battle.net requires access to the Internet. Blizzard is not responsible for all applicable Internet fees. †Strategy Game of the Year: Computer Gaming World, 1996; WarCraft II Game of the Year: PC Gamer, 1995. StarCraft is a trademark and Blizzard is a registered trademark of Davidson & Associates, Inc. All rights reserved. © 1997 Blizzard Entertainment.

$t_{1/2} = \frac{\ln 2}{\lambda}$
= decay constant
MATURE
M
VALVE
SIERRA



SHE'S SMART, HAS A GREAT PERSONALITY, AND KNOWS THAT THE WAY TO A MAN'S HEART IS THROUGH HIS STERNUM.



SHE'S A TRAINED GOVERNMENT ASSASSIN WHOSE ONLY GOAL IS TO SILENCE YOU— PERMANENTLY. AND YOU'RE RUNNING OUT OF PLACES TO HIDE.

THINK THE ONLY OPPONENTS WORTH FIGHTING ARE THOSE YOU MEET IN A DEATHMATCH? THINK AGAIN. WITH HALF-LIFE'S ADVANCED CHARACTER AI, YOU'LL BATTLE ENEMIES SO SMART, YOU'LL SWEAR THEY'RE ALIVE. THEY'LL TAKE COVER, RECRUIT OTHERS AND WORK TOGETHER TO BRING YOU DOWN.

AND THE REALISM DOESN'T STOP THERE. THINGS ACT, LOOK AND SOUND LIKE THEY DO IN THE REAL WORLD. WE COULD FILL YOUR HEAD WITH TERMS LIKE 16-BIT COLOR, FULL-SPECTRUM LIGHTING, DSP SOUND, AND SKELETAL ANIMATION. WHAT IT ALL MEANS TO YOU IS A GAME SO REAL, SO UNPREDICTABLE, SO ALIVE, YOU'LL SWEAR IT HAS A PULSE. ADD A 3D CARD AND YOUR OWN PULSE WILL RACE. CREATE CUSTOM LEVELS WITH WORLDCRAFT 2.0 (INCLUDED). OF COURSE THERE ARE MULTIPLAYER OPTIONS— FOR UP TO 32 PLAYERS. BUT HOW MANY OF YOUR FRIENDS ARE AS BEAUTIFUL AS SHE IS, OR AS DEADLY?

PLAY THE DEMO @ www.sierra.com/half-life

HALF-LIFE

This is your glorious empire moments before it became

To build a Stone Age tribe into a thriving empire, you can rest easy knowing that you can never rest easy. Because what takes thousands of years to build can be destroyed in seconds if you don't plan wisely.

In Age of Empires, your challenge is to take one of 12 ancient civilizations (including Egyptian, Yamato, and Greek) from grass hut beginnings to world domination in 10,000 years of real-time evolution. Which gives you just enough time to decide whether you want to conquer everyone else, explore the four corners of the globe, or accumulate great wealth to achieve victory. And with a 100-node technology tree, you can choose your advancements accordingly. For instance, you can research gold mining or commerce

"Best real-time strategy game."

© 1997 Microsoft Corporation. All rights reserved. Microsoft and *Where do you want to go today?* are registered trademarks, and Age of Empires is a trademark of Microsoft Corporation.

their glorious empire.

Microsoft
Where do you want to go today?

to amass great riches, or ballistics and naval warfare to strike fear into the hearts of others.

Multi-player capabilities, 40 pre-set scenarios, lavish campaigns, randomly generated maps, and an expansive scenario editor make it a new challenge each time you play. Add in the rich 3-D graphics where you'll see every flaming arrow, marching phalanx, and charging war elephant, and the pressure to win becomes downright intense.

But before you think you've got what it takes to win, make sure you've got the empire to back it up.

"Microsoft heads right to the top of the real-time strategy class with Age of Empires..."
—Computer Games Strategy Plus, June 1997

AGE of EMPIRES

Choose your favorite form of world domination.

www.microsoft.com/games/empires

All other company names mentioned herein are either registered trademarks or trademarks of their respective companies.

JSF: Joint Strike Fi

Future fighters meet in a striking simulation

In the 21st century, air combat will be a battleground of technology where the plane with the most toys wins — and the Joint Strike Fighter aims to win.

— Todd Vaughn

During twilight missions, the stealthy characteristics of the JSF planes allow you to slip through an enemy's defenses, avoiding visual and radar detection with great ease.

FYI. FOR YOUR INFORMATION

Game: JSF: Joint Strike Fighter
Category: Flight sim
Developer: Interloop
Publisher: Eidos Interactive, 651 Brannan Street, 4th Floor, San Francisco, CA 94107 (415) 547-1200
Percentage Complete: 80%

In a nutshell:

JSF is an air combat simulation that gives players the chance to fly the two prototypes vying for the upcoming Joint Strike Fighter project, a multinational, multi-role, multi-service fighter scheduled to take flight in the 21st century.

What's so special?

Early versions of *JSF* show there's a lot of care going into its design. With its dynamic campaign engine, versatile waypoint editor, multi-player action and gorgeous graphics, *JSF*'s juicy features should make for an intriguing sim.

Why should I care?

As the first opportunity to take a ride in two 21st-century fighters, *JSF* should pique the interest of casual gamers and hard-core enthusiasts alike.

And when's it coming out?

First Quarter 1998

During the first decade of the 21st century, America's air power will undergo a revolution of sorts as the Joint Strike Fighter becomes the workhorse multi-role fighter for the U.S. Air Force, U.S. Navy, and U.S. Marine Corps, replacing the aging F-16 and AV-8B Harrier II.

The result of dimishing defense budgets and the escalating cost of developing aircraft for each branch of our armed services, the goal of the JSF program is to ease the cost of upgrading the nation's air power while ensuring that future pilots are equipped with the most advanced, most lethal, and most versatile aircraft in the world. Each branch of the service will receive a JSF variant designed to meet its particular specifications and mission parameters. The Navy will receive a model that can withstand the rigors of carrier launches and landings; the Marines will get a Short Take-Off Vertical Landing variant (STOVL); etc. Wherever possible, though, the variants will share common systems for maximum production efficiency. Using many of the lessons learned from the F-22, the specifications for the JSF are very aggressive and demanding, including supersonic non-afterburner flight (supercruise), an internal weapons bay, stealth characteristics, and vectored thrust.

Compared to the more conventional configuration of its rival, the delta wing design and thick mid-section of the X35 make it look like the Batwing.

At the moment, two prototype designs are in the works for this ambi-

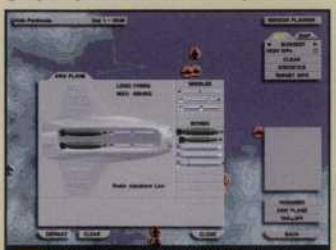
ghter

The point and click simplicity of the waypoint editor will be a welcome sight for armchair generals, giving you the ability to set altitude, set orders for your wingmen before a flight, and select primary and secondary targets.

tious undertaking: the McDonnell Douglas/Boeing X-35 and the Lockheed Martin X-36 (currently referred to in the game as the X-32B and X-35B, respectively). Even though the planes haven't been built yet — in fact, there's no clear winner in the competition, and the Joint Strike Fighter isn't scheduled to go into service until 2007 — Eidos Interactive is ready to explore the future of flight, as it gears up to release *JSF: Joint Strike Fighter* early next year.

Developed by the Norwegian company Interloop, *JSF: Joint Strike Fighter* is an air combat simulation that puts the multi-role capabilities of both prototype contenders to the test. Using the ground-based variants scheduled for the U.S. Air Force, *JSF* divides its time equally between the high-threat air superiority and ground support missions that these fighters of the future will face.

It might seem odd to base an air combat simulation on planes that have yet to take flight, but the designers at Interloop are confident they'll be able to get pretty close to the initial specifications, based on their talks with Boeing and Lockheed. Though they're confident the flight models will be convincing, they're quick to point out that, ultimately, *JSF* is based as much on speculation as it is on actual data. With that in mind, the designers are trying to fit *JSF* neatly between the action-oriented feel of *Jetfighter III* and the more complex demands of a sim like *EF2000*.



Before each flight, you'll be able to equip your plane's internal bay for maximum stealth or add additional arms to the external pylons for maximum payload.

While this "soft sim" philosophy has proven a hard line for other game publishers to walk, *JSF* has a lot of planned features that should attract hard-core air combat nuts as well as action fans. For gamers who just want to jump in and shoot stuff, there are instant-action modes and head-to-head multi-player options with support for as many as eight people, but the real heart of *JSF* is its campaign mode. With four campaigns based on a somewhat dynamic campaign engine, players will have the opportunity to take flight over Afghanistan, Columbia, Korea, and the Kola Peninsula (Russia). The first campaign — Afghanistan — is designed to ease players into the feel of these high-tech planes by pitting the player against inferior hardware and poorly organized defenses. The challenge increases as you move through the Colombian and Korean campaigns, and the final campaign — Kola Peninsula — puts you up against overwhelming numbers of high-tech aircraft.

Though the designers tout a "dynamic campaign engine," it isn't exactly dynamic as most gamers understand the term. A dynamic campaign traditionally models all aspects of a battlefield environment, from the smallest infantry unit to the movements of enemy air power, and as a result enemy forces can be reinforced, retreat, or launch attacks during a battle. While *JSF* doesn't follow this definition to the letter, it *does* allow the player more freedom than linear, mission-based games; using a very

During the battles, you'll have a little help from friendly aircraft such as this C5 and its F-16 escort. *JSF* will have instant-action modes for gamers who want to just get gaming.

Thanks to the graphics engine's high level of detail, expect to see some juicy explosions.

The cockpit follows the F-22 design and is equipped with modular MFDs. You will be able to move between displays with your mouse rather having to use keyboard commands.

intuitive waypoint editor, you have complete freedom to create and edit waypoints, set cruising altitude, and assign primary and secondary targets. And whether you want to knock out the enemy's early warning radar system or take out key facilities like airbases, your decisions do play a part in your success (you can capture and use airbases, for example) — but the overall ground war isn't modeled during the campaign, and the enemy forces are comprised of a fixed number of primary, secondary, and tertiary targets.

During extensive test flights with an early version of the game, we found both the X-35 and X-36 proved to be very well behaved, with very F22-like performance — although with the exception of top speed and some cosmetic differences, it was hard to tell whether there were any significant differences in each plane's performances. Both perform nearly the same (they are, after all, sleek, stealthy, and highly lethal machines), but players will be able to assign wingmen to additional planes like the F-22 or F-16 — which, in the case of the F-16 at least, can compromise an otherwise stealthy approach to a target.

Possibly the most impressive feature of *JSF* is its gorgeous graphics engine. Interestingly, unlike most high-end flight simulators due in the coming year, *JSF* doesn't use 3D acceleration, but still achieves a high level of detail at playable frame rates. Using an algorithm-based engine that generates terrain in real-time, the designers are able to create very detailed environments that look convincing at any altitude.

Flying high above the Kola Peninsula, for example, you'll see lush valleys and vast wooded sections (trees are also generated in real-time). As you go lower, the detail increases. Another advantage to this technique is that it

You'll be able to choose whether you want to start on the runway or in the air thanks to user-friendly options that allow sim fanatics and newcomers to fine tune *JSF* exactly the way they want it.

allows for an "infinite" horizon with none of the jarring terrain pop-up seen in other sims (or hidden by fog effects that limit how far you can see).

An advanced particle system provides realistic weather effects like rain or snow. Supporting resolutions as high as 1280x1024, *JSF*'s visuals are only limited by the power of your CPU. That's where one caveat crops up — it may take one horse of a machine to run the game at its fullest resolution and detail settings. The unoptimized preview version we tried turned in perfectly acceptable frame rates at 512x468 on a Pentium 166 with 32Mb of RAM, even with the terrain detail turned all the way up. In higher resolutions, though, speed becomes a costly

At its highest level of detail, *JSF* delivers breathtaking visuals and exquisite detail, but it may require a horse of a machine.

JSF will feature four campaigns taking you on a whirlwind tour through Afghanistan, Columbia, Korea, and the Kola Peninsula in Russia.

premium. Eidos says it's considering adding support for hardware acceleration, but the publisher cautions it will probably be used to add additional effects to the game rather than boost the frame rate; the terrain generator just isn't designed to work well with 3D hardware.

Although the terrain graphics in *JSF* grab the lion's share of attention, there are some very nice touches in the cockpit as well. Borrowing a page from *EF2000*'s virtual cockpit, the instrumentation for both of *JSF*'s fighters is active and visible during flight, and with a touch of a button you can zoom in directly to any multi-function display (MFD). The Joint Strike Fighter will follow the F-22's glass cockpit example, with several big, modular MFD screens, and Interloop has made the cockpit even more intuitive by allowing the player to control and move between displays with the mouse, rather than the keyboard. When cycling through targets relayed from AWACs or checking your plane's systems en route to the target, you can intuitively switch to an MFD and select the information, rather than fumbling through the manual looking for an arcane keyboard command.

Although the game will use a simplified approach with regard to selecting radar modes and targeting (in other words, don't expect to see anything like the F-22's Low Probability of Intercept radar system), there are a few advanced features in *JSF* that should see service in the real Joint Strike Fighter. One such feature is the proposed terrain overlay system, which uses satellite data to display 3D contours of the landscape, providing the pilot with a clear view of the terrain, even in low visibility situations.

It'll be a while before we actually see which JSF prototype makes the cut and goes into production — and it'll be years before the winner goes into service — but in the simulation, at least, *JSF: Joint Strike Fighter* makes a strong case for both.

PCG

THE ONLY HOPE FOR THE FUTURE LIES 3,700 YEARS IN THE PAST.

THE JOURNEYMAN PROJECT 3: LEGACY OF TIME

Your mission: Embark on a journey of discovery paramount to earth's survival.
Your destination: The lost worlds of Shangri-La, El Dorado and Atlantis.
Your vehicle: *Legacy of Time*, a new CD-ROM adventure coming in December.

RED ORB ENTERTAINMENT

PRESTO STUDIOS

www.JourneymanProject3.com

The Journeyman Project and Presto Studios are registered trademarks of Presto Studios, Inc. Legacy of Time and Red Orb Entertainment are trademarks of Broderbund Software, Inc.

ACTIVISION.
SOMETHING MONUMENTAL
HAS HAPPENED TO
REAL-TIME STRATEGY.

DARK REIGN™

THE FUTURE OF WAR

MULTIPLAYER SUPREMACY

Wage unrelenting Internet battles over Activision's free gaming service.

UNSURPASSED ARTIFICIAL INTELLIGENCE

Confront responsive AI which detects and adjusts intelligently to your tactics.

REVOLUTIONARY CONSTRUCTION KIT

Create unique maps and missions with the easy-to-use Construction Kit.

ENTER THE NEW REIGN OF POWER THIS SEPTEMBER.

AURAN

www.activision.com

Activision is a registered trademark and Dark Reign: The Future of War is a trademark of Activision, Inc. © 1997 Activision, Inc. All rights reserved. All other trademarks and trade names are the properties of their respective owners.

Product Information Number 98

The Journeyman P

Presto Studios makes its return to the Journeyman Universe

Combining a finely crafted story with unique character interaction and well-integrated puzzles, *The Journeyman Project 3* should please both long-time fans and newbies.

— Colin Williamson

FYI. FOR YOUR INFORMATION

Game: The Journeyman Project 3: Legacy of Time
Developer: Presto Studios
Publisher: Red Orb Entertainment, 500 Redwood Blvd., Novato, CA 94948 *www.redorb.com*
Projected Price: TBA
Percentage Complete: 90%

In a nutshell:

This is the third time-travelling epic in the Journeyman Project series, with an abundance of adventuring through the ancient cities of Atlantis, El Dorado, and Shangri-La.

What's so special?

Brought together on four CDs, *Journeyman Project 3* allows you to assume the appearance of any character you meet throughout the game, and introduces a slick, 360-degree viewing mode through SGI-quality environments.

Why should I care?

The Journeyman Project games have amassed a cult following, thanks to their massive environments and intriguing storylines — and *JP3* takes immersion one step further through the use of the new "Chameleon Suit."

And when's it coming out?

First quarter, 1998

When it was first released on the Macintosh, *The Journeyman Project* was one of the premiere CD-ROM puzzle/adventure titles. Unlike *Myst*, *The Journeyman Project* actually offered a meaty story to back up those pretty pictures, and in turn won a lot of devoted fans. The sequel, *Buried in Time*, was an admirable follow-up, continuing the unique back-story while offering even more technical zing. But now it's time to surf back into the timestream and re-assume the role of Gage Blackwood of the Temporal Security Agency in *The Journeyman Project 3: Legacy of Time*.

In *Buried in Time*, your character had been framed for crimes he didn't commit by coworker Agent 3. You spent much of the game gathering evidence that would clear your name, and at the end, there was a final showdown between you and Agent 3. With some quick thinking on your part, you managed to infect her timesuit with a virus, and she was sent spinning back to be lost in the timestream forever — or so it seemed.

This unfortunate mishap has shut down the Temporal Security Agency for good, leaving you without a timesuit. News arrives that Agent 3 is still alive and has discovered three forgotten cities in the past that were destroyed by a mysterious alien race. Springing into action, you learn from an engineer that a new, untested prototype suit called the Chameleon is available, so you head out to find Agent 3 while checking out the three cities.

Your journey to the past is important in stopping an alien invasion of Earth.

The Chameleon doesn't just allow you to travel through time — it also lets you assume the appearance of any character you've met so far. "With *Buried in Time*, people loved the whole aspect of time travel, and going into other people's cultures," says Steve Schreck, producer at Red Orb Entertainment. "But they kept saying they wanted to *interact* with the characters, as opposed to cloaking every time every time they saw someone. One of the cool things we've done with this game is integrating a time suit with the story, and giving the players the ability to take on guises from native cultures."

As the story progresses, you discover that the three destroyed cities were none other than the legendary Atlantis, El Dorado, and Shangri-La. At first, you visit the ruins of the cities to scan for clues, so that you can travel back through history to the day before their destruction. While you puzzle over why they were obliter-

For the third title in the Journeyman Project series, Presto Studios has reworked the game engine to provide even more interaction and detailed graphics than its previous efforts.

roject 3

While you are busy checking out ancient cities, aliens are racing toward Earth — and it's not going to be a friendly visit.

ated, there's another big problem back in the present day — the aliens are headed back to Earth, and they're not interested in tea and truffles. It's a race against — and through! — time itself, to discover *what* the aliens were after, and figure out the "Legacy of Time" by collecting remnants scattered through the three cities.

The size of the gaming world will be on par with *Buried in Time*, and the hope is that *JP3* will appeal to beginner and expert players alike. "We really want to give the player a sense of progression," says Schreck. "One of the things *Buried in Time* was acknowledged for — and a lot of people panned it for — was the fact that it was so open-ended, and you didn't get a sense of progression. We're really trying hard to methodically get the player into the game, and then open up a broader-based world to the hard-core gamers. You'll feel rewarded for sticking with it, and you'll know when things are going right. If you play for five hours, you're not going to wonder, 'have I done anything?'"

JP3 will contain more than five hundred "nodes," or stopping places, within the gaming world. These nodes allow you to interact with characters and objects, or spin your view around in 360 degrees, giving the player a feeling of freedom. "We've taken the incredible graphics that Presto is always doing and put them into a realistic, rotating environment, while having little loss of integrity with the graphics," says Schreck. "We were always questioning exactly what we could achieve, and Presto was nervous about losing visual quality. Fortunately, we've been jumping up and down with the level of quality we've achieved, and there's nothing else like it."

During Agent 5's time-travelling exploits, you'll encounter primitive cultures.

There are around twenty characters to talk with — and since the Chameleon suit can create the appearance of multiple personas, there will be different reactions for each doppelganger "You can interact with people as any character you meet in the game," says Greg Sellers, producer for Presto Studios. "In Atlantis, there are eight characters in the world, so you can talk to them as seven different people. We can set up relationships with people within these worlds — some might be brother and sister, or some might be enemies — you could be talking to a stranger, and little do you know that you're his worst adversary! If you find the right combination, you could get a clue to solve a puzzle."

As for the puzzles, the most difficult development hurdle was getting them to mesh with the storyline. "We feel that if the puzzles aren't integrated into the world, it's not gonna be a good game," says Sellers. "All the puzzles are environmental-based games. It's not like you're playing a game of chess, and then a door across the hall opens. A lot of people can make good puzzles, and a lot of people make good stories. I haven't seen many people put the two together — but we're doing it in a way that makes it the number-one selling point for this game."

JP3 will contain some tougher puzzles, but you'll always have help from Arthur, an AI creature who hangs around on the inside of your time suit and gives you advice. If you like, Arthur will give you hints that can get you through hairier situations. "It's a neat mechanism, since you have a companion who travels along with you, experiences everything you're experiencing, and is an aid in solving puzzles," says Sellers. Schreck agrees. "Arthur is one of those characters where you love him, or you don't like him very much," he says. "If you love him, you can get more than you ever dreamed of — and if you don't, we have an option to mute him."

Meanwhile, cautious gamers can breathe a sigh of relief before playing *JP3* — the aspect of dying has been completely removed. "It was more of a design issue," says Schreck. "People who are playing an adventure game aren't ready to be in an action-oriented situation — you don't want to continuously die. You don't want people to be scared of death, so they can do things that are out of the ordinary."

Though past knowledge of the first two Journeyman games isn't required, followers of the series will be pleased, says Shreck. "Players of the first Journeyman games will get a sense of coming full circle," he says. "They'll see things other people won't see. We have a sequence where you get to meet Elliot Sinclair, the father of time travel, and there's a lot of underlying meaning to it. Previous players will get a lot more out of it — but a new player will get the information they need, and perfectly understand how to move forward. That's something we really strove to get in the story."

Remember some of the, uh, *questionable* acting in the first two games? They're history. "We had always found local actors or our friends to act so we could get the project done," says Sellers. "Broderbund told us to solve that problem, so we went through a professional casting agency and spent a month casting the 26 roles in the game. It was great to work with people on-set who were experienced and professional, rather than trying to get one good take out of everybody. Digital video hasn't been the most well-received thing in the past, and the way we're working it into the storyline is necessary. There's a feeling of having a character talking to you, rather than having a person acting *with* you. We have some great talent to work with."

When you get right down to it, Presto's main goal is to keep you playing throughout the game. "We want to encourage people to make it all the way through the game," says Sellers. "If they don't finish it, it's like a person walking out halfway through a movie — it's not satisfying for the people who developed it if it wasn't enticing enough for people to stay and experience it. The key is to get people stuck in their chair." PCG

The word is out.

Your custom-designed hellhole

Lovely gathering of trespassers

Heroes, meet the welcoming party

MATURE M AGES 17+ CONTENT RATED BY ESRB

BULLFROG™ An Electronic Arts Company

Dungeon Keeper™ is really bad.

"It brings bad things to life"

– Computer Gaming World, ★★★★½

"Wonderfully evil and wickedly addictive"

– PC Gamer, 90%

"Fiendishly good"

– Computer and Net Player, 10/10

"Hell is bubbling out of your PC."

– Happy Puppy

"The bad guys have more fun."

– Newsweek

And we couldn't be more proud.

Product Information Number 137

www.bullfrog.ea.com

© 1997 Bullfrog Productions Inc. Ltd. Bullfrog, the Bullfrog logo and Dungeon Keeper are trademarks or registered trademarks of Bullfrog Productions, Ltd. in the U.S. and other countries. All rights reserved.

Jagged Alliance 2:

A killer game gears up for an even deadlier sequel!

Those bloodthirsty rogues from A.I.M. are back. This time the mission is bigger, the action is hairier, and the enemy is not always... human.

— William R. Trotter

FYI
FOR YOUR INFORMATION

Game: Jagged Alliance 2
Developer: Sirtech Software
Publisher: Sirtech, P.O. Box 245, Ogdensburg, NY 13669 (315) 393-6633
Projected Price: TBA
Percentage Complete: 55%

In a nutshell:

Manage an army of mercenaries and attempt to liberate a country from its evil queen and her deadly minions (human and otherwise). More than a frag-fest, *JA2* requires planning, strategy, and a killer's instincts.

What's so special?

The original *Jagged Alliance* was hailed as one of the best squad-level wargames ever created. This sequel ups the ante: It's vast in scope, rich in detail, offers deeper roleplaying satisfaction, and throws in a surprise sci-fi thriller twist for good measure.

Why should I care?

This combination of mano-a-mano combat and RPG depth gives *JA2* a unique flavor. It promises to be one of 1998's most imaginative games. No one who fell under the spell of the original will want to miss it.

And when's it coming out?

Spring 1998

"Bugs, Mr. Rico! Zillions of 'em!" A new breed of enemy awaits in *JA2*.

When *Jagged Alliance* arrived on my desk back in May 1995, my first reaction was: "Oh, no, not another hire-the-mercs game!"

Nonetheless, I was intrigued by the fact that *JA* was a Sirtech game. Long famed for its *Wizardry* roleplaying series (Volume 8 is now in preparation and it looks marvelous), Sirtech has been turning out first-rate games since 1981, and, even in 1995, it was one of the last independent, family-owned software companies (it may now indeed be the last of its kind). Obviously, *Jagged Alliance* was a real departure from the company's usual fare.

I loaded the game, then, with mixed feelings... and proceeded to play for six hours straight. And kept on playing for weeks. What hooked me was the gritty, riveting simulation of squad-level combat combined with the remarkably convincing personalities of the characters (skillfully delineated by pungent bits of dialog that conveyed each merc's attitude, morale, enthusiasm, and I.Q.). This exquisite balance between action, strategy, and roleplaying created a truly immersive gaming-gestalt. *JA* won plaudits from the critics and became the best-selling non-*Wizardry* title in Sirtech's history.

Last year, a semi-sequel appeared called *Deadly Games*. It, too, sold very well. Why, I wondered, is the *third* game going to be called *Jagged Alliance "Two"*? Producer Ian Currie explains it this way: "By 1996, there was suddenly this huge emerging market clamoring for a multi-player version of *JA*. *Deadly Games* was produced in response to that demand, and as such, it was hugely successful," he says. "But it was basically a multi-player revision of the original game and, for some reason, the multi-player mode made it seem more linear than the original *JA*, and that non-linearity was one of the things solo players loved the most. So we waited until we had a totally new, non-linear product to call *Jagged Alliance 2*."

Shawn Lyng, the writer responsible for all those tangy sound-bites in the original game, says, "We've taken away *nothing* that was popular in the first game, but we've added *so much* great new stuff that it's going to blow your mind!"

So what has been added?

Scope, for one thing. *JA2* will be a huge game. Instead of conquering one tropical island, you'll have to liberate an entire country named Arulco. Instead of 60 sectors, the gameworld will contain 200 and will boast varied terrain: rivers, mountains, swamps, deserts — and ever-changing weather. Arulco will have a fully functioning transportation network of roads, railroads, and air fields, thus introducing totally new strategic possibilities. The gaming environment runs on a 24-hour clock and Arulco's inhabitants go about their business until and unless the player's actions have an impact.

The back story is strong: Enrico Chivildari, the well-intentioned Prince of Arulco, marries a beautiful but evil woman, Deidranna. Once ensconced in the royal family, Deidranna makes her move: She kills Enrico's father, frames

The new graphics engine and isometric perspective of *JA2* should please fans of the original with even more detailed depictions of combat.

Feeding Grounds

The jungle environments of *JA2* show the impressive detail at work in the game.

In *Jagged Alliance 2*, the scope of the game has taken a larger turn as you campaign against the Queen's forces above ground and an army of flesh-eating creatures underground.

Enrico for the murder, throws him in jail, and rules Arulco with an iron hand, ruthlessly exploiting its mineral wealth and hiring an army of thugs to terrorize the populace while trying to convince the people that Enrico is the real villain behind their miseries.

A small, weak, guerrilla movement forms in the back-country. Besotted with power, Deidranna assumes rulership openly and hands Enrico over to the rebels, figuring they'll kill him. But they don't. Instead, they see him as the only leader who can command a real liberation movement. They help Enrico escape into exile, and Enrico, in effect, hires you to manage the mercenary army that will try to depose the evil queen.

A bigger challenge requires a bigger army, and in *Jagged Alliance 2* you can hire a core force of up to 20 mercenaries. Only six can be actively controlled at one time, but the extra soldiers allow you to rotate injured or exhausted troops for rest or medical treatment without weakening your active-duty force.

You can leave any merc "on assignment" anywhere in the country — he or she can repair equipment, doctor the sick, or train local self-defense forces — and you can activate that person instantly if the need arises.

When you first land on Arulco, the queen's army is thinly-spread — just token garrisons in the outlying towns. But if your rebellion gains sufficient strength, Deidranna begins to assemble a bigger, better-equipped force and gradually moves it out from her capital to reclaim liberated sectors. Since her troops travel by road, rail, and light aircraft, you'll need to consider strategic choke-points that can be sabotaged or defended. Eventually, at the game's climax, you'll be facing tanks as well as infantry.

Obviously, by that time, you'll need something heavier than shotguns. Currie and Lyng have included many more weapons than were available in the original. "We're not going to make you start off with rusty .38s this time — and you won't have to scrounge in the bushes to find a discarded shotgun," Currie says. "There are arms dealers on Arulco who'll buy, sell, or trade. And there are a few non-player characters who are scientists capable of developing exotic new weapons. But since the queen's paying them well for their expertise, you'll first have to persuade them to come over to your side."

Lyng is very proud of the expanded NPC element in *Jagged Alliance 2*: "We wanted to avoid those tedious lists of questions you get in some RPGs — you know, where you have to go through every possible topic to make sure you don't miss some little clue," he says. "Our approach is direct: There are just four basic ways to interact with an NPC, ranging from back-slapping friendliness to open intimidation."

> **"We've taken away *nothing* that was popular in the first game, but we've added *so much* great new stuff that it's going to blow your mind!"**
>
> — SHAWN LYNG, WRITER, *JAGGED ALLIANCE 2*

Each merc now has a "Leadership" rating, so you can select the best spokesperson for each encounter. To succeed, you need to cultivate popular support, and every NPC you encounter will have an evolving opinion of your cause. Individual mercs can become legends of valor and trustworthiness, or become known as brutes — and those reputations influence public opinion and cooperation, as does word of your military successes and failures.

"It's even deeper than that," says Currie. "Say you encounter an NPC who knows a *lot* about the mines in your area, but doesn't know zip about soldiering. How do you handle him? Do you just hire him as a guide and hope he doesn't get killed on his first mission? Or do you take the time to train him so he's also valuable in a fight? Remember: The clock is ticking, and every day you're inactive means another day for the enemy to grow stronger. And once you've converted an NPC to your side, you can leave him, under orders, anywhere in the country, then jump to him instantly when he's needed."

Has Sirtech succumbed to the real-time fetish this time out? Currie and Lyng both confess to being turn-based traditionalists. "This is squad-level warfare.

With a sophisticated AI that controls the behavior of non-player controlled units, the addition of a real-time gameplay option in *JA2* is more than a gimmick tacked on to the turn-based game.

USED OR NEW?

In the violent world of *Jagged Alliance*, the biggest and most established source of mercenaries is still A.I.M. (Association of International Mercenaries), which has now gone high-tech. To examine the roster of possible hires, the player uses a laptop computer to access (what else?) the A.I.M. website. The corporation has also gotten more sophisticated in its contractual negotiating methods.

All contracts must be paid in full in advance. You can hire a merc for a one-day "test drive," if you want, or for one week, or for two. Only if you sign a two-week contract does the merc come with a "guarantee," and only soldiers hired for two-week periods can be re-hired automatically (so the better they get, the more they cost you). You also have to pay a refundable "medical deposit," the size of which depends on how good the merc is. You get the money back if he or she survives the contract period; you don't if the merc gets killed. Pretty tough contracts, huh?

But now, there's a new corporation that offers more affordable mercs, on easier terms, called M.E.R.C. (More Economical Recruiting Center). If you're strapped for cash, you can shop with them — but doing so is a bit like picking a used car at random. You may get something dependable, or you may get a lemon that breaks down three blocks from the dealership. And you can complain all you want to, but M.E.R.C.'s mercs don't come with a warranty — you take 'em "as-is" and hope for the best.

Besides adding an amusing and provocative twist to the hiring process, this new feature has the added effect of forcing you to rely more on NPCs to fill up your ranks, at least until you have the bucks to buy the best.

The scale is simply wrong for a *Command and Conquer* type set-up, where if you lose a bunch of units, you just crank out another bunch of units," Currie says. "But in *JA2*, you're dealing with *individuals*, who represent a considerable investment of cash, and who get better the longer they survive. They are *not* expendable, and a conventional real-time engine would result in bloody mayhem, not to mention an unplayable game."

But fear not, real-timers: You will be catered to. If you elect to play *JA2* in real-time, you still control only one active merc at a time, but you can set the AI parameters for the others, so they'll act in concert with your plan of action. You can, for example, order one non-active character to do nothing unless ordered to. Another might be programmed to fire at the most logical target that appears; another, to run for cover if fired upon and return fire if possible. Yet another might be set to give medical aid to anyone who gets wounded.

There's even a multiplayer real-time mode that allows each participating person to control a single character. This conjures visions of dastardly deeds, treachery, or, that scourge of online gaming, the maverick berserker who suddenly turns on his own companions and guns them down. "We will supply the environment," Shawn says, laughing. "Once you're in it, you may do as you please!"

Sure to be the most controversial new feature in *JA2* is the "giant bug" sci-fi twist it takes in mid-game. Seems those mine shafts scattered around Arulco (the source of the queen's wealth) are home to a loathsome race of creatures who love to eat flesh and who only come out at night. Until your rebellion started, the critters were kept under control because the queen kept them well-fed with the bodies of her enemies. Now that their food supply has been cut off, however, they're starting to come out from underground and prey upon the local citizens.

"We realize we're running a risk of alienating some players who take *JA* very seriously as a tactical wargame, but we wanted to add a new and surprising twist," Currie says. "We think players will enjoy figuring out the proper strategy for coping with the creatures — other than brute force, which is a very tough and time-consuming way to kill them off. There's something about the way these critters tick than can give you an edge over them; you just have to figure out what that is."

Introducing the giant bugs also introduces a clever new element of strategy. Those mines, it seems, are not entirely played-out: They contain gold and other valuable assets, so cleaning out the bugs advances your campaign. But while you're underground fighting the cast of *Them!*, the queen's army may move in and regain control of the sector above you. Do you fend off the human enemies first (and give the creatures more time to multiply), or do you play Orkin Man first and deal with the human foes later? Or do you split your forces and try to do both? *Can* you assemble enough manpower and firepower in the threatened sector to do both?

Speaking as one who "takes *JA* very seriously as a tactical wargame," I don't mind the giant bugs one bit. They *do* add a novel twist to the sequel and besides... they look sooo cool!

And so do the rest of the graphics. *JA2* sports a new 16-bit, hi-res engine, a *Diablo*-like isometric viewpoint, dynamic lighting, and very impressive animation.

I watched several battle demos and was captivated by the improvements. Characters now crawl, run, swim, crouch, and leap with eerie realism. Each figure moves according to his or her body type: muscles flex, faces contort, small, agile people move with nervous energy, while big-bruiser types lumber along like NFL linemen. Skin tones and features are finely textured, adding to the player's sense of personal identification with his or her team.

As you move deeper into the mines, you'll encounter an army of man-eating bugs.

As for the bang-bang — it looks terrific. Mercs armed with automatic weapons can now fire bursts in player-specified arcs, or lay down suppressive fire at any area thought to conceal an enemy. All kinds of ammo are available, all bullet velocities and penetration-factors are realistically modeled. I witnessed a merc take a head-shot at close range with a hollow-point slug, and the results were grossly convincing.

Jagged Alliance 2 seems to be an ideal sequel: Everything good about the original game has been retained, even strengthened, and the new features add tremendous depth and lots of new strategic options.

PCG

LOS ANGELES NOVEMBER, 2019

Westwood's own True Color Emulation delivers game play and break through lighting and special affects in full screen (640 x 480).

Real-Time camera movements DURING game play, and Real Time animation with **Westwood's** own optical motion capture technology.

Over 70 Real-Time virtual actors pursuing their own agendas that effect your final outcome each time you play.

Blade Runner © 1982 Blade Runner Partnership. Blade Runner™ Blade Runner Partnership. © 1997 Blade Runner/Westwood Partnership
©1997 Westwood Studios, Inc. Westwood Studios is a registered trademark of Westwood Studios, Inc.

BLADE RUNNER™

WWW.BLADERUNNER.COM

The First Real-Time 3D Adventure

Armed with your investigative skills and the tools of a 21st century *BLADE RUNNER*™, you'll be immersed in a futuristic world that revolutionizes computer gaming, and tests your ability to survive in one of the richest and most atmospheric games ever created for the PC.

For Windows® 95

COMING NOVEMBER 1997 TO RETAILERS EVERYWHERE
OR CALL 1-800-874-4607

Westwood™ STUDIOS
www.westwood.com

Product Information Number 361

Redline

Beyond Games resurrects the sleeper hit *Battle Wheels*

Lose the seat belts and get ready for *Redline*, a white-knuckle festival of burning rubber and hot lead that will forever raise the stakes for the auto-combat genre.

— Colin Williamson

Players will be able to get out of their cars and explore the environment on foot. Trying to carjack another player's vehicle is always a good idea.

FYI
FOR YOUR INFORMATION

Game: Redline
Developer: Beyond Games
Publisher: Accolade, 5300 Stevens Creek Blvd., Suite 500, San Jose, CA 95129 (800) 245-7744
Projected Price: TBA
Percentage Complete: 80%

In a nutshell:
Redline mixes the first-person shoot-'em-up with the driving sim, and tosses in liberal amounts of destruction, attitude — and a darned good story.

What's so special?
Not only does *Redline* take advantage of the hottest 3D hardware, but the gameplay promises to be stellar, with a near-perfect physics and collision engine.

Why should I care?
This is the sequel to one of the most insanely fun — and overlooked — multi-player games ever: *Battle Wheels* on the handheld Atari Lynx.

And when's it coming out?
Early 1998

Anyone familiar with the Atari Lynx will fondly reminisce about a game called *Battle Wheels* created by garage-band developer Beyond Games. Serving as the ill-fated Lynx's sole "killer app," *Battle Wheels* mixed white-knuckle vehicular combat with the resource management and customization of pen-and-paper games like *Car Wars*. *Battle Wheels* contained hot-and-heavy multi-player deathmatches (before *Doom*, even) and maintains a cult following to this day. Using a wide variety of weapons, *Battle Wheels* had you blasting the hell out of your opponents, while picking up money bags in order to upgrade your car for the next mission. However, grabbing those power-ups wasn't done by simply driving over them — you actually had to *get out of the car*, making yourself vulnerable to being squashed by oncoming vehicles — or, even worse, losing your car to a carjacker. The resulting gameplay was unpredictable, aggressive, and totally dynamite. And now, over five years later, Beyond Games is convinced that 3D gaming technology has reached the appropriate plateau for a PC conversion. "We've been working on this for years," says Beyond Games vice-president Clark Stacey. "The engine and game design have been in our heads for a long time — we've been waiting for the hardware to catch up with our ideas."

The futuristic architecture of *Redline* may have you doing a few double-takes.

Here's the setup: It's the far future, and mankind is beginning to make the discovery that technologies developed in the far past have been suppressed for years. "All these crackpot scientists had it going, but they were deliberately shut down by The Man, so to speak," says

"Without hesitation, I can say that we have the most sophisticated collision engine in the gaming world."

— CLARK STACEY, VICE-PRESIDENT, BEYOND GAMES

The amount of detail present on every polygon surface is nothing short of astounding. Your final goal lies atop this tower.

Stacey. "So people start resurrecting the inventions, and discover that anyone can create free energy for the human race — you can have your own reactor in your back yard." Eventually, everyone starts scrambling back to the history books to find old inventions. The governments, starting to panic, do the same, and in turn, manage to screw up the planet by sending it into environmental cataclysms. In the wake of such destruction, the big corporations build domed cities for their own safety, while *Road Warrior*-type outsiders hang out in the wastelands. For their entertainment, the rich construct giant arenas for the game of *Battle Wheels*, a game where the outsiders destroy each other using armored vehicles.

"The whole look of the game is 'Victorian Technology in the future,'" says Stacey. "It's sort of Jules Verne. It gives the world a rich look — some gangs have vehicles that were assembled from these old, shiny parts." Your goal is to join one of the two gangs, and rise in rank to become their leader. Some of the gangs have different motives. While one might have a utopian view on society and wish to be self-sufficient, the other might be in it for the money, and the safety that living in the domes brings them.

With destructable walls and objects, getting through this gate may be as simple as ramming your way through it — or is there another way around?

Redline will contain 10 to 15 action-fraught missions that bring the story together. "With our mission structure, the big thing is that you're always bouncing your character around, depending on how you like to play," Stacey says. "If you like to stand around on the outside of the fray, and poach off long-range shots, you'll stick to different paths, and that's going to determine how your character develops. It's almost got some RPG elements. The beauty to this is that once you've played through one of the gang's odysseys, you have *another* gang with a new character you can build."

The *Redline* engine has been internally dubbed "Dadaelus," named after the mythological character who created wings in order to escape a maze. "It's symbolic, since all the first-person shooter games are in mazes, and since you can't throw too many polygons at the engine at one time. The first thing that people notice about *Redline* is that you have this *massive* line of sight. And in most games, you have *one* guy to keep track of," Stacey says. "In *Redline*, you have a guy who can get in and out of a car, plus the car has all of its physics and collisions to deal with, so it becomes a computational nightmare." The early version of *Redline* that we saw was extraordinary, with objects and scenery located miles away in the distance, without an ounce of the dreaded scenery pop-in. Monolithic towers and skeletal supports reach up into the sky, and bridges and ramps provide access to higher ground.

Daedelus contains some jaw-dropping new features that greatly add to the realism, intensifying the gameplay experience. "We're really excited about the sophisticated destructible geome-

With the ability to hop in and out of vehicles and roam around the environment, *Redline* should make for some very interesting deathmatches.

Sure, you can stay on this highway and blast away at your opponents if you want — but we bet it's a lot more fun to stray from the path for some off-road action.

try," says Stacey. "If your opponent is swerving through some pillars and shooting at you, it's possible to knock out one of those pillars, and bring a wall crashing down on him." And, since you're never actually driving on a set track, the freedom of movement is liberating — one of the maps is based on a futuristic highway, and you can blast out embankments and go driving off the road. "Level design becomes a lot more difficult when you don't have the traditional restrictions," Stacey explains.

You won't be ventilating opponents from your vehicle's air-conditioned cockpit the whole game long — there are some missions where you'll start out on foot and have to steal a car. Though being a squishy pedestrian decreases your chances for survival, the Beyond Games team is adding some weapons that give footbound warriors a fighting chance (yes, the paintball gun from the Lynx version will be included). If you're in the driver's seat, picking off fellow humans will be as satisfying as ever, with an audible rumble as you drive over your opponent's smashed figure.

"The best thing about the game is the way that the vehicles handle," says Stacey. "We have a really cool powerslide implementation. You go hauling ass down the road, hit the parking brake key, and you go into a controlled powerslide, where you can strafe your opponents. It's a gas." And if you're a fan of the jumping-based courses in *Interstate 76*, you'll love this — different areas of the map will be accessible only by jumps, and the destructible geometry means you can blast out a wall and use it as a ramp.

Adding to *Redline*'s intensity will be the dialog. At its E3 showing, people got a kick out of *Redline*'s hilarious placeholder voice acting, performed by Stacey doing his best Snake Plisken routine. "I *will* be doing some of the acting, and I *will* be using that voice," he says, laughing. "We have half a dozen big names lined up for the game, but we're going to make sure they're *good* — we're not going to put the name there just to have it on the box. There's quite a bit of vocal scripting, which will talk you through the missions and give you more of a feel for your gang." The ambient musical track will be handled by Tommy Tellarico of *Earthworm Jim* fame.

Once you've managed to get underneath this superhighway, feel free to knock out these metal supports for sure-fire fun.

Redline contains stunning graphics like these flaming towers. Is it just us, or does that cathedral in the distance kinda look like Notre Dame?

Becoming the leader of your gang will require some stealth moves on your part.

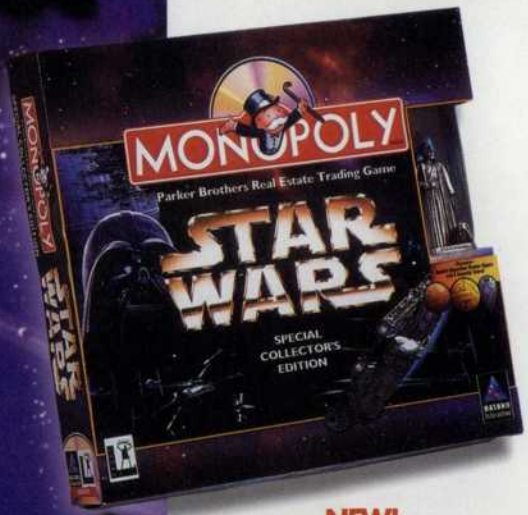
The selection of vehicles will be nicely varied, with battle vans, armored *Road Warrior*-type muscle cars, and Hummer-style offroaders. Car selection will be crucial to the mission's success, since some missions will take place on sand dunes, and others on pavement. Each vehicle will contain a deadly armament of hard-core weapons. "*Turok* pushed the envelope in terms of cool visuals centered around your weapon," says Stacey. "You want to give the player a feeling of having a *big, damn gun* in their hands, so we've pushed the envelope in terms of that. We have mines, missile configurations, harpoons, and plenty of stuff we're not talking about yet." Owners of force-feedback joysticks will be even more immersed — *Redline* will support DirectInput-compatible devices for some stick-wrasslin' action.

Beyond Games is working closely with 3Dfx, PowerVR, and Rendition to squeeze peak performance out of each card. *Redline* is likely to include a specific version for each of the major 3D boards written in their own native API, out of the box. *Redline* will support just about every cool 3D board trick you can think of, including multiple colored light sources, a la *Quake II*. The minimum system is a P133, with a 3D card comparable to the 3Dfx or PowerVR. Neither card should have any significant advantage over the other, since the 3Dfx and PCX2 chipsets will deliver near-identical graphics. "Once we implement both APIs, they'll be equivalent," says Stacey.

The original *Battle Wheels* was one of the most enjoyable multi-player games ever made — and that was on a three-and-a-half by two-inch screen. *Redline* takes the competitive action into the next decade, with 16-player Internet play. "Our model for Internet play is that we want to bring the whole character-building process to the online world. We set up some dedicated tournament sites, you log on, you have a character that you're building up, and advance through the ranks — and then you can form your own gang," Stacey says. "You can come up with your own vehicle textures and insignias, and your own backstory — and as long as it fits in with the *Redline* world, it becomes part of the registered online tournament play. We also want to set up *Capture the Flag*-type games, drag-racing games — a few surprises for the online players." And shortly after *Redline* hits the shelves, the map editor will be released to the general public.

Though the auto-combat genre has already seen games like *Interstate 76*, *Twisted Metal*, and *Carmageddon*, *Redline* should be the game that really grabs the genre by the horns. "The physics model is so much more refined and robust, the feel of the world is so real and eye-popping, the differences are night and day," says Stacey. "It's difficult for other games, since they're using physics and collision engines that weren't designed for driving games — and they just fall apart when you toss complex geometry at them. Without hesitation, I can say that we have the most sophisticated collision engine in the gaming world." *Redline* is set for a first-quarter release, so you better limber up those thumbs and get ready for some hard-core pedestrian poaching.

PCG



When buying galactic real estate, remember three key words.

Location. Location. Location.

NEW!
The Monopoly Star Wars Special Collector's Edition. Now exclusively at Wal-Mart.

The world's most popular board game has joined forces with Wal-Mart and the #1 movie trilogy of all time to bring you the Monopoly Star Wars Special Collector's Edition. But in order to find this one-of-a-kind edition of the galactic game of real estate, you have to start with the right location. Because it's only available at Wal-Mart.

With Monopoly Star Wars, you play just like the classic version, except on your PC. And instead of the race car, Park Place and Boardwalk, one of eight full-motion 3-D Star Wars characters guide you to galactic properties like Endor and Dagobah, where you build starports and view classic movie clips from the Star Wars Trilogy.

Hosted by Anthony Daniels, the original C3PO, this special edition also comes with three limited edition Imperial coins, a collectible pewter figure of Anakin Skywalker, and a letter of authenticity.

And all the excitement begins in Wal-Mart's newly upgraded computer department. With an expanded selection of the newest and hottest computer software and games at every day low prices, you're sure to agree, location is everything.

Joel,
Wal-Mart associate

WAL★MART®
ALWAYS LOW PRICES. ALWAYS WAL-MART.
Always

© 1997 WAL-MART
http://www.wal-mart.com

Product Information Number 376

"Kick Ass"
(Gasp! Well...I never!)

The editors of *boot* magazine never did, either.

Never saw a machine that even came close to the Micron™ Millennia® XRU, that is.

That's why *boot* gave the Millennia XRU with Fusion 3D™ its highest rating possible, an ass-kicking 10 out of 10. There's no better way to describe it. And we've taken it one step further with our new Millennia XRU. Its rabid speed, performance and power will blow you away, thanks to our raging Fusion 3D option with DVD, 2D and 3D video cards, and a speaker system that'll hurl your boots back to the cow they came from.

Buy a Millennia with Fusion 3D, and you'll also get our wild-eyed multimedia gaming bundle, and you'll pick one of three pre-installed software bundles.

The editors of *boot* called the Millennia XRU with Fusion 3D the closest thing to their dream machine you can buy. Strong language? We deserve every word.

Call or visit our Web site today.

MICRON MILLENNIA MME

Intel 233MHz Pentium® processor with MMX™ technology
64MB SDRAM
6.4GB Ultra ATA hard drive
24X EIDE variable speed CD-ROM
17" Micron 700FGx, .26dp (16" display)

STANDARD FEATURES

512KB pipeline burst cache, flash BIOS
Integrated 100MB Iomega Zip drive, 3.5" floppy drive
32 voice wavetable stereo sound with speakers
USR Sportster 56K x2 data/fax modem*
PCI 64-bit 3D video, MPEG, 4MB EDO DRAM
Microsoft® IntelliMouse® USB Connections
Microsoft Windows® 95 and MS® Plus!
Microsoft Office 97 Small Business Edition
Choice of Micron Software Solutions Pak
5-yr/3-yr Micron Power® limited warranty

FUSION 3D OPTION PAK **ADD $699**

DVD-ROM,** DVD software
E4 Cool DVD PCI decoder card: 6 channel AC-3 to 2 channel out capability, SPDIF output (digital audio out)
AWE 64 PCI sound card
Cambridge SoundWorks/MicroWorks- 2 speaker satellite with subwoofer stereo system
Monster 3D graphics card with 4MB memory
Fusion 3D game pak: Mech Warrior 2: Mercenaries 3Dfx version, AH-64D Longbow, U.S. Navy Fighters '97, Command & Conquer, Popular 3Dfx Racing Sim
MS Sidewinder Pro joystick

$2,599

MICRON MILLENNIA XRU

Intel 266MHz Pentium II processor (features MMX technology)
64MB SDRAM
6.4GB Ultra ATA hard drive
24X EIDE variable speed CD-ROM
17" Micron 700FGx, .26dp (16" display)

STANDARD FEATURES

82440LX chipset
512KB internal L2 cache, 2MB BIOS
Integrated 100MB Iomega Zip drive, 3.5" floppy drive
32 voice wavetable stereo sound, Advent 009 speakers with subwoofer
USR Sportster 56K x2 data/fax modem*
Diamond Viper V330 128-bit 3D video with 4MB SGRAM
Microsoft IntelliMouse, USB connections
Microsoft Windows 95 and MS Plus!
Microsoft Office 97 Small Business Edition
Choice of Micron Software Solutions Pak
5-year/3-year Micron Power limited warranty

FUSION 3D OPTION PAK **ADD $549**

DVD-ROM,** DVD software
E4 Cool DVD PCI decoder card: 6 channel AC-3 to 2 channel out capability, SPDIF output (digital audio out)
AWE 64 ISA sound card
Cambridge SoundWorks/MicroWorks- 2 speaker satellite with subwoofer stereo system
Fusion 3D game pak: Mech Warrior 2: Mercenaries 3Dfx version, AH-64D Longbow, U.S. Navy Fighters '97, Command & Conquer, Popular 3Dfx Racing Sim
MS Sidewinder Pro joystick

$3,099

*Maximum transmission speed of up to 56Kbps when downloading data and 33.6Kbps when uploading. However, actual performance is dependent upon numerous factors and observed transfer rates may be less than the maximum potentials. **The CD-ROM drive will be removed upon the purchase of the DVD upgrade.

Call for information on our Software Solution Paks. Other Millennia configurations also available.

MICRON POWER™ WARRANTY

- 5-year limited warranty on microprocessor and main memory
- 3-year limited parts-only system warranty
- 1-, 3- or 3-year optional on-site service agreement for Micron desktop and server systems
- 30 days of free Micron-supplied software support for Micron desktop systems; 3 optional network operating system incident resolutions included for Micron server systems
- 30-day money back policy
- 24-hour technical support

The foregoing is subject to and qualified by Micron's standard limited warranties and terms and conditions of sale. Terms and conditions of sale may vary for specific configurations. Copies of the limited warranties may be obtained on our Web site or by calling Micron.

Micron Sales Hrs: Mon-Fri, 6 am-10 pm, Sat, 7 am-5 pm (MT) • Technical Support Available 24 Hours A Day, 7 Days A Week • Toll free from Mexico: 95-800-708-1755 • Toll free from Canada: 800-708-1758 • Toll free from Puerto Rico: 800-708-1756 • International Sales: 208-893-8970 • International Fax: 208-893-7393

boot KICK ASS! AWARD Millennia XRU

Designed for Microsoft® Windows®95

Call now to order
888-215-6507
www.micronpc.com

MICRON ELECTRONICS™

Configured For Your Life.™

©1997 Micron Electronics, Inc. All rights reserved. Micron Electronics is not responsible for omissions or errors in typography or photography. All purchases are subject to availability. Prices and specifications may be changed without notice; prices do not include shipping and handling and any applicable taxes. 30-day money-back policy does not include return freight and original shipping/handling charges, applies only to Micron brand products and begins from date of shipment. All sales are subject to Micron Electronics' current terms and conditions of sale. Lease prices based on 36-month lease. The Intel Inside Logo and Pentium are registered trademarks and MMX is a trademark of Intel Corporation. Microsoft, Windows, Windows NT and the Windows logo are registered trademarks of Microsoft Corporation. Other product names used in this publication are for identification purposes only and may be trademarks of their respective companies.

iPanzer '44

Finally, a World War Two tank sim with today's technology!

Interactive Magic, the publisher of *iM1A2 Abrams*, turns its talents to the classic era of armored combat and the hellwagons that fought World War Two.

— William R. Trotter

FYI. FOR YOUR INFORMATION

Game: iPanzer '44
Deveoper: Charybdis Enterprises
Publisher: Interactive Magic, P.O. Box 13491, Research Triangle Park, NC 27709 (919) 461-0722
Projected Price: TBA
Percentage Complete: 70%

In a nutshell:

Building on the expertise shown in *iM1A2 Abrams*, I-Magic hopes to publish the definitive simulation of World Two armored combat.

What's so special?

There hasn't been any good first-person sims of Shermans, Panthers, and T-34s in a long, long time. And the game's developers, Charybdis, have the technical chops to do it right.

Why should I care?

This is tank-to-tank combat at its most exciting: Simple but powerful machines, slugging it out at close range on the battlefield. Low-tech, in this case, can be beautiful.

And when's it coming out?

Late 1997

The dense treelines of the Ardennes will be represented by solid walls of impassable growth.

I've often wondered why there have been so few simulations devoted to the classic tanks of World War Two. Sure, the Abrams is a sexy, gadget-packed, ultra-high-tech machine, but wouldn't it be just as much fun to control a sleek Nazi Panther or a rugged Russian T-34?

No fancy read-outs, no computer-guided shell fire — just a gunsight, a steering device, a compass, and a fuel gauge — leaving you much freer to concentrate on out-thinking and out-shooting your enemy at relatively close range. The intensity and the sheer up-close violence have an appeal similar to that of a good prop-driven aerial duel. You can't just loose a round at a tiny dot on the horizon and expect the computer to supply the accuracy — you've gotta get the enemy in your crosshairs and see where those rounds are hitting.

Yet, for all its dramatic potential, WW II-era tank warfare has been strangely ignored by the gaming industry. To be sure, there's the *Steel Panthers* series, but for all their admirable qualities, they're basically top-down tactical battles that play out the same in a 1995 scenario as they do in a 1942 engagement. And then there was a Sherman simulation from the (aptly named) Deadly Games company some four or five years ago, but it came up short in every respect.

This drought may be at an end, as Interactive Magic puts the finishing touches on *iPanzer '44*. Yes, it's built on the *iM1A2 Abrams* engine, but I-Magic says it'll display significant improvements over the much-criticized plain-Jane graphics of that product.

Desktop tankers fresh from campaigning in their Abrams will at first be startled by the Spartan, brute functionality of the tanks' interiors: no computers, no thermal imagers, nothing in fact that does not relate to moving the tank around and firing its guns. In other respects, the interface will be familiar, including the same pull-up menus at the bottom of the screen.

You'll have a choice of playing for the Germans, the Russians, or the Americans; you can fight in the rugged, wooded terrain of northern Europe, or on the plains of Mother Russia. You can command a single tank (Panther, Sherman, or the T34/85), a platoon, or a larger "Kampfgruppe"-type force that could include artillery and air assets, self-propelled guns, half-tracks, towed anti-tank cannon, and infantry.

The simple controls of a WWII tank may be a shock to *iM1A2* veterans.

The cramped driver's station of a T-34 shows what little consideration the Russian tank's designers gave to comfort.

Since the World War Two-era weapons didn't have the range of today's guns, you'll get a much closer look at your enemies before you blow them away.

The commander's view. Binoculars are about as high-tech as it got in WWII.

In the early version I've been tinkering with, the inventory of possible weapons was not fully implemented, but some of the diverse and interesting vehicles under consideration for inclusion in the final game are the spunky American Chafee, the obsolescent but still useful German Mark IV, and the Soviet SU-85 self-propelled gun. All three of the main vehicles will be accurately modeled (down to the Sherman's unfortunate tendency to burst into flames from even a glancing hit), but more interestingly, the armored doctrines of each nation's army will be a major component of both the stand-alone battles and the campaigns.

An American task force, for example, will reflect a true "combined arms" approach; a mixture of Shermans, light tanks, recon vehicles, tank-destroyers, and towed cannon. A German "Kampfgruppe" will typically have a core of Panthers supplemented by MK IV's, Marders, STGIIIs, and Panzergrenadier infantry mounted in half-tracks. Since their tanks had better armor and superior gunsights, they preferred to engage at long range rather than mix it up in a melee, where their enemies' superior numbers canceled out those advantages.

By contrast, the Russians relied on sheer mass applied to a narrow front. Typically, a Soviet company of ten tanks under unified command was simply pointed at a single target and hurled in its direction, supported by as many direct-fire guns as were available.

All three combatants developed armored doctrines that sought to capitalize on the strongest aspects of their technology. In *iPanzer '44*, I-Magic says that these doctrines will be realistically depicted in battle. So if you tire of playing as a Russian commander, you'll get quite a different experience — and have to master quite different tactics — by switching to one of the other two armies represented in the game.

Currently, there are two hefty campaigns planned. I regret to say that one of them is The Battle of the Bulge (again? Wouldn't Normandy have been more balanced and less hackneyed?). But the other, "Operation Bagration," is a T-34s-vs.-Panthers struggle on the wide-open spaces near Minsk. To the best of my knowledge, it's a campaign that's never been simulated before. Interactive Magic is also considering designing mini-campaigns that could be spawned by circumstances developed in the context of the larger campaigns' operations.

Multiple difficulty and realism options, comparable to those found in other I-Magic simulations, will of course be part of the package, as will cooperative or competitive multi-player games via modem, LAN, and Internet.

I saw only a fairly early version of *iPanzer '44*, and one in which the 3D accelerated graphics were not yet implemented — but I had a strong and positive reaction to the look, feel, and ambience of the game. While there's an undeniable thrill in taking control of an F-22 and mastering its long-range potency, there's an even more primal excitement about dog-fighting in a Spad at a range so close you can hear the bullets whump and see the splinters fly.

The same analogy applies to these World War Two tanks: victory or defeat is not so much a matter of technology as it is of tactical skill, good gunnery, and guts.

I-Magic is on the right track with *iPanzer '44*; if this simulation lives up to its full potential, it will be a strong product indeed. And a unique one.

PCG

THE THREE MAIN CONTENDERS

THE T-34

When it was first introduced in combat in late 1941, the T-34 was a nasty shock to the Germans. Its thick, sloped, armor could withstand direct hits from all German anti-tank guns then in service, while its 76mm gun could pierce the armor of any German tank. It was a brute of a machine, with absolutely no concession made to the comfort of its crew. In the words of German General von Mellenthin, who had plenty of first-hand experience on the Russian Front: "The Russian tank designers understood their job thoroughly: they cut out refinements and concentrated on the essentials — gunpower, armor, and cross-country performance." More than 53,000 T-34s were built, and in late 1943, an even more potent model mounting an 85mm main gun began showing up on the front lines. This is the model you'll command in the simulation.

THE SHERMAN

It was robust (its tracks lasted five times longer than those of the Panther before they had to be replaced), and its engine was as reliable as Detroit's engineers could make it. But its low-velocity 75mm gun was no match for the armament of the Panther — or even the upgraded MK- IVs. American tankers could prevail against their German opponents only by outmaneuvering them with superior numbers and shooting at their rear and sides, where the armor was thinner. The Sherman was also prone to catch fire even from a glancing hit. But it proved to be "good enough," and Detroit's assembly lines produced more than 50,000 of them, while the Germans only manufactured 6,000 Panthers altogether.

THE PANTHER

By common agreement, this was the best medium tank of the war. Its designers incorporated the sloped-armor concept of the T-34 and armed it with a high-velocity 75mm cannon of extreme accuracy and penetrating power. It was first introduced in 1943. If the Panther had a weakness, it lay under the hood — its engine and transmission were extremely temperamental and most Panthers spent as much time "in the shop" as they did in battle. But when everything was working right, it could hit 46mph on a road, making it the fastest tank of the war, as well as one of the deadliest.

G.POLICE
EVER BURY THE ONE YOU LOVE IN A MATCH BOX? THAT'S ALL THEY LEFT OF HIS SISTER.
FOR SLATER, EVENING THE SCORE WASN'T VENGEANCE, IT WAS SIMPLE JUSTICE.
WHABOOM
BRAM BRAM BRAM
AND IT WAS TIME FOR THE EXECUTIONER TO DO HIS WORK.
BAROOM
SEE YOU IN HELL!
PSYGNOSIS
PC CD ROM
PlayStation
KIDS TO ADULTS
ESRB
G Police, Psygnosis and the Psygnosis logo are trademarks of Psygnosis, Ltd. ©1997 Psygnosis, Ltd. All rights reserved.

"G Police... thumb-blistering shoot-'em-up gameplay... prepare for the ride of your life." – *PC Gamer*

You are Jeff Slater, 21st Century cop. Fly your Havoc gun ship on 35 missions through 51 of Callisto's domed environments. You have fly-anywhere 360° maneuverability and tons of firepower. Serve & protect.

3-D Accelerator Card Required.
www.gpolice.com

Dark Vengeance

Swashbuckling action with a touch of evil

The stunning visuals of *Dark Vengeance* will grab you, but this combat-driven adventure promises gameplay to back up its good looks.

— Dan Bennett

FYI. FOR YOUR INFORMATION

Game: Dark Vengeance
Category: Action
Developer: Reality Bytes
Publisher: Reality Bytes, One Kendall Square, Building 400, Cambridge, MA 02139
Percent complete: 85%

In a nutshell:

Think of it as *Tomb Raider* in a medieval fantasy setting; it's a third-person 3D adventure with a heavy emphasis on combat.

What's so special?

Beside the gorgeous graphics, you mean? Reality Bytes says you'll be able choose any of five characters — each one with unique qualities that change the way the game plays out.

Why should I care?

If you liked *Tomb Raider* — and if you're intrigued by 3D fighting games but want something with more depth — *Dark Vengeance* may be your game.

And when's it coming out?

"When it's perfect," say the designers.

Dark Vengeance's trademark "swipe trails" show the path of your weapons and the enemies'; a little red means they hit you — a lot of red means they clobbered you.

You've already taken a good look at *Dark Vengeance*'s graphics in the screen shots on these pages, so you don't need to be told that this game's going to be visually impressive. And, let's face it, graphics can only carry a game so far. Around the *PC Gamer* offices, we like to say "Bad graphics can't kill a great game, but great graphics can't save a bad game." (We also like to say "Chicago is a plate of green sofas," so take it with a grain of salt — but we think we have a point with this graphics thing.)

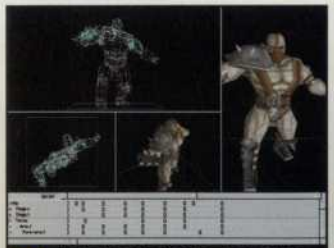
What's encouraging about *Dark Vengeance* is that the developers at Reality Bytes seem to be putting as much thought into the gameplay as the visuals. The way they see it, beautiful graphics are a given in these days of MMX Pentium machines and 3D accelerators — they're a "checkmark," to use an industry term. They know *Dark Vengeance* will have to do something different to distinguish itself from the crowd of 3D action games — something more than just looking pretty.

The differences start with the third-person perspective; the game is played from behind your character, with an over-the-shoulder viewpoint, *Tomb Raider* style. *Dark Vengeance* certainly isn't the first action game to use this perspective, but the designers say the decision was more than a cosmetic one. Since *DV* is first and foremost a fighting game, the developers want the player to have a full view of the on-screen character's surroundings, just as you would in a console-style punch-'em-up.

The game's story is nothing to write home about — it's the usual spiel about an evil wizard and his Dark Elf minions — but the designers say they're more interested in creating a character-based game than anything else. To that end, they've created a range of characters you can choose to play. Gamers can go through *Dark Vengeance* as any of five different heroes, each with his or her own style of fighting and puzzle-solving:

- **NANOC THE GLADIATOR** is a huge brute who's been fighting in the arena since age nine. He's learned to place little value on life, so he likes to charge into the fray with his battle-ax swinging and with no regard for his own safety.

- **JETREL THE WARLOCK** literally lost face when a demon he summoned ripped it right off of his head. Now he's misshapen, swathed in bandages, and generally pissed off. Physically, he's weak, but his powerful spells let him attack from a safe distance.
- **NOCTURNE THE DRUID** is an Elf who has taken it upon herself to set things right in a land besieged by Dark Elves. She's a fair fighter, but she can protect herself and augment her skills with magic.
- **SHA'KAR THE SAVAGE** is *Dark Vengeance*'s archer character, a forest Elf who prefers long-distance combat with a bow. He's out for revenge on the Dark Elves who burned his village and butchered his family.
- **KITE THE TRICKSTER** isn't terribly heroic; she's basically out to learn the Dark Elves' magical secrets for herself. If that means defeating the bad guys, well — that's okay, too. She'll fight if she's cornered, but Kite prefers to outwit her enemies with traps and potions.



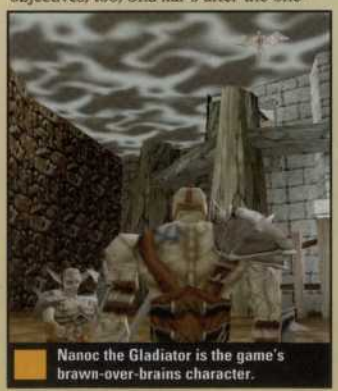
Each character has his unique animations for every weapon he carries.

Nocturne the Druid takes on some zombies. The game's R.I.V.E.T. 3D engine has a particle system that allows for lots of flying blood.

Each of the five characters will have its own look, its own weapons, and its own set of animations, but *Dark Vengeance*'s designers say the differences will run deeper than that. They want each different character choice to result in a slightly different game.

The differences should be evident from the start. *Dark Vengeance* will throw about 20 missions at the player, some of which will be unique to each character type. The first mission will be character-specific, letting you get an idea of how the character you've chosen will approach the game in later missions. For example, the designers say, Nanoc will begin by having to escape from the gladiatorial arena, while Sha'kar may open the game in the middle of the fateful attack on his village.

As the game progresses, the main objective will be the same — find the evil warlock, Smite, and smite him mightily. But each character will have its own subobjectives, too; Sha'kar's after the one-eyed Dark Elf who slew his family, Jetrel is looking for the demon lord who snatched his face, Nanoc wants to find his sister, who was enslaved by the Dark Elves, etc. These subplots will unfold in sub-levels that branch off from the main levels, and that only one kind of character can enter. Ultimately, Reality Bytes hopes the different character classes and gameplay styles will attract a wider range of gamers and add to *Dark Vengeance*'s replay value.



Nanoc the Gladiator is the game's brawn-over-brains character.

The differences between characters will be magnified in multi-play, the designers say. *Dark Vengeance* is currently projected to support as many as 32 players via local-area network or the Internet. There'll be the basic deathmatch free-for-alls, of course, but Reality Bytes also plans to include team play that will capitalize on the differences in character classes. Ideally, a cooperative game will take on a "combined arms" feel, with each type of character taking on a role that accentuates his or her skills and compensates for teammates' weaknesses. Interestingly, Reality Bytes says *Dark Vengeance* will also provide for as many as 64 "voyeurs" — people who can connect to the game and watch the action without playing.

But what *about* those graphics? They're pretty sharp. Of course, you'll need a pretty fast MMX machine and a 3D graphics accelerator to play the game with all of its details and special effects turned on. Jon Chait, Reality Bytes' president and CEO, says 3D hardware is pretty important; the company's last game, *Havoc*, was one of the first games to be 3D accelerated — the Macintosh version even supported Apple's 3D hardware upgrade right out of the box.

"We look at 3D acceleration as something we need to exploit," Chait says, "and we design for it first-hand, rather than port to it after the fact."

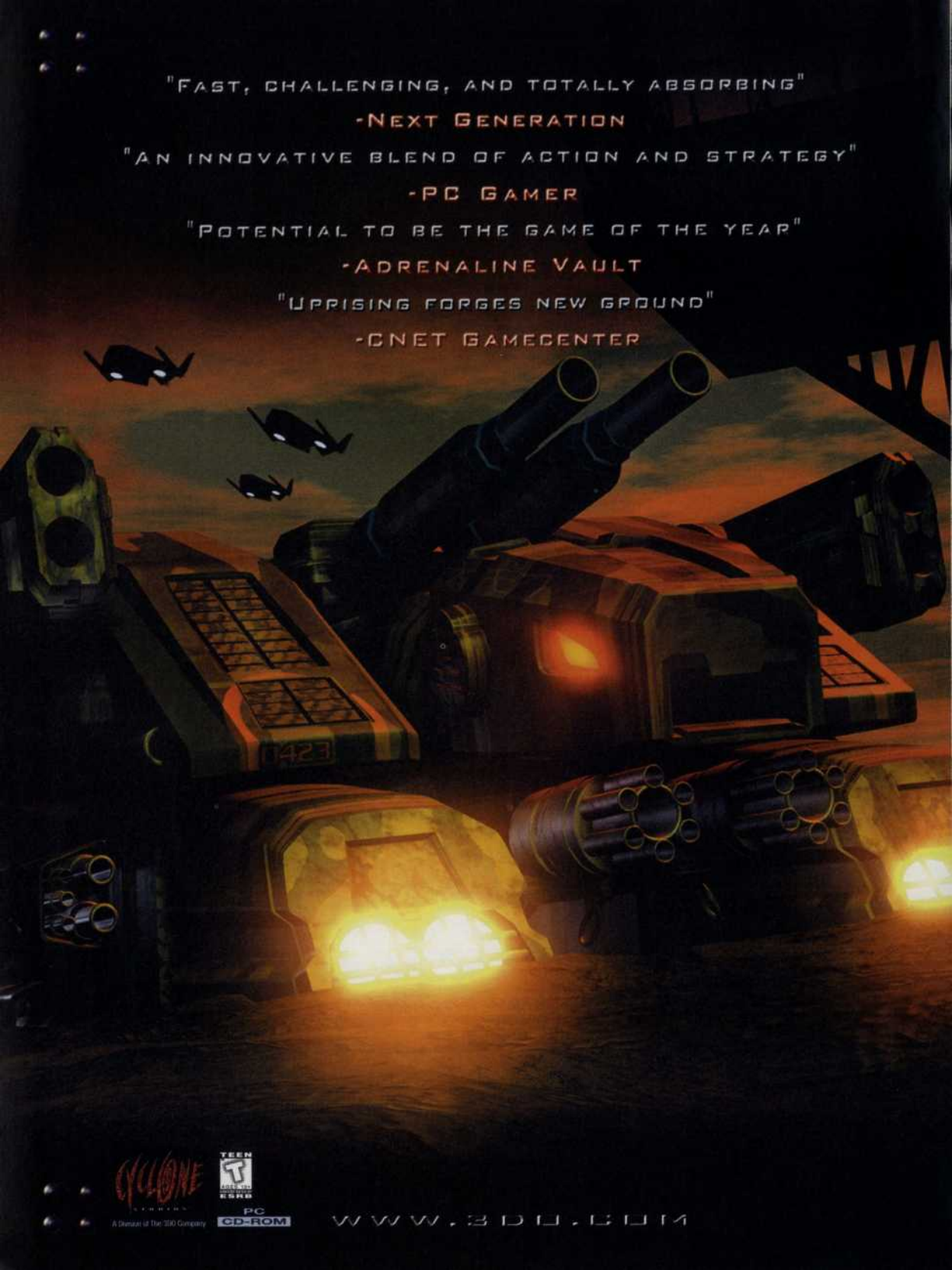
So you'll need a Direct3D-compatible accelerator card and at least a 120MHz MMX processor to get the most out of *Dark Vengeance*'s graphics — 24-bit colored textures, and smooth fog and transparency effects (like the "swipe trails" you see in the screen shots, showing the path of a swinging weapon), etc. Without an accelerator or MMX, you'll be looking at 8-bit graphics (256 colors) and fewer special effects, but Chait says the game will be optimized so the software-only version will look good, too. And whatever your hardware setup, the game's visual details will be scalable to work with machines that aren't fully decked-out. Novice gamers will be able to choose from three settings (maximum performance, prettiest graphics, or a compromise); and more experienced users will be able to tweak a whole array of detail levels and special effects.

Jetrel the Warlock takes a nasty hit from a little green Pax.

The detail of the animation will be scalable, too, so gamers with faster systems will see more fluid movement. The designers say that many current action games have animation "hard-coded" at around 15-20 frames per second, which means that character animations don't look any better on a fast machine that can play the game at 40 frames per second than they do on a machine running at 15fps. *Dark Vengeance*'s R.I.V.E.T. 3D engine will be able to "interpolate" between frames of animation, Chait says, filling in the action and creating the effect of as many as 60 frames per second. The end result is that gamers with machines capable of running *Dark Vengeance* at higher-than-average frame rates will get even smoother animation.

In the end, though, it's the gameplay that's always going to make or break a game — and with its multiple character classes, tailor-made subplots, and multiplayer support *Dark Vengeance* appears to be on the right track.

PCG


"Fast, challenging, and totally absorbing"
-Next Generation
"An innovative blend of action and strategy"
-PC Gamer
"Potential to be the game of the year"
-Adrenaline Vault
"Uprising forges new ground"
-CNET Gamecenter
CYCLONE
A Division of The 3DO Company
TEEN
ESRB
PC
CD-ROM
WWW.3DO.COM

JOIN OR DIE.

[STUNNING 3-D GRAPHICS]

[INTENSE MULTIPLAYER]

[MASS-SCALE DESTRUCTION]

[STRATEGIC DEPTH]

[HEART-POUNDING ACTION]

[COMMAND ENTIRE ARMIES]

UPRISING

FUTURE. WAR. IMMERSION.

Product Information Number 374

Uprising, 3DO, Cyclone Studios, and the 3DO and Cyclone Studios logos are trademarks and/or registered trademarks of The 3DO Company. All other trademarks and/or registered trademarks are properties of their respective owners. © 1997 The 3DO Company. All rights reserved.

DARK COLONY™

There *is* life on Mars. And in the twilight of the 21st century, it raises its ugly head. Dark Colony transports you to that not-so-distant future where warring corporations have plundered Mars and unearthed a horrific secret. Now, all must suffer the consequences.

This is real-time tactical combat – smart, visual, and violent. The animation? Flawless. Feel the heat and toxic gases singe your eyes with each fiery explosion and massive eruption.

Windows 95 and Macintosh CD-ROM

LAST SEPTEMBER, NASA SHOWED YOU MICROBES FROM MARS.

The aliens? Revolting. Leave your pre-conceived notions about ET at the space dock – these are anything but humanoid and everything you fear.

Dark Colony. A superior real-time strategy experience – now, and well into the future. That is, if we still have one. *Call 800-234-3088 to order or visit your local retailer. www.darkcolony.com*

GAMETEK

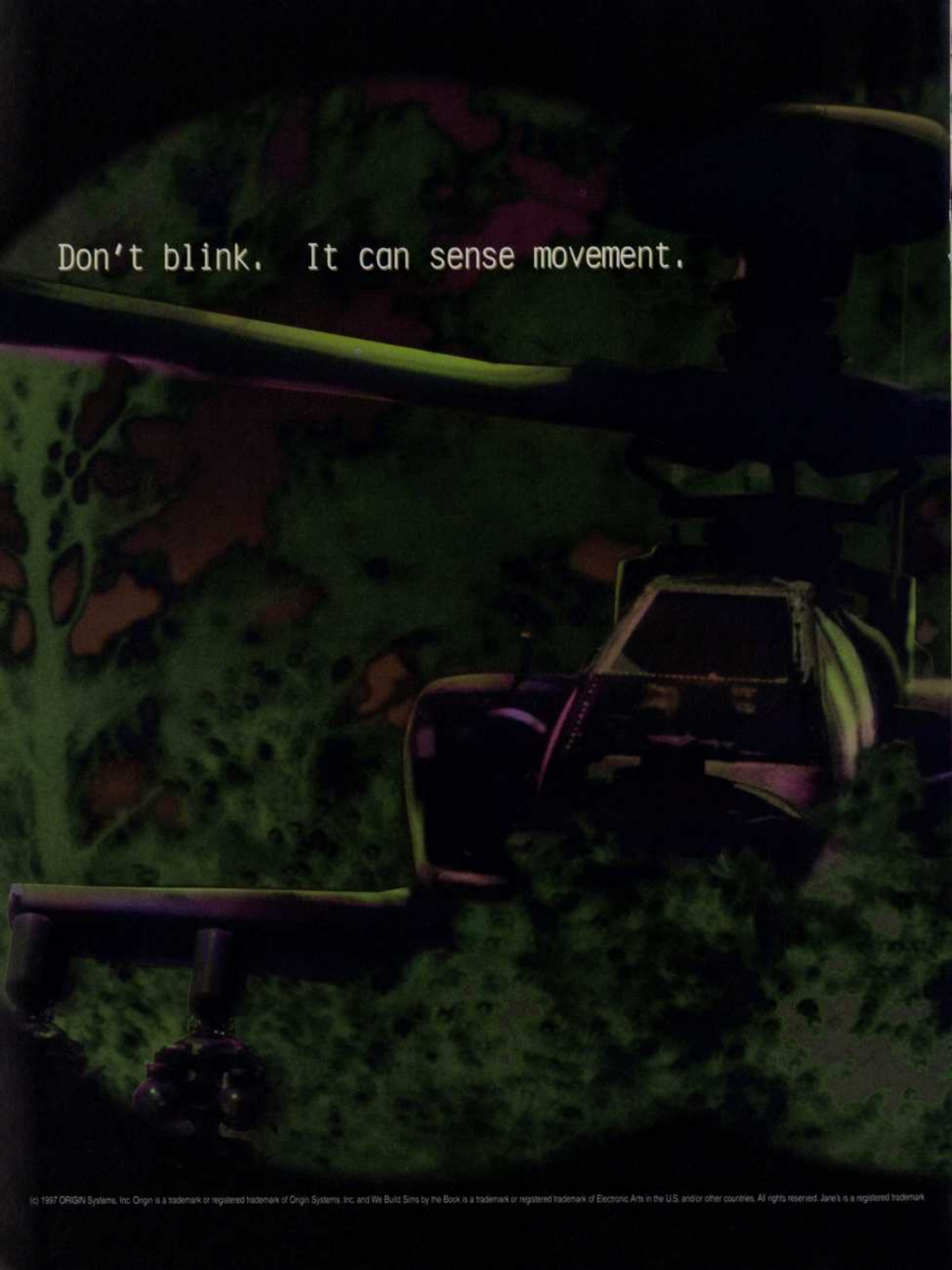
SSI

A MINDSCAPE COMPANY

Dark Colony is a trademark of GameTek, Inc. ©1997 Strategic Simulations, Inc., a Mindscape Company. All rights reserved.

TODAY, WE'D LIKE TO SHOW YOU HOW NICELY THEY'VE GROWN UP.

Product Information Number 321



(c) 1997 ORIGIN Systems, Inc. Origin is a trademark or registered trademark of Origin Systems, Inc. and We Build Sims by the Book is a trademark or registered trademark of Electronic Arts in the U.S. and/or other countries. All rights reserved. Jane's is a registered trademark.

LONGBOW 2

NOCTURNAL BY DESIGN, THE LONGBOW INSTINCTIVELY BLENDS INTO THE NIGHT, STRIKING FROM THE SHADOWS. PREPARE FOR THE NEXT GENERATION OF 1996'S SIMULATION OF THE YEAR: LONGBOW 2. IMMERSE YOURSELF IN A COMPLETE COMBAT EXPERIENCE AT THE CONTROLS OF A LONGBOW GUNSHIP, KIOWA SCOUT, OR BLACKHAWK TRANSPORT (CAN YOU SAY...DOOR GUNNER?). TAKE OFF FAST WITH INTERACTIVE TUTORIALS AND UNLIMITED INSTANT ACTION MISSIONS. THE TWO DYNAMIC CAMPAIGN ENVIRONMENTS MAKE FOR UNPARALLELED REPLAY VALUE. AND YOU WON'T NEED TO FLY ALONE WITH A FULL COMPLEMENT OF MULTIPLAYER MODES. THE PHOTO-REALISTIC GRAPHIC DETAIL — 8 TIMES AS SHARP AS THE ORIGINAL — MAKES THIS LOOK LIKE REAL WAR. LONGBOW 2. CLEARLY THE MOST AUTHENTIC SIMULATION YOU CAN PLAY WITHOUT HIGH-LEVEL GOVERNMENT CLEARANCE.

(ACTUAL GAMEPLAY SCREENS)

of Jane's Information Group Ltd. Jane's Combat Simulations is an Electronic Arts brand.

RATING PENDING RP CONTENT RATED BY ESRB

Jane's COMBAT SIMULATIONS

WE BUILD SIMS BY THE BOOK.™
www.janes.ea.com

Product Information Number 144

Diablo II

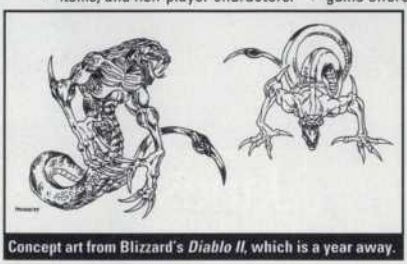
THE SEQUEL'S STILL A YEAR AWAY

But Sierra aims to tide gamers over with add-on, Hellfire

The Zeus Bow is a new magical weapon from the *Hellfire* pack.

With more than a million copies of Blizzard's *Diablo* sold, perhaps a sequel was inevitable.

Diablo II, announced by Blizzard at the ECTS trade show in London and expected to ship in late 1998, will introduce some significant changes to one of the most popular games of the last couple of years. This time there will be five character classes, as opposed to *Diablo*'s three, and the world will grow from the one town and dungeon of *Diablo* into a world more fully fleshed out, including four towns, each with its own accompanying wilderness areas. The combat system is being modified too, specifically with the addition of class-specific fighting techniques. We can also expect a whole gamut of new monsters, spells, quests, magic items, and non-player characters.



Concept art from Blizzard's *Diablo II*, which is a year away.

On the online front, Blizzard's *Battle.net* remains one of the busiest gaming networks, even though currently the only game offered is *Diablo*. *Battle.net* has nearly a million registered users and more than 15 million games have been played on the network, so naturally *Diablo II* will build on that success. *Diablo II* will add new multiplayer options for *Battle.net*, including an online trading post and a comprehensive system of rankings for players.

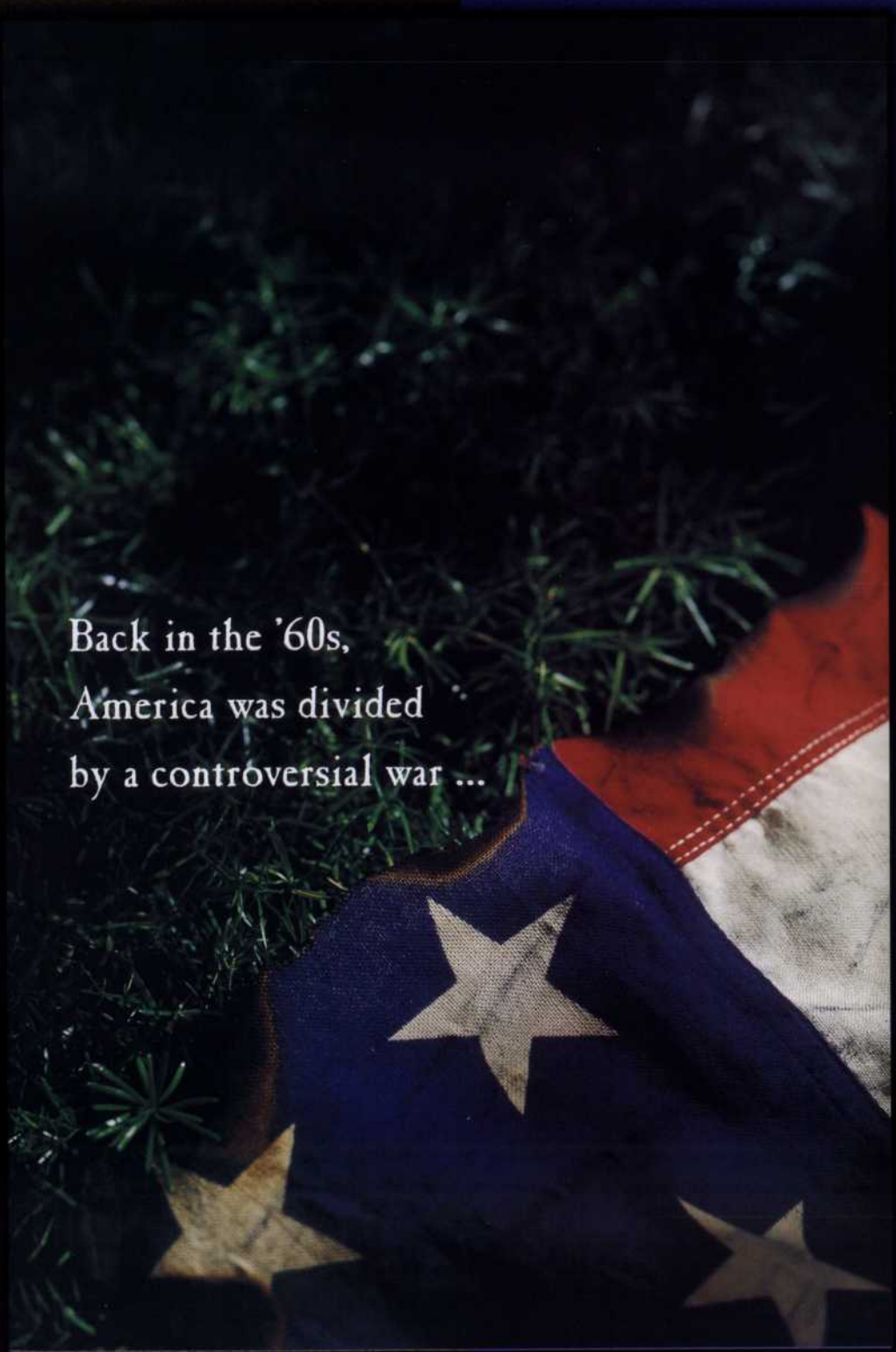
But *Diablo* fans needn't wait that long for more hack-and-slash fun. An expansion disc is in the works, though it won't be published by Blizzard but by its sister company, Sierra On-Line (which is in turn owned by CUC). Called *Hellfire*, the expansion pack will include a new character class — the Monk — and new quests, monsters, magic items, spells and dungeons.

The Hork Demon, from Sierra's *Hellfire*.

The back story in *Hellfire* goes something like this: *Diablo*'s chief lieutenant, a demon king named Na-Krul, rebelled against his master and was banished to the void. Now freed by an evil sorcerer, Na-Krul has gathered an army of new evil creatures with which to challenge *Diablo* and make a bid for control of Hell itself.

Some of these new creatures in Na-Krul's horde include the Lich, an undead sorcerer, and the Grave Digger, a zombie undertaker armed with a shovel. To combat these menaces, players have access to thirty new magic items and five new spells, including Immolation and the Lightning Wall.

Hellfire will be available in November with a suggested retail price of $29.95. It will require the full version of *Diablo* to run.


Back in the '60s,
America was divided
by a controversial war ...

THE 1860s, THAT IS.

July 2, 4:00 P.M.
Southern Objective:
Take Peach Orchard
to attain pivotal
strategic position.

Rally your routed troops around a general for quicker recovery.

Entrench with a Double Battle Line formation.

Attack from the trees to protect your brigade.

Change tactics with the click of a mouse.

The bitter memories of the Civil War still linger, and now they're stirring again in Sid Meier's Gettysburg! Experience the most sophisticated real-time combat strategy game ever.

SID M
GETTYS

CHOOSE YOUR SIDE.

Gettysburg, Pennsylvania, 1863

July 2, 4:00 P.M.

Northern Objective: Defend Peach Orchard to maintain supply lines.

Keep your general close by to improve morale.

Bolster your line with these reinforcements.

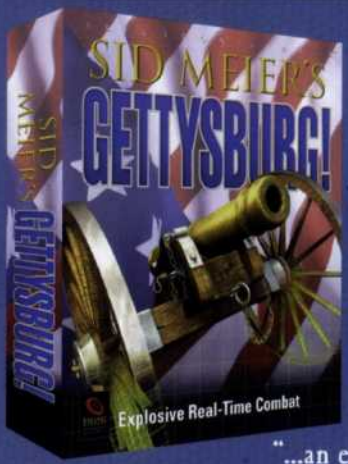
Take the high ground for tactical advantage.

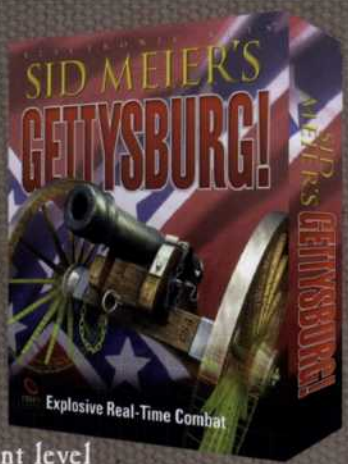
Decimate opposing lines with rifled cannon.

EIER'S

BURG!

In a stunning three dimensional battlescape, you plan the tactics, you lead the troops, — and you take history into your own hands. Choose your side.





"...an entirely different level of real-time gaming....We're betting that Sid Meier's Gettysburg! becomes a hit."
– Computer Gaming World

"...No way this one can fail to be a hit."
– PC Gamer

"Gettysburg! is definitely a breakthrough in real-time action strategy."
– CNET Gamecenter

The creative genius behind such all-time greats as ***Sid Meier's Civilization,*** ***Sid Meier's Civilization II,*** and ***Sid Meier's Railroad Tycoon,*** Sid Meier has been honored with virtually every major award in the computer gaming industry, including the recent naming of Civilization as the **Best Game of All Time** by *Computer Gaming World*.

Under Sid's leadership, Firaxis Games creates innovative games that computer players of all levels enjoy. With Sid Meier's Gettysburg!, Sid's commitment to intensely fun game design combines with his lifelong fascination with the Civil War era.

- Incredibly addictive REAL-TIME COMBAT with a host of unique tactics and strategies at your command
- INFINITE REPLAYABILITY—There's something new every time you play
- BRILLIANT AI from SID MEIER, one of the world's best game designers
- 3-D BATTLE MAP of Pennsylvania's rolling hills
- Complete MULTIPLAYER support—8 player via LAN and internet, 2 player via modem and serial link

www.gettysburg.ea.com

FIRAXIS GAMES™

Sid Meier

©1997 Electronic Arts. Electronic Arts is a trademark or registered trademark of Electronic Arts in the U.S. and/or other countries. All rights reserved. Firaxis Games is a trademark of Firaxis Games, Inc.

Sid Meier's Civilization and Sid Meier's Railroad Tycoon are registered trademarks of Microprose Software, Inc.

Lord British is Dead

Richard Garriot's character is slain in Ultima Online

The moment of truth arrives for Lord British. (Thanks to Tarquin for the picture.)

Lord British, better known as Richard Garriot, the creator of the Ultima series of roleplaying games, has found out what it's like to be the victim of a player-killer in *Ultima Online*. The reigning monarch of Britannia was assassinated while addressing the masses during the game's beta test, by a rogue thief known only as "Rainz".

Rainz pulled off this amazing feat by stealing a magic scroll from a knight next to him (it turned out to be a firewall spell), and then using the scroll on Lord British. Lord British, who is supposed to be invulnerable, fell victim because after a server crash, his invulnerability "flag" wasn't reset properly.

The assassin was subsequently banned from the Ultima servers, though Origin notes that Rainz was removed for exploiting bugs in the game for his advantage, instead of reporting them to the development team (which is, after all, the point of the beta test). The dramatic assassination apparently tipped off the developers that Rainz was in fact exploiting bugs. But Origin later stated that Rainz would be allowed to join *Ultima Online* once it went commercial.

In other *Ultima Online* news, the game recently hosted 2,850 people in a single game session, an unprecedented number and one that it believes sets a world record for the largest number of people playing in a single game world simultaneously.

We spoke with both Richard Garriott and his assassin about the assassination and the beta test in general (see sidebar).

PC Gamer: What was your immediate reaction when you found yourself dead?

Richard Garriot: I was shocked. At first, I wasn't even sure what had happened. I was so confident in my immortality that I basically walked into the wall of fire thinking "Ha, you can't scare me!" Then, when my screen turned black and white, I was stunned and thought, "Oh no! What have I done?" Then, it was "Hey, that's not supposed to happen!" Then "Damn, not only did it happen, but it happened in front of thousands of players, so there would be no way to cover for it!" So, I was briefly disappointed, until I realized what a legendary event it would surely become.

PCG: What is your personal take on player-killers? Will they potentially disrupt or ruin the game?

RG: I have no problem with people playing evil characters, and the final game should have a justice system in place to keep anti-social behavior relegated to the "bad lands" outside of the peaceful towns. During beta however, we have had a problem with people exploiting bugs that allow them to kill hundreds of others without risk, even in the intended safe havens. In the long-run though, I am confident we will get this licked, and that PKilling will not be a issue for players.

PCG: What about players' complaints about specific game design imbalances, such as "Super Guards," too-profitable forges, and that there's little opportunity for low level, non-smith characters to make much money or live long?

RG: Well, we intended "Super Guards" to prevent the certain injustices, so they're working correctly. Forges are a way for beginners to make money, even if they have been at times too profitable. Remember that this is a test, and part of that entails having things out of balance.

PCG: Have you been largely pleased

Continued on page 90
See Lord British is Dead

Richard Garriot's character was killed by a player known as Rainz.

Portrait of a Killer

We managed to track down the player behind "Rainz" — it turns out he is 23-years old and runs a small software company in Indiana, but he asked us not to use his real name in this interview, for he is cautious about retaliation from hardcore Ultima players, and we agreed.

PC Gamer: What is your opinion of *Ultima Online*?

RAINZ: The interactivity of *UO* gives you endless possibilities in gameplay. After you tire from forging weapons, baking bread, and taming monsters, you can adventure with your friends. *UO*'s open style and lack of restriction keep you coming back. No current game even comes close.

PCG: How did the assassination take place?

RAINZ: Lord British and Blackthorn were orating to the masses on a bridge at Blackthorn's castle. I stood beside Helios, my fellow Raven of Fate, directly below their bridge. I was so close to British I figured I had to try killing him since it might be my only chance. I found nothing helpful in my inventory, so I peeked into the backpacks of those around me. A knight beside me carried a fire field scroll, which I stole and then immediately cast on the bridge. Blackthorn and British both stood in the heart of the flame, one of them chanting 'nice try' or something to that effect. Then suddenly we all heard a loud scream of anguish as the flames consumed British and he toppled to his death. The crowd was silent for a moment, and then... mayhem.

PCG: What was your reaction after you succeeded? What did you do afterwards?

RAINZ: Confusion, amazement, then laughter.... When you've just killed the ruler of Britannia and four demons have been summoned in your vicinity, you pretty much have only one outlet. I ran. Fast.

PCG: Did you act on impulse, or were you planning to assassinate him for a while?

RAINZ: More impulse. I saw the opportunity, took the opportunity, got lucky and succeeded.

PCG: Did you think you had a chance to succeed?

RAINZ: No, I was stunned by the outcome. If Lord British is reading this, I want him to know that if he builds a secret dungeon named after me, I will spare his life next time we meet.

PCG: What motivated you to go on your killing sprees — which, according to Origin, resulted in hundreds of

Continued on page 90, See Portrait of a Killer

UNDER CONSTRUCTION

Semper Fi

There's a new wargame in the works featuring the U.S. Marine Corps. Called *Semper Fi* (what are the odds of that?), it is a turn-based strategy game sporting three different campaigns, fifteen different stand-alone scenarios, and a host of equipment and gear that accurately reflect the composition of the U.S. Marines when they go into action around the world. Using a hexagon grid, the game is typical of most traditional wargames, but the subject matter is certainly unique, as few computer war games have taken the Marines as their subject matter. Campaigns set in every type of terrain, from deserts and jungles to Arctic wildernesses, will test all but the most battle savvy commander, and formation sizes ranging from a single company to an entire battalion give some variety in terms of scale. The game has fairly light system requirements, requiring only a 486 and 16MB of RAM, though Windows 95 will also be necessary. *Semper Fi* is from Interactive Magic.

We're looking for a few good wargamers, says Bill Stealey, as his company unveils *Semper Fi*, a new USMC wargame.

Seven Kingdoms

Trevor Chan — the developer of *Capitalism* — is back, with a new strategy game called *Seven Kingdoms*. The game branches out from Chan's business-oriented roots, being a real-time strategy game combined with elements of *Civilization*. Your goal is to lead one of seven civilizations — Mayan, Persian, Viking, Norman, Chinese, and

Continued on page 83

Gunfight at the 3D Corral

3Dfx sues Sega for breach of contract

Graphic chips maker 3Dfx recently filed a massive, multi-million dollar lawsuit against console-maker Sega for breach of contract. At issue: Sega's decision not to use a custom 3D graphics chipset developed by 3Dfx in Sega's next generation of console gaming machines. Sega chose instead to go with a competing design from NEC.

"Sega terminated our contract without justification," says Greg Ballard, president and CEO of 3Dfx. "We lived up to all of our commitments, yet they terminated the agreement. It's a clear breach of contract." 3Dfx is also concerned that Sega will share 3Dfx's proprietary work with NEC. The suit alleges in full: breach of contract; interference with contract; threatened misappropriation of trade secrets; and unfair competition.

Sega terminated the deal with 3Dfx on July 22, choosing instead the PowerVR 3D chipset co-developed by NEC and VideoLogic. 3Dfx's suit claims that Sega breached the terms of the contract without justification, failed to make assurances to protect 3Dfx's confidential material, and that NEC deliberately induced Sega to break the contract with 3Dfx.

3Dfx was developing a custom 3D graphics chipset for Sega.

"[The lawsuit] really has three components," says Andy Keene of 3Dfx. "The first component is that we had a valid contract that we lived up to. We were executing under the terms of the contract we had, and Sega breached the contract. They basically canceled the contract, in our view, without cause.

"During the development process, you cast significant information back and forth. We have sought assurances from Sega that that information was being appropriately treated given the difficulty with the contract. To date, we haven't received assurances from Sega that that information is being adequately protected."

Sega responded with the following public statement:

- Sega takes exception to 3Dfx's allegations of improper conduct;
- Sega is an investor in 3Dfx, and it would not be involved in any activities that would disclose 3Dfx's proprietary information;
- Sega has strategic partnerships with numerous entities and, in the course of the relationships, receives proprietary information;
- Sega has always respected the proprietary rights of its partners and expects the same treatment in return;
- Sega plans to aggressively defend itself against 3Dfx's complaints. The company will not comment further on this lawsuit at this time.

The Horror... the Horror

Sierra at work on Gabriel Knight III

Blood of the Sacred, Blood of the Damned. That's the dramatic subtitle of the next game in Sierra's Gabriel Knight series, the third installment of which was announced in August.

Supernatural investigator extraordinaire Gabriel Knight finds new mystery as he descends into a rural European village for a little rest, only to find himself up to his chin in the occult yet again. This time around, the designers are promising to add even more mystery elements (there will be a whole slew of suspects for Knight to investigate, Agatha Christie-style), but without sacrificing any of the occult plot elements of the previous. And in fact, Sierra says this story will have even more spine-tingling chills and supernatural elements than before.

The game is also using a new 3D engine, called the G-engine, custom-built for *Gabriel Knight III*. According to Sierra, "it allows you to interact with intelligent, lifelike characters, who have fluid animations as never before seen in a real-time game." And yes, the full-motion video is gone, returning Gabe and friends to their animated roots. But unlike the first game, which was your standard 2D graphic adventure, *GKIII* has a true 3D world.

Although Sierra isn't saying much about the plot, it's been revealed that Knight encounters a mysterious Prince with a new infant son and a dark family secret... but it can't be lycanthropy this time around, because that was the story behind *Gabriel Knight II*. So what, Vampirism perhaps? A history of weak ankles? We'll let you know as soon as we find out.

The game is due to be released in the summer of 1998.

Gabriel Knight III will feature animation rather than full-motion video.

Kornelia Triumphs

Wins first women's Quake *tournament*

Kornelia Takacs is one of the best when it comes to playing *Quake*. She's just taken the top honors in the All Female *Quake* Tournament, a recent competition hosted by the Total Entertainment Network. With elimination rounds being played on TEN, the eight finalists were flown to Burbank, CA, to compete at Slam Site, a entertainment center that features networked PCs for public gaming.

"The tournament was pretty relaxed, but I wasn't," says Takacs about the event. "I was very nervous about my upcoming games." But she needn't have worried, as she ended up undefeated, and beat Stevie "Killcreek" Case in the final round (23-6) to take the top prize.

Her reward was a black garter autographed by id Software's John Carmack. "The garter is nicer than I expected," says Takacs. She also won a new P200 MMX computer, a copy of the id anthology, and some other goodies.

The eight finalists in the AFT tournament: (left to right) Queen Beeatch, Temperance, Kornelia (the winner), Killcreek, LaEl, Mars, Shadyr, and Tonka.

This tournament wasn't her first victory, though; she also won one at the Computer Game Developer's Conference, where she got to play one of *Quake*'s creators, John Romero, and beat him at his own game. "We've also played a few times just for fun at ION Storm, and he hasn't beaten me yet," says Takacs. "He's a very fun opponent, and a cool guy." She's also taken on the current reigning champion of *Quake*, Dennis "Thresh" Fong, and managed to place third in the recent 'Intergraph Thresh Challenge' — though, like everyone else who took the challenge, she wasn't able to beat Thresh.

Her advice for players still struggling to win: "I think the most important thing is good aim and good reflexes," she says. "You also need to have good strategy; be able to switch weapons fast. Usually you don't have time to think once you're in a fight, you just do it instinctively."

Continued from page 82

Interactive Magic's *Seven Kingdoms* brings some interesting new options to the strategy realm.

more — through the varied waters of military conflict, economic development, espionage, and trade. The trading and diplomatic options are rich and well-thought out, while the espionage element adds features not seen in previous strategy games — the ability to corrupt a rival unit to your side, unknown to your enemy, while having that unit still appear to be working for the

Continued on page 86

THE KING OF BASS FISHING IS BACK!

Sammy USA presents *Jimmy Houston's Bass Tournament USA 97*, the *Ultimate* bass fishing experience!

Filmed on location at Lake Fork, Lake Richland Chambers and on Jimmy's own private lake, this 2-CD game offers tips from Jimmy in full-motion video. Add a full-featured practice mode and players can learn to fish like a pro! Players can improve or refine their skills in preparation for the tournament, which is modeled after actual bass fishing contests!

Enter to win a fishing trip with Jimmy Houston, by catching the "Golden Bass", hidden in each game!

It's the most realistic fishing game on the market, and the only fishing game approved for Windows 95.

Product Information Number 301

Sammy USA
901 Cambridge Drive
Elk Grove Village, IL 60007-2434

1-888-US-Sammy

www.sammyusa.com

Sammy

Designed for Microsoft Windows 95

© 1997 Sammy USA Corporation. Jimmy Houston's Bass Tournament USA 97 is a registered trademark of Sammy USA Corporation. All rights reserved. Shimano® Rods and Reels are used courtesy of Shimano American Corporation. Ranger® Boats are used courtesy of Wood Manufacturing Co., Inc. Microsoft, Windows and the Windows logo are registered trademarks of Microsoft Corporation. Made in the USA.

© 1997 MicroProse, Inc. All Rights Reserved. Falcon is a registered trademark of MicroProse, Inc.

IT ACTUALLY TRAVELS AT ABOUT MACH 2
COMING SOON
F/A-18E/F
Product Information Number 235

Continued from page 83

other side. This and other elements should offer some interesting strategic takes on a genre replete with unimaginative clones.

Dark Angael, from Vicarious Visions, is an *Abuse*-style game that offers plotlines and puzzles to boot.

Dark Angael

From Vicarious Visions comes a whole new side-scroller. Called *Dark Angael* — no, it's not a typo, they spell it that way — the game offers storytelling elements along with the action, in a manner not seen since the days of *Prince of Persia*, according to the game's creators. There may be some resemblance to Crack dot Com's *Abuse*, since Vicarious Visions used some of the same core technology employed in that game, and they retained *Abuse*'s unusual mouse-aiming mechanism. Besides single-player mayhem, the game also offers eight player network madness to quench your thirst for multiplayer side-scrolling action.

Jquan

Small developer CounterActive Software is hatching *Jquan*, a first-person shooter using an

Jquan is a new game from new developer CounterActive Software that's still very much under construction.

Continued on page 88

The Software Robot

Anark's Galapagos *reinvents AI with a robot named Mendel*

Though it's long been known that challenging artificial intelligence is an essential component of computer games, "weak AI" is one of the most frequently heard complaints in reviews. Too many game AIs are predictable. They move and act in rote patterns; they are — in a word — stupid. This is not the fault of programmers, but more in the nature of game AI itself, which is basically a bunch of simple subroutines that follow rules hard-coded during game design. Game AIs don't learn, they don't adapt, and they're hardly "intelligent."

Mendel, a small intelligent robot that lives in software, explores environments in the new game *Galapagos*.

This is decidedly not the case with Anark's *Galapagos*. An environment-oriented puzzle title, the game involves guiding a small, virtual robot named Mendel through a series of strange, Escherian worlds. But what makes this game unique is that the small creature you guide is actually learning about his environment through trial and error and your careful coaching.

Galapagos' virtual intelligence is built on something Anark calls NERMS — Non-stationary Entropic Reduction Mapping. This is a complex, proprietary technology (and something Anark understandably won't go into a great detail about) that is more akin to the primitive robots you see on TV science programs than a typical software program.

Anark describes a NERM as a self-organizing controller, defining a controller as any device that gathers input and produces an appropriate response; for example, a computer-controlled fuel injector is a controller. It measures engine data, temperature, and how hard you push the gas pedal, then releases an appropriate amount of gasoline. Traditionally, controllers' responses are pre-programmed by the engineers who build them. Their limitations: The more data and variables they're fed, the more complex and unwieldy their rule sets become.

What makes Mendel different is that it is self-organizing. There are no pre-defined responses to specific situations. Mendel gets feedback from the environment (pain, pleasure) and adjusts its behavior accordingly. A newborn Mendel is even unable to walk until it learns to control its limbs.

Mendel reacts to infrared radiation (heat) and sound. Heat is simulated in the game world. Sound is input from you, through a microphone or keyboard. You don't control him, you only coax him, much as you train a dog by giving him treats for doing tricks, or scold him for chewing your furniture. It's uncannily like actual intelligence, and references to biology permeate the game: Mendel is named after the pioneer genetics monk, and the game takes its name from the Galapagos islands where Darwin first stumbled upon natural selection. It's as if Anark is saying, in a subtle way, that this artificial creature is truly alive.

Anark is starting small but thinking big. Not only is the team aware that NERM technology could revolutionize the way game characters act in every genre across the board, they envision their same NERM technology being useful in countless commercial applications, everything from car engines to digital switches for phone companies.

We're pretty excited about the prospects of NERM technology. Picture an RPG dungeon, where instead of a static environment of monsters doing nothing until a player character enters the room, the dungeon becomes a virtual environment, where NERM-powered monsters eat, breed, explore and fight in an underworld ecology. Or a flight sim where the computer pilots kept getting better, trying out new tricks. Or a shooter — suddenly those Imps are dodging, strafing, and stalking you. The possibilities are endless.

But a word of caution. This technology is in its infancy. Little Mendel is no Commander Data, and isn't going to get up and talk to you. But it's a fascinating glimpse into technology's potential, and it happens to be available in the form of a PC game.

Galapagos will be distributed by EA and is due out this fall.

See us at Comdex **L158**

Upgrade your PC to 3D for only $99*

Experience the outer limits of 3D gaming with the new **Matrox m3D** upgrade for games.

Matrox m3D delivers over 30 frames per second of non-stop, arcade-action game play. Its extensive set of 3D special effects offers breathtaking, realistic graphics for a more immersive gaming experience. You'll be able to play Tomb Raider, Hexen II, Wipeout XL, Terracide, and other hot 3D game titles at resolutions up to 1024 x 768 for superior image quality.

What's more, **Matrox m3D** comes with the full OEM version of Ultim@te Race™, the 9-level OEM version of Hexen II™ : Continent of Blackmarsh, and over 20 game demos. For only $99*, **Matrox m3D** is the most cost-effective, full featured 3D upgrade for your PC. Visit our Web site for more information!

Matrox m3D

- Ideal upgrade for P133 PCI and AGP systems with compatible PCI slots
- Works with all 2 MB PCI graphics cards, and Matrox Mystique®, Mystique 220®, Millennium and Millennium II graphics boards
- Power VR2 3D controller with 4 MB of SDRAM memory
- 3D features include perspective correct texture mapping, bilinear filtering, MIP mapping, fogging, alpha blending, and transparency

3D games included:

Over 20 3D game demos included:

Win!

a free **matrox board** check out www.matrox.com/mga/pcgamer

matrox

1-800-362-9371

Product Information Number 239

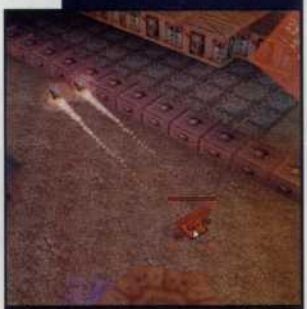
* Estimated street price. Ultim@te Race is a PowerVR Extreme™ software game. PowerVR and PowerVR Extreme™ are trademarks or registered trademarks of VideoLogic Ltd. (UK). All rights reserved. Used with permission. NEC Electronics Inc. (USA) and Matrox Graphics Inc. (Canada) are authorized distributors of Ultim@te Race. NEC Electronics Inc. is a worldwide distributor and licensee of PowerVR software games developed by Kalisto Entertainment S.A. (France). © 1997 Raven Software Corporation. All rights reserved. Id Software, Inc. software code contained within Hexen II™ © 1996 Id Software Corporation. All rights reserved. Developed by Raven Software Corporation. Published by Id Software, Inc. Distributed by Activision, Inc. under sublicence. Hexen® is a registered trademark and Hexen II™ is a trademark of Raven Software Corporation. The Id Software name and the Id logo are trademarks of Id Software, Inc. Activision® is a registered trademark of Activision, Inc.

Continued from page 86

original true 3D engine that boasts real-time lighting and shadows, nonlinear gameplay, Internet options, and an outdooor engine, integrated into a science fiction storyline still being developed. CounterActive Software (*www.counteract.com*) is located in the small town of Willits, CA, and this is its first release. There was no publisher for the game as of press time.

Need for Speed II: Special Edition

Electronic Arts is prepping *Need for Speed II: Special Edition*, an expansion disc that adds new tracks and three new cars — the Ferrari 355, the Ford Mach 3, and the Italdesign Nazca C2 — to the original game. Another welcome feature is support for 3Dfx. A special upgrade offer will be made available to current owners of *Need for Speed II* — no details, however, have yet been released about the offer.



Reflux is a real-time strategy game being developed in Poland by Metropolis.

Reflux

Poland's Metropolis Software House is at work on a new real-time strategy game called *Reflux*. The game has a true 3D engine and some unusual and innovative game design features. Prominent among these is the fact the player isn't saddled with a designated set of units in a game, but rather custom builds unit templates with a number of different elements. For example, when assembling a unit, there are eight different types of legs and bodies to choose from. Some legs will be fast but not heavily

Continued on page 89

The "Dragon Project"

Sega and Microsoft developing console?

Reports emanating from Japan after the recent Tokyo Game Show indicate that Microsoft and Sega are negotiating a deal whereby Sega's next console would run a souped-up version of Microsoft Windows' CE operating system. Games written for this console would then be playable on the new machine or, with a quick conversion, on any Windows-powered PC.

Sources close to the project tell us that this effort is code-named "The Dragon Project," and that a deal has already been signed. The project will use a modified version of the CE operating system that includes the DirectX API, making existing and future games written to DirectX easy to convert to the Sega console.

But Microsoft says that no deal has been announced, and that it can't comment on what it considers rumors. "We don't comment on conjecture," said Kevin Bacchus, Microsoft's product manager for DirectX. Bacchus points out that a large company like Microsoft talks to many other companies about many possibilities, and that just because something's been talked about — which he doesn't concede has happened, in this case — it doesn't mean it's going to happen. "There's a tendency to get very excited about rumors and different possibilities, but since neither we nor Sega have announced anything, all we're really talking about are conversations," says Bacchus.

When asked if a DirectX-powered Windows CE operating system *could* be used to power a game machine, Bacchus says that it is very hard to deal with hypotheticals. But he notes that Microsoft does "believe that Windows is an API that is scaleable and has many applications beyond the desktop," including the CE-powered hand-held computers currently available.

A spokesperson for Sega reiterated those thoughts, saying "We haven't announced anything, and it's all just speculation."

Still, the rumors continue to circulate: Hitachi is said to be providing the 128-bit microprocessor, ten times more powerful than the

current Sega Saturn; the graphics chip will come from PowerVR, after a very public fallout with 3Dfx (see "Gunfight at the 3D Corral" on page 82); a modem attached to the console would enable multi-player gaming, and could be used to run Microsoft's Internet Explorer. This would give console users quick access to the web and give Microsoft a new market for its web browser and Internet content. Former Microsoft DirectX evangelist Alex St. John was engaged to evangelize the project before his termination, though St. John declined to comment on this story.

The deal would be a good thing for Sega because its new console will not have to wait for new content to be developed, which has been the case with Nintendo's latest machine. Any computer game written to DirectX would be a potential "Dragon" game, after a quick conversion. Sega would also have the entire PC game development community as potential content creators.

PC game developers win too. "This sounds like great news," says ION Storm's John Romero, when asked what he thought of the potential of a Windows-based console. "The possibilities are endless," he says. "You could extend your favorite console game on your PC; no need to spend money porting games from one platform to another, merely copy it to a new medium; and, of course, you can play your favorite console game while you're at work."

AOL, Worldcom Buy CompuServe

America Online (AOL) and Worldcom have acquired CompuServe's assets, with Worldcom taking over CompuServe's Internet operations and business customers, and AOL receiving its base of consumer subscribers.

Worldcom acquired CompuServe from tax giant H&R Block in a strict stock-for-stock exchange, a transaction valued at $1.2 billion. It then gave CompuServe's Interactive Services Division and $175 million to America Online in exchange for AOL's Advanced Networks and Services (ANS) division.

The deal adds the 2.6 million CompuServe subscribers to AOL's existing base of 9 million subscribers, strengthening AOL's position as the dominant online network. It has not been announced whether AOL would keep CompuServe as a separate network, or integrate it into AOL.

Separately, AOL's European partner, Bertelsmann AG, will pay $75 million to AOL, making CompuServe's European service a joint venture. Each company will pitch in $25 million to expand it.

Worldcom retains the CompuServe Network Services (CNS) division, one of the largest data communication networks in the world. CNS has 100,000 dial up ports and a presence in more than 100 countries in the world. The deal also gives Worldcom control of AOL's Advanced Networks and Services division, another large Internet network that provides Internet access to businesses. The result: Worldcom and its UUNET subsidiary, combined with ANS and CNS, form the largest Internet network in the world, with more than half a million dial-up ports. Worldcom companies are now the Internet backbone for America Online, CompuServe, and the Microsoft Network.

A separate deal involving Worldcom and AOL creates a partnership between the companies, with Worldcom expanding AOL's existing network at discounted prices, and upgrading the AOL network with next-generation broadband technology. AOL's CEO Steve Case also joins Worldcom's board of directors.

Origin Designer Goes to ION Storm

Warren Spector joins John Romero's company

Noted game designer Warren Spector has joined John Romero's start-up game company, ION Storm, where he will head up ION's brand new Austin, TX, development offices. Spector was most recently at Looking Glass Technologies, where he oversaw the development of *The Dark Project*, a 3D roleplaying game.

"ION Storm was set up with modular design teams allowing each team to be autonomous, yet at the same time, reap the benefits of the greater organization," says John Romero, chairman of ION Storm. "This allows us to immediately take advantage of great opportunities such as the chance to bring Warren and his awesome Austin crew on board."

This is a major coup for ION, as Spector's work has always been top notch. His credits while with Origin include *Cybermage*, *Crusader: No Remorse*, *System Shock*, and the Ultima Underworld games. At ION he joins John Romero, Tom Hall, and Todd Porter as a lead game designer.

"John Romero and I are on the same page design-wise," says Spector. "It's so exciting to once again be immersed in game design and to associate myself with guys who live, eat, sleep and breathe games."

In other ION news, the company has just purchased 7th Level's *Dominion*, a real-time strategy game developed by Todd Porter (previously at 7th Level, now with ION). But the deal had not yet been finalized at press time.

Noted game designer Warren Spector has joined John Romero's development house, ION Storm.

Redline Signed by Activision

The development studio founded by James Anhalt and Ron Millar — Redline Games — has just been signed to a three-project contract with Activision. Activision is also taking an equity position in the new company.

Ron Millar is no stranger to Activision, having worked as a design consultant on Activision's real-time strategy game *Dark Reign*. Millar was a designer on *WarCraft II*, *Diablo*, and had worked on *Starcraft* before leaving Blizzard Entertainment in January. For an interview with Millar, see the April 97 news section of *PC Gamer*.

Redline's first project is a strategy and roleplaying with a science fiction theme, code-named *3rd World*.

Patently Absurd

Lawyer challenges game industry

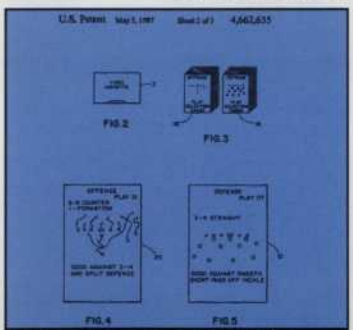
Several computer game companies have received an ominous letter from a lawyer claiming that their games are violating a patent. Attorney Ernest Kettelson's letter states that anyone who makes a computer or videogame using "real actors or players, making actual plays of the game in question, which have been recorded on video tape, or video disks, or other recording mediums," are infringing on a 1987 patent, held by his client, one Craig Enokian.

The letter, sent to Apogee Software, goes on to say: "An examination of your animated video games such as *Duke Nukem 3D* indicates that they infringe our client's patent... Immediately cease and desist from further manufacture, sale and use of such animated video games."

The patent dates from 1987, and it's unclear why Mr. Enokian is pursuing his claims now, when computer and video games using animated characters based on motion-capture, FMV, and similar technologies have been made for years. Neither Mr. Enokian nor his attorney were available for comment at press time.

And while it might seem unlikely that someone could patent such a broad and widely used concept — essentially motion capture — this is potentially "a patent that could shake the game industry to its core," as Apogee's Scott Miller says. "Apogee is currently consulting our attorneys on what to do, but it's obvious that we and the game industry must fight to have this patent overturned," he says.

Those interested in viewing Mr. Enokian's actual patent may do so by reading it on the Internet's various online patent databases, including IBM's at *patent.womplex.ibm.com/*. It's patent # 4662635.



This diagram is the original patent faxed to Apogee's Scott Miller. The figures represent a diagram of football plays.

Continued from page 88

protected, while others will be stable and well-armored but correspondingly slower. With such options, the number of unit types can range into the hundreds. And this is just a small sampling of some of novel game design; Metropolis is holding back other features so that other designers won't copy them. The game is being developed in C/assembler for DirectX, and will support MMX, 3D audio, and the Glide SDK. No U.S. publisher has been named yet.

The *Prince and the Coward* is a traditional graphic adventure designed around attractive, modern graphics.

The Prince and the Coward

Also from Metropolis, but in a completely different vein, is *The Prince and the Coward*, a graphic adventure being jointly developed with Revolution Software (whose work includes *Circle of Blood*). Intended as an old-fashioned adventure game in the grand tradition of Monkey Island, *The Prince and the Coward* combines humor and story-telling in the tale of a young man who's had his soul switched with that of a medieval prince. The plot is being created with the assistance of Polish fantasy writer Jacek Piekara, and the game's interface hearkens back to the day when adventure games used menus with commands such as Look, Take, and Use. Metropolis also says that its lead programmer is writing the game for DirectX totally in assembler, and he's doing it on a 486/66, because he wants to feel how the game plays on a 486/66!

PCG

News Briefs

Interplay Signs *Tomb Raider* Duo

Publisher Interplay has signed Toby Gard and Paul Douglas' new game company, Confounding Factor, as an associated developer. Gard and Douglas were responsible for the creation of the well-received *Tomb Raider* while at Core Design, and the original concept for the Lara Croft character.

ThrustMaster Gains Recognition

ThrustMaster has been named as the second fastest growing companies in the country, according to a new study published by *Individual Investor*, a financial advice and investment magazine. Of the 100 companies named, ThrustMaster was ranked based on its operating efficiency, growth, earnings forecasts, and other factors.

Abrash an Author

Michael Abrash (a programmer who worked on *Quake*) has a new book out, *Michael Abrash's Graphics Programming Black Book, Special Edition*, containing insights into 3D graphics programming. The book lists for around $60; it can be ordered from book stores and would be of interest to those seriously into programming computer games.

Warcraft Adventures Delayed

Blizzard's *Warcraft Adventures*, which was originally slated for release this Christmas, won't be out until some time in the first half of 1998. Blizzard is re-doing the cinematics on the game, which will account for part of the delay, and adding other, new features. For more info, see our June 1997 issue.

Virgin Logic

Virgin Interactive has signed The Logic Factory to its affiliate label program; the first game to be published under the agreement is *The Tone Rebellion*, a science fiction strategy game.

Correction

In the October issue, the Hard Stuff section reviewed the Powerramp Mite game pad made by ACT Labs. We listed the manufacturer as InterAct Accessories. *PC Gamer* regrets the error. Contact information for the Powerramp Mite gamepad is: ACT Labs, (604) 278-3650, *www.actlab.com*.

The PC Gamer Playlist

What's hot at the magazine's offices this month.

Our network was crashing like Apple stock. New versions of DirectX were leaping from beta discs to cannon-ball into the graveyard of previous versions littering our hard drives. OpenGL applications turned out to be not so "open" after all, expressing a cool indifference to advances.

Normally in such times of hardware melodrama, we turn to our capable technical editor, Joel Durham. But alas, like a 386 processor or an AdLib sound card, it was becoming increasingly clear that our technical editor was out of date. New drivers, new operating systems, and new technologies like MMX, AGP, and New Coke had made our once shiny, new, shrink-wrapped tech editor hopelessly obsolete.

According to Moore's Law, we ought to be able to get a new technical editor who is twice as fast and costs only half as much every eighteen months or so. But not even a few months had gone by and Durham v1.0 had become slow and unwieldy!

So we decided to upgrade our existing editorial system, retain its few working parts and replace its essential components. And no doubt some quick hacks and patches applied to Durham v1.0's increasingly clouded neural networks could prolong his nine-month shelf life! Indeed, Durham v2.0 (or "Durham 98") has performed with fewer crashes, *Quake*-camping incidents, and driver conflicts than his predecessor.

So what's the secret to upgrading your PC, or for that matter, your technical editor, so you get your under-valued Canadian dollar's worth? A plentiful supply of Burgie beer! Mmm... Burgie.

1. *Red Alert: Aftermath* — Tanyas and Tank Rushes are back in style, but will Quintin stop playing SimBase?
2. *Quake* (Mmm... *Quake*).
3. *Hexen II* Demo (Mmm... *Quake*-engine)
4. *You Don't Know Jack* About Anything, Apparently.
5. Run Around and Frag Gary Whitta (Wait, that's *Quake*).
6. That installation program everyone's using.
7. Screen shot roulette.
8. Usenet Flambeau.
9. The "Goodbye Joe, we love ya' and are sad to see you go!" drinking game.
10. The beta build of Coconut Monkey's groundbreaking, epic graphic adventure: "Click On That Thing!"

Lord British is Dead

Continued from page 88

with the beta test so far, or are there specific areas of concern?

RG: So far so good. Overall, I have been very pleased with the help people have given us, and the improvements we have been able to make. Not too surprisingly, the whole process has taken a fair bit longer than expected. On the down side, there are some people who have forgotten that this is a test. They seem to think this is free play time and get openly hostile when the game is broken. In the end though, due to the fact that we also have some great quality feedback coming from a group of players, I am confident we will be shipping the first major online success in the industry.

PCG: Do you think Lord British's "death" will go down as a bit of Ultima Lore?

RG: I hope so!

Portrait of a Killer

Continued from page 88

deaths? [Rainz's player also used another character called "Aquaman"]

RAINZ: Just as Rainz fights for the oppression of tyranny, Aquaman fights in favor of it. Aquaman does not discriminate, he kills on sight and without discretion. That is his nature. Aquaman's rampage was motivated by his characteristics; that is the nature of roleplaying.

Origin's Internet roleplaying game Ultima Online regularly hosts thousands of players in one giant game.

PCG: Don't you think it's a bit unfair to kill players with a bug, when they can't fight back? [Origin has said that Rainz and others were exploiting a bug that gave them an unfair advantage].

RAINZ: If 'bug' means 'innovative training technique' then I am guilty of killing others with a bug. Sometimes a standard feature of gameplay evolves into a bug when programmers realize it needs tweaking.

PCG: What exactly was this bug that you were exploiting? How did it work?

RAINZ: There was no bug. I trained in shrines with others, we would heal and/or resurrect ourselves to stay alive while tweaking our combat skills. Following Aquaman's rampage, shrine function was wisely altered to counter this style of combat training.

PCG: Do you think player-killing is just part of the game?

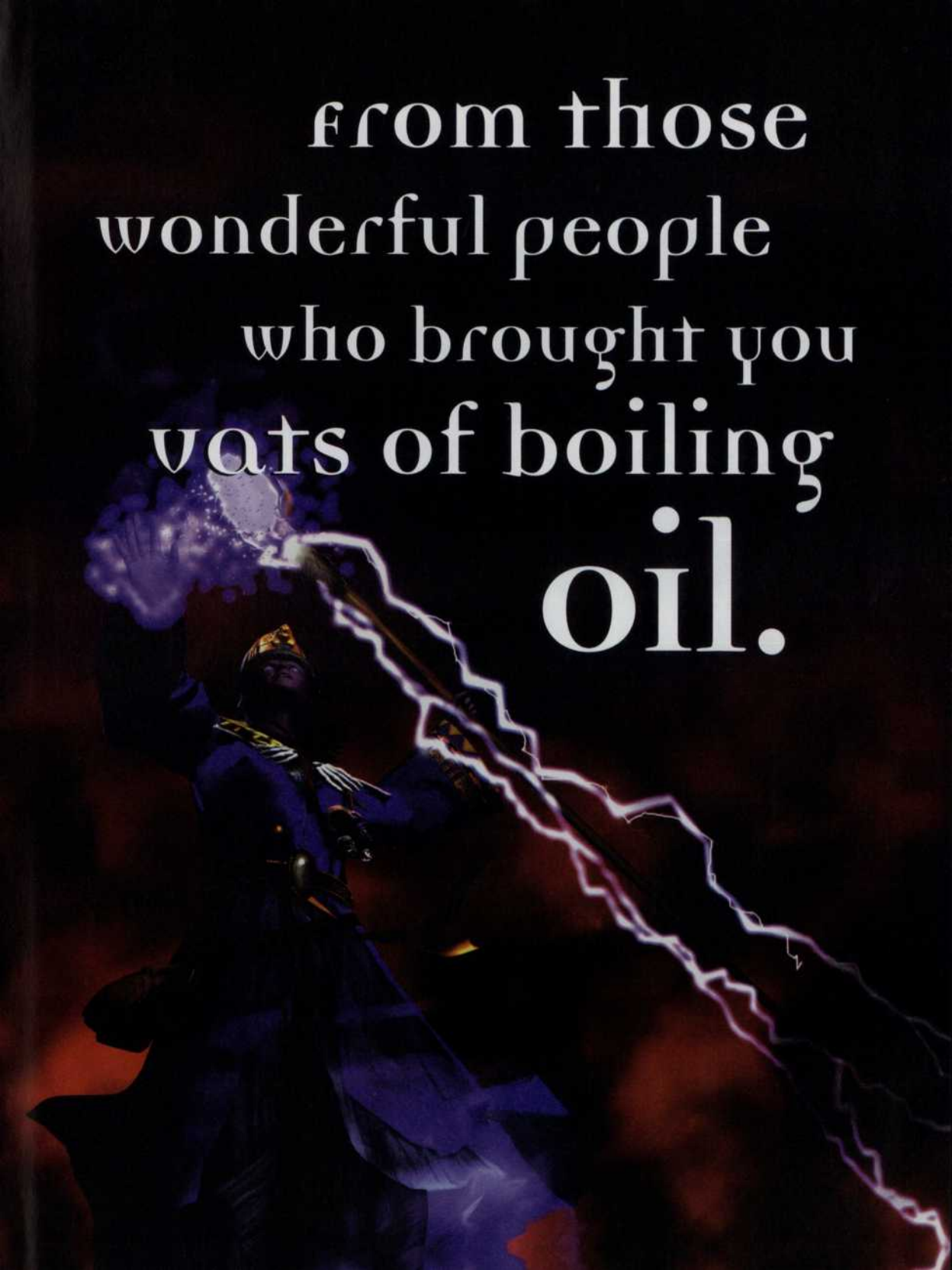
RAINZ: Player-killing should always be part of *UO*. No player should ever be 100 percent safe, regardless of their location. I am sure that other online game designers will learn from these episodes, power gamers will always be present and certain precautions need to be taken.

PCG: Since Origin has said you will be allowed to play on *UO* when it goes commercial, do you plan on re-joining?

RAINZ: Nothing will keep me away from *UO*.

PCG: Will you play a character called Rainz?

RAINZ: Aye, he will be one of the characters I play.


from those
wonderful people
who brought you
vats of boiling
oil.

LORDS OF MAGIC™

8 magical races

When the evil sorcerer Balkoth threatens the peaceful people of Urak with death and destruction, brave heroes with magical powers must rise up to stop the reign of terror and defeat the forces of tyranny. In Lords of Magic, the successor to the popular Lords of the Realm II, you enter a fantasy world where good and evil fight for primacy against a mystical backdrop of wizards, warriors, spells and storms, giants, gnomes, and Barbarians.

3-D terrain editor

Building on the dramatic features that made Lords of the Realm II a breakthrough in strategy gaming, Lords of Magic combines turn-based exploration and resource management with real-time combat. Join forces with others (up to six players can compete on a LAN or over the Internet) or marshal your forces to take on Balkoth and his Barbarian allies alone. You'll command up to Eighty creatures, including elves, vampires, skeletons, and gargoyles, as you defeat evil and save the realm. Wielding the forces of magic through spells and artifacts of power, you can take multiple paths to victory: more choices, more outcomes, and unlimited replayability.

Lords of Magic features a true 3-D game map, with 16 bit SVGA Graphics and a powerful map editor that puts you in control of terrain height, topography, and texture.

As you explore the land of Urak, you'll battle in dark and mysterious caves, castles and dungeons

comes a mys

www.sierra.com

SIERRA®

Impressions

RATING PENDING
RP
ESRB

1996 Sierra On-Line, Inc. ® and/or ™ designate trademarks of or licensed to Sierra On-Line, Inc. Bellevue, WA 98007
U.S. Patent No.s 5,297,240; 5,425,139; 5,377,997 Other U.S. and foreign patents pending. All rights reserved. 0697-03881

select one of eight cities to be the center of your empire

in your library wizards will research spells to overpower your enemies

ical world of swords and sorcery

deep inside your wizard tower sorcerers practice their secret arts to conjure magical creatures and train new acolytes

when you confront the enemy forces of Malkoth, "zoom in" to real time combat

Microsoft
Where do you want to go today?

Endorsed by:
FlightSafety
international

Cessna
a textron company

BOMBARDIER BUSINESS AIRCRAFT

©1997 Microsoft Corporation. All rights reserved. Microsoft and Where do you want to go today? are registered trademarks of Microsoft Corporation. Other products and company names mentioned herein may be the trademarks of their

Look here ace, you've got just 90 feet of runway before you earn your wings the hard way. Face it. Your fixed-wing rules do not apply here. What you need is a helicopter.

And now you've got one in Microsoft Flight Simulator 98, an upgrade guaranteed to blow all past flying experiences out of the sky. With it you'll soar over vastly improved landscapes that include 3000 airports (10 times more than the previous version) and more than 45 cities around the world.

Flight Simulator 98 features multiplayer, force feedback support and flight models validated by Cessna® and Learjet, so you can achieve all new levels of flight realism. Take control of the widest range of aircraft, including this Bell 206B JetRanger III helicopter, a machine that's guaranteed to make you feel like a rookie all over again.

Your coordinates for take-off are www.microsoft.com/games/fsim

You're Dash Rendar - quick on the trigger of a blaster.

It's you and your tiny snowspeeder versus a giant, Imperial AT-AT.

Speeder bike mode - fast-paced action with a kick start.

THERE'S A NEW FACE OF EVIL IN THE UNIVERSE.

(AND YOU THOUGHT IT COULDN'T GET ANY UGLIER.)

STAR WARS®

SHADOWS OF THE EMPIRE™

REQUIRES 3D ACCELERATOR

Enter Prince Xizor - the newest villain in the *Star Wars* universe. In *Shadows of the Empire*, you'll encounter him along with a host of new *Star Wars* characters, vehicles and locations. With your 3D accelerator, it's a fast, sharp, colorful universe - so detailed, in fact, you can see the trigger of a blaster. Enter the fray in 5 gameplay modes; ground shooter, space combat, speeder bike, jet pack and snowspeeder - all in an effort to protect Luke from the evil clutches of Xizor - a face of evil so dark, you'll only find him in the shadows. www.lucasarts.com

TEEN T AGES 13+ ESRB

TESTED

®, TM & © 1997 Lucasfilm Ltd. All Rights Reserved. Used Under Authorization. *Star Wars* and the LucasArts logo are registered trademarks, and Shadows of the Empire is a trademark of Lucasfilm Ltd.

HAIL *to the* KING, BABY!

BY JASON BATES

LAST YEAR, Duke Nukem defended Earth from an alien invasion and in the process gave us one of the PC's most enjoyable 3D action games. Now he's back, powered by the *Quake* engine and defending America's cultural capital — Las Vegas — from a second swarm of interstellar scumbags. Hang onto your hats and turn the page for your first-ever look at *Duke Nukem Forever.*

Illustration by Peter Bollinger

The early part of 1996 was a bad time for the 3D action game genre. Gamers hungry for something new and original were instead force-fed a tiresome parade of uninspired *Doom* clones, and the revolution that *Quake* promised was still some months away. Clearly, the genre needed something new. Something original. It needed a hero. And did it ever get one.

As if out of nowhere, 3D Realms' quirky and inventive *Duke Nukem 3D* burst onto the scene in early 1996 amid considerable fanfare, and instantly jumped to the top of the charts. And there it stayed, right up until *Quake* finally shipped, and even for some time after. The running popularity battle between the blasting genre's twin champions sparked a long, heated and at times rancorous debate amongst gamers over which was better, *Quake* or *Duke*.

A quick rehash of the classic arguments: one side claimed that *Quake* was vastly superior — that its true 3D engine, its customizability, and its superior Internet play made it the best game ever made. Others said that *Quake* was great technology but had only a thin veneer of solo gameplay, while *Duke Nukem 3D*'s clever weapons, comic book colors, wry sense of humor, and sheer sense of *fun* more than made up for the fact that the engine was slightly dated. In short, *Duke 3D* was a blast, and it's no wonder that more than a million copies were sold.

But now the time has come to toss away all those arguments, because now we get the best of both worlds, *Quake* and *Duke* alike. The next installment of the Duke Nukem series — *Duke Nukem Forever* — grafts the patented swagger of 3D Realms' macho mainstay onto the *Quake* engine, freshly-licensed from id Software.

Or in Duke's own words: "Damn, I'm good."

The first question is why 3D Realms chose to license id's engine in the first place, after it had spent much time and energy creating its own in-house technologies, the *Prey* and Build engines. The short answer is timing. To build *Duke Nikem Forever* (or *Duke 4* for short) on the *Prey* engine would have delayed the release until late 1998, around the same time as *Prey* itself. And to be honest, 3D Realms' Build engine (the basis of *Duke Nukem 3D*, *Shadow Warrior* and a slew of clones) is looking a little out of date these days. The only logical solution was to use the ready-made, industry-leading *Quake* technology.

3D Realms did consider other engines, including Epic's *Unreal*, but unlike *Unreal*, *Quake* was finished, it was a known quantity, and it was ready to go. By using the *Quake/Quake II* code base, 3D Realms gains the true 3D world and TCP/IP play of *Quake* with the added functionality of the upcoming *Quake II*: OpenGL, QuakeWorld, colored lighting, more brushes per level, and more interactivity with the environment. (And don't forget the crouch recently added to *Quake II* — who can imagine Duke Nukem not crouching?)

Yet after the long, acrimonious debates over *Quake* versus *Duke*, one has to ask if the necessity of licensing John Carmack's technology hurt 3D Realms' pride. The answer is no, according to Scott Miller, president of 3D Realms' parent company Apogee Software. "Pride cannot affect our decisions. Pride is the cause of many a company's demise," he says. "We see this deal with id as a way to get *Duke 4* out well ahead of *Prey*. We're not pushing *Duke 4* as a technology show-

Boom! The rocket launcher takes out a big piece of the Las Vegas landscape. About ten weapons are planned for *Duke Nukem Forever*. Though most haven't been created yet, a chaingun and shotgun are in.

Al Bundy will feel right at home in this nudie bar — *Duke 4* will have an adult theme just as in *Duke 3D*.

case like *Prey*; it's a game that will succeed or fail based on its unique content, gameplay innovations and Duke's characterization." And Apogee is not new to this concept — id's *Commander Keen* engine was used in Apogee's *Bio Menace*, and the *Wolfenstein 3D* engine was used in both the *Blake Stone* games.

"What we did was license an engine, and a good one. But that's the end of the story," says George Broussard, president of 3D Realms and the project leader on *Duke 4*. "*Duke Nukem Forever* will have it's own unique feel, setting and gameplay. When we're done, you won't even care that it's the *Quake II* engine anymore."

That's a good thing, considering that there are so many other *Quake* engine games on sale now or in imminent release (including the two *Quake* mission packs, *Hexen II*, *Half-Life*, *Daikatana*, *SiN*, and *Quake II*; not to mention other, non-*Quake* engine 3D games like *Jedi Knight*, *Unreal*, *Blood 2*, *Riot*, and 3D Realms' own *Prey*). With so much competition on the way, standing out from the crowd is critical, and Broussard knows this as well as anyone. He spelled out for us in detail exactly what

THE HISTORY OF DUKE NUKEM

From an EGA side-scroller released as shareware on early bulletin board systems to the complex 3D worlds of the current project, the growth and development of the Duke Nukem series parallels that of much of the industry. But one thing that has remained consistent throughout is that Duke, whether drawn in pixels or polygons, has been preventing robots and aliens from taking over the Earth in a brightly-colored, tongue-in-cheek style.

DUKE NUKEM [June 1991]

The original *Duke Nukem* was a two-dimensional, EGA (that's 16 colors, for you youngsters out there) platform side-scroller released as PC shareware back in 1991. Featuring parallax scrolling and the first appearance of Dr. Proton, its gameplay was inspired by the then popular Sega Genesis console, and the game went on to be the best-selling shareware title of 1991 and 1992, even beating out *Wolfenstein 3D* during 1992. And of course back in those days, the shareware distribution was done not over the World Wide Web, but across the thousands of independent bulletin boards that were owned and operated by computer enthusiasts, as well as on Apogee's own Software Creations BBS. At its height, Software Creations had more than 150 lines, allowing users to dial in and download games over their brand new 1200 and 2400 baud modems.

Duke Nukem made his first appearance in this eponymous shareware side-scroller.

DUKE NUKEM II [November 1993]

Another 2D side-scrolling adventure game, the sequel featured much brighter, VGA colors and brand new sound effects for the sound cards that were starting to come to market. The story was created by Tom Hall (now creating *Anachronox* for ION Storm), and it went like this — Duke, while being interviewed on TV about his latest best-selling book, "Why I'm So Great," is suddenly kidnapped by the alien Rigelatins and threatened with the sucking away of his brain. Many of the features that appeared later in *Duke Nukem 3D*, such as the jet pack, invincibility, and spy cameras, first showed up in this side-scroller. *Duke Nukem II* required the awesome power of a 286 to run, as opposed to the original, which had an XT as a minimum spec. Ah, those were the days!

DUKE NUKEM 3D [January 1996]

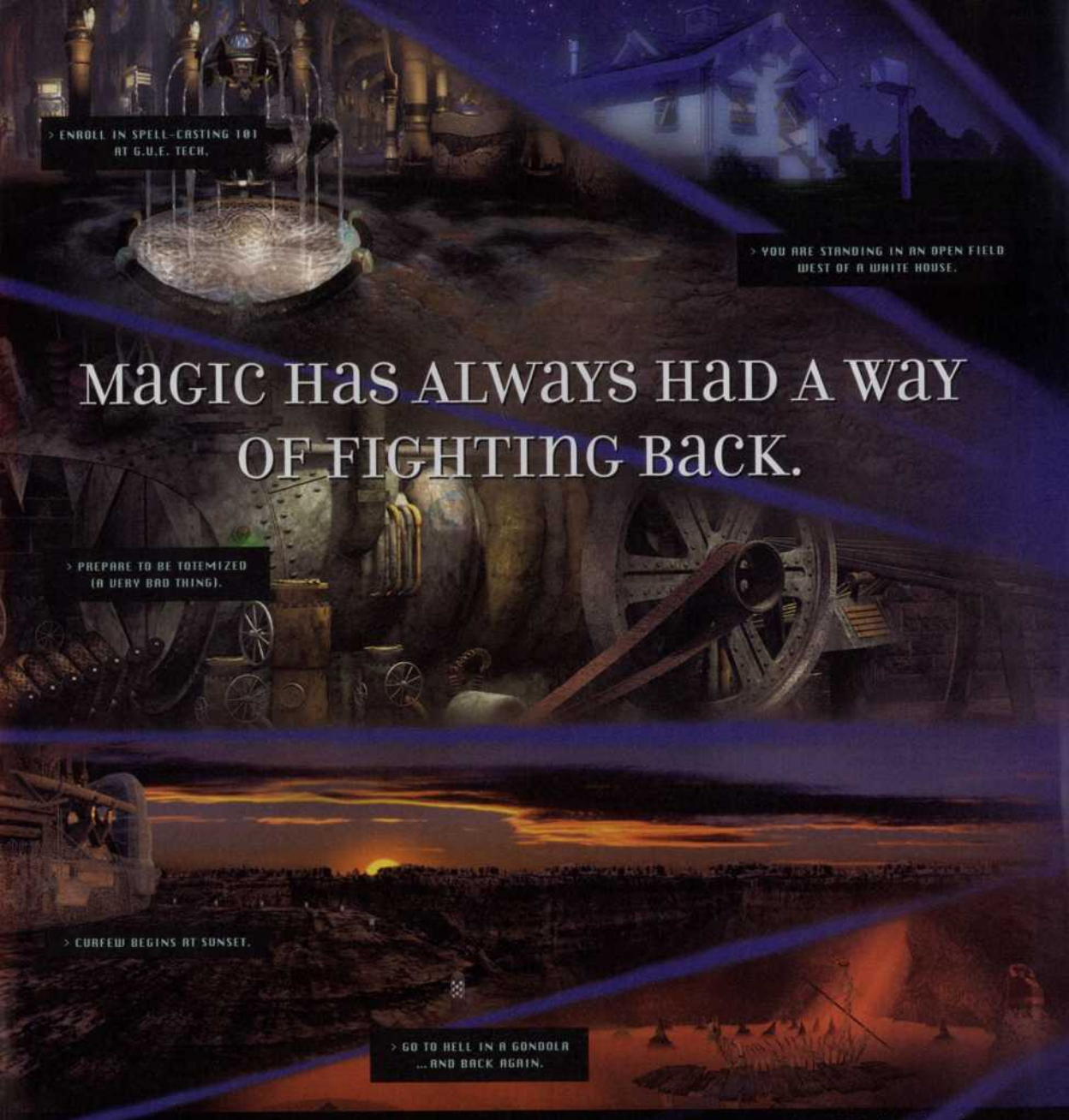
By the time the shareware version of *Duke Nukem 3D* was released, the Internet and the World Wide Web had grown exponentially, making it the natural distribution vehicle for the game, replacing the ad hoc system of game-related bulletin boards. *Duke 3D* topped the download charts for months and dominated the action gaming newsgroups for as long a time. It was also one of the first games to ship with a level editor in the final package — users everywhere were soon designing levels of their own, while dedicated deathmatchers were soon mixing it up over Total Entertainment Network and Kali, taking advantage of *Duke*'s networked play. *Duke Nukem 3D* was followed by the add-ons *Duke Nukem Plutonium Pack*, *Duke Nukem Atomic Edition*, and *Duke it out in D.C.*

DUKE NUKEM FOREVER [1998]

To find out more about this one you ought to read the feature! But *Duke Nukem Forever* will be the first to use an id Software engine and support 3D accelerators. It's interesting to see how the series has shaped up; many elements from the earlier games have been reworked and revised as the series moved from a 2D side-scroller to a 3D shooter. What elements from the older games might make the cut this time around has yet to be decided, but there are a few interesting items still left unexplored — for example, the side-scrollers had a power-up called the gravity boots that let you walk on walls and ceilings.

That could be fun! (Hint, hint.)

The growth in the Duke Nukem series' popularity and technological sophistication in many ways mirrors that of the industry as a whole. What makes Apogee different, however, is that it got its start in the shareware market long before its games were sold at retail.



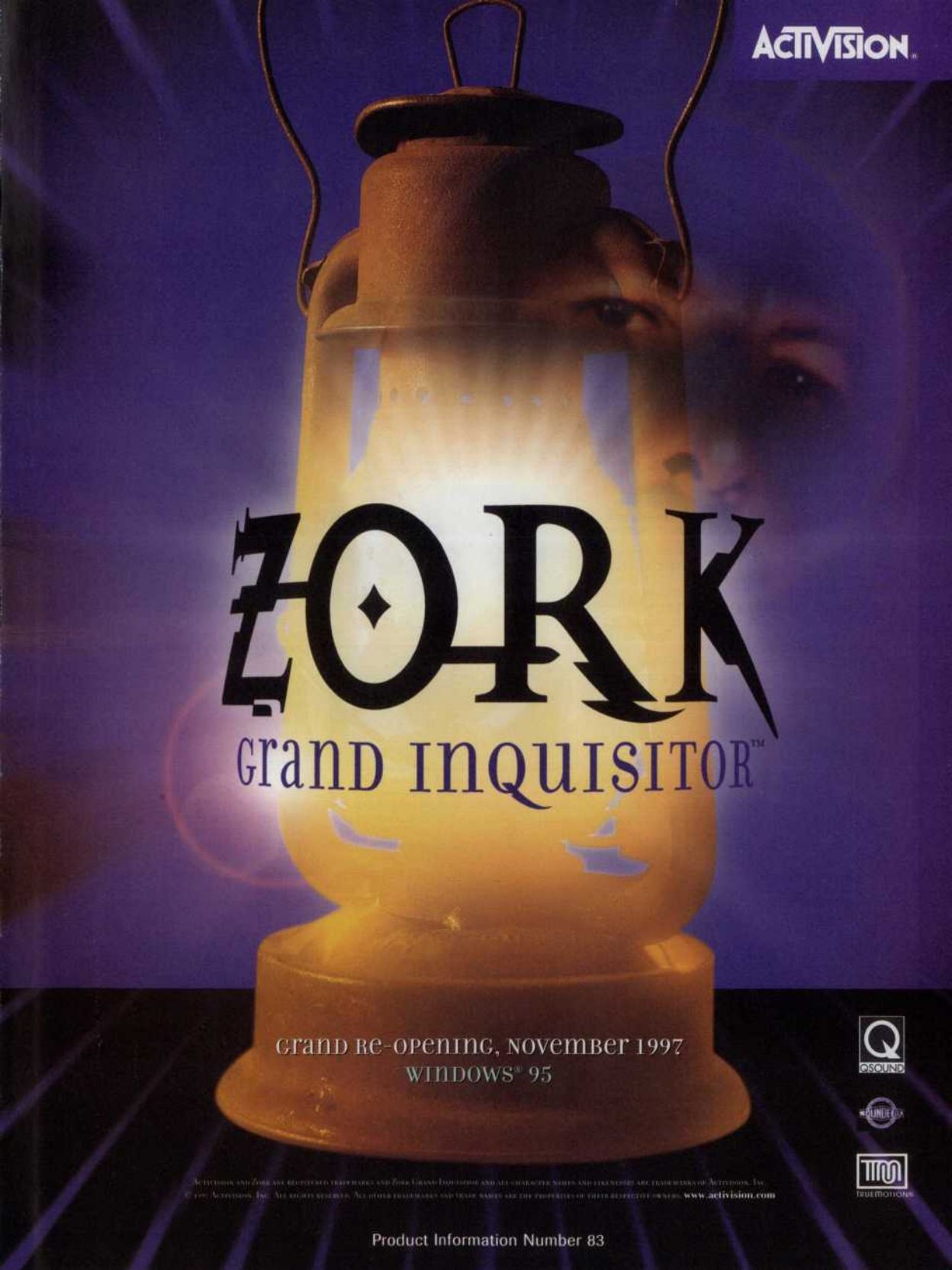
Actual 360° views from the game

NOW ALL IT HAS IS YOU. Since 1979, evil forces have tried to destroy magic in Zork.

Now a mighty oppressor threatens to take the "Great" out of the Great Underground Empire forever.

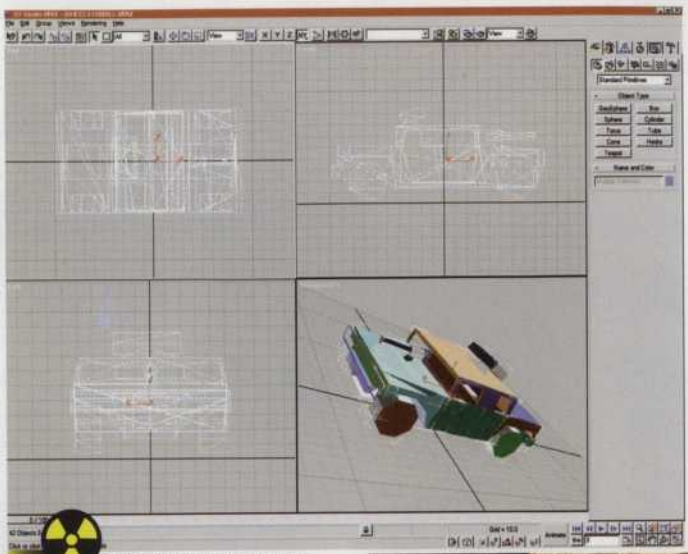
The Grand Inquisitor is a failed magician who claims technology will make magic obsolete.

And, you're the only adventurer brave enough to stop him. It could only happen underground.



ACTIVISION AND ZORK ARE REGISTERED TRADEMARKS AND ZORK GRAND INQUISITOR AND ALL CHARACTER NAMES AND LIKENESSES ARE TRADEMARKS OF ACTIVISION, INC.
© 1997 ACTIVISION, INC. ALL RIGHTS RESERVED. ALL OTHER TRADEMARKS AND TRADE NAMES ARE THE PROPERTIES OF THEIR RESPECTIVE OWNERS. www.activision.com

Product Information Number 83



***Duke Nukem Forever* will have all the expandability of *Quake* and *Quake II*, allowing users to add their own models, levels, and extensions to the game.**

will make the new Duke different.

First off is the character of Duke himself. Duke talks trash. Duke sings. Duke has an ego the size of Texas, and if you were casting an action movie hero and had to choose between one of id's anonymous grunts or Duke Nukem, the choice couldn't be more clear. "He's the coolest 3D action hero. Period," says Broussard. (Naturally, Duke's voice has to remain consistent as well, so the good news is that L.A. disc jockey Jon St. John will reprise his voice once again.)

Then there's the famed interactivity of *Duke Nukem 3D* — a game world filled with little touches, like the pool table that actually works or the toilets that restore health when flushed — these were the little things that made *Duke 3D* more fun to play as a single-player game than any action title before, and arguably, since.

"What we did in *Duke 3D* took interactivity to a level that still has yet to be matched," says Broussard, "and people are still scrambling to catch up and surpass *Duke 3D*'s interactivity." In *Duke Nukem Forever*, 3D Realms hopes to up the ante again. "Everyone says that, but the cool thing is we actually have a history of doing it, so it's not just talk or hype. You will simply be able to 'do' more things in *Duke Nukem Forever* than you can in other 3D games," he says.

And since so many of the fun extras in *Duke Nukem 3D* were added in the last few months or so of development, when the whole team was eating, breathing and dreaming Duke Nukem, we should hope for and expect the same kind of thing to happen here, come crunch time.

Finally, by simply being a Duke Nukem game, Broussard expects that the controversy and notoriety that ensues can't help but grab attention. "Controversy," says Broussard. "Yes, we love it, and you can bet right now that *Duke Nukem Forever* will offend someone, somewhere, for some reason, and that 95 percent of the world will love it, while 5 percent sit and complain about this or that."

The 3D Realms team is experimenting with putting in working vehicles as seen in *Shadow Warrior*.

While 3D Realms' *Shadow Warrior* was recently subject to controversy for its handling of Asian characters (see the sidebar on page 107), *Duke Nukem 3D* drew its fair share of heat for its simple-minded depiction of women. All the women in *Duke Nukem 3D* were either strippers or hookers, and they weren't actual game characters with independent movement and AI, but stationary, animated decorations. But since the success of Lara Croft in *Tomb Raider*, female characters are taking on starring roles in games like *Hexen II*, *Daikatana*, *Unreal*, and now *Quake II*, all of which have female leads or co-leads. So don't be surprised if Duke gets a girlfriend.

There's talk of doing a Duke Nukem action movie, and lines of action figures and novels are in the works.

"Well over a year ago, we had a 3D shooter in development titled *Bombshell*, somewhat inspired by the movie *Barb Wire* and Pamela Anderson's title character," says Miller. "Though we fired the *Bombshell* team because the game was going nowhere, we liked the character so much that we're going to have her as a cameo in *Duke Nukem Forever*, plus we hope to have her as a choice you can play as in multi-player matches." And if Bombshell turns out to be popular, Miller says, then she'll have a larger role in *Duke 5* — (which admittedly is nothing more than a gleam in Miller's eye at this point) — and might possibly star in her own game down the road.

But don't expect Duke to share the spotlight with anyone this time around — Bombshell will be strictly a supporting role, and for good reason. "Since we have heavy character speech in our games, that'd mean a full set of male and female lines," says Broussard. "Something like that's just too far beyond the scope of an action game. We'd rather put the time into enemies and things to *do* in a level."

But we'll join the crowd and ask — will the strippers return in *Duke Nukem Forever*? "Hey, it's Duke, and we're 3D Realms," says Broussard, and as you can

Surf's up! Duke sure looks cool on his very own jet ski, but Broussard and the *Duke 4* team have not yet determined what specific vehicles will be included in the new game.

MAX PAYNE

GET READY TO RUMBLE IN THE BRONX

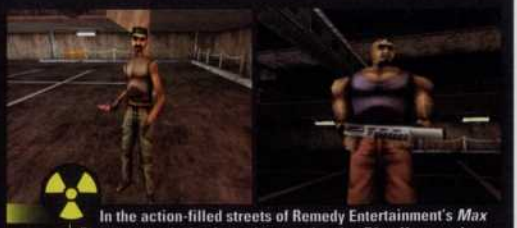
The collapse of Scavenger, a company that recruited heavily from Scandinavia and Eastern Europe, left a lot of talented developers out of work, and many of them drifted back across the sea. A few of these returned to their native Finland and joined Remedy Entertainment, a game company founded in 1995 and filled with veterans of Europe's "demo" scene — it's currently co-developing a graphic benchmarking program called Final Reality (*http://www.remedy.fi/fr/index.html*), which will be released this winter.

But Remedy Entertainment was founded primarily to form games, and its first release, *Death Rally*, was particularly successful on the shareware charts. *Death Rally* was published by Apogee, and as a result the two companies developed a good working relationship, so it was natural that Remedy would turn to the Texans for its next game project, *Max Payne*.

And what a project it is. Far more sophisticated than *Death Rally's* 2D, top-down shoot-and-drive action, *Max Payne* is a next-generation 3D game engine, based on the same kind of portal technology used in 3D Realms' own *Prey*. A 3D accelerator will be required for this one.

With *Max Payne*, the developers are promising that its

The game's story unfolds through comic-book style cutscenes that play between the levels.



In the action-filled streets of Remedy Entertainment's *Max Payne*, your mission is to clean up the city, Dirty Harry-style.

unique portal technology, the power of the 3D accelerator, and the action-driven storyline, will result in the most realistically violent game yet. Payne will wade, Dirty Harry-style, through rivers of blood, laying waste to mobsters, cops on the take, doped-up psychopaths, and assorted thugs and villains.

Besides running around and shooting things, you'll be able to drive around in some of the game vehicles, though you might have to search someone's desk to find the keys, as some plot and adventure elements are important to the game. The game has an editor very similar to *Prey*'s "Preditor" to let create your own levels as well.

The title character, Max Payne, is an undercover cop in New York City who finds himself framed for the murder of his boss when he discovers evidence of widespread government corruption and mob infiltration of the police department. Now on the run for his life, Max will wander through gritty urban alleys, city streets, and abandoned warehouses in a third-person, *Tomb Raider*-style point of view.

Yeah, the plot's a bit hackneyed, but it would seem to fit well with the intense, action-oriented world of *Max Payne*. The plot is uncovered within the game, as players discover clues, talk to other characters, and investigate the corruption.

For added emphasis, new story elements are introduced between levels, with comic book-style storyboards introducing new chapters. This looks to be one of the few upcoming action games that is striving to incorporate a plot along with the constant action.

see for yourself from these screen shots, the landscape of Las Vegas is the perfect setting for a Duke game, with its casinos, strip clubs, and houses of ill repute.

The Game

Duke Nukem Forever takes place in Las Vegas and the surrounding state of Nevada, where Duke's old nemesis from the early side-scroller days, Dr. Proton, is making a comeback. Proton has set up camp in Area 51 (the top secret base where the government is rumored to study captured UFOs, in case you don't watch "The X-Files"), destroyed much of Las Vegas with a tactical nuke, and recruited an alien army to help him conquer the Earth. Hey, what more do you want from a super-villain?

"Proton has taken over Area 51 and used the spacecraft there to contact aliens around the galaxy who have had their butts kicked by Duke," Miller says. "Proton's plan is for all of these aliens to join forces with him and be rid of Duke once and for all." The wicked Dr. Proton, himself a formidable 7'6" cyborg, has also re-animated the Area 51 military guards and given them bionic enhancements, creating an army of super-dupes to do his bidding — and naturally, only Duke can stop these nefarious schemes. It's a classic comic book plot, and one perfectly in keeping with a Duke Nukem game.

But apart from this backstory, 3D Realms is keeping other details under wraps, and of course, the story is subject to change. "I often think some people give out too much information on their games, so then there is nothing left to discover as you play," says Broussard. One thing we can reveal, though — most of the bad guys from *Duke Nukem 3D* have been retired, and the only baddies from the last game that will re-appear here are the famous Pig Cops, this time dressed in military duds. "Honestly, the enemies in *Duke 3D* were not that good," says Miller. "We'll do much better this time."

Chainguns and Choppers

No preview of an action game is complete without a perusal of its arsenal. While many of the designs for the *Duke 4* weapons are still being worked out, Broussard already knows what the basic lineup will be. "Right now, we have the shotgun, chaingun and rocket launcher," he says,

Duke's nemesis, Dr. Proton, makes an explosive return in *Duke Nukem Forever* when he nukes Las Vegas.

MASS DESTRUCTION™

Don't just sit there...

SHOOT!

TEEN T ESRB

NMS SOFTWARE™

PlayStation™

ASC GAMES™

SEGA SATURN™

Windows® 95 PC-CD ROM INTERACTIVE™

Mass Destruction™ is a trademark of BMG Interactive International, a unit of BMG Entertainment. ©1997 NMS Software, Ltd. ASC Games™ is a trademark of American Softworks Corporation. ©1997 American Softworks Corporation. Mass Destruction™ is developed by NMS Software, Ltd. The NMS logo is used under license from BMG. BMG is a trademark of BMG Music. Play Station™ and the Playstation logos are trademarks of Sony Computer Entertainment, Inc. Windows® 95 is a registered trademark of Microsoft Corp. Sega™ and the Sega Saturn™ logo are trademarks of Sega Enterprises, Ltd. The ratings icon is a trademark of the Interactive Digital Software Association. All rights reserved.

No trip to Las Vegas would be complete without a visit to the lair of the one-armed bandits.

adding that he considers such weapons as standard issue in action games these days. But even these obvious choices may offer a few unique twists, such as a SWAT team-style flashlight mounted on the shotgun.

As for the rest, Broussard says, "There will be a lot of new weapons. We are making a new game here, around the consistent game character of Duke Nukem. Just like in James Bond movies, it's always Bond, but each time he's back, you eagerly wait for the scene with 'Q' to see what toys and gadgets he has this time."

But 3D Realms will be listening to fan input, and may let people vote on its web site as to which older Duke Nukem weapons make the cut. "Lots of fans have requested the return of the Shrinker, and we are seriously considering it," Broussard says. He adds that there will be about ten weapons in all. "Trying to balance any more becomes silly and unfocused," he says.

Considering what was achieved with *Duke Nukem 3D*, we're confident that *Duke Nukem Forever* will have an impressive load of fun gadgets and toys to play with — and along with *Quake*'s Capture The Flag grappling hook and *Heretic*'s animalizers, *Duke 3D*'s shrinker, freeze gun, laser tripwires, pipebombs, holodukes, and jetpack rank among the best power-ups ever seen in this genre.

Meanwhile, when it comes to Duke's famed interactivity, 3D Realms says the team will surpass what it's accomplished in the past, with stuff light years beyond what was seen in *Shadow Warrior*. They're currently testing out vehicles in the game environment and figuring out which ones are fun enough to keep.

Some of the concept art shows Duke on a motorcycle, an idea Broussard likes: "Duke on a Harley? That's too obvious and natural of an idea that we'd be crazy not to try it," he says. As for the rest, again, Broussard doesn't want to give away too much when there could be competitors reading this article. "*Duke Nukem Forever* is far enough out that we really don't want to give all our ideas away, although I promise you, you haven't seen anything yet. Imagine *Duke Nukem Forever* to be *Duke 3D* on crack and steroids at the same time. It's going to simply be insane to play," he says.

Bits and Bytes

Writing all the squiggly code that makes Duke come alive is the task of long-time 3D Realms vet Todd Replogle and Chris Hargrove, freshly plucked from Raven Software. They're already messing with the *Quake* engine and playing around with ideas.

As Broussard points out, just because you license Carmack's technol-

Creating the outdoor, urban environments of *Duke Nukem 3D* in the *Quake* engine is no easy task, but as these screen shots demonstrate, the design team is already tackling the problem.

An Audience with The Founder

Scott Miller

Scott Miller founded Apogee Software in 1987 and pioneered the shareware model of games marketing, and was recently awarded a Lifetime Achievement Award from the Shareware Industry Foundation. He's been in the games business for a long time and has a unique perspective on it.

PC Gamer: Lately it seems like if there's trouble in the gaming industry, there's a good chance Apogee's involved. For example, the *Duke* versus *Quake* flame wars, your *Raptor* trademark, the war of words between Ritual and Apogee, alleged ethnic insensitivity in *Shadow Warrior, and* the recent patent controversy. Why is this?

Miller: Certain things we help orchestrate, such as the strippers in *Duke Nukem 3D*. Most controversies happen without our initiating them, though, such as the SPA Codie Awards controversy and the "war" with Ritual. What makes us different, perhaps, is that unlike other companies, we'll take our issues public. For example, dozens of other developers and publishers received a similar letter regarding the patent issue, but we were the first to take it public.

PC Gamer: Some in the industry have criticized Apogee for its politically incorrect content — the strippers in *Duke Nukem 3D*, the ethnic stereotypes in *Shadow Warrior*. How do you respond?

Miller: The claims that *Shadow Warrior* is racist against Asians caught us by surprise, and was certainly not our intent. We like to be controversial with the content of our games, but we'd never purposely use racism toward this goal. I'm afraid that we live in such a politically correct society nowadays that it's almost impossible to make a piece of entertainment that doesn't step on at least one group's toes. We can't afford to walk on eggshells here, because we'd end up making a game so watered-down that it appeals to no one.

PC Gamer: Do game developers have a certain responsibility?

Miller: I think developers have a responsibility to shoot for a particular market and correctly label their game for that market. If the consumer knows who the game is targeted for, then they can make the appropriate buying decision. We shoot for an adult market and we label our games to indicate this, just like movies are rated.

CONTINUED ON PAGE 108

CONTINUED FROM PAGE 107

I think this is the developer's main responsibility, to label their games properly and where buyers can clearly see the label.

PC Gamer: How did you end up licensing the Build engine to people like Capstone and Lobotomy even before *Duke Nukem* came out?

Miller: We wanted Build to take over the world! Actually, we knew there was a lot of money to be made licensing, so I sent faxes to a dozen publishers and developers, telling them about Build's features and its availability. We also made a VHS tape with George [Broussard] and I showing the engine in action, which impressed many companies, including Activision at the time, who was going to license the engine until we chose FormGen over them to release *Duke Nukem 3D*. Then they didn't like us anymore. Activision lost the deal to FormGen by only $30,000 in advances, which they refused to match.

PC Gamer: Licensing the *Quake* engine couldn't have been cheap. How big was that check?

Miller: The size of the check, which is an advance on royalties for id, not a flat fee, was huge, but is confidential as per our agreement.

PC Gamer: You helped id Software immensely in the early days, but missed out on a lot of its subsequent success until *Duke* came along. Was there some sort of falling out?

Miller: Not at all, at least not from our side. After the giant success of *Wolfenstein 3D*, it made sense for id to handle their own shareware marketing for *Doom*. After they announced their plans, Jay Wilbur and I had many conversations in which I helped them with marketing ideas and giving them contacts for handling direct orders, etc. I think that players prefer to think that developers have rivalries, but the reality is that we are generally all friends or friendly to each other.

PC Gamer: How important a factor has engine licensing become as a source of income for developers?

Miller: For us, engine licensing has been worth millions, and Build has made more than most of our games, and the money is still coming in from licenses. When you spend a year or more making an engine, licensing is a great way to recoup this huge time investment. We have every intention to license *Prey*, and several well known publishers have already shown interest. *Prey*'s engine will be ready to hand over early in 1998. The fact is that most developers should not be in the business of making engines because it takes too long, is too costly, and is too difficult. I think there are only a few 3D engine designers capable of developing a visionary 3D engine, and most companies do not employ someone of this caliber. This is partly why many developers nowadays have decided not to even pursue 3D engine development.

This menacing mechanical monstrosity is our first glimpse at a *Duke Nukem Forever* enemy. Dr. Proton will employ a whole army of cyborgs and robots in his desperate bid at world conquest.

ogy doesn't mean you won't need programmers of your own to add that little bit extra. "An engine is just that, an engine," says Broussard. "Look at Build. We licensed that engine four or five times, and the games that were built on top of that engine were all different, and all required their custom code. And we will want to re-do a lot of the *Quake II* 'game' stuff anyway, just to keep it from looking like a clone. If we have Duke on ropes, driving vehicles and interacting with his environment in a hundred different ways, then that all represents new code we have to write. Duke games require lots of gimmicks and special, one-time events, and those kind of additions must all be hand-coded."

But 3D Realms will need to take delivery of the final *Quake II* code from id Software before that kind of work can begin in earnest. "We can actually do quite a lot without the *Quake II* code," says Broussard. "What we're spending time on are the 'new' ideas that we want to do. This can all be done in Quake C and pretty easily converted to *Quake II* .DLLs later."

Another bonus of using the *Quake II* engine is that homebrew hackers will have the opportunity to play with the guts of the game, modifying its art and weapons and story to create a whole new slew of freeware Duke stuff that will keep the community together, much more so than was the case with *Duke 3D* and its not-so-well-documented editor.

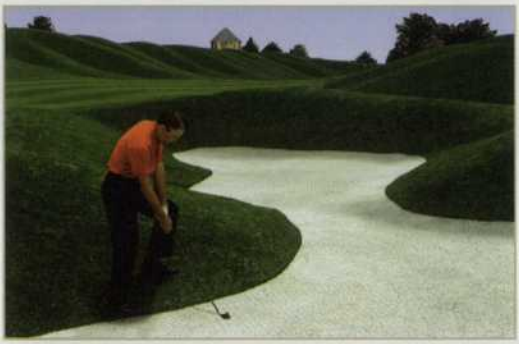
Look and Feel

Because 3D Realms is still waiting for the *Quake II* code, all the screen shots in this feature are shown in 256 colors and running in the standard *Quake* engine. But that 256-color limit may not be the case in the final game — better things are afoot. "Certainly environments like the Grand Canyon and Hoover Dam, which are so colorful, will present unique challenges," says Ruben Cabrera, an artist on the project, "but we have a couple of ideas that we are still working on to take advantage of color." There is serious discussion about moving to 16-bit color, though there are frame rate issues to consider.

In the meantime, the graphics team is working from the *Quake II* tech specs when building models and textures, and then they're stuffing them into the *Quake* engine (with less colors, of course) in some early levels just to see how they look. So what you are seeing in this feature are some very early — but very tasty — looks at some of the Las Vegas environs that will form the backdrop of *Duke Nukem Forever*. The colors are not all there yet, but the graphics strictly adhere to the *Quake II* specs for scene complexity. "Our scenes are all under 500 polygons

If you remember the side-scroller Duke Nukem games, you'll remember the taunting messages from Dr. Proton.

AT LAST, A GOLF GAME WITH NO HANDICAP.



FEEL THE CLUB THROUGH YOUR FINGERTIPS. YOUR MOUSE IS POISED TO ADDRESS THE BALL. A SUBTLE OPENING OF YOUR WRIST ANGLES THE CLUBFACE. SWEEP THE MOUSE BACK, THEN FORWARD IN ONE ELEGANT MOTION. A SMOOTH AND RHYTHMIC SWING, FULL OF POWER & CONTROL. TRUE CONTACT. MOUSE ON BALL.

A low drive into the wind? A fade with a six-iron round a tree? An explosion shot from a deep pot bunker? You have the technology. Serious control. Serious golf. It feels perfect. And it looks perfect too. Flowing terrain, surveyed to the last inch. Fine textures down the rolling fairway to the contoured green. The bunkers raked, and 20,000 frames of animation put you in the correct stance even in the most awkward lie.

UNIQUE FEATURES. UNIQUELY REALISTIC.

THE *Golf* PRO

Featuring Gary Player

A STROKE OF GENIUS

AND THE REST OF THE SCORE? EXTENSIVE TV-STYLE COMMENTARY, FULL INTERNET PLAY AND CHAMPIONSHIPS FOR UP TO 32 GOLFERS, 18 PRIVATE LESSONS FROM GARY PLAYER, 36 COMPELLING HOLES OF GOLF ON HILTON HEAD NATIONAL, SOUTH CAROLINA AND ST MELLION INTERNATIONAL, CORNWALL, ENGLAND. INTELLIGENT HANDICAPPING AND A RANGE OF COMPETITIONS.

EMPIRE INTERACTIVE USA
TELEPHONE NO: 415 439 4854
FAX NO: 415 285 3370
WEBSITE: http://www.empire-us.com

Hilton Head National · Gary Player · St Mellion International

empire INTERACTIVE

AVAILABLE ON PC CD-ROM

Product Information Number 149

and many are half that or less," says Broussard. "So the bottom line is that these are real shots of real gameplay."

A special challenge for the art staff is bringing the bright, colorful world of the previous Duke games to the *Quake* engine without looking too cartoonish or too dark and gloomy. "We are interested in developing a place that feels as real as possible," says Michael Wallin, another artist on *Duke 4*. "To succeed in this we will have colors that are not too saturated or cartoon-looking, and contrasts that match the environmental mood of the place we are in. We will also utilize a dynamic palette so we will have the flexibility to create environments that do not all look the same. So, in short, *Duke 4* will not be a middle ground between *Duke3D* and *Quake*; it will be more robust and real for the player than either environment."

So how does the art team work together to create a consistent look for the game? "Well, it all depends on what the game is about — where it's taking place and when," says Brian Cozzens, another of the project's four artists. "Everyone gets together and offers suggestions about how it should look and feel, what general mood it should convey. Then it's written into our design documents. From there, the artists begin to work up sketches of characters, and begin to create prototype work — such as textures and models. If George and the team likes those, we work from there."

The new engine allows for even more activity — and interactivity — than before. Here is a delapidated foot bridge that Duke will have to negotiate. No word yet if the cacti cause damage!

Level Lords

When it comes to building levels, using the *Quake II* engine gives the map designers more freedom than Build, but it also means some new challenges. Outdoor areas in particular must be handled carefully. But the team, headed up by Duke veteran Allen Blum (this is his fourth Duke game) is more than ready to make the change.

"*Duke Nukem 3D* used the Build Engine, which was actually 2D," says Blum. "But with a couple of tricks we were able to make it seem very three-dimensional. Now that we're using the *Quake II* engine, we have less limitations and can make the Duke environment even more realistic than ever before."

Getting ready for this jump was not as difficult as it might seem, as the level designers had already been intrigued by *Quake* and its shareware editors long before *Duke Nukem Forever* got underway. "I looked at Thred, Worldcraft, and Stoneless while I was still working on *Shadow Warrior*, even before I knew we were going to license the *Quake II* engine," says level designer Keith Schuler. "These editors were a welcome break from Build, and helped me learn my way around the various nuances and limitations of making 3D levels." Schuler's moved on to id's own *Quake* editor now, and he's also played around with some of the *Quake* patches like Team Fortress, and created one of his own that added some *Duke 3D* features, including respawn markers and remote ridicule, to *Quake*.

Still, other challenges lay ahead, especially creating the outdoor, real-world feel of the previous Duke game with an engine more usually associated with creating claustrophobic dungeons. "Creating outdoor areas with the *Quake* engine requires more planning than a *Duke 3D* level did, obviously due to the differences of how *Quake* deals with level architecture," says level designer Stephen Coole. "In *Duke*, a wall that blocks the player's view will suffice and raise your framerate, while in *Quake* the same wall may not help block your view or will add more polygons to the scene, actually slowing it down. There are new tricks and design methods to be learned, but I feel the end result will yield a much better game than *Duke Nukem 3D*."

As for cinematics, the team is com-

DUKE NUKEM: THE FRANCHISE!

This foot-high Duke figurine toy should soon be available soon in hobby shops everywhere.

Toys, movies, novels — there's plenty of merchandising opportunities to tap into with a successful game franchise, so don't be surprised if you start seeing Duke Nukem goodies outside of the software stores. 3D Realms has passed off all the merchandising side of the business to GT Interactive, who will be bringing several products to market soon.

A new line of Duke Nukem action figures made by Resaurus will be out by this holiday season, with the first set including Duke Nukem himself and some of the enemies, such as the Pig Cop and the Octabrain. They should cost about $8 a piece.

A second way to get an actual three-dimensional Duke into your life is with the foot-high Duke Nukem figurine, created by Moore Creations and pictured here. Also headed to the stores is a new line of novels from Pocket Books.

And for console gamers who can't get enough of "The Duke," there's a new PlayStation-only Duke Nukem being developed with a third-person point of view.

Then of course there is *Duke Nukem: The Movie*. According to George Broussard, a studio was very interested in the project and the negotiations may move beyond the hypothetical stage soon, though the studio might wait and see if the Duke Nukem novels, comic books, and other toys are a hit.

The guys at 3D Realms love the idea of a Duke movie, and of course everyone has an idea about who should play the lead.

"I like Schwarzenneger, myself," says George Broussard. "Nobody does action like he does, but he'd have to dye his hair blonde and he'd probably be too expensive — but man, it'd be cool to see on the screen."

Still, don't get your hopes just yet. Hollywood is pretty darn slow about putting a project together — we're still waiting for the *Doom* movie, after all.

pletely undecided on what that aspect will entail, other than the fact that there will definitely be some. But they are aiming for something more professional and of higher quality than what's been done in the past, while retaining the same twisted humor that appeared in *Duke Nukem 3D*. "We don't believe in pretty-looking cinematics just to keep people busy," says Broussard. "We want some really cool content to watch, so it's worth your time to not hit the Escape key." Even so, cutscenes created from within the game engine (like you'll see in *Quake II*) have not been ruled out.

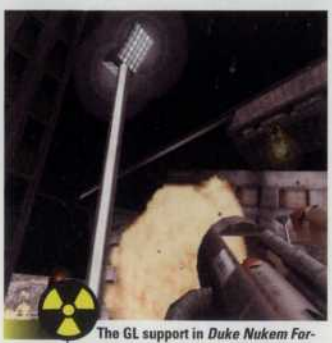
All right then, what about system requirements? Minimum requirements should be something similar to 16 megs with 32 recommended on a Pentium class machine; a P133 or higher is recommended. "We've also discussed the possibility of converting the *Quake II* engine into 16-bit, so the game will look amazing and things like color palettes aren't a concern," says Broussard. "What is a concern, though, is the speed hit 16-bit color adds to a software engine. But since we're targeting a mid-to-late 1998 release, we also think computers will evolve fast enough to keep the framerates and action high."

But what about MMX, Intel's much-ballyhooed godsend to Wintel game makers? "It was dropped, due to not improving performance enough to justify its development time," says Broussard. "Ken Silverman did try it, and just wasn't happy with the speed increases."

All the fans will want to know when this game is coming out, but, in true Texas-style, 3D Realms won't commit to anything more definite than that mid-to-late '98 timeframe or, even less specifically, "when it's done." In the meantime, it's highly likely that the game will get its first live showing at E3 in Atlanta next May.

Broussard, 3D Realms, and the *Duke 4* team are promising a lot, but their track record has already shown that they can deliver — they have the technology, the experience, and the work ethic to pound away on this thing until it's done right. They know their character, know this genre, and know its audience, and we'd be a bit surprised if they didn't get it right. We're not fortune tellers, but we have every confidence that *Duke Nukem Forever* will be one of the biggest — and perhaps the best — titles of 1998.

PCG



The GL support in *Duke Nukem Forever* will be optional; a 3D Realms game won't require a 3D card until *Prey*.

TIME TO PREY

APOGEE'S NEXT BIG THING

Pitting a full-blooded Apache Indian against three alien races, *Talon Brave: Prey* is probably the first action game from 3D Realms with a full-blown, honest to goodness storyline.

Using a new portal technology instead of today's standard BSP tree, the game also offers a unique environment of dynamic entries into other levels and architecture which can be modified — or destroyed— during the course of the game.

Heading up the design team is Paul Schuytema, and he is well-qualified to do so. Formerly the lead designer on *Mechwarrior 3*, prior to that he taught interactive authoring, 3D animation, creative writing, and science fiction world-building on the collegiate level, while maintaining a second career as a game design consultant and freelance writer. Now he will apply all those skills at once on *Prey*.

For more on *Prey*, check out our September issue.

AN INTERVIEW WITH PAUL SCHUYTEMA

PC Gamer: Why is Talon Brave fighting the Trocara?

Paul Schuytema

Schuytema: On one hand, that's a question for the player to discover. The short answer is that Talon is, in every sense of the word, a reluctant hero. He's sort of abducted, in a very unusual manner, and finds himself in a place that he didn't expect to be — but the Trocara didn't expect Talon either.

PC Gamer: Will *Prey* allow players to destroy anything?

Schuytema: We could do that, but what happens when you blow the floor out of the lowest room in an environment? Do you simply fall through? Our lead programmer Will Scarboro still can't have infinitely complex environments, so there has to be a limit. We have to also make sure that we're not allowing the player to create shortcuts.

PC Gamer: It seems that Prey's dynamic technology opens up all kinds of four dimensional level design possibilities. What *can't* you do?

Schuytema: Actually, our Portal Technology engine *is*, mathematically, a four-dimensional engine. Just sit down with Will Scarboro, and he'll tell you all about it until your head explodes! Any three-dimensional position in the *Prey* engine can posses multiple three-dimensional points, just as any 2D position in a 3D world can posses multiple 2D points — try it with some graph paper, and you'll see what I mean. The implications for gameplay are simply staggering, as you've guessed. We're going to have fun with these capabilities, but we're not going to go overboard. I need to feel comfortable that this type of "folded space" fits consistently within the fictional realm of the game universe. But secretly I hope that someone will license the engine to make a wholly surrealistic game, sort of an ode to Dali.

PC Gamer: This project sounds like a perfect fit for your background. How did you find out about it?

Schuytema: I call it my "Creative Holy Grail." Before *Prey*, I had what I considered *the* cherry project in the industry: lead designer of *MechWarrior 3*. I loved it there and sure wasn't looking for anything else. But Scott and George, who had known me for quite a while, heard that I'd jumped ship from academia and had entered the game industry, and Scott came a huntin'. I was flattered beyond belief, but I still didn't think it could beat out *Mech 3*. They flew me down, laid their cards on the table, and essentially offered me creative carte blanche with the *Prey* project. My wife and I talked about it long and hard for a few weeks, and we came to the conclusion that this was one of those decisions we'd second-guess for the rest of our lives if we didn't take it.

So I said "Hell, yes" and I haven't regretted it for a second. This project is really a test, and it stretches the creative talents of our entire team on a daily basis.

It's a daunting task, but no one on the *Prey* team would trade this opportunity for anything.

Feeling you are no longer alone, you turn, with just

GT Interactive Software

MEGAMEDIA CORPORATION

WIZARD Works

Visit the Chasm Website and download the demo www.chasm3d.com

©1997 Megamedia Corp. Action Forms, Ltd. All rights reserved. Megamedia is a registered trademark of Megamedia

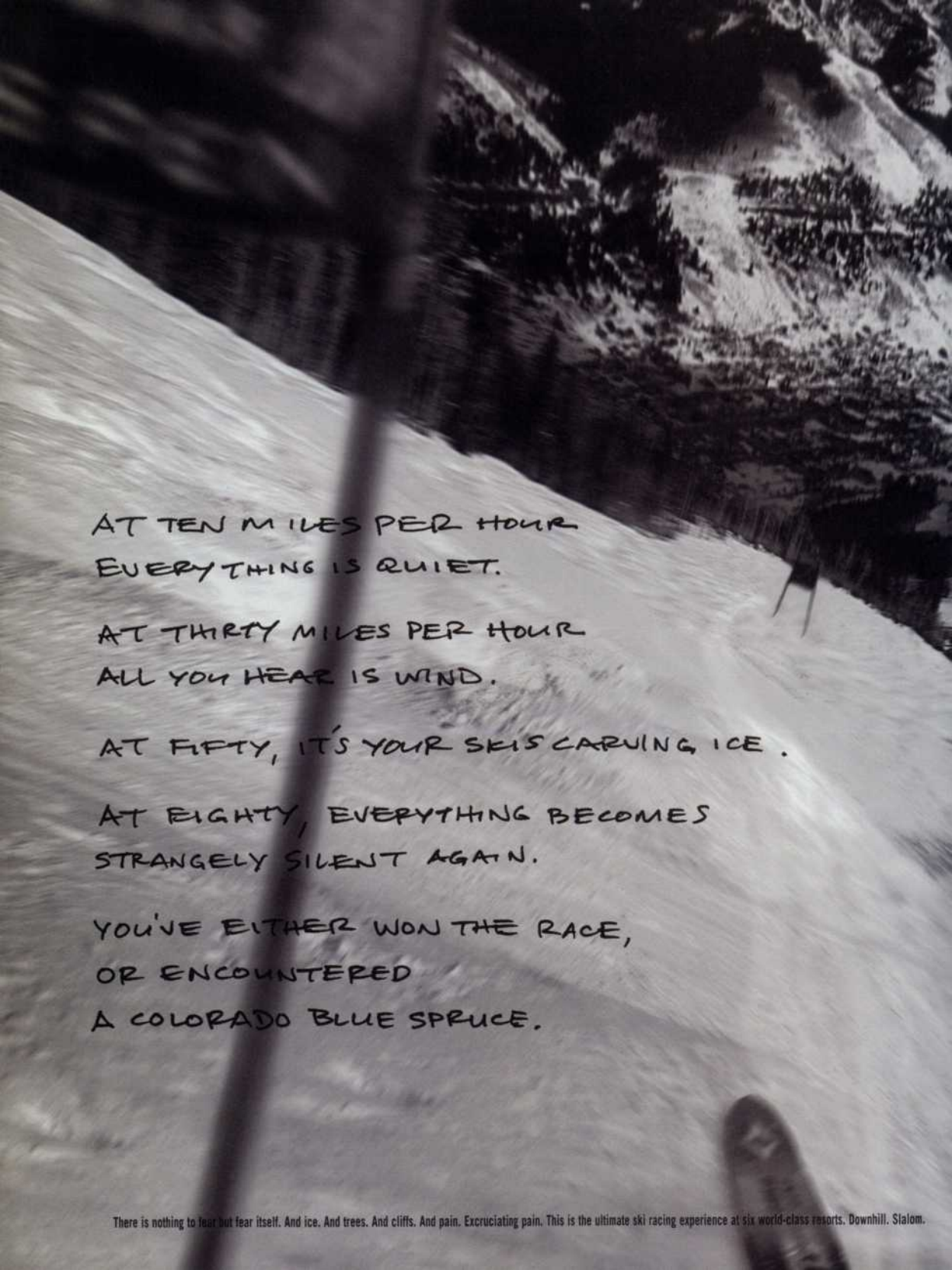
CHASM™

THE RIFT

16 Missions in 4 Episodes • 20 death-seeking monsters • 13 incredible weapons & items

Dynamic effects including water, rain, snow, wind, smoke, dust, sparks, explosions and distant fades
Blow off monsters' limbs as they continue to attack with remaining appendages
Multiplayer battles through TCP/IP (Internet), IPX, modem and serial port

Product Information Number 377



There is nothing to fear but fear itself. And ice. And trees. And cliffs. And pain. Excruciating pain. This is the ultimate ski racing experience at six world-class resorts. Downhill. Slalom.

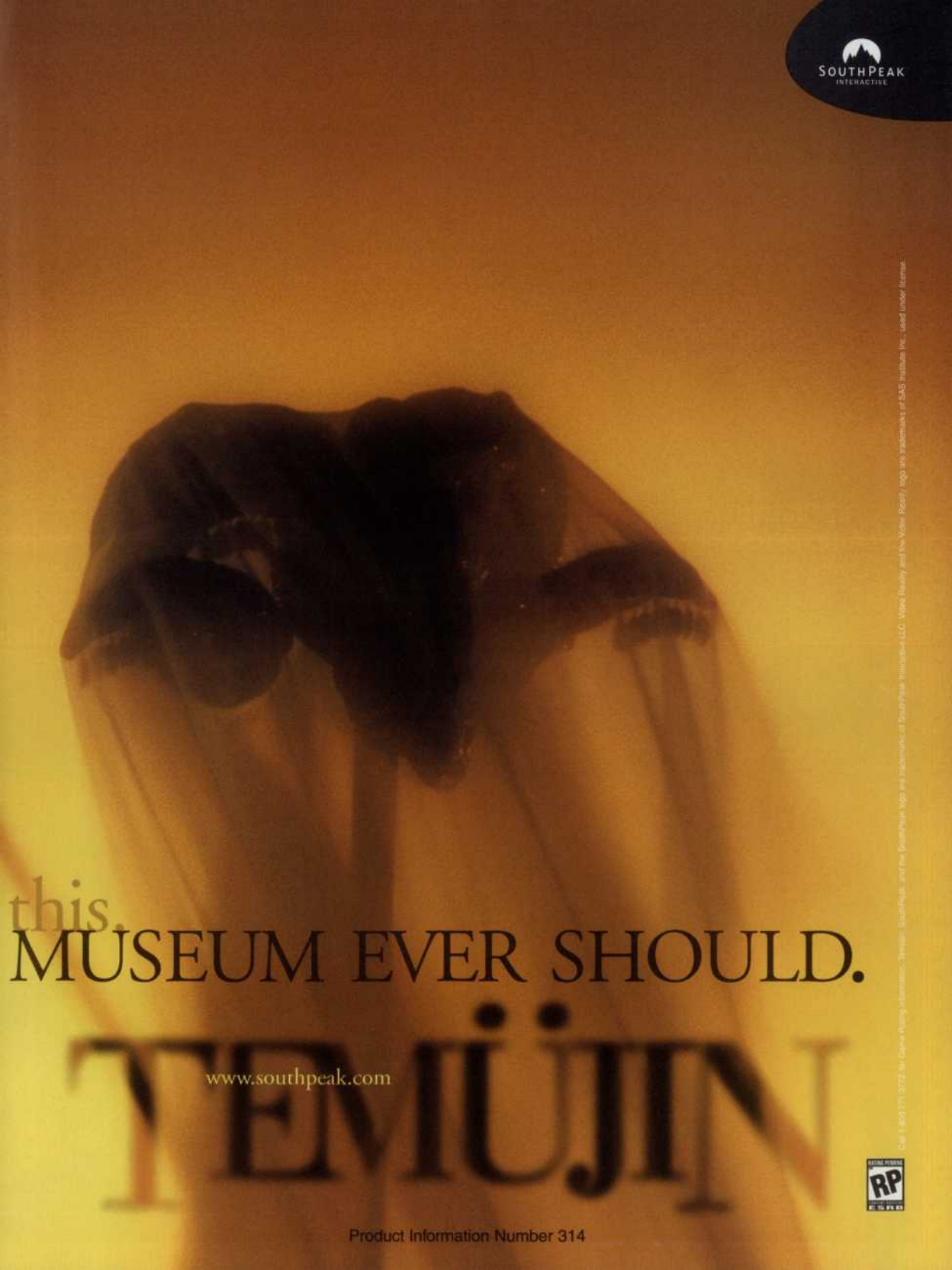
SIERRA®
SKI RACING
SKI RACING
SKI RACING
IT'S NOT JUST A GAME.
Giant Slalom. Super G. All Around. the mountain is calling. Are you insane enough to answer? www.sierra.com/ski.
Product Information Number 311

no museum
has ever unveiled
an exhibit like
NO

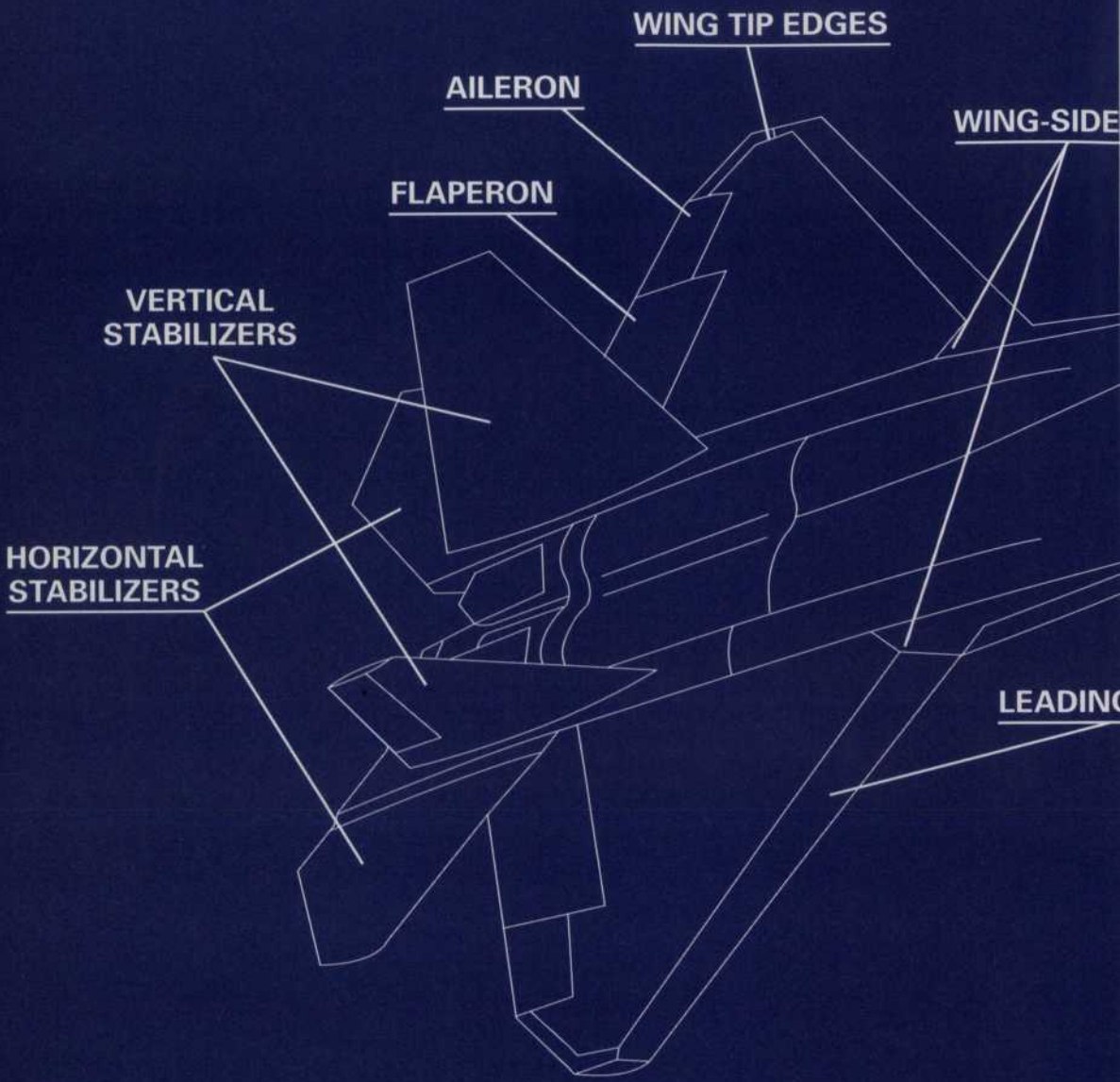
TEMÜJIN™

Temüjin is the world's first game powered by Video Reality® technology. It's a psychological thriller that'll immerse you in 360° of completely seamless, incredibly realistic, motion picture-quality gaming.

POWERED BY
VIDEO REALITY



Product Information Number 314


WING TIP EDGES
AILERON
WING-SIDE
FLAPERON
VERTICAL STABILIZERS
HORIZONTAL STABILIZERS
LEADING

DOMIN

OF BODY

RADAR AND
MISSION SOFTWARE

G EDGE FLAP

F-22 RAPTOR

WITH THE RELEASE OF EF2000, England's DID established itself as a top gun in combat simulations. Now the big brains in Britain are tackling a cutting-edge U.S. fighter – the F-22 Raptor – and air combat fans are understandably excited.

VANCE

BY DAN BENNETT

Before Digital Image Design released *EF2000*, PC gamers knew the Cheshire, England, company best for *F-29 Retaliator*, a port from the Amiga and Atari ST, and *TFX*, an enjoyable, action-oriented sim. DID's designers had a reputation for creating pretty sims built on fast, efficient 3D engines, but few joystick jet jockeys thought of them as purveyors of detailed, hardcore air combat sims.

EF2000 changed all that. It was based on a very real aircraft — the Eurofighter, an advanced tactical jet being developed by Britain, Spain, Italy, and Germany — and it set new standards with its balance of convincing detail and playability.

EF2000 got off to a slow start in the states, where gamers weren't sure what to make of the sleek, wiry Eurofighter. But the sim was destined for great things, including loads of critical acclaim and not a few industry awards, all confirming the growing sentiment that DID had created one of the four or five best air combat simulations in PC gaming.

For its next big project, DID could've stayed in its own backyard and focused on another European fighter. In fact, the company was approached by two European military contractors to create simulations they could use as marketing tools. Instead, DID chose a decidedly American plane, Lockheed Martin's F-22 Raptor. It's a fighter that has already gotten a lot of attention from game companies; it appeared in Jane's Combat Simulations' *Advanced Tactical Fighters* and was the star of NovaLogic's *F-22 Lightning II*, Interactive Magic's *iF-22*, and Mission Studios' *JetFighter III*. But DID's own take on the Raptor, *F-22 Air Dominance Fighter*, looks like it'll have no trouble holding its own. And besides, the Raptor may well be the sexiest aircraft ever designed. Who could resist?

"The Eurofighter, being a very European aircraft, wasn't very well known in the states, as we found out when we went to E3 and other shows," says DID Project Director Don Whiteford. "We even had comments like 'there's no such aircraft.' We thought we'd like to do an American aircraft with the depth that we put into *EF2000* to make up for that."

Of course, learning anything useful about the F-22 wasn't easy. Even with British Aerospace in its own backyard, DID didn't always find it easy to get reliable information on the Eurofighter. Getting details on a U.S. Air Force fighter so new it hasn't yet gone operational was bound to be even tougher. So

In F-22 Air Dominance Fighter, you can direct the battle from an AWACs plane or jump into any F-22 in the game.

Thanks to 3D accelerator support for 3Dfx, Rendition, and Direct3D-compatible boards, F-22 ADF has some sharp visuals. Check out the transparent exhaust and vapor trails.

> ***"The more I found out about it, the more I came to realize the F-22 is the ideal plane to make a computer game out of. There's so much gameplay in there."***
>
> **SIMON KERSHAW, PRODUCER**

DID entered a partnership with Aerospace Publishing, the British firm that produces Air Power Journal and a series of air combat-related books.

"Their focus is purely on modern air forces," Whiteford says. "They're a competitor to Jane's [Information Group], and they have a very, very sharp focus on this area. Knowing it was going to be tough getting information — as it was for the Eurofighter — we got into a partnership with them very early on. They were able to feed through a lot of information that would've been difficult to get hold of without the right contacts."

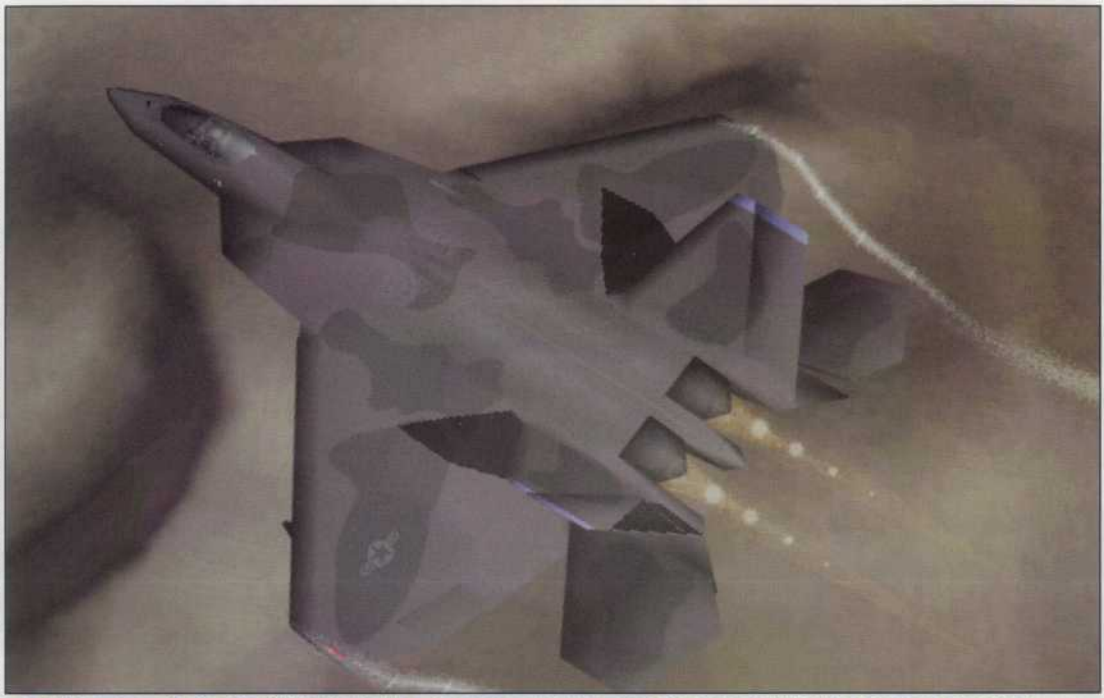
As information came through and the DID crew learned things about the F-22 that even they hadn't known, it became clear they'd chosen the right subject for their next sim.

"The more I found out about it, the more I came to realize the F-22 is the ideal plane to make a computer game out of," says Simon Kershaw, producer of *F-22 Air Dominance Fighter*. "It may sound a little bit odd that the military might be making games out of warfare, but essentially that's what they're doing. They're looking for 'gameplay' — how they can win. Far from it being a bad candidate for a simulation, it's actually good, because there's so much gameplay in there."

"I think the amazing thing about the F-22 is the way the aircraft fits into a system," Whiteford says. "And also the way its sensors work — that's quite a revelation, in fact. Simon sort of unraveled that one, and it really is a completely different way of thinking about sensors, and how the aircraft defends itself and picks up targets."

Whiteford refers to the F-22's revolutionary radar system, which can detect enemy aircraft without sending out signals that would give away its position.

The system, called Low Probability of Intercept radar, works differently from even the most advanced conventional radar systems. Most fighter radar works



The F-22 Raptor, with its ultra-high-tech avionics and weapons systems, makes the perfect subject for a computer simulation.

like a flashlight; you turn it on, and it sends out an intense, focused beam. If the beam falls on someone, you can see him. Unfortunately, whoever you spot with your flashlight knows right away that you're looking at him and can easily find out where you are. Kershaw likes the F-22's radar to a fluorescent light; it's less intense than a flashlight, but it sends its light everywhere.

"It's a fixed array, so there isn't a dish swinging about," Whiteford says of the F-22's radar. "It's just a static thing. It sends out these pulses of energy, and it's got a couple of computers aboard which are equivalent to two Cray computers. It's able to piece back the information — the very, very small signals that come back — and construct these into pictures that wouldn't otherwise be possible."

As in EF2000, detailed training missions will help gamers learn their way around the F-22.

That means the F-22 can actively search for and detect other aircraft while emitting energy levels so low that enemy planes' radar warning receivers can't pick it up. It's only when the F-22's pilot is ready to track a target for a weapon launch that the radar's output will increase to conventional levels.

"That's when another aircraft may for the first time be aware that something's in the neighborhood locking him up," Whiteford says. "But by that time, it's usually too late because there's a missile on the way. It's a stealthy radar, effectively."

The nozzles that direct the F-22's thrust up and down are another innovation that should give the plane a distinct advantage in combat. Thrust vectoring lets the Raptor make much tighter turns than other fighters and maneuver at an unheard-of angle of attack, sustaining flight with its nose pulled as much as 60 degrees off-center.

"Thrust vectoring changes close-in dogfighting," Whiteford says. "You can do some incredible things. It has its advantages, it has its disadvantages; you can pull nose authority where you couldn't before — on the other hand, you may lose so much airspeed you become a sitting duck. Thrust-vectored dogfighting has never been done before, even in real life. They've done some experiments, but no one really knows how it's going to pan out. That's kind of exciting, because it's new. It's fresh."

In *F-22 Air Dominance Fighter*, the Raptor won't carry much in the way of exotic new weapons, but it will sport the latest versions of tried-and-true missiles, like an AMRAAM (Advanced Medium Range Air to Air Missile) with extra-high speed and extra long range, or the experimental AIM-9X Sidewinder.

EF2000 featured a wicked European short-range missile called the ASRAAM (for Advanced Short Range Air to Air Missile), a fast, thrust-vectored weapon that could be fired "off-boresight," intercepting enemy planes from sharp angles that no other dogfighting missile could handle. Whiteford says *F-22 ADF*'s AIM-9X is the American equivalent of the ASRAAM.

"Whether it will go into service or not is not clear," he says, "but it essentially does the same job. The pilot will be able to fire off-boresight about 120 degrees using a helmet-mounted display. He'll be able to fire that missile in a close-in dogfight, and it'll vector in to the target. Now, if you combine that with thrust-vectoring, which the Eurofighter doesn't have, you'll have the ability to do all sorts of snap shots with that missile that you wouldn't get otherwise."

One weapon nearly as new-fangled as the F-22 is the JDAM, or Joint Direct Attack Munition. It's a smart-bomb guided by the Global Positioning System, the same satellite system that lets

DEFIANCE™

IF IT'S BATTLE YOU WANT IT'S BATTLE YOU'LL GET!

Features:

- 18 different horrific creatures attack you again and again from above, below and in your face!
- Solve baffling puzzles to advance between levels.
- Navigate 13 levels of intense action.
- Death Match battle for up to 8 players.*
- Immersive 3D cinematics between levels and, if you ever get there, an epic movie at the shocking conclusion.

IT'S A NORMAL DAY. YOU'RE TESTING AN AWESOME NEW ONE-MAN GUNSHIP AND YOU'RE BLASTING THE HELL OUT OF THOSE STATIONARY TARGETS.

SUDDENLY, WALLS COME CRASHING DOWN AND THE TEST IS NO LONGER A TEST. IT'S A BATTLE FOR SURVIVAL.

CITY LIVING CAN BE DANGEROUS. TRUFLOW™ TECHNOLOGY CREATES KILLER-SMOOTH MONSTER MOTION.

VISCERAL PRODUCTIONS

TEEN T AGES 13+ CONTENT RATED BY ESRB

© 1997 Visceral Productions, Baltimore, MD.
A DIVISION OF AVALON HILL GAME COMPANY
4517 Harford Road, Baltimore, MD 21214

ENHANCED FOR DIRECT 3D and MMX

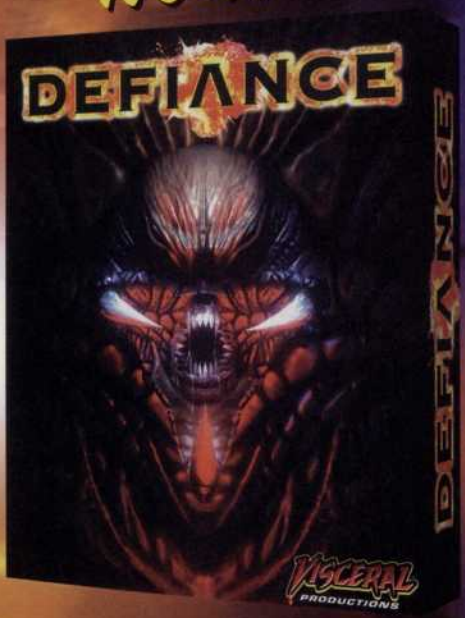
"SHARP 3D ENGINE." "REAL GAMEPLAY" " . . . CREATURES EVERY BIT AS SHARP AND DANGEROUS AS THOSE IN QUAKE."
PC Gamer

"DEFIANCE™ SEEMS DESTINED TO ACHIEVE NOTEWORTHY STATURE."
Computer Game Entertainment

"ACTION FANS TAKE NOTICE."
Computing Gaming World

BEST GAMES OF THE SEASON SELECTION
PC Games

AVAILABLE NOW!



LASERLOK™ TARGETING SYSTEM CAPTURES THE TARGET THEN YOUR MISSILES BLAST IT TO SMITHEREENS.

VISCERAL PRODUCTIONS
GAMES WITH GUTS
www.avalonhill.com
1-800-999-3222
Logicware

TruFlow™, and LaserLok™ are trademarks of Avalon Hill Game Company. Defiance™ is a trademark of Avalon Hill Game Company and Logicware™, Inc. Visceral™ Productions - Games With Guts is a division of Avalon Hill Game Co., a division of Monarch Avalon, Inc., Baltimore, MD 21214 Trademarks and tradenames cited are the property of their respective owners. All rights reserved.

The F-22 is the stealthiest tactical fighter in existence, but DID says air combat fans will still find plenty of challenge in F-22 ADF.

ground troops pinpoint their locations with great accuracy. Because the JDAM doesn't need the F-22's radar or a laser designator to tell it where it is and how to reach its objective, targeting and releasing the bomb doesn't compromise the Raptor's stealth. All the F-22 pilot has to do is get the JDAM to a point from which it can glide in to its target, then let it go.

"It's a rather good device, because the coordinates are preprogrammed," Whiteford says. "What you can actually do is a very stealthy approach to your target; you can pull up and toss-bomb it, and as long as you've got the aiming basket on the multi-function display over your target, the bomb's going to hit."

"It's kind of fool-proof bombing," Kershaw says. "You can't go wrong."

All of these high-tech advantages would seem to give the F-22 such a huge edge on the opposition that a simulation of it wouldn't be very exciting: you detect enemy planes without revealing your own position and fire can't-miss missiles at them before they know you're around; you fly over your target with a radar cross-section that's about a thousand times more stealthy than an F-15's; and you drop your bombs without using radar or even a laser. Where's the challenge?

Interactive Magic, in designing its F-22 sim, decided to make its simulated Raptor much less stealthy than the real thing — the idea being that the computerized enemy needed to be able to detect the player more readily if the simulation was going to have any kind of gameplay.

DID takes a different position; the designers of *F-22 ADF* believe real air combat is hard enough without imposing artificial difficulties.

"You can still make good and bad decisions, even with all the information at your fingertips," Whiteford says. "The way the plane works — because it will tell you, for example, how your radar cross-section is affecting the way a SAM site's looking at you — you can suddenly start to think about things that, prior to that, you would have found difficult to form a picture of. Now you've actually got information that tells you where something's looking, whether it's able to pick you up, and you're able to make many more decisions and much more quickly. It changes the whole nature of it.

The Aircraft Combat Maneuvering Instrumentation lets you record and analyze a dogfight — a much-requested feature.

"If you look at a real environment where aircraft go into war," he says, "and you look at someone who's got to deliver a bomb into a heavily defended target area, the chances of success are actually very low. You need everything you can get to give you a chance of getting out."

But what about the Persian Gulf War? Everyone remembers the CNN clips of smart-bombs demolishing buildings and hardened aircraft shelters like targets in a videogame, breaking the back of the Iraqi military before the ground war even began. But anyone who followed the news at the time should also recall the battered face of an American pilot who was captured after being forced to ditch his A-6 Intruder in that same war. And Whiteford says it could've been worse.

"The Gulf air war was not typical," he says. "If the Iraqis had done a few things early on, it would've been a very

different picture. We were very fortunate that they decided to move their aircraft away, and that they didn't hit a couple of strategic targets before everyone was in place."

Whiteford says the F-22's advantages won't necessarily take the challenge out of air-to-air combat, either.

"For example, you might have a couple of F-22s, but the opposition may have as many as 40 different aircraft coming at you," he says. When the wall went down in Germany, it was revealed that the squadrons tasked to take out NATO's AWACs planes — the big birds that orbit the battlefield and tell allied fighters where the bad guys are — devoted 40 aircraft to each AWACs kill.

"We're talking about MiG-29s here, very capable aircraft," Whiteford says. "So you've got one AWACs, maybe four F-22s, and as many as 40 incoming. So you're going to need a lot more than just your conventional arms — you're going to need all this new stuff.

"That's the reason it was built," he says. "You're going to find the F-22 put into situations where you haven't got the luxury of large air forces; that plane's replacing maybe a squadron of aircraft."

With a relatively small number of jets doing a job that squadrons of fighters would've handled in the past, information becomes more important than ever. The F-22 pilot needs to know where to go to maximize his effectiveness.

"The huge re-think, from a fighter pilot's point of view," says Kershaw, "is why is he there, where does he need to be to do his job?" That's where the AWACs comes in.

"We haven't just done an F-22 equivalent of EF2000. It's a complete redesign with an intention of being better than EF2000 in every way we could."

DON WHITEFORD, PROJECT DIRECTOR

The F-22's JDAM is a smart bomb that allows for pinpoint strikes without the need for radar or laser designators.

"The F-22 must be viewed as part of an overall system, and the AWACs is part of that system," he says.

"You need to look at the big picture," Whiteford says, "and *F-22 Air Dominance Fighter* is designed with that in mind. That's why it's got the AWACs aircraft in it and why all the data-linking works."

In fact, the airborne early warning role of the AWACs is going to figure so highly in *F-22 ADF* that you'll actually be able to jump into an AWACs plane, getting the big picture and even conducting the battle from there.

"You can sit in the commander's chair of an AWACs aircraft and vector aircraft around and make tactical decisions on the fly," Whiteford says. "So you're not just seeing it from a pilot's perspective, you're seeing it from a broader tactical sense, and you get a better understanding of how the aircraft is supposed to work.

"You can start off in the AWACs, looking at what's happening in the air," he says. "You can vector aircraft around; you can move them onto CAPs; you can order them to land; you can order them to refuel. Basically, it's like 3D chess. You need never get into an F-22, to be honest; you could play the whole game from this point of view. However, if you want to fly any of the F-22s in the world, you can click on the icon and you can jump into the cockpit. So you can set up an intercept, then leave the AWACs — it'll go back on AI control — and you can get in and fly the battle."

All very impressive, but there's one nagging question: The F-22 only saw its first official test-flight back in September, and it's still a long way from being operational with the Air Force. How can DID create an accurate simulation of a jet that's still being tested? It's all down to guesswork, but Whiteford says DID's guesses are pretty educated ones.

"We have in-house a number of aeronautical engineers," Whiteford says. "With Eurofighter, they looked at the shape of the plane — the profiles and so forth — and used some data tables which had been compiled in America that give the performance of different types of aerodynamic surfaces. They did a kind of reverse-engineering job, where they said 'Okay, a plane that shape should behave something like this.' With the Eurofighter, we actually managed to get the test pilot to have a go and validate what we'd done."

For *F-22 ADF*, the process was essentially the same. DID's initial studies of the F-22's shape and control surfaces

DID says American pilots have helped the designers to verify the authenticity of F-22 ADF's flight model.

TOTAL AIR WAR

Followers of DID's *EF2000* know the game in its current state was released in two steps; the original sim was very good, but the *TACTCOM* add-on made it great, improving it in just about every respect.

DID plans to follow a similar model with *F-22 ADF*. The sim's designers are already working on *Total Air War*, an enhancement that will add some significant features to the F-22 sim.

Actually, it's kind of a good-news/bad-news situation: many *EF2000* fans will no doubt be disappointed to learn that *F-22 ADF* won't include a dynamic campaign. Instead, missions in *F-22 ADF* will be linear, scripted affairs. On the other hand, DID says *Total Air War* will give *F-22 ADF* a dynamic campaign engine that should top *EF2000*'s.

"In *EF2000*, the campaign engine works on eight-hour cycles for processing the logic," says Project Director Don Whiteford. "The *Total Air War* campaign engine is real-time. So as time ticks on, things will happen — there won't be any stops or pauses; it's a continuous process.

"So basically it's a much revised campaign engine — in fact, a total rework," Whiteford says. "It adds a lot of ground activity that was missing in *EF2000*; there are now proper, full-scale ground wars going on. The other thing is an incredible mission planner which uses all sorts of AI techniques to allow you to do very, very sophisticated mission planning. It's being developed with a lot of input from the military."

But why isn't this functionality being worked into the initial release? Whiteford is frank about that; DID wants to get *F-22 ADF* into gamers' hands as soon as possible; the general consensus is that the sim will give gamers plenty to do even without the *Total Air War* enhancements.

"There's going to be so much in *ADF* that we think people will still be figuring out all the things they can do by the time *Total Air War* hits, which will be early next year — February or March," Whiteford says.

led to the development of an unstable flight model. That might sound like a problem, but it's not; typical of modern fighters, the F-22 gets much of its agility from an unstable design, then relies on computerized fly-by-wire systems to help the human pilot maintain control of it. DID "layered on" a flight control system to make its virtual F-22 manageable, ending up with what the designers feel is a convincing flight model.

"Although we haven't been able to get an F-22 pilot to have a look at it," Whiteford says, "we have been able to get a lot of American pilots — some of whom have been involved in thrust-vectored flight — to have a look and see what they think about the flight model. We go on their responses, really; if they say 'Yeah, that feels pretty good,' or 'that's what we'd expect from an aircraft like that,' then we take that as a good sign."

While *F-22 ADF* doesn't abandon the philosophies that worked so well in *EF2000*, it's still a very new simulation.

F-22 ADF ***emphasizes the Raptor's role as part of a much bigger electronic battlefield.***

"We haven't just done an F-22 equivalent of *EF2000*," Whiteford says. "It's a complete redesign with an intention of being better than *EF2000* in every way we could."

F-22 ADF will use *EF2000*'s game engine, but it'll be a significantly updated version.

"We learned a lot of lessons with *EF2000*, so we've had a chance to refine things," Kershaw says. "You'll see a marked difference in the graphical look of it. It's also coming standard with hardware acceleration, and we've been able to add some wonderful effects there."

"The terrain in *F-22 ADF* is light-sourced, so it'll look much more dramatic," Whiteford says. "We've also got a completely new system of air combat that's been based upon a simulation used by the military for training pilots in dogfighting. So the way the planes maneuver and interact will be much more authentic.

"Coupled with that, we've added true six-degrees-of-freedom flight modeling to every aircraft in the game — not just the player's plane," he says. "So, for example, when you're behind a MiG-29, and he suddenly snaps into a very high-G turn, he isn't just going to go around

DID's next combat simulation will tackle modern ground warfare, focusing on the main battle tanks of all the major powers.

WHAT'S NEXT?

DID isn't a company to rest on its laurels. Even with *F-22 Air Dominance Fighter* and the *Total Air War* add-on in development, DID has other irons in the fire. At ECTS, the European version of the Electronic Entertainment Expo, DID first showed off an early version of its next combat sim.

"We've got a ground warfare simulator in development at the moment," says DID's Don Whiteford. It's based on a new engine written specifically for coping with the huge amounts of detail necessary for ground simulation.

"The first product that will come out with that engine will be a tank-based simulation based on the Rapid Reaction Force," Whiteford says. "We're aiming to make it look like — or superior to — the kind of thing the military are using. We're aiming to push the graphics as far as they can possibly go. The gameplay is very immediate and very fast-moving. The worlds are quite small, but very detailed. Lots of fast action, on-the-fly decision-making, but very realistic and very atmospheric.

"It's being designed from the ground up as a multi-player game," Whiteford says.

Also on the horizon is a civilian aviation simulator based on a sort of cult hit. Laminar Research's *X-Plane* is a very complex and detailed sim that has cultivated a small but dedicated audience by concentrating on extremely accurate models of private, commercial, and experimental aircraft. DID's job will be to give the game a graphics facelift and some goal-oriented gameplay that should make it more accessible to the average gamer.

"We're going to put our graphics engine together with what amounts to an incredibly detailed civil aviation simulation which also features plane-building in a way that's never been done before," Whiteford says.

DID's Simon Kershaw says the updated version of *X-Plane*, slated for release in 1998, is "a little like *Microsoft Flight Simulator*, but with bells and knobs on." The sim will include very accurate modeling of helicopters, and Whiteford says it's so accurate that kit-plane builders can enter the specs of a prospective aircraft and get a good idea of how the real thing will perform.

Meanwhile, the laser-guided bombing simulator DID developed for the UK air force is still doing very well, and DID is still working on its military projects. Whiteford couldn't tell us much without having to kill us, but he did say DID is currently in competition with a major French supplier of military sims.

"We're going in with a PC-based, accelerated solution, they're going in with a Silicon Graphics-based solution," Whiteford says, "and we've just heard they've desperately tried to switch to a PC-based simulation, but it doesn't move very well."

***DID's civilian aviation sim will be a major update of Laminar Research's* X-Plane, *a hard-core alternative to* Microsoft Flight Simulator.

VIRUS

THE GAME

IMAGINE...

- ...that a highly contagious virus has infected your computer.
- ...defending your PC with anti-virus weapons and vehicles.
- ...building factories, fortresses, and spy cameras.
- ...navigating through your own computer in real-time 3D.
- ...fighting your way through levels based on your own files and documents.
- ...seeking and destroying multiple virus strains.

Get ready for the most original game in years. Virus: The Game lets you journey *inside* your computer to confront the infection eating away at your files.

Travel through your graphic files in 3D and see those graphics on the walls. Battle a Virus inside a .WAV file and hear the .WAV mixed in with the sounds of combat. Build an anti-virus module inside a text file and see the text around you.

Protect your Windows™ folder at all costs. If your graphic driver is infected, your screen display will corrupt. And if your mouse driver is hit, you might lose control altogether. Frightening, isn't it?

Just remember: It's only a game...

Coming Soon!

Product Information Number 315

Tel:(315) 393-6633
Fax:(315) 393-1525
To order, visit your retailer
or call 1-800-447-1230.
www.sir-tech.com
Look for the Virus playable demo

PC USER SAFE

SIRTECH

TELSTAR

the corner like he's on rails — you'll see the plane skid."

Some of the improvements in *F-22 ADF* are the result of suggestions made by fans of *EF2000*.

"On a daily basis, we get E-mail from airplane and flight-sim nuts from all over the world with suggestions on things that they'd like to see," Kershaw says. "We read every one of them. On an awful lot of them, we can't push the technology hard enough to make it happen, but we do implement good ideas and get them in there. With *EF2000* trailblazing for us, we got a lot of response from people around the world; we took note of it and, wherever possible, we put it into *F-22*."

"A key feature, which was greatly demanded in *EF2000*, was ACMI, Aircraft Combat Maneuvering Instrumentation," Whiteford says, "which basically allows you to record your air combat, replay, and analyze battles and so forth. We've got a very sophisticated model for doing that in *F-22*. You can record what happens in air combat, then come out and analyze the whole thing and see why you won — or why *they* won — and develop tactics."

Other improvements include high-resolution head-down displays. *EF2000* fans know a big part of that game is keeping an eye on the three multi-function displays built into the plane's instrument panel. In that game, the quality of the information those displays could provide was limited by the fact that *EF2000*'s 3D virtual cockpit was rendered in a lower resolution than the rest of the game's visuals. *F-22 ADF*'s fully interactive, high-res displays should alleviate that problem. Whiteford says the new sim will also incorporate authentic U.S. Air Force refueling procedures and much more authentic procedures for landing and air traffic control.

"If you look at the lines of code, it's a huge, huge product," he says. But the game's hardware requirements shouldn't be astronomical.

"I think when we released *EF2000*, we were a little optimistic in putting the base machine as a 486/66," Kershaw says. "You're really going to need a Pentium PC, and we're sort of hovering between a 120 and a 133." *F-22 ADF* will also require Windows 95.

"Things have moved on," Kershaw says. "People have upgraded their machines, and we think that's a reasonable level now."

Of course, the sim will be able to take advantage of faster Pentiums, and built-in support for 3D accelerators will make the game even prettier.

"We're playing it on P200s here with hardware accelerator cards, and it's magnificent," Whiteford says. Out of the box, *F-22 ADF* is projected to work with any accelerator that supports Direct3D, and it'll have specific support for 3D accelerators based on the 3Dfx standard and Rendition's Verite chips.

Only one question remains, then: When is it coming out? Now that our appetites are whetted, are we going to endure the kind of interminable wait that has nearly become a standard in PC gaming? Whiteford doesn't think so.

"We're pretty well on schedule," he says. "To be perfectly honest, putting a project to bed is always a very tense time, but we're just about feature- and content-complete now. It's in testing, and we're pretty confident it'll release before Christmas. Now, I think in the states there probably won't be a big launch behind it before Christmas, because it's a little bit late to catch the American market full-on. So they'll probably do a smaller introduction at the beginning, then wait until after Christmas to put the effort behind it."

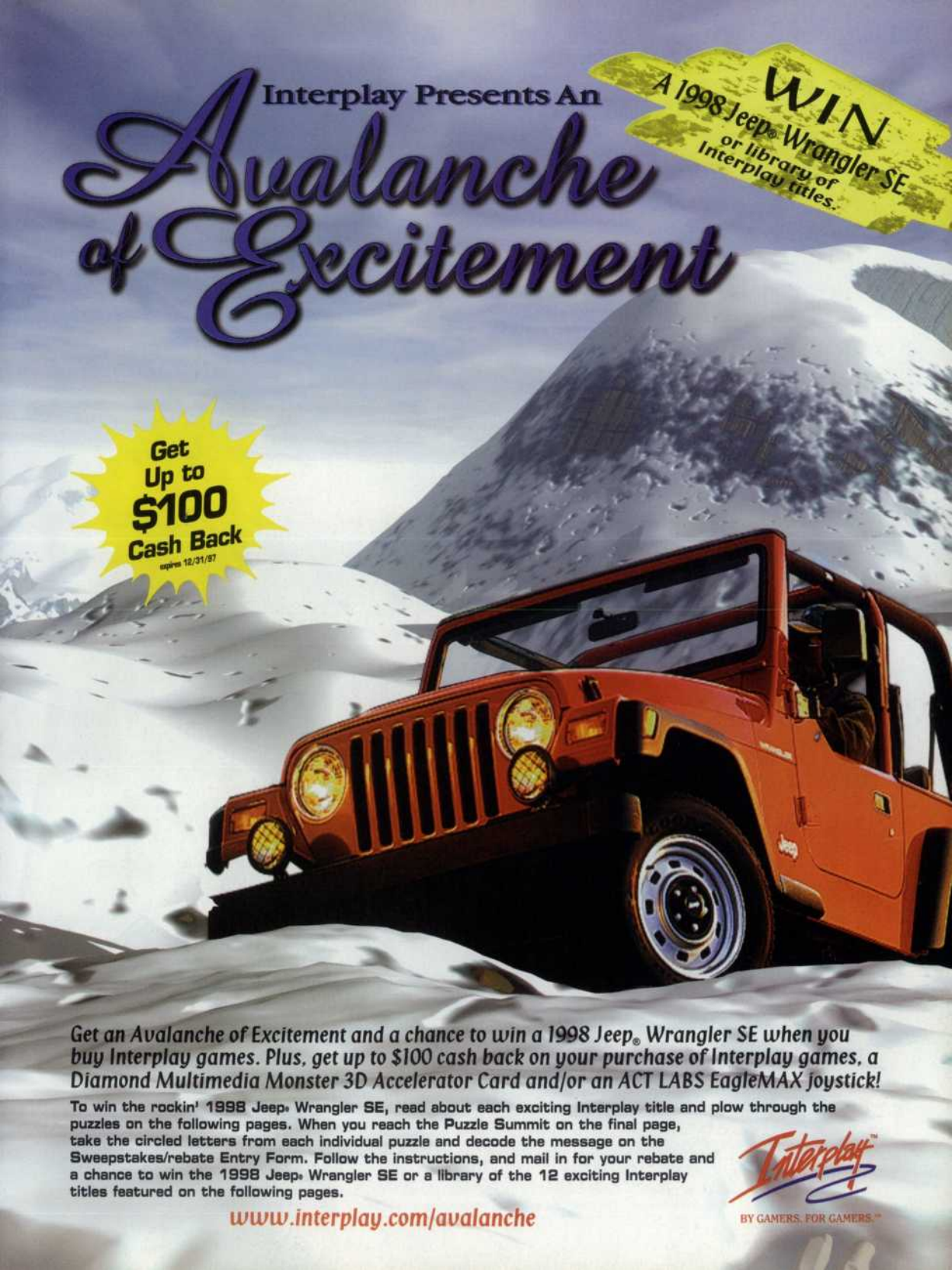
Fair enough. It's mid-September as we go to press, which means *F-22 ADF* still has a few months of testing ahead of it before we see the final product. But it looks like this sim will be worth the wait.

PCG

The F-22 has the ability to break the sound barrier without using afterburners.

***F-22 ADF's 3D cockpit displays will be done in high-res graphics, unlike those in* EF2000.**

Even ground objects in F-22 ADF are rendered in painstaking detail. This building looks like too tasty a target to pass up.


Interplay Presents An
Avalanche of Excitement
WIN
A 1998 Jeep® Wrangler SE
or library of
Interplay titles.
Get
Up to
$100
Cash Back
expires 12/31/97
Get an Avalanche of Excitement and a chance to win a 1998 Jeep® Wrangler SE when you buy Interplay games. Plus, get up to $100 cash back on your purchase of Interplay games, a Diamond Multimedia Monster 3D Accelerator Card and/or an ACT LABS EagleMAX joystick!
To win the rockin' 1998 Jeep® Wrangler SE, read about each exciting Interplay title and plow through the puzzles on the following pages. When you reach the Puzzle Summit on the final page, take the circled letters from each individual puzzle and decode the message on the Sweepstakes/rebate Entry Form. Follow the instructions, and mail in for your rebate and a chance to win the 1998 Jeep® Wrangler SE or a library of the 12 exciting Interplay titles featured on the following pages.
www.interplay.com/avalanche
Interplay
BY GAMERS. FOR GAMERS.™

STAR TREK™

STARFLEET ACADEMY™

THE FIRST EVER STAR TREK SPACE BATTLE SIMULATOR.

"The most anticipated space sim of the year"
—Computer Gaming World

"Starfleet Academy promises to be the flagship of MacPlay's immensely successful Star Trek line of games."
—Mac Home Journal

"STAR TREK fans are finally about to get a simulation worthy of Starfleet itself."
—PC Gamer

KIRK. CHEKOV. SULU. BEFORE THEY WERE LEGENDS, THEY WERE CADETS AT THE MOST CELEBRATED TRAINING FACILITY IN THE UNIVERSE — STARFLEET ACADEMY.

A variety of missions will test your ingenuity, leadership and courage – and determine if you've got what it takes to graduate first in your class. Going where no simulator has gone before, you'll take on 30 of the universe's finest starships, from a cloaking Klingon Bird of Prey to the Romulan heavy cruiser. All the while, Captain Kirk (William Shatner), Commander Chekov (Walter Koenig) and George Takei in a special appearance as Captain Sulu, are there to provide instruction as well as inspiration.

WINDOWS®95 PC CD-ROM

Developed and Published by Interplay
BY GAMERS. FOR GAMERS.™

Designed for Microsoft Windows 95

MacOS

PlayStation Coming Soon

VOKECH _ _ _ _ _ _ _
6 10

1. Unscramble the names of the 3 legendary Star Trek instructors featured in Starfleet Academy.

RIKK _ _ _ _ LUUS _ _ _ _ _
17

Starfleet Academy Software ©1997 Interplay Productions. Trademark and ©1997 Paramount Pictures. All rights reserved. Star Trek, Starfleet Academy and related trademarks are trademarks of Paramount Pictures. MacPlay and Interplay are trademarks of Interplay Productions. All rights reserved. PlayStation and the PlayStation Logo are trademarks of Sony Computer Entertainment, Inc. All rights reserved. Microsoft, Windows and the Windows logo are registered trademarks of Microsoft Corporation. All rights reserved. Mac and the Mac OS logo are trademarks of Apple Computer, Inc., used under license. All other copyrights and trademarks are the property of their respective owners.

VIRTUAL POOL 2™

The ultimate pool simulation just got better. *Guaranteed.*

Over 2 million pool players have taken a break with Virtual Pool the #1 pool game in the world. Now, after 8,000 man hours of enhancements, new 3D look and 50 new game features like called shots and the ability to jump balls, the ultimate pool simulation is better than ever. And it's still the only pool game guaranteed to improve your real pool playing. **Virtual Pool 2** includes 5 new games, 3 modes of play (Amateur, Pro and Championship), all new 3D-rendered graphics and 3 texture-mapped pool halls. Plus, unlimited camera angles, adjustable table characteristics, an all new physics model and a multi-player tournament mode with up to 64 computer opponents. There is even a new pool tutorial with lessons on specialty shots and pool strategy.

So, get **Virtual Pool 2** today. It's all new and it's still the only game with the balls to offer a money back guarantee. Have you had your break today?

WINDOWS®95 PC CD-ROM

Celeris

VR SPORTS

Designed for Microsoft Windows 95

K-A ESRB

Beat The House™

The Ultimate Gaming Tutor & Simulator

Prepare yourself for the #1 casino gaming experience! Featuring vividly detailed graphics and superior sound, **Beat The House** will make you feel like you are part of the action. Not only will you experience the thrill of casino gaming but you'll also learn the skills and techniques of the experts.

WINDOWS®95 PC CD-ROM

Interplay™ BY GAMERS. FOR GAMERS.™

Designed for Microsoft Windows 95

REAL ADVISORY ALL SUITABLE FOR ALL AUDIENCES

2. What sequel to the best-selling virtual game is so real it will improve your actual play?

Virtual Pool 2 © 1997 [illegible] reserved. [illegible] and [illegible] trademarks of Interplay Productions. All rights reserved. Exclusively licensed and distributed by Interplay Productions. Beat The House © 1997 Park Place Productions. Beat The House is a trademark of Park Place Prod[illegible] distributed by Interplay Productions. PlayStation and [illegible] are trademarks of Sony Computer Entertainment, Inc. All rights reserved. Microsoft, Windows and the Windows logo are registered trademarks of Microsoft Corporation. All rights reserved. All other copy[illegible]nd trademarks are the property of their respective owners.

REDNECK RAMPAGE™

"The Trailer Park Won't Be The Same"

- Computer Gaming World

Redneck Rampage is a ruckus-raisin' riot of a first-person 3D shooter set in the fictional town of Hickston, Arkansas. Armed with up to ten impractical weapons, players blast their way through country bars, trailer parks, and chicken processing plants in search of their missing pig who's been abducted by evil aliens. But they ain't gonna make it without enough fuel (pork rinds and whiskey) to fend off good ol' boys with sawed-off shotguns who aim to blow away their bony behinds.

PC CD-ROM

"It's A Heck Of A Hayride"
- Gamespot

"The Funniest Game We've Played this Year Y'all"
- Happy Puppy

"One Of The Most Hysterical Games In Years"
- Online Games Review

"The Bestest Thing To Hit The South"
- Strategy Plus

All The KILLIN', Twice The HUMOR... Half The INTELLIGENCE.

MATURE M ages 17+ ESRB

XATRIX entertainment

Interplay™
BY GAMERS, FOR GAMERS.™
By Redneck, For Redneck.

3. Complete the Redneck Rampage Word Search.

G	B	G	I	P	V	D	I	C	C
T	U	R	D	M	I	N	I	O	N
K	B	N	I	I	X	I	W	O	E
R	B	O	N	Y	E	R	S	T	I
O	A	D	R	A	N	O	E	L	L
P	I	N	E	K	C	I	H	C	A

Gun
Pig
Vixen
Coot
Cow

Turdminion
Bony
Yer
Leonard
Pork

Chicken
Alien
Bubba
Rind

5 letters are unused. 4 are the letter I. What's the 5th?

©1997 Xatrix Entertainment Inc. All rights reserved. Redneck Rampage is a trademark of Interplay Productions. All rights reserved. Interplay is a registered trademark of Interplay Productions. All rights reserved. Interplay is the sole publisher and distributor. All other trademarks and copyrights are property of their respective owners. ©1997 and ™ Hudson Soft Co., Ltd. Bomberman is a registered trademark of Hudson Soft Co., Ltd. All rights reserved. Interplay is the trademark of Interplay Productions. All rights reserved. Exclusively licensed and distributed by Interplay Productions. Windows and the Windows 95 logo are registered trademarks of Microsoft Corporation. All rights reserved. All other trademarks and copyrights are the property of their respective owners.

CARMAGEDDON™

THE RACING GAME FOR THE CHEMICALLY IMBALANCED.

THE CARMAGEDDON XV5. 520 HORSES UNDER THE HOOD. EVEN MORE PEDESTRIANS ON TOP.

Interplay
BY GAMERS, FOR GAMERS.™

Some race for glory. Some for money. Then there are those who drive for the sheer ecstasy of crunching bones against their bumper. Introducing **Carmageddon**, the racing game that separates the men from the grease spots on the road. Pit your wits and wheels against 25 maniac drivers over 36 formidable race circuits to become The King of Carnage and The Prince of Pile-up. **PC CD-ROM**

STAINLESS SCi

MATURE M ESRB

DESCENT II
THE INFINITE ABYSS

This Time, You're Going All The Way Down

Interplay
BY GAMERS, FOR GAMERS.™

Descent II: The Infinite Abyss, includes the award-winning Descent II with an optional 3D accelerated version and the all new Vertigo Series. With 50 levels, 40 enemy robots, easy to use utilities like the Mission Builder, Level Converter and the Robot Texture Editor your Descent experience is infinite. **PC CD-ROM**

Designed for Microsoft Windows 95

TEEN T ESRB

Descent II Developed by Parallax Software

ATOMIC BOMBERMAN™

The BLAST is Back & more CHAOTIC than Ever!

Since 1989 **Bomberman** has been defined by gamers as the ultimate multi-player game. Now "the man" is available in an enhanced multi-player package complete with 3D rendered graphics, new character animations, and a vast repertoire of spiteful canned and custom taunts. Keeping true to the original addictive gameplay, you better think fast as you vie for deadly power-ups, race against the clock and blow your opponents to smithereens.

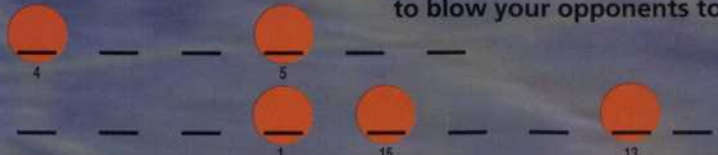
WINDOWS®95 CD-ROM

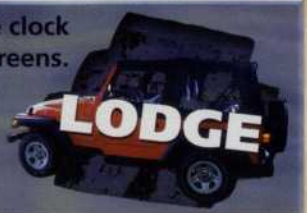
HUDSON

Designed for Windows 95 Compatible

KA RATED TO ADULTS ESRB

4. It's an addictive action/arcade game, where you race against the clock to blow your opponents to smithereens.





Descent © 1996 Parallax Software. All rights reserved. Mission Builder © 1996 Interplay Productions. All rights reserved. Descent, 360° logo, and Interplay are trademarks of Interplay Productions. All rights reserved. Portions of Mission Builder © 1996 Bryan Aamot. All rights reserved. Windows™95 is a trademark of Microsoft Corporation. All rights reserved. © 1997 and trademark SCI (Sales Curve Interactive) Ltd. SCI is a trademark of SCI (Sales Curve Interactive) Ltd. All rights reserved. Interplay is the trademark of Interplay Productions. All rights reserved. Exclusively published and distributed by Interplay Productions.

Realms of the Haunting™

THE BATTLEGROUND BETWEEN ULTIMATE GOOD AND EVIL

ARE YOU PREPARED FOR THE BATTLE OF ALL EXISTENCE?

Forged in the Beginning and protected by the Seven Seals, there lies a place where thought and creation intertwine. The center for all realms of existence, it is the balancing force between good and evil, man and spirit. A focal point for all energies, and the one element that has kept the consuming nature of darkness at bay... until now.

One by one, the Seals of protection have been broken. Step by step, Darkness prepares for its final assault. And as the apocalypse draws near, only one force can stop the shadow of evil from eternal reign...you.

★★★★★ *Computer Life*
...offers one of the most fluid, absorbing fantasy-horror game experiences available."

★★★★½ *CGW*
"ROTH covers all the bases."

AVAILABLE NOW ON PC CD-ROM

Interplay
BY GAMERS. FOR GAMERS.™

Gremlin

TEEN T AGES 13+ ESRB

Windows 95 COMPATIBLE

5. In Realms of the Haunting, it's the Battleground Between

_ _ _ _ _ _ _ _ _

_ _ _ _ _ and _ _ _ _ _.

LOOKOUT POINT

3

REALMS OF THE HAUNTING: ©1997 Gremlin Interactive. All rights reserved. Realms of the Haunting and Interplay are trademarks of Interplay Productions. All rights reserved. Interplay is the sole publisher and distributor. Licensed from Gremlin. Developed by Gremlin Interactive, Ltd. DESCENT TO UNDERMOUNTAIN: ©1997 Parallax Software. All rights reserved. DESCENT ©1997 Parallax Software. All rights reserved. DESCENT TO UNDERMOUNTAIN is a trademark of Interplay Productions. DRAGON DICE™ and ©1997 TSR, Inc. Used by Interplay Productions under license from TSR, Inc. ADVANCED DUNGEONS & DRAGONS, AD&D, FORGOTTEN REALMS and the TSR logo are registered trademarks owned by TSR, Inc. POOL OF RADIANCE, CURSE OF THE AZURE BONDS, HILLSFAR, SECRET OF THE SILVER BLADES, POOLS OF DARKNESS, EYE OF THE BEHOLDER, EYE OF THE BEHOLDER II, EYE OF THE BEHOLDER III, DUNGEON HACK,

Forgotten Realms
Advanced Dungeons & Dragons

DESCENT TO UNDERMOUNTAIN ADVENTURE

The AD&D® game's most famous world, the FORGOTTEN REALMS® setting, is now powered by the award-winning Descent™ engine.

DESCENT TO UNDERMOUNTAIN™ is the most revolutionary new AD&D® FORGOTTEN REALMS® computer game ever. Based on an enhanced, SVGA version of the award-winning Descent™ engine, you are challenged to build an authentic AD&D® character and plunge deep into Undermountain — a twisting, monster-filled dungeon labyrinth located beneath the city of Waterdeep.

COMING SOON ON PC CD-ROM

Interplay
BY GAMERS. FOR GAMERS.™

RATING PENDING RP ESRB

Survival comes down to two things: The role of strategy. And the roll of the die.

Introducing the new CD-ROM version of TSR's blockbuster dice strategy hit, DRAGON DICE. Players are challenged to build and command dice armies from an assortment of races and creatures that struggle for territorial dominance. Multi-player features, animated tutorial and special collectible Dragon Master die make DRAGON DICE a must buy for strategy enthusiasts.

DRAGON DICE™ GAME

FREE
EXCLUSIVE DRAGON MASTER DIE INCLUDED

Interplay
BY GAMERS. FOR GAMERS.™

KIDS TO ADULTS K-A ESRB

AVAILABLE NOW ON PC CD-ROM

All the Legendary Games. All the Magnificent Stories.

The FORGOTTEN REALMS® Archives – the ultimate ADVANCED DUNGEONS & DRAGONS® PC game collection. Twelve of the greatest role-playing fantasy adventures ever created are gathered together in one incredible boxed set.

All 12 FORGOTTEN REALMS™ Titles
from the All-Time Collector's Edition

- POOL OF RADIANCE™
- CURSE OF THE AZURE BONDS™
- SECRET OF THE SILVER BLADES™
- POOLS OF DARKNESS™
- HILLSFAR™
- EYE OF THE BEHOLDER™
- EYE OF THE BEHOLDER II™
- EYE OF THE BEHOLDER III™
- DUNGEON HACK™
- GATEWAY TO THE SAVAGE FRONTIER™
- TREASURES OF THE SAVAGE FRONTIER™
- MENZOBERRANZAN™

AVAILABLE NOW ON PC CD-ROM

Interplay
BY GAMERS. FOR GAMERS.™

KIDS TO ADULTS K-A ESRB

Forgotten Realms
Advanced Dungeons & Dragons

6. It's 12 of the greatest role playing fantasy adventures ever, gathered in one boxed set.

11 12 16 14

GATEWAY TO THE SAVAGE FRONTIER, TREASURES OF THE SAVAGE FRONTIER, and MENZOBERRANZAN are trademarks owned by TSR, Inc. and used under license. SSI and Strategic Simulations, Inc. are trademarks of Strategic Simulations, Inc., a Mindscape company. Computer game code © SSI and Strategic Simulations, Inc. Used under sublicense. Interplay is a trademark of Interplay Productions. All rights reserved. Windows and the Windows logo are registered trademarks of Microsoft Corporation. All rights reserved. All other trademarks and copyrights are the property of their respective owners.

Fallout

A POST NUCLEAR ROLE PLAYING GAME

"Fallout has everything necessary to be the best roleplaying game of all time"

- Next Generation

A NEW BREED OF RPG

In the recent wave of fantasy RPG-lites, FALLOUT's post apocalyptic vision sets a new standard for today's role-players.

Cutting edge technology with 3D-rendered personalities adds a whole new level of dynamic sophistication to character interaction.

With unusual characters, hidden surprises, unique locales, and multiple death sequences, FALLOUT packs a replay value few games can match.

- If you agitate someone with your comments, they'll look and act agitated and remember that encounter. Depending on the player's choice of conversation topics, characters will look happy, normal, and/or angry.
- Over 50 mini-quests with multiple solutions take you through devastated wastelands such as Rad Scorpion dens, Junktown, and the Brotherhood of Steel.
- Meticulous turn-based combat system lets you target specific body parts to wound, cripple, or kill as you see fit.
- Make your own character or start with one of three pre-generated types: Diplomatic, Deceptive, or Combative.
- Victims don't just perish-they get cut in half, melt into a pile of goo, and explode like a blood sausage into chunks of flesh.
- Improve your character's skills through play and receive perks tailored to your character's abilities.
- Available on WIN®95/DOS and Mac CD-ROM.

Interplay

MECPLAY

CD-ROM

Mac

Designed for Microsoft Windows 95

MATURE M ESRB

7. Fallout is a post-nuclear role playing game with over 50 mini-quests where you can target specific body parts to:

_ _ _ _ _ _, _ _ _ _ _ _ _ _,

or _ _ _ _ _, as _____ _____.

2 9

© Interplay Productions. All rights reserved. Fallout, Wasteland and Interplay are trademarks of Interplay Productions. All rights reserved. Windows 95 is a registered trademark of Microsoft Corporation. All rights reserved. Mac and the Mac OS logo are trademarks of Apple Computer, Inc. and used under license. All other trademarks are property of their respective owners.

PUZZLE SUMMIT

Interplay Presents An

Avalanche of Excitement

To receive your rebate & be automatically entered in the sweepstakes drawing:

1. Complete the puzzle
2. Complete rebate portion
3. Mail this form to:

Avalanche of Excitement Rebate
P.O. Box 19129, Irvine, CA 92623

To enter the sweepstakes only:

1. Complete the puzzle and mail this form to:

Avalanche of Excitement Sweepstakes
P.O Box 19641, Irvine, CA 92623

DIAMOND MULTIMEDIA

ACT·LABS MAX THE EXPERIENCE

Entry Form

Take circled letters from puzzles on the previous pages & decode message: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

Eligible Interplay Titles:
(check all that you purchased, maximum of 4 games without additional accessory purchases, maximum 6 with accessory purchases)

- ☐ Starfleet Academy™
- ☐ Virtual Pool™ 2
- ☐ Fallout™
- ☐ Beat the House™ Win 95/Win
- ☐ Realms of the Haunting™
- ☐ DESCENT TO UNDERMOUNTAIN™
- ☐ DRAGON DICE™
- ☐ The FORGOTTEN REALMS® Archives
- ☐ Redneck Rampage™
- ☐ Atomic Bomberman™
- ☐ Descent II™: The Infinite Abyss
- ☐ Carmageddon™

BUY: Any combination of Interplay games and accessories listed below **between 10/1/97 & 12/31/97.**

MAIL: 1. Proof of purchase (original UPC) from each product package purchased. 2. Original cash register receipt w/store name or Interplay invoice, title purchased, and date of purchase circled (receipts cannot be returned). 3. This original completed certificate in a stamped envelope to: Interplay Avalanche of Excitement Offer P.O. Box 19129, Irvine, CA 92623.

RECEIVE: Up to $100 cash back (via rebate check). Allow 8-10 weeks for processing.

PRODUCTS PURCHASED

- ☐ $30 - 1 featured Interplay game and 1 Diamond Multimedia Monster 3D Accelerator Card
- ☐ $30 - 1 featured Interplay game and 1 ACT LABS EagleMAX Joystick
- ☐ $10 - 1 Interplay game
- ☐ $20 - 2 Interplay games
- ☐ $30 - 3 Interplay games
- ☐ $40 - 4 Interplay games

TOTAL REBATE: $_____ (UP TO $100)

Interplay™ BY GAMERS. FOR GAMERS.™

Name_____ Birthdate____/____/____
Address _____
City _____ State_____ Zip_____
e-mail Address _____

The product must be purchased and receipt dated on or between 10/1/97 and 12/31/97. This request must be postmarked by 1/15/98 and received by 1/31/98. Allow 8-10 weeks for processing. This original certificate must accompany your request and may not be reproduced in any manner. Offer not valid with any other offers. Only the original retail store receipt or Interplay invoice will be accepted. Receipts will not be returned. Materials from noncompliant or duplicate requests will not be returned. Not responsible for late, misdirected, incomplete or illegible requests. Offer good in USA and Canada only. Void where prohibited, taxed or otherwise restricted. All rights reserved.

Products available at participating U.S & Canadian retailers including:

Circuit City • Best Buy • CompUSA • Egghead • Electronics Boutique • Computer City • Media Play
Babbage's Etc. • Hastings • CompuCenter • CompuSmart • Future Shop • Business Depot • London Drugs

1. HOW TO ENTER: No purchase necessary. Sweepstakes begins 10/1/97. Decode the Interplay jumble puzzle and mail the answer on this form or a 3 x 5 card hand printed with your name, mailing address, zip code to: P.O. Box 19641, Irvine CA 92623. Entries must be received by 1/31/98. Sponsor assumes no responsibility for lost, late, misdirected, mutilated, illegible, stolen, incomplete or postage-due mail. 2. ODDS OF WINNING: depends on number of entries received; total circulation of entry forms approximately 1,000,000. 3. WINNERS: will be randomly selected on or about 2/15/98 from all entries that correctly decode the puzzle & are received during the promotional period. PRIZES: ONE (1) GRAND PRIZE: A 1998 Jeep Wrangler SE, ARV $15,000.00. Tax, license, registration, title and any other fees will be the responsibility of the winner. One hundred (100) first Prizes: An Interplay library of twelve (12) titles. (ARV $468.00) Total Prize package ARV $61,800.00. Taxes are responsibility of winner. No cash substitutes. 4. Sweepstakes open to all continental U.S. and Canadian (except Quebec) residents, ages 16 or older, except employees of Interplay Productions, HWB, Inc. their affiliates, subsidiaries, advertising and promotion agencies and the immediate families of each. 5. By entering the sweepstakes, participant acknowledges that he/she (or if a minor, the parent/guardian) agrees to allow the use of participant's name and/or likeness and/or voice in publicity concerning the promotion without compensation, unless prohibited by law. 6. Interplay Productions, its subsidiaries, affiliates, directors, officers, agents, employees, and HWB Inc. shall not be responsible for any damages, compensation, direct, incidental, consequential or otherwise, with respect to, or in any way arising from this sweepstakes. Grand Prize winner will be required to sign affidavits of eligibility and a liability/publicity release which must be returned within 15 days of notification. Canadian resident winners will be required to answer a mathematical question. 7. This sweepstakes is being conducted by HWB, Inc., and independent judging organization, whose decision in all matters shall be final. 8. Offer void where prohibited or restricted by law. Offer void in Quebec. Subject to federal, state and local laws and regulations. 9. For the names of the major winners, send a self-addressed stamped envelope to: Avalanche Winner's List, PO Box 17129, Irvine, CA 92623. Requests for winners list must be received by 3/1/98.

BY GAMERS. FOR GAMERS.™

www.interplay.com

Product Information Number 188

BY GAMERS.

ORIGINAL SERIES. SIX NEW

From the creators of Star Trek™ Starfleet Academy,™ Star Trek

ACTUAL CHARACTERS AS THEY APPEAR IN THE GAME

STAR TREK™

SECRET OF VULCAN FURY™

COMING THIS SPRING

FOR GAMERS.™

Interplay

INTERACTIVE EPISODES. ALL DIGITAL.

Judgment Rites, and Star Trek 25th Anniversary, comes the amazing digital adventure based on the original series.

ACTUAL GAME PLAY SCREENSHOTS

▲ *Incredible digital technology recaptures the characters as they appeared 30 years ago*

▲ *Explosive New Story Written By D.C. Fontana*

▲ *Uncover The Shocking Secrets Behind The Original Vulcan/Romulan Conflict*

▲ *A "One-Click" Interface Offers Immersive, Fast-Paced Action*

"Bottom line, Secret of Vulcan Fury is set to become the ultimate Star Trek game ever."

-Adrenaline Vault

"Interplay's attention to graphic detail has resulted in a stunningly lifelike synthetic revival of the classic Star Trek players."

-PC Gamer

RATING PENDING RP ESRB

Designed for Microsoft Windows 95

Interplay BY GAMERS FOR GAMERS WWW.INTERPLAY.COM

Total Dreams

Paramount

STAR TREK: SECRET OF VULCAN FURY. Software ©1997 Interplay Productions. All rights reserved. Trademark and ©1997 Paramount Pictures. All rights reserved. Star Trek, and related marks are the property of Paramount Pictures. All rights reserved.
All other copyrights and trademarks are property of their respective owners.

Product Information Number 189

BY GAMERS.

AD&D + DESCENT™

AN UNBEATABLE COMBINATION

The AD&D game's most famous world, the *FORGOTTEN REALMS*® setting, is now powered by the award-winning *Descent* engine.

INTRODUCING DESCENT TO UNDERMOUNTAIN, THE MOST REVOLUTIONARY NEW AD&D FORGOTTEN REALMS COMPUTER GAME EVER. BASED ON AN ENHANCED, SVGA VERSION OF THE AWARD-WINNING DESCENT ENGINE, YOU ARE CHALLENGED TO BUILD AN AUTHENTIC AD&D CHARACTER AND PLUNGE DEEP INTO UNDERMOUNTAIN — A TWISTING DUNGEON LABYRINTH LOCATED BENEATH THE CITY OF WATERDEEP. HERE YOU WILL ENCOUNTER AN INCREDIBLE 360° WORLD FILLED WITH SHADOWY HALLS, ANCIENT CRYPTS AND ABANDONED TEMPLES — NOT TO MENTION A TERRIFYING ASSORTMENT OF CREATURES WHO CALL UNDERMOUNTAIN THEIR HOME. SOLVE THE RIDDLE OF UNDERMOUNTAIN AND YOU WILL CERTAINLY AMASS A PILE OF GOLD. FAIL AND YOU WILL BECOME A MERE PILE OF BONES.

EITHER WAY, YOU'RE GOING DOWN LIKE NEVER BEFORE.

DESCENT TO UNDERMOUNTAIN™

FOR GAMERS.™

Interplay™

FORGOTTEN REALMS SETTING

- Experience more than 25 different levels that come alive in full 3D 360° detail, from a dwarven temple to an ancient Egyptian crypt.
- Build your character using true AD&D role-playing elements — 6 different races and single or multi-classed options. Your choice of character class leads to unique abilities and will also affect the way the game plays — if you choose a thief character you can climb walls!
- Battle more than 50 different 3D monsters — skeletons, mummies, giant insects and more...
- Seek out and utilize more then 160 magical items and 40 different spells, including the powerful magic missile that homes in on its targets and the fireball that engulfs its target in a shroud of flames!

Interplay™ BY GAMERS. FOR GAMERS.™

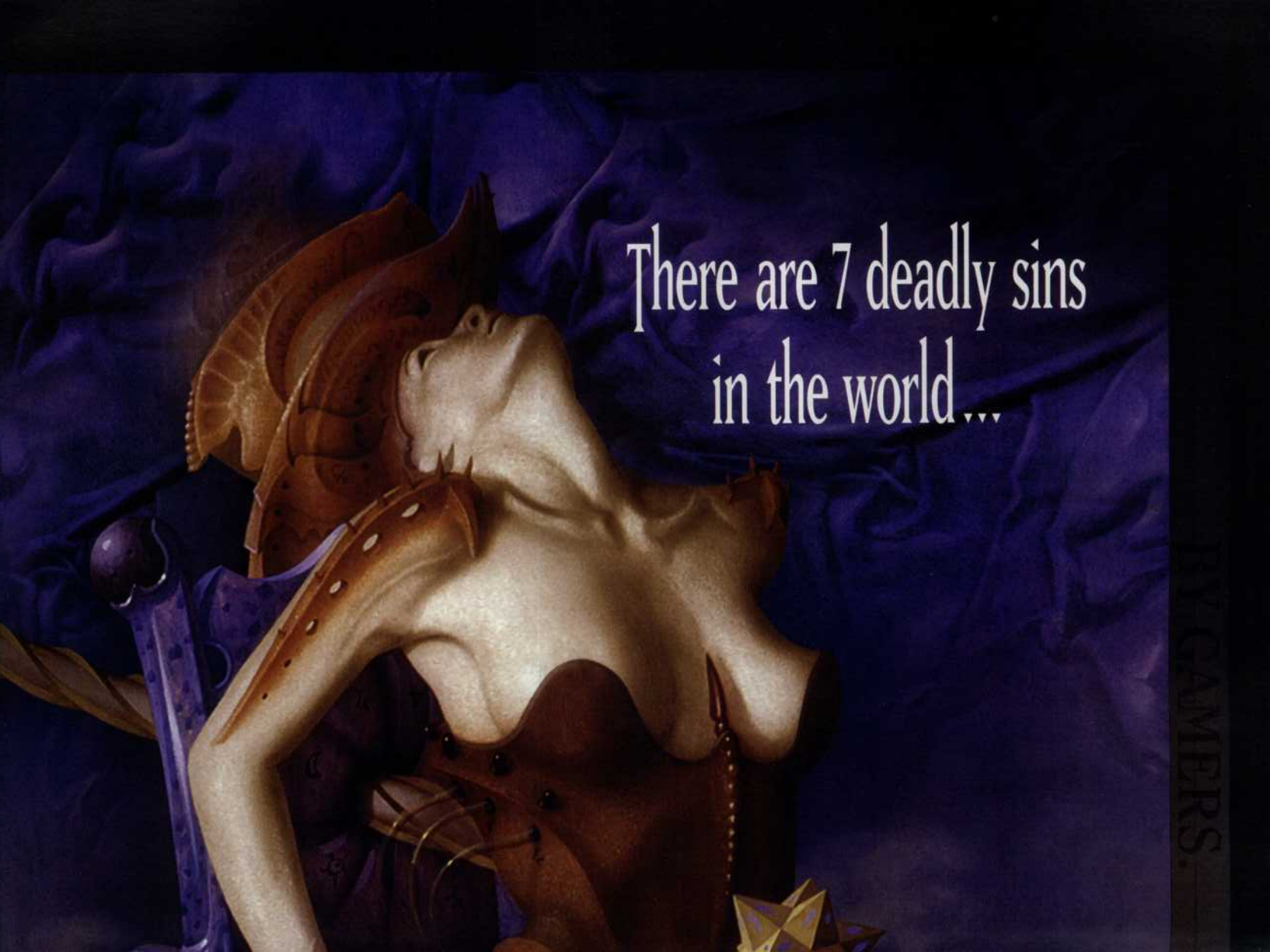
RATING PENDING RP

www.interplay.com

Coming this September!

©1997 Interplay Productions. All rights reserved. Descent ©1997 Parallax Software. All rights reserved. Descent to Undermountain is a trademark of TSR, Inc. Forgotten Realms, Advanced Dungeons & Dragons, AD&D, and the TSR logo are the trademarks of TSR, Inc. Interplay is the trademark of Interplay Productions. All rights reserved. All other trademarks and copyrights are the property of their respective owners.

Product Information Number 192


There are 7 deadly sins
in the world...

...you are committing
one of them
right now.
FOR GAMERS.™
of
LIGHT
and
DARKNESS

Sinners beware, the purification is near ...

FOR GAMERS.™

Interplay

LIGHT and DARKNESS™

the prophecy

- Lightning Fast, Real-Time Adventure Game with Dramatic Multiple Endings
- 3D SGI Art by world famous artist Gil Bruvel; if game screens were paintings it would sell for over $10 million dollars
- Stunning 3DI 360 scrolling environment
- Absorbing level-based game created by Cliff Johnson, creator of Fools Errand
- Post-Apocalyptic soundtrack by the MF'ers
- Immersive CD surround sound
- Experience the Seven Deadly Sins while you can!

Actual scenes from game

Coming this Winter

Interplay
BY GAMERS. FOR GAMERS.
www.interplay.com

Tribal Dreams

Designed for Microsoft Windows 95

RATING PENDING RP

©1997 Interplay Productions. Of Light and Darkness and Interplay are trademarks of Interplay Productions. All rights reserved. Exclusively licensed and distributed by Interplay Productions. Microsoft, Windows and the Windows logo are registered trademarks of Microsoft Corporation. All rights reserved.

Product Information Number 193

BY GAMERS.

The PERFECT Sequel To The PERFECT STRATEGY Game

3D terrain affects movement, line of sight, and combat results

MAX 2: Complete Real-Time Combat

Exquisite 16-bit color

Alien units regenerate and improve with experience

Unlimited waypoint settings for sneak attacks

Unique parallax scrolling with 3D topography

- Optional Pause To Give Orders
- Complete Scenario Editor
- Multiplayer Capability (LAN, Modem, Internet) With Alliance Building
- Simultaneously view multiple Areas of The map With The Spy Cam
- Optional Turn-Based Play

FOR GAMERS.™

Interplay

Coming This Spring...

Product Information Number 191

Interplay
BY GAMERS. FOR GAMERS.™
www.interplay.com
Questions? E-mail max2@interplay.com

RATING PENDING
RP
CONTENT RATED BY ESRB

MAX 2
MECHANIZED ASSAULT & EXPLORATION

© 1997 Interplay Productions. All rights reserved. MAX 2 Mechanized Assault & Exploration and Interplay are trademarks of Interplay Productions. All rights reserved. All other copyrights and trademarks are the property of their respective owners.

FOR GAMERS.™
Interplay
Discover a new horizon
in classic AD&D® role playing.
BALDUR'S GATE™ takes you back to the FORGOTTEN REALMS® on a visually dazzling, real-time RPG experience. This wondrous place, where true role playing on a grand scale first began, now comes alive in stunning graphic detail. Your quest? Lead a party of adventurers on a journey to save the Sword Coast region from a sinister plot that involves impending war, dark prophecies, betrayed alliances...even your own soul.
Huge game world - 5 CDs filled with nearly 10,000 game screens in striking SVGA, all rendered in glorious 16-bit color
Authentic AD&D® characters, each represented accurately on-screen down to individual class, race, gender, skin and hair color, armor and weaponry
Incredibly detailed structures and environments; dynamic lighting; day/night, rain, snow, fog, and lightning effects
Manage up to a 6-character party on a gripping, non-linear adventure spanning seven chapters with multiple twisting subplots
Baldur's Gate™
ARRIVING MARCH, 1998
Interplay
BY GAMERS. FOR GAMERS.
www.interplay.com
TSR
Advanced Dungeons & Dragons®
FORGOTTEN REALMS
BIOWARE
RP
©1997 BioWare Corp. All rights reserved. ADVANCED DUNGEONS & DRAGONS, AD&D, FORGOTTEN REALMS and the TSR logo are registered trademarks of TSR, Inc. BALDUR'S GATE is a trademark of TSR, Inc. Interplay is a trademark of Interplay Productions. TSR is a subsidiary of Wizards of the Coast, Inc. All rights reserved. All other trademarks are property of their respective owners.
Product Information Number 187

Escape.

Hack your way through a savage world or head straight for the arena.

For the 1st time battle up to 4 players via network or modem in arenas filled with traps.

Create, store and trade killer custom moves with the versatile move editor.

RATING PENDING
RP
ESRB

Interplay
BY GAMERS. FOR GAMERS.
www.interplay.com

©1997 Treyarch Invention. All rights reserved. Die By The Sword and Interplay are trademarks of Interplay Productions. All rights reserved. Licensed and distributed exclusively by Interplay Productions. All other copyrights and trademarks are property of their respective owners.

FOR GAMERS.™

Interplay

Dismember. Massacre.

Complete Freedom of Movement.
Precision Killing.

"We're not talking about your standard run-and-gun four-player session here."
-Gamespot

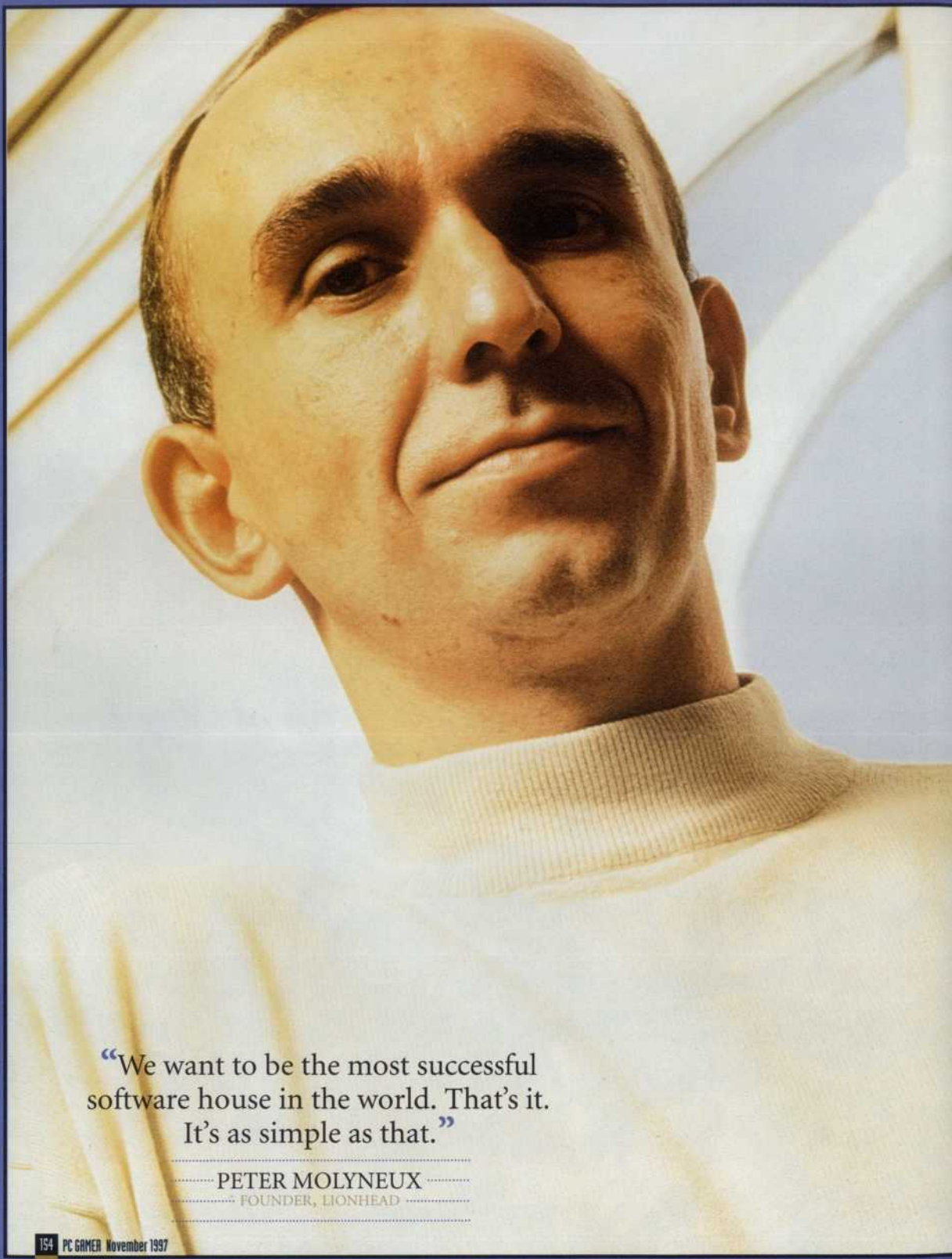
"Seriously Hot!"
-Strategy Plus

Lop off heads, sever limbs and bring your enemy to his knees (literally).

Coming This Fall!

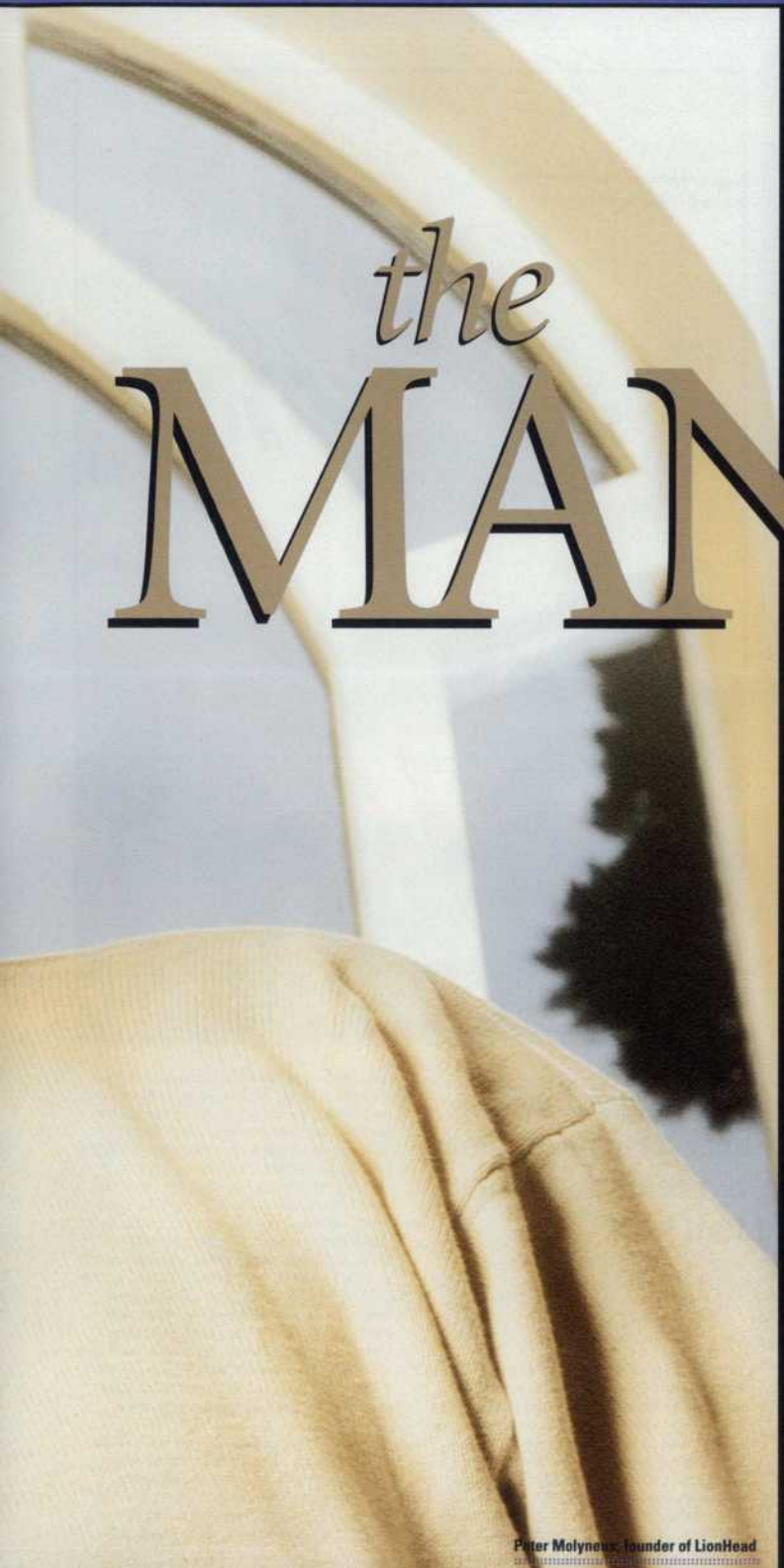
DIE BY THE SWORD™

Product Information Number 184



"We want to be the most successful software house in the world. That's it. It's as simple as that."

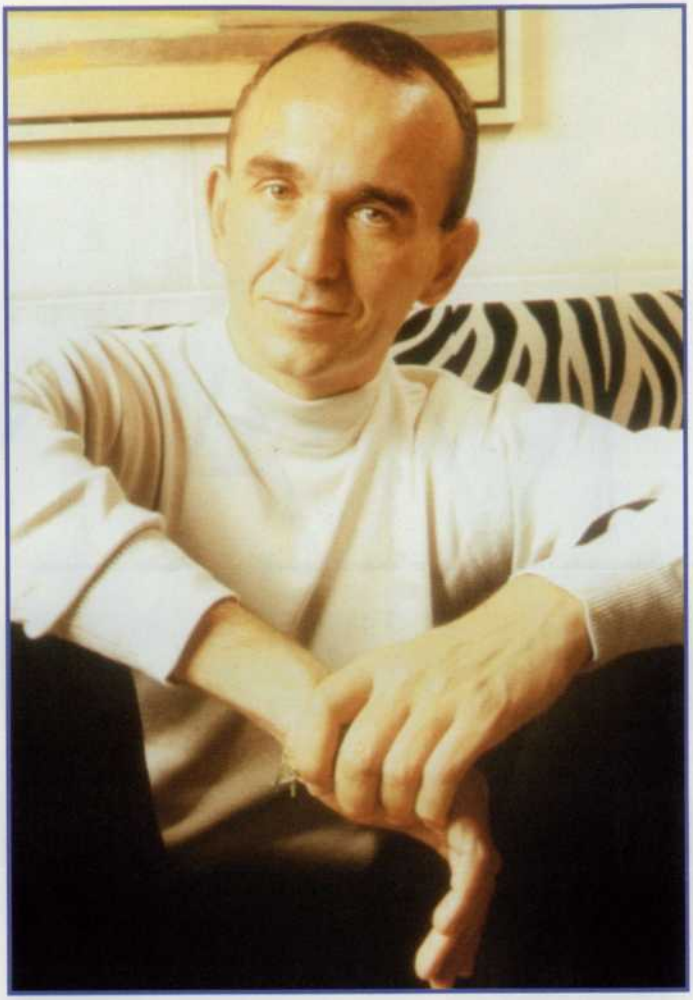
PETER MOLYNEUX
FOUNDER, LIONHEAD



the MANE event

With his ambitious new venture, LionHead, ex-Bullfrog legend Peter Molyneux is just one of a new wave of superstar game designers who are going back to the drawing board by starting their own independent game companies. "You'd think I'd be more confident this time round," Molyneux tells Gary Whitta. "I'm actually more scared. I think it gets a lot more scary as time goes on."

Peter Molyneux, founder of LionHead



"I really did think about retiring," says Peter Molyneux of the time after his much-publicized resignation from Bullfrog. "I tried it for about four hours, and I hated it. What would I do? I'm not particularly good at anything else."

Maybe not, but one thing Molyneux can do in spades is create original, wonderful PC games. From his breakthrough game *Populous* in 1988, through the sequel *Populous II*, *Theme Park*, and most recently *Dungeon Keeper*, Molyneux has been one of the biggest, most talented names in gaming for the past decade. Meanwhile, Bullfrog Productions, the company he founded, has grown into one of the world's most prestigious games developers — and one of the largest, a major factor in Molyneux's final decision to leave. Since his resignation, he has made no secret of the reasons behind his departure — the company had grown too large and too corporate for him to keep his focus on his first love of making computer games. "To be honest, the emotional separation between Bullfrog and I happened a long time ago," he says. "It was a big company, over a hundred people, and it was controlled by a huge corporation. It was all very different to the company I set up in a small office above a Hi-Fi shop."

So Molyneux has gone back to his roots with the founding of LionHead, a brand new company that he promises, no matter how successful it may be, will never grow into the kind of corporate leviathan that he mistakenly allowed Bullfrog to become. "The idea is to keep LionHead really small, no more than 25 people," he says. "And with those 25 people, we'll do everything that much larger software houses can do."

But LionHead, only a few months old and based not far from Bullfrog's old offices in Guildford, England, is already growing fast. With its first game well into development, it currently employs nine people, and a major publishing deal has been signed with Electronic Arts. "The main feeling that I have right now is one of amazing excitement," says Molyneux. "It's like starting with a blank sheet of paper. The trouble with Bullfrog, as it is with any software company, is that you get into bad habits, and it's very hard to change direction. But by starting afresh now, I can say, 'This is what my watermark is, this is where I start from.' It's an incredible feeling to be able to do that.

"In the early days of Bullfrog, it was a lot of panic," he says. "We were inventing the wheel all the time, and everything we did was completely new and fresh. We had no idea if what we were doing was going to work or not. But now I've been through the mill of all that, I've had the experience, and now I know the answers to a lot of the questions that come up when you set up anything new and different. When you're building a team, that kind of experience is absolutely invaluable."

Molyneux sees his hiring choices as LionHead continues to grow to its maximum capacity of 25 as some of the most crucial decisions he will have to make. "You've got to make sure that the people who you hire are going to fit in and get along well with everybody. Because you live on top of each other for months, if not years, at a time. And if you hire people who don't fit in, it causes untold hassle," he says. But while several of the people on the LionHead teamsheet are ex-Bullfroggers, Molyneux denies that he's raided his former company for talent. "I have never, and would never, poach anybody from Bullfrog," he says. "I'm not trying to construct a Bullfrog Two here, but it's an issue because there have been a lot of Bullfrog people who've been asking me if they can join LionHead, and I'm having to say no because I wouldn't feel right about it." He pauses and says, "Having said that, it is very tempting, and there may be a couple more people from Bullfrog who will join us."

> "I'm not trying to construct a Bullfrog Two, but it's an issue because there have been a lot of Bullfrog people who've been asking me if they can join LionHead."
>
> PETER MOLYNEUX
> FOUNDER, LIONHEAD

Peter Molyneux describes his first game for LionHead, currently code-named *Origin*, as "the most important game of my entire life." Even though the game's not due out until 1999, Molyneux is already routinely working through the night on what he calls his "testbed" pro-

gram. "We have a really wacky way of producing games here," he says. "The core gameplay team writes a testbed program, which is completely playable but with very raw graphics. Once the game's finished, they hand it over to a second team that adds all the gorgeous graphics and special effects. But they're adding those graphics to a game that they can completely play in finished form and refer to.

"The big problem with the way that games are developed in this industry is that you can't play the finished game design until right at the very end, about eight weeks before release, when it's all too late. That's crazy. What the testbed does is give you a basis. You can see that people enjoy playing the game even though it looks very primitive graphically," he says.

"There is no hard and fast rule to developing games, no right or wrong way. But to me, this is the is the best way because it gets all the gameplay issues out in the open to start with. It allows you to be really ambitious with the AI and the game features because you're not always worrying about the graphics. *Dungeon Keeper* was exactly like that; you could play it when the graphics were just blocks on the screen."

So even though you won't see *Origin* on the shelves for another two years, the gameplay code already exists in near-finished form. "*Origin* is going really really well, and we've actually got a version of it up and playing already," Molyneux says. "But I wouldn't like to show it to you now because it looks horrible. But it's starting to play really nicely. I think we'll be able to give that to the graphics team reasonably quickly and start on the second game."

So how much can Molyneux actually tell us about *Origin*? Not much, unfortunately, but enough to whet the tastebuds. "I always said that the first game that I do at LionHead has to be completely original. It has to be something I've never attempted before. But I want it to have more of what I'm good at doing, and more of what I think people want, which is more depth. It's far more ambitious than anything I've ever worked on. I want to do something with AI, where the computer learns the way someone plays, and changes the game according to that. That's where the big growth is. AI is a fascinating area, and the best examples currently, albeit primitive, show just how much further we can go. Look at the Tamagotchi. There's an example of good AI with primitive graphics, and that thing made 1.5 billion dollars."

Molyneux says that he'll be ready to show something of *Origin* to press and public around January of next year, by which time LionHead's second game (most likely designed for one of the 32-bit console systems) should also begin production. But don't hold your breath waiting for *Origin* — even that 1999 release date is speculative, and having worked with Molyneux many times before (including the much-delayed *Dungeon Keeper*), Electronic Arts knows not to make release plans too early. "I really want to get the game out in two years," says Molyneux, "but who knows? Anyone who says, four weeks into development, that they can tell you exactly when their game is going to ship is either lying, a fool, or is going to produce something that's shit."

Amen to that. Molyneux's games have always been worth the (considerable) wait, and *Origin* should be no exception. Roll on 1999 (or 2000, or 2001...).

The PC Gamer Mavericks feature continues on page 160 with a look at Chris Roberts' new company, Digital Anvil.

LION'S HEADS

HERE'S A QUICK GUIDE TO THE SIX PEOPLE WHO HELPED FOUND LIONHEAD, DESCRIBED IN PETER MOLYNEUX'S OWN WORDS...

MARK WEBLEY: "Mark was a computer systems salesman before working with me at Bullfrog. Despite this, he was the person responsible for Bullfrog's success as he single-handedly managed 32 projects in one year. He also has the accolade of being my brother-in-law! So when he showed an interest in setting up LionHead, I jumped at the chance. He was also the project leader on *Theme Hospital* — he was responsible for the sick humor — and now he is working with me on the testbed of the new game, *Origin*."

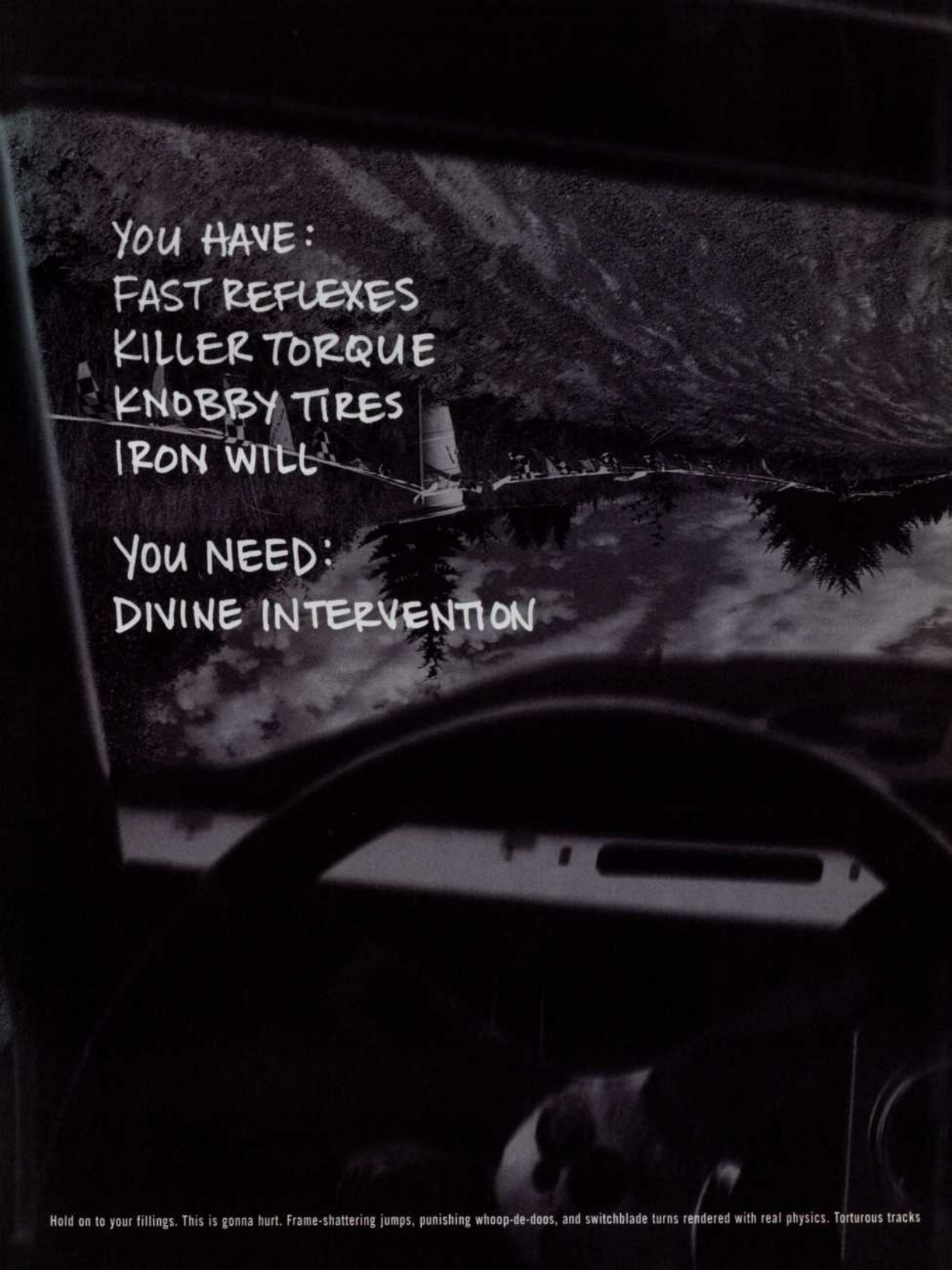
DEMIS HASSABIS: "Demis just finished his computer science degree at Cambridge where, thankfully, university did not manage to stifle all his creativity. Demis is one of the most aggravating people I know, as he is brilliant at all games and loves to smash people into the ground and then laugh at them. He also worked with me on *Theme Park* and has a creative mind coupled with being an excellent programmer that understands 'how to project a B-spline surface on to an affine plane using spherical polar coordinates.'"

JONTY BARNES: "Jonty and I worked 16 hours a day on *Dungeon Keeper*. He has the stamina of a marathon runner and will accept that nothing is finished until it is perfect. His favorite place in the world is Amsterdam. He will be working with me on the testbed version of *Origin*."

STEVE JACKSON: "Steve was responsible for the success of the company Games Workshop, and an old adversary at our regular 'Games Nights.' He has also designed a ton of board games and written loads of fighting fantasy books. He also bears a striking resemblance to Tom Baker, who played Doctor Who. Steve, or The Doctor, as we like to call him, is our financial director — he flat refuses to spend any money unless it's on executive toys for his desk, which is now festooned with every conceivable toy."

TIM RANCE: "Tim is an old friend who in his dim and distant past used to work for Electronic Arts as technical director. He then went and worked as a systems analyst in a merchant bank, which is the perfect combination for him to handle all our Libraries and Tools, a job that is essential but occasionally tedious. Tim excels at croquet and the ball-on-a-stick game."

MARK HEALEY: "Mark is not only a brilliant artist, but also a great character designer who seems to spend a huge amount of time researching his characters, mainly in a magazine called 'Skin II,' which is written for fans of S&M. I have heard of stories of Mark touching up the pixels of a character called 'Kinky Mistress' with his left hand. That aside, Mark is an all round top bloke."



Hold on to your fillings. This is gonna hurt. Frame-shattering jumps, punishing whoop-de-doos, and switchblade turns rendered with real physics. Torturous tracks

SIERRA
SODA
OFF-ROAD RACING
Product Information Number 312
lovingly laid out by the world's most sadistic designers. Yourself included. www.sierra.com/soda.
IT'S NOT JUST A GAME.

FORGI

ahead

Chris Roberts, founder of Digital Anvil

NG

Boasting three titles under development and a multi-million dollar, multi-year publishing deal with Microsoft, Chris Roberts' new company Digital Anvil is poised to become one of the most watched developers in the coming years. As the creator of *Wing Commander*, Roberts' has already proven himself to be one of the industry's leading visionaries, but for the moment, at least, it seems all we can do is watch. Compared to the imminent releases from other big-name startups like Firaxis and ION Storm, the winter 1998 release schedule for Digital Anvil's first title seems like an eternity away, and, aside from some basic information, painfully little is known about those future projects. But according to Roberts, the relative silence surrounding the DA camp suits him just fine.

"For the time being, we want Digital Anvil to be a bit like Willy Wonka's chocolate factory," he says. "You know there's something special going on inside, but you don't know exactly what. It's not that I don't like building hype, I *like* building hype. I just like building hype six months before a game release when there's actually something to show and get excited about."

According to Roberts, it may be some time before we actually get our first glimpse at Digital Anvil's lineup, but it won't be due to a lack of effort. For his first title since leaving Origin, Roberts has decided to stick to familiar territory with *Freelancer*, a *Privateer*-style space exploration game with massive multi-player support.

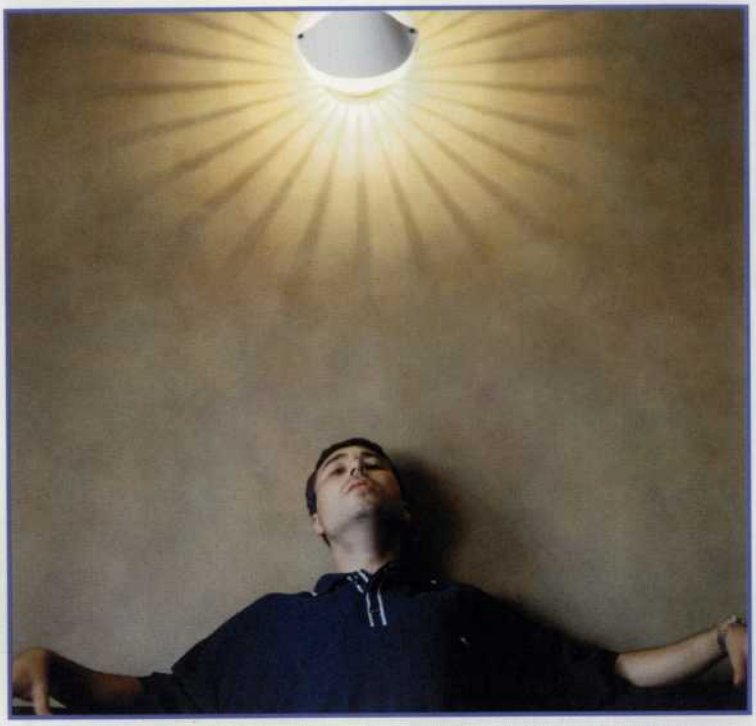
His brother Erin Roberts (who produced *Privateer: The Darkening* before leaving Origin to join DA) is hard at work on *Conquest* (that's a working title), a space-based real-time strategy game with a 3D twist that is being described by all involved as "just like the big battle at the end of *Return of the Jedi*!" Tony Zurobek (responsible for Origin's *Crusader* series) has taken a more down-to-earth approach and is working on an as-yet-unnamed game similar to *Car Wars/Auto Duel*, with an emphasis on stellar 3D graphics and

"For the time being, we want Digital Anvil to be a bit like Willy Wonka's chocolate factory; you know there's something special going on inside, but you don't know exactly what."

CHRIS ROBERTS
CEO, DIGITAL ANVIL

As producer of the Crusader series at Origin, it's not surprising that Tony Zurobek (third from right) and his team are working on a game based on the *Car Wars* theme.

photography by Robert Pandya



multi-player play. All three games have been in production for quite some time, but after becoming disenchanted with the production-line method of game development used by larger software publishers, Roberts and company have come up with radically different way of developing games that affords them the luxury of time.

"We wanted to get away from the 12, 16, or 18 month development cycle that seems to be the industry standard," says Roberts. "We'd like to take two years to develop a project. The idea was to get back to smaller, more focused, creatively driven groups, rather than something driven by quarterly earnings."

As the teams hunker down and work on their projects, they're doing so with a minimal staff, which, according to Roberts, should improve the quality of their titles, rather than harm them. "We start off with a concept for a game, and then our first big milestone is a technical prototype, which is basically a full working version of the game," he says. "It's not going to have all of the game art, or the missions, or the levels, what have you. But in the case of Tony's game, for example, you'll be able to drive the cars around, see how the physics model works, and get a sense whether it is going to be a fun game or not. If it is, then all that's left to do is the heavy production work, like putting in the art, sound, and story elements.

During the technical prototype stage, we try to have the fewest number of people as possible working on a game so the vision will remain concentrated and consistent," he says. "Those guys spend about a year to get to technical prototype, and once we hit technical prototype and have proof of concept and a game looks like it's going to be fun, we finish up the project the following year, and that's when we bring in four or five more people."

Roberts says that proving the game concept and technology allows them to avoid potentially costly mistakes. "At lot of times, you'll hear of software projects that have gone on for two or three years, and racked up a cost of six or seven million dollars, and it comes to the point where a company simply has to release the game in order to make some of their investment back. That's one of the reasons we try to keep the teams small in the early stages, that way if you take a look at you can say 'okay, we can junk it,' and we haven't invested too much money in it."

Oddly enough, it was Digital Anvil's desire to be free of quarterly reports and rushed releases that led them to sign a multi-million dollar long-term publishing deal last February with Microsoft — the world's largest publisher of computer software. While this arrangement would seem like an unlikely way to escape the corporate clash they were so desperately trying to avoid, Roberts describes the relationship with Microsoft as being an ideal situation for both parties, one that has left Digital Anvil free to set its own pace in developing content and releasing products, while giving Microsoft's games division a much needed boost in credibility among gamers.

"After I left Origin, we started talking to a lot of different companies like Electronic Arts, Virgin, and Microsoft," he says, "and we settled with Microsoft on the PC side because they seem to have the most patience, and they have long term goals that fit with what we're doing. I think the other thing that really worked with Microsoft was that they are relatively new to the games market and were able to bring a lot to the table in terms of building that market up. It doesn't hurt that they have things like Windows 95 and Office 97 that basically pay the bills."

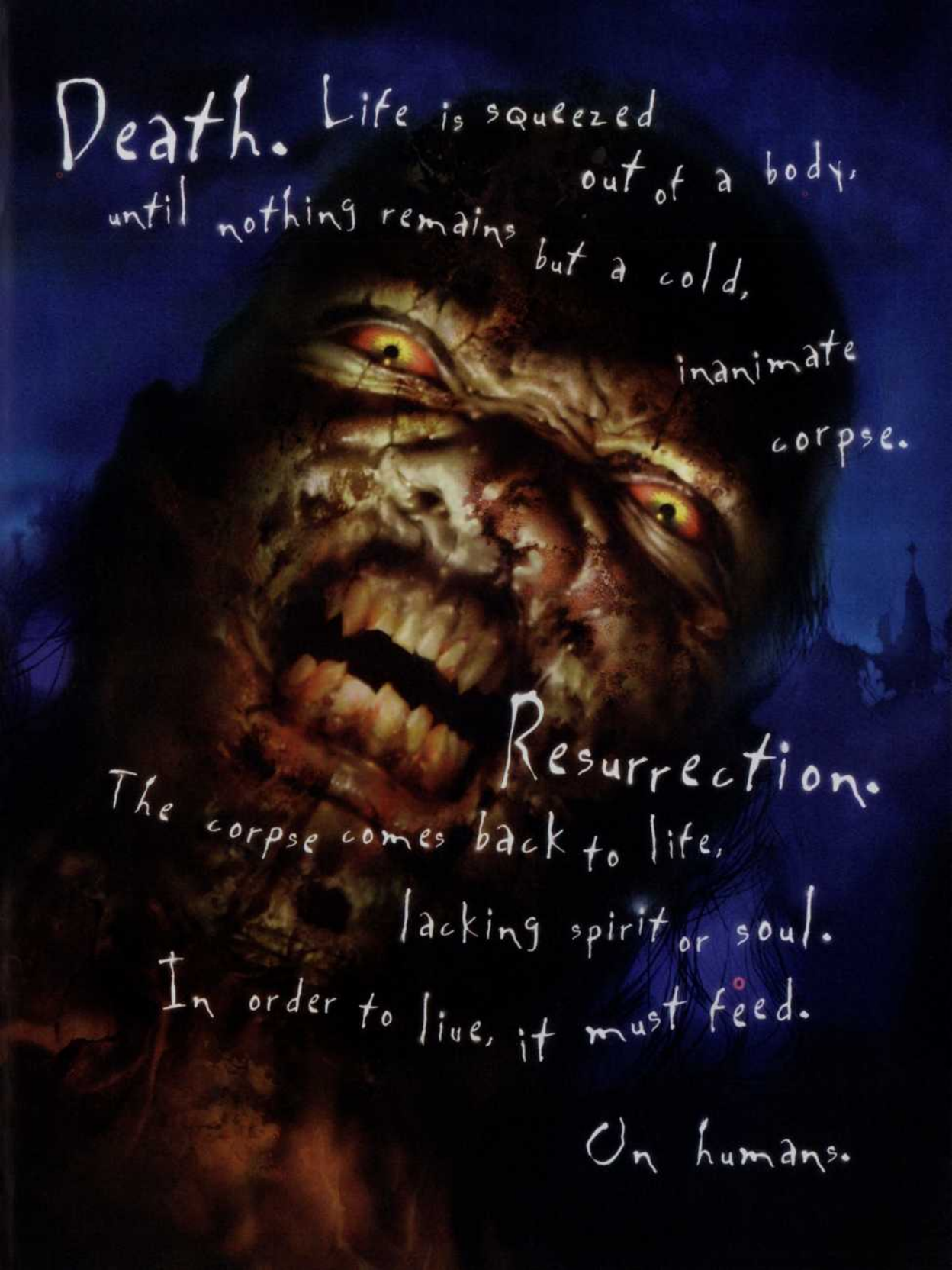
But aside from radically rethinking the development process, and having the luxury of time to get it right, Roberts cites the ability to attract some of the industry's best talent as one of the company's strongest assets. "Right now, I don't think there's anyone in the building who hasn't had more than five years experience developing computer games," he says, "and that's quite a different experience than what we had at Origin where we hired people straight out of school and they had to be trained, and once they were trained, they went somewhere else. At times, it felt like Origin had become a placement agency for the rest of the industry." Among the notable figures among Digital Anvil's startup staff is technical guru John Miles (whose Miles Sound System is used throughout the games industry). Miles is hard at work as DA's Chief Technical Officer, sorting through various technologies to ensure each game gets the most versatile features with the least amount of fuss.

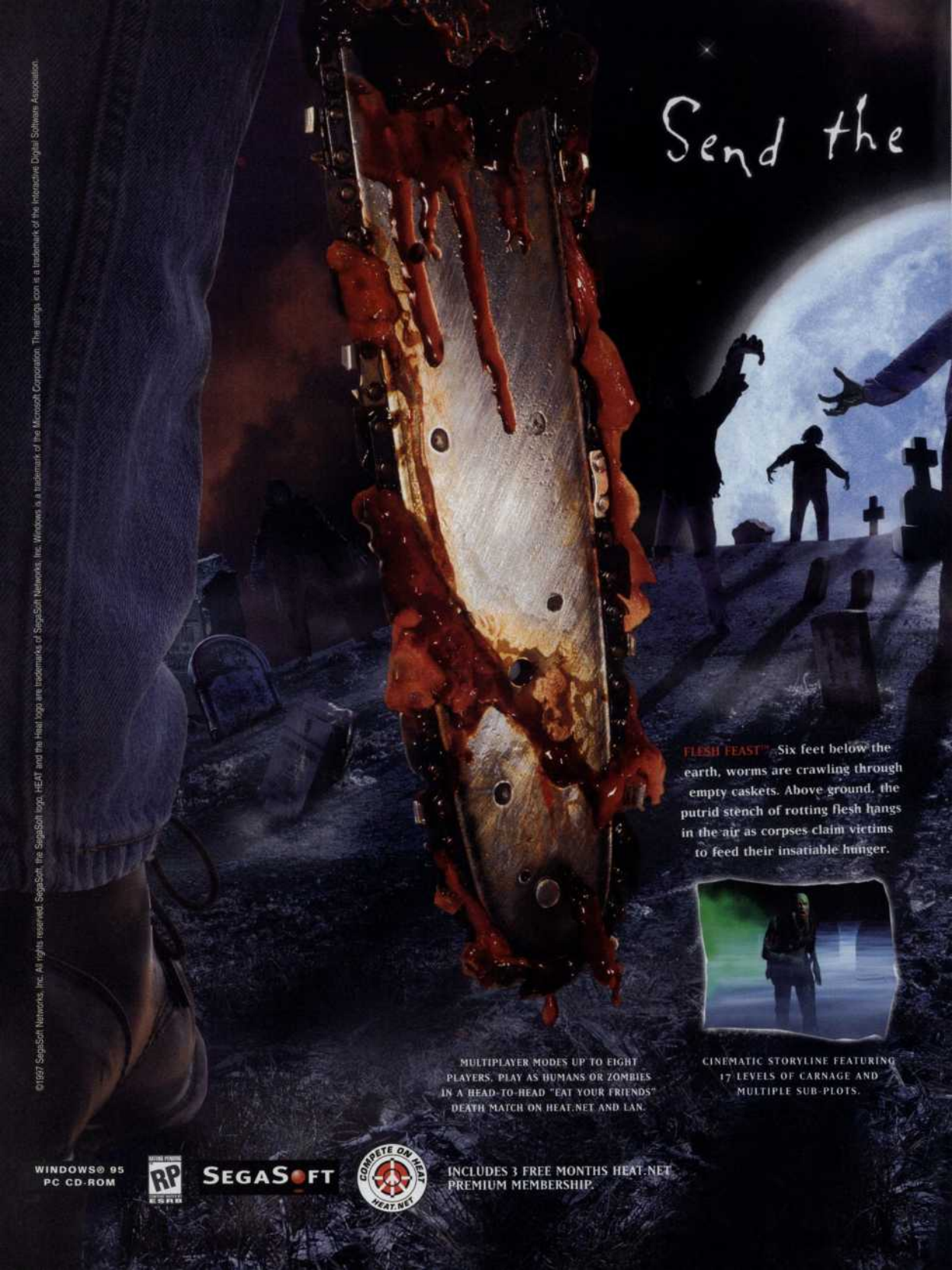
Erin Roberts (top left), who worked on Origin's sci-fi adventure *Privateer: The Darkening*, and his team are developing a real-time strategy game set in the depths of space.

Roberts (sitting) and his team are working on a space exploration/exploitation game called *Freelancer*. Roberts, one of the gaming industry's most successful developers, struck out on his own so he could devote more time and effort to individual projects.

For story elements, Roberts says that co-founder and filmmaker Robert Rodriguez (director of movies like *El Mariachi*, *Desperado*, and *From Dusk Til Dawn*) will be able to bring cost-effective and exciting content to their games. "I've known Robert for a while, and I like his visual side, and even though the focus of digital Anvil is games, we're going to be doing some story components, and we thought why not make them look as cool as possible," Roberts says. "Robert's relationship with DA is to be a consultant on that side to make sure we can do it well, do it efficiently, and do it as cool as possible, and still be cost efficient, which is something he is well known for."

The PC Gamer Mavericks feature contiunes on page 166 with a look at Sid Meier's new company, Firaxis Games.


Death. Life is squeezed out of a body, until nothing remains but a cold, inanimate corpse.
Resurrection. The corpse comes back to life, lacking spirit or soul. In order to live, it must feed.
On humans.



©1997 SegaSoft Networks, Inc. All rights reserved. SegaSoft, the SegaSoft logo, HEAT and the Heat logo are trademarks of SegaSoft Networks, Inc. Windows is a trademark of the Microsoft Corporation. The ratings icon is a trademark of the Interactive Digital Software Association.

dead to their graves. Again.

The dead have mysteriously come back to life, and Nasat Island has gone from premier tourist destination to nightmarish human hunting ground, where nobody is safe.

Survive the island's many terror-filled sectors using weapons and wit to eliminate wave after wave of ravenous undead hordes. Rescue the remaining survivors and strategize your escape.

Then, in the climactic finale, penetrate the complex that houses the secrets to the dead's resurrection. FLESH FEAST. IF YOU'RE ONLY CONSUMED BY FEAR, YOU'RE ONE OF THE LUCKY ONES.

FIGHT OFF THE FLESH-HUNGRY HORDES AS YOU STRATEGICALLY CONTROL FOUR DIFFERENT CHARACTERS.

OVER 50 DIFFERENT WEAPONS AND DOZENS OF GRUESOME DEATH TRAPS.

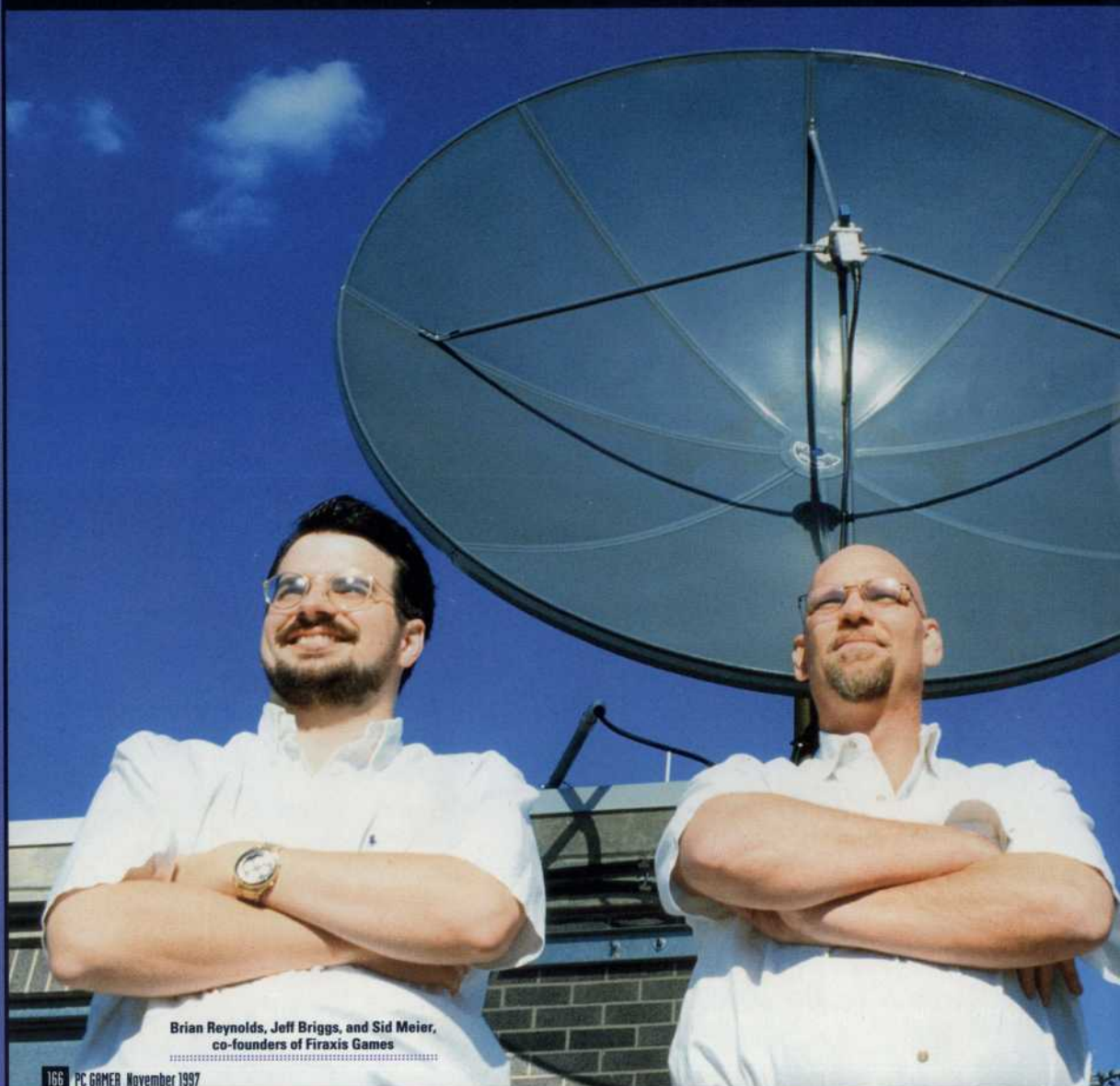
Now we'll see what you're made of.

FREE DEMO: 1-888-SEGASOFT OR www.fleshfeast.com

COMING SOON. You have been warned.

Product Information Number 306

the RIGH



Brian Reynolds, Jeff Briggs, and Sid Meier, co-founders of Firaxis Games

HT stuff

Even as Sid Meier's ambitious new company prepares to release its first game, the smart money is already on Firaxis quickly becoming one of the most respected developers in the business. But with Meier at the helm (and at the top of his game), how could it be anything less? "We know how things ought to be done," he tells William R. Trotter.

For the first six months of our existence, we lived in a cave," says Jeff Briggs, President and CEO of Firaxis Games. "Or at least it felt like one — old, cheap, nearly windowless office space. We learned about *this* space almost as soon as we went into business, but we also learned it wouldn't be rentable for six months. We decided that this was worth being cave-dwellers for six months."

Briggs gestures expansively at the view from his office — part of a twelfth floor penthouse office suite in tiny Hunt Valley, Maryland; it's a 180-degree panorama of lush rolling Maryland hills, soft and dusty green under a hazy late-summer sky. Briggs rates the corner office, of course, but many of Firaxis's full-time employees enjoy a piece of this beauty from their office windows, too.

Briggs's expression seems to say: It was all worth it. Nodding agreement are two other gaming celebrities: Brian Reynolds, VP of Software Development, and the legendary Sid Meier, Director of Creative Development. "All" of it, for these three gentlemen, means their combined years of work together at MicroProse during that company's golden age, and the challenge they all accepted when they broke away and formed their own company.

Now, after more than a year of low-profile organization and hard work, the company is almost ready to release its first game: *Sid Meier's Gettysburg!*. And since there simply *is* no more famous or bankable byline in PC gaming, any company that debuts with a new Sid Meier game is going to be taken very seriously indeed. Its success or failure will be taken as a bellwether of changing times within the industry as a whole.

Given the talent sharing this room with me, the smart money is going on success. All three men have landmark games to their credit. Briggs was Microprose's Director of Product Development and as such has fifteen major games to his credit; Reynolds' creative programming skills contributed mightily to the success of MicroProse's strategy game line-up, and he developed a brilliant partnership with Meier during the creation of *Colonization* and *Civilization II*.

And as for Sid Meier — well, if it can be said that our young industry had produced its equivalent of Tolstoy, it is he. Through 1986's *Silent Service*, 1987's *Pirates!*, 1989's *F-19 Stealth Fighter*, 1990's *Railroad Tycoon*, 1992's *Civilization*, and 1996's *Civilization II*, the man's work has displayed more depth, range, and sheer creativity than any other game designer.

How did this trio of industry veterans come together to form their own company? And just what the hell *does* that name mean, anyhow? Isn't it Greek for "great PC code"?

Jeff Briggs chuckles. "All of us swore we didn't want any corporate name with the words 'soft' or 'software' in it. Actually, it's a word I made up for a musical composition. It combines 'fire' and 'axis' and has no connotation other than that of the creative crucible from which good artistic work emerges," he says. Briggs, it

THINK FOR YOURSELF, WHILE YOU STILL CAN...

Both DVD and CD-Rom versions available

TEX MURPHY

Overseer

NOVEMBER 1997

An elite group of scientists have been assembled to create a dark secret. Now each of these men are marked for death...and the monster they have created will put the dreams and desires of all men under the domination of one lord and master...

The adventure game for the 21st century

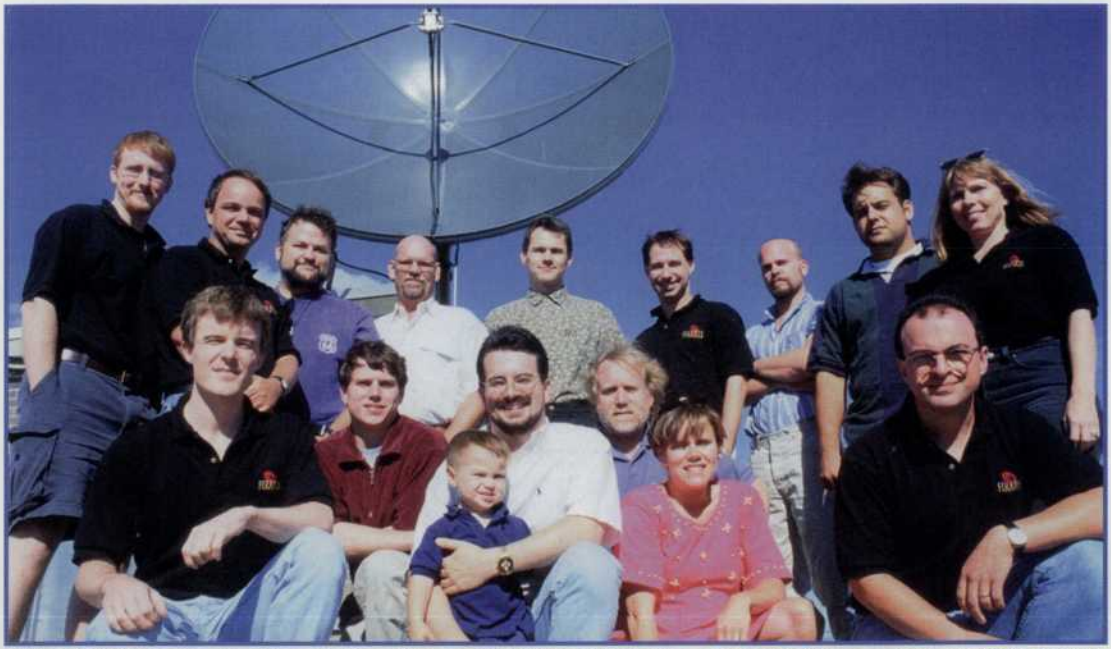
- Award-winning, high color 3D Virtual World puts you into the 21st century
- Fantastic graphics, great puzzles and AC-3 5-channel sound
- Two levels of play with on-line help

Actual game screen shots

Product Information Number 85

(800)800-4880 • FAX (801)359-2968 WEBSITE—http://www.AccessSoftware.com

ACCESS SOFTWARE INCORPORATED



THE FIRAXIS TEAM: top row – Jason Coleman, Sid Meier, Michael Bazzell, Jeff Briggs, Michael Haire, Tim Train, Nick Rusko-Berger, Greg Foertsch, Susan Brookins. bottom row – Mike Ely, Dave Insore, Ro Reynolds, Brian Reynolds, David Evans, Lindsay Riehl, Jerome Atherholt.

turns out, has a doctorate in music and his works have received a respectable number of performances. (*Firaxis*, incidentally, is scored for string quartet, piano, winds, and a large percussion ensemble.) "I just *love* a big percussion section!" he says, grinning, as though designing great computer games and writing well-received classical music on the side were the most natural combination of skills in the world.

All three men came to the decision to break with MicroProse at approximately the same time. It's no secret that, after a string of brilliant games in the late '80s and early '90s, MicroProse's leadership made a series of bad marketing decisions, overextended itself by branching into the arcade genre, and released some execrably buggy and/or downright bad games (*Darklands*, for instance, and the incredibly ill-conceived *Pizza Tycoon*).

"We all came to the conclusion, for a variety of reasons, that we were tired of working in a 'big company' environment," explains Sid Meier. "And after MicroProse was bought out by Spectrum HoloByte, the focus of things began to shift to the West Coast, which was logical from a corporate point of view, but left us here in Hunt Valley feeling more and more isolated and out of the loop."

Meier's comments reflect a growing phenomenon in the industry, a natural action/reaction cycle to the mid-'90s trend of bigger-is-better and of software companies being acquired by vulture...er, *venture* capitalists who knew nothing about the gaming industry and tended to treat games as just another "product," or who thought of the industry as being "just like book publishing" or "just like movie-making." It wasn't and it isn't, as many of those investors have learned to their financial dismay.

The final straw came when top management's bean-counters decided not to pay the substantial bonuses all three men had been promised for the highly profitable *Colonization*. For several months, they quietly laid plans to strike out on their own and create a company with a small, tightly-knit, "family" style of doing things. Meier was the last of the triumvirate to make the jump — he felt duty-bound to finish work on *Magic: The Gathering* before turning in his resignation.

From the start, the new company's philosophy has embodied a passionate reaction to the trends that dominated the industry in the mid-'90s. But their idealism was tempered with good business sense. From a sales and marketing point of view, a large company makes sense; from a creative point of view, it means time wasted in endless "strategizing" meetings, layers of bureaucratic protocol, and frequent misunderstandings, not to say downright conflicts, between those who dream up the games and those who want to make bigger and bigger profits on them.

But even as Firaxis was gearing up, the complexion of the industry began to change rapidly. Many of the bigger firms that had tried to put traditional corporate methods under the same roof with in-house developers had begun to stagnate. And some of the smaller, purely creative outfits (id Software being a prime example) had begun to soar simply by creating terrific games on their own and then finding an outside partner for marketing and distribution.

As soon as word got out about Firaxis and the people involved in it, the fledgling company enjoyed the pleasure of being courted by a number of major publishers. They finally settled on Electronic Arts (which saw the handwriting on the wall earlier than most of the industry giants and has now abandoned in-house development altogether).

"We're comfortable with EA's attitude and the way they have evolved," says Meier. "They've been as good as their word; very supportive, very understanding of what we're trying to do, and allowing us full creative control."

So what, exactly, *is* Firaxis trying to do? There is a seasoned, matured, and closely-reasoned philosophy behind the company. "The game comes first," says Briggs. Reynolds expands on the concept: "We concentrate on creating games that are *fun*," he says. "We design a prototype, based on a concept that excites us, and then, as soon as we have something that's playable, we concentrate on *playing it*. The graphic embellishments, the bells and whistles, all the cool details — these emerge as a direct result of all our people playing the game and bouncing ideas back and forth. It's a very dynamic process, and it makes for an enjoyable working environment.

"So many times," he says, "in some of the big under-one-roof companies, the techies off in one wing of the building will come into a meeting and say 'Hey, we've developed this great new 3D engine!' and then the marketing people will say 'Okay, programmers, go figure out a game for it.'

> "We want the fun to take place inside the imaginations of the players, not inside the guts of the computer."
>
> BRIAN REYNOLDS
> CO-FOUNDER, FIRAXIS GAMES

We don't do that. If existing technology carries our game, we use it. If some new technological development appears during the gestation period that we all agree will add to the playability and the fun, then we'll adopt it. The technology must serve the game. But always, the *game* is the thing."

It's abundantly clear that these three men love to play games; it's also clear that they would never consider releasing a game that did not deliver a richly satisfying gaming experience over a long period of time — a game that will still be as much fun to play two years later as it is when it first hits the market.

Take *Gettysburg!* as an example: Everyone in the company has been playing it for more than a year, adding new touches, trying out new ideas, gradually deepening the "coolness" factor. And they're *still* playing it, and still enjoying it, and still, on the very eve of its release, coming up with incremental features that will make it as deep, as addictive, as richly replayable, as any Sid Meier classic ever released.

"We're free to try anything," says Reynolds. "We program *and* we design; there is no separation. In some companies, the designers come up with their concept, do their story boards and flowcharts, and then hand the package over to the programmers. This gives rise to inevitable friction as the ideal comes into conflict with the programming realities. Something is lost, some spark that vitalizes the product. Egos come into play; meetings multiply; product slippage becomes almost inevitable. The three of us feel totally unconstrained to try anything, just throw out the idea and see if it works, because if it doesn't, we're only wasting our own time, not someone else's. When I'm typing in one block of code, I'm already imagining the next one. If it turns out badly, I don't have to call a meeting and say: 'Look, guys, this is a great piece of code, but it's got to go.'"

There are no remote corporate owners flogging the employees to crank out "multimedia masterpieces." Every employee at Firaxis is a dedicated and passionate game-player, whatever else he or she may be within the company structure. In a metaphorical sense, there are no walls, and the free exchange of opinions, ideas, and criticism makes for a yeasty and high-energy environment. If someone approaches Meier or Briggs or Reynolds and says to them: "Look, we've been playing with this new feature and it really sucks," there's no rancor involved on either side — just a mutual determination to replace or revamp the element in question until it doesn't suck.

"Based on our collective experience," says Meier, "we know how things ought to be done in order to create a fresh, innovative game. What we hope we've accomplished in this company is to liberate ourselves from the outside pressures that prevent us from doing games the way they ought to be done."

Where does Firaxis hope to be in the next, say, five years? "We hope for one thing, primarily: That our name becomes synonymous with great entertainment software, period," Reynolds says. "We don't want to become a giant — in fact, we're quite comfortable with the eighteen or nineteen people we have on our payroll right now. We want the fun to take place inside the imaginations of the players, not inside the guts of the computer. We want our games to live in the players' minds, we want them to stay fresh and never grow old."

What about multi-player gaming? Gazing into his crystal ball, Meier predicts: "I think eventually, online multi-player gaming will be as big a revolution as the jump from board games to computer games," he says. "I do not think that's going to happen by simply taking a single-player game and adding a multi-player option to it. At present, though, it is *not* the millennial revolution its more avid fans would like to think it is. It will be an evolutionary process, and will require whole new styles of games. It took almost a decade for PC games to evolve from crude boardgame conversions to the kind of sophisticated products they are today. It may take almost that long for multi-player gaming to reach its full potential, and for it to become as easy-to-access, for large numbers of consumers, as buying a CD and popping it into the slot is today. *Gettysburg!* will have the full range of multi-player options available today, naturally, but it's also as good a solo game as I can make it, so that people who either don't have the time or the knowledge or the inclination to go online, will have a superior gaming experience 'on demand'. As I've said before, one of our guiding principles is that the technology — any technology — must allow the gamer's fun to take place effortlessly. When multi-player reaches that stage, of course we'll incorporate that technology, whatever it turns out to be, in our games."

In short, Firaxis as a whole wants to achieve the "hallmark of quality" status that has come to be associated with a Sid Meier game. To accomplish that is no small undertaking, but the atmosphere in the hallways and offices is very different from some of the high-tech sweatshops *PC Gamer* has profiled during the years. Clearly, this is a place where young talent is nurtured and ideas are exchanged with the utmost candor. Although the three men who founded the company have, among them, more years of experience in the field than any other trio one could think of, there is no sense that they would ever "pull rank" on their employees.

A tour of the facility confirms that this non-traditional environment is a fact, not a concept. There's even a "kids' room" where parents who must, for one reason or other, bring their children to work, can deposit them in a safe, warm, fun, place. It's filled with blocks, toys, a playhouse with furniture, books, and, of course, a computer loaded with kid-friendly software.

Our impression, after an all-too-brief day of exceptionally stimulating discussion, is that Firaxis really is a special company. It seems dedicated to producing fresh, innovative, games that are recognizably in the tradition of the classic products its founders have been identified with for many years. Sid Meier calls it "innovative continuity," and then, as though uncomfortable with such high-falutin' language, adds the words: "which means we want to keep on creating cool, fun games."

Chances are, they will.

The PC Gamer Mavericks feature continues on page 172 with a look at John Romero's new company, ION Storm.

SID IN SPACE!

MEIER'S NEXT GAME — *ALPHA CENTAURI*

WELL, SINCE *Gettysburg!* is nearing completion and looking great, *PC Gamer* naturally went on to ask the question: "What's next?"

Brian Reynolds, Project Leader for Firaxis' next game, can't reveal many details as yet, but it's going to be Sid Meier's first science fiction game. The title is *Alpha Centauri*, and Brian promises it will be far more than just "*Civilization* in Outer Space."

"The very fact that we're doing a sci-fi game, which is a genre we've not been identified with so far, is going to spark a lot of interest," says Reynolds. "Fans of our previous games, however, are going to take one look at this one and smack their foreheads and say, 'Of course! What a natural!' Which is exactly how we all responded when the concept first came up for discussion."

Alpha Centauri will be a near-future, alternate history game of grand strategy — as expansive and broad in range as *Gettysburg!* is tightly focused. It will be turn-based, and it will deal with the early stage of human colonization in outer space. It will have elements of exploration and resource management, as well as military strategy, but it will also have "a deeply philosophical element" undergirding the action.

That's all Firaxis wants to say about the game at present, but it's certainly enough to whet our appetites.

© 1997 NOVALOGIC Inc. NovaLogic is a registered trademark and F-22 Raptor and NovaLogic - The Art Of War are trademarks of NovaLogic Inc. All other trademarks are the property of their respective owners.

Product Information Number 253

Photography by Sue Pictures

no JACKET

John Romero (front and center), and the *Daikatana* team

Dressed in T-shirts and shorts, ION Storm's army of "Generation X" game developers may look out of place at the company's upscale office complex, but founder John Romero's laid-back approach could result in some of the best games of the coming year. "We encourage *fun*," Romero tells Colin Williamson. "We don't ban games from the networks."

required

Of all the high-profile game developers that have sprouted forth this year, ION Storm, the new company set up by ex-id Software "stud" and *Doom* and *Quake* designer John Romero, has gotten off to a faster start than most. Already employing over 60 people (affectionately known as ION Stormtroopers), and with no less than four games scheduled to appear over the next twelve months, ION Storm is more than just hype — these guys mean business.

Romero's new baby was born in style, too — the company's leased a multi-layered, glass-ceilinged penthouse suite on the fifty-fourth floor of the Texas Commerce Building. There are plans for a motion-capture stage, a DeathMatch Center, and even a mini movie theater. The offices won't be ready for a few months, so the team temporarily has to make due with the makeshift accommodations on the thirtieth floor — a sea of cubicles and haphazard wiring.

Though the atmosphere is rather cramped, the employees are open and social. All four development teams are in close proximity, and employees share daily activities ranging from watching movies on the new DVD player, to cutthroat games of ping-pong and foosball. "The company was set up with the idea of the United Artists concept," explains Bob Wright, ION Storm's CEO. "We wanted to be a modular company, so we have self-sufficient teams. Programmers work on particular projects, while we have company resources like music and an in-house writer."

Just take a quick jaunt around the office, and you'll run into many influential industry figureheads. "It's not like a lot of startup companies where a bunch of programmers and artists get together because they want to do a game," says Romero. "It's people who have worked on games for 18 years. There's tons of experience here." Even so, it's an amazingly young company — the average age of an ION Storm employee is just 22. "On the business side, we kid around a lot that we're raising them as much as we're employing them," says Wright. "Basically, we're Generation X, and we wear T-shirts and shorts, much to the initial chagrin of the building we work in. We're in a highbrow, downtown Dallas office, and we had an issue in negotiating our lease, regarding whether or not we were an appropriate tenant for the building," he says with a chuckle.

Meet Stiletto Anyway, a character from Tom Hall's ambitious new *Quake*-powered RPG *Anachronox*, due out late next year.

Interaction between the design teams is friendly, with minimal interference from the 'higher-ups.' Romero describes the relationship: "If there's something going wrong, or a bad decision, I'll say 'hey, you shouldn't do this,' but I'm not going to change the game design," he says. "That's not what we started the company for. They can make their *own* game."

"Having three designers under the same roof is a real benefit," says Wright. "They all have opinions. Even though Todd Porter (*Doppleganger*) isn't a big shooter fan, he knows what makes a good game, and it's not abnormal for these guys to sit down and talk.

"There are companies where people make games, and they're *wearing suits!* These people are not permitted to play games — yet they're making them. At ION Storm, it's a different environment."

JOHN ROMERO
FOUNDER, ION STORM

The programmers from different teams are always talking to each other, and there's some cross-pollination going on. But the drive on each of the games is the lead designer."

So far, ION Storm's line-up is driven by a lot of licensed technology — *Daikatana* and *Anachronox* are powered by the *Quake* engine, *Doppleganger* uses a licensed voxel engine written by the creator of *Tetris*, and in the case of the real-time strategy game *Dominion*, the entire project was bought outright from the troubled 7th Level.

At this point, ION Storm's goal is not to create new technology. Much of this hands-off attitude stems from John Romero's original problems while working on *Quake* — as the game engine went through its varied incarnations, design ideas were shot down or became impossible to implement, and previous designs were eradicated. That's not good, especially when your personal mantra is *Design is Law*. "I just didn't want to be creatively restricted, and have to argue about game design," says Romero.

ION Storm's present goal, then, is to take the most versatile engines in existence and refine them to create games that are more than simple showpieces of technology. Instead, they want to tweak existing technology in new ways to create surprisingly unique gaming experiences. For example, *Anachronox* uses the *Quake* engine, but from a third-person perspective, and with RPG elements like evolving player levels and skills. Similarly, the 3D shooter *Daikatana* features several adventure and roleplaying elements, such as AI-controlled characters who follow and interact with you in real-time. Finally, *Doppleganger* is a twist between the real-time strategy game and action game, and uses voxels to create some of the most convincing character animation yet seen.

"What helped with the rapid development of *Daikatana* is that we're building on finished technology," says Wright. "That isn't just a benefit to us, but a benefit to the rest of the gaming public, in that it gives them the time to take a little breather. We're not building a new engine that has different requirements for their hardware at home. The fact that we're building on the *Quake* engine means that the standards that you have to play it are the same as *Quake*. In keeping with that, we've taken the direction in which we will always license the best engine." But ION Storm's 3D games won't be limited to id's technology. "If it's id's engine, great. If it's someone else's, great — that represents evaluation in the industry, and that's the direction we'll go. That doesn't mean at some point we won't actually try to develop our own technology — but it won't be one of those situations where we'll build a game on our technology come hell or high water. If we're building technology, and it's not up to par with what's in the industry when it's ready, we'll go ahead and license someone else's technology," Wright says.

So what separates ION Storm from the rest of the big boys? "For starters, we're doing three different genres," says Romero. "Most companies don't do that many unless they're a couple hundred people. There aren't many who go outside their genre, with LucasArts being one of the exceptions. We also *play games*. There are companies where people make games, and they're *wearing suits!* These are the places where it's super-quiet all the time, and people are not permitted to play games — yet they're making them. At ION Storm, it's a different environment, where we encourage *fun*. We don't ban games from the networks — even Origin banned people from playing *Doom*."

ION Storm has found plenty of inspiration from several of the more elite gaming companies. "We model ourselves after SquareSoft and LucasArts," says Romero, who frequently and reverently mentions Shigeru Miyamoto, the Japanese game design deity. In terms of more local designers, ION Storm is especially friendly with nearby Ritual Entertainment (developers of *SiN*). "We have a standing basketball game with those guys," says Wright. "Ritual is a lot like us in the fact that they're a very cohesive group."

Many of ION Storm's diverse staff have emigrated from other big companies. "We've got people from 7th Level, Origin, Epic, Xatrix, Dwango, and id," says Romero. "We want to make sure that the people we get are hard-core gamers."

Other companies aren't the only source for good employees — the Internet is also a frequently tapped pool of talent. "We hire a lot of people over the Internet," Romero says. "Sometimes we'll find some guy who's just awesome, whether it's a great texture artist, or a great level designer." Case in point: During PC Gamer's visit, ION Storm was considering hiring a *Quake* level designer, due to his incredible work on a new map.

ION Storm is going strong, but will there be any more expansion? Romero thinks so. "It depends on our team," he says. "We want to do cool games, and if we don't have enough people to do them, we'll go outside the company for outside developers, or we'll add new teams if they're strong."

In the meantime, morale amongst the existing ION Stormtroopers is high. "We're hoping this model represents the model for the future of gaming," says Wright. "Most gaming companies, up until this point, have been mostly one-project companies, like a garage-band industry. We're proving that our concept is viable, and it points in the direction the industry ought to move. Our goal is simply to get bigger, and create the best games in the industry..."

PCG

Recently bought from 7th Level, the real-time strategy game *Dominion* will be ION Storm's first game. *Doppleganger* will also be real-time.

***Daikatana* is shaping up to be a biggie — but rather than rush it out for the holidays, the team is taking its time and is planning on a March release date.**

***Doppleganger*'s team plans on combining real-time strategy and action elements into the game.**

The *Anachronox* team will use the *Quake* engine for its game.

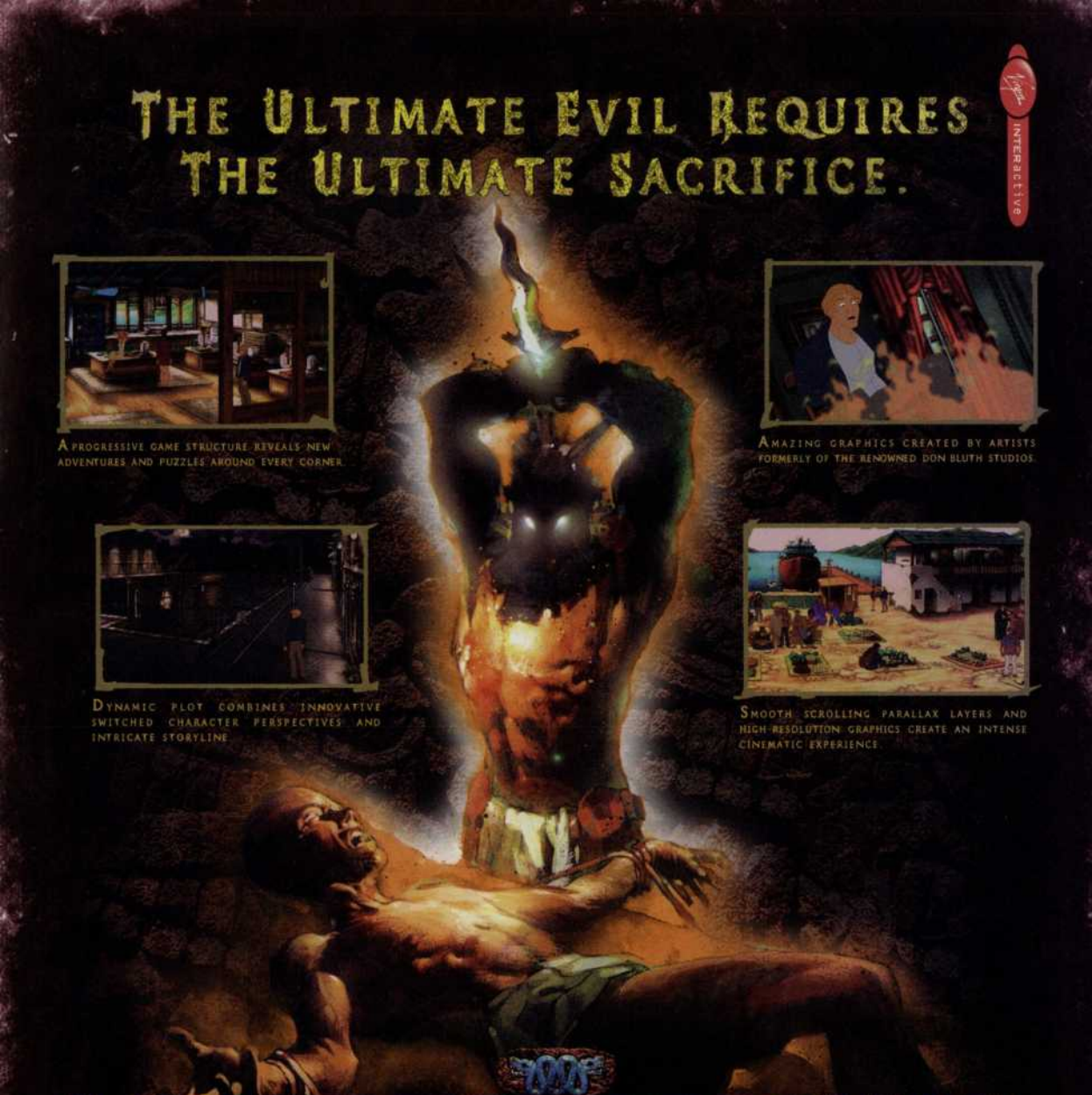
THE ULTIMATE EVIL REQUIRES THE ULTIMATE SACRIFICE.

A PROGRESSIVE GAME STRUCTURE REVEALS NEW ADVENTURES AND PUZZLES AROUND EVERY CORNER.

AMAZING GRAPHICS CREATED BY ARTISTS FORMERLY OF THE RENOWNED DON BLUTH STUDIOS.

DYNAMIC PLOT COMBINES INNOVATIVE SWITCHED CHARACTER PERSPECTIVES AND INTRICATE STORYLINE.

SMOOTH SCROLLING PARALLAX LAYERS AND HIGH-RESOLUTION GRAPHICS CREATE AN INTENSE CINEMATIC EXPERIENCE.



FOR THOUSANDS OF YEARS THE MIGHTY MAYAN GOD OF DEATH, TEZCATLIPOCA, HAS BEEN TRAPPED BY THE POWERFUL MAGIC OF ANCIENT PRIESTS. NOW THE FIENDISH DRUG LORD KARZAC WANTS TO UNLEASH THIS EVIL DEMON SO THAT TOGETHER THEY CAN RULE THE WORLD. IT'S UP TO YOU TO STOP THE APOCALYPSE AS YOU CONTROL THE ACTIONS OF GEORGE AND NICO THROUGH AN EXCITING ADVENTURE FILLED WITH BLOODTHIRSTY THUGS, DEVIOUS LOCALS AND EXOTIC LOCATIONS.

BROKEN SWORD
THE SMOKING MIRROR

AN EPIC GRAPHIC ADVENTURE

FREE CD OFFER

LOOK FOR SPECIALLY MARKED VIRGIN GAME PACKAGES FOR DETAILS.

And Celebrate EMI-Capitol's 100 with the Sale of the Century--Going on at Record Stores Everywhere!

RP RATING PENDING ESRB

Designed for Microsoft Windows 95

Revolution

BBB-VIE-COM!

WWW.VIE.COM

© 1997 REVOLUTION SOFTWARE LTD. All rights reserved. Broken Sword: The Smoking Mirror is a trademark of Revolution Software Ltd. Published by Virgin Interactive Entertainment, Inc. Virgin is a registered trademark of Virgin Enterprises, Ltd. Virgin Interactive Entertainment, Inc. 18061 Fitch Avenue, Irvine, CA 92614 U.S.A.

FROM BADROCK TO RIPTIDE – HARNESS 11 UNIQUE AND DEFIANT CHARACTERS.

DENSE JUNGLES. ARID DESERTS. AND THE DEPTHS OF HELL ITSELF!

WEAVE A TANGLED WEB OF PLAYER-CREATED STORYLINES.

A FIERY COCKTAIL OF FURIOUS 3D ACTION AND STRATEGIC RPG.

WORLD WAR FREAK

SEVEN SUPER-SOLDIERS
ELEVEN REAL-TIME COMBAT MISSIONS
A THOUSAND GENETIC MUTATIONS
A MILLION WAYS TO DIE

You're commanding a team of heavily-armed warriors into unholy war.

And in the heat of battle each of them will be changed.

They'll learn new strategies.

Gain new powers.

Handle bigger weapons.

Form new relationships.

Hell, some of them might even live.

ROB LIEFELD'S

YOUNGBLOOD

SEARCH & DESTROY

RATING PENDING RP

PlayStation

Designed for Microsoft Windows 95

EXTREME STUDIOS

AWESOME

Realtime Associates

GT Interactive Software

www.gtinteractive.com

YOUNGBLOOD® and all related characters are TM and © 1996 Rob Liefeld Inc. from Extreme Studios™ and Awesome Entertainment™. All Rights Reserved. Developed by Realtime Associates. Published and distributed by GT Interactive Software Corp. PlayStation and the PlayStation Logo are trademarks of Sony Computer Entertainment, Inc. Microsoft and Windows are registered trademarks of Microsoft Corporation. All other trademarks are the property of their respective companies.

Product Information Number 158

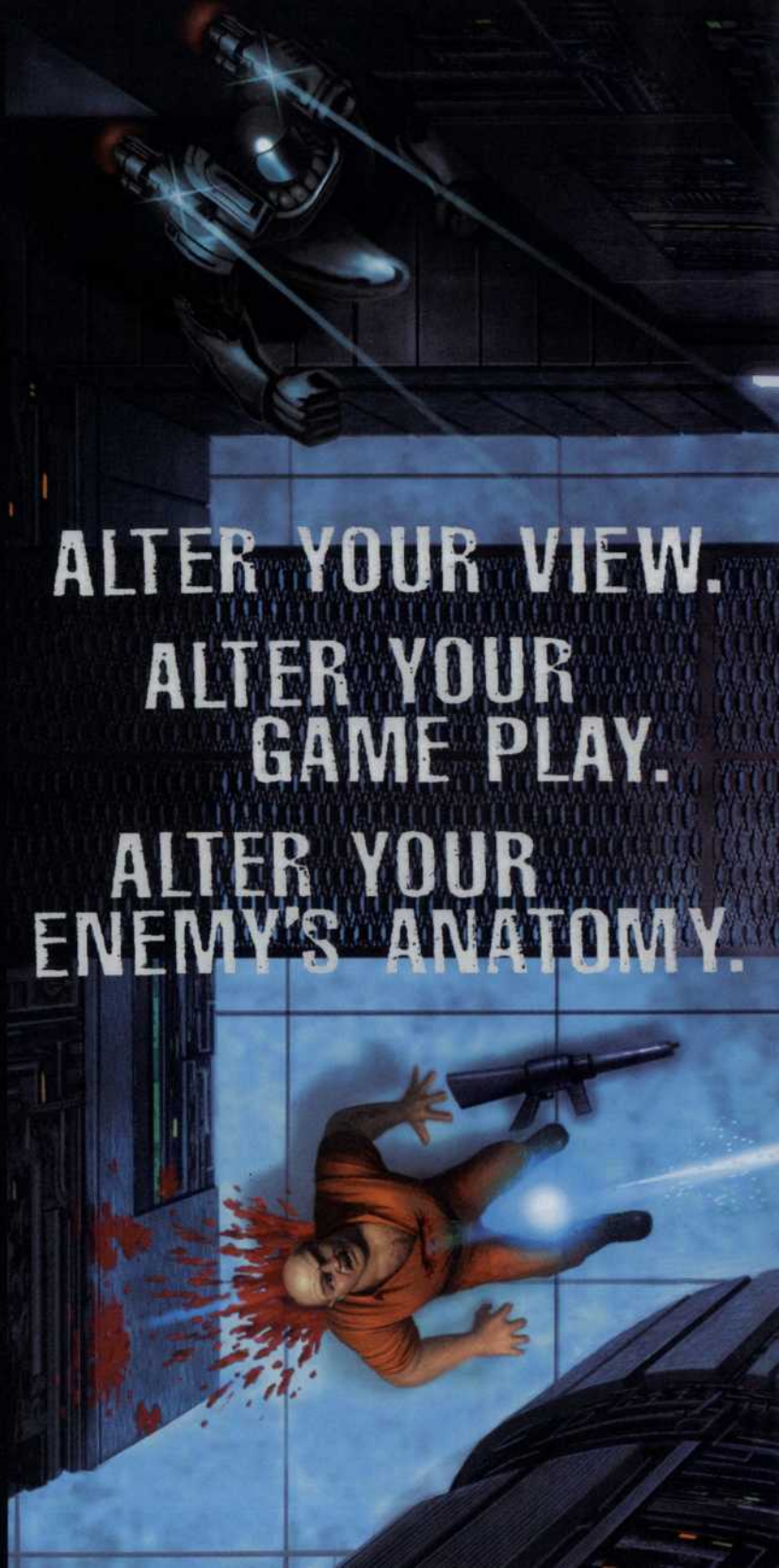
"A refreshing escape from all the me-too action games."
PC Games

"A deeper world than the typical first-person shooter."
Next Generation

"One manic gaming experience."
CNET Gamecenter

"You are starting a whole new style of 3D shooters."
E-mailed Gamer Feedback

"This game has to be the best that I've seen in years!"
E-mailed Gamer Feedback



ALTER YOUR VIEW. ALTER YOUR GAME PLAY. ALTER YOUR ENEMY'S ANATOMY.

Mutants, Psychos, Cultists and Punks are converging on you from everywhere; above, below, behind, in front. You definitely haven't been here before. Top-down views don't just change the way the game looks, they change the way 3D action games play. You'll no longer be blindly running into doom, but mercilessly causing it from every conceivable angle.

Blow away enemies on the catwalk above or on the ground below. Grab some homicidal friends and cooperative multiplayer games can actually be just that—cooperative. With some skill, you might survive this post-apocalyptic hell on earth. But watch your back because death is all around you.

Now available for Windows® 95.
Download demo at
www.takenoprisoners.com

TAKE NO PRISONERS™

Top-Down 3D Action from the Creators of Hexen™

6 unique multiplayer games for up to 8 players, including Assassin, Arsenal and Stockpile.

22 twisted enemies, each with unique combat behavior, plus 21 bone-shredding weapons.

20 non-linear territories: no set path; explore ahead before completing previous levels.

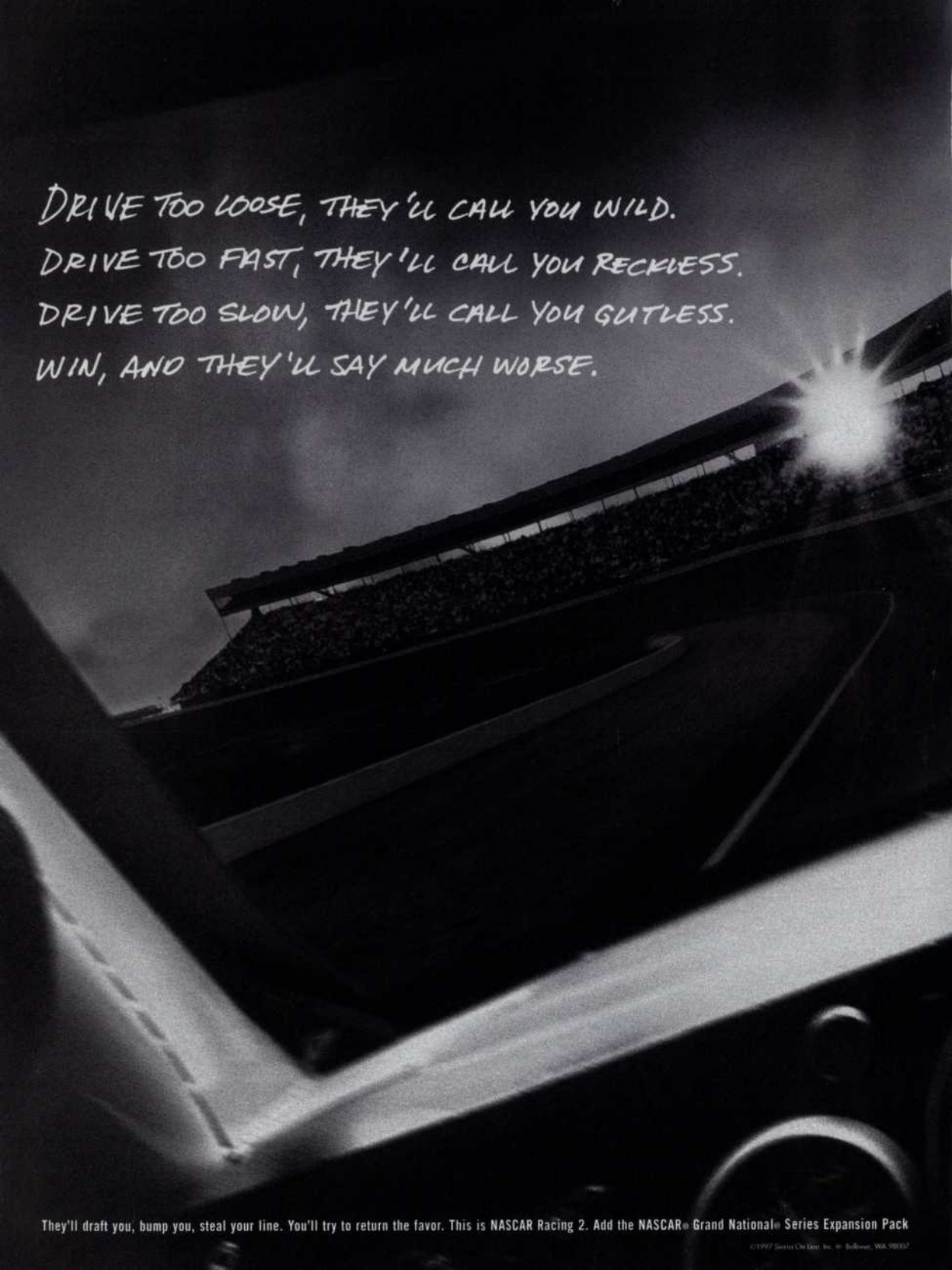
RAVEN SOFTWARE™

REDORB ENTERTAINMENT™

MATURE M AGES 17+ CONTENT RATED BY ESRB

©1997 Bodenburg Software, Inc. Red Orb Entertainment, Take No Prisoners, and the Apogee Kills Trademarks of Bodenburg Software, Inc. All other trademarks and registered trademarks are the properties of their respective owners.

Product Information Number 103



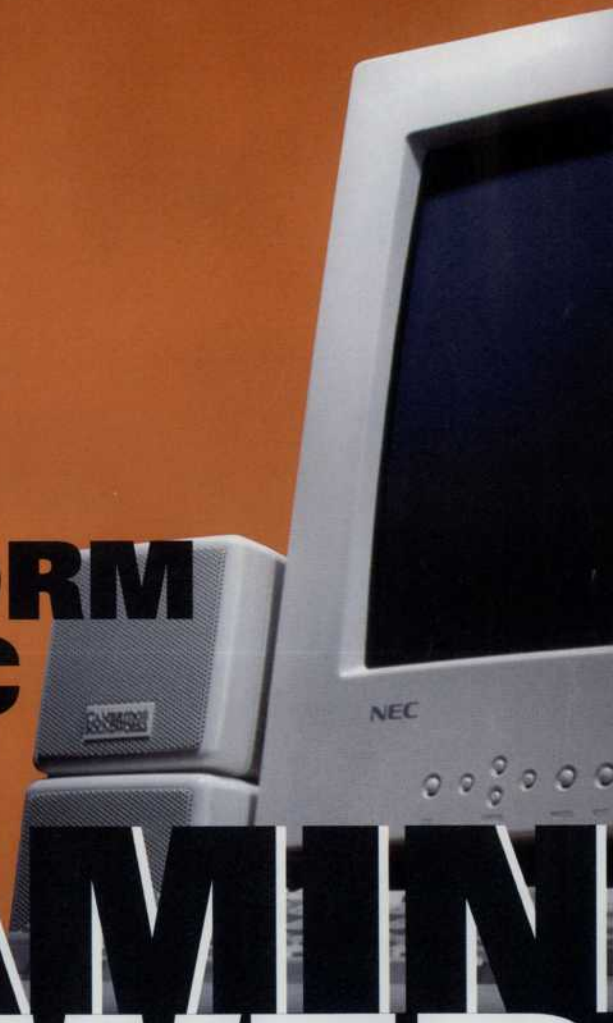
They'll draft you, bump you, steal your line. You'll try to return the favor. This is NASCAR Racing 2. Add the NASCAR® Grand National® Series Expansion Pack

©1997 Sierra On-Line, Inc. ® Bellevue, WA 98007

SIERRA
NASCAR® GRAND NATIONAL SERIES EXPANSION PACK
NASCAR RACING 2
Product Information Number 313
for 12 tricky new tracks and 30 crafty new opponents. Buckle up. www.sierra.com/nascar2.
IT'S NOT JUST A GAME.

special HOW TO feature

TRANSFORM YOUR PC INTO A GAMIN POWER



DON'T BUY A NEW MACHINE —

Photography by Aaron Lauer & Dean H. Rennhiger

G HOUSE

BUILD ONE. BY JOEL DURHAM

As a gaming platform, the PC is unsurpassed. No matter what can be said about video-game consoles, PC gamers don't need 'em. Our choice of equipment is versatile, expandable, and far more powerful than any other game-playing electronics made for home use.

The advantages don't come free, though. Computer enthusiasts are subject to a curse that frustrates everybody involved: Hardware just keeps getting better. Last year's ultimate system is this year's discount-rack special, and it's soon to be obsolete altogether. Technology has advanced this way since long before the first personal computers began to make their way into our homes, and it's not going to stop any time soon.

Since new, more powerful hardware makes it possible to create more advanced games, most game developers are quick to adopt the new technology. The result is games that are prettier and more technologically sophisticated than their predecessors — and they require computers that most of us don't own yet.

This is a source of ongoing frustration for many gamers, who write countless letters to gaming magazines like *PC Gamer* recounting how the ever-advancing juggernaut of technology has run them over. But as long as games with high hardware requirements continue to sell well, game developers are going to stay on the bleeding edge. It seems our choices, then, are to stick with games from an era when your computer was still the hottest thing going — or upgrade.

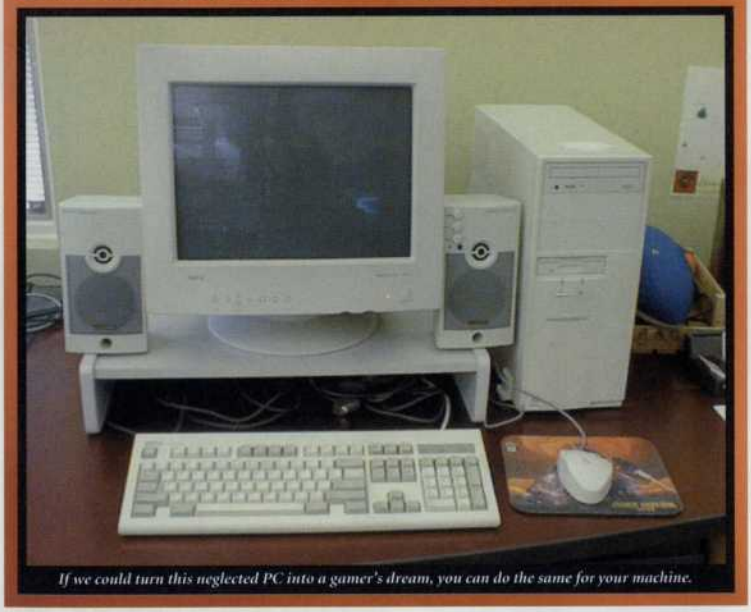
Even if you've had your PC less than a year, chances are good that there are some things you can do to it to make it an even more powerful game machine. The good news is that you don't have to do them all at once. Save your money, choose your priorities, and start reworking your PC into a truly powerful gaming machine!

This Old PC:

OUR UPGRADE

Right here at *PC Gamer*, we've got a computer, a Dell 120MHz Pentium, that has sort of fallen by the wayside as new, more powerful systems appear on our desks. We banished it to the art department and tried to forget about it, but Dean, Lisa, and Quintin were immediately attracted to it. (See, they work on Macintosh machines, so when we exposed them to an actual *computer*, they couldn't keep their hands off of it.)

Soon enough, they started complaining that their machine wasn't as powerful as the rest of the staff's PCs, so naturally we... ignored them. We kept that up as long as we could, but now it's time to upgrade that machine. We'll take you through the process, step by step. Are you ready? Then get reading!



If we could turn this neglected PC into a gamer's dream, you can do the same for your machine.

THE CPU AND THE SYSTEM BOARD

Often referred to as the motherboard or main board, the system board and its components are a major determining factor in the overall performance of a system. Besides the main processor chip, a motherboard houses the chipset, RAM slots, the external cache, the BIOS, and, usually, expansion bus slots and I/O ports. Let's go over the functions of each of these components.

The chipset is a set of integrated circuits that work together to perform the basic task of moving data through your PC. The chipset will determine most of the motherboard's capabilities, including which processors are supported and how much RAM the board will hold.

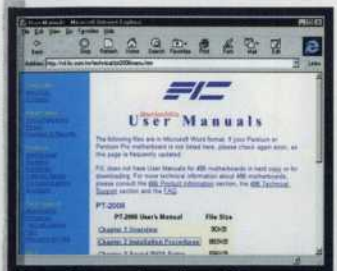
RAM, or random access memory, is your system's main memory. The number and type of RAM sockets on the system board is an important factor. Most system boards have at least four sockets for 72-pin SIMMs (single inline memory modules); some will also have sockets for 168-pin DIMMs (dual inline memory modules). Different boards may support different configurations: Some may require all of the RAM installed to be similar in capacity and speed; others will handle any combination. Some boards will use SIMMs and DIMMs simultaneously, some will not.

The external, or Level 2, cache, refers to the amount of cache memory on the board that's not part of the processor. Cache memory is used to store data that may be of immediate use to the processor; since it's much faster than RAM, the bigger your L2 cache, the better.

BIOS stands for basic input-output system. Among other things, the BIOS will determine which processors will be recognizable to the motherboard. Some BIOS chips can be *flashed*, or upgraded with software released by the BIOS manufacturer, eliminating the need to buy a new BIOS chip.

The number of expansion slots on your motherboard determines how many expansion boards (sound cards, 3D accelerators, internal modems, etc.) you'll be able to install. Most system boards have at least three slots for PCI expansion boards and four for ISA boards. In most cases, one of the slots is called a shared slot, meaning it can be used as either a PCI slot or an ISA slot — but not both. I/O, or input-output, ports are the connectors your system uses to communicate with printers, external modems, and the like.

The first decision you'll have to make is whether or not you want to upgrade your processor (CPU) or motherboard at all. Most of the games currently available will fly on a 200MHz Pentium-class processor with MMX, and they'll run well on a non-MMX Pentium 166. If your computer is in that range, and you're still not getting good performance, you may want to look into



Most major system board manufacturers, such as FIC, will have downloadable information about its boards on its web sites.

adding RAM or upgrading your video card before you replace the mother- board or CPU.

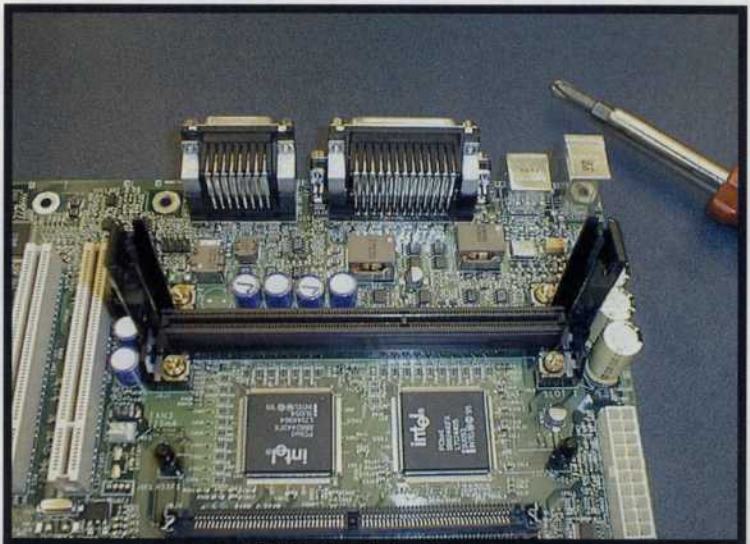
The next thing to check out is the range of processors your current system board will support. If you have a 486-based machine, plan to replace the motherboard. (Stay away from Pentium Overdrive chips designed for 486 boards; any performance gain over a fast 486 will be bottlenecked by the slower motherboard). If you have an Intel Pentium or another Pentium-class processor, such as an AMD K5 or K6 or a Cyrix 6x86, you should be able to upgrade the CPU without replacing the motherboard. The only way to truly be sure is to check the manual that came with the board or the manufacturer's web site. Depending on the manufacturer, the web site (if there is one) will not only have info on your board, but it may have a BIOS update that you can download.

If you cannot find information about your motherboard, you have a choice: Either replace it, or take a chance. Your best bet is to replace it, because replacing a CPU involves more than just getting a chip that works with the motherboard; you'll also need to set the board's jumpers to tell it the chip's clock speed and voltage requirements. If the jumpers aren't clearly labeled (and they rarely are), there's no way to identify them without the motherboard's manual or information from the manufacturer's web site.

Upgrading the CPU

If you're going to upgrade your CPU without replacing the motherboard, you'll need to know what kind of CPU

A ZIF type, Socket 7 socket.



A Slot 1 port for a Pentium II processor.

socket you've got. Socket 7 is the socket most Pentium class processors fit — except for the Pentium Pro. This type of socket is square with 387 holes that line up with the pins on the bottom of a processor. The socket and the chip will both have an irregular corner to show you how to line them up.

Pentium II chips are shaped like a videogame cartridge and attach to the board via a slot, (called Slot 1) rather than a socket. While there are a few motherboards that support both Slot 1 and Socket 7, they're relatively new and expensive. If you're ready to upgrade, your board is probably old enough to have been made before the Slot 1 spec came about.

Intel Pentium processors will be compatible with every Pentium system board, but they're the most expensive choice. Of major non-Intel processors, AMD K5 and K6 chips have generally been proven to be faster and more compatible than the Cyrix 6x86 line, but both AMD and Cyrix owners have occasionally experienced incompatibilities and reduced performance with some games. If you want to be sure of complete compatibility with future PC games, you'll want a true Intel processor.

Be sure to get an MMX enhanced processor if your system board will take it — you don't want to have to upgrade again for as long as possible. Besides Intel's Pentium MMX line, the AMD K6 family and Cyrix's 6x86 MX chips support MMX calls. Shop around for the chip; check with as many computer stores and mail order firms as possible for the best price. Find out what a store's exchange policy is, in case the CPU fails after a short time. Buy the fastest chip you can afford within the limits of your system board.

If your old processor's heat sink/cooling fan is not permanently attached to the CPU, you should be able

A heat sink with a cooling fan is mandatory for keeping a Pentium processor cool.

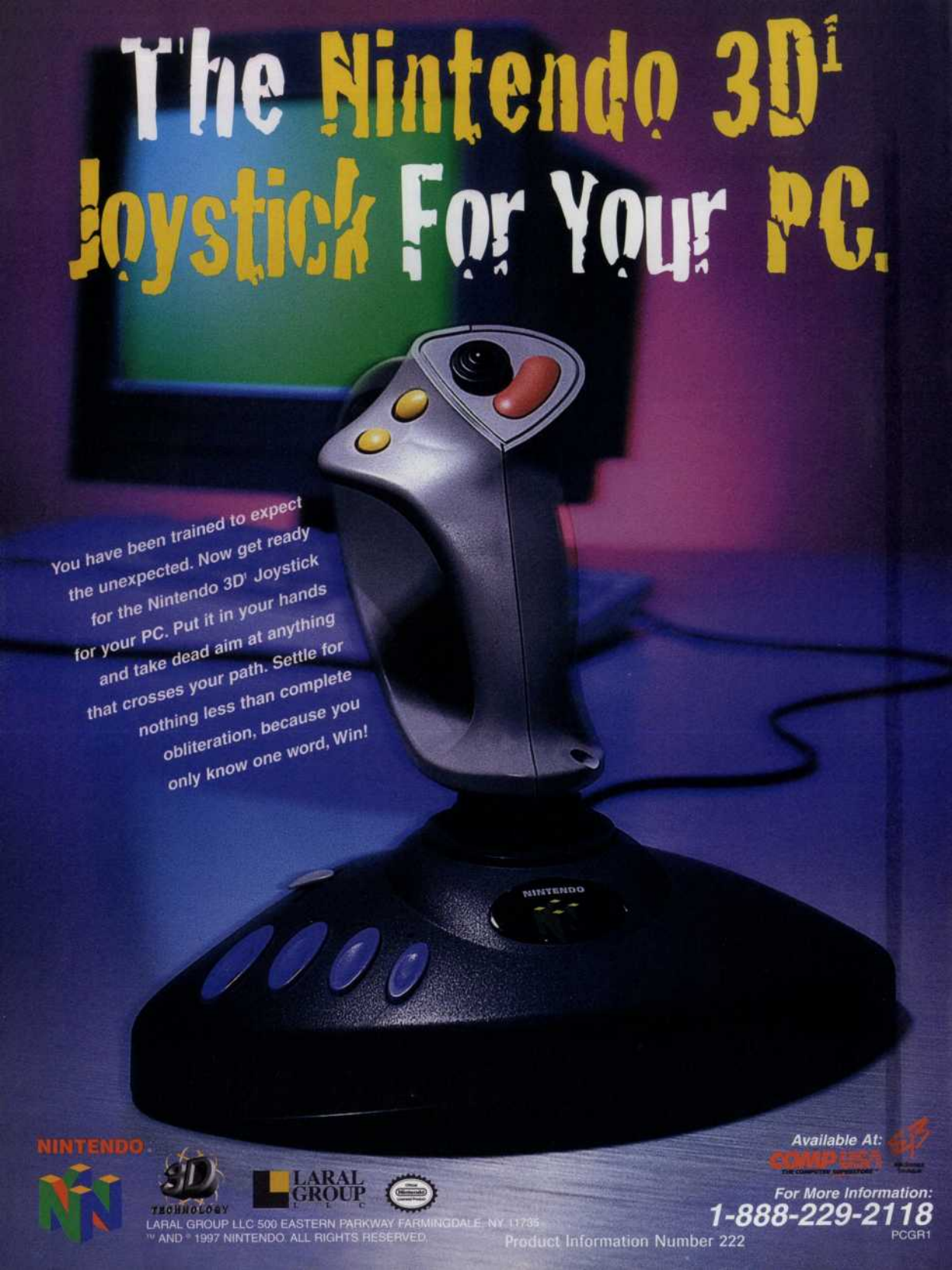
to use it with the new chip. Otherwise, when you buy the chip, ask for a compatible fan.

Before you even think about installing the chip, hold it carefully by the edges and look at the gold pins on the bottom. Make sure than none of them is bent; if any seem slightly off, straighten them very gently with a pair of needle-nosed pliers.

Older sockets required pressure to seat the processor correctly. A new type of socket, called a ZIF (zero insertion force) socket, is common on most PCI system boards and requires almost no force to insert or pull the chip. It has a lever next to it that locks and releases the CPU.

Swapping chips is almost a no-brainer: Pull the lever, remove the old CPU, and drop in the new one. You may have to remove an expansion card or two to allow for easy access to the socket. Make sure you line up the CPU's

The Nintendo 3D[1] Joystick For Your PC.



NINTENDO 64

3D TECHNOLOGY

LARAL GROUP LLC

Available At: COMPUSA

For More Information:
1-888-229-2118
PCGR1

LARAL GROUP LLC 500 EASTERN PARKWAY FARMINGDALE, NY 11735

™ AND ® 1997 NINTENDO. ALL RIGHTS RESERVED.

Product Information Number 222

Overclocking: The Other Option

Processors are costly little things. You may be aware of another method of bumping up the performance on your CPU without replacing it. Overclocking is a method of setting the jumpers on your system board for a faster processor than you actually have. While successfully overclocking a processor can bring a small increase in performance, it comes at considerable risk; it will increase the heat generated by the chip, possibly leading to premature failure. In the July 1997 issue of *PC Gamer*, The Hard Stuff section took an in-depth look at the risks and rewards of overclocking; be sure to check it out.

"rounded" corner with the corresponding corner of the socket, or the chip could be damaged. If you meet any resistance, check the pins again; the CPU should drop right in. Once it's in place, lock the lever and attach the cooling fan. You'll have to connect the fan to one of your system's power supply connectors; most cooling fans use a pass-through connection so another device can be daisy chained to the fan's own connector.

With the new chip in place, set the motherboard jumpers for the appropriate clock speed according to the manual. Replace any boards you pulled, button up the case, and power up. Watch the text that appears as the PC boots, and make sure the new CPU is properly identified.

Upgrading the System Board, Part 1: Casing the Case

If you decide that a system board upgrade is the way that you want to go, the first thing you'll have to determine is what you have. There are two common physical types, or form factors, of motherboards built to fit standard cases: AT (with a smaller subset called baby-AT) and ATX. Each form factor has specific shapes, port locations, and power supply connectors.

The first thing you'll need to determine is if you've got a standard case. If your computer is a nationally sold brand, it very well may not be standard. Packard Bell, IBM, Compaq, NEC, AST, Gateway 2000, Dell, and many other companies either build or have built custom cases and system boards to fit; to upgrade from one of those with a standard board, you'll have buy a new case.

These small, round ports are PS/2-style connectors for a mouse and a keyboard.

AT and baby-AT boards will have a keyboard connector and possibly a mouse port near the rear, right-hand corner of the board, and the serial and parallel port connectors will not be integrated onto the board. ATX boards will have mouse, keyboard, serial, and parallel ports integrated into the rear, right-hand side of the board.

If you have a non-standard board, all is not lost; you can probably take most of the major components with you — it depends on how much of the computer is proprietary. 72-pin SIMMs and IDE hard drives are definitely good to go. The floppy and CD-ROM drive will probably be transferable, too; you can tell by looking at the front of the case. If the front of the drives are rectangular and clearly visible, they should be okay, but if only the slot and eject button of a floppy or CD-ROM drive are visible, then those may be proprietary, too.

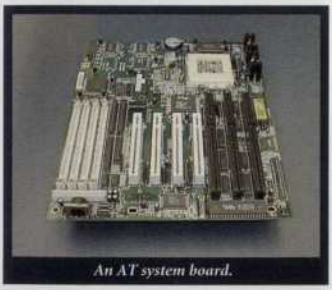
Sometimes, sound and video hardware is built onto the motherboard. If that's the case, you will have to replace both of them.

The last things to check are the mouse and keyboard connectors. There are two standards for each: PS/2 style, or 5-pin, for keyboards, and 8-pin or serial for mice. If the system you upgrade to has different inputs than those you are currently using, inexpensive adapters are available.

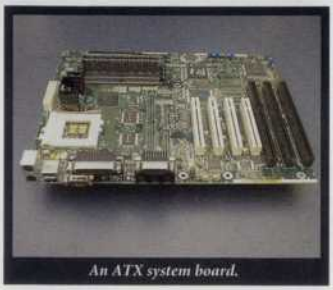
Upgrading the System Board, Part 2: What to Buy

The motherboard board you choose will affect the upgradeability of your computer for years to come. The trick is to find a motherboard that has features you feel will be important now and in the future.

Motherboards based on Intel chipsets are the most popular, but there's a major change in store. Intel is abandoning the Socket 7 spec; the 233MHz Pentium MMX is the company's last Socket 7 processor. If you feel strongly about using only Intel processors, you'll want a Slot 1 system board. AMD, Cyrix, and other Intel rivals claim that Socket 7 will be viable for at least another 18 months. Intel's last Socket 7 chipset, the 430TX, is the most popular chipset of 1997.

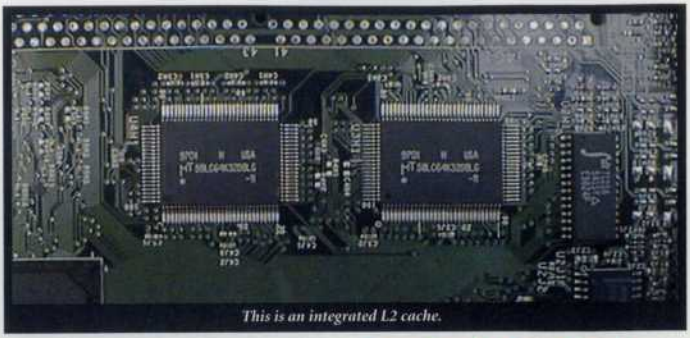


An AT system board.



An ATX system board.

This non-standard board is the only system board that will fit this case.



This is an integrated L2 cache.

Factors to consider when selecting a motherboard include:

- The BIOS
- Maximum amount of RAM supported
- System bus speed
- L2 cache
- USB support
- AGP support
- Number of processors supported

Two things to keep in mind about a system board's BIOS are whether or not it supports the processor you want and whether it can be "flashed" (upgraded via software). Most name-brand motherboards will have a "flashable" BIOS. You'll want to keep your BIOS up to date since newer versions can increase performance and support a wider range of processors.

Nearly all current motherboard chipsets support FPM, EDO, and SDRAM memory in SIMM and DIMM sockets. The question is, how much can they handle? The Intel 430TX only supports a maximum of 64MB, while the AMD 640, SiS 5571, and VIA Apollo VP2/97 Socket 7 chipsets will go as high as 512MB. An upcoming board from VIA, the Apollo VP3, will not only be the first non-Intel chipset to support the Accelerated Graphics Port (AGP), but will also handle as much as 1GB of RAM.

This motherboard is ready for USB support.

Bus speed refers to how fast the data flies across the system board. Intel does not support bus speeds faster than 66MHz, but other companies have made 75MHz and 83MHz chipsets. 100MHz bus-speed boards are in the works.

Level 2 cache capacity is another important factor. Some new boards allow the L2 cache to be upgraded to as much as 2MB.

Support for USB, or universal serial bus, and AGP will become more important in coming months. USB is an external expansion bus that will be supported in Windows 98. As many as 128 devices can be connected via USB, and everything from printers and scanners to joysticks, keyboards, and mice will be appearing as USB devices. The USB bus is faster than serial or parallel ports. Most new system boards have a USB connector on them.

AGP is a new graphics port designed for high bandwidth, accelerated images. Not only is it much faster than PCI, but 3D accelerators on the AGP bus will be able to use the main system RAM as texture memory, letting game developers use richer, more detailed models in their 3D games (and making 3D cards less expensive).

Dual, quad, or more processors generally aren't necessary for gamers; DOS and Windows 95 don't support more than one CPU, and Windows 98 won't, either. Operating systems that do, such as good old Unix, Windows NT, and others, aren't compatible with most games on the market.

Expect to pay $150 to $350 for a good, single-processor motherboard (not including the CPU or RAM). Try to purchase a name-brand system board; technical support, BIOS upgrades, web-based manuals, and other services are much more likely to be readily available. If you're not sure about a board, investigate the company; make sure it has a web site with plenty of information and technical support, find out how long it's been in the motherboard business — and call the sales and tech support offices and make sure the representatives know what they're talking about.

The Mother Lode

Most popular motherboard manufacturers offer information via telephone or the Internet. Take some time to research the different motherboards available and where you can buy them.

MANUFACTURER	WEB SITE	TELEPHONE NUMBER
American Megatrends	www.megatrends.com	(800) 828-9264
Asus	www.asus.com	(408) 474-0567
ECS	www.ecsusa.com	(888) ECS-2288
FIC	www.fica.com	(800) 342-2636
Giga-Byte	www.giga-byte.com	—
Intel	www.intel.com/design/motherbd/	(800) 628-8886
Microstar	www.achme.com	(888) 224-6348
Ocean	www.oceanhk.com	(818) 339 8888
Tyan	www.tyan.com	(408) 956-8000

Upgrading the System Board, Part 3: Make the Switch

When you're sure you've got everything you need, pop open the case and get started. First, make sure you're static-free by planting your feet and grounding yourself. Carefully remove each expansion card from its slot and set it in a safe place. Remove cable connections, including EIDE cables, the floppy drive cable, and I/O port (parallel and serial) connectors. Keep all of this stuff with the old system board; don't re-use the I/O connectors; the new ones that came with your board may be wired differently. If you're working with an ATX board, the I/O ports are integrated.

Carefully remove any screws holding the system board in place. Besides screws, there may be plastic clips; some slide out, others have to be pinched with needle-nosed pliers and eased out. Once the system board is up and out, put it in a safe place.

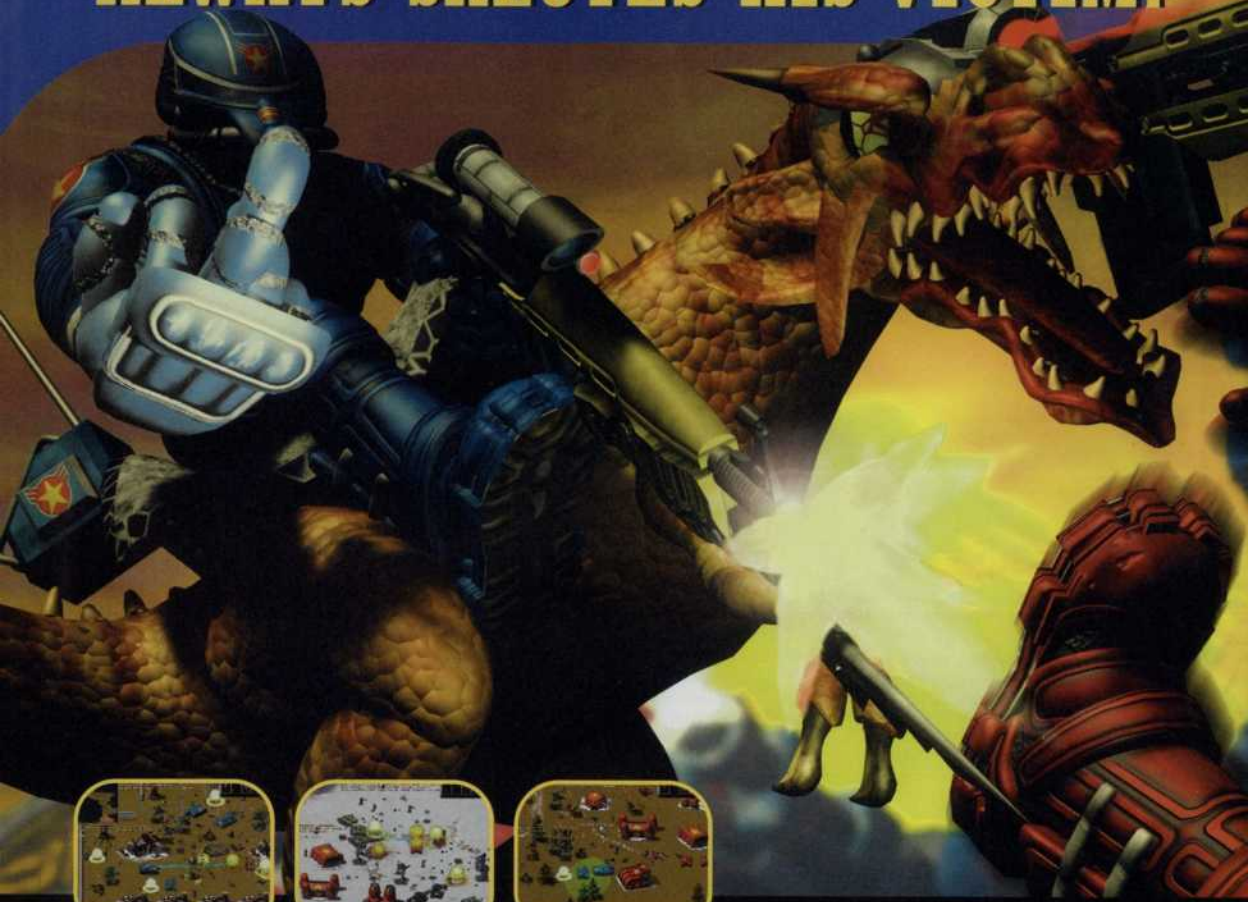
Install the RAM, insert the CPU, and set the necessary jumpers on the new motherboard before putting it in the case. Locate the holes on the new board and determine which plastic clips and screw anchors the new board lines up with. Use at least two screws to hold the board in place; the plastic clips are more for keeping the board from touching the metal case than for stability.

Carefully insert the new motherboard, make sure the clips are in place, and screw it down. Then connect IDE, floppy, power, and — if necessary — I/O port cables. Check your motherboard manual carefully to be sure all the cables are connected properly.

Now install just the video card, plug in the computer and the monitor cable, and power the system up (you don't have to put the cover on the case yet, but don't touch anything inside while the computer is on). If the system begins to boot properly, then the new system board works. Power down, install the rest of your expansion cards, close the case, plug everything in, and power up. Enter the BIOS settings to set the current date and time and make sure the system is using the proper hard-drive parameters. If you're running Win95, the OS will detect the new system board components; you may need your Win95 CD-ROM or floppies to install new drivers.

If you receive a Windows protec-

A GOOD *7TH LEGION* RECRUIT ALWAYS SALUTES HIS VICTIM.



SCREAM through combat strategy and savor every ***GUT-WRENCHING*** moment of annihilating your enemy. With rage in your veins and ***ASSASSINATION*** on the brain, be prepared to command this *7th Legion*™ battalion in the ultimate ***UNTAMED DEATH FEST.*** Because once you're in–it's all about balls-to-the-wall real-time combat action, where "paying your respects" is done with a dignified ***SINGLE FINGER SALUTE.***

MICROPROSE
www.microprose.com

7TH LEGION™

AVAILABLE ON WINDOWS 95. VISIT YOUR LOCAL RETAILER OR CALL: 1.800.695.GAME 24 HOURS (U.S. AND CANADA)

© 1997 MicroProse, Inc. All rights reserved. 7th Legion is a trademark of Epic MegaGames, Inc. MicroProse is a registered trademark of MicroProse, Inc. All other trademarks are the property of their respective holders.

ATTITUDE. *Your voracious band of ruthless mercenaries gets smarter as they collect mutilated bodies for cold hard cash.*

ANARCHY. *Wage war with up to 6 legions via modem, LAN or Internet–then deploy action element cards to wreak havoc on enemies.*

ACTION. *MMX technology delivers feverish, finger-blistering combat with action faster than any other real-time strategy game.*

Product Information Number 233

This Old PC:

THE SYSTEM BOARD

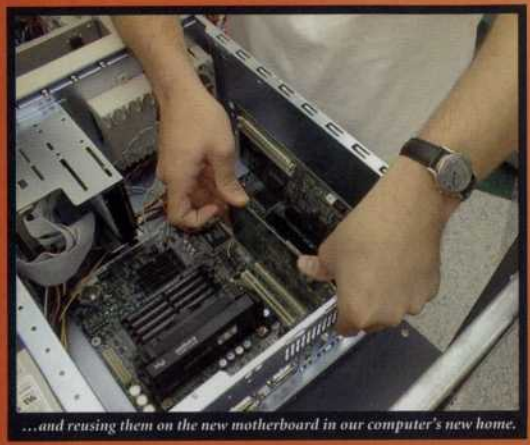
The PC we're upgrading started its life as a Pentium 120 with 16MB RAM. We've decided to fly in the face of the Socket 7 supporters and upgrade to an Intel 440FX system board with a 266MHz Pentium II processor. Since the 300MHz P2 CPUs have recently made their debut, the prices for the 266MHz Pentium IIs have been decreasing, making this processor a good buy as we go to press.

We also decided to switch to an ATX case. This wasn't necessary, since the old case holds a standard AT, and there are plenty of AT system boards available — but the change will help illustrate the differences between the two form factors.

We'll strip the case bare, transplanting the floppy drive, hard drive, video card, sound card, CD-ROM drive, RAM, and L2 cache module to the new box.

In the new box, we first configure and install the system board. Then we add only the video card, power up the computer, and look for a startup screen. When it comes up, we power down and go ahead and connect everything else.

We're stripping the old components out of the old case...



...and reusing them on the new motherboard in our computer's new home.

tion error warning, it's probably because the new system board's architecture is so different from the old one that Windows doesn't know what to do. Don't worry; just re-install the OS. It'll retain all of your old settings.

RAM

Do you need to upgrade your RAM? It all depends on what you do with your computer and how much you already have.

For the average gamer running Windows 95, 16MB is the minimum you'll want in your machine. For even better performance, you'll want 24MB or 32MB. Right now, RAM recommendations in game reviews peak at 32MB, but don't be surprised if that number becomes a minimum requirement in a year or so.

There are several different types of memory, with subtle differences between them. If you choose to replace all of your memory, get the fastest RAM your system board will support. If you are adding memory to RAM already installed, get the same type unless you can be absolutely sure your system board supports different types of RAM installed simultaneously.

There are two sizes of RAM modules in common use: 72-pin SIMM and 168-pin DIMM. 72-pin SIMMs are used on most system boards in like pairs; for instance, you can have two 16MB SIMMs combined with two 8MB SIMMs, but you cannot have one 16MB SIMM combined with one 8MB SIMM. A set of two sockets intended for two like SIMMs is called a bank; if your system board has four SIMM sockets, it's probably divided into two banks. DIMMs can be used singly or in any combination you need.

RAM speed is measured in nanoseconds, and that refers to the amount of time it takes the memory to refresh. During a refresh cycle, the RAM's contents is checked and updated, and the information is not available to the processor, so the lower the refresh time, the better. You probably won't see anything slower than 70ns, and 60ns is the current standard. 60ns RAM requires a 66MHz bus speed. SIMMs and DIMMs are available in sizes of 4MB, 8MB, 16MB, 32MB, and so on.

All RAM in use as main memory today is DRAM, which simply stands for Dynamic RAM. Check out the chart for the different types of DRAM.

A 72 pin SIMM.

A 168 pin DIMM.

Types of DRAM

FPM DRAM: Fast Page Mode DRAM, the bottom line of current RAM. Data is not available during the refresh cycle.

EDO DRAM: Extended Data Out DRAM. RAM logic makes some of the data available to the CPU *during* the refresh cycle, making it less necessary for the CPU to wait until the end of the refresh to read data.

SDRAM: Synchronous DRAM. Reads and writes are synchronous to the CPU clock, making this the most efficient RAM in current use.

BEDO DRAM: Burst EDO DRAM. Data is supplied to the CPU in burst mode, meaning that data is supplied to the CPU even before it's ready to read it; this makes read time much faster.

In other games you kill your enemies. In Oddworld, you make them do the killing for you.

Got some nasties to off? Why get your hands dirty? Possess one of them and let him do the blasting for you.

Sound Odd? Welcome to Oddworld.

see the slig. be the slig.

a quantum leap in gameplay.

it's a hostile takeover.

A.L.I.V.E.
Aware Lifeforms In Virtual Entertainment

Designed for Microsoft Windows 95

TEEN AGES 13+ ESRB

Strategy Guide available from GW Press

ODDWORLD INHABITANTS
www.oddworld.com

GT Interactive Software
www.gtinteractive.com

Oddworld Inhabitants Abe's Oddysee TM & © 1997 Oddworld Inhabitants, Inc. All Rights Reserved. Published and distributed by GT Interactive Software Corp. Microsoft® and Windows® are registered trademarks of Microsoft Corporation. All other trademarks are property of their respective companies.

This Old PC:

UPGRADING RAM

Now that our system has a blazing fast motherboard and CPU, we've decided to bump up our total RAM from 16MB to 32MB. The system board we upgraded to has four SIMM sockets, and we moved over two 8MB EDO SIMMS — 16MB of EDO RAM. We've decided to add 32MB of EDO RAM to bring the computer up to 48MB of RAM.

Since one bank is full and one is free, all we have to do is drop 2 16MB SIMMs into place, boot up, check the memory test, and we're done.

Adding SIMMs is quite simple.

Boosting Your RAM

RAM pricing changes rapidly; one day, RAM might be five dollars per megabyte, only to drop to three dollars per megabyte the next week. It's a good idea to keep an eye on the price of memory, especially on web-based mail order catalogs, which often reflect daily or weekly changes. If you see RAM prices dip really low, you might want to buy some; it may go back up shortly thereafter and not drop back down for a while.

To upgrade your RAM, you first have to determine what type you have, what configuration it's in, and what configurations your motherboard can deal with. Most systems display the type of RAM in each bank on the BIOS screen at startup.

Open the case and take a look. Find your RAM sockets; take note of how many are on your system board and how many have SIMMs or DIMMs in them. If you have free slots, then you're all set. If not, you'll have to pull some or all of your RAM and buy SIMMs or DIMMs with more RAM.

To remove SIMMs, release the metal (or plastic) clips on either end, gently tilt the SIMM to a 45 degree angle, and lift it out. To insert a SIMM, slide it into the socket at a 45 degree angle, make sure it's seated all the way across its length, and snap it upright. You can tell which way the SIMM goes in by looking for a notch on one end just above the golden edge connectors and aligning it with a corresponding tab in the socket. The clips will click into place if the SIMM is seated properly.

To remove a DIMM, press down on the release tabs on either side. The DIMM will pop right out. To add a DIMM, align the gaps in the edge connector on the bottom with tabs in the socket, carefully insert the DIMM, and press it into place. It should be seated firmly. Lift the release tabs up until they click.

When you power up the machine, watch the memory test on the startup screen (if you've disabled the test in the BIOS setup, turn it back on). If it counts RAM in bytes and not megabytes, it will count up to a number 1024 times the amount of megabytes of RAM you have installed (there are 1,024, *not* a thousand, kilobytes in a MB). For example, 16MB is actually 16,384KB; 32MB is 32,768KB.

Watch your startup screen when it counts your RAM to make sure it recognizes an upgrade.

If the RAM test stops at a lower number than you expected, either the RAM isn't installed correctly or the system board doesn't support the configuration you tried.

VIDEO

3D acceleration is rapidly changing from a novelty into a must-have. Games that require 3D acceleration of some sort are starting to appear; by the holiday season, several 3D-only titles should be on the shelves.

Cards, Chipsets, and APIs

The difference between who makes a consumer-level graphics card, which company made the chips on the card, and which games the card supports is a source of major confusion among most gamers out there.

Video cards contain chips that perform the function of accelerating the output from your PC to your monitor. They have special processors designed to perform graphics functions that otherwise would have to be done by the CPU, freeing the processor to do other things. The result is faster games and smoother animation.

Some video cards accelerate Windows and other two-dimensional graphical applications; these are now referred to as 2D video cards or 2D accelerators. 3D accelerators, on the other hand, perform functions specific to displaying and animating three-dimensional graphics.

Psygnosis' G-Police looks spectacular, but you'll need a 3D accelerator to play it.

An API is an Application Programming Interface. This is a set of drivers that acts as liaison between a computer's hardware, its operating system, and programs written for it. A program can then be written to an API, which will take care of the various hardware calls and operating system demands; the programmer doesn't have to worry about including specific support for many different types of hardware within the program.

While 2D is fairly compatible and

In other games enemies are evil. In Oddworld, they're moody, territorial, lazy, hungry, fickle, paranoid *and* evil.

If you don't know what makes other characters tick, they just might explode.

Sound Odd? Welcome to Oddworld.

scrabs ahoy!

paramites on the prowl.

every slog will have his day.

A.L.I.V.E.
Aware Lifeforms In Virtual Entertainment

Designed for Microsoft Windows 95

TEEN T AGES 13+ CONTENT RATED BY ESRB

Strategy Guide available from GW Press

ODDWORLD INHABITANTS
www.oddworld.com

GT Interactive Software
www.gtinteractive.com

Oddworld Inhabitants Abe's Oddysee TM & © 1997 Oddworld Inhabitants, Inc. All Rights Reserved. Published and distributed by GT Interactive Software Corp. Microsoft® and Windows® are registered trademarks of Microsoft Corporation. All other trademarks are property of their respective companies.

stable, there are many 3D chipsets and APIs battling for industry dominance. Some 3D chipsets have their own specific APIs, which are used in brand specific support in games. Most of them also support Microsoft's 3D API, Direct3D, which is being challenged by another widely supported 3D API called OpenGL, which was developed by a company called Silicon Graphics (SGI).

Upgrading Your Video Card

If you have a fast computer with a lot of RAM, but your unaccelerated games seem sluggish, or if Windows seems a bit slow, that can indicate that you need a new 2D accelerator. Make it a fast, 128-bit PCI accelerator, such as the Hercules Dynamite 128/Video.

In the 3D world, the current industry champion is 3Dfx, with the most game support and fast, versatile 3D acceleration. If you want to jump on the bandwagon, you have a choice: 3Dfx cards come in two varieties: Voodoo Graphics and Voodoo Rush.

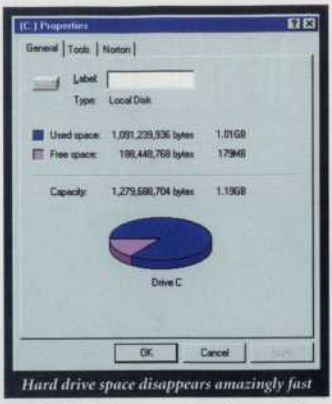
The Voodoo Graphics chipset does 3D only; it comes on an add-in card and works in conjunction with your current 2D (or 2D/3D) video card. Voodoo Graphics-based boards support virtually everything accelerated for the 3Dfx chipset; the only shortcoming is that it can't display 3D graphics in Win95 in a window smaller than full-screen.

The Voodoo Rush chipset is designed to be built into a 2D accelerator card. In terms of speed and performance, they do very well — and they don't require an extra PCI slot — but some games accelerated for 3Dfx Voodoo Graphics cards won't work with Voodoo Rush cards.

If you're satisfied with your current 2D performance and you need a 3D accelerator, or if you're unhappy with the one you have, we recommend a Voodoo Graphics board like the RealVision Flash 3D (probably the best buy in 3Dfx cards). Alternately, if you want to replace your 2D card and add a 3D accelerator at the same time, you'll want a Voodoo Rush board like the Jazz Adrenaline Rush 3D.

The 3D market is by no means stable; as we go to press, we haven't had a chance to try the new Rendition V2200 accelerators, but they looks promising; so do boards based on nVidia's Riva 128. ATI, Rendition, and nVidia are also ready to produce AGP video cards, which have the potential, at least, to be faster and more powerful than anything currently available.

Some important advice: If you're replacing a video card in a Windows machine, be sure to set the display mode to Standard VGA before swapping the cards; Win95 has an easier time configuring itself for the new card if it's starting from a generic driver rather than your old card's driver. If you're adding a 3D-only card, there's no need to change the display properties.



Hard drive space disappears amazingly fast

STORAGE DEVICES

The major factor in choosing a hard drive should be capacity. Games take up tons of room. Remember when CD-ROMs were going to put an end to that, when games would run right off the CD and not need much hard-drive space? Remember how it turned out that CD-ROMs actually became a way for games to require so much *more* hard-drive space than floppy based games did? Think about this: DVD-

This Old PC:

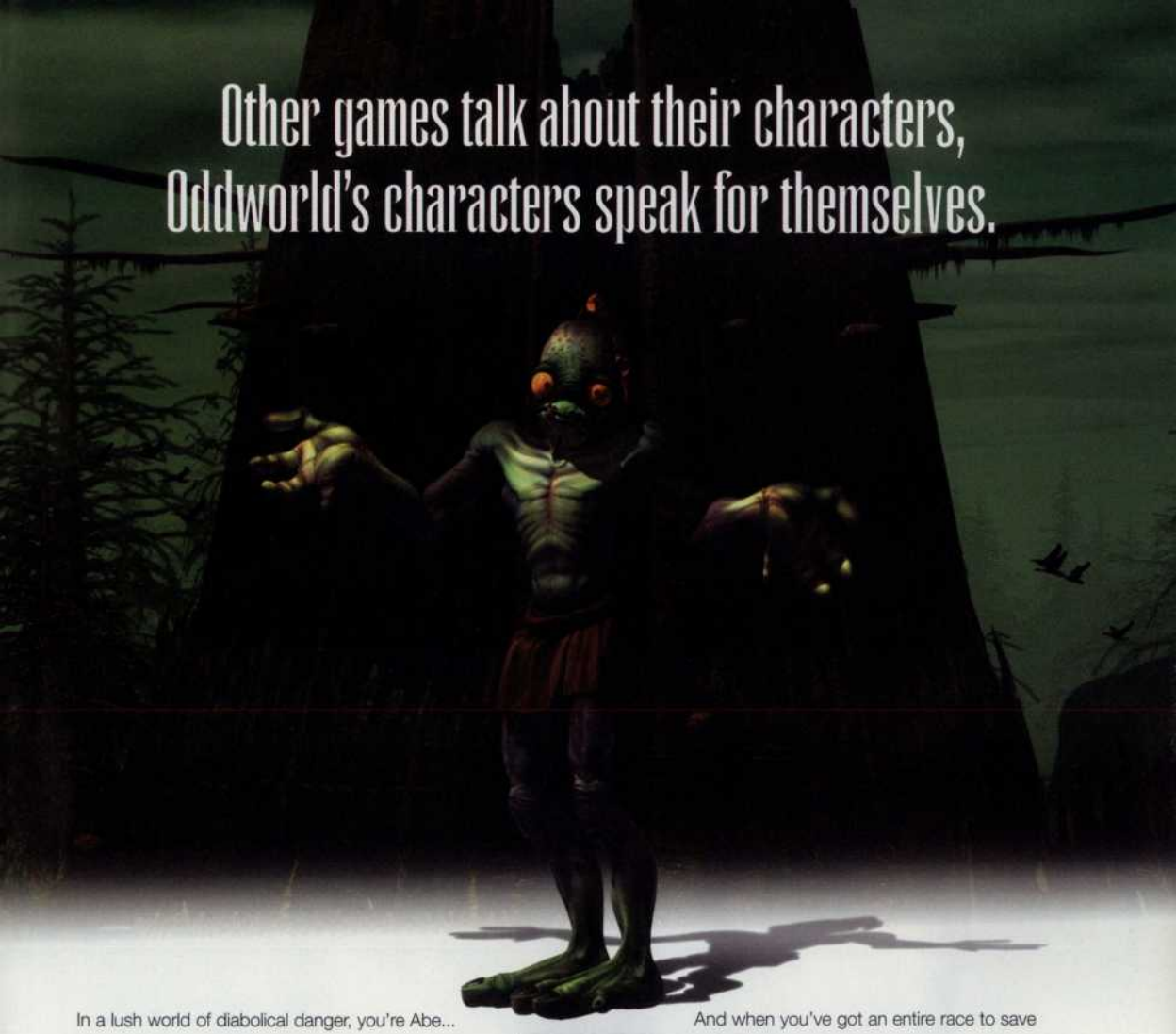
UPGRADING VIDEO

While we're pretty happy with our Intergraph Intense 3D 100, based on the Rendition Verite V1000 chipset, Quintin wants to be able to play *GLQuake* when the team gangs up and hands him his daily Deathmatch pounding. Since Gary just upgraded his video card to a Voodoo Rush-based Hercules Stingray 128/3D, he's kindly donated the Voodoo Graphics-based Diamond Monster 3D he was using. We're simply going to add it in, attach its pass-through to the Intergraph, plug the monitor in, boot up, and load the drivers. Easy!

3Dfx Voodoo Graphics cards, such as this Diamond Monster 3D, sit in a separate PCI slot from the 2D card.

Connect the 2D card to the 3Dfx card with the supplied cable.

Other games talk about their characters, Oddworld's characters speak for themselves.



In a lush world of diabolical danger, you're Abe... the skinny guy with no weapons.

Your mission is simple...run, jump and talk your way out of this ravaged world.

You heard me... Talk! With just your keyboard (or gamepad) and your brain. It's called Gamespeak.

And when you've got an entire race to save from the deli counter it could come in handy.

For Odd's sake, do something different. Chow down on ODDWORLD's pure nugget of surreal, sensory overload gaming.

You'll never be hungry again.

ODDWORLD: ABE'S ODDYSEE

GAMING GETS ODD

A.L.I.V.E.
Aware Lifeforms In Virtual Entertainment

Designed for Microsoft Windows 95

TEEN AGES 13+

Strategy Guide available from GW Press

ODDWORLD INHABITANTS
www.oddworld.com

GT Interactive Software
www.gtinteractive.com

Oddworld Inhabitants Abe's Oddysee TM & © 1997 Oddworld Inhabitants, Inc. All Rights Reserved. Published and distributed by GT Interactive Software Corp. Microsoft® and Windows® are registered trademarks of Microsoft Corporation. All other trademarks are property of their respective companies.

Product Information Number 153

INTENSE
3D
Voodoo
LAP TIME
BEST LAP
TIME

Now Get Arcade Thrills from a PC Graphics Card!

Putting an Intense 3D Voodoo graphics card in your PC is like getting a coin-op 3D game arcade. With 3Dfx Interactive's Voodoo Rush technology, Intense 3D Voodoo delivers everything you want in a game card...super 3D acceleration, 2D acceleration, DVD support, NTSC and PAL output to television...and more!

Enhances More Games

3Dfx Voodoo Rush technology is the popular standard and is widely supported among game developers. In fact, more than 150 new 3Dfx supported games are expected to be available by the end of this year!

Put an Arcade in Your PC!

Don't miss the arcade fun. Buy Intense 3D Voodoo now from your local computer retailer!

These games included:

Moto Racer

Turok: Dinosaur Hunter

Longbow FX

Intense 3D Voodoo delivers arcade-quality 3D graphics on *your* PC.

INTERGRAPH
COMPUTER SYSTEMS

www.intergraph.com

Product Information Number 197

Intergraph and the Intergraph logo are registered trademarks and Intense 3D and the Intense 3D Voodoo logo are trademarks of Intergraph Corporation. Electronic Arts is a registered trademark and EA is a trademark of Electronic Arts. Jane's is a registered trademark of Jane's Information Group, Ltd. used under license. Moto Racer is a trademark of Delphine Software International. TUROK is a registered trademark of GBPC, a subsidiary of Golden Books Family Entertainment. Acclaim is a registered trademark of Acclaim Entertainment, Inc. 3Dfx, the 3Dfx logo, Voodoo Graphics and Voodoo Rush are trademarks of 3Dfx Interactive, Inc. Windows is a registered trademark of Microsoft Corporation. Other brands and product names are trademarks of their respective owners. Copyright 1997 Intergraph Corporation, Huntsville, AL 35894-0001. MC 970660 9/97

ROMs hold a *lot* more data than CD-ROMs.... Ominous, ain't it?

EIDE vs. SCSI

There's a giant rift in the realm of computer mass storage interfaces. Supporters of SCSI devices will extol the benefits of their higher transfer rates and a more dynamic bus, but we think EIDE is still the way to go. Consider:

Most system boards have integrated IDE or EIDE controllers, but integrated SCSI controllers are rare and drive up the cost of the board.

SCSI hard drives and CD-ROM drives cost 50 percent to 200 percent more than equivalent EIDE drives.

SCSI drives require a host adapter (if there's not one integrated on the system board), which, for a 32-bit adapter, costs between $150 and $200.

SCSI host adapters can cause the system to lock up when DOS games try to detect sound cards.

There's a minimal difference in access time, which is more important to gamers than data transfer rate (for games that frequently access small amounts of data on the hard drive).

Upgrading the Hard Drive

If your hard drive is smaller than a gigabyte, you've probably already run into a space crunch. Maybe it's time to upgrade. Buy an established brand, such as Western Digital, Seagate, Maxtor, or Quantum, and get the biggest hard drive you can afford. Pay attention to the access time, measured in milliseconds (ms); you should be able to get a drive with a 10ms access time. Don't settle for anything slower than 12ms.

If it's been a long time since you've reformatted your hard drive, you may want to start with a clean installation of your operating system, especially if you're a Windows 95 user. Win95 tends to take up a lot of space with undetectable junk, such as temporary files, old registry entries, drivers no longer used, and other wastes of precious space.

You may want to add your new drive as a slave, or, if your current drive is a few years old, replace it altogether; hard drives have gotten much faster over the years, and you'll want the operating system on the faster drive.

If you want to completely replace the drive without reformatting, add the new hard drive as a slave to the old one and use some sort of drive-cloning software — it will make life much easier. We suggest *Ghost*, which can be downloaded at *www.ghostsoft.com*. It's shareware, so if you like it, be sure to let Ghost Software know by registering the product. Clone the drive, remove your old hard drive, and set the new one up as the master.

CD or DVD?

While CD-ROM drives are getting much faster — we're up to 24-speed (24x) drives now — it's important to note that numbers like 16x and 24x are measurements of *sustained* data transfer rates. That means when one or two really big files are being transferred and the head of the drive doesn't need to move around much, the speed will max out at whatever speed the drive is supposed to transfer data. That speed is rarely reached, however, when lots of small files are read from the disc — which is generally the case when playing CD-ROM games. As is the case with hard drives, the more important measurement of a drive's performance in games is its access time, not its data transfer rate.

If your current drive is an 8x, you're in very good shape. Upgrading to a faster CD-ROM drive won't buy you a significant performance increase unless you're down below the 4x range.

While DVD is an exciting technology with a promising future, a CD-ROM drive is still all you need for games. Still, movie buffs with an eye for quality may want to investigate the possibilities of installing a DVD-ROM drive. A DVD kit with a good MPEG-2 decoder and a TV output can reproduce movies so crisply and clearly, you may resent your VCR. The DVD standard will read CD-ROMs and audio discs.

SOUND AND SPEAKERS

It's probably still too early for most gamers to give up the last vestiges of 16-bit DOS compatibility — there are still lots

This Old PC:

STORAGE DEVICES

The CD-ROM and hard drive in this machine are just fine, but to be ready for the first DVD games, we decided to install a HiVal PC-DVD kit. It's quite simple; we've found this device to be both easy to use and very compatible. All you have to do is find an open PCI slot and 5" external drive bay, drop everything in, and load up the software.

We're going to keep the CD-ROM drive because first-generation DVD-ROM drives don't read the recordable discs game companies sometimes send us. The next generation will be able to, however.

We'll insert a DVD-ROM drive right next to the CD-ROM drive.

The CD-ROM and the DVD-ROM drive can share an IDE port.

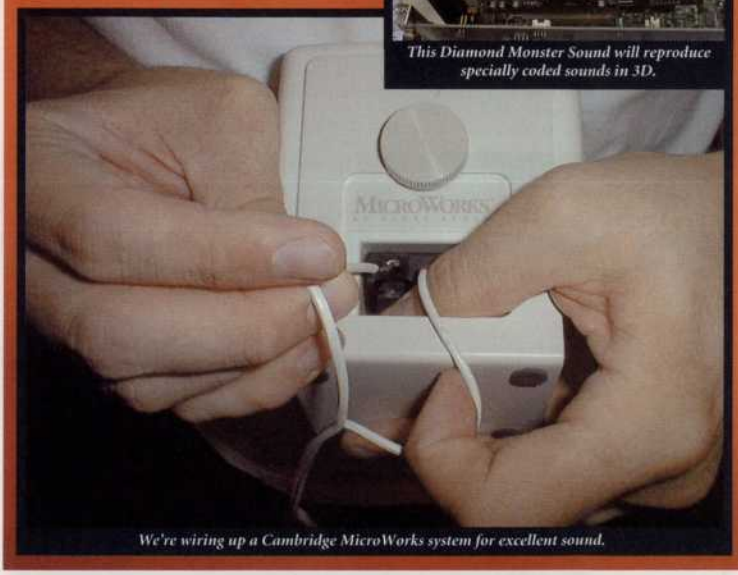
This Old PC:

SOUND CARDS

We still insist on full DOS compatibility, so we're sticking with the Sound Blaster AWE32 we installed when we got the Dell machine a couple of years ago. But we're going to add a Diamond Monster Sound, because the new LucasArts games *Jedi Knight* and *Shadows of the Empire* are going to come with A3D support, and the list of new games that work with Win 95's DirectSound keep on growing. We simply pop the card into an available PCI slot, connect it to the AWE32, power up, and install the drivers.

To make the PC sound as good or better than an average stereo system, we're going to replace the old speakers with an awesome Cambridge SoundWorks' MicroWorks three-piece system. At $350, it's costly, but it sounds fantastic. The art staff likes to play music CDs when they're not gaming, and now their PC sounds better than most of our home stereos.

This Diamond Monster Sound will reproduce specially coded sounds in 3D.



We're wiring up a Cambridge MicroWorks system for excellent sound.

of games that'll only run in a pure DOS environment. A Creative Labs sound card will ensure DOS compatibility.

If you're ready to give up on DOS forever, check out Guillemot's MaxiSound Game Theater 64. This excellent, high-quality sound card outperforms the Sound Blaster line in every area but compatibility, and it supports surround speakers to boot. It has 64 voices of wavetable synthesis, all in hardware, for realistic MIDI music.

If you crave 3D sound, you might want to look into a Diamond Monster Sound. This add-in card will work next to your current sound card, and it uses the Aureal A3D positional audio chip, the best of the current 3D sound solutions currently available. It also supports DirectSound3D.

Guillemot's MaxiSound Game Theater 64 is an excellent, high quality sound card.

Your speakers don't *have* to be ordinary, though. If you're still stuck with the "courtesy speakers" that came with your PC, it's time to replace them. Cambridge SoundWorks makes some great multimedia speakers: the MicroWorks, SoundWorks, and PCWorks systems have to be heard to be believed. The three models represent three price ranges, from $350 down to $100; they all produce amazing sound. Other companies, like Bose and Altec Lansing, make excellent compact speaker systems, too.

INPUT

Nothing you can buy for your PC is more subjective than its input devices. Recommending a specific controller to a gamer is as tricky as recommending a brand of bow to a concert violinist.

There are joysticks, gamepads, driving wheels, and other gadgets in every price range, with features that go from intuitive to insane. You're going to have to make your own decision on what's right for you, based on what games you like to play. Ideally, you'll do a little comparison shopping at a store that lets you get some hands-on time with a controller before you buy it.

Joysticks and Gamepads

A good joystick is a must for every gamer, but your choice will vary based on the games you play most. Military flight sim fans should check out joysticks from CH Products, Saitek, and Suncom. Thrustmaster flight sticks are still very popular, although they're considerably more expensive than comparable — or even better — sticks from other companies.

Action gamers have dozens of excellent sticks to choose from. One of the most comfortable grips in existence is found on the Logitech WingMan series; the WingMan Extreme Digital is an excellent stick. If programmability and low price are important, take a look at the EagleMax from ACT Labs; it combines a comfortable stick with lots of extra buttons and an EEPROM that remembers four programs without software. If you're trying to save some cash or you just want a simple, four-button joystick, the Gravis Blackhawk is a good way to go; it's comfy and inexpensive. Force Feedback is a big buzzword in controllers now, and the new Microsoft SideWinder Force Feedback Pro is a good one, although it's not DOS compatible. CH's Force FX is good, too. Remember, though, that force feedback technology is still in its infancy; the truly great force feedback controllers are probably still on the horizon.

ACT Labs' EagleMax is a nice marriage of comfort and programmability.

If you find yourself playing a lot of arcade games, fighting games, or console ports, you'll probably want a gamepad. The Gravis Gamepad Pro and Microsoft SideWinder gamepads let players use two or more gamepads on the same PC without being limited to two buttons each. You'll have to buy a Gravis GRiP Multiport to use more than two Gamepad Pros at a time, while four Microsoft SideWinders can be daisy-chained without extra hardware. On the other hand, the Microsoft pads don't work in a pure DOS environment. Another gamepad worth a glance is InterAct's 3D Program Pad, which could be the most comfortable gamepad on the market.

Racing sim buffs know even a great joystick can't match a really good steering wheel. The

driving wheel market is poised to explode around the holiday season with standard and force-feedback models due out from a slew of major manufacturers. Right now, the best wheel and pedal system for the money is Thrustmaster's Formula T2.

MONITOR

The choice of a good monitor depends on your budget and how much space you have on your desktop. In most cases, you won't have to upgrade your monitor unless you want to; as long as you have an SVGA monitor you're satisfied with, it should be fine.

If you feel it's time to move up, there are a few things to bear in mind. Since a monitor can be the single most expensive piece of hardware you buy for your PC, you'll want to make sure you get one you can live with — or better yet, one you can actually enjoy — for years.

To select a monitor, pay attention to:

Made by ViewSonic, most models from OptiQuest combine high quality and good value.

Size: This number indicates the size of the display screen, measured diagonally, but it doesn't give you the whole picture on how big an image you'll see; the monitor's plastic frame covers a portion of the tube, and not all monitors let you size the display so it runs out to the edges of the frame. Pay attention to the number representing the monitor's *viewable area*, which indicates how much of the screen, measured diagonally, you can actually use. For example, a 17" monitor may only have a 16" viewable area.

15" is a good minimum size to consider for a new monitor. 17" is large enough for gaming, and will still fit on most desks. 19" and larger monitors are very expensive and very large, and they're really only an option if you have bags of cash and want the biggest display you can get your hands on.

Big-screen monitors that run as large as 31" and 36" are available, too. Beware the limitations before you buy one: Unless you're spending more for the monitor than you did for your entire system, the highest resolution available will probably be 800x600, and the dot pitch may not be crisp enough to do text-based computing such as word processing.

Dot pitch: This number represents the distance between the pixels on the screen. The smaller the distance, the more crisp and clear the images will appear. Choose a monitor with a dot pitch of .28mm or smaller.

Resolution: Make sure the monitor you buy will support a large variety of resolutions. A 15" monitor should do at least 800x600, and a 17" monitor should go at least to 1024x768. Most monitors today will handle much higher resolutions.

Refresh rate: The higher a monitor's refresh rate, the more often it redraws the screen every second, and the less likely you are to notice any flicker at high resolutions. For flicker-free images, a monitor should offer refresh rates at a minimum of 85Hz at high resolutions (1024x768), and higher rates as the resolution decreases. At 640x480, a good monitor will do 120Hz (redrawing the screen 120 times per second).

Price: Monitors are quite expensive, but they are gradually becoming more affordable. A 15" monitor should cost from $300 to $500, and 17" monitors generally go for $500 to $700.

Select as big a monitor as you can afford, given your monetary and space limitations. You may want to measure the area where you plan to put your new monitor; the dimensions of the new product will be printed on its box.

Go to a computer or electronics store that has monitors on display so you can see how they look, how clear they are, and so on. Don't be afraid to try out different resolutions; if you are prevented from doing it yourself, have a salesperson do it for you. Once you've chosen a make and model you like in person, shop around and see if you can find a better price. Don't rule out mail-order.

PCG

This Old PC:

POWERHOUSE!

The art folks are happy with their 17" NEC monitor, so we rounded off the upgrade with a Microsoft SideWinder Force Feedback Pro joystick, and let 'em have it during Deathmatches!

After all was said and done, we took an aging P120 with 16MB RAM and turned it into a P2 266 with 32MB RAM, and added 3D graphics, 3D sound, a thumpin' sound system and wrapped it up in a totally upgradable ATX box.

Unfortunately, no one else on the *PC Gamer* staff has a workstation nearly this powerful, and since Dean, Lisa, and Quintin are usually chained to their aforementioned Macs, they'll have to grow eyes on the back of their heads to keep their new gaming powerhouse. Dan Bennett was last seen under the desk, awaiting an opportune moment....

After a few days in the shop, this old PC has found new life as a butt-kickin' gaming machine!

daytona® USA deluxe

SEGA® hard stuff

www.sega.com

As stock car racers say, "If you can't beat 'em with skill, beat 'em with a root vegetable." Welcome to the white-knuckled world of Daytona™ USA Deluxe, the phenomenal 3D sequel to the hit arcade game, now on PC. 8 different stock cars. 6 heart pounding courses. An all new track. And network play means up to 7 of your buddies can eat your rubber at once. Plus with Force Feedback support, you'll feel every bumper kiss and wall bounce. Gentlemen, start your engines. If you can.

AGE TO ADULTS

Designed for Microsoft Windows 95

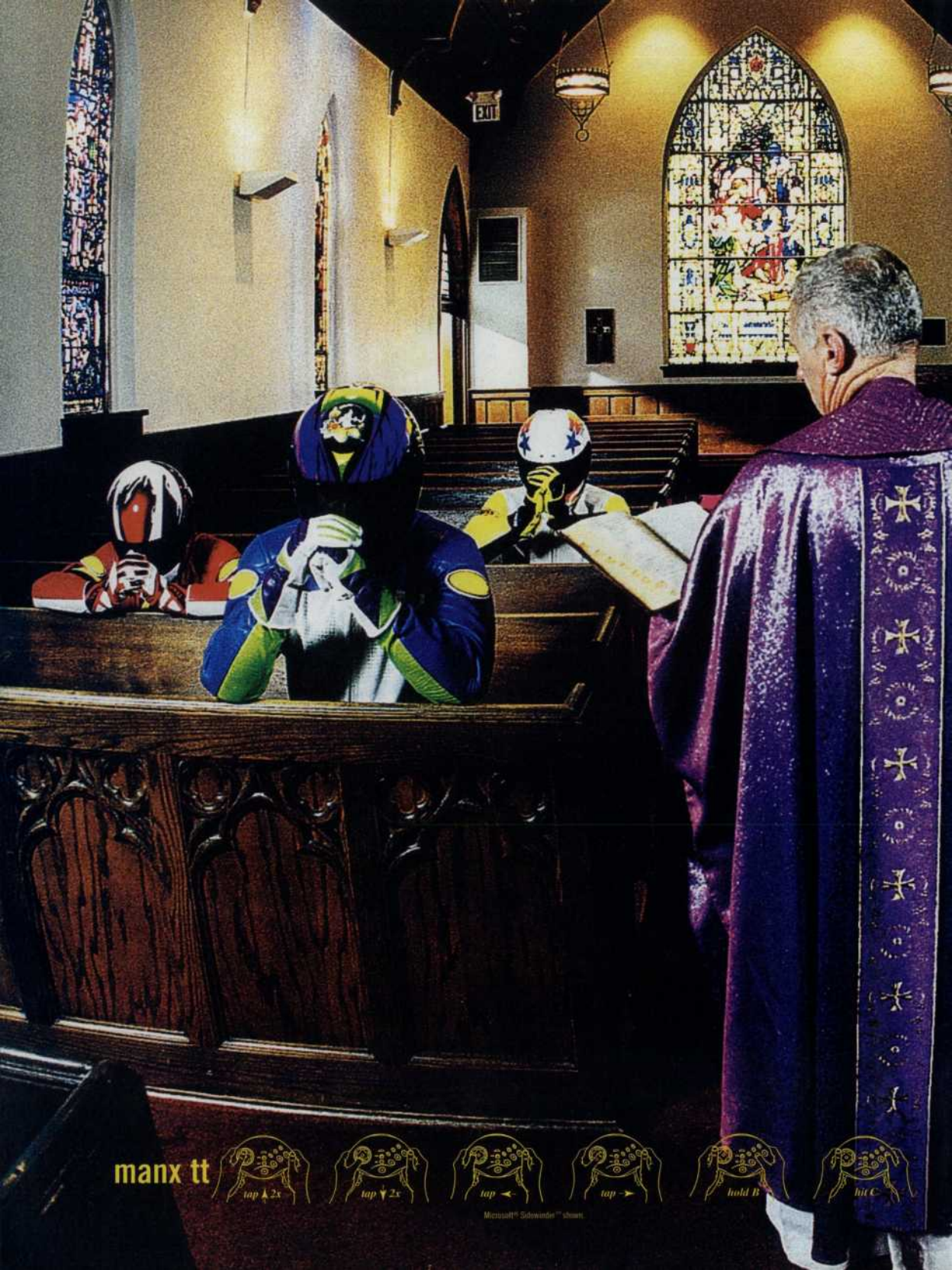
Sega is registered in the U.S. Patent and Trademark Office. Daytona USA is a registered trademark of the International Speedway Corporation. Used by license from Daytona properties. Microsoft, Windows, and Windows 95 are registered trademarks of Microsoft Corporation. ©1996 SEGA. All rights reserved.

nba® action 98
SEGA®
hard stuff
www.sega.com

Some people go to extremes to play NBA Action 98. They should. In this game, you're up against guys who'd love nothing better than to pound your puny torso into the court. We're talking every NBA player, every NBA team, all 29 Arenas, team specific plays. Behind the back passes. Alley oops. It's all here. Chick Hearn even calls the plays. NBA Action 98. See how you measure up.

SEGA SATURN™

Windows® 95
CD-ROM



Microsoft® Sidewinder™ shown.

SEGA® hard stuff
www.sega.com
Pray to the motorcycle gods. Manx TT, the killer arcade game, is now on PC. Pick from 8 custom built SuperBikes. Gun it down one of the most treacherous race tracks on the planet, England's Isle of Man. And try not to scrape your knees off through the turns. Just so you can feel it all in your gut, we've recreated every last bump and dip on the road. Equipped with 8 player Network Play over IPX and TCP/IP so you can race other speed freaks across the country. Get down on your knees.
MANX TT
Super Bike
Windows® 95
CD-ROM

CAPCOM CO., LTD. © 1997 CAPCOM U.S.A., INC. All rights reserved. Resident Evil is a trademark of CAPCOM CO., LTD. CAPCOM is a registered trademark of CAPCOM CO., LTD. Virgin is a registered trademark of Virgin Enterprises, Ltd.
Microsoft and Windows are registered trademarks of Microsoft Corporation. All rights reserved.

RESIDENT EVIL

Virgin INTERactive

USE YOUR BULLETS WISELY. YOU MAY WANT TO USE THE LAST ONE ON YOURSELF.

Arguably the best PlayStation game of all time is now available for the PC in its original, uncensored entirety. It's bloodier, more violent and contains all the gruesome, never-before seen footage that was cut out of the console version. Part of you will want to uncover the grisly mysteries that dwell within. Part of you will wish you never set foot inside.

NOW AVAILABLE FOR THE PC

Visit Your Local Retailer or Call:

888-VIE-COMI

www.vic.com

CAPCOM

MATURE M AGES 17+ CONTENT RATED BY ESRB

Requires one of the following 3D cards: Matrox Mystique, Diamond Monster, Orchid Righteous, Canopus Total 3D, Creative 3D Blaster or Intergraph Intense

Product Information Number 363

MICROPROSE. TEAM17™

www.microprose.com www.worms2.com

Dear Mrs. Worm,

We regret to inform you that your son has died in battle. Although he was

KILLCRAZED and bent on destruction,

this should not diminish the bravery of his kamikaze attack on a platoon of hostile worms. Our country owes him much. His death will not be in vain.

Available on Windows® 95 CD-ROM

Visit your local retailer or call 24 hours:

1-800-695-GAME (U.S. and Canada)

©1997 MicroProse, Inc. All rights reserved. Worms2 and Team17 are trademarks of Team17 Software Ltd. MicroProse is a registered trademark of MicroProse Software, Inc. All other trademarks are the property of their respective holders. Call 1-800-771-3772 for information on Game Ratings.

WORMS 2™

The cult classic is back!

Changes Are Afoot at PC Gamer

Here at *PC Gamer*, we fear change. We really do. We love seeing new games and new technology, but alter the world around us — even a little bit — and we're lost. So the past few months have been especially distressing for us.

In September, beloved Disc Editor Joseph Novicki left us. Joe went way back with *PCG*; in our very first issue, he was listed in the masthead as the editorial assistant (i.e., the guy who made the beer runs). We already miss Joe, but we're comforted by the fact that he's in Heaven now — well, he's back in North Carolina, anyway, which is pretty close. And it's good to know that he and his wife, Beth, will be raising their new baby, Samuel, as a genuine tarheel.

Not quite so traumatic was our recent office move. We've got a lot more space now, and we're just downstairs from our old offices, so we haven't had to change our address. But it's taken some getting used to. The worst part was having to sort through all the junk we'd accumulated on our desks and decide what was worth moving. Until you've had to choose between a lifelike rubber brain and an authentic U.S. Army MRE (Meal, Ready to Eat), you don't know the meaning of indecision. (We stuck with the MRE; it might come in handy here in earthquake country. If we're trapped under something heavy, we won't have to eat Coconut Monkey.)

But now we're settling in. And Joe's former assistant, Michael Wolf, has thrown himself onto the disc-editing grenade, which means next issue's CD won't have to be a recording of our off-Broadway production of *Cats*. (Actually, that's a mixed blessing for you readers, since Todd does an outstanding Rum-Tum-Tugger, and Lisa's rendition of "Memories" made Andrew Lloyd Weber weep openly.)

More good news: Young Michael Luton joins us from sunny Florida as our new webmaster. He'll be helping Jason make *PC Gamer Online* better than ever. As Sandmoose, he's also proven to be a worthy foe in our *Quake* and *Hexen II* deathmatches. He hasn't stood still long enough for us to snap a picture of him yet — believe us, he's a very animated guy.

So, to sum up: So long, Joe! Congratulations, Wolf! And welcome, Michael! The powerful play goes on, and you've all contributed a verse. Or something.

So long, Joe! *Congratulations, Mike!*

Hardware Requirements

With each *PC Gamer* review, you'll find two very important pieces of information: the game's minimum hardware requirements and the hardware configurations we recommend as the *least* you'll need to really enjoy the game. While a game will run on the minimum system the manufacturer specifies, it might not run all that well. Because of this, we test each game on several systems so we can bring you a more realistic assessment of what you'll *really* need.

THE PC GAMER RATINGS SYSTEM

100%-90% CLASSIC
Not many games can earn a rating over 90%, and even fewer can approach the magic 100. Anything that we rate over 90% is an instant classic — a game that's truly significant in both content and design, and one that we'd recommend without reservation to anyone interested in PC gaming.

89%-80% EXCELLENT
These are excellent games. Anything that scores in this range is well worth your attention, though it may not make any significant advances over its rivals. Also, some genuine benchmark games of decidedly specialist taste will fall into this area — it may be the best 7th Cavalry simulation on the market, but not all of us want to relive Little Bighorn.

79%-70% VERY GOOD
These are pretty good games, which we would recommend to fans of the particular genre — although it's a safe bet that there are probably better games out there.

69%-60% GOOD
A reasonable, above-average game. It may be worth buying, but probably has a few significant flaws that keep it from earning a higher rating.

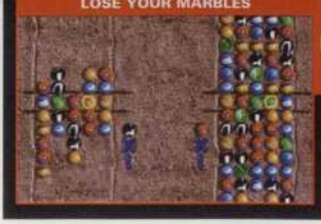
59%-50% FAIR
Very ordinary games. Not completely worthless, but not a very good way to spend your gaming dollar, either.

49%-40% BELOW AVERAGE
Poor quality. Only a few, slightly redeeming features keep them from falling into the abyss of the next category...

39%-0% DON'T BOTHER
Just terrible games — and the lower you go, the worse they get. Avoid these titles like the Plague — and don't say we didn't warn you!

PC Gamer Editors' Choice Awards

Every month, we honor the best games we see — those earning 88% or above — with our Editors' Choice award. It's not easy to earn, and there are a lot of excellent games that fall just short of the honor. So when you see the *PCG* Editors' Choice logo on a game at a local software shop, you can bet it's among the best.



p.241

XCar: Experimental Racing

Category: Simulation

Developer: Bethesda Softworks

Publisher: Bethesda Softworks, 1370 Piccard Drive, Rockville, MD 20850 (301) 926-8300

Required	We Recommend
Double-speed CD-ROM drive; Pentium; 16MB RAM; MS DOS 5.0 or higher; Super VGA; 10MB hard-drive space	Pentium 166; Voodoo Graphics accelerator card; Driving wheel

This racing sim attempts to blow the doors off those NASCAR and IndyCar wimps by throwing the rule book out the window.

If you're a fan of the upright and respectable world of the IndyCar or NASCAR racing leagues, you can reasonably assume that everything from engine specifications down to the stitching in the seatbelts has been meticulously scrutinized and approved through a lengthy process. While the rules and regulations that govern these organizations are designed to make their respective sports safer and fairer, there are a lot of race fans who wonder about what might happen if there were no rules at all.

With *XCar: Experimental Racing*, Bethesda Softworks explores this wild idea with an unrestricted, unregulated free-for-all, where speed-draining rules are tossed out the door. The only thing standing between you and the winner's circle is the amount of horsepower you can cram under the hood.

Compared to the current crop of racing games, the graphics in *XCar* seem a bit underwhelming, even with the built-in 3Dfx accelerator support.

Yet, despite this attractive concept and a few well-implemented features, the long and the short of it is that *XCar* never manages to build up steam. This is a game that tries to be all things to all people, carefully going through the motions with the expected Super VGA graphics, 3Dfx support, arcade and "realism" settings, customizable features, and multi-player modes. Yet, almost from the first lap, it seems that no one bothered to compare these features to the current state of driving games. The end result is a game that feels suspiciously out of place among more accomplished rivals.

This is a shame, because there really are a lot of promising features that could've made *XCar* a cut above the rest. For starters, there is the unbridled horsepower of 16 closed-wheel prototype cars that you can race on 11 varied tracks (including six based on real race courses). The interface is sleek and efficient, and whether you want to run a single race, conquer all of the tracks in a circuit competition, or just tool around in practice laps, getting up and running takes just a couple of clicks of the mouse.

The selection of cars is admirable, yet the default cars seem to handle and perform roughly the same, and the tech-heavy descriptions of each make it hard to distinguish one car from another at a glance. An arcade mode softens the blow for first-time drivers, allowing you hop into a car right away and get a feel for each course without worrying too much about those meddlesome crashes. For even more assistance, there are a number of driving aids like auto-braking, auto-shifting, and invincibility that help keep you on track. More experienced drivers have the option to go all out and bump up the realism to its fullest. For full-on racing you can even adjust the race length, number of competitors, and aggressiveness of the computer opponents. The tracks are nicely varied with a

***XCar* features 11 tracks that vary from tight, twisty road courses to high-speed ovals. Here, you take to the streets of Seattle, Washington, in attempt to win the circuit.**

balanced mix of long ovals for blistering speed runs, and tight, twisty tracks that are just right for hair-raising fun.

But behind the wheel, the game just doesn't *feel* right. From crashes and spins to the overall sense of speed, I was never convinced that I was behind the wheel of an actual race car. It's a subjective argument, especially considering the hypothetical nature of the cars, yet Bethesda claims there are actual physics at work for each car.

Whether you believe the handling characteristics or not, it is possible to hunker down, stick with it, and accept the driving style on its own terms, but realism fans will have a hard time swallowing the seemingly inexplicable behavior of the cars.

The graphics also suffer from a few lapses in realism. Based on the latest version of Bethesda's Xngine (which was also used for *Terminator: Future Shock*, *SkyNET*, and *Daggerfall*) *XCar*'s graphics run very smoothly without 3D acceleration (though it does include support for 3Dfx's Voodoo Graphics chipset), yet the detail and quality we've come to expect from current driving games just isn't there. Even under hardware acceleration, the tracks and accompanying graphics have an unfinished quality about them, with backgrounds and objects that seem jarringly out of place. In the car selection screen, the cars themselves don't look bad, with a good variety of curvy aerodynamic models and bulky racers, but once out on the tracks, they seem poorly proportioned compared to the rest of the environment.

The in-car view adds its own problems to this peculiar sense of scale. As you sit on the starting line, or cruise along in the pit, you'll feel as though you're scooting along on a skateboard mere inches above the ground, while the other cars seem to be at least a full foot higher. With the cockpit graphics on, the bottom third of the screen is consumed by a dashboard so large and distracting that you'll constantly feel the need to peer over it. Needless to say, it didn't take more than a few laps before I promptly turned the cockpit off.

But if there is one area where *XCar* really shines, it is with its built-in car editor. The ability to customize car setups has become a regular feature in nearly every driving game, but the editor in *XCar* takes this concept to a new extreme. Instead of adhering to the rules and regulations of a governing body like NASCAR or IndyCar, which only allow for modification of certain components within a narrow range, the experimental theme of *XCar* gives users carte blanche to create and tinker to their hearts' content.

When caught in a pack of cars with 900+ horsepower, expect to see more than a few wipeouts.

Pretty much anything you would want to modify is represented; engines, fuel, tires, suspension components, paint job, etc, and the interface for the editor is a case study in simplicity. Everything is consolidated on a single screen, making point-and-click modification a breeze. And unlike the hassle of saving your modifications and then wading through several screens to test your car in *NASCAR* or *IndyCar*, once you've built your dream car, you can head out onto specialized testing facilities right from the car editor. There are three tracks that allow you test braking, top speed, and handling, and after performing your tests you can quickly pop back into the editor and tinker some more.

The built-in car editor proves to be *XCar*'s strong suit, and its flexibility and ease-of-use should be the watermark for future simulations.

If you're not satisfied with hands-on testing and want some numbers to back it all up, you can check out the telemetry data for more detailed information on your ride. Another nice touch is the VCR feature which records a race or test session and allows you to review your performance. As you watch the tape, you'll also be able to view the raw numbers concerning tire temperature, lateral G-forces, and speed as you blow through hairpin turns or head down the straights. After designing several cars, I found the VCR an invaluable resource when deciding which parts to tinker with next.

But even this excellent addition will matter little for most folks. It is a monotonous and methodical undertaking to build, test, and tweak until you've built a car you can be happy with. Unless you're really determined and patient enough to go through the process of building and modifying your car, the car editor is a nifty add-on and nothing more.

In the end, you'll need to ask yourself some basic matchmaking questions before you decide to take the plunge with *XCar*. If you're after quick arcade driving with state-of-the-art graphics, you'll only be disappointed by the so-so graphics, and possibly find yourself in over your head with the car editor. If you're a car nut eager to crawl under the hood and build your own personal land-rocket from scratch, *XCar* excels at giving you the tools and information to put it all together, but you'll have to be willing to forgive the occasional gaps in realism and other inadequacies on the track.

—*Todd Vaughn*

PC GAMER FINAL VERDICT

68%

HIGHS: Customizable; smooth frame rate; inventive concept.

LOWS: Controls don't feel right; boring default cars; relentless AI.

BOTTOM LINE: *XCar* is great for tinkerers and pit crew wannabes, but casual gearheads will find it all too much to handle.

The Baron

Bullets riddle your plane, shattering wood and shredding canvas. The sky screams with red tracers, smoke and explosions. And as the Red Baron himself blasts out of the sun's glare... as your palms start to sweat and your pulse races... as you hear the ominous groan of stressed wings the instant before they shatter... you realize that this is much more than just a game. This is a taste of history. And your next move will determine whether you become a legend... or another kill in the Baron's book.

Eight years ago we set the standard for flight simulation with a product so timeless and revolutionary that it has remained unchallenged... until now.

The Baron is Back.

Visit our website and download the original Red Baron™ for free! www.sierra.com/RB2

SIERRA®

Dynamix

©1997 Sierra On-Line, Bellevue, WA 98007. ® and/or ™ designate trademarks of, or licensed to Sierra On-Line, Inc.
All rights reserved. Windows 95 is a registered trademark of Microsoft Corporation. 006713000

is Back!

Over three years in the making, Red Baron II is an epic achievement. From gamer directed features to state-of-the art technology, it is the ultimate recreation of the men, machines and experience that marked the birth of aerial combat.

- Dynamix's revolutionary new 3Space 2.0™ engine takes a giant leap ahead of the competition with unmatched realism in terrain modelling.
- User-definable difficulty levels for players of all skill levels.
- Multiplayer dogfighting action featuring internet, network and head-to-head modem support.
- Fly single missions for quick action or select Campaign play for a full tour of duty.
- Over 40 unique aircraft with 22 flyable planes.

- The Dynamix Mission Builder™ allows players to completely customize their missions.
- Dynamix's revolutionary new ACE AI™ system recreates the skills, tactics and personalities of historical and non-historical pilots with unbelievable realism.

- The Plane Paintshop™ allows players to customize the colors, insignias and look of their planes, using either provided patterns or by importing artwork of their own from any standard paint program.

Red Baron II™

Product Information Number 316

CyberDiversion Institute

WHERE THE CYBERDIVERSION INSTITUTE STANDS ON THE HEAT.NET 5-POINT PLAN.

On August 17, 1997, several members of the CyberDiversion Institute logged on to HEAT.NET. Here's what they found:

(RATINGS ARE FROM 1 TO 5 DOVES, 5 DOVES BEING EXCEPTIONAL)

POINT #1: Making Internet Gaming Easy.

After trying every internet game network, we found HEAT.NET had the easiest start-up: Log on to HEAT.NET, get the free HEAT software and play free, OR purchase the retail box (includes six months' premium membership, HEAT CD with games and internet access from MCI). HEAT.NET's simplified start-up process will jump-start world peace by allowing people to start diverting their aggressive urges away from reality immediately!

POINT #2: Creating The Fastest Internet Gaming Experience.

We found that HEAT.NET delivers the fastest, smoothest gameplay on the net. With the new millennium and the threat of Armageddon looming, the faster every human can purge their evil Reptilian Complex buildup, the better for all of us!

POINT #3: Making HEAT.NET Compatible With Nearly Every Multi-Player PC Game.

Nearly every aggression-intensive game out there can be played on HEAT.NET! We played some of our favorites, like Quake,™ WarCraft II™ and Scud: Industrial Evolution,™ as well as games designed exclusively for HEAT, like DeathDrome,™ Alien Race™ and Net Fighter,™ plus some intense HEAT-only Quake Mods. This wide range of Reptilian Complex outlets puts the power of peace into the hands of the masses!

Quake™

Scud: Industrial Evolution™

POINT #4: Rewarding Cyber-Aggression With Points And Prizes.

We found that HEAT is the ONLY internet game network where aggression is rewarded with frequent player points (they call Degrees) that can be redeemed for prizes. What an idea! If people play more often, they will quell aggressive urges more often and decrease real-life aggression more often. We believe HEAT.NET should win the Nobel Peace Prize for this point alone!

POINT #5: Creating Competition With Ladders And Events.

The ability to compete against the best players for prizes in automated, secure events and rise to the top creates an environment for Optimum Diversion Release (ODR), or the release of the most aggressive Reptilian urges, and the attainment of individual peace—which we believe will lead to a greater world peace!

Therefore, we, the CyberDiversion Institute, endorse HEAT.NET for its outstanding contribution in making the world safer for everyone. Please log on to HEAT.NET today and do your part for world peace!

D. G. Bartha

Officially endorsed by Dr. D.G. Bartha
The CyberDiversion Institute

FOR MORE INFORMATION, PLEASE VISIT US AT WWW.CYBERDIVERSION.ORG, OR WRITE TO THE CYBERDIVERSION INSTITUTE: 1453-A 14TH ST. SUITE 267 SANTA MONICA, CA 90404

Product Information Number 303

Resident Evil

Win95

Category: Action adventure

Developer: Capcom

Publisher: Virgin, 18061 Fitch Avenue, Irvine, CA 92614 (800) 874-4607

Required	We Recommend
Win95, Pentium 90, 16MB RAM, Direct3D-compatible accelerator card (4MB minimum), 105MB hard-drive space	Pentium 133 or higher, 32MB RAM, 290MB hard-drive space, joypad

The PlayStation frightfest comes to the PC in uncensored form, and, a few minor complaints aside, it's a real doozy!

On Sony's PlayStation console, *Resident Evil* is unanimously considered one of the all-time greats — only the all-conquering *Tomb Raider* keeps it off the number one spot on most PlayStation magazines' "hall of fame" listings. It's also one of the biggest-selling console games ever, both here in the USA and in its home country of Japan, so it's no surprise that its inevitable transition to PC is being hailed as one of the most significant console-to-computer ports to date.

What is surprising is that *Resident Evil* ever surfaced on the PlayStation in the first place — its ultra-gory shlock horror subject matter is generally not considered suitable for a game system aimed primarily at kids, but then again that's probably what helped make it such a stand-out product in a sea of politically-correct gaming blandness. Even so, the initial console release had to take some censoring (the amount of bloodshed was reduced, and some of the cut scenes edited), so much is being made of the fact that this PC version, unshackled by the censorship issues affecting the console market, is the full gore, uncut version — the one recently re-released on PlayStation as *Resident Evil Director's Cut*, in fact.

Now, one point we need to get out of the way immediately — as good as this game is, it's not going to cause the kind of stir on PC that it did on PlayStation. Why? Because while it looks strikingly original to Sony gamers brought up on a tiresome diet of driving games and 3D fighters, seasoned PC gamers have seen this type of thing not once, not twice, but three times before as the French classic *Alone in the Dark* and its two sequels. *Resident Evil* is, basically, a shameless *Alone in the Dark* clone — in both games you're a fearless hero investigating a spooky haunted mansion, collecting weapons and clues and blowing away the ghosts, zombies, and other creatures of the night that assault you. *Alone in the Dark's* groundbreaking graphic approach has been lifted pixel-for-pixel, too — *Resident Evil's* 3D scenes are viewed from a variety of cinematic camera angles that switch as you move from room to room.

Yikes! Here's a nice little fright as a rabid hell-hound smashes through the window to launch an attack on you.

Your companions may arrive from time to time to get you out of trouble.

None of this is necessarily a bad thing. We haven't seen an *Alone in the Dark* game for a few years now, and all three are starting to look a little behind the times technologically. So until a much-desired but unlikely-to-happen *Alone in the Dark 4* surfaces, *Resident Evil* is the only chance we have to play something in the same vein. And, some quibbles aside, it's a darned good effort.

What little story there is is set out in a spectacularly cheesy and gory FMV intro, which sees a military combat team attacked by werewolves, and the surviving members holing up in a haunted mansion which, you'll discover, was the site of some ungodly scientific experiments and is now home to hordes of zombies and other flesh-nibbling nasties.

Depending on whether you choose to play as Chris Redfield or his female counterpart Jill Valentine, there are some minor gameplay differences (Jill starts out with a 9mm pistol, Chris with a knife, for example) but the overall action/adventure formula is fundamentally the same. The *Resident Evil* mansion is huge and will take a lot of exploring if

Once you've got the bazooka, zombie-killing has never been so much fun — or so easy. Use the ammo sparingly!

you're to find the clues and objects you'll need to get out alive. Managing weapons and health is key — medical aid and extra ammo can be found, but they're rare, so you have to make every shot and every ounce of energy count. That's not easy when you're being set upon by zombies, giant spiders, hell-hounds and the like. But don't think this is a shoot 'em-up; the action is carefully rationed, and the game is all the better for it. *Resident Evil* is quite happy to let you do plenty of exploring, moving from room to room without being accosted — but like a good horror movie, it knows exactly the right moment to leap out at you and say "Boo!". There were a few times when I really did jump out of my seat as the quiet tension suddenly and unexpectedly exploded into a zombie attack, or crazed dogs smashed through the windows to savage me. And because you never know quite what's lurking in wait for you around the next corner, or where the next surprise is coming from, you're constantly on tenterhooks. As Alfred Hitchcock once said, "The suspense is terrible. I hope it will last."

You'll battle these beasties with knives, pistols, shotguns, and bazookas, if you can find them and keep them stocked with ammo. This is the really fun part. The weapons are weighty and realistic — shoot a zombie with the 12-guage, and he'll be blasted backwards in a satisfying shower of blood. If a zombie gets to you, he'll munch on your neck, complete with arterial spray. If you shoot one to the ground, he'll go down but might not be quite dead — try to walk over him, and he'll come alive again and chew on your ankles. Fortunately you can kick his decomposing head off like a blood-filled football.

The puzzle element is fairly simplistic, for the most part involving pushing objects around, *Tomb Raider*-style, or grabbing things from somewhere and depositing them somewhere else. The puzzles are simple, but they are at least fairly logical and the clues are just right, neither too cryptic nor too obvious. But remember this was originally a console game, so those looking for a cerebral workout won't find much of one here.

The pump-action shotgun will take most creatures out with one blast.

Unfortunately, *Resident Evil* suffers from some trivial but collectively annoying flaws that keep it out of Editors' Choice territory. Here's a brief rundown of the stupid, easily-correctable niggles that bother this game:

• Inconsistent control. For example, you can walk to the bottom of a staircase, but once you get there, you can't just push forward to climb it. You have to hit the generic action button (also used for picking up objects, shooting guns etc) to trigger the walking-up-the-stairs sequence. Illogical and unecessary.

• Limited inventory management. You can only hold eight objects at a time, including ammo clips. And you can't just drop an object whenever you want to, you have to find a special chest and deposit unwanted items in there. So, at times, I was forced to waste ammo just to free up an inventory slot to make way for a puzzle item I really needed. Again, illogical and just plain stupid.

• Bad game-saving. Here's a hold-over from the PlayStation original that could have been easily avoided. You can't save your game wherever you like — instead, there are typewriters littered around the house with limited save slots. The PC version of *Tomb Raider* has a better save mode than the PlayStation version, so why doesn't *Resident Evil*?

• Terrible voice acting and dialog. Actually, this is almost a plus point, if you have a sense of humor. All the text has been translated from Japanese so it has that quirky quasi-English quality to it, while the voice-overs are so unbelievably hammy and badly delivered that it's either intolerable or hilarious, depending on your point of view.

Overall, *Resident Evil* is a terrific and fun game afflicted by a few sloppy mistakes. The fact that they could have been so easily corrected but weren't is annoying, but the game as a whole is good enough to make them worth putting up with. It doesn't quite have the imagination and spine-tingling eeriness of *Alone in the Dark*, but it's rare these days to see a game packing this much tension and atmosphere. If pure adrenaline-pumping bang for your gaming buck is what you're looking for, this is one of the better titles to emerge this year — particularly with the lights turned down!

— Gary Whitta

PC GAMER FINAL VERDICT

87%

HIGHS: Terrific graphics, great atmosphere, loads of blood and guts to satisfy splatter fans.

LOWS: Some silly control, inventory and save-game flubs mar an otherwise excellent game.

BOTTOM LINE: If you can overlook the minor niggles, Resident Evil comes highly recommended.

Take to the skies with the Eidos Flight sim sweepstakes

JOINT STRIKE FIGHTER

JSF

FLIGHT UNLIMITED II

1 GRAND PRIZE

- Canopus Total 3D Board
- CH Products Peripheral Package
- JSF and Flight Unlimited 2 Games
- Strategy Guides for both games
- Year Subscription to PC Gamer

5 FIRST PRIZES

- CH Products Force FX Joy Stick
- JSF and Flight Unlimited 2 Games
- Strategy Guides for both Games
- Year Subscription to PC Gamer

10 SECOND PRIZES

- JSF and Flight Unlimited 2 Games
- Strategy Guides for both Games
- Year Subscription to PC Gamer

1. No purchase necessary. To enter, send a standard size postcard containing name, address, phone number and e-mail address to "JSF/FU2 PC Gamer Contest", Eidos Interactive, 651 Brannan Street, 4th Floor, San Francisco, CA 94107. No purchase or payment of any money is necessary to enter. One entry per household. Mechanically reproduced entries will not be accepted. Entries must be received by December 5, 1997. All entries become exclusive property of EIDOS Interactive and will not be acknowledged or returned. Only one prize per family, organization, or household. 3. Prizes: One Grand Prize: Grand Prize winner will receive a Canopus Total 3D Board, CH Products Peripheral Package (pedal, throttle and joystick), copy of JSF and Flight Unlimited 2 Games, JSF and Flight Unlimited 2 Strategy Guides, Year Subscription to PC Gamer. Grand Prize has an approximate retail value of $500.00. Five First Prize winners will receive a CH Products Force FX joystick, copy of JSF and Flight Unlimited 2 Games, JSF and Flight Unlimited 2 Strategy Guides, Year Subscription to PC Gamer. First Prize has an approximate retail value of $300.00. Ten Second Prize winners will receive a copy of JSF and Flight Unlimited 2 Games, JSF and Flight Unlimited 2 Strategy Guides, Year Subscription to PC Gamer. Second Prize has an approximate value of $200.00. Winners will be determined by a random drawing from all valid entries by EIDOS Interactive whose decisions are final. Drawing will be held on or about January 15, 1998. All prizes will be awarded. Prize(s) are non-transferable. No substitutions are allowed, except at the option of EIDOS Interactive should the featured prize(s) become unavailable. The odds of winning will be determined by number of valid entries received. 3. Eligibility: Sweepstakes open to residents of United States and Canada. Non-compliance with the time parameters contained herein or return of any prize/prize notification as undeliverable will result in disqualification and an alternate winner will be selected. In the event of disqualification, Grand Prize, First Prizes, Second Prizes and Third Prizes will be awarded to the next available entry. Runner up winners will be notified by mail. By acceptance, winner(s) agree to the use of their name and/or likeness for purposes of advertising, trade, or promotion without further compensation, unless prohibited by law. EIDOS Interactive is not responsible for any damages, taxes, or expense that consumers might incur as a result of this contest or receipt of prize. Winners accepting prize(s) agree that all prize(s) are awarded on the condition that EIDOS Interactive and its agents, representatives, and employees will have no liability whatsoever for any injuries, losses or damages of any kind resulting from acceptance, possession, or use of the prize(s). 4. List of winners: For a list of winners, send a self-addressed stamped envelope to JSF/FU2 PC Gamer Contest, EIDOS Interactive, 651 Brannan Street, 4th Floor, San Francisco, CA 94107. Requests for winners must be received by January 15, 1998. Allow 4 weeks for delivery of winners list. 5. Restrictions: Void where prohibited or restricted by law. All federal, state and local regulations apply. 6. Sponsors: This sweepstakes is sponsored by EIDOS Interactive, PC Gamer, CH Products, and Canopus. EIDOS Interactive and Joint Strike Fighter are trademarks of EIDOS, Plc. ©1997 EIDOS.

PC GAMER

LOOKING GLASS TECHNOLOGIES

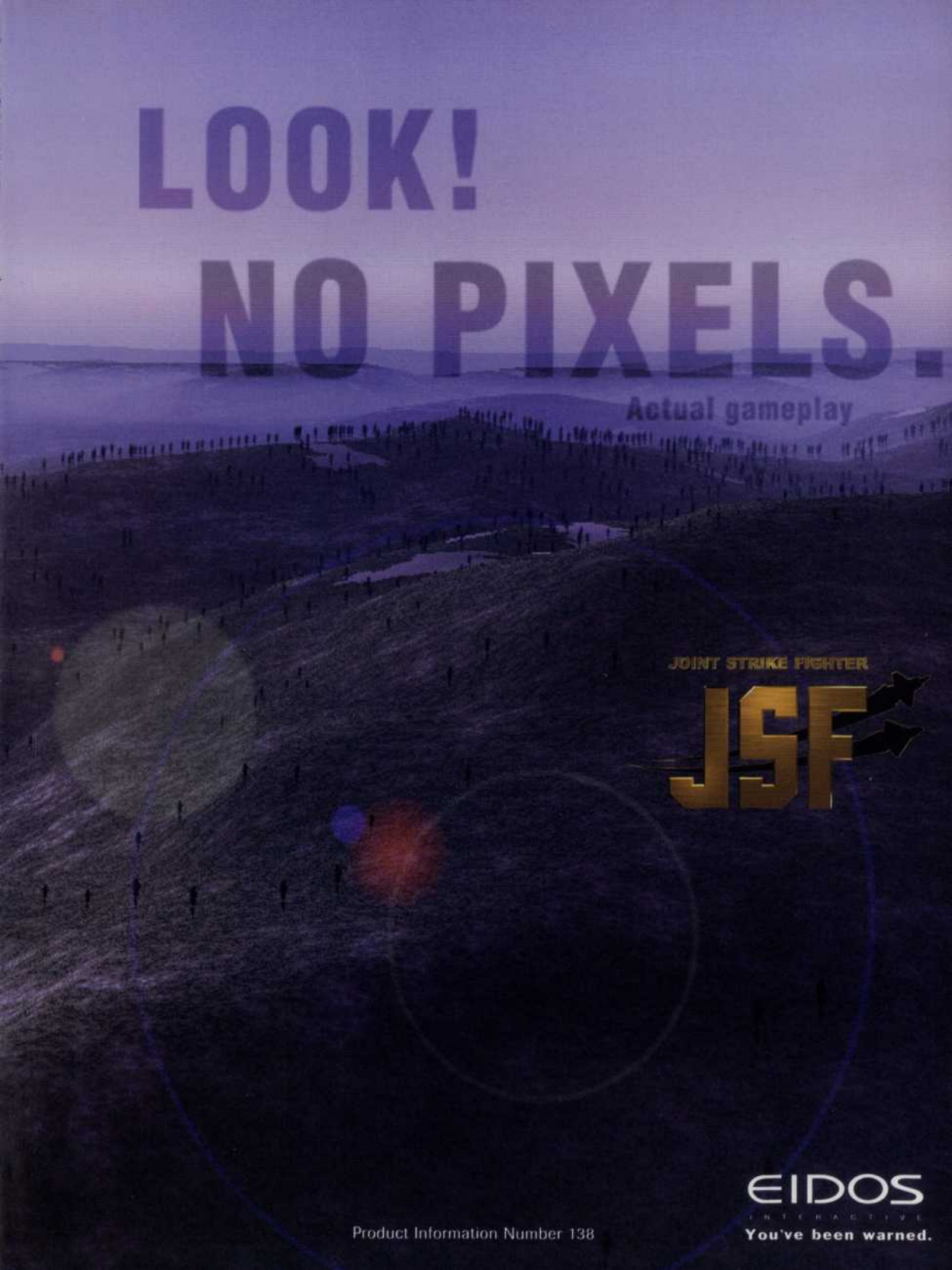
CH PRODUCTS

www.eidosinteractive.com

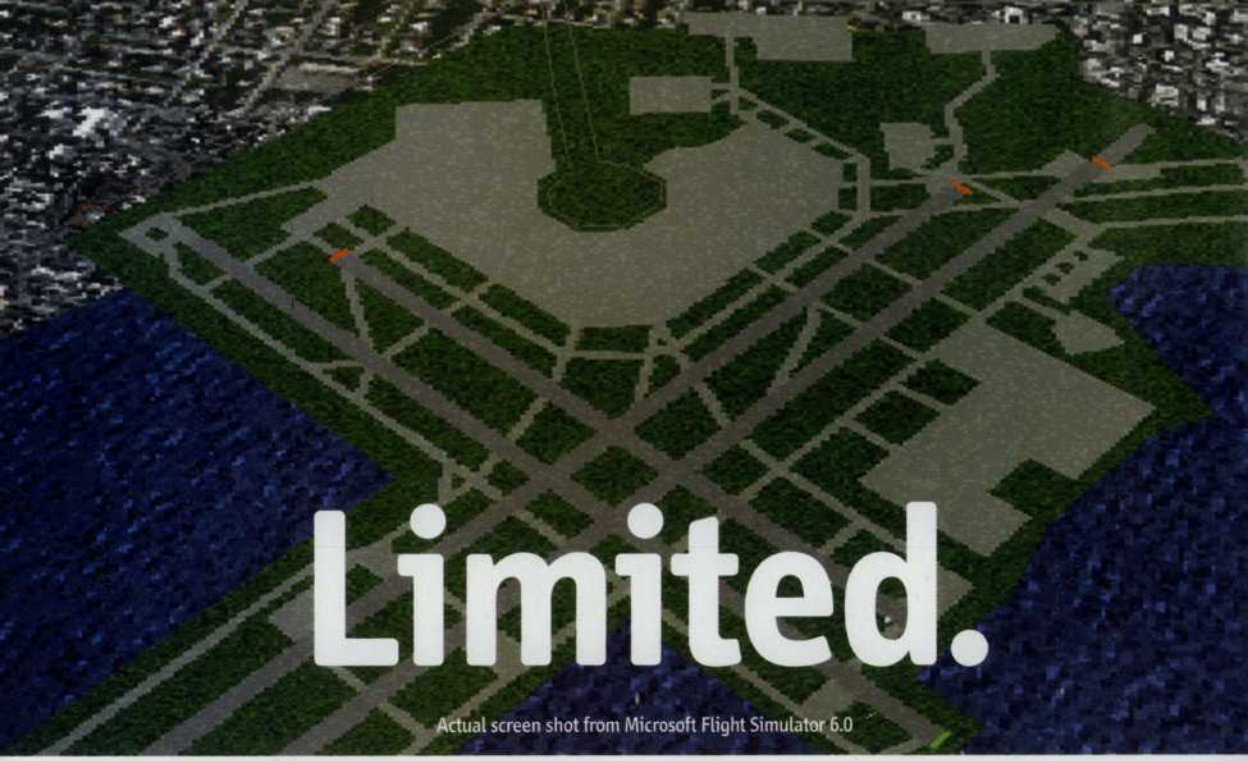
EIDOS INTERACTIVE

You've been warned.

"...The first time an engine moves this fast and is just as detailed at 100 feet as 100,000 feet."
PC Gamer
Don't take our word for it.
See for yourself at www.eidosinteractive.com



Product Information Number 138



Finally, a flight sim with no limits. Flight Unlimited II from Looking Glass. The most realistic flight experience ever in a PC simulation.

Beechcraft Baron 58

Flight Unlimited II sets a whole new standard with realism, thrills and adventures you won't find in any other flight sim. Fly the speedy Piper Arrow over 11,000 square miles of breathtaking, photo-realistic Bay Area terrain. Jump in the cockpit of the notorious P-51D Mustang. Or, mix it up with over 400 different aircraft using ground, tower and approach controllers. Whether you're a rookie or an experienced pilot, take off with the most realistic flight sim ever.

DeHaviland Beaver DHC-2 Seaplane

North American P-51D Mustang

Piper Arrow 200

LOOKING GLASS TECHNOLOGIES. **www.lglass.com**

©1997 Looking Glass Technologies, Inc., Cambridge, MA. Flight Unlimited II and Looking Glass are trademarks of Looking Glass Technologies, Inc. All rights reserved. EIDOS Interactive is a trademark of EIDOS PLC ©1997 EIDOS.

Unlimited.

Actual screen shot from Looking Glass' Flight Unlimited II

FLY THE DEHAVILAND BEAVER SEAPLANE IN FLIGHT UNLIMITED II AND ACTUALLY LAND ON WATER. FLIGHT SIMULATOR MAY HAVE WATER, BUT IT SURE DOESN'T HAVE A SEAPLANE.

"Microsoft should have cause for concern...Flight Unlimited II's stunningly rendered world is only exceeded in excellence by its smooth interface."

"E3's Best of the Best"
Computer & Net Player

WHEN WE SAY "THE MOST REALISTIC WEATHER CONDITIONS," WE MEAN IT. IN FLIGHT II, THUNDER CLOUDS ACTUALLY FLOAT ACROSS THE SKY AS THEY UNLEASH A DOWNPOUR. EXACTLY WHAT ARE THOSE IN THE SKY IN FLIGHT SIMULATOR 6.0, ROCK FORMATIONS?

FLIGHT UNLIMITED II

www.eidosinteractive.com EIDOS INTERACTIVE

Product Information Number 130

YOU'VE LOOKED

Even your high school yearbook picture was more becoming than this. But as an alien, glamour is not high on your agenda. So, bust out of the traditional strategy game mold, morph into a human and make enemies with your friends. Conquest Earth is a world you'll want to step into very carefully.

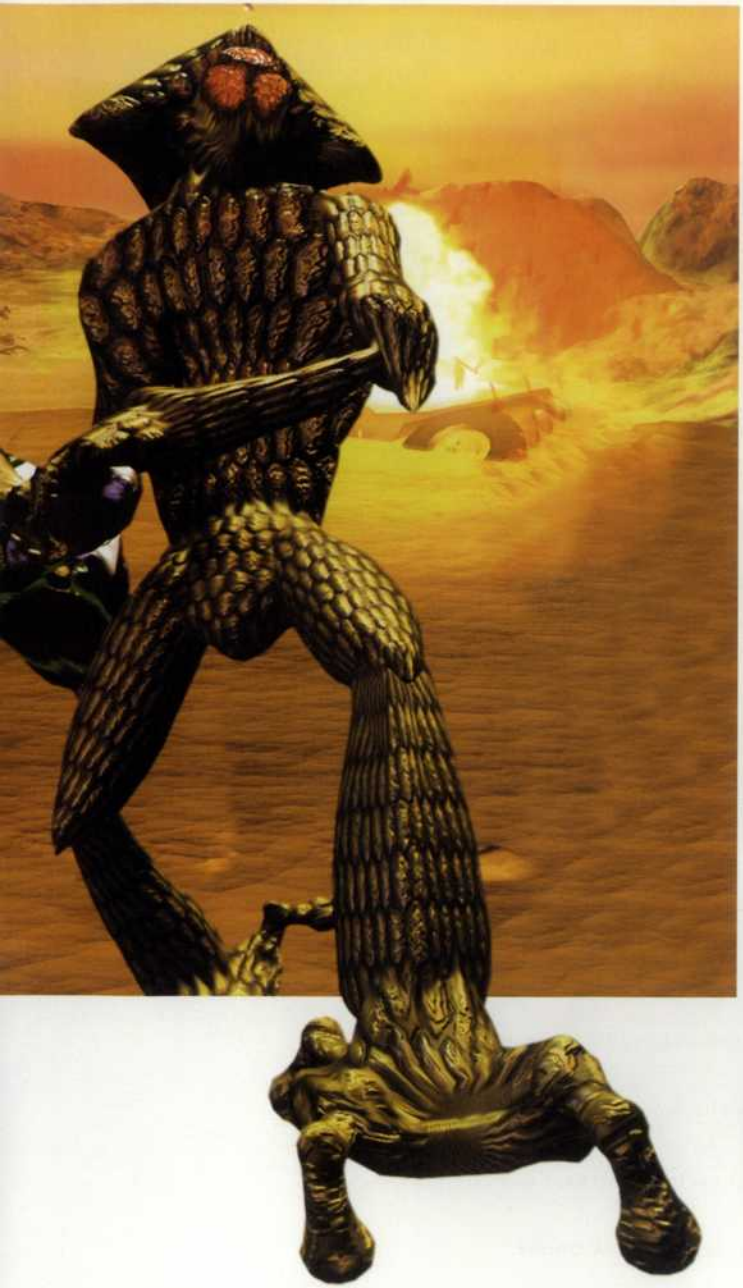
"THE VISUAL EFFECTS ARE SPECTACULAR"
COMPUTER GAMES STRATEGY PLUS

"STUNNING VISUALS AND INTENSE GAMEPLAY"
PC GAMER

CONQUEST EARTH

WHERE STRATEGY TAKES ON A NEW FORM

BETTER.



You can play either side in this intergalactic strategy game. Instantly morph into a weapon or battle tank—even a human being.

When playing the alien side, you'll experience a unique interface with different rules and capabilities. You'll employ never-before-seen tactics and strategies to foil your human counterparts.

Vary your strategy to keep your opponents guessing. Keep track by monitoring them through your interface portals. With over 65,000 colors, the action will come to life like never before.

Playing the human side, you'll need to manage your resources wisely. Thwart the aliens' attempt to mine oxygen from the atmosphere. Only one race will remain standing after this war. Make sure its yours.

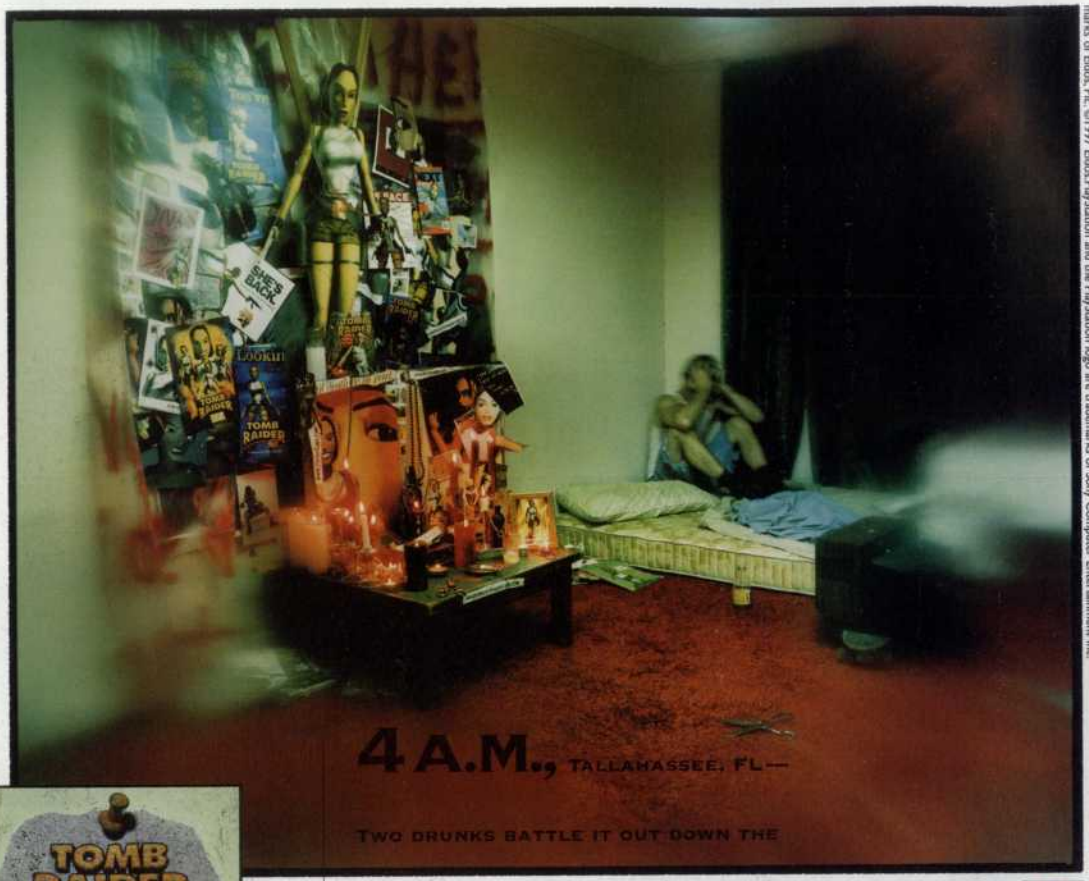
WWW.CONQUESTEARTH.COM

Conquest Earth and Eidos Interactive are trademarks of EIDOS, PLC. © 1997 Eidos

Product Information Number 135

EIDOS INTERACTIVE

You've been warned.



TOMB RAIDER II
STARRING LARA CROFT

HALL. THE 38 EXPRESS SQUEALS TO A HALT EVERY HALF HOUR ON THE STREET BELOW. SLEEP DOESN'T COME EASY IN ROOM 23. BUT FOR 19 YEAR-OLD RAY COOPER, IT HAS NOTHING TO DO WITH THE NOISE. AS HE SAYS, "IT'S BECAUSE EVERY TIME I CLOSE MY EYES, ALL I SEE IS LARA CROFT."

inset photos

Top: The Second Coming, slated for this fall. **Bottom:** Preparing for her return.

PC CD

PlayStation

CORE

EIDOS INTERACTIVE

You've been warned.

EIDOS HINT LINE 1-900-773-4367. Cost of call $0.95/minute. Must be 18 years or have parent's permission. Touch-tone phone required. Eidos Interactive, Core, Tomb Raider, Lara Croft and her likeness are trademarks of Eidos, Plc. ©1997 Eidos. PlayStation and the PlayStation logo are trademarks of Sony Computer Entertainment Inc.

Outpost 2

Win95

Category: Strategy

Developer: Dynamix

Publisher: Sierra, 3380 146th Place S.E., Suite 300, Bellevue, WA 98007 (800) 757-7707

Required	We Recommend
Win 95; Pentium 60; 2x CD-ROM drive; 16MB RAM; 40MB hard-drive space; Windows-compatible sound card; Mouse	Pentium 120; 4x CD-ROM drive; Super VGA capable of 1,024x768 resolution and 32K colors; network or modem for multi-player

This sequel to what was a legendary disappointment is nothing spectacular, but it's not too shabby.

It's best to get this out of the way at the start, like yanking off a Band-Aid to minimize the pain: It's true that the original *Outpost* scored a whopping 93 percent when *PC Gamer* reviewed it for the September 1994 issue.

That rating was... excessive, to say the least. While it was in development, *Outpost* was a very promising game — most gamers agreed that a space-colony sim based on principles of hard science was a great idea. And as one of the first CD-ROM-only titles, it had more impressive graphics and animations than most PC games on the shelves at the time. But when it came to gameplay, *Outpost* was half-baked and buggy. Its documentation was undeniably bad, too, describing features that didn't exist and failing to explain features that did. It was a major letdown.

So how did this troubled and disappointing game get such a high recommendation from *PC Gamer*? We honestly don't know. Unfortunately, no one who was working on *PCG* three years ago is still on the editorial staff today, and the author of the review now works for another publication — so the reasons for that strange rating are lost to history.

Was it misguided enthusiasm? A brain fever? Our only explanation is the same one we always offer when all else fails: the government must've gotten to 'em.

Whatever the case, *Outpost* vanished pretty quickly, but it wasn't forgotten. Right along with the likes of *Battlecruiser 3000 A.D.*, it's frequently cited as an example whenever gamers discuss titles that promise big and deliver little. So you can bet Sierra thought long and hard before deciding to release a sequel, and you can bet the designers at Dynamix took care not to repeat old mistakes.

You can give a unit or group a complex path to follow, but the waypoint markers disappear as soon as you enter the last one, so there's no way to review the route later.

For the most part, they've managed to avoid the pitfalls that dragged *Outpost* down. On a technical level, *Outpost 2* is a lot more stable and intuitive than its predecessor. More to the point, it's unquestionably more fun than the original. Then again, it attains these goals largely because it doesn't attempt as much as *Outpost* did; where the original was intended as a painstakingly detailed, turn-based simulation built on a foundation of real-world science, *Outpost 2* is a fairly light real-time strategy game with only a handful of notable differences from every other product in that growing genre.

The story behind *Outpost 2* is basically the same one that set the stage for *Outpost*. Knowing that Earth is about to be smacked by a huge meteor that will wipe out all life on the planet, humanity has built spaceships that can take us to a new home, where we'll build colonies and — theoretically, at least — live happily ever after. The travelers find a new planet, Terra, without much trouble, but problems arise when the survivors are divided into two opposing groups. Eden Colony wants to use technology to turn Terra into a reasonable facsimile of Earth, but the members of Plymouth Colony — conservationists at heart — want to adapt and live in harmony with their new home.

In *Outpost*, not much was done with the conflict between the colonies. In *Outpost 2*, it's the basis for some *Red Alert*-style combat. But this new game isn't one of continual military conflict; *Outpost 2*'s single-player campaign games (one for each colony) are divided

OUTPOSTINGS

Outpost 2 features a slew of reports that tell you how you're doing.

Communications: Game messages are recorded in the Communications log. Some messages are interactive; a double-click will center the map window on the affected area.

Resources: The Resources Report gives you a summary of your colony's current status. When you double-click on any section, like the Morale summary...

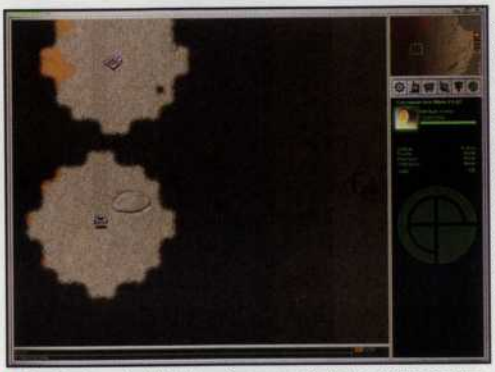
Morale: ...you'll get a detailed report. This colony has plenty of housing, but unemployment (Unoccupied Colonists) is starting to hurt morale, and low morale generally means no one's in the mood to make new colonists.

Lava oozing into your base swallows up a reactor. Power stations give off a powerful electromagnetic pulse when destroyed, making it hard to attack them without temporarily disabling your own units.

into run-and-gun "unit missions," which will be very familiar to any real-time strategy fan, and more subtle "base missions." In base missions, your main goal is to tend to your colony, advancing its technology, building its population, and preparing for the worst (which may appear in the next mission). For example, the Plymouth campaign begins with a unit mission that challenges you to load up your trucks with resources, construction kits, and frightened colonists and evacuate them all to safety before a lava flow devastates the colony; succeed at that, and you face a base mission, in which you must build up your population, research some vital sciences, and prepare yourself to evacuate again if necessary. Later, a unit mission will have you sending armed vehicles into dangerous territory to retrieve the wreckage of a crashed starship.

None of the campaign missions exists entirely for the sake of combat; you're never charged with simply finding the other guy and wiping out his base. Whether you're playing on Eden's side or Plymouth's, your ultimate goal is to build a starship and get your colonists off the planet, which is rapidly being overtaken by a bizarre technoplague. (One nice touch: You can't win the campaign without evacuating the other colony's children along with your own people.)

Each campaign is only 12 missions long, and most missions can be completed in one sitting. Replay value is boosted a bit by offering three difficulty levels; the computer opponent doesn't get any smarter at higher levels, but the goals become more complex and you'll find less of your work has been done for you when the mission begins. Missions can be pretty complex, with multiple goals to keep track of, but a Mission Objectives report is always available to tell you what still needs to be done.



Day breaks and night falls as time passes in *Outpost 2*. You can turn your units' headlights off, which might give you an advantage in multi-play — if your opponent's a dim bulb.

The drawback to some of the base missions is that they can become tedious before they're over. In addition to asking you to research several technologies and produce X amount of each resource, they usually require you to have a certain number of children, workers, and scientists in play. Too often, you'll achieve all your other goals well before your population objectives are met, leaving you to do a little morale-tweaking and a lot of waiting as the colonists get with it and multiply.

In addition to the campaign missions, you can play a free-form Colony game. You choose Eden or Plymouth, then try to build your population to a specified level or complete a starship to get your people off the planet. This mode lets you build to your heart's content, threatened by nothing more malevolent than natural disasters like electrical storms or meteorites — sort of a SimColony. But the problem that crops up in base missions is magnified here, with even more fiddling and waiting to be done.

Interestingly, *Outpost 2* reaches its full potential only in multi-player mode, where the game's 15 unit types and 11 weapons systems can finally get a real workout. Two players can go head-to-head via modem or serial link, and as many as six players can connect via local-area network or the Internet (using SIGS, Sierra's free Internet Gaming System). In addition to the usual last-man-standing slugfest, opponents can compete to mine the most resources or enter a Space Race, in which the winner is the player who builds a starship first.

Multi-play is fun and pretty solid, although we ran into some sound-related glitches that didn't appear during single-player action. Unfortunately, none of *Outpost 2*'s single-player modes really prepares you for multi-player action; it'd be nice if the game had a *Red Alert*-style skirmish mode that let you practice against simulated opponents.

The game's biggest problem is one that haunts it from whatever afterlife the original *Outpost* calls home: an inadequate manual. *Outpost 2*'s manual is much better than the original's, but it still leaves quite a few concepts unexplained.

Fortunately, the game disc includes three strategy guides in Microsoft Word format (and a viewer for anyone who doesn't have Word). These aren't little text files; they're big documents, complete with illustrations and detailed charts. The campaign guides run to 60-plus pages for each colony, and the tips for the colony and multi-player games fill 41 pages. That's more than 160 pages of information that *someone* felt was important; seems like some of it should've appeared in the printed manual. At the very least, the tables that explain each technology and how you get it should've been included.

Ultimately, *Outpost 2* is a reasonably solid real-time strategy game with some interesting multi-player options. If you're looking for a new real-time challenge, don't let its dubious heritage scare you off — but don't expect anything terribly new or original.

— *Dan Bennett*

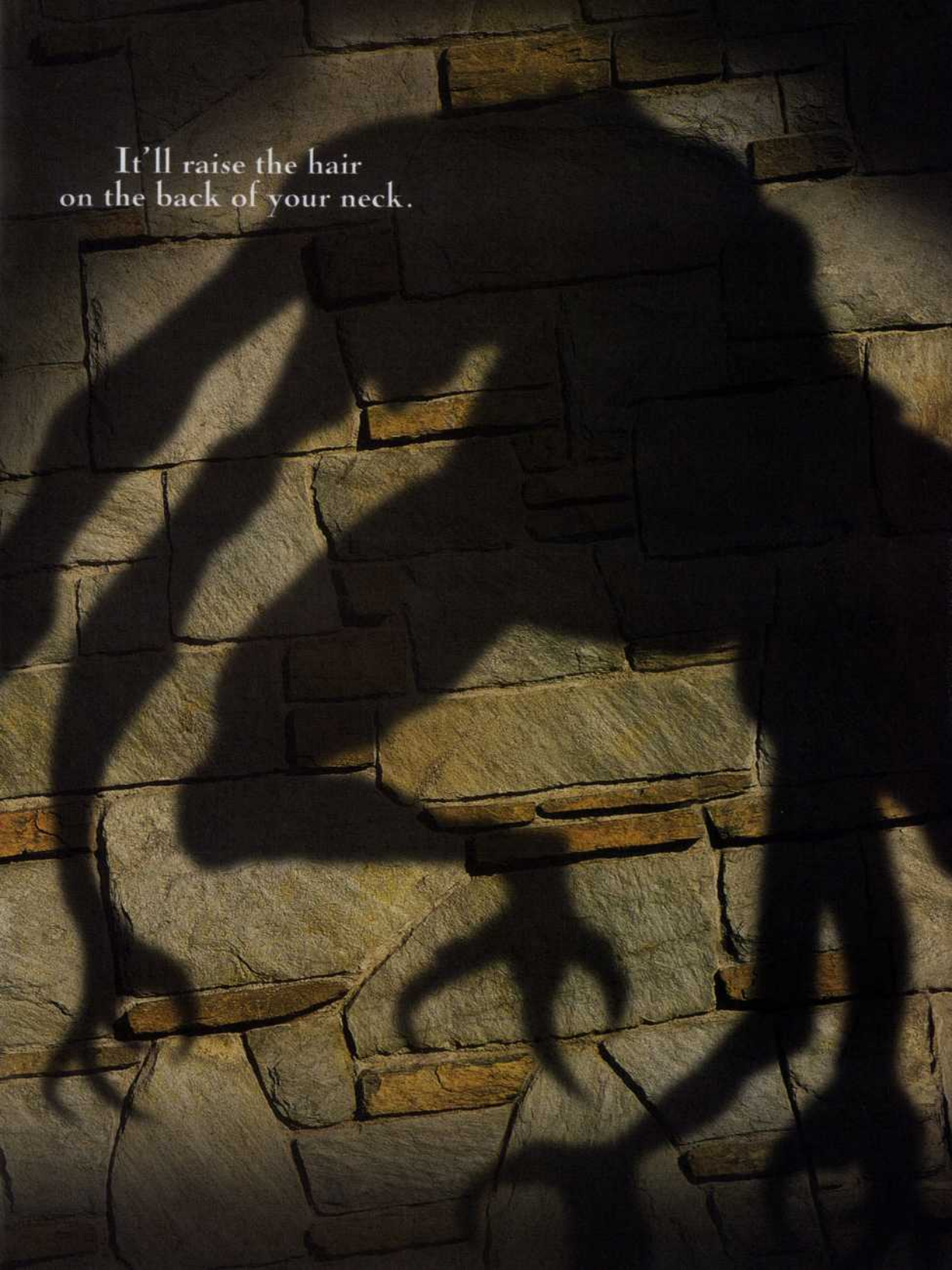
PC GAMER FINAL VERDICT

75%

HIGHS: Variety spices up campaign missions; good multi-player action; free Internet play.

LOWS: Inadequate manual; offers little originality.

BOTTOM LINE: A pretty enjoyable and solid game that doesn't deserve to be saddled with its predecessor's reputation.


It'll raise the hair
on the back of your neck.

Explore Gothic London as the ever-faithful Ignatius or nimble, sword-wielding Nadia, looking for clues and solving puzzles.

Battle 21 marauding medieval monsters in 16 equally disturbing 3-D environments as you search for the evil Adam Crowley.

Use any one of 28 different mutilating moves to divide and conquer the diabolical demons, bloodthirsty beasts and overzealous zombies.

Don't let something as minor as a little severed limb stop you. Because it certainly won't stop them.

NIGHTMARE CREATURES™

A bloody good time in jolly old London.

For more on this tale of terror, call 1-800-850-1682.

Coming soon for Windows® 95. To prepare yourself, go to www.nightmare-creatures.com or www.kalisto.com

kalisto

MATURE M AGES 17+ CONTENT RATED BY ESRB

Activision is a registered trademark of Activision, Inc. Nightmare Creatures is a trademark of Kalisto Technologies. © 1997 Kalisto Technologies. Published and distributed by Activision, Inc. The ratings icon is a trademark of the Interactive Digital Software Association. All rights reserved. All other trademarks and trade names are properties of their respective owners.

Product Information Number 87

Circuit Racer

Category: Arcade Racing

Developer: NoriaWorks/FriendWare

Publisher: WizardWorks, 2300 Berkshire Lane North, Plymouth, MN 55441 (612) 559 5301

Required	We Recommend
Double-speed CD-ROM drive; 486/66; 4MB RAM; 7MB hard-drive space	Pentium 90; 8MB RAM; Joystick or gamepad

Despite two ways to play, this budget racer needs a lot more horsepower under the hood before it can get up to speed.

Hmm, that's odd — how come all the yellow cars are Number 6?

Ahh, arcade racing. Nothing beats the feeling of power-sliding through corners at 200mph, then misjudging your turn, smashing your McLaren F1 into a brick wall, and cringing as you listen to your friends taunt you mercilessly. PC gamers have been getting a refreshing dose of competent arcade racers with the likes of *Moto Racer* (the demo, at least) and *Sega Rally*, and if you're looking for some budget-priced racing to fill your bill, *Circuit Racer* may beg for purchase. However, think twice before you splurge, since this gray-haired relic ain't exactly cutting-edge.

Here's the skinny: *Circuit Racer* delivers your standard arcade racing fare, where you go up against 20 other computer-controlled cars and attempt to hit each checkpoint before the time runs out and you get the dreaded Game Over. The game allows you to swap between racing styles before each race, so you can either go at it Formula One style or in a Daytona-ish stock car.

Including two separate car models to switch between is an interesting twist — but *Circuit Racer* is such a dated title, there's nothing innovative in the actual implementation. *Circuit Racer* looks extremely good for a game that came out in 1995, but it's baffling why WizardWorks chose to release this one in the wake of other superior titles. Playing *Circuit Racer* after rocking through *Moto Racer* is like graduating to a scythe after using a riding mower.

With a name like "Lucky Horse," there's no way this car can lose.

For starters, the graphics throughout the game are duller than dishwater, suffering from repetitive textures, drab colors, and mostly flat-shaded, boxy-looking cars. You can choose from six cars per race (three manual and three automatic), but darned if they don't all handle pretty much the same. There are subtle variations depending on the type of car you're driving — the F1 requires more delicate handling, while the stock cars allow you to perform powerslides. Unfortunately, the control for both vehicles is simply uninspired, not to mention lacking in the realism department. Scraping into another car just slows you down, and piling into a wall results in a tiny jerk, not the flaming pile of twisted metal you'd expect.

There is an abundance of tracks to race on (none of which are car-specific), though few of them are going to win any design awards. Trackside details are sparse, and the backgrounds look like something from *OutRun*. Each track has a different musical theme, but you'll be tempted to turn off the music after experiencing the out-of-tune saxophones and cheeseball organ solos. Oh, yeah — since it's a two-year-old game, you can count out Internet play, a split-screen mode, or 3D card support.

So is *Circuit Racer* worth even a mere twenty bucks? Though the sense of speed isn't all that convincing, it runs at a good clip on the old 486/66 in low-res VGA, so you might want to give this a look if your system isn't quite qualified to handle all that Direct3D stuff. If you have an older system and want a half-assed *Daytona* or *F1* clone, go for it — but for gamers serious about their racing, *Circuit Racer* lacks any spark to keep you playing. Even crummy arcade racing games can be fun, just because you're sitting in an actual cockpit with a force-feedback steering wheel and big-ass screen. However, without all those toys on a normal PC, mediocre won't cut it. Take the twenty bucks and blow it on *Super GT* instead.

— *Colin Williamson*

PC GAMER FINAL VERDICT

58%

HIGHS: Runs on low-end systems; only takes up 7MB.

LOWS: Blah, circa-1995 graphics; no convincing sense of speed; unrefined gameplay.

BOTTOM LINE: You can do a lot better than this — unless you have an older system, there are no reasons to bother.

Discovery CHANNEL MULTIMEDIA

Thousands of eyes are watching your every move. The next one could be your last.

PLANET EXPLORER

BYZANTINE

THE BETRAYAL

You step off the plane in Turkey
and are thrown into a murderous conspiracy.
Decipher the clues. Solve the mystery.
Or pay with your life.

www.planetexplorer.com

Receive a $10 rebate in the mail when you buy this game.

Journey into a corrupt world that stretches from the ancient past to worlds of virtual reality.

Delve into 6 CDs featuring 45 minutes of exotic video shot on location in Turkey.

Immerse yourself in 360° photographic environments that bring Istanbul to life.

STORMFRONT STUDIOS

KIDS TO ADULTS ESRB

MMX

Intel Inside APPLICATE PARTNERSHIP

Available on Windows® 95.

UNITED CONNECTION

United Connection® Travel Planning Software is included in every game. Purchase a United flight online by April 30, 1998, and receive a $25 Travel Certificate on your next United flight of $200 or more. Some restrictions may apply.

©1997 Discovery Communications, Inc. All rights reserved. All other trademarks are the property of their respective companies.

Product Information Number 121

Machine Hunter

Win95

Category:	Action
Developer:	Eurocom Ent. Software
Publisher:	MGM, 2500 Broadway St., Santa Monica, CA 90404-3061 (800) 586-2021

Required	We Recommend
Windows 95; Double-speed CD-ROM drive; Pentium; 8MB RAM	16MB RAM; Supported sound card; Gamepad

***Machine Hunter* mixes a dash of strategy and puzzling with fast-paced action, and despite a few flaws, delivers a frenzy of fun.**

Despite the puddles of icky goo laying around, the gore factor is pretty low compared to *Quake* or *Duke Nukem 3D*, but the action quotient is pretty high.

Since the arrival of *Doom* and all its offspring, it seems that non-first-person action games have been few and far between, and good ones rarer still. But with its top-down perspective and shoot-'em-up style, *Machine Hunter* offers up a measure of hope on this bleak horizon by reviving the fast and furious button mashing of games like *Alien Breed* and *Loaded* — it even ups the adrenaline level by adding in a few twists of its own.

Like the games it emulates, *Machine Hunter* is painfully lean on story or purpose, but in the shooter world, it doesn't really need either. Though the manual alludes to a story about Mars, renegade robots, and alien influence, the basic gist is the classic "kill or be killed" standby that always seems to do the trick.

Your job, as a gun-toting human, is to scramble around massive multi-story levels shooting bad guys, rescuing hostages, and solving minor puzzles, and the designers have added a clever bit of strategy to the mix that makes it all the more entertaining and interesting. During your battles, you'll encounter a variety of robot enemies. When certain robot enemies are disabled, you can assume their identity by running across their shattered remains. If you happen to get killed during a battle as a robot, you'll simply resume your human form, but you'll lose all that nifty firepower in the process, and, as a result, you'll be eager to find another robot. As you get deeper into the game and encounter a wider variety of these robots, deciding which robot form to take — and how to hang on to it — plays an important part in your success.

***Machine Hunter* offers the player the chance to assume the identities of various enemies.**

For example, if you've acquired a robot that is fast and powerful, and you are taking damage, you'll need to find a power station to heal your robot or risk losing it in your next encounter. If you're caught up in a frantic firefight against multiple enemies (which happens quite a bit), you'll need to be careful not to run into the disabled heap of a weaker robot during a battle. This tiny bit of strategy may not sound like a huge addition to a top-down shooter, but *Machine Hunter* makes it work by challenging the player with large enemy-filled levels, numerous bosses, and tricky puzzling. Yet as much fun as it is, I do have to give *Machine Hunter* a slap upside the head for not including a save feature (password only).

Graphically, the game isn't all that exciting, but it does maintain a varied look throughout the levels, and even has a few some nice touches such as lighting effects, visible damage, and gouraud shading. Unfortunately, there are a few graphics-related problems that make it difficult to get around in the game world. Each level has multi-level sections, but due to the low resolution graphics, there are times when you can't always tell at a glance if something is above or below you. The level design is fairly forgiving in this regard, and you'll rarely get stuck or killed because of a fall off a ledge, but due to the poor sense of depth, expect to do a fair amount of backtracking during the more elaborate levels.

As a fairly direct port from the PlayStation, *Machine Hunter* may not have the 3D acceleration or save features we've come to expect, but it does have a robust array of networking options to give it a life beyond the single-player game. Network, modem, LAN, and Mplayer play are all available (though at the time of this writing, *Machine Hunter* support wasn't ready on Mplayer's free game area) and the robot versus robot dynamic of the single-player game makes for good fun against human opponents.

While I don't expect *Machine Hunter* to single-handedly spawn a new round of action shooters, this strangely addictive title shows that there's still some room for something other than a first-person shooter. For that we should be thankful.

—Todd Vaughn

PC GAMER FINAL VERDICT

HIGHS: Addictive action. Unique strategy makes for varied gameplay

LOWS

BOTTOM LINE

72%

Discovery CHANNEL MULTIMEDIA

You've Just Been Gored By A Triceratops.

There Are Two Choices.

Evolve Or Die.

Evolution

THE GAME OF INTELLIGENT LIFE™

evolution.discovery.com

Receive a $10 rebate in the mail when you buy this game.

Play through 360 million years where life evolves at 30,000 years per second.

Challenge up to 5 other opponents as you play across the whole planet.

Control more than 160 creatures as continents collide and break apart.

Available on Windows® 95.

UNITED CONNECTION

United Connection® Travel Planning Software is included in every game. Purchase a United flight online by April 30, 1998, and receive a $25 Travel Certificate on your next United flight of $200 or more. Some restrictions may apply.

©1997 Discovery Communications, Inc. All rights reserved. All other trademarks are the property of their respective companies.

Product Information Number 122

WAR IS HELL.

(ALTHOUGH WITH THE RIGHT GAME, IT'S ALSO SORT OF FUN.)

How do you outgun a great game like *Robert E. Lee: Civil War General*? With *Civil War Generals II* you can now command Confederate or Union Armies. And you can put yourself in the boots of Lee, Grant, or Sherman as you attempt to rewrite history.

Civil War Generals II comes combat-ready with 40 legendary battles from both the Eastern and Western theatres. But if you want to wage your own wars, use the map editor to create terrain, armies, and commanders. Then go online to test your cunning in head-to-head battles.

This war isn't just hell. It's history. And you'll experience it as never before with an insightful new collection of Mort Künstler paintings and all-new multimedia mini-documentaries on the men, weapons, and tactics of the Civil War.

SIERRA®
Impressions
www.Sierra.com

FROM THE CREATORS OF ROBERT E. LEE: CIVIL WAR GENERAL

Product Information Number 320

Dark Colony

Win95

Category: Real-time strategy

Developer: Gametek, Inc.

Publisher: SSI, 657 Almanor Ave., Suite 201, Sunnyvale, CA 94086-2901 (800) 601-7529

Required	We Recommend
Windows 95; Double-speed CD-ROM drive; Pentium 90; 16MB RAM; Mouse; 1MB Super VGA video card	Quad-speed CD-ROM drive; Pentium 120; Supported sound card

The latest entry into the real-time strategy genre is lean on originality but manages to deliver a solid gaming experience.

Ever since the enormous success of Westwood's Command and Conquer lineup and Blizzard's WarCraft series, gamers have been bracing themselves for the inevitable flood of real-time strategy games. Judging by the hype-o-meter, it would seem that that time has arrived. Overall, this isn't a bad thing. If done right, real-time strategy games offer great potential for fun, they're usually multi-player, and pretty darn good even if you don't have a human opponent. If done poorly, however, gamers may begin to lose interest in the genre as a whole. We can't expect every new offering to be totally original, so let's hope that the me-too games coming to market will, at least, show an understanding of what makes *C&C: Red Alert* and *WarCraft II* great.

Dark Colony may not be original, but it adheres to the tried-and-tested real-time formula with success. Other than the graphics — which are quite nice by the way — there's little in the way of innovation. From start to finish, *Dark Colony* upholds the standard "build up your base, mine some resources, crank out some units, improve buildings, upgrade troops, and blow away the enemy" theme that has been defined by *WarCraft* or *C&C* (geez, there are those two games again).

If I seem to keep mentioning *WarCraft* and *C&C*, it's because each facet of *Dark Colony*'s gameplay seems plucked from one game or the other. I apologize to anyone not familiar with them, but hey, crawl out from that rock you've been hiding under and play these two genre-defining, modern-day-classics, you'll be a better person for it. Now, back to *Dark Colony*.

The only discernible difference between *Dark Colony* and, ahem, the aforementioned classics, is its futuristic theme. Set on Mars, *Dark Colony* pits a small human outpost against an alien race known as the Taar in a struggle for control of the planet's resources. The Taar resemble the big-eyed "Grays" that are always being described by alien abductees, and if they defeat the human outpost, their next stop is Earth itself.

You get to play as either the Humans or the Taar. Each side has an almost identical array of units and weapons, the only difference being the graphic representations. The Humans have a more machine-like quality to their units, with powered suits, rockets, mortars, bullets, and even napalm as their weapons. On the other hand, the Taar units are more organic in nature and even heavy weapons bleed when being attacked, a nice touch.

The fact that each side is equally armed does make for very balanced gameplay, but as *WarCraft* and *C&C* prove (oops, there are those games again), each side doesn't have to have

The Taar base, as with all Taar units, is organic and can be seen bleeding after taking damage from Human units.

Nighttime is the Taar's favorite time to attack, while Humans favor the daytime because of their outstanding vision capabilities.

Dark Colony's Key Units

You can't just crank out a single type of unit to overwhelm your opponent. A good mix of units is needed for a balanced attack, otherwise you're very vulnerable to air or artillery attacks. Here's a list of the key units you'll need.

These are mines, and are very important at guarding any bridge crossing. They'll destroy or seriously weaken any enemy headed your way.

These are tough missile batteries that dish out serious damage and can take quite a pounding as well. The only drawback is that once they're in place, they can't be moved.

These units are needed to mine the precious Petra-7 resource.

These are very powerful ground assault units. Get a load of these before going on any attack.

These are long range artillery units, poorly armored and slow, but pack a wallop and are the only thing that can safely take out missile batteries.

These grunts of each army are needed early on to guard against air strikes and scouting units.

These scout units are vital at finding new Petra-7 vents. They're also good at attacking unsupported artillery.

The most versatile of any unit, these guys can fire at a distance, call in support units, and even inspire your troops.

identical units for a fun matchup. Slight differences in troop types could've made for a much more varied and interesting array of scenarios. Unfortunately, the designers took the safe route, and in *Dark Colony*, the only difference the Humans and Taar have is that the Taar are better night fighters and Humans better daylight fighters, mainly because of vision and a resulting range and accuracy bonus.

When the right units are on the field, either side can call in help from a dropship on a limited basis.

One of the few unique aspects within the game is the addition of artifacts left behind by an ancient Martian race. These artifacts come in the form of deadly new weapons or items that may enhance the skills of your troops. They are always worth going after, as they could tip the balance of power in an otherwise even match-up.

Each side has to mine a resource called Petra-7, which erupts from vents in the ground, to gain enough money to buy the units, buildings, and upgrades needed to win. Taking control of these vents is probably the most challenging aspect in the game as the computer relentlessly goes after your mining vehicles, which requires you to devote a lot of attention to your resource supply.

In the campaigns, the Petra-7 vents give out after a while, but in single or multi-player games, the vents can be set to regenerate. The gentle difficulty curve of the campaigns offers a good way of easing into the gameplay, and also teaches you how to use the invaluable S.A.R.G.E. unit, which is not only tough, but can attack from a good distance, has very good vision, can inspire your troops, and is the only unit capable of calling in a dropship to bring down some extra help.

But despite the addition of a few new ideas (artifacts, command units), *Dark Colony*'s gameplay will seem eerily familiar to fans of *WarCraft* or *Command & Conquer*, never really defining itself as anything but a clone.

Probably the best things *Dark Colony* has going for it are its graphics and the simplicity in game design. Anyone whose ever played a real-time strategy game will find it very easy to jump into. And even without a great deal of originality, *Dark Colony* still offers an enjoyable encounter with the "Grays." The campaign mode for either side is quite good, and even when you learn the finer points, the computer AI is no pushover. The interface is well implemented, so you won't find it complicated or frustrating. There's a good deal of fun to be had — just don't expect the same kind of following enjoyed by *WarCraft* and *C&C*.

— Joseph Novicki

Those familiar "Grays" make up the basis of the Taar force.

PC GAMER FINAL VERDICT

79%

HIGHS: Good graphics and mix of units; the chance to play the "Grays."

LOWS: Not too original; almost identical units for both sides. Simple AI.

BOTTOM LINE: Even though it doesn't improve on the real-time strategy genre, it's an enjoyable sci-fi romp with a good campaign mode.

INSANE

[3D CAR COMBAT]

Smashing into Stores This November!

The most twisted driving and shooting game ever created just packed its bags and hit the road — Paris, New York, Hong Kong, Antarctica, and beyond. With eight new levels in all, hidden areas, world landmarks to destroy, new weapons and killer combo-attacks — it's a whole new world to blow away! A monster hit for the PlayStation™ game console, Twisted Metal 2 for Windows® 95 is a direct port with a network play option that allows you to annihilate up to 8 friends in a single match. Also compatible with all Direct3D video accelerators.

TEEN T ESRB

PC CD ROM

Get ready. Get twisted. Drive Angry.

Sony Interactive Studios America
PlayStation is a trademark of Sony Computer Entertainment Inc. Twisted Metal and Drive Angry are trademarks of Sony Computer Entertainment America Inc. Windows 95 and Microsoft are registered trademarks of Microsoft Corporation.
©1997 Sony Computer Entertainment America Inc.

TWISTED METAL 2™

Product Information Number 323

Time Warriors

Category: Fighting Game

Developer: Silmaris

Publisher: Malofilm Interactive, 3575 St-Laurent St., Ste 650, Montreal, Canada H2X 2T7 (514) 844-4555

Required	We Recommend
Double-speed CD-ROM drive; Pentium; 8MB RAM; SVGA	Pentium 133; 16MB RAM; Supported sound card

Another combatant goes to the mat in the heated beat 'em-up genre as the Village People of fighting games.

With the glut of console 3D fighting games, PC owners have been seeing a lot of "me-too" attempts to cash in on the craze, but success in the genre has been rare. While *Virtua Fighter PC* was an example on how to do a good 3D fighter, shoddy titles like *FX Fighter Turbo*, *Catfight*, and *Battle Arena Toshinden* quickly wound up in the bargain bin. Soon to join them is the dismal *Time Warriors*, a title that had a little going for it, but blew its big chance by neglecting a thing called gameplay.

In *Time Warriors*, gladiators from different historical eras have paid their five bucks to enter one of those ridiculous tournaments where the goal is to hack-and-slash their way up to the final boss. Like every other fighting game created, the cast of *Time Warriors* is designed to be a diverse and well-rounded lot, but in reality they're pretty goofy, with chicken-legged vikings and short martial arts experts with questionable names like Dong and Yrrwin. Each character carries a large weapon, and is equipped with one or two special moves, plus magic moves that can be performed once your power meter charges up. Sounds like your standard one-on-one fighting game — but unfortunately, the gameplay is so atrocious, you'll be taking this one back to the store after your first battle.

The biggest problem *Time Warriors* faces is ridiculously slow animation and sluggish control. Swinging your weapon takes an eternity, and pressing the same button multiple times won't link the previous move with a follow-up slash. You have to wait for your character to complete the swing and move his weapon back into its idle state. Sure, it's more realistic — after all, swinging a six-foot claymore takes a good deal of time — but it sure doesn't work when "twitch" gameplay is what you're going for. Hell, even *Catfight* had more responsive control.

But that's not all. Complementing the jerky control is character animation that's choppier than the plot of an Andy Sidaris movie — there are no motion-captured kinematics here. The movements of your characters are so unnatural that you'll wonder if you're playing a fighting game or watching an old episode of *Thunderbirds*.

Time Warriors just doesn't have the graphical flash that games in this genre require. Though there's little pixelization on the characters, they're nowhere near as detailed or colorful as the *Virtua Fighter* or *Tohshinden* crew, and the only remotely interesting character is the final boss. At least the arenas are fully 3D, so it's halfway entertaining when you knock your opponent off Olof's towering glacier stage, or into the watery pool surrounding Shodan's ring. There's native support for 3Dfx and Mystique, but aside from smoothing out the rough edges, there's very little improvement (save for interesting streaming light effects in the forest stage). Even the spell effects are corndog, with magical fireballs resembling floating playground balls with pixelly sparkles trailing behind.

The aging Dong speaks softly and carries a big stick. Is this Lo Wang's long-lost brother?

There's plenty more evidence that *Time Warriors* is a half-baked fighter — by selecting the default character and using a single attack, I was able to plow through all of the combatants on the normal difficulty setting. The challenge does improve as you move the difficulty setting up a few notches, but, oddly enough, in most instances, it doesn't really make characters more aggressive; instead the artificial intelligence merely relies on defense and flight resulting in long, drawn-out battles as you vainly chase opponents around the ring.

So, does anything save *Time Warriors*? Not really, unless you and someone else have the same masochistic gameplaying tastes and have the uncontrollable urge to play a networked game over IPX or modem. Simply put, before attempting a fighting game, Silmaris should have learned from successful, smooth-playing blunt-weapon brawlers like *Soul Edge* and *Last Bronx*. Ah well, maybe next *Time*.

—Colin Williamson

You'll pay for that sheep joke, laddie! Yrrwin lets out his frustration, attributed to the lack of vowels in his name.

PC GAMER FINAL VERDICT

34%

HIGHS: It's funny to hear the announcer say "Dong Wins."

LOWS: Crap control; bad animation; playing on different difficulty levels doesn't change gameplay that much.

BOTTOM LINE: Buy this if you want to learn how *not* to do a 3D fighter.

BRUTAL

[ALL-TERRAIN RACING]

Blazing into Stores This November!

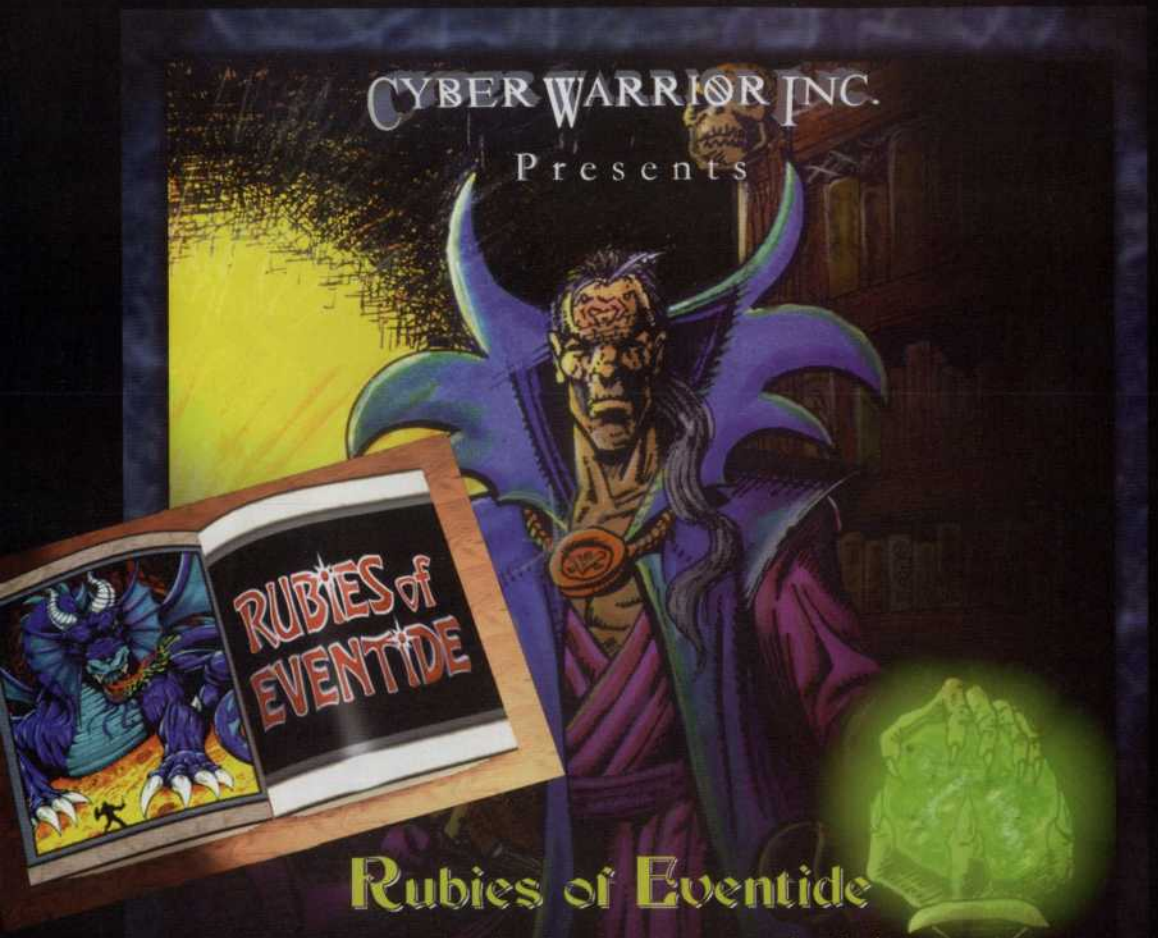
These are the most treacherous motorcraft courses ever created. Test your stomach on a vehicle equal parts motocross bike and rocket as you scream across sun-drenched sea courses, tree-choked bayou swamps, and snow-covered slopes. TruePhysics™ 3D technology brings every whip turn and spin into gut-wrenching reality. A triumph for the PlayStation™ game console, Jet Moto for Windows® 95 features a network play option that enables you to race up to 20 friends simultaneously. Also compatible with all Direct3D video accelerators. Ride it. Feel it. Split some air.

PC CD ROM

Sony Interactive Studios America
PlayStation is trademark of Sony Computer Entertainment Inc. Jet Moto, TruePhysics are of Sony Computer Entertainment America Inc. Windows 95 and Microsoft are registered trademarks of Microsoft Corporation. ©1997 Sony Computer Entertainment America Inc.

Jet Moto

Product Information Number 325



Rubies of Eventide

Massive on-line interactive fantasy role playing game

Over 3 years in development

Advanced, multi-threaded client/server architecture

Playable over the Internet

State of the art visuals utilizing Windows 95 & DirectX technologies

Over 200 player/character combinations . . . 7 races, 16 classes, 2 genders

Experience an infinite number of encounters in a growing game environment

An abundance of items, hundreds of spells, 7 spell schools

Over 300 sound effects; 125 separate musical scores

Thousands of high quality illustrations in a richly detailed 3D environment

Call

1-800-Play-CWI

for information on membership and pricing.

www.rubiesofeventide.com

Product Information Number 117

Lose Your Marbles

Win95

PC GAMER EDITORS' CHOICE

Category:	Puzzle
Developer:	SegaSoft
Publisher:	SegaSoft, 150 Shoreline Drive, Redwood City, CA 94065 (888) SEGASOFT

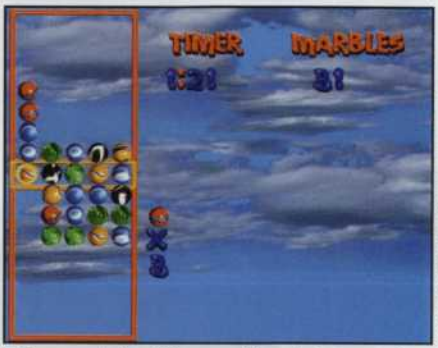
Required	We Recommend
Windows 95; CD-ROM drive; Pentium; 8MB RAM; 1MB SVGA	Double-speed CD-ROM drive; 16MB RAM; Supported sound card

Losing your marbles has never been so fun thanks to this addictive and original puzzle game.

We've said it before, and we'll say it again: *Tetris* is the king of puzzle games. Never before and never since has a game caught on like *Tetris* did back in the late 1980s; it is, quite simply, the best puzzle game to date.

Now SegaSoft's *Lose Your Marbles* is trying to knock *Tetris* from the throne, and we'll tell you right up front — it comes pretty darn close. So close, in fact, that SegaSoft has issued a big, bright sticker on the *Lose Your Marbles* box that proclaims, "Better than *Tetris* or your money back!" It's a bold statement, but once you play *Lose Your Marbles*, you're not going to want to return it — whether you think it's better than *Tetris* or not.

Like all good puzzle games, *Lose Your Marbles* has an original concept that is easy to learn but hard to master. You play versus the computer or a friend, and the object of the game is to keep your board clear of marbles while your opponent tries to do the same. When you start a game, marbles are already placed on the board. You must align marbles of the same color in the middle row (called the pitch line), either in groups of three, four, or five, for them to disappear. As you clear marbles you will receive bonuses that effect your opponents by adding marbles to their board, and vice versa. Some of these bonuses can be a real pain. The refugee bonus, for example, dumps stone marbles, which cannot be eliminated, on to your opponent's board. There are five different boards you can play on: dirt, grass, asphalt, concrete, and wood, and the bonus marbles' actions change depending on which board you're playing on. There are three skill levels to choose from; level one is good for when you first begin to play while level three is extremely tough and recommended for expert players only. If you want to practice before starting an actual game, check out the helpful tutorial in the help menu and then do a practice round.



Bonus rounds, in which your goal is to eliminate a certain number of marbles in a certain amount of time, are only available during single-player games.

Multi-player options are limited to two players at one machine or one-on-one over a local-area network. Unfortunately, there are no Internet play options. The configurations for play are limited as well; you can't change the assigned keyboard or mouse configurations. This is fine if you're playing solo, but against a friend on the same machine, the keyboard layout for player one is downright uncomfortable. In single player, you use the arrow keys with your right hand to move rows and the space bar with your left hand to rotate the pitch line. In a multi-player game, one player has to use A, W, S, and D and the space bar. A gamepad can be used instead, but proves too unwieldy for a game of this type.

When you match and eliminate Refugee Marbles (they're the silver marbles with the cross pattern), stone marbles fall on to your opponent's board. That's bad news for player one because the stone marbles can't be eliminated!

Obviously, *Lose Your Marbles* is a pretty darn good game — it's just as addictive as *Tetris*, and the bright colors, fun sound effects, and happy soundtrack enhance the experience. So, you may be wondering, does it actually top *Tetris* as the packaging claims? That's a hard question. *Tetris* was ground-breaking when it came out in 1984; it has sold more than 40 million copies worldwide, and has withstood the test of time. It's a classic that gamers are still playing today. Does *Lose Your Marbles* have that potential? Maybe — it certainly has all the right ingredients, but only time will tell. Until then, you'll have a blast playing *Lose Your Marbles*.

— *Lisa H. Renninger*

PC GAMER FINAL VERDICT

88%

HIGHS: Highly addictive gameplay; original concept; good graphics and sound effects.

LOWS: Awkward keyboard configurations for multi-player games; no Internet mode.

BOTTOM LINE: Good clean fun that hooks you from the very start.

®, ™ & © 1997 Lucasfilm Ltd. All Rights Reserved. Used Under Authorization.
Star Wars, Dark Forces and the LucasArts logos are registered trademarks,
and Jedi Knight is a trademark of Lucasfilm Ltd.

INTRODUCING THE FIRST GAME YOU CAN PLAY WITH THIS JOYSTICK.

THE LIGHTSABER. THE ELEGANT WEAPON OF THE *STAR WARS*® SAGA. NEVER BEFORE HAS ANYONE BUT A JEDI KNIGHT BEEN WORTHY OF CARRYING ONE. UNTIL NOW.

STAR WARS® JEDI KNIGHT™
DARK FORCES® II

JEDI KNIGHT™: DARK FORCES® II CONFRONTS YOU WITH THE JOYS OF JEDI KNIGHTHOOD. THERE'S COMBAT. MORE COMBAT. (DID WE MENTION COMBAT?) YOU LIVE LIFE AS A MARKED JEDI. INTERGALACTIC ASSASSINS ABOUND ON TWENTY-ONE 3-D LEVELS, EACH WITH THE SINGULAR INTENT OF PUTTING "I KILLED A JEDI" ON THEIR RESUMÉS. BOSSK, GORC, JEREC - EACH EVIL ENEMY YOU FACE WANTS YOUR JEDI SKULL ON A STICK. AND THERE'S DEFINITELY NO JOY IN THAT.

www.lucasarts.com

play it on zone.com

THE OFFICIAL STAR WARS® WEBSITE:
www.starwars.com

™ & © 1997 Lucasfilm Ltd. All Rights Reserved. Used Under Authorization. Star Wars, Dark Forces, and the Lucasarts logos are registered trademarks, and Jedi Knight is a trademark of Lucasfilm Ltd.

Pandemonium

Win95

Category:	Action
Developer:	Crystal Dynamics
Publisher:	Crystal Dynamics, 2460 Embarcadero Way, Palo Alto, CA 94303 (800) 262-7668

Required	We Recommend
Win95; 2x CD-ROM drive; P100; 16MB RAM; Super VGA with 2MB	P166; Voodoo Graphics accelerator; Supported sound card; Gamepad

Pandemonium delivers side-scrolling action with a 3D twist, but frustration awaits for all who enter.

Say what you will about side-scrolling action games, but one thing is certain, it doesn't look like they're going to go away anytime soon. Though the basic concepts of the genre remain in a state of arrested development, the games keep coming, and for whatever reason, we keep playing them.

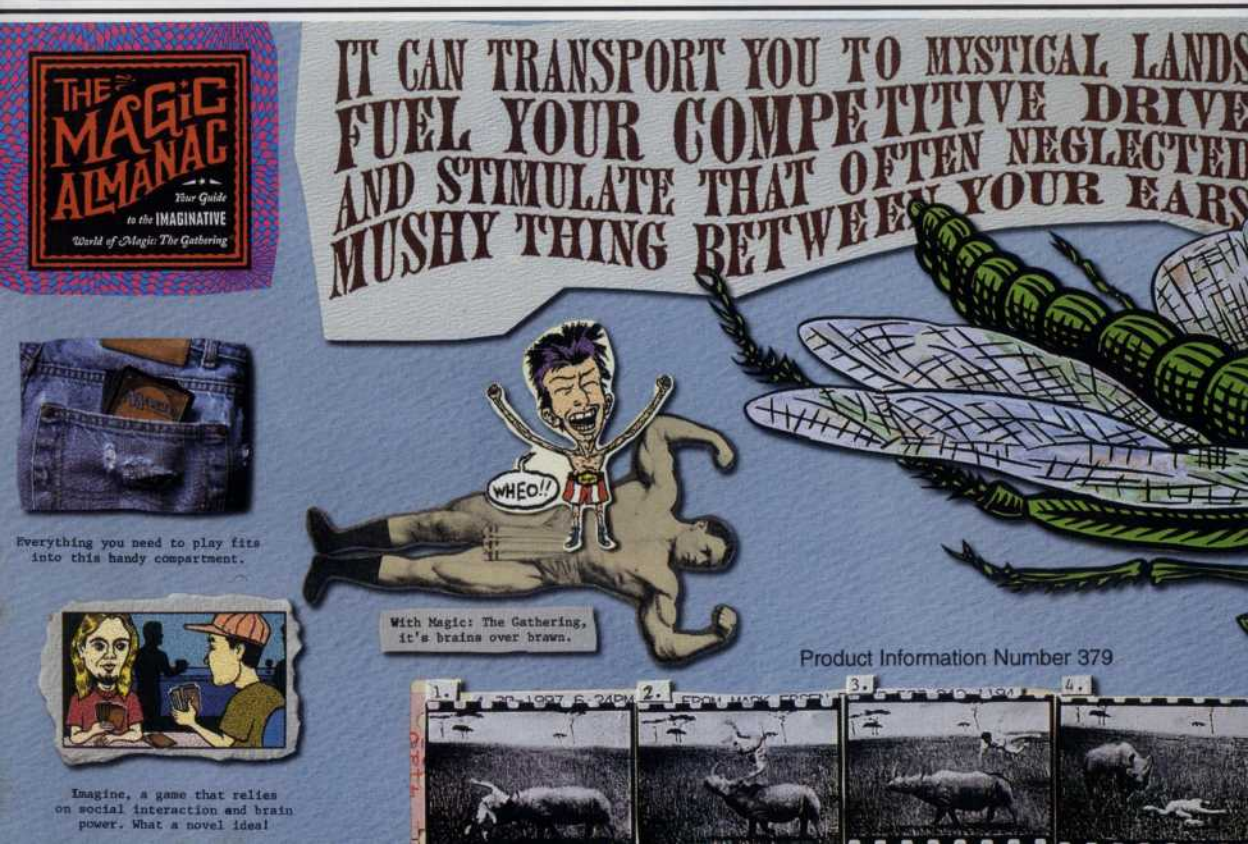
I'll be the first to admit that I enjoy a good side-scroller — *The Earthworm Jim 1 & 2 Collection* has earned an honored place on my home system's hard drive alongside *Quake* and *X-COM* — so when I cracked open Crystal Dynamics' *Pandemonium* for review, I was hopeful that this would be one that I could add to my collection.

Yet after several days worth of frustration, expletives, and manic button mashing, I can safely say that *Pandemonium*'s longevity will be measured by the amount of time it will take for it be uninstalled from my hard drive. This is an unforgivingly frustrating and repetitive game that relies solely on the player's gullibility to see it through to the end. And the worst part is, most of the frustration I experienced could have easily been avoided.

This is unfortunate, since this port from the PlayStation has a lot going for it. Instead of the bland 2D graphics and low-tech animations that typify the genre, *Pandemonium* uses 3D polygonal characters and objects to give the environment a fresh look, while a fairly intelligent camera system reveals the depth and splendor of the world with dramatic and fluid transitions. The control is simple and sharp, and when coupled with a 3Dfx-based accelerator, *Pandemonium* looks like a champ. But in the gameplay department, it comes up short of the mark, with some minor design flaws that ultimately become major headaches.

***Pandemonium* has a sophisticated feel due to its 3D characters and objects.**

At the start of the game, you have a choice of one of two player characters, and as you move through the game, you'll jump around levels avoiding hazards, creatures, and traps, while collecting treasure, keys, and power-ups in standard side-scrolling fashion. Instead of the gritty shoot-'em-up style of *Blackthorne* or *Flashback*,



Throughout the levels, you'll have to learn to use the environment to your advantage. High pressure geysers can propel you up into the stratosphere.

Pandemonium takes a less violent route where dangers such as hopping mushrooms and menacing snails are dealt a fatal blow simply by jumping on their heads. Additionally, both characters can use a variety of magical spells (though you can only carry one spell at a time) to dispatch their enemies.

In the world of game heroes, *Pandemonium*'s heroes are some of the frailest weaklings you'll ever see. Both characters have only two hit points each and nearly everything you touch is lethal. Touch a stalactite, lose a hit point, bump into a plant, lose a hit point, etc. And if you've struggled to obtain a spell, you'll lose that ability if you take any damage. Ordinarily, this could be seen as a way to challenge the player to do well and not get hurt, but when you take into account the size and complexity of the levels and the use of a silly post-level password system, things get ugly very quickly.

The ability to save a game in progress is something PC owners have come to expect as a standard feature (I shudder to think of all those poor PlayStation owners who had to repeat sections of *Tomb Raider* because of a slight misstep) and rightly so. It eliminates the tiresome necessity of backtracking.

But thanks to the unfriendly password system, what should be considered good fun becomes a test of patience. Some levels are so interminably large that it takes several passes just to figure out what is going on. In order to successfully move on to the next stage, you'll have to exhaust whatever precious few lives you've carried over from the previous level to cautiously explore each and every nook and cranny, just so you can memorize where the enemies and bonuses are hidden. Once you've learned a level, your work is far from over, since you'll have to attempt to complete the level without losing a life, just so you can start the process all over again on the next stage. The level designs are simply too intricate and time consuming to enjoy.

While many of these complaints can be applied to almost any side-scroller, *Pandemonium* seems to excel at making them all the more intolerable. A save feature and a few more hit points could easily rectify the situation, but as it is, you'll want to take a pass on *Pandemonium*.

—*Todd Vaughn*

PC GAMER FINAL VERDICT

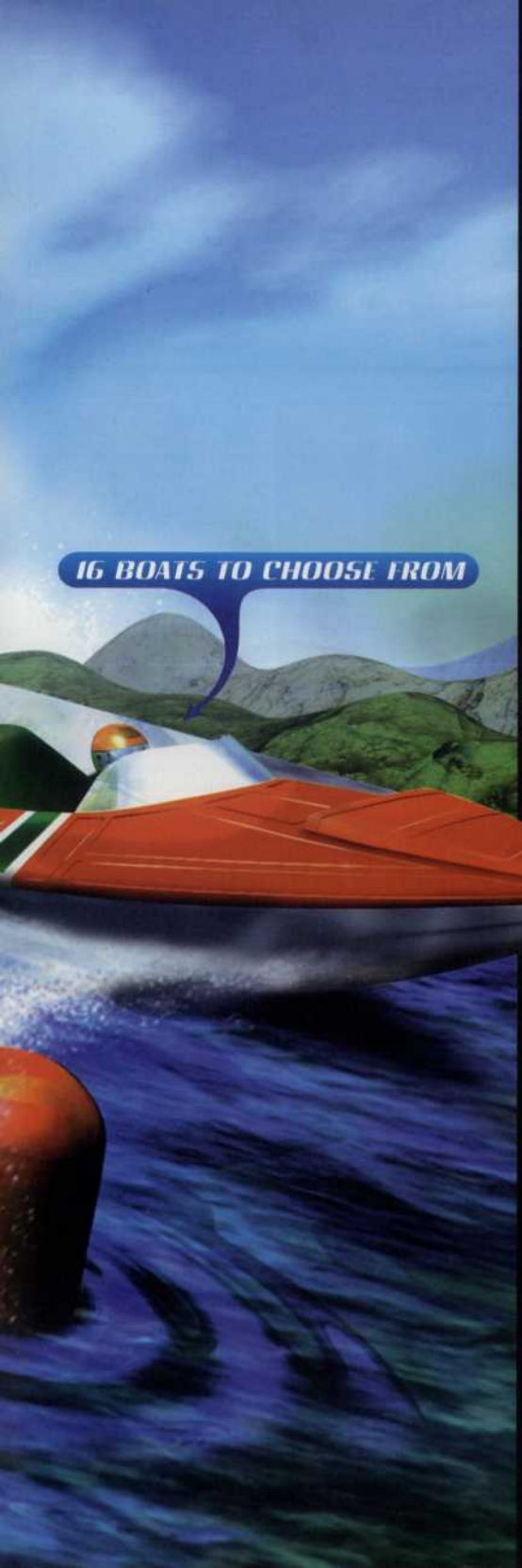
58%

HIGHS: Attractive graphics, 3Dfx support, and large game world.

LOWS: With a few exceptions, *Pandemonium* is full of repetitive, uninventive side-scrolling gameplay.

BOTTOM LINE: Even the most dedicated side-scroller fans will grit their teeth on this one.

VR SPORTS
The Difference Is Real.
DEATH-DEFYING JUMPS
INTERACTIVE ENVIRONMENTS
ADJUST ENGINE TRIM FOR SPEED
REALISTIC WATER PHYSICS CREATE WAKE EFFECTS
SO REAL ... YOU'LL WET YOURSELF.

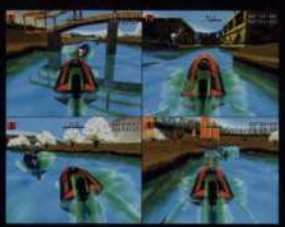


VR SPORTS POWERBOAT Racing™

Strap in and throttle up as you whip through the most realistic and immersive powerboat racing game ever made. Jump over roadways and through passing convoys or speed between oil tankers before they close off the track and turn your boat to splinters. Find a shortcut and take the lead, or better yet, secure your victory and force your opponent into a river barge at 200 miles per hour.

Check out the tunnels but don't get too friendly with the walls.

See the sights in New York, but watch out for the cabs!



Split your screen 4 ways and play 3 friends simultaneously.

Use first-person or third-person "flo-cam" to catch all the action!

- Dive under water, crash through waves and careen off jumps.
- Fully interactive 3D environments that continually change during races.
- Race computer opponents or compete with up to eight networked players.
- Eight super-intense racetracks from around the world to tear through.
- Can't find a worthy opponent? Race your "ghost" using your own best time.

Available January '98!

16815 Von Karman Avenue
Irvine, CA 92606
www.vrsports.com

VR SPORTS

KIDS TO ADULTS
K-A
CONTENT RATED BY ESRB

PlayStation

Designed for Microsoft Windows 95

© 1997 Interplay Productions. All Rights Reserved. PowerBoat Racing, VR Sports logo, The Difference is Real, and Interplay are trademarks of Interplay Productions. Published and distributed by Interplay Production. All other trademarks are properties of their respective owners. All Rights Reserved.

Product Information Number 186

Crush! Deluxe

Win95

Category: Strategy

Developer: Stone Jackal Studios

Publisher: MegaMedia, 47381 Bayside Parkway, Fremont, CA 94538 (800) MEGAMEDIA

Required	We Recommend
Windows 95; Quad-speed CD-ROM drive; 486/66; 8MB RAM; 30MB hard-drive space; Mouse	Pentium; 16MB RAM; Supported sound card

***Capture the Flag* butts heads with *X-COM* in this turn-based, strategic sports game that can be fun but is mostly baffling.**

Just what is it with game designers taking violent sports and tossing in even more buckets of gore and carnage? We've seen this genre of "extreme sports" before, with *Hyperblade*, *Blood Bowl*, *Brutal Sports Football*, and *League of Pain*. Now, MegaMedia has brought us *Crush! Deluxe*, a sort of *Capture the Flag*-ish turn-based monster mash with scads of the expected unnecessary roughness.

Crush! Deluxe is a turn-based strategy/sports game played from a top-down view of a maze-like arena. Here's how it works: While playing against two other teams full of aliens, your goal is to search the arena for the B.A.L.L. (Biologically Augmented Lower Lifeform), acquire it, and zip back to your goal to score. It's not as easy as it sounds, though — the B.A.L.L. is hidden in one of many dispensers scattered about the playing field, and if you choose the wrong dispenser, you get fried by electricity. Teleporters allow quick escapes from oncoming opponents, and though *Quake*-style telefrags aren't possible, teleporter misfunctions randomly occur, transforming your team member into a pulp of organic matter. One more thing — if you happen to get bodychecked, the B.A.L.L. will go flying in a random direction, scooting around like a greased pig until you manage to grab it.

Whoops! Looks like that dispenser was rigged from the get-go. This guy will be down for a while.

"Take me out the B.A.L.L.-game, take me out to the crowd." Set up your teams and hit the courts.

Ha-do-ken! This poor schlep feels the wrath of the repulsor belt.

The concept may seem suspiciously like that of *Blood Bowl*, but overall, the design reflects a wide variety of influences, integrating elements from turn-based classics like *X-COM*. For example, there's a fair amount of resource management throughout the game where you're allotted a limited amount of funds to buy stuff like heavy armor and booster belts. What makes these toys more interesting is that using them is considered illegal by the game's management. If the referee catches you, you'll be ejected from the proceedings. There are also legitimate skills to acquire with experience points, from a Karma boost to Judo abilities. Another quirky feature is that as you play, your team members can develop personalities that affect their performance, like "Egomaniac" or "Slacker."

Okay, so *Crush! Deluxe* has a ton of variables and almost infinite replay value, but is the dang thing actually any fun? Well, kinda. *Crush! Deluxe* is turn-based instead of real-time, so you get to plan out your strategies in advance (unless you activate the turn timer, which restricts a player's turn to a set number of seconds). The rigged B.A.L.L. dispensers can be real sources of frustration — it's not much fun to have your star player go down within the first minute of the game thanks to an electrical shock from an ill-chosen dispenser. *Crush! Deluxe* is much stronger when it's played against friends, and the disc allows you to spawn two other copies for network play. You can go up against two other teams in the MPlayer free zone, and the turn-based play makes latency only a minor issue.

The biggest problems in *Crush! Deluxe* come from the interface, which can be baffling at times — the icons and buttons are semi-confusing, and mouse clicks sometimes don't register in the setup screens. The game can be mathematically overwhelming, since simple moves such as jumping and checking require pre-allocated action points, and the manual includes a page or two of mathematical formulae by which the game runs. Graphics and animation are bare-bones simple (bordering on embarrassing) and lack any of the definition or "attitude" that give a game personality. There's a lack of smooth scrolling as well, and there are still a few bugs randomly rearing their ugly heads. Last but not least, there are enough typographical errors in the already confusing manual to drive an English teacher to the brink of insanity.

Crush! Deluxe is an average game from a startup garage-band company, but you should probably hold off unless you do a lot of multi-player gaming.

— *Colin Williamson*

PC GAMER FINAL VERDICT

58%

HIGHS: Unique, turn-based style of play; multi-player mode can be entertaining.

LOWS: Bore-o-rama graphics and sound; the higher math can get tedious.

BOTTOM LINE: A mediocre thinking-man's game of blood, sweat, and tears.

Feeling Boxed In By Your PC's Multimedia Capabilities?

It's Time To Upgrade Your PC With Creative!

- SOUND BLASTER®
- PC-DVD™
- SPEAKERS
- GRAPHICS
- MULTIMEDIA KITS

The Hottest Upgrades Create the Coolest PC.™

CREATIVE®

WWW.SOUNDBLASTER.COM

©1997 Creative Technology Ltd. All other brand or product names listed are trademarks or registered trademarks and are property of their respective holders.

Upgrade to Hair-Raising, Heart-Pum

©1997 Creative Technology Ltd. All other brand or product names listed are trademarks or registered trademarks and are property of their respective holders. Sondius® Sound Synthesis made under license from the Board of Trustees of the Leland Stanford Junior University. Sondius® and the Sondius® symbol are trademarks of The Board of Trustees of the Leland Stanford Junior University. This product contains one or more protected programs under international and U.S. copyright laws as unpublished works. They are confidential and proprietary to the Board of Trustees of the Leland Stanford Junior University. Their reproduction or disclosure, in whole or in part, or the production of derivative works therefrom without the express permission of the Board of Trustees of the Leland Stanford Junior University is prohibited. Copyright 1992, 1993, 1994, 1995, 1996 by the Board of Trustees of the Leland Stanford Junior University. All rights reserved.

ping AWE64 Audio.

SOUND BLASTER®
PC-DVD™
SPEAKERS
GRAPHICS CARDS
MULTIMEDIA KITS

"For your listening pleasure... you can't beat this board."
— *Computer Life*

Sound Blaster® Makes Listening to Your PC a Blast!

Step up to the next level in audio fidelity and experience sound so real you can almost touch it. Glass-shattering highs. Thundering lows. Sound that makes your heart pound and your toes tingle. The Sound Blaster® AWE64 line offers incredibly smooth, expressive and realistic audio with 64 voices of Advanced WavEffects™ Synthesis and WaveGuide Technology. You get rich audio with crisp, clear digital output. The onboard memory and SoundFont™ technology enables you to add unique, new sounds or create some of your own. With the top-of-the-line Sound Blaster® AWE64 Gold you can output glorious sound in 20-bit fidelity, just like the pros! So, choose either of these award-winning solutions and receive the superior audio quality, expandability and compatibility you need to meet the most demanding gaming and multimedia tasks. Sound Blaster®—the premier solution for awesome AWE64 PC audio fidelity. For true audio quality and compatibility that can't be matched—Sound Blaster®.

Sound Blaster® AWE64 Value

- 64 voices of Advanced WavEffects™ Synthesis and WaveGuide Technology
- 512k onboard RAM for SoundFont™ samples and 3D Positional Audio
- Accelerates Microsoft® DirectSound™ and DirectSound 3D™
- Designed for today's demanding gaming and multimedia applications

Sound Blaster® AWE64 Gold

- Superior quality, low distortion, 90db analog and 120db digital audio outputs
- 4MB onboard RAM for SoundFont™ samples to experience E-mu 3D Positional Audio
- 64 voices of Advanced WavEffects™ Synthesis and WaveGuide Technology
- Includes S/PDIF output, gold-plated RCA line outs
- The premier solution for audio fidelity

The Hottest Upgrades Create the Coolest PC.™

CREATIVE

WWW.SOUNDBLASTER.COM

Product Information Number 115

the great 64GOLD giveaway
Enter to WIN GOLD! Visit us at: http://gold.soundblaster.com

*Estimated Street Price

For more information, check out our Website at **www.soundblaster.com** or call 1.800.998.5227.

If you don't do SOMETHING...

...SOMETHING will do SOMETHING to you.

Available on Windows® 95. Visit your local retailer or call 1-800-695-GAME day or night (U.S. or Canada).

MICROPROSE
www.microprose.com

You are your own worst enemy in the moody world of Dark Earth. Debris fills the air and your flesh is being attacked by a deadly virus. Poisonous clouds drift and photosynthesis has ceased. Still, it is your mission to uncover a secret history that'll help restore the one thing that can save all of humanity–light. You'll uncover dark murder plots through real-time adventure and control treacherous combat as you interact with greedy and bizarre characters. Your foes envelop the City you protect. Whether you're there or not, they continue to prey upon you as you ponder your next move. But, there is a ray of hope–you simply have to find it. **www.darkearth.com**

Product Information Number 236

Star Trek: Starfleet Academy

Win95

Category: Action/simulation

Developer: Interplay

Publisher: Interplay, 16815 Von Karman Ave., Irvine, CA 92606 (714) 553-6655

Required	We Recommend
Four-speed CD-ROM drive; Pentium 90; 16MB RAM; 180MB free hard-drive space	Pentium 166 or higher; 32MB RAM; Direct3D-compatible accelerator card

Interplay's Star Trek franchise boldly goes into a new genre, but this is hardly where no game has gone before.

It's frustratingly rare that game publishers actually respond to gamers' demands and give them what they want, but here's a product that PC players have been crying out for since time immemorial: a straightforward, fully-loaded simulation of starship command in the Star Trek universe. We've had the chance to command the USS Enterprise before, of course, in MicroProse's Next Generation licenses and Interplay's own *Star Trek: 25th Anniversary* and *Judgment Rites* — but only as a supplementary addition to the core adventure-based gameplay.

Here, finally, is a game that really lets you sit in the Captain's chair, command a bridge crew and do battle with those pesky Klingons and Romulans. Sounds great, huh? Unfortunately, the reality is something of a disappointment.

As the title suggests, you're cast as an aspiring young cadet working his way through Starfleet's elite officer training school in San Francisco. There are around 25 simulated missions to fly, covering all kinds of situations from straight combat to diplomatic, escort, and investigative assignments, in line with the Starfleet training program's goal of preparing its future officers for every eventuality. Between missions, the ongoing story of our chisel-jawed cadet hero and his team of idealistic fellow students is played out in brief FMV episodes, with occasional pauses for gamer interaction — at critical points, it's up to you to decide your alter-ego's course of action and thus affect the direction of the story.

If the above paragraph makes *Starfleet Academy* sound a lot like the Wing Commander games, that's

This view gives you the best Trek-like feel, but the viewscreen is too limited to be effective in combat.

because it is. An awful lot. Actually, this is one of the most blatant clones I've seen, looking all the more copycat for its similarly high production values (obviously Paramount was happy to lend out costumes and props for use in this production, as well as defrosting William Shatner, George Takei, and Walter Koenig to appear in cameo roles).

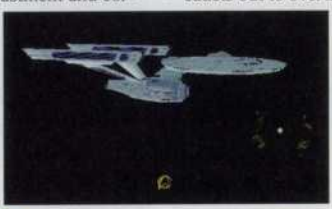
The Wing Commander comparisons run right through the actual space-based gameplay too, and this is what sits most awkwardly. Rightly or wrongly, I've always thought of Star Trek ship-to-ship combat as analagous to tactical submarine warfare — huge, lumbering ships stealthily hunting each other across vast, impenetrable expanses, with brief moments of intense action and panic. Trek's writers obviously had similar ideas — witness the taut, tension-mounting engagements of the Trek movies and many a Next Generation episode. Kirk even alludes to this in one of *Starfleet Academy*'s cinematics, when during a lecture he refers to life in space as "thousands of hours of boredom offset by abject moments of terror."

Contrary to this, once you actually get into a mission, it's largely action all the way, in much the same way as *Wing Commander* or *X-Wing*. In combat, there's very little sensor management, tactical movement, stealth, or imagina-

Yes, it's William Shatner, looking very pleased to still be playing Kirk after the character's death. (No "Bridge on the Captain!" jokes, please!)

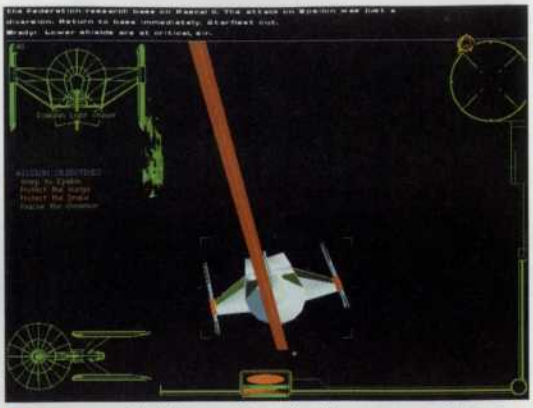
tion required to locate and acquire targets — once you've been fired upon (as a Starfleet officer, of course, you're rarely afforded the luxury of firing first), you and the enemy ship will run rings around each other, dogfighter style, and pound away at each other with phasers and photon torpedoes. Whether or not you agree that this approach to stellar combat is inappropriate for the Star Trek universe, the fact remains that it's not a whole lot of fun.

Aside from arcade dogfighting skill, survival tactics are limited to power and damage management. More power to phasers at the expense of propulsion and shields? Which damaged system should be repaired first? How to get warp engines back on line in time to get the hell out of a hopeless situation? These are the Trek-like questions you'll ask yourself during many a mission — the problem is that you can't, of course, have your orders ("More power to shields!", "Damage report!" etc.) carried out by your crew like in the TV show, so you have to do it all yourself. The interface provides shortcuts so you never have to leave the main viewer, but even so, there are so many ship systems requiring constant adjustment and correction for maximum survivability that keeping tabs on everything while simultaneously piloting the ship becomes a very slippery, panicky affair. It's not a whole lot more complex than the system management in, say, *Wing Commander* or *TIE Fighter*, but just enough that it becomes cumbersome and intrusive. Ironically, I took more hits from enemy vessels while trying to tinker with Damage Control than at any other time.



You're treated to a brief external sequence whenever your ship goes into warp.

It's not all combat — there are truer Trek-like missions that require some diplomacy and original thinking, since the characters you meet out there in these (simulated) scenarios are rarely all that they seem. However, most of this is either handled automatically (For example Sturek, your Vulcan science officer, will often nudge you in the right direction with helpful hints) or blindingly obvious — in a conversation with a testy Klingon, for example, do you adopt a diplomatic or combative approach in order to avoid confrontation? You don't need to be Jean-Luc Picard to figure out which is the correct option.



You can turn off the bridge graphics and go full-screen to get a better view during dogfights.

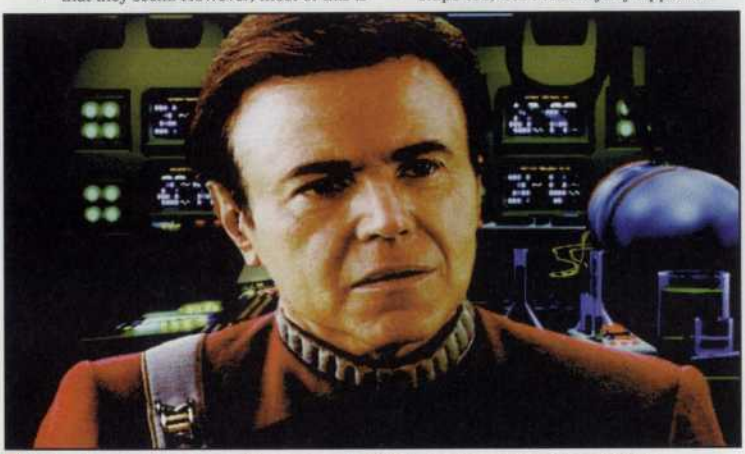
The episodic FMV story provides some consistency between missions, but while the production is glossy, it's difficult to muster much interest in the supposedly intriguing plot (involving an underground group of hardline extremist cadets out to overthrow the Federation — yes, really) when the protagonists are, in the main, stereotypical and poorly-acted. The Kirk, Sulu, and Chekov cameos add some value, but their performances have an apathetic, where's-my-pay-check feel to them.

Interplay has tacked on a multi-player component, but that's just how it feels — tacked on. The network mode offers varying scenarios (dogfight, escort, etc.) for lone ships or teams, as well as a *Privateer*-style mini-game that has you working under contract for a rich space baron, ferrying cargo around the quadrant in the freighter of your choice. It's nice that you get to fly Romulan and Klingon ships too, but I felt majorly ripped off that no matter what kind of craft you choose, you get exactly the same Federation starship bridge graphics. That's just cheap — if you're going to add this stuff, do it properly.

Ultimately, I enjoyed the time I spent with *Starfleet Academy*, but that time was short — less than a week — and I don't feel compelled to pick it up and play it any more. If you want fast-action knife-fighting in space, *TIE Fighter* and *Wing Commander IV* do it better. If you're a Trek fan who's always wanted to "have the conn" of a Federation starship, you'll be disappointed with the approach that Interplay has taken. The game sits awkwardly between too stools, too slow and fiddly to rival the big-name space combat sims, while at the same time too action-oriented and simplistic to make you feel like a real Starfleet captain. We hope Interplay will be back on track with the forthcoming *Secret Of Vulcan Fury*, but in the meantime, this polished and well-intentioned but ultimately misguided effort simply fails to ignite.

— Gary Whitta

A Romulan Warbird comes under fire from your Constitution class vessel — a few more well-placed shots should finish it off.



Chekov is on hand to lend you guidance, complete with his wacky mispronunciation gimmick!

PC GAMER FINAL VERDICT

67%

HIGHS: Lots for Trek fans to like; decent multi-player mode adds longevity.

LOWS: Unsuitable overall approach; uninspired FMV; simplistic combat.

BOTTOM LINE: A promising idea that's inadequately executed — budding Starfleet captains won't find the challenge they crave here.

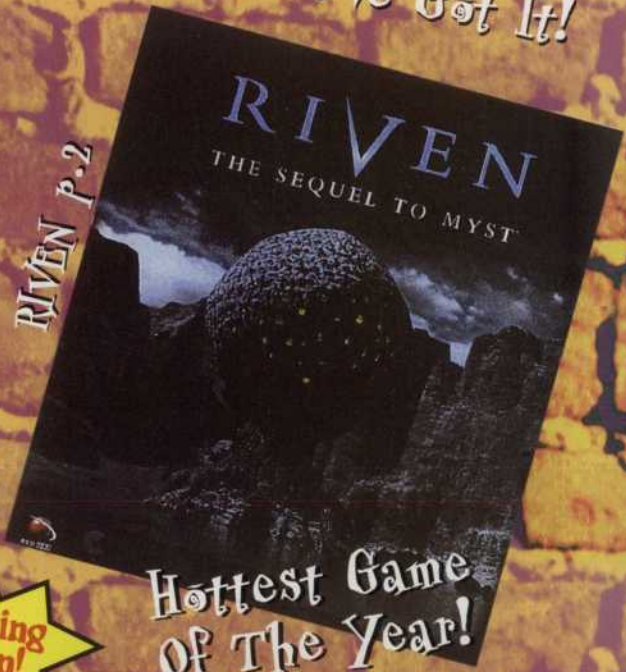
EB

Oct./Nov. 1997 Issue #4

www.ebworld.com

You Want It, We've Got It!

INTENSE 3D VOODOO P.9



RIVEN P.2

Hottest Game Of The Year!

Coming Soon!

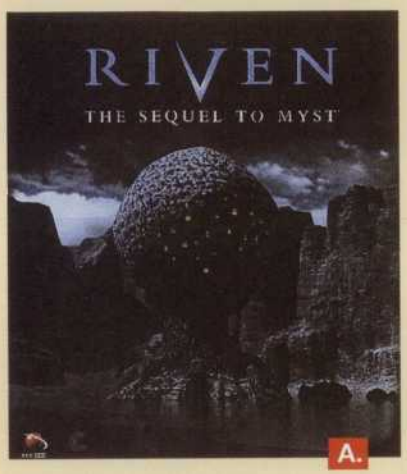
SIDE WINDER FORCE FEEDBACK P.19

Coming Soon!

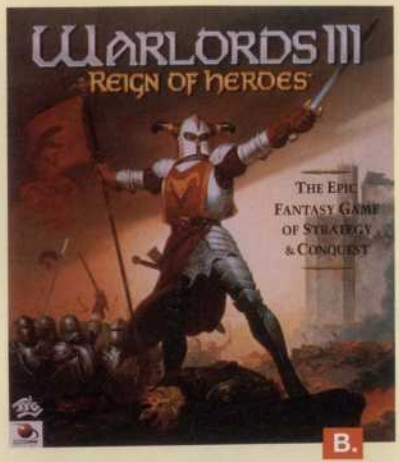
BARNEY HEADQUARTERS!

The BEST Selection Anywhere!

EB CD ROM Entertainment



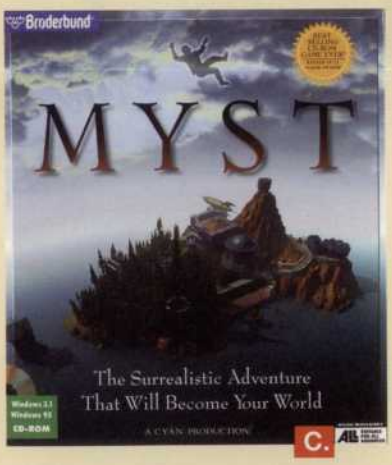
Broderbund
Riven
A. Timeless, unresolved conflicts await you.
WINDOWS 95 CD ROM
$54.99



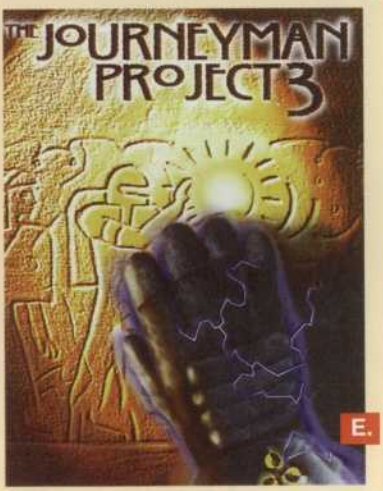
Broderbund
Warlords III
B. An epic game with barbaric heroes set among medieval fantasy.
WINDOWS 95 CD ROM
$49.99

Broderbund
Myst
C. Like a complex novel, a story evolves as more secrets are divulged.
WINDOWS 95 CD ROM
$23.99

Broderbund
Take No Prisoners
D. Explore a nuclear world populated by mutants.
WINDOWS 95 CD ROM
$49.99

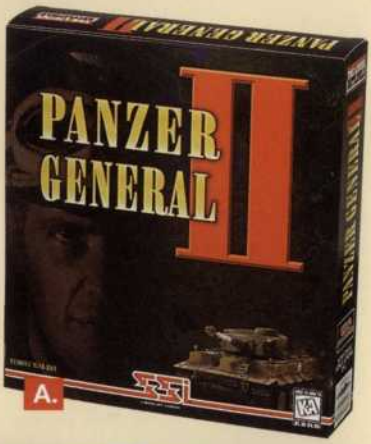


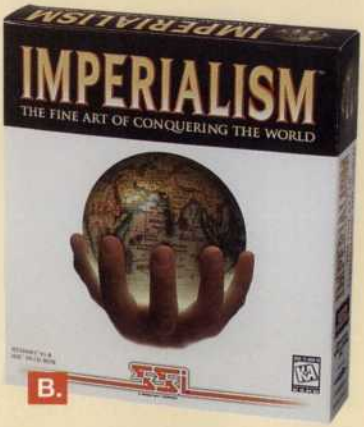
Broderbund
The Journeyman Project 3
E. Investigate a time distortion from deep in the past.
WINDOWS 95 CD ROM
$49.99



electronics boutique® Call 1-800-800-5166 for the store nearest you!

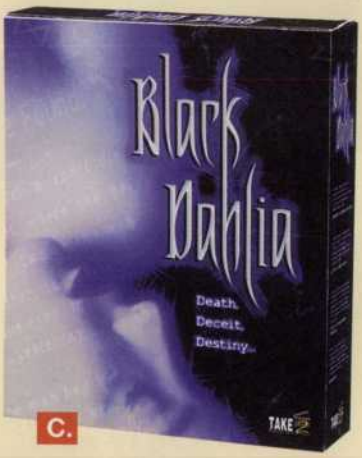
CD ROM Entertainment

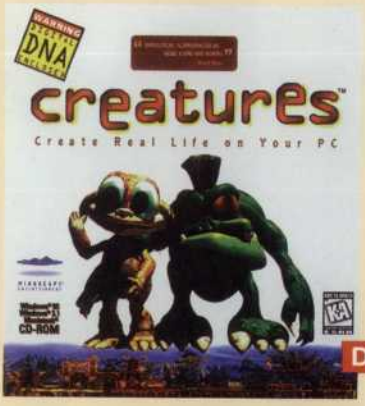




Mindscape
Panzer General II
A. Witness the living battlefield in heightened realism.
WINDOWS 95 CD ROM
$49.99

Mindscape
Imperialism
B. Lead a civilization to world dominance!
WINDOWS 95 CD ROM
$49.99

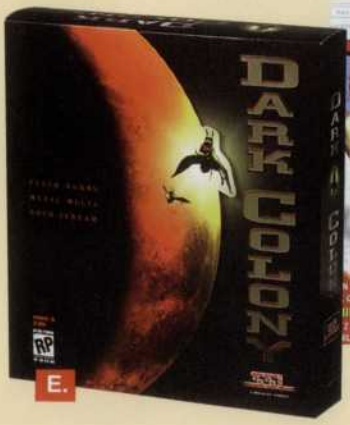




Mindscape
Black Dahlia
C. Its 1941 and the U.S. teeters on the brink of war.
WINDOWS 95 CD ROM
$49.99

Mindscape
Creatures
D. Lovable creatures that live and think on their own.
WINDOWS 95 CD ROM
$39.99

Mindscape
Dark Colony
E. A superior real-time strategy experience.
WINDOWS 95 CD ROM
$49.99

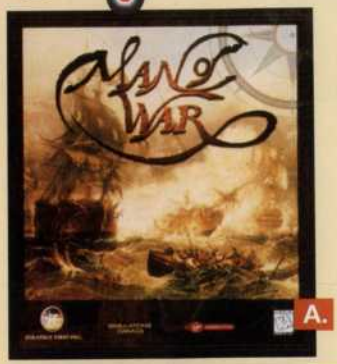


Mindscape
Dogz II
F. New and improved Petz for your PC.
WINDOWS 95 CD ROM
$19.99

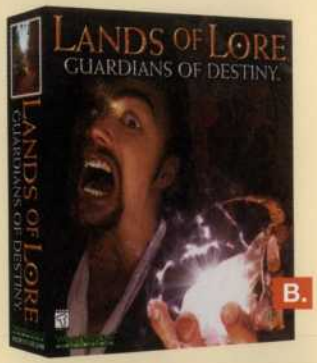
Mindscape
Buccaneer
G. A high seas/land combat set in the 17th century.
WINDOWS 95 CD ROM
$39.99

Where else but on-line! **www.ebworld.com**

EB CD ROM Entertainment

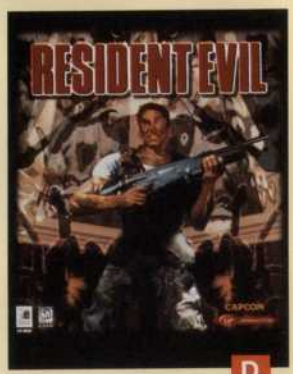


A.



B.

C.



D.

Virgin Interactive
Man of War
A. Take command and change history.
WINDOWS 95 CD ROM
$44.99

Virgin Interactive
Lands of Lore: Guardians Of Destiny
B. An epic adventure filled with majestic beauty.
WINDOWS 95 CD ROM
$54.99

Virgin Interactive
NHL Powerplay '98
C. Check Lemieux and watch out for McSorley.
WINDOWS 95 CD ROM
$37.99

Virgin Interactive
Resident Evil
D. You're dead scared. So face your fear!
WINDOWS 95 CD ROM
$44.99

Eidos Interactive
Tomb Raider II
E. New moves, enemies, and of course the unstoppable Lara Croft.
WINDOWS 95 CD ROM
$54.99

Eidos Interactive
Conquest Earth
F. Blow aliens to pieces and save the earth.
WINDOWS 95 CD ROM
$49.99

Eidos Interactive
Flying Nightmares 2
G. Experience the brutal realities of combat.
WINDOWS 95 CD ROM
$54.99

Eidos Interactive
Deathtrap Dungeon
H. Sixteen levels of fast and furious combat.
WINDOWS 95 CD ROM
$47.99

E.

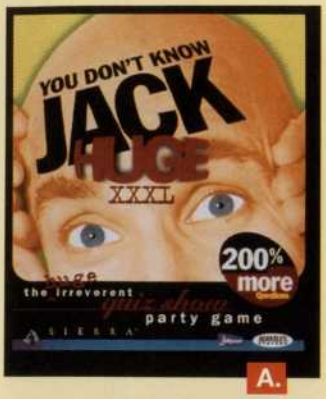
F.

G.

H.

electronics boutique® Call 1-800-800-5166 for the store nearest you!

CD ROM Entertainment

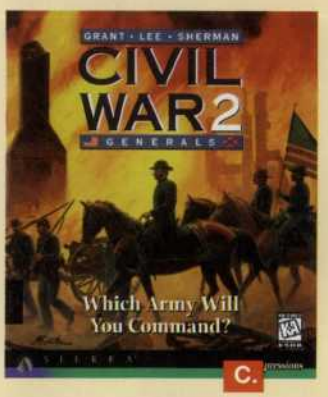


A.

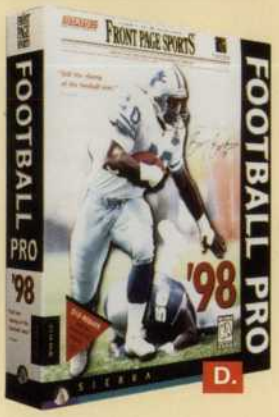
B.

Sierra
Jack Huge XXXL
A. Large and in charge! Test your knowledge against the best.
WINDOWS CD ROM
$39.99

Sierra
Red Baron II
B. World War II started all over again. Unbelievable!
WINDOWS CD ROM
$54.99



C.



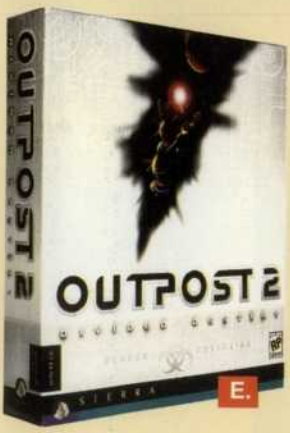
D.

Sierra
Civil War 2 Generals: Grant, Lee, Sherman
C. Command the North or the South and conquer the enemy.
WINDOWS CD ROM
$54.99

Sierra
Front Page Sports Football Pro '98
D. Live gameplay with celebrity commentator and reporting.
WINDOWS 95 CD ROM
$29.99

Sierra
Outpost 2
E. Lead your colony and build your civilization while fending off natural disasters.
WINDOWS CD ROM
$54.99

Sierra
3D Ultra Pinball The Lost Continent
F. Your skills as a pinball wizard will sweep you through this ultimate mystery.
WINDOWS CD ROM
$44.99



E.

F.

G.

Sierra
Birthright
G. You will be commanding heroes, wizards and armies!
WINDOWS CD ROM
$29.99

EB CD ROM Entertainment

A.

B.

DARK REIGN
$10 REBATE
From Our Site!
www.ebworld.com.
See site for details.

Activision
Blood Omen: Legacy of Kain
A. Satisfy your hunger for revenge and your thirst for blood.
WINDOWS 95 CD ROM
$44.99

Activision
Dark Reign
B. Journey into the heart of an empire at war.
WINDOWS 95 CD ROM
$54.99

C.

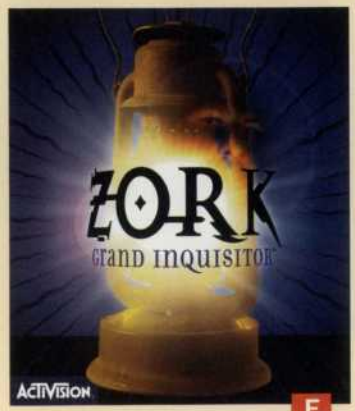
Activision
Hexen II
C. Put an end to the ravenous onslaught.
WINDOWS 95 CD ROM
$59.99

D.

Activision
Heavy Gear
D. Pilot one of sixteen heavy gear war machines.
WINDOWS 95 CD ROM
$59.99

E.

Activision
Quake II
E. The fate of all humanity is in your hands.
WINDOWS 95 CD ROM
$59.99



F.

Activision
Zork Grand Inquisitor
E. Journey back in time to save a crumbling empire.
WINDOWS 95 CD ROM
$54.99

electronics boutique® Call 1-800-800-5166 for the store nearest you!

CD ROM Entertainment

EB

A.

New Low Price! On Duke Nukem 3D and Duke Nukem 3D Atomic!

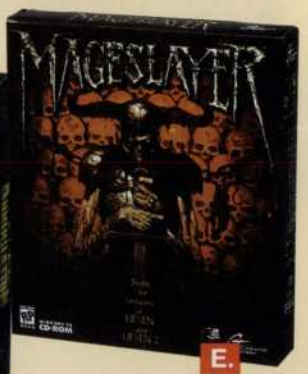
B.

GT Interactive
Duke Nukem 3D: Atomic Edition
A. Powerhouse Jonathan Mendoza provides exclusive information.
WINDOWS 95 CD ROM
$36.99

GT Interactive
Duke Nukem 3D
B. 3D Realms provide you with exclusive information and walkthroughs.
WINDOWS 95 CD ROM
$24.99

C.

D.



E.

GT Interactive
Shadow Warrior
C. Nearly two dozen huge levels of Ninja action.
WINDOWS 95 CD ROM
$54.99

GT Interactive
Total Annihilation
D. Mobilize your forces and experience the new landscape of war!
WINDOWS 95 CD ROM
$54.99

COMING SOON! FOR N64 AND PSX

GT Interactive
Mageslayer
E. Fight your way through fear and madness.
WINDOWS 95 CD ROM
$44.99

F.

GT Interactive
Stealth Reaper 2020
F. Action-oriented, futuristic air combat simulator.
WINDOWS 95 CD ROM
$44.99

G.

GT Interactive
Oddworld
G. See the slig. Be the slig. Sound odd? Welcome to our world.
WINDOWS 95 CD ROM
$54.99

Where else but on-line! **www.ebworld.com**

EB CD ROM Entertainment

A.

B.

Accolade
Legends '98 Football
A. Meet legendary eras in the evolution of pro football.
WINDOWS CD ROM
$39.99

Novalogic
F-22 Raptor
B. The sequel to the best-selling flight combat game.
WINDOWS CD ROM
$49.99

Novalogic
Armored Fist 2
C. Take command of the tank of the future.
WINDOWS CD ROM
$54.99

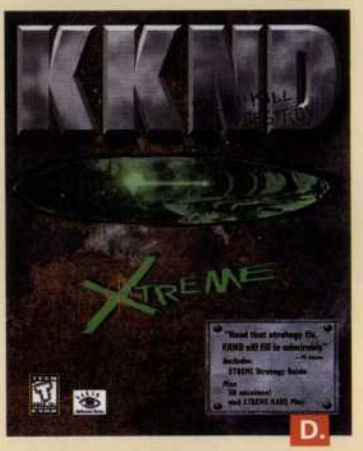
Melborne House
KKND Xtreme
D. One of the best strategy games ever.
WINDOWS CD ROM
$42.99

Anark
Galapagos
E. Adapt and survive in hostile worlds.
WINDOWS/MAC CD ROM
$42.99

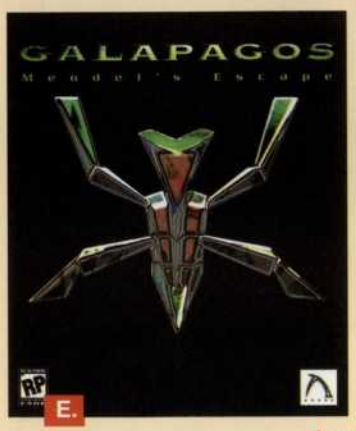
Accolade
Jack Nicklaus 5
F. Play on five exotic golf courses designed by Jack Nicklaus.
WINDOWS CD ROM
$49.99

Accolade
Test Drive 4
G. Feel the rush! This is the ultimate 3D experience.
WINDOWS 95 CD ROM
$49.99

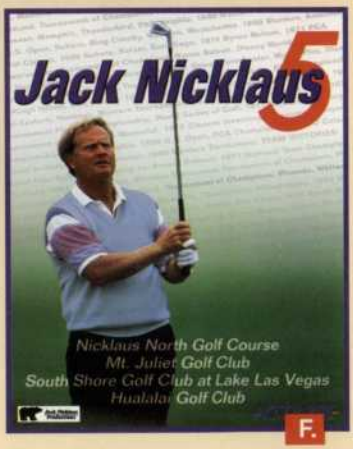
C.



D.



E.



F.

EB EXCLUSIVE FREE BONUS
Car CD with Test Drive 4 in box!
While Supplies Last.

G.

electronics boutique Call 1-800-800-5166 for the store nearest you!

CD ROM Entertainment

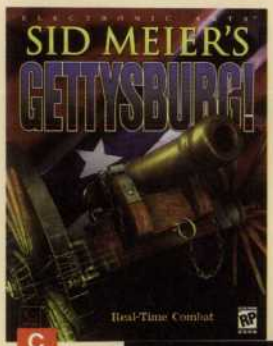
A.

B.

Buy 2 Get One FREE On Any EA Sports Title. Begins Nov. 1st Expires 12/31/97 See store for details.

Electronic Arts
NHL '98
A. Smartest and fastest game ever created.
WINDOWS 95 CD ROM
$49.99

Electronic Arts
Madden '98
B. Includes every NFL player and team!
WINDOWS 95 CD ROM
$49.99

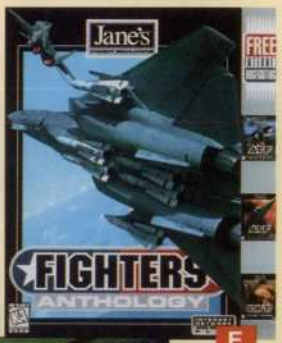


C.

Electronic Arts
Sid Meier's Gettysburg
C. The challenges shift with each victory or loss.
WINDOWS 95 CD ROM
$49.99

D.

Jane's
Longbow 2
D. Recon, destroy and rescue in the ultimate helicopter experience.
WINDOWS 95 CD ROM
$52.99



E.

Jane's
Fighters Anthology
E. Challenging missions and intense dogfights.
WINDOWS 95 CD ROM
$52.99

F.

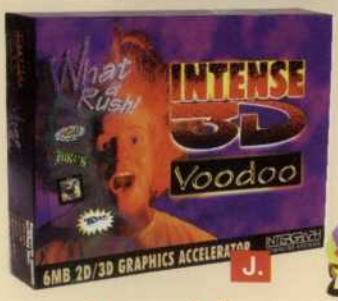
Origin Systems
Wing Commander Prophecy
F. Unequaled visuals and tactical realism.
WINDOWS 95 CD ROM
$49.99

G.

Electronic Arts
Nuclear Strike
G. Stop the war before it goes nuclear!
WINDOWS 95 CD ROM
$47.99

H.

Origin Systems
Ultima Online
H. Explore an ever-changing fantasy world.
WINDOWS 95 CD ROM
$59.99



J.

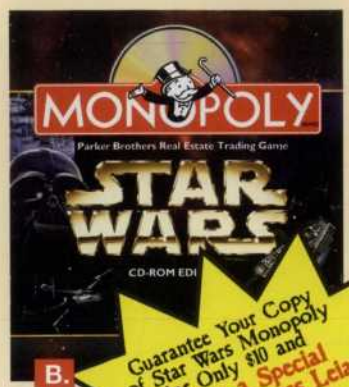
Electronic Arts
Intense 3D Voodoo
J. This is the ultimate PC graphics accelerator.
PC
$219.99

Where else but on-line! **www.ebworld.com**

CD ROM Entertainment

A.

Lucas Arts
Jedi Knight
A. Become a Jedi Knight, Learn to master the Force.
WINDOWS 95 CD ROM
$59.99



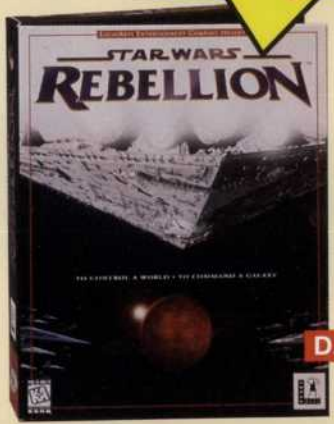
B.

Guarantee Your Copy of Star Wars Monopoly for Only $10 and Receive a Special Edition Princess Leia 'Slave Girl' Figurine Absolutely FREE!

Hasbro Interactive
Monopoly: Star Wars
B. The classic game has been transported to a galaxy far, far away.
WINDOWS CD ROM
$49.99

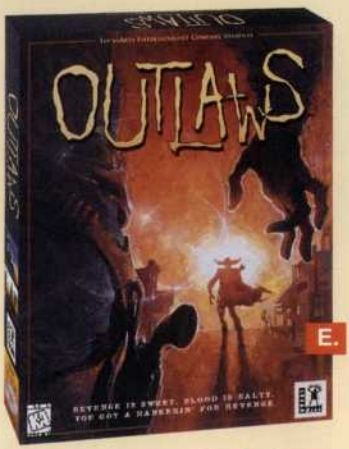
C.

Lucas Arts
Star Wars: Shadows of the Empire
C. Protect Luke from assassination and save Han Solo.
WINDOWS 95 CD ROM
$59.99



D.

Lucas Arts
Star Wars Rebellion
D. Strategize to control a world and command a Star Wars galaxy.
WINDOWS 95 3DFX
$57.99



E.

Lucas Arts
Outlaws
E. Includes a notorious collection of the West's toughest outlaws.
WINDOWS CD ROM
$29.99

F.

Lucas Arts
Lucas Arts Archives Vol. 3
F. Includes Dark Forces, The Dig, Afterlife and more.
WINDOWS 95 CD ROM
$49.99

electronics boutique® Call 1-800-800-5166 for the store nearest you!

CD ROM Entertainment

A.

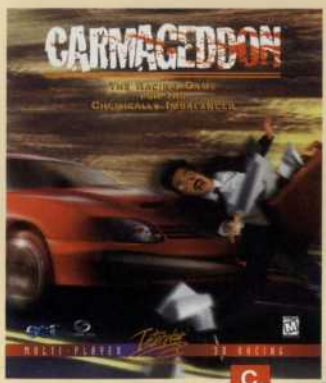
Interplay
Star Fleet Academy
A. Challenge your ingenuity, leadership and courage!
WINDOWS 95 CD ROM
$57.99

B.

Interplay
Fallout
B. Dynamic sophistication and character interaction.
WINDOWS 95 CD ROM
$57.99

D.

Interplay
Atomic Bomberman
D. Deadly power moves and challenging new levels.
WINDOWS CD ROM
$29.99



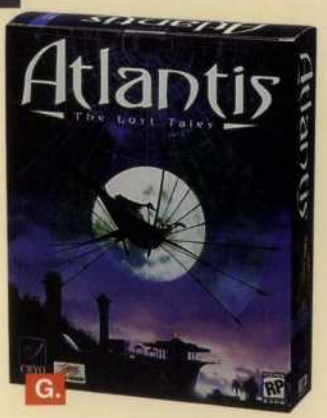
C.

Interplay
Carmageddon
C. Everything you ever wanted from a car game.
WINDOWS CD ROM
$49.99

E.

Interplay
SWIV
E. Fast, furious and ready for high-speed combat!
WINDOWS CD ROM
$29.99

F.



G.

Interplay
VR Baseball '97
F. Play baseball from any position or any angle.
WINDOWS CD ROM
$32.99

H.

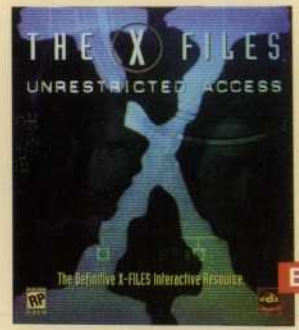
Interplay
Atlantis
G. A thrilling opportunity to explore, a desperate challenge to survive.
WINDOWS CD ROM
$44.99

Interplay
Descent To Undermountain
H. Horrific monsters, dark magic and evil descend.
WINDOWS 95 CD ROM
$49.99

Where else but on-line! **www.ebworld.com**

CD ROM Entertainment

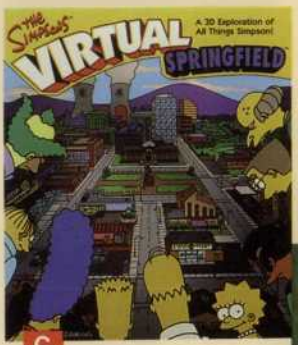
A.



B.

Fox Interactive
Croc
A. Rescue Croc's friends from the grasp of evil.
WINDOWS CD ROM
$49.99

Fox Interactive
The X-Files: Unrestricted Access
B. Tap into the mood and experience of "The X-Files"
WINDOWS CD ROM
$29.99

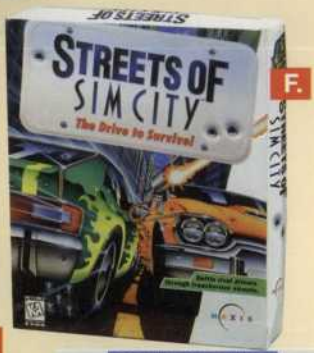


C.

D.

Fox Interactive
The Simpsons Virtual Springfield
C. Run loose in the Simpsons hometown.
WINDOWS/MAC CD ROM
$27.99

E.



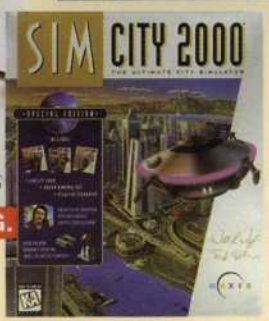
F.

Bungie Software
Myth-The Fallen Lords
D. Get ready for the first 3D real-time strategy game ever created!
WINDOWS 95 CD ROM
$49.99

Bethesda Softworks
Battlespire
E. The ultimate war college and training facility!
WINDOWS 95 CD ROM
$54.99

Maxis
Streets of Sim City
F. Battle through the Streets in this unique combat game.
WINDOWS CD ROM
$49.99

Maxis
Sim 2000/Sim Copter Bundle
G. Soar through 30 built-in cities in hyper-realistic 3-D. Two great games in one!
WINDOWS CD ROM
$54.99



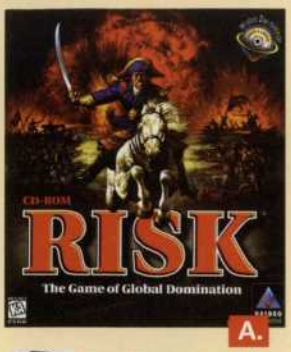
G.

Maxis
My 3 Sims
H. Three award winning games to spark kids' imaginations.
WINDOWS CD ROM
$39.99

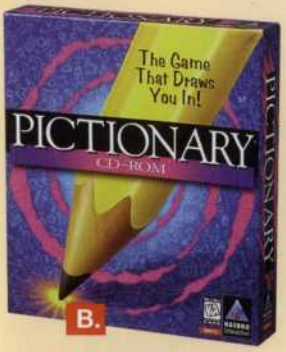
H.

electronics boutique Call 1-800-800-5166 for the store nearest you!

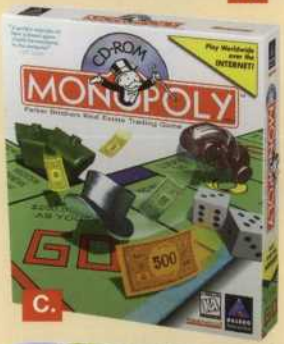
CD ROM Entertainment



A.



B.



C.

D.

E.

F.

Coming Soon! Reserve Your Copy NOW!

J.

G.

Coming Jan. '98

H.

Hasbro Interactive
Risk
A. Cutting edge artificial intelligence and tactics.
WINDOWS CD ROM
$29.99

Hasbro Interactive
Pictionary
B. All you need is a little imagination and a quick wit.
WINDOWS CD ROM
$29.99

Hasbro Interactive
Monopoly
C. Get ready to wheel and deal on a 3D gameboard.
WINDOWS CD ROM
$29.99

Acclaim
Constructor
D. Build a city in the everyday craziness of Big City life.
WINDOWS 95 CD ROM
$47.99

Acclaim
Turok Dinosaur Hunter
E. Hunt razor-toothed raptors with tracking technologies.
WINDOWS 95 CD ROM
$47.99

Access Software
Tex Murphy-Overseer
F. A maddening chase to the core of an evil plot.
DVD/WINDOWS 95 CD ROM
$49.99

3DO Company
Might And Magic VI
G. Explore a world filled with intrigue and deceit.
WINDOWS 95 CD ROM
$54.99

3DO Company
Might And Magic VI Limited Edition
H. Enter a new world of fantasy role playing.
WINDOWS 95 CD ROM
$64.99

3DO Company
Uprising
J. It's war strategy from a new perspective.
WINDOWS 95 CD ROM
$44.99

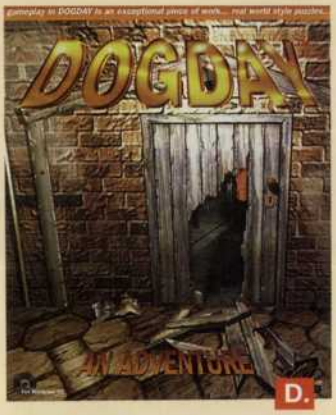
Where else but on-line! www.ebworld.com

CD ROM Entertainment

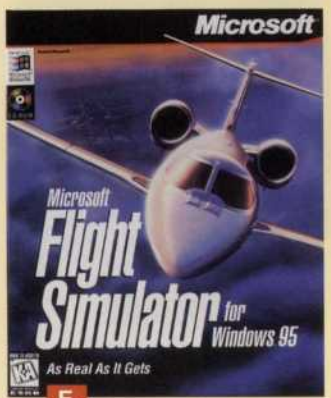
A.

B.

C.



D.



E.

F.

G.

Sega of America
Sonic 3D Blast
A. Cool sonic soundtrack and new 3D environment.
WINDOWS 95 CD ROM
$32.99

Sega of America
Daytona USA Deluxe
B. Come drive the amazingly realistic courses.
WINDOWS 95 CD ROM
$39.99

Sega of America
NBA Action 98
C. Unbelievable big name signature moves.
WINDOWS 95 CD ROM
$44.99

Impact Interactive Publishing
Dog Day
D. Make contact with CATS and expose the government.
WINDOWS CD ROM
$34.99

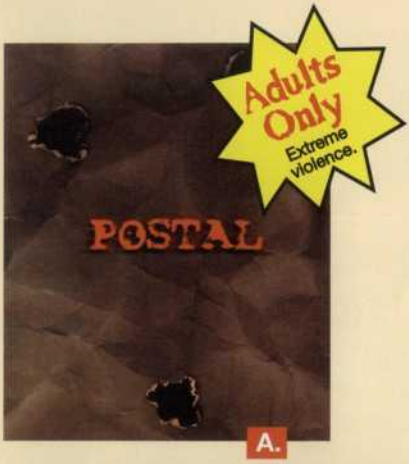
Microsoft
Flight Sim For Windows 95
E. The world leader in flight simulation takes you to new levels.
WINDOWS 95 CD ROM
$52.99

Sammy USA
Jimmy Houston Bass Tournament 97
F. You too can learn to fish like a pro and catch bass!
WINDOWS 95 CD ROM
$49.99

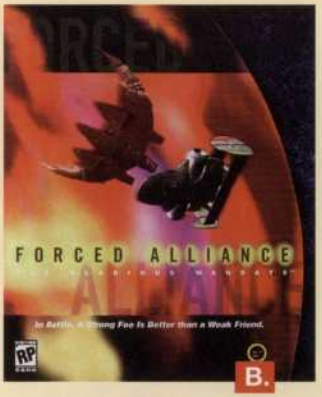
THQ
Pax Imperia Eminent Domain
G. Explore and colonize hundreds of worlds.
WINDOWS 95 CD ROM
$49.99

electronics boutique® Call 1-800-800-5166 for the store nearest you!

CD ROM Entertainment

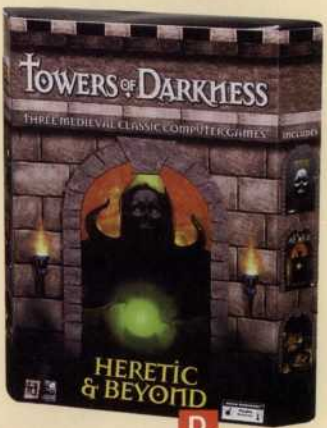


A.



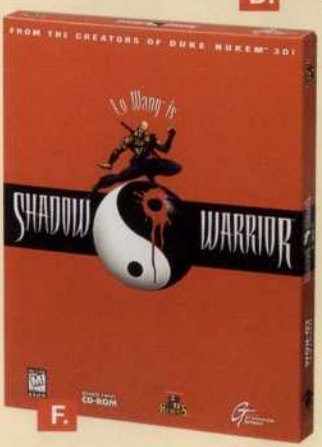
B.

C.



D.

E.



F.

Ripcord
Postal
A. The most psychotic, frenetic and totally addictive game of the year.
WINDOWS 95 CD ROM
$54.99

Ripcord
Forced Alliance
B. Diplomatic and combat mastery will advance you through the ranks!
WINDOWS 95 CD ROM
$54.99

GT Value Products
The Depths of Doom Triology Collector's Set
C. Get ready for the most awesome challenge ever!
WINDOWS CD ROM
$29.99

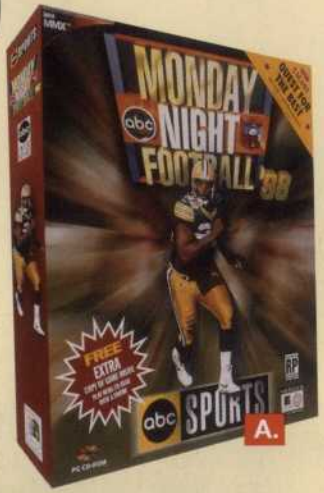
GT Value Products
Towers of Darkness
D. Three medieval classic games of horror await you.
WINDOWS CD ROM
$29.99

GT Value Products
Master of Orion II
E. Master the unknown before it masters you.
MACINTOSH CD ROM
$54.99

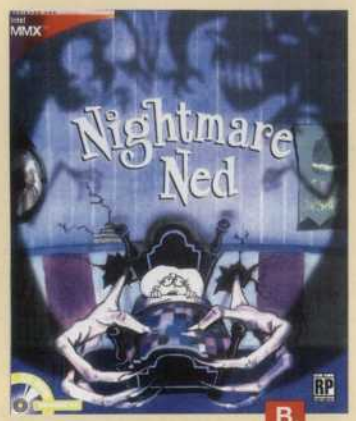
GT Value Products
Shadow Warrior Shareware
F. A berserk ninja on a kamikaze mission to evil!
MACINTOSH CD ROM
$54.99

Where else but on-line! www.ebworld.com

EB PC Entertainment



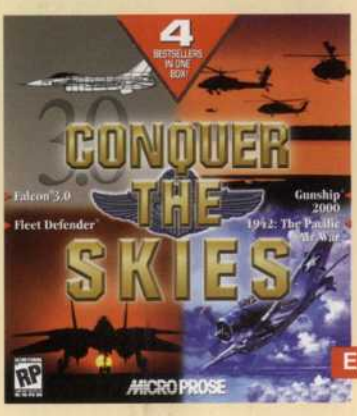
A.



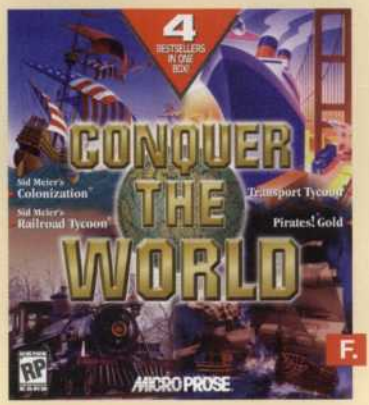
B.

C.

D.



E.



F.

Disney
ABC Sports: Monday Night Football '98
A. Al Michaels and Frank Gifford blitz CD-ROM football!
WINDOWS 95 CD ROM
$44.99

Disney Interactive
Nightmare Ned
B. It's action and adventure that's way past your bedtime!
WINDOWS 95 CD ROM
$34.99

Microprose
7th Legion
C. Centuries of consumption has brought the earth to the brink of collapse.
WINDOWS CD ROM
$42.99

Microprose
Top Gun
D. Thrills of the dogfighting escapades come to life.
WINDOWS CD ROM
$19.99

Microprose
Conquer The Skies
E. Take off with this collection of flight simulation games.
WINDOWS 95 CD ROM
$29.99

Microprose
Conquer The World
F. Conquer road, rail, air and sea in this collection of strategy games.
WINDOWS CD ROM
$29.99

electronics boutique® Call 1-800-800-5166 for the store nearest you!

PC Accessories

A.

B.

C.

D.

Vivitar

Vivitar Flat Bed Scanner

A. Powerful and easy to use with high-res quality.

PC

$149.99

Suncom

F-15E Talon

B. Realistic simulation that makes this stick frightening.

PC

$49.99

Connectix

Color Quickcam 2

C. The most popular digital still and video camera.

PC

$229.99

Logitech

Wingman Extreme Digital X-Wing Vs. Tie Fighter Combo

D. Play meaner, harder and faster with Wingman Joysticks. Includes a special version of X-Wing Vs. Tie Fighter.

PC

$59.99

Memorex 74 Min. CDR $15 Mail-In Manufacturer REBATE!

E.

F.

G.

Memorex

Memorex CDR 74 5 Pack

E. 74 minute recordable CD's.

PC

$29.99

Memorex

Memorex Zip Rack

F. Holds 10 Zip cartridges. (Zip disks not included).

PC

$5.99

Labtec

Gamers Headset/ Boom Mic

G. For crisp, clear delivery of telephony sound.

PC

$59.99

PC Accessories

Thrustmaster
Nascar Pro Steering Wheel
A. You race and you know what it means to win the flag.
PC
$129.99

Thrustmaster
Millennium 3D Stick
B. Watch the explosions rip through your enemy!
PC
$79.99

Thrustmaster
Rage 3D Game Pad
C. Gives you fast, furious in-your-face gaming.
PC
$39.99

Viagrafix
MS Office 97 Video 6 Pack
D. Its easy with training videos and CDs.
PC TRAINING
$49.99

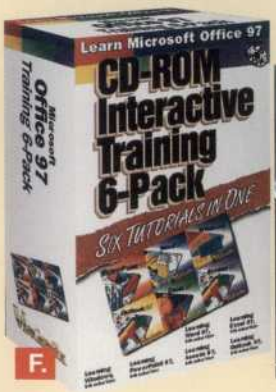
Viagrafix
MS Office 95 Video 6 Pack
E. Videos make learning MS Office 95 easy.
PC TRAINING
$49.99

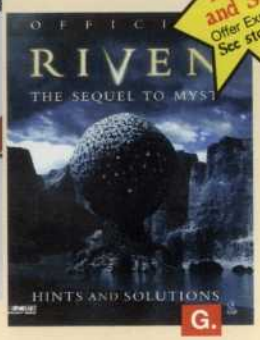
Viagrafix
MS Office 97 CD 6-Pack
F. Six interactive training tutorials in one.
PC TRAINING
$69.99

MacMillan Computer Publishing
Official Riven Hints And Solutions
G. Interact with multiple characters as they explore the world of Riven.
BOOK
$19.99

Fuji
Fuji Zip 2 Pk IBM
H. High reliability and unsurpassed speed.
PC
$29.99

Fuji
Fuji Zip 2 Pk Mac Formatted
J. Expand your hard drive capacity.
PC
$29.99





20% OFF Riven Hints and Solutions
Offer Expires 12/15/97
See store for details

$3 Mail-In Manufacturer REBATE!

electronics boutique® Call 1-800-800-5166 for the store nearest you!

PC Accessories

A.

B.

Laral Group

Unwired Wireless Headphones

A. Enjoy private listening with the highest quality.
MULTIMEDIA HEADPHONES

$39.99

Laral Group

Nintendo 3D Joystick For PC's

B. Delivers the utmost finesse and firepower.
PC

$59.99

C.

D.

Random House

Official Starcraft Strategy Guide

C. An interstellar empire game that involves defending a shattered earth.
BOOK

$17.99

Labtec

Stereo Headset/ Boom Mic

D. Crisp, clear delivery of telephony sound.
PC

$17.99

Labtec

Desk Boom Microphone

E. Reduces background noise. Soundcard compatibility, too.
PC

$9.99

Microsoft

SideWinder Force Feedback Pro

F. The joystick that breaks new ground in gameplay by introducing a new sensory experience to gaming–the sense of touch, or force.
PC

$149.99

Electronic Arts

Intense 3D Voodoo

G. Everything you want in a PC graphics card.
PC

$219.99

Mad Catz

Fight/Flight Stick

H. Analog flight styled stick with extra action buttons.
PC

$39.99

E.

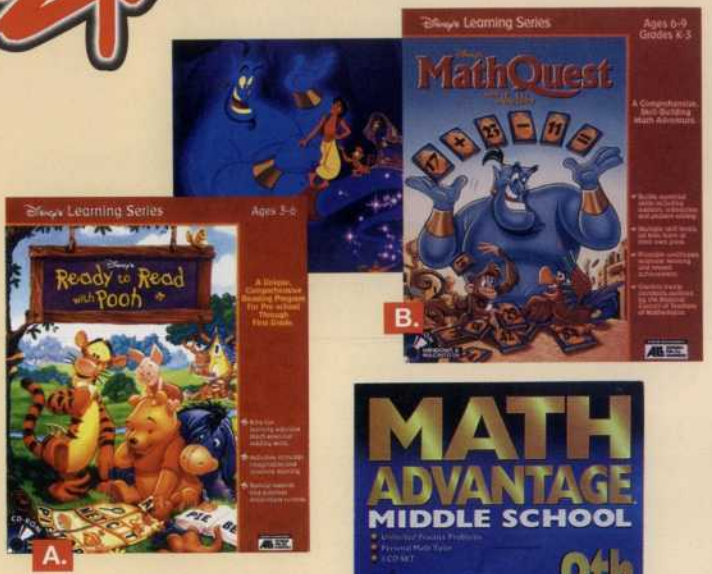
F.

G.

H.

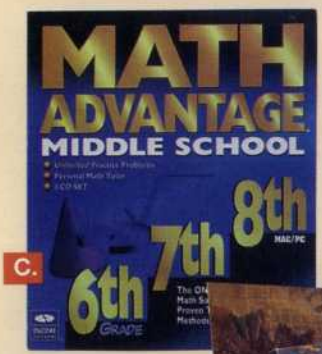
Where else but on-line! www.ebworld.com

EB PC Education



Disney Interactive
Ready To Read With Pooh
A. Play with Pooh and learn the alphabet.
WINDOWS/MAC CD ROM
$39.99

Disney Interactive
Disney's Math Quest With Aladdin
B. Master your math skills and save Agrabah.
WINDOWS CD ROM
$39.99



Encore Software
Math Advantage Middle School
C. A students most comprehensive math resource.
WINDOWS CD ROM
$44.99

OmniMedia
The Mystery of the Missing Princess
D. Search for clues that lead you to the missing princess.
WINDOWS CD ROM
$29.99

OmniMedia
Great Explorers
E. The quest for knowledge comes to life.
WINDOWS CD ROM
$19.99

Palladium
Wishbone Print Tricks
F. A terrific home printing center for children.
WINDOWS CD ROM
$19.99

Palladium
Wishbone and the Amazing Odyssey
G. Explore islands, solve puzzles and battle monsters.
WINDOWS CD ROM
$19.99

electronics boutique® Call 1-800-800-5166 for the store nearest you!

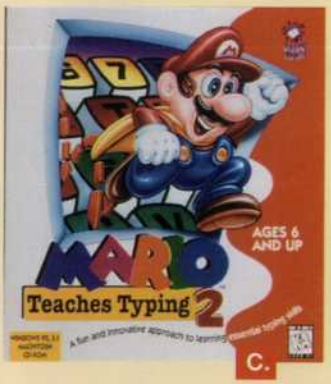
PC Education

A.

Humongous
Big Thinkers 1st Grade
A. Kids can do amazing things when they think big.
WINDOWS CD ROM
$29.99

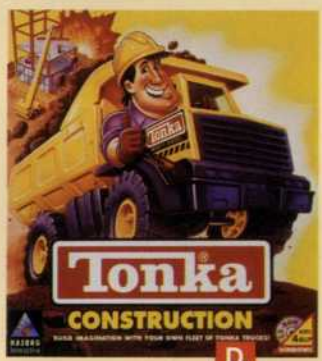
B.

Humongous
Big Thinkers Kindergarten
B. Superstar twins bring learning and laughter to educational software.
WINDOWS CD ROM
$29.99



C.

Interplay
Mario Teaches Typing 2.0
C. Mario will train children to be proficient typists.
WINDOWS CD ROM
$37.99



D.

Hasbro Interactive
Tonka Construction
D. Kids will have a blast as they dig and bulldoze.
WINDOWS CD ROM
$21.99

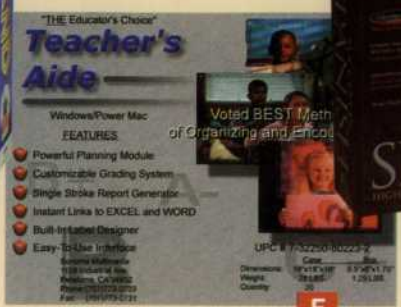
Mindscape
LEGO Island
E. On LEGO Island you will explore, build and race.
WINDOWS 95 CD ROM
$49.99

Softkat
Teacher's Aide
F. The most effective method for organizing and motivating students.
WINDOWS/MAC CD ROM
$24.99

Syracuse Language Systems
Success In Spanish
G. An interactive language course of 12 lessons.
WINDOWS CD ROM
$19.99

Syracuse Language Systems
Success In French
H. Large selection of multimedia games and activities.
WINDOWS CD ROM
$19.99

E.

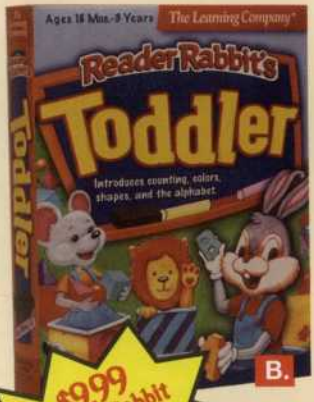


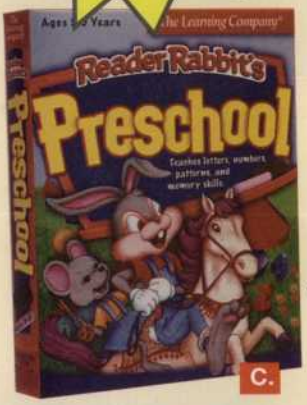
F.

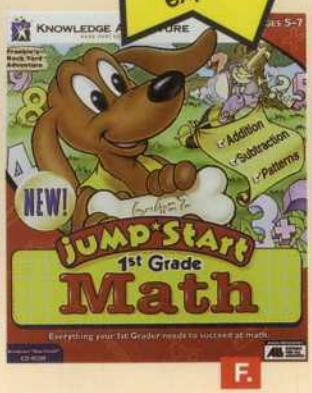
G. H.

Where else but on-line! www.ebworld.com

EB PC Education







$19.97 Reader Rabbit Kindergarten After Mail-in Mfg. REBATE.

$9.99 Reader Rabbit Toddler After Mail-in Mfg. REBATE.

Buy 2 Jumpstart products & receive $20 Mfg. mail-in REBATE exp. 10/31/97

The Learning Company
Reader Rabbit's Kindergarten
A. Builds early reading, math and thinking skills for ages 4-6.
WINDOWS CD ROM
$44.99

The Learning Company
Reader Rabbit's Toddler
B. Teaches essential skills for children 18 months to 3 years.
WINDOWS CD ROM
$34.99

The Learning Company
Reader Rabbit's Preschool
C. Teaches essential skills for children 3 to 5 years old.
WINDOWS CD ROM
$34.99

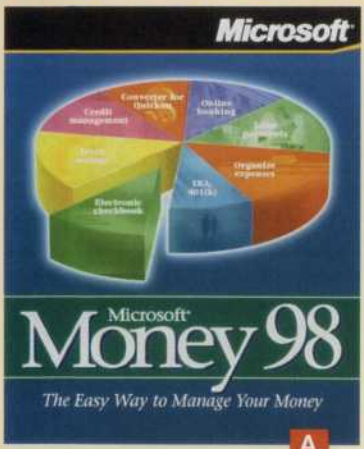
Knowledge Adventure
JumpStart Kindergarten
D. Focus on phonics and math skills with workbook.
WINDOWS CD ROM
$29.99

Knowledge Adventure
JumpStart 5th Grade
E. Learn language, math, history science and art.
WINDOWS CD ROM
$29.99

Knowledge Adventure
JumpStart 1st Grade Math
F. Interactive play designed to advance preschooler's learning.
WINDOWS CD ROM
$29.99

Knowledge Adventure
JumpStart 1st Grade Reading
G. Teaches children ages 5-7 fundamental and comprehensive reading skills.
WINDOWS/MAC CD ROM
$29.99

electronics boutique® Call 1-800-800-5166 for the store nearest you!



A.

B.

Microsoft
Microsoft Money 98

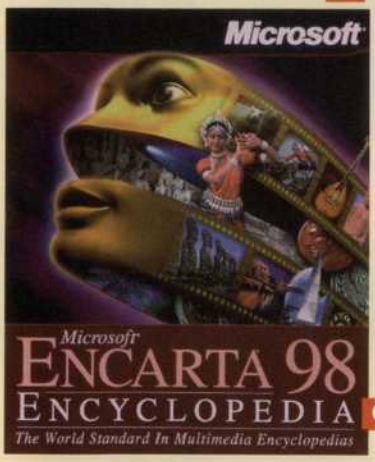
A. Personal finance software that lets you perform your financial tasks–everything from paying bills to planning for the future.
WINDOWS 95 CD ROM

$29.99

Microsoft
Picture It 2.0

B. Powerful photo editing software that allows consumer and Small Office/Home Office users to easily modify their photos on their PC and create professional-looking cards.
WINDOWS 95 CD ROM

$54.99

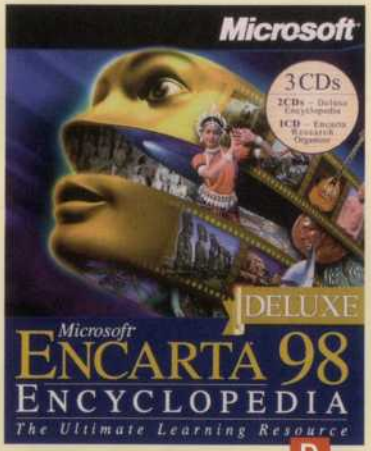


C.

Microsoft
Encarta 98

C. Award-winning multimedia encyclopedia that combines current, comprehensive content with the most up to date multimedia technology.
WINDOWS 95 CD ROM

$49.99



D.

Microsoft
Encarta 98 Deluxe

D. Provides users with a wealth of information resources, but also helps you organize information, facilitate research and report writing.
WINDOWS 95 CD ROM

$79.99

E.

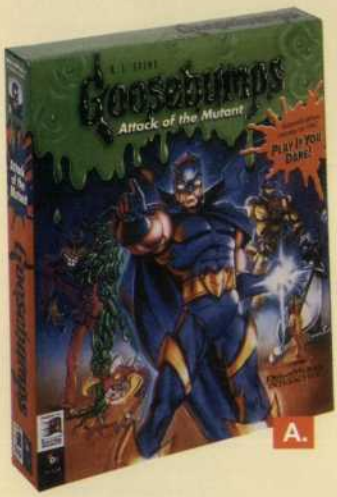
Microsoft
Encarta 98 Reference Suite

E. Three products to create the essential multimedia reference library. Includes: Encarta 98 Encyclopedia Deluxe Edition, Encarta Virtual Globe 1998 Edition and Microsoft Bookshelf 98.
WINDOWS 95 CD ROM

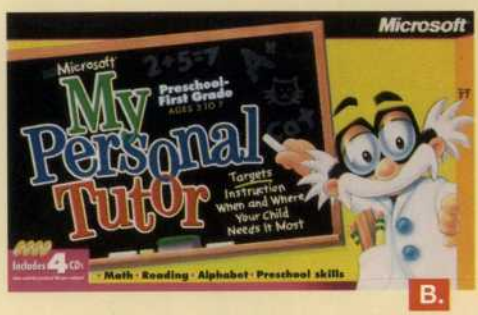
$119.99

Where else but on-line! www.ebworld.com

PC Home Software

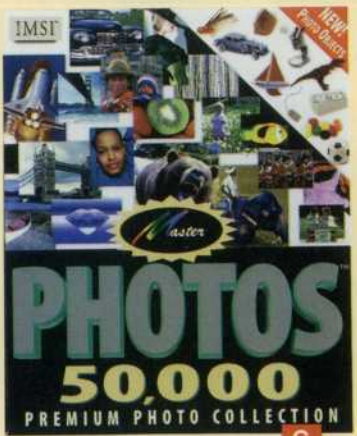


Microsoft
Goosebumps Attack Of The Mutant
A. Save the world from the evil Masked Mutant.
WINDOWS 95 CD ROM
$47.99



Microsoft
My Personal Tutor
B. Targeted instruction in essential preschool skills.
WINDOWS 95 CD ROM
$59.99

IMSI
Master Photos 50,000
C. Image management made easy. Convert, compress, catalog and retrieve!
WINDOWS CD ROM
$49.99



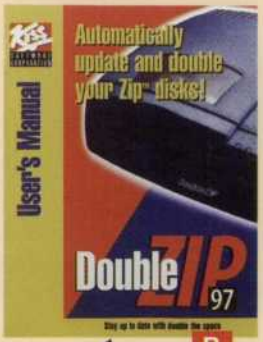
Simon and Schuster
C Programming Starter Kit
D. Create your programs within a full-featured development.
WINDOWS CD ROM
$29.99

Cybermedia
First Aid 98
E. Fixes common computer problems with easy one-click solutions.
WINDOWS 95 CD ROM
$44.99

electronics boutique® Call 1-800-800-5166 for the store nearest you!

Utilities

A.



B.

White Pine Software
CU-See Me 3D
A. Leading software for live video chat.
WINDOWS CD ROM
$79.99

Kiss Software
Double Zip
B. Stay up to date with double the space.
WINDOWS CD ROM
$44.99

Vital Signs
Net Medic
C. Identifies problems in seconds and resolves them.
WINDOWS CD ROM
$49.99

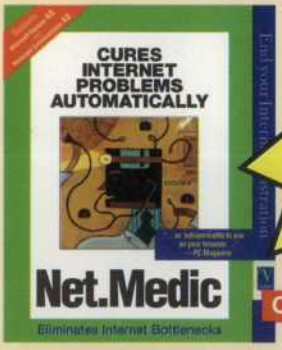
Dr. Solomon's Software
Dr. Solomon's Anti-Virus
D. Detects and destroys most viruses, automatically.
WINDOWS 95 3.5
$54.99

Helix Software
Nuts & Bolts
E. Complete utility program that knocks Norton Utilities 95 off its feet.
WINDOWS CD ROM
$59.99

Encore Software
PC Toolkit
F. The most complete software utilities ever!
WINDOWS CD ROM
$69.99

Touchstone Software
PC-cillin 3.0
G. Guaranteed 100% virus protection, plus much more.
WINDOWS CD ROM
$49.99

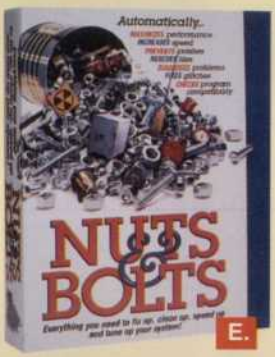
Powerquest
Drive Image
H. Backup, recover or upgrade quick and easy.
WINDOWS CD ROM
$69.99



C.

$30 Mfr. Mail-in Rebate on Dr. Solomon's Anti-Virus if you own any other virus program. Offer expires 12/31/97

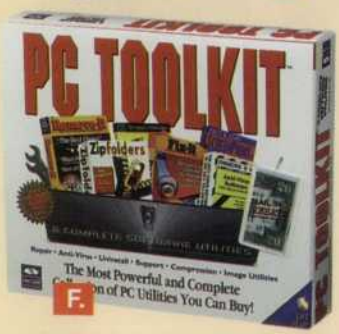
D.



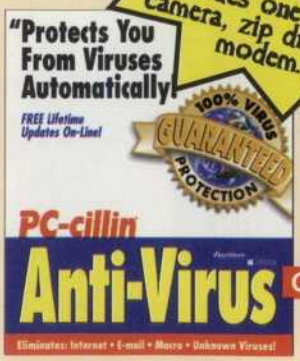
E.

PC-cillin 3.0 Enter to win a gadget pack. Includes one digital camera, zip drive and modem.

H.



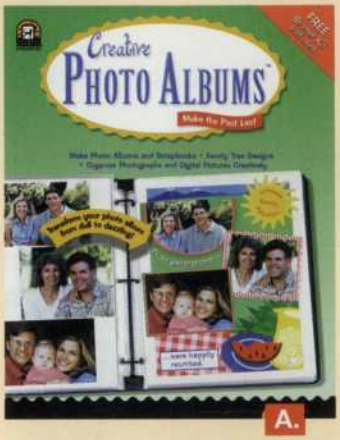
F.



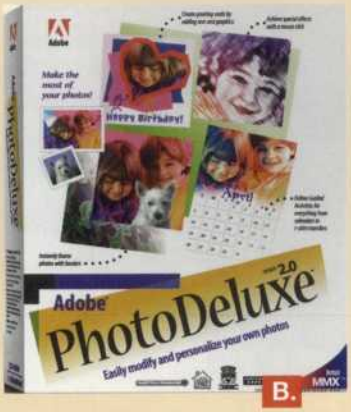
G.

Where else but on-line! www.ebworld.com

Print/Photo



A.



B.

Dog Byte Development

Creative Photo Albums

A. The ultimate kit for photo album creation.
WINDOWS CD ROM

$29.99

Adobe Systems

Adobe Photo Deluxe 2.0

B. Have fun and be creative with your photographs.
WINDOWS CD ROM

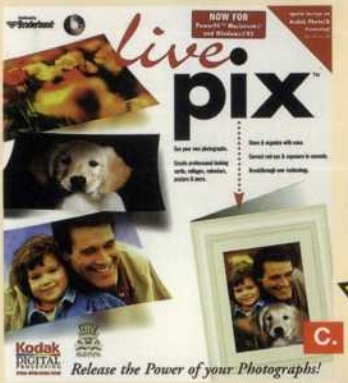
$54.99

Broderbund

Live Pix

C. Enhance your photo, distort, export and e-mail.
WINDOWS CD ROM

$49.99



C.

D.

Broderbund

Print Shop Premiere Edition

D. It's never been easier to create banner, signs, stationery and more.
WINDOWS CD ROM

$59.99

Broderbund

Print Shop Signature Greetings

E. Design greeting cards featuring the art of Marcel Shurman®.
WINDOWS CD ROM

$29.99

Broderbund

Print Shop Standard Edition

F. An introductory solution for all your home printing.
WINDOWS CD ROM

$29.99

Micrografx

American Greetings

G. Over 3,000 cards you can personalize and print.
WINDOWS CD ROM

$34.99

Corel

Print House Magic

H. All-in-one graphics package that lets you express yourself.
WINDOWS CD ROM

$34.99

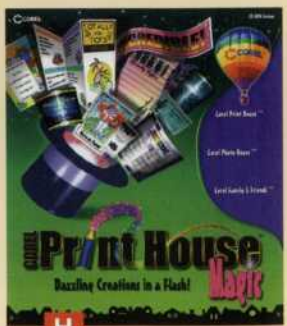
Buy Any Red Orb Title and Get $10 OFF Any Broderbund Productivity or Education Title. Download offer from our website www.ebworld.com See site for details.

Create A Card Plus 2.0 Also Available

E.

F.

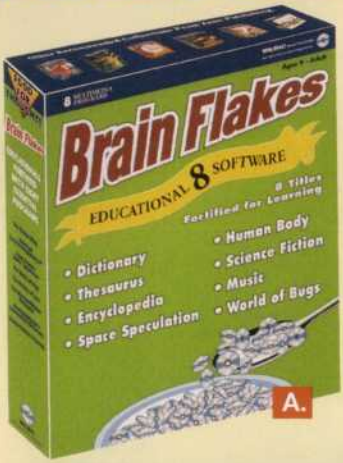
G.



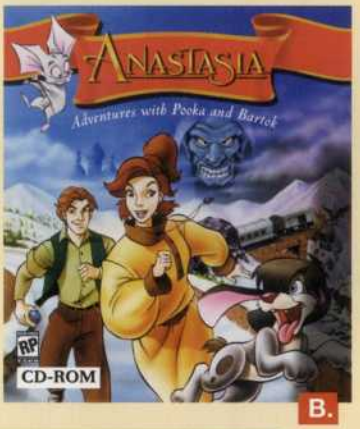
H.

electronics boutique® Call 1-800-800-5166 for the store nearest you!

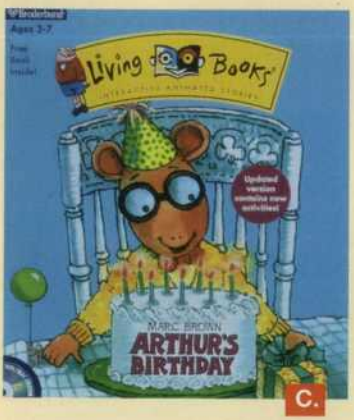
Education



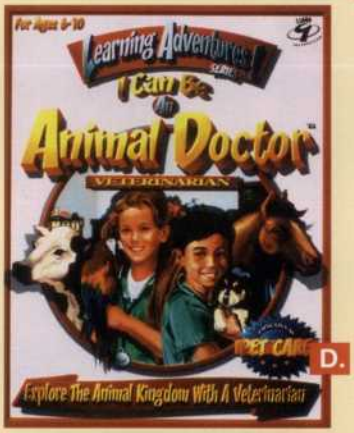
Zane Publishing
Brain Flakes
A. A dictioary, thesaurus, encyclopedia and more.
WINDOWS CD ROM
$39.99



Fox Interactive
Anastasia
B. Magical adventure based on feature film.
WINDOWS CD ROM
$34.99

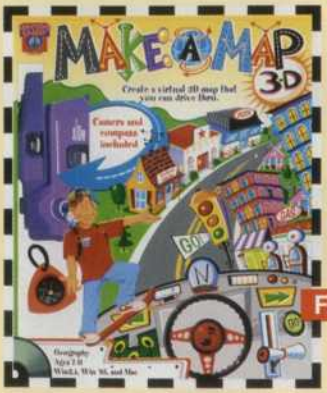


Broderbund
Arthur's Birthday
C. Fun and easy for children to learn to read.
WINDOWS CD ROM
$34.99



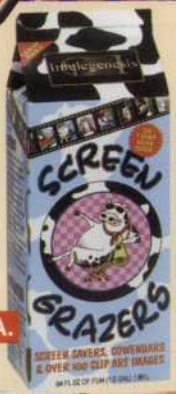
Simon and Schuster
I Can Be An Animal Doctor
D. Exciting adventures into the world of animals.
WINDOWS CD ROM
$29.99

Panasonic Interactive
Smart Bunch K-2
E. Four great educational titles bundled together!
WINDOWS CD ROM
$29.99

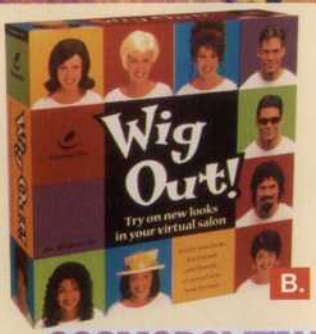


Panasonic Interactive
Make A Map 3D
F. Unique geography with fun interactive game play.
WINDOWS CD ROM
$39.99

Personal Productivity



A.



B.

Intelegenesis

Screen Grazers

A. This cast of cartoon style cows provide hours of entertainment with audio, multiple cowendars and a detailed screen saver.
WINDOWS CD ROM

$29.99

Connectix

Wig Out

B. Try on different hairstyles and accessories.
WINDOWS CD ROM

$29.99

MGI

MGI Photo Suite

C. Edit, capture, catalog and transform your photos.
WINDOWS CD ROM

$54.99

C.

D.

Sega Soft

Cosmopolitan Virtual Makeover

D. The revolutionary way to revitalize your look.
WINDOWS CD ROM

$39.99

Wizard Works

Turbo Draw, Turbo Publisher & Win Delete

E. YOUR CHOICE

$14.99
WINDOWS CD ROM

Wizard Works

Ultimate Home Organizer and Draw, Design, Illustrate 2

F. YOUR CHOICE

$12.99
Light Speed Pro $29.99
WINDOWS CD ROM

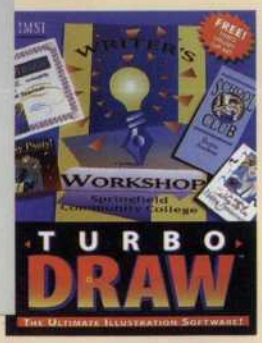
Individual Software Inc.

Plan Retirement

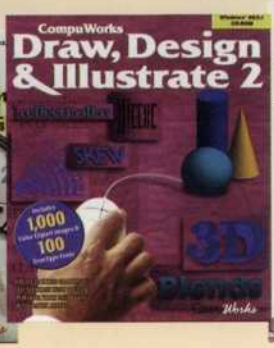
G. In minutes create a financial plan for a secure retirement.
WINDOWS 95/
WINDOWS 3.1

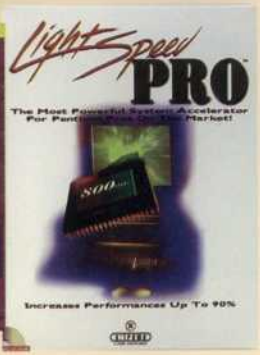
$54.99

E.



F.

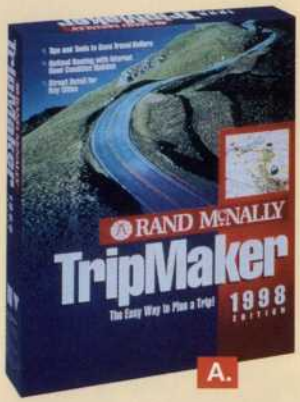




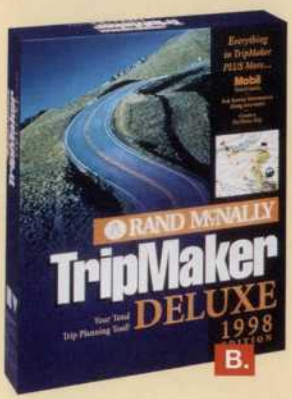
G.

electronics boutique® Call 1-800-800-5166 for the store nearest you!

Personal Productivity



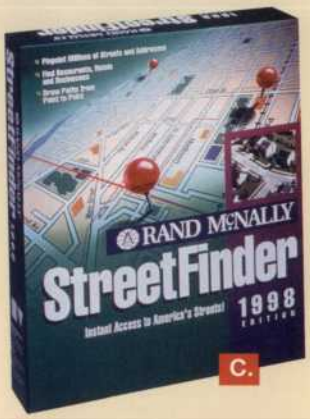
A.



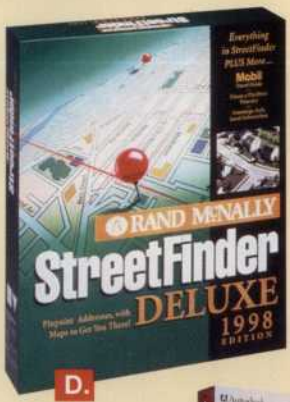
B.

Rand McNally
TripMaker 1998
A. Essential trip planning for the savvy traveler.
WINDOWS CD ROM
$29.99

Rand McNally
TripMaker 1998 Deluxe
B. Feature-rich trip planning for the specialized traveler.
WINDOWS CD ROM
$49.99



C.



D.

Rand McNally
StreetFinder 1998
C. Fundamental street-based planning tool.
WINDOWS CD ROM
$29.99

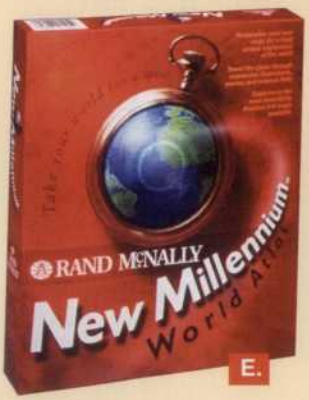
Rand McNally
StreetFinder 1998 Deluxe
D. Specific planning needs for the business traveler.
WINDOWS CD ROM
$49.99

Rand McNally
New Millennium
E. The first atlas to recognize each person's world view.
WINDOWS CD ROM
$49.99

Pilgrim New Media
Harvard Guide To Women's Health
F. A comprehensive medical encyclopedia for women only!
WINDOWS CD ROM
$24.99

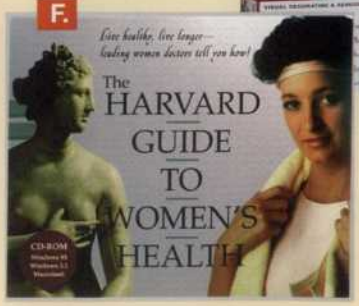
Autodesk
Picture This Home! Kitchen & Bath
G. Visual decorating and remodeling software.
WINDOWS CD ROM
$49.99

WinWay Corporation
WinWay Resume 4.0
H. The most complete job winning system, now with Internet and e-mail.
WINDOWS CD ROM
$39.99

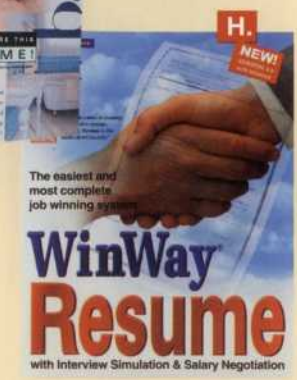


E.

G.



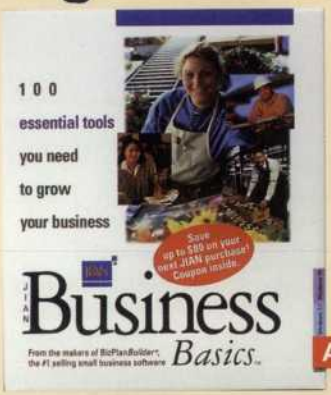
F.



H.

Where else but on-line! www.ebworld.com

Productivity/Business



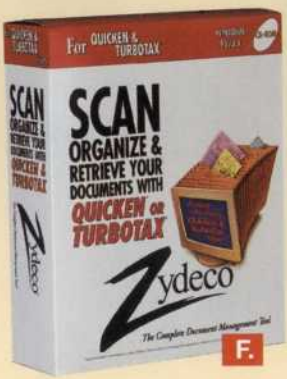
A.

B.

C.

D.

E.



F.

G.

Jian
Business Basics
A. A must have collection of business forms & reports.
WINDOWS CD ROM
$39.99

G & A Imaging
Photo Recall
B. Searches the Internet to build digital photo albums.
WINDOWS CD ROM
$49.99

Voice Keyboarding
Voice Pilot
C. Provides complete vocal navigation.
WINDOWS 95 CD ROM
$44.99

Media Graphics
10,000 Graphics
D. 10,000 high impact graphics to choose from.
WINDOWS CD ROM
$9.99

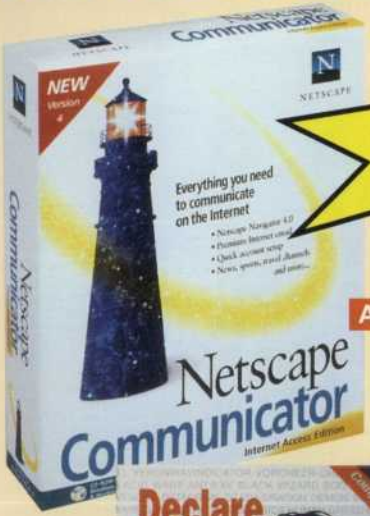
Quarterdeck
Cleansweep Deluxe
E. Safe, effective way to remove unwanted programs, files and viruses.
SYSTEM SYSTEM
$59.99

Zydeco
Quicken/Turbo Tax Bundle
F. Scan, organize and retrieve your documents with Quicken or TurboTax.
WINDOWS CD ROM
$49.99

Image Disk
PhotoVue Plus
G. Display beautiful color images on any PC monitor.
WINDOWS CD ROM
$39.99

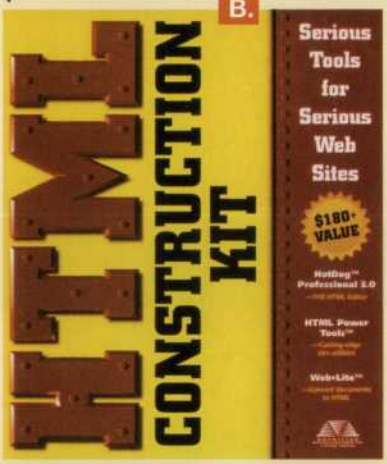
electronics boutique® Call 1-800-800-5166 for the store nearest you!

Win A Whole Year FREE of Internet Access On the Web with Bell Atlantic.net
Just fill out entry form for the Netscape Communicator Contest. No purchase necessary. See store for details.



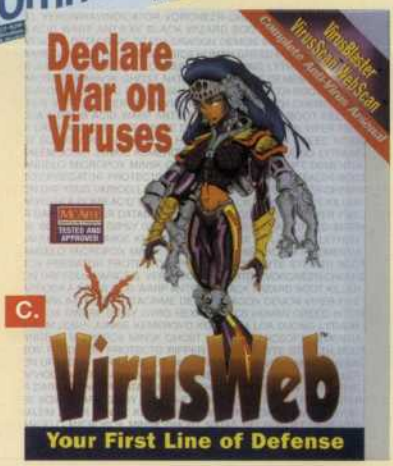
A.

Netscape Communications
Netscape Communicator
A. Everything you need to communicate on the Internet.
WINDOWS/MAC CD ROM
$89.99



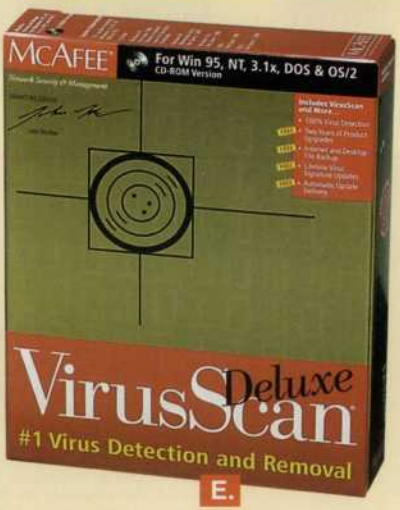
B.

Simon and Shuster
HTML Construction Kit
B. Allows you to create and manage Web sites.
WINDOWS CD ROM
$49.99



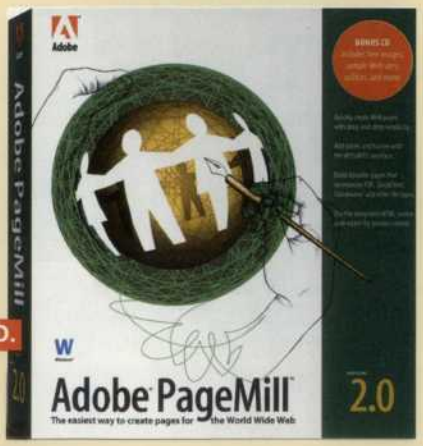
C.

Full Circle
Virus Web
C. A complete anti-virus arsenal.
WINDOWS CD ROM
$69.99



E.

Adobe Systems
Adobe Page Mill 2.0
D. Create full-featured Web pages without having to know a thing about HTML.
WINDOWS CD ROM
$34.99



D.

McAfee Software
Virus Scan 3.0
E. Anti-virus and backup for complete data protection.
WINDOWS CD ROM
$69.99

WE GUARANTEE THE LOWEST PRICES!
Ask your sales associate about our price match policy.

JOIN OUR FREQUENT BUYER CLUB AND GET 5% OFF EVERYTHING IN THE STORE!*

- $29.99 for a 1 year membership
- Limit one video game hardware purchase per customer.
- Limit one quantity per sku.

*No dealers please. See store for details.

electronics boutique®

$10 EB GIFT VOUCHER

When You Buy Any PC CD Entertainment Game $42.00 Or More

Mail-in EB gift voucher offer only. This voucher is not valid with any other offer. Mail this voucher plus receipt to: Electronics Boutique, Consumer Products Division, 931 S. Matlack St., West Chester, PA 19382. One voucher per offer only. Allow 4-6 weeks for fulfillment. Expires 11/31/97. See store for details.

electronics boutique®

$10 EB GIFT VOUCHER

When You Buy Any Business Productivity Product $39.99 Or More

Mail-in EB gift voucher offer only. This voucher is not valid with any other offer. Mail this voucher plus receipt to: Electronics Boutique, Consumer Products Division, 931 S. Matlack St., West Chester, PA 19382. One voucher per offer only. Allow 4-6 weeks for fulfillment. Expires 11/31/97. See store for details.

CALL 1-800-800-5166 FOR THE STORE NEAREST YOU!

WHERE ELSE BUT ON-LINE! www.ebworld.com

Jimmy Houston's Bass Tournament U.S.A. 97

Win95

Category: Fishing sim

Developer: Sammy USA

Publisher: Sammy USA, 901 Cambridge Dr., Elk Grove Village, IL 60007 (847) 364-9787

Required	We Recommend
Windows 95; Double-speed CD-ROM drive; 486DX2/66; 16MB RAM; Super VGA; 20MB hard-drive space; Mouse	Quad-speed CD-ROM drive; Pentium 100; Supported sound card

Experience the trials and tribulations of America's freshwater fishermen as you hit the lake with fishing legend Jimmy Houston.

If you think the idea of a fishing game for the PC is a little strange, you're not alone. It was nearly three years ago — back in the days when *PC Gamer* was still in North Carolina — that we first laid eyes on Amtek's *Gone Fishin'*, a game that, to the best of our recollection, was the very first fishing game on the PC. We giggled, gawked, and mused over the little red tackle box that it came in, and confidently summarized that it had to be the worst idea for a game ever. Eventually, our curiosity got the better of us, and somebody fired it up, and surprisingly, *Gone Fishin'* became an addictive pastime for weeks on end. Since that time, Sierra offered up its own surprisingly good take on the genre and took the lead in PC fishing with *Trophy Bass* and *Trophy Bass II*.

As mundane as it may sound, all three of those games were quite fun — assuming you're the least bit receptive to computerized fishing — and as I began to play *Jimmy Houston's Bass Tournament U.S.A. 97*, I was reminded not only of how much fun fishing on the PC can be, but how much better it has been done before.

Part of the problem with *JHBT* is the presentation. The game is spread across two CD-ROMs, yet most of that space is used for full-motion video of boats being launched from the docks. Once you've had your fill of fluff — including tidbits from the man himself, Jimmy Houston — the actual gameplay graphics are coarse and unrefined, with lots of jagged edges and poorly matched colors. The animation of the player-controlled fisherman is jerky and stiff, and just when you think it might be acceptable, you'll witness cheesy effects like flying saucers and tiny airplanes flying across the horizon. Compared to the solid look and feel of its predecessors, *JHBT* simply looks slapped together and rough.

Once you're out on your bass boat, the bland graphics don't really help you determine which bait to use or where to cast your line.

The gameplay suffers from the same sort of rushed feel as the graphics and makes some serious omissions in terms of flexibility and options. As a bass tournament simulation, the goal of the game is simple — catch your limit of the biggest, baddest fish within the time allotted and score a third place position or better based on the weight of your overall catch. You'll maneuver your boat around one of the two available lakes, choosing your spots with care as you try to out-fish your opponents. But unlike *Trophy Bass* where you could move freely about a lake and apply knowledge gained from real fishing in order to locate the really big fish, *JHBT* hamstrings the player to several predetermined areas within each lake and just a handful of viable fishing spots within each of these areas.

The lake map allows you to choose the general area you want to go to.

Once you reach a fishing spot, more problems crop up. Within each spot, you can move your boat only a few degrees from side-to-side (which is never more than the width of the screen), alter your casting technique, and change your tackle. Instead of being able to work your way around the shore in search of better spots, you'll have to fish a spot until you determine there's nothing more to catch, and move on to another predetermined spot.

After trying the tournament mode, it was obvious that this limitation becomes less a matter of skill and more a matter of strategy. If you can manage to hit the sweet spots in just the right order with the right bait, chances are you'll end up vying for the winner's circle.

If you don't want to bother with the tournament, there is a practice mode where you can fish all you want without concern of competition, but the limited size of each spot and the dull nature of fishing for fishing's sake is best used as a proving ground for different bait under varied conditions. In the end, *Jimmy Houston's Bass Tournament U.S.A.* is a lot like the silly fishing game that we had imagined was hiding in that tackle box.

— Todd Vaughn

PC GAMER FINAL VERDICT

55%

HIGHS: Tournament play makes for a challenging day on the lake.

LOWS: Unimpressive graphics, limited fishing areas, touchy casting interface, dull multimedia elements.

BOTTOM LINE: Anglers who prize diversity and challenge should stick to *Trophy Bass* or *Gone Fishin'*.

PREGNANT WOMEN, INDIVIDUALS WITH BACK PROBLEMS AND RECOVERING HERNIA PATIENTS SHOULD NOT LIFT THIS PACKAGE.

The LucasArts Archives™ Vol. III

Just a ton of award-winning games.

(Without spending a ton of money.)

INCLUDES

THE DIG® • FULL THROTTLE® • STAR WARS®: DARK FORCES®

AFTERLIFE® • MONKEY ISLAND™ MADNESS

PLUS A BONUS DEMO SAMPLER

FOR PC CD-ROM

www.lucasarts.com

The software in this collection is rated K-A to TEEN by the ESRB.

® & © 1997 Lucasfilm Ltd. and LucasArts Entertainment Company. All Rights Reserved. Used Under Authorization.

Product Information Number 223

Atlantis: The Lost Tales

Win95

Category: Adventure

Developer: Cryo

Publisher: Cryo, 1592 Union Street, #155, San Francisco, CA 94123 (800) 468-3772

Required	We Recommend
Windows 95; Quad-speed CD-ROM drive; Pentium 90; 16MB RAM; Super VGA; Mouse	Pentium 166; Supported sound card

Journey to the mythical city of Atlantis and attempt to thwart an insidious plot in this mediocre adventure from Cryo.

Whether it is a result of apathy or a lack of innovation, there's no denying that graphic adventures have taken a back seat to real-time strategy, first-person shooters, and flight simulations in the hearts and minds of gamers. In the past few years, only *Zork: Nemesis*, *The Beast Within*, and the seemingly unstoppable *Myst* have spent any measurable time in the gaming top ten, and with the exception of *Myst*, still failed to hold the public's attention for long.

That said, *Atlantis* looked like it might have all the right elements for an inspired adventure that could bring the genre out of its doldrums. The game takes place in the mythical island continent of Atlantis at a time when it was still a beachfront community, rather than the bottom feeder it eventually became, and begins with the disappearance of the queen. It seems isolationists within the Atlantean community became concerned over the growing contact with the primitives in the world, and decided to make a play for control of the island nation and eliminate the Queen. As Seth, the newest Queen's companion — read "lackey" — it's your job to find the Queen and thwart the forces that are moving against her.

An old man in the sea? Don't forget to show him your badge.

Throughout your adventure, you'll visit five different worlds, and meet a host of characters, most of whom don't really like you, don't trust you, or won't give you what you want the first time you ask. For any given encounter, you may have between one and four dialog choices, some of which affect the story, while others are simply thrown in for filler.

As you begin your quest, you'll discover that the most striking thing about *Atlantis* is the graphics. Instead of the traditional side-scrolling animation-based adventure, *Atlantis* uses a first person perspective like *Zork: Nemesis* or *Myst*. What makes *Atlantis* a bit different from the others is that, from any point, you can look around with free 360 degree mobility. *Zork: Nemesis*, used a similar technique as well, though it was easy to complain that it looked too pixellated. Here, the movement is smooth and fluid.

As impressive as this is, there are areas where the graphics fall flat. Cryo should be given credit for its ambitious approach to character animation, but the bottom line is that the character movements are still chunky, the lip movements are way off, and the characters simply don't look human. If anything, *Atlantis* proves once again that 3D character animation on the PC is darned hard to do, and game companies should avoid it unless they're willing to spend enough time and money to get it right.

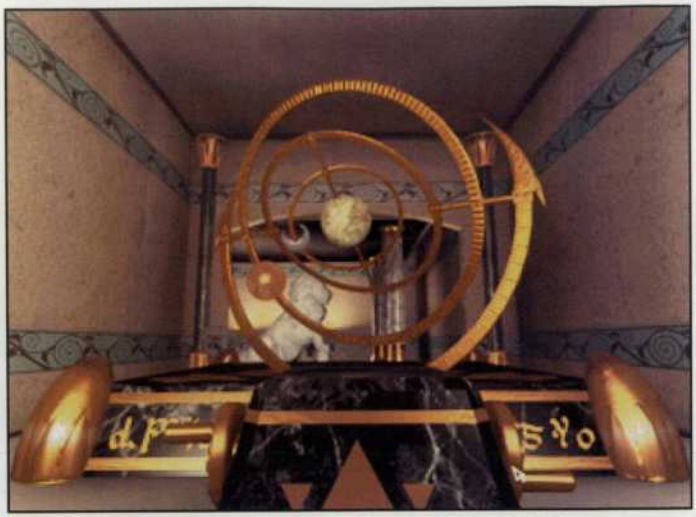
Despite the freedom allowed by the technology, the overall graphics quality of *Atlantis* looks somewhat dated. To a certain degree, I think we may have got-

Welcome to Atlantis. We're having a sale on beach front property.

Never trust a guy with a beard and a gold plate on his head.

ten spoiled by games like *Zork* and *The Beast Within*, where the graphics are seamlessly integrated with the characters. In Atlantis, buildings look drab and dull, and most of the scenes look a little flat. Probably the biggest disappointment, though, is how the 3D characters are mapped to the pre-rendered backgrounds. When you watch the characters move, you're basically watching a cut scene. However, when you're approaching a character to speak with him, instead of using a 3D image, Cryo decided to paste a 2D bitmap on the 3D background. The result is that the characters look completely static, and the overall scene effect is cheapened.

Any good graphic adventure is going to be remembered, though, not by the graphics, but by the quality of the story and puzzles. Again, *Atlantis* does nothing to break any new ground. Puzzles basically fall into two categories: dialog and keys. The dialog puzzles simply require that you chose the right verbal cue from the list you're given. Of course, not every dialog exchange is a puzzle, and this is the part that I don't quite get. Most of the verbal puzzles are simple yes or no questions, which makes it pretty easy to figure out if you got the answer right or wrong. Answer incorrectly, and you usually either end up dead or in prison. Fair enough, but the game automatically puts you back to the point just before you made the wrong choice. So, it takes some doing to get it wrong the second time.



Hmm... look familiar? Where's my copy of *Zork*? Yep, we've seen this puzzle before.

The game has inventory, but only in the most basic sense. *Atlantis* establishes early on that the focus is on dialog and exploration, but there are occasions when you will need to keep certain items handy for use in other locations. A number of the conversations that are not of the "yes or no" variety will often lead you to an object, which will in turn need to be given to someone else or used in conjunction with a key puzzle. This makes the game way too linear for a graphic adventure. Usually, you can't go very far until you get a puzzle right, and it succeeds only in making the world seem awfully small.

These key puzzles are far more difficult than the dialog puzzles, but they too fall into the category of "been there, done that". The first major puzzle is one in which you have to align the earth, the moon and the sun by using two cranks to move the objects into sync with each other. Sound familiar? If you've played *Zork: Nemesis*, it will. There are two puzzles in *Zork* which are reminiscent of this one, and they're much harder and the payoff is more satisfying, too. My biggest gripe about the puzzles in *Atlantis* is that they seem detached from the story, arbitrarily placed in order to give the player something to do. The satisfaction just isn't there for the amount of work you put in.

What *Atlantis* does have going for it is variety. The locations are interesting, and the characters all have a different sense of personality. The dialog is laughably bad, but that makes for some (albeit unintentional) entertaining moments.

In the end, *Atlantis* won't win any awards for ingenuity or redefine graphic adventures as we know them, but it can keep you entertained (though only intermittently) without too many jarring mistakes. If you really need a graphic adventure fix and find the mystical world of Atlantis too appealing to pass up, you'll find a few hours worth of gameplay. But if you're looking for an adventure that does all of the above, with style and confidence, pass up this trip and wait for something better to come along.

—Damon Dean

This "friend" will stab you in the back if you're not paying attention.

PC GAMER FINAL VERDICT

62%

HIGHS: Stunning scenes; gameplay is reasonably entertaining; good variety.

LOWS: Same old puzzles. Same old pop-up dialog boxes. 3D character movements are jerky and unbelievable.

BOTTOM LINE: It's a standard graphic adventure that will only do in a pinch.

SOMETIMES, A LEAP IN TECHNOLOGY TAKES A LITTLE JUMP

Actual PC screenshots

- All new physics model that allows you to call shots and even jump balls!

- Real-time photorealistic animation, 3 texture-mapped pool halls and 5 new games.

- Over 8000 man hours of enhancements and over 50 new game features.

ALL NEW! *Sequel to the best-selling pool simulator!*

The ultimate pool simulator just got better. *Guaranteed.*

Over 2 million pool players have taken a break with Virtual Pool, the #1 pool game in the world. Now, with 5 new games, 3 modes of play (Amateur, Pro and Championship), adjustable table characteristics, 128 computer opponents, network play, new pool tutorial and a tournament mode with up to 16 challengers, Virtual Pool 2 is better than ever. Designed by physicists and mathematicians, Virtual Pool 2 is the only real-time 3D pool game guaranteed to improve your game...or your money back!

THIS GAME WILL IMPROVE YOUR ACTUAL POOL PLAY OR YOUR MONEY BACK.
DETAILS INSIDE PACKAGE.
GUARANTEE

© 1997 Celeris, Inc. All rights reserved. Virtual Pool, VR Sports, VR Sports logo, The Difference Is Real, and Interplay are trademarks of Interplay Productions. All rights reserved. Exclusively licensed and distributed by Interplay Productions. Microsoft, Windows and the Windows logo are registered trademarks of Microsoft Corporation. All rights reserved. All other copyrights and trademarks are the property of their respective owners.

VR SPORTS
The Difference Is Real.

VR Sports
16815 Von Karman Ave.
Irvine, CA 92606
www.vrsports.com

Celeris

Designed for Microsoft Windows 95

RATED K-A ESRB

Product Information Number 182

Pause for a breather...

...and it'll be the last breath you take!

"For action lovers, *Extreme Assault* is a must-have and is simply the best game of its type around."
Computer Games Strategy Plus

"Blue Byte unleashes one of the most beautiful graphic engines ever to hit the PC..."
PC Gamer

"*Extreme Assault* attacks your senses with white-knuckled gameplay, eye-popping graphics, and hair-raising action."
Boot Magazine

"*Extreme Assault* will tingle your spine, raise your hair and thrill your soul in a way that very few games can."
Computer Gaming World

Command a 21st century attack helicopter and battle tank with simple arcade style controls!

Fight over 50 intense missions in 6 enormous levels complete with secret caves and tunnels!

Battle up to three of your friends in the unique multi-player operation areas!

COMPUTER GAMES STRATEGY PLUS STAMP OF APPROVAL

CG CHOICE

preferred

EXTREME ASSAULT

1 TO 4 PLAYERS Kali™ • LAN Mplayer™

Available in Stores Now!

Call (800) 933-2983 for a FREE demo or download it from www.bluebyte.com.
Mention source code # EAPCG1197

TEEN T AGES 13+

Blue Byte

Blue Byte Software, Inc. • 870 E. Higgins Road, Suite 143 • Schaumburg, IL 60173 © 1997 Blue Byte Software, Inc. All rights reserved.

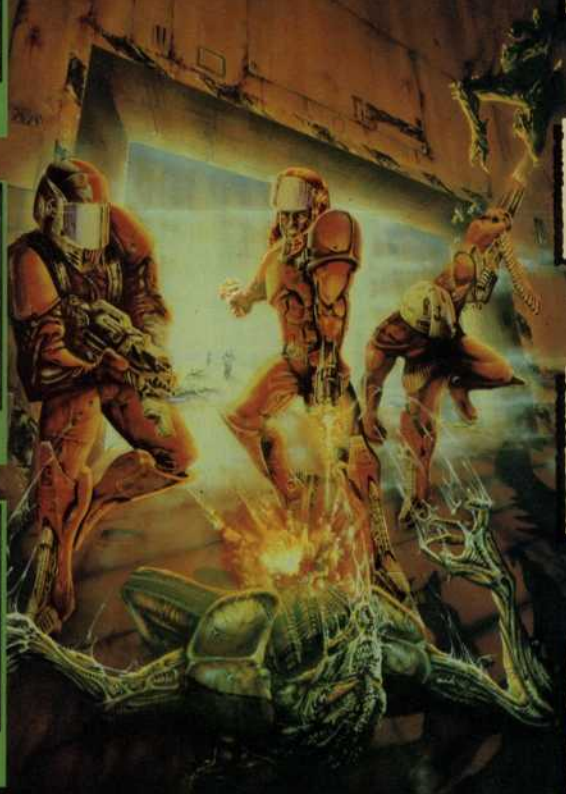
AFRAID OF THE DARK?

YOU WILL BE!

Lead a squad of up to 10 Space Marines in over 30 terrifying turn-based missions!

Slaughter the bloodthirsty Scav'Ger with just a point and click using the intuitive interface!

View the tense action from almost any angle with a free-floating mouse-controlled camera!



"Think *X-Com* meets *Quake* and you might see the picture, and subsequently start salivating."
GamePen

"*Incubation* looks to be one of the best tactical combat games of the year."
PC Games

"Every single weapon has some kind of demented effect, all of which are wonderfully gross and twisted."
online gaming review

"...Blue Byte has created what has to be one of the best looking strategy games ever."
Computer Games Strategy Plus

Featuring the Revolutionary Extreme Assault graphics engine!

INCUBATION

TIME IS RUNNING OUT

1 TO 4 PLAYERS
LAN • Internet
Modem
Play-by-Mail

Product Information Number 101

Available 4th Quarter 1997.
Call (800) 933-2983 for a FREE demo or download it from www.bluebyte.com.
Mention source code # INCPCG1197

RP

Blue Byte

Blue Byte Software, Inc. • 870 E. Higgins Road, Suite 143 • Schaumburg, IL 60173 © 1997 Blue Byte Software, Inc. All rights reserved.

Available August 21

The Future Is About To Become History

EXCALIBUR 2555 AD

Journey to the far future to save the distant past. Battle hand-to-hand. Solve intriguing puzzles. Wield powerful magic. Explore a huge 3D world. Your mission: retrieve the legendary sword Excalibur.

Featuring over 200 locations, 60 different characters, full speech, and incredible realistic light-sourcing, Excalibur 2555 is an absolute epic.

"...could well do for 3D action adventures what *Tomb Raider* did for 3D platformers"
— *Edge*

"Excalibur 2555 is one of the most unique 3D games ever... a really, really cool game."
— *Diehard Gamefan*

Product Information Number 322

SIRTECH

Tel.: (315) 393-6633 Fax: (315) 393-1525
To order, visit your retailer or call: 1-800-447-1230

www.sir-tech.com

PC CD ROM

PlayStation

TEEN T AGES 13+ ESRB

TELSTAR

PlayStation and the PlayStation logos are trademarks of Sony Computer Entertainment Inc.

Imperialism

Win95

Category: Strategy

Developer: Frog City

Publisher: SSI, 657 Almanor Ave., Suite 201, Sunnyvale, CA 94086-2901 (800) 601-7529

Required	We Recommend
Windows 95; Double-speed CD-ROM drive; Pentium 90; 16MB RAM; 1MB SVGA video card; Mouse	32MB RAM; Supported sound card

Conquering the world one turn at a time is now more interesting and fun thanks to this unassuming little title from SSI.

Somewhere between the all-encompassing conquest and expansion of Sid Meier's classic *Civilization* and the micro-management of a game like *Capitalism*, there is fertile ground ripe for exploration. SSI has taken the first step in exploring this rich environment with *Imperialism*, a game of interdependencies, not aggression, and a finely tuned balancing act involving economics, diplomacy, and military action set in a fictitious 19th century world. As in the real world, success depends on the ability to manage the economics — you can't drive a war machine for long without a robust economy under the hood. Different natural resources — foodstuffs, iron, coal, timber and cotton — are essential for fueling the empire, for creating the trade goods, and cannons necessary for survival. Extracting these resources and maximizing your production is as involving and as challenging as anything this side of *Capitalism*; and while that may not be everyone's cup of tea (and the learning curve can be steep), *Imperialism* treats its subject with such care and detail that hard-core strategy gamers can't help but be delighted.

As you explore a map from your starting territory, you'll use a group of non-combatant units (like *Civilization's* settler units) to improve the land's productivity, but unlike the do-all Settler of *Civilization*, each of these units is a specialist — a Miner, a Forester, a Prospector, and so on. To create one of these units, you need a highly trained worker as well as a supply of paper. But trained workers are at a premium. To raise workers up among the three ranks of skill, you must educate them, which costs money and paper. To get paper you need wood, which only comes from forests.

The key to success is to develop a constant flow of natural resources — timber, coal, cotton and iron — with which to grow your economy and build your defenses. But inevitably your productivity will outstrip the resources of your own homeland, and if your economy stagnates at that point, you will be too weak to fend off an attack from one of your many hungry rivals. This is a powerful impetus for aggressive expansion, and this is what *Imperialism* is all about.

The imperialist economy has its effects on diplomacy as well. You can subsidize trade with other nations or enact boycotts against your rivals. You can also pay lump sums as a form of bribery (or "economic aid") to win friends and influence people. Subsidies, embassies, and pacts enhance your diplomatic clout with that nation, with the ultimate goal of getting them to voluntarily join your empire. But if they won't join you, you can always beat 'em.

The international economy is also nicely handled. You can buy and sell all the natural resources, refined products, and finished goods available, including armaments, though selling armaments (even horses, in this age of cavalry) can be dangerous, as these arms can and will be used against you if peaceful trade escalates into war. The amount of trade you can conduct is determined by the size of your merchant fleet, and to expand your merchant fleet, you must produce sailcloth and timber. To pro-

You can check on the economic activity taking place all over your empire.

Tactical combat is handled in this optional mini-game.

duce adequate amounts of cotton and timber, you must have a growing economy – everything neatly ties into everything else.

Imperialism's economics may sound horribly complex, but it does not involve so much micromanagement that it becomes unwieldy and boring. There are only a few finished products — clothes, tools and furniture — that in the abstract represent all of merchant trade. More importantly, micromanagement is kept in check because all production is handled on one central screen, representing your capital. So instead of city-by-city clicking every turn, an empire-wide transport network of rails and ports moves the goods into your capital, allowing you to allocate production in one fell swoop. It's a great system, with the single drawback being that newly-created military units must emanate from your capital city and begin a long march to the front.

When it comes time to venture into combat, the game is as detailed as it needs to be. A dozen different unit types can be built, covering infantry, cavalry, and artillery. Victories result in medallions, creating veteran forces. The quality of the troops is dependent on the skill of the workers you muster for the unit. It's a nicely balanced system.

There's even a tactical combat engine, totally optional, but intriguing nonetheless. As in *Conquest of the New World*, it gives players an extra opportunity to outwit the AI and pull out wins where there should only be defeat. Local fortifications, unit experience, range, firepower, movement, and morale are neatly and succinctly described in this internal game.

Naval combat is more abstract. You move fleets into ocean zones, and set them to patrol. You can't actually order them to attack other fleets, as there is no hex grid on the game map. Instead they must encounter an enemy fleet and engage them on their own, independent of your control. This takes some getting used to, and can cause frustration when your fleet is next to an enemy's fleet, and you look for an "attack" button, but it's nowhere to be found.

Economic management for your entire empire is easily handled on this one screen.

The computer players in naval combat are tough to beat, and your ships may be taken out pretty quickly.

But that's because *Imperialism's* naval combat, as abstract as it is, is a fairly accurate reflection of 19th Century encounters — tiny fleets of slow-moving ships patrolling and pirating across vast swathes of oceans. You just have to hope your fleet engages the enemy and is victorious. You also can't know for sure how many ships and of what type the enemy fleet consists of. You must create small fleets and patrol every ocean off your coast, and then build another war fleet solely for blockading enemy capitals.

A more insidious problem with the naval combat is that at the beginning of a new turn, your advisors will tell you hostile ships are maneuvering in waters off your shores, then they rattle off some fictitious seas and bays. Unfortunately, a minor video card bug (possibly exclusive to the test machines used for this review) garbles the text once you start scrolling the screen. So locating hostile fleets off your many, many shores becomes a tedious affair of scrolling around the giant world map and trying to locate them. But the strong points of *Imperialism's* naval model — the realistic uncertainty of engagement and the ability to interdict trade and sink or capture merchant shipping — outweigh the negatives.

And when it comes to warfare, the artificial intelligence players are suitably and unscrupulously ruthless. Inevitably, at some point, a strong power will attack a weaker power. The other artificial intelligence players are then opportunistic enough to join in en masse with everyone grabbing a piece of the pie (shades of the Crimean War here). It's a great chance for you to jump in too... just be sure you're not on the receiving end.

Still, a few more diplomatic options would have been welcome. You don't, as in *Civilization*, get to know your enemies personally — there are only generic AI players with generic names, reacting in a generic and dull manner.

There's also no technology tree. Scientific advances are discovered periodically, through no effort on your part. You merely need to pay the ever-increasing cash fee to have access to this technology. Though perhaps true to the mercantilistic era in which the game is set, where technologies such as the steamboat and telegraph were quickly and widely adopted, it does preclude the technological advantage of concentrated scientific research, and as a result, industrial espionage of any sort is non-existent. Military espionage is also skipped.

Another failing of *Imperialism* is its over-simplistic maps. There are seven great powers, and about as many minor nations. But there is little to distinguish the minor nations from the major, and even minor nations are armed with cannon and musket. There are no vast, resource-rich continents, of the kind that you find in *Colonization*, and for a historic game, *Imperialism* is rather unhistoric.

There are some other problems and some bugs, such as the fleets who refuse to move after being given "no orders" the prior turn, (until you realize they've been grayed out and must be clicked on to be re-activated). And some players have reported persistent bugs and crashes, mainly with video drivers.

Also, the game just arbitrarily ends, with some sort of grand council meeting and voting for the most powerful two nations at the game's end. Whoever gets the most votes wins. It feels like something tacked on at the end of development to prevent games from lasting too long. There should be an option to turn off the council and give players a chance to just continue the game and win the old-fashioned way, through economic might and military superiority. After all, that's what imperialism is all about.

Too many features are missing to make this a world class, enduring classic like *Civilization* — scientific research, espionage, personalized diplomacy, AI players with different traits, open-ended scenarios, population morale — but there's more than enough here to satisfy the ardent tactician. It's an excellent game, and though it feels a bit thin and unfinished in parts, overall it's a clever and creative take on the empire-building genre.

— Jason Bates

PC GAMER FINAL VERDICT

87%

HIGHS: Original, engrossing, and fun; for connoisseurs of raw strategy.

LOWS: Artificial victory conditions; clumsy ocean maps; non-historical geography; no edit options.

BOTTOM LINE: Fresh, well-balanced gaming that serious strategy gamers shouldn't miss.

1994 The Elder Scrolls® ARENA Role-Playing Game of the Year*

1996 The Elder Scrolls® DAGGERFALL Role-Playing Game of the Year**

1997 The Elder Scrolls® Legend Series begins...

From the epic role-playing world of Daggerfall & Arena, springs forth a sinister tale of mortal conflict & triumph. The celestial citadel known as Battlespire has been ravaged by a black-hearted Daedra Lord. If this dark Lord & his minions can brush aside an entire defending garrison of the Empire's Battlemages, can you, a solitary Hero, stand against them?

- Create your character with the proven character design system based on the Daggerfall game system. It gives you unrivaled power to custom-build the exact type of hero you want.

- Chat with, conspire & then betray your enemies. Mete out justice with sword & fyre. Battle fiends so cunning they smell your blood, hear your footsteps, & track you like prey.
- Explore exquisitely detailed 3D interiors & exteriors. From ominous dungeons to towering castles, all rendered in splendid hi-res & hi-color.
- Wage war in multi-player mode! Team vs. computer, team vs. team or the ultimate Deathmatch via IPX or Internet.

An Elder Scrolls® Legend

BATTLESPIRE™

powered by XnGine

Product Information Number 102

BETHESDA SOFTWORKS

WWW.BETHSOFT.COM

1370 Piccard Drive • Rockville, MD 20850 • BBS 301.990.7552 • Fax 301.926.8010

Arena—Role Playing Game of the Year: Computer Gaming World, Computer Player, Game Machine, Games Magazine.
Daggerfall—Role Playing Game of the Year: Computer Gaming World, PC Gamer, PC Games, PC Today, CGDC Spotlight Award

Bethesda Softworks™, Daggerfall®, Arena®, Battlespire™ & The Elder Scrolls® are trademarks of Media Technology Limited. Copyright© 1994-1997 Media Technology Limited. All rights reserved.

To go even further, discover the totally new Outpost 2™ missions

"Outpost 2™ should be at the top of your shopping list for this fall's early releases."

ALL ABOUT GAMES

"An incredibly fun and challenging gaming experience."

GAMES DOMAIN

SIERRA®

Dynamix

©1997 Sierra On-Line, Inc. All rights reserved. ® and/or ™ designate trademarks of, or licensed to Sierra On-Line, Inc.

s posted at www.sierra.com

Far Out

survival is a trip...

heroin
s & m
unfiltered cigs
binge drinking
creamed corn
one night stands

hell, what's left?

X-COM: APOCALYPSE
the most addictive (and still good for you)
"beat the crap out of aliens" strategy game

MICROPROSE
www.microprose.com
Product Information Number 245
Available on PC CD-ROM. Visit your local retailer or call: 1-800-695-GAME day or night (U.S. and CANADA)

Dragon Dice

Win95

Category: Strategy

Developer: Interplay Productions

Publisher: Interplay Productions, 16815 Von Karman Ave., Irvine, CA 92714 (800) 969-4263

Required	We Recommend
Windows 95; Double-speed CD-ROM drive; 486DX2/66; 8MB RAM; 47MB hard-drive space; Super VGA; Mouse	Pentium; Supported sound card

The award-winning dice game makes the transition from the tabletop to the computer with a lot of fanfare but little substance.

Despite the recent resurgence in roleplaying thanks to the success of *Diablo* and *Daggerfall* (not to mention *Betrayal in Antara* and *Shadows over Riva*), it is interesting to note that one of the biggest phenomena to hit roleplaying in the past several years has nothing to do with computers or technology. In the few short years since its release, Wizards of the Coast's *Magic: The Gathering* card game has amassed a massive following of fans around the globe, surpassing pen and paper classics and computer roleplaying games in sheer popularity. It is little wonder, then, that TSR's *Dragon Dice* follows closely in the footsteps of *M:TG* and has in its own right become a popular pastime for roleplaying fans.

A game of *Dragon Dice* is played with dice representing units and terrain. Two to four players compete to gain control of two territories, each represented by an eight-sided die. The creatures who fight the wars are six-sided dice, and the dragons that players can summon are twelve-sided dice. There are fifteen dice for each of the four races of standard creatures — Coral Elf, Dwarf, Lava Elf, and Goblin — and both the computer and the tabletop game support expansions of new dice introducing new units. If this all sounds rather confusing, that's because it is. It takes quite a bit of patience and a lot of practice to figure out how to play a game of Dragon Dice, and even longer to figure out how to play it intelligently.

The computer version is no different. The greatest asset of the computer version is that it will calculate all the roll totals for you — figuring out exactly how many spell points you just rolled while taking territory adjustments and other bonuses into consideration. In the original tabletop version, this is quite a task, especially when you're rolling with more than twenty dice. If you've never played *Dragon Dice* before, the computer version is a great tutorial for the tabletop game, as long as you carefully read the manual first.

At some points in the game, you'll have to do battle against dragons called forth by other players.

But as a skillful conversion of the original game, the computer version of *Dragon Dice* just doesn't cut it. When you play the tabletop version with real dice, you get a much greater sense of exactly where your enemy's units are. You can see at a glance whether you'll have a tough time trying to skirmish with an army, or if you should just back off and retreat. The layout of the interface for the computer version doesn't really give you an "at a glance" summary of exactly what's on the playing field — how many total units the other players have, and where they're located. Your view is limited to six dice at a time, regardless of how many were rolled.

Another problem is the bland graphics. The game attempts to spruce up each roll of the dice through animations, but these get tiresome rather quickly. But if you check the option to

The campaign screen gives you an overall look of what's going on, but you have to look at each territory individually to see how many armies are hidden there.

Pitting two dragons against each other is a good way to get rid of one of them.

The magic system seems a bit confusing at first, but reading the manual can help you get the hang of it, and you'll soon be casting spells with ease.

bypass them, the action passes far too fast for you to get an idea of what just happened. For example, when you roll the dice, an animated arm sweeps them up and a click of the mouse rolls them. When an opponent rolls, a battle screen pops up demonstrating how strong your attack was, and how well their defense countered it. Take these animations away, and as soon as you choose an action the computer resolves the damage before you even know what you rolled — there's no post-roll status screen to illustrate exactly what happened.

The game supports as many as four players in a multi-player battle, as well as three different kinds of solo-play — standard, tournament, and campaign. The campaigns are lengthy, with sixteen scenarios for each of the four races. You take on the role of one of the four races as they battle against the others. The scenarios are usually "win two territories" missions, although some variety is thrown in — perhaps you have to kill all the enemy dragons, or hold on to a territory for more than a few turns against overwhelming odds. For the most part, however, these scenarios get tiresome rather quickly, especially since the computer artificial intelligence doesn't pose much of a threat.

Overall, the game is a great way to learn to play the tabletop game of *Dragon Dice*, but usually things go by so quickly, it's difficult to follow what's happening — it would still take a lot of practice to get proficient at the tabletop version, even with this game's help. Die-hard fans of the tabletop game will probably get annoyed at the lack of information presented, and those looking for a good turn-based strategy game should look elsewhere.

— *Michael Wolf*

The animations of a monster's hand rolling die might be hokey, but you'll want to leave them in order to follow exactly what you've done after a roll.

DICE 101

Unit Dice

Six-sided dice represent different units. The color determines what race each die represents — Coral Elf, Dwarf, Lava Elf, or Goblin. There are five different classes for each race (Light Infantry, Heavy Infantry, Cavalry, Missile, and Magic), and each class has three different levels, which determines the unit's power for defense and attack, as well as how many hit points the unit can sustain before being killed. Common dice have one hit point, uncommon have two, and rare have three. That means there are 60 individual unit dice in the basic set of *Dragon Dice*, and each one has a name, such as Death Mage for a Rare Magic Goblin unit.

Terrain Dice

The terrain you're attempting to capture is represented by an eight-sided die. It gets rolled once at the beginning of the game to determine the starting number of the territory. The number is then maneuvered up or down by your armies or an opponent to gain control of the territory. The symbols next to the number represents the type of action allowed in that territory, whether it's a magic attack, a missile attack, or a melee attack. When the die is maneuvered to its eighth face, the controlling army has a choice of any of the above, as well as advantages gained by the icon represented on the eighth face (City, Standing Stones, Temple, or Tower).

Dragon Dice

When players cast a magical combat spell, they can summon a dragon to a territory if they have enough magic points. The dragon will attack any army within the same territory, even if it's the army that called forth the dragon. Depending on how the dragon rolls during an attack, it can take either ten or five points to kill it, and it can cause quite a bit of damage itself. A single dragon is capable of wiping out entire armies.

PC GAMER FINAL VERDICT

HIGHS: A good way to learn Dragon Dice. You can get dice combos without spending tons of money.

55%

LOWS: It's difficult to track the number and movements of your units. Lack of useful information.

BOTTOM LINE: It's a good learning tool, but the tabletop version is a deeper strategy game.

HEAT.NET!

THE ONLY INTERNET GAME NETWORK ENDORSED BY THE CYBERDIVERSION INSTITUTE!

WHAT THE CYBERDIVERSION INSTITUTE SAID ABOUT THE HEAT.NET 5-POINT PLAN:

POINT #1: MAKING INTERNET GAMING EASY.

What the CDI said about being able to log on to HEAT.NET, download the free HEAT software and play for free, or simply purchase the retail package (includes six months' premium membership, a HEAT CD with games, and internet access from MCI): ***"HEAT.NET'S SIMPLIFIED START-UP PROCESS WILL JUMP-START WORLD PEACE BY ALLOWING PEOPLE TO START DIVERTING THEIR AGGRESSIVE URGES AWAY FROM REALITY IMMEDIATELY!"***

IN STORES NOW!

POINT #2: CREATING THE FASTEST INTERNET GAMING EXPERIENCE.

What the CDI said about HEAT.NET having the smoothest, fastest internet gaming available:

"THE FASTER EVERY HUMAN CAN PURGE THEIR EVIL REPTILIAN COMPLEX BUILDUP, THE BETTER FOR ALL OF US!"

POINT #3: COMPATIBILITY WITH MOST MULTI-PLAYER CD-ROM PC GAMES.

What the CDI said about HEAT being compatible with almost every multi-player CD-ROM PC game, after playing their favorites, including Quake,™ WarCraft II™ and Scud: Industrial Evolution,™ as well as HEAT-exclusives, like DeathDrome,™ Alien Race,™ Net Fighter™ and "intense" HEAT-only Quake Mods: ***"THIS WIDE RANGE OF REPTILIAN COMPLEX OUTLETS PUTS THE POWER OF PEACE INTO THE HANDS OF THE MASSES!"***

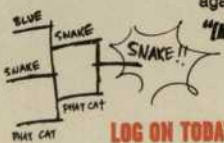
POINT #4: OFFERING REWARDS FOR FREQUENT PLAYERS.

What the CDI said about HEAT being the only network to award frequent player points (Degrees) that can be redeemed for prizes:

"WHAT AN IDEA! IF PEOPLE PLAY MORE OFTEN, THEY WILL QUELL AGGRESSIVE URGES MORE OFTEN AND DECREASE REAL-LIFE AGGRESSION MORE OFTEN!"

POINT #5: CREATING COMPETITION WITH LADDERS AND EVENTS.

What the CDI said about HEAT's automated, secure events and the ability to rise to the top against the best competition in the world:



"[HEAT] CREATES AN ENVIRONMENT FOR...THE ATTAINMENT OF INDIVIDUAL PEACE— WHICH WE BELIEVE WILL LEAD TO A GREATER WORLD PEACE!"

LOG ON TODAY TO THE INTERNET GAME NETWORK THE CYBERDIVERSION INSTITUTE SAID "SHOULD WIN *THE NOBEL PEACE PRIZE!*"

HEAT IS THE ANSWER!

THE ONLY INTERNET GAME NETWORK ENDORSED BY THE CYBERDIVERSION INSTITUTE!

© 1997 SegaSoft Networks, Inc. HEAT, HEAT.NET, Net Fighter and Alien Race are trademarks of SegaSoft Networks, Inc. Scud: Industrial Evolution and its characters are ™ and © Rob Schrab. DeathDrome is a trademark of Wacom New Media, Inc. All other product names are the trademarks of their respective owners.

Prepare to meet thy maker.

When you're ready for skull-crushing, hard-hitting, tournament style action ... you're ready for Drachen Zor.™ Not just another fighting game, Drachen Zor takes you on a no-holds-barred battle through the nine blood pits of Drakkor – a mystical fantasy world where 16 high-definition, fully-mobile, 3D warriors all fight to become Warlord of the Dragon Gate.

Fight one character at a time, or up to three others with its multiplayer networking mode – either way, you'll encounter combatants of all shapes and sizes attacking from all angles. And with more than 54,000 different playing combinations, you could play this game forever.

Assuming you don't meet thy maker first.

Drachen Zor™

SOUTHPEAK™ INTERACTIVE

www.southpeak.com

Developed by: 4th WONDER™ GAMES

RATING PENDING RP ESRB

Windows® 95 CD-ROM

Drachen Zor, SouthPeak and the SouthPeak logo are trademarks of SouthPeak Interactive LLC. Call 1-800-771-3772 for Game Rating information.

Product Information Number 324

The Puzzle Collection

Win95

Category: Puzzle compendium

Developer: Mir Dialogue

Publisher: Microsoft, One Microsoft Way, Redmond, WA 98052-6399 (800) 429-9400

Required	We Recommend
Windows 95; CD-ROM drive; 486/66; 8MB RAM; 6MB free hard-drive space; Compatible sound card	Double-speed CD-ROM drive; 16MB RAM; 30MB free hard-drive space

This uneven collection of brain-teasing (and mind-numbing) puzzles is the first game from the developer of *Tetris* since joining Microsoft.

Okay, let's see a show of hands — how many of you still play *Tetris*? Yep, me too. Developed by Alexey Pajitnov in 1984, *Tetris* was a smash hit, selling more than 40 million copies worldwide. After a brief stint with Spectrum HoloByte — where he oversaw development of *Clockwerx*, *Qwirks*, and *Knight Moves* — Pajitnov is now working with Microsoft Games Group, and *The Puzzle Collection* is his first game since joining them last year. Four of his puzzles are included in *The Puzzle Collection*, along with six puzzles from other Russian game designers.

But despite the influence of Pajitnov, *The Puzzle Collection* is a bit of a disappointment with its collection of competent but ultimately uninteresting head-scratchers. The puzzles are supposed to be for players of any age, but most have a childish feel and look that may turn adults off. The difficulty levels may also be a hindrance; kids may find *The Puzzle Collection* too hard overall, while adults may think it's too easy.

Here's a brief run through of the puzzles in *The Puzzle Collection*. In Muddled Casino, you try to move playing cards off a grid to the exit without knocking other cards off. Cards can only be moved in groups, which are determined by symbols at the edges of the grid. It's not a whole lot of fun.

On the other hand, Finty Flush is one of the most enjoyable games in *The Puzzle Collection*. Different colored marbles fill a grid at the top of your screen; your job is to fill the bottom four grid with marbles of all the same color by manipulating the grids. It's tougher than it sounds.

In Color Collision, you control a line that changes color as it zig zags all over the board. Your goal is to get the line to touch the floating sunshines when the line and the sunshine's edge are the same color. As silly as that sounds, kids will enjoy the bright colors and grinning sunshines.

Mixed Genetics is another puzzle kids will like. A row of animals at the top have been "mixed" — elephants have monkeys' legs or rhinos have birds' heads — and you have to "breed" the animals back to normal by matching common traits.

In Jewel Chase, getting to those jewels faster than the computer-controlled creature isn't easy.

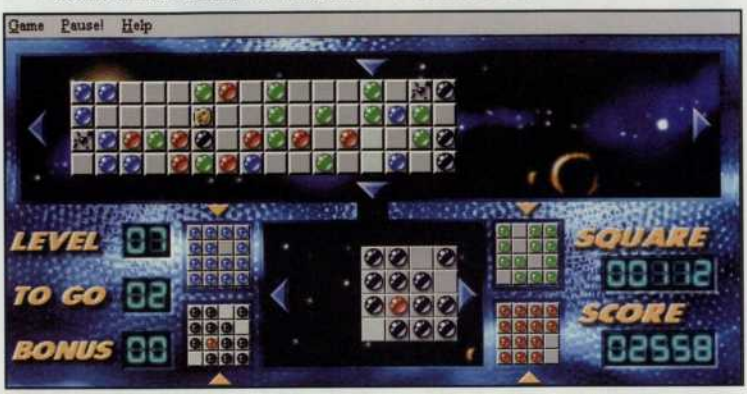
In Fringer, you have to untangle ropes in alternating directions before a bar comes down and tangles them up again. Although it requires quick thinking and reflexes, Fringer is a tad boring. Rat Poker is not much better than Fringer — as different colored rats run around grids, you have to trap them and try to combine them into winning poker hands. Fun, right? Wrong.

Jewel Chase is one of the easiest puzzles in the collection. Your goal is to grab as many jewels and coins before the computer-controlled creature gets to them. And in Spring Weekend, you rotate gardening icons on a board in order to match the design on the computer board in as few moves as possible. This is fun for about five minutes.

Lineup is fun but not that engaging. You get odd-shaped five-block pieces of sports balls (basketballs, tennis balls, etc.) that you line up on a grid attempting to form horizontal or vertical lines. In Charmer, you control flutes in order to charm snakes out of their pots. This is another puzzle that kids may enjoy but one that adults will find too elementary for their tastes.

The overall problem with *The Puzzle Collection* is simply that the puzzles are so different, and work on so many different levels, that you'll latch on to one or two favorites and discount the rest. The variety is commendable, but the collection is simply too uneven to enjoy them all. While the collection is relatively inexpensive ($35 MSRP), most puzzles simply don't have the staying power to last for more than a few weeks. I know I won't be playing these puzzles in the years to come. I will, however, still be playing *Tetris*.

—Lisa H. Renninger



Finty Flush gets more complicated as the levels progress, with lots of different colored marbles and special action icons.

PC GAMER FINAL VERDICT

HIGHS: Some engaging and fun puzzles; wide range of puzzles may satisfy whole family.

52%

LOWS: Some real stinkers in the mix; wide range of difficulty may turn off whole family.

BOTTOM LINE: A decent package for puzzle fiends, but none of the puzzles comes close to *Tetris*.

PAX IMPERIA
EMINENT DOMAIN
The largest, most sophisticated game universe ever created is at your control.
THQ
WWW.PAXIMPERIA.COM
Product Information Number 337
Designed for Microsoft Windows 95
MacOS

©1997 SSG. All rights reserved. Warlords is a trademark of SSG. Reign of Heroes and Red Orb Entertainment are trademarks and or registered trademarks of Broderbund Software, Inc.

"Warlords AI not only blows away the immediate fantasy-based competition, but other strategic wargames as well." -PC Games

"For this gaming series, third times a charm!" -PC Gamer

WARLORDS III
REIGN OF HEROES

"Warlords III pushes the envelope forward for turn-based games -- especially for internet play." -Computer Gaming World

Unique simultaneous movement mode for up to 8 players in multiplayer games reveals each player's actions in real time.

Test your strategies with more than 80 different animated creatures and warriors, plus countless spells, abilities and rewards over multiple terrains.

Struggle against computer opponents whose AI monitors your every tendency and plots elaborate strategies against you and your allies.

Hordes of the Undead overrun the Selentine Empire, leaving utter devastation in their wake. From the ashes, a powerful new reign of heroes arises to contend for power and build a new empire. Arrayed against zombies, elementals and other unspeakables, you must arrange alliances, cast horrific spells, and lead your armies to victory... or be crushed beneath the enemy's merciless heel.

WWW.WARLORDS3.COM

Product Information Number 108

Pacific General

Win95

Category: Strategy

Developer: Strategic Simulations, Inc.

Publisher: SSI, Inc., 675 Almanor Ave., Ste. 201, Sunnyvale, CA 94086 (408) 737-6800

Required	We Recommend
Windows 95; Quad-speed CD-ROM drive; Pentium 90; 16MB RAM; 1 MG Super VGA	Pentium 133; Supported Sound Card; 32 MB RAM

The last of SSI's Five Star Series hits the water like a reluctant kamikaze; not with a bang or whimper, but with a loud, wooden "Clunk!"

In the two years since the smashing, and in some ways, unexpected, success of *Panzer General*, SSI has wisely used the same tried-and-true engine to power a series of strategy games that were both complementary to *PG* and wildly different. *Allied General*, *Fantasy General*, and *Star General* have all benefited from *Panzer General*'s legacy.

However, the final game in the Five Star series — *Pacific General* — shows all the signs of having been thrown onto the marketplace very prematurely, and given how great the original *Panzer General* was (and how smart, dedicated, and knowledgeable the SSI design team truly is), I cannot believe that this half-baked farrago went out the door backed by their fullest enthusiasm and confidence.

Where to start? Well, as regular readers of my columns/reviews should know by now, whenever there are design conflicts in a wargame between grognard-level "realism" and beer-and-pretzels "fun", I generally cast my vote in favor of fun.

That's one reason why *Panzer General* was such a hit: it was respectful enough of historical realism to please the hard-core bunch, but it was so easy to slide into, so addictive, so much fun to play, that it hooked thousands of consumers who'd rarely (or never) played a wargame before. Its prestige/victory points system was easy to grasp; so was the concept of upgrading your "core" units to the extent that they became your elite personal legion.

But in *Pacific General*, what had seemed crystal-clear has become murky and unbalanced. Veteran players of the series are going to find themselves stymied, stumped, and frustratingly unsure of what exactly is going on. God knows, I put in almost as many hours playing the original *Panzer General* as I did the original *Empire* — making it Number Two on my personal Wargame Hall of Fame list — yet there were times playing *Pacific General*, when I was trying to fathom why weird stuff was or was not happening, that I felt like a befuddled novice.

First things first: *Pacific General*, outwardly, is a full-scale translation of the *Panzer General* system to the Pacific Theater of War, with a greatly expanded element of naval combat, especially with regard to carrier operations. There is a nifty inventory of stand-alone battles, a Japanese-or-Allied campaign/career option, and a new roll-your-own Battle Generator for creating custom-made scenarios — a feature *Panzer General* addicts have been clamoring for.

The stand-alone battles are mostly fun and mostly solid. All the biggies are here (Iwo Jima, Tarawa, Midway, etc.), along with some great less-famous scenarios set in China, Burma, and India; you also get a fascinating fantasy scenario depicting a Japanese invasion of San Francisco.

For a better gaming experience, select the Japanese side to play in the Campaign.

Graphics show little improvement over the earlier games — they are, in some details, actually rather bad (pale gray "damage" symbols against a black background in naval battles makes for serious eyestrain). The musical score, a grating and wildly unsuitable medley of 1940s swing tunes, will immediately be turned off, permanently, by 99 percent of those who buy the game.

God only knows why the interface has been changed, since its friendliness was one of the major ingredients of *Panzer General*'s success. But in *Pacific General*, those columns of main control and option-control icons pop on-screen when you move your cursor over the top-left or top-right of the screen. This often happens when you're simply trying to scroll in those directions, creating a minor but frequent irritation; some of the new icons are either mystifying or redundant, such as the enigmatic "Special" icon, which turns out to be nothing special at all — it just duplicates, for no good reason, a couple of carrier-battle functions that are more logically handled by clicking on the ships. The "Go to Unit" icon is also simply useless. You can keep the menus on-screen by hitting the spacebar, but if you do that, you lose about 25 percent of your view of the battlefield.

In fact, the whole area of carrier operations has been handled with astonishing klutziness (check out Gary Grigsby's old *Carrier Strike*, also an SSI product, to see how elegantly it can be done, and Grigsby is not known for the friendliness of his interfaces). Combat resolution in this series has always been a kind of scissors-rock-paper abstrac-

The main Battle Generator screen is a complicated mess and about as user-friendly as a junkyard dog.

tion, but in *Pacific General*'s carrier battles it looks and feels all wrong.

You cannot launch multiple air strikes against an enemy surface vessel in the same turn (unless you've got torpedo bombers, which can launch from one hex away); you can only drop bombs with the planes parked directly over the target, and those planes cannot move after dropping. Hence, the very idea of sending "waves" of planes against an enemy carrier or capital ship is impossible, even though, historically, that was the most efficient way of sinking such a target. If you have other friendly planes clustered around the active hex, you do get better odds of inflicting serious damage, but that's a poor substitute for real carrier tactics.

Whoever designed the Allied campaign-tree must have been temporarily deranged. It starts not with Pearl Harbor, Wake Island, or the Philippines (as logic might suggest), but with the Battle of Midway. And that first battle is a bear. Until you figure out the (extremely arbitrary) "trick" to winning, you will lose — over and over again. Hell, even if you sink two Japanese carriers, seriously damage two more, decimate their air forces, sink a bunch of surface ships, and successfully protect your own carriers, you're still fired for "gross incompetence" and the "campaign" ends right there. This is a terrible design choice — in effect, it slams the door to the whole Allied campaign experience right in the face of every gamer whose tolerance of frustration is anything less than Job-like.

As for the much-anticipated battle generator, it is so complicated (and its explanation in the manual so inexcusably superficial), that even expert wargamers are going to waste hours and hours trying to second-guess the design. You can't create a battle more than 30 turns long; why not? No explanation. If you want a really big, toothsome, engagement, you're outta luck. The three layers of victory-determination ratios are somehow interrelated, yet sometimes they're mutually exclusive, too. I designed (ever so carefully) several scenarios that were shut down by the computer after *one turn*, even though I had specified 30 turns. Why? I have no idea — something abstruse about those victory conditions, probably, but you'll search in vain for any illumination in the manual.

***Pacific General* gets off to a rocky start as players go to Midway for the first battle in the Allied campaign.**

Worse yet, you cannot edit the stand-alone battles (here comes patch number one folks!), unless you open up Windows and manually swap a bunch of files from folder to folder — and even that doesn't work very well. Then there's the battle generator function called "Setting the AI Bucket," which is "explained" in prose so impenetrable that, unless you have a degree in computer science, you might as well be trying to decipher Babylonian tomb inscriptions. Just click on the default setting — that *seems* to work all right, even though I'm still not sure what's "working."

Many players will find the carrier action at Midway so tough to beat that their Allied Campaign career will end before it really has a chance to begin!

Despite what the ads and the packaging promise, you can't import any desired map or unit-roster from *Panzer General* or *Allied General*. Only a relative handful of maps are available, and scenario data has to be manually input, by selecting, empowering, and deploying each individual unit. If it's this much work, why bother?

But the most sheerly aggravating "new feature" of *Pacific General* is that you can't save at the end of a campaign game — when one battle ends, you get kicked straight into an incredibly unwieldy next-scenario set-up/purchase-units screen, which means you have to figure out when one battle's close to ending, and save then. Otherwise, the next chance you get to save comes only after you've laboriously purchased and deployed everything needed for the next campaign battle! Hey, guys! If it ain't broke, don't fix it! A simple little design element that worked perfectly well in *Panzer General* has been replaced by an illogical, infuriating, and utterly pointless revision.

I'm out of space, even as I am out of patience with a game I've been anticipating eagerly for months. All that redeems *Pacific General* in its current state are the stand-alone battles. If you have the time and patience to download all the patches required to bring this game up to snuff, and you have a burning interest in the subject matter, you might want to invest in it. But as it stands upon its initial release, this game is an ungodly mess. When I think of what it *could* have been... but if wishes were horses, beggars would ride.

—William R. Trotter

HAVING IT YOUR WAY at MIDWAY

Okay, let's get this straight right off the bat. The *reason* why there *was* a Battle of Midway is because the Japanese wanted to invade this strategic island, capture its airbase, and turn it into a fortress guarding the frontier of their Greater East-Asia Co-Prosperity Sphere.

In the *Pacific General* version, there *are* no transports crammed with Japanese marines (so you get no credit for repelling an invasion, even though that's the only reason the battle was fought in the first place!). No — it's just an abstract carrier battle, and unless you sink at least three of the four Japanese carriers (which look, as rendered by SSI's artists, more like Great Lakes ore-freighters than carriers), you lose and the campaign ends.

It took me lots of tries to do it, but here's one way to eke out enough points to keep your campaign career going:

Group all of your ships (except for the sub) and sail northwest, away from Midway, until you're just outside of enemy sight (you'll have to play a few games to get a feel for where that invisible line is), then turn hard to port and head west. Forget about Combat Air Patrols (CAPs) — put all of your fighters in a wall on the southern flank of your fleet.

Japanese cruisers will appear below your fleet, heading east. Harass them with your PBYs and your submarine — this usually keeps them away from your carriers until it's too late for them to make a difference.

Add your Midway-based aircraft to the southern flank of your air fleet. When the enemy carriers appear, swarm all over every Zero that comes at you (these F4F Wildcats are a lot more effective than they were in reality). You should be able to decimate the Japanese fighters and still be able to screen your carriers from serious harm.

As soon as Japanese aircraft losses hit 50 percent or so, their carriers will start withdrawing to the northwest. By now, the skies are mostly cleared of Zeros and Claudes, so your Dauntlesses, Devastators, and land-based bombers can pummel the carriers almost at will. Keep hammering them (always use your TBF torpedo bombers at a one-hex distance so you can put another bomber directly over the enemy carriers in the same turn). If you don't sink all four carriers by turn nine, your surface ships should be close enough to deliver the coup de grace with gunfire or destroyer-launched torpedoes.

PC GAMER FINAL VERDICT

48%

HIGHS: Many stand-alone scenarios are fun and historically interesting.

LOWS: Lots of *bad* changes to the interface; Battle Generator is a nightmare; can't save at the end of a campaign battle!

BOTTOM LINE: One of the biggest disappointments I've ever experienced as a game reviewer.

A NEW FORM OF LIFE...

YOU'VE ACCESSED GALAPAGOS™: AN UNSTABLE, TECHNOLOGICALLY ADVANCED WORLD OF ELECTRIC BLUE CORRIDORS AND OMINOUS DIMENSIONAL GATES. POPULATED BY LEGIONS OF MECHANIZED SOLDIERS, GALAPAGOS OVERTHROWS NEIGHBORING WORLDS AND ALIGNS THEM TO ITS INTERNAL DIMENSION, DRAINING RESOURCES AND ANNIHILATING INHABITANTS.

TWISTED BY GENIUS AND GREED, THE CREATORS OF GALAPAGOS EXPERIMENT WITH PILLAGED RESOURCES TO CONSTRUCT PRE-PROGRAMMED MACHINES OF WAR. **MENDEL IS THE EXCEPTION.**

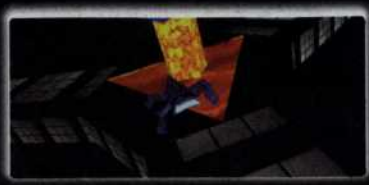
MENDEL IS A SYNTHETIC ORGANISM WITH THE UNIQUE ABILITY TO LEARN. BENEATH HIS ALLOY SHELL IS A TECHNOLOGY THAT SERVES AS HIS MIND, ALLOWING HIM TO LEARN AND ADAPT TO HIS ENVIRONMENT THROUGH TRIAL AND ERROR. HE IS THE PROTOTYPE TO A NEW GENERATION OF AUTONOMOUS WAR MACHINES, AND IF HIS ENGINEERING IS REPRODUCED, GALAPAGOS WOULD BE UNSTOPPABLE!

BUT MENDEL IS HARMLESS AND ALONE. HE'S TRAPPED IN A LABORATORY AWAITING TORTUROUS EXPERIMENTS DESIGNED TO TEST THE SCOPE OF THIS NEW TECHNOLOGY. YOU CAN HELP HIM, BUT YOU CAN'T CONTROL HIM. IF MENDEL DOESN'T ESCAPE, GALAPAGOS WILL PROSPER, AND ITS TYRANNICAL ARMY WILL RAVAGE THE GALAXY.

MENDEL MUST ESCAPE FROM GALAPAGOS!

GALAPAGOS
Tyrannous Command Center

SINE
Toxic Cloud Mine



LUMEN
Subterranean Powerplant

Anark, the Anark symbol, and NERM are trademarks of Anark Corporation. Galapagos is a trademark of Anark Game Studios, Inc. All rights reserved. Electronic Arts is a trademark or registered trademark of Electronic Arts in the U.S. and/or

NERM™

Non-stationary Entropic Reduction Mapping

In the scientific realm of Artificial Life, Anark has developed a revolutionary form of technology called NERM.

NERM lends itself to everything from enhanced industrial productivity to digital switching systems used in telecommunications. And now NERM changes the face of video games.

Mendel, the synthetic organism in Galapagos, utilizes NERM technology to survive. Much like a living organism, Mendel learns and develops new behaviors to survive. If Mendel steps off a bridge and sinks into a glowing pit of acid, he melts and regenerates, his mind is altered by the experience, and he becomes less likely to repeat his mistake.

In other words, Mendel is not pre-programmed; he learns right before your eyes. NERM allows Mendel to express a number of behaviors resulting from the same stimulus. This flexibility is impossible with other adaptive technologies and makes every game of Galapagos unique.

NERM Controller Converging on Logistic Map

IS EMERGING

"More than any other title ever previewed in NEXT Generation, the technologies pioneered in this title may significantly change the way we play games in the next several years." — NEXT Generation

GALAPAGOS™

MENDEL'S ESCAPE

PLON
Lethal Refinery

HELLEN
Gothic Temple

Download
the Windows® 95/
Mac OS® demo today.

WWW.EA.COM/EAD

Order yours today.
Call (800) 245-4525.

other countries. All rights reserved. All other trademarks are the property of their respective owners.

Product Information Number 142

IF GUNS FAIL, BRING IN DOGS.

IF DOGS FAIL, BRING IN TEAR GAS.

IF TEAR GAS FAILS.

BRING IN HELICOPTERS.

SIERRA®

© 1997 Sierra On-line, Inc. ® and/or ™ designated trademarks of, or licensed to Sierra On-line, Inc. Bellevue, Wa. 98007. All rights reserved.

Download the demo at www.sierra.com/swat2.

Product Information Number 317

DARYL F. GATES' POLICE QUEST SWAT 2

Welcome to the world of Daryl F. Gates and the LAPD. Here, a thin blue line separates law-abiding society from kooks, crazies, terrorists, sociopaths, drug lords and gang bangers. The choice is yours. Join the good guys and learn LAPD SWAT tactics, strategies and scenarios. Or become one of society's miscreants, and take it to the establishment with bombs, grenades, and rocket launchers. Alone or on-line, no two missions are alike. All you have is your mental wherewithal and a steely resolve to keep your drawers soil-free under fire. It's not just another day in L.A. Then again, it is.

IF HELICOPTERS FAIL.

BRING IN THE NEGOTIATION TEAM.

DEATH is NOTHING

Play as one of 4 death-dealing Mageslayers across dozens of hellish levels.

Soul-destroying 3-D environments heaving with diabolical traps and mysteries.

An all-powerful war chest of magical attacks like Chain Lightning and the Firewhip.

Spread the Evil with several modes of MultiSlayer action for up to 16 players.

Death would be too easy.

Too little to repay a **thousand year old** debt.

Too **quick** to satisfy the hunger of one you **betrayed** and left to the ravages of the **Mages** in another millennium.

Before **LORE THANE** extracts his terrible price on your body and **soul**, you are bound to wander through five worlds of atrocity.

Stoking your **powers**. Solving internal mysteries. Gathering **magic** and **arcane knowledge**.

Fighting your way through **FEAR** into **MADNESS** for one last, desperate struggle against **Evil**, himself.

Only then will he **anoint you** with the last sacraments of your torment.

No. **Death** would be too easy.

A malevolent
3D fantasy quest
from the creators of
HEXEN™ and HEXEN II.

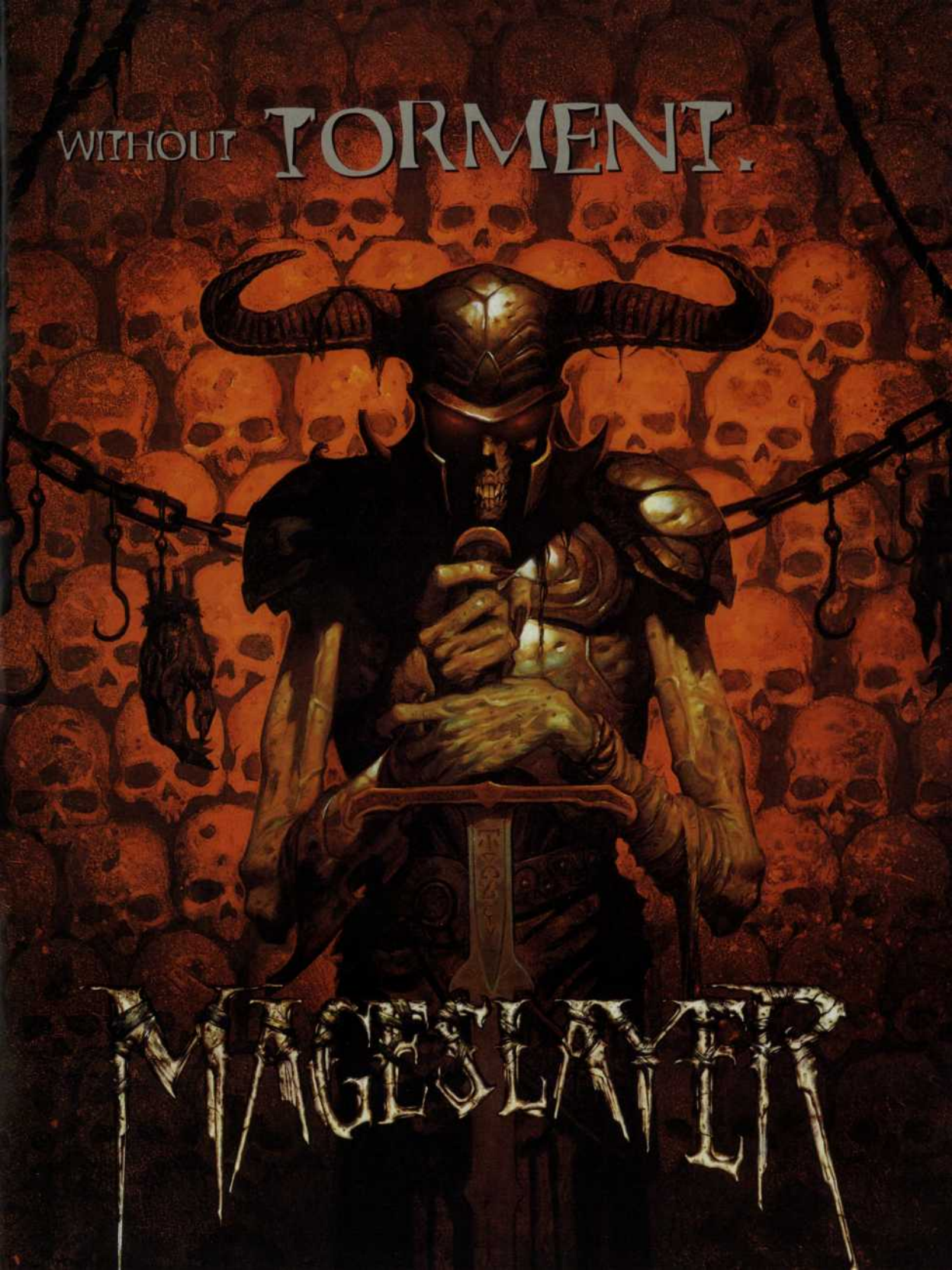
Windows® 95

RATING PENDING RP ESRB

RAVEN

MageSlayer © 1997 Raven Software, Inc. All Rights Reserved. Published and distributed by GT Interactive Software Corp. GT is a trademark and the GT Logo® is a registered trademark of GT Interactive Software Corp. Windows® is a registered trademark of Microsoft Corp. All other trademarks are the property of their respective companies.

GT Interactive Software
www.gtgames.com


WITHOUT TORMENT.
MAGESLAYER

Want unreal performance from Unreal?
Play it on a Falcon MACH V
CALL TOLL FREE:
1-888-FALCON-1
www.falcon-nw.com
FALCON NORTHWEST
COMPUTER SYSTEMS
Product Information Number 140
Custom built PCs starting at $2,495 for game playing, graphics, game design - or even getting some work done
Unreal™ ©1997 Epic Megagames, Inc. All Rights Reserved. Created by Epic Megagames, Inc.
Published & distributed by GT Interactive Software Corp.

This is where gamers go to build the machines of their dreams. This is far more than just techno-babble... this is

The Hard Stuff

Turn the page and you'll notice a big, fat, Hard Stuff-style preview of the operating system that will probably be running on your computer before too long. Windows 98 looks good and has many new and convenient features that Win 95 lacks.

Of course, if Microsoft continues its policy of revising its operating systems every two years and releasing a new one every three, the next OS you will install will probably be called (appropriately enough) Windows 2001 — another reason to fear the millennium!

In any case, Microsoft has already begun work on the wish list for Windows 2001, which will probably be code-named after a major city like Chicago (Win 95) and Memphis (Win 98). Here at The Hard Stuff, we're developing our own wish list for the next operating system. So far, it's not very long:

1. The code name for the OS should either be Graceland or Lynchburg.
2. It should have the ability to do our laundry.
3. It should be able to entertain guests who visit from out of town while we're on deadline.
4. Most importantly, it should be capable of writing hardware reviews with little supervision.

Actually, the next version of Windows is still way too far away to even think about, but Windows 98 will be upon us in a few months. It's got a lot of interesting new features, many of which are pretty neat. For instance, a stable API suite, DirectX 5, is built right in! Imagine not having to install the latest version of DirectX every time you buy a game, desperately hoping all the while that it doesn't crash your system!

The most exciting new twist is — or will be, when the hardware becomes available — the *OnNow* feature, which cuts down boot-up and shutdown times immensely. We're especially happy about this one, since the average *PC Gamer* system is so constantly barraged with alpha and beta software that, within a month after a clean format, booting up in the morning can take us long enough to go get a cup of coffee, drink it in a leisurely fashion, then go out for an early lunch before we get a chance to log in....

Contents

Previews

Windows 98: *The new OS will arrive early next year, and here's what to expect* 322
Rendition readies its next 3D chip 326
Jane's releases its own joystick 326

Reviews

Recompute Gamester *system* 330
MTS 100 Home Theater System *speakers* 282
VRex VR Surfer *VR glasses* 336
Suncom FX1000 *joystick* 336
Number Nine Revolution 3D *card* 341
Laral Group Nintendo 3D1 *joystick* 341
Gemini Maverick Joystick 342
Jazz Adrenaline Rush *card* 342
SideWinder Force Feedback Pro *joystick* 345
Platinum Sound SRS 2000 *speakers* 346
Altec ACS48 PowerCube Plus *speakers* 346

The Hard Stuff Sideways Page

We dare to compare: *Here are all the systems and 3D graphic accelerator cards we have reviewed listed side-by-side* 349

Tech Q&A

Having problems? *Joel can help* 352

How We Rate The Hard Stuff

You've been around long enough to know the greatest technology doesn't mean a thing unless it improves the games you love to play. Our reviews focus on real-world testing, but when a number is in order for comparisons, we use the benchmarking tools developed by our hardware-frenzied sister publication, *boot*. Between our rigorous testing and the thorough bootMarks, we'll give you the lowdown on which devices perform and which ones fizzle.

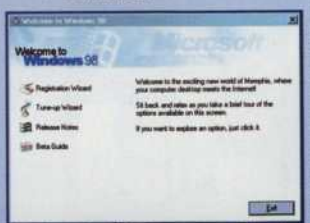
PC Gamer Editors' Choice Awards

Every month, we honor the best peripherals, utilities, and hardware we test with our Editors' Choice award. So when you see the *PCG* Editors' Choice logo on hardware at a local computer store, you can be sure it's among the best.

What's New in Windows 98

■ The new Windows will be here next year, and here's what to expect.

Get ready to change your operating system. Microsoft is busy putting the final touches on the follow-up to the hugely successful Windows 95, which has sold more than 80 million copies since its release. Long known as Memphis, the new OS is officially called Windows 98 and should hit store shelves in the first quarter of next year.



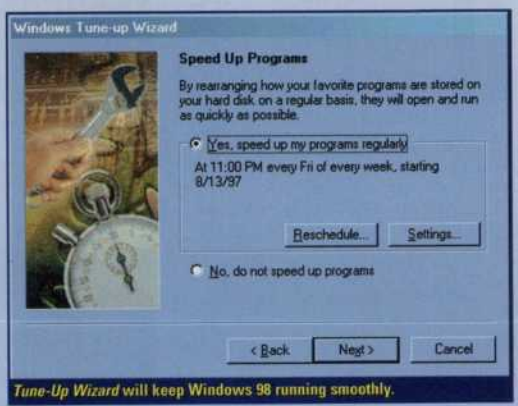
Windows 98 will be the most user-friendly Microsoft OS yet.

Now for the good news: The new operating system won't bring a radical facelift, as Win95 did compared to Windows 3.x. Microsoft has kept the same feel, so users who upgrade to Win98 won't have to scale a huge learning curve to make the best of the new OS. There will be major — and welcome — changes hidden beneath the old GUI, however. Microsoft says it's listened to, and acted upon, the suggestions and complaints of the millions of Win95 users.

The biggest change is that *Internet Explorer 4.0* will be grafted into the interface. That's right — an Internet browser will be intertwined throughout the entire operating system. In some aspects, Windows will use browser-type features locally; desktop icons will become hot links, so watch for the death of double-clicking. To facilitate the web integration, Dial-Up Networking will be streamlined with the ability to automate the connection process.

Look for faster boot-up and shut-down times, quicker program loads, and a feature called *OnNow*, which will let users start their PCs almost instantly, eliminating the lengthy boot-up process. Win98 will also include a utility called *Tune-Up Wizard*, which is supposed to keep your system optimized for continually fast performance.

Under View options, you can choose to make your interface act like a web page, complete with single-click "hot link" style icons.

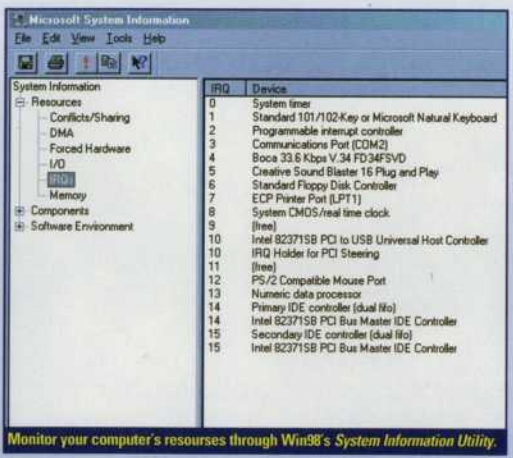


Tune-Up Wizard will keep Windows 98 running smoothly.

Win98-powered PCs will feel more comfortable next to the stereo and the TV. Support for IEEE 1394 will give users the opportunity to add a host adapter to which VCRs, CD players and other entertainment center equipment can be attached, then controlled via the computer. Win98 will also natively support DVD and other digital audio equipment. Television will also become a function of the computer — at least partially. Win98 will support Enhanced TV, which consists of shows that incorporate supplemental web-style content, and it'll also have a TV program guide built in.

To keep things running smoothly, *Windows Update* will keep the OS up to date through the web by downloading the latest drivers and OS revisions as needed. That's a major relief to those of us who shudder uncontrollably at the very mention of DirectX; Version 5 will be built into Win98. DirectX 5 will be the biggest gaming advantage of the new OS: support for force-feedback devices, enhanced MMX support, and better Direct3D implementation are promised for the new API suite. The new Windows will also test your hardware and system configuration automatically on a regular basis and, if possible, fix any problems before they become a danger to your data.

Moving under the hood, we see major technical advancements over Win95. Win98 will still



Monitor your computer's resourses through Win98's *System Information Utility*.

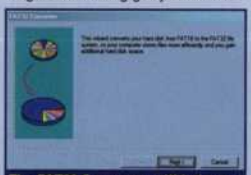
combine 16- and 32-bit code, mainly for backward support of DOS and Windows 3.x games and apps. Numerous refinements should make the new OS much more stable than its sometimes-twitchy predecessor. There will be new utilities to help diagnose problems: *System Information Utility*, a, robust, ActiveX version of Device Manager, and *Dr. Watson*, which will be familiar to NT users: it snoops things like drivers, startup programs, and TSRs, and informs users about their version, where and why they were loaded, and so on.

Hardware support will be greatly expanded. Plug-and-Play will reach new heights with hot docking support for IEEE 1394 and USB devices. In fact, with native support finally in place at the OS level, look for USB to really take off in 1998. Every peripheral you can think of — joysticks, modems, printers, external drives, and anything else you'll want to hook up to your computer — will be available for the fast, external bus.

Win98 will embrace the long touted Advanced Configuration and Power Interface (ACPI), upon which *OnNow* is dependent. ACPI will allow the PC and its components to be independently turned on or off through the operating system, enabling features like a low-power sleep mode, in which some automatic jobs can still be performed; modems that can be used to turn the computer on remotely; timed recordings of TV, radio, or Internet broadcasts, and so on.

Win98 will support multiple monitors, and applications are already poised to take advantage of them. For instance, an upcoming version of PowerPoint will let users show slides on one display and captions on another. Different displays can have different resolutions, too, so users can keep their 17" desktop monitors at 1024x768 for *Quicken*, and plug in a 31", 800x600 monitor for *Quake*. Imagine a flight sim with three monitors: one in the traditional position and one on each side, so you no longer have to depend on the hat switch for viewpoint changes. Or picture a real-time strategy game with multiple monitor support, so you can watch a different map area on each display.

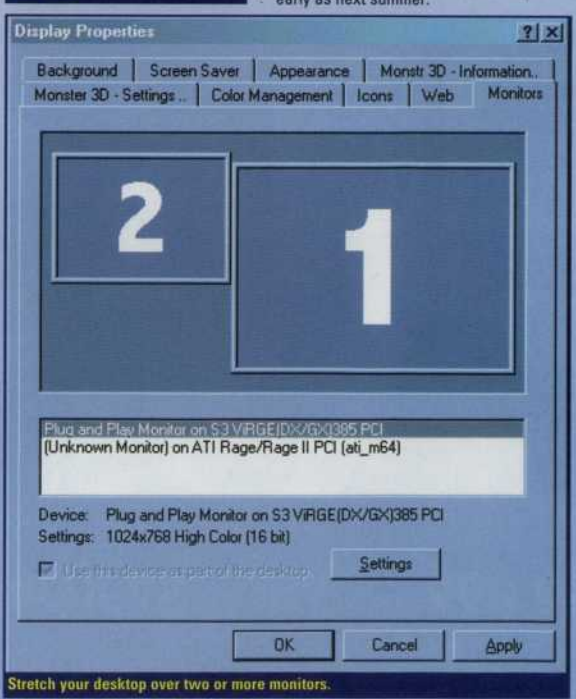
The Win98 file system will be far more efficient with hard-drive space, thanks to the addition of FAT32. Smaller **clusters** will make it possible to store more small files in the same amount of space, and drives larger than two gigabytes will be able to be formatted as one huge logical drive.



The FAT32 Converter will help you get the most space out of your hard drive.

Little things will be altered, too, mostly in the way of simple convenience. For instance, drag and drop operations will be extended to include the Start menu; an icon on the Toolbar will let you minimize and restore all open windows with one click; a number of the popular Power Toys will be built in; preferences for each folder can be customized using HTML (web site) commands; and all of the new interface features can be toggled on or off if you don't like a change they made from Win95.

Windows 98 will be backward compatible with Win95, which is largely backward compatible with DOS and Win 3.X, so you still won't have to throw away that 8-bit sound card and all of your old DOS games. But just as Windows 95 has slowly squeezed DOS out of the picture, the new Windows *will* become the dominant PC gaming platform. Look for games that require Windows 98 to be released as early as next summer.

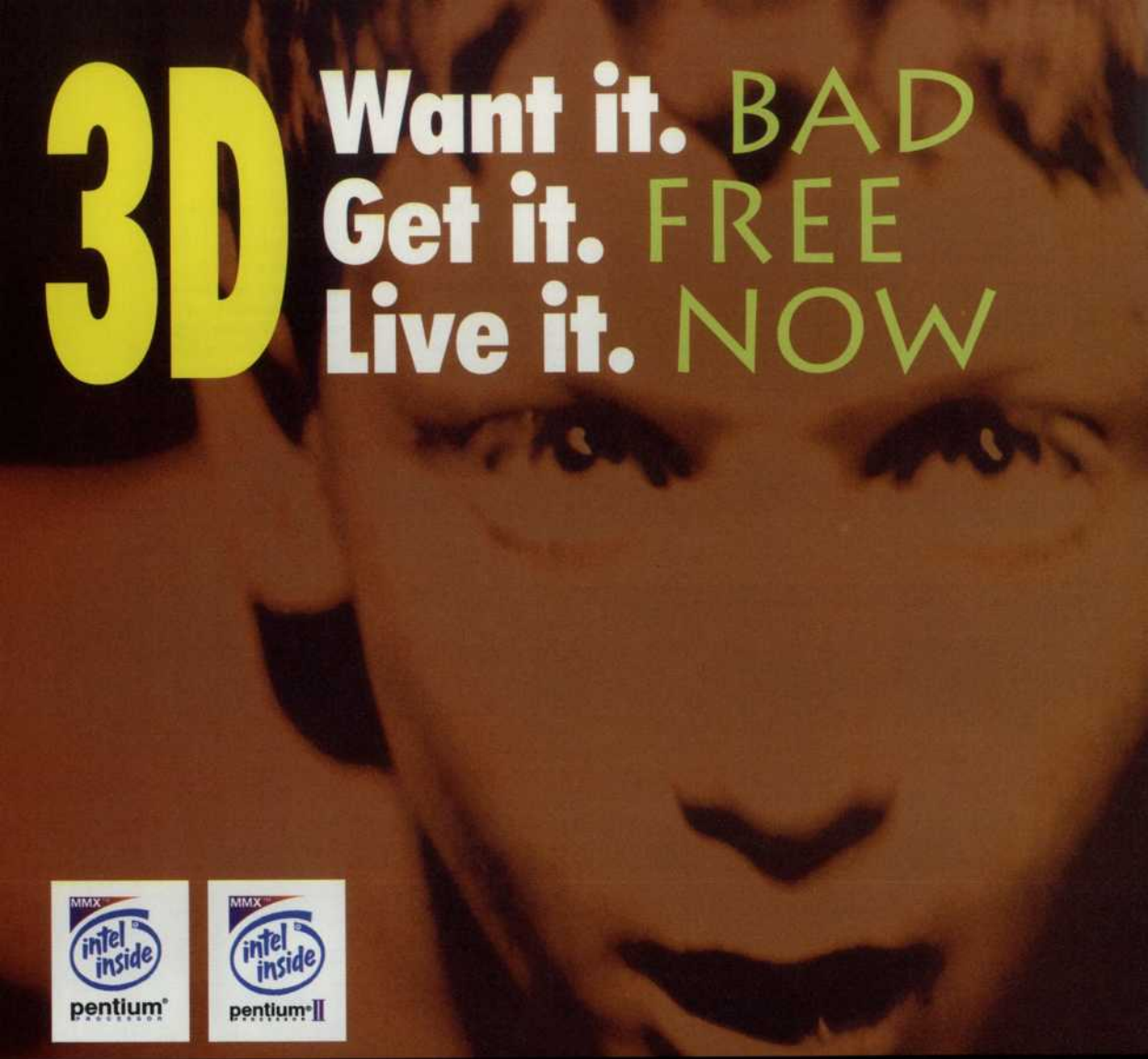


Stretch your desktop over two or more monitors.

Windows 98 On the Web

For more information about Windows 98, hit the web!

- Microsoft's official Windows 98 site: *www.microsoft.com/windows95/info/memover.htm*
- There are informative, unofficial pages at *home.sprynet.com/sprynet/tbana/* and *www.win98.net*
- The Usenet is also abuzz with Windows 98 talk, but you should take it with a grain of salt — as with any Usenet forum, there's not a lot of fact-checking going on. Check out: *alt.windows95comp.os.ms-windows.advocacymicrosoft.public.inetexplorer.ie4*



166 MHz TD-25

- Intel 166MHz Pentium® Processor with MMX
- 32MB (1-32MB) DIMM
- 512K Pipelined Burst Cache
- Intense 3D 100 w/4MB EDO RAM
- 17" .27dp, 1280x1024 Monitor (16.0"viewable)
- 1.7GB 10ms EIDE Hard Disk
- Floppy 3.5", 1.44MB
- 7 slots (3 PCI, 3 ISA, 1 Shared), 6 Drive Bays
- 2 USB Ports, 1 Parallel Port, 2 Serial Ports
- Dual EIDE channel/Ultra DMA 33/4 devices

$2,099 model #GAM500

233 MHz TD-25

- Intel 233MHz Pentium® Processor with MMX
- 32MB (1-32MB) DIMM
- 512K Pipelined Burst Cache
- Intense 3D 100 w/4MB EDO RAM
- 17" .27dp, 1280x1024 Monitor (16.0"viewable)
- 3.5GB 10ms EIDE Hard Disk
- Floppy 3.5", 1.44MB
- 7 slots (3 PCI, 3 ISA, 1 Shared), 6 Drive Bays
- 2 USB Ports, 1 Parallel Port, 2 Serial Ports
- Dual EIDE channel/Ultra DMA 33/4 devices

$2,469 model #GAM600

233 MHz TD-225

- Intel 233MHz Pentium® II Processor
- 64MB (2-32MB) EDO SIMMs
- 512K Pipelined Burst Cache
- Intense 3D 100 w/4MB EDO RAM
- 17" .27dp, 1280x1024 Monitor (16.0"viewable)
- 1.7GB 10ms EIDE Hard Disk
- Floppy 3.5", 1.44MB
- 7 slots (4 PCI, 2 ISA, 1 Shared), 6 Drive Bays
- 2 USB Ports, 1 Parallel Port, 2 Serial Ports
- Dual EIDE channel/4 devices

$2,809 model #GAM700

Systems include: 30-day money-back guarantee, 3 year limited warranty,* one year on site, Windows 95® w/30 Days Free Phone Support, Microsoft® IntelliMouse®, Windows® 95 ready 104-key keyboard, NEW! US Robotics 33.6 KBPS Fax/Data modem, tool-free mini tower case, and Ensoniq Wavetable Card, Speakers & Mic, NEW! 24X Variable CD-ROM

Live the 3D experience.

This is no game. Our PCs are serious 3D graphics machines. The kind that make your eyeballs jitter with ecstasy.

And our direct prices are *really* low. But the best part – these systems have the Intergraph name on them. A name that means graphics.

Go ahead, compare our 3D PC prices with other manufacturers' PCs without 3D. You'll see. Buying Intergraph is like getting 3D for FREE. No Lie!

So, live the 3D experience. Immerse yourself in the new and vivid universe of 3D. Let it caress your imagination and excite your soul.

- **3D Graphics.** Unbelievable at these prices! You get real 3D acceleration for Direct3D® apps, mind-blowing 3D games and multimedia. It's a world of 3D realism with correct textures, Gouraud shading, environment mapping – *serious stuff.*

It's where you're going. We'll take you there.

- **3D Sound.** Totally 3D. Our Ensoniq™ 3D sound card, mic and speakers deliver stereo surround, wrap-around effects and wavetable synthesis, plunging you into a realm of 3D sight *and* sound.
- **Spectacular Video.** Of course! Intergraph PCs give you MPEG and AVI compatibility, full-screen, smooth-motion video at 30 frames per second at resolutions up to 800 x 600. And you can scale, zoom and stretch in real time.

This is it! The 3D PC you want. Got to have. And the 3D is FREE! Don't wait. Get it NOW. Get Intergraph.

INTERGRAPH
COMPUTER SYSTEMS

266 MHz TD-225

- Intel 266MHz Pentium™ II Processor
- 64MB (2-32MB) EDO SIMMs
- 512K Pipelined Burst Cache
- Intense 3D Pro 1000 w/16MB RAM
- 21" .25 dp, 1600x1200 Monitor (20.0" viewable)
- 3.5GB 10ms EIDE Hard Disk
- Floppy 3.5", 1.44MB
- 7 slots (4 PCI, 2 ISA, 1 Shared), 6 Drive Bays
- 2 USB Ports, 1 Parallel Port, 2 Serial Ports
- Dual EIDE channel/4 devices

$5,379 model # GAM800

Order Direct Now!
1-800-692-8069
or order on-line
www.intergraph.com/express
Next-day shipment available.

†Service provided by Intergraph Corporation. On-site service may not be available in certain remote locations. 30-day money-back policy does not include original or return shipping and handling charges and begins from date of shipment. For a complete copy of our terms and conditions of sale or Limited Warranties, please write Intergraph, One Madison Industrial Park, Red Stop 040102, Huntsville, AL 35894-0001. ††Intermediate Delivery: 20 available while supplies last. Prices and specifications are valid for the U.S. only and are subject to change without notice. Prices do not include shipping and handling. All purchases are subject to availability. Intergraph and the Intergraph logo are registered trademarks and TD is a trademark of Intergraph Corporation. The Intel Inside Logo, Pentium Pro, Pentium, and MMX are registered trademarks of Intel Corporation. Windows is a registered trademark of Microsoft Corporation. 08/97/0426 **Intergraph Computer Systems 1-205-730-5441**

Product Information Number 183

Peripheral Visions

The Future of Hardware

Sound at its Apex

AVM Technology is introducing the Apex sound card, a professional-level audio solution that promises tons of advanced features. At the core is a 24-bit digital effects processor that does 16-bit digital audio, and it's SoundBlaster compatible for gaming in a pure DOS environment. 128 General MIDI voices are stored in 2MB of wavetable ROM for MIDI music support. The full-duplex Apex also offers 3D positional sound and full Windows DirectSound compatibility, and it's expandable: as with the Sound Blaster AWE 32, you can add your own music samples. You can use 72-pin SIMMs to expand the on-board RAM up to 64MB, so you'll have plenty of room for your noise.

New Muscle for Your Speakers

Labtec's banking on the idea that some PC users aren't ready to spend hundreds of dollars on a whole new speaker system when they already have decent speakers. Labtec's LCS-2408 is a subwoofer-only solution that can give just about any pair of speakers some extra thump. It works with a crossover circuit that splits the output from your sound card so the subwoofer takes care of very low frequencies with its 14-watt, 5 1/4" cone, leaving the midrange and high end for your existing speakers. Street price is around $60.

PCG

Rendition Readies V2000

■ Next-generation 3D accelerator chip announced

On August 18, Rendition finally announced the highly anticipated follow-up to its popular Verite V1000 2D/3D accelerator. The first Verite chip took the 3D market by storm, appearing on Sierra's Screamin' 3D, Creative Labs' 3D Blaster, Intergraph's Intense 3D, and the Canopus Total 3D.

The V2000 family will be similar in architecture to the V1000, with an improved **RISC**-based graphics processor churning out polygons at several times the speed of the V1000. A **3D setup engine** and a pixel-drawing engine will be built into the single chip, and literally every current 3D feature will be directly supported. The chip contains only 1.8 million transistors, about the number of the average 3D accelerator chip, resulting in less heat and a lower cost to produce V2000-family products.

Current plans for the V2000 have it coming out in two models: the V2200, which will be available on expansion cards for both the PCI bus and, later this year, AGP-equipped computers; and the V2100, which will be made available to OEMs to build directly into motherboards.

A number of graphics card developers have already expressed their intentions to build V2200 products. In fact, Hercules announced its V2200-based Thriller 3D board a few days before Rendition officially announced the chip itself. While Rendition officially called the slip "unfortunate," it wasn't particularly damaging, considering that the V2200 was possibly the most leaked piece of computer technology in history. The chip was openly discussed on the Internet, and it became such common knowledge that Rendition began briefing the press in early June.

The new V2200 model chip will be available on expansion cards for both the PCI bus and AGP-equipped computers.

Other companies that are promising Rendition V2200 boards include Canopus, Sierra, and Diamond Multimedia.

The question will be this: How does the V2200 stack up to the 3Dfx? The V1000 products were widely considered the only real alternative to the Voodoo chipset, which is generally accepted by the industry as the 3D solution to beat. Rendition may have an advantage, especially in the OEM market, however, comparing its small, inexpensive, single-chip solution to 3Dfx's trademark pair of processors, which take up too much real estate to be very attractive to motherboard makers. Both of the companies boast a large number of brand-specific game ports currently available and in development, as well. The deciding factors will be performance and software support.

A Joystick For Jane's

■ Sim company expands into the world of peripherals

Jane's Combat Simulations must be doing something right; it's the first line of sims to have its own official joystick.

The Jane's Combat Stick is based on CH Products' critically acclaimed Combat Stick. With six buttons and two four-way hat switches, the Jane's Combat stick is supported by most of the Jane's simulations — but of course it's not limited to them. The Jane's Combat Stick works as a CH Combat Stick or Flight Stick Pro with anything that supports those joysticks. The stick is bundled with its own drivers for Windows 95 and a full version of Jane's *Advanced Tactical Fighters*.

CH, one of the best known makers of game controllers, is hard at work on new products for the holiday season. A racing wheel compatible with the CH Pedals and Pro Pedals should be available by the time you read this. The wheel will have four buttons that can be configured for use without pedals — one pair for gas and brakes and the other pair for shifting gears up and down — or used as the four standard joystick buttons.

Based on CH Products' Combat Stick, the Jane's Combat Stick will be compatible with many products.

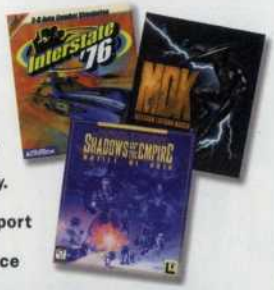
Two new joysticks are also in the works, but CH was only releasing details on one of them at press time. The four-button Gamestick will be a departure for CH; it'll have a newly designed grip and will be marketed as a gaming joystick, not as a flight sim controller.

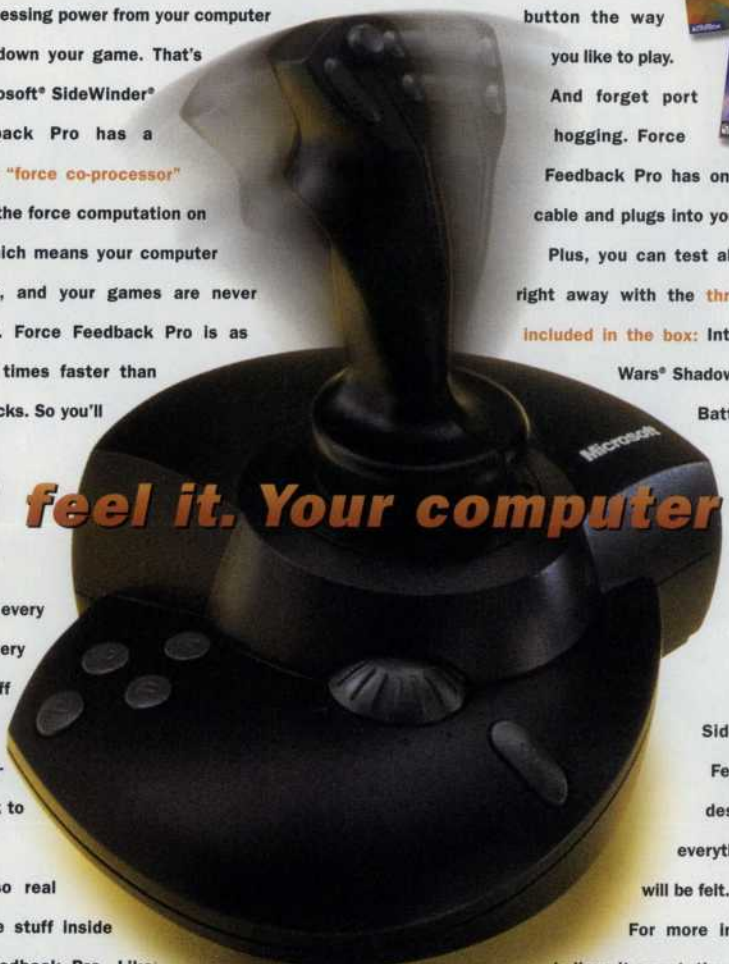
Force feedback adds the sense of touch to supported games so you can actually feel the game. But a force feedback joystick isn't worth a dusty Pong if the stick is pulling processing power from your computer and slowing down your game. That's why the Microsoft® SideWinder® Force Feedback Pro has a 25MHz 16-bit "force co-processor" that does all the force computation on the stick. Which means your computer feels nothing, and your games are never slowed down. Force Feedback Pro is as much as six times faster than other force sticks. So you'll see and feel every Uzi recoil, every stall on take-off from O'Hare, and every nine-iron you shank to the left.

There's also real rocket-science stuff inside the Force Feedback Pro. Like Microsoft-patented digital-optical technology. Imagine a tiny infrared camera that detects handle and throttle motion to within one-hundredth of a degree without any wear or calibration.

The stick is also easily customizable, so in just a few seconds you can program each button the way you like to play. And forget port hogging. Force Feedback Pro has only one computer cable and plugs into your gameport.

Plus, you can test all these features right away with the three killer games included in the box: Interstate '76,™ Star Wars® Shadows of the Empire:™ Battle of Hoth,™ and MDK: Mission Laguna Beach.™





You'll feel it. Your computer won't.

The Microsoft SideWinder Force Feedback Pro. It's designed so that everything in your game will be felt. But only by you. For more information (yes, believe it or not, there is more), go to www.microsoft.com/sidewinder

MICROSOFT® SIDEWINDER® Force Feedback Pro

Microsoft Where do you want to go today?®

© 1997 Microsoft Corporation. All rights reserved. Microsoft, SideWinder and Where do you want to go today? are registered trademarks of Microsoft Corporation. Activision is a registered trademark and Interstate '76 is a trademark of Activision, Inc. Star Wars is a registered trademark and Shadows of the Empire and Battle of Hoth are trademarks of Lucasfilm Ltd. MDK, MDK: Mission Laguna Beach, the MDK logo, and the Shiny logo are trademarks of Shiny Entertainment, Inc.

CAVEDOG ENTERTAINMENT™
PRESENTS...

TOTAL ANNIHILATION™

The New Landscape Of War

The word is spreading across the map.
TOTAL ANNIHILATION is poised to redefine
real-time strategy gaming.

"...a lock to become the new king of real-time strategy games..."
-COMPUTER GAME ENTERTAINMENT

"...the level of detail is astounding... it'll be the envy of every kid on the block..."
-PC GAMER

"...true 3D engine lifts the game into new territory..."
-COMPUTER GAMES STRATEGY PLUS

"...TOTAL ANNIHILATION has the potential to do for real-time strategy what QUAKE did for first-person shooters ..."
-COMPUTER & NET PLAYER

AVAILABLE NOW!
Total Annihilation strategy guide from GW Press.

COMING SOON!
Total Annihilation Add-On Pack featuring all-new maps, missions, and units.

CAVEDOG™
ENTERTAINMENT
www.cavedog.com
A GT INTERACTIVE COMPANY

TEEN T AGES 13+ ESRB

Designed for Microsoft Windows 95

©1997 Humongous Entertainment, Inc. All rights reserved. Created and Published by Cavedog Entertainment, a division of Humongous Entertainment, Inc. Distributed by GT Interactive Software Corp. Cavedog Entertainment™ and Total Annihilation™ are trademarks of Humongous Entertainment, Inc. GT™ is a trademark and the GT Logo® is a registered trademark of GT Interactive Software Corp. Microsoft® and Windows® are registered trademarks of Microsoft Corporation. All other trademarks are the property of their respective companies.

Obliterate the enemy from the high ground.
Tank battalions that respond to real 3-D terrain.
Defend your coastline from invasion.
Blast opposing forces into smoking 3-D segments.
Bombard the enemy from the safety of the sea.

Devastating amphibious assaults.

Challenging landscapes, metal worlds and more!

Extensive multiplayer and internet support.

Recompute Gamester

Company: Recompute
www.re-compute.com

Phone: (800) 510-8414 (TO ORDER)
(888) 463-6669 (TECH SUPPORT)

Prices: $1,798

Recompute's remanufactured Gamester is a surprisingly powerful gaming PC — especially considering its attractive price.

Since The Hard Stuff began a few months ago, our system reviews have centered on no-holds-barred, high-end machines. Some are great, some so-so, but they've all had one thing in common: a hefty price tag.

Just as it was beginning to seem like the only way to purchase a complete system suitable for gaming was to take out a second mortgage, along comes Recompute. The company has found a pretty clever way to target the budget PC market: it sells low-cost computer systems built from used, reconditioned equipment. Prices start at $599 — with a monitor included. For the most part, the systems lack frills, but they're functional and complete.

Recently, the company began marketing a line of multimedia computers with CD-ROM drives, sound cards, and speakers. To stir up the gaming audience, Recompute brought forth the Gamester line, which starts at $1,299 for a 120MHz Pentium machine with a 14" monitor. Ours came with a 133MHz processor and a 17" monitor. Standard features include a 256K level 2 cache, 32MB EDO RAM, and a 33.6Kbps internal modem.

The Gamester comes with everything you need to get started. A fat, mid-sized tower case houses an 8x CD-ROM drive, the requisite 3.5" floppy drive, two external expansion bays, and plenty of free slots for future expansion. Getting everything up and running is a snap, since each connector is numbered to match its respective socket.

The Gamester we reviewed was a CTX before it was reworked through Recompute's 32-step program.

This system doesn't have the polished, integrated feel of a $2,800-plus wallet-buster; the components here are low-budget, but they're not bottom-of-the-line by any means. The CTX case, the keyboard, and the AST monitor are identified as Recompute components by clear, plastic labels affixed to them, and the floppy and CD-ROM drives are a different shade from the case. If minor aesthetic failings really get on your nerves, keep saving your money.

The input devices aren't state-of-the-art, but they're perfectly functional. The keyboard, complete with its old-fashioned, 5-pin connector, has a bit of a squishy feel. The two-button serial mouse works perfectly, but it looks and feels like an early 1990s model. You'll have to shop elsewhere for a joystick or gamepad: Neither is included, and Recompute doesn't offer game controllers.

There's room for expansion, but getting to the 5" drive bays may be tricky in this mini-AT case.

For display purposes, Recompute threw in a Sierra Screamin 3D video card, which houses a Rendition Verité V1000 3D accelerator — a very good choice. The .28 dot pitch monitor is an AST Vision 7I; it's billed as a 17" monitor, although its viewable area is just under 15 3/4".

The audio equipment is cheap and functional, but not fabulous. An ESS AudioDrive sound card comes installed, and it's piped through a pair of JUSTer DC-961A powered speakers. One thing must be said for these speakers: although the bass is muffled and treble is tinny, they have a little convenience feature that most high-end systems tend to lack: a headphone jack.

Each connection is numbered to simplify setting up the Gamester.

The Gamester comes with Windows 95 all set up and ready to go. The games bundle, which consists entirely of Sierra Screamin' 3D titles, is preinstalled. You get full versions of *IndyCar II*, *A-10 Silent Thunder*, *CyberGladiators*, and Verité-enhanced *Quake* shareware. All of these games are ready to run, and they play very well on the Gamester. Also included are unaccelerated shareware versions of older games like *Doom*, *Heretic*, and *Aces of the Deep*.

Unfortunately, the system wasn't configured properly to provide mouse or CD-ROM drivers after a reboot to DOS mode. The real-mode drivers were provided in a directory on the hard drive, but neither the startup files nor the Exit To DOS file, used in reboot-

bootMarks

Norton SI bootMark: 33.5
(TESTS CPU AND SYSTEM BOARD PERFORMANCE)

Sysmark 32: 120
(TEST VIDEO AND OTHER SUBSYSTEMS)

MDK Perftest: 60
(TESTS DIRECTX PERFORMANCE)

Debablilzer: Not tested
(TESTS MMX PERFORMANCE)

Terramark: 338
(TESTS DIRECT3D PERFORMANCE)

***Quake (accelerated)* time demo:** 26.3fps
14fps (640x480), 10fps (800x600)
(TESTS FLOATING POINT PERFORMANCE)

***Duke 3D* time demo:** 26 fps (640x480)
14 fps (800x600)
(TESTS DOS GAMING PERFORMANCE)

Your Mileage May Vary

Your experience with a Recompute Gamester may be different from ours. Since Recompute sells pre-owned equipment, the actual models of PCs and monitors vary from customer to customer. Before being resold, the components are put through an exhaustive testing process outlined on the Recompute web site at *www.re-compute.com/32point/index.html*.

When you call Recompute and order a PC, a rep will determine what's available and give you an exact breakdown of what they plan to send to you. If something on the list doesn't meet your fancy, they can replace it with a different brand, depending on exactly what they have on hand. They offer a seven-day money-back guarantee, just in case.

System Specs

SYSTEM
Processor: Pentium 133
RAM: 32MB EDO
Cache: 256K

STORAGE
Hard Drive: 1.6GB IDE
1.44MB Floppy Drive
8x IDE CD-ROM

EXPANSION
Internal 3" bays: 1 (occupied)
External 3" bays: 2 (1 free)
External 5" bays: 2 (1 free)
Bus slots: 3 ISA (1 free), 2 PCI (1 free), 1 shared (free)

VIDEO
Video Card: Sierra Screamin' 3D with Rendition Verité V1000 2D/3D
Monitor: 17" AST

AUDIO
Sound Card: ESS AudioDrive 16-bit sound
Speakers: JUSTer DC-961A

INPUT
Keyboard: 104-key Win 95
Mouse: 2-button serial

OTHER
33.6Kbps modem

ing to DOS mode from the Start button Shut Down option, were configured to load them. A representative from Recompute assured us that this was an isolated oversight; normally, we were told, Gamesters are ready for DOS gaming out of the box.

In testing the Recompute Gamester with the bootMarks, we kept in mind an interesting claim that has appeared in the company's marketing: to quote directly from the press release, "The $1,399 Pentium 120MHz Gamester is designed to outperform most 166MHz MMX-based systems at a much lower price; the $1,499 Pentium 133 Gamester outperforms most 200MHz MMX-based systems."

Our AST Vision 7I 17" monitor has a huge bezel, cutting the viewable area to just under 15 3/4".

If you find that hard to believe, you're not alone. The bootMarks kicked out numbers typical for, well, a Pentium 133MHz with 32MB of RAM and a nice video accelerator. Since most of the computers we've reviewed in past Hard Stuff sections have been based on the 200MHz MMX Pentium, we had plenty of basis for comparison, and we can honestly say our Recompute didn't outperform them.

Beyond the bootMarks, we also tested a number of games on the Recompute. We found that we had to turn the detail levels down to play non-accelerated *Interstate '76* at a decent frame rate. *X-Wing vs. TIE Fighter* was a bit choppy with its default display options, but it wasn't unplayable. In DOS mode, non-accelerated *Quake* did 26 frames per second at 320x200 resolution but dropped to 14fps at 640 x 480 and choked out 10fps at 800x600.

Direct3D games fared much better. With the help of the Rendition, *Moto Racer*, *Mechwarrior 2: Mercenaries*, and *HyperBlade* looked smooth and crisp. Games written directly to Rendition's APIs were also pretty and playable: *Tomb Raider* and *Descent II* ran pretty nicely.

Still, as well as these games run, the Gamester doesn't top the performance of a similarly equipped P200 MMX. A conversation with a company rep cleared up the confusion; as the basis for Recompute's claim, the company compared Rendition-accelerated games on their P133 with non-accelerated versions on a P200. It was explained that the comparison was based strictly on 3D polygon counts, fill rates, and other 3D functions. Floating point performance, 2D acceleration, and other benchmarks weren't part of the deal.

Tricky marketing double-talk aside, the Recompute Gamester is a nice machine for the gamer on a budget. The question is, as faster processors hit the market and the price of older chips fall, could you build an equivalent machine yourself for a similar overall price? The answer is probably yes, but the advantages that Recompute offers will appeal to novice computer users. Recompute offers comprehensive technical support and warranty plans to cover the used equipment as if it were new.

The Gamester may not be the most powerful gaming PC on the planet, but it can save you some cash. The system may not be ideal for hands-on, gearheaded gamers, but beginners unwilling to pay $3,000 for a decent gaming system will be satisfied — for a while, at least.

PC GAMER FINAL VERDICT

HIGHS: Good price; Direct3D and Rendition accelerated games run very well; well put together and easy for beginners to set up.

LOWS: Generally low-end components (except the Screamin' 3D); can't do justice to some non-accelerated games.

BOTTOM LINE: The Recompute Gamester is ideal as a low-cost, entry-level computer, but power gamers may be disappointed.

IMPERIA

THE FINE ART OF CONQUERING THE WORLD

It's one thing to create a working civilization, *quite* another to lead that civilization to world dominance. IMPERIALISM™ inspires you to do both. Combining elements of resource management, economic trade, exploration, diplomatic maneuvering and military conquest, this multi-faceted strategy game allows you to attempt what few in history have dared: *unify the world under one leader!*

To achieve victory you must develop your country's infrastructure through deft manipulation of delicate economic, diplomatic and military resources. Then, skillfully maneuver it to a position of dominance in the Council of Governors.

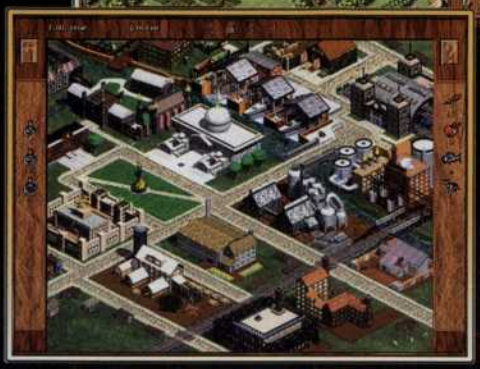
Easy to say. Difficult to accomplish.

Your Cabinet Ministers will, of course, offer varying amounts of advice.

SSG

A MINDSCAPE® COMPANY

LISM™



But ultimate control over the fate of your nation is yours and yours alone. However you handle it, the vigorous climb to the top of this earth-like world is a challenge with no equal!

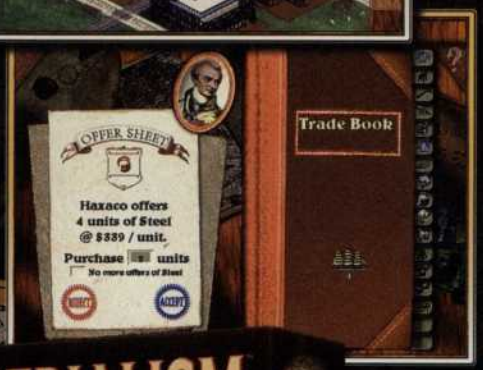
IMPERIALISM.
The World is Within Your Grasp.

www.imperialism.com

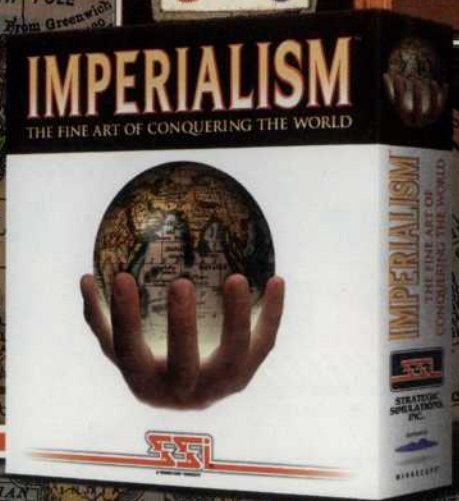
Developed by Frog City.

To Order: Visit your retailer or call 1-800-234-3088 (USA & Canada) with Visa or MasterCard.

IMPERIALISM is a trademark of Strategic Simulations, Inc. ©1997 Strategic Simulations, Inc., a Mindscape Company. All rights reserved. All other trademarks and registered trademarks are the property of their respective holders.



WINDOWS® 95 &
MAC™ OS CD-ROM



Product Information Number 302

CH
no compromises.
overpowering. deadly. abusive.
the ultimate domination tool.
it's even better when plugged in.
the stunning new
gamestick
from CH products.
there is nothing like it.
anywhere.
gamestick.
the future is here.
GAMESTICK
ADVANCED
ABSOLUTE
USA
MADE
3
YEAR
WARRANTY
GAMESTICK • GAMESTICK 14
760.598.2518 www.chproducts.com
Product Information Number 118
Best Buy Chips & Bits Circuit City Comp USA Computer Express Cyberian Outpost Egghead Electronic Boutique Flight Sim Central Fry's Electronics High Flight
J & R Computer Micro Center Musicland Office Max Sears Target The Good Guys! Thinkstuff United CD-Rom PC Connection

SSI MTS 100 Speakers

Company: SSI Products

Phone: (800) 845-4774 (TO ORDER)

Prices: $179.95

This surround sound system scores high on the gadget scale but falls short on basic sound quality.

Designed as an all-in-one surround sound solution, the MTS 100 Home Theater System from SSI Products (no relation to game publisher SSI) packs a subwoofer, a Dolby Pro Logic Surround decoder, and five speakers into a relatively small and inexpensive package.

All the electronics are built into the system's subwoofer. Five separate amplifiers drive the woofer, the center speaker, the right and left front speakers, and both rear speakers. 1/8" jacks on the back of the subwoofer unit are clearly labeled — a necessity, since you're dealing with so many different outputs and cables.

The MTS 100's manual is clearly written and illustrated with detailed diagrams; those are things we tend to take for granted when we buy an expensive VCR or stereo receiver, but they're still unusual in the world of PC hardware. The only mistake you could make in setting up this system would be to confuse the 1/8" stereo cable that connects the subwoofer to your sound card with one of the five mono cables that connect the speakers to the subwoofer. If you look very closely at the manual's illustrations, you'll notice the plugs on the stereo cable have two black bands, while the mono plugs have only one; if you have a little knowledge of stereo systems, you might already know that. Still, it'd be nice if a clearer distinction was made or the stereo cable was labeled somehow.

Once you've made the connections, you'll have to find places for all of these speakers. The left and right speakers can go on either side of your monitor, and you can place the center speaker on top of it; they're well shielded, so they shouldn't distort your monitor's image. The rear, or surround, speakers are more of a problem; they need to go on either side of you, beside or behind where you'll be sitting when you use your computer. The system comes with a 20-foot cable to make that possible; but unless you just happen to have a couple of end-tables or bookshelves in convenient positions, you may find yourself rearranging furniture.

The MTS 100 from SSI Products is an affordable Dolby Surround system with below-average sound quality.

Placement of the subwoofer is another problem; the ideal place for it is on the floor under your desk, but that's not a very convenient location, since the MTS 100 is yet another speaker system that places all of its controls on the woofer unit. To make adjustments, you'll have to reach under your desk — or evolve prehensile feet.

And there are plenty of adjustments you can make. There's a balance control for the left and right speakers and level controls for the rear and center speakers. A subwoofer level knob lets you dial in the amount of bass you want; there's even a crossover control that lets you determine how low a frequency will have to be before the subwoofer will amplify it, from 180Hz down to a near-subsonic 45Hz. This "range" control is something we've never seen on a subwoofer this inexpensive.

Finally, there's a big master volume knob that controls the overall output of the speakers, and even a test-tone generator that pumps white noise through each of the system's channels in succession — left, then center, then right, then rear — so you can balance all the speakers' levels and make sure you're hearing the surround effects the way they were meant to be heard.

The system has five separate amplifiers. The subwoofer is powered at 15 watts; the center, left, and right speakers get 6 watts each; and the rear channel gets 8 watts — pretty anemic when you consider that it's shared by two speakers. Today, it's generally accepted that a surround sound system's rear channel should be just as powerful as the others, so 4 watts for each rear speaker is less than ideal.

In addition to being a bit underpowered, the MTS 100 doesn't produce very good sound; highs are thready and washed-out, and midrange frequencies tend to be muddy and indistinct. In terms of audio fidelity, you probably won't find this system a big improvement over the speakers you got with your PC.

Still, the five speakers and Dolby decoder do produce a genuine surround effect. Whether or not the MTS 100 system is for you depends on how much you value high-tech gadgets — if the surround effect is more important to you than sound quality, the system is a decent buy. Otherwise, you'll find much better speaker systems without surround in the same price range.

PC GAMER FINAL VERDICT

HIGHS: Easy setup; lots of control over sound level and balance; genuine Dolby Surround.

LOWS: Under-powered; below-average sound quality; not many PC games support Dolby Surround.

BOTTOM LINE: If you've just gotta have surround, this is a good integrated solution — but don't expect great sound.

VRex VR Surfer

The wireless VR Surfer won't weigh down your head with cables.

Company: VRex
www.vrex.com

Phone: (888) 877-8733 (TO ORDER)

Price: $99.95

Playing 3D games in true 3D is one of the coolest experiences you could possibly try on your computer. The drawback is the technology itself — it's just not there yet. And VRex's VR Surfer just demonstrates that.

These wireless "flicker glasses" work by turning on and off LCD shutters built into the lenses, rapidly alternating between your left and right eyes. The picture on your computer monitor alternates in sync, giving each eye a slightly different angle on the image. Your brain reconciles the different information being received by both eyes by assembling them into a single 3D image.

The concept is great, and in most cases it really works. But there are some serious problems when it comes to computer games. The first and foremost is lack of support by game developers; the only games that will work with the VR Surfer right out of the box are at least two years old. Granted, playing *Descent II* or *Magic Carpet* in 3D almost qualifies as a whole new experience — there's nothing like seeing enemy missiles fly right out of the screen at you. But after about 15 minutes of play, you'll run into the other serious drawback of shutter glasses: severe eye strain and a splitting headache. This is especially troublesome with DOS-based games that don't support the flicker-free video refresh rates you can get under Windows.

The glasses themselves are rather uncomfortable, since most of their bulk is located at the front, supported almost entirely on the bridge of your nose. And if you wear glasses, you'll have a hard time getting them to stay on your face. It could certainly use a bit of counter-balancing.

The VR Surfer does have some other things going for it, though. The VR Surfer is the first set of shutter glasses to go wireless, which makes it a little more convenient than its predecessors. And besides playing games, you can use it for viewing 3D images on the web using several different methods, the easiest being *DepthCharge*, a plug-in for Netscape or Internet Explorer that will automatically switch the monitor to 3D mode and present the image in all its 3D glory. The VR Surfer also works with your VCR, so you can view movies that have been filmed with a stereoscopic camera. However, for both the pictures and the videos, there's very little to view. There aren't any real *movies* that support it, and what would be cooler than seeing Arnold Schwarzenegger whip out an AK-47 and point it right at you? Perhaps there's a future in 3D stereoscopic technology, but right now the only thing you'll gain from using the VR Surfer is a splitting headache and bruised nose.

PC GAMER FINAL VERDICT

HIGHS: The visual effects are pretty cool; support for using it online with 3D pictures.

LOWS: Expect a splitting headache after 15 minutes; the glasses are awkward to wear.

BOTTOM LINE: Although the 3D images are entertaining to view and play with, the pain will make most users uncomfortable before finishing even a single level of *Descent II*.

Suncom FX1000

Company: Suncom
www.suncominc.com

Price: $14.99

The Suncom FX1000 may be the ideal joystick for gamers on a tight budget.

Most recently, joystick legend Suncom has become known for its high-end joysticks — the F15 series has earned the company a healthy reputation among virtual jet fighter pilots. Fans of the company's quality products don't have to cash in their stock options to buy a stick, though; Suncom still has an affordable line as well.

The most recent addition is the sub-$20 FX1000, a simple, two-button joystick with absolutely no features. It's no surprise that this is not the controller of choice for fans of heavy, tense armbusters, but budget-minded gamers who simply need a functional joystick to play keyboard-and-mouse-unfriendly games may find something to like here.

The curvaceous base fastens to the desk with suction cups; a good thing, because it's not nearly big or heavy enough to survive without them. Although this isn't the most stable method of securing a joystick — a wide base and a low center of gravity are still the best bets — the FX1000 doesn't have enough tension or range of motion to cause accidental tipping.

The FX1000 is a very basic analog joystick, so it doesn't come with software. DOS games recognize it as a traditional 2-button joystick with no problem; in Win 95, it's set up as a 2-axis, 2-button joystick. For some, its symmetrical design will be a plus; it's just as comfortable in the left hand as the right. Button One is the trigger; Button Two is a wide, butterfly-shaped widget placed in easy reach of your thumb.

Although the analog FX1000 is not the most responsive or precise joystick in the world, it's comfortable enough. We tested it with *X-Wing vs. TIE Fighter, Interstate '76, Scorched Planet, Wing Commander IV, Jetfighter III*, and a handful of other games, and it performed remarkably well for a joystick in its price range. In fact, it's actually far better than quite a few controllers selling for several times the price (for example, see Laral Group's 3D1, reviewed in this issue).

The problem is, there *are* better joysticks *close* to this price range. The Gravis Firebird or even Suncom's own FX3000 are far more sturdy and relatively close in price, compared to high-end sticks. The decision will lie with you and your checkbook: can you afford to save up a little more for a $30 to $40 joystick? If you can, do it. If anything over $20 is out of the question, grab the FX1000.

PC GAMER FINAL VERDICT

HIGHS: Cheap, comfortable; not a bad little stick.

LOWS: Flimsy, imprecise, and no extras — exactly the lows you'd expect in this price range.

BOTTOM LINE: For the price, this is a decent joystick, but just a little more cash will get you a much better one.

ADRENALINE RUSH

Shock Every Dimension 3D

Powered by 3Dfx Voodoo Rush Chipset

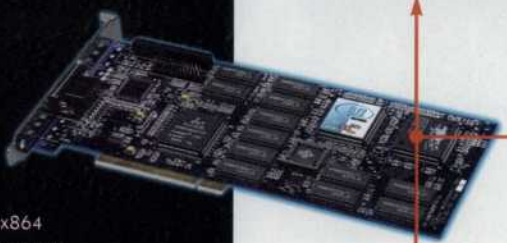
Prepare yourself! Enter the domain where dreams become real, where the line between imagination and reality blurs...Adrenaline Rush 3D. Total experience. Total control. Total invincibility. Immortal combat at 800x600. High speed car destruction at 60 FPS.

Turok: Dinosaur Hunter

BUNDLED WITH 3 3Dfx Enhanced Games

(3Dfx Enhanced Editions)

With six huge megabytes of EDO memory, you never slow down and never, ever need an upgrade to experience 3D gaming at 800x600.



Do real work. Fly high and fast with screen resolutions up to 1152x864 with 16 million colors and 120 Hz refresh rates. Whether you're working hard or hardly working, the Adrenaline Rush 3D rules.

Mechwarrior 2 Mercenaries

Now, it's your time to command the 3D world. Shock Every Dimension! Assault Your Senses! Make your own rules and prepare yourself for the experience of a lifetime. Prepare yourself for Adrenaline Rush 3D.

CONSULT YOUR PHYSICIAN BEFORE PLAYING!

Interstate '76

"Bottom line: A+ The Adrenaline Rush 3D is what the first Voodoo Rush boards should have been. *-The Adrenaline Vault*

Just let me say this thing is unstoppable ... and I wanted to let you know of the Adrenaline Rush 3D's apparent superiority ... when it comes to pushing the envelope.

-The Rush Allgames Network

Jazz Multimedia, Inc.
1040 Richard Avenue
Santa Clara, CA 95050
(408) 727-8900
www.jazzmm.com

JAZZ MULTIMEDIA

Product Information Number 200

© 1997 Jazz Multimedia, Inc. Jazz Multimedia is a registered trademark and Adrenaline Rush 3D is a trademark of Jazz Multimedia, Inc. All other product names are trademarks of their respective holders. Specifications are subject to change without notice.

It not only sets a new standard in flight simulation, but goes well beyond anything out there. Introducing Sierra Pro Pilot. Never before has a single flight simulator captured this experience so completely. Here, you'll find the broad strokes and the fine touches. You'll choose from

WE DIDN'T SET OUT TO JUST A SMALL PART OF

a hangar of five civilian aircraft, ranging from the introductory Cessna 172 Skyhawk to the dual-throttled thrill of a Citation Jet. At the other end of the runway are 29 cities and over 3,000 airports, each rendered in exacting detail. All major

PRE-FLIGHT CHECKLIST

- 3,000 AIRPORTS NATIONWIDE/100'S OF CITIES
- 27 MILLION ELEVATION POINTS
- GLOBAL POSITIONING SYSTEM
- LIVE ON-LINE MAP DISPLAY
- AIR TRAFFIC CONTROL
- EVALUATED FLIGHT ASSIGNMENTS
- FLIGHT TUTORIAL
- PHOTOREALISTIC PANELS
- DUAL THROTTLES FOR MULTI-ENGINE AIRCRAFT
- CROSS-COUNTRY NAVAID COVERAGE

Dynamix

rivers, forests and canyons are afforded such faithful geographic representation they could double as a map. Within 25 nautical miles of any city, the flying world is rendered with lifelike realism. You'll hear from Air Traffic Control and other pilots, and learn to

CHANGE THE WORLD.

IT CALLED THE SKY.

navigate the sky with the close company of other planes. Then, upon touchdown, debrief and compare your performance to over 30 full-motion preparation videos. This is Pro Pilot: The Complete Flight Simulator. Both a statement of what a flight sim should be today, and the promise of what one can be tomorrow.

SIERRA®

© 1997 Sierra On-Line, Inc. All rights reserved. ® and ™ designate trademarks of, or licensed to Sierra On-Line, Inc.

www.sierra.com/propilot

Product Information Number 305

QUARTERDECK

SQUEEZE EVERY LAST DROP OF MEMORY OUT OF YOUR SYSTEM FOR ITS SPEEDIEST, MOST POWERFUL GAME PERFORMANCE. QEMM 97 WILL EVEN GET YOUR DOS GAMES MORE MEMORY, SO THAT YOU CAN PLAY FASTER AND OVERALL FEEL JUST A LITTLE BIT, WELL, JUICED. TO LOOK INTO MAKING WINDOWS 95'S MEMORY MANAGEMENT GAME FRIENDLY, VISIT US AT WWW.QUARTERDECK.COM, OR CALL 800-683-6696 AND MENTION CODE #01007. QEMM 97 IS AVAILABLE AT THESE FINE RETAILERS: COMPUSA, COMPUTER CITY, BEST BUY, STAPLES, OFFICE DEPOT, OFFICE MAX, EGGHEAD COMPUTER, ELECTRONICS BOUTIQUE, FRY'S ELECTRONICS, AND MICRO CENTER.

©1997 Quarterdeck Corporation. All rights reserved. Quarterdeck and QEMM are registered trademarks and the Quarterdeck "Q" symbol is a trademark of Quarterdeck Corporation or its subsidiaries. All other products are trademarks or registered trademarks of their respective holders.

Product Information Number 280

Number Nine Revolution 3D

Company: Number Nine
www.nine.com

Phone: (617) 674-8595

Prices: $349 w/4MB (M.S.R.P.)
$449 w/8MB (AS REVIEWED)

You say you want a revolution? Well, check out Number Nine's new 3D video board. It's pretty fast and quite powerful, based upon the new Ticket To Ride chipset. Number Nine has had a long tenure in the graphics accelerator industry, once being regarded as manufacturers of some of the very best cards to be had. But as the field has widened and technology has become more affordable, Number Nine's hold in the market has slipped.

HOW IT SCORED

Terramark: 504 (failed level 3)
(TESTS DIRECT3D PERFORMANCE)

***Quake* time demo:**
13.7fps (640x480), 10.1fps (800x600)
(TESTS FLOATING POINT PERFORMANCE)

***Duke 3D* time demo:**
37fps (640x480), 26fps (800x600)
(TESTS DOS GAMING PERFORMANCE)

The new Ticket To Ride chipset is a cornerstone in Number Nine's plan to regain past glory. Lacking its own API, the Revolution 3D is compatible with OpenGL, Direct3D, and Windows NT accelerator.

As a gaming card, the major problem with Number Nine's new Revolution 3D is the price. This is a high-end card designed primarily to make the most of the graphical prowess of Windows NT and 3D Studio MAX, a popular 3D animation suite; it actually comes up a bit short in Windows 95 compared to the 3Dfx-based Voodoo Rush cards currently hitting the market.

The Revolution 3D installed effortlessly, and its software includes an excellent suite of display controls called *HawkEye 95*. With it, you can expand the size of your desktop beyond the area of your monitor, manually adjust the refresh rate, control gamma correction, and even change the color of the mouse cursor. With 8MB of WRAM, it'll do true color at 1280x1024 at a fast, flicker-free 86Hz refresh rate.

As a Direct3D accelerator, the Revolution 3D delivers good, but not outstanding, performance. It could simply be a matter of the first-generation drivers, but the Revolution was unable to provide alpha blending. Anti-aliasing wasn't very smooth, either, and gaps between texture maps were occasionally too noticeable . 2D performance is nice, but not exceptional. The Revolution 3D is a powerful Windows accelerator, but in DOS games, its scores were strictly average.

The Revolution is not a bad card, but you'll find better game-centered cards for less cash.

The Revolution 3D is a good high-end card, but it doesn't really belong in the gaming market. In terms of both price and performance, you're better off with a 3Dfx- or Rendition-based accelerator.

PC GAMER FINAL VERDICT

HIGHS: This card is pretty easy to install and it has a nice display utility.

LOWS: High price; average Windows 95, DOS, and Direct3D performance; doesn't measure up to good gaming boards.

BOTTOM LINE: Number Nine's Revolution 3D is simply not a gamer's card. You can find better gaming cards for the same amount of cash.

Laral Group Nintendo 3D1

Company: Laral Group

Phone: (516) 293-6900 (TO ORDER)

Prices: $69.99

Get this thing off my desk!

If we didn't absolutely have to fill this space with some sort of text, that sentence would be the entire official Hard Stuff review of the Laral Group's new Nintendo 3D1 joystick. This horrid device is one of the very worst joysticks ever to pass through the offices of *PC Gamer*.

Aesthetically, it would fit in on the bridge of the Enterprise — around the time of the first movie — but it would only work at a station manned by an alien or a monkey: this grip was *not* designed for human hands. Baffled by how uncomfortable it was, we proceeded to force it upon different people with hands of varying sizes and shapes; absolutely no one found it comfortable. Bigger fingers chafed on the bizarre hand guard, which creates a narrow channel for your digits and is, as far as we know, totally unnecessary — have you ever seen anyone fencing with a joystick? Smaller hands found the trigger button too high to be reached comfortably. Hands of all sizes nearly suffered thumb injuries attempting to manipulate the hat switch and the buttons near it: They're mounted too low on the stick.

The 3D1 might look like a cool, high-tech joystick, but it's better suited for simians than PC gamers.

This $70 waste of springs has a hat switch and a throttle, but they can't be used together. It has a twist-axis that makes the original Microsoft Sidewinder sticks seem incredibly precise: it's *impossible* to twist the stick without moving along the X or Y axes. In fact, between the way the handle is shaped, the uneven tension of the stick, and the oddly shaped base that doesn't provide any stability, it's hard to play any game with a technique that resembles skill.

Four base buttons toggle rapid-fire mode for their respective buttons, reminding us that this is a videogame company license. A switch on the bottom of the stick toggles Thrustmaster- or CH-compatibility mode (throttle or hat switch functionality) or a third, "arcade" mode: The base buttons become regular joystick buttons, to simulate an arcade machine. Interesting idea, but most arcade-style joysticks are much better than this.

$70 is better spent on, well, a better stick, which in this case means just about any other stick on the market. If this is what console gamers call a joystick, let's all be glad we own PCs.

PC GAMER FINAL VERDICT

HIGHS: The stick looks sort of cool — well, you know, in a unique classic Star Trek kind of way, sort of.

LOWS: Overpriced; horribly uncomfortable; uneven spring tension; not programmable; unstable base; unreliable twist axis.

BOTTOM LINE: Don't let its slick looks fool you — you want to avoid this stick at all costs.

Gemini Maverick Joystick

Company: Gemini

Phone: (201) 471-9050 (TO ORDER)

Prices: $44.99

It's becoming difficult to stand out in the bustling world of midrange joysticks. Wander down the controller aisle of your local trillion-square-foot computer super store and count all of the joysticks that cost $30 to $70. How many did you come up with? If your answer is less than 80, you must've missed some.

The Gemini Maverick Joystick might be one of those you missed; it wouldn't have jumped out at you. It looks like most of the joysticks you counted, except the handle was a little taller. Remember it? Go back and check it out.

The long handle gives the Gemini Maverick Joystick a little wider range of motion than your average stick.

It's actually a pretty nice stick. It has a hat switch and a throttle, although in typical analog fashion, you can't use both at once; a switch lets you choose between them.

You set this stick up in Windows 95 as a Thrustmaster Flight Control System or a CH Flightstick Pro, depending on your throttle/hat switch preference. The Maverick also faithfully emulates those sticks in DOS games.

The feel of the Maverick seems cheap at first, but it takes a little getting used to. First, you'll notice suction cups on the wide base. Since the stick tension is quite low, we actually pulled the suction cups off of our test unit (sorry, Gemini) to confirm our theory that you don't need them. In fact, the stick was even more stable without the typically squishy feel of suction cup support.

Provided it's well calibrated, this is a precise analog stick. The added range of motion provided by the long handle, combined with smooth movement, makes this a very nice, accurate joystick that won't wear out your forearm.

Another interesting observation is that the Maverick worked quite well with military flight sims and action games alike. It doesn't *look* like an F16 control stick, and it's not ultra-tense like an old biplane handle, but it felt quite nice in *Jetfighter III* and *Hind*, and it also performed well in twitch games like *Scorched Planet, Wing Commander IV,* and *Carmageddon.*

The Gemini Maverick is a nice joystick by a lesser-known company that, unfortunately, might get buried in the pack of midpriced controllers. If you get the opportunity to try it out, give it a few minutes, and you may grow to love it.

PC GAMER FINAL VERDICT

HIGHS: Easy to use; sturdy; nice range of motion and silky-smooth movement.

LOWS: Analog only; not programmable; easy to overlook with all the other joysticks out there.

BOTTOM LINE: The Gemini Maverick Joystick is a well-built, moderately priced joystick that takes a little getting used to, but it's worth it.

Jazz Adrenaline Rush 3D

PC GAMER EDITORS' CHOICE

Company: Jazz Multimedia
www.jazzmm.com

Phone: (408) 727-8900 (TO ORDER OR FOR TECH SUPPORT)

Prices: $215

Even as Rendition, ATI, and other 3D chip makers are poised to unleash their next generation 3D accelerators, 3Dfx continues to dominate the market — at least, in terms of performance. The Voodoo chipset recently took a big step up when Voodoo Rush hit the market, enabling card makers to incorporate 3Dfx acceleration onto a 2D board for a single-slot solution with windowed 3D acceleration — something the Voodoo Graphics add-on cards are unable to produce. The Hercules Stingray 128/3D was the first manifestation of Voodoo Rush, and now Jazz Multimedia has taken the idea and improved upon it in many ways.

Unlike the first Stingray cards, the Jazz Adrenaline Rush incorporates everything onto one board rather than mounting the Voodoo Rush hardware on a daughterboard, thereby bypassing the bandwidth hit a daughterboard can cause. The result is faster 3D acceleration. Combine that with a price point that will allow stores to sell the card for less than $200, and you have a winner.

The Adrenaline Rush installs easily and its first-run production drivers are quite stable, especially under DirectX 5. While nobody has yet found a way to get the Voodoo Rush's frame rate in *GLQuake* up to the Voodoo Graphics' level, it's still quite acceptable at 25.6fps. It aced the *TerraMarks* with a total score of 933. The Alliance ProMotion AT3D chip, which provides the 2D portion of the Adrenaline Rush, proved to be a competent Windows accelerator and kicked butt in 2D DOS gaming — especially since, unlike Hercules' Rush-based board, the Jazz card supports VESA VBE 2.0 in hardware.

HOW IT SCORED

Terramark: 933
(TESTS DIRECT3D PERFORMANCE)

***GLQuake* time demo:** 25.6fps
(TESTS FLOATING POINT PERFORMANCE)

***Duke 3D* time demo:**
47fps (640x480), 35fps (800x600)
(TESTS DOS GAMING PERFORMANCE)

The Adrenaline Rush 3D combines an AT3D 2D/3D chip with a 3Dfx chipset on one board.

The gaming bundle is very nice, an excellent bonus considering that it comes with a Voodoo Rush board at this price. You get the very pretty console port *Turok, Mechwarrior 2: Mercenaries* and the first 3Dfx version of *Interstate '76.*

The Jazz Adrenaline Rush is the next step in the awesome evolution of the 3Dfx Voodoo chipset, and it's truly a gamer's board. If you've been holding out for the right 3D accelerator and you're ready to replace your 2D card in the process, get a Jazz.

PC GAMER FINAL VERDICT

HIGHS: Fast 3Dfx Rush acceleration; stable drivers; VESA 2.0 support in hardware; nice bundle of games.

LOWS: *GLQuake* still not up to par with Voodoo Graphics boards.

BOTTOM LINE: This is the best Voodoo Rush card yet, making it the best gamer's video card to date.

BLOW THE OPPOSITION OUT OF THE SKY.

WE HAVE.

FLYING CORPS GOLD

THE BEST IN FLIGHT SIMULATION HAS JUST GOT EVEN BETTER

● FULLY FUNCTIONAL MISSION EDITOR WHICH CAN BE USED TO PRODUCE CAMPAIGNS AS WELL AS MISSIONS. ● 3D CARD SUPPORT FOR UP TO 33 FRAMES PER SECOND. ● MULTI-PLAYER SUPPORT WITH DEATH MATCH AND TEAM PLAY SUPPORTING NETWORK, MODEM AND DIRECT CONNECT. ● NEW FLYABLE AIRCRAFT INCLUDING THE CLASSIC FOKKER D-VII. ● ENHANCED VIEW SYSTEM, INCLUDING A NEW PERIPHERAL VISION MODE. ● NEW LANDSCAPE TEXTURING PROVIDING PHOTO-REALISTIC TOWNS AND VILLAGES. ● PLUS FORCE FEED STICK AND MUCH MUCH MORE.

THERE IS NO COMPETITION. BUY FLYING CORPS GOLD TODAY FOR THE ULTIMATE COMBAT FLIGHT EXPERIENCE

AVAILABLE ON PC CD ROM

"FLYING CORPS IS OUTSTANDING" PC GAMER 90%
"THE DEFINITIVE WW1 FLIGHT SIM EXPERIENCE" PC GAMES A RATING

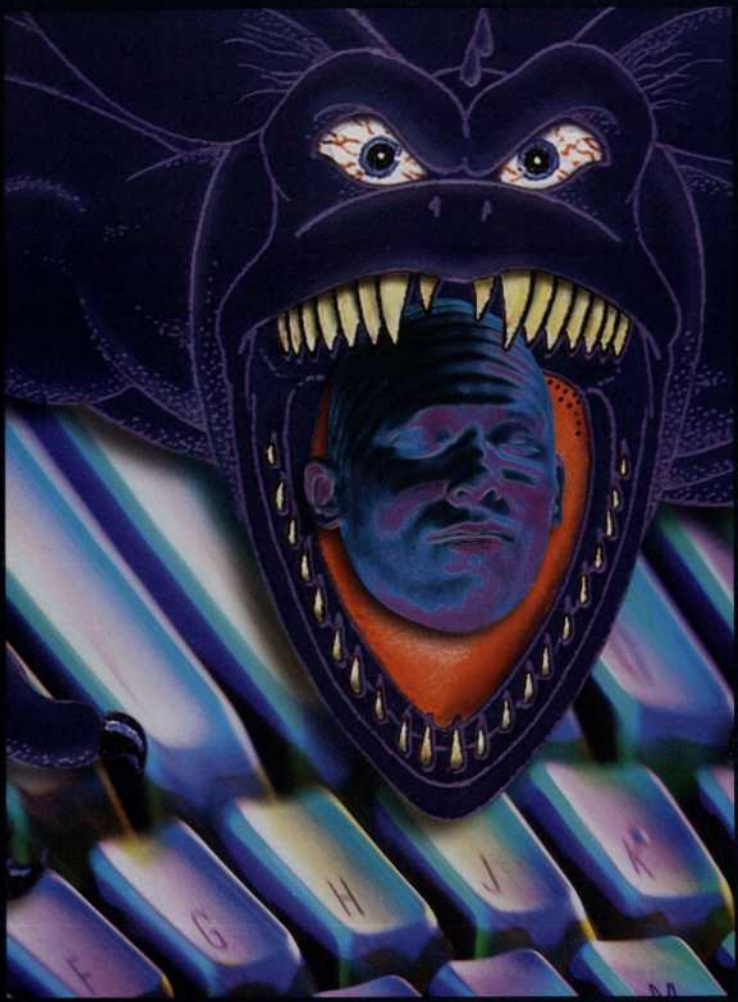
empire INTERACTIVE

"THE NEW KING OF WW1 FLIGHT SIMS" CGW 4/5
"FLYING CORPS IS SIMPLY STUNNING" COMPUTER GAME ENTERTAINMENT 98%

EMPIRE INTERACTIVE CALL 1 800 216 9706 WEBSITE WWW.empire-us.com

3Dfx Logo © 1996 3Dfx Interactive, Inc.

Product Information Number 147



Monster 3D graphics! Monster 3D sound! (Gaming has never been so fierce.)

MONSTER SOUND:

- THE FIRST PCI BASED SOUND CARD
- ACCELERATES DIRECTSOUND, THE NEW MICROSOFT AUDIO STANDARD
- IDEAL FOR HEADPHONES OR 2-4 SPEAKERS
- FREE FULL-VERSION GAMES INCLUDED

MONSTER 3D:

- WICKED DIRECT 3D AND GLIDE GAMING ACTION
- AWARD-WINNING, REALISTIC 3D PERFORMANCE
- WORKS WITH YOUR EXISTING GRAPHICS CARD
- BUNDLED WITH MORE THAN 20 FREE GAMES

Visit www.diamondmm.com/monstersound for your chance to win Monster Sound and Monster 3D!

It doesn't just surround you. It swallows you with realistic, heart-pounding 3D sound. And now, when you combine the amazing new Monster Sound PCI-based 3D audio card with our award-winning Monster 3D graphics accelerator, you'll have the ultimate gaming system for your Windows 95 PC. Using ground-breaking A3D Interactive technology from Aureal—initially developed for NASA virtual reality simulators—Monster Sound provides stunning, digital-quality 3D positional sound. And, according to *Computer Gaming World*, the Monster 3D graphics card is the ideal solution "for no-holds-barred blistering 3D performance." Separately, they bring the absolute best out of today's most outrageous games and Web sites. Together, they deliver performance that blows everything else away.

DIAMOND MULTIMEDIA

Accelerate your world.

Monster 3D is a trademark of Diamond Multimedia Systems, Incorporated, 2880 Junction Avenue, San Jose, CA 95134. All other trademarks are the property of their respective owners. ©1997 Diamond Multimedia Systems, Incorporated. All rights reserved.

Product Information Number 123

Microsoft SideWinder Force Feedback Pro

PC GAMER EDITORS' CHOICE

Company: Microsoft
www.microsoft.com/sidewinder

Phone: (800) 429-9400 (TO ORDER)
(206) 635-7040 (TECH SUPPORT)

Prices: $149.95

Force feedback adds a whole new level of realism to gaming, and Microsoft has done it right.

If you haven't yet experienced force feedback, you're in for a treat. Force-feedback controllers allow gamers to feel physical response from their games; little internal motors jolt and shake the joystick (or steering wheel, etc.) in response to the computer's commands. In a driving game, for instance, you'll feel increased resistance in hard turns; the controller will jiggle as you travel over rough terrain; it'll shake or jerk when you crash into an obstacle; it might even develop a shimmy as your wheels are knocked out of alignment. In flight sims, you'll feel every G you pull in combat maneuvers; firing the machine gun will jiggle the handle with simulated recoil; take a hit, and you'll feel the stick jerk; spin out of control, and the stick may go crazy in your hand.

Microsoft has polished up the SideWinder series and added the SideWinder Force Feedback Pro, a huge, heavy joystick that moves by itself. The massive base is packed with motors, gears, a cooling fan, and optical position sensors. By using electric eyes rather than potentiometers, the stick is more likely to stay calibrated at all times.

If you're familiar with Microsoft's first SideWinder joysticks, the first thing you'll notice is the new handle. Gone is the unfriendly, skinny swizzle-stick that made them uncomfortable over long gaming sessions. The new SideWinder grip is sculpted and very comfortable. Two of the stick's buttons are nicely placed: the trigger is right where it should be, and one of the thumb buttons is easily reached. The hat switch is also within the comfort zone — it's only the other two thumb buttons, to the right of the hat switch, that aren't ergonomically placed: they're too close to each other, and they don't fall into the thumb's natural range of motion.

The SideWinder Force Feedback Pro takes up a lot of real estate, but it's worth every square inch.

The Force Feedback Pro has all of the features found on the SideWinder Pro: it's digital, sports a throttle, a hat switch and a twist axis, and it's totally programmable through Microsoft's game profiling software, which is very intuitive. The base button layout has changed a bit; on the Force Feedback Pro, there are four base buttons and a "shift" button, which, when held down, activates an optional second function for every button on the stick.

Microsoft bundles three games with the Force Feedback Pro to let you jump into the world of wiggling peripherals: *MDK: Mission Laguna Beach*, (a single mission), *Shadows of the Empire: The Battle of Hoth* (the first three missions of the Star Wars game), and the full version of *Interstate '76*. The last one makes the best use of the joystick's motors: You can feel a distinct difference in the quality of the various terrain types you drive on; each weapon has a different "kick;" and when you start blowing tires, it becomes increasingly difficult to hold the stick steady enough to drive a straight line! *Shadows of the Empire* works well, but sometimes, the jiggles and jerks were out of sync with the action. *MDK's* force feedback is also nicely done, but force feedback works much better with games in which you control a vehicle and not a person: It's weird to feel an impact in your hand that's supposed to affect your entire, virtual body.

Comparison to the first force-feedback stick, the CH Products Force FX, is inevitable. For the record: Microsoft has taken force feedback to the next step. The impact of the various forces seems more solid, and the stick generally feels better and is not prone to unwelcome vibration. Both joysticks have a method of detecting the proximity of your hand, so that when you're not touching the handle, the stick doesn't sit there and flop around by itself. The CH stick uses optical sensors on the side of the stick; sometimes, if you hold it loosely, the stick will vibrate violently between activating and deactivating the motor. The Microsoft Force Feedback Pro uses a beam in the front of the handle where your knuckles rest; when you grab the stick, the beam is broken, notifying the stick that you're ready.

If you're playing a game that doesn't support force feedback, the stick falls into a "virtual tension" mode, which feels like a regular joystick. The tension, provided by the stick's motors rather than springs, is adjustable through the joystick's properties menu.

The stick adds a major feel of immersion in games that implement force feedback well, but be warned: The wiggling, jiggling joystick can be a handicap. If you're more concerned with performing well in a game than experiencing an added degree of realism, you'll want to go with a traditional joystick. Still, Microsoft's Sidewinder Force Feedback Pro is the next intriguing step in a trend that has the potential to be very enticing.

PC GAMER FINAL VERDICT

HIGHS: Very comfortable grip; intuitive programming interface; good, solid feel of various forces; lots of features.

LOWS: Expensive; the base is *huge*; some of the buttons are poorly placed.

BOTTOM LINE: Microsoft has introduced an awesome force-feedback joystick with plenty of perks.

Platinum Sound SRS 2000

Company: Platinum Sound
www.platinumsound.com

Phone: (602) 368-9490 (TO ORDER)

Prices: $179

3D sound is a very subjective matter. There are several methods of creating sounds with only two speakers that — theoretically, at least — seem as if they're coming from all around you. Even the best solution, the A3D chip featured on Diamond's Monster Sound, still doesn't convince everybody.

Comparatively, SRS is far less convincing. SRS stands for Sound Retrieval System; it's a method that uses spatial manipulation, or stereo separation, to make sound seem to come from all over the room instead of only through the speakers. For what it does, it works well with music, making it sound fuller and more lifelike, but it doesn't do much for PC digital audio.

SC&T's subdivision, Platinum Sound, has created a 3-piece multimedia speaker set that boasts SRS as a major feature, as well as a toggle switch to turn it off when it fails to enhance the sound. That's a good — if not original — idea, which would be much better appreciated in a nicer sound system.

The large SRS 2000 components don't sound as good as they look.

The dual 13-watt satellites house midrange cones and tweeters, and the subwoofer, clocking in at a weighty 30 watts, is encased in wood. The first strike against this system is that all of the controls are on the subwoofer. The question is, *why?* This silly, shortsighted mistake is all too common and hard to excuse. Ideally, in *any* sound system, the subwoofer should be able to be placed in a convenient location that will maximize its effect — usually, the ideal location is on the floor, next to a wall. Most of us at *PCG* have our subwoofers under our desks, and it's a real hassle to crawl around down there just to adjust the volume or turn off the SRS enhancement.

Perhaps that would be forgivable if the system sounded really great, but the SRS 2000 doesn't score well there, either. While the bass is reasonably satisfying, midrange sounds seem hollow and high frequencies lack definition. The only controls the system offers are volume, bass level and, of course, an on/off switch for the SRS option, so there's no way to tweak this system's tone.

There are plenty of superior 3-piece speaker systems at or below the price of this system. Between the mediocre sound and the inconvenient controls, it just wouldn't be sound advice to recommend the SRS 2000.

PC GAMER FINAL VERDICT

HIGHS: Plenty of power; SRS enhances music CDs and can be turned off for PC audio.

LOWS: Poor sound quality; all controls placed on subwoofer.

BOTTOM LINE: Platinum Sound's SRS 2000 speaker system just doesn't stack up to its competition. In this price range, you can probably do much better.

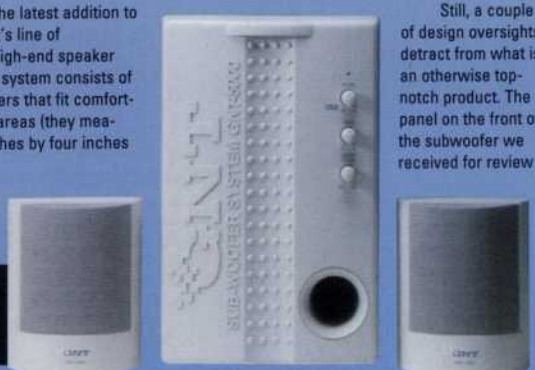
Altec ACS48 PowerCube Plus

Company: Altec Lansing
www.altecmm.com

Phone: (800) 258-3288 (TO ORDER)

Prices: $149.95

The ACS48 is the latest addition to Altec Lansing's line of PowerCube high-end speaker systems. The system consists of two desktop speakers that fit comfortably into crowded areas (they measure about four inches by four inches around the base, and are about eight inches high); and an impressive subwoofer that sits on the floor in a sturdy wooden housing.



How do they cram so much great sound into those little cubes? This little system sounds much bigger than it looks.

Altec's PowerCube line is noted for its high-quality audio, and the ACS48 system is no exception. The 20-watt satellite speakers produce crisp, clean sound in a small package, putting them in a class with the computer speaker systems from Cambridge SoundWorks. The subwoofer definitely pounds, too, with plenty of power to let you dial in as much thump as you want.

Still, a couple of design oversights detract from what is an otherwise top-notch product. The panel on the front of the subwoofer we received for review was a bit loose; a careless kick under the desk, and the panel fell off. It wasn't hard to reattach, but it was an annoyance.

The speakers' lack of a headphone jack is an unfortunate oversight, especially if you like to listen to loud music at work or late in the evening. On the other hand, this is a convenience feature many high-end systems lack.

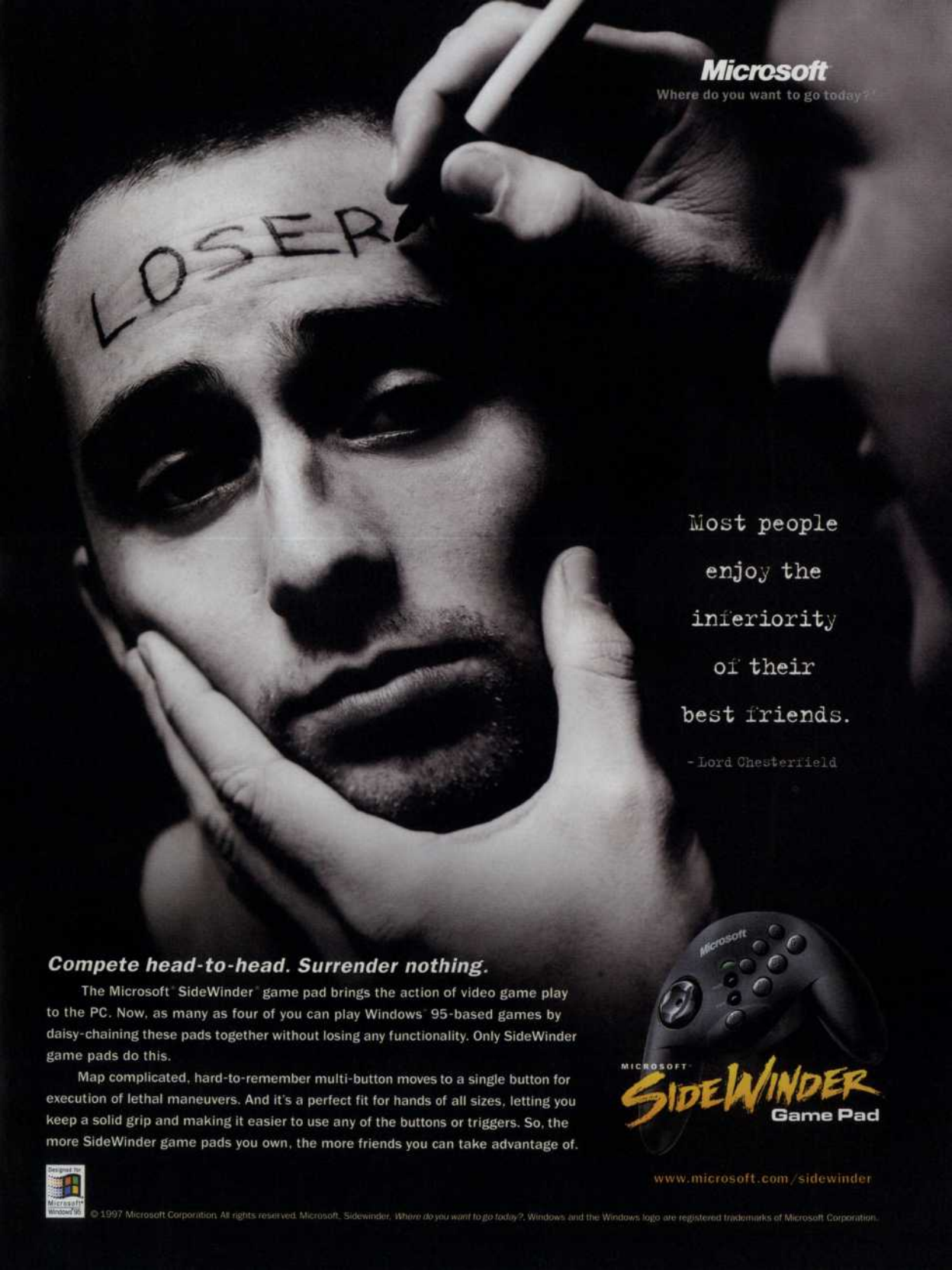
The volume control is digital; you press buttons to increase and decrease the speakers' output, and it can take several seconds to make any significant change in the volume. An ordinary volume control knob would've been more convenient and responsive. Push-buttons are nifty in some applications, but sometimes there's no need to reinvent the wheel.

PC GAMER FINAL VERDICT

HIGHS: Excellent sound; a solid, well-built subwoofer; compact satellite speakers make them ideal for a crowded desktop.

LOWS: Less-than-ergonomic design makes these speakers less user-friendly than they could have been.

BOTTOM LINE: These are great speakers with just a couple of weaknesses.



Compete head-to-head. Surrender nothing.

The Microsoft® SideWinder® game pad brings the action of video game play to the PC. Now, as many as four of you can play Windows® 95-based games by daisy-chaining these pads together without losing any functionality. Only SideWinder game pads do this.

Map complicated, hard-to-remember multi-button moves to a single button for execution of lethal maneuvers. And it's a perfect fit for hands of all sizes, letting you keep a solid grip and making it easier to use any of the buttons or triggers. So, the more SideWinder game pads you own, the more friends you can take advantage of.

MICROSOFT® SIDEWINDER® Game Pad

www.microsoft.com/sidewinder

Designed for Microsoft® Windows® 95

© 1997 Microsoft Corporation. All rights reserved. Microsoft, Sidewinder, *Where do you want to go today?*, Windows and the Windows logo are registered trademarks of Microsoft Corporation.

BETHESDA SOFTWORKS
presents

XCAR
EXPERIMENTAL RACING

Test drive XCar at
www.xcar.com

"Outstanding!... XCar should rush past the current pole-sitters and take the checkered flag."
—Computer Gaming World

"Superb graphics and realism...pure relief for the terminally gridlocked."
—Strategy Plus

"XCar redefines the racing sim. Destined to become a classic."
—Sim Racing News

Actual IBM screens shown

Greatness is earned. Not awarded.

- Race any of 17 prototype XCars. The latest experimental racing vehicles!
- Customize every aspect of your car's performance using the latest cutting-edge racing technology, then test drive your prototype.
- Experience brilliant high res (SVGA) graphics at sustained frame rates. XCar is the most beautiful and fastest racing game on the market!
- Includes a library of real racing circuits and conceptual tracks. You can race Lime Rock, the streets of Seattle or around Mayan Temples!
- Generate real telemetry data on the high speed oval, skid pad or handling tracks to customize your car for optimum performance.
- The first true hard core racing simulation for experienced racers. Arcade Mode for those who want to learn to race like the Pros.
- Includes network and modem support for multi-player racing!

POWERED BY Xtreme

BETHESDA SOFTWORKS
1370 Piccard Drive, Suite 120
Rockville, MD 20850-4304
BBS: 301 990-7552 • Fax: 301 926-8010
Website: http://www.bethsoft.com

XCar®, X²Gine®, Bad Dog™ logo and Bethesda Softworks™ are trademarks of Media Technology Limited. Copyright © 1997 Media Technology Limited. All Rights Reserved. All other trademarks, logos or graphics are the property of their respective owners.

Product Information Number 100

The Hard Stuff Sideways Page

WE REVIEW SO MUCH HARD STUFF EVERY MONTH, it can be hard to keep track of what's hot and what's not. On this page, we dare to compare hardware we've reviewed in past issues. In fact, there's so much data, we had to turn the page sideways to make it all fit! This month: 3D cards and systems.

SYSTEMS

SYSTEM	ISSUE REVIEWED	PRICE WHEN REVIEWED	PROCESSOR/ RAM	VIDEO	BOOTMARKS: NORTON SI	SYSMARK 32	MDK PERFTEST	DEBABILIZER PRO	TERRAMARK	QUAKE	DUKE NUKEM 3D
Falcon Mach V	June '97	$3,495	Pentium 200 MMX 32MB	Diamond Stealth 2000 + Monster 3D (3Dfx)	not tested	not tested	not tested	not tested	not tested	21.4fps 640x480 14.5fps 800x600 *GLQuake:* 45fps	not tested
Intergraph TD-25	July '97	$2,873	Pentium 200 MMX 32MB	Intense 3D 100 (Rendition)	56.6	166	96	6:12	810	20.7fps 640x480 13.1fps 800x600 *VQuake:* 30.5fps	32fps 640x480 21fps 800x600
Micron Millennia MME	Aug. '97	$2,948	Pentium 233 MMX 32MB	Diamond Stealth 2000 + Monster 3D (3Dfx)	61.2	185	104	5:49	935	*GLQuake:* 28.1fps	39fps 640x480 25fps 800x600
Gateway 2000 Destination D5-200	Sept. '97	$3,599	Pentium 200 MMX 32MB	STB Video Range	54.9	Would not run	92	6:06	n/a	22fps 640x480 12fps 800x600	39fps 640x480 19fps 800x600
NEC PowerPlayer 3020	Oct. '97	$2,599	Pentium 200 MMX 32MB	ATI 3D Rage + Diamond Monster 3D (3Dfx)	58.1	153	91	6:03	834	*GLQuake:* 34.6fps	35fps 640x480 26fps 800x600

WHAT THE BOOTMARKS MEAN

Norton SI: tests data transfer across the system bus. The higher the number, the better.
SysMark 32: tests nearly all of a PCs subsystems in everyday Win 95 applications. The higher the score, the better.
MDK PerfTest: tests DirectX performance. The higher, the better.
Debabilizer Pro: scopes out MMX performance through a scripted routine. The faster it's completed, the better.
TerraMark: tests Direct3D performance through routines with increasingly demanding graphics processing. Three levels are tested, with increasing demands. Some cards with less feature support in hardware fail the third level.
***Quake* and *Duke Nukem 3D*:** both represent real world gaming tests.

3D GRAPHICS ACCELERATOR CARDS*

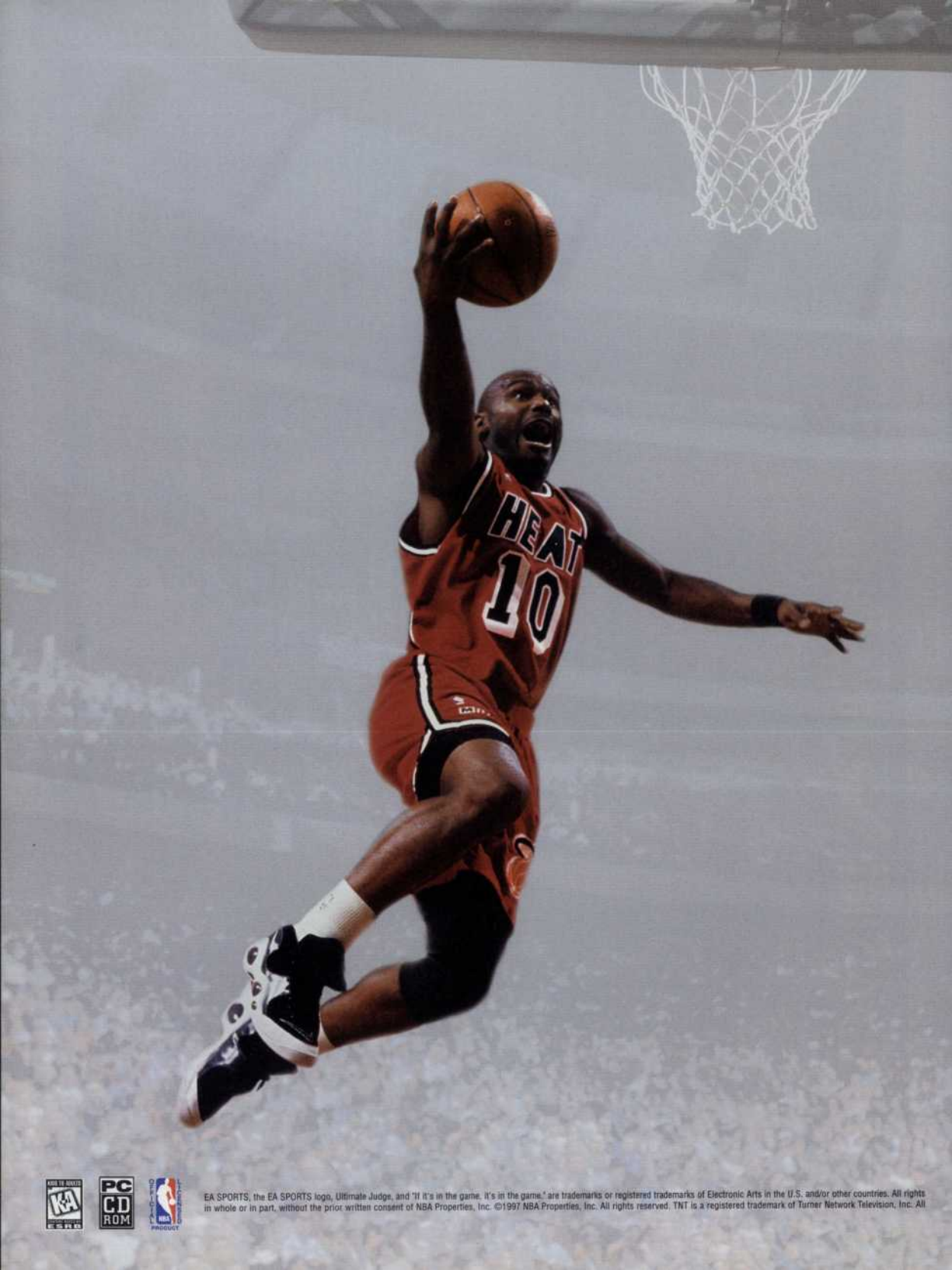
CARD	ISSUE REVIEWED	PRICE AS REVIEWED	RAM AS REVIEWED	3D CHIPSET	TERRAMARKS (DIRECT3D TEST)	QUAKE	DUKE NUKEM 3D	MISC.
Techworks Ultimate 3D 644	June '97	$99.95	4MB	Cirrus Laguna	Not Tested	11.6fps 640x480 6.7fps 800x600	Not tested	
VideoLogic Apocolypse 5D	June '97	$299	8MB	PowerVR	Not Tested	16.9fps 640x480 11.8fps 800x600	Not tested	
STB Nitro 3D	July '97	$179	4MB	S3 ViRGE GX	Would Not Run	16.3fps 640x480 10.9fps 800x600	38fps 640x480 21fps 800x600	
Diamond Monster 3D	July '97	$199	4MB	3Dfx Voodoo Graphics	824	*GLQuake:* 31.9fps	n/a	3D only
ATI All-In-Wonder	July '97	$329	4MB	ATI Rage II	364 (failed L3)	14.1fps 640x480	36fps 640x480 24fps 800x600	Tons of features
RealVision Flash 3D	Aug. '97	$149	4MB	3Dfx Voodoo Graphics	895	*GLQuake:* 32.6fps	n/a	3D only
Hercules Stingray 128/3D	Sept. '97	$299	6MB	3Dfx Voodoo Rush	933	*GLQuake:* 23fps	48fps 640x480 33fps 800x600	No VESA support
Number Nine Revolution 3D	Nov. '97	$449	8MB	Number Nine Ticket to Ride	397 (failed L3)	13.7fps 640x480 8.4fps 800x600	35fps 640x480 25fps 800x600	
Jazz Adrenaline Rush 3D	Nov. '97	$215	6MB	3Dfx Voodoo Rush	931	15.9fps 640x480 11.1fps 800x600 *GLQuake:* 28fps	47fps 640x480 35fps 800x600	

*ALL TESTED ON A P200 MMX WITH 32MB RAM.

The Game Machine

If you're like us, you don't buy a whole new PC when you're ready to upgrade; you do it a piece at a time until you've got a great game machine. Every month in this space, we'll tell you which components we recommend in each category, based on our experience using them and on the hardware requirements of current and upcoming games. The Game Machine carries a maximum theoretical price of $2,500.

- Intel Pentium 200 MMX
- 32MB EDO RAM
- 128-bit 2D graphics card
- 3Dfx Voodoo Graphics-based 3D accelerator
- 2GB IDE Hard Drive
- 8x IDE CD-ROM drive
- Sound Blaster AWE 32
- 15" Super VGA Monitor
- Programmable joystick
- Multi-Player gamepad (Gravis Gamepad Pro or Microsoft Sidewinder)
- 33.6Kbps modem



EA SPORTS, the EA SPORTS logo, Ultimate Judge, and "If it's in the game, it's in the game." are trademarks or registered trademarks of Electronic Arts in the U.S. and/or other countries. All rights in whole or in part, without the prior written consent of NBA Properties, Inc. ©1997 NBA Properties, Inc. All rights reserved. TNT is a registered trademark of Turner Network Television, Inc. All

NBA LIVE 98

www.easports.com

If it's in the game, it's in the game.

EA SPORTS

Now holding auditions for gravity-defying, jaw-dropping, rated-S-for-Sweet moves. Bring 'em if you got 'em.

reserved. The NBA and individual NBA Team identifications used on or in this product are trademarks, copyrighted designs and other forms of intellectual property of NBA Properties, Inc. and the respective teams and may not be used, rights reserved. Light 'em up.

Tech Q&A

Is your computer not acting the way it should? Has tech support let you down? The Hard Stuff is here to help!

Q In a recent issue of *PC Gamer*, I read a review of the Hercules Stingray 128/3D in The Hard Stuff. You recommended it as a one-card solution with 3Dfx acceleration, which I guess is the best 3D you can get. Of course I want to play *GLQuake* and all the new games that'll support 3Dfx, so I was going to buy the Stingray. Then I read in another magazine that a Hercules Stingray 128/3D blew up a monitor! My 17" monitor is only a year old, and it cost more than $600. That's a big risk, especially to spend half of that amount on a video card that might ruin it. What's the deal? Can the Stingray damage my monitor or any other components of my computer?

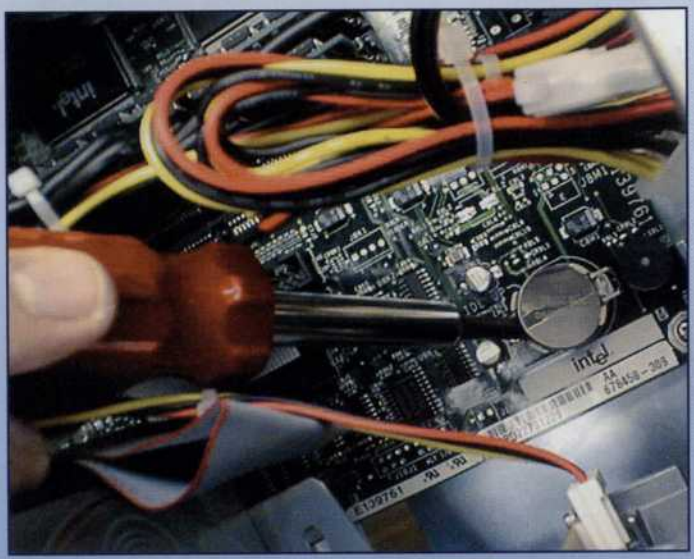
— Neil Van Ness, via the Internet

A So *that* explains the heap of smoking monitors all over the office! Actually, the only thing that's been destroying our monitors is Gary Whitta, who thought that a real shotgun might give him an edge in *Quake*.

Seriously, it's almost impossible for a video card to destroy a monitor — even a really bad video card. The only way we can conceive is to set a resolution or refresh rate that the monitor can't handle, but even that's not a reliable way to wreck most modern monitors, because they'll drop into standby mode if they receive a signal they can't deal with.

If a monitor receives an incompatible video signal and can't shut itself off, it's possible that it could blow one of its components. This can actually be done by accident; most video card manufacturers recommend that you switch Windows 95's display settings to standard VGA mode, which is 640x480 resolution with a 60Hz refresh rate, before replacing a video card. Virtually any monitor can deal with that type of signal. After you install your new video card, it'll be able to autodetect the capabilities of a plug and play monitor and configure itself accordingly. If your monitor isn't plug and play capable, you'll want to check its manual to determine exactly what resolutions and refresh rates it can handle.

A representative of Hercules assured us there aren't any known problems with the Stingray 128/3D. Whoever wrote the monitor anecdote you refer to, Neil, either didn't install the new card properly or was simply unlucky: like any electronic device, monitors wear out and break down over time.



One way to reset your CMOS is to remove the battery for a minute or two.

Q I didn't know who to write to, so here is my problem. My son was playing with my PC, and now it comes up with a little gray box that says "Enter Password" whenever I turn it on. I think he did something to the CMOS, and I can't edit it, either!

— Robert Savettiere, via the Internet

A Most computers have a security feature in the CMOS setup, the program that lets you select BIOS settings. When you first power up, usually you'll see a message that says "Press F1 (or Del or some other key) to enter Setup...." The program lets you adjust basic settings like the time and date, hard drive parameters (cylinders, heads, and tracks per sector), PCI slot resource options, sleep mode options — and a power-on password. Nearly every setup program forces the user to enter a new security password *twice*, to keep you from accidentally password-protecting your machine, so there's every chance you can coax the password from your son if you promise him ice cream, a new computer game, and a car when he turns 16.

If that doesn't jog his memory, there's still a way to get around the password in most computers. It involves opening the machine's case and possibly removing some of the expansion cards; if you don't feel confident doing that, you may want to ask a PC-savvy friend for help, or take your PC to a qualified technician.

If you choose to open up the case, be sure to ground yourself to avoid damaging any components with static electricity. Look for a jumper or switch somewhere on the system board labeled CMOS RESET, or something to that effect. If you've still got your system board's manual, it should be able to tell you where to find what you're looking for; most manuals have a diagram showing the locations of all of the board's jumpers and switches and their functions.

If there is no such jumper, look for a

Need Help?

If you have a hardware question or comment, write to us at:
The Hard Stuff, *PC Gamer*, 150 North Hill Drive, Suite 40, Brisbane, CA 94005

or send E-mail to:
jdurham@pcgamer.com

Glossary

RISC
This stands for Reduced Instruction Set Computer. It's a type of processor with a limited instruction set designed for a specific purpose, and because of that it's faster than processors with more complex architecture. Generally, a RISC chip is smaller and contains fewer transistors than other processors.

3D Setup Engine
Before three-dimensional polygons are displayed on screen, they must be "set up." For each frame, the locations and shapes of the polygons that make up an object vary depending on what angle we're viewing the object from. A hardware- or software-based setup engine handles the task of preparing the polygons for rendering.

Transistor
A component of a digital circuit that regulates the flow of electricity by amplifying, insulating, or simply conducting the current. Depending on their function, computer chips contain thousands or millions of transistors. The more transistors a chip contains, the bigger the chip will be and the hotter it will get. As microcircuitry technology advances, it becomes possible to make transistors smaller and smaller. (Note: The Lucent Technologies web site contains an excellent history of the transistor, complete with animations and clear diagrams. It can be found at *www.lucent.com/ideas2/heritage/transistor/index.html*.)

Full duplex
This term is used to describe a serial communication device, such as a modem, that can transmit and receive data simultaneously, as opposed to a half duplex device, which can only handle one data stream at a time. In terms of sound cards, a full duplex card can record and play back digital sound at the same time, making multi-track recordings possible.

battery. Most system boards today use a long-life battery to keep the CMOS settings intact while the system is powered down. The battery may resemble a larger version of a flat, silver watch battery, or it might look like a little blue barrel. Again, if you have the system board's manual, it can help you locate the battery — you may have to remove one or two expansion cards to get at it.

If you find the battery, examine it closely to make sure it's not soldered in place. If it's not, make note of its orientation and *carefully* remove it from its socket. Leave it out for at least a full minute and pop it back in. All of the settings stored in the system board's CMOS will revert to their defaults, and the password protection will be disabled. If you power on and the password prompt appears again, try removing the battery for a longer period of time.

You didn't include any information about what type of computer, system board or hard drive you have, Robert, so it's impossible to predict what shape you'll be in when you power back up. But if you're using a SCSI drive, or if the CMOS autodetects your IDE drive (virtually any modern motherboard will), you should be all set — enter the setup program, set the time and date, make any other modifications you may have made in the past, and reboot. If you have to enter the parameters manually, the hard drive's *native* parameters should be recorded on the drive itself or in the hard drive's manual. In the very worst case, you may have to call the drive manufacturer's technical support line with the drive's model number — they'll be able to supply you with the numbers you need. Unless the drive was formatted under parameters other than its native ones, which is unlikely, you should be fine.

What if there's no battery, or it's been soldered in place? Your best bet is to have the CMOS reset by a professional.

Q I notice in your reviews that some wireless stuff is IR, which I know stands for Infra-Red, and other things are RF. What does RF stand for? Which way is better for remote controls? Which one has a farther range? I want to buy a remote control mouse and keyboard for my computer, so I can hook it up to my TV with my ATI All-In-Wonder card, but I don't want to trail cords all over the place or sit with my nose against the TV. Please E-mail me back.

— Edward Sonja, via the Internet

A We get an enormous volume of mail every day, and although we'd love to be able to, we just can't respond personally to each letter Hard Stuff receives. We do, however, read every single piece of correspondence that passes our way, so keep it coming! Whether you see your letter in print or not, every question and suggestion we receive influences the section — after all, you readers are the reason we're here!

On to your questions: IR does indeed stand for infrared, and RF stands for radio frequency. Each is a method of transmitting signals and each has its own advantages and drawbacks.

An IR signal is actually a beam of light. Infrared light is outside of the spectrum visible to the human eye — it's actually in the microwave range. By its nature, this is a very "clean" way of transmitting data; if the transmitter has a clear line of sight to the receiver, there's little chance of interference, which occurs when the receiver picks up a signal not intended for it. IR remote control is very reliable, but the line of sight is crucial: if an object breaks the "beam," the signal is lost.

RF signals are actually radio signals. Radio stations, broadcast television, cellular phones, and most other forms of wireless communication use radio waves to carry their signals. Radio waves are not dependent on line of sight and can pass through walls, people, and most anything that might get in the way. However, RF transmission is more subject to interference from other electronic devices. Telephones, power lines, microwaves, and other electrical equipment give off ambient RF waves that can interfere with RF remote control devices. In the case of mice and keyboards, RF interference can cause unwanted input or mouse movement, or block input entirely. The FCC regulates the use of RF frequencies, so interference from other transmitting devices is rare, but ambient signals can be unpredictable.

The range of a device depends upon the power of the transmission. Neither IR nor RF equipment should have a problem getting across your living room.

The Sejin Freeboard Beamer is an IR keyboard, while the Logitech Cordless MouseMan Pro is RF. We like 'em both!

TANARUS™

The planet you wish you never heard of and launches its attack on Windows®

TANARUS sets a new standard in multiplayer action-strategy gaming — delivering futuristic tank warfare either online or on disc. Pick your team, load up your tank, and let it roll. Experience killer graphics as you navigate through sun-baked deserts, futuristic cityscapes and frigid snow-swept lands. Plant mines, fire an array of deadly missiles, and blow the opposition to kingdom come.

RATING PENDING
RP
CONTENT RATED BY ESRB

Sony Interactive Studios America

Tanarus is a trademark of Sony Computer Entertainment America Inc. ©1997 Sony Computer Entertainment America Inc. Windows 95 is a registered trademark of Microsoft Corporation.

has just declared war on the internet, 95 this fall.

TANK WARFARE AVAILABLE IN STORES FOR WINDOWS® 95 FALL 1997

EXPLOSIVE ACTION BEGINS NOW AT http://www.tanarus.com

MULTIPLAYER GAMING ONLINE
No AI online — every tank commander is very real — or practice solo with Windows® 95 version.

ONLINE COMMUNICATIONS
Chat with tank teammates, or psych-out the opposition on an open line.

FULL CUSTOMIZATION
Customize controls and peripherals, then choose from 5 different tanks with more than 30 different weapons modules.

POUNDING EFFECTS
Feel the effects that day and night cycles, and weather have on your tank drive.

Product Information Number 304

INCREDIBLE 3D GRAPHICS • IMMERSIVE SOUND EFFECTS • REAL-WORLD PHYSICS

DIVE INTO SUB CULTURE AND SUBMERGE YOURSELF IN A STUNNING 3D UNDERWATER WORLD WHERE SCHEMING PIRATES, GIANT SEA CREATURES, AND WARRING FACTIONS THREATEN YOUR MINIATURE SUBMARINE. CAN YOU DISCOVER THE CAUSE OF YOUR HOME'S DESTRUCTION?

WWW.UBISOFT.COM

RATING PENDING RP ESRB

Designed for Microsoft Windows 95

POWERVR

Redline Racing

Speedster

3Dfx

DYNAMIC LIGHTING EFFECTS • MISSION-BASED OBJECTIVES • NON-LINEAR GAMEPLAY

ONCE YOU DIVE INTO ITS DEPTHS,

SUB CULTURE

YOU MAY NEVER RESURFACE.

PC CD-ROM

© 1997 Ubi Soft Entertainment S.A. and its affiliates. Uses Smacker Video Technology © 1994-97 Invisible, Inc. dba R.A.D. Software. Windows® is a registered trademark of Microsoft Corporation. RenderWare® is a registered trademark of Criterion Studios. SubCulture © 1997 Criterion Studios. All rights reserved. Criterion Studios and the Criterion Studios logo are trademarks of Criterion Studios Limited. Ubi Soft and the Ubi Soft logo are trademarks of Ubi Soft Entertainment S.A. All other trademarks belong to their respective companies.

Criterion Studios

Ubi Soft ENTERTAINMENT

Product Information Number 341

Myth Sports A 3D Engi
Renders Other Strat

© 1997 Bungie Software Products Corporation. Myth: The Fallen Lords is a trademark of Bungie Software Products Corporation.

Now you can go hand-to-hand with the enemy on a smoothly rolling 3D landscape the way you've always imagined. The environment of Myth: The Fallen Lords is so real that every bloody limb, every scattered sword, every unexploded charge tossed by a ground-rippling explosion remains a live element ready to be seized and used by or against you. Not limited to a simple overhead view, you'll rotate around the heads of your troops, follow the arc of a burning arrow and zoom in on the slaughter.

BUNGIE®

Get an eyeful of stunning detail: reflections in the water, lightning frying the enemy to cinders, smoking craters ringed with the heads of the inept and every ounce of blood remaining on the scarred battlefield.

ne So Advanced It Even egy Games Obsolete.

But don't stare too long. Learn the art of war and the importance of physics as you move fast to seize the high ground where the archers have greater range and pyromaniac dwarves can shower targets with explosives.

Multiplayer games include classic scenarios like King of the Hill and Capture the Flag, and uniquely challenging variants like Assassin and Steal the Bacon, even in teams! Play over the Internet for free using bungie.net or turn your local network into your own personal war zone.

So call 800-295-0060 or surf to www.bungie.com for the only strategy game where "uphill battle" is more than a figure of speech.

myth
THE FALLEN LORDS

Product Information Number 104

I CONTROL YOUR PC

For I Am The Master Of Outdated Games

I DARE YOU!

Take Back Control With Oil Change

Outdated games can lead to ghastly computer crashes, mutated graphics, and wretched sounds. I am the master of these diabolic disruptions. The only thing that can ruin the reign I hold over your PC is Oil Change from CyberMedia. Oil Change automatically updates over 400 games for your PC, leaving your games running smoother, faster, better. I despise that! Oil Change updates everything from the latest versions of software, shareware, and hardware drivers, to helpful game hints, tips, and cheats. I dare you to take back control! Stop by your local store to pick up a full copy of Oil Change, or visit the CyberMedia web site at www.cybermedia.com/phantom to download a free trial version.

The choice is yours — Oil Change, or me.

For more information, call us at
1.800.841.3539 x13

CYBERMEDIA®
MORE POWER TO YOU™

Visit our website at:
www.cybermedia.com

Product Information Number 116

Su-27 1.5: The Last Word Until 2.0

Visitors to the SSI suite at E3 got a teasing glimpse at the new *Su-27 Flanker 2.0*. The game's Russian developers are hard at work upgrading the engine and maybe even adding another plane to the lineup, which is good news for flight hacks. *Su-27* is the finest computer simulation of flight yet, and although it's beginning to show its age, it still has some kick left in it.

SSI has made a fairly large revision to the original, bringing it up to version 1.5 and packaging it with a new set of missions in the *Su-27 Flanker Mission Disc*. Version 1.5, which for now will only be available with the mission disc, adds some excellent new features. One of the big ones is that you can save the simulated mission status by hitting Ctrl-Q. This freezes the game world at the moment you save, allowing for multiple saves per mission that can even be modified in the editor. If you crash during a mission, you can hit a "recover" button to continue the mission in a fully-loaded and fueled Su-27.

An interesting new view is enabled by F10: SSI calls this the "AWACS" view, and it gives you an overview of all the elements on the battlefield at once. Icons on a map of Crimea show the constantly fluid state of the battlefield. By clicking on any of these icons, you can call up information on that asset, including speed, altitude, heading, rate-of-climb, type of object, and whether it's friendly or enemy. Unless the Show all Objects in Map View toggle is selected in the editor, you will only "see" those ground and air assets you've already detected.

Head-to-head and cooperative play is now fully enabled over LAN and TCP/IP for as many as 16 players. Built-in TCP/IP support is included, as well as shareware versions of Kali and Kahn. Some added shading makes the aircraft look better, but the 16-color cockpit still looks — well, 16-color.

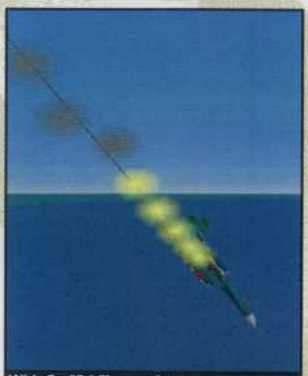
A couple of utilities are also included in the package. One generates random missions based on certain user-determined parameters, such as how much air-to-ground or air-to-air action you want. The other utility is a new version of the Campaign Shell, which lets you group a set of missions and fly them as a campaign, with a final evaluation offered based on your performance of the whole set.

Finally, there are 150 new missions to fly, many of them created by gamers. Their missions load onto your hard drive and are grouped under categories: anti-radar, anti-shipping, beyond visual range, combat air patrol, close air support, dogfights, escort, ground attack, interdiction, training, pinpoint bombing, anti-runway, scrambles, and sweeps. There's also a set of three small campaigns and something called an "E-mail campaign," which I have tried in vain to figure out and which, with the expanded Internet play, is now irrelevant. The missions are almost uniformly excellent, and although I didn't play all 150, I didn't find a bummer in the bunch I did play.

T. Liam McDonald

A mission set for SSI's great air combat simulation, *Su-27 Flanker*, adds fresh challenges, improved visuals, and some great new features.

In addition to all the new features introduced by version 1.5, the *Su-27* pack gives you 150 new missions to fly, plus utilities to generate more.



With *Su-27 1.5*'s save feature, you can save your place in the middle of a mission, then recover from even the worst mistakes.

Cryptic Passage for Blood

After getting off to a so-so start with cheapie level bundles culled from the Internet, WizardWorks is now publishing some damn fine add-on discs, thanks to Sunstorm Interactive. Sunstorm is the level-building team behind the quite good *Duke It Out in DC*, and now they're offering up *Cryptic Passage for Blood* as a sacrifice. *Cryptic Passage* is a unified set of ten new levels for *Blood*, and in terms of design, innovation, atmosphere, and challenge, they're equal to — and often better than — the original Monolith levels.

The story (hah!) that links these levels has something to do with an ancient scroll you need to recover in the Carpathian Mountains. The new episode begins with your boat deposited at a run-down dockside, complete with fishing shacks and a lighthouse. From there, the levels proceed through the old opera house, a gothic library, abandoned monastery, steamboat, graveyard, mountain pass, mine,

BUG PATCHES*

A-10 Cuba! v.1.2 (Activision): Faster frame rates, more weapons in network games, network messaging and optimization, better joystick control, detachable chutes, and other fixes and tweaks. *a10p1_2.zip*

Air Warrior II v1.02b (Interactive Magic): Fixes bugs causing garbled CPIDs in certain situations and in-flight disconnects. Adds more visible planes, so that in offline play as many as 40 aircraft are visible, with 84 in online play. New "what-if" missions in the mission editor allow any country to have any type of plane. The "invite to squad" item on the right mouse button menu in the player list can now be used to create a new squadron. There are also new explosion animations and a full-screen text buffer. *aw2102b.zip*

Carmageddon 3Dfx Beta Upgrade (Interplay): Early patch for 3Dfx-based 3D accelerator cards. *carmvus2.zip*

F/A-18 Hornet 3.0.1 (Graphic Simulations): DirectX 3 is now supported. The game will work even if no sound card/driver is present. Numerous networking bugs have been fixed. Player connections are more reliable. Direct IP networking is now available, so Internet games can be played without requiring Kali or Kahn. Physical effects have been added for missile hits. The view system has been improved, and a padlock view added. Other AI, stability, and flight-model tweaks have been made. *F18301b2.zip*

Imperium Galactica 1.2 (GT Interactive): In the rank of Commander, the traders leaving the Zeuson planet (if it was under blockade) did not have the correct text appearing in space warp. This is fixed. If you played the game for a very long time, it might have happened that one of your last ground battles wouldn't end. This bug has been fixed; the ground battles will always end. There was a limit to the number of buildings that could built in the galaxy; this number was 5,000, which some players found not to be enough (especially in longer games). Also, on one of the planets, the enemy forces could deploy their tanks into positions from which they couldn't exit. This has been fixed as well. *igupd12e.zip*

Interstate '76 v.1.081 (beta 3D card patch) (Activision): Currently supports: Diamond Monster 3D, Orchid Righteous 3D, Deltron RealVision Flash, Hercules Stingray 128 3D, Creative Blaster 3D, Sierra Screamin' 3D, Intergraph Intense 3D, Canopus Total 3D, and STB Nitro 3D. Adds bi-linear filtering, MIP mapping, and hardware acceleration. *i76v1081.zip*

MechWarrior 2: Mercenaries 1.081 (beta 3D card patch) (Activision): Currently supports: Diamond Monster 3D, Orchid Righteous 3D, Deltron RealVision Flash, Hercules Stingray 128 3D, Creative Blaster 3D, Sierra Screamin' 3D, Intergraph Intense 3D, Canopus Total 3D, and STB Nitro 3D. Adds bi-linear filtering, MIP mapping, and hardware acceleration. *md3d1081.exe*

Warcraft II : Beyond the Dark Portal v.1.50 (Blizzard): Fixes compatibility issue with old saved games, adds Draenor tile set and new heroes to the map editor, and prevents cheating in multiplayer games. *w2xpatch.zip*

Zork Nemesis Subtitle Upgrade Patch (Activision): This patch adds subtitles to all movies, voiceovers, and key sound effects. *znpatch.exe*

*YOU'LL FIND ALL OF THESE PATCHES ON *THE CD*!

and a final showdown in a castle. Each is stylish and intriguing. The steamboat — like the train in the original — is a moving level, complete with paddle-wheels and riverside. While the original didn't offer a really satisfying graveyard, *Cryptic Passage* offers one in spades, complete with underground chambers, mausoleums, and other dark treats.

A hidden level involves a boat trip — with Charon himself at the helm — through a misty swamp to a ramshackle cabin. The levels are pretty challenging, with a nice flow and a showdown featuring a series of minor bosses. Four deathmatch levels are also included, but there are no new weapons or creatures of note. This is disappointing, as is the rather awkward interface and installation. But the high quality of design and imagination is a treat.

WizardWorks' interactive *Blood* strategy guide is pretty good, but the video host is really cheesy.

WizardWorks doesn't fare quite so well with its GameWizards *Blood Interactive Strategy Guide*, which it sent me along with *Cryptic Passage*. The general idea of the GameWizards series is a good one: Use video of actual gameplay to guide players through levels. The extensive video clips do a pretty good job of this, but the package feels unfinished. The interface is confusing, and there is no way to read text descriptions of each level without printing hard copies. (Actually, you can choose Print, and then read the text in Print Preview mode.) And the cheesy dime-store-Elvira hostess — "Victoria Wolfe" — is pointless. The printable maps are good, however, and there's hope that future installments could refine the system a little further. At $29.95, however, gamers might well wonder whether it's worth the price when you can pull similar information from the 'net for free.

Short Takes

• Graphic Simulations has made a set of new *F/A-18 Hornet 3.0* missions available on its web site, and we've included them on *The CD* this month in the \patches directory. These "Red Flag Missions" are practice encounters and don't affect pilot ratings. They include a one-on-one, guns-only dogfight, four-on-four and eight-on-eight beyond-visual-range encounters, interception, combat air support, ground strike, SEAD, and a shipping strike. It's a nice little set of encounters for a really solid sim. Check out *www.graphsim.com*.

• Wild Bill Wilder and Doug Bevard of Pegasus Enterprises sent me *Making War: Steel Panthers Scenarios Design Tutorial*. This is clearly a homemade product, but it has some interesting information. It comes on 80 printer pages in a three-hole cover, with a 3.5" disk in the back. The authors take you through all the processes involved in creating your own *SP* or *SP2* scenarios, from map-making to O/Bs. I found the information interesting and insightful, if sometimes repetitive (okay, we get the idea that we need to save our work!). Six *SP* and six *SP2* scenarios are included on the disk. I kept hoping for a little more depth and insight for more experienced designers, but for people who are struggling with their first scenarios, it might be just the thing to get them started. Pegasus also produces a wargaming newsletter with some interesting strategies. *Making War* is $28 post-paid, and can be ordered from Pegasus Enterprises, 6801 Flower Street, Reno, Nevada, 89506-1712. You can find more info at *www.powernet.net/~pegasus/*.

PCG

I LOVE MOM
ebworld
www.ebworld.com
• CHAT EVENTS
• CONTESTS
• REVIEWS
• DEMOS
• RELEASE DATES
• ONLINE SHOPPING

The New

PANZER GENERAL® II. More than a sequel. An entire generation beyond anything yet seen in strategy games. And seeing *is* believing. Witness the LIVING BATTLEFIELD™ a new standard for strategy game artwork. Featuring the heightened realism of hand-rendered maps — thirty painstakingly crafted battlefields that are faithful to the real ones of WWII — the LIVING BATTLEFIELD also showcases detailed 3D-rendered combat units with six facings.

Of course, this beauty is beyond skin deep. The phenomenal game play of the second generation PANZER GENERAL game engine is truly

THE LIVING BATTLEFIELD SERIES features the enhanced realism of hand-crafted maps and photo-realistic 3D-rendered combat units.

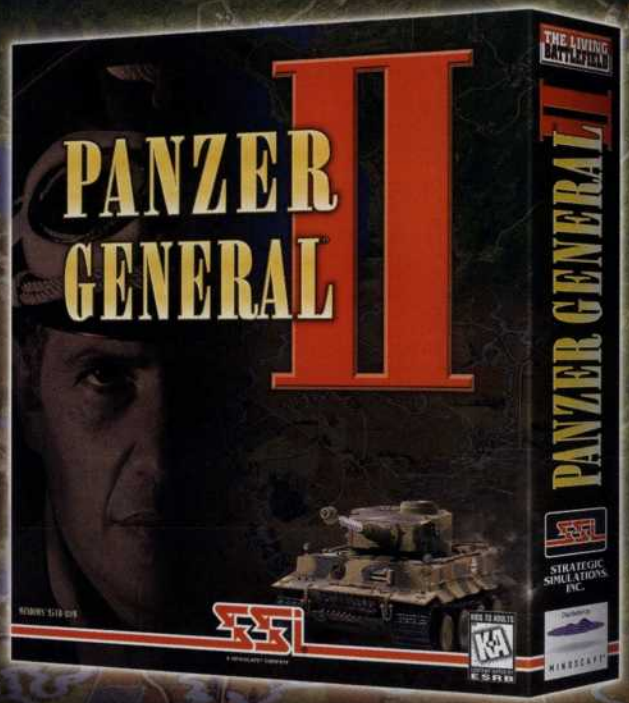
CLUB SSI

Play Panzer General II online at www.clubssi.com

www.panzergeneral.com

Face of Strategy Gaming.

awesome. Battles rage through WWII's Eastern and Western Fronts, North Africa, even the continental USA. Play one large campaign and three mini-campaigns — some of which are playable as either Axis *or* Allied forces. Edit scenario and unit data with the powerful Battle Editor for enhanced gameplay and extended replay. And with full multiplayer support, battles can include up to four players.



PANZER GENERAL II.

The New Face of Strategy Gaming.

To Order: Visit your retailer or call 1-800-234-3088 (USA & Canada) with VISA or MasterCard.

WINDOWS® 95 CD-ROM

Developed by the SSI Special Projects Group.

AGES 13 AND ADULTS K-A ESRB

SSI
A MINDSCAPE® COMPANY

PANZER GENERAL is a registered trademark of Strategic Simulations, Inc. LIVING BATTLEFIELD is a trademark of Strategic Simulations, Inc. ©1997 Strategic Simulations, Inc., a Mindscape Company. All rights reserved.
All other trademarks and registered trademarks are the property of their respective holders.

Product Information Number 330

A Subtle Hint

To whom it may concern: I'm starting early this year, because I don't want you to have any excuses. It's nearly December, and if this year is anything like last year, I'll be getting nothing but dirty dishes for the holidays. So here's a hint: I may be a grownup, but I want something to play with, something to stretch my mind like pulled taffy, something *fun*. But no shoot-'em-up games, no blood (bit-based or real), no noise. I get enough of that at home with the kids.

Virtual Jigsaw

How about a jigsaw puzzle on the PC? Something like *Virtual Jigsaw* from SouthPeak Interactive. It packs about 50 puzzle pictures onto its CD-ROM. I can choose a picture, select a difficulty level, and zap! The picture is carved up into puzzle pieces. And you should see the different levels. The easy, moderate, and difficult levels are ranked by the number of pieces, but there are more unusual levels, too. I found the "Shattered Glass" level pretty easy, even though the pieces were broken up into untraditional, spiky fragments. However, I peeked at the "Impossible???" level and balked: tons of pieces broken up into weird shapes, such as eggs and curves or rectangles and frames.

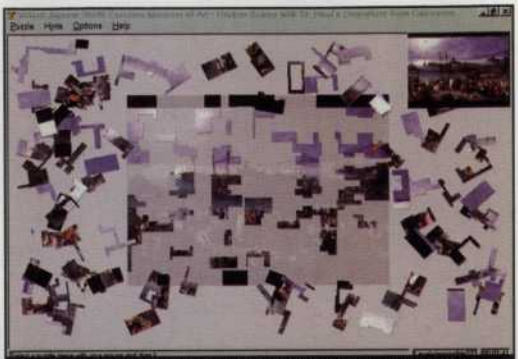
The puzzles are complex enough by themselves, but the double-sided puzzles are the worst — or the best, depending on how hard you like your puzzles. South Peak Interactive contends that, with the double-sided option, I can conjure up more than 6,000 puzzle variations. If I were really perverse, I could even choose a double-sided puzzle with two solid colors instead of pictures.

In spite of all the choices, no electronic jigsaw puzzle can accurately reproduce the real-world experience of fingering little cardboard pieces, sorting and resorting them, and knocking a few to the floor. However, SouthPeak compensates for the lack of tactile input by adding sound and visual effects. I love the satisfying click when two pieces fit together, and sometimes the whole puzzle shifts a bit in concert with the click to show the fine fit. It's a small feature, but effective.

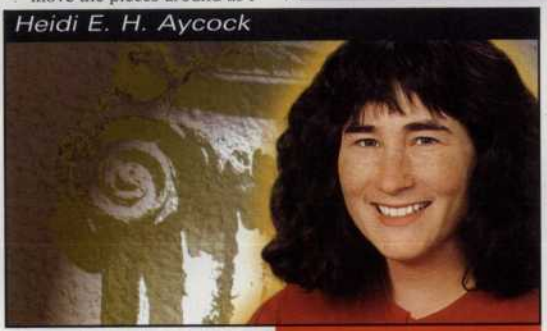
Another small but effective feature is the way I can move the pieces around as I solve the puzzle. None of that clicking a million times to rotate a piece a few hundred degrees. In Virtual Jigsaw, I can drag a piece by its corner and turn it at the same time according to how I drag it. Although this system is a little clumsy, it still feels far more natural than others I have tried. To flip a piece to its other side, I simply double-click or right-click on it, and to pick a new piece at random, I right-click on a blank part of the screen. A really skilled puzzler might use that right-click method to complicate the solution a bit — imagine if someone told you which piece you had to place next instead of letting you choose for yourself.

I'm not a really skilled puzzler, so I couldn't solve the more difficult levels. But my guess is that any jigsaw fan would appreciate the program for its selection of beautiful puzzles, its wide variety of ways to carve up the pictures, and its small footprint. All those pieces and no mess!

If I didn't already have *Virtual Jigsaw*, I'd be pleased to find it wrapped in shiny paper on a dark December day. Too bad. I've got it, so you'll have to think of something else.



The "Impossible???" level of SouthPeak's *Virtual Jigsaw* carves up stunning pictures into hundreds of oddly shaped pieces.



Heidi E. H. Aycock

The holidays are just around the corner, and Heidi has some advance tips for those who want to do some computer-savvy gift-giving.

Marble Drop

Something like *Marble Drop* from Maxis. I know, I know; this program got a lukewarm review from *PC Gamer*, but I beg to differ. For mind-moshing, *Marble Drop* is marvelous.

Playing this game, I feel as though Leonardo Da Vinci had built 50 puzzles just for my pleasure and edification. He tacked together chutes, funnels, spinners, and other strange devices in complex ways. He jotted notes on the background, hinting at how various gizmos affect each marble's path. And he wrote documentation in the singular voice that only a renaissance man could manage. Thanks, Lenny; the puzzles are peachy.

The puzzles are really active mazes. There are starting points, ending points, and dynamic twists in between. The trick is to find the correct starting point for each marble so that the marble reaches its proper ending point. The dynamic twists change the path so that the correct starting point

changes from one attempt to the next. I spent a lot of marbles figuring out how each path transformed.

All of this figuring, guessing, predicting, and so on takes place in the brain; hardly any of the gameplay actually takes place with the mouse. More aggressive gamesters will probably find *Marble Drop* unbearably slow and static, much as Type-A personalities probably find meditation excruciatingly quiet and empty. However, *Marble Drop* exercises different muscles, different reflexes, and different skills than more active games like *Quake* and *Redneck Rampage*. It's an exercise in visualization — intense visualization. And it's an exercise in forming algorithms — complex algorithms.

On the one hand, this program offers something I could never do except on the computer. Who's going to build all those contraptions for me on my dining table, and how am I going to clean up the mess in time for dinner? On the other hand, this program offers me a new skill I *can* use away from the computer. I'm learning to conjure up mental mazes with my eyes closed. I'll probably fall asleep before I finish following the path of the first mental marble, but sleep is a gift, too.

Scrabble

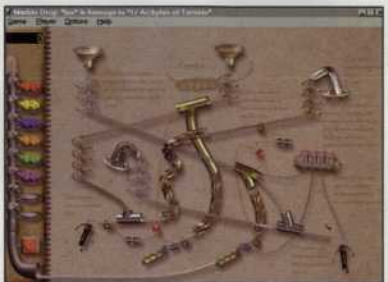
Oh, that's right; I've already got *Marble Drop*, too, so you'll have to think again. Think of something like Hasbro's *Scrabble* on CD-ROM. I love word games, and I can never find someone to play with me when I have a free moment. So something like *Scrabble* would be great.

The program feels very much like the boardgame, just without the social interaction. I played game after game the first day I opened the package. The challenge was irresistible.

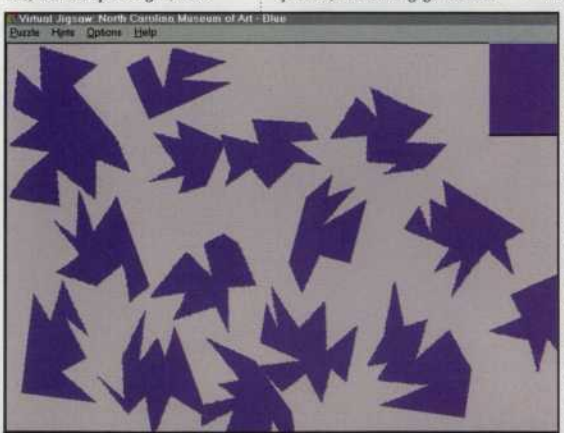
That challenge presents itself as a 3D board floating on a dark background. My tiles sit in front of me, easy to read, easy to shuffle — not, however, easy to sort. After building a word on the board, the other tiles spin along the perimeter awaiting my mouse click to refill my rack. Sound effects and visual effects punctuate the game play. *Scrabble*'s digital atmosphere is encouraging, but not too distracting.

With four difficulty levels, the computer opponent can be as pleasant or annoying as you like. Called Maven, the computer player can limit its choices to relatively familiar *Scrabble* words such as *hod* (a portable trough), or *quoits* (a throwing game like horseshoes). Or the program can blast open the dictionary and choose such irritating words as *ogee* (an S-shaped trough), or *ae* (one). I have yet to see *trough* played, despite all the odd synonyms the program finds. There's no penalty for peeking at the dictionary, so I tested all kinds of letter combinations with impunity. That's how I discovered that an *ai* is a three-toed sloth. All the time that I was shuffling vowels, the computer waited patiently.

Like *Scrabble*, Hasbro's *Boggle* on CD-ROM should please any word puzzle fan on your gift list.


Someone must have channeled Leonardo Da Vinci's spirit to build the beautiful and clever mazes in Maxis' *Marble Drop*.

Unlike *Marble Drop*, which offers gameplay unavailable off the computer, *Scrabble* offers a game that is *widely* available off the computer. Still, this program extends the fun rather than mimicking it. *Scrabble* allows me to play alone or with people across the world through modems, networks, and the Internet. With *Scrabble* on CD-ROM, I'm never at a loss for opponents. But again, that's not much help for your gift quest, since I already have the program. And don't buy *Boggle*, either. I've seen a beta version of *Boggle* (is *beta* a legal word in *Scrabble*?), and it's at least as much fun and addictive as *Scrabble* — plus it has a better dictionary feature. *Boggle* would be a great choice if it wasn't already tucked away in my CD-ROM case.



For a painfully difficult puzzle, try solving a double-sided, solid-color puzzle broken up into shards of glass, compliments of *Virtual Jigsaw*.

Other Ideas

See if you can find something perfect. Something that gives me credit for being able to think. Something that will play with me during those odd lulls in the day and wait for me during those more common bouts of chaos. Here's a hint: Look for puzzles and games that worked well on a card table. Software developers have gotten much better at transforming them into code. They've figured out how to compensate for what's lost in translation by adding special effects, more power, and more imagination.

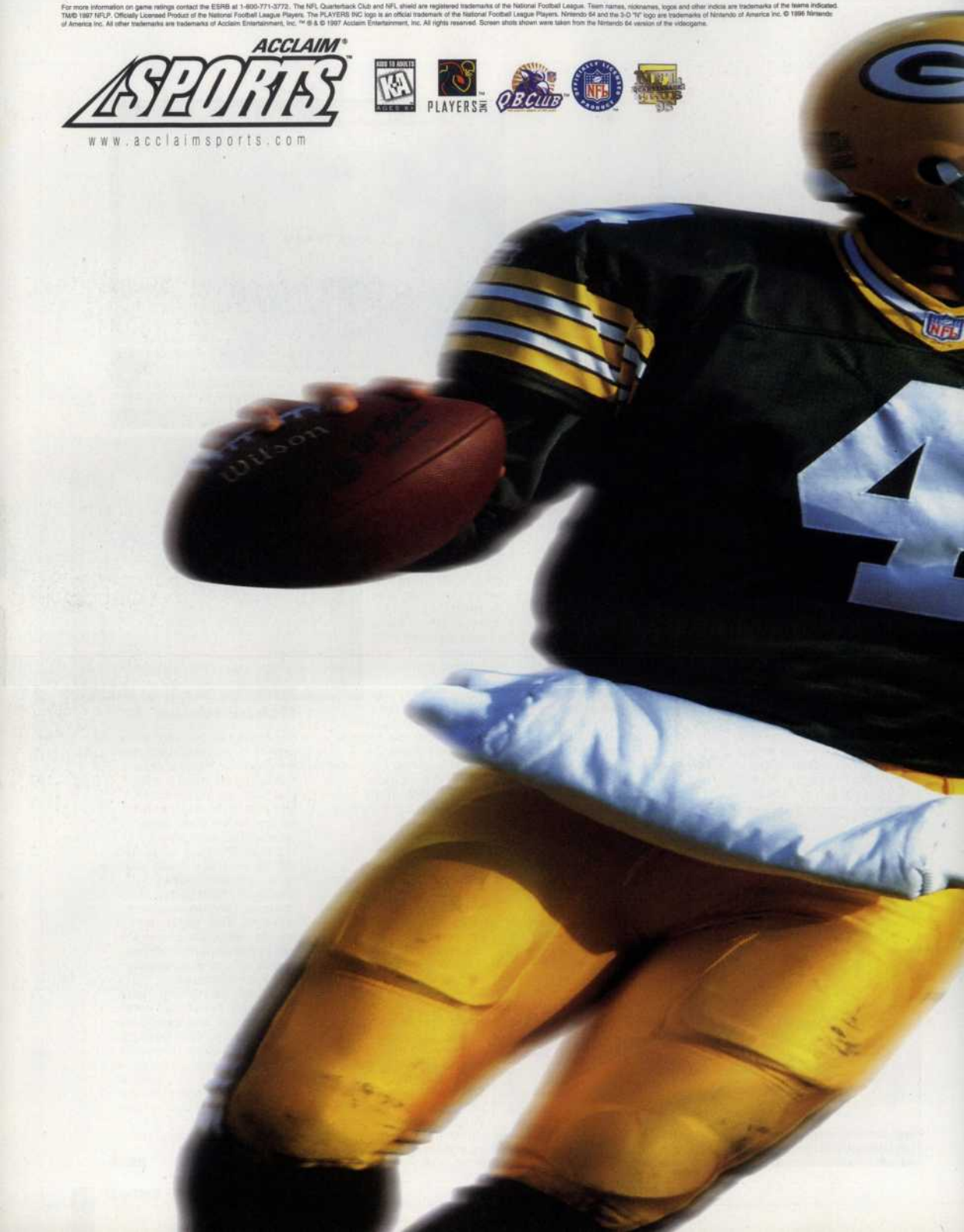
If you find the right gift, you can still tweak your code, surf your 'net, and shoot a few villains. I might even listen to your tales of glory. However, I'd like my own glory in my own style. And I'm sure there are a few other grownups out there who would use the computer for fun if they could just find a box of the kind of fun they like best.

PCG

For more information on game ratings contact the ESRB at 1-800-771-3772. The NFL Quarterback Club and NFL shield are registered trademarks of the National Football League. Team names, nicknames, logos and other indicia are trademarks of the teams indicated. TM/© 1997 NFLP. Officially Licensed Product of the National Football League Players. The PLAYERS INC logo is an official trademark of the National Football League Players. Nintendo 64 and the 3-D "N" logo are trademarks of Nintendo of America Inc. © 1996 Nintendo of America Inc. All other trademarks are trademarks of Acclaim Entertainment, Inc. ™ & © 1997 Acclaim Entertainment, Inc. All rights reserved. Screen shots shown were taken from the Nintendo 64 version of the videogame.

ACCLAIM®
SPORTS

www.acclaimsports.com



Brett Favre
1996 and 1997 NFL MVP

All 30 NFL Teams and 1500 Players
Exclusive Quarterback Club profiles

Proprietary Motion Capture Graphics
Real moves by real NFL stars

All 29 3D-rendered NFL Stadiums
Mile High Stadium to Lambeau Field

Game and Season Stat Tracking
In-game updates to individual league leaders

Total Team Management
Creating, trading, drafting and managing the salary cap

Comprehensive NFL Playbook
Plays designed by Brett Favre

NFL QUARTERBACK CLUB 98

The difference between winning and losing is in the details. A split-second of missed coverage. A deflection. A committed block. Knowing your opponent's tendencies. Why should our game be any different? NFL Quarterback Club '98 does the small things the same way it does the big things...the right way. From bone-jarring tackling animations to Total NFL Team management, this year's model is even faster, meaner and deeper. Play it.

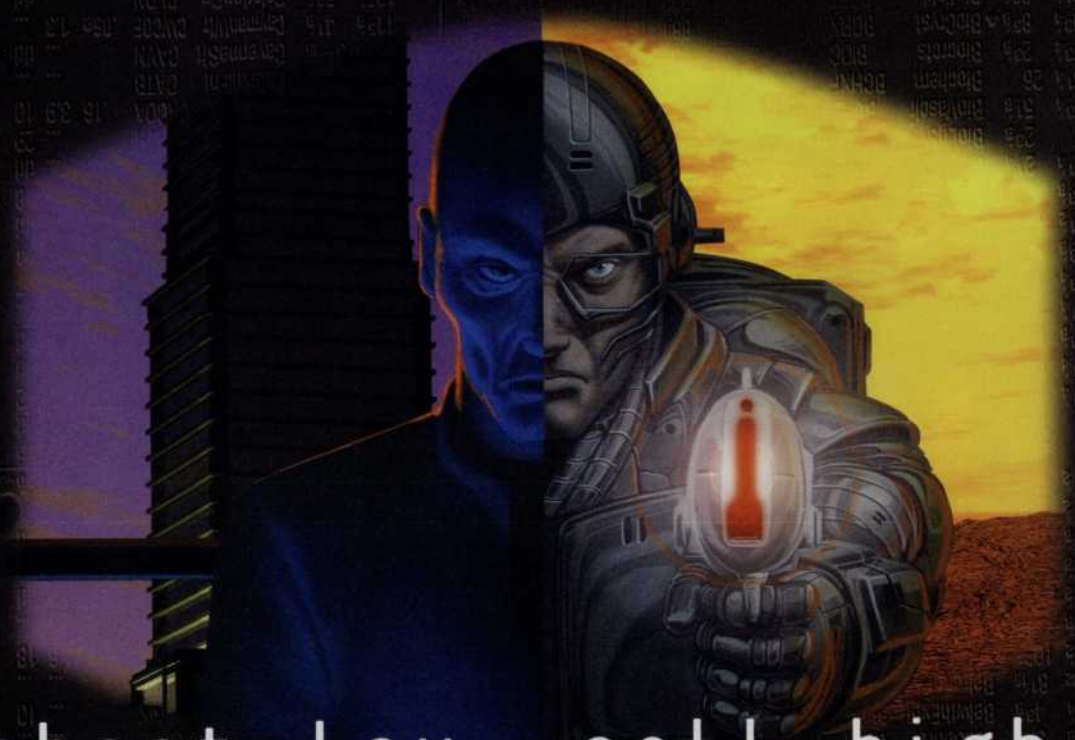
sweat the details™

NINTENDO64

DOS CD ROM

Product Information Number 84

WAR INC.



shoot low, sell high.

kiss your ass goodbye.

Developed by:

OPTIK

INTERACTIVE MAGIC

P.O. Box 13491 • Research Triangle Park • NC 27709 • www.imagicgames.com

Visit your local retailer or call toll free 1-800-448-5261 to order a copy today!

WAR, Inc is a trademark of Interactive Magic, Inc. All other trademarks are the property of their respective owners.

Product Information Number 196

Here There Be Dragons

Gangs of bandits lurk on the outskirts of town, ambushing travelers and slaughtering them for a few meager possessions. Desperate outlaws butcher the local livestock, taking meat and hides to sell for a few measly coins, while in the towns, mobs rush to strip the dead of all their goods and clothes, littering the streets with naked corpses. In a desperate attempt to maintain law and order, the local guardsmen execute thieves and murderers on the spot.

Is this medieval Europe in the darkest of the Dark Ages, when hunger and the Black Death ruled the land? No, this is the *Ultima Online* beta test — and anarchy reigns in Britannia.

Ultima Online has had a rough start. The game has its problems with latency, but more fundamentally it is struggling with imbalances in its game design. These imbalances make it difficult for new characters to get started and for established characters to survive, and these difficulties in turn lead to the frustration that brings out the worst in online gamers and casts doubt on the whole concept of an online Ultima in the first place. And what is *UO* supposed to be but a rich, multiplayer, online roleplaying experience akin to an interactive fantasy novel — a novel that we're paying money for, again and again?

Player-Killers

The biggest problem *Ultima Online* faces is players killing other players. This behavior is nothing new — it was rife in *Diablo*, and it looks like it's going to be a fact of life in online gaming, so there's no point bemoaning its existence.

But why does it happen? Just because most people won't rob and kill in real life doesn't mean they won't online. In the virtual world, nothing matters. Moral inhibitions are relaxed, and legal repercussions are nonexistent. After all, it's only a game.

An online world has a schoolyard feel, because even if you get caught doing something wrong, rarely does anything come of it. The online game designer has to contend with not just the low percentage of criminal deviants in the real world but also the large group of players who are naturally inclined to online anarchy, just because it's fun.

And then there's the nature of computer games themselves: if they've taught us anything, it's that if something's on the screen and it's moving, kill it. The inevitable result: the forests are filled with heavily armored warriors chasing rats, cows, and rabbits with broadswords and maces. But more to the point, players will go after each other with even more determination, because none of the livestock is likely to be carrying a backpack full of gold.

Player-killing is to be expected, but *UO*'s imbalances exacerbate it. Characters begin penniless, homeless, and equipped with little more than an edged weapon. Because the nearest dungeons are picked clean and overcrowded and the economy is a bust, these heroes have few prospects for advancement and experience except through banditry, corpse-robbing, and murder. It's as if some barbarian conscript army had just disbanded, and the impoverished ex-soldiers, outnumbering the locals ten to one, were left to fend for themselves. Naturally they turn to pillage, leaving *Ultima Online* full of monsters of the two-legged kind.

The problem is so pervasive that even Lord British himself (played by Richard Garriott, the creator of Ultima), through an unusual combination of bugs and errors (he's supposed to be invincible), was assassinated by a thief with a fire-wall scroll. The incident will go down in Ultima legend as the ultimate player kill.

Super-Guards

Related to the problem of player-killing is *UO*'s heavy-handed method of coping with it. The method is this: if you attack someone in a town, they can call for the guards, and seconds later, you're dead. While preserving some veneer of roleplaying by trying to make player-killing prohibitively dangerous, this mechanism is wiping out the more traditional outlet for RPG sociopaths — the thief character.

Whether you attack someone or steal from someone, or even pick through your own possessions after being resurrected (in one notorious bug), the result is the same — the Super Guards will get you, and you're dead.

The first time I died in *UO* was only a couple of minutes into my first game. I walked into an unattended room and saw some playing cards on a table. "This looks neat," I thought, and clicked on the deck. Perhaps I would get to play a game of chance, although of course I had nothing to wager, since I started with no money.

But my touching the cards was interpreted as an attempt to steal them, and several omnipotent, halberd-hefting Guardsmen teleported in — yes, *teleported* in — and carried out capital punishment without any hint of due process.

Britannia's watchmen make *Daggerfall*'s guards-from-nowhere look like the Keystone Cops. At least you could run in *Daggerfall*, and petty theft — or unwittingly touching something — didn't result in being slain on sight. This is absurd, and has to be fixed.

And for actual thief characters (a vital part of any RPG world), it's worse. I tried a thief character, because snooping and stealing seemed like more fun than hanging around the outskirts of town and waiting for a body to fall. But every third failed attempt or so resulted in instant death. That's not fun, that's frustration.

The town is where a thief would operate. There are plenty of crowds, so you can pick pockets, and plenty of stores where a little shoplifting

Jason Bates

Ultima finally goes online, but exactly what is going on? Jason fills us in on what's wrong, what's right, and ways to improve the overall experience.

Even Lord British (shown here, dead) fell victim to the rampant player-killers in this famous incident. (Thanks to Tarquin for this picture).

is possible. You can't be expected to do your stealing and pickpocketing in the wilderness; if you sidle up next to a complete stranger on a dark forest path, they're bound to look askance.

This is the way it should work: if your target notices you trying to steal from him, he can shout for the guards. If some guards are within hearing distance, they can run and try to grab you. And you, the thief, can try to run away. None of this instant death. If you're caught, you can be put in jail for a set number of real-world days. Maybe a brand, or the loss of a finger. Maybe they'll hang you if you persist in your lawlessness. But then there could be a chance for your friends to break you out.

But in Britannia today, being a player-killer is safer and far more lucrative than being a traditional RPG thief.

Yellowstone National Dungeon

If you manage to survive the fascistic towns and run the gauntlet of player-killers and cow-hunters in the nearby woods, you might find your way to a dungeon.

Here, the player-to-monster ratio is about ten to one, at least in the more accessible dungeons. That's ten players for every poor snake or spider that tries to slither out of a hole and offer up some gameplay. Half a dozen dungeoneers were camped about the monster re-spawning points, waiting for their next victim to appear. This isn't dungeon exploration, it's a lynch mob.

Though player-killers are less a problem in the dungeons, there is still a lack of camaraderie and roleplaying, mainly because there are so many people. If dungeon corridors are as crowded as a subway terminal, what chance roleplaying?

There are too many players in *UO* for the size of the map. The wilderness looks like Yosemite at the height of tourist season. Walking through a dungeon is like being on a guided tour of the Carlsbad Caverns. Imagine Bilbo bumping shoulders with twelve other adventurers when he infiltrated the cavern of Smaug. I continually expect to turn a corner and find a souvenir shop or an RV park.

The point of the beta test may be to test the technology, to find out if the servers can handle thousands of players at once, but what if that beta test unveils some flaws in the game design itself — that's there's not much for these thousands of penniless swordsmen to do but prey upon each other? That Britannia itself has become a vast, medieval refugee camp?

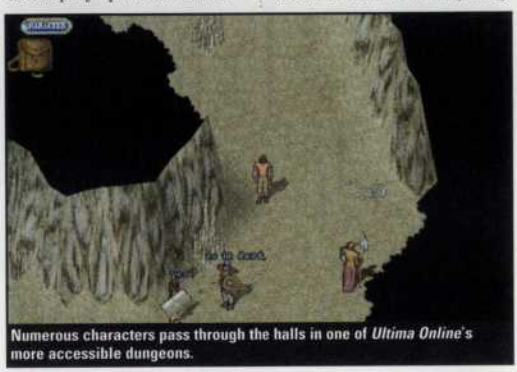
The Great Depression

There are a few players determined to roleplay — and more power to them — and for the persistently patient, *UO* is not as grim as described here, but subtly rewarding. Many of those players have found an outlet by roleplaying as merchants or craftsmen.

But because the *UO* game world is based on a real economic model, any problems in the economic model magnify and distort the rest of the experience, particularly for those involved in trade.

The design idea was that players would hunt animals in order to sharpen their skills and earn their keep. Players are killing animals left and right, as if in some Big Game Safari, but they're leaving their skins and meat on the ground, because the shops just won't buy them. Meanwhile, those who take up blacksmithing are able to convert raw ore into plate armor with laughable ease, if they can elbow their way into one of the forges, which are as crowded as a college-town bar on quarter-beer night.

Britannia's economy is completely out of whack, which shouldn't really have surprised us, as it's a new system, in beta. But economies work on supply and demand — and there is too little demand for anything players can produce. New players should come into the game with lots of money and little equipment, so that the first thing they do is hit the shops and buy some weapons, armor, equipment and clothes. Players who are mining, forging, weaving, and hunting will have a market, even if they have to sell to an NPC middleman. And everyone should have to buy food, several times a day.



Numerous characters pass through the halls in one of *Ultima Online*'s more accessible dungeons.

Light at the End of the Tunnel

This column has touched on some major problems in *UO* — there are other, smaller annoyances that could be ironed out later, such as the inability for an otherwise capable person to light a fire and cook some meat, or how difficult it is to read road signs. A real tavern, where players can actually chat or whisper with each other, instead of shouting randomly to everyone within hearing, would also be useful. But that's for a rainy day.

You shouldn't come away from this column thinking that this is a review of *Ultima Online*, because it's not — these are some observations on a beta version, and this is a true beta test; *UO* is not, at this writing, a finished commercial product.

And it probably sounds like I don't like *Ultima Online*, but that's not the case at all. Even in beta, this is the most compelling online game I've ever tried, and I find myself inexorably drawn in again and again. It's fascinating just to see what happens when a large numbers of people are left to fend for themselves in a virtual world.

There have been plenty of MUDs (multi-user dungeons) and several commercial online RPGs before *UO*, but only *UO* has a critical mass of players, an exhilirating sense of freedom, and a rich graphical presentation that could lead to great things. A little game-balancing, a little more fine-tuning, an effort to give characters a stake in their world and a reason to keep their characters alive and coming back, and we might be able to look back on this beta in years to come and say — yes, that was the *first* virtual world. PCG

EARTHLINK NETWORK® MEMBER BENEFIT # 17

Free Internet Access

FOR EVERY NEW MEMBER YOU REFER*,
YOU WILL GET A MONTH OF FREE INTERNET ACCESS.
IT'S THAT SIMPLE.

No catch, no strings - the program is open to all EarthLink members.

Every month, we give thousands of our members free access. In fact, some of our members refer so many people, they never have to pay for their Internet access.

Our free access program is just one of many benefits EarthLink members enjoy. If you're not getting free Internet access from your current provider, give us a call.

EarthLink Network

It's your Internet.™

- EMAIL
- UNLIMITED INTERNET ACCESS
- FREE 24-HOUR HELP LINE*
- PERSONAL START PAGE
- 33Kbps/56Kbps
- NATIONAL ISDN
- FREE 6MB WEB SITE
- OVER 900 LOCAL DIALUP #'S
- NEWSLETTER
- INTERNATIONAL ROAMIING
- NEWSGROUPS
- FREE INTERNET USER GUIDE
- COMPLETE SOFTWARE FOR WINDOWS OR MAC
- CHOICE OF BROWSER
- 800# ACCESS OPTION

FREE WEBSITE SPACE INCREASED FROM 2MB TO 6MB

1-800-EARTHLINK, ext. 3177
3 2 7 - 8 4 5 4

*For details on EarthLink Network's Referral Program check out http://www.earthlink.net/company/free_access.html

© 1997 EarthLink Network, Inc. Trademarks are the property of their respective owners. All rights reserved.

PC MAGAZINE EDITORS' CHOICE
September 9, 1997
Internet Service Provider

EARTHLINK NETWORK TOTALACCESS™ SOFTWARE
INCLUDED WITH ENCLOSED CD-ROM.

It's RPG Appreciation Month

As I conducted the interviews that went into last month's RPG feature, something started bugging me. What was it? Ingratitude, that's what.

I've read letters from readers and posts on the Internet newsgroups, and I've heard people talking about roleplaying games for years. If an RPG comes out and it contains flaws, you'll hear about it from the gamers who spend $60 or more on the title. Fair enough, but now what amazes me about their comments is how strong the opinions are when the people doing the complaining seem to have no idea what goes into the creation of these games.

For example, I heard many people complain that *Betrayal in Antara* shouldn't have 2D textures, but it should have used a true 3D engine like *Quake*. After all, with today's technology, there's no excuse for still having 2D sprites instead of 3D polygons. Well, the problem is that the design and programming for *Antara* started well before *Quake* was out.

A game's engine — and hence its technology — is generally the first thing that's locked in during development. We're never going to have an RPG that really blows us away with cutting-edge technology, because while a game company can develop a hot new game engine and churn out an action game based on it within a few months, a good RPG takes a *long* time to develop. ION Storm's *Anachronox* will use the *Quake* engine, but after several months of production, they've only got concept art to show. By the time *Anachronox* is finished, even the *Quake* engine won't be the hottest thing going.

In the process of putting together last month's feature, I got to speak to some of the industry's most intelligent, passionate, and dedicated people. Because that's the kind of person you have to be if you're going to put together an RPG. It's certainly not the kind of game you can slap together in a few months — at least, not if you want it to be worth playing. These men and women work hard to make sure people like you and me have a good time for many, many hours in front of our computers.

It may not be the best roleplaying game the industry has ever seen, but the folks at Sierra did as good a job as they could with *Betrayal in Antara*, and we should appreciate their efforts.

Michael Wolf

Different developers have different ideas about what makes an RPG great, and most of these people really try to make the best game they can, according to their own standards. Sometimes they fail, whether it's because of time constraints or simply lack of discipline. But walk into an office filled with bug-eyed designers slaving away in front of bright monitors in a dark room, and you'll start to get an idea of how much work goes into the products that we dismiss with a sneer if they don't live up to our expectations. Talk to some of the programmers who forfeit any semblance of a real life to spend their nights at the office, making sure all the code fits with all the others, and you have to respect their work ethic, even if the resulting game is crap. We can blow off these products, but we have to respect the people who make 'em.

Might and Magic VI is one of the better-looking games slated for release in the near future. And no, it doesn't use 3D polygon characters either.

It's not so easy to trash the latest roleplaying game once you understand how much work goes into even a mediocre one.

What's my point? Just that behind most computer roleplaying games, there's a lot of sweat and not a few tears. So the next time you slag an RPG because it lacks a feature you'd like to see, remember how much work went into the product. If you're going to trash it, at least do it respectfully. The creators deserve at least that much.

Along those lines, I'd like to personally thank each of the artists, programmers, animation experts, testers, producers, and designers of the RPGs that give us so much enjoyment. Much like the movie industry, most of the people who work hardest on these games never get to see their names on the big marquee. There's no room for more than a few star designers in this industry, but without a team effort, we'd never see the games that take up so much of our spare time.

PCG

THE DECKS ARE SEALED.

And, unless you're good, SO IS YOUR FATE.

Introducing Magic: The Gathering *Spells of the Ancients* expansion set for the PC.
More creatures. More spells. More ways to experience the thrill of Magic.

Intensify your Magic PC gameplay with the new exalted Sealed Deck Generator. ***Spells of the Ancients*** now bestows rare and powerful cards like Juzám Djinn, Guardian Beast and Psionic Blast from the ***Unlimited***, ***Arabian Nights*** and ***Antiquities*** card sets. Construct decks around new themes or fine-tune an existing one with multilands to impose a demoralizing defeat. Either way, ***Spells of the Ancients*** gives you over 130 new spells, creatures and abilities to steel your competitive spirit and crush your planeswalking foe.

Play over 130 new cards

Experience the thrill of opening starters and boosters

Build your deck for Sealed Deck tournaments

Requires Magic: The Gathering for the PC

MAGIC The Gathering
SPELLS OF THE ANCIENTS

The Ultimate Magic Experience

Available on Windows® 95. Visit your local retailer or call: 1-800-695-GAME day or night (U.S. and CANADA)

MICROPROSE
www.microprose.com

© 1997 MicroProse Software, Inc. All Rights Reserved. WIZARDS OF THE COAST, Magic: The Gathering, Arabian Nights and Antiquities are registered trademarks and Unlimited is a trademark of Wizards of the Coast, Inc. © 1997 Wizards of the Coast, Inc. Illustrations by Kaja Foglio and Mark Tedin. MICROPROSE is a registered trademark and SPELLS OF THE ANCIENTS is a trademark of MicroProse, Inc. and its affiliated companies. All other trademarks are the property of their respective holders.

Product Information Number 234

F/A-18 KOREA

HIGH-REALISM STRIKE FIGHTER SIMULATION

The latest in hardcore realism from the engineers of the award-winning F/A-18 Hornet 3.0

FEATURES:

- Proprietary ultra high-speed differential scan conversion graphics engine
- Native 3Dfx™ texture mapping and effects
- Powerful mission creator/editor
- Highly realistic carrier operations
- Detailed printed/online documentation
- Extensive theater of ops with rolling terrain
- Authentic avionics and flight modeling
- Network play over LAN or Internet
- Huge arsenal, including B-57 tactical nuke!
- Windows '95/NT 4.0 & PowerMac

COMBAT PILOT TESTED

*3Dfx texture mapping requires compatible 3D Hardware.

For product information and availability, check out our web page at: **www.graphsim.com**

GRAPHIC SIMULATIONS CORPORATION

Product Information Number 157

Vox Populi: The Wargamers Speak Out!

I intended my August 1997 column to be ruminative in nature, rather than provocative — but to my surprise, no other installment of *The Desktop General* has generated such a volume of mail. If I get any kind of consensus from these thoughtful (and often eloquent) letters, it's that a surprisingly large number of wargamers have begun to feel alienated by the gaming industry. Many of them are angry, and virtually all of them feel that the industry is chugging along like a juggernaut, occasionally throwing them a bone but generally hewing to the bean-counters' creed that bigger is better; numbers mean everything; and not enough consumers are interested in the obscure-but-fascinating to justify producing games about any battle that isn't on list of Military History's Greatest Hits.

Admittedly, wargames constitute a modest share of the overall PC entertainment market, and profit is the reason companies produce games in the first place. But wargamers share a passion for their favorite genre that goes deep, and many of them feel their voices are being ignored.

Well, friends, that's what this column is all about, and this time, I'm turning it over to the folks who cared enough to communicate their thoughts and suggestions. My comments appear in italics.

And I hope the Big Companies are reading....

Dan Cyr writes:

"I'm a middle-aged wargamer with some 30 years' experience in various gaming media. It's my belief that not only has there been an almost complete lack of 'new' battles in recent years, but that the companies' failure to provide fresh games/scenarios is even deeper than you suggest.

"The reason *Age of Rifles* is an excellent game is the nearly unlimited number of scenarios you can play straight out of the box, coupled with the ability for the individual gamer to create his own game, if it's from a historical period not covered by the 'canned' game. I'm just not interested in replaying the same battle with minor variants (Battle of the Bulge: the Germans have unlimited gas, the weather stays bad, etc.). These games do well mainly with players who want to recreate the historical outcomes or 'change history' rather than just playing to win."

Good point, Dan. While I do enjoy tinkering with history, there is a point of diminishing returns where the tinkering, in effect, becomes *the game, rather than the winning/losing goal that actually defines what a 'game'* is.

Cyr continues his message: "In this sense, the industry's failure to cover more periods and levels of wargaming has hurt the very development of PC wargaming. There hasn't been an updated *Ambush!*-type game (extreme tactical) since it came out for the Apple II in 1982."

Well, there was Jagged Alliance, *if you want to stretch a point.*

"Stalingrad, Berlin, the Pacific islands, Vietnam, America's inner cities, all of these would lend themselves to such a scale," Cyr writes. "And where is a tactical Civil War naval game to complement the *three* extant age-of-sail games?"

God bless TalonSoft; they are developing such a game right now. It's called Age of Ironclads.

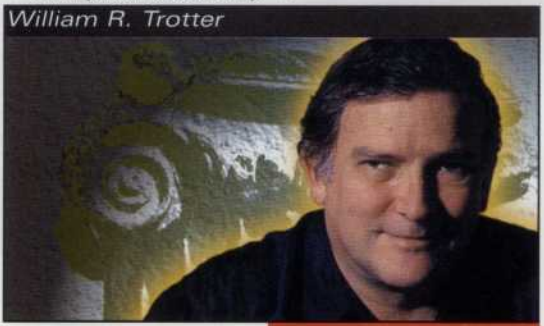
"Entire eras of history are ignored," Cyr says. "And how about wargames that incorporate realistic intelligence-gathering? Truly realistic logistics?"

That'll never fly, Dan. If you really like *messing with logistics, you're the first wargamer I've met in years who does.*

"What I'm suggesting is that not only is there a tendency by game companies to cover only the battles that everybody's heard of, but also an attempt by the same folks to 'dumb down' the games they *do* publish in an effort to attract a mass market," Cyr concludes. "I understand the reasoning, but I honestly

With all the games based on early naval combat — like TalonSoft's *Age of Sail* — you'd think there'd be room for a tactical Civil War-era game. Good news: TalonSoft is working on one called *Age of Ironclads*.

William R. Trotter



Back in August, the General stirred up quite a ruckus when he asked the musical question "Are We Running Out of Battles?" The responses were very interesting....

Panthers in the Shadows **isn't pretty, but its creators could serve as a model for larger game companies.**

don't think that this method produces the best games.

"I would suggest that the big companies create small divisions, on the order of HPS or Incredible Simulations, to produce the kinds of games I'm talking about, and that these departments be given a free hand to cover battles that are not 'glamorous' or that only feature Americans battling 'sexy' enemies like the Waffen SS. Let the experiment be tried; it might settle once and for all the question of whether or not there is a real wargaming community out there willing to support such an endeavor. I, for one, certainly would."

That's one of the best ideas I've heard in a while. Would someone from a Big Company care to respond and tell us if such an arrangement is economically feasible?

John Tiller, one of the men responsible for Talon-Soft's success, writes:

"...I noticed at Origins last week [that's the biggest grognard convention of the year] that there is still much more variety in the board-game format, ranging from monster games to the smaller Napoleonic engagements. Somehow, the economics of computer games impose much more constraint."

Yes, small-scale board-games, produced without excessive production values, cost less to make; therefore, a company need not sell huge numbers of them to recoup a modest profit. If it works with boardgames, John, can it be made to work with PC games?

"Unfortunately," Tiller says, "there's a get-rich-quick culture in control of the industry that steers designers away from the less-known and forces concentration on the big-name titles. Even our Battleground series is being forced into retirement because of the demands of this culture. Can smaller companies, with no demands for full-page ads or cover-story fanfares, succeed to the point that a wide range of history can be addressed successfully? You've tried to encourage such enterprises in the past (your columns about HPS and Incredible Simulations, for example), so maybe it's possible..."

The large number of scenarios included with *Age of Rifles*, coupled with the unusual period it covers and its versatile editor, make it an excellent choice for wargamers looking for a break from yet another Bulge battle.

John Beck writes:

"Your column was right on target. We don't need another demonstration of how the Germans ran out of gas in the Bulge. It's a given that one side or the other will have better logistics, but must we always have simulations of battles that are so lopsided that playing the side with the stretched supply lines (usually the Germans) becomes an exercise in futility?

"With the end of the Cold War, the old boardgame standby of NATO vs. Warsaw Pact has become an historical footnote, but why not convert some of the best games of this type, such as GDW's Third World War series, into PC games? It would certainly be more fun to play these games than to spend more time beating up an already defeated German Army. Hopefully, some enterprising companies will break out of this rut that's slowing the wargame genre worse than Russian mud."

Nearly all the letters contained suggestions for interesting, viable, not-terribly-expensive games: East Africa in World War One, Italians vs. Greeks in 1941, the Thirty Years' War, the China-Burma-India theater, the fall of France, city-state wars during the Italian Renaissance, politics and Borgia-esque intrigue included — the list is long and thought-provoking.

My favorite hypothetical title, though, came via E-mail from a reader identified only as "Dark Apollo:"

"It's October, 1962, and Kennedy was assassinated three months ago. Due to Johnson's inferior diplomatic skills, the Cuban Missile Crisis explodes into war — only, instead of attacking Florida, where we have lots of forces, the Reds send one Tu-95, with a big escort, to nuke Ft. Randall in Alaska, while their paratroopers overwhelm Fairbanks. Once the Soviets have secured their bargaining position in Alaska, you have to take over as commander of a Canadian/American task force and kick them out."

There would be no nukes allowed, I presume.

"If you fail," Apollo writes, "you have to fall back to the Pacific Northwest. Alternatively, you could play the Russian commander, fearlessly leading his legions into the Yukon."

I like it, Apollo, I really do! Dudley Do-Right goes to war!

And I can't resist quoting an excerpt from the weirdest *game-proposal I received, from Dan Swensen:*

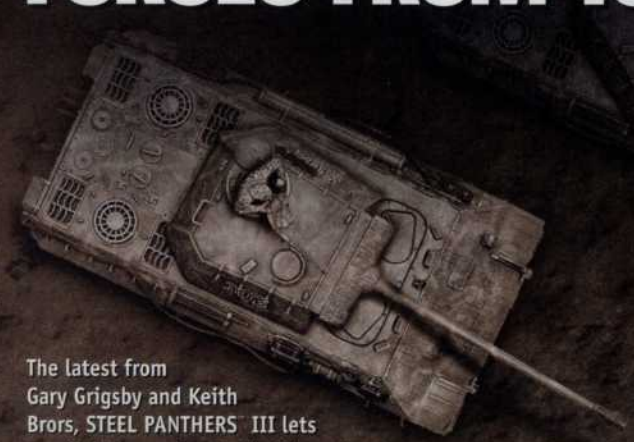
"Why not a Klik & Play game featuring William Trotter running around in a Panama hat, putting the mighty kibosh on competing magazines and hostile news-group carpers? You could give him some snappy one-liners, a la Duke Nukem, have God Lives Underwater do the soundtrack, and you've got an instant classic! Don't forget to tweak it, though, so that it becomes the first Klik & Play game to require 150MB of hard-drive space. Stay with the technology curve, baby!"

I'll sign the contract, Mr. Swensen, but only if you include a roleplaying element that lets me be Lara Croft's love-slave....

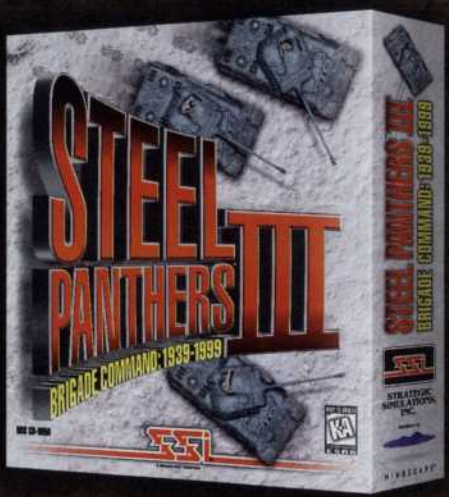
My thanks to all who wrote; even if you weren't quoted here, your contribution was valuable and your interest appreciated.

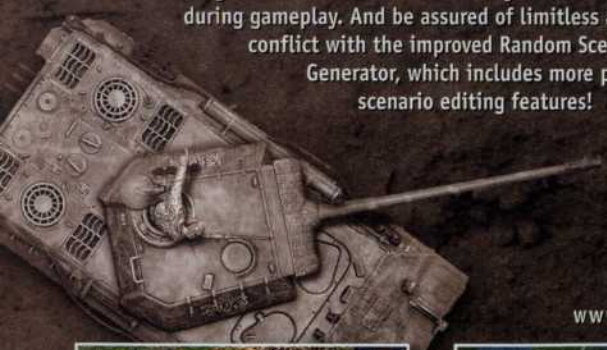
PCG

COMMAND MULTI-NATIONAL FORCES FROM 1939 TO 1999!



The latest from Gary Grigsby and Keith Brors, STEEL PANTHERS III lets you fight larger tactical battles using the same easy-to-use interface featured in STEEL PANTHERS I & II. This brilliant tactical wargame includes 6 campaigns and over 40 scenarios. Engage in brigade-size battles from virtually every major historical conflict from 1939 to date, plus hypothetical battles, such as NATO 1998 and Holy War 1999! New 200 yards-per-hex and platoon-size units allow you to control entire brigades — even divisions! Get key reinforcements during gameplay. And be assured of limitless armored conflict with the improved Random Scenario Generator, which includes more powerful scenario editing features!





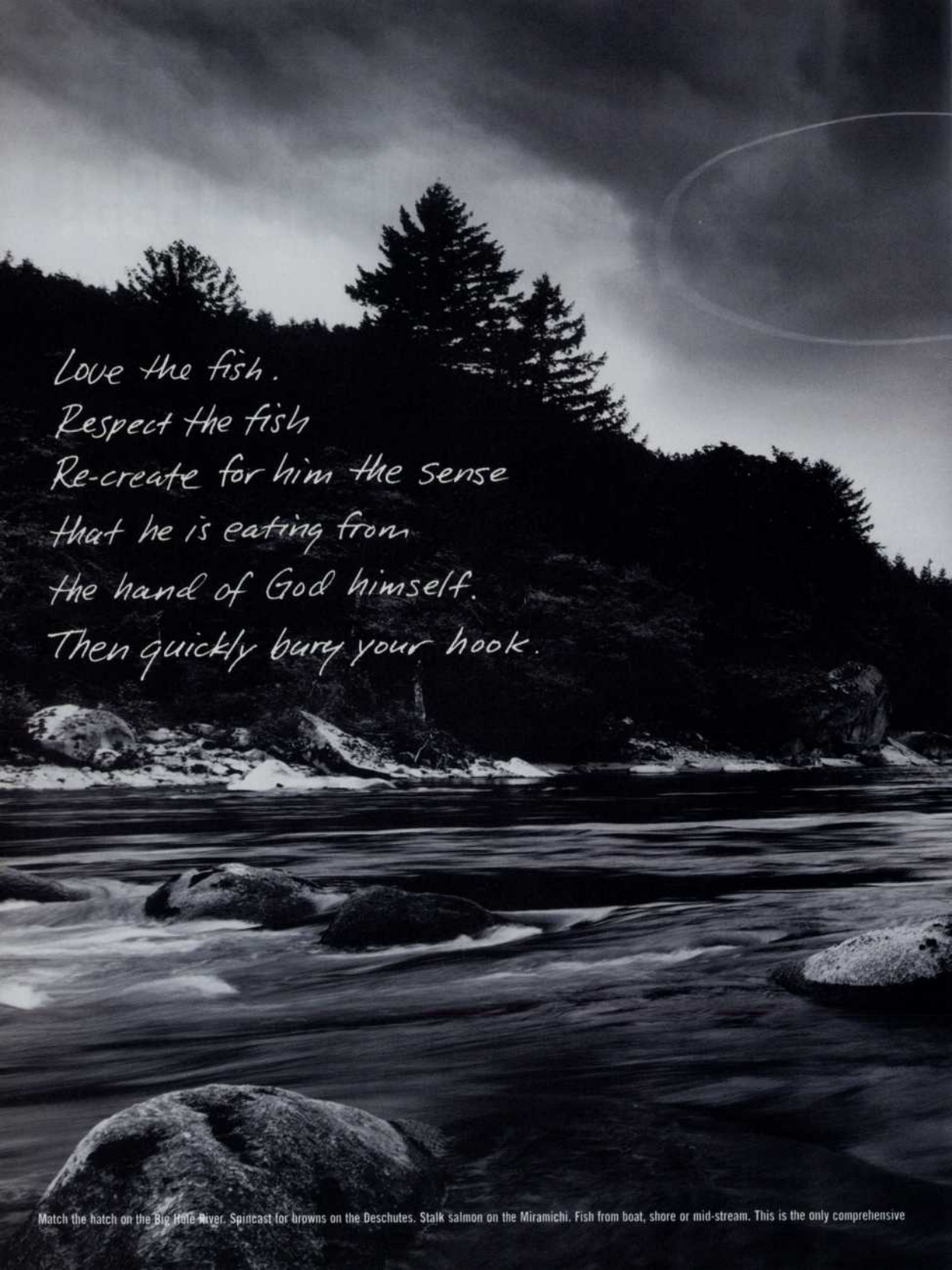
DOS CD-ROM
www.ssionline.com

To order: Visit your retailer or call 1-800-234-3088 with Visa/MC (North America only).

SSI
A MINDSCAPE™ COMPANY

©1997 Strategic Simulations, Inc., a Mindscape company. All rights reserved. STEEL PANTHERS is a trademark of Strategic Simulations, Inc. All other trademarks and registered trademarks are the property of their respective holders.

Product Information Number 327



Match the hatch on the Big Hole River. Spincast for browns on the Deschutes. Stalk salmon on the Miramichi. Fish from boat, shore or mid-stream. This is the only comprehensive

SIERRA®

TROPHY RIVERS
IT'S NOT JUST A GAME.

river fishing simulation out there. Any more immersive and you'd need waders. www.sierra.com/trophyrivers.

Product Information Number 318

©1997 Sierra On-Line, Inc. ® and/or ™ designate trademarks of, or licensed to Sierra On-Line, Inc. Bellevue, WA 98007. All Rights Reserved.

EF2000 2.0 Finally Enters U.S. Airspace

It took a good long while, but DID has finally released *EF2000 2.0*, a vastly enhanced version of its fantastic air combat sim.

For us here in the states, the wait was especially frustrating, since the U.K.-based company released most of the goodies that make up *EF2000 2.0* months ago in Europe. The *TACTCOM* add-on made huge improvements to the campaign game and to multi-player action; *Super EF2000* was a Windows 95-native version of the sim with Internet support and *TACTCOM* built in; and the *Graphics+* upgrade added support for 3D accelerators. While our cousins across the pond were enjoying all this new stuff, we could only drool and wait.

Rumors abounded concerning a conflict between DID and its long-time publisher, Ocean, but the truth was simpler. Ocean's products were distributed in the states by GTE Interactive; that distribution fell through when GTE shut down its computer gaming operations, and *EF2000 2.0* was left in the lurch.

"That caused us quite some concern," said DID Project Director Don Whiteford in a recent interview. "The people who felt the pinch more than anyone was DID; no one was more hurt by this than us."

Fortunately, Ocean found new U.S. distribution. But when that obstacle was overcome, the frustration was compounded both for DID and some sim fans when a big chunk of the *EF2000 2.0* discs released here turned out to be defective, forcing Ocean to recall those that hadn't yet sold and replace the rest.

On the other hand, now that it's finally on the shelves here, *EF2000 2.0* gives us the whole Eurofighter package in one handy box. Tear off the shrink-wrap, and you'll find the DOS versions of *EF2000* designed for 3D accelerators based on the 3Dfx Voodoo and Rendition Verité chips, both with *TACTCOM* built in; the Windows 95 version, which supports Internet play via DirectPlay or the Total Entertainment Network (TEN); a single manual covering all of the sim's features, new and old; and even a condensed version of Sim-Tech's amazing *EF2000 Strategy Guide*.

The *Graphics+* upgrade is striking, making a two-year-old air combat sim look cutting-edge. Back in 1995, *EF2000* was the prettiest sim going; with 3D acceleration, it very nearly reclaims that title. Bilinear filtering smoothes out the pixels, so the terrain and clouds look fantastic even at low altitudes; fog and transparency effects create realistic haze and the wavering heat of your jet's afterburners — it's all very pretty and runs at a slick frame rate, too. On the downside, the 3D accelerated versions are DOS-only (you can run them in a DOS box under Windows 95, but the Win 95-native version isn't accelerated). And only 3D accelerators based on Rendition's Verité and 3Dfx's Voodoo Graphics (not Voodoo Rush) are supported.

Of course the improvements provided by the *Graphics+* patch, while impressive, are only cosmetic. *TACTCOM*, on the other hand, adds tons of cutting-edge features that greatly improve *EF2000*'s gameplay. Most significant is the mission editor, which effectively lets you direct the air war; you can still choose from a list of computer-generated missions in *EF2000*'s dynamic campaign, but you can also create your own mission plans, selecting targets, setting waypoint routes, and committing aircraft. This becomes doubly important if you choose to have your performance affect the outcome of the campaign — another new twist *TACTCOM* adds. Of course, if things get too tough, you can always start a new campaign at an easier setting — you can choose any of 10 difficulty levels. After a mission, a revamped debriefing gives you more detailed information on the performance of every plane in your flight.

EF2000 2.0 adds gorgeous 3D accelerated graphics and a slew of gameplay improvements to an already excellent air combat sim.

Most exciting of all, you can fly your hand-made missions in cooperative mode with friends, via network, modem, or the Internet. Human players can act as leader and wingmen in a single flight, or take separate roles in a coordinated strike — for example, one player might fly target CAP; another could take a Wild Weasel role, killing SAMs in the target area; another would strike the primary target; and still another could escort the strike flight. As many as eight players can take part in a mission plan. Naturally, *EF2000 2.0* has options for team deathmatches and free-for-alls, but no current sim handles cooperative combat as well as this one does.

Another new feature is SmartView, which puts *EF2000*'s many external views under the control of a computerized stage manager that automatically switches views to follow the plane that's closest to the action — the EF2000 engaged in a dogfight, the F-117 rolling in on its target, etc.

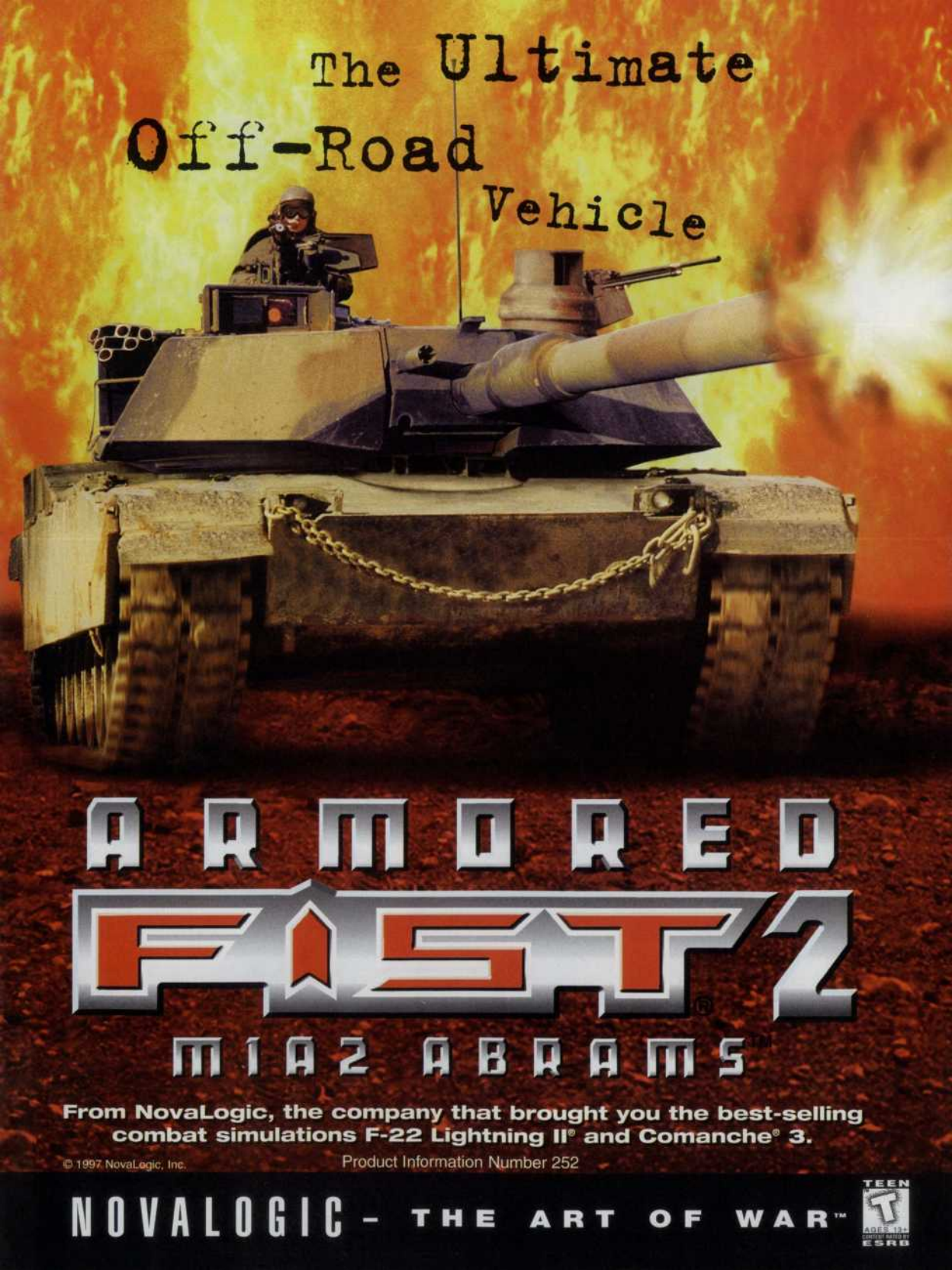
On top of all that, there's the scaled-down edition of Sim-Tech's *EF2000* book, which has to be the best strategy guide ever created for any game. It's a great plus, but it's also fantastic advertising for Sim-Tech; if you're serious about your sims, you'll want the full version of this excellent book.

So it took a while for the next generation of *EF2000* to reach us, but it's definitely worth the wait. If you're a fan of the original, you'll definitely want to trade up — and if you've never tried *EF2000*, now's the perfect time to find out what the fuss is about.

PCG

Dan Bennett

After some unavoidable delays, the enhanced version of DID's incredible jet fighter sim is finally available in America.



From NovaLogic, the company that brought you the best-selling combat simulations F-22 Lightning II® and Comanche® 3.

© 1997 NovaLogic, Inc.

Product Information Number 252

NOVALOGIC - THE ART OF WAR™

TEEN T ESRB

HEROES NEVER DIE

"If you are a strategy fan, I would heartily recommend THE PRICE OF LOYALTY"
Computer Gaming World

"HEROES OF MIGHT AND MAGIC® II is clearly one of the best strategy games of this year – or any other year, for that matter."
PC Gamer

"HEROES II is an amazing sequel to 1995's Best Strategy Game"
Computer Gaming World

"Heroes of Might and Magic is one of those games that DEMANDS to be played."
PC Gamer

"A first rate strategy title."
Computer Game Review

"5 out of 5 Stars"
Computer Gaming World

USE POWERFUL SPELLS TO WIPE-OUT YOUR ENEMIES AND BUILD ARMIES THAT CRUSH OPPONENTS WITH THEIR SHEER NUMBERS. RAGE AGAINST THE MACHINE OR AGAINST A LIVE OPPONENT IN HEAD-TO-HEAD COMBAT OVER THE INTERNET OR NETWORK. EITHER WAY, BE PREPARED TO FIGHT TO THE LAST MAN BECAUSE THE ROAD TO GLORY IS PAVED WITH THE BONES OF THOSE WHO CAME BEFORE YOU... ***AND NO ONE WILL CRY WHEN YOU ARE GONE.***

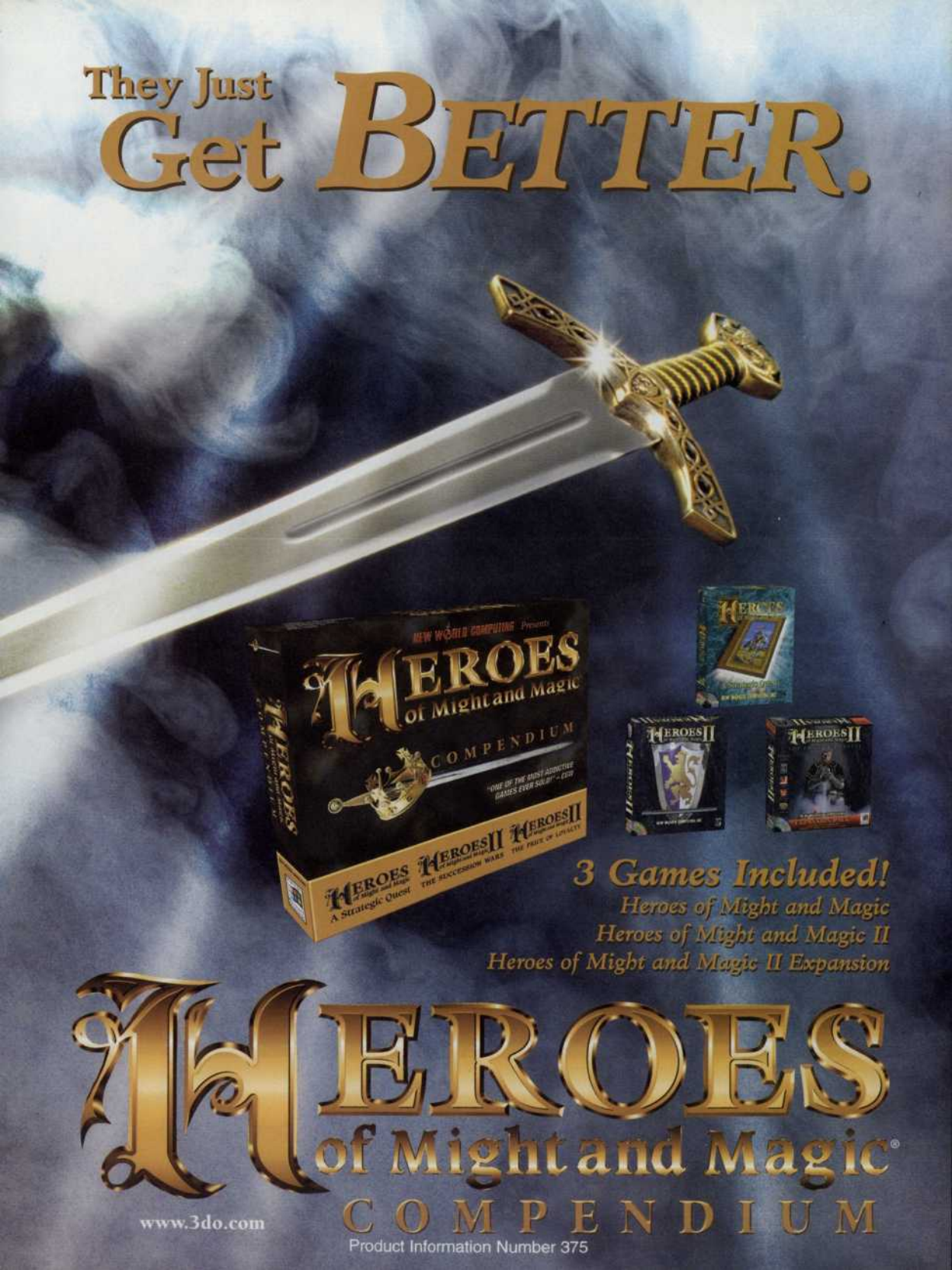
Designed for Microsoft Windows 95

NEW WORLD COMPUTING®
A Division of The 3DO Company

KIDS TO ADULTS K-A ESRB

©1995, 1996, 1997 The 3DO Company. All rights reserved. New World Computing, the New World logo, Heroes of Might and Magic, and the Heroes of Might and Magic logo are trademarks and/or registered trademarks of The 3DO Company. All other trademarks belong to their respective holders. New World Computing is a division of The 3DO Company.

They Just Get BETTER.

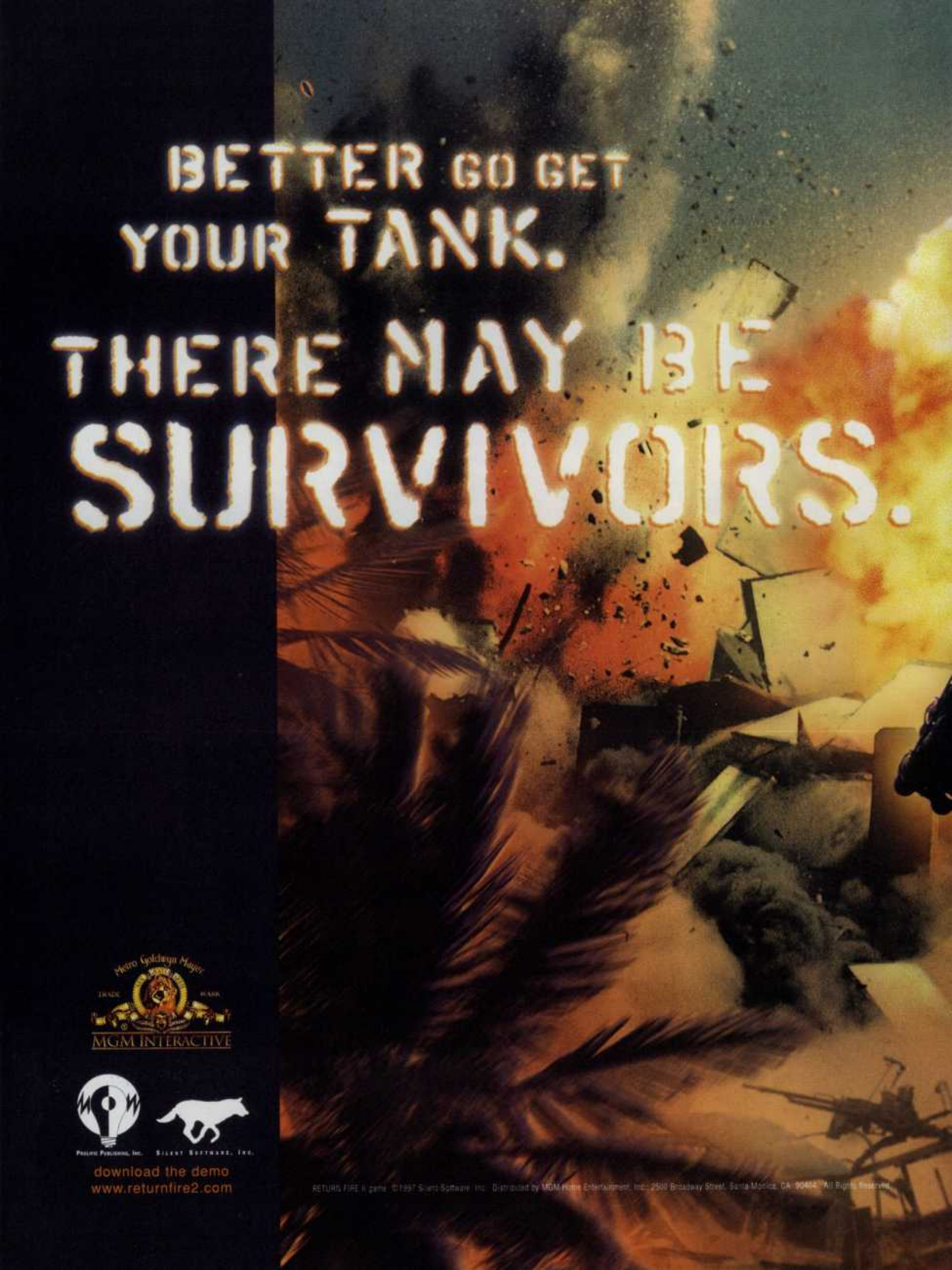


3 Games Included!
Heroes of Might and Magic
Heroes of Might and Magic II
Heroes of Might and Magic II Expansion

HEROES of Might and Magic®
COMPENDIUM

www.3do.com

Product Information Number 375


BETTER GO GET
YOUR TANK.
THERE MAY BE
SURVIVORS.
Metro Goldwyn Mayer
TRADE MARK
MGM INTERACTIVE
PRISLITE PUBLISHING, INC.
SILENT SOFTWARE, INC.
download the demo
www.returnfire2.com
RETURN FIRE ® game ©1997 Silent Software Inc. Distributed by MGM Home Entertainment, Inc., 2500 Broadway Street, Santa Monica, CA 90404. All Rights Reserved.

It's the sequel

to the 1996

Strategy Game

of the Year.

And it's got

more firepower

than ever.

Use your head.

Don't leave any-

thing standing.

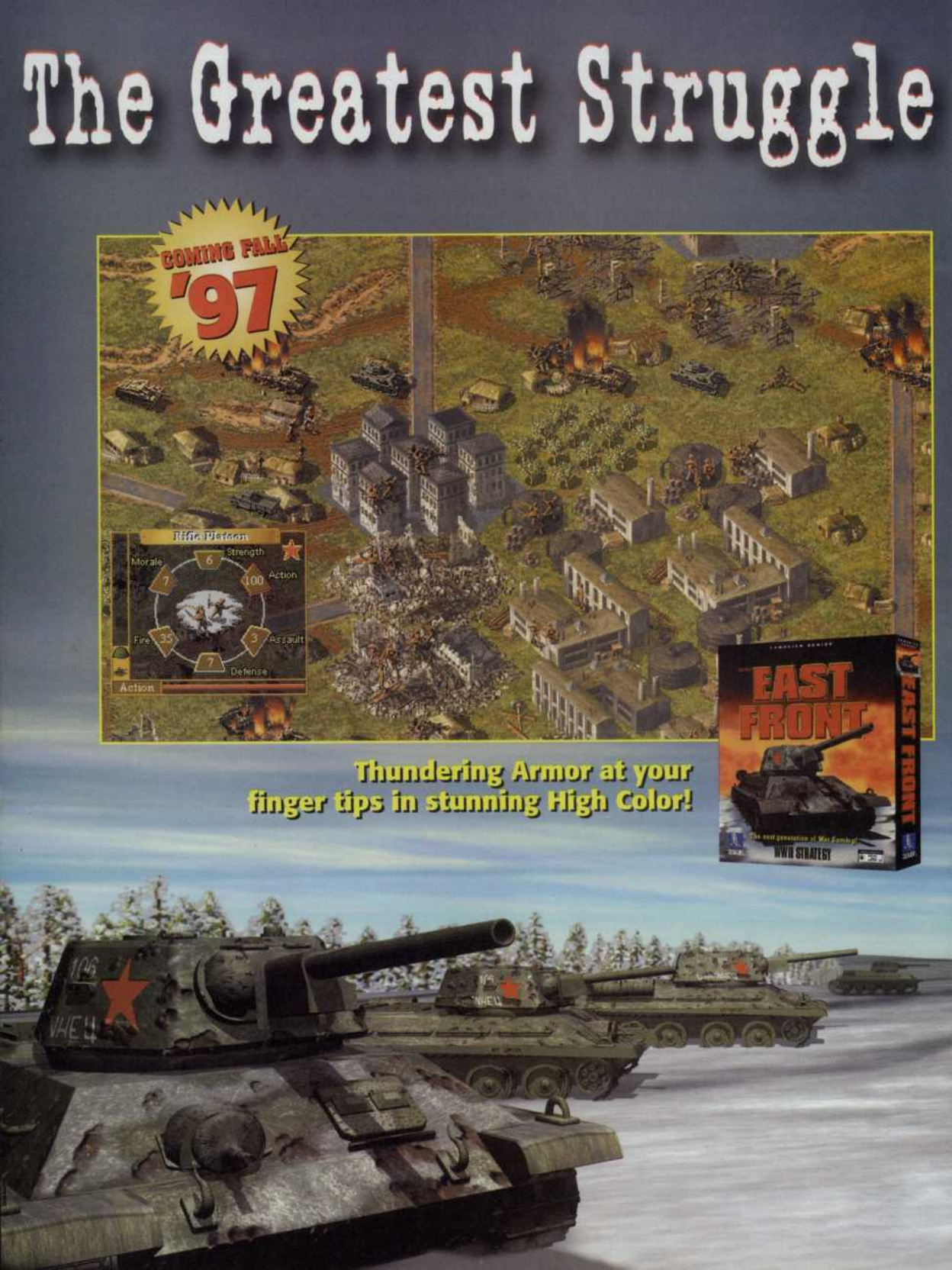
And don't take

anyone alive.

RETURN FIRE II

Product Information Number 237

The Greatest Struggle



Thundering Armor at your finger tips in stunning High Color!

of the 20th Century...

Fast-paced, explosive action...
From the devastated Polish border to the streets of Stalingrad!

Desperate valor at Yakhroma.

Spearhead at Kursk!

Spectacular 3D animations!

CAMPAIGN SERIES™

TalonSoft's

EAST FRONT™

From the creators of the award-winning Battleground™ Series, TalonSoft's East Front™ delivers graphic and historical detail as only TalonSoft can. This all-new game design will bring the feel of the Russian Front right to your desktop. Mud, metal, blood and snow. Explosive action, platoon-level combat with a variety of gaming options that will keep your teeth clenched!

★★★ All-Star Contributing Designers ★★★

John Tiller
TalonSoft's Battleground™ Series

Bob McNamara
ASL-Advanced Squad Leader®, TalonSoft's Battleground™ Series

Charlie Kibler
ASL-Red Barricades®, TalonSoft's Battleground™ Series

Jim Dunnigan
Panzerblitz®, Founder of SPI

Dana Lombardy
Streets of Stalingrad®

Richard Berg
Terrible Swift Sword®, Great Battles of Alexander®, Blackbeard®

Mark Herman
Gulf Strike®, Pacific War®, We The People®

We Make History!™

Available Fall '97 at Software Retailers World Wide! Reserve your copy today.
Call 1-800-211-6504 (orders only) or visit our web site at www.talonsoft.com

We Make History™, Campaign Series™ and Battleground Series™ are registered trademarks of TalonSoft Inc.
©Copyright 1995, 1996, 1997 TalonSoft Inc., P.O. Box 632, Forest Hill, MD 21050 *All other trademarks are property of their respective holders.*

TALONSOFT®

STRATEGY CENTRAL

SOLUTIONS • TECHNIQUES • QUICK TIPS

The Strategy Crew slammed it in to overdrive this month in order to bring you more than 20 pages of the best hints, tips, and cheats.

We've got the lowdown on *X-COM: Apocalypse*, *688[I] Hunter/Killer*, *The Space Bar*, *Warlords III*, *Ecstatica II*, *Betrayal in Antara*, and many more, — so many, in fact, we can't list them all here!

Write to us at:

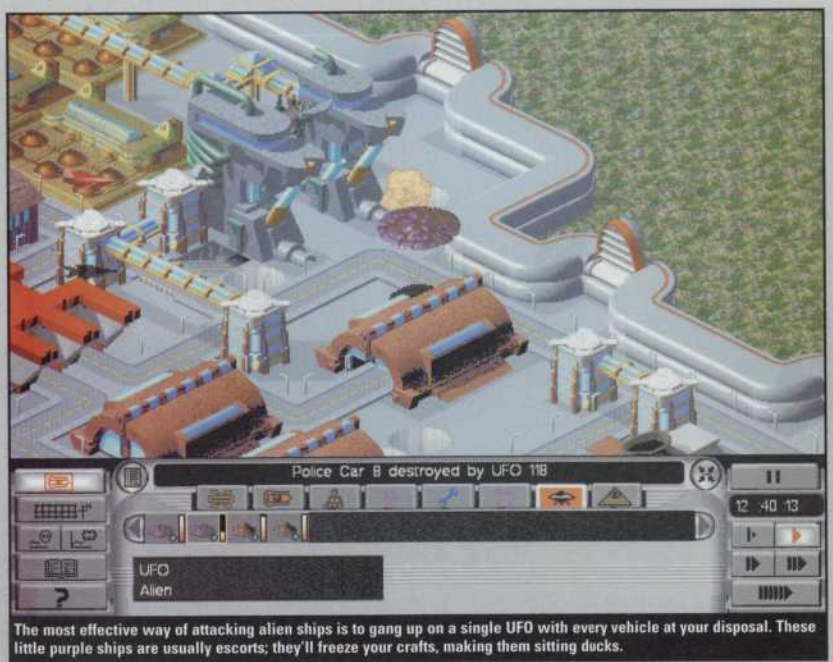
PC GAMER

150 North Hill Dr.,
Brisbane, CA 94005
or
E-mail:
peeceegee@aol.com
www.pcgamer.com

X-COM: Apocalypse, Part 2

Are you ready for part two of our definitive alien-bashing guide?

The elite squads of X-Com agents under your command are smashing the alien hordes all over the city. You've mastered the tactical skills necessary to defeat brainsuckers, poppers, and multi-worms with minimal loss. But you can't celebrate just yet. Kicking alien butt in tactical combat is only half the battle. To save Mega-Primus, you must also oversee the strategic defense of the city, manage delicate diplomatic relationships, and direct the scientific research that is critical to turning back the alien menace — and to develop the technology necessary to take the battle to the enemy dimension.



The most effective way of attacking alien ships is to gang up on a single UFO with every vehicle at your disposal. These little purple ships are usually escorts; they'll freeze your crafts, making them sitting ducks.

Defending Mega-Primus

Don't just sit back in your cozy office, waiting to be dispatched on emergency missions. Instead, watch for UFO incursions and marauding raids by other hostile forces. The news ticker will alert you to these events, automatically pausing the game in order to give you a chance to pinpoint the location and monitor the situation.

When UFOs appear through the dimension gates, target them with every airborne vehicle you have. Your goal is to destroy them before they're able to drop aliens into a building. If you can't shoot them down, watch them closely to see which building they infiltrate. You'll see a clear tube descending from the UFO into the building. Don't wait for an alert that aliens have been spotted. Get a squad to the suspect building as quickly as possible, then click the "investigate" button.

As you combat alien and other hostile vehicles, get into the habit of using the overhead map view to track hostile forces and coordinate your defenses. The overhead perspective doesn't look as cool as the isometric map, but it gives you a much better understanding of the location of hostile and friendly units. Don't forget to use the waypoint system to hit targets from different directions.

Your scientists are eager to get a look at these alien ships, and the data they can provide is critical to understanding the enemy — and defeating them.

Building Bases

It's possible to win the game with just a single base, but there's no need to make the job any harder than it already is. A second, or even a third base, will allow you to react more quickly to hostile activity both on the ground and in the air. Buy a second building right away, even though it will take some time before you're able to hire agents and construct facilities. Buy the largest building you can afford, and try to select a location

You should often target UFOs that you haven't previously encountered or shot down. This will keep your scientists busy.

When aliens successfully infiltrate a building, you'll see a transporting tube descend from an invading ship. This is your clue to get busy cleaning out that building. It will help your performance rating and may increase your funding.

that's as far away from your first base as possible. The key to smashing your enemies in Cityscape battle is to hit hostile units with as much firepower as you can muster, as quickly as you can. If you're forced to respond to a UFO siting from all the way across the city, you're in trouble.

To respond quickly to alien activity, you should have at least two bases housing X-COM agents. Remember, though, that scientific research into alien technology is just as critical as defeating the enemy on the tactical battlefield. Make sure your second base is large enough to accommodate several advanced research labs — you'll need them to conduct the more sophisticated research necessary later in the game.

Base Defense

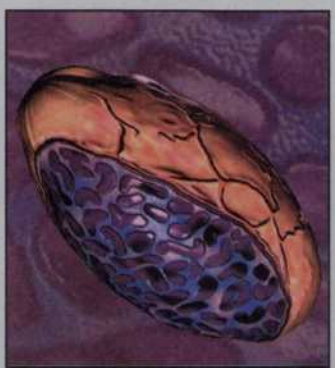
It's critical that you defend your precious bases from both vehicle attacks and infantry raids. A strong air defense should be your first step. When a base comes under attack from the air, order any vehicle in the area to attack the hostile units. Leave a base undefended, and a single air attack can quickly reduce it to rubble.

If hostile forces penetrate exterior defenses and raid one of your bases, let's hope you have a squad or two inside to protect the helpless researchers. Move all researchers into an isolated area of the base, leaving a handful of agents to protect them.

Research

It's easy to just hire researchers at the outset, put them to work, and then forget about them until you need to reassign them to another project. But remember, you're managing this operation, so don't just let your labs run themselves. Like your agents in the field, scientists have skill ratings that directly impact the time needed to complete research. It's okay to hire everybody available just to get research underway, but you should check the list of scientists available for hire every week. Hire the most talented guys and gals available, and get rid of the dead weight.

The flat cityscape view is the best way to keep track of activity from alien and hostile forces. It's also the easiest way to identify buildings you may want to investigate.



You've got to research every alien artifact you find, even some goofy looking football like this. You never know which ones will be useful.

If you've got more money than you know what to do with, buy a fleet of Hawk Air Warriors. They're devastating, and a small group of them can take down anything the aliens throw at you, even Battleships and Motherships.

Vehicles

Early on, it's tough to get enough vehicles to provide adequate defense and respond to UFO incursions at the same time. If you can afford it, buy one Valkyrie for each base. Don't use the powerful Valkyrie to transport agents; save these babies for attacking UFOs and hostile vehicles. The APCs can get your agents to the tactical battlefield just fine, leaving the Valkyries for more important work.

In general, stay away from the road vehicles. Sure, they look pretty cool, but they're too slow to respond to airborne attacks. One useful role for the road vehicles, however, is for base defense. Some players like to park a Griffon AFV outside the base entrance to open fire on raiding parties. It's a neat trick, and is usually enough to thwart most enemy attacks.

At the start, when money is short and the best weapons aren't available, consider buying several Hoverbikes. They're quite a bargain, and a fleet of them can bring down a UFO in a coordinated attack.

The vehicles you have at the start of the game are adequate to deal with the early threats, but you'll want to upgrade vehicles, engines, weapons, and defensive systems as quickly as money and availability allow.

Diplomacy

You're a soldier, dammit, not a politician! But as leader of X-COM, you have to play both roles. Dealing with the powerful organizations that own the buildings of Mega-Primus is critical to defending the city, along with maintaining funding and weapons supplies. Identify your friends, and keep them happy. Identify your enemies, and punish them. Use the organizations tab to keep track of X-COM's current relationships with the various organizations of Mega-Primus. Allies must be protected at all costs, while hostile organizations can be the target of money-making raids.

The government and Megapol naturally ally themselves with X-COM, so you don't need to worry about keeping these groups happy — just try not to waste their buildings. Friendly relations with other organizations are trickier, and may require an occasional cash donation to maintain. In particular, keep an eye on the status of your relations with Marsec, the arms supplier. If you want to have access to those cool incendiary grenades — and more importantly, the Marsec armor — you'll need to keep this company happy. Be careful not to anger these guys by destroying their property, and carefully monitor the organization's level of alien infiltration. A little cash payment won't hurt, either. Here's a brief description of some of the important organizations.

GOVERNMENT: Big Brother runs the show in Mega-Primus. Naturally, you'll want to keep the government happy, since this is the source of your funding.

MEGAPOL: Aside from the politicians, the cops are your most important friends in the city. Megapol reacts quickly to defend the city from UFO attacks. These guys are also your primary arms supplier.

CULT OF SIRIUS: These wackos are allied with the aliens, so don't waste any energy or money on them. Consider them hostile from the outset. Regular raids on Sirius buildings can be a welcome source of extra income. Just be ready to defend your bases against retaliatory attacks.

SUPER DYNAMICS: This is the company that produces vehicles and engines. If you want that hot new turbo engine, you'll want to keep these guys on your side.

Nice to see the GAP has remained in business so long. It's actually Transtellar Spaceliner (which we think Spacely Sprockets owns). Keep this group happy if you want to transport goods between your bases.

REAL 8 POOL™

There's nothing virtual about it.

Photo-Realistic 3D in Real TIme

Includes these Real Pool games:
Straight•8-Ball•9-Ball•Rotation•Snooker•Spanish•Many more!

Play against the computer or challenge and chat with your friends over the Internet.

Created by

DIGITAL FUSION INC.

Coming Soon to Retailers Everywhere!

800-229-2714

Call for a free catalog or visit
our website at www.wizworks.com

WIZARD Works

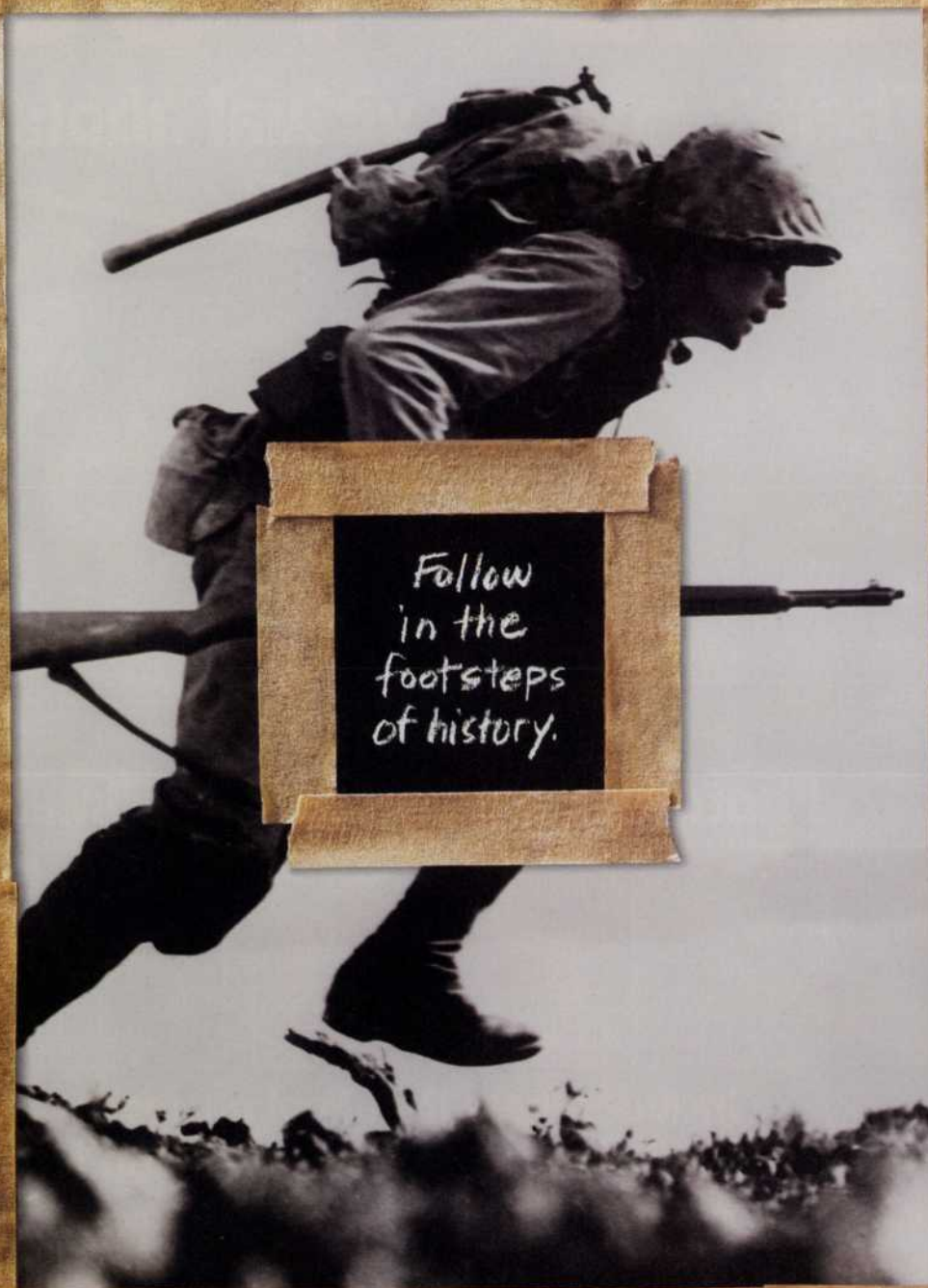
A GT Interactive Software Company
2300 Berkshire Lane No., Plymouth, MN 55441 • 612-509-7600

©1997 Digital Fusion, Inc.

Product Information Number 378

Microsoft

Where do you want to go today?®



MacOS

© 1997 Microsoft Corporation. All rights reserved. Microsoft, Where do you want to go today?, Windows and the Windows logo are registered trademarks of Microsoft Corporation. Mac and the OS logo are trademarks of Apple

Getting yourself your men surrounded is very bad for morale.

To do in Holland:

Smell tulips, admire windmills,

secure bridgeheads.

"Look ol' boy, ignore everything I say and you'll do smashingly."

mortar or flamethrowers... mortar or flamethrowers...

Unless of course you want to win.

You took the bridge yesterday. That doesn't mean you'll have it today.

Nothing cleans out a town quite like flamethrowers.

Too tired to march?

Cozy up in an empty blast crater.

CLOSECOMBAT
A BRIDGE TOO FAR

Operation Market Garden was Field Marshal Montgomery's brilliant über-plan to send the Nazis scampering back to Berlin once and for all. And even though it began with the largest airdrop in military history, it ended up a complete and bloody failure. Maybe you can do better. With the right amount of strategic brilliance you can take the fifth and final bridge that Monty so unfortunately missed. It's simple. Recreate history and you will fail. Rewrite it and well, anything's possible. **www.microsoft.com/games/closecombat**

Computer, Inc. © Copyright 1997 by Atomic Games, Inc. All rights reserved.

Introducing the only pirate adventure that asks the question: What's sharper, your sword or your wit?

THE CURSE OF MONKEY ISLAND

Presenting the long-awaited third installment in LucasArts' classic adventure series, Monkey Island. With features like 30-plus hours of gameplay, 8,000 lines of hilarious dialogue, oodles of challenging puzzles, high-resolution graphics, film-quality animation and a few surprise celebrity voices. Not to mention vegetarian cannibals and a guy named Snugglecakes. So get ready to embark on a rollicking, swashbuckling graphic adventure where the seagulls have better aim than the pirates, and the sharpest weapon is your wit. **For Windows 95 CD-ROM**

Check out the playable demo in select magazines or download it from our Web site at www.lucasarts.com

KIDS TO ADULTS
K-A
CONTENT RATED BY ESRB

LUCAS Arts

© 1997 LucasArts Entertainment Company. All Rights Reserved. The Curse of Monkey Island is a trademark of LucasArts Entertainment Company. The LucasArts logo is a registered trademark of Lucasfilm Ltd., used under authorization.

688(I) Hunter/Killer, Part 2

Survive the stormy seas with the rest of our complete guide

Last month's strategy dealt with general game hints designed to make you a successful sub captain. Part Two gives you an in-depth analysis of all seven training missions, 11 single missions, and 15 campaign missions.

I. Training Missions

1. THE SILENT SERVICE

Two U.S. Spruance class destroyers are playing the role of enemy vessels in this mission. Don't shoot them. No special load out is required for this mission so read your briefing carefully then get underway. Your objective is to transit the exercise area undetected and reach a point 50 nautical miles south of your start position.

This mission emphasizes stealth. You are required to receive radio traffic at least once during the exercise. Except for those times when you are receiving radio traffic, remain as deep as possible and set your speed at 10 to 15 knots. Steer clear of the two surface ships.

2. ASSAULT ON FREEPORT

This mission is an exercise in the use of Tomahawk missiles. You are required to fire four of these missiles from a specific point within a very narrow launch window. The launch point is 30 nautical miles to the south-east, so you're going to have to hurry. Set turns to 25 knots and take up a course of 165 degrees. Don't worry about cavitating; there are no other naval vessels in the area.

Once you reach the launch point, raise your radio mast and check on the latest traffic. Your orders require that the missiles make landfall at specific locations. Use the targeting map and set the missile waypoints accordingly. All of the missiles must be launched prior to 19:15 hours, so be sure to keep a close eye on the clock.

Always check your baffles. You never know who or what you may find lurking there.

3. VIRGINIA SLMMS

This is a two-part mission. The first part gives you some practical experience in laying hasty minefields. The second part requires you to navigate through the minefield you just laid. You'll need at least six SLMMs to complete this mission, but take a few extras just in case. Swap out a couple torpedoes in favor of extra mines but make sure you have the minimum required number or torpedoes.

When you have placed six mines at the locations called for in your briefing, you are ready to tackle the second part of the mission. Because you know their locations, getting past these mines will be a piece of cake. (It won't be so easy later on when you are asked to pass through an enemy field, however.) Essentially, all you need to do is plot a course and speed that avoids getting too close.

4. FIRE ONE!

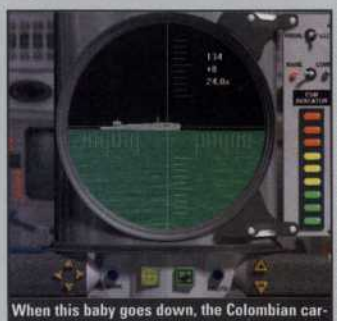
Two MK-37 mobile targets are playing the role of enemy Victor II class submarines. Your mission is to destroy these two targets using ADCAP Ex torpedoes. No special load-out is required. Just read the briefing and get underway. Torpedo hits on these targets are simulated. You'll know if you score a hit when the torpedo executes a turn-away maneuver and shuts down. The closer of the two MK-37s is located only several thousand yards to your northeast at a depth of 150 feet. The second MK-37 is located several nautical miles to your south-southeast at a depth of 500 feet.

5. JUST LIKE JOHN WAYNE

Target identification plays a big part in this mission. You are surrounded by numerous contacts, but only two are legitimate targets. The rest are neutral fishing boats or other non-military vessels. Make certain of your targets before shooting. (You know you're going to feel very silly putting a torpedo into somebody's Bayliner.)

The two targets you need to destroy are Cimarron class tankers. Since these targets are surface vessels, you'll want to position yourself above the thermal layer. The closer of the two tankers is located several nautical miles to the west. Take up a course of 270 degrees and set turns for 5 knots. One

This surfaced 688(I) has just let go with a flurry of Tomahawk missiles.



When this baby goes down, the Colombian cartels will lose a shipment of drugs.

Looks like this sub and her crew are going down. This will become a familiar scene if you don't pay attention to where you are going and you are detected by enemy subs.

ADCAP EX should do the trick. The second target is located to the east. Turn to 90 degrees and proceed at flank speed to intercept.

Again, be careful of civilian and neutral shipping in the area.

6. SINKEX

You are to attack a non-moving target (a ex-Oliver Perry class frigate) with a Harpoon anti-ship missile using only your ESM sensor. Raise your ESM mast to get a bearing on the target. It's

In Scenario 6, you won't have to surface to use ESM, but you'll have to risk periscope depth.

located at approximately 88 degrees. Set a course of 90 degrees and make turns for 2 knots. Set your Harpoon search pattern to wide and then fire.

You must be sure the target area is clear before firing. Monitor radio traffic and check your ESM readings frequently. Two neutral merchant ships are leaving the area. If you fire too soon, there's a possibility you may hit one. Don't be in a rush to launch the missiles.

7. MANO A MANO

Consider this mission as your Graduation Day exercise. In the ultimate test of your seamanship, you are to engage another 688(I) submarine in simulated combat, one on one. Just to make things a little more difficult, a merchant ship will be transiting the exercise area from north to south at 10 knots. Ignore it.

special promotion

HEAT.NET

november sizzles @ heat.net

Tired of the same old run and shoot? Itching for some new Quake experiences?

Well Heat's first exclusive Quake modification, Bomb Squad, is launching this November, and it's unlike any Quake mod you've ever played before.

Picture this:
You, pitted against anywhere from six to fourteen other players and you're dropping bombs in each other's bases. Think you know everything there is to know about Quake - think again - five new levels with new artwork new models and loads of new textures. Best of all, it's free to Heat members. Heat premium members will be able to take advantage of special tournaments and ladder rankings. Be sure to download it as soon as it becomes available to get involved in special Bomb Squad events.

November marks the launch of Heat's new 'Air Raid' spontaneous tournaments. Occurring at completely random times, Heat referees will go into a random lobby and call for an Air Raid. The result is a spontaneous tournament where the winners and many of the participants can win a number of different prizes ranging from T-shirts, hats and other offerings.

Heat's 'Page and Win' contest will also begin in November. Throughout the day, a Heat referee will randomly page a member. If that member is logged on, and responds to the page in a reasonable amount of time, he or she will win a small prize and be entered for a chance at one of the grand prizes. We're not revealing exactly what the grand prizes are, but it is fair to say they will be worth sizable amounts of cash. The more you're online, the better your chances of winning are.

As always, Heat will allow you to spend the degrees you've earned playing games and participating in exciting promotions to get special discounts on games and other computer related paraphernalia in Heat's Black Market. You can save up to 50 percent off of retail prices in the store so be sure to stop by to check out the latest bargains.

The ESM sensor is an important asset in detecting surface vessels and aircraft.

This 688(I) skipper has drawn a bead on the Kuznetsov and one of her escorts.

Not only is the 688(I) a very capable submarine, your opponent is one of the Navy's top sub drivers. His Proficient rating means you have your work cut out for you. At the start of this mission, the "enemy" is located approximately 10 nautical miles to the north-north-west below the layer at a depth of 700 feet. He's moving at 10 knots, so you should detect him early on.

II. Single Missions

1. ONE STEP AT A TIME

This first mission is a tutorial. Follow the walk-through instructions in the manual.

2. FIGHTER PLANES DON'T FLOAT

This is a Search and Rescue (SAR) mission. A raft with several pilots is located about 30 nautical miles to the north-north-east. A Grisha and Heroj are lurking in the vicinity of the downed pilots, however. Remain near the surface and begin slowly moving north. Use your ESM sensor to target the Grisha and then go ahead and fire a bearing-only salvo of two Harpoons.

The Heroj is located about 10 nautical miles north of you, moving west to east at a speed of 5 knots. It has a Novice crew and shouldn't pose too much of a problem. Get rid of it quickly, and then move to pick up the pilots. Be sure to monitor the radio for late-breaking information.

3. MOHAMAR'S MADNESS

Your objective is the destruction of a chemical weapons plant at 29-30N, 20-30E. It is protected by three SAM bunkers, so you will have to guide your TLAMs accordingly. Three Libyan surface ships (a Krivak and two Grishas) and a Foxtrot are on patrol nearby, so things will get tricky. Time is critical, so move quickly. You must launch all the missiles by 08:15 hours. It is not necessary to engage the Libyan vessels, so don't. You can count on being detected, though, so launch your missiles and then get the heck outta Dodge.

4. REBEL YELL

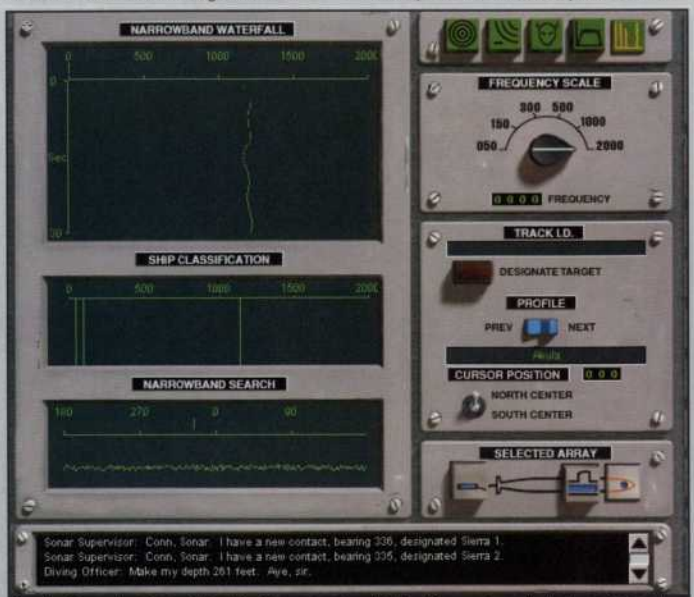
You are to destroy a Delta class SSBN in the Sea of Okhotsk. Guarding the Delta are two attack subs, an Akula and Victor II. Be advised that a biological is transiting the area, so confirm your targets before firing. All three of the enemy subs are north of your position moving west to east.

The nearest enemy sub is the Victor II. It is traveling at 8 knots at a depth of 150 feet. This places it above the thermal layer. A single ADCAP should take care of business. The Akula will be a little more difficult to get rid of. It is running at 5 knots and located below the thermal layer. The Delta is located about 2 nautical miles further north.

5. FIDEL'S FOLLY

Your objective is to enter a mined harbor and destroy a cargo ship carrying nuclear weapons. This mission is difficult because of the enemy helicopters patrolling the entrance. Limit your time near the surface. To enter the harbor, stick to the eastern coastline. This will avoid the minefield.

Use your ESM sensor to target the cargo ship and use Harpoon missiles to destroy it before it leaves port. You can



Use the Narrowband waterfall to identify your targets, which in this case is an Akula class attack sub.

If you want to fly like an ace, you'll have to know what buttons to push.

EAGLEMAX

HYPER PROGRAMMABLE 10 IN 1

boot Magazine boot worthy

"THIS IS A WELL-CRAFTED, WELL-DESIGNED FLIGHT STICK" – 1997 BOOTWORTHY GAME CONTROLLER *boot Magazine*

"PROGRAMMING IS WONDERFULLY EASY AND CAN BE DONE WITHOUT A SOFTWARE INTERFACE" *PC Gamer*

"DECENT STICK OFFERS ON-THE-FLY PROGRAMMABILITY FOR A SONG" *Computer Gaming World*

"A VERY POWERFUL CONTROLLER FOR USE WITH GAMES THAT ARE BETTER SUITED TO STICK CONTROL" *Computer & Net Player*

CHECK YOUR SIX! – PROGRAM ROCKER SWITCH TO ZOOM IN/OUT OF YOUR RADAR HUD

MACRO 1: JETFIGHTER III
MACRO 2: LONGBOW 2
MACRO 3: FLYING NIGHTMARES 2
MACRO 4: iF-22 RAPTOR™

LOWER FLAPS, LOWER LANDING GEAR, DECREASE THROTTLE AND BRING 'ER IN FOR A LANDING

LAUNCH 3 MISSILES, THEN RELEASE A BOMB TO ENSURE DESTRUCTION

SET FORMATION, ENGAGE TARGET AND FIRE

10 IN 1 HYPER PROGRAMMABLE

Interplay Avalanche Excitement www.interplay.com

Get $30 Cash Back with the purchase of EagleMAX and one of twelve featured interplay titles. See store for details.

ACT·LABS™

MAX THE EXPERIENCE

Available at: Electronics Boutique, Future Shop

http://www.actlab.com

1-800-980-9997

Product Information Number 88

© 1997 ACT Laboratory Ltd. All rights reserved.
EagleMAX and ACT LABS are trademarks of ACT Laboratory Ltd.
All other trademarks and registered trademarks are the property of their respective owners.

safely ignore the Grisha moving into the area, but watch out for the Helix helicopters overhead. They present the greatest threat to your sub.

6. OSCAR WINNING PERFORMANCE

The friendly battle group you are protecting is located about 40 nautical miles to the south-southeast. It consists of an aircraft carrier (the USS Nimitz) and an Arleigh Burke class missile cruiser. An Oscar II submarine (with a Proficient level crew) is located less than 10 nautical miles to the north. It is moving south at 12 knots to attack the battle group. Its present course will bring it close to your position.

Make your depth 300 feet and come to a course of 355 degrees. Set turns for 3 knots and then wait. Your forward sonar should detect the enemy sub within a few minutes. Because of the highly trained crew, expect it to evade your torpedoes. Launch multiple fish as a precaution.

7. AGAINST ALL ODDS

This is one of the most difficult missions. Your objective is the Russian carrier, Kuznetsov. Unfortunately, it is protected by two Slava class destroyers, two Akula class subs, and several Helix helicopters. All enemy forces have Proficient rated crews. The battle group is located about 50 nautical miles west of your position. The two Akula subs are deployed ahead of the surface ships.

Get a bearing on the surface ships using your ESM sensor. Fire at least two Harpoons at each target, but be sure not to linger near the surface. The helicopters will be breathing down your neck very soon if you do. Try to knock out the surface ships with Harpoons — otherwise, you will be forced to close in with torpedoes and have to deal with the Akulas.

Many campaign missions require the use of Navy SEALs. Just be sure to pick them up after the mission.

8. REBEL YELL II

An Akula class submarine is chasing down a friendly surface battle group. Although the sub has a Proficient rated crew, it will be easy to detect. It is traveling below the thermal layer at a speed of 20 knots. Your submarine is between the battle group and the Akula.

Maintain your present position, and the submarine will come to you. You can expect it to successfully evade at least one of your torpedoes. Fire several just as a precaution.

Playing cat and mouse with a Kilo class attack sub is sheer delight.

Use waypoints to steer your TLAMs away from SAM sites.

CHIPS&BITS INC.

POB 234 DEPT 10936 ROCHESTER, VT 05767
INT'L 802-767-3033 FAX 802-767-3382

On Line Ordering

www.cdmag.com/chips.html
or call 1-800-699-4263
Source Code 10936

COMPUTER GAMES: STRATEGY

Title	Release	Price	Title	Release	Price	Title	Release	Price	Title	Release	Price
10 Six	NOW	$35	Creature	NOW	$34	MAX	NOW	$22	Spaceward Ho! 4	NOW	$24
1830 RR/Rbbr Baron	NOW	$34	Dark Colony	NOW	$43	MAX 2	02/98	$48	Speed Tribes	04/98	$48
7th Legion	NOW	$39	Dark Reign Futre War	NOW	$48	Magic Spells of Anct	NOW	$28	Star Control 3	NOW	$28
AD&D Birthright	NOW	$29	Dark Reign MP 1	NOW	$29	Magic:the Gathering	NOW	$37	Star General	NOW	$43
Admiral Sea Battles	NOW	$22	Deadlock 2	NOW	$46	Mass Destruction	NOW	$38	Star Nations	06/98	$46
Admiral Ancient Ships	NOW	$46	Dominion	NOW	$40	Master of Orion	NOW	$19	Starcraft Expansion	12/97	$30
Advanced Civilization	NOW	$39	Dune 2	NOW	$22	Master of Orion 2	NOW	$24	Stars	NOW	$38
Age of Empires	NOW	$46	Dungeon Keeper	NOW	$46	Mechcommander	02/98	$48	Starship Troopers	NOW	$46
Age of Wonders	NOW	$47	Emperor Fadng Suns	NOW	$29	Mission Nexus Prime	12/97	$48	Stratosphere	02/98	$46
Agents of Justice	NOW	$48	Empire 2	NOW	$24	Missn Frc:Cybrstrm 2	NOW	$42	Submarine Titans	05/98	$44
Ares Rising	NOW	$46	Empire of the Ants	03/98	$43	Netstorm	NOW	$48	Syndicate Wars	NOW	$46
Army Men	03/98	$46	Enemy Nations	NOW	$29	New Order	NOW	$48	Tranpsort Tycoon Dlx	NOW	$42
C & C	NOW	$29	Evolution	NOW	$40	Outpost 2	NOW	$47	Tycho Rising	NOW	$44
C & C 2 Tiberium Sun	05/98	$48	Extreme Tactics	12/97	$49	Perfect General	NOW	$12	Ultimate Civ 2	NOW	$48
C & C Covert Oprtions	NOW	$22	Fallen Haven	NOW	$30	Plague	NOW	$42	Uprising	NOW	$48
C & C Gold W95	NOW	$40	Fantasy General	NOW	$35	Reach for Stars 2	02/98	$48	Whlammr 2 Drk Omen	NOW	$43
C & C RA Cnter Strke	NOW	$21	Frenzy	12/97	$44	Rebellion	NOW	$52	Wages of War W95	NOW	$29
C & C RA Aftermath	NOW	$26	Galactic Mirage	NOW	$41	Return Fire	NOW	$37	WarBreeds	NOW	$48
C & C Red Alert	NOW	$48	Heist	02/98	$44	Rising Lands	NOW	$44	WarGames	02/98	$46
C & C Sole Survivor	NOW	$46	Heroes M&M 2	NOW	$35	SWAT 2	NOW	$48	Warcraft 2	NOW	$37
Capitalism Plus	NOW	$43	Heroes M&M 2 Ex Pk	NOW	$25	Semper Fi	NOW	$46	Warcraft 2 Add On	NOW	$20
Captives	NOW	$40	Heroes M&M W95	NOW	$19	Sentinel Returns	03/98	$45	Warlords 2 Dlx	NOW	$41
Cave Wars	NOW	$39	Hidden Wars	NOW	$48	Settlers 2 Gold	NOW	$38	Warlords 3	NOW	$45
Civilization 2	NOW	$36	Imperialism	NOW	$43	Shadow of Emperor	NOW	$35	Warwind 2	NOW	$34
Civilization 2 Scen	NOW	$26	Infinity War	12/97	$48	Shattered Nations	NOW	$46	Warwind W95	NOW	$43
Clay Warfare	12/97	$45	Into the Void	NOW	$28	Siege	NOW	$48	Wisdom of the Kings	NOW	$46
Colonization	NOW	$29	Jagged Alliance 2	NOW	$48	SimCity 2000 Spec Ed	NOW	$40	Wooden Ship Iron Mn	NOW	$39
Command HQ	NOW	$18	KKND	NOW	$36	SimCity 2000 W95 Nt	NOW	$47	Worms 2	NOW	$44
Conq New World	NOW	$21	KKND Extreme	NOW	$38	SimCity 3000	NOW	$54	X-Com Terr frm Deep	NOW	$19
Conq New World Dlx	NOW	$29	Lords Realm 2	NOW	$39	SimPark	NOW	$34	X-Com UFO Defense	NOW	$19
Constructor	NOW	$42	Lords Realm 2 Exp Pk	NOW	$28	SimSafari	12/97	$44	X-com Apocalypse	NOW	$41
Corsairs	NOW	$43	M Gathrng Battlemage	NOW	$35	Soldiers at War	02/98	$43	Z	NOW	$33

COMPUTER GAMES: WAR

Achtung Spitfire	NOW	$40	Battlegrnd Waterloo	NOW	$32	Harpoon 97	NOW	$44	Stalingrad	NOW	$39
Afrika Korps	04/98	$42	Civil War Generals	NOW	$48	Harpoon Classic	NOW	$19	Steel Panthers 2	NOW	$29
Age of Sail	NOW	$42	Close Combat 2	NOW	$44	Napoleon in Russia	NOW	$42	Steel Panthers 3	NOW	$43
Aide de Camp 2	12/97	$44	Close Combat	NOW	$38	Over the Reich	NOW	$39	Stl Pnthrs Cmp 1-2aa	NOW	$15
Battle of Bulge	03/98	$42	Dcave Battls of WWII	NOW	$43	Pacific General	NOW	$43	TACOPS	NOW	$44
Battlegrnd Antietam	NOW	$41	East Front	NOW	$42	Panthers in Shadows	NOW	$42	Tank Resistance 2024	NOW	$39
Battlegrnd Bulge	NOW	$28	Fifth Fleet	NOW	$39	Panzer Commander	06/98	$45	Third Reich	NOW	$39
Battlegrnd Bull Run	NOW	$42	Flight Commander 2	NOW	$39	Panzer General 2	NOW	$42	Tigers on Prowl 2	NOW	$42
Battlegrnd Gettysbrg	NOW	$32	Great Battls Alexndr	NOW	$40	Panzerblitz	03/98	$42	V Victory Bundle	NOW	$28
Battlegrnd Mid East	05/98	$42	Grt Bttls of Hannibal	NOW	$48	Prelude to Waterloo	NOW	$45	Wargme CS 3 w/ Cmp	NOW	$24
Battlegrnd Shiloh	NOW	$30	Harpoon 2	NOW	$17	R E Lee CW General	NOW	$28	Zulu War	NOW	$29

BOARD GAMES

1870	NOW	$40	Battles of Alexander	NOW	$33	Geronimo	NOW	$32	Pain Doctor	NOW	$25
ASL Mod Beynd Valor	NOW	$33	Battlespace	NOW	$26	Gettysburg	NOW	$15	Rats	NOW	$24
ASL Mod Gung Ho	NOW	$38	Battletech 4th Ed.	NOW	$19	Go	NOW	$22	Rebels & Redcoats 2	NOW	$25
ASL Mod Jatkosota	NOW	$10	Car Wars Deluxe	NOW	$21	Grand Prix	NOW	$19	Risk	NOW	$27
ASL Mod Leatherneck	NOW	$9	Chancellorsville	NOW	$34	Great War at Sea 1	NOW	$32	Robo Rally	NOW	$33
ASL Mod Partisan	NOW	$15	Circus Maximus	NOW	$11	Hannibal	NOW	$32	Sam Grant	NOW	$42
ASL Solo Rules	NOW	$29	Civilization	NOW	$29	Harpoon Box Set	NOW	$41	Samurai Swords	NOW	$35
Advanced Civilization	NOW	$25	Colonial Diplomacy	NOW	$42	Here Come the Rebels	NOW	$23	Scrabble Dlx	NOW	$39
Advanced Squad Ldr	NOW	$38	Crisis Sinai 1973	NOW	$25	History of the World	NOW	$27	Scrabble DlxTravel	NOW	$24
Advanced Third Reich	NOW	$38	D-Day	NOW	$16	Hobbit Adventure	NOW	$29	Sherlock Holmes	NOW	$20
Age of Renaissance	NOW	$42	Days of Decision 2	NOW	$42	Jena	NOW	$38	Space Chess 3D	NOW	$35
Air Baron	NOW	$27	Decision in France	NOW	$15	Kingmaker	NOW	$19	Squad Leader	NOW	$23
Alamo	NOW	$15	Deluxe Diplomacy	NOW	$42	Knightmare Chess	NOW	$13	Stonwall's Last Battle	NOW	$25
Ancient Empires	NOW	$29	Die Hanse	NOW	$55	Krieg!	NOW	$32	Texas Revolution	NOW	$18
Axis & Allies	NOW	$35	Diplomacy	NOW	$19	Longstreet's Assault	NOW	$22	The '45	NOW	$25
Axis & Allies Cntl Pwr	NOW	$30	Empire Builder	NOW	$25	Lunch Money	NOW	$15	Watjet	NOW	$50
Axis & Allies Mid Est	NOW	$16	Federation & Empire	NOW	$38	Magic Realm	NOW	$23	We the People	NOW	$29
Axis & Ally WW2 Exp	NOW	$14	Ferrocarriles Pampas	NOW	$17	Mystical Circle	NOW	$35	World War One	NOW	$11
Battle for N Africa	NOW	$32	Feudal	NOW	$18	Napoleons Later Battls	NOW	$22	World in Flames Dlx	NOW	$90
Battles Forgotten War	NOW	$42	Field Command	NOW	$30	Ogre Miniatures	NOW	$13	Zorndorf	NOW	$36

HINT BOOKS

Age of Empire	NOW	$16	Earthsiege 3	NOW	$16	Myst 2: Riven	NOW	$16	Starcraft	NOW	$16
Agents of Justice	NOW	$16	Falcon 4.0	NOW	$16	Outpost 2	NOW	$16	Steel Panthers 3	NOW	$16
Blade Runner	12/97	$18	Fallout	NOW	$16	Pax Imperia 2	NOW	$16	Tomb Raider 2	NOW	$10
Civilization 2	NOW	$16	Heavy Gear	NOW	$18	Populous 3	NOW	$16	Ultima Online	NOW	$16
Curse of Monkey Isle	NOW	$16	Heroes M&M 3	07/98	$18	Quake 2	12/97	$18	Unreal	NOW	$16
Dark Earth	NOW	$18	King's Quest 8	12/97	$16	Quest for Glory 5	NOW	$16	War Wind 2	NOW	$16
Dark Forces 2 OSG	NOW	$16	Land Lore 2	NOW	$16	Red Baron 2	NOW	$16	WarBreeds	NOW	$18
Dark Reign	NOW	$16	Lords of Magic	NOW	$16	SWAT 2	NOW	$16	Warhammer 2	NOW	$16
Death Trap Dungeon	NOW	$16	Mask of Eternity	12/97	$16	Shadows of Empire	NOW	$18	Warlords 3	NOW	$16
Descent	NOW	$16	Mechwarrior 3	NOW	$16	Sid Meiers Gettysburg	NOW	$18	X-COM: Apocalypse	NOW	$16
Diablo	NOW	$16	Might & Magic 6	NOW	$16	Star Trek Star Flt Acad	NOW	$18	Zork: Grand Inquisitr	NOW	$18

COMPUTER GAMES: ARCADE

3D U Pbll Creep Nght	NOW	$36	Lose Your Marbles	NOW	$19	Boggle	NOW	$28	Mnty Pythn Mng Life	NOW	$45
3D U Pbll Lost Cntnt	NOW	$35	Overboard	NOW	$44	Caesar's Palace	12/97	$38	Mnty Pythns Wst Time	NOW	$32
Bomberman	NOW	$32	Pro Pinball	NOW	$37	Chessmaster 5500	NOW	$37	Monopoly Star Wars	NOW	$48
Bvs & Bttlhd Clig Drks	NOW	$19	Pro Pinball Timeshock	NOW	$28	Chessmastr Online	NOW	$15	Pictionary	NOW	$38
Bvs & Bttlhd Wnr Tkes	NOW	$19	Psybadek	NOW	$44	Chessmstr 5000 W95	NOW	$35	Power Chess 98	NOW	$45
Crucible	NOW	$44	Puzz 3-D	NOW	$28	Clue	NOW	$29	Shanghai Double Pack	NOW	$28
Frogger	NOW	$38	Sonic 3D Blast	NOW	$30	Fin Fin	NOW	$54	Shanghai Dynasty	12/97	$40
H.E.D.Z.	NOW	$38	Tempest 2000	NOW	$19	Golden Nugget W95	NOW	$32	Shanghai 98	12/97	$39
Hyper 3D Pinball	NOW	$22	Virtua Fighter 2	NOW	$39	Hong Kong Mahjong	NOW	$21	You Dnt Know Jack 3	NOW	$28
Last Bronx	12/97	$39	WWF Wrestling 3D	12/97	$48	LEGO Sea Challenge	01/98	$44	You Dnt Knw Jk MviesNOW		$39
Looney Labyrnth Pbal	NOW	$29	Youngblood	NOW	$47	Mnty Pythn Holy Grl	NOW	$29	You Dnt Knw Jk XXXL	NOW	$38

©1997 CHIPS & BITS, INC.

'TOTAL ANNIHILATION' Fully articulated 3D units, buildings and terrain. Over 150 units and 25 missions per side in single player campaign, plus full multiplayer support. Complex water units such as aircraft carriers, floating factories and amphibious tanks that drive into and under water.
GT Interactive (Strategy)
Release Date: NOW PC CD $47

'LORDS OF MAGIC' In a fantasy world where magic is common, trouble lurks. Dark Lord Balkoth's giant war machine is wreaking havoc. You must stop his reign of terror, using real-time combat on true 3D terrain. Play alone or with 5 friends over a network or modem.
Sierra (Strategy)
Release Date: NOW PC CD $47

'INCUBATION' Over 30 turn-based missions take place within the dimly lit and complex passageways of the colony Scay-Hallwa. Individuals in your squad become more proficient soldiers when they gain experience in battles by surviving missions and racking up kills.
Bluebyte (Strategy)
Release Date: NOW PC CD $44

'MYTH' is a tactical level game of fantasy warfare, with unprecedented realism and detail. Seasons change during the course of the game, affecting tactical decisions. Real 3D terrain, dynamic lighting, and tricky artificial intelligence.
Bungie (Strategy)
Release Date: NOW PC CD $48

'MAN OF WAR' Faithfully re-enacts an Admiral's life at sea circa 1765-1815 using actual battles and strategies. Contains 12 historically accurate scenarios, large scale fleet action, and revolutionary real-time 3D first person perspective.
Virgin (War)
Release Date: NOW PC CD $41

'WAR INC.' In the 21st Century, private security forces have evolved into powerful armies under corporate control. Take command of your own corporation and its armies, assume control of R&D, production, and strategic and tactical combat.
Interactive Magic (War)
Release Date: NOW PC CD $46

'SID MEIER'S GETTYSBURG' sets a new benchmark in real-time action strategy. Control infantry battle lines and artillery in real-time over rolling 3D terrain, making split second decisions that give each scenario a different ending.
Electronic Arts (War)
Release Date: 11/97 PC CD $46

'SETTLERS OF CATAN' Groups of settlers try to dominate a remote island by building and trading. Gain resources based on where you build and the roll of the dice. The combination of skill and luck makes this an excellent game for all skill levels.
Mayfair (Board game)
Release Date: NOW BG $30

'PAX IMPERIA 2' Control every aspect of a civilization: economics, research, espionage, exploration and diplomacy. Build a fleet of mighty warships or quietly establish economic dominion, the universe is yours to conquer.
THQ (Strategy)
Release Date: 1/98 PC CD $48

'POPULOUS:THE THIRD COMING' Large strategies can be planned and enacted from fully playable global view. Various terrain varieties(mountains, oceans, aerial views) impose different challenges on your warriors as you lead them into battle.
Electronic Arts (Strategy)
Release Date: NOW PC CD $45

'LEGO ISLAND' A LEGO enthusiasts dream! Meet over 35 unique, animated characters, build and drive your own custom vehicles. Multiple levels of play, build, explore, customize, race and ultimately capture the destructive Brickster.
Mindscape (Traditional)
Release Date: NOW PC CD $39

CHIPS & BITS INC.

POB 234 DEPT 10936 ROCHESTER, VT 05767

INT'L 802-767-3033 FAX 802-767-3382

Huge Selection

World Wide Shipping

Great Prices

'iF16 FIGHTING FALCON' contains an easy to use quick start mode as well as detailed missions and campaigns. Jump into combat and experience incredible graphics and high energy explosions without ever opening the manual.

Interactive Magic (Simulation)
Release Date: NOW PC CD $48

'HEAVY GEAR' Pilot one of 16 Heavy Gear war machines, as well as Striders and other armored vehicles. Gears are capable of agile, humanoid movements. Construct your own Gear, then pilot it with your exact customizations.

Activision (Simulation)
Release Date: NOW PC CD $48

'FLIGHT UNLIMITED 2' takes the realism and thrill of simulated flying to a higher plane. Over 11,000 square miles of incredible Bay Area terrain accurately modeled for the most precise detail ever in a flight sim. Visual and instrument navigation, 6 of the coolest civilian aircraft, including the P-51D Mustang and the DeHaviland Beaver seaplane.

Eidos (Simulation)
Release Date: NOW PC CD $44

'DARK FORCES JEDI KNIGHT' In this long awaited sequel to Dark Forces, you battle a multitude of enemies and discover the secrets of the lost Jedi burial ground. Master light saber combat and harness an arsenal of firepower. Develop your force powers and become a Jedi Knight or a dark Jedi. All new 3D environments and characters.

LucasArts (Action)
Release Date: NOW PC CD $53

'POSTAL' A psychological thriller with a ravenous killer instinct pushes 3D combat over the top. Real-time 3D characters, outrageous backgrounds, rage inducing x-ray effects. 17 unsuspecting locales and a vicious arsenal. Supports multi-player network play.

Panasonic (Action)
Release Date: 11/97 PC CD $48

'STAR WARS SHADOWS OF THE EMPIRE' A gripping new plotline, with new characters and environments and an unbelievably detailed Star Wars universe. Five gameplay modes, in a variety of vehicles and spacecraft- from the heavily armored Outrider, to snowspeeders, hovertrains, jet packs and speeder bikes.

LucasArts (Action)
Release Date: NOW PC CD $51

'STARCRAFT' You must gather your resources to accomplish your goals, either freedom or galactic domination. Play 30 different missions in space, on planets, within installations. Scenario and map editor allows you to create your own campaigns.

Blizzard (Strategy)
Release Date: NOW PC CD $46

'CH RACING SYSTEM' Become a road warrior with the system that was built for speed and durability. System comes complete with a high-performance racing wheel with 160 degree range of motion, four push buttons and foot pedals for acceleration and braking.

CH Products (Hardware)
Release Date: NOW PC $85

'CH GAMESTICK 14' The comfortable base is equipped with 14 functions, a slide throttle, trim controls, two directional pads and patented gimbal. Designed for both left and right handed gamers.

CH Products (Hardware)
Release Date: NOW PC $60

'CABIN FEVER:SNOWBOUND' How about a weekend stuck in a cabin with nothing to do but play strip poker with 3 gorgeous women? Advanced poker engine and hilarious story elements.

Art Worx (Adult)
Release Date: NOW PC CD $34

'MAXIMUM SEX 6 PACK' Adult Image Library Vol2, Disc 2, Awesome Asians, Big Bust Babes, Latin Lust, New Machine Sampler, and Sweet Cheeks are what you'll get in this sexy 6 pack!

(Adult)
Release Date: NOW PC 6-CD $36

COMPUTER GAMES: SIMULATION

Title	Release	Price
10th Planet	NOW	$48
1943 Euro Air War	NOW	$45
688i Hunter Killer	NOW	$46
AH-64D Longbow 2	NOW	$46
AH-64D Longbow Gld	NOW	$46
AHX-1	NOW	$47
ATF 98	NOW	$46
Aces: X-Fighters	NOW	$39
Air Cmbt Nvy Ftrs 97	NOW	$45
Air Warrior 2	NOW	$43
Anarchy	02/98	$41
Armored Fist 2	NOW	$46
CART Prcision Racing	NOW	$48
Comanche 3	NOW	$39
Condemned	NOW	$48
Conquest of the Skies	NOW	$48
Daytona USA Dlx	NOW	$42
EF 2000 V 2	NOW	$45
Earthsiege 3	NOW	$49
F-15	NOW	$48
F-16 Agressor	NOW	$48
F-22 ADF	NOW	$48
F-22 Raptor	NOW	$46
F/A 18 Korea	NOW	$46
FA 18 Hornet 3	NOW	$44
Falcon 4.0	04/98	$52
Fghtng Flcn Bck Bgdd	NOW	$26
Fighter Duel 2	NOW	$39
Flying Corps Gold	NOW	$48
Flying Nightmares 2	NOW	$42
Flying Tigers	09/98	$48
Forced Alliance	NOW	$45
Interstate 76	NOW	$39
Interstate 77	NOW	$48
J Fghtr Lghtning Strk	NOW	$43
Jet Fighter 3	NOW	$35
Jet Fighter Fll Burn	NOW	$46
M1A2 Abrams	NOW	$27
M1 Tank Platoon 2	06/98	$52
MS Flight Sim 98	09/98	$48
MW Mercenaries	NOW	$28
MW Mercenaries 3Dfx	NOW	$48
Mech 2 Battlepack	NOW	$42
MechWarrior 3	12/97	$52
Mig Alley	NOW	$46
Moto Racer GP	NOW	$44
Nascar Racing 2	NOW	$39
Nascr Rcg 2 Bsch Srs	NOW	$30
Need for Speed 2	NOW	$46
Nuclear Strike	NOW	$42
Privateer 2 SE	NOW	$48
Privateer Darkening	NOW	$38
Racing Days	NOW	$44
Red Baron 2	NOW	$50
Redline	12/97	$46
Road to Indy 500	NOW	$44
SODA Off-Road Racng	NOW	$48
SU-27 Electrnc Bfield	10/98	$46
SU-27 Flanker 2	NOW	$43
SabrAce	NOW	$42
Sand Warriors	NOW	$46
Scrmn Demons Europe	NOW	$52
Sierra Pro Pilot	NOW	$48
Silent Hunter CE	NOW	$43
Spearhead	NOW	$49
Tanarus	NOW	$44
Tank!	02/98	$48
Team Apache	12/97	$44
Test Drive 4	NOW	$46
Thunder Truck Rally	NOW	$45
Touring Car	01/98	$42
Trophy Bass 2	NOW	$39
Trophy Bass Rivers	NOW	$49
Wing Commander 4	NOW	$38
Wing Commander 5	NOW	$55
Wings of Destiny	02/98	$49
X-Car Exprmntl Rcn	NOW	$48
X-Wing V Tie Fghter	NOW	$50
iF-22 Raptor	NOW	$42
iPanzer 44	12/97	$48

COMPUTER GAMES: ACTION

Title		
Blood	NOW	$41
Blood Plasma Pak	NOW	$20
Bugriders	NOW	$40
Carmageddon	NOW	$45
Chromoform	NOW	$46
Daikatana	12/97	$49
Dark Forces	NOW	$30
Dark Vengeance	02/98	$45
Death Trap Dungeon	NOW	$48
Dreams	NOW	$48
Flesh Feast	02/98	$44
G-Police	NOW	$44
Gatherer	NOW	$42
Golgotha	NOW	$48
Half Life	NOW	$48
Hexen 2	NOW	$52
MDK	NOW	$45
Mageslayer	NOW	$39
Normandy 97	NOW	$36
OutWars	NOW	$48
Postal Level Editor	NOW	$48
Profiteer	03/98	$45
Quake	NOW	$42
Quake 2	NOW	$52
Quake Mssn Pk 1-2ea	NOW	$29
qED for Quake	NOW	$19
Resident Evil	NOW	$42
Scud	NOW	$35
Shadow Warrior	NOW	$47
SkyNET	NOW	$39
Sin	02/98	$49
SpecOps	NOW	$48
Terra Victus	02/98	$48
Tomb Raider	NOW	$42
Trespassr Jrssic Park	12/97	$48
Turk Dinosaur Huntr	NOW	$42
Turk Dinosaur Hunt 2	02/98	$48
Unreal	NOW	$48
Unreal Add-On	01/98	$19
Virus	NOW	$48

COMPUTER GAMES: SPORTS

Title		
ABC Mdy Nght Fbll 98	NOW	$45
APBA Pro Boxing	NOW	$38
All Star Baseball 98	NOW	$44
Bass Mstrs Clssic Pro	04/98	$42
Crush! Deluxe	NOW	$26
FIFA Road Wrld Cp 98	NOW	$46
FPS Baseball 98	NOW	$28
FPS Football 98	NOW	$29
FPS Golf Add-On	NOW	$29
FPS Golf Bundle	NOW	$48
FPS Skiing	NOW	$47
FPS Trophy Bass Rivrs	NOW	$48
Frank Thos Baseball	NOW	$34
Gone Fishin'	NOW	$29
Hardball 6	NOW	$46
Heroes of Iron Grid	NOW	$44
Jack Nicklaus Golf 4	NOW	$46
Jack Nicklaus Golf 5	NOW	$45
Kick Off 97	NOW	$44
Legends of FB 98	NOW	$39
Links LS	NOW	$46
Links LS 98	NOW	$45
Links LS Cng Ctry Clb	NOW	$19
Links LS Davis Love	NOW	$25
Links LS Oaklnd Hlls	NOW	$19
Links LS Valderrama	NOW	$19
Links LS Valhalla	NOW	$19
Links Pro Devils Isl	NOW	$19
MS Baseball 3D	NOW	$45
Madden FB 98	NOW	$46
NBA Action 98	NOW	$42
NBA Live 98	NOW	$46
NCAA Football 98	NOW	$45
NFL QB Club 98	NOW	$42
NHL Breakaway 98	NOW	$42
NHL Hockey 98	NOW	$45
NHL Power Play 98	NOW	$34
PBA Bowling 2	NOW	$35
PGA Tour Glf 96 W95	NOW	$37
PGA Tour Pro 3-D	NOW	$50
Triple Play 98	NOW	$45
World Series BBall 98	NOW	$42
Worldwide Soccer 98	NOW	$39
Wrld Cup Glf Dor Bch	NOW	$19

COMPUTER GAMES: HARDWARE

Title		
Attc ACS55 Spker Sys	NOW	$152
Assassin 3D Contllr	NOW	$59
Assassn 3D W/ Wgmn	NOW	$99
CH F16 Combatstick	NOW	$60
CH F16 Fighterstick	NOW	$100
CH F16 Flightstick	NOW	$35
CH Flight Stick Pro	NOW	$50
CH Force FX	NOW	$169
CH Game Card 3 Auto	NOW	$26
CH Jane's Combt Stck	NOW	$71
CH Mach 3 Joystick	NOW	$25
CH PC Gamepad	NOW	$19
CH Pro Pedals	NOW	$80
CH Pro Throttle	NOW	$102
CH Rcng Whl W/ Pdal	NOW	$87
CH Virtual Pilot Pro	NOW	$75
Gravis Firebird 2	NOW	$65
Gravis GrIP Contrllr	NOW	$85
Gravis GrIP Pad 2 Pk	NOW	$24
Gravis Grp Stnd Alne	NOW	$69
Gravis PC Gmepd Pro	NOW	$27
Gravis Thndrbrd Jstk	NOW	$43
Joyswitch	NOW	$42
Labtec LCS 2612 Spkr	NOW	$112
Ltech Cyberman 2	NOW	$92
Ltech WingMn Wrrior	NOW	$85
MS Sidewinder Pro	NOW	$85
MS Sidewinder FF Pro	NOW	$159
MS Sidewinder Pro Pad	NOW	$39
Sound Blaster 64 Val	NOW	$149
Space Orb 360	NOW	$75
TM Driving Control T2	NOW	$108
TM F16 TQS	NOW	$108
TM F22 Pro	NOW	$128
TM FLC F16 System	NOW	$108
TM Flight Contr Pro	NOW	$99
TM Game Card	NOW	$25
TM Millnm 3D Incptr	NOW	$69
TM Nascar Racng Whl	NOW	$112
TM Phazer Pad	NOW	$47
TM Rage 3D Pad	NOW	$40
TM Rudder Contr Sys	NOW	$98
TM Weapon Cont Sys	NOW	$88
Verbal Commander	NOW	$85

COMPUTER GAMES: ADULT

INTERACTIVE

Title		
2069 Oriental Sex Odys	NOW	$50
Asians in Wonderland	NOW	$39
AssTroids	NOW	$40
Buster Cherry	NOW	$45
Car Wash Angels	NOW	$36
Circus	NOW	$24
Crystal Fantasy	NOW	$34
CyberStrip Black Jack	NOW	$36
CyberStrip Poker	NOW	$36
CyberXperience	NOW	$29
Diva X Ariana	NOW	$39
Diva X NJ	NOW	$39
Diva X Rebecca	NOW	$39
Doll House	NOW	$29
Dream Machine 2	NOW	$49
Duke Screw'em	NOW	$46
Eros 3	NOW	$27
Face Jam	NOW	$27
Fantascenes 3	NOW	$39
Girlfriend Donna	NOW	$49
Girlfriend Teri	NOW	$39
Girlfriend Tracy	NOW	$39
Hot & Bottled	NOW	$48
Hot Leather 2	NOW	$25
Hot Slots	NOW	$19
Interact Seymore Bt 2	NOW	$49
Interact Seymore Bt	NOW	$39
Japan Interactive	NOW	$46
Latex	NOW	$44
Lust Connection	NOW	$39
Mysteria	NOW	$35
Nightwatch Int 3	NOW	$46
Oriental Ecst Exposed	NOW	$36

INTERACTIVE

Title		
Outpost 69	NOW	$40
Penthouse Interactive	NOW	$39
Porntris	NOW	$24
Private Investigator	NOW	$49
Private Plsr Park 2	NOW	$49
Private Prison	NOW	$44
Rodney Rubber Show	NOW	$39
Sex Castle	NOW	$29
Sex TV 2	NOW	$24
Sex With Jena	NOW	$49
Sex:The Game	NOW	$39
Sexy Sports Trivia	NOW	$19
Shock:The Game	NOW	$49
Space Sirens 2	NOW	$34
Strip Fighter	NOW	$40
Strip Poker Pro 2	NOW	$39
Time Warp	NOW	$44
Ultra Slots	NOW	$28
Ultra Vixen	NOW	$49
VCA 6-Pack	NOW	$39
Valentine's Day	NOW	$26
Vampire's Kiss	NOW	$36
Venus Playhouse	NOW	$29
Virtual Director	NOW	$39
Virtual Sex 2	NOW	$39
Virtual Sex Shoot	NOW	$44
Virtual Valerie 2	NOW	$36
Virtual Veronica	NOW	$48
Virtual Victor	NOW	$42
Virtual Vixens	NOW	$24
Virtually Yours 2	NOW	$39
You Don't Know Dick	NOW	$35
Zoom	NOW	$36

MOTION

Title		
101 Sex Positions	NOW	$24
American Blond	NOW	$24
Asia X	NOW	$29
Asian Paradise	NOW	$39
Bangkok Nights	NOW	$19
Blond Justice 3	NOW	$16
Borderline	NOW	$19
Cat House	NOW	$19
Christy In the Wild	NOW	$14
Deep Throat Girls 5	NOW	$26
Deep Thrt Grls 4Pk	NOW	$49
Dirty Debutnt 6 Pk	NOW	$44
Endangered	NOW	$19
From Asia With Love	NOW	$15
Geisha's Secrets	NOW	$12
Hawaii	NOW	$16
Heidi's Girls Exposed	NOW	$19
Hist Of Blue Movie	NOW	$15
Immortal Desire	NOW	$19
Kama Sutra	NOW	$24
La Blue Girl 4	NOW	$22
La Blue Grl Scrn Svr	NOW	$29
Max Domintn & Fetsh	NOW	$35
Mystique Orient 2	NOW	$19
New Machine 6 Pk	NOW	$42
Oriental Action	NOW	$19
Oriental Diaries	NOW	$19
Racquel Released	NOW	$12
Romsoft Six Pk 2	NOW	$29
Tokyo Nightlife	NOW	$48
Tokyo Nymphs	NOW	$19
Twin Angels 2	NOW	$28
Venus 5	NOW	$20

STILLS

Title		
Adult Image Lib 2 +	NOW	$25
Adult Image Library	NOW	$19
Adult Image Library 2	NOW	$19
All Night Long	NOW	$16
Asian Pearls 2	NOW	$28
Asian Pearls 3	NOW	$24
Bankok Beauties	NOW	$19
Beverly Hl Call Grls	NOW	$19
Busty Babes 4	NOW	$39
Celebrity Nudes	NOW	$26
Domin-A-Trix 2	NOW	$24
Ebony Shack	NOW	$19
Elite Amer Mdls 4	NOW	$19
Elite Ctrfold Mod 2	NOW	$24
Elite College Girls 1	NOW	$24
Elite Models 4	NOW	$19
Erotic Playground	NOW	$9
Forbidden Desires	NOW	$15
Hardcore Gallery 2	NOW	$16
Japanese Pearls	NOW	$19
Latin Lust	NOW	$24
Lingerie Models	NOW	$19
Mega Pix	NOW	$21
Miss Nude World	NOW	$23
Pink Passion	NOW	$12
Ropes & Chains	NOW	$19
Sexual Debutantes	NOW	$18
Shackles 2	NOW	$18
Shaved Pink	NOW	$19
Tabloid Beauties	NOW	$19
Tokyo Glamour Girls	NOW	$29
Village Collection	NOW	$29
Visions of Erotica	NOW	$29

©1997 CHIPS & BITS, INC.

Open 24 Hours | New Releases | Order Online

www.cdmag.com/chips.html
or call 1-800-699-4263
Source Code 10936

COMPUTER GAMES: ADVENTURE

Title	Release	Price	Title	Release	Price	Title	Release	Price	Title	Release	Price
20k Leagues Undr Sea	NOW	$48	Curse of Monkey Isle	NOW	$39	Kings Quest 8	12/97	$48	Secret of Black Onyx	NOW	$46
Abe's Odysee	NOW	$47	Cyberia 2	NOW	$48	Last Express	NOW	$39	Shivers 2 W95	NOW	$48
Aden Quest	01/98	$43	Dark Camelot	03/98	$48	Lost Mnd Dr Brain 2	NOW	$42	Siege of Stormhaven	10/98	$48
Adremix Crisis	01/98	$45	Dark Earth	NOW	$46	Metal Works	NOW	$38	Simon Sorceror 2	01/98	$40
Albion	NOW	$19	Dark Half	03/98	$44	Myst	NOW	$24	Space Quest 3000	NOW	$45
Alien Earth	03/98	$45	Dark Side of Moon	NOW	$48	Myst 2	NOW	$52	Star Trek Voyager	NOW	$48
Alien Trilogy	NOW	$42	Dawn of Darkness	NOW	$44	Neverhood	NOW	$50	Star Trk Str Flt Acad	NOW	$55
Alone in Dark Trilogy	NOW	$25	Demon Isle	NOW	$48	Obsidian	NOW	$35	Starship Titanic	NOW	$48
Armed and Delirious	NOW	$46	Dig	NOW	$26	Overseer	12/97	$54	Str Trk Scrt Vlcn Fry	12/97	$48
Arrival	NOW	$45	Discworld 2	NOW	$44	Patriot Games	NOW	$48	Temujin	NOW	$48
Atlantis	NOW	$40	Ecstatica 2	NOW	$47	Phantasmagoria 2	NOW	$54	Tone Rebellion	NOW	$52
Badlands	02/98	$48	Evidence	NOW	$42	Planetfall	01/98	$44	Trial	NOW	$44
Beavis Butthd Virt St	NOW	$29	Excalibur 2555	NOW	$48	Police Quest 5 SWAT	NOW	$28	Twinsen's Odyssey	NOW	$47
Black Dahlia	NOW	$46	Fighting Fantasy	NOW	$40	Principles of Fear	NOW	$47	Ubik	NOW	$42
Blade Runner	NOW	$48	Gabriel Knight 2	NOW	$29	Redguard	NOW	$54	Versaille	NOW	$44
Blue Heat	NOW	$43	Galapagos	NOW	$45	Respect Inc	03/98	$45	Warcraft Lord of Clns	NOW	$46
Byzantine	NOW	$46	Gothos	NOW	$29	Return to Krondor	01/98	$45	Wheel of Time	NOW	$46
Circle of Blood	NOW	$43	Gundam	NOW	$44	Reverence	NOW	$43	Zombieville	NOW	$40
City of Lost Children	NOW	$41	Izmogoud	NOW	$42	Ripper	NOW	$48	Zork: Grnd Inquisitor	NOW	$48
Curly's Adventure	NOW	$45	Journeyman Projct 3	01/98	$48	Secret Mission	NOW	$44	Zork:Nemesis	NOW	$29

COMPUTER GAMES: ROLE PLAYING

Anvil of Dawn	NOW	$19	Die By the Sword	NOW	$48	Lands Lore Grdns Dst	NOW	$48	Star Trail	NOW	$29
Arena Deluxe	NOW	$47	Dragon Lore 2	NOW	$39	Legcy Kain Bld Omn	NOW	$40	Stonekeep	NOW	$29
Baldure's Gate	NOW	$48	Dungeon Master 2	NOW	$18	Ravnlft 2 Stn Prop	NOW	$16	Swords of Heroes	10/98	$46
Battlespire	NOW	$49	Elder Scrolls 2	NOW	$39	Realms of Haunting	NOW	$44	Ultima 7 Series	NOW	$15
Betrayal in Antara	NOW	$44	Eldr Scrlls Mrrowind	02/98	$54	Redemption	02/98	$43	Ultima 8 Pagan	NOW	$15
Broken Sword	NOW	$42	Elric	NOW	$45	Rlms Ark Shdow Riva	NOW	$36	Ultima 9 Ascension	03/98	$52
Buccaneer	NOW	$46	EverQuest	NOW	$44	Sacred Pools	NOW	$48	Ultima Online	NOW	$52
Cobra Mission	NOW	$29	Forgttn Rlms Archives	NOW	$30	Serpent's Kiss	NOW	$43	Ultima Undrwld 1 & 2	NOW	$15
Dark Project	NOW	$49	Fallout	NOW	$48	Shadows of Death	03/98	$43	Wizardry 8	04/98	$48
Diablo	NOW	$37	Lands of Lore	NOW	$25	Skyrealms of Jorune	NOW	$33	Wizardry Gold W95	NOW	$25

ROLE PLAYING GAMES

AD&D Core Rules	NOW	$36	Changeling	NOW	$21	GURPS Religion	NOW	$17	Nightspawn	NOW	$16
AD&D Combt & Tactics	NOW	$17	Changeling Screen	NOW	$15	GURPS Robots	NOW	$14	Of Gods And Men	NOW	$22
AD&D DM Guide	NOW	$16	Conspiracy X	NOW	$20	GURPS Space	NOW	$14	Once Upon a Time	NOW	$14
AD&D Monstrs Manl	NOW	$20	Cyberpunk 2020	NOW	$17	GURPS Ultra-Tech	NOW	$15	Palladium Fantasy	NOW	$20
AD&D Players Hndbk	NOW	$20	Dragonlance 5th Age	NOW	$21	GURPS Vampire	NOW	$17	Paranoia Fifth Ed.	NOW	$20
AD&D Skills & Power	NOW	$17	Earthdawn	NOW	$18	GURPS Vehicles	NOW	$16	Pendragon 4th Ed.	NOW	$19
AD&D Spells & Magic	NOW	$19	Earthdawn Companion	NOW	$15	GURPS Warehouse 23	NOW	$15	Rifts	NOW	$21
AD&D DM Screen	NOW	$6	Legends Earthdawn 1	NOW	$9	Heavy Gear	NOW	$25	Robotech	NOW	$11
AD&D Sea Devils	NOW	$17	Legends Earthdawn 2	NOW	$9	Hidden Invasion	NOW	$17	RuneQuest 4th Ed.	NOW	$19
AD&D World Bldr Gde	NOW	$17	Earthdawn Magic	NOW	$15	In Nomine	NOW	$25	Shadowrun 2nd Ed.	NOW	$20
AD&D Tale of Comet	NOW	$25	Fading Suns	NOW	$22	In Nomine GM Pack	NOW	$13	Skyrealms Jorune	NOW	$17
Albedo	NOW	$18	Fadng Sun GM Screen	NOW	$10	Indiana Jones	NOW	$25	Species	NOW	$21
Albedo Bonus Pack	NOW	$30	Fantasy Earth	NOW	$12	MERP 2	NOW	$17	StarWars Revised	NOW	$25
Alternity Player Hndbk	NOW	$25	GURPS Aliens	NOW	$14	Macross 2	NOW	$11	Toon Deluxe	NOW	$16
Alternity RM Guide	NOW	$21	GURPS Autoduel	NOW	$15	Mage 2nd Ed.	NOW	$21	Traveller	NOW	$24
Ars Magica 4th Ed	NOW	$26	GURPS Celtic Myth	NOW	$15	Mage Chronicles 1	NOW	$19	Vampire 2nd Ed.	NOW	$24
Bloodshadows	NOW	$25	GURPS Dinosaurs	NOW	$15	Mechwarrior	NOW	$13	Web Basic Game Sys	NOW	$21
Bubblegum Crisis	NOW	$20	GURPS Compendium	NOW	$18	Mechwarrior Comp	NOW	$12	Warhammer Fantasy	NOW	$19
Call of Cthulhu	NOW	$18	GURPS Compendium II	NOW	$18	Millenium's End 2.0	NOW	$17	Werewolf	NOW	$24
Cthulhu Live	NOW	$15	GURPS Rulebook	NOW	$20	Mutation	NOW	$30	Witchcraft	NOW	$20
Castle Falkenstein	NOW	$25	GURPS Goblins	NOW	$18	Nephilim	NOW	$18	World of Darkness	NOW	$16
Champions 4th Ed.	NOW	$22	GURPS Mecha	NOW	$15	Nexus	NOW	$18	Wraith	NOW	$24

COLLECTIBLE CARD GAMES

BTech BP Merc	NOW	$2	MTG Chronicles BP	NOW	$1	Magic Ice Age SD	NOW	$7	Star Trek NG Hdeck	NOW	$2
Battletech Booster	NOW	$2	MTG Mirage BP	NOW	$2	Middle Earth Dragons	NOW	$2	Star Trek NG Q-Cont	NOW	$2
Battletech Starter	NOW	$8	MTG Mirage SD	NOW	$8	Middle Earth Drk Min	NOW	$2	Star Trek Starter	NOW	$8
Dr Who Booster	NOW	$2	MTG Tempest BP	NOW	$2	Middle Earth Wiz BP	NOW	$3	Star Trek TNG SD	NOW	$7
Dr Who Starter	NOW	$8	MTG Tempest SD	NOW	$8	Middle Earth Wiz SD	NOW	$9	Star Wars BP	NOW	$2
Great Dalmuti	NOW	$5	MTG Visions	NOW	$2	Monty Python SD	NOW	$9	Star Wars ESB BP	NOW	$2
Illuminati BP	NOW	$2	MTG Weatherlight	NOW	$2	Monty Python BP	NOW	$3	Star Wars SD	NOW	$7
Illuminati SD	NOW	$8	Magic Homelnds	NOW	$1	Star Trek Booster	NOW	$2	Vampire SD	NOW	$7
MTG 5th Ed BP	NOW	$2	Magic Fallen Empirs	NOW	$1	Star Trek NG Alt Univ	NOW	$2	X-Files Booster	NOW	$2
MTG 5th Ed SD	NOW	$7	Magic Ice Age BP	NOW	$2	Star Trek NG BP	NOW	$2	X-Files Starter	NOW	$9

SONY PLAYSTATION

ASCII Sphere 360	NOW	$69	Interstate '75	03/98	$49
Ace Combat 2	NOW	$46	Lost World	NOW	$44
Alundra	NOW	$49	MDK	NOW	$46
Aqua Prophecy	02/98	$49	MLB Pent Race 98	NOW	$36
Army Men	05/98	$49	Magic the Gathrng	NOW	$50
Breath of Fire 3	01/98	$54	Monstrous City	NOW	$54
Bushido Blade	NOW	$44	Myst 2: Riven	NOW	$49
C & C Red Alert	NOW	$46	NBA Live '98	NOW	$46
Castlevania	NOW	$48	NFL Game Day '98	NOW	$39
Clayfighter 3	12/97	$50	Odd World	NOW	$49
Clock Tower	NOW	$44	Ogre Battle	NOW	$50
Crash Bandicoot 2	NOW	$49	PGA Tour '98	NOW	$46
Croc	NOW	$49	Pamdemonium 2	12/97	$49
Death Keep	NOW	$52	Resident Evil 2	01/98	$52
Diablo	NOW	$54	Sign of the Sun	NOW	$50
Dungeon Keeper	NOW	$46	Suikoden 2	NOW	$49
FIFA Soccer 98	NOW	$46	Tactics Ogre	12/97	$49
Final Fantasy VII	NOW	$59	VMX Racing	NOW	$46
GEX 2	01/98	$49	Wild Arms	NOW	$44
Herc's Adventures	NOW	$40	Xevious 3D	NOW	$44

SEGA SATURN

Albert Odyssey	NOW	$52	MLBPA	NOW	$44
Battle Monsters	NOW	$34	MagcKnght Rayrth	NOW	$52
Bomberman	NOW	$52	Mechwarrior 2	NOW	$36
Clockwrk Knight 2	NOW	$22	Mortal Kombat 4	03/98	$62
Colliderz	NOW	$52	NBA Live '98	NOW	$46
Commnd & Conqr	NOW	$52	NHL Hockey '98	NOW	$46
Courier Crisis	NOW	$46	Nascar 98	NOW	$46
Croc	NOW	$49	Quarterback Attck	NOW	$29
Darklight Conflict	NOW	$44	Resident Evil	NOW	$44
Darkstalkers 3	NOW	$49	Sega Ages	NOW	$40
Diablo	NOW	$54	Shining Holy Ark	NOW	$46
Die Hard Arcade	NOW	$44	Shining Wisdom	NOW	$42
FIFA Soccer '98 -	10/98	$46	Soviet Strike	NOW	$49
Herc's Adventures	NOW	$42	Star Fighter	NOW	$44
Hyper 3D Pinball	NOW	$42	Tecmo Super Bowl	NOW	$54
Legend of Oasis	NOW	$39	Ten Pin Alley	NOW	$44
Lost Vikings 2	NOW	$46	Ultimate Football	NOW	$46
Lost World	NOW	$44	Wing Arms	NOW	$26
Lunacy	NOW	$49	World Series '98	NOW	$46
Lunar Director Cut	12/97	$46	Worldwde Soccr98	NOW	$49

'SPACE BAR' You play a human detective assigned to catch a shifty criminal before he escapes the planet. Three discs of hilarious gameplay with hundreds of puzzles to solve. Smooth-motion 360 degree views of imaginative alien environments.
SegaSoft (Adventure)
Release Date: NOW PC CD $34

'OF LIGHT AND DARKNESS' Once every thousand years, gates open between the waking world and the realms of dream time, offering opportunities to those who dare, to save humanity from extinction. Now is the time to stop catastrophes that could usher in a thousand years of darkness.
Interplay (Roleplaying)
Release Date: 11/97 PC CD $48

'MIGHT & MAGIC VI' The Mandate of Heaven, the newest M & M edition contains an integral time clock with multiple plots and story lines. Unique 'skill based' character development and over 1000 miles of virtual terrain!
3DO/New World (Roleplaying)
Release Date: 11/97 PC CD $49

'QUEST FOR GLORY 5: DRAGON'S FIRE' Select the character of your choice, customize your skills and abilities, and embark on your adventure in the beautifully rendered 3D landscape. Story line changes with the choices you make. Single player with Multiplayer Internet option.
Sierra (Roleplaying)
Release Date: 12/97 PC CD $48

'DESCENT TO UNDERMOUNTAIN' With a visit from a stranger from the future, many characters are now developing in the cracks and under the rocks of ancient caves. Move through an new world of 3D with 360 degree movement.
Interplay (Roleplaying)
Release Date: NOW PC CD $46

'DEFIANCE' You are a test pilot for an awesome new weapon when suddenly it is no longer a test. First person combat simulator, four levels of firepower, missiles and auxiliary weapons. Twin beam laserlok firing system.
Avalon Hill (Action)
Release Date: NOW PC CD $40

'MECHWARRIOR' Create your unit from the ground up by deciding what and how you want to play, use the character generation system to flesh out your fighting team. Play character archetypes such as the MechWarrior, Aerospace Pilot, Tech or Clansman.
Fasa (Pen/Paper Roleplaying)
Release Date: NOW RPG $13

'MAGIC THE GATHERING 5TH EDITION' This deck contains 60 tradable game cards, randomly assorted, plus a rule book. Each player must have a deck. This deck may be enhanced with more cards sold in booster packs.
Wizards of the Coast (Card game)
Release Date: NOW CG $7

'SEGA AGES' The hottest hits of the 80's arcades are finally available on a home system. On a single cd, 'Sega Ages' features the blasting sci-fi madness of 'Space Harrier', the tune-rockin' tour race 'Outrun', and the top gun action of 'Afterburner II'.
Working Designs (Bundle)
Release Date: NOW SAT $40

'TIME CRISIS' Blast through the original arcade hit, with an all new shooting scenario. Comes with the most accurate gun available for PlayStation, which has a button allowing you to escape incoming bullets, not just absorb them.
Namco (Shooter)
Release Date: NOW PSX $69

'COMPUTER GAMES CALENDAR' Featuring Star Wars 'Rebellion', East Front, Jurassic Park 'Trespasser', Prelude to Waterloo, Half-life, Cyberstorm 2, Earthseige 3, Curse of Monkey Island, Might and Magic VI, SpeedTribes, StarFleet Academy, and Tomb Raider 2.
Release Date: NOW $12.95

Visa, MC and Discover accepted. Checks held 4 weeks. MONEY ORDERS UNDER $200 SAME AS CASH. COD $8. Price, availability, offer subject to change at any time. Release schedules and shipping times are approximate, not guaranteed, and subject to change at any time. Hardware orders may require additional shipping and handling charges. Defectives replaced with same product. All sales final. Call for details. Shipping and handling charges calculated on a per order, per shipment, and per item basis. The "per order" charge is charged once per order placed and the "per item" charge is charged once for each item ordered and the "per shipment" charge is charged once for each shipment we make to you. Each United States order will include a 12-issue subscription starting with the Nov. 1997 issue (while supplies last) of *Computer Games Strategy Plus* Magazine, for which $10.00 of the order cost will be allocated.

	Standard U.S. Mail 7-10 Days	Priority U.S. Mail 2-3 Days	2 Day	Over Night 1 Day	Mail To Canada 4-7 Days	Mail To The World 7-14 Days
Per Order	$1.00	$2.00	$2.00	$2.00	$2.00	$2.00
Per Shipment	$1.25	$1.00	$3.00	$7.00	$2.00	$2.00
Per Item	$0.75	$1.00	$1.00	$2.00	$2.00	$6.00

©1997 CHIPS & BITS, INC.

Maneuvering in Mission 9 will be difficult due to the confined area in the Strait, but you've got to get to a damaged merchant ship.

9. KEEP THE PETROL FLOWING

Two Kilo class submarines are chasing after a damaged merchant tanker. You must arrive there first, so set your course for 300 degrees and make turns for 25 knots. Maneuvering will be difficult because of the confined area in the Strait. Make your depth 100 feet. This will ensure that you don't plow straight into the bottom.

Once you reach the vicinity of the merchant ship, change course to 270 degrees. You'll want to get between it and the subs coming in from the west. Drop your speed to 5 knots and deploy your towed array. The Kilos are quiet but they're no match for your 688(I). Assign two ADCAPs per sub.

10. LET MY PEOPLE GO

Your objective is to drop off a Navy SEAL team at 08-29N, 077-06W by 02:00 hours. Mark this location on your Navigation overlay. You must remain at this location for the next two hours in order to recover the SEAL team and hostages. Three Turya class patrol boats are in the area. Don't engage them unless it is absolutely necessary. A Helix helicopter is on patrol north-north-west of your location. Spend as little time on the surface as possible.

Dropping off and recovering a Navy SEAL team is the main objective of Mission 10.

11. NEED A LIFT

This is one of the more interesting missions. There are two Kilo class enemy subs in the area, a crippled friendly sub to rescue, a DSRV to deploy and recover, plus a minefield to watch out for. Time is critical. You have only three hours to make the rescue.

Set your course for 360 degrees and make turns for 32 knots. This course will keep your sub safely east of the minefield. Your objective is to drop off the DSRV at 26-49N, 56-41E. Mark this location on your Navigation overlay. Upon reaching this point, set your speed to zero. The DSRV will launch and recover automatically.

In Mission 11, you have only three hours to make a critical rescue of a friendly sub. Watch out for the two Kilo class enemy subs and a minefield you'll run in to along the way.

III. Campaign Region 1: The Caribbean

1. SEALING THEIR FATE, PART I

Your mission is to insert a Navy SEAL team off the southern coast of Cuba (22-02N, 080-38W). Success depends on remaining undetected. Engaging enemy vessels is out of the question. The water is deep enough to allow you to get below the layer and crank up your speed. Do it. You must reach the insertion point quickly. Watch out for the Foxtrot class sub and Koni class frigate. These vessels are located between you and the drop-off area. Since you cannot engage them, determine their bearing and then cut behind them.

2. SEALING THEIR FATE, PART II

This mission requires you to go back in a pick up the SEAL team you dropped off previously. Two enemy Foxtrots are stationed along the coast near the pick-up point (22-02N, 80-38W). They are creeping along at 3 knots just waiting for you to come sailing in. Be careful. Two Osa class patrol boats are located 20 nautical miles to your west. They are also moving toward the pick-up at high

speed. Finally, a Grisha class frigate is several nautical miles east of your position. It is likely to detect you unless you dive below the layer and keep your speed low.

3. DOING DRUGS

Congratulations, you recovered the team and brought back proof of drug labs in Cuba. Now you must destroy these labs with Tomahawk missiles. Move quickly to the launch point and fire two missiles at each lab. The coordinates are given to you via radio. On your targeting map, you'll see the location of enemy SAM bunkers. Steer your TLAMs between the bunkers to avoid having the missiles shot down. There are no enemy subs to worry about, but there are three Osa patrol boats and two enemy choppers in the area.

4. CRUSH THE CARTEL

Two cargo ships containing drugs will be leaving the port of Barranquilla. Monitor the radio for the latest information concerning their exact location. You are not authorized to attack vessels of the Columbian Navy, so steer clear. They may mistakenly attack you. When the mission begins, set your course for 145 degrees and make turns for 5 knots. The two cargo ships will appear on sonar before long. Fire two torpedoes at each vessel.

5. SNATCH THE BOSS

This is the last mission in the campaign. You are to take out the drug lord by blowing up his yacht called the *de la Cruz*. The yacht is located 30 nautical miles directly east of your present position. When the mission begins, set a course for 80 degrees. You may destroy the yacht with either Harpoons or torpedoes. The actions you take are left up to you. Two FS 1500 patrol boats are also in the area; however, keep in mind that they are not in a position to interfere unless you linger at the start location.

Make sure you know what you're aiming at before launching any of these weapons — you're going to feel mighty bad if you take out Willy the whale and his family.

IV. Campaign Region 2: The Mediterranean

1. RO/RO YOUR BOAT

Your objective is a RO/RO container ship located 20 nautical miles to the north-northeast. Wait for radio traffic giving you permission to fire. When authorized, get an ESM fix on the vessel then launch your Harpoons.

There are numerous neutral and civilian vessels in the area so be careful where you go and where you aim. There is one Heroj class sub further to the north, but it does not represent a serious threat to your sub.

2. ACROSS THE LINE OF DEATH

You are protecting a friendly battle group consisting of the USS Nimitz and two Arleigh Burke cruisers. These vessels are located about 30 miles to the west of your position. A fast moving Osa class patrol boat has slipped between you and the battle group. Radio traffic will give you permission to fire. Hit the Osa with several Harpoons as soon as possible. A Kilo class submarine, located north of you, is also threatening the battle group. It is traveling above the layer at 6 knots. Target it with two ADCAPs.

3. SURGICALLY REMOVED

You are ordered to destroy two Libyan airbases with TLAMs as a retaliatory measure. Radio traffic gives you the firing point and launch window. Move quickly to 31-47N, 18-55E. Two Libyan IL-38s are releasing sonobuoys nearby, so you will have to complete the firing sequence and leave the area quickly. Steer your TLAMs so that they avoid the SAM sites near the coast. A three ship Libyan surface group is located to the west. You are free to engage these vessels only after you destroy your assigned targets.

Wait for authorization before getting an ESM fix and launching in the first Campaign Region 2 mission.

During the third training mission, you will want to swap out some of your torpedoes in favor of extra mines.

The stateroom in *688[I] Hunter/Killer* is sure pretty to look at — but you won't be spending a lot of time here. You need to get off your butt and get back into the action!

V. Campaign Region 3: The Persian Gulf

1. STRAIGHT TO HELL

This mission is like playing with razor blades in the middle of a busy intersection. You must confirm the presence of a minefield while dealing with two angry Kilo class subs and a couple of Helix helicopters. Radio traffic will direct your activities. The enemy vessels have highly rated crews, so be careful. There is no time limit to worry about. Track down and destroy the subs first, then deal with the mines.

2. DUCK IN A SHOOTING GALLERY

You are to launch a Navy SEAL team with orders to knock out an Iranian oil platform. Radio traffic directs you to the release point. A Koni class frigate and Kotor gunboat are patrolling the area. Avoid engaging these vessels unless absolutely necessary. Release the SEAL team, and then remain on station. The team will return for pick-up automatically. Transmit the "mission complete" message when you are at least 100 nautical miles away.

3. SINK THE NAVY

This is a straight-up fight with the Iranian Navy. Three enemy surface ships are located about 20 nautical miles away to the north-northeast. Use your ESM sensor and Harpoon missiles to target and destroy them quickly. A Kilo class sub is directly north of your start position. It has a Novice crew and should be easy to deal with. A Helix helicopter is flying a box patrol to the west. Ignore it because it will not venture close unless you spend too much time near the surface.

VI. Campaign Region 4: The North Pacific

1. THEY SAID THEY WERE JUST TRAINING

This mission requires you to locate four North Korean minisubs. These tiny vessels are hard to detect. You'll have to use active sonar, so forget about remaining stealthy. There are four Grisha patrol boats strung in a line running west to east. Set a course of 230 degrees and dive below the layer. Turn to 270 degrees after about 20 minutes. You'll find the mini-subs west of 128E. Be advised that two Helix helicopters are also patrolling this area.

Many missions require you to dive deep below the layer — just be careful to not hit the bottom.

2. ROGUE RUSSIAN

This is a sub versus sub duel. An Akula class boat (with an Advanced rated crew) is protecting a Delta class SSBN (also with an Advanced rated crew). These subs are both located approximately 15 nautical miles to your north-north-east. They are moving very slowly above the thermal layer in preparation to launch nuclear SLBMs. Take out the Akula first. It is the more dangerous of the two subs. There is a whale pod very close to the enemy subs. Check your targets carefully before firing.

3. REBEL REVENGE

This is one of the interesting missions. An Akula class sub is hunting a British (allied) Trident class sub. You must take out the Akula without anyone knowing you're there (even the Trident). As the mission begins, you are between the two subs. The Akula is located 20 nautical miles away along a bearing of 155 degrees, give or take. Proceed slowly to avoid detection. The Akula will have to pass by you in order to get to the Trident.

At your port of call, you can get repairs to damaged parts or go ahead and get them replaced. You can also do several upgrades while here.

4. GIVE IT EVERYTHING YOU'VE GOT

The final mission in the game is a blockbuster. Your objective is to kill off the Russian aircraft carrier Kuznetsov. Protecting it, however, is a surface group containing a Krivak and two Grishas. There are also two Akulas, two Kilos, and a Foxtrot in your immediate area, not to mention two Helix helicopters overhead. To win this mission, you must lay a minefield at several pre-determined locations. Monitor the radio for late breaking news. Good luck. There are no easy hints to relate here. Just give it everything you've got!

Blood
Arcade Style 5115100
DOS/WC 486/66, 16mb, J

Duke Nukem 3D: Atomic Edition
Arcade Style 5105804
DOS 486/66, 8mb

Command & Conquer: Red Alert
Strategy Game 5105101
DOS/WC Pentium, 8mb

First Aid 97 Deluxe
Utilities 5098306
WIN '95 486, 8mb

WarCraft Battle Chest
Strategy Game 5123807
DOS/WIN3.1/WC 486/33 or MAC 68040, 8mb

Quake
Arcade Style 5097902
DOS/WC Pentium, 8mb

Give or Get 2 CD-ROMs for $4.95 ea.

PLUS 1 MORE AT GREAT SAVINGS!
(See details below.)

	Flying Corps DOS/WC Pent90, 16mb, J	Flight Sim.	5105606
NEW	**Links LS 1998 Edition** WIN '95 Pent90, 16mb	Sports	5121702
NEW	**Links LS** DOS/WC 486/66, 12mb	Sports	5121801
	The Roberta Williams Anthology DOS/WC 486, 8mb	Adventure	5107206
	Compton's Interactive Encyclopedia '98 WIN3.1/WC Pent., 8mb	General Reference	5126800
	Command And Conquer DOS/WC 486/66, 8mb or MAC 68040, 16mb	Strategy Game	5050208
	Home And Garden 3D WIN3.1/WC 486/33, 12mb, P	Home/Personal	5115803
	Hoyle Casino WIN3.1/WC 486/33, 4mb	Strategy Game	5093109
	Jumpstart Kindergarten WIN3.1/WC 486, 1mb or MAC 68040, 4mb	Children's Ed.	5027701
	Jumpstart Pre-K WIN3.1/WC 486/33 or MAC 68040, 8mb	Children's Ed.	5091400
	Masterclips 35,000 Premium Image Collection WIN3.1/WC 386, 4mb, P	Clip-Art Library	5084801
	Corel Gallery WIN3.1 386 or MAC LCII, 4mb, P	Clip-Art Library	5010301
NEW	**Reader Rabbit 1: Deluxe** WIN3.1/WC 386/25 or MAC 68030, 8mb	Children's Ed.	5110705
	Pod (MMX compatible) WIN '95 Pent120, 16mb	Arcade Style	5108709
	Interstate '76 WIN '95 Pentium, 16mb	Arcade Style	5108600
NEW	**How To Buy Mutual Funds** WIN3.1/WC 486, 8mb	Home/Personal	5119607

How To Select CD-ROMs For Your System.

Each selection includes the following important information: minimum system required, minimum CPU required, minimum RAM required, and required peripherals in addition to a mouse and keyboard (J=joystick, P=printer).

For all titles, the minimum system requirements recommended (unless otherwise indicated) are: Hardware: SVGA monitor (256 colors), sound card, 40mb hard drive, double speed CD-ROM drive. Operating System: DOS 5.0; Windows 3.1; Macintosh System 7.0; (WC=WIN '95 compatible); WIN '95 =designed for Windows '95 only. Pent.=Pentium.

NEW	**Super Solvers Spellbound** WIN3.1/WC 386/25 or MAC 68030, 8mb	Children's Ed.	5111901
	Mechwarrior 2: Battle Pack WIN '95 Pentium, 16mb, J	Arcade Style	5108501
	Mechwarrior 2 Mercenaries DOS/WC 486/66, 8mb, J	Arcade Style	5091905
NEW	**The Jenny Craig Cookbook** WIN3.1/WC 486/33, 8mb or MAC 68040, 4mb	Home/Personal	5118708
	The 7th Guest DOS/WC 386 or MAC LCIII, 4mb	Interact. Game	5004700
	Earthsiege 2 WIN '95 486, 8mb, J	Arcade Style	5080700
	Phantasmagoria DOS/WIN3.1/WC 486/66 or MAC 68040, 8mb	Interact. Game	5004502
	First Aid 3.1 WIN3.1 386, 4mb	Utilities	5098405
	The 11th Hour DOS/WC 486/66, 8mb	Interact. Game	5054309
	Nickelodeon: Director's Lab WIN3.1 486, 8mb	Children's Enter.	5081005
	Indycar Racing II DOS 486/66, 8mb or MAC PMAC, 16mb	Driving Sim.	5083308
	Z DOS 486/66, 8mb	Strategy Game	5089404
	Resume Maker Deluxe CD WIN3.1/WC 386/33, 8mb, P	Home/Personal	5050703
	Pitfall: The Mayan Adventure WIN '95 486/33, 8mb	Arcade Style	5076005
	Earthworm Jim WIN '95 486/33, 8mb	Arcade Style	5075304
	Floorplan Plus 3D WIN3.1/WC 386, 4mb	Home/Personal	5084702
	Command Aces Of The Deep WIN '95 486/33, 8mb	Strategy Game	5080809
	Front Page Sports Trophy Bass 2 WIN3.1/WC 486/66, 8mb	Sports	5093604
	Freddi Fish 2: The Haunted Schoolhouse WIN3.1/WC 486/33 or MAC 68040, 8mb	Children's Enter.	5093406
	Print Artist 4.0 WIN3.1/WC 486/33 or MAC 68030, 8mb, P	Home/Personal	5089305
NEW	**Leisure Suit Larry Collection** DOS/WC 486, 4mb	Adventure	5116009

NEW	**Police Quest Collection** DOS/WC 486, 4mb	Adventure	5115902
	Beavis And Butt-Head In Screen Wreckers WIN '95 486/66, 8mb	Home/Personal	5117205
NEW	**Zork: Legacy Collection** DOS/WC 486/66, 8mb	Adventure	5114004
	Final Doom DOS/WC 486/33, 4mb or MAC 68040, 8mb, J	Arcade Style	5083209
	Beavis And Butt-Head In Virtual Stupidity WIN '95 486/33, 8mb	Adventure	5075007
	Gabriel Knight: The Beast Within WIN3.1/WC 486/33 or MAC 68040, 8mb	Adventure	5060405
	Silent Thunder: A-10 Tank Killer 2 WIN '95 486/66, 8mb, J	Flight Sim.	5080908
	The Oregon Trail II WIN3.1/WC 486, 8mb or MAC 68030, 5mb	Children's Ed.	5078308
	The Time Warp Of Dr. Brain WIN3.1/WC 486/66 or MAC 68040, 8mb	Children's Ed.	5106307
	Star Trek Deep Space Nine: Harbinger DOS 486/66 or MAC 68040, 8mb	Adventure	5072608
	WinDelete WIN3.1/WC 386, 8mb	Utilities	5084504
NEW	**Logic Quest** WIN3.1/WC Pentium, 8mb	Children's Ed.	5110200
NEW	**Select Phone** WIN3.1/WC 486/33, 8mb	Home/Personal	5120100
	Phantasmagoria: A Puzzle Of Flesh WIN '95 Pentium, 12mb	Adventure	5102801
NEW	**Net Accelerator** WIN '95 486, 8mb	Utilities	5120605
	3D Ultra Pinball: Creep Night Arcade Style 5088208 WIN3.1/WC 486/33, 8mb or MAC 68040, 12mb		
	NASCAR Racing 2 Driving Sim. 5104609 DOS/WC 486/66, 16mb		

COLUMBIA HOUSE
CD-ROM DIRECT

A whole new way to get the most exciting CD-ROMs this holiday season – games, reference, edutainment and more – all at great prices! Great to give as gifts. Great to keep for yourself. Just write in the numbers of the 2 CD-ROMs you want for $4.95 each, plus shipping and handling. In exchange, you agree to buy 4 more CD-ROMs in the next 2 years, at our regular prices (currently as low as $29.95, plus shipping and handling) – and you may cancel membership at any time after doing so. What's more, you can get one more CD-ROM right now for the low price of $19.95 and have less to buy later (see complete details in coupon).

Free CD-ROM magazine sent approximately every 4-6 weeks (up to 13 times a year) reviewing our Featured Selection – plus scores of alternate choices, including many lower priced CD-ROMs. And you may also receive Special Selection mailings up to four times a year. (That's up to 17 buying opportunities a year!)

Buy only what you want! If you want the Featured Selection, do nothing – it will be sent automatically. If you'd prefer an alternative selection, or none at all, just mail the response card always provided by the date specified. You'll always have 14 days to decide; if not, you may return the selection at our expense.

Money-Saving Bonus Plan. If you continue your membership after fulfilling your obligation, you'll be eligible for our generous bonus plan. It enables you to enjoy great savings on the CD-ROMs you want – for as long as you decide to remain a member!

10-Day Risk-Free Trial. We'll send details of how Columbia House CD-ROM Direct works along with your introductory package. If you're not satisfied, return everything within 10 days at our expense for a full refund and no further obligation.

Act now, membership in CD-ROM Direct may be limited.

For faster service, use your credit card and call us toll-free 24 hours a day.

1-800-792-1000 Dept. SY5

Check us out online! For more titles...to order...or for more information.
http://www.columbiahouse.com/cdrom

Columbia House CD-ROM Direct

Dept. SY5, 3109 Canterbury Court, Bloomington, IN 47404-1498

Yes, please enroll me under the terms outlined in this advertisement. As a member, I need buy just 4 more CD-ROMs at your regular prices within the next 2 years.

Send my CD-ROM selections for: (check one only) ☐ PC (1) ☐ Macintosh (3)

Send me these 2 CD-ROMs for just $4.95 each plus $1.75 each shipping/handling (total $13.40). Write in the selection #'s below: # _____ # _____

Buy your first selection now and have less to buy later!

☐ Also send my first selection for $19.95 plus $1.75 shipping/handling which I'm adding to my $13.40 payment (total $35.10). I then need to buy only 3 more (instead of 4) in 2 years. #_____

Please check how paying: ☐ My check is enclosed. (BYX/BY1)

☐ Charge my introductory CD-ROMs and future CD-ROM Direct purchases to: (BYY/BY2)

☐ MasterCard ☐ Diners Club ☐ AMEX ☐ VISA ☐ Discover

Account Number _____ Exp. Date _____ Signature _____

My main CD-ROM interest is: (check one) (Note: You are always free to choose from any category.)

☐ Entertainment ☐ Education (includes children's titles) ☐ Edutainment ☐ Productivity

Name _____ Phone (_____) _____

Address _____ Apt. _____

City _____ State _____ Zip _____

Important! Did you remember to choose PC or Mac? Will your selections run on your system?

Note: Columbia House reserves the right to request additional information, to limit membership or reject any application, or to cancel any membership. Offer limited to residents of the contiguous United States. Residents of Alaska, Hawaii, Puerto Rico, U.S. territories, APO and FPO addresses please write for separate offer. Applicable sales tax added to all orders. F97-CDR-11G

©1997 The Columbia House Company

Media On GAME EXTREME

MGPX166 Featuring:

- Intel 166MHz Pentium® Processor with MMX™ Technology
- Intel AN430TX Motherboard with 512K cache
- 16 MB DIMM
- 3 GB EIDE Hard Drive/1.44 MB Floppy Drive
- Metabyte Gia 3D w/4MB EDO RAM(S3 ViRGE)
- 16X CDROM
- Yamaha Sound System
- 104 Win95 Keyboard & Mouse
- Mini-ATX CASE with 235 Watt Power Supply
- Microsoft Windows 95 /McAfee VS SCAN
- Diamond Supra 33.6 Modem
- Monitor Sold Separately

MGPX166 $999

MGPX200 Featuring:

- Intel 200MHz Pentium® Processor with MMX™ Technology
- Intel AN430TX Motherboard with 512K cache
- 32 MB DIMM
- 3 GB EIDE Hard Drive/1.44 Floppy Drive
- S3 ViRGE 3D with 4MB EDO RAM
- Yamaha Sound System (OPL3 Driver)
- 16X CDROM
- Mini-ATX CASE with 235 Watt Power Supply
- PS/2 Keyboard & Mouse
- Microsoft Windows 95/McAfee VS SCAN
- Diamond Supra 33.6 Modem
- Monitor Sold Separately
  233MHz Upgrade add $125

MGPX200 $1,199

Note. Intel Inside and Pentium are registered trademarks and MMX is a trademark of Intel Corporation. All other names are properties of their respective corporations. Price and specifications are subject to change without notice. Not responsible for typographic errors.

Media On GRAPHIC EXTREME

MEPX200 Featuring:

- Intel 200MHz Pentium® Processor with MMX™ Technology
- Intel AN430TX Motherboard with 512K Pipeline Burst Cache
- 32MB DIMM/1.44MB Floppy Drive
- 4.5 G Ultra Wide SCSI HD with UW SCSI Controller
- MATROX 3D with 4MB SGRAM
- Yamaha Sound System
- 16X SCSI CDROM
- 100Mb Zip Drive
- Diamond Supra 33.6 Modem
- McAfee VS SCAN
- keyboard & Mouse/Windows 95
- Monitor Sold Separately

MEPX200 $2,155

Expert II Featuring:

- Intel 233MHz Pentium® II Processor
- 32MB EDO RAM/1.44MB Floppy Drive
- 4.5 G Ultra Wide SCSI HD with UW SCSI Controller
- PS/2 keyboard & Mouse/Windows 95
- Yamaha Sound System
- 16X SCSI CDROM
- MATROX 3D with 4MB SGRAM
- Diamond Supra 33.6 voice modem
- McAfee VS SCAN & Win95
- Monitor Sold Separately

266MHz Upgrade Add $175

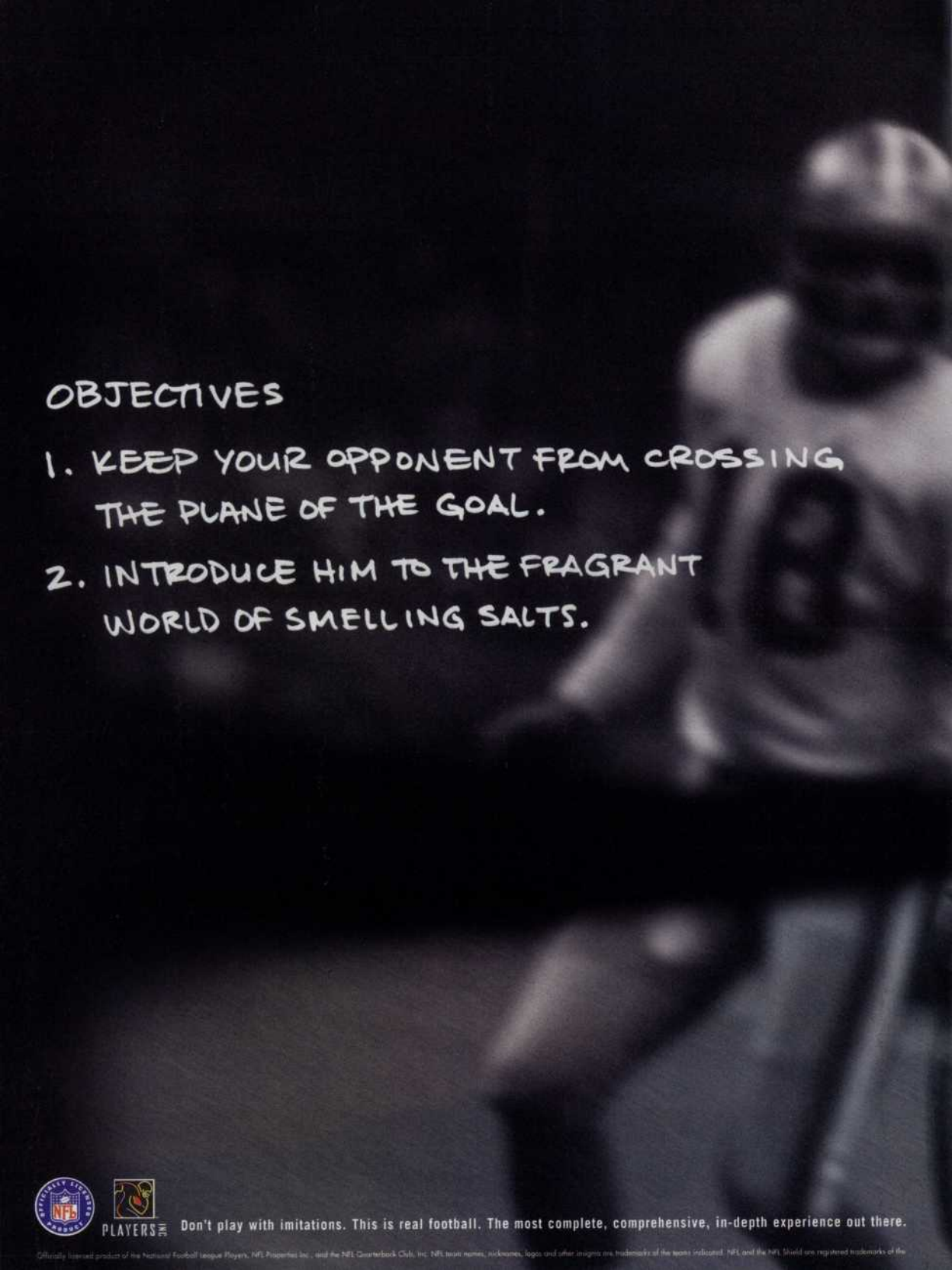
EXPERT II $2,399

* 2 years limited warranty/2 years free labor

call: **1-888-U-GAME-IT** 1-888-842-6348

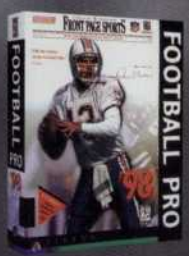
Product Information Number 230

MMX intel inside pentium II



Officially licensed product of the National Football League Players. NFL Properties Inc., and the NFL Quarterback Club, Inc. NFL team names, nicknames, logos and other insignia are trademarks of the teams indicated. NFL and the NFL Shield are registered trademarks of the

SIERRA®



Product Information Number 319

FOOTBALL PRO '98
IT'S NOT JUST A GAME.

Strap on the pads. Reality is just a stutter step away. www.sierra.com/fb98.

National Football League. The PLAYERS, INC. logo is a trademark of the National Football League Players. ©1997 Sierra On-Line, Inc. ® and/or ™ designate trademarks of, or licensed to Sierra On-Line, Inc. Bellevue, WA 98007. All Rights Reserved. Photo © Bob Rosato/NFL Photos.

The Space Bar, Part 1

This step-by-step solution should solve all your problems!

Steve Meretzky's latest adventure is a terrific game, but it's huge, and it's tough too. So, over the next few issues we'll be making your life much easier with this serialized solution direct from Steve Meretzky and Patricia Pizer at Boffo Games.

Celia is one of the belly-dancers at the Space Bar — treat her nice, and she'll help you out.

Note: This walkthrough provides one of the shortest possible routes through the game. We highly recommend exploring and trying things that are "unnecessary," as these are the things that provide much of the humor and surprises in the game.

First, chat with Thud, the large, green, lizard-like fellow at the bar, and solve his flashback. To win this flashback, stash the cup (on the shelf near the drawers). Exit through the door. Chat with Fleebix (the pear-shaped guy in the jar on the bar) and solve his flashback.

In this flashback, you'll see a second "you" icon shaped like Thud. You can give orders to Thud using this "shortcut." Order Thud to get the cup and then come outside. By looking in the cup, you'll find a bus token. When the bus pulls up, try to board the bus. Thud will forget you and come back for you, missing the bus. Wield the token again and wait a couple of turns. When the bus returns, Thud will take you onto the wrong bus. There is no way to avoid this.

Once at your new location (The Glom Hole), order Thud to open the mailbox and have him get the letter. Order him to open the letter and have him pick up the mailing label that has fallen to the ground. Go down the road and have Thud paste the mailing label on the box. Take a closer look at the wreckage here. You'll find a nav dial on the foreground. Stash it for later.

Don't spend too much time watching the dancers on the stage area — you've got a murderer to catch!

Have Thud take the cardboard box and return to the area near the mailbox. Have him drop the box and enter the box. Wait a few turns, and the mail truck will pick you up. Once inside the truck, exit the box. You'll see a small package lying in the back of the truck. Open it and have Thud stash the crystal within. Wait approximately 8 turns. Eventually, the cursor will free up and the voices will stop. Exit the box.

Get the nav dial from your stash and drop it on the driveway. Get back in the box and wait for the scooter owners to find it and go back into the house. Exit the box and have Thud set the nav dial to 42. Don't be concerned if it doesn't appear to be set correctly. It will work. Get back in the box immediately. Wait and listen to the voice overs. When the cursor is available, exit the box.

Have Thud climb the clock tower and pull the lever (this will make him come down to show you what he's found). Send him back up the clock tower. The next part of the puzzle is a process of elimination, so you'll have to repeat these steps until you find the bad crystal. Pick up crystal 1 and have Thud put it in the slot and pull the lever. Have Thud press the red button. If he says, "Yellow button flashing now," it is a good crystal. Have him pull the lever and press the white button. This will return the crystal to your stash. Repeat the process until you find the "bad" crystal (when you hit the red button with the "bad" crystal in the slot, you'll get a text message that nothing happens). Have Thud take the crystal that came from the box and put it in a slot, then turn the knob. Replace the other "good" crystals, turning the knob after inserting each crystal. You will be left with one "bad" crystal. Have Thud pull the lever, press the green button, then the blue button, and descend the clock tower.

Have Thud knock on the lodge door. You will then need to do the Navigation Simulation puzzle. For the first level, click on, in sequence, Fruufnia, Karkas, Armpit, then H'Poctyl. You will then move to level two. In level two, click on, in sequence, Wilbur, Medge, Wall, Roman, Pizer, Woo, Bok. This will move you to the next level. Click on, in sequence, Slug, Pustule, ToeJam, Hellhole, ToeJam, Uranus, Backwater. Now for the final lever, click on, in sequence, No Vacancy, Peggleboz, Archeroids, Packrat, Beacon, Fuge, Battlefish. You'll be told the planet that Fleebix needs to report to for his first mission.

The Junebug-14 Deep Space Shuttle is found in the shuttle while you're in the Zzazzl flashback. You'll need to grab the Outside Access Card lying on the ground to get through the rest of this section.

Soldier Z14-Z67 is your ever-friendly bartender — he'll serve you anything your heart desires — but try to stay clear of those poisonous alien ingredients, huh?

Chat with Soldier, the bartender, and solve the Zzazzl flashback.

The opening movie of Queen Zzoonz will explain your task in this flashback. Begin by rolling the egg into the Mess Hall and follow it there. Go to the Pool Room and stash the plunger. Return to the Mess Hall and proceed to the Food Prep area. From there, enter Battle Station B. Pick up the pike from the rack. Enter the Hallway leading back to the Mess Hall. The egg is lodged in the doorway. Push it and then follow it back into the Mess Hall. Proceed to the Great Hall and use the pike to pry open the elevator doors. Enter the elevator shaft, and you'll find yourself in the Shuttle Bay. Stash the Outdoor Access Card lying on the ground there. Proceed up the mine tracks until you reach the Mine Cart Unloading Area. Go to the control panel (on the raised platform near the track) and press the Black, Green, and Chute buttons.

Enter the maze and go through the green door. Stash the hairball and go down through the Chute. Stash the Ventilation Access Card and go through the black door. Go up the Tracks to the Mine Cart Unloading Area. Use the Outdoor Access Card and slide it through the card reader. Go through the now open gate. You'll see a spear cannon here. Stash the spear. Mount the plunger onto the cannon and aim it right, centering the cannon toward the river. Using the Outdoor Access Card again, slide it through the card reader at the opposite end of the Lookout. Go through the now open door and you'll be in Battle Station B. Stash the card.

Enter the Mess Hall and go to the Pool Room. Drop your hairball into the water there. Return to the Mess Hall and roll the egg into the Food Preparation Area. Follow the egg. Use your Ventilation Access card to open the vent on the left side of the water. Stash the card and roll the egg into the water. Go through the vent. You'll now be at the lookout, and the egg should be in the river ahead of you. (If it hasn't appeared there yet, wait one turn.) Fire the cannon and watch the plunger hit the egg. Reel it in. Using your Outdoor Access card, open the gate to the right of the cannon and push the egg through to the Mine Cart Unloading Area. Use the card again to re-open the gate and follow the egg. Stash the card.

Roll the Egg onto the Mine tracks. Enter the Maze. Go through the Green door and down through the chute. Then go through the black door. Go down the tracks once. Go through the black door on your right. The egg will narrowly miss hitting you. Go through the Green door and down the chute. Go through the Green door and then through the Black door. You'll be in the Shuttle Bay. Roll the egg to the Shuttle. Queen Zzoonz will deliver a speech and give you a brooch as well as the combination to open it. Return to the bar.

After you solve the Zzazzl flashback, click on the magnifying glass over the brooch on the machine behind Soldier. Set the combination levers to 00100111 (0 is up and 1 is down). Stash the key and proceed to the Kitchen. Once there, tear a piece of tin foil off the roll of foil on the counter. Put the foil in the megawave and set the timer for any time period then press the Start button (the red one). It'll blow a fuse and Borksh will

You'll find this police boat during the Trisecks flashback you'll come up against later in the game.

The Napthaleens are moth-like creatures that are permanent residents of the Space Bar — but you won't need to deal with them until near the very end of the game.

Don't make too much commotion when you're exploring Celia's kitchen, or you'll anger her companion.

Arguing with the referee is one of your tasks during the Ziltroid flashback.

Are you ready for some Zeebleball? You'd better be when you jump into the Ziltroid flashback, because you'll be transported to this futuristic sports arena where a game is in progress.

leave to investigate. Use the key to open the Storeroom door and enter the room. Get the pair of nose filters from the shelf. Wear them (there is no harm in putting them in now). Carry on with the game.

From the bar area, proceed to the area outside the restrooms. Pick up the plastic fruit on the coffee table. Go to the dance floor and chat with Seedrot, the plant seated at a table near the runway.

In Seedrot's flashback, turn on the TV. Pick up the collar on the floor near the jumping sheepplant. Put it on the sheepplant. Go to the control panel and adjust the Retractor #3 slider to less than 40. The sheepplant will disappear. (This *is* a good thing.) Go back into the TV close-up and wait for the ad for the "Mystical Experience Salon," then wait for the beginning of Dr. Root's show (next turn). Change to channel "2." Go to the phone and call the number for the Mystical experience salon (leaf-flower-flower-fruit). Next, call Dr. Root (flower-flower-fruit-fruit) and listen to her suggestion. Return to the TV and wait for the ad for "Photo Shoots and Buds." Change to channel "4." Wait for the ad for the announcement of the number to call to order "Nitrogen Fixation Attractors." Turn off the TV. Mom should leave by now. Go to the control panel and adjust the ground temp to less than 30 but greater than 0. Make a note of the time.

Go to the Desk and look under the desk. Using the key you've found, unlock and then open the desk. Get the book and stash it and the key. Now stash the spoon. Go to the Phone and dial the Photographer's number (mushroom-root-pinecone-mushroom). This will get the photographer to come over. Wait a couple of turns and you'll hear a noise that sounds like a pipe bursting (make sure it's been ten turns since you changed the ground temp).

The photographer's arrival may mask the sound of the pipe bursting, so double check the turn count to be sure. When at least ten turns have passed, change the ground temp to greater than 50. Also, adjust the central light bank to the far right (bright) and adjust the right light bank to the far left (off). When the photographer arrives, stash his business card and get the spoon. Put the spoon into the photographer's bag. Do what the photographer asks of you. He'll ask you to "Rustle your leaves." Choose one of your leaves and rustle it. He'll ask you to "Raise your leaves." Do so. Finally, he'll ask you to "Stroke one of your buds." Choose a bud and stroke it. Wait for him to make his phone call.

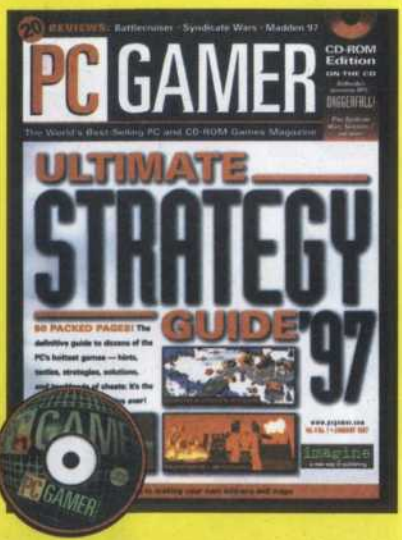
Go to the phone and enter "mush-room-seed-seed-seed" and listen to the call. The photographer will leave and soon the NFAs will arrive and be transferred to your stash. Pick up the NFAs and click on your icon to pour the NFAs onto yourself. Click on bud #3 and bloom it. The bee that followed the photographer should return momentarily and pollinate your flower. It will then turn into a fruit. Open up the book of erotic photos and find a picture you like (make note of which picture it is). Close the book and then fantasize about it. Your fruit will drop off, Mom will return, and then you're back in the bar!

Now, you need to get Seedrot's fruit. Open the book, flip to the page you had chosen in the flashback, and close the book. Order Seedrot to look at the book. She'll drop her fruit, which you'll automatically stash. Put the fake fruit on her and move on.

We hope these tips helped start you off on the right foot — tune in next month for more of our *Space Bar* walkthrough!

You'll get to explore the graphic wonders of the Solarium when you jump into the Vedj flashback — but you'll have to wait until next month's issue if you want to know how to solve it.

Meet Lowpollencount the photographer — when he asks you to rustle your leaves, do it.



SAVE 69%!

☑ **YES! Send me 12 issues and 12 CD-ROMs of PC Gamer for $29.95—a savings of 69% OFF the newsstand price! With my paid order, I also receive special demo versions of Phantasmagoria and Flight Unlimited FREE!**

Name _____

Address _____

City _____ State _____ Zip _____

❑ Bill me ❑ Payment enclosed

Offer good in US only. Newsstand price per issue with disc is $7.99. Canada: $US 43.95 (includes GST). Foreign: $US 53.95. Prepaid in US funds. Please allow 6-8 weeks for mailing of first issue.

42RC7

PC GAMER

SAVE 69%!

☑ **YES! Send me 12 issues and 12 CD-ROMs of PC Gamer for $29.95—a savings of 69% OFF the newsstand price! With my paid order, I also receive special demo versions of Phantasmagoria and Flight Unlimited FREE!**

Name _____

Address _____

City _____ State _____ Zip _____

❑ Bill me ❑ Payment enclosed

Offer good in US only. Newsstand price per issue with disc is $7.99. Canada: $US 43.95 (includes GST). Foreign: $US 53.95. Prepaid in US funds. Please allow 6-8 weeks for mailing of first issue.

42RC7

PC GAMER

SAVE 69%!

☑ **YES! Send me 12 issues and 12 CD-ROMs of PC Gamer for $29.95—a savings of 69% OFF the newsstand price! With my paid order, I also receive special demo versions of Phantasmagoria and Flight Unlimited FREE!**

Name _____

Address _____

City _____ State _____ Zip _____

❑ Bill me ❑ Payment enclosed

Offer good in US only. Newsstand price per issue with disc is $7.99. Canada: $US 43.95 (includes GST). Foreign: $US 53.95. Prepaid in US funds. Please allow 6-8 weeks for mailing of first issue.

42RC7

PC GAMER

Special demo versions of Phantasmagoria and Flight Unlimited FREE!

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

BUSINESS REPLY MAIL
FIRST-CLASS MAIL PERMIT NO 1149 BOULDER CO

POSTAGE WILL BE PAID BY ADDRESSEE

PC GAMER
PO BOX 51199
BOULDER CO 80323-1199

Special demo versions of Phantasmagoria and Flight Unlimited FREE!

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

BUSINESS REPLY MAIL
FIRST-CLASS MAIL PERMIT NO 1149 BOULDER CO

POSTAGE WILL BE PAID BY ADDRESSEE

PC GAMER
PO BOX 51199
BOULDER CO 80323-1199

Special demo versions of Phantasmagoria and Flight Unlimited FREE!

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

BUSINESS REPLY MAIL
FIRST-CLASS MAIL PERMIT NO 1149 BOULDER CO

POSTAGE WILL BE PAID BY ADDRESSEE

PC GAMER
PO BOX 51199
BOULDER CO 80323-1199

SAVE 69% OFF THE NEWS-STAND PRICE

PC Gamer Exclusive T-shirt Offer!

Now YOU can dress

with the same suave sophistication as the *PC Gamer* team. No kidding! When threatened... sorry, questioned with a sharp stick, 10 out of 10 *PCG* staff said, "Heck, yeah! I'd happily fork over $16.95 for such a groovy shirt. Why, look how easily the blood rinses out!" Be the first truly cool gamer on your street. **Order your PC Gamer T-shirt or sweatshirt today!**

T-shirt Only
$16.95!
Order at www.pcgamer.com

BACK

Check out ***PC Gamer Online*** (www.pcgamer.com) for easy ordering, and to take a look at the ***PC Gamer*** sweatshirt. Tastefully embroidered with the ***PC Gamer*** logo, it's a must-have this season for only $39.95.

Ordering information:

- **ORDER ONLINE** with complete security. Go to *www.pcgamer.com* and select the "T-shirts and stuff" button. Also, check out the site often for other neat *PC Gamer* stuff we'll be adding soon.
- **FAX YOUR ORDER** to (310) 815-2636. Mark your order clearly "*PC Gamer*," and include the information requested below.
- **ORDER BY MAIL** Include the information requested, and mail to:
  PC Gamer, c/o Jack Nadel, Inc.,
  9950 W. Jefferson Blvd., Culver City CA 90232

Include the following information with your order:
- Billing Address
- Shipping Address (no P.O. boxes)
- Description of Item
- Size, quantity of each size
- Total cost of items including shipping and handling and applicable sales tax (AZ, CA, CO, TX, & UT residents only)

Shipping/Handling Charges...
Please add the following to your order total:
- Orders $16 to $25.....Add $7.15
- Orders $25.01 to $50...Add $9.70
- Orders $50.01 to $100..Add $13.15
- Orders $100.01 to $200...Add $18.35
- Orders $200.01 to $300...Add $29.95
- Each additional $100, add $6.00.

Method of Payment:

☐ Check or money order made payable to "Jack Nadel, Inc." (Sorry, no CODs)

☐ Visa ☐ Mastercard ☐ AmEx

Account number _____

Expiration date _____

(YOUR ACCOUNT WILL BE CHARGED BY JACK NADEL, INC.)

Please allow 3-4 weeks for shipping after receipt of order.

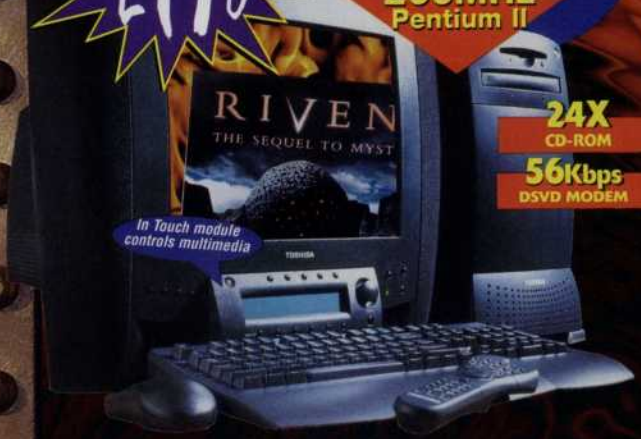
Buy Today Play Tomorrow! at www.pcconnection.com

PC Connection

7-Time Award Winner! PC WORLD Best Mail-Order Company!

Toshiba Infinia 266MHz Pentium II

43306 $2798



24X CD-ROM

56Kbps DSVD MODEM

- ✔ Dazzling 3D graphics with 4MB SGRAM ATI Rage video cards and even MPEG-2 support
- ✔ Models with cable-ready TV tuner and FM radio

SONY 200SX 17"

Genuine 17" Sony Picture Quality Just $699

34930 $699.95

15.9" viewable, front mounted adjustments

Sound Blaster AWE 64 Gold

38951 $189.95

The Most "AWEsome" Sound Yet From Your PC!

4MB of RAM dedicated to sound effects, voices, music plus full duplex phone capability!

Diamond Monster 3D

40162 $199.95

Bring Out Your Monster's Best!

4MB VRAM for all Direct3D or DOS games; eliminates the "jaggies"!

STB NITRO 3D

NEW LOW PRICE: Same Great 3D Performance!

45891 $149

4MB EDO DRAM; up to 1600 x 1200 dpi resolution; w/FREE Skins at Bighorn Golf or Star Trek 25th Anniversary

Memorex 24X CD-ROM Drive

43363 $119.95

Kick-Butt Speed For Your Kick-Butt System!

The fastest CD-ROM speed yet for an incredibly low price!

F-16 Fighterstick

SECOND PLACE IS NOT AN OPTION!

37672 $100

Extreme programmability: one 8-way switch; three 4-way switches; 3 fire buttons; trigger; trim control; even throttle!

800-986-4420

Order by 3AM for Same Day Delivery

Buy It On The Web!

1197PCG

The Gamer's Source: The Best Products... The Widest Selection... The Best Company!

THOUSANDS OF GAMES TO CHOOSE FROM VISIT OUR WEBSITE! TODAY!

RIVEN
The Sequel To MYST

45697 $49.95

Hitachi VisionBook 7000 Pro Series

Enjoy Your Multimedia Games On The Road!

42343 $3199

- 12.1" ACTIVE MAXTRIX DISPLAY
- 133MHz PENTIUM With MMX TECHNOLOGY
- 56.6Kbps PCMCIA X2 MODEM
- 10X CD-ROM (removable)

Starfleet Academy

Are You Bold Enough?

32103 $49.95

Star Trek's first action/flight sim with 25 missions; spectacular 3D settings and 30 legendary enemy starships!

Ultima Online

The Biggest 'Net Game Ever!

43367 $47.95

Interact with thousands of players in constantly evolving virtual 3D world on the Internet!

Accura 56K Fax Modem

38189 $139.95 INTERNAL

56K Modems From The Standard Setters

Upgrade to blazing 56K speed and see how good gaming can be!

38188 Accura 56K (external) $169.95

Quick Cam 2 Plus VideoPhone 2

36042 $179.95*

Look 'Em In The Eye-Live Over The 'Net

Color QuickCam 2 plus video software so you can see and talk at the same time!

* PRICE AFTER $50 MFR. MAIL-IN REBATE

Cambridge SoundWorks

Serious Sound For Your PC!

20Hz to 30kHz frequency response provides full rich sound; 15 Watt subwoofer.

39252 $349.95

MEMORY

Low Prices Guaranteed

Call for a FULL line of Desktop & NoteBook Memory

- 8MB $39.95
- 16MB $69.95
- 32MB .. $149.95

Memory upgrade prices subject to change without notice due to fluctuating market conditions. Please call for the latest price quotes.

Wingman Warrior

31243 $79.95

SHOW 'EM NO MERCY! 360° spin control, two-fisted joystick ideal for first-person shooters!

LOGITECH

5.1GB Caviar HDD

So, Big Even You'll Have Trouble Filling It!

42537 $399.95

Enormous size; simple, geek-free installation!

www.pcconnection.com

Product Information Number 272

Warlords III

Conquer the world of swords and sorcery with these helpful tips

The long-awaited sequel to *Warlords II*, one of the best loved fantasy strategy games of all times, has finally arrived. True to form, *Warlords III: Reign of Heroes* presents an awesome array of strategic and tactical challenges, with options and variants aplenty to keep the scenarios fresh for years. To help keep you ahead of the game, we've got some useful hints from Broderbund's Ron Pereira and Jim Tso. Thanks, guys!

Different sides feature different units in *Warlords III* — and in multi-player games, building a custom side is a must.

Single-player Games

These principles apply to all human versus computer games, whether you're in a campaign, a scenario or a random map.

• Garrison! Build relatively inexpensive units in the first eight turns of owning a city. That is usually sufficient to hold off a decent attack. Then turn your production to a more time-consuming unit such as Knight Lords. We like Knight Lords because they have three hit points and the field bonus. They can take their relative strength out in the open to hold off (or at least inflict major pain on) approaching powerful stacks.

• Remember the two-turn rule. We try not to occupy cities that are within one turn's striking distance of an enemy without being 90 percent sure that we can hold it for at least three turns (which is time enough to vector an adequate garrison there). This is something of a guessing game. One alternative: if you know you are going to capture a city that is within one turn's striking distance from a computer opponent (and this is a desirable city with a temple or other site attached to it), have a defensive stack following right behind your offensive stack to immediately garrison the city. If the computer really wants this city back, first it'll deal with your garrison, then it'll have to take out your offensive stack and thus probably leave itself pretty exposed. Otherwise, if the city is not easily defended, and you don't have garrison troops readily available, and your offensive stack has an opportunity that can't wait three turns, then raze it! Building a nice buffer after you've secured sufficient income and resources helps fend off the computer opponents.

Those tips are defensive in nature, because the crux of offensive strategy revolves around taking advantage of bonuses and hero "super" stacks. You will lose to the computer when your lack of a cohesive defensive strategy allows the computer to whittle away at you. Now, on to how to attack and win.

At the beginning of the game, there are two important things that you should do: Grab as many neutral cities as fast as you can, and avoid war with multiple computer opponents.

It's important that you expand your production base and increase your revenues as fast as possible. The computer does a great job of expanding its initial holdings, and if you don't keep up, the computer will eventually overwhelm you. Concentrate on building cheap units such as Heavy Infantry or Archers. These units make good defensive units and do an adequate job against neutral cities, especially if they're led by your hero.

"All will fall before our mighty wrath!" Having the right combination of powerful units in a stack can make all the difference in a close battle.

Second, avoid war with multiple computer players if at all possible. In the early stages of the game, you're just not prepared to handle multiple computer opponents. Therefore, it's best to expand in areas where it won't antagonize your computer opponent. Resist the temptation to take undefended computer cities — it's not worth it unless you plan to declare war on that side. If it's impossible to do this, check the Diplomatic Report and find the computer opponent who dislikes you the most and is also closest. This side will be the one that is most likely to declare war on you first anyway.

Once you've identified your first victim, start expanding toward him in a methodical manner. Sooner or later, you will take a city that he also wants. At this point, the computer will declare war and attack you. This is the best thing that can happen since you were planning to attack him anyway, and you don't suffer a diplomatic penalty because the computer declared war first. Concentrate on this opponent until you've wiped him out. When you have conquered all of his

Once the game begins, spread out and take over as many neutral cities as rapidly possible, moving in the general direction of the enemy you wish to fight first. Sooner or later, he or she will declare war on you.

When you conquer a city, you are presented with several options, including razing it to the ground. Choosing the raze option is an effective tactic to use on computer opponents if you can't hold the city.

cities, check the Diplomatic Report and find the next likely target.

The benefit to this approach is that you can expand across the map in a methodical manner while maintaining your diplomatic rating. Instead of joining up to defeat you, the computer opponents will spend time beating up on each other. At some point, you will have more cities and armies than any other side on the map. At that time, all remaining computer opponents will likely declare war on you, but it won't matter since they're weakened, and you should have a powerful revenue base and more than enough armies to deal with them.

While you're expanding across the map, be sure to have your hero explore ruins and embark on quests whenever he can. When you complete a quest, always choose Allies as your reward. You will be rewarded with a powerful unit that generally costs you too much to build at one of your own cities. Keep these powerful units with your hero to create a "super" stack. Use this super stack to take particularly difficult cities or to wipe out enemy heroes. Always accept heroes when they're offered, as you can't predict when the next one will be available. Don't choose quests that require you to raze an enemy city or site, as doing so will have negative diplomatic consequences. However, don't hesitate to raze enemy cities once you're at war with them. It won't matter in that case, and it's often the most effective tactic against the computer.

Playing the Campaign

Your strategy during the campaign scenarios should not be too different from playing against regular computer opponents. The difference is that some sides will start the scenario already at war or allied with you. Try to focus on Lord Bane or Lord Sartek if you can, otherwise pick the side that's closest to you for your initial victim.

Since the campaign is a series of linked scenarios, you have the ability to bring your top three heroes from scenario to scenario. You will also find that at the end of each scenario you will have the opportunity to bolster your side's points. With this in mind, there are two basic recommendations:

• Build up your heroes, especially magic users, early. Having three level ten heroes (We like a Warrior with a couple of Paladins and/or Priests) going into the latter stages of the campaign will make the pesky tactics of the AI a little less troublesome. To do this, take Quests. Additionally, make sure at least one of the non-questing Heroes is active taking cities or searching ruins. After the first three scenarios, you should have major world-class Heroes, so protect them well. The extra heroes that are given at the beginning of each new scenario are usually gravy, but are useful for defense.

Choose the right combination of heroes and keep them with you through the entire campaign game. Our tipsters recommend a mage or priest and some warriors.

• Be wise in spending your bonus points on the units. Would you rather have a Knight Lord in two turns or a Pegasi in one? Our recommendation is to take the Pegasi, but you may focus on different units. Use your point purchases to solidify that strategy, whatever your favorite unit might be.

• On to the more tactical stuff. As we mentioned above you have a pretty limited side. You'll find some troop

Here's a situation with a lot of cities closely clustered together. Be sure to guard each castle well, and keep a strike force of Knight Lords handy to quickly ride out and relieve any castle under pressure.

Always keep heroes busy on quests or exploring ancient ruins. When you finish a quest, choose Allies as your reward, and you will be granted a team of powerful creatures to assist you in your battles.

types aren't worth much while others are worth a bunch. Our favorite offensive units are the one-turn Pegasi, and our favorite defensive units are a combination of Infantry, Knight Lords, and Pegasi. This is, of course, after you have built sufficient garrison troops. Here's our basic strategy, although given each scenario's differences, it varies a bit.

While building up your heroes, select focal cities. That is, select and occupy cities that can be defended more easily by one powerful stack than having to cover vast distances with multiple stacks. Often you will find it much more fun to have a stack with open field bonuses (thus our affinity for Knight Lords) in a city that can reach a pretty good number of surrounding cities in one turn. This way, when the enemy tries to approach a city that doesn't have a strong defensive presence and falls just short, you have a stack in a nearby city that can ride out and crush him in the next turn!

With these focal cities, use a point city as your vector point, choosing a city close to the front. Use this city to vector your offensive units. This could be your Catapults in early scenarios and later becomes your Pegasi. In any event, if you have the surrounding cities garrisoned and protected by a defensive stack, you'll find that vectoring all offensive production to this city is a very useful tactic.

Playing in a Multi-player Game

One of the biggest changes in *Warlords III* is the simultaneous movement system in multi-player games. This new movement system allows for some new strategy while presenting new challenges. You have the unpredictable nature of human opponents and the relative randomness of map placement, as well as plain old dumb luck (like when your neighbor gets the castle right next to yours and then finds three dragons on the first turn!).

Given these factors, there are some things you can do to ensure some success. Defense is a key. Many an unsuspecting opponent can be taken out by a single bat running rampant through undefended cities! So keep some Archers in the back line cities as garrison troops. Granted, one stack of archers won't hold off a super stack, but with the missile bonus, you will inflict some pain.

Here are some more things to watch for:

• It is vitally important to keep an eye on what the other human players are doing. A handy tool for this is the Army Report in the Reports Menu

Multi-player games offer a whole new challenge to veteran Warlords players, and the wealth of set-up options offer plenty of game variety.

Computer opponents are often slow to exploit the nearby ruins. Don't miss out on these opportunities to rack up treasure and powerful allies.

button. This report will show the location of all armies in the game at any given time. Learn to check this report frequently during a turn. It allows you to see if anyone is sending armies toward your cities or your heroes.

• Try to get to as many ruins as possible. There's only a finite number on each map, and you shouldn't allow your opponents to gain all the magical items and allies that these ruins hold.

• If you're playing a game with Hidden Map turned on, one of your first priorities should be to scout the entire map.

• Some human players like to raze cities instead of capturing them. The best tactic against these players is to fight fire with fire. Once you start razing their home cities, it will force them to hold at least a few cities. They will also be in a bad position as newly captured cities usually have weaker defenses and no production. You could also just turn off the razing cities option.

• Flying units are extremely powerful units to have in a multi-player game. Even a Giant Bat can cause a fair amount of damage if an opponent is foolish enough to leave his or her home cities undefended.

• The Invisibility spell is incredibly powerful for obvious reasons. A deadly tactic is to have your hero cast an Invisibility spell and send him with an entire stack of flying creatures toward your enemy's rear.

• Finally, the ability to create a custom army side for multi-player games opens up much room for debate as to what would make up the ultimate side. Individual preferences vary, but this is what we prefer: Our regulars consist of a Giant Bat (not only for flying, but for view as well), Dwarf Crossbows, Pegasi, Knight Lords, and Dragons. If you get this group on a roll, it can be a lot of fun. Then, you'll take the "No Mercenaries" option, with your Allies being Pegasi, Air Elementals, Dragons and Dust Wyrms. You should have a Barge, and your heroes should be a General, Paladin, Priest, and Wizard. You want an eight unit stack, turn "sell items" off, and start everyone with 172gp and a maximum of 13 Grey Mana.

Now go get 'em!

ORKS!

Join Humanity's Last Stand In This Epic Battle For Survival In The 41st Millennium!

- Set in the WARHAMMER® EPIC 40,000 universe by GAMES WORKSHOP.® Features the armies of the Imperium of Man and the Space Ork Horde!
- Command a vast army and wage turn-based war on the battlefields of the 41st millennium!
- Campaign play features over 30 scenarios and 20 minutes of live action video.
- Comprehensive encyclopedia covers the forces of the WARHAMMER EPIC 40,000 universe – which includes over 100 unit types to select and control!
- 4-player support via TCP/IP, IPX , and modem.

WARHAMMER EPIC 40,000

HOLISTIC

RP RATING PENDING ESRB

WINDOWS® 95 CD-ROM www.warhammer.ssionline.com

TO ORDER: Visit your retailer or call 1-800-234-3088 (USA & Canada) with Visa or MasterCard.

Call 1-800-771-3772 for Game Rating Information.

GAMES WORKSHOP®

SSI

A MINDSCAPE® COMPANY

Artwork and imagery © 1997 Games Workshop Ltd. All rights reserved. Program © 1997 Strategic Simulations, Inc. All rights reserved. Warhammer and the Games Workshop logo are registered trademarks of Games Workshop Ltd. Final Liberation is a trademark of Strategic Simulations, Inc. © 1997 Strategic Simulations, Inc., a Mindscape Company. All rights reserved. Windows is a registered trademark of Microsoft Corporation. All other trademarks and registered trademarks are the property of their respective holders.

• DIAMOND • ACTIVE LABS • BLUE BYTE • KENSINGTON • LOGITECH • MATROX • NUMBER NINE • MGM • ORIGIN • SYMANTEC • WESTERN DIGITAL • VIEWSONIC • DAVID

COMPUTER Express

WORLDWIDE SHIPPING

800-228-7449 Ext 403

Call to Order Mon - Fri 9:00 am -10:00 pm EST

CUSTOMER SERVICE, CALL 978-443-6125 Mon - Fri 9am - 5pm EST

EAST FRONT
Talonsoft
Start as company commander in the epic battles in mother Russia and work your way up the ranks. Play scenarios preset by an All-Star design team, or create your own using the scenario editor!
Win '95 #46944

CONQUEST EARTH
Eidos
Play as an alien or human and fight to take over Earth. Use your limited resources wisely! Features incredible graphics and smooth gameplay. Take command of land, sea and air forces to ward off invaders.
Win CD #47089

PRELUDE TO WATERLOO
Talonsoft
The award-winning history series returns with the twin battles of Ligny and Quatre Bras preceding the epic struggle at Waterloo. Easy to play, difficult to master!
Win '95 #46943

ORBIT
Kensington
The most comfortable trackball on the market! The Orbit is designed to use the natural motion of your fingers and is shaped to the natural angle of your hand and wrist. Mouseworks software is included.
PC Only #48212

DRACHEN ZOR
Southpeak
No need to play by yourself any more. Multi-player design. 15 high-definition, 3D characters battle through various levels of the Blood pits. Requires Pentium P90, Win95 and CD.
Win '95 #45155

WAR, INC.
Interactive Magic
Welcome to the world of heavy firepower and high-finance. You are the CEO and Commander-in-Chief. It's up to you to command your corporation...and it's armies.
Win '95 #48303

TEMUJIN
Southpeak
Hours of challenging game play await you in the Stevenson Museum. Uncover the secret housed within Genghis Khan's treasures, navigate through beautiful, lavish sets and interact with live characters
Win '95 #44360

CONQUER THE SKIES
Microprose
Features best- selling, award-winning flight simulation games: Falcon 3.0, 1942: The Pacific Air War, Gunship 2000 and Fleet Defender. Four classic flight games at a great price!
Win CD #48456

INCUBATION
TIME IS RUNNING OUT
Blue Byte
Turn-based, tactical "Battle Isle" game. Features a vast array of weaponry and glorious real-time 3D animations. Lead a platoon of space marines, protect the colony and facilitate evacuation!
Win '95 #48302

ULTRASOUND PNP PRO
Advanced Gravis
Ideal for gamers or musicians! Features a 16-bit 32-voice wavetable and full-duplex for Internet phone applications! Upgradable to 8MB RAM for stunning effects processing.
PC Only #42410

MONSTER 3D 3400XL PCI 4MB
Diamond
Works beautifully with any graphics accelerator on a Pentium system. Check out the graphics capabilities on one of the six full-version games that are included!
PC Only #46518

GOLDSTAR 7D 17"
Goldstar
Superior visual performance and stunning audio output combined! Resolution up to 1280x1024 at 60 Hz and an audio system with dome speakers, amplifier and front panel microphone!
Universal #48469

IBM EDUCATION

45031 Algebra Smart CD	27
45302 Berlitz Think & Talk French	79
44526 ConcertWare Home	36
46761 French Now!	54
45101 GRE	20
45485 GRE/GMAT/LSAT Roadtrip Bundle	27
46763 German Now!	54
45027 Inside the SAT & ACT '97 CD	27
41500 Kids Fun and Learning Pack	20
45554 Let's Talk About Me	25
43672 Logical Journey: Zoombinis CD	31
39954 Math Blaster In Search of Spot	29
41469 NFL Math - Second Edition	26
39861 Nine Month Miracle	21
46775 Piano Discovery Software	46
44522 Piano Discovery System	195
45323 Practice Makes Perfect French	28
33605 Putt-Putt Goes to the Moon	21
33205 Putt-Putt Joins the Parade	21
47563 Putt-Putt Travels Thru Time	34
42888 Score Builder for the SAT/ACT	42
47074 Sesame Street:Preschool Deluxe	34
47075 Sesame Street:Toddler Deluxe	34
47140 Solar System Explorer CD	30
46759 Spanish Now!	52
34938 Treasure MathStorm!	36
43981 Typing Tutor 7	27
45454 Ultimate Word Attack	28

IBM HOME SOFTWARE

43638 3-D Landscape	51
43924 Alpha's Home Designer 3D	51
47642 American Greet CreataCard Gold	48
48082 American Greet Creatacard Plus	31
47193 Beat Home Plans by Sunset New	20
41820 Emergency Room	41
45090 Family Album Creator	41
43428 Family Tree Maker Deluxe II	86
32619 Health Bundle	23
46738 MasterCook Deluxe CD	38
39879 Micro CookBook	27
41453 Micro Kitchen:Taste at Home	29
44495 Money	27
37346 Multimedia Workout	27
48170 PC Toolkit	65
46163 Quicken Deluxe	66
45808 Visual Home 3D	53
46093 William-Sonoma Good Cooking	38
42072 20 Wargame Classics	22
47476 3-D Ultra Mini Golf	42
38164 Advanced Civilization	42
45105 Age of Sail	43
42746 Alien Trilogy	40
44617 Archimedean Dynasty	26
40377 Archives Volume 1	26
38189 Ardennes Offensive	48

PC GAMER NOV 1997, PAGE 1

WIN 3.X CD

45077 Armored Fist 2	46
20955 Atlantis PREORDER	41
21040 Atomic Bomberman	41
47696 Babylon 5: Shadow Wars	25
46425 Banzai Bug!	38
43251 BattleGround Vol4 Shiloh	28
39477 Betrayal in Antara	48
40996 Blood!	38
38614 Braindead 13	38
42747 Callahan's Crosstime Saloon	40
46047 Carmageddon	46
40979 ChessMates	33
45075 Comanche III	47
34696 Command & Conquer IBM CD	28
42883 Command & Conquer:Covert	23
45347 Command & Conquer:Red Alert	48
47290 Command&Conquer:CounterStrike	23
45677 Conquest of New World Deluxe	42
48403 Constructor	41
45825 Creatures	35
36302 Dark Forces	27
41009 Dark Seed II	26
41941 Deathtrap Dungeon	38
41585 Descent to Undermountain PREORDER	48
41025 Dragon Dice	34
35232 Dragon's Lair II: Time Warp	36
41586 Duke Nukem 3D IBM CD	34
46281 Duke Nukem 3D Plutonium Pak	27
47382 Duke Nukem Atomic Edition	50
40129 Elder Scroll: Daggerfall CD	55
45616 Emperor of the Fading Suns	26
47771 Entertainment Pk for WinCE	30
45683 Eradicator	20
40468 F-16 Fighting Falcon	48
45253 FIFA Soccer 97	47
42075 Fantasy General	35
43135 Fast Attack	25
36699 Flight Shop IBM CD	46
43033 Flight Sim. Scenery Pack	29
44899 Flight:Great Airliners	39
42886 Flying Corp	43
41508 Flying Nightmares 2 PREORDER	38
42306 Flying Nightmares 2 PREORDER	38
39461 Gabriel Knight II	42
48103 Hardball 5 Enhanced	21
48379 Hardwar	48
47679 Heroes of Might&Magic 2 Expans	27
42560 Hind CD	20
47938 Hollywood Mogul	40
45371 Hoyle Casino Collection	30
43407 Hoyle's Classic Card Games	25
41170 Id Anthology	113
39513 Incredible Machine 3.0	20
40663 IndyCar Racing II	50
45019 Infocom Masterpieces	21
37204 Jetfighter III IBM CD	30
21045 Jetfighter III: Mission Disk	26
40703 Jigsaw Power	34
41134 Lands of Lore 2:Guardians PREORDER	48

WIN 3.X CD

43167 Legend of Kyrandia Series	25
44956 Leisure Suit Larry VII IBM CD	50
47371 Links LS Valderamma CDX	21
47373 Links LS Valhalla Course	21
46384 Links:5 Course Library #3 CD	20
45376 Lords of the Realm II	50
41466 X-Car: Experimental Racing	49
47738 You Don't Know Jack Movies	30
45886 You Don't Know Jack Sports	30
48436 You Don't Know Jack XXXL PREORDER	44

PC HARDWARE

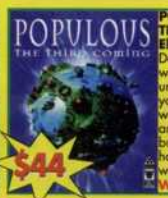
46288 1.70GB EIDE Fata3 12MS 4480RPM	205
39348 4X5 Artpad II w/ Serial Cable	149
34338 AHA-1520B Single FSCSI2	71
47314 All-In-Wonder 4MB	269
46971 BigPicture Video Kit 33.6Voice	389
40715 CH F-16 Combat Stick	60
40802 CH F-16 Fighter Stick IBM	100
16439 CH Flight Stick	27
31417 CH Flight Stick Pro	50
24017 CH GameCard III	26
45211 CH Gamepad 8	19
47329 CH Jane's Combat Stick	74
20288 CH Mach III Joystick	24
40701 CH Pedals	42
36876 CH Pro Pedals	79
40803 CH Pro Throttle	95
48053 CH Racing System	85
38950 CH Trackball Pro - Serial	70
38462 CH Virtual Pilot Pro	69
46740 Colorado T3000 INT 3.2GB	198
47218 Courier 56K EXT V.Everything	279
47217 Courier 56K INT V.Everything	249
47033 Discovery AWE64 Infra2400 16x	249
46162 Dynamite 128/Video 4MB PCI	129
42732 EIDE-AT32 VP Kit ISA w/ cable	37
44608 EIDE-VL VP Kit ISA w/ cable	58
20652 EasyPhoto Reader 2000PI 24Bit	139
46442 EasyPhoto Smartpage 3000PI	180
46259 GameJammer PCMCIA Internal	179
47316 Glidepoint Touch Pad 2	59
45357 Gravis Firebird 2 Joystick	68
45358 Gravis Gamepad Pro	32
42146 Gravis GrIP Gamo System	77
42408 Gravis Grip Fighting Machine	89
43465 Gravis Grip Pad Accessory Kit	25
46755 Gravis Grip w/ Triple Play 97	93
46075 Intellimouse Win95 Serial&PS2	78
47793 MSMembers II 8MB	349
44024 MouseMan 96 3-Btn	45
36562 Natural Keyboard for Windows	69
48165 Nitro 3D 4MB 64 Bit 2D/3D	149
44298 NotebookTV PCMCIA2 TV Tuner	249
47234 Overdrive 166MHZ MMX Pent	225
48472 P2 Processor 300MHz w/MMX PREORDER	999
45805 Pentium Pro 200MHz w/Fan	569

ESTIMATED PRICE WARRANTED!*
THE TIME ON COMPUTER EXPRESS

• ACCESS • DARWIN • EIDOS • HOLLYWOOD MOGUL • INTERPLAY • MAG INNOVISION • VIRGIN INTERACTIVE • JALECO • SEGA • ACCLAIM • KLEI • SUBSOFT • INTERACTIVE MAGIC • MICROPROSE • DR. SOLOMON • CHEYENNE • CANON • AVALON HILL • BUNGIE • MAXIS • ACTIVISION • HEWLETT PACKARD • GOLDSTAR • BRODERBUND • INTEL

F-15 TALON
Suncom
12 programmable fire buttons and built-in memory. 4 sets of functions for each fire button for a total of 48 commands. Talon remembers your programmed fire buttons even after your computer is turned off!
PC Only #39876

iF-16
Interactive Magic
From the creators of Apache, Hind, and Tornado comes iF-16, the flight sim that's perfect for any air warrior! You'll long for your G-suit with incredibly realistic weapons systems and cockpit.
Win '95 #40468



POPULOUS: THE THIRD COMING
Electronic Arts
Descend and walk amongst the uninitiated. Summon your shaman to teach wild men to kneel and worship you...to build temples in your honor...to conquer the world in your name.
Win '95 #48066

WARLORDS III
Broderbund
Combine the action of real-time with the depth of turn-based strategy and you've got Warlords III. Random map generator and 80 different heroes, creatures, and warriors keep battles fresh.
Win '95 #48249

FLIGHT SIMULATOR '98
Microsoft
With a global database of scenery, airports and pilot-tested flight models, Flight Simulator '98 is as real as it gets!
$10 upgrade rebate for Flight Simulator users!
Win '95 #48174

G-FORCE PLUS
Suncom
Go from land to air in a snap with G-Force Plus! This full-sized flight yoke is also a realistic-feeling racing wheel! Sturdy design ensures that you won't take a spill and the ergonomic feel keeps you playing for hours!
PC Only #39225

RIVEN
Broderbund
The sequel to Myst promises to be just as enthralling. Prepare yourself, this task won't be as easy. Alluring music and sound effects draw you in, but beware, nothing in Riven is as it seems...
Win '95 #45891

ARMED & DELIRIOUS
Sirtech
Join Granny as she travels to exotic worlds searching for her family. Sense becomes nonsense as poor Granny uses trial and error (mostly error) to save her beloved kin.
Win '95 #47960

ACHTUNG SPITFIRE
Avalon Hill
Assume the role of the French, British or German air force as you relive the Battle of Britain, the German Blitzkrieg on the west, or May, 1940 as the Panzers roll through France. Take control of your air forces!
Win '95 #48278

EXTREME ASSAULT
Blue Byte
Looking for a good adrenaline rush? This game gives plenty of intense action! Features a highly-advanced engine that delivers incredible 3D graphics - accelerator card not necessary!
Win '95 #48250

GAMESTICK 14
CH Products
Ambidextrous design to suit any gamer! The ergonomically-designed base and handle will keep you comfortable for hours of vigorous game play. Fourteen functions to kick butt in any game you choose!
PC Only #48055

TAKE NO PRISONERS
Broderbund
With unique top-down views, this adrenaline-filled game of annihilation from the developers of Hexen II, is a new way to play 3D action-shooters. 24MB RAM recommended.
Win '95 #48239

VIRUS-THE GAME
Sirtech
Your computer has been infected by a virus and you need to journey to the core of your machine to kill it. The Virus will nuke the mouse, keyboard; anything to keep you out. Just be glad Virus is only a game...
Win '95 #47963

LONGBOW 2
Electronic Arts
The cutting-edge sequel to the undisputed Flight Sim of the Year! Features interactive training and a dynamic campaign engine: no two missions are the same!
Win '95 #48076

DEFIANCE
Avalon Hill
Navigate through 13 levels of intense action, attacking creatures that want your blood. 3D acceleration for 3Dfx and an epic movie at the conclusion, should you ever make it...
Win '95 #48244

MYTH
Bungie
The first fully multimetric, real-time tactical warfare strategy game. This masterpiece of epic battle depicts the carnage of the battlefield in all its savage glory.
Win '95 #47797

PC HARDWARE

46228 Righteous 3-D	169
29441 SFX PC GamePad	25
46041 ScanMan Color 2000	129
45410 Sidewinder 3D PRO Joystick	42
47357 Sound Blaster AWE64 Gold	189
46329 Space Orb 360	75
42063 Sportster 33.6 External	150
42064 Sportster 33.6 INTERNAL	120
47166 Sportster 56K Int Fax/Modem	199
47766 Sportster 56K Int Voice F/M	220
44130 Sportster Voice 33.6-EXTERNAL	169
43652 Sportster Voice 33.6-INTERNAL	128
48173 Sportster Winmodem 33.6	79
23301 Stealth3D 2400XL2 PCI 4MB	93
30825 Thrustmaster ACM Game Card	30
35104 Thrustmaster F-16 FLCS	135
44189 Thrustmaster F-22 Pro	128
41348 Thrustmaster Formula T2 PC	112
47443 **Thrustmaster Millenium 3D**	65
48024 **Thrustmaster Rage**	40
29863 Thrustmaster Rudder Pedals IBM	112
38156 Thrustmaster TQS for FLCS	120
31258 Thrustmaster WCS Mark II IBM	104
39846 Thrustmaster X-Fighter	44
45974 Waveforce DB50XG Daughterbrd	133

IBM BUSINESS

45519 Excel 97 CD	309
45520 Excel 97 UPGRD	105
45558 Netscape Navigator Personal CD 3.0	45
45526 Office 97 PRO w/Bookshelf UPGRD CD	329
45453 Windows 95 UPGRD CD w/Explorer	99

WIN '95 CD

45609 11th Hour CD PREORDER	65
47002 688i Hunter/Killer	47
46017 A-10 Cuba	20
43083 Aaron vs. Ruth	40
45234 Advanced Tact Fighters Gold	27
35157 Air Warrior II	50
41536 Al Unser Jr Arcade Racing	25
39144 Apache	26
46445 Baku Baku	21
47556 Balls of Steel	34
46152 Battleship	42
44949 **Birthright**	28
48514 Boggle	29
47529 Brain Food Games	38
47098 British Open Golf CD	42
48169 **Cabin Fever: Snowbound**	29
47660 Capitalism Plus	46
42735 Chaos Overlords CD	21
41849 Chessmaster 5000 CD	35
43903 Close Combat CD	38
23581 **Command & Conquer CD**	41
44560 Conquest of the Skies CD	45
46350 Corel Moto Extreme	28
47923 **Creatures**	35
44561 Crow: City of Angels CD	39
48026 **Curse of Monkey Island** PREORDER	51
47550 Dark Colony	44
46018 Dark Reign: Future of War CD	46
46463 Daytona USA	41
45675 **Descent II: Infinite Abyss**	28
44581 Destruction Derby 2 W95 CD	26
43300 **Diablo**	47
44137 Die Hard Trilogy CD	50
48341 Dilbert Desktop Games	22
47091 **Dominion**	47
41022 Doom II: Hell on Earth CD	24
21696 Dragon Lore II	41
35231 Dragon's Lair II CD	26
45055 **Dungeon Keeper**	47
41027 Earthworm Jim CD	20
44583 Ecstatica 2	47
47516 Entertainment Pack:Puzzle Edit	29
44125 F/A-18 Hornet	44
48171 **FP Sports: Football '98 CD**	28
46885 Fable CD	39
34272 Falcon PREORDER	55
47350 Fallen Haven	27
20969 Fallout	52
47881 Fighter Squadron PREORDER	51
47053 Fischer's Erotic Encyclopedia	36
46076 Flight Sim: Expansion Pack CD	29
48174 Flight Simulator '98	55
44584 **Formula 1 (Psygnosis) CD**	44
44511 Golf Courses: Mauna Kea CD	25
45610 Grand Slam '97 CD	44
45889 Great Battles of Alexander	44
48099 **Gubble**	25
45895 Hardball 6 PREORDER	47
45497 Harpoon '97 CD	36
47882 Heavy Gear PREORDER	47
47883 **Hexen II**	52
41844 HyperBlade	27
44356 ID4:Independence Day CD	49
47385 IF-22 1.0	48
47551 Imperialism	36
44411 Interstate '76	47
47106 **Interstate '77** PREORDER	50
46446 Jack Nicklaus 4	47
48106 Jack Nicklaus 5 PREORDER	47
27422 Kick Off '97	40
47155 Krush Kill N Destroy	27
41123 Lemmings Paintball	20
47695 **Links LS 1998 Edition**	46
48344 Lords of the Realm: Siege Pack	28
48280 Lose Your Marbles	20
44229 M1A2 Tank Abrams	27
48070 **Madden NFL '98**	45
45862 Magic:The Gathering BattleMage CD	41
37926 Magic:The Gathering W95 CD	47
46928 MechWarrior 2 Battle Pack	47
47741 **MechWarrior 2:Mercenaries 3DFX**	47
41149 Microleague: Baseball CD	35
44496 Monster Truck Madness CD	38
41145 Mortal Kombat III	23
48063 Moto Racer	43
47797 Myth: The Fallen Lords	42
44969 NASCAR II W95 CD	46
44566 NBA Jam Extreme CD	46
48072 **NCAA Football '98 1998**	45
45682 **NFL Legends of Football'98**	41
47930 **NHL '98**	45
46961 Need for Speed II	47
44502 Neverhood CD	48
45892 Obsidian	36
44403 Outlaws W95 CD	52
41464 PBA Bowling CD	29
22228 PGA Tour Pro	46
47455 POD	44
45235 Pacific General CD	45
43057 Panzer General II CD PREORDER	44
36773 PitFall, Mayan Adventure CD	20
44966 **Pro Pilot CD** PREORDER	48
47886 Quake 2 PREORDER	52
48513 Ragged Earth	36
47245 Rebellion PREORDER	54
43299 **Red Baron II**	50
48346 Resident Evil	43
43383 Rise & Rule: A. Empires CD	30
46157 Risk CD	38
41232 Road Rash CD	35
48241 Sabre Ace PREORDER	45
45160 Screamer 2 W95	24
48305 Shadows Of The Empire	51
40726 Shanghai Great Moments	20
40775 SimCity 2000 Collection CD	48
43607 SimCity 2000 Special Edtn CD	41
45724 SimCopter CD	25
47107 SimPark	35
44357 Simpsons: Virtual Springfield	25
41987 Solitaire Deluxe CD	26
45977 Sonic CD	32
40123 SpaceWard Hol IV CD	20
41073 Spycraft: The Great Game	20
41255 Star Control III CD	28
43091 Star General	44
40220 Star Trek: Generations CD	50
48127 Stratojams	25
47116 **Strip Poker Pro Vol. II CD**	29
47694 Super EF2000	46
44347 TNN Motor Sports Hardcore 4x4	CALL
45672 Tempest 2000	36
40228 Terracide	40

800-228-7449 Ext 403

CUSTOMER SERVICE, CALL 978-443-6125 Mon - Fri 9am-5pm EST

Call For All Your Computing Needs

Order Mon-Fri 9:00am - 10:00pm EST and Sat-Sun 9:00am - 6:00pm EST

To Fax your order dial: 978-443-5645

or mail your order with a check to:

COMPUTER *Express* 31 Union Avenue, Sudbury, MA 01776

Complete on-line catalog with over 5000 software and hardware titles.

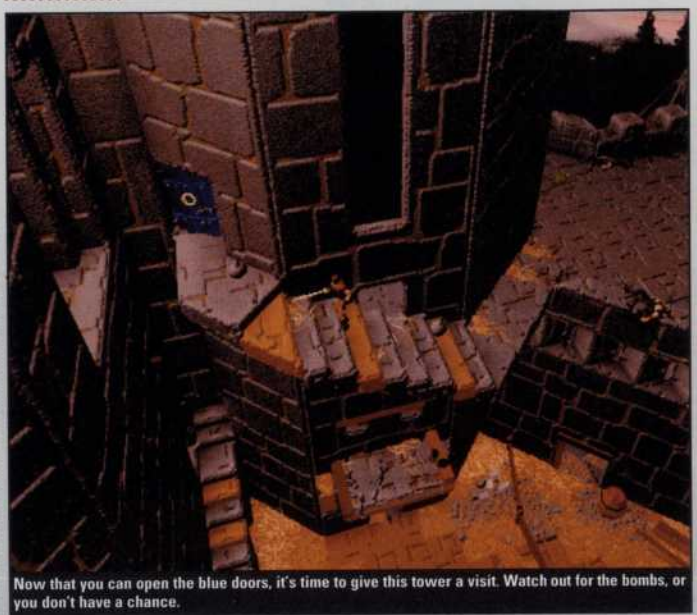
•No surcharge is added to credit card orders. •PO's, wire transfers, personal and cashiers checks accepted. •Some items are not returnable. Returns require authorization # and are subject to 15% restocking fee. •All items offered for sale are subject to availability. •We are not responsible for typographical errors. •Shipping and handling charges apply. •Worldwide shipping! •All prices are subject to change without notice. *If you find a product at Computer Express that is currently sold anywhere for less, show us the ad and we will beat the price!

Ads by Damian

Ecstatica II, Part 2

Yep, this is the rest of the complete solution, so get gaming!

In last month's Strategy Central hints on *Ecstatica II*, we covered how to capture a good number of the Elder Sign pieces. Now, with these easy to follow tips, victory is just around the corner!



Now that you can open the blue doors, it's time to give this tower a visit. Watch out for the bombs, or you don't have a chance.

Okay, so we pick up where we left off — in the clearing just after you've killed the plant guarding a piece of the Elder Sign. Now go back to town and head up to the tower located above the hospital. You can either walk around the bombs or attempt to jump over them. Bash down the blue door. Kill the two demons inside and enter the door on the right. Head upstairs, while clearing your path of any zombies hanging on the wall. Keep heading up until you reach the top floor. Whack open the door, and step into the teleporter. Kill the two demons that will pop out, and then kill the wizard. Take his armor. Teleport back, and obtain the amulet from the claw. Go downstairs. Enter the door directly across from the stairway, then open the blue door. Go inside and grab the fifth part of the Elder sign. Go back downstairs and exit through the large black door. Go around the tower to the balcony with the crystal ball and flashing teleport. Talk to the crystal ball. Enter the teleport.

The armor you obtained from the wizard will allow you to safely enter the possessed town in the wilderness. Head south to the village and kill the black monks who appear. Enter the building with the small balcony that faces the well and climb the ladder inside. Exit to the balcony and take a leap into the well. Grab the amulet inside and climb back out.

The villagers have reappeared. Kill any monsters that might remain. Go to the hunting lodge on the outskirts of town (the villagers sitting on barrels will point you in the right direction) and hit the bear statue. Enter the hut to the left of the lodge and get the lantern in the fireplace. Go back to the village, visit the church, and talk to the crystal ball.

Check out each of these three doors. Inside, you'll find some health, a piece of the Elder Sign, and a teleporter.

Eliminate the sorcerer on the top of the tower, and this ballsy force field will be no more.

Head north into the woods. You'll discover some ruins and a rocky outcropping that leads to a better sword. Walk into the swirling teleport. Go up through the dungeons out to the rocky wall. Jump up to the open door and step into the teleport. Keep moving forward, but watch out for the zombies — they can throw fireballs faster than you can dodge them. Get the piece of the Elder Sign in the center of the large room. Go back to the crystal ball you saw on the way in and talk to it. Go back to the Elder Sign room and walk into the teleporter on the checkered floor.

Once you've entered the Dark Tower it is an extremely good time to save your game. The next seven levels will be timed (you can see how much time you have left by pressing Enter and checking the timepiece), and it's a good idea to run through these levels as quickly as possible, saving after every good move.

First Floor

Hit open all the chests until you find the key, then walk into the teleporter at the upper right hand of the screen. Avoiding the rotating wooden spikes takes a hint of practice.

Second Floor

Same procedure as above.

Third Floor

Walk down and hit open the barrel on the bottom left of the screen. When you head back to the top of the

These ruins contain a teleport that will transport you into a cliffside dungeon.

screen, you'll teleport to the bottom. Head to the right, and hit open the chest on the upper right hand of the screen. Walk into the teleporter surrounded by four statues. Continue into the second teleporter. Hit open the chest next to you. Keep walking through the teleporters, and finally head to the center-screen teleporter.

Fourth Floor

Be sure to avoid getting squished by the crushing walls! Work your way to the bottom of the screen and hit the bottom-right chest, then break open the center-left chest. Head to the upper-right hand corner of the screen and bash open that chest. Go back to the left (don't get skewered by the hidden spikes) and hit open the chest on the far upper left. Hop in the flashing center teleport.

Fifth Floor

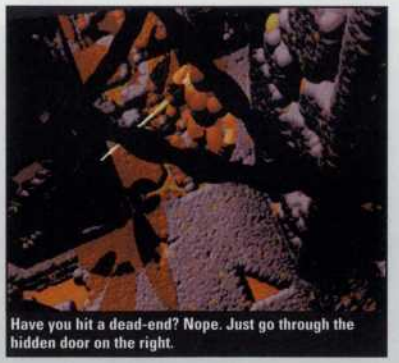
Go directly to the bottom of the screen and hit open the chest. Get the key, go to the north of the room, hit open the chest, and get the key. Walk to the right into the teleporter.

Sixth Floor

Run into the first teleporter in the middle of the screen. You'll pop up on another screen, so hang a right into the second teleporter. You'll be transported in front of the crushing gates. Don't jump through them, but instead, take a right into another teleporter. Walk to the left of the screen — another teleport. Once again, walk to the closest teleporter. Finally, walk to the right through the blue thingies.

Seventh Floor

Enough of this teleportation hooey! Head to the north. Run through the crushing wall to the right and open the chests to receive the necklace. Head back to where you started and go through the door on the left. Run past the swinging blades. Keep going forward. Kill the skeleton and turn the corner. Kill the mage, bust open the chest, and take the boots. Head back to the swinging blade room and take a left. Open the first chest you see — you'll get a scroll. Keep going, kill the two zombies on the walls, and step through the slime with your boots. Head to the left of the screen. Run through the two crushing walls. Go to the north of the screen, run past the swinging blade, and kill the mage at the end of the hall. This may look like a dead-end, but you can simply hang a right into the concealed doorway. Run all the way to the end of the hall and then break open the chest to find the key. The electricity field will be gone, so just walk through and teleport to the realm of the Archmage.



Have you hit a dead-end? Nope. Just go through the hidden door on the right.

Lair of the Archmage

If you're running low on health, hit F11 to exchange some of your gold for health. Step into the center of the screen, and the Archmage will pop out. Kill him, using either your sword or long-range magical attacks — he should go down after four or five direct hits. After he bites the bullet, watch as the seven pieces of the Elder Sign reform. If you can do all this, then you've won! Congrats!

You've restored peace to the kingdom. But what are you going to do about those hundreds of dead bodies stinking up the castle?

THE MACHINES FINALLY CONQUERED MANKIND.

NOT THE PHYSICAL MACHINES THEY HAD BUILT, BUT THE MACHINERY THAT RAN THEIR SOCIETIES. THE ENTITIES KNOWN AS CORPORATIONS WERE GIVEN GREATER AND GREATER POWER UNTIL THEY EVENTUALLY BECAME SELF-AWARE. SLOWLY, THE CORPORATIONS BEGAN SHAPING THE WORLD TO SUIT THEIR OWN NEEDS. WHAT WERE ONCE LARGE ORGANIZATIONS RULED BY POWERFUL PEOPLE, BECAME AS GREEDY AND COLD BLOODED AS THE HUMANS THAT HAD SPAWNED THEM. THE FEW THAT REALIZED WHAT WAS HAPPENING WENT UNHEARD, DROWNED OUT IN THE PERPETUAL WHITE NOISE OF ADVERTISING, PROMOTIONS AND MARKETING STRATEGIES, UNTIL IT WAS FAR TOO LATE...

THE REVOLUTION WILL NOT BE TELEVISED
IT WILL BE PLAYED

SKRAP

neuronware
ENTERTAINMENT

NEURONWARE ENTERTAINMENT PROUDLY PRESENTS
A MIND BENDING 3D ACTION EXPERIENCE UNLIKE ANY OTHER COMING SOON TO A PC NEAR YOU

1 888 371 4425
www.neuronware.com

Product Information Number 250

Readers' Requests

Just when you thought you were going to end up in the Pit of Despair, along comes the ever-faithful Strategy Central crew to bail you out.

Unraveling the complex ins and outs of the PCs best and most sophisticated games takes a lot of energy. It's a good thing we've got help from readers who believe that it's better to give than receive. This month, we're graced with information on how to make a bucketful of money in *Betrayal in Antara*, clues on winning battles in *Imperium Galactica*, and some excellent ideas for beating the computer in *Fallen Haven*.

Betrayal in Antara

Yes, you too can earn hundreds, even thousands, of Burlas in your spare time by becoming a Fidali Paste Tycoon. In *Betrayal in Antara*, I found some easy money in the town of Waterfork. Just go in the tavern and buy lots of ale, then go around the corner to the herbalist and buy an equal amount of Fidali leaves. Combine them (no skill required) to make Fidali Paste. Then sell it to the herbalist for a *huge* profit. Repeat as desired. I built up a tidy little nest egg quickly. Of course, you don't want to forget to save a jar of paste for the poisoned Waterfork boy. After all, it isn't really profit we're after, we just want to save the world.

— Victoria Knapke, *via Internet*

Oh, if only making money was that easy in real life, Victoria. Thanks for that little tidbit of helpful information — with a ready source of income available, earning enough money to outfit your whole party with the best possible gear will be no problem!

Imperium Galactica

Here are a few hints on *Imperium Galactica*. First, don't try to put tanks and vehicles on all your planets — in the beginning of the game, you don't have enough money. Keep them in reserve, and if you detect a hostile fleet near a planet, go to the equipment window and add them to the planet's arsenal. Then, when the danger is over or the enemy goes to another planet, transfer them to the reserves or the new endangered planet. That way they're also available for planetary conquest, and you can keep the best tanks that your present technology can afford.

Second, keep your fleets at areas with a military spaceport. If they're at a military spaceport, you can upgrade them and add fighters more easily, and best of all, you can strip them. For example, if your main fleet is in the middle of the map, but an enemy fleet is in the upper corner by your second fleet, and your second fleet hasn't been upgraded to meson cannons and UV pulse lasers, you can strip them from the main fleet and add them to the second fleet.

Third, after you've researched all the technologies available, your research centers are just taking up energy, space, and workers. Demolish them. You get back some of the money, available space for stadiums or other morale lifting buildings, and you may not have to build another energy plant as soon.

Fourth, favor the "Blitzkrieg" style of combat. Get four fleets set up with maximum ground support, and (early in the game) fighters, and send them out all at once. In one game day, I conquered 12 planets. The enemy tried to take back two but never managed it.

Finally, fighters are worthless later in the game. Your factories won't be able to keep up with the demand. Six type-3 Cruisers with mesons and UV pulse lasers are better, cheaper, and quicker to build than 120 fighters.

— Jeff Worthen, *via Internet*

Thanks, Jeff! Those are some great tips. Also, thanks for the cheat codes — you'll find them listed in the ***Cheater's Corner*** *box on this page. With those kinds of tips, galactic domination is within your reach!*

Buy some Fidali leaves and some ale, and then mix them together to make Fidali paste. Sell the paste to the herbalist, and you'll make almost 400 percent profit!

Cheater's Corner

IMPERIUM GALACTICA

To use these cheats, hold down the left **Shift** key and type **KAROLY**. Then hit the key for the cheat you'd like to use. But be warned — using these cheat codes has a tendency to scramble some of the graphics in the game.

- **C** Get all Colonies and Inventions
- **C** Hitting **C** a second time gives you cheats on the planets
- **V** 100,000 credits
- **5** Promote yourself to Rank 1 (LT)
- **6** Promote yourself to Rank 2 (CPT)
- **7** Promote yourself to Rank 3 (CMDR)
- **8** Promote yourself to Rank 4 (ADM)
- **9** Promote yourself to Rank 5 (GR ADM)

By using some of these cheats, you can easily build up your colonies and pursue your goal of galactic domination.

The Secret of Monkey Island

I was glad that you were able to put *The Secret of Monkey Island* and *Monkey*

Island 2: LeChuck's Revenge on the July 1997 CD, but as I was playing *The Secret of Monkey Island,* I got stuck. I would appreciate it if you folks at Strategy Central could give me a hint or two. I need to know how to tell the storekeeper that I have a job and get credit from him to buy a ship. I also need help in assembling my crew — who should I ask to join me to rescue the Governor?

— John Gregorich, *Pasadena, CA*

The Secret of Monkey Island *sure is a great adventure game, but it can get a bit tricky in places. Here are the answers to your questions, John.*

Assembling your crew is easy. First, you can ask the Sword Master. She'll join you as soon as you tell her the Governor has been kidnapped. Second, you'll want to free the prisoner, Otis. To do this, go to the Scumm Bar and pick up all the mugs you see sitting on the tables. Fill one up with grog, and make your way as quickly as possible to the jail. The grog will eat through the mug, so you'll have to switch them when they start melting. Once you get to the prison, pour the grog on the lock to free Otis. He'll take off, but he'll join you later. The third member of your crew is on Hook Island.

Climb up the pole and use the rubber chicken on the cable to slide across the water (the rubber chicken is in the house with the psychic in the village). Tell the large fellow inside the house that the Governor's been kidnapped, and he'll test your bravery to see if you'll make a worthy sea captain. Just touch the frightening beast, and he'll join your crew. Now that you've got a crew to man your boat, it's time to get a boat. Talk to Stan of Stan's Previously Owned

Watch the storekeeper carefully when he opens his safe, and memorize the combination so you can open it after he leaves the store.

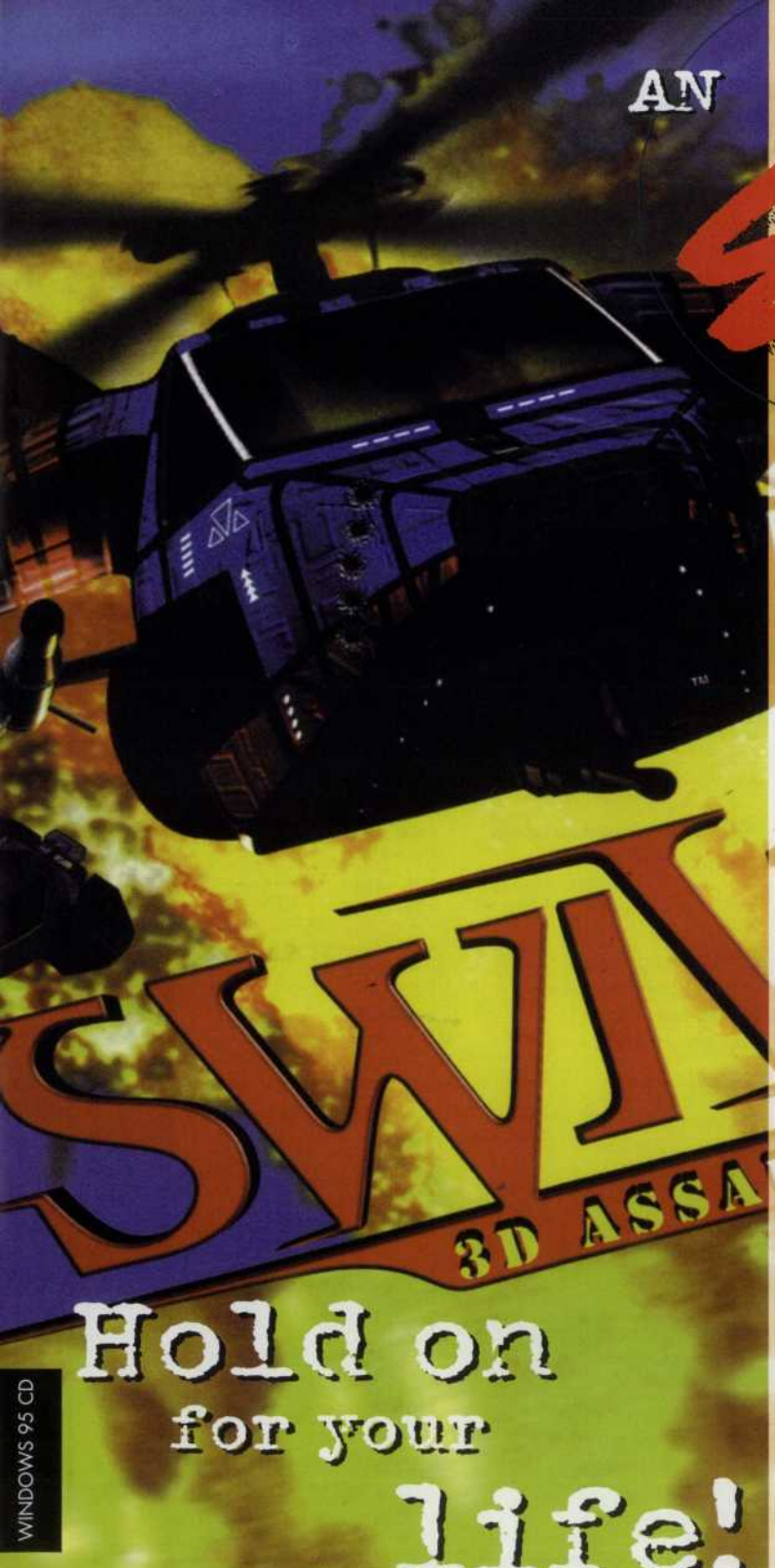
DIABLO

Back in the September 1997 issue of *PC Gamer,* we listed all the shrines and their effects in Blizzard's excellent roleplaying game, *Diablo.* Several readers pointed out to us, however, that the list was incomplete, and some of the entries were not specific enough. So here is the list once again, in its entirety, with the missing shrines added and other shrines defined in more detail. Thanks to all the readers who responded and let us know the list was incomplete — next time, we'll do a better job!

Abandoned	Adds two points to Dexterity.
Cauldrons	Produces random shrine effect.
Creepy	Adds two points to Strength.
Cryptic	Refills your mana, then the Nova spell erupts around you.
Divine	You get two full rejuvenation potions and it fills your health and mana globes.
Eerie	Adds two points to Magic, minus one to Strength.
Eldritch	All potions in your inventory are changed to rejuvenation potions.
Enchanted	One spell goes down one level, while all others are raised one level.
Fascinating	Adds two points to the Firebolt spell while reducing your mana by ten percent.
Glimmering	Identifies all unknown items in your inventory.
Gloomy	All armor gains two armor class points while all weapons lose one point of maximum damage.
Goat	Produces a random shrine effect.
Haunted	Adds the character level plus two to the base mana, and minus the character level to base health.
Hidden	One item loses ten durability points while all others gain ten points.
Holy	Teleport to a random location on the current level.
Imposing	Adds character level plus two to the base health, and minus the character level to base mana.
Magical	Casts mana shield upon player.
Mysterious	Raises one attribute by five points and drops another by one. At higher levels, it decreases two attributes by one and increases another by five.
Mystic	Adds experience based on the formula (gold x 10 x dungeon level/5), and takes away all gold but one.
Ornate	Adds two points to the Holy Bolt spell while reducing your mana by ten percent.
Quiet	Adds two points to your Vitality.
Religious	Restores all weapons to maximum durability.
Sacred	Adds two points to the Charged Bolt spell while reducing your mana by ten percent.
Secluded	Reveals the complete map of the current level.
Spiritual	Fills any free space in your inventory with gold — usually about six pieces each.
Spooky	All players receive full life.
Stone	Recharges all the staves you're carrying.
Tainted	All other players get one point to three stats, and minus one to others.
Thaumaturgic	Closes and refills all the chests on the current level.
Weird	All weapons gain one point of maximum damage.

FOUNTAINS

Fountain of Blood	Heals one hit point for each drink.
Fountain of Tears	Gives one point to a random stat, while taking away one point from another.
Murky Pool	Casts the Infravision spell on you for a short period of time.
Purifying Spring	Returns one mana point for each drink.



EXCLUSIVE

- *Six specially built engines of destruction are waiting for your take-no-prisoners banzai gaming style.*
- *Non-stop action with over 100 objects onscreen at the same time.*
- *The plug-and-play feature allows you to jump right into the action.*
- *Over 30 weapon pick-ups including Napalm, Homing Missiles and deadly Smart Bombs.*
- *Full CD audio.*
- *Enhanced 3D card support for 3Dfx and Direct3D.*
- *Battle up to 6 friends in furious network play.*

JUST

$29.99

ONLY AT

electronics EB boutique

Where else are you gonna go?

www.ebworld.com

Hold on for your life!

WINDOWS 95 CD

Product Information Number 146

ADVERTISER INDEX

COMPANY	PHONE #	INTERNET ADDRESS	PAGE #	PRODUCT INFO #
Access Software	(800) 800-4880	www.accesssoftware.com	168	85
Acclaim	(516) 759-7900	www.acclaimnation.com	39, 368-369	91, 84
Accolade	(800) 245-7744	www.accolade.com	4-5	86
ACT Laboratory Ltd.	(800) 980-9997	www.actlab.com	401	88
Activision	(800) 477-3650	www.activision.com	IFC, 50-51, 102-103, 227-228, 32	89, 98, 83, 87, —
American Inst. for Computer Science	(800) 767-AICS	www.aics.com	441	—
ASC Games	(203) 655-0032	www.ascgames.com	106	94
ATI Technologies, Inc.	(905) 882-2600	www.atitech.com	15	90
Avalon Hill	—	www.avalonhill.com	122-123	95
Berkeley Systems	(510) 540-5535	www.berksys.com	37	106
Bethesda Softworks	(301) 926-8300	www.bethsoft.com	299, 348	102, 100
Blizzard/Sierra On-Line	(800) 953-SNOW	www.blizzard.com	40-41	—
Blue Byte Software	(847) 995-9981	www.bluebyte.com	294-295	101
BRE Software	(800) 347-6760	www.bresoftware.com	442	109
Bungie Software	(800) 295-0600	www.bungie.com	358-359	104
CD-ROM Playback	(954) 752-3237	playback.com	445	119
CH Products	(619) 598-2518	www.chproducts.com	334	118
Chips & Bits	(800) 699-4263	www.cdmag.com/cgi-bin/order.cbi-home	403-404	112
Columbia House	(800) 792-1000	www.columbiahouse.com	409	—
Compu Experts	(714) 367-1090	—	443	111
Computer Express	(800) 228-7449	www.cexpress.com	424-425	114
Creative Labs	(800) 998-5227	www.creativelabs.com	OBC, 251-252	113, 115
Cryo Interactive Entertainment	—	www.cryo-interactive.fr	439	—
Cybermedia	(800) 841-3539 x13	www.cybermedia.com	360	116
CyberWarrior, Inc.	(800) PlayCWI	www.cyberwar.com	240	117
Data Processing Independent Consultants Exchange (DICE)	(515) 280-1144	www.dice.com	441	127
Diamond Multimedia	(800) 380-0030	www.diamondmm.com	344	123
Discovery Communications Inc.	—	www.planetexplorer.com	231, 233	121, 122
Earthlink Network	(800) 395-8425	www.earthlink.net	373	131
Eidos Interactive	(415) 616-2022	www.eidosinteractive.com	217, 218-219, 220-221, 222-223, 224	—, 138, 130, 135, 141
Electronic Arts	(800) 245-4525	www.ea.com\ead www.ea.com	23, 314-315, 78-79, 350-351, 184-185	143, 142, 144,132, —
Electronics Boutique	(800) 800-0032	www.ebworld.com	257-288, 363, 431	139, 145, 146
EMC Marketing	(412) 562-0143	www.aii.edu	441	133
Empire Interactive	—	www.empire-us.com	343, 20, 109	147, 152, 149
F-Test	(213) 663-0586	www.F-TEST.com	441	148
Falcon Northwest Computer Systems	(888) FALCON1	www.falcon-nw.com	320	140
Goosebump Graphics	(216) 254-2609	—	447	152
Graphic Simulations	(800) 580-4725	www.graphics.com./graphics	376	157
GT Interactive	(800) 305-3390	www.gtinteractive.com	6-7, 176-177, 191, 193, 195, 318-319, 328-329, 440	154, 158, —, —, 153, 151, 150, —
Interactive Magic	(888) 746-2442	www.imagicgames.com	370	196
Intergraph Computer Systems	(800) 692-8089	www.intergraph.com	196-197, 324-325	197, 183
Interplay Productions, Inc.	(800) 969-GAME	www.interplay.com	129-130, 138-139, 140-141, 142-143, 144-147, 148-149, 150-151, 152-153, 248-249, 293	185, 188, 189, 192, 193, 191, 191, 187, 184, 186, 182

ADVERTISER INDEX

COMPANY	PHONE #	INTERNET ADDRESS	PAGE #	PRODUCT INFO #
Jazz Multimedia	(408) 727-8900	www.jazzmm.com	337	200
Just CD's	(714) 634-3823	www.justcds.com	447	201
Laral Group	(800) 229-2118	—	186	222
LucasArts Entertainment Co.	—	www.lucasarts.com	96-97, 242-243, 290, 396-397	220, 227, 223, 225
Matrox Graphics Inc.	(800) 362-9571	www.matrox.com/mga	87	239
Media On	(888) U-GAME-IT	—	410-411	230
MGM/UA Interactive	—	www.machinehunter.com	386-387	237
Micron Electronics	—	www.micronpc.com	66-67	232
MicroProse	(800) 695-GAME	www.holobyte.com/www.microprose.com	84-85, 189, 208, 154, 302, 375	235, 235, 231, 236, 245, 234
Microsoft	(800) 429-9400	www.microsoft.com	11, 44-45, 94-95, 327, 347, 394-395	—, —, —, —, —, —
Neuronware Entertainment	—	www.neuronware.com	428	250
New World Computing	(415) 261-3454	www.3do.com	384, 74-75	375, 374
Nova Logic	(818) 880-1997	www.novalogic.com	171, 384-385	253, 252
Origin	(800) 245-4525	www.origin.ea.com	54-55, 80-81	137, —
PC Connection	(603) 423-2000	www.pcconnection.com	418-419	272
Price Shopper	(800) 183-1555	www.top7	443	274
Psygnosis	(415) 655-8000	www.psygnosis.com	70-71	273
Quarterdeck Corp.	(800) 354-3222	www.quarterdeck.com	340	280
R&G Games	(800) 525-GAME	http://members.aol.com/rggames	442	290
Red Storm	(919) 460-1776	www.redstorm.com	442, 12	291, 293
Red Orb	—	www.redorb.com	30-31, 49, 178-179, 310-311	99 , 105, 103, 108
RPM Computers	(972) 248-4646	—	445	292
Sammy USA Corporation	(888) US-SAMMY	www.sammyusa.com	83	301
Sega Entertainment	(800) USA-SEGA	www/sega.com/segapc	201, 202-203, 204-205	—, —, —
Segasoft	(415) 442-5000	www.segasoft.com	24-25, 163-164, 214, 305	300, 306, 303, 303
Sierra On-Line	(800) 757-7707	www.sierra.com	42-43, 91-92, 114-115, 158-159, 180-181, 212-213, 234, 300-301, 316-317, 338-339, 380-381, 412-413, 436	310, —, 311, 312, 313, 316, 320, —, 317, 305, 318, 319, —
Simon & Schuster Interactive	(800) 910-0099	www.ssitrek.com	27, 29	—, 332
SirTech Software	(800) 447-1230	www.sir-tech.com	28, 127, 296	333, 315, 322
Sony Interactive Studios America	(415) 655-8000	www.interactive.sony.com	237, 239, 354-355	323, 325, 304
SouthPeak Interactive	(800) 774-6183	www.southpeak.com	116-117, 306-307	314, 324
SSI -Strategic Simulations, Inc.	(800) 601-7529	www.ssionline.com	34, 76-77, 332-333, 364-365, 379, 423	307, 321, 302, 330, 327, 326
TalonSoft	(800) 221-6504	www.talonsoft.com	388-389	335
Multiservice	(913) 451-2400	www.rosecoq.com	446	240
THQ	(818) 591-1310	www.paximperia.com	309	337
UbiSoft	(800) UBI-SOFT	www.ubisoft.com	356-357	341
United CD-ROM	(800) United-4	www.unitedcdrom.com	435	342
Virgin Interactive Entertainment	(888) VIE-COM1 (800) 874-4607	www.vie.com www.westwood.com	IBC, 175, 206-207 16-17, 59-60	365, 364, 363 362, 361
Wal-Mart	—	www.wal-mart.com	65	376
Wizard Works Group	—	www.wizworks.com	112-113, 393	377, 378
Wizards of the Coast	(206) 624-5818	www.wizards.com	246-247	379
PC Gamer T-Shirt	—	*www.pcgamer.com*	*417*	—
PC Gamer Customer Service	*(800) 898-7159*	*subscribe@pcgamer.com*	*444*	—
Boot Subscription	*(800) 706-9500*	*subscribe@bootnet.com*	*446*	—

Vessels and ask him about buying ships on credit. He'll refer you to the storekeeper. Talk to the storekeeper about a note of credit, and he'll get one out of his safe. Watch what the handle does when he opens the safe — the combination changes with each game, so you have to memorize it on your own. After he sees through your lies about employment, ask him to find the Sword Master, and he'll walk out.

After he's gone, use the combination you memorized on the safe to get the note of credit. Take the note of credit to Stan, and bargain with him for the Sea Monkey. After you purchase it, head back to town, and your crew will be waiting for you along with your ship. So begins your journey to Monkey Island!

Fallen Haven

Having trouble beating the computer in *Fallen Haven*? Here's a tip that will allow you to take over provinces easily and effectively with little to no loss of your own units.

When you start the game, go to the research screen and put all of your points into researching energy efficiency. Then try to build up to ten energy centers, ten refineries/mining facilities, and ten research buildings. Make sure you have towers and walls all around your base to protect yourself from attacks. Also, make sure you have barracks, a facility to build flying units, and a facility to build heavy units.

If you do not have enough credits to do all of this in the first turn, make sure the units the computer gave you are placed around the base to protect it from being attacked before it's built up, and proceed to the next turn.

Attack all the neighboring provinces that are still weak and have yet to build to full strength until you can produce the gunship/S.H.O.G. Now go back and check your research. If your energy level has reached a level of about seven, then rest assured your buildings will not break down anymore. Now focus all your research on rocketry until you get to level four so you will be able to protect yourself from nukes. After that, research until you have reached level ten in unit movement, level six in armor, and level eight in weapon damage. Now place about two artillery, two gunships/S.H.O.G., two tanks, and two flyers/speeders into a dropship and send it toward a neighboring province. Land the dropship somewhere near a group of enemy units isolated from the rest. Do not land anywhere where the towers can hit you because they may end up destroying half your units. Dispatch the tanks to take them out. Send out the speeders/flyers and take out anything that may be near the dropship that your tanks missed, and then dispatch the artillery to take out the farthest target it can reach. Finally, dispatch the gunship/S.H.O.G. and take out whatever is left near the dropship that is still within weapons range or may move within weapons range. Anything that gets within artillery range you can take out with the artillery without any risk of the computer hitting you. Continue this strategy and soon you will control all the provinces and win the game.

— George Chang, *San Francisco, CA*

Well, George, obviously you know how to take out the enemy quickly and efficiently at Fallen Haven. *Your tactics are sound, and should help many a warrior defend their own territory while taking over more. As a matter of fact, you've managed to win the coveted Tip of the Month prize! Coconut Monkey is rummaging around in the prize bin even now, and soon you'll get a package full of selections, courtesy of everyone's favorite simian!*

PCG

Use George's tips, and you'll soon be ruler of the world in Interactive Magic's *Fallen Haven.*

Cheater's Corner

THEME HOSPITAL

Sick of losing patients? Tired of the vomit flood? Try some of these cheat codes for *Theme Hospital* to keep your legions of ill under control. To use these codes, enter the code 24328 on the fax machine, and press the green button. Then go back to the hospital view and try the following commands:

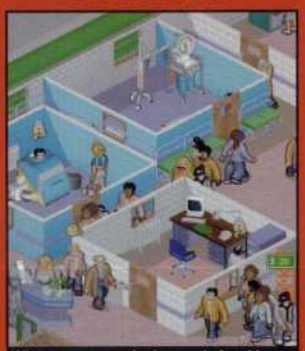
Shift-C
Give yourself $10,000

Control-C
Research all

Control-M
Go to the end of the month

Control-Y
Go to the end of the year

Shift-Control-C
Give yourself all items



When you start to feel overwhelmed by the flood of patients in *Theme Hospital*, you can always cheat to make your hospital run more smoothly!

ARE YOU A GAMING GENIUS?

Do you know the secrets to every PC game ever made? Want to share your love of gaming with the world? Then Strategy Central wants you for The Tip of the Month Club.

Every month we'll select a letter that gives the best advice or puzzle solution to a current game, and the lucky winner will receive a slew of prizes, including a *PC Gamer* T-shirt, a free strategy guide to inspire you, and a PC game pulled randomly from our mysterious and sinister Box O' Prizes. Send letters to:

PC Gamer Tip of the Month
Imagine Publishing
150 North Hill Drive, Brisbane, CA 94005
***OR* editor@pcgamer.com**

Thousands of Entertainment Titles Available

www.UNITED CD ROM.com

CHECK OUT OUR HOT WEBSITE AT

OVER 10,000 TITLES IN STOCK DAILY!

FREE SOFTWARE WITH EVERY PURCHASE!*

SAME DAY SHIPPING!**

THRUSTMASTER T-2 BURN RUBBER! $119 46109

CALL US NOW FOR A FREE CATALOG!

1•800•864•8334

STARCRAFT
It is a time of crisis. Three of the most powerful forces in the universe are on a collision course for galactic domination. The only choice is war and the only allies are enemies.

CUC SOFTWARE

52691 $49

DIABLO
Players descend into a sinister underworld filled with mysterious quests, traps, and a horrifying story of supernatural forces and demonic creatures.

49959 $44

X-FILES-UNRESTRICTED ACCESS
Captures the mood and experience of the real thing. Custom built browser built to keep you continually updated on upcoming episodes!

51501 $27

SIMPSON'S VIRTUAL SPRINGFIELD
Run crazy in the streets of Springfield and explore the world of the Simpson's in this hilarious interactive experience.

51500 $23

HEXEN II
The follow-up to the extremely popular Hexen, Hexen II promises to provide more sword and sorcery battles for all gamers alike.

ACTIVISION

59422 $52

QUAKE II
Featuring 28-30 levels, all new weapons including a disintegrator, new monsters and a new story, Quake II promises to be better than the original. Monsters will duck when fired upon or hunt you down throughout the level.

60449 $47

WARLORDS III
Enter the world of Warlords III...The door to the left leads you into another world, a place of danger, intrigue intrigue and glory.

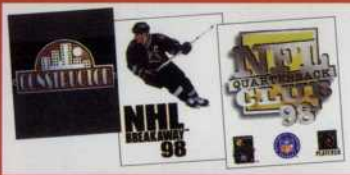
HEROES

58776 $45

Broderbund

RIVEN
The Sequel To Myst
Prepare yourself for Riven, the much anticipated sequel to Myst, the best selling computer game of all time. Riven stands as a story for all time.

51572 $49



CONSTRUCTOR: Constructor takes the empire building and resource management of the best simulations and adds to it a strong dose of character interaction, humor and strategic competition.

NHL BREAKAWAY '98: NHL Breakaway '98 is the most realistic hockey simulation ever created.

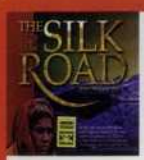
NFL QUARTERBACK CLUB '98: Brett Farve, the 1997 MVP brings you the hottest action in football on your PC!

$41 Your Choice
Constructor 61064
NHL Breakaway '98 61244
NFL Quarterback Club '98 61245

Acclaim

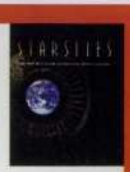
MYTH-THE FALLEN LORDS
by Bungie
Myth is a tactical-level game of fantasy warfare. In either single-player or network games, the player directs a group ranging from a handful to hundreds of units on a battlefield.

57162 $43



THE SILK ROAD
Winner of three gold medals at the 1996 International Digital Media Awards and the Macromedia Award for best educational product of 1996.

61365 $32



STARSITES
A visually stunning and knowledge-rich weaving of five ancient sites shaped by our effort to understand the sky and its role in human life.

61372 $32

BACKPACKER
by Animagination
A 60 year-old unsolved murder mystery. A strange note, a desperate plea for help. Adventures await you along the trails of the Great Northwest as you pursue unsolved mysteries.

Great Adventures

61512 $23

VR SURFER
by VREX
The VR Surfer is the most sophisticated 3D eyewear available today, with patented innovations for your 3D viewing enjoyment at an unprecedented price. VRex gives you the safety and convenience of wireless 3D viewing.

60058 $40

DAIKATANA
John Romero's latest venture in the 3D gaming world. Wield the mighty Japanese Daikatana sword through 4 worlds from the Dark ages to post-apocalyptic San Francisco.

TOMB RAIDER 2
Sequel to the award-winning title of 1996. Complete with new movies, enemies, weapons, puzzles and the unstoppable Lara Croft. More exotic locations await you.

EIDOS

60335 $45 59329 $45

WING COMMANDER V: PROPHECY
by Electronic Arts
The most successful series in the space sim genre just got WAY better! Amazing cutting edge graphics, completely reworked game engine and envelope pushing gameplay.

61363 $53

ALLEY 19 BOWLING
by Starplay Prod.
Multi-player bowling simulation with full network play. Computer opponents, full-motion digitized characters and retro 50's look.

60670 $25

* While supplies last. Shipping charges apply to free offers.
**Orders received as late as 6:00 pm (CST) for 2nd day air. Call for other deadline times.
Special offers, item availability and prices may vary according to format and are subject to change without notice. All prices in U.S. dollars. Not responsible for inadvertent errors.

ALL MAJOR CREDIT CARDS ACCEPTED

CODE P11

Business Hours: Mon 8am–8pm, Tues-Fri 9am–8pm; Sat 11am–5pm; Sun 12pm–5pm.

Mail Orders to: 800 United CD ROM Drive, Urbana, IL 61802

CONTACT US!

Int'l orders 1-217-337-8532
http://www.unitedcdrom.com
Phone Orders 1-800-864-8334
Fax orders 1-217-337-8531

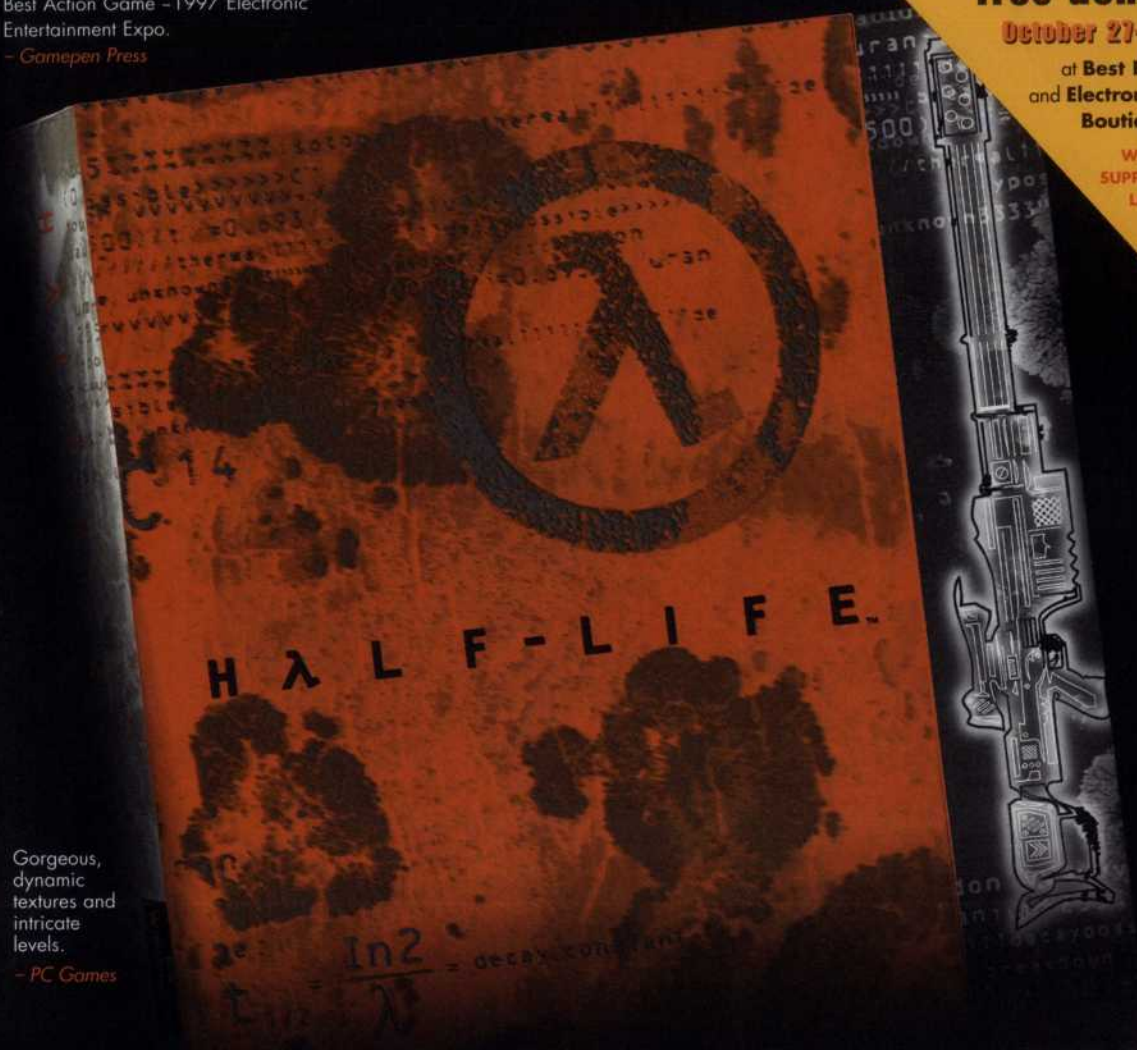
SPORTSTER 56K EXTERNAL
by US Robotics
U.S. Robotics is pleased to announce an expansion of the Sportster product line to include their x2™ 56K technology. These new products have x2 technology already built into give you maximum speed for minimum effort.

After $50 Mail-in Rebate 57372 $169

Product Information Number 342

Best Action Game - 1997 Electronic Entertainment Expo.
– Gamepen Press

free demo
October 27-31
at **Best Buy** and **Electronics Boutique**
WHILE SUPPLIES LAST!



Gorgeous, dynamic textures and intricate levels.
– PC Games

The best looking 3D action game we've seen yet.
– Gamespot

Demo the future of 3D action games...

Half-Life. Face-to-face confrontations with nightmarish alien creatures. Enemies that work together to hunt you down. A game so cunning, so unpredictable, so alive, you'll swear it has a pulse.

This Halloween, Sierra-On Line invites you to pick up a free playable demo CD of the most anticipated action game of 1997. Visit your local **Best Buy** or **Electronics Boutique** store between October 27th and 31st and claim your CD while supplies last.

www.sierra.com/half-life

©1997 Sierra On-Line, Inc. ® and/or ™ designate trademarks of, or licensed to Sierra On-Line, Inc., Bellevue, WA 98007. All rights reserved.

Hey kids! It's the Letters page! We print your comments, criticisms, and suggestions, and suddenly your words belong to the ages. It's guaranteed immortality — at least until the aliens come and burn all Earth-magazines. And it doesn't cost a red cent! So, what are you waiting for? Get crackin' on writing the perfect letter — we promise we'll print it (well, maybe, you know, if it's *good*).

Let's Hear From You!

Write to:
PC Gamer Letters
Imagine Publishing
150 North Hill Dr.,
Brisbane, CA 94005

or E-mail to:
peeceegee@aol.com
www.pcgamer.com

When we say "exclusive," it doesn't mean that no other magazine will ever cover a given game; it just means we're the firstest with the mostest.

Exclusive!

I look forward to *PC Gamer* every month. It's the best games magazine out there, but I have to say that I was confused by your October *Quake II* cover. It says "The World Exclusive," but I've seen *Quake II* stuff in other mags and on web sites all over the place. What constitutes an "exclusive"?

— Roger Mueth, *Dora, AL*

Good question, Roger. It seems that every magazine has its own definition of "exclusive" — it's a word that gets tossed about quite a bit in PC gaming. But we don't use it lightly; if we say we've got an exclusive, it means we believe we're offering some significant goodies you won't find anywhere else — not for a while, at least. When our Quake II *feature went to press,* PC Gamer *was the only magazine to visit id Software's offices to see and play* Quake II *and interview the game's development team. We also came away with tons of screen shots that hadn't been given to anyone else — so many that we couldn't print 'em all. That doesn't mean no one else had anything on* Quake II *— every magazine got a press release and a handful of screen shots at the E3 show back in June — but our 14-page feature was the first in-depth coverage of the new game and the people behind it.*

Long Live the King

I didn't know that Lord British had been assassinated until I read the news on your web page, but when I read that the culprit had been banned from playing, I was rather puzzled. I mean, if the game world is so "deep," shouldn't assassination be a part of it? If you ask me, it was a rather amusing incident. It was relatively harmless, as I'm sure it would be nothing to bring back Lord British. It is preposterous that he should be invulnerable! He should have to be careful when addressing the masses. When I was playing *Daggerfall*, I went into the palace with the intention of killing the king and queen, just to see what effect it would have on the game world. When I found they were impervious to my swings, I was very disappointed. I say, if Lord British is so careless, he deserves to be assassinated (in virtual reality, of course). And to ban that guy who killed Lord British... he was just playing a prank, and it seems unfair to do so.

— Jeremy Smith, *via the Internet*

The official word from Origin is that Lord British's assassin, a thief who goes by the name of Rainz, wasn't banned entirely from playing Ultima Online. *He was simply ejected from the beta test for taking advantage of bugs in the game rather than reporting them (a definite no-no in beta testing). On the other hand, it was only an unreported bug that made Lord British, the alter ego of Ultima creator Richard Garriott, vulnerable to Rainz's attack; when the game's working properly, it's impossible to harm British.*

Now, if there's any character in all of role-playing who should be immortal, it's Lord British — but we tend to agree with you, Jeremy. If it's possible for Ultima Online *players to slay each other, the same should be true for British himself. It should be tremendously difficult and carry huge penalties, in keeping with the legendary status of Britannia's sovereign — but it'd certainly be more interesting and believable if a* UO *player crazy enough to attempt regicide had at least a long-shot chance at success.*

An Ultima Online beta tester named Tarquin was an eyewitness to the fluke assassination of Lord British.

The Next Tex

I saw on the news section of your web page that the fifth Tex Murphy game is planned for release on DVD-ROM. Fifth? I only know of two, *Under a Killing Moon* and *The Pandora Directive*. Can you tell me what they are and where I can get them? Thanks for your time and effort.

— Jason Risinger, *via the Internet*

Sure thing, Jason. Tex Murphy first appeared in Mean Streets, *which may well have been Access Software's first adventure game. In it, you traveled from one location to another by means of a first-person hovercar simulation executed with early 3D graphic technology.* Mean Streets *was followed by* Martian Memorandum, *which was billed as the first graphic adventure to use full-motion video. It shipped on lots of floppy disks. Sadly, these two early Tex Murphy outings are probably harder to find than early Robert Johnson recordings; Access doesn't even mention them on its web site. Although the next Tex Murphy adventure,* Overseer, *will be designed from the ground up for DVD-ROM, Access says it plans to ship the game*

with one DVD disc and four CDs in each box, so you'll be able to play it in either format.

Inconsolable

Every time I see a console game ported over to the PC, I shudder. I read your reviews every month, and it seems that they never do a complete job of moving a game from Nintendo or Sega to the PC. They always have huge system requirements, they won't run without 3D accelerators, and they don't take advantage of the superior features of the PC. For example, why should they even make *Formula 1* a PC game without adding multi-player support, which is almost expected of every PC game? Why do so many console ports still require silly password codes to get you back to the last level you played, rather than letting you save your position to the hard drive, a component that *every single computer sold since 1988 has as standard equipment*? I say that if they don't make their console games good enough for computers, then we don't want 'em!

— Seth Wanston, *Des Moines, IA*

We hear you, Seth. Unfortunately, time is money, and videogame publishers seem even more concerned with the bottom line than PC game companies. Porting a videogame over from console to PC can be a fairly time-consuming task by itself; adding features that actually bring a videogame port up to PC-game standards increases the cost of production and cuts into profits. That might make us gamers happy, but the bean-counters frown on it. We can only hope that as PC gaming grows, fewer videogame companies will treat PC ports simply as afterthoughts.

Tale of the Tape

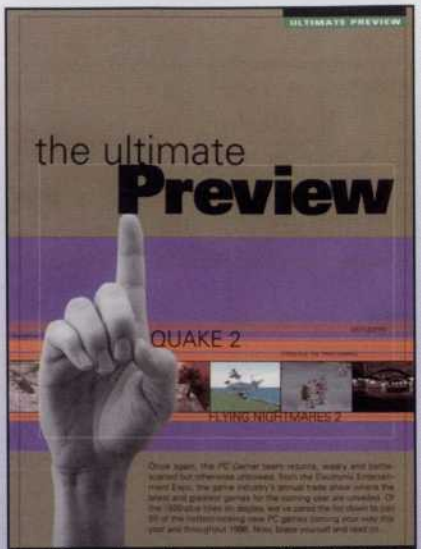
Since I have no life at all, I have put together some interesting statistics about this year's and last year's E3:

- Games previewed: 50 for both years
- How many games previewed last year were released: 29
- How many of the above received Editors' Choice awards: 15
- How many of this year's games are real-time strategy games: 9
- How many of this year's games are first-person shooters: 6
- How many games are in both this year's and last year's preview: 5
- Amount of pages in last year's issue: 168
- Amount of pages in this year's issue: 288
- Cost of magazine for both years with CD (in the U.S.): $8

I like the last statistic best. There you have it; lots of boring information. Enjoy!

— Hamish Gunn, *via the Internet*

Nothing boring there, Hamish — then again, we're our favorite subject. Seriously, though, some of those numbers are pretty startling, lined up like that. Kind of disheartening to see how many games shown at the Electronic Entertainment Expo in 1996 still aren't on the shelves, several months after 1997's E3. What's really depressing, though, is that a few of those games may never see the light of day. Could it be we're already starting to experience the inevitable shakeout that follows a boom in any industry? Our Magic 8-Ball says "Signs Point to Yes...."



Hamish Gunn, who confesses he has no life whatsoever, put together some interesting statistics regarding this year's and last year's big preview roundups.

Ye Daft Wee Eejit!

I was checking your web page the other day (as I am wont to do, on a daily basis) and stumbled across the staff biographies page.

While I was enlightened to discover Joe Novicki's previous career as a drunken orc in video games, and deeply moved by William Trotter's life-saving sock pantomime, "Please Don't Eat Me," I was taken aback by one tidbit mentioned in Gary Whitta's biography.

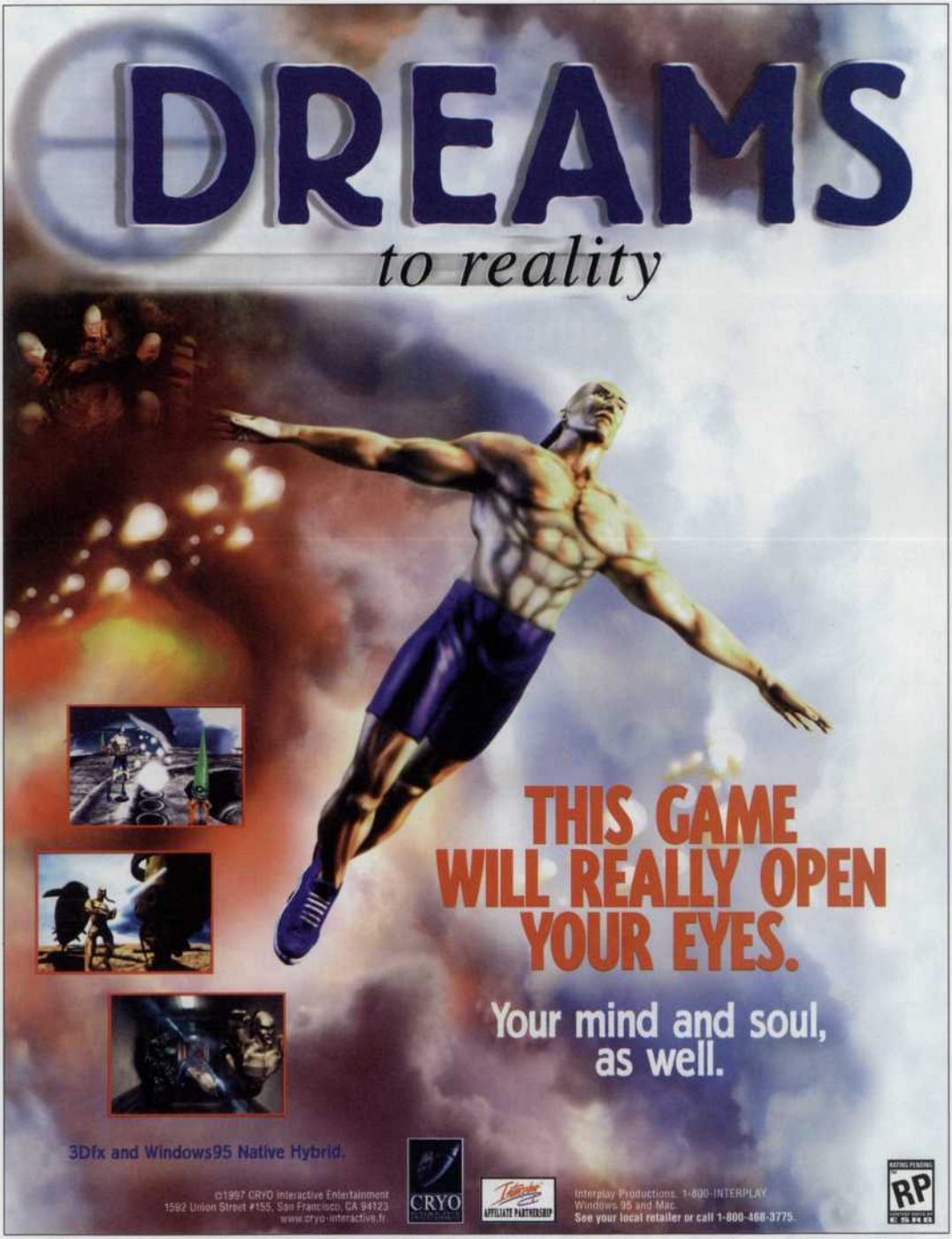
According to what I read, Whitta was kicked out of his editor jobs at English computer magazines due to his incessant calls for the use of kilted Scotsmen as major characters in computer game story lines. The biography on your web site also says that Whitta has seized the helm of the flagship of U.S. gaming, *PC Gamer*, to promote this eccentric, one-man crusade. But I haven't seen Whitta pen one word on this subject, ever!

Where, oh where, are Whitta's impassioned cries for the use of skirted highlanders in multimedia gaming? Or has the idle debauchery that is this so-called "California" inured him to his one true calling in life?

— Troy Deveroux, *Winnepeg, Canada*

Actually, we were hoping no one would ask what broke Gary of his obsession with kilted Scotsmen. See, we used a rather drastic form of aversion therapy, one that would no doubt be illegal in many a state. All of PCG*'s male staffers wore our kilts to work one day, and the sight of so many pale, hairy knees was enough to cure our Editor-in-Chief for good. He still goes a peculiar shade of green any time he gets near anything plaid.* PCG

Console ports of games tend to lack many of the elements that make computer gaming so great, like *Formula 1*'s lack of multi-player support. Was it the time or the money that kept the programmers from adding it in?



Dreams to reality: a visually spectacular action-adventure game in real-time 3D. Live out your wildest, most vivid dreams... if you dare.

Got Blood? Get Bloodier.

And win a trip to Monolith Headquarters in Seattle, or other great "Blood"-y prizes*.

Blood™ Plasma Pak:

The only expansion pak made by Monolith Productions, creators of BLOOD™

- 7 new maniacal monsters including Zealots, Fire Chrysallids and a new boss, The Beast!

- 3 powerful new weapon modes including Akimbo Tesla Cannons and the Sphere of Incineration for the Napalm Launcher!

- 11 all-new bloodcurdling levels including 2 sadistic new Multiplayer Bloodbath levels!

BLOOD™

PLASMA PAK

requires the full version of BLOOD™

MATURE M AGES 17+ CONTENT RATED BY ESRB

www.lith.com

CD-ROM

Distributed by GT Interactive Software
www.gtgames.com
www.gtinteractive.com

* RULES:

NO PURCHASE NECESSARY. Open to US residents over 18 years of age at time of entry. Void where prohibited by law. For entry information and official rules, visit GT's web site at http://www.gtgames.com/blood rules or send a SASE to GTIS 10 E. 40 St. NY, NY 10016 Attn: Blood Sweeps. Residents of WA and VT may omit postage. Game ends November 30, 1997.

Blood™ Plasma Pak ©1997 Monolith Productions, Inc. All Rights Reserved. Created by Monolith Productions, Inc. Published and distributed by GT Interactive Software Corp. This game uses the Build engine and tools by Ken Silverman. GT™ is a trademark and the GT logo™ is a registered trademark of GT Interactive Software Corp. All other trademarks are the property of their respective companies.

Looking for a high tech job?

Take a short cut.

www.dice.com

DATA PROCESSING INDEPENDENT CONSULTANT'S EXCHANGE

Don't gamble with your job search. Use DICE.

A Service of D&L Online, Inc: 515-280-1144

Product Information Number 127

EDUCATIONAL OPPORTUNITY

SURE, YOU CAN PLAY video games... CAN YOU BRING ONE TO LIFE?

Atlanta
Chicago
Dallas
Denver
Fort Lauderdale
Houston
Los Angeles
Minneapolis
Philadelphia
Phoenix
Pittsburgh
Schaumburg
Seattle

- Computer Animation
- Multimedia
- Video Production
- Graphic Design
- Web Site Administration

Programs not available at all locations.

1.800.592.0700

http://www.aii.edu

The Art Institutes International®
300 Sixth Avenue • Pittsburgh, PA 15222
©The Art Institutes International®, Inc., 1997 PCGAM

Product Information Number 133

Netscape: Student Section

ADDRESS FOR SUCCESS

Location: http://www.aics.edu

Welcome to the AICS Virtual Campus

- Earn B.S. and M.S. in Computer Science
- DISTANCE EDUCATION
- Object oriented B.S. program
- New courses in Java, Networking, HTML, MIS
- Approved by more than 275 companies
- Follows ACM/IEEE guidelines
- Thousands of students throughout U.S.

AMERICAN INSTITUTE OF COMPUTER SCIENCES

ACCREDITED MEMBER World Association of Universities and Colleges

Free catalogue 1-800-767-AICS
or http://www.aics.edu

Document: Done

SOFTWARE FUNCTIONALITY TESTING
quality assurance

- CD-ROM/Multimedia
- Games/Educational
- Internet applications
- Website Testing
- Mac/Windows
- U.I. assessment

We can help get your software in shape. Call today.

F-Test LLC (213) 663-0586
http://www.f-test.com
e-mail: ftest@earthlink.net

Product Information Number 148

Red Storm ENTERTAINMENT

Ready to work on projects where you make a difference? Ready to build a company that rewards hard work with excellent benefits and stock options? If so, take this opportunity to join Tom Clancy and the rest of Red Storm.

We're looking for enthusiastic, game savvy software engineers, artists, QA analysts, and producers who want to make great games.

Please send your cover letter and resume to:
Human Resources, Red Storm Entertainment,
2000 Aerial Center Suite 110 • Morrisville, NC 27560
FAX: 919 468 3305
Job descriptions available at wwwredstorm.com

Accept the Challenge!

Product Information Number 291

R&G GAMES

PO BOX 5008 Glendale Hts, IL 60139
We Buy & Sell New & Used IBM Games & Hintbooks Call 1-800-525-GAME
Fax 630-980-9996 Email rggames@aol.com in Canada ☎ 630-980-9995
More games call for prices:

Used Titles		Harvester CD	$20	Star General CD	$22
3D Creepnight Pinball CD	$22	Heroes Might & Magic CD	$22	Star Trek Final Unity CD	$22
Albion CD	$22	Heroes Might & Magic 2CD	$25	Star Trek Klingon CD	$26
Amber CD	$22	Hexen CD	$20	SU 27 Flanker CD	$18
Apache CD	$18	Hyperblade CD	$20	Time Commando CD	$20
Anvil of Dawn CD	$18	Imperium Galactica CD	$25	Tony Larussa 4 CD	$25
Battleground Shiloh CD	$22	Iron Helix CD	$14	Toonstruck CD	$22
Blood CD	$29	Jagged Aliance DeadlyGm	$22	Torrin's Passage CD	$20
Blood & Magic CD	$22	Last Express CD	$25	Under Killing Moon CD	$15
Caesar 2 CD	$20	Lighthouse CD	$20	US Navy Fighter Gold CD	$18
Cave Wars CD	$22	Links 386 CD	$22	Wages of War CD	$22
Comanche 3 CD	$29	Links LS CD	$22	Warcraft 2 CD	$27
Command & Conquer CD	$22	Lords of the Realm 2 CD	$28	War Wind CD	$23
Comm & Con Red Alert CD	$28	MAX CD	$20	X-com Terror from Deep CD	$25
Crusader No Remorse CD	$18	Master of Orion 2 CD	$25	X-Wing Collector CD	$18
Crusader No Regret CD	$20	MDK CD	$28	X-wing Vs Tie Fighter CD	$26
Daggerfall CD	$27	Mechwarrior 2 Merc CD	$24	Z CD	$21
Destiny CD	$18	Myst CD	$18	Zork Nemesis CD	$22
Diablo CD	$29	NHL Hockey 97 CD	$20	***New Titles***	
Dig CD	$22	Phantasmagoria CD	$19	Afterlife CD *SALE!*	$29
Doom 2 CD	$20	Phantasmagoria 2 CD	$25	Birthright D&D CD	$39
Ecstatica 2 CD	$28	Police Quest 5 CD	$22	Carmagedden CD	$39
EF2000 CD	$20	Powerchess CD	$22	Fallen Haven CD	$39
Enemy Nations CD	$32	Privateer 2 CD	$19	Independence Day CD *SALE*	$26
Eradicator CD	$18	Qin CD	$22	Madden 97 CD *SALE!*	$25
Exploration CD	$18	Quake CD	$30	Magic the Gathering CD	$38
F-22 Lightening 2 CD	$24	Realms of Haunting CD	$30	Megarace 2 CD *SALE!*	$25
Fable CD	$25	Rebel Assault 2 CD	$20	NHL 97CD *SALE!*	$25
Fantasy General CD	$22	Shadows Over Riva CD	$22	Time Commando CD *SALE!*	$31
Final Doom CD	$22	Space Quest 6 CD	$20	Triple Play 98 CD	$39
Fragile Allegiance CD	$25	Space Quest Collection CD	$25	Twinsen's Odyssey CD	$39
Front Page Football 97 CD	$20	Spycraft CD	$22	Warlords 3 CD	$39
Gene Wars CD	$15	Star Control 3 CD	$20	X-com Apocalypse CD	$39

Free UPS SHIPPING with purchase of $75 or more
http:// members.aol.com/RGGAMES/ index.html
Shipping UPS $5 Airborne $11 Visa/MC/Disc/AMEX/Cashier Check/Money Order accepted Hours 9am -9pm Mon-Fri

Want to sell us your games: Games must be complete with original boxes, CD's & manuals (NO COPIES) in good condition, working & scratch free. List your games include your name, address, phone #. Under 10 items call for prices, over 10 fax, email or write. Prices are good for 2 weeks. Unacceptable games will be returned at your expense $5 per box. Prices & Availability Subject to change.

Product Information Number 290

BRE Software

FAX (209) 432-2599 | FAXBACK Info System (209) 432-2644
E-Mail: breinfo@lightspeed.net

FREE Shipping *on orders over $50. Send money order orders to the address below. Credit card orders call (800) 347-6760. Call for FREE catalog.*

Turn your old games into CASH!
FREE Catalog (800) 347-6760

We Sell Used / We Buy					
AGE OF EMPIRES	29.95/15.00	*FLIGHT SIMULATOR '98*	34.95/18.00	*ODD WORLD*	34.95/18.00
ANVIL OF DAWN	29.95/15.00	*FLYING NIGHTMARES 2*	34.95/18.00	*PACIFIC GENERAL*	29.95/15.00
BALDUR'S GATE	34.95/18.00	*FRONT PAGE SPORTS*		*PANZER GENERAL 2*	29.95/15.00
BATTLE SPIRE	29.95/15.00	*FOOTBALL PRO 98*	34.95/16.00	*PAX IMPERIA 2*	
BETRAYAL IN ANTARA	34.95/12.00	*HALFLIFE*	29.95/15.00	*EMINENT DOMAIN*	34.95/18.00
BIRTHRIGHT	29.95/15.00	*HEAVY GEAR*	34.95/18.00	*PHANTASMAGORIA 2*	34.95/12.00
BLADE RUNNER	29.95/14.00	*HEROES OF*		*POWER F-1*	29.95/15.00
BLOOD	29.95/14.00	*MIGHT AND MAGIC 2*	29.95/15.00	*PRIVATEER 2*	
CARMAGEDDON	29.95/15.00	*HEXEN II*	34.95/16.00	*THE DARKENING*	29.95/15.00
CIRCLE OF BLOOD	34.95/12.00	*ID ANTHOLOGY*	39.95/18.00	*PRO PILOT*	29.95/15.00
CIVIL WAR	29.95/15.00	*IF-16 VIPER*	29.95/15.00	*QUAKE*	29.95/15.00
CIVILIZATION II	29.95/15.00	*IF-22 RAPTOR*	29.95/15.00	*QUAKE 2*	39.95/18.00
CLOSE COMBAT 2	34.95/18.00	*IMPERIALISM*	34.95/19.00	*QUEST FOR GLORY 5*	34.95/18.00
COMANCHE 3	29.95/15.00	*INTERSTATE '76*	29.95/15.00	*REALMS OF HAUNTING*	29.95/15.00
COMMAND & CONQUER	34.95/12.00	*JANES*		*REBELLION*	34.95/18.00
GOLD	34.95/10.00	*688 HUNTER KILLER*	34.95/18.00	*REDGUARD*	34.95/18.00
RED ALERT	34.95/18.00	*AH-64D LONGBOW*	34.95/12.00	*RESIDENT EVIL*	34.95/20.00
CONQUEST EARTH	29.95/15.00	*AH-64D LONGBOW 2.0*	34.95/18.00	*RIVEN*	
CURSE		*KING'S QUEST*		*SEGA RALLY*	
OF MONKEY ISLAND	29.95/15.00	*MAST OF ETERNITY*	34.95/16.00	*CHAMPIONSHIP*	24.95/10.00
DAGGERFALL	29.95/15.00	*LANDS OF LORE 2*		*SHADOW WARRIOR*	29.95/15.00
DANATANA	34.95/18.00	*GUARDIANS DESTINY*	34.95/18.00	*SHADOWS OF EMPIRE*	34.95/18.00
DARK EARTH	29.95/15.00	*LAST EXPRESS*	29.95/15.00	*SHADOWS OVER RIVA*	29.95/15.00
DARK FORCES II		*LEGACY OF KAIN*	29.95/15.00	*SINCITY 2000*	24.95/10.00
JEDI KNIGHT	34.95/14.00	*LINKS LS 1998*	34.95/16.00	*SINCITY 3000*	34.95/18.00
DARKLIGHT CONFLICT	24.95/12.00	*LONGBOW 2*	34.95/18.00	*SIN*	34.95/15.00
DARK REIGN	34.95/18.00	*LORDS OF THE REALM 2*	34.95/12.00	*STAR CRAFT*	34.95/15.00
DEADLOCK II	29.95/15.00	*MAGE SLAYER*	34.95/18.00	*STAR CONTROL 3*	24.95/10.00
DEATHTRAP DUNGEON	34.95/18.00	*MAGIC THE GATHERING*	29.95/15.00		
DEFIANCE	29.95/15.00	*MASTER OF ORION 2*	29.95/15.00		
DESCENT TO UNDERMTN	29.95/15.00	*MDK*	34.95/18.00		
DESTRUCTION DERBY 2	24.95/12.00	*MEAT PUPPET*	34.95/14.00		
DIABLO	29.95/16.00	*MECHWARRIOR 2*			
DIE BY THE SWORD	29.95/14.00	*MERCENARIES*	24.95/12.00		
DIEHARD TRILOGY	24.95/12.00	*MECHWARRIOR 3*	34.95/18.00		
DUKE NUKEM 3D	29.95/14.00	*MERIDIAN 59*	34.95/18.00		
ATOMIC PAK	29.95/16.00	*MIGHT & MAGIC VI*	34.95/18.00		
DUNGEON KEEPER	34.95/18.00	*MONDAY NIGHT F/B '98*	29.95/15.00		
EARTHSIEGE 3	34.95/18.00	*MYST*	14.95/8.00		
ECSTATICA 2	29.95/15.00	*MYTH*	29.95/14.00		
EXTREME ASSAULT	29.95/15.00	*NASCAR RACING 2*	29.95/14.00		
EXTREME TACTICS	29.95/15.00	*NCAA FOOTBALL '98*	29.95/15.00		
F-22 LIGHTNING 2	29.95/15.00	*NEED FOR SPEED II*	34.95/15.00		
F/A-18 HORNET 2.0	34.95/18.00	*NEVERHOOD*	24.95/10.00		
FALCON 4.0	39.95/16.00	*NFL QUARTERBACK*			
FALLOUT	34.95/16.00	*CLUB 98*	29.95/14.00		
FIFA INT'L SOCCER 97	24.95/12.00	*NHL HOCKEY 98*	34.95/10.00		
FINAL REDEMPTION	29.95/15.00	*NIGHTMARE CREATURES2*	29.95/15.00		

To sell your CD-ROM games

1. On a full sized piece of paper, write your name, complete address, phone number and a list of all games you are selling.
2. If you would like to purchase other CD-ROM games, list the titles you would like to order on the same piece of paper.
3. Pack your games and paperwork in a box and send it to the address below. You will normally receive your check within 7-10 business days after we receive your package.

Send your games to:
BRE Software
Dept PCG11
352 W. Bedford Suite 104
Fresno, CA 93711

Ask about N64 and PlayStation Games

www.bresoftware.com

Titles in *ITALICS* are used and may or may not be available. All USED PC CD-ROM games include original box, instructions and a 90 day warranty. For ground shipping, add $5, for air shipping, add $9. Calif. res. add 7.75% tax. When selling back PC CD-ROMs, all games must include original box, instructions, and installation instructions. Any unacceptable/damaged games will be returned at your expense ($5 minimum). We reserve the right to refuse any sale or purchase. Prices in this ad good through 11/30/97. To receive prices in this ad you must include the "Dept #" from this ad on the OUTSIDE of your package. If we do not receive your package by 11/30/97 or your game titles are not listed in this ad, you will be paid from our current catalog. All games are subject to availability.

Product Information Number 109

PC GAMER

You can fulfill all of your recruitment needs by advertising in the PC Gamer Recruitment Section!

TO PLACE AN AD, CALL MELISSA MARRA AT (415) 468-4684 EXT 407

CD-ROM COMPUEXPERT WORLD WIDE DISTRIBUTOR

WORLDWIDE CD-ROM DISTRIBUTOR

"The BEST Choice for Top-Selling CDs"

Games Kids Educational

- Best Prices
- Latest Releases
- Fast Delivery
- Direct From the U.S

Be a part of the
$6 Billion
CD-ROM Software Industry!

714/367-1090
Fax 714/367-1045
Compu@fia.net

- Starcraft
- Quake II
- Shadow Warrior
- Jedi Knight
- Sim City 3000
- Con Quest Earth
- Fall Out
- Riven

To qualify for dealer pricing you must have a resale license & be able to place a $1000 initial order

Price Shoppers WWW.TOP7.COM

The Best Rated Products at The Best Found Prices
Demos, Reviews, Shopping Online Auction
Ad Produced By Price Shoppers Media

MEMOREX® SOFTWARE

Visit Your Local Software Retailer

VISIT US AT OUR WEBSITE http://www.memorexsoftware.com

We've got what you're looking for

TO ORDER: CALL TOLL FREE 1-888-7-MEMOREX

CLAW

Get Claw Now for only $34.95!
Save $5.00!

Call 1-800-381-1581 or shop online at

http://store.ttth.com!

CPU's

P166MMX	$145
P200MMX	$219
P233MMX	$299
PII 266	$599

32/64MB SDRAM $109/$249
16/32MB EDO RAM $44/$99

G&R Company Store

visit the website for the most current best prices on all of you hardware and peripheral needs

800-540-9643

For you Gamers

Matrox Mystique 220 4MB	$139
Diamond Monster 3D	$145
Toshiba 24X	$95

ISI Innovative Solutions Trainers and Consultants Certification inNovell, Microsoft, and Oracle. CNE, MCNE, MCIP, MCSD, NCIP, MCT, MCPS, and A+. 800-877-1707 x595

Price Auction Shoppers

FIND GREAT DEALS ON HARDWARE, SOFTWARE, ETC. CHANCES TO WIN FREE SOFTWARE! Some of the products featured on Price Shoppers Best Product Best Price Guide are available to purchase with your credit card or money order. On auction: Diamond MM, Comfy Interactive, 01 Communique, Legacy Software, Memorex. www.top.com/auction.html

All copyrights and tradedmarks belong to their respective owners. Prices verified as of September 3, 1997. Prices subject to change. Some Orders may require shipping and tax.

PC GAMER CUSTOMER SERVICE

You're Saved!

You read *PC Gamer* and that means you're important to us. We're committed to providing the best customer service possible and have listed details of how to reach us below.

SUBSCRIPTION INQUIRIES

If you have a change of address, invoice or renewal questions, or haven't received your *PC Gamer* by the first day of the issue month, please contact us:

WRITE: *PC Gamer*
Customer Service
P.O. Box 51199
Boulder, CO 80322
CALL: (800) 898-7159
E-MAIL: subscribe@pcgamer.com

When writing us, please include your old address on a mailing label. Please allow at least six weeks notice for any change in your subscription record.

BACK ISSUES & CDS

The price per copy for back issues within the U.S. is $8.99, including postage. For foreign orders, send $12.00 in U.S. funds, which includes airmail postage.

To order just *The CD!* within the U.S., send $7.95, including postage. For foreign orders, send $10 in U.S. funds, which includes airmail postage. All orders must be prepaid and sent to the following address:

WRITE: *PC Gamer*
Attn: Back Issues
150 North Hill Dr.
Brisbane, CA
94005
CALL: (415) 468-2500
M-F, 9 a.m. - 5 p.m., PST
Have your credit card ready.
FAX: (415) 656-2486

RENTING SUBSCRIBER NAMES

PC Gamer occasionally rents our subscriber list to other companies that we think offer products of interest to our readers. If you would like your name removed from this list, please let us know.

TECH SUPPORT FOR THE CD!

We are committed to bringing you the best possible disc every month. In the disc pages, we provide the phone numbers of the companies whose games are featured on *The CD!* Please call these companies for technical support.

TO REPLACE A DAMAGED DISC

To replace a damaged disc, please contact our customer service department at:

WRITE: *PC Gamer*
Customer Service
P.O. Box 51199
Boulder, CO 80322
CALL: (800) 898-7159
E-MAIL: subscribe@pcgamer.com
WEBSITE: http://support.imagine-inc.com

GIFT SUBSCRIPTIONS

Call (800) 905-7500 to order a gift subscription.

PC GAMER

http://www.pcgamer.com

Product Information Number 240

THOUSANDS OF NEW & USED CD-ROMS
Buy-sell-trade | retail and wholesale
CD-ROM PLAYBACK (954)752-3237
1-800-370-1241
WE'LL BEAT ANY PRICE!!
(In this publication)
Http://www.playback.com

Product Information Number 119

Best Gaming Systems... Best Prices... Best Service

RPM Computers

1-800-717-9711

http://www.rpm-computer.com

VISA MasterCard DISCOVER

intel inside

UPGRADE OPTIONS

MEMORY	
16MB RAM EDO 72pins	$49.00
16MB SDRAM	$69.00
32MB RAM EDO 72pins	$104.00
32MB SDRAM	$129.00
64MB SDRAM	$CALL
HARD DISK	
EIDE 2.5GB	$199.00
EIDE 3.1GB	$229.00
EIDE 4.0GB	$269.00
EIDE 5.0GB	$379.00
EIDE 6.4GB	$359.00
MAIN BOARD / CPU	
Intel Pentium® 166MMX	$279.00
Intel Pentium® 200MMX	$389.00
Intel Pentium® 233MMX	$549.00
AMD K-6 200 MHz	$334.00
AMD K-6 233 MHz	$459.00
Intel Pentium II 233 MHz	$896.00
Intel Pentium II 266 MHz	$1019.00
ADD-ON SPECIALS	
17" SVGA Monitor	$475.00
20" Monitor	$1099.00
Matrox Millennium II 4MB	$259.00
Diamond Monster S/C	$159.00
Creative Labs AWE 64 Gold	$189.00
24X CD-ROM	$89.00
CD-Recorder Panasonic 4X	$499.00

Prices and configurations subject to change without notice.

Home Gaming Series

Intel Triton TX Chipset (Gigabyte Main Board)
Mid Tower Case (250 Watt P/S)
High Density Floppy Drive
EIDE 3.0GB Hard Disk • On Board controller
104 Win 95 Keyboard • MS Intilla Mouse
15" SVGA .28 NI Low Rad Monitor
2MB Diamond Stealth 3D 3000 VRAM Video Display
20X CD-ROM
SB 64 Value Sound Card PnP
200 Watt Speakers
MS Windows 95 OSR-2 w/ Applications CD
MS Sidewinder Pro
MS Home Package
(MS Encarta, MS Works, MS Money)
Two Year OnSite Warranty

Intel Pentium® 166 MMX	$1599
Intel Pentium® 200 MMX	$1699
Intel Pentium® 233 MMX	$1899
AMD K6-200 MHz	$1659
AMD K6-233 MHz	$1799
Intel Pentium® II 233 MHz	$2199
Intel Pentium® II 266 MHz	$2299

Super Gaming Series

Intel Pentium® or AMD K-6 Processor
Mid Tower Case (250 Watt P/S)
High Density 1.44 Floppy
EIDE 4.0GB WD Hard Disk
32MB SDRAM (12ns)
On Board Controller • 104 Win 95 Keyboard
17" SVGA .28 NI Low Rad Monitor
4MB Matrix II Millennium WRAM
24X CD-ROM IDE
Creative Labs SB Gold 64 PnP
Altec Lansing ACS-45 Speakers
Diamond Monster 3D 4MB
MS OSR-2 w/ Applications CD
Assembled and Burn Tested
Two Year OnSite Warranty

Intel Pentium® 166 MMX Tech	$2299
Intel Pentium® 200 MMX Tech	$2399
Intel Pentium® 233 MMX Tech	$2599
AMD K6-200 MHz	$2349
AMD K6-233 MHz	$2499
Intel Pentium® II 233 MHz	$2899
Intel Pentium® II 266 MHz	$2999

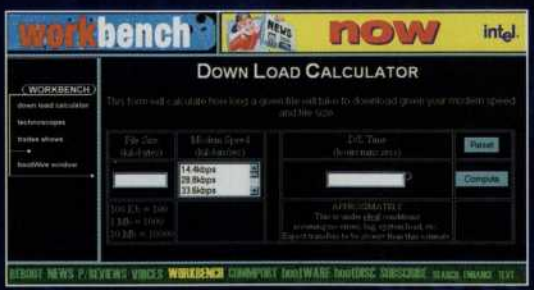
Product Information Number 292

PURE ONLINE POWER!

Check Out boot on the Web

bootNet sports many of the exciting **features** that make ***boot*** magazine such a valuable resource for the hardcore ***PC*** enthusiast.

There are **reviews** and **previews**, **bootworthy products**, and *boot* **articles** from past issues online for easy **reference**, complete with a search **engine**.



bootNet

www.bootnet.com

REBOOT NEWS P/REVIEWS VOICES FEATURES COMMPORT bootWARE bootDISC SUBSCRIBE

JUST CDS, INC.

E-MAIL SALES@JUSTCDS.COM

THE **LEADER** IN CD ROM DISTRIBUTION

OVER 1500 TITLES IN STOCK

NEW GAMES! **REFERENCE** **EDUCATIONAL**

GUARANTEED LOW PRICES!

CALL US FOR A PRICE LIST

CONTACT US SOON!

TEL: 714-634-3823

FAX: 714-634-0117

DEALER INQUIRES PLEASE

Product Information Number 201

marketplace

do you want to sell a product?

The PC Gamer *Marketplace Section is the most affordable and effective way to sell your product to the gaming market.*

advertise today.

PC GAMER

To place an ad, call Melissa Marra at (415) 468-4684 Ext. 407

ADULT CD-ROMS! OVER 700 TITLES IN STOCK! WILL BEAT ANY PRICE!
FREE SHIPPING, AIRMAIL, WORLDWIDE! VISA MASTERCARD AMEX, CHECK COD
(800) 304-4730 24 HRS/7DAYS (216) 254-2604 INTERNATIONAL (216) 254-1206 FAX
GOOSEBUMP GRAPHICS, BOX 516, MENTOR, OH 44061 (MUST BE OVER 21)

ACTRESSES UNCOVERED (GIFS) $39	INCOGNITO (GERMAN BONDAGE) $39
ADULT STOREYBOOK (TEXT Files) $39	JAPANESE PEALS 1 OR 2 $39
AMATEUR DEBUTANTES (GIFS) $39	LIFE IN THE FAT LANE (PHOTOS) $39
AMATEUR PHOTO GALLERY $39	LUST (GAME) $39
AMATEUR SCRAPBOOK (GIFS) $39	MAKE YOUR OWN D*** (GAME) $39
**** ROM $39	MANPOWER (GAY) $39
ASIAN PEARLS 1,2 OR 3 $39	MISS NUDE WORLD (GIFS) $39
AWARD WINNING XXX PHOTOS $39	NASTY NURSES $39
BANKOK BEAUTIES (GIFS) $39	NIGHTWATCH 1,2, OR 3 (GAMES) $39
B**F 1,2,3 OR PRIME (GAY) $39	NIX PIX HOT FIX 1,2,3,4 OR 5 $39
BEST OF CANDY STRIPERS $39	NUDE CELEBS $39
BUSTY LADIES (GIFS) $39	ONLY THE BEST OF A*** $39
B**TI WORLD I $39	ONLY THE BEST OF D*** $39
CHERRY POPPERS 1 OR 2 $39	PEEPING PETE (GAME) $39
CLIP ART EROTICA $39	PENTHOUSE 1,2,3,4,5, OR 6 $39
CYBER EXPERIENCE (SCD'S) $39	PINK PASSION (LESBIAN GIFS) $39
CYBERSTRIP BLACKJACK $39	PORNO POKER $39
DAMSELS IN DISTRESS (GIFS) $39	PRIVATE EROTIC GALLERY $39
DEBBIE DOES DALLAS $39	PRIVATE GIRL'S SCHOOL (GIFS) $39
DEEP T****T GIRLS 1,2,3 OR 4 $39	PRIVATE PRISON (GAME) $39
DEPRAVED FANTASIES 1 OR 2 $39	RARE PICS 1 (ANIMALS) $39
DESKTOP VOYAGER (GAME) $39	RARE PICS 2 (WATER SPORTS) $39
DIE PIETSCHE (GERMAN B&D) $39	RAUNCH (GAME) $39
DIRTY DEBUTANTES 1 OR 2 $39	ROPES 'n CHAINES $39
DIRTY LITTLE ADULT CARTOONS $39	RUBBER PHANTASIES (PHOTOS) $39
ELITE COLLEGE FIRLS (PHOTOS) $39	SEALED WITH A KISS 1 OR 2 $39
EROTIC READER (STORIES) $39	SEXUAL DEBUTANTES (GIFS) $39
FETISH $39	SHACKLES, CUFFS 'n TOUGH STUFF $39
FOR WOMEN ONLY (GIFS) $39	STARS 'n MODELS $39
FORBIDDEN SUBJECTS $39	STRIP POKER PROFESSIONAL $39
FREAK SHOW 1 OR 2 $39	S**** BAR GIRLS $39
FREAK SHOW 1 OR 2 $39	SWEET CHEEKS (GIFS) $39
FUN WITH T**S $39	SYLT-MADCHEN 1 OR 2 (NUDES) $39
GAY WORLD 1,2 OR 3 $39	THAI BONDAGE $39
GIFFY WORLD 1,2,3 OR 4 $39	TIFFANY (AMATEUR NUDES) $39
GIRLFRIEND TRACI OR TERI $39	TRANZ (CHICKS WITH *****) $39
HACKER CHRONICLES 2 $39	ULTIMATE EROTICA COLLECTIONS $39
HARD CORE 2 $39	ULTIMATE TOKYO (GAME) $39
HARD CORE GIFS $39	VAMPIRE KISS (GAME) $39
HEIDI'S HOUSE (GAME) $39	VILLAGE COLLECTION (2 CDS) $39
HIDDEN CAMERA UPSKIRT VIDEO $39	VIRTUAL SEX 1 OR 2 $39
HIDDEN CAMERA LOCKER ROOM $39	VIRTUAL VALERIE 2 (GAME) $39
HOME BOYS 1,2 (GERMAN GAY) $39	WORLD'S BEST B****S (GIFS) $39
HONEY I B**** EVERYBODY $39	WORLD'S BEST B***** (GIFS) $39

Product Information Number 152

NEXT TIME...

Vol. 4 No. 12 Goes On Sale Nov. 18 Don't Miss It!

Okay. It's time. Time for THE BIG ONE. The earth-shattering annual event that is the *PC Gamer* Holiday Issue is almost upon us, and it will be bigger than ever before. You thought last year's December issue was as big as it could get? Ha! You ain't seen nothin' yet!

HOLIDAY EXTRAVAGANZA

It's become a *PC GAMER* TRADITION, and this year's bumper holiday special will be bigger and better than ever before.

You simply won't be prepared for the holiday gaming season without our mammoth gift guide, round-up of the year's best software and hardware, and preview of the hottest new games for the holidays and beyond.

And with our one-stop guide to Gaming Goodness clocking in at more than 35 packed pages of information, you'll have everything you need to have a happy holiday season!

The 25 Best Online Games!

Our correspondents in cyberspace have scoured the Internet and returned with the definitive list of the 25 best and most promising games available to play online. From the big-name, big-budget online epics, to some you may never have even heard of before, we've got the skinny on the Internet's elite games. Don't miss it.

Tons of Reviews!

All of the Holiday biggies reviewed, including ...

- ***iF-16***
- ***Sid Meier's Gettysburg***
- ***Shadows of the Empire*** ▸▸
- ***Incubation***
- ***Legends 98***

...and many more!

PC GAMER

NOVEMBER 1997

EDITORIAL STAFF

Editor-in-Chief · Gary Whitta
Editor · Dan Bennett
Deputy Editor · Todd Vaughn
Managing Editor · Lisa H. Renninger
Disc Editor · Joseph Novicki
Assistant Disc Editor · Michael Wolf
Technical Editor · Joel Durham
Online/News Editor · Jason Bates
Webmaster · Michael Luton
Senior Writer · William R. Trotter

ART STAFF

Art Director · Dean H. Renninger
Associate Art Director · Quintin Doroquez
Contributing Artist · Rey Serrano

CONTRIBUTING EDITORS

Heidi Aycock · T. Liam McDonald
Colin Williamson

ADVERTISING STAFF

Associate Publisher · Caroline Simpson-Bint
Advertising Manager · Karen Lee James
Account Manager · Robin John Rosales
Account Manager · Nancy Romano
Marketplace Sales Rep. · Melissa Marra
Advertising Coordinator · Jennifer Barbeau
Marketing Manager · Angela Bennett
New Media Manager · Mary Hoppin

PRODUCTION STAFF

Production Director · Richard Lesovoy
Production Coordinator · Ken Brandow

CIRCULATION STAFF

Vice President Circulation · Holly Klingel
Newsstand Director · Bruce Eldridge
Circulation Analyst · Terry Lawson
Circulation Manager · Tina Rodich
Fulfillment Manager · Peggy Mores
Direct Mail Manager · Amy Nibbi

CORPORATE STAFF

Publisher · Matthew A. Firme
VP/Finance & CFO · Tom Valentino
President · Chris Anderson

International Licensing Representative
Robert J. Abramson and Associates, Inc.
720 Post Road, Scarsdale, NY 10583

General Consumer Advertising Sales
Fox Associates, Inc.
Atlanta · (404) 252-0968
Chicago · (800) 345-8670
Detroit · (810) 543-0068
Los Angeles · (310) 841-0280
New York · (212) 725-2106
San Francisco · (415) 989-5804

SUBSCRIPTIONS AND CUSTOMER SERVICE

Write: PC Gamer, Customer Service Dept., P.O. Box 54163, Boulder, CO 80322
Call: Inside U.S.: (800) 898-7159
Outside U.S.: (415) 468-2500
Fax: (415) 656-2486
E-mail: subscribe@pcgamer.com

IMAGINE PUBLISHING, INC.
150 North Hill Dr., Brisbane, CA 94005
Phone: (415) 468-4684 · Fax: (415) 468-4686

Audit Bureau of Circulations

"You don't have any idea who you're dealing with," Devon said, looking over his reading glasses at the brash young man. "Dystech Industries is one of the most powerful companies in the world. You'd do best to go home and forget this incident. You're lucky to be here at all."

Ryan was as nervous as he'd ever been, but he stood his ground. "Sir," he said, and stopped himself. "Mr. Devon, you can give me a real job or not, but I'm not going to rot in your mail room another day. I don't care if you didn't want me to marry your daughter, but it's too late for you to stop us. Either help me support her, or I'll be on my way." He stood tall, kept his gaze steady, but inwardly he couldn't believe the words coming out of his own mouth.

Devon was silent. He looked down, shuffled some papers on his desk and glanced back up. Ryan didn't like the look in his eye.

TO BE CONTINUED...

FROM THE MAKERS OF ASCENDANCY

NEXT TIME...

Vol. 4 No. 12 Goes On Sale Nov. 18 Don't Miss It!

Okay. It's time. Time for THE BIG ONE. The earth-shattering annual event that is the *PC Gamer* Holiday Issue is almost upon us, and it will be bigger than ever before. You thought last year's December issue was as big as it could get? Ha! You ain't seen nothin' yet!

HOLIDAY EXTRAVAGANZA

It's become a *PC GAMER* TRADITION, and this year's bumper holiday special will be bigger and better than ever before.

You simply won't be prepared for the holiday gaming season without our mammoth gift guide, round-up of the year's best software and hardware, and preview of the hottest new games for the holidays and beyond.

And with our one-stop guide to Gaming Goodness clocking in at more than 35 packed pages of information, you'll have everything you need to have a happy holiday season!

The 25 Best Online Games!

Our correspondents in cyberspace have scoured the Internet and returned with the definitive list of the 25 best and most promising games available to play online. From the big-name, big-budget online epics, to some you may never have even heard of before, we've got the skinny on the Internet's elite games. Don't miss it.

Tons of Reviews!

All of the Holiday biggies reviewed, including ...

- ***iF-16***
- ***Sid Meier's Gettysburg***
- ***Shadows of the Empire*** ▸▸
- ***Incubation***
- ***Legends 98***

...and many more!

PC GAMER

NOVEMBER 1997

EDITORIAL STAFF

Editor-in-Chief · Gary Whitta
Editor · Dan Bennett
Deputy Editor · Todd Vaughn
Managing Editor · Lisa H. Renninger
Disc Editor · Joseph Novicki
Assistant Disc Editor · Michael Wolf
Technical Editor · Joel Durham
Online/News Editor · Jason Bates
Webmaster · Michael Luton
Senior Writer · William R. Trotter

ART STAFF

Art Director · Dean H. Renninger
Associate Art Director · Quintin Doroquez
Contributing Artist · Rey Serrano

CONTRIBUTING EDITORS

Heidi Aycock · T. Liam McDonald
Colin Williamson

ADVERTISING STAFF

Associate Publisher · Caroline Simpson-Bint
Advertising Manager · Karen Lee James
Account Manager · Robin John Rosales
Account Manager · Nancy Romano
Marketplace Sales Rep. · Melissa Marra
Advertising Coordinator · Jennifer Barbeau
Marketing Manager · Angela Bennett
New Media Manager · Mary Hoppin

PRODUCTION STAFF

Production Director · Richard Lesovoy
Production Coordinator · Ken Brandow

CIRCULATION STAFF

Vice President Circulation · Holly Klingel
Newsstand Director · Bruce Eldridge
Circulation Analyst · Terry Lawson
Circulation Manager · Tina Rodich
Fulfillment Manager · Peggy Mores
Direct Mail Manager · Amy Nibbi

CORPORATE STAFF

Publisher · Matthew A. Firme
VP/Finance & CFO · Tom Valentino
President · Chris Anderson

International Licensing Representative
Robert J. Abramson and Associates, Inc.
720 Post Road, Scarsdale, NY 10583

General Consumer Advertising Sales
Fox Associates, Inc.
Atlanta · (404) 252-0968
Chicago · (800) 345-8670
Detroit · (810) 543-0068
Los Angeles · (310) 841-0280
New York · (212) 725-2106
San Francisco · (415) 989-5804

SUBSCRIPTIONS AND CUSTOMER SERVICE

Write: PC Gamer, Customer Service Dept., P.O. Box 54163, Boulder, CO 80322
Call: Inside U.S.: (800) 898-7159
Outside U.S.: (415) 468-2500
Fax: (415) 656-2486
E-mail: subscribe@pcgamer.com

IMAGINE PUBLISHING, INC.
150 North Hill Dr., Brisbane, CA 94005
Phone: (415) 468-4684 · Fax: (415) 468-4686

Audit Bureau of Circulations

"You don't have any idea who you're dealing with," Devon said, looking over his reading glasses at the brash young man. "Dystech Industries is one of the most powerful companies in the world. You'd do best to go home and forget this incident. You're lucky to be here at all."

Ryan was as nervous as he'd ever been, but he stood his ground. "Sir," he said, and stopped himself. "Mr. Devon, you can give me a real job or not, but I'm not going to rot in your mail room another day. I don't care if you didn't want me to marry your daughter, but it's too late for you to stop us. Either help me support her, or I'll be on my way." He stood tall, kept his gaze steady, but inwardly he couldn't believe the words coming out of his own mouth.

Devon was silent. He looked down, shuffled some papers on his desk and glanced back up. Ryan didn't like the look in his eye.

TO BE CONTINUED...

FIFTEEN RICHLY DETAILED ISLAND-WORLDS WITH A LUSH DIGITAL SOUNDTRACK.

FOUR DISTINCT SPECIES WITH UNIQUE APPEARANCES, SKILLS, AND TACTICS.

UNIQUE BLENDING OF REAL-TIME STRATEGY AND PUZZLE-SOLVING ADVENTURE.

COOPERATIVE MULTIPLAYER SYSTEM ALLOWS FOUR PLAYERS TO WORK TOGETHER TO DESTROY A COMMON ENEMY.

IN

VICTORY

COMES

ENLIGHTENMENT

EMI CAPITOL

FREE CD OFFER

LOOK FOR SPECIALLY MARKED VIRGIN GAME PACKAGES FOR DETAILS.

And Celebrate EMI-Capitol's 100 with the Sale of the Century–Going on at Record Stores Everywhere!

THE

TONE REBELLION™

FROM THE MAKERS OF THE CODIE AWARD-WINNING ASCENDANCY...

IN A REMOTE PART OF THE UNIVERSE, CREATURES CALLED FLOATERS RELY ON TONE, THE ESSENCE OF LIFE. BUT NOW THE LEVIATHAN THREATENS THIS PEACEFUL KINGDOM, LEAVING DEATH AND DISCORD IN ITS WAKE. SET IN A FRACTURED WORLD OF AMAZING FLOATING ISLANDS, CONNECTED BY SHIMMERING BRIDGES OF TONE ENERGY, YOU MUST LEAD THE FLOATERS ON A JOURNEY OF LIBERATION. THE TONE REBELLION IS A NEW AWAKENING IN REAL-TIME STRATEGY ADVENTURE THAT IS MORE THAN A REVOLUTION... IT'S A REVELATION.

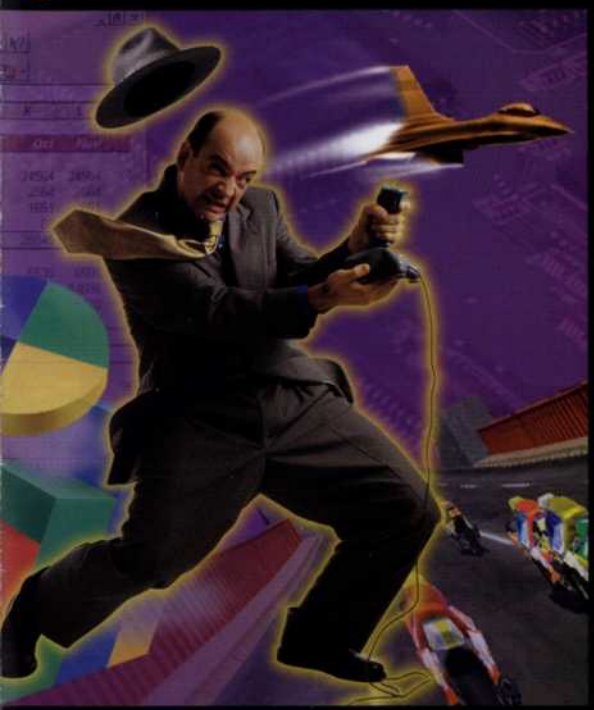
WWW.VIE.COM

© 1997 The Logic Factory, Inc. All Rights Reserved. Distributed exclusively by Virgin Interactive Entertainment, Inc. The Tone Rebellion™ is a trademark of The Logic Factory, Inc. All company and/or product names are trademarks and/or registered trademarks of their respective companies. Windows® 95 is a registered trademark of Microsoft Corporation. Virgin is a registered trademark of Virgin Enterprises, Ltd. 18061 Fitch Avenue, Irvine, CA 92614.

Product Information Number 365

SOUND BLASTER
PC-DVD
SPEAKERS
GRAPHICS CARDS
MULTIMEDIA KITS

Upgrade to Mind-Blowing Acceleration & Eye-Popping Graphics.



Introducing
Graphics Blaster® Exxtreme™

Power Up Your PC's Performance!

The graphics card is one of your PC's hardest working components. With so much performance riding on just one card, make it the very best. Creative's new Graphics Blaster® Exxtreme™ breaks the performance barrier and delivers incredible value. Blast through the coolest games. Punch up your presentations. Get more productive. With up to 8MB of memory and state-of-the-art display technology, the Graphics Blaster® Exxtreme™ provides ultra-high resolutions up to 1600x1200, as many as 16.7 million colors and vertical refresh rates that deliver brighter, more vibrant images. With built-in upgrade capabilities, including support for our revolutionary new DynamicXtended Resolution™ (Dxr2™) enhanced DVD playback technology, you'll have the coolest PC today and into the future.

Graphics Blaster® Exxtreme™

- Full 2D & 3D acceleration, plus enhanced video playback
- 4MB of SGRAM, upgradeable to 8MB
- High-speed 230MHz DAC, with refresh rates up to 220Hz
- High-performance drivers for Windows® 95 and Windows® NT, including fully accelerated support for DirectX® and OpenGL®
- Upgradeable to Creative's Dxr2™ enhanced DVD playback module, including TV output

The Hottest Upgrades Create the Coolest PC.™

CREATIVE®

WWW.SOUNDBLASTER.COM
Product Information Number 113
For more information, check out our Website at **www.soundblaster.com** or call 1.800.998.5227.

©1997 Creative Technology Ltd. All other brand or product names listed are trademarks or registered trademarks and are property of their respective holders.

Heavy Gear Supplement

ACTIVISION.

THE NEW BREED OF WAR MACHINE.

HEAVY GEAR IS WARFARE PERSONIFIED. A SUPERIOR BREED OF WAR MACHINE WITH ENDLESS TACTICAL CUSTOMIZATIONS. A SPECIALIZED COMBAT SYSTEM WITH HUMANOID CAPABILITIES SUCH AS DODGING, CROUCHING AND KNEELING. A DEVASTATING ARSENAL OF 3-D ENGINE ADVANCEMENTS ONLY THE PRODUCERS OF THE #1-SELLING, 3-D COMBAT SIMULATOR OF ALL TIME COULD UNLEASH. HEAVY GEAR. THE NEW BREED OF WAR MACHINE.

AN IMMENSE UNIVERSE
HEAVY GEAR PROGRESSES AN EPIC COMBAT EXPERIENCE THROUGH A DRAMATIC CHARACTER-BASED STORYLINE AND STUNNING CUTSCENES.

PERPETUAL INTERNET WAR
MATCH YOUR BATTLES AFFECT THE WARFRONT ON A PERSISTENT INTERNET/LAN BATTLE-MAP. CREATE YOUR OWN CHARACTER, AND ACCESS NEW GEARS AND MISSIONS WITH HIGHER RANK.

THE NEW BREED

HEAVY GEAR™

COMING THIS FALL
ON WINDOWS®95 CD-ROM

ADVANCED GEAR CONSTRUCTION
USE THE SIMPLE DRAG-AND-DROP INTERFACE TO CONSTRUCT AN UNLIMITED ARSENAL OF GEARS FROM THE GROUND UP: PILOT YOUR VISIBLY UNIQUE DESIGNS IN THE SIMULATOR!

3-D BATTLEGROUND REALISM
USE THE TRULY 3-D TERRAIN TO YOUR ADVANTAGE — HIDE BEHIND SAND DUNES AND UTILIZE OTHER LAND FORMATIONS THAT DRASTICALLY IMPROVE YOUR COMBAT EXPERIENCE.

OFFICIAL
HEAVY GEAR™
UNIVERSE

DUNDEE

ACTIVISION.

HACS-01MG-MP HUNTER

SPECIFICATIONS

The Hunter Heavy Gear has the distinction of being the first walker on Terra Nova exclusively for military use. A rugged machine which enjoyed an enormous popularity in its prime, the Hunter's simplicity and versatility are the main reasons why it's still used today.

VEHICLE DESCRIPTION	
Manufacturer:	Northco
Use:	Trooper Heavy Gear
Height:	4.3 meters
Full combat weight:	6627 kg
Armor material:	Durasheet w/alloy
Average armor thickness:	45 mm
Maximum running speed:	41 kph
Maximum rolling speed:	73.8 kph
Powerplant:	S-V950A V-Engine

WEAPONS	
M222 Autocannon Rifle:	60 rounds
RP-109 Pepperbox:	24 rockets
MK IV Grenade Launcher:	6 grenades
M-2A Hand Grenade:	3 grenades

HACS-10HG-AST KODIAK

SPECIFICATIONS

Introduced in the final two cycles of the War of the Alliance, the Kodiak was the sum of Northern engineering, concentrating massive firepower in a mobile package. Quite rare because of its high production cost, it is sought after to add a mystique of power to a regiment.

VEHICLE DESCRIPTION	
Manufacturer:	Northco/Shaian Mechanics
Use:	Heavy Assault Heavy Gear
Height:	5.2 (6.2 m w/AGM) meters
Full combat weight:	10,485 kg
Armor material:	Durasheet w/alloy and ceramic
Average armor thickness:	80 mm
Maximum running speed:	37 kph
Maximum rolling speed:	65 kph
Powerplant:	S-V2202 V-Engine

WEAPONS	
Northco 8.2 mW XPA-001 Accelerator:	12 shots
GH-16 71 mm Rocket Pod:	36 rockets
Hammerstrike-II Guided Missile Launcher:	12 missiles
Two GU-10 10 mm Gatling Guns:	400 belted cartridges each
Mark IV Grenade Launcher:	6 grenades
Hand Grenade:	6 grenades
Heavy Hand Grenade:	6 grenades

OACS-05M/SU BLACK MAMBA

SPECIFICATIONS

The cutting edge in Southern Gear design, the Black Mamba uses a carbon composite in its internal frame to reduce weight and increase flexibility, making it ideal for commando operations. It also sports rounded composite armor to better deflect incoming rounds.

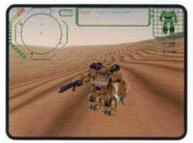
VEHICLE DESCRIPTION	
Manufacturer:	Territorial Arms
Use:	Soldat Heavy Gear
Height:	4.6 meters
Full combat weight:	6230 kg
Armor material:	Armoplast w/composite
Average armor thickness:	56 mm
Maximum running speed:	55.4 kph
Maximum rolling speed:	84 kph
Powerplant:	WV-930TC V-Engine

WEAPONS	
PR-55 Autocannon:	40 rounds
Vogel-8 Rocket Pod:	32 rockets
Two GL-01 Grenade Launchers:	6 grenades each
HG-C4 Hand Grenades:	3 grenades

THE HEAVY GEARS WERE BORN OUT OF THE WAR OF THE ALLIANCE AFTER EARTH WAS DEFEATED IN ITS ATTEMPT TO CONQUER TERRA NOVA. UNTIL THEN, COMBAT ROBOTS HAD BEEN LARGE AND CUMBERSOME. BUT A SIGNIFICANT TECHNOLOGICAL ADVANCEMENT MADE CONSTRUCTION AND MINING ROBOTS ADAPTABLE FOR MILITARY USE. COMBINING AN INFANTRYMAN'S FLEXIBILITY WITH AN ARMORED VEHICLE'S DURABILITY, THE HEAVY GEAR BECAME THE PERFECT BATTLE MACHINE.

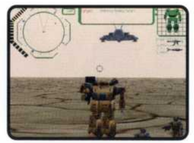
THE STUNNING TEXTURE-MAPPED 3-D GRAPHICS ARE ELEVATED TO THE NEXT LEVEL WITH DIRECT 3D SUPPORT.

GEARS ARE CAPABLE OF AGILE, HUMANOID MOVEMENTS LIKE DUCKING, SIDE-STEPPING, CROUCHING AND KNEELING.



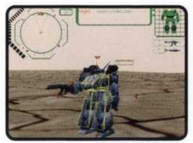
ALL HEAVY GEAR MACHINES ARE EQUIPPED WITH TREADS OR WHEELS FOR HIGH-SPEED SECONDARY MOVEMENT.

BARRAGE YOUR ENEMIES WITH FIELD GUNS, GRENADE LAUNCHERS, LASER CANNONS, BAZOOKAS, MORTARS AND MORE.



PILOT 16 MASSIVE GEARS IN A BATTLEFIELD SHARED BY STRIDERS, TANKS, ARTILLERY AND AIRCRAFT CARRIERS, INFANTRY SOLDIERS AND MORE.

USE MILITARY TACTICS TO YOUR ADVANTAGE — CALL IN AIR AND ARTILLERY STRIKES DURING THE HEAT OF BATTLE.



A STATE-OF-THE-ART, WIRE-FRAMED OVERLAY SYSTEM DISPLAYS DAMAGE DIRECTLY OVER A TARGETED GEAR.

THE NEW BREED

HEAVY GEAR™

COMING THIS FALL
ON WINDOWS®95 CD-ROM

© 1997 DREAM POD 9, INC. AND TARGET GAMES, AB. BASED ON THE HEAVY GEAR™ UNIVERSE CREATED AND OWNED BY DREAM POD 9, INC. ACTIVISION IS A REGISTERED TRADEMARK OF ACTIVISION, INC. © 1997 ACTIVISION, INC. ALL RIGHTS RESERVED. ALL OTHER TRADEMARKS AND TRADE NAMES ARE THE PROPERTIES OF THEIR RESPECTIVE OWNERS.

WWW.ACTIVISION.COM