WINGS OF GLORY

Feature Reviews
Alone In The Dark II
Carriers At War II
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Circle Reader Service #141
Game Ratings:

by Johnny L. Wilson

As usual, the government is acting upon their misconceptions of the world of gaming and, as usual, it is going to cost you, the gamer. The solutions to the video game ratings dilemma advocated by U.S. Senators Lieberman (Dem., CT) and Kohl (Dem., WI) will cost computer gamers in terms of time, money and content. At press time, Senator Joseph Lieberman’s office sent us a copy of a letter which his office had sent to Ken Wasch, the Executive Director of the Software Publishers Association. The letter indicated that Senator Lieberman and his associate, Senator Herb Kohl, have no conception of the differences between audience, publication/manufacturing process, and game size between video games and computer games. The senators and their colleagues seem to believe that all interactive entertainment is for kids and that whatever is good for the video game companies is good for all platforms.

Lieberman stated specifically, “...your letter appears to imply that there is a distinction between interactive entertainment software developed for PCs or other open platforms and software developed for use on dedicated platforms. We question the basis for such a distinction.” Further, Lieberman’s committee insists on a ratings system that requires “prior review” (where a panel views every game in full prior to its release) for all products. Both of these misguided approaches to the ratings issue are dangerous for you as a gamer.

First of all, Lieberman and Kohl have endorsed a ratings plan that has been developed by video game manufacturers and video game publishers without significant input by personal computer-based publishers. The lone exception to this rule is Electronic Arts, which publishes personal computer titles but nets more than two-thirds of its proceeds from video game sales. The plan, advocated by this group of video game-oriented companies, calls for every game to be viewed by an independent panel prior to release. This independent panel would consist of parents, child psychologists, and educators.

How does that hurt you? This panel is not going to understand that you are a largely mature audience. They are not going to perceive that there is a marketplace of mature gamers. Everything they evaluate will be examined under the rubric, "Is it good for children?" As a result, many of the games covered in CGW will be rated as unsuitable for children and many retailers will refuse to handle these games because they perceive themselves as family-oriented stores and cannot sell unsuitable merchandise.

Further, the requirement for “prior review” does not hurt video game companies. They have a lag time in which review can take place while the cartridges are being manufactured. This is a lengthy process that usually takes place out of the country, requires some shipping delays, and costs more than disk duplication. It can be months from “code release” to distribution on a cartridge game, whereas it may be a matter of a week or two on a disk-based product. So, timing is not a sensitive issue on cartridge games, but it is quite significant on the disk-based side.

For example, assume that a video game company submits a game for review and a competitor submits one a week later. Let’s assume that for no particular reason (a breakdown in logistics, personal preference of the panel, etc.), the second company’s game is reviewed first. Chances are that it still won’t hit the market before the first company’s game, as both products are in a lengthy duplication process. With disk-based software, however, that logistical anomaly could mean that the first product would not hit the shelves until after the second product had taken advantage. Lieberman’s letter merely tells Wasch, “We would hope that any pre-shipment review rating system will process software products in a non-discriminatory manner, such as first-come-first-served.” They expect this kind of even-handed treatment from the video game industry where the machine manufacturers dictate how many games a software publisher can have on the shelf, but make allowances for some publishers to have more than others.

Most importantly, the creation of an independent panel to review all games necessitates the creation of a unwieldy bureaucracy that will cost a lot of money to administer. Senators Lieberman and Kohl do not understand the difference between video games and computer games, so they do not realize that whereas video game play is extended because you have to play levels over and over again in order to master them, computer game play is often extended because the game worlds are larger and the environments/system more complex. So, while you could view a video tape showing a gamer going all the way through a video game in a few hours, it would take almost a week to go through even the most optimal path of a large computer game. Who is going to pay the hard-earned cash for the bureaucracy that spends this amount of time? You!

What can you do? We have already sent a letter to Senators Lieberman and Kohl delineating the problems inherent in their solution. Now, it’s up to the readers of Computer Gaming World to let these gentlemen know that there are adults gamers that want their side of the issue to be heard. Write them now or expect to pay the price later in limited subject matter, late game releases, and higher prices. It can happen here.

Write Sen. Joseph Lieberman at 316 Hart Senate Office Building, Washington, DC 20510-0703; and Sen. Herb Kohl at 330 Hart Senate Office Building, Washington, DC 20510-4903. CGW
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- Video Games & Computer Entertainment

"The graphics for WolfPack are stunning."
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WolfPack is published by NovaLogic™, the creators of Comanche™.
Ad Astra
Origin Goes To The Stars For Wing Commander III

Paladin, Maniac, Angel, Spirit—characters familiar to fans of Origin's Wing Commander series—will shed their animated shells to be portrayed by live, Hollywood talent. Names like Mark Hamill, Tim Curry, John Rhys-Davies, and Ginger Lynn Allen will fill the credits of what will surely be one of the hottest games of '94.

Mark "Star Wars" Hamill and Tim "Rocky Horror Picture Show" Curry are returning to the PC screen for the second time, having both recently done voice acting for Sierra's Gabriel Knight. Curry will play Melek, a Kilrathi warrior, while Hamill will star as the player-character (aka "Blue Hair") role. John Rhys-Davis, who's had a variety of supporting film roles (Raiders of the Lost Ark) and is currently starring in the hit TV series "Untouchable," may don an Irish brogue for the role of Paladin. Malcolm "A Clockwork Orange" McDowell will portray Admiral Tolwyn, and Ginger Lynn Allen, an actress of some renown in the "adult film" industry, will play a Chief Technical Officer and possible love interest. Jason Bernard (Herman's Head) will lend his commanding tones to the character of Colonel Eisen.

In spite of all the acting talent, the true star of the show may be the game's technology. Wing Commander III will sport a stunning Super VGA graphics mode and Silicon Graphics rendered backdrops into which the actors will be seamlessly inserted. In a recent demonstration, CGW was able to play a scenario in SVGA mode and fly a ship through the beautifully bit-mapped belly of a Kilrathi capital ship. The SVGA mode will require the highest of high-end 486 machines, but there is a VGA mode available to accommodate high-end 386s.

Wing Commander III is scheduled to release before Christmas of this year.

Gamers Get Break In Compton's Patent Review

The U.S. Patent and Trademark Office has rejected all 41 claims for the Compton's NewMedia multimedia patent announced during last year's Comdex. The patent had made broad claims with regard to the use of certain "search and retrieval" functions which Compton's believed were proprietary. Under the broad claims, any publisher of a multimedia product would have to pay royalty fees to Compton's. CGW and other industry observers were concerned about the potential impact in two areas: 1) the tendency for publishers to pass along the pricing (royalties + paper work fees + the inevitable buffer) increases to gamers and 2) that the precedent of approving this broad patent would encourage other companies to claim broad patents on technology which has been developed simultaneously in other companies (causing more emphasis to be placed on legal filings and litigation than in design and development).

In addition to the good news for gamers, the decision of the U.S. Patent and Trademark Office to overturn the broad patent claims may stem the tide of questionable software patents already granted. For example, Patent #5,175,857 granted a patent on a Quicksort implemented by using a linked list of pointers to the objects to be sorted. This is a task regularly assigned in introductory computer science classes. Patent #5,121,492 was granted to a developer who had figured out how to simulate the access times associated with a CD-ROM by slowing down a hard disk. Hardly revolutionary technology!

Compton's does not expect to be hurt by the decision. Thomas McGrew, Vice-President for Market Development and Product Planning, told CGW that the company was not depending on any patent-related revenue stream as part of their current business plan.
It's An SX2!
Intel’s Newest Addition To Its OverDrive Family

In a recent meeting with CGW and Intel, Intel discussed their long term strategy to market an OverDrive upgrade chip for each CPU it manufactures. The OverDrive processor is a replacement processor for your existing CPU allowing you to easily and economically upgrade your system for faster performance.

The latest OverDrive processor is the new SX2 OverDrive upgrade chip. This chip will allow 486-25SX users to turn their machines into the equivalent of a 486-50DX2, although without the standard DX’s math co-processing ability. The suggested retail price is $249.

The OverDrive package is designed to allow the average computer user to install the chips themselves in a few minutes. All OverDrive packages will come with many value added features such as a pre-attached heat sink, a utilities disk, chip remover, concise documentation, and technical support. Installing the chip is a matter of either directly replacing the existing CPU or dropping the OverDrive into a special OverDrive socket and having it coexist with your CPU.

Along with the announcement of the SX2 OverDrive, Intel announced a price reduction for the first member of the OverDrive family, the 66MHz IntelDX2.

Software Toolworks Nets $462 Million

Software Toolworks, publisher of the award-winning Chessmaster series, has been purchased by Britain’s Pearson PLC for $462 million ($14.75 per share). Pearson is not only the publishing company that owns the Financial Times, but is the owner of popular publisher Penguin Books and scientific/textbook publisher Addison-Wesley. Pearson is also the parent company of Thames Television and has a significant stake in British Sky Broadcasting.

Software Toolworks has been on the acquisition side of such deals in the past, having purchased Datsoft (sometimes known by its Intellicreations label) and Mindscape in the past. The former purchase was primarily to add additional floppy-based titles after Software Toolworks bought a disk duplication company. The Mindscape purchase added cartridge design and marketing capacity to the mix. Currently, Software Toolworks gains 48% of its revenue from PC- and CD-ROM-based products and 42% from cartridge-based products.

It is unclear whether the purchase was for the purpose of getting Software Toolworks’ game divisions or not. The optimistic sign for gamers may be that Pearson immediately appointed an experienced Sega Europe CEO, Nick Alexander, as head of the Pearson New Entertainment Europe group. However, Pearson may very well plan to focus on Software Toolworks as a vehicle for porting traditional content (book and television properties) over to CD-ROM titles, much like the very successful Grolier Encyclopedia product and the Ziff-Davis How Do Multimedia Computers Work? title. It will be interesting to see which direction Toolworks takes its next-generation products. CGW

Microsoft Security Leak!
Secret Levels of Tempest Revealed

An undisclosed source at the Microsoft Corporation has come forward to tell CGW that there are 14 previously unseen levels of the arcade game Tempest buried within Microsoft Arcade. To access the secret levels, hold down the "1" and "D" keys while double-clicking on the main Tempest icon. When the game loads, the level selection menu will allow you to choose from these secret levels.

Tempest: Bill Gates' second favorite pastime; the first, shredding Outland cartoon strips.

June 1994
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Circle Reader Service #138
A canvas and wood airplane, no parachute, castor oil smearing your goggles, clouds of yellow mustard gas below, and they expect you to be a hero? Yes, World War One was a strange time for this new breed of winged warriors called "aviators." Airplanes were a new technology (not even five years had passed since Orville and Wilbur's "powered kite" milestone), and the pilots who flew them were on one hand gallant knights of the air and, on the other, expendable tools of war who were far less valuable than the fragile planes which they flew. Parachutes were available, and the observers who hung above the battlefields in tethered balloons wore them regularly, but the pilots were not issued chutes for fear that they would simply leap out of the airplanes at the first sign of trouble.

Wings of Glory, the forthcoming "cinematic-simulator" from Origin Systems, will bring the unique world of W.W.I aviation to life, but with a nod more in the direction of an Errol Flynn movie than a dry and super-real simulation. Make no mistake, though, Wings of Glory will model the flight of the rickety and tricky-to-fly airplanes to the utmost detail, surpassing all other W.W.I-era sims in the reality department.

Wings of Glory is based on a modified Strike Commander flight-simulation engine.
Talk around Origin was that, while the latest release of Strike Commander cleared up many of the realism problems, the simulation did not make the best use of the flight engine. The ability to beautifully render the details of the various planes and ground targets was lost in the kilometers of distance between opponents who faced off with radar and guided missiles. Warren Spector, the producer of Wings of Glory, had been fascinated with W.W.I aviation for years, and had put many hours behind the stick of Dynamix’s Red Baron (which he believes to be an excellent game and “an astonishing accomplishment”). When he saw what the Strike Commander engine could do, he felt that marrying the power of that technology with the seat-of-your-pants quality of a W.W.I dogfight would be a marriage made in heaven.

Warren brought Bill Baldwin on board from the Strike Commander crew, assembled a design team and hit the ground running, sculpting a game with the realism and detail made possible by the Strike Commander engine with a story reminiscent of the 1930s-era W.W.I dogfighting film.

**Masters Of The Canvas**

The first thing that struck me about Wings of Glory was the gorgeous detailing of the airplanes. By texture-mapping highly detailed graphics onto the plane’s polygonal shapes, the simulation presents the players with aircraft which feature canvas stretched across wooden wing spars, the vibrantly colored patchwork of German camouflage, unique fuselage paintings, wooden cowlings, and enemy pilots with scarves flapping in the wind. When flying, switching to the external view and rotating around your plane will present you with a visual treat never before seen in a flight simulator. The graphics are just that good.

While watching the art team put together the images, I couldn’t help but notice their dedication to historical accuracy. Working with blueprints of the actual planes, period photographs, and color photos of restored aircraft, they sought to create as authentic a look as possible.

The beautiful birds you can take aloft include a Sopwith Pup, an early, single-gun plane with poor performance; the twin-gunned Sopwith Camel; the Spad XIII 235hp bomber boasting twice the power of the Camel; the anemic SE5A which had the sole virtue of a wing-mounted gun for bal-

The player can pan around the cockpit, nearly a full 360 degrees while still in full control of the plane. This “rubber necking” is very useful when tracking an opponent who flies past, allowing the player to immediately break and fall into pursuit. The flight control is smooth, and even at the novice levels the planes are modeled with enough realism to startle PC pilots who are familiar with the other W.W.I-era sims out there. Wings of Glory does not mask the fact that these planes were slow, ungainly contraptions, as did Knights of the Sky, and players might be a little taken aback by the awkward flight dynamics.

**Stories Of Glory**

The game features three main arenas of play: the cinematic game, the mission generator and the mission recorder. The mission recorder is a Dynamix-like VCR that allows you to play filmmaker and edit your mission tapes, as well as enter the sim at any point during a tape. The mission generator will allow you to set up any aerial combat mission you might imagine (including unlikely Sopwith Camel versus Sopwith Camel and other “Allies only” dogfights), perform a bombing or ground attack run, or take on the “gauntlet,” which is basically an arduous, never-ending stream of enemies to test your aerial mettle.

The heart of Wings of Glory, though, is the cinematic game. Cast in the role of an American flyer, the player begins the game on January 25, 1917, to the angry rebukes of a commander who doesn’t like that two of his star pilots had decided to “tie one on” the night before. As a result, the player/character is relegated to “B” squadron, the flight wing for the fresh cadets. These young pilots came to the front with only a few hours flying time under their belts, and were shouldered with life-expectancy only a little longer than it
would take to fly over the western front.

The game follows the player through 40 varied missions, up through November, 1918. Instead of choosing to work with a branching-tree mission format, *Wings of Glory* presents the player with a linear sequence of missions. Spector observed, through his work on the original *Wing Commander* game, that while the designers created an entire tree of missions that would branch one way or the other based on player performance, it did not accurately model the way players actually played the game. Most players would play a mission over and over again until they got it right, so they would only follow the “victory” path of 18 missions, never seeing the other missions. By laying out the sequence in a linear fashion, every player in *Wings of Glory* will experience all of the missions. This layout also seemed to fit well with the fact that while the air war was significant in W.W.1, it did not alter the course of the war to any real degree, and so no matter what a single pilot was able to achieve in the air, the Allied forces would still have won the war in 1918.

The plot and dialogue, crafted chiefly by Origin writer Lisa Smith, throws the player into a pulp adventure film, complete with a beautiful French farm girl, a 100-year-old farm house, a cast of quirky and very convincing characters, and of course, an arch-nemesis, the German ace Ulrich Germain. Through the missions, the player will fly better and more capable planes as they are introduced (the game starts out throwing you into the rather anemic, single-gunned Sopwith Pup). Along the way, the player develops attachments to characters, learns from his mentor, and confronts a German spy. Eventually, the player moves from the comparatively luxurious aerodrome to an American outpost of green canvas tents to finish out his tour of duty.

**Drawing The Line**

I was not able to perform any ground strike or bombing raids on the version I tested, but I did get a chance to look over the ground objects and vehicles which Whitney Ayres, one of the four full-time project artists, was working on. The level of detail is astounding, from the glow of coals in the back of a steam locomotive to the flowers in the window boxes of French farmhouses. The most prevalent landscape feature in the sim is the ever-present front line, a bombed-out, cratered snake of muddy trenches which disappears into the horizon in both directions, and really illustrates the awkward stalemate of the war. Dotting the trenches are aerodromes and small villages, and flying overhead truly gives the impression that there is a war going on “down there.” Perhaps one of my greatest disappointments in other war-era sims to date has been the fact that there is really no indication of a war going on below my plane. The terrain in *Wings of Glory*, especially the trench-line, solves this problem admirably.

After spending an afternoon with the design team at Origin, I was struck by their absolute dedication to this project, and their efforts to make *Wings of Glory* the most beautiful and accurate sim out there. Warren Spector’s enthusiasm was contagious, and he seemed to beam when he told me, almost matter-of-factly, that *Wings of Glory* would be “the most realistic game in the world.”

If it can live up to that high promise, then it will truly be an accomplishment, but even if it just comes close, *Wings of Glory* still holds all the potential to be an excellent game, and one certainly worth looking forward to.

---

**Wings On The Screens**

*Since Wings of Glory strives to exude the aura of “pulp cinema,” we thought it might be useful to refer interested readers to the classic films. These films will give you a feel for the spirit of the game and will put you in the mood to don your silk scarf and silly leather hat and climb into the air on “wings of glory.”*

---

**Wings (1927)**
Clara Bow, Charles Rogers and Gary Cooper
(first film to win the Best Picture Oscar)

**Dawn Patrol (1930)**
Richard Barthelmess and Douglas Fairbanks Jr.

**Hell’s Angels (1930)**
Jean Harlow and Ben Lyon
(produced by Howard Hughes)

**Ace of Aces (1933)**
Richard Dix

**Dawn Patrol (1938)**
Errol Flynn, David Niven and Basil Rathbone
(the favorite of the Wings of Glory design team)

**Lafayette Escadrille (1958)**
Tab Hunter and Clint Eastwood

**The Blue Max (1966)**
George Peppard and James Mason

---
SO MANY TARGETS, SO LITTLE TIME!

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Many wargamers have lamented the breakup of the Soviet Union, at least from the standpoint of modern-era wargames. What fun is it to beat up on the hapless Iraqis or other third-rate armies? Though there is no one currently in the queue to take over the role of Evil Empire, there’s no cause for wargamer alarm, as game designers have realized that all they have to do is postulate a hard-line coup in the former USSR to set all aright.

Seawolf, the newest submarine simulator from Electronic Arts, is set in just such a near-future world in which the Soviet Union has been resurrected by hard-line militarists, with predictable results. Global tension mounts and the newly-reborn USSR faces off with her old antagonist, the good old U.S. of A. The Seawolf, the USN’s newest toy, finds herself square in the middle of the raging naval conflict that follows.

Speculative Specs

You take on the role of a submarine commander who leads the prototype Seawolf on reconnaissance, attack, and patrol missions all over the world in the course of the US-Soviet conflict. And what a prototype she is! Capable of speeds approaching 60 knots and carrying a massive armament load, the Seawolf is a remarkable submarine. It is so remarkable, in fact, that it is unbelievable. Nothing remotely like this ship is on the Navy’s drawing boards, nor could it be. Sixty-knot submarines simply do not exist, and despite this impressive speed in the water, the Seawolf is remarkably quiet, eluding Russian sonar with ease while picking up the quietest sounds with her beyond-state-of-the-art sonar and towed array. While it is fun to command such a powerful craft, this incredible power is the first torpedo into the hull of Seawolf’s claim to being a realistic simulation.

On booting Seawolf up, you are presented with a remarkably well-rendered animation of a ship on the horizon. A rain of missiles launch from this vessel and disappear into the clouds. Suddenly, a boiling spray appears in the foreground, and a missile (obviously from a submarine) leaps high on a parabolic arc into the sky, reappearing a few seconds later and making tinfoil out of the enemy ship. This is all accompanied by dramatic stereo sound and is quite an impressive beginning. Once within the game, it is pleasant to note that the graphics are nearly as good as the cinematic introduction. Digitized video shots of your crew members appear in response to orders, and the battle screen graphics (usually an overhead naval plot display) are crisp and easily read. A status box takes up a disproportionate amount of space on the top-down screens; though it can be moved about the four corners of the map at will, it can be very distracting and all too often covers up approaching enemy vessels. Other views are possible, and the periscope view is particularly well-done. An underwater view can be useful for detecting enemy subs (and here we’ve been wasting all this money on sonar systems, when all we have to do is look out the window). Most unique is the camera view, wherein the Seawolf can drop off a remote camera, which then pans in a 360-degree arc, providing a constant view from wherever the camera was dropped.

It is possible to play Seawolf’s 33 missions in a campaign mode, or any given mission can be played singly. During the campaign, you must successfully complete each mission to proceed to the next. Most of the missions are straightforward sub hunts or surface ship shooting galleries, most with the Seawolf significantly outnumbered. The mission are all drawn from plausible conflict scenarios (although the designers apparently could not conceive of a naval situation in which the US was on the losing side), however, one of the missions is silly and highly unrealistic. In mission 29, the Seawolf is ordered to sink a Japanese convoy invading Sakhalin Island (one of the islands over which Japan and the former USSR have a long-standing disagreement). This occurs right after the Seawolf...
is ordered to support an invasion of another of the disputed territories! Aside from the unpleasantness of resurgent Japanese militarism—particularly when the world is teetering on the brink of nuclear conflict, as it would be in the war Seawolf describes—the thought of the USN turning its guns on any ally simply over a policy disagreement does not ring true.

In any case, having picked out a mission or started the campaign, you are placed aboard the Seawolf itself. Function keys on the keyboard allow you to call up navigation, sonar, weapons, communications, or the “conn”—the game term for the game preferences panel. Each of these command systems is comprised of a menu of options and a digitized video chip of the responsible crew member. For example, under Sonar are the commands for deploying the towed array, sending an active sonar ping, and consulting the waterfall display. This system is clumsy and slow, particularly in the heat of battle, but most of the important commands do have hotkeys, and after a few missions of practice the interface does not get in the way too much. You have reasonably good control over most systems, the only flaw being the difficulty in getting information about the Seawolf’s current status. It is altogether impossible to get a damage report, for instance, and difficult to make out the ship’s remaining weapons.

**Hull Breach!**

In addition to the Seawolf’s specs, there are other serious reality problems with the game. The Seawolf’s weapon load consists of two Harpoons, two Tomahawks, and two Sea Lance missiles, along with a huge (50+)-arsenal of torpedoes. Aside from the illogic of an attack sub having so few missiles (and missiles are far more effective in Seawolf than their underwater cousins), no meaningful weapons data of any kind is given in the manual. No weapon ranges, no weapon speeds, no details on how long control cables for torpedoes are, no data on weapon effectiveness, no data on how deep a sub can be and still be hit by a missile, no data on how deep a sub can be and still fire a missile—indeed, no data at all. The manual is so deficient that it even fails to tell you what your weapons are. Admittedly, most people buying the game probably know the difference between a Harpoon and a Sea Lance, but what’s a stasis torpedo? As it turns out, it’s just a Captor mine—in which case, why not call it a Captor mine? The manual therefore basically consists of a list of the game’s options, with sketchy information on each of them. Many gamers will probably be upset to find that EA has already begun advertising a “hint book” for Seawolf, which is more likely than not, the real manual for the game.

Your sonar operator will identify targets for you, given sufficient time. This is well and

### F.Y.E.O.

**Secret Weapons Data For Seawolf**

Like a hypothetical U.S. nuclear response to a Soviet first strike, Electronic Arts has responded swiftly and effectively to answer certain criticisms about the Seawolf manual. In this table you will find the weapons data that was omitted, purged, or stolen from the documentation.

The weapons are broken down by Power, Speed, Detection and Range. Power refers to the maximum number of damage points a particular weapon can inflict. Thus, if the Seawolf gets nailed by three Type 66 Torps, it’s toast. Speed refers to the maximum speed of the particular weapon in knots. Detection refers to the ability of the particular weapon to find targets (the higher the number, the better the weapon). Range, listed for friendly weapons only, refers to the approximate maximum range of the particular weapon.

<table>
<thead>
<tr>
<th>ENEMY:</th>
<th>POWER</th>
<th>SPEED</th>
<th>DETECTION</th>
<th>RANGE</th>
</tr>
</thead>
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<tr>
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<td>75</td>
<td>80</td>
<td>16</td>
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<tr>
<td>SS-N-15 Missile</td>
<td>80</td>
<td>60</td>
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<tr>
<td>Type 45 Torpedo</td>
<td>60</td>
<td>65</td>
<td>16</td>
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<tr>
<td>Type 53 Torpedo LR</td>
<td>80</td>
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<td>Type 53 Torpedo HS</td>
<td>80</td>
<td>45</td>
<td>15</td>
<td>-</td>
</tr>
<tr>
<td>Type 66 Torpedo HS</td>
<td>100</td>
<td>65</td>
<td>18</td>
<td>-</td>
</tr>
</tbody>
</table>

**FRIENDLY:**

Harpoon 255 - - -
(Use against surface vessels only)
Sea Lance Missile 100 55 20 -
(Can be used against subs, but best used against surface vessels)
MK-48 Torpedo LR 80 40 22 10-12 miles
(Best used against slower subs and all surface vessels)
MK-48 Torpedo HS 80 55 18 3-6 miles
(Best used against the Akula and Alpha Class subs at less than 1 mile)
MK-48 Wakehoming 80 40 20 10-14 miles
(Most effective against surface vessels by homing in on their wake)
MK-48 Stasis 80 50 18 3-6 miles
(Drop to the bottom of the ocean to wait for an unsuspecting vessel to pass over)
good, but he is capable of identifying any number of targets at once. This makes manual identification using the waterfall display rather pointless. In the time it takes you to identify one target by comparing its signature to those given in the manual, your sonar officer will have identified everyone else within sonar range. It's easier and safer to simply stay in the top-down map and wait for the computer to do the work, rather than moving to the waterfall display for identification purposes.

On the whole, the artificial intelligence is poor. Convoys will continue steaming on course even while your torpedoes rip them to bits. Enemy carriers, presumably bristling with ASW helicopters, launch one or two at a time, if they even launch at all. Enemy submarines don't try to get into the Seawolf's baffle range, and they rarely even move between thermal layers. The game's hydrodynamic and thermodynamic models are highly realistic, but the AI is so poor at finding your submarine that much of the effort that went into creating these models is wasted.

There are a few gameplay problems, as well. Lockups are not infrequent, particularly when large amounts of digitized video are being played. The Seawolf itself so outclasses its opposition that only hordes of Russian subs or surface vessels pose a threat. As a result, there is very little feel of one lone wolf cautiously (and dramatically) stalking its prey. Target selection is idiosyncratic, as it often takes multiple attempts to pick a target out of a pack of enemy ships. Finally, the Seawolf cannot communicate with friendly vessels in the area.

On The Other Hand...

Seawolf does have many strong points. Modern and network play are supported, to the loud cheers of many gamers. Although I was unable to find a willing soul in time for review, I expect that head-to-head play will be very popular. The graphics are lovely, and the sounds are very well done. The digitized video clips are in a low resolution, but still add loads of atmosphere to the game. There are a wide variety of enemy ship types, of all nationalities, and most of the scenarios are quite enjoyable. Who hasn't wanted to blow up Cuban picket ships and wreak havoc through defenseless convoys?

So, despite the problems with the manual, the realism, and some of the gameplay, the game is still a whole heck of a lot of fun. This is definitely a game for someone who wants to enjoy a few hours of blowing up Russian ships, and not for the next Admiral Nimitz. Unfortunately, Electronic Arts gives the impression that Seawolf is the ultimate submarine simulation, and that's just not the case. Serious naval warfare fans are not likely to be entertained by the liberties Seawolf takes with its suspension of disbelief. As a simulation, Seawolf is a dud; as a game, it's a solid effort and a worthwhile addition to any naval gamer's shelf. Those wishing for the next Red Storm Rising will be disappointed, but as long as you're expecting an enjoyable beer-and-pretzels submarine shoot-em-up, Seawolf will hit your target. C64W

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Top Cat!

Fleet Defender
From MicroProse

by Mark “Endo” Estefanichian

On the vapor trail of Spectrum HoloByte's F-18 Hornet, MicroProse casts its hat into the carrier-based operations ring with Fleet Defender. This long awaited flight simulator models the twin-engine, swept wing, strategic interceptor known as the “Tomcat” with a solid flight and radar model, and excellent campaign features.

On start up, the choice you face is a simple one: enter the quick turn-and-burn arena of the Scramble mode, or take the Campaign route with its three theaters of operation, multiple scenarios, and mission generator.

In Scramble mode you can set up allied and enemy fighters in a snap. You can select your targets—from TU-22 bombers to a flight of MiG-29s—along with many other variables with a few quick clicks of the mouse. No control of enemy way points is available, but you can specify a position in which to start the scenario: either offensive (on the bandit's six), defensive (he’s on yours) or neutral (head to head BVR).

The Campaign mode features a mission generator with three theaters of operation: North Cape, Mediterranean, and a training theater, Oceana. Several scenarios are available in each, including the Oceana training missions tailored to hone the skills necessary for flight and fight. The mission generator will send two squadrons of allied aircraft to engage the enemy, with your objective being to survive and bat .500 in your missions.

In most campaign missions, your job is to protect your carrier and escort various strike packages to their targets. A pilot will advance in rank as he racks up campaign points, but if he dies or allows his carrier to get nuked, the campaign is over. Thankfully, you may resurrect your pilot in the middle of a campaign. Wingmen can also advance in rank, making them more capable companions and increasing their tendency to take the initiative and seek out targets.

Most missions will take place over water, though you will escort bombers into defended ground areas where AAA and SAM sights will complicate your life. The campaign objectives are broken down into rather simplistic terms such as “you must shoot down a total of four TU-22 for success,” and you are given no control of waypoints or mission planning. Gamers used to setting waypoints and time on targets will probably be disappointed.

I Was There!

The best way to illustrate Fleet Defender’s radar modes and flight model is to put you in the seat. So, let’s fly a campaign mission with the El Dorado canyon scenario (historically based on the US Libya air strike in 1986). Our mission is to escort a flight of F111 bombers in route to the Benghazi airfield.

After selecting the Jolly Roger VF-84 squadron, I max out the difficulty settings, and arm up with a fleet defense bravo load out. Once in the front cockpit, I marvel at the very detailed front displays. Left and right views are very clean and display a throttle, gear lever, and a bank of warning indicators. Snapping a quick glance back, I can see my backseat RIO (Radar Intercept Officer) working the scopes. The front cockpit sports a sharp representation of a center display called the vertical display indicator (VDI), a mini HUD-type repeater which can be toggled to display the Television Camera System, and a 20X zoom camera that can track and display targets in all weather. The “look down” view reveals a navigation instrument called the HSD (horizontal situational display). Engine and fuel status indicators also appear in this view.

As I dump raw fuel into my burners, I shift views to the Air Boss perspective and watch as my F-14 rockets down the deck. I clean her up and adjust my...
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flight path to line up the HSD caret with my next waypoint. It's now time to activate the AWG-9 radar and fire control system.

Steady up at angels 10, the EC-3 Hawkeye vectors me to an intercept position for incoming contacts. I swing port heading 160 for a 20-degree offset and with a quick keystroke tell my wing man to "go tactical." I now have his attention and he will hopefully seek out targets on his own. Engaging auto-pilot to maintain heading and altitude, I jump into the rear RIO seat where my forward view shows the DDD (Detailed Data Display) indicator and a rectangular box with a radar beam sweeping back and forth. The look down view is a radar scope called the TID (target indicator display). This scope looks like a baseball diamond with your aircraft at home plate and is slaved to several radar modes that are selected on the DDD display.

On the DDD I can see three blips off to the left side of the screen and several blips to the right. The blips are appearing and disappearing, so I tweak the beam elevation to get a solid return. I can actually shape the scan pattern emanating from the nose of my aircraft. The beam elevation can be tilted up or down, and I can adjust the vertical and horizontal scanning volume by changing the elevation bar and azimuth switches in the left RIO view; this will flatten or elongate the area of radar coverage. I have several search and track modes at my disposal, and I select the TWS-M (Track While Scan-Manual).

This mode is slaved to the TID and will display target icons along with range, altitude and heading information. I can use the Pulse Doppler Search (PDSRCH) or Range While Scan (RWS) search modes to scan for targets at greater ranges, but I will receive no range information and I will have to lock up the target in Pulse Doppler Single Target Track (PDSRTT) to get a track. This will set off the bandit's warning system, and he'll know I'm tracking his aircraft. The TWS-M and TWS-A track modes are best suited for the AIM-54 Phoenix missile system. The radar is passive and shows multiple targets on the TID without having to lock the targets. The "A" variant automatically assigns a Phoenix to each contact prioritized by proximity, and the "M" manual mode allows the pilot to decide the sequence. Have your eyes glazed over yet? It does take a while to get your head around the radar system—it took me at least three reads through the documentation—but dedication will certainly be rewarded.

Having dialed in the radar on the DDD, I highlight or "hook" each blip on the TID with the HT button. This will bring up information on the scope. I identify all the targets, and I now can see that the F-111 will be intercepted by a flight of four. I use the DT key to designate each enemy target and a Phoenix is assigned to each. At 60 miles, I am well within the range of the AIM-54 missile,
I clear my wingie to attack the target I have selected; as soon as he fires I can switch targets and effectively direct his firepower. I pop back into the front seat at 50 miles and closing...Fox 3!! I hose off four AIM-54 missiles while my wingman also ripple fires. Our flight closes within 20 miles and I get a report that three F-5's are splashed. I watch the TID as the target icons spin 360 with decreasing altitude and vanish... YES!! A single bandit has avoided my million dollar missile, and I have lost contact with the small agile fighter.

I jump back into the RIO seat to try to get him locked. Shifting to the close-in radar mode, I lock the twisting F-5 below my flight and get a launch warning. My TEWS system lights up with a missile warning so I activate my jammer, break hard 90 degrees, and spit a load of chaff packets. I can see the missile's long black smoke trail, and it's not traveling at the speed of heat, so I can pull across the missile's line of sight and jink. I spoof the missile and keep closing within visual range of the F-5. BAD IDEA!

The fighter out turns me and immediately saddles me up for dinner. I instruct my wingie to go defensive, meaning he will drop everything and help me out, but it's obvious I'm out of altitude, energy and ideas. I switch to a padlock view which will swivel around tracking the enemy, but I get disoriented and, just before the bandit gets a firing solution on me, my wingman nails him with a Side-winder. The bandit is engulfed in a huge black and orange fireball screaming out pieces of twisted aircraft, careening down to the deck. Whoaaaa... one case of whiskey to my wingie for saving my butt.

High Visibility

Graphically, Fleet Defender pushes the envelope of desktop computers. The texture-mapped polygon images are highly detailed, and things like panel markings, insignias and weapon stores are all rendered in detail. The cloud patterns and water effects are a pure joy to watch. Early morning and nighttime are also simulated extremely well, so the overall look of the sim is very rich. At low levels, the water has a rippling effect which gives the illusion of cresting waves.

There is, however, a performance penalty for all this grandeur—especially when venturing into enemy cities. The frame rate slows considerably as the high detail of buildings and landscapes sucks up CPU power. Fortunately, you can turn off the detail to speed things up. Fleet Defender incorporates various exterior views, some of which can be manipulated on both axes. These views pan slowly, and other flights can appear jerky. However, views like the LSO and Air Boss are worth the price of admission, and Fleet Defender strikes a very good balance between gameplay and pure graphic orgasm. It also supports a full complement of sound devices, and emulates engine spooling sounds and explosions with very good fidelity. Digitized speech is available if you have the free memory.

Bring 'Er Down

Carrier landings are performed by contacting the Air Boss. If the deck is clear he will give you clearance to land. If not, he will

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If it were any more real, you'd be drinking Tang.
vector you to a marshaling area where you await a landing sequence. The carrier is equipped with an optical ball, and the LSO (landing signal officer) will give you verbal cues for your approach.

The actual landings and launches are fairly easy, even at the maximum realism settings, and anyone who has flown Flight of the Intruder, Jet Fighter, or F-18 Hornet will find landing pretty routine. Stormy conditions will make things much tougher as you struggle to get lined up, but weather conditions don’t affect the pitch of the deck or create any nasty turbulence for you to deal with. You can practice landings by using the “cheat” key for a quick setup in the landing pattern, enabling you to practice landings from different points in the approach.

The flight model has an accurate envelope and takes altitude into consideration, modifying indicated air speed by air density. While not a close-in dog-fighter, the F-14 can turn moderately well, and the radius will tighten with increased G’s. The rudders induce no roll during deflection, and stalls are preceded by a tame buffeting from which it is easy to recover. The model simulates high angle of attack accurately with the velocity vector accurately displayed; but while you can yank the nose up all day long, the sink rate is negligible, making it difficult to descend in a nose up attitude. The graphics make up for any shortcomings of the flight model by creating a very convincing sense of momentum, especially at low levels.

Fleet Defender has something for either the casual or the hard-core gamer. It’s not a close-in dog-fighter like Falcon 3, but is really a tactical flight simulator where you will spend most of your time in the back seat searching for targets. The product is of high quality and exhibits some very new and innovative features like extensive wingman controls, adding a new level of strategy and game play. Enemy AI is very good, and you can expect to be kept very busy in a game of bandit’s that maneuver in both the horizontal and vertical. I found no major bugs, but I did encounter some problems with getting the wingman commands to function consistently. Fleet Defender does lack a modern option, which is a natural for this product, and I’m sure many head-to-head players will be disappointed. Still, even as a solo flight, Fleet Defender is an outstanding simulator that will serve to reestablish MicroProse as a major player in the flight sim wars.

Do you bring your F-14 back to the carrier after firing a full spread of 6 Phoenix? Or, do you and your RIO (Radar Intercept Operator) spend enough time adrift in a life raft that the rest of the crew suspects you’re practicing rowing—perhaps to defect to neutral Sweden? If you said the latter, or if you fall somewhere between the two, we’ve got some tips for you.

29’s vaunted Pugachev’s Cobra, but it simply wasn’t designed to be a dogfighter. The F-14 was created to shoot down hordes of enemy bombers at long range, before they could threaten the host aircraft carrier with cruise missiles. When flown properly, limited-energy fighters can best more modern opponents, but it takes a lot of skill and just a bit of luck.

The best advice is to use the F-14 as it was intended—killing the bad guys at maximum range. No bandit should be allowed to close and initiate a dogfight. If a dogfight does commence, call your wingman for assistance immediately. This gives the bandit something else to worry about. Keep your nose low and the throttle set high to maximize available energy. Spend your g-forces wisely as needed. Don’t pull 6g if a 2g turn will suffice. With any luck, the bandit will engage your wingman and present a quick, easy rear-quarter kill shot to you.

Far Wars

Long-range killing means using the AIM-54 and (to a lesser degree) the AIM-7 Sparrow missiles. In casual conversations, the AIM-54 is discussed as having a 100nm range, being totally fire-and-forget, scoring extremely well in non-combat missile tests, but considered to have limited maneuverability and therefore limited capabilities against fighter-sized targets. Discussions with F-14 crew members will dispel most of these myths, however.

First, the AIM-54 missile has an absolute maximum range around 100nm, but keep in mind that like all other air-to-air missiles, the
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Paramount Interactive
rocket motor burns less than 1 minute. After that, the missile glides the rest of the way to the target. As it glides, it loses speed and maneuverability. At the maximum edge of its envelope it has little or no maneuverability left. Against a lumbering C-130, the AIM-54 Phoenix may well destroy the target at maximum range. A nimble MiG-29, however, will simply dance away from the missile. The AIM-54 is typically effective against fighter-sized targets at ranges less than 30nm. In Fleet Defender, I usually hold fire until bomber-sized targets are less than 75nm away and fighter-sized targets are less than 50nm away.

Secondly, the AIM-54 is generally referred to as “active radar homing” as opposed to the “semi-active radar homing” (SARH) AIM-7 Sparrow. SARH missiles require the launching platform to maintain a radar lock on the target for the full duration of the missile’s flight. An active radar homing missile is usually called “fire and forget,” meaning once the pilot launches the missile he can forget about it completely, confident that it will find and kill its target.

The AIM-54 is usually called a “fire and forget” missile, but that is a somewhat misleading phrase, as the AIM-54’s guidance mode varies. Depending upon the mode the AWG-9 radar is in at launch time, the missile may actually fly in semi-active mode part way to the target, then go active in the terminal moments of the hunt. Alternatively, the missile may be semi-active all the way to the target, requiring the pilot to maintain radar lock, or it may even fly the entire flight in active mode. In the real AWG-9 radar, when using the TWS (track while scan) mode at far away targets, the missile launches in SARH, then goes active after a set amount of time. During the SARH portion of the flight, the F-14 must maintain radar lock on the bandit. When the AWG-9 is set to PDSSTT (Pulse-Doppler Single Target Track) the missile remains semi-active throughout the entire flight. If the radar lock is broken, the missile seems to be SARH until either you break the lock, or the missile reaches a pre-defined “activation point” derived from the target information available at launch time. Therefore, the longer you maintain radar lock on the target, the less time the missile will actually be active. At 10nm from the target, the missile will go active. If you break the lock sooner, the missile will immediately go active. Although the enemy should get a lock warning on his RWR when you lock him up, he shouldn’t get a missile indication until the missile goes active. So, the longer the missile remains SARH, the closer it will get to the target before going active, and the less time the target will have to react. Experiments in Fleet Defender seem to show a much higher hit rate when the launching aircraft maintains a lock on the target and keeps the missile SARH for as long as possible.

We Are Not Alone
In many ways, Fleet Defender bears little resemblance to previous MicroProse products, most notably in the addition of wingmen. No longer do you alone, armed with a single aircraft and eight missiles, engage the entire third world. Now, you have support aircraft, friendly fighters, and your own personal wingman. These three can save your life...if you use them correctly.

Support aircraft could be B-52 bombers, A-6 Intruders or an E-2C Hawkeye. While all of these rely mainly on you for protection, the Hawkeye is particularly vulnerable. Patrolling high above the waves, these AWAC aircraft use their powerful radar to report the positions of enemy air and naval forces to you and other fighters. When you are within 100nm of the Hawkeye, it will datalink information directly to your RIO’s displays. Using this information, you can fire Phoenix missiles at long range without even activating your own radar. Using the SHIFT+P command, the Hawkeye’s radar operator will report all known contacts around you.

Like all carrier assets, there are only a limited number of Hawkeyes available to you (usually 3 or 4). If these aircraft are lost, so are your long range eyes. Use the Hawkeye mercilessly to destroy your enemy and always be ready to come to their aid. The loss of a single patrolling E-2C could allow an entire squadron of MiG-29s to ambush you from your flanks.

Other F-14s are near you, generally flying barrier patrols called BARCAPs to prevent any enemy aircraft from approaching the carrier. They also provide a reception escort for returning aircraft, so they’ll shake bandits off your tail if needed. Additionally, an extra pair of F-14s are on standby on the carrier. These ready-5 aircraft are armed for flight, and can be underway five minutes or less after receiving the launch order.
These other F-14s have their own jobs to do, but they'll come to your rescue, and they expect you to help them out as well. As stated, the F-14 is an interceptor first, a dogfighter second. If you find the enemy getting in too close for comfort, and especially if you're low on weapons, don't hesitate to use SHIFT + <F1> to call for help. Unless you are way off course or extremely deep in enemy territory, another pair of F-14s will be vectored toward you immediately. If possible, call for help slightly before you egress so they can cover your escape. If you receive the "no assistance available" reply, that's a not-so-subtle hint that you're a long way from where you're supposed to be, or that all other F-14s are in trouble of their own. In either case, you should hightail it back to the carrier pronto.

Cover Me

The last friendly aircraft left is the wingman, your best friend in the sky. He'll stick by you like glue, follow your orders, and protect you at all costs. Your wingman isn't disposable: lose a wingman and you'll most likely lose your own jet. Lose enough jets and you'll lose the war.

Your wingman expects you to tell him what to do every step of the way. He won't engage until you give him permission, and he won't stray from your wing without orders. He's your most powerful asset (other than your own aircraft), but he's looking to you for guidance. To begin with, he won't engage a target, even if you radar lock it and press <F2>, until you tell him to enter combat mode. Press either <F1> to order him to "go tactical" or <F3> to tell him to fly "combat spread." Either of these commands will make him wake up and prepare for battle. When you radar lock a target and press <F2>, he'll immediately attack that target.

I prefer to let my wingman operate on a longer leash. I usually proceed to the main waypoint and perform the primary mission objective while using the <F6>, "Sanitize" command to order my wingman to search for targets at my six or my flanks. I order him to "check sanitize" both sides and the rear before issuing the <F1> "go tactical" command. I wait and see what (if any) contacts he reports, then press <F1>, then again order him to sanitize the direction of the highest threat. After receiving the command, he'll cheerfully go off on his own and kill bad guys. Once that task is done, I continually order him to sanitize either side and the rear until I've accomplished the main mission.

Next month, Tom will discuss the intricacies of the Fleet Defender radar systems.

QQP's Strategies of the Month

The Grandest Fleet

There are many ways to acquire victory in Grandest Fleet, A) Develop just your basic fleet and keep pumping them out. A six to eight battleship force can be devastating even against super-ships. B) Grow your economy to eventually construct super-ships. These ships are both powerful and interesting to use. If you can get your base economy to the point of building super-ships in your ports, you'll be tough to beat. C) Get your cities up in size. This will do several things to take you to victory. As the cities' size gets beyond certain levels of growth they will increase in victory point value. This can be significant. Larger cities also create more tech and resource points per turn, and when those cities are very large it is pretty tough to bomb them down in size. Carrier planes and bombers will take many more casualties when attacking large cities. D) Go into a full city-economy development. This includes; Universities, Hospitals, Downtowns, City Size, Convoys, Forts...Etc. This gives you many extra victory points per turn, unbeatable defensive position, and overall strength. Many games can be won with this approach. E) A combination of the above. The options are limitless. With all this, G.F. plays as a very in-depth game. There is still the maneuvering and building your fleets. ENJOY!!

Origamo

A puzzle game that will entertain anyone. Try all three ways of playing; Basic-Adventure-Master. These have nothing to do with the difficulty level.

Perfect General II

Tactical support aircraft is "The answer" to those pesky enemy artillery pieces hidden in woods or behind hills. But be careful if your opponent has placed machine gunners close to this artillery your planes could get shot down. Much more on Perfect General II next month.

Zig Zag

Truly the ultimate word puzzle game for the computer. We truly believe this. The four quests are quite different from each other, even though they may not seem to be at first glance. Give each one a good try. Of all our testers, each have a favorite.

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CDs On A ROMpage

8 Upgrade Kits To Turn Your Mundane Machine Into A Multimedia Monster

by Mike Weksler

The history of entertainment software reads a bit like a Chinese calendar. Back in the mid-80s, when gamers spent more time swapping floppy disks than skewering bad guys in their favorite role-playing games, there was a Year of the Hard Drive. When MS-DOS gamers grew disenchanted with their 16-color EGA palette compared to superior graphics on the Amiga and Atari ST, there was a Year of the VGA Card. Likewise, there were Years of the Amiga and a couple Years of the Apple II.

In addition to being a year of endless buzzwords, 1994 is The Year of the CD-ROM. Nearly every game publisher will put their games on CDs this year, and many have committed to going to CD-ROM as their primary delivery medium by the beginning of 1995. If you want to keep up with the gaming Jones, it looks like your next hardware investment will be a CD-ROM drive.

The CD-ROM aisle in your local computer superstore can be a bewildering place. Unlike the laundry detergent aisle of a supermarket, the CD-ROM upgrade kit section is usually crammed with huge, alarmingly vibrant boxes that shout their content’s fabulously new and improved ingredients. In this survey we’ll try to get beyond the hype and look at the active ingredients in these packages and help you determine what kit is best for you.

Do You Even Need A Kit?

If you already have a sound card with a built-in CD-ROM interface (like the Sound Blaster Pro), you may want to skip the upgrade kits completely and simply plug in a CD-ROM drive. With that, you’re done, finite! Once you have those two components working, you’re ready to handle just about any CD the software industry can throw at you.

If you get a stand-alone CD-ROM, I’d recommend a double speed (300 KB per second minimum transfer throughput) with less than 350ms access time. You can find them for under $200. Why not a triple-speed drive? I’ve found that, for the most part, they are significantly faster for software installations, but they yield only a marginal improvement in game performance over that of a double speed CD drive. Also, talk among game publishers suggests that both the double speed and the triple speed drives are interim products before faster CD-ROMs become available sometime in 1995. Since the triple speed drive only gives marginally superior performance at a not-so-marginal larger price, the double speed is probably the best interim buy.

What Is A Multimedia Kit?

Basically, a multimedia upgrade kit contains a CD-ROM drive, a 16-bit sound card, some means of connecting this equipment to your computer (the three wires of power, sound and data), and usually a boatload of bundled software.

When considering the sound card in an upgrade kit, there are a few things to keep in mind. Look for Sound Blaster compatibility—that is, genuine FM support (not software emulation) via a Yamaha OPL2 or OPL3 chip for music and 8-bit mono (stereo for Sound Blaster Pro) hardware DAC compatibility for voices and sound effects. Creative Labs’ cards, and anything from MediaVision or Aztech will fit the bill. Also if the card provides wavetable synthesis, make sure that the card supports General MIDI in addition to native mode support. Of the sound cards available, I’ve found the Orchid GameWave32 (or the SoundWave32) and the Logitech Soundman Wave to work with games with the least amount of hassle.

In addition to a sound card and a CD-ROM drive, you’ll usually get a few CD games, some speakers, and perhaps a low-end joystick. Most of these packaged speakers are worthless. Using these speakers on a multimedia computer is like paying $3000 for a great stereo system, only to pump the music through cheap, swap meet speakers. The speakers that accompany most kits seem to come from Labtech and require a DC converter adapter. Unfortunately, the adapter is missing from most multimedia upgrade kits. So, you must either use batteries, buy a 6V adapter, or listen to the speakers unamplified. I’d recommend either buying better speakers (Acoustic Research sells adequate models for $60-$80) or plugging your computer sound system into your home stereo.

Into Each Life, A Little DOS Must Fall

Once you get your CD-ROM drive and
sound card installed, you'll have to wrestle with conventional memory. You must somehow track 50K of new CD-ROM and sound card drivers into upper memory just to get your games to run! To go into detail on this subject is way beyond the scope of this article (check out my new technical tips column in the July issue). If you're a tech-weenie like myself, it's just another memory juggling trick that shouldn't take you long to master, but the majority of gamers should consider dropping the QEMM or 386Max memory managers into their shopping carts. When shopping for your kit, be sure to ask your retailer if they will install a multimedia upgrade kit for free as a purchasing incentive.

Aztech Labs, Inc.

Double Speed Pro 16

The Sound Galaxy Pro 16L, the foundation of this kit, is treated like Sound Blaster Pro (8-bit stereo digital audio) by the majority of games, and has the added benefit of an inexpensive waveetable upgrade using the Aztech Wave Power daughter card (with 8-bit E Macronics ROMs). While you don't have to be Werner von Braun to install this kit, a bit of technical knowledge regarding interrupts and memory I/O addresses doesn't hurt. I found that I still had to manually install the CD-ROM drivers and do a little tinkering after the installation (which goes into Windows and installs lots of multimedia junk onto your rig). This kit is great for someone who just wants to play games, but compared to some of the other kits in its class, is priced a bit high for what you get. The speakers are a notch above most others but there's much less software bundled into this kit. The waveetable upgrade feature, while not Wave Blaster compatible, is adequate, and an Aztech spokesperson said that it should now support General MIDI via the on-board MPU-401 hardware. Aztech provides hardware to many of the manufacturers mentioned here, so those of you who like to drink straight from the well should check out this kit.


Creative Labs

Game Blaster CD 16

After going all the rounds with multimedia kit installations, I have come to the conclusion that you just can't go wrong with one of Creative Labs' multimedia upgrade kits. Creative Labs offers several different kits in addition to the Game Blaster CD 16, including the Discovery CD 16 ($449) and the Education CD 16 ($599). Each package contains a different collection of bundled software, but the hardware is identical, except that the Game Blaster CD 16 offers more games and a Suncom PX2000 joystick. So, if you already have a large game library and a good joystick, I would recommend that you get the least expensive double speed kit—the Discovery CD 16. The Matsusita CR-563-B drive has proven to be adequate for almost all the CD-ROM games I've played. The only hitch I've found being that, on occasion, the CD drawer must be opened and closed in order to get the CD to mount.

The kits all have variants of the Sound Blaster 16 (either Basic with the sole Panasonic interface, or the Multi-CD variant, with adaptors for Panasonic, Sony, and Matsusita CD-ROM drives) which is waveetable upgradable with the Wave Blaster, one of the better waveetable synthesizers on the market. When the SB16 was first introduced, it had some noise problems, 8-bit Sound Blaster compatibility problems, and driver bugs, but these seem to be less of an issue with more recent versions of the cards.

Creative Labs' installation routine is one of the best I've seen, the exception being that it won't let the user selectively install certain programs. It will configure your system easily, but then proceed to dump several megabytes of multimedia programs (MIDI sequencers, MIDI file players, authoring software, voice recognition utilities, etc.) onto your hard drive whether you want it or not. As a footnote, I found the customer support to be excellent, especially considering that I called on a Sunday afternoon.


Creative Labs

Digital Edge 3X

This kit is essentially the Sound Blaster 16 SCSI-2 card with the Advanced Signal Processing chip) and the NEC CDR-510 triple speed (450KB per second throughput) CD-ROM drive. Once hooked up, this combination proves to be a true multimedia dynamic duo. Games run without a hitch, and software installation from the triple speed to the hard drive was blazingly fast. Since it is rather expensive, you might find it hard to justify the extra cost of the triple speed drive unless you're pulling huge graphic files from the CD, given the marginal improvement in game performance. If money is no object, however, this is the kit for you.

Creative Labs Digital Edge 3X


Media Vision

Super Deluxe

While the games bundled with the Super Deluxe may not be the cream of the crop, the sound card is some heavy duty multimedia iron, capable of running as either a Sound Blaster, a Sound Blaster Pro, or a PAS 16. The initial release of the Pro Audio Spectrum 16 had some serious problems, but these problems seem to have been eliminated in the latest versions, as all of the Media Vision cards I've recently tested have performed without a hitch. The NEC CDR-210 double speed CD-ROM is a solid performer, on par with the Creative Labs Omni CD (Matsusita CR-563-B).

Media Vision has the easiest multimedia kits to install, period. The "quickstart" option
allows you to select which superfluous programs (from a gamer's perspective) you don't want to dump onto the hard drive, and it tests the IRQs, I/O addresses, and DMAs with a pleasant female voice. The best part about the installation is that it only requires one floppy disk. The installation will configure the system for you (allowing more experienced users a manual override), and prompts you to place an installation CD in the drive and reboot the machine. After a few prompts, you can walk away. All of the other kits require you to feed floppy disks into the machine. In addition (and someone at Media Vision should receive a multimedia medal for this), the package includes a truly useful installation video. It begins with an overview of the Phillips screwdriver (really?) and steps you through the entire process. The hardware installation techniques are real-world techniques (i.e., they show you how to connect the audio and data cables to your drive before you screw it into the bay), and the tape is divided to differentiate between the novice and advanced user. With the concise documentation and the best installation routine in the industry, you should be up and running in no time.

The package also includes a really beefy audio cable with Fischer Price-like connectors and an extra "Y" power connector. The only drawbacks to the package are the poor speakers. For one hundred dollars less, you can get the Family Deluxe kit which has essentially the same hardware, but with fewer games.

**Super Deluxe** Price: $459. CD-ROM: NEC CDR-210 double speed,
installation for the SoundWave 32 does not require you to play with hardware jumpers, the installation routine has some intuitive steps. This is also the only kit which will not automatically install the MS-DOS CD-ROM extension driver, and it’s easy to pass up the installation screen that informs you of this.

For the money (ca. $499), you get decent Sound Blaster-compatible 8-bit digital audio and General MIDI support, as well as MT-32 compatibility. The SoundWave 32 card has new ROMs and sounds very good, but it’s not in the league of a Wave Blaster.

Once installed, this kit worked as advertised. As the only kit in this survey offering wavetable right out of the box, it is well worth looking into. It’s a solid product from Orchid, but I would highly recommend that the novice user seek help with the installation. On a more positive note, the one game that is included, Lucas Arts’ Day of the Tentacle CD, packs more value into the kit than the entire software package of some of its competitors.


Reel Magic

Imagine the wonderful next generation games with real-time, full-motion, full-screen video such that actors in uniform conduct briefings instead of depending on animated sequences. Right now, the only solution for higher resolution full-motion, full-screen video is the Reel Magic MPEG decoder. The card connects to your video card and plays full screen MPEG video. It can work with an existing sound card, or it can use its own hardware for Sound Blaster compatible music.

The Reel Magic card might be the future of full motion video, except that video card manufacturers are currently working hard to get an open MPEG playback standard on video cards. In other words, you wouldn’t need an additional product to get full motion video. In the meantime, there are a few titles that support the Reel Magic with its MPEG decompression (Return to Zork, Police Quest IV, and Dragon’s Lair) and they look great. In addition, you can play Philips CD-I DVI movies using the media player that comes standard in Windows.

If you already have a sound card and CD, you can get the Reel Magic board as a stand alone for $449, or if you already have a sound card, you could get the Reel Magic Light (cheaper, no sound hardware) for $349. If you have nothing, you can get this kit, but they are mighty slim pickings in the software arena for MPEG compatible games.

As for the installation, this one is not exactly plug-and-play, and just might require a user with a black belt in DOS. The Reel Magic board installation had a pretty screen that scanned all interrupts, I/O address, and DMA slots, showing unused resources in green. You can also toggle the Reel Magic board on and off in the setup screen, toggle on and off the CD-drive, MPEG player, and sound emulation. I configured for everything and when it was all done and rebooted, no CD-ROM drive was recognized! It turned out that the installation crapped out and didn’t install the CD-drivers. I can work around such things, but I’m an experienced hardware guy. The novice would be nonplussed. It’s a shame that the installation is so clumsy, because the upgrade kit is packaged with the care that a mother would use in sending her child to camp for the first time. There’s everything you would need including an extra “Y” connector in case you run out of power connectors, and a 6-volt adapter for the speaker.


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**Multimedia FX, MFX06 Elite**

"Value Added!" should be stamped all over this package. Reveal stuffed this kit with 8-watt powered speakers, an Aztech 16-bit sound card, the Matsushita CR-563-B CD-ROM drive, and a boatload of software.

Installation is very similar to the Aztech multimedia upgrade kit, but if you have to go to DOS to tweak things, there is little reference to CD drivers in the documentation. The documentation is quite voluminous, but is more focused on the included applications and less on the hardware and installation routine. There is an installation video, but it only covers the hardware installation (the easy part) and not the software configuration (the beef!). To its credit, Reveal does have a 24-hour 365-day technical support hotline.

With the huge amount of both games and family oriented software bundled with this kit, marvelous speakers, and a good double speed CD, you might not be able to pass it up if you find it at a decent price. Most of your money will be going to the bundled software, so you may decide to purchase one of the more inexpensive kits Reveal offers, such as the MFX02 Prestige ($449) or the MFX04 Ultra at ($549).


**Is There A Winner?**

If I had to pick one kit off the shelf, it would be a toss up between the double speed Family Deluxe kit from Media Vision and the Discovery CD 16 from Creative Labs. The Family Deluxe, in spite of its lack of a wavetable upgradeability, has the best installation procedure and offers good gaming hardware at a low price, without a lot of useless software. The Discovery CD 16 can be upgraded to wavetable synthesis with a Waver Blaster, and is priced to sell at $449. It really becomes a toss up between the two sound cards. With the Media Vision, you get Pro Audio Spectrum 16, Sound Blaster Pro, and Sound Blaster compatibility, and with Creative Labs, you get Sound Blaster 16, Sound Blaster Pro and Sound Blaster compatibility. These cards are pretty close in performance and when combined in a kit, either one would suit the would-be multimedia gamer. If you can find one on sale cheaper than the other, it makes the decision that much easier. If they were the same price and you were a hardware novice, the Media Vision install video and toll free customer support would be quite an inducement. If these things aren’t important to you, or you see a Waver Blaster in your multimedia future, then the Creative Labs kit would be a good choice. Any of the other kits in the roundup would be a welcome addition to a computer for general multimedia use, but when dealing with games, it’s usually best to go with companies who have a strong track record.

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**Impressions** Committed to Excellence in Strategy Entertainment
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Fans of classic science fiction are probably familiar with Isaac Asimov’s story *Fantastic Voyage*, in either its novel or movie form. In the story, a submarine full of scientists is miniaturized and injected into the bloodstream of a dying politician to remove a life-threatening brain tumor. With the release of *Microcosm*, Psygnosis updates Asimov’s inner space adventure with brilliant ray-traced graphics and animation, teamed with a motion picture-quality soundtrack. In a product which could easily be dubbed *Son of Fantastic Voyage*, *Microcosm* attempts to take CD-ROM-equipped gamers on a shoot-em-up adventure through the fascinating inner vistas of the human body.

Your goal in *Microcosm* is to locate and destroy a microscopic brain-control probe, dubbed “Gray M”, that has been injected into the bloodstream of Tiron Korsby, president of Cybertech Corporation. To reach Gray M, you must successfully complete five separate game stages. The first stage is the Cephalic Vein, located in Korsby’s right arm. The second stage is the Femur bone, followed by the Superior Vena Cava (which carries deoxygenated blood to the heart), and the Carotid Artery (which supplies blood to the brain). The final stage is where the player confronts Gray M itself, inside the Brain.

**We All Live (And Fight) In A Yellow Submarine**

You begin the game at the helm of a miniature submarine, looking outward as the sub races down Korsby’s Cephalic Vein. As you move through Korsby’s body, you will be confronted by a variety of objects racing toward your sub. These consist primarily of a hostile menagerie of geometrical objects, ranging from spiked spheres to spider-like objects. Most are unarmed and simply try to smash your sub to bits by colliding with it. Destroying these objects requires your moving the targeting cursor over them and pressing the requisite fire button/key, much like a microscopic version of the action found in the *Operation Wolf* arcade game. You can’t help but wonder how Korsby remained breathing with so many foreign objects clogging his veins and arteries, crowding out the paltry supply of red blood cells which occasionally appear. Even though they are few, the red blood cells present a problem of their own, often appearing suddenly in small groups, forcing you to make the difficult decision of whether to shoot them (diminishing Korsby’s health in the process) or plow into them, battering the submersible’s meager allotment of shields. Since the Spook submersible isn’t allowed to maneuver inside veins, you’re faced with a kill-or-be-killed choice. Giving players the option to swerve inside veins might have made things a bit more interesting.

In an effort to provide some sort of diversity to this very basic shooter, Psygnosis places three different vehicles at your disposal. The primary craft is the Spook series submersible, a slow craft used in the Cephalic Vein and Femur bone sections. The Hunter-Killer sub is smaller, faster, and more nimble, and is used in the Vena Cava, Carotid Artery and Brain segments. Finally, a pressurized diving suit is used to finish the second half of the final stage of the game, in which you must explore the furrows and folds of the brain in order to locate Gray M.

Both the Spook and the Hunter-Killer offer three forms of arcade sequences, two of which are identical for both craft. When piloting the Spook, you have no control over speed or direction—just the targeting crosshair. When flying the Hunter-Killer, the view shifts to a rear, external view of the craft and provides a limited amount of control over its movement. The similar sequences consist of a combat in which the sub comes to a complete stop, and you assume control of a stationary laser cannon, firing at objects which charge into view. Finally, each vessel has to confront and defeat an
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Go for the Crown.

Lords of the Realm

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end-of-level guardian in order to pass to the
next level.

A Not Quite So Fantastic Voyage

Though the gameplay is simplistic, even
brainless, it still has problems. I often found
control of the targeting cursor to be some-
what cumbersome. Instead of trying to race
the cursor around the screen in an attempt to
target faster moving enemies, placing the cur-
sor in the middle of the screen and firing
continuously seemed to yield the best results.
The crosshair also has an annoying tendency
to disappear when there are no ene-
 mies on screen, making the player
spend an extra second or two to
locate the cursor when a new wave
of hostiles appears.

The preferred control method is
the mouse; the keyboard and joys-
tick seemed far too slow to be useful.
Although the manual states that the
joystick and mouse can be used in-
terchangeably throughout the
course of play, I discovered that
when I did so, the game occasionally
refused to accept input from
any
control source. Strangely, there is no
method for joystick or mouse calibration,
although a configuration utility for keyboard
control is included.

Another annoyance with the game con-
cerns the lack of a save-game function. Micro-
cosm lacks such a mechanism, although the
game does offer a limited number of oppor-
tunities to continue after one has botched a
particular level.

Bon Voyage

Psygnosis reportedly used Silicon Graphics
workstations to generate the graphics in Mi-
crocosm, and it definitely shows. The game
shimmers with polished graphics and anima-
tion. Lengthy animated sequels and cut scenes
are interspersed throughout the game. The
program uses a proprietary animation tech-
nique that Psygnosis dubs Fractal Engine
Technology, or FET. Astute Amiga owners
may have noticed FET in action over a year
ago when Psygnosis used the
technology to create the
Planeside demo displayed
on the CDTV. Using fractal
technology, FET can trans-
fer large amounts of graphic
data very quickly, even on
single-spin CD-ROM

drive and extra RAM, pauses to load data
during gameplay are almost nonexistent.

Accompanying the excellent animation is an
excellently equal suite of music. Rick
Wakeman (from the rock group YES) is cre-

dited with the composition of the original
game soundtrack, which fits nicely with the
game's cinematic animation elements.
The sound effects used in the game aren't up to
the same high quality, though. Explosions
sound tinny and weak, and the laser cannon
sounds as if it is powered by AA batteries.

Unfortunately, however, Microcosm does not
support a wide variety of sound cards, thanks in
part to the game's MCOSM.CFG utility. Using a text editor and a brief section in the
user's manual, players can edit
MCOSM.CFG to get Microcosm to run most
sound cards. This feature is better in theory
than in practice, as less-technically astute
gamers may have undue difficulty in getting
their sound cards to work at all. Practical
playing experience revealed that the default
Microcosm installation works well with Sound Blaster cards and compatibles; gamers with less popular sound cards may be
in for a frustrating installation
process. Gravis UltraSound users take note: the game does offer
enhanced audio for UltraSound cards with extra
memory (up to 1MB) installed.

The game's documentation

doesn't help much during installation, either.
Nearly half of the 32-page instruction book-
let is spent on setting the stage for the game,
with an appalling paucity of useful playing
information. As is, the player is injected into
the blood stream of Korsby without having
the slightest idea of what to shoot at. The last
few pages are dedicated to describing the solar
system in which the game is placed. It serves
well as interesting reading, but is entirely
useless as an aid to gameplay. Important game
information—such as the fact that bumping
into vessel walls and trigger-happy shooting
can kill Korsby and end the game—is
strangely missing from the documentation.

Psygnosis is aware of Microcosm's flaws and
is promising a patch disk that will fix most of
the control and audio problems; it should be
available by the time you read this. Players can also contact Psygnosis at their Internet
address: PSYGETECH@PSYGNOS.COM.

Finally, less dexterous users may want to sim-
ply cheat their way through all
the levels in Microcosm by using
Wayne Sike's handy
PLAYLEVEL utility, which allows the five game levels to be played in any order.

PLAYLEVEL (also called
MCPLAY) can be found in the
Gamer's forum on CompuServe
under the keyword 'Micro-
cosm'. Other on-line services
may carry the utility as well.

On purely aesthetic terms,

Microcosm breaks exciting new ground in CD entertainment.

The abundance of ray-traced animation and
polished cut scenes gives the game a decidedly

cinematic aura, with the professionally
crafted soundtrack adding to the big screen
feel. Psygnosis' FET technology is also a big
step for gaming, and I hope we see it again in
the future. Unfortunately, cool technology
and a "cinematic feel" do not a game make;
and, indeed, it seems that in their effort to
make an audio-visual marvel, Psygnosis for-
got to make a game.
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The Polygons of Penzance

I-Motion's 3-D Actors Star In Pirated Sequel to Alone In The Dark

by Allen L. Greenberg

My first thought on experiencing the increased violence of *Alone in the Dark 2* was that the program's profuse polygongs had surely been infected by some mysterious software virus. I had recently cured my desktop 486 of just such an infestation. Seemingly, it had been designed to implant revolutionary and anarchistic ideas into an otherwise conservative word-processing document. Having finally cleared myself of all charges regarding the overthrow of the current political system, could it be that I now faced the virus in a new form? I was well aware that normally peaceful polygons had been used to create the willful characters in the original *Alone in the Dark*. Had these same polygons, due to my carelessness, now undergone a hideous mutation into some new, nastier breed? I soon discovered to my horror, that no mere viruses were these! No, these insidious polygons had been deliberately bred to become the deadlier of villains, and the fiends now populating *Alone in the Dark 2*, the latest three-dimensional action/adventure game from Infogrames.

Once again, Edward Carnby is the hero of a macabre tale set in the early part of this century. A young girl has been kidnapped, and Carnby's partner has disappeared during an attempt to locate her. The trail leads to a classically haunted mansion located on a rocky cliff in California, overlooking the Pacific Ocean. Hell's Kitchen, as this estate is called, is surrounded by a dangerous garden maze, underground passages, hidden traps, and enough well-armed guards to protect the house from a small army. The villains responsible for the crime are a crew of pirates, most definitely not of common stock, and who share a deadly secret which keeps them from the grave. Their leader, One Eyed Jack, has established an alliance with a voodoo-wielding witch whose plans for the kidnapped girl, Grace, are not at all appetizing.

Both *Alone in the Dark* games are distinguished by several graphic features. As already mentioned, there are the polygons that are effectively used to create animated characters which are as awkward and blocky in appearance as they are elegant in execution. While the characters in the sequel may have been refined somewhat beyond those of the original, they retain the same marionette-like movements. While they may seem on the verge of collapsing into a pile of mangled geometry, each character manages to go about his or her task with purpose and dignity. Obediently, and with great deliberation, they walk or run at your command, despite the fact that a wall or some other object may have long ago made forward progress impossible. There is definitely a charm to these creatures that you just don't see in more conventional adventure games.

The two games are also distinguished by their use of multiple perspectives or "camera angles" at each location. Thus, the point of view in one room may jump from behind the

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**Alone In The Dark 2**

**Price:** $59.95  
**System:** IBM  
**Requirements:** 86-25MHz, 2MB RAM, 144KB hard drive space, VGA graphics; supports Adlib, Sound Blaster, and Sound Source sound cards  
**Protection:** Code cards  
**Developers:** Infogrames  
**Publisher:** Santa Monica, CA  
**Telephone:** (800) 443-3386

---

Players who were impressed with the original *Alone In The Dark*, yet found the program occupied only a few brief evenings of their lives, will find *Alone 2* to be in a killer league of its own, and not a game for those who are easily frustrated. The program serves up a sinister mix of puzzle solving and one-on-one combat, the latter of which proves to be the game's greatest challenge. More than once, Carnby will find himself captured and seemingly without hope. At these points, the story shifts to little Grace who, under your control, must find a way to free her would-be rescuer. Amazing Grace, teddy-bear in tow, has her share of puzzles to solve. She is never called upon to fight, but must strategically avoid the pirates lest she find herself imprisoned alongside Carnby.
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Carnby will not survive more than one or two head-on encounters with the pirates, so skillful use of combat strategy is the key to success. Pistols, Thompson submachine guns and ammunition are liberally scattered throughout Hell's Kitchen, and Carnby does best by finding a protected corner from which he can briefly emerge and fire at his enemies before ducking back to safety. These are supernatural enemies, and most of them require more than one or two bullets before they dramatically fade away. As the game progresses, Carnby's ammunition becomes less plentiful and his guns may be lost altogether. Fighting with a sword becomes an option, but that seems to be the one form of combat in which the pirates are better trained than the hero. Oddly enough, it seems that Carnby is at his most deadly when fighting without a weapon. He may throw a left or right punch, or put his feet directly in the face of the enemy. Most potently, if Carnby moves as close to his enemy as possible, as though he were about to dance cheek-to-cheek, he is able to pound the villain mercilessly into the ground with his forehead.

More than once, solving Alone 2's puzzles will help Carnby avoid being caught in a battle in which he is attacked by multiple villains. Every object found in the game is useful, and there is no limit to the number of items which may be carried around. Being in the right place at the right time is vital to success in the game. Unless the hero is properly positioned, doors will not open and certain objects may not be manipulated or used. At one point, it becomes necessary to push a cannon into position in order to destroy a room across a hallway. This simple action may take hours of trial and error before Carnby is in the proper position to respond to the command. In addition to weaponry, Hell's
Kitchen also contains a wealth of information which not only relates the history of the place's current evil inhabitants, but also reveals how various items lying about the house can be used to defeat them. Most important is the special weapon which is needed to destroy One-Eyed Jack. A commonly used voodoo icon must also be uncovered so that it may put to rest his vampiric female companion. Also scattered around the mansion are flasks of the pirates' favorite drink which, under most circumstances, will restore the battle-weary Carnby's diminishing supply of hit points.

The controls for Alone 2 are similar to those used in the first game. There is no need for any input device other than the keyboard, and this works quite well. The two vertical direction keys move either Carnby or Grace forward or backward, while the remaining directional keys spin the character clockwise or counter-clockwise. Tapping either of the vertical keys a second time will cause Carnby to break into a swift trot, while Grace, the little darling, prefers to "skip to my lou." The program also includes the same innovative game-save system in which a screen snapshot is saved alongside the player's description of the situation. The "enter" key brings up a list of options including "fight" and "push." The character's inventory list is also here, along with options which are specific to each item in that list. All action comes to a halt in this mode. This way, Carnby is able to switch weapons, reload one of his firearms, or even take a hit-point-restoring swig from his flask without being pummeled by a bad guy as he does so.

The musical score which accompanies Alone 2, with the exception of some brief inspiring excerpts from Wagner's opera The Flying Dutchman, is somewhat silly, and most of the undead pirates fades out of existence. Carnby's footsteps echo realistically as he walks through the giant mansion, yet one cannot help but wonder how the diminutive, bare-footed Grace makes a similar noise as she walks about. More ludicrous is that each time Carnby hangs his deadly forehead into an enemy, he lets out a grunt that more resembles an expression of indigestion than it does a battle cry.

For a game which demands as much physical effort to defeat as does Alone 2, the ending is somewhat of a letdown. It comes after several white-knuckled battles, including one against an acrobat on a narrow, wooden beam high above the ground. These final battles are so intense that it would be foolish not to save the game to disk after each victory. Unfortunately, the only reward is a brief explosion and little Grace waving "bye-bye."

Despite its weak ending, as well as some other irritating moments, Alone 2 is a good, solid challenge. Much more so than its predecessor, it will test players reflexes as well as their minds. Make no mistake: the polygons are back, and they are hungry.

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Featuring the latest in 3-D terrain technology derived from digitized information taken from LANDSAT geological surveys, you'll pilot your F-14 through actual locations.

Fleet Defender from MicroProse. We brought you the F-15 Strike Eagle, now try the F-14 Tomcat featuring the most authentically modeled F-14 systems available anywhere outside of the Navy.
First Place, Numero Uno, Top of the Line, Apex, Gold Medalist—Premier! All of these terms point to the pinnacle of authority, the peak performance or the preeminent product in its field. This has always been true of the CGW Game of the Year Awards, a selection of the best computer games of the commercial year from both a critical and popular perspective. This year, we have shortened the eligibility cycle to move toward a calendar year awards process; added multimedia awards (any multimedia product released before press time was eligible for these awards); and finally, named our awards — The Computer Gaming World Premier Awards. So, even though we’ve given Game of the Year Awards in the past, this year’s presentation of the CGW Premier Awards is something special. So, break out the champagne, pass out the confetti, put on your tux or formal, and launch the fireworks, it’s time for the premiere unveiling of The Computer Gaming World Premier Awards.
GAME OF THE YEAR

Doom

We heard about it everywhere we went, "DOOM!" We were asked about it whenever gamers congregated, "DOOM?" We tossed off accolades about its smooth scrolling, its detailed texture mapping, its network capability, the aural impact of its visceral violence and its deranged graphic look—DOOM. We printed stories about companies where employees faced a DOOM of career-crisis proportions if they were caught booting the game. We thumbed through countless cards from readers stating that "DOOM rules!" "DOOM is awesome." The #1 rated game in our Top 100 was DOOM. We had DOOM fests in our offices on the network and played what was virtually DOOM VR with a flying mouse and head-tracking unit. On-line services and BBSs became filled with DOOM editors and new levels. It seemed that whenever and wherever computer games entered the picture during the latter part of 1993, DOOM was the first syllable on our lips.

So, with its technological excellence and near-universal approbation from the gaming public, what better game to name as the first Computer Gaming World PREMIER Game of the Year, our equivalent to the Academy of Motion Picture Arts and Sciences' "Best Picture" award, than DOOM? If you liked the monsters in DOOM, you can credit the back story by Sandy "Call of Cthulhu" Petersen and the artistic excellence of Adrian Carmack and Kevin Cloud, along with model builder Gregor Punchatz. The techno-wizardry that enabled you to play so many hours of smooth-scrolling, monster-blasting fun was brought to you by John Carmack, John Romero and Dave Taylor.

DOOM is a first-person perspective action game with smooth scrolling as players face 3-D modeled, texture-mapped monsters. It is technologically important because it offers advances over id's Wolfenstein 3D engine, which was licensed and modified for other commercial games, and is much imitated in the world of computer games today. Congratulations to the PREMIER Game of the Year.

ONLINE GAME OF THE YEAR

Multi-Player BattleTech

Those of us who love on-line games find that the fictional universes they depict are pleasant escapes from the mundane normality of our everyday lives. On-line games become colorful refuges, mindlife preserves, and cyburban retreats where our alter egos, those game characters whose back stories we keep stored within our minds, live more exciting, successful and sometimes, fulfilling lives than we do during the average day in the classroom, courtroom, factory, family, hospital, laboratory, legislature or office. Most people who play on-line multi-player games spend as much time talking about what they've done in the game universe as they do playing the games themselves. The finalists for this year's awards are no exception. They are worthy of plenty of talk.

MPG-Net introduced a masterful translation of Empire Builder, the boardgame of railroad building in the U.S. and Canada from Mayfair Games. The Imagination Network brought out a new version of Shadow of Yserbius: Fates of Tawton, their extremely successful on-line fantasy role-playing game, as well as 3-D Golf, a multi-player version of Wilson Pro Staff Golf. Tim Wisemann's VGA Planets deserves special recognition for being the first BBS game to be nominated for this award. Award winners have always represented simultaneous multi-player gaming rather than PBEM, simply because it's harder to accomplish, but the editors felt that the impact of VGA Planets made it worthy of an Honorable Mention in this category.

The PREMIER On-Line Game of the Year is Multi-Player BattleTech, the GEnie game designed by Kesimai Corporation. The game lets the gamer control his/her destiny as a MechWarrior in the pre-Clans BattleTech universe. Gamers enlist in the military or mercenary units of their choice, and the universe is dynamic in that individual battles impact upon the on-line universe. Battles are fought from 'mechs, giant robotic vehicles of destruction, in a simulation that looks like Activision's classic MechWarrior, but performs significantly better with real human 'mech pilots on your flanks. There are plenty of fans of the novels and boardgame who make this less of a game, and more of an alternative lifestyle.
With DOOM capturing overall honors, the contest for PREMIER Action Game of the Year was reduced to a four-way slugfest between four significant games. Origin's Privateer brought capitalism and piracy into the universe of Wing Commander. The game advanced the graphic look of the series somewhat and introduced a free-wheeling open-endedness for the players who chose not to follow the story line. Origin's Shadowcaster (Brian and Steve Raffel with Victor Penman) added art, role-playing elements and story to a modified Wolfenstein-3D engine. LucasArts' Rebel Assault (Vincent Lee) established a new record for CD-ROM game sales as well as a new model for action games based on film properties. Not only did the game feature digitized footage from one of the most successful film series of all time, but it offered game sequences with a 3D feel, enabling the player to slew through canned animation sequences.

The winner of the PREMIER Action Game of the Year is Prince of Persia 2: The Shadow & The Flame from Broderbund. It isn’t surprising that Jordan Mechner (Karakara and Prince of Persia) would offer a smoothly animated horizontal scrolling thriller with cinematic scope, vivid action and daunting puzzles. He’s done it before. The original Prince of Persia was a masterpiece of animation, blending the action from feature film footage with animated sprites to create very realistic characters. What is surprising is that the sprites (moving characters) and backgrounds for Prince of Persia 2 can be as detailed as they are without reducing the fast, fluid action quality to the game. The sequel certainly surpasses its predecessor and well deserves the crown of PREMIER Action Game of the Year.
ROLE-PLAYING GAME OF THE YEAR

Betrayal At Krondor

Role-playing is a subset of the adventure game genre. Where 
adventure games focus on the 
puzzles and stories, CRPGs tend to 
emphasize character growth or skill-
building. This year, every title among 
the finalists brought a terrific new look 
to role-playing. New World 
Computing's Darkside of Xeen features 
the most impressive linking of two 
CRPGs in computer game history. Jon 
Van Caneghem's dark counterpoint to 
his earlier Clouds of Xeen title is a major 
step in the advancement of virtual 
world building, since you can bounce 
back and forth between two linked game environments. 
Westwood's William Alan Crum and Philip W. Gorrow 
designed Lands of Lore. Lands of Lore features impressive special 
effects that some said couldn't be done in the MS-DOS world and 
a delightful story that blends together many of the classic 
fantasy archetypes of shape-shifting.

MicroProse ventured into the world of CRPGs for, perhaps, 
the last time with Bloodnet. Developed by their former 
Pennsylvania development group, Bloodnet is a gothic romance 
gone cyberpunk. The script by John Antinori and Laura 
Kamp, which mixes vampirism and hacking, is one of the most 
interesting to hit this genre, and the surrealistic approach to the art style 
are definitely fascinating. Dark Sun, from Strategic Simulations, 
Inc., is the long-awaited "new engine" for games 
produced under the TSR Advanced Dungeons & Dragons license. 
It is also one of the last TSR-licensed products to be published 
by SSI. Russ Brown and the rest of the team managed to capture 
the uniqueness of the magic system and "scorched earth" look of 
Troy Denning's Prism Pentad series of novels.

So, in a year of stiff competition, the winner of the PREMIEt Role-Playing Game of the Year award is Betrayal at Krondor. Published by Dynamix and designed by industry veteran John Cutter, with significant assistance from Fantasy author Raymond E. Feist, Betrayal at Krondor is the quintessential example of how a computer game should be built from a fantasy 
Novel. It is favored by our readers because of its play value and 
non-linear story, and it is favored by our editorial staff because it 
seems to be the product that took the most creative risks. It features a bold use of the company's proprietary 3-Space (3-D) 
technology, lavish use of digitized images, a fascinating magical system that is built upon the magic in the novels, and the skillful blending of new story elements with the history and characters from the much loved novels.

INDUSTRY GAME OF THE YEAR

IndyCar Racing

Damon Syle is a perpetual contender in this category. Though he has 
won in the past, Aces Over Europe features a look and 
feel that is too close to previous efforts for the 
great sim designer to garner this year's award. 
However, Dynamix continues to accelerate the performance of products in Damon's 
Great War Planes series, and its position as a finalist in this category underscores the quality of this series. Spectrum HoloByte's 
Tornado (Kevin Bezant, Nick Maccall, Tony Hosier, Robin 
Heydon and Matthew Smith) offers the most versatile and realistic mission planning approach that flight sim fans have ever been able to use. It is positively brilliant in its operational model.

Domark took a different path with Flight Sim Toolkit. 
Jonathan Newth and David Payne have created a "Power to the 
People" product extraordinare. We have never seen such an 
ambitious project in our combined years of covering computer 
games. This construction kit allows you to actually build a 
commercial-looking flight simulator to your specifications. Though 
the product may require too much work for it to achieve 
the popular appeal of some of the other finalists, it is a welcome 
addition and innovative addition to the simulation genre.

Paul Grace, Sonny Hays, and Andre Gagnon decided to simulate something completely different. Instead of using the first-person viewpoint out of a vehicle's cockpit, windshield, or 
view-slit, they elected to produce a simulation of infantry combat in the 
jungles of Vietnam. Electronic Arts' SEAL Team is the first simulation to treat infantry combat with the same detail as 
would a game of armored or aerial combat, and it is one of the 
most sensitively handled treatments of the Vietnam Conflict 
that we've seen.

The PREMIER Simulation of the Year goes to Papyrus 
Software for IndyCar Racing. David Kaemmer's texture-mapped 
exteriors race through the twists and turns of an IndyCar season 
across lightning fast polygon models. Kaemmer is attentive to 
detail in modeling how everything from wind, tire wear, gear 
ratio, wing angle, tire quality, engine fatigue and physical damage affects the performance of a high performance car. IndyCar 
Racing also features modem-to-modem play and lots of high 
performance chrome in terms of replay action and camera angles. It is the motor sports aficionado's dream come true.
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MULTIMEDIA AWARDS

To celebrate the launching of multimedia as an integral part of the computer gaming world, we selected four categories in which we would present PREMIER awards: Best Voice-over Acting—Male, Best Voice-over Acting—Female, Best Musical Score and Best On-Screen Performance. Selections were made on the basis of performance expertise, artistic value added to the game, and appropriateness to the medium. Acting for computer games is very different from any other type of acting. Actors in a multimedia production have to run through scenes for numerous possibilities, often without having an ensemble of other actors with which he/she can work. Also, note that though this year’s winning performances were published in games which we considered excellent, future awards may yet arise from games with limited play value but sterling performances. Unlike the PREMIER awards for the games themselves, eligibility for the multimedia awards was open to every game published by press time. Multimedia games are still a new enough approach that we needed a wider eligibility span in order to see a significant number of performances.

With a unanimous vote, the editorial staff chose Michael Gregory as the first winner of the award for the PREMIER On-Screen Performance in a Multimedia Game. Gregory plays the evil chancellor in The Horde (from Crystal Dynamics). A film veteran with parts in RoboCop and Total Recall under his belt, Gregory had the advantage of performing in film vignettes with a live cast as opposed to providing a solo performance in front of a ChromaKey or Ultramate screen like many computer game performers. Nevertheless, we found ourselves particularly impressed with the way Gregory communicates via body language and facial expressions, even in scenes where he has no speaking part. He literally steals the show from male lead Kirk Cameron, and gives gamers an incentive to keep playing until they can force this campy bad guy into eating his words. Michael Gregory well-deserves his position as winner of the first-ever acting award in this new medium.

Best On-Screen Performance

Burke Treischmann’s original music for The Horde. Not only do we like the funky, whimsical riffs within the score, but we appreciate the way that every type of terrain or genre of hordling has its own musical theme. The music adds to the game by shaping the mood and intensity of each level in the game, and it is safe to say that every track on the CD has something musically unique about it. Just listening to the various tracks is like listening to an album by an avant-garde jazz performer.

Best Musical Score

Virginia Capers offers just the right balance between ethnic accentuation, playful whimsy and mood-setting suspense. We initially expected to give this award to a performer who was portraying a specific character, but we were totally overwhelmed by Capers’ performance as the narrator. Her performance alone makes it worthwhile to purchase the CD version of Gabriel Knight: Sins of the Fathers, so she is the inaugural recipient of the PREMIER Award for Best Voice-over Acting (Female) in a Multimedia Game.

Best Female Voice-over Acting

The winner of the first-ever PREMIER Award for Best Voice-over Acting (Male) in a Multimedia Game is Patrick Stewart. From the initial stentorian tones heard in Lands of Lore, the role-playing magnum opus from Westwood Studios, we never had a doubt that the Shakespearean actor and television star was perfectly cast as the royal monarch. His vocal range gives a sense of urgency and reality to the game as the story unfolds.

Best Male Voice-over Acting
Front Page Sports Football Pro

The finalists in the Sports Game category offer superior performance in a number of categories. Cactus League Pro Basketball (Cactus Development) by Ralph Rhoades offers in-depth strategy and an exciting challenge in player management. Largely a text game in a year of 3-D blockbusters, we nevertheless honor this game for its accurate replays, detailed stat disks, and exciting game play. APBA Baseball For Windows from Miller Associates is similar. Though the most recent version has added a new graphic look with more appeal for the average gamer, it is still the statistical model and replay accuracy of this new game, like its venerable ancestor, that commands everyone's attention. Yet another sport is represented in NHLPA Hockey. Electronic Arts took the most successful hockey game in the cartridge world (so successful that it was reviewed favorably in CGW, a rare event for cartridge games) and expanded its horizons to offer league play, a larger view of the rink and more user-customizable features. NHLPA Hockey is an adrenaline pumper with new refinements for hockey addicts.

All of the finalists mentioned so far are worthy products, but the championship bout was fought between the two groundbreaking football products: MicroProse's Coaches Club Football and Dynamix' Front Page Sports Football Pro. Both offer intriguing new 3-D perspectives and both appear to be the results of exhaustive research. The designers of Coaches Club Football, Ed Fletcher (who worked on the original Wayne Gretzky Hockey) and Doug Whitley (an industry veteran releasing his first design), had the advantage of working from an actual NFL coach's playbook and took great patience to design even the newest NFL rule changes into the product.

The winner of the PREMIER Sports Game of the Year is Front Page Sports Football Pro from Dynamix. Since its inception, Front Page Sports Football has been the leading football game among our readership and the addition of real players and statistics in the latest edition makes it even better. Graphically, Front Page Sports Football Pro is still the clear leader, and the customized coaching profile allows you to create realistic leagues with AI coaches that have the tendencies you specify. Plus, NFL fans like the fact that Front Page Sports Pro offers all of the "off the field" fun of personnel management through trades, drafts, and replacing injured players. Front Page Sports Football Pro is, to date, designer Pat Cook's masterpiece and his Front Page Sports Baseball is sure to be a contender in this category next year.

Master Of Orion

Something old and something new entered the strategy genre during this year's period of eligibility. Software Toolworks unveiled another incarnation of their classic Chessmaster series. The scion of CGW's Hall of Fame member, Chessmaster 4000, proves that Software Toolworks still has the capacity and will to improve their best-selling chess engine. This year's model is more competitive than ever with not only the expected stronger chess engine, but refined artificial opponents who do an excellent job of emulating classic grandmasters via an exhaustive 17-variable model. Electronic Arts' Kasparov's Gambit is, on the other hand, a chess game for the "rest of us." The emphasis of the game is on tutorial, commentary and classic game libraries. Both games are beautifully crafted, and the nod would have to depend upon whether you were looking for a great opponent (Chessmaster 4000) or a great teacher (Kasparov's Gambit).

Will Wright and Fred Haslam are also no strangers to a list of finalists in the strategy genre. SimCity 2000 is their latest entry in the world of system simulations. This advanced city simulator adds many of the features and considerations that were previously lacking in the original SimCity. It offers more types of energy, transportation and funding to meet the needs of discriminating mayors ex machina everywhere.

Strategy classics were not the only products in the offering for this year, however. Two other games put new subject matter in the strategic orbit. First, Several Dudes Holistic Gaming teamed up with QQP to present Merchant Prince, a strategy game that captures the greed and treachery of medieval Italy even more than the classic Machiavelli boardgame from The Avalon Hill Game Company. Merchant Prince allows you to build wealth and power via three different tracks: ecclesiastical, economic, and political. Everyone has to use some of all the tracks, but it is up to you which approach will be your primary vehicle to incontrovertible influence and preeminent prestige. (Hint: The church is easiest.)

Second, the inimitable Jeff Tunnell turned his fascinating The Incredible Machine engine into a strategic tribute to cartoon violence and invention, Sid & Al's Toons. If you've ever wanted to try your hand at designing the latest Wile E. Coyote-style
contraption, Sid & Al's Toons gives you all the computerized Acme parts you'll need to succeed. It's a difficult game to describe because it moves beyond the boundaries of the genre into a new generation of software toys.

The PREMIER Strategy Game of the Year is Steve Barcia's Master of Orion (MicroProse). Steve's company, SimTex Software has created a game that is worthy of being called "Civilization in Space" because Sid Meier's Civilization is the game with which, because of its strategic depth and addictive quality, it is most often compared. Like the winner of two years ago, Master of Orion offers multiple tracks for victory and even advances beyond its distant cousin because it adds a complex diplomatic web of intricate intrigue and builds upon a technological model that is not merely cosmetic, but forces tactics to evolve. This game epitomizes and expands the "Conquer the Galaxy" motif in strategy gaming.

SPECIAL AWARD FOR INNOVATION

Aide De Camp

This year, the editors of CGW wish to present a Special PREMIER Award for Innovation to Scott Hamilton of HPS Simulations for Aide De Camp. Billed as the wargamer's friend, this unique product allows even the clumsiest gamer the opportunity to convert his/her favorite boardgames into computer moderated (Play-By-Electronic-Mail capable) versions of those games. The maps can be as beautiful or functional as you want, and the whole process is easy-to-accomplish. The product comes complete with generic terrain sets and the tools to build your own. It has a capacity for redefining the properties of each terrain tile in order to accommodate the movement restrictions and combat effects of said terrain. It provides for easy road and river design by letting you point and click from center-point of each hex and connect the dots. It has simple tools to let you convert game counters into on-screen reproductions, even if you don't have artistic talent. We've never seen anything this versatile for meeting the varied and often obscure interests of wargamers. We think it's the most user-friendly design kit this side of scanning maps and counters directly into your system.

WARGAME OF THE YEAR

Clash of Steel

Sequels and new versions fill out the roster of finalists for PREMIER Wargame of the Year, but the award goes to an original design. The final release of the V for Victory series is Gold Juno Sword. Released by Three-Sixty Pacific and designed by Eric Young and Keith Zabalaou, the game refines the system with better artillery and supply rules, as well as a cleaner interface. Although basically a sequel, the improvements to the system brings it to the realm of wargame finalist.

High Command is the Three-Sixty Pacific release of an ambitious, sometimes overly economic model of the European theater of WWII. A refinement of the previously released game, this strategic tour de force by Gregg Carter and Joey Nonnast offers more hard data than the previous incarnation and a more comprehensive economic model. This is the wargame of choice for those who want a detailed, realistic simulation.

The heir to a previous CGW Wargame of the Year, Warlords II (Strategic Studies Group) takes the award-winning game system and enhances it with more and randomly generated maps, hidden terrain, and more diversity in unit types. The AI presses SSG's approach to a new high in versatility and competitiveness. Designers Steve Fawknerr, Gregor Whiley, Roger Keating and Ian Trout have managed to add an expanded diplomatic wrinkles to the basic strategy of the game, as well.

In Walls Of Rome, Ali Arabeks, Scott Baker, Paul Kellner, and James Thomas bring the Siege game system to its full maturity. Unfortunately, this occurred as the demise of Mindcraft as a publisher was imminent. In this sequel to Siege, the AI is less predictable than in the previous releases, the historical research is extremely solid (including many obscure battles that you can't find anywhere else and historical uniforms/banners which are something of a miniaturists' dream), and a multi-player modem capacity that takes the game up another notch in our opinion.

German designer Martin Scholz created the PREMIER Wargame of the Year for Strategic Simulations, Inc. Clash of Steel takes a classic, marketable wargaming subject—strategic warfare in WWII's European Theater—and gives it a boost in terms of playability, interface, and historical chrome/personality. Although the AI is respectable, Clash of Steel is particularly excellent as a multi-player "hot seat" game (played at the same computer). It offers the right amount of historical depth, but never frightens the gamer with unnecessary details. Everything is accessible, useful and enjoyable in this well-conceived design.

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As far as we Brits are concerned, there is only one "Football." It's played with a round ball and not that funny-shaped excuse for a bladder that those grunting, padded refrigerators throw at each other. The word "Soccer" is an abomination that should be expelled from all dictionaries and wiped clean from all memories of the world's population. Football is all about flair, intricate passing, vision, spectacular goals and crunching tackles.

Unfortunately, the idea of seeing England win the World Cup, which is about to take place in several US cities this June, has been reduced to a bit of a personal dream. Abysmal tactical play and poor player selection from the team manager (now ex-manager) have eliminated England from participation at the World Cup, the holy grail of football. From Germany and Brazil to far-off Australia and exotic Cameroon, the best teams from all over the globe will compete in this premier sporting event. Of course, as the host country, the USA has an automatic place in the tournament, rather than having to qualify.

For those enlightened Americans who are switched on to the football scene and are getting into the mood of the World Cup, here's a personal selection of our top six football games from the UK, Europe and Japan. We have tried to cover all types from the managerial game to the action/tactical examples. The choices are tough, because there must be 30 or so different football games floating around on different formats at the present time. Anyhow, here's the kick-off...

SENSIBLE SOCCER
(Sensible Software)
Available on: Amiga, IBM, SNES, Gameboy

Sensible Software, one of the leading UK software houses, has released its own version of football on every format over the last two years. The most recent releases have been on Nintendo's SNES and Gameboy. In the debate over the best football action/tactical game, there is no doubt that Sensible is in everyone's top three, no matter what format. All the versions look the same with the usual top-down view presented. After a few bits of management setting formations and tuning the player's skills, you can jump right into the game. The Gameboy version is one of the best games on this particular system. Will we see a Jagaur or 3DO offering? The chances are very high. The game is fast and responsive, with plenty of tricks, a huge playing area, and precise controls. In short, it's a class act.
GOAL (Virgin)  
Available on: Amiga, IBM

The first thing you notice in this top-down view, tactical game is the wealth of menu options to be chosen before actual play begins. I personally appreciated the Practice option, because it gave me a chance to work on my dribbling, passing, shooting and corners at my own pace before I moved into the game's more serious level of competition. In addition, all the usual options are available. The field conditions can be set for normal, muddy, wet or Wembley, the latter emulating England's national stadium. Match duration can be set between one and 20 minutes for each half. Goalkeepers have levels of hard, medium or easy, predominantly changing the speed of the goalie's actions.

Replays are fairly standard, although a nice change here is the ability to replay each goal automatically and to be able to save a replay straight to disk. Choice of scale allows a zoom in/out function to operate either automatically or by pressing the space bar in order to change perspective. The viewpoint for the game is basically from a bird's-eye perspective. So, zoom-in gives a bigger and more detailed view of individual players, while zooming out allows you to see more players and a greater deal of the playing field.

Once the options have been altered, you may select your team. A single match gives the direction for a quick crossover into the penalty area. A player's pace and stamina decide how quickly he is able to turn within a confined space, fake out the defender, and burst to the net in true Bobby Charlton style.

Defenders have four ways to stop potential goal-bound attacks: a slide tackle coming in from the side; a block tackle by getting between an attacker and the ball; intercepting a pass; or simply fouling. Fouls may result in either a free kick, or no foul called, depending on the referee. A nice touch is the variety of referees from which to choose.

When a free kick is awarded near the goal, a dotted line appears, allowing you to set the direction, length, and height of the kick. Defenders will form a wall that can be adjusted from one to seven players. Also, corners and throw-ins have a more realistic feel than in most games, because they use the dotted boundary lines properly.

WORLD CUP SOCCER '94  
(Sierra) Available on: Amiga

This game is being programmed in the UK, which is somewhat unusual for Sierra. More significantly, it is a football game which will be released only on the Amiga for the European market. Release on other formats depends upon the success of the Amiga version.

The programmer is Steven Dunn, who works alone at his home, just a mere six miles from MicroProse UK. His previous work included the coding for Starglider 2 and Hammerfall. The new football game has taken him nearly a year to complete.

The game initially looks like Sensible Soccer and plays in a manner similar to that slick title. Many subtle differences, however, ensure that World Cup Soccer ‘94 is in the Premier League of football games.

The familiar overhead view of the game is used, but this time, it is vector based. Surprisingly, the players don't look too weird, and the pitch and scrolling ensures that most of the playing angles can be viewed. You can even see the goal rotate and retain its form as player movement occurs in its vicinity. As a player veers to the side to contact the ball, a full view of the goal is seen from the player's perspective, as opposed to seeing an inaccurate goal at an incorrect symmetrical position. In addition to having the proper look and feel as the angle of the goal moves, it gives you the opportunity to shoot (and possibly score) from a very acute angle.

Control of the players is standard with fluidly scrolling banana kicks and good attention to inertia and heading. The computer intelligence in the game ensures that the players work as a team. For instance, if one of your players is sent off the field in Sensible, there is a hole left on either defense or offense. With World Cup '94, the game system fills this hole with another player who, in effect, takes on a double role. Even the throw-ins are innovative and simple. When a throw-in is taken, the three nearest players on your team will run around close to the player with the ball and are highlighted. When a player is spotted and targeted the ball will be thrown to him. This is far more intuitive than any similar feature seen in other games.

Like any good football game, however, it is only as good as the user. All the teams are seeded, based on the designer's research of team and individual player skills. The great teams you would expect are included, and all of the teams can be adjusted in terms of skill. Possession of the football requires plenty of skill, but it is well worth the effort. After a game's completion, statistics are posted pertaining to time of possession, shots on goal, etc., making this a worthwhile purchase for the stat fan.

PREMIER MANAGER 2  
(Gremlin)  
Available on: Amiga, IBM

Last November Gremlin's Premier Manager shot straight up to the top of the UK charts. It has stayed there ever since and is now acclaimed as one of the better management
Holy Sphinx

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games on computer (if a little predictable in the AI stakes). The facet that appeals to most players is that it is highly intuitive, but also requires a reasonable level of skill. From the moment the game is loaded up, the player becomes engrossed in the world of football management.

Now, Gremlin retains all of the original ideas, with added features to make the sequel, Premier Manager 2, the best in its class. A Conference League has been added to help develop your player skills before you move on to the Premier League. A two-player option is also included, plus detailed match reports of all the games being played. If a continental flavor is more to your liking, see if your managerial skills are up to the French or Spanish Leagues.

In addition to the different leagues, the new version offers 16 unique playing formations and eight selectable playing styles, including individual morale and fitness levels. The graphic look of the playing fields has been improved, and you may even set ticket prices and the level of crowd control. Weather conditions are variable enough to sometimes result in postponements. The new challenges require you to balance up to 64 sponsors while simultaneously struggling with player contract negotiations. From the eight training camps to the limit of four foreign players in European competition, you will have no lack of managerial decisions to make.

Although other management games may have a glossier look, Premier Manager 2 is the tops as far as gameplay is concerned. Changing tactics subtly affects the outcome of a game. Fitness is a key component, especially during long matches that feature extra time or, for successful clubs, who have to deal with a congested fixture list. Player statistics are important, but knowing when and whom to substitute is the critical decision in who will

Human goalies are often distracted by the lush
fields of FIFA International Soccer.

win a particular game. Ball control is often more important than defensive or shooting capabilities, particularly when setting the pace early in a game. Later on, mixing the endurance and speed of youth with the experience of veteran players will generally provide a successful strategy. The best part of Premier Manager 2 is that you can apply a variety of different types of management styles to produce a successful football team. All in all, a classic football game.

FIFA INTERNATIONAL SOCCER (Electronic Arts)
Available on: Sega Genesis
(SNES forthcoming)

With the official license of FIFA (the world football governing body) combined with the expertise of the world’s leading software company, you have a right to expect something good...but this is stunning. FIFA International Soccer is a remarkably complete simulation of the sport. The numerous options include league play (with exhibitions, play-off and tournaments), computer or human-controlled goalkeepers, adjustable fouls, and a variety of time settings. The new four-way, multi-player adapter is supported, and up to eight players can compete together or even team up against the computer.

Play begins with the crowd roaring, a good example of how the sound support enhances play. The controller pad allows you to finely execute ball control, player moves, and kicks with consummate ease. The perspective of the game is just above and slightly to the side of the pitch. This adds the feeling of speed to the game, and the superb overview makes passes and anticipation very natural during play. In no other game can you achieve such a high degree of pinpoint accuracy when passing. The clever design allows for players to be assigned both offense and defensive stances at midfield. Thus, the transition of the team from offense to defense is accurately simulated. Players may also be positioned for full defense or all-out offense by assigning them to specific areas of the field.

The impressive controls allow short passes or Pele-style power kicks from 40 yards out. Your only limitation is in how quickly you can master the controls. When putting in the frantic action, the designers didn’t neglect the simulation aspects. Illegal or dirty plays will cause your team to be a few players short. Also, unlike many games, these referees see everything (perhaps these chaps remembered their glasses).

Final Wrap Up
So, that describes the top division of football contenders which are currently available on the digital pitch. We don’t expect every gamer to choose the same game as his or her favorite, but we think we’ve handicapped them well enough for everyone to start their own World’s Cup.
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Return To Arena

Magic And Character Classes
In Bethesda’s Role-Playing Epic

Last month we stepped into Bethesda’s *Arena* and looked at this epic game’s main features, but due to space and time constraints I only mentioned the finer details in passing. In particular, I was only able to give the character classes and the detailed magic system a cursory glance, so this article will fill in the gaps and get into the meat of these meaty features.

**Got You Under My Spell**

As noted last time, the magic system is very flexible in that spells can be purchased readymade, and unique spells can be created from scratch through the Spellmaker at any Mages Guild. My experience was that with most spells, especially offensive spells, it’s better to “roll your own” than to buy “off the rack.”

The typical offensive spell comes with a certain base damage, modified by the level of the caster. For instance, Shock does a base damage of 1-35 points, plus 1-5 points per level. This makes it rather weak in killing power. Nice against goblins and orcs, perhaps, but not really all that great against, say, an iron golem.

I found it better to reverse that, starting with low base damage and large increments per level. Cold Death, one of my favorites, did a base 5-15 damage, plus 25-40 per level. An expensive spell, in points, for low-level mages to cast, but well worth it in killing power.

The same holds true for protective and utility spells. Shalidor’s Mirror, an off-the-rack spell, gives a 40% chance, plus 2% per level, of reflecting an incoming spell back at the enemy caster. Compare that to Improved Reflection, which starts with a base 1% chance, increasing by 14% per level.

Of course, you can go too far with custom spells. Depending on class, the most points a magic-user can ever have for spellcasting ranges from 100-300 points. The cost to cast a spell declines as character level rises, but if a spell starts out requiring a lot of points, you may have to wait a very long time before it can be used.

Spells can be created with multiple effects, such as a combination of paralysis and continuous damage (nasty), but these, as you might expect, cost more to buy and more to cast in spell points. I found it simpler and more efficient to concentrate on sheer firepower. Blowing a critter out of its tracks with a shot or two is always preferable to fancy stuff. The best enemy is a dead enemy, and the sooner it’s dead, the better.

With that in mind, there is no question that the best mage class for firepower is the Battle Mage. Offensive spells in Spellmaker are cheaper for Battle Mages and also cost less to cast in spell points. I had two main spellcasting characters: Kali the Dark Elf Nightblade (a thief/mage), and Orvaal the Breton Battle Mage.

Kali had to pay 1740 gold for Cold Death; Orvaal only 936, and that for a slightly more potent version (25-45 increment instead of 25-40). At level 18, Kali needed 48 magic points to cast it; Orvaal, only 26. A well-equipped Battlemage is probably the most deadly character in the game.

Actually, any properly-run mage is deadly and will have an easier time of it than the non-spellcasting classes. They can sneak around invisible to all but the most potent monsters. They have protection against physical and magical attacks. They can float over lava and dissolve walls in their way. They can cast death from near or far. And they don’t really need a lot of spells to accomplish all that. Neither Kali nor Orvaal had more than about 15 or so spells in their spellbooks.

Other professions can simulate these effects with potions or items. For example, a fighter might have a buckler with levitation spells on it, or a dagger with Passwall, or some invisibility potions, or a longsword with lightning spells in it. These are all helpful, but don’t really compare to having the ability to do all that on a regular basis.

Further, the level of spell on an item is fixed, while spell potency for mages increases with their levels. So that longsword of lightning will always do the same damage, however advanced your fighter, whereas a mage’s lightning spell becomes ever more deadly as the mage advances.

Mages of all types therefore have a tremendous advantage in *Arena* and are the best choice of character to play. Of course, it is possible, although difficult, to get through with a non-spellcasting character. For that, a Knight is probably the best way to go. Knights have good hit points, can wear any armor, and use any weapon. They also repair weapons automatically, so by carrying a couple and switching around now and then, weapons never wear out or break.

The least advantaged class is the thief. Except for the spellcasting Nightblades, thieves do not have an easy time at all. Let’s face it, a thief’s force is stealing, not solo dungeon-entering. There is no scope at all for thiefly activities (aside from lockpicking) in the dungeons. Thieves can’t try to slip past a monster, or sneak up and backstab it. Once in a dungeon, thieves are no more than third-rate fighters, with mediocre armor and hitpoints.

I ran Shadow, a Dark Elf Assassin, through several dungeons. He didn’t do too badly, until he came up against the Wraiths with their devastating fireball spells (those spells are potent!). Two
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shots and he was cinders. Trying to get him across the room to the monster (so it couldn’t cast spells) while guggling healing potions by the case, was a frustrating experience.

Wraiths weren’t the worst of my problems. Still ahead were fire daemons, vampires, and liches, all of whom have powerful spell attacks, can see invisible adventurers (so can Wraiths), and hit very hard in melee, too. I couldn’t see Shadow getting past all that without truckloads of healing potions, a lot of luck, and many restores. So I abandoned him and went on to Kali the Nightblade, who of course had a much easier time of it, being a spellcaster.

So while thieves may be fun to run in town where they can burglarize, pick pockets, and steal from shops, they aren’t terrific, or even good, when it comes to following up the main line of the game, which is getting those staff pieces out of the dungeons.

One thing to watch out for is creating new characters after running an old one for a while. After Shadow had gotten the second staff piece, I decided to look at some other character types. I went back to “create new character” from inside the game and made up a Monk.

She came, brand-new, with two staff pieces already in her inventory and the sewer map already filled in; the same thing happened with two more characters I created. It was only after exiting the game completely and re-running it that I got new characters with proper inventory and blank sewer maps. Always start fresh when making up new characters.

It’s A Rich Man’s World

Money is of interest to all classes, although in somewhat different ways. Warriors need it to buy the fancy plate armor that not only protects, but enhances physical stats, as well as to purchase fancy weapons with spells on them. These things are, of course, expensive. Between those and a good supply of potions for healing, curing disease, etc., fighters are always in need of cash.

Mages have it (again) easier. Since weapons and armor are restricted for them, spellcasters don’t have to spend much on equipment. Their money goes into building a nice collection of spells. Once that’s taken care of, mages only need gold for a good supply of Restore Power potions and a few other types as backup (always have a couple of backup potions for emergencies).

Thieves can’t wear the fancy armor, but they can use some of the fancy weapons. That, and a raft of potions is what they spend money on. Thieves will generally end up with the most cash and not much to buy with it.

Gold can go pretty far in this game, too, because all prices, except for Spellmaker and identifying items, can be bargained down from list. Mundane stuff is amazingly cheap to begin with, and any character can be completely outfitted for very little right after exiting the dungeon. This is a nice change of pace from all those other games that want your life savings just for a suit of leather armor.

The better items, weapons and armor with enchantments on them, naturally cost more. Still, good bargaining can get them for you at more reasonable prices. There are even special festival days when items are half-
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price to start with, and can be bargained down from there. The mages guild has festival days, too, when everything (except Spellmaker and Identification) is half-price; these are good days to stock up on potions.

Raid!

As reported in the previous article, Arena's big problem (aside from not having much of a plot) is that the game is buggy. Four patches already, and a fifth is in the works as I write this. Obviously, the game was released far, far too soon, with less than adequate playtesting.

Nothing I ran into was fatal (that is, prevented winning the game), but others have had problems because the dungeon levels reset when you leave them, although not always completely. One unlucky player was making his way through Labyrinthian, the second staff piece dungeon, and came to a dead halt.

This place has two doors that require special keys to open. He found the first key, unlocked the door, then headed for town to cash in his goodie. On his return, he discovered that the first door was locked again, only this time, there was no key to open it...and the only way past that door is with the key. Restoring to a previous save, before the first door was unlocked, was the only option. That's a lot of time and progress lost.

So it is best, especially in dungeons that have magically-locked doors requiring keys, to stay in there until the dungeon is completed. Otherwise, you may find yourself at a dead end, with much to do over. This problem is being addressed in the fifth patch, but until then it becomes available, better safe than sorry.

Bethesda, I will add, has taken steps to ensure that all patches are downward compatible. This means that if you have used an earlier patch already, the newer one will not require you to start over; none of your progress will be lost by upgrading with a later patch. Further, if you are playing the original release, adding any patch will not force you to start over. Given the size of the game, that is an important consideration, and kudos to Bethesda for making this effort. [Although Bethesda has gone to great lengths to ensure that Arena patches are backward compatible, one CGW editor did lose his save games corrupted by the 4th patch. This was apparently a rare case. To ensure that you do not have problems, Bethesda suggests that you make sure you are not in the middle of a quest when you apply a patch. -Ed.]

I didn't mention the endgame last time (don't ask embarrassing questions why). It takes place on the bottom level of the Imperial dungeons, you vs. Tharn. I found him a rather difficult opponent and opted for the easy (relatively speaking) method of defeating him. I've been told that it's possible to defeat him in battle, but going by my own experience, that could be a long-term project. Afterwards comes a brief story sequence, then your character is whisked out of the dungeon and deposited back in the Imperial City. At this point, you can save the game and go on to other things, or save the game and continue exploring the world of Tamriel.

Whichever, you will probably want to save your character for the sequel. For that, you have to back up all the related save files to floppy. There are ten save positions, and the related files end in "00" to "09". So if your final save is in the first position on the save screen, you'd copy off all files ending in "00". If it's in the fifth position, you want all files ending in "$04" and so on, up to "$09" for the tenth save. Keep those disks in a safe place; I expect that the next game will show quite a few improvements over the initial entry in the series. CGW

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Exorcising The Madness Of Strahd’s Possession

Sink Your Teeth Into SSI’s Ravenloft

by Petra Schlunk

The suspension of disbelief, the sense of being there, of feeling one’s heart pounding before opening yet another door—the creation of a game atmosphere conducive to such things is both one of the most difficult elements of game design to achieve and one of the most necessary components of a good role-playing game. Strategic Simulations’ Ravenloft (developed by DreamForge) manages to blend the elements of a first-person 3-D environment, with sound and story into a work replete with just such an insidiously credible atmosphere. From the introduction where we discover that Lord Deht of Elturel has been attacked by a foul assassin who has stolen the Holy Symbol of Helm, to the closing scenes, Ravenloft invites us to become part of the story.

After Lord Deht’s Holy Symbol is stolen, you are sent to recover it from the assassin. Upon recovering this amulet, your party is surrounded by mist and transported to a forest in a new world. The amulet is gone and the party is trapped in this new place (Did you really believe that recovering the amulet would be that easy?). From these woods, your party must find the village of Barovia and uncover clues which will lead to both the recovery of the lost Holy Symbol and an exit from this world. In your way are large and deadly dungeons, vicious monsters, and the evil Count Strahd. But, we are getting ahead of ourselves; we need some adventurers first!

Fortune Deals Its Hand

Bearing in mind that your purpose is to find some adventurers, you cautiously enter a fortuneteller’s hut (noticing how similar the furnishings are to the gypsy’s wagon in Ultima IV). Cards are dealt and from these cards you choose your character’s gender, race, character class, alignment and portrait. Character attributes are rolled up randomly, but you can modify the attributes up to the maximum values for the character’s race.

While up to four characters can eventually be enlisted for the party, you only begin with two. Naturally, this means that you are expected to meet many characters in your travels and that some are likely to offer to join you. Consider all such offers, even when your party is full. Dismissed party members can always be found again, eager to return to adventuring, and their belongings automatically transferred to their willing replacements!

Before You Can Walk

The newly created pair of adventurers will find themselves in hot pursuit of Lord Deht’s would-be assassin. Ah, but for this pursuit you must learn how to move, and movement in the world of Ravenloft has many forms. You may move by clicking on the movement arrows at the bottom of the screen, by holding the left mouse button down and positioning the cursor in the screen, by using the numeric keypad, or by just moving the mouse around after activating the “free mouse movement” option. You can also choose to move with the default smooth scrolling interface or with the “step movement” feature. Step movement is not recommended because the mode’s angular, 90 degree movements make navigating dungeons and facing monsters during combat almost impossible.

Having figured out how to move, your party runs wildly after the assassin and corners him! Well, he is not about to hand over his stolen goods, is he now? That means combat!

Combat is real time and virtually identical to that in many of SSI’s previous role-playing games (such as the Eye of the Beholder series and Dungeon Hack). Fortunately, a new feature has been added to this game in which everyone may attack simultaneously by clicking on the attacking monster, assuming they are close enough to engage in hand-to-hand combat. I found that the most effective way to deal with hordes of monsters was by clicking madly on the screen while using the nu-
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meric keypad to turn and face the monsters that slipped behind my party.

Note that most encounters are predetermined and, once cleared out, a dungeon stays that way. However, nocturnal excursions to any location outside of the dungeons will result in numerous random encounters.

Everyone knows that magic is particularly helpful in CRPG combat, but in *Ravenloft*’s case, it can work against your party. Choosing spells to cast during combat occurs in real time! That makes casting spells a poor option in most circumstances because your fighters tend to be sitting ducks while your cleric or mage is frantically trying to find the right spell! Unfortunately, this is not the only problem with the magic system, because the spell-casting menu obscures your characters’ portraits and, more importantly, the information on how many hit points they have left and how much damage they are taking. This can lead to unexpected and unnecessary fatalities.

Many monsters are hard to hit, deadly and, worse, undead! Most of the undead monsters can drain levels, and there are no restoration spells or items in this game. So, saving frequently is essential (a “quick save” feature is helpful here). Since frequent saving and reloading can be inconvenient, it is fortunate that monsters often act as if they suffer from some sort of curse upon their movement AI. As a result, they have trouble figuring out how to turn and walk through doorways, and this allows you to stand back and fire either missiles or spells at them without risking damage. In addition, most monsters will ignore your party if you’ve cast an Invisibility spell. Eventually, I found that the easiest way to get through most of the dungeons was by traveling under an Invisibility spell and repeatedly firing a magic Dagger of Throwing (found early in the game) at all monsters in my path.

Finally, there is one especially irritating problem with combat: monsters have an occasional tendency to materialize or move on top of your party! You will not be able to see the monster or hit it unless you move away. Turning around will not help. Characters have been known to die ignominiously while spinning frantically looking for an attacker who is, presumably, standing on their head!

After combat your party can rest to heal and to memorize or pray for spells. Resting occurs without interruption everywhere but outdoors. The only requirement for a peaceful night’s sleep is that no monsters are within your range of sight. This is especially useful in dungeons where you can quickly slip around a corner or down a stairwell and catch a nap before returning, refreshed and recharged with spells, to combat.

**Cartography Made Easy**

Having mastered the essentials of combat, you can begin exploring the interesting places in the world of *Ravenloft*. Forests, caves, catacombs, an eerie cemetery and foreboding buildings, such as the immense and fearsome Castle Ravenloft, await your vigilant exploration. Fortunately, your lengthy peregrinations through such regions and edifices are recorded by an elegant automapping system. The maps (which can be saved and printed) indicate doors, items, nearby monsters, NPCs, teleporters, illusionary walls (only after they have been discovered) and trapdoors. Unfortunately, the maps do not show buttons (frequent features of the dungeons that can be difficult to find) or stairwells. The ability to write on the maps can help you make up for this oversight, since all maps are accessible at any time, and you can easily remind yourself of places that remain partially unexplored.

On your journeys you will encounter many people. Conversations are easy to begin; simply position the cursor of your mouse over characters and left click. This starts an animated sequence in which the character speaks to you and text appears on the screen. Through conversation, you will learn more about Barovia, the surrounding lands, and your quest, as well as acquire new party members. At times unintentionally amusing and at other times appropriately evocative, conversations in *Ravenloft* are always entertaining and one of the best features in the game.

**On Possessions (Yours, Not Strahd’s)**

As you travel, you will find many useful items. Although characters have a limited carrying capacity based on their strength (an overly encumbered person will be less effec-
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rative in combat), this does not really present a problem. Strong characters can carry an enormous number of weapons and armor without approaching the limit of their carrying capacity. You can place items directly in characters' hands from the adventuring screen, allowing both a rapid determination of whether a particular weapon can be used by a character and the quick perusal of documents. Unfortunately, inventory management can become painful because you can only equip armor and rings from the inventory screen and store, use or drop objects by going back and forth between the adventure and inventory screens.

Puzzle solving does not play a prominent role in Ravenloft. Most puzzles are of the make-sure-you-have-explored-everything variety. That means walking along walls to find secret passages or buttons, exploring all rooms in dungeons and buildings to find important items, reading everything and talking with everyone. By doing this, almost all puzzles will solve themselves. All that will remain is following up on the leads you get from NPCs and from books or manuscripts.

There are a few optional subquests in Ravenloft. Completing one or more of these subquests is highly recommended since experience points are difficult to acquire (at best, you may get a pure mage or thief up to level 12). Fortunately, the outcome of the final battle against Strahd depends less on the levels of your party members than it does on their having completed the appropriate steps in getting to that point.

Reversal Of Fortune

The biggest problems with Ravenloft have nothing to do with the game design. Movement speed varies widely, occasionally slowing to an aggravating crawl. Also, the CD version of the game frequently locks up. This occurred most often when exiting the game and while using the automap. A few times,
saved games were lost, corrupted, or caused problems with my hard drive. So, be prepared for a few extra headaches when playing this version of Ravenloft and be sure to save frequently using different saved game slots.

Encore!

Aside from a few technical problems and a somewhat cumbersome interface, Ravenloft is a solid, thoughtfully designed and enjoyable game. While the music varied in effectiveness, the graphics and sound effects (many of which will be recognizable to those who have played other SSI games) added greatly to the feeling of suspense and discovery. The animation sequences are entertaining and the narration is superb. Best of all, Ravenloft has the one thing that makes me want to replay a role-playing game: because the game is basically fun and not too long (about 40 to 50 hours on a first pass), once you know how everything works and what you will find, you can think about what the "best" starting party will be to make the most efficient use of the items and NPCs found in the game. In my opinion, this "what if I started with..." quality makes Ravenloft a valuable contribution to the world of computer role playing.
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S
o here we are in the back room again, struggling in a sea of mail sacks. And
we were making such good progress getting the place cleaned out, too. Now that
summer is about to pounce, Fred is thinking more about the annual Gruen Convention
in August instead of keeping his mind on the business at hand. Ah well, maybe we can do
some autumn cleaning instead.

Before we get to the mail, though, I have a little something to say about Dieu
et Domage. I have not played this game and don’t plan to do so, but a letter came in from a CGW reader
in early March detailing his frustrations with tech support for the game.

The box contained no warranty card and no information at all about tech support.
When he hit a serious bug in the game, he had to get the phone number from an ad.
Amazingly, someone did answer the phone, and he did get a return call the same day;
unfortunately, very unfortunately, he was out at the time.

That was the last contact he had with Imagine Design. He kept calling them for
about a month and a half with no answer on the other end, until finally he got a message
that the number had been “temporarily disconnected.”

PERSISTENT to the end, he managed, after great trouble and expense, to track down
Dreamweavers, the England-based company that made the game. They told him they
knew about the bug (more than one, it turned out), and that they were planning to upload
patches to the Internet. Since the patches weren’t ready at that time, I don’t know if
they actually made it onto the net, nor at what FTP sites they might be available on, and I
don’t have an Internet address for the company. However, I do have the regular address
and phone number. If you need to get in touch with the company, you can do so at:
Dreamweavers, Suite 202, 15 Wellington Rd., Dewsbury, West Yorkshire, England,
WF131HF. Phone: 011-44-924-461-115. Many thanks to James Kight of North Caro-
rina, who provided this information (and paid for it in more ways than one!).

And now on to the mail!

Return To Zork: A lot of people have been
asking about how to get back across the river
after visiting the temple at Bel Nair. They
have trouble because the game does not indi-
cate in any way (except a vague remark about
receiving a special gift) that their map has
become a magical map. Once you’ve been to
the temple, you can get to any known (pre-
viously-visited) location simply by clicking
on it. This makes travel quite easy, once you
know about it. By the way, some players have
had problems with the map becoming cor-
ruped. Not everything appears on it, or it
can’t be scrolled, or some other odd thing
happens. In those cases there is nothing you
(Continued next page.)
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The Text Generation

More Games For The Textually Insatiable

by Charles Ardai

A few months back, CGW published an article I wrote called "Sons of Infocom," about a couple of game designers who stubbornly persist in writing text adventures. The clear signs on all sides are that text adventures are the last thing a hip, bleeding-edge, ear-to-the-infohighway gamer wants to play. No one, the conventional wisdom goes, still cares about text adventures.

I was delighted that these young rebels were bucking conventional wisdom. Since I cut my gaming eyeteeth on text adventures, I very much want new ones to play. What I didn’t put in the article was my feeling that I was not alone in desiring new text adventures, mainly because I wasn’t sure.

Now I’m sure. Since the article appeared, I’ve gotten a dozen letters from people who wanted to second the sentiment. To appreciate just how unusual this is, you have to know that the largest number of letters I had previously received in response to an article was two. (If you’re a game reviewer and you’re not Scorpio, the mail doesn’t exactly pour in.) This is why the response to "Sons of Infocom" was so surprising—and so gratifying.

Granted, from a marketing standpoint, a dozen people who like text games is hardly better than one, since selling a dozen copies of a game won’t exactly make a dent in a designer’s payments on his Rolls Royce. But the rule of thumb in publishing is that for every dozen people who bother to write in response to an article, there are 120 who don’t. And if 120 people buy a game, why, you’re practically talking grassroots support.

All of which I offer as prelude to and explanation for, this article, a sequel of sorts to the earlier piece and (who knows?) maybe the start of something big. You see, two of the dozen letters I received came with games attached. The first was from D. A. Leary, author of Unukula Zero, one of the games I covered in "Sons of Infocom"; D. A. enclosed a copy of his latest title, The Horror of Rlyehmania. The second was from Dennis Cunningham, who sent his magnum opus, T-Zero.

And, by gum, both games were good.

Hexed By Text

Nestled in the foothills of Eastern Europe, not far, one assumes, from that other-ylvania, lies the sleepy nation of Rlyehmania. You and your girlfriend Carolyn are touting the countryside when dusk falls, the woods close around you, and a pack of wolves leaps out of the underbrush. When the wolves retreat, Carolyn lies bleeding, near death, on the ground. You run into the nearest town for a doctor. When you and the doctor return, Carolyn’s body has vanished. You’re all alone, a stranger in an unholy land, with a girlfriend who is both missing and dying…and your troubles have only begun.

To say any more about The Horror of Rlyehmania’s story is to say too much, since the game hits you early on with a number of surprises. To know about these in advance would diminish your ultimate enjoyment, although knowing nothing about them means you can’t begin to appreciate the game’s delicious perverseness. Consider: some 70-odd moves into the game you’ll have the rug pulled out from under you when an attack turns you into a...

No, I can’t bring myself to spoil it. Let’s just say that afterwards you won’t be eating a lot of garlic bread with your fettuccine in red sauce. (And as for that red sauce...)

The subplots mount as you leave the town for the perilous Castle Gloomen, trying desperately to mix a potion to return you to your normal state. Meanwhile, you’re getting visions of Carolyn being tortured by a maniac, visits from a headless apparition, the cold shoulder from a crore who wants some booze before she’ll tell you your fortune, and hunger pangs because it’s been hours since you ate your last priest. Not necessarily in that order.

Leary is at the top of his form here, integrating marvelous multiple-stage puzzles (including, be warned, some of his famous lying-computer puzzles and dead ends) into the most fully-developed storyline I’ve seen in a text game in years. Rlyehmania is not just a grab bag of puzzles; it’s a ripping good yarn full of good scares, good jokes, good adventure game writing, and a plot that actually holds everything together.

Experienced adventurers will find themselves racing through the game, since the puzzles tend not to be all that difficult. (Leary himself rates the game’s difficulty at 5 on a scale of 1 to 10.) However, there are a few ringers in there. I was stumped twice,
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not counting times when I knew what to do, but couldn’t get the computer to understand my instructions. For the most part the parser operates well, but there are some maddening exceptions to the rule, such as when you find an ink bottle the computer won’t let you open except when you smell it. That’s not a puzzle, just a quirk of the writing.

Other weaknesses include occasional errors of language (“shiny” for “shimmery,” a sound described redundantly as “far-distant thunder”) and some inconsistent descriptions, such as a room where “the only sound is the quiet ticking of the clock,” but contains a buzzing fly, of which it is said “you can’t see it anywhere but you sure can hear it.”

Leary also sometimes denies gamers the opportunity to exercise their cleverness in coming up with alternate solutions to his puzzles. In one instance, he wants the player to use a staff found at the end of a maze to balance while wire-walking across a gorge. The player cannot acquire a signpost or a spoke from a wrought-iron fence, both of which are described as tall and pole-like. It would be fine for these alternate solutions not to work; the signpost could splinter while being uprooted, perhaps, and the spoke could turn out to be too heavy. Still, the game would be better if it let the player try.

So, the game is not perfect, but it is the best of Leary’s games that I have played, high praise indeed, and one of the most enjoyable I can remember. Because of its subject matter and irreverent tone, Rythania may not be for all tastes, but players with hearty constitutions will have, as it were, a bloody good time.

Time In A Bottle

T-Zero will also not be to everyone’s taste, even though it’s an essentially bloodless and abstract epic—or possibly, for exactly this reason. In almost every way it is the opposite of a hearty, full-of-fun game like The Horror of Rythania: T-Zero has a hard-to-fathom storyline that makes almost as little sense at the end as at the beginning; it takes place in a surreal Wonderland with many locations and difficult, brain-taxing puzzles; and it seems to exist not to draw the player into a fiction, but as a showplace for the verbal virtuosity of the author. In some regards, T-Zero reminds me less of a text adventure than of those infuriatingly difficult cryptic crossword puzzles from the London Times, which suddenly appear infuriatingly easy once the puzzle’s constructor leads you through the solution.

T-Zero is subtitled “an adventure for the time being,” and if you don’t see the double meaning in that phrase at first glance, this game’s not for you. You see, you are the “time being” in the game, or at least one of the time beings, a custodian-cum-librarian who has just been given his pink slip (yes, check your inventory, it’s there) by the mysterious Count Zero, a wealthy individual on the grounds of whose estate the adventure begins. The grounds are jam-packed with timepieces of every description, from sundials to egg timers, and many of the puzzles are time-related. Needless to say, this is one of those games where you have to pay attention to where you are at any given time.

Nothing is simple in T-Zero. When you find a trophy case in Rythania, you open it by smashing the glass top. When you find a trophy case in T-Zero, you open it by timing the ringing of chimes to coincide, initiating sufficient sympathetic motion on the part of a pendulum to make it swing and smash the glass from inside. Want to take the contents of the case? Good luck. Reach for the pendulum and your hand swings back and forth, not quite snagging it; reach for the stopwatch and, sure enough, the feeling that you are being watched makes you stop.

Later, you find a suspension bridge. Try to cross it and you get stuck, halfway across, in suspended animation. How to proceed? Try snapping your suspenders.

You encounter a door whose jamb isajar. What’s behind the door? A jam jar.

You find a field full of stones with a couple of tennis circling overhead. Are you supposed to leave no stone unturned or no torn unstoned?

You find a rag man who is “all mixed up.” What’s an anagram of “a rag man”? “Anagram” is an anagram of “a rag man.”

And so it goes. Not since Infocom’s Nord and Bert Couldn’t Make Head or Tail of It has a single game contained so much wordplay. Cunningham, true to both parts of his name (since he is clearly both cunning and something of a ham), laces a pun into nearly every line. The density of the text is almost Joycean—if there ever were to be a computer game based on Finnegans Wake, Cunningham would be the man to write it.

That said, who is actually going to play T-Zero and love it? It will have to be someone with more patience than I have. On top of the too-clever wordplay, which is hard enough to navigate, Cunningham has made mapping his world a nightmare by using multiple paths, ostensibly heading in different directions, to reach the same location. What should be up is down; what should be northwest is east. Did Cunningham deliberately set out to confuse players, or did it just happen? Hard to say, but I do know that I had to redraw the whole map four times.

If there is anyone out there who wants a mammoth brain-twister—if you like, in the words of that proto-Cunningham, W. S. Gilbert, “quips and quibbles heard in flocks”—you might want to give T-Zero a try. If you’re leery...stick to Leary.

To Order The Horror Of Rythania, write: Advections P.O. Box 851 Columbia, MD 21044 CompuServe: 76440.2671 GEnie: ADVENTIONS Internet: dmib@al.mit.edu

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A Six-Pack of Russkies

Interplay Imports Russian 6 Pak

by Paul Hymen

The Cold War may be over, but there's still one Russian bomb that needs defusing—it's Russian 6 Pak, the latest release from Interplay.

As a Tetris fanatic, I eagerly awaited this package that sounded like a comrade piece to the Tetris series (Tetris, Wordtris, etc.) of games. So when it arrived, I grabbed a nice hot glass of tea and settled in for a double troika of Slavic puzzles.

My excitement was quickly purged by the manual's introduction, a disclaimer written by, of all people, the inventor of Tetris, Alexey Pajitnov.

"Due to a lack of sophisticated hardware availability," he says, "Russian programmers are typically a few years behind their American counterparts regarding sound and graphics. Because of this, we don't intend to emphasize them as much as strategy aspects and game concepts. We would rather create these small logic-type games than to create violent shoot-'em-ups."

But, ironically, the problem with Russian 6 Pak isn't the sound or graphics—it's the game concepts. The collection features six games that are described as "marvelously mind-bending and enormously entertaining." In truth, they aren't.

The most interesting of the half dozen is "Flying Pictures," an oddball exercise in which a little girl climbs up and down a ladder alongside piles of fruit. You can make each fruit vanish by having the girl toss an identical fruit at it. The trick is to make sure that the correct fruits are exposed so they can be hit. It isn't as easy as it looks, and one quickly becomes addicted to fruit flinging.

While the pace of "Flying Pictures" can best be described as leisurely, "Line Man" is frantic. This is a hyperactive version of the classic LucasArts game Pipe Dream in which pieces of pipe must be laid to accommodate

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When writing about Quantum Gate, an ambitious interactive movie burdened with an apocalyptic plot, a cartload of avant garde visuals, bad poetry, good acting, an identity crisis, and not one but two subtitles ("No One Dreams Here" and "The Saga Begins"), one feels the urge to crib from the works of Charles Dickens: It is the best of games, it is the worst of games.

How is it the best? For one thing, it is one of the first interactive movies to take full advantage of the technology on the market, offering more than two hours of full-motion video and requiring the hottest of hot-rod systems to view it. For another, it eschews the "let's get a big-name star to go stamping" method of casting, the results of which can be hit-or-miss, in favor of hiring unknown actors who are simply outstanding. Its script is beautifully crafted, evoking the sort of paranoid dread normally associated with science fiction writers like Philip K. Dick and Fredric Brown. Its animation, which could compete with the clips collected in showcase anthologies of computer graphics such as Computer Dreams or The Mind's Eye, is combined extremely well with its video clips, which have none of the graininess of the clips in, say, ICOM's Sherlock Holmes games. Composer Paul Haumer's score, though rather too New Age for my taste, is effective, raising the hackles on the back of your neck when it is supposed to. All in all, Quantum Gate scores high marks in every category that defines a multimedia product.

So how is it the worst of games? By hardly being a game at all. Oh, there are other bones to pick—a few plot holes, some scenes that run too long, some visuals that are too dark to be made out, an insufferable instruction manual—but any gamer's main complaint will be that Quantum Gate is yet another interactive movie that stresses the movie element, not only at the expense, but almost to the exclusion of the interactive element.

Read the marketing materials that come with the game and you'd never know it. Media Vision says things like "How you interact makes the difference between life and death" and "How you interact decides the fate of the two worlds." The only problem is that this isn't true. Quantum Gate is a movie. The viewer gets to wander around the sets on which it was filmed at several points during lulls in the action, as well as to make a handful of dialogue choices during encounters with other characters, thereby determining which of several dozen supplemental scenes get played. But through it all, the plot chugs forward without the player doing much to prompt it, and the direction in which it chugs cannot be affected by the player at all.

Apparently to make up for the lack of real interaction, the game also contains a repeated action sequence—a first-person tank battle simulation—the less said about which the better. It adds nothing to the Atari 5200 version of Battlezone, and offers only minor graphic improvements on the even older Atari VCS clunker RoboTank.

Frankly, these scenes are marginal at best and an embarrassment at worst. To leap from the stunning visuals of the movie sequences into the crude and clumsy battle-sequences is to leap from a champagne bubble bath into a trough full of mud.

As a game, therefore, Quantum Gate deserves a scathing review. I would be most happy to give it one, were it not so damn good as a movie. Though as a game designer, writer-director Greg Roach has a lot to learn, he has produced something remarkable in Quantum Gate: a science-fiction movie better than any since Blade Runner, and some of the most mind-bending science-fiction, period, that I've come across in years.

So, you have to go into Quantum Gate expecting to be disappointed with the gameplay, which is unfortunate. However, if you are prepared to give yourself up entirely to the storytel-
ling, you are in for an incredible experience.

A Tale of Two Planets

The Earth is dying, choked by pollution and ecological misdeeds, and only you, medical student Drew Griffin, can save it. Yes, folks, it's yet another environmental The End Is Nigh plot—or so it appears at first. You're subjected to the usual eco-prop film clips of poisonous smoke and ominous acid rain clouds, accompanied by the usual text, describing in numbing detail how humankind has ruined its home and is scheduled to make itself extinct within five years. There is the sad, Yanni-esque plink-plink-plunk music calculated to wring tears of self-mortification from the most dry-eyed player. There is the invocation of the United Nations as a catch-all political panacea. There is the self-consciously multi-racial cast, with its perfect, politically correct distribution of minority and white, as well as male and female, actors.

And yet, all is not well in this politically correct paradise, for more reasons than just the dying Earth. Something rotten is behind all the noble-sounding propaganda, as Drew discovers when he signs on to the Quantum Gate Project, a group that is sending volunteers through a space-time rift to newly discovered Planet AJ3905, the only place that contains sufficient quantities of Iridium Oxide to halt the Earth's spiral into disaster.

Something is fishy about AJ3905. The place is run as a military operation, and some snooping around reveals only a single mechanic on the planet—clearly not enough for the large-scale mining operation they are supposed to be undertaking. Then there is the matter of the bugs. Drew and his fellow grunts are told that the planet has a deadly atmosphere and is inhabited by hostile insectoid aliens, meaning that they periodically have to go out on raids to slaughter the indigenous population lest the Green Meanies overrun the human base.

There is only one problem: the hazardous atmosphere means that no one can go out without a protective suit, and the suits offer a virtual-reality display in place of a faceplate. You see that you're shooting big, ugly bugs out of a three-year-old's nightmare, but you only see that because it's what the VR chooses to show you. And as one of Drew's comrades discovers, if you try to remove your helmet to see what's really out there, it's rigged to self-destruct.

The writing is shockingly adult and shockingly good, on par with such classics of anti-war SF as Joe Haldeman's The Forever War and James Tiptree, Jr.'s Yanni Doodle. That Roach has assembled a cast that is equal to the task of bringing the story to life is nothing short of remarkable. It is always easiest to make this sort of material campy and ridiculous—but the fact is that he has, and the realism of the performances combines with the quality of the writing to create a future-shock film on par with Aliens.

Jamie Callahan turns in an incredible, running-on-razorwire performance as Private Michaels, the space marine who tries to convince Drew that they are being lied to by the government: "I don't know where we are, or who we're killing, or why, but they are not telling us the truth."

James Black plays the sinister base commander, Colonel Saunders, as though he were auditioning for the role of Blofeld in the next James Bond picture. He is corruption incarnate, full of Machiavellian charm and threat: "Private Michaels may be unbalanced...the man may be schizophrenic and I believe he's a subversive...We want you to keep an eye on him." Ruth Aguilar's hard-ass Sergeant Cranshaw outdoes Sigourney Weaver's Ripley for sheer testosterone without becoming a caricature along the way. Annalee Jeffries turns in a strong performance as the scientist who invented the Quantum Gate and who now has the blood of an alien race on her conscience.

The story's intrigue unfolds over the course of three days, following Drew from the moment he arrives until the moment the evidence against the government becomes overpowering. Even then, though, you don't know what to believe. Michaels may very well be crazy, or simply more sane than everyone else. Is Earth really in any danger? If so, from whom? Who are you really working for and what are their motives? The story races along at an incredible pace, horrific revelations pil-

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Circle Reader Service #58
ing up one after another until the final shot of the game, which answers some questions but raises still others. Yes, it's a cliffhanger, and a very effective one. Quantum Gate II is already in the works.

Great Expectations

So where is the game in all this? Well, in between the frequent movie sequences there are long stretches of "free exploration" time during which you can click on directional arrows to make Drew explore the three floors of the base. When you encounter something you can look at, an eye icon allows you to do so. There is also a mouth icon for initiating conversations with characters Drew meets, and a brain icon for accessing Drew's memories, which unroll in the corner of the screen like home movies. Then there are the dialogue menus for when you have to decide whether or not to admit to Saunders that you broke into the MedLab with Michaels, and the occasional VR bug-hunts as described above. Aside from this, there is very little in the way of interaction. Even scenes that look like they ought to be interactive are not. For instance, the computer controls Drew's skivver during a rescue mission, and when Drew is asked to choose from a grim menu at the end of the game, the computer chooses for him. Worse still, when the player is given a choice, it is often a Hobson's choice: No matter what dialogue path you choose with Sergeant Cranshaw in the second scene, you'll end up doing K.P. duty in the third. Granted, the K.P. scene is necessary for the plot, but for the game to claim interactivity while really offering none is a species of deceit only slightly less heinous than that perpetrated on the volunteers in the story.

The folks at Media Vision assure me that the next game in the series will repair this breach of faith by focusing more on game elements. I hope this means more than that they plan to have three, rather than just one, execrable action sequences. We'll see.

In the meantime, there's Quantum Gate, a movie for which the greatest praise I can offer is probably to say that I would gladly pay $7.50 to see it in a theater. I realize that this is a strange thing to say, since the game costs $80.00 (which neither this nor any other game is worth, but that's a subject for another article), but I mean it in only the best ways. Quantum Gate is a quantum leap forward in computer, though not interactive, movie-making; but more than that, it is a hell of a good movie, period, with a story that sticks with you long after the final credits roll.
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No Wonder The Dinos Are Extinct

Jurassic Park: A Meteoric Smash Or Mediocre Game?

by Neil Harris

Start with a best-selling novel, turn it into a thrill-a-minute movie with some of the greatest special effects ever put on the silver screen, then turn it into a computer game. Sounds like a formula for success, right?

If you've been playing computer games long enough, you've seen quite a few where a hot movie turned into a computer game. Often, the problem with this process is that the software publishing company has to spend so much on the license that there's not much left for the actual game. Somewhere in California there's a landfill full of old Atari E.T. games, for instance. Other times, like with the Terminator games from Bethesda Softworks, the adaptation takes advantage of the power of the computer and results in a decent game.

Jurassic Park from Ocean is somewhere in between. The production values are stronger than in most movie adaptation games, particularly in the later segments where a first-person perspective (similar to Wolfenstein 3D) puts you right into the action. On the other hand, the game design makes for a frustrating experience. It's as if all the budget for a movie went into special effects with nothing left over for a good script.

Carnivorous Reptile or Dinowussie?
The biggest issue I'll take with the game is that the dinosaurs aren't particularly scary. In the book and the movie, running into any of the dinosaurs was not a pleasant experience. In particular, the spitters and the raptors were almost certain to leave anyone dead, or at least mangled. But in the game the dinosaurs are wussies. Even if a dinosaur hits the player, there's very little damage and ample opportunity to get healed.

Based on that, you would think that the game is too easy. Far from it. The game is quite difficult to win. On the other hand, it's not particularly challenging. This game can't decide whether it's an action game or a puzzle game. Each level requires the player to accomplish specific goals, which usually involve running around and gathering up the required pieces. It takes a long time, and any mistake is fatal—not to the player, but to the ability to get through the level.

It Gets Better When You Cheat

The first 15 levels of the game are from an overhead angled perspective, similar to the Ultima role-playing games. After that, the game switches to a first-person 3D perspective. At this point it gets a little more interesting, as you run around the Jurassic Park maze shooting waves of 3-D dinos. Of course, it's nearly impossible to put all the pieces together to get to this point, since the puzzles have to be solved exactly right to make progress.

The easy answer is to cheat a little. If you switch the names of two files, IP2D.EXE and IP3D.EXE, the next time you play you won't have to bother with the overhead action game—you'll be in the 3D mode right from the beginning. The dinosaurs are still not very dangerous and you'll wade through dozens of them, taking only enough damage to go through a box of Band-Aids.

Read The Book, See the Movie, Skip the Computer Game

It's amazing that Amblin Entertainment (Stephen Spielberg's company) allowed this game to get out the door. They wouldn't have released the movie in this shape, it would have gone back to the editing room. The best news is that it got into stores a year after the movie, so most of the excitement (and hopefully the sales) has come and gone. If you're interested in the ultimate dinosaur experience, read Crichton's book, or rent the movie when it comes out on video. You'll do much better.
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MegaRace™
Shareware Showcase

by Chuck Miller

This month, three new games have captured my attention and driven my fellow editors to the brink of stamping on my surge protector. Each of these games outshine their shareware brethren by several kilowatts, blinding me late into the night and still leaving me thirsty for more. They are Raptor, an exceptional action title from Apogee Software, Heartlight, a logic puzzler from Epic MegaGames, both for the PC, and TaskMaker for the Mac, an Ultima-style RPG from Storm Impact.

Raptor Rapture

When I get a knot in my neck and spasms in my gnarled mouse hand, I know a game is intense. I've been suffering this delectable syndrome since I began playing Apogee's Raptor. Though the goal is the same as that of a hundred top-down shoot-ers—to blast everything in sight, avoid being hit, and collect all the bonuses—Raptor's voracious gameplay eats other shooters for lunch. I have not been as hooked on an action title since Sidewinder first appeared on the Amiga in 1988. The graphics are exceptional for a shareware title, with audio to match.

You start Raptor by generating a character with a name, callsign and photo ID. Next, you select a difficulty level: Training Mode, Rookie, Veteran or Elite. Increased difficulty means more alien ships per wave bristling with greater firepower and damage resistance.

After signing in, you arrive at the hangar with three options: Fly Mission, enter the Supply Room or Save Pilot. Before going on a mission, you might want to drop by the Supply Room in case you have an interest in arming yourself to teeth. Just like an arms bazaar, it takes money to buy bombs and missiles, but you'll find that violence is rewarded handsomely. You'll also be able to pick up bonuses in the desolate wake of exploding ships, so money shouldn't be hard to come by. If you know how to fight. Once armed, it's time to begin the mission.

Game play, as mentioned, is intense. You can use the keyboard, joystick or mouse, but I prefer the mouse. Once play starts, don't worry about what you hit. Just shoot everything, stationary or moving. There are no penalties for hitting "innocent bystanders" because there aren't any. However, be sure to monitor your shield status—while weapons are unlimited, shields are not. If you run low on shield bars, energy pods will restore your shields.

Raptor is made up of three episodes, the shareware version comprising episode one. To obtain the other two, plus new animations, harder bosses, and a slew of extra deadly weapons, send in your registration. Raptor is the best shareware title to arrive since DOOM strode onto the screen and is definitely a contender for this year's shareware awards. Registration is $34.95 plus $5.00 S&H, although Apogee will give CGW readers a $5.00 discount if they mention this column when they order. You'll need a 386 or better system with VGA graphics and a sound card to fly this bird. To register, contact: Apogee Software, P.O. Box 496389, Garland TX 75049-6389, (800) GAME-123.

Turn On Your Heartlight

Switching now from synaptic to sagacious, Epic MegaGame's Heartlight is a delightful logic-based game offering a good mix of arcade action and conundrums. Reminiscent of the many Rockford and Boulder Dash clones, Heartlight will devour a number of your evenings with challenging—perhaps a little frustrating—yet enjoyable brain benders.

Twenty ingenious levels tempt you through a variety of mazes in the process of collecting all the hearts on a given screen. The trick is to avoid being crushed by huge steel balls, blown to bits by grenades, or stopped dead in your tracks. Planning and forethought are key playing elements.

Though graphics, sound effects, and music are just average by most standards, it makes very little difference in Heartlight. Game play is so addictive that the game's slight visual and soundtrack weaknesses aren't noticeable.

Carring a "Surgeon General's" warning that it's dangerous to your productivity, Heartlight does have its share of time gobbling and head pounding puzzles. One in particular took over 20 tries before I realized that I was approaching the whole thing from the wrong perspective. Thankfully, you don't have to finish a level to advance to the next one. If you are stumped too long on one level, you are free to move on to the next and return to solve those you were unable to complete at a later time.

While the shareware version of Heartlight offers 20 levels of amazing play, registering nets you an additional 40 levels of brain-twisting action. This is one diversion that will keep you coming back for more. To register Heartlight, send $19 (plus $4 shipping and handling) to Epic MegaGames, 10406 Holbrook Drive, Potomac MD 20854, (800) 972-7434.

Max Mac Impact

Mac role-players should look no further than to Storm Impact's TaskMaker 2.0 for Ultima-style adventuring (of the Ultima I - V variety). Though not state-of-the-art in gaming technology, TaskMaker is nonetheless a very solid, professional production. Those who enjoyed the "middle" Ultima will find TaskMaker a nostalgic, yet refreshing experience.

As with all such titles, TaskMaker is a story of a land in distress and a hero destined to free
Island of Kesmall
MUD
Kingdom of Drakkar
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it from some curse. Boasting "over 100 million pixels of dungeons and villages," this title has obviously been kissed by a marketing mouth, but it does offer an extensive playing experience.

All commands and spells are available from the menu and keyboard, resembling those used since the dawn of computer RPGs. The spells are limited compared to many current role-playing titles, but are more than sufficient to the tasks at hand. The action window fills the right two-thirds of the screen, with the inventory list and character stats occupying the left third. When equipping weapons or armor, the action window is replaced with a character screen visually depicting the body parts and items equipped.

A unique aspect of TaskMaker is the manner in which death is handled. Here, death is only a temporary setback. When a player dies, he immediately goes to Hell where he must escape the Devil and make it to the appropriate exit. The items the player was wearing when he died will remain with him. Those he had in his pouch will be found at the place of his death when he is resurrected in Outer Terra.

Game play is typical of most RPGs. Mazes, dungeons and villages must be explored; villains and creatures must be battled and dispatched. In the process of your adventure, you must gather as much treasure as possible, making periodic deposits at local "automatic tellers." In all, TaskMaker is an enjoyable, if slightly dated RPG. Still, titles like this often span the gulf of technology and provide a truly enjoyable experience.

TaskMaker is System 7 compatible, offers full color, includes a built-in interactive tutorial, built-in virus protection, and internal on-the-fly decompression. Maps from the Mac Plus to the newest systems are supported. Minimum requirements include System 6.02 or better, 600K free memory for B&W mode, and 1750K free memory for color mode; a hard disk is recommended.

To order TaskMaker 2.0, contact Storm Impact, 2148 Rugen Road, Suite B, Glenview IL 60025. (708) 729-2666. Registration is $24.95 for new owners, $14.95 if upgrading from a previous version. A 45-day complete money back guarantee is provided.

That wraps it up for this month. Each of these titles is a real gem and will be easy to unearth now that CGW is on-line on ZiffNet. ZiffNet can be accessed through both CompuServe and PRODIGY. On CompuServe, go to Computer Gaming World's own forum (GO GAMEWORLD), Library 8, Shareware Sizzle. On PRODIGY, JUMP ZiffNet and Search by Title for the games listed here, or Search by Category to browse the entire Games Library. In addition, the above titles are available through numerous shareware and public domain disk libraries, as well as on many national telecommunication services and private BBSs. As always, please remember to register each program and support your shareware authors. CGW

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The High Price Of Medi-Carelessness

Maxis' Prescription For SimHealth

by Keith Schlesinger

S

o you've already become prince of SimCity, recreated SimEarth in your own image, hoed your row down on SimFarm, and become king of the SimAnt hill? Are there no challenges left in the Maxis world? How about...national health care? SimHealth is Maxis’ look at the current debate swirling around a topic with something for everyone: moral choices, social responsibility, individual freedom, and, of course, the almighty pocketbook.

Produced in cooperation with the Markle Foundation, SimHealth is expressly intended as a thinking aid rather than a competitive game. With the wit and wisdom for which Maxis justly has become famous, the user's manual sets forth the rationale behind the game. Since it is "difficult to understand complex systems" and "get the big picture" through the news media, the game keeps track of all the boring details related to the choices made by the player as U.S. President and provides instant feedback for additional decision making. Besides, as the manual says, "You might as well enjoy yourself while you're learning." Four pre-recorded "tours" make it easy to learn game basics, which means players barely have to glance at the tidy little 32-page manual in the first place.

The Politics Of The Sick Bed

SimHealth begins when the player automatically wins the 1992 election, regardless of what policy is adopted on health care. This may sound unrealistic, but when was the last time you heard a candidate provide concrete details? The first thing the President must do is plot Personal Values on four separate "policy diamonds" dealing with Coverage, Cost, Choice of Services and Technology. This involves choosing a spot at or between the four points for each issue labeled Liberty, Efficiency, Community and Equality. These conform roughly to libertarian, conservative, liberal, and socialist ideologies.

After choosing values, the player moves on to the Policy Window to select funding, cost control, and a list of benefits; see the amount and type of taxes paid by individuals and businesses; place spending caps and set guidelines of varying strength; determine to what extent preventive, acute, and long-term care are covered; and whether or not to put service rationing into effect. The "WHAT?" and "WHY?" buttons become helpful at this point; they activate help screens that give brief but effective explanations of what all the technical terms really mean. If only the screens and text were larger and could be advanced by a simple click of a mouse button!

All this planning costs political points, or "chips." The player usually begins with around 55 political action chips, although this varies slightly depending upon the type of values adopted. With policies like cost controls on doctors’ fees requiring 15-20 chips, you cannot do everything under the sun. Still, only the most ambitious plan will exhaust the pile. Thereafter, the chips seem to have little impact on events, even the outcome of elections. No matter how many times a player alters values within a previously selected policy topic, no additional chips are used. This seems unrealistic, since frequent changes in direction ought to use up political capital. Although this would make the challenge much tougher, it is something Maxis should seriously consider if it does a second edition.

With the initial policy in place, events now begin to unfold at a monthly pace for up to 12 years. A year can take up to 20 minutes, even without interruptions for new technologies and pleas from unhappy constituents accompanied by staff recommendations. Those wishing to move faster can set game speed for the end of the year, which cuts playing time in half and provides a built-in action lag that is more realistic than the game's usual month-by-month micro-management. SimHealth can still be paused at any time to allow the player to figure out a new strategy. It can also be stopped in order to change policy, check conditions in each sector of the health industry.
You've Trashed Their Homes, Left Their Police Force in Ruin and Laughed While a 300 Ton Monster Trampled Their Streets and Residential Zones...

Now, Those Quiet Little Citizens of SimCity® Have a Few Words For You.
Two More Years!

The player must achieve re-election every two years, beginning in Nov. 1993, or face sudden political death. Biennial contests reflect the presidential and off-year congressional elections, both of which seriously affect governmental action. Winning is not too difficult for the first few years as long as the original policy can garner 60% of the vote at the start—a common occurrence regardless of the player’s ideological bent. The troubles really begin in 1999 or 2001 when accumulated cost overruns, service delays, and high taxes catch up with the system and produce a sudden tide of voter unrest that no amount of fiddling with benefits, cost caps, and tax cuts can stop. Indeed, the problems generating such unpopularity are usually the result of earlier adjustments to maintain standing in the polls and win earlier elections. It is rare for new players to survive past the election of 2001 or 2003, and it remains a challenge even for veterans of half a dozen contests.

Disaster has a way of creeping up, but players quickly learn to pause the game and check out the graphs representing a wide array of data. Everything from hospital beds to educational outlays are tracked on simple displays using colored lines that can be toggled on and off for easier viewing. No numbers are available, but this is not a serious problem because what matters in SimPolitics is whether things are moving up, down or sideways (status quo). When things start to happen, the buildings and neighborhoods on the Main Street screen start to grow, shrink, or fall apart. While the changes can sometimes be hard to spot, especially on smaller 14 and 15-inch screens, players will soon gain a sense of what to look for.

Catastrophic Illness?

SimHealth is a trailblazer in the simulations genre, but as a game it has problems. Of course, the fact that it wasn’t designed primarily as an entertainment product mitigates against these criticisms, but for those of us who try to make a game out of everything, here are the problems. For one, the victory conditions are not well developed; you have to win elections to keep going, unless the elections option is turned off—something which makes very little sense in such a heavily political situation! If you survive the whole 12 years to 2008, you receive a final score which is nothing more than the free market keeps everything pretty much in line. There might be a debt crisis, but all you have to do is push the “fantasy” button and draconian measures automatically kick in to bring general spending under control. There is one catch: the entire private insurance industry goes bankrupt in the first three months of the game! That means no one has any protection even from catastrophic disease and injury. One wonders what people are doing about this. Why aren’t the unlucky 43% in the minority rioting and burning down the Main Street window?

The problems of victory determination are not insurmountable. The game could be played competitively with friends; the program’s graphs could be used to set goals for a particular match, with the player coming closest to the targets declared the winner. In case of close calls, the lack of displayed numbers will prove a bone of contention. Another way to adjust the game is to tinker with the 152 assumptions used in the computer model, which could be useful for handicapping. The trouble is that this will take long hours of thought and preparation to set up a 2-4 hour game. Games can be saved and assumption changes can be recorded for later replay, which helps spread the pain over several shorter sessions.

While the fun may be somewhat limited, the program a bit difficult to use, and some definite biases present (a funeral march plays whenever the Canadian “single payer” socialized medicine plan pops up on the screen!), SimHealth still offers much at a good price, and in a good cause. For those who think that “the play’s the thing” and who are not too fussy about winning and losing, this game will prove especially attractive. It is also recommended for those who want to “get under the hood” of a game and tinker with its black-box assumptions—something most of us would like to do with our real-time, real world political model. csw
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In the April issue of CGW, we began this series with an introduction to two of the five editors in Flight Sim Toolkit: the Shape and Color editors. Readers were exposed to several previously undisclosed methods used to create realistic aircraft, as well as some tips on the best use of color in a simulator.

Last month, we looked in depth at the Model, Cockpit and Sound editors. Various examples of how to utilize the functions of the Model editor to create realistic flight characteristics for your aircraft were provided. The Cockpit editor examples defined useful cockpit instrumentation and how to place them appropriately on a panel. Sounds were easily imported into the sim using the basic Sound Recorder that comes with every copy of Windows.

In this final installment we will explore Toolkit's most powerful tool, the World editor. The World editor will bring to life the work completed in the past two articles. Here you are able to lay down terrain, determine where objects are placed, and determine what characteristics those objects will have. Enemy flight paths for aircraft and firing rates for ground forces are also selected here. You may even choose the routes of enemy supply lines, adding to the challenge of the sim.

The scenario we are working with is a simple one. A U2 spy plane has been stolen by the Soviets and is being flown out of the country somewhere over the Aleutian Islands. You pilot a single Hornet, which is launched to intercept the U2. Soviet aircraft and surface vessels try to down the Hornet, protecting the U2 and the secrets it holds, something the U.S. cannot afford to let happen.

Islands In The Screen
One of the unique features of sims created with Toolkit is that you can create a virtually unlimited playing area. Thus, we begin in the World editor by deciding how large a playing area we want to use. I would suggest for our Coldwar sim that we make it three tiles high by six tiles wide, which can be set in the creating the island chain. Go to the Terrain menu item and select Tool Action. Change the height to 50 meters and the radius to five squares. Make sure that the selector is on "Add Height." Using the Raise Point tool you will create small mountains 50 meters high and five squares wide with sloping sides down to the water level. Each time you click on a particular spot you will raise that area another 50 meters. Click several places on the screen and create a mountain range covering most of the water.

With a newly created mountain range, you may want to randomize the terrain a bit. This can easily be done by adding Fractal Iterations into the terrain. Fractalizing terrain lays down random "fault lines." Select Fractalize Terrain and highlight the entire terrain tile. Do this two or three times to get a good land mass to work with.

Our next step is to make islands out of our expanse of terrain. Select the "Lower Point" tool and smooth out the edges of the various islands by clicking on the range's perimeter. You will notice that this makes very convincing valleys and rivers, and if we take it a step further, creates islands in an island chain. Repeat this process for every terrain tile in the Project Manager. Once completed, you will have a very good looking chain of islands within which we will create the remaining sim characteristics.

Since we need an airport for jet takeoffs and landings, we are going to need to level out some terrain to build it. Select a terrain tile near the left of the screen, and choose one of the larger islands. Move the mouse over the...
island terrain and read the status bar on the bottom of the window. Try to get an idea of how high the terrain is in general. Go to Terrain on the menu bar and select Tool Action again, but this time select the Tool Height to be the height that you determined was the average for the area. Now use the Raise Area tool to level the land for your airstrip. You want to raise about a 4 x 5 square area for your airport.

**Airport '94**

The first object we want to place on the terrain will be the U.S. Naval Air Station in the Aleutian Islands. We will start by putting down two Runways on the area of land we leveled in the previous step. This is the most important consideration regarding laying down objects in Toolkit: never, ever, cross the grid lines with an object. Crossing the lines will "cut" the object in pieces, and not all of those pieces will be displayed in the flight sim. Many of our users suffer from disappearing runways because they are crossing the grid lines when creating the object.

Now, get the World Editor into Object Mode (1st button, 2nd column). This will allow you to lay down objects and place them in appropriate positions, as well as give them properties. Zoom in on the island you leveled by clicking on the Zoom In button and selecting the area you want to Zoom In on. Click and drag the highlight box over the area. If you want to get a better view of the area, Maximize the World Editor screen by clicking in the Maximize/Minimize button at the top right hand corner of the box. This will make everything a bit larger and easier to work with. To zoom in on one specific square, just double click on the square after selecting the Zoom In tool.

When you have sufficiently zoomed in, select the “Place Object” tool in the editor. Click in the middle of one of the leveled squares. This puts down the default object “BOX.FSD”. Since it would typically be a major challenge landing on a box the size of a postage stamp, we want to change the shape that is displayed. You can do this either by selecting Edit Object, or by double-clicking on the object itself to bring up the Object Properties screen. Here we can change what type of object it is, what it looks like, and how it acts.

For the runway, we want to change the Shape to RUNWAY.FSD and leave the type at Cultural. Runways don’t need to be anything else (though enemy runways might be Hangars, as they might be set to generate aircraft). On the right side of the properties box, there are three check boxes: Player, Runway and Target. Selecting “Player” marks that craft will be automatically rearmed for re-engagement!

Place two runways side by side and then two in the square above the one you just laid out. You now have a large runway that is easily accessible for landings. If you wish, you can also place some cultural objects around the airport. Hangars, other aircraft, etc., can all be laid down very easily. You don’t even need to change any of the object’s properties, except perhaps the shape.

Placing a beacon at your airport acts as a navigation aid to help you find your way back for re-arming. Place the Tower object and change it from Cultural to NDB (Non-Directional Beacon). You want to give this NDB some more defined properties, so click on the Properties button at the bottom of the screen. Change the NDB frequency to 110. We will also be putting an NDB along the flight path of the U2 that you are trying to destroy, so you will be able to use that as a navigation point to help you find the aircraft after you do some dogfighting with Soviet Blackjacks (it’s easy to lose your sense of direction performing a Split-S).

You can lay down more runways if you’d like (you may want one going East-West as well); just remember to mark every runway object as “Runway” in the Object Properties section. You can change the angle that any object is shown at using the Angle property in the Properties section.

**A Path Well Taken**

Webster’s New World dictionary defines “path” as: 1. A way worn by footsteps; 2. A walk for use of people on foot; 3. A line of movement. While the first two make sense if you are hiking or playing a computer role playing game, we are most interested in how Toolkit handles the third definition.
Paths must be associated with a Hangar (for aircraft) or a Depot (for ground units). After defining a path, you must link it to one of the above object types using the Link Path tool. A path does not need to begin at the object. A box on one side of the world can be generating an aircraft somewhere on the other side. If the box is destroyed, it will sever the link and aircraft will stop being generated. The most common use for this is a Hangar-object generating aircraft that begin on a runway.

Paths in Toolkit can be laid down for one of two purposes. The first and most common path is Combat Air Patrols on which enemy fighters are sent. Enemy aircraft on this path will follow it until the player comes within 50 kilometers of their position, at which point they will break from the path and engage the player in air-to-air combat.

We must also deal with re-supply paths, which are most often used with ground units, re-supplying SAMs, and AA guns that have run out of ammunition. One trick available to you is to re-supply a Hangar or Depot that re-supplies something else. Let’s take a look at a few examples:

Example 1: The Bridge

We can simulate an enemy supply line by creating a Bridge as a Depot that begins with zero objects. We then create another depot that re-supplies the bridge with objects (trucks, tanks, whatever). Thus, we have one path that ends with the supplying of one truck by the Bridge Depot. The Bridge/Depot then sends out another truck. This way, should the player destroy the bridge, the supply line will be severed.

Example 2: The Enemy Carrier

Here we will have a path for an aircraft that re-supplies an aircraft carrier hangar with enemy aircraft. We are simulating an enemy fighter landing, refueling/rearming and taking off again. Mark the first path as Supply, the second as Fighter, so that the enemy plane will not break off to attack you as it comes in.
to land. For Coldwar, we will be using this to simulate long range reinforcements.

Example 3: The Civil Airport

Aircraft will take off from an airport, fly around for a while, then land at the same airport, re-supplying the airport with one more aircraft. This aircraft will then take off and fly the same path in a continuous loop.

When you lay down a path, it is not necessary to edit each point on the path to instruct the speed of the vehicle or the height of the aircraft during flight. If you do the first point on the path, then the vehicle will use that data for every point afterwards, until it reaches a point where something is different. Aircraft paths with very sharp turns will be executed to the best of that aircraft's ability.

In a civil simulation you will want several aircraft flying about on paths, giving you a little scenery in the sky to look at beyond that being viewed on the ground. In Coldwar, we are going to set up one simple path, from one map edge to the other, for the U2 to follow. To run the path along the entire length of the map, you are going to have to exit from the World editor, move the highlight box over, then reenter the editor and drag the end point of the path to the edge of the tile. Repeat this process until the U2's flight path runs the length of the map.

The U2 itself has not yet been entered into the sim, so we must create a hangar that generates one U2. One possible trick is to create an object that has no polygons and save it as INVISIBL.FSD, giving you the ability to create an object made literally out of "thin air." The invisible object can be anywhere, as long as the U2's path is linked to it.

Bandits, SAMs, and Triple A

Now we come to the fun part of Toolkit's World Editor, as we determine the enemy forces we will use and how ferocious their firepower will be. For the enemy fleet, we will probably want two aircraft carriers and several picket ships to thwart the Hornet's progress.

---

Q: What do film stars Brian Keith, Margot Kidder, & Russell Means have in common?

A: They all star in ACCESS Software's new CD thriller Under a Killing Moon!

What Reviewers Are Saying:

"Lots of games push the envelope—Under a Killing Moon blows it to smithereens!"
—William Trotter, PC Entertainment

"A ground breaking CD adventure!"
—Joyce Worley, Electronic Games

"Under a Killing Moon combines the best elements of movies and computer games... It literally pulls you into the screen."
—Denny Atkin, Entertainment Editor, Compute Magazine

Coming Spring 1994!
To a Software Dealer Near You!
Place one of the carriers near the middle of the map, and place the other near the western edge. Give each of these vessels 1500 kill points, so that only missiles will be capable of taking them out. Place several picket ships around the carriers, worth between 500 and 1200 kill points each, to serve as the carrier's protective shield.

Of the two ways to get the picket ships to fire at the Hornet, the simplest is to mark the ships as AA Guns in the Properties section, and also set their rate of fire and reload time. The main advantage is that you can set down several ships of this type quickly. The drawbacks are that you cannot have more than one AA gun firing per ship, plus the AA gun itself can't be destroyed without sinking the ship.

A better way to handle ships firing back at you is to place AA Gun shapes on the ship itself. Place the guns on the high points of the ship, so it doesn't blow itself up when you fly by. You will now have several AA guns firing at you as you pass over the ship, and you have the ability to pick off individual AA guns when strafing the boats—a cool effect, especially if you give them low Kill Power between 2 and 10.

Enemy air forces will use the BLACKJACK.FSD shape from the Library. Much like the carrier supply line in the paths section above, these aircraft should land and take off again. Mark the carriers as "Hangar" with an initial supply value of zero (or maybe one or two, depending on how vicious you are). Then you want to place an INVISIBL hangar on the West map edge that generates a Supply Blackburn. Create a path from the West map edge to the carrier, and then create a path for the CAP (Combat Air Patrol). The CAPs will most likely intersect the U2's flight path, which will give you an additional challenge when engaging the U2. The flight mod-}

els you denote in the Hangar Properties section determine what the aircraft are armed with in the game. A jet engine-equipped aircraft will have guns and missiles, while a prop aircraft can have only cannons.

After the set-up of the AA and aircraft comes the dreaded enemy of the fighter pilot. Surface-to-Air Missiles (SAMs) track down your aircraft based on the heat emissions of your jet. The only recourse a pilot has is to drop Chaff decoys when he hears the MAW (Missile Approach Warning). Place some SAMs on ships and a few on the islands to add increasing levels of difficulty to the sim. Don't put down too many SAMs though, as they can turn your ways. Place an object, then go to Object Properties. Change the shape to "A-18" (the Hornet shape included in Toolkit, found in the Library sub-directory). Now mark this as Player, and change the object's class to Military, then select the Properties button on the panel. This brings up the Player Arming screen and properties section. The work we've done over the last two issues comes to fruition here, so let's input the variables:

Change the cockpit to HORNET.FGD and change the flight model to HORNET.FMD. If you want a gear-down shape, it is no trouble to go into the Shape Editor and add a set of landing gear to the Hornet; then, using the "Save As" function, save the new shape as A-18GD.FSD (for Gear Down). The Hornet does not have Swing Wings, so we can leave the High Speed shape blank.

Now we have to arm the Hornet with ammunition. What we decide on here will determine the level of challenge built into the simulation, giving you the ability to build sims to match your own level of play. For a good balance of playability and realism, I suggest the following:

Cannon: 2000 rounds at 1 KP each
Air to Air: 6 missiles at 30 KP each
Air to Surface: 4 missiles at 500 KP each
Iron Bombs: 6 bombs at 10 KP each.
You are now ready for play!

Learning to FLY.EXE

The FLY executable is the command you run from DOS (or Windows, if you have over 16MB of memory) that starts the flight sim component of Toolkit. There are numerous "switches" for the Fly executable that change the way the game is viewed and played. The
most common switches are "-S", "-A", or "-V". These three switches set the screen size to 640x480 pixels instead of the default 320x200. The S stands for S3 based Windows Accelerator cards, the A stands for ATi Mach 8 or Mach 32 based Windows Accelerators, and the V stands for VESA compliant video cards (version 1.2 or later). Some S3 cards need the VESA driver installed before the S3 chip can work to full effectiveness; so if you are convinced you have an S3 card, but the computer won't take the -S switch, try loading the VESA driver beforehand. Remember that you can only run the sim in the same resolution as the cockpit you have designed for the player. In the TOPGUN and PILOT simulations included with Toolkit, Domark used a batch file instead of the normal FLY command to start the game. This allowed us to maneuver around the issue of display choices on various machines. The Batch file rewrites the WORLD.FST file into a new WORLD.FST file that has the variables loaded for it automatically. Experienced DOS users may want to try this as well, as it allows many users to enjoy sims created with Toolkit as long as they have DOS-based PCs. As such, Toolkit is used to create sims but not to fly those sims, because the Windows-based engine that Toolkit uses doesn't run the sim portion of the game at acceptably fast speeds. FLY.EXE requires very little conventional memory (330K), so virtually any computer has the capacity to enjoy Toolkit sims.

Another switch you may be interested in is "-P" for Optional Player. Used in the following manner: "FLY -S -PFALCON" where Falcon is the name of the object you want to use as the player. Set this up in the World editor by creating a playable object (in shape, Object Class, flight model, armament, etc.). Then, in the Name section of the Object Properties, enter a name that can be entered immediately after the -P (as in -PFALCON).

Mission Complete
I hope you've found this three-part series on unleashing the power of Flight Sim Toolkit informative and helpful in mastering the creative process. Be on the lookout for the highly-flying World War II add-on disk featuring the Battle of Midway and D-Day scenarios. FST WWII will be released to stores near you in May and will be followed soon thereafter by FST Helicopters.

For the time being, however, test your newly honed sim building skills by participating in Domark/CGW's sim building contest: World of Flight featured on this page and win lots of exciting prizes. CGW
Letters from Paradise

Sili-wood

I tend to agree with most of the views expressed in CGW regarding the computer game industry. However, I can’t believe you guys actually think the “Hollywoodization” of computer games is a GOOD thing. A best actor award? Give me a break! The best actor in any computer game should always be THE PLAYER! If the player is forced to take on a supporting role, upstaged by some Hollywood star, it’s not a good game. If you really must give someone an award for best actor, give it to me. I’ve starred in hundreds of computer games!

John Enright
Boca Raton, FL

It is the responsibility of the press to act as informed observers. In the case of the so-called "Hollywoodization," we observed in our July, 1993 editorial that this phenomenon would have at least five effects. First, the "High Concept" mentality of Hollywood could lead to an undesired reduction to the lowest common denominator in game design. Second, the Hollywood mentality would place an emphasis on pyrotechnics or special effects. Third, Hollywood connections would lead to a new era of cross-promotion and licensing deals. Fourth, the big studio involvement would create a more difficult environment for small developers to enter. Fifth, the content standards of games would be liberalized extensively. We hardly think that such observations should lead to the perception that we think this "Hollywoodization" is strictly a good thing. However, we think that the introduction of solid acting talent into the world of computer games IS a good thing, and we decided to celebrate it with our multimedia acting awards.

Darklands: The Last Generation

Your January, 1994 (#114) edition contained an interesting and favorable commentary from one of your readers about the game Darklands. This comment intrigued me so much that it occurred to me to track down the game's development as mentioned in CGW. This is what I found:

1. The first announcement that I could find was in CGW #80, March 1991, in the form of an advertisement which showed a hooded figure with a white dove.

2. The first time the "official" ad appeared (a man wielding a sword) was in February, 1992. It bore the promise that "...this March, the Middle Ages return," a promise it couldn't keep.


4. CGW's Stock Watch in September 1992 noted that Darklands was one of four products by MicroProse that failed to meet its deadline.

5. CGW for December 1992 contained Scorpia's opinion, slashing the game into pieces, and Johnny L. Wilson's counterpoint, defending it. The edition contained also the first of Sam Baker's two-part strategy series of articles on the game.

6. Still in the December issue, the PC Research Hits List, Playing Lately, responses and quotes were very good on Darklands.

7. In January of 1993, Darklands was number 97 of the Top 100 Games and in the "Big Five" of both the PC Research Hits List and Playing Lately.

Unfortunately, I could not obtain the CGW issues from February to May of 1993. Surprisingly, in the June 1993 edition, only the Rumor Bag made a passing reference to Darklands. All the other writings and articles, the Top 100 Games ratings, etc., seem to have forgotten it completely.

This impression is dispelled by the opinion from one of your readers in your issue #114, as mentioned at the beginning of this letter. So, unless I got the wrong picture due to the editions I missed, I believe that Darklands is a game that does not get people addicted so that they can't do or think anything else, but play the game continuously for the next few months, but what it does have is a quality that will make it a joy to go back to from time to time. Perhaps, like Star Trek (whose ratings were shady on the series' original release), the game Darklands will amass a huge following that will spawn Darklands: The Next Generation, set in 16th Century Germany. What do you think?

Mark Alexander
Bandung, Indonesia

The original plan from MicroProse called for three products. The first was set in Germany because designer Arnold Hendrick considered it the most violent and superstitions of medieval cultures. He also wanted to do similar games based on medieval Britain and Italy. With both King Arthur and Machiavelli's Caesar Borgia to build upon, we actually thought the latter two products had more marketing potential than the original. Unfortunately, the game didn't sell well enough to meet the expectations and the game "engine" isn't exactly an engine. It would require so much new code (as well as new research) in order to produce a sequel that such a product would be almost as expensive to publish as the original, if not more so. In short, we don't ever anticipate a sequel.

All Patched Up

For those of you who missed it in the April issue, here's a reprint of what will undoubtedly go down in the annals of computer
gaming as the greatest and most significant patch notice of all time:

The Patch File (p. 185)

** Metal and Lace (The Battle of the Robo Bakers) V1.42A Update: Fixes a few minor bugs and adds an Easy and Hard mode. 1/20/94.

I’ll leave it at that.

Jim Corbin
Lowell, MA

So will we.

More Power

Great job on the audio sound card feature. It’s really confusing out there, even on the networks. I would love a similar article on video card upgrades. Again, thanks for all the pleasurable reading and invaluable information.

Russell L. Reed
Brandon, FL

We hope you find this issue’s article on multimedia upgrade kits to be just as useful. The video card article sounds interesting and we’ll give it some consideration.

The End Is Near

You haven’t reviewed my new “Reveal” double-speed CD-ROM and great PRO FX-16 sound board. All floppy disk products are doomed. I will never buy another one. CD-ROM is here!

Jay Beards
Lincolnville, ME

P.S. Do you only review advertisers’ stuff?

Your board is covered in this issue’s article on upgrade kits. As for your question, the answer is an unequivocal “No!” We do not only review products by advertisers. However, there are very few publishers that do not advertise with us, so it sometimes appears that this is the case. We not only review products which are not advertised, but we have run cover stories about non-advertised products and have given awards to non-advertised products. Just don’t tell our advertising department, okay?

Michael McClinton
South Pasadena, CA

We’ll have whatever he’s having. Actually, we already did.

Just a quick comment or two. First, on the editorial concerning the Gamers’ Liberation Movement. Great stuff! I am 41 years old and started with pinball machines, moved through Pong to Tank, Galactica and so on. In magazines, I went from video game magazines to CGW. You guys have a great publication that has saved me much time and money. Thanks!

Joseph Shaffer
Vernal, UT

Classical Grasp

I have been reading your excellent magazine for over two years now, and have enjoyed it immensely, even when you deal with stuff which I could care less about. The diversity of your publication is one of its merits, showing how your vision is not narrowed onto one specific type of game or platform, but rather looking across the entire spectrum of evolving computer entertainment. I feel I must commend you on your top-notch work. As I told a friend of mine who scoffed at your subhead, “The #1 Computer Game Magazine,” that title has definitely been earned over more than ten years of superior computer industry coverage.

That said, I would like to get to the real point of my letter, that of a quotation I recently read from the writings of Titus Lucretius Carus (ca. 99-55 B.C.). I believe it applies excellently to the world of computer wargaming and gaming in general.

What joy it is, when out at sea the stormwinds are lashing the waters, to gaze from the shore at the heavy stress some other man is enduring! Not that anyone’s afflictions are in themselves a source of delight; but to realize from what troubles you yourself are free is joy indeed. What joy, again, to watch opposing hosts marshalled on the field of battle when you have yourself no part in their peril! But this is the greatest joy of all: to stand aloof in a quiet citadel, sturdily fortified by the teaching of the wise, and to gaze down from that elevation on others wandering aimlessly in a vain search for the way of life, pitting their wits one against another, disputing for precedence, struggling night and day with unavailing effort to scale the pinnacles of wealth and power.

(Nels M. Bailkey, Readings in Ancient History Through and Experience from Gilgamesh to St. Augustine, p. 393.)

Thanks again for striving to build the best computer gaming magazine possible.

F. Ross Englefield
Editor Emeritus, Brock University Press
St. Catharines, Ontario, CANADA

June 1994

Page 133
Ever wonder what it's like to have your life flash before your ears?
You'll find out when you play SSN-21 SeaWolf™, the sequel to 688 Attack Sub. And the most realistic PC submarine simulation this side of Annapolis.
Are you schon the world's newest, most heavily armed nuclear attack sub, no less than 100 different sound effects assault your senses via our revolutionary 16-bit full-digital stereo sound.

NOBODY KNOWS WHAT HELLS GIVE YOU A PRETTY GOOD

You'll hear the eerie high-pitched whine of torpedoes as they home in on their targets. The menacing drone of a destroyer passing overhead.
All looks like. But we'll have no idea how it sounds.

And damage reports from the mouths of crewmen proving they'll live to enjoy another liberty call.

Of course, it pays to keep your eyes open, too. SSN 21 SeaWolf™ features color motion video, 3-D underwater mapping, and vivid digitized images of more than 50 real-world ships and aircraft.

Now, take a final breath of fresh air and dive into a world where good hearing is your greatest asset.

Sure, it'll test your nerves. But what were you expecting, the Love Boat?
Congratulations,
Clash of Steel

Celebrating the Return of Fun in Computer Wargaming

by Alan Emrich

"I Came, I Played, I Conquered"

W e don't want to outflank our gala Premier award coverage (starting on page 51 of this issue), but it does seem fair to talk to wargamers about the wargame winner in particular. We could talk about *Master of Orion*, as well, but we've waxed pretty eloquently on that in the past. Instead, let's consider the wargaming winner, SSI's *Clash of Steel*.

Although *Clash* has its share of flaws, it won our award based upon its most important underlying virtue: the fun factor. Now, "fun" is an adjective you don't see much of in *Computer Gaming World*, as it is broad, vague and used all too freely when describing any kind of game. But the word still has value, and it's sad to see a once-great word all but dropped from the wargaming vernacular.

What's In An Adjective?

Wargames are usually described in terms of their scale, complexity, and historical validity. Often, we will focus our attention on wargame elements like "perceived realism," how many ways we can outsmart the AI in battle, and the generally deplorable state of wargame rules (which, believe me, predates the advent of *computer* wargames by decades). Seldom will you get a comment from a reviewer like "this game's a stitch, we yanked it up all the way through it."

Granted, the serious side of history is important and is one of the primary attractions of the hobby. However, not all wargames are history-in-a-game-format (i.e., serious studies presented as detailed simulations present-
This incredible offering from SSI serves up limitless small-scale tactical armored confrontations using all of the various tanks and tools of mechanized warfare from 1918 to 1991. In short, welcome to tank heaven!

Our powerful random scenario generator allows you to create a custom map, choose one of three climates, pick opposing forces, and assign objectives for each combatant. Scenarios are created according to your specifications, and no two scenarios will ever be exactly alike.

Not enough control for you? Then give the custom scenario editor a try. It places all the resources of the game under your control — which means the only limit to what you can create is your own imagination!

Of course, if you're not in the mood to create scenarios right away, there's still plenty of intense armored action — over twenty ready-to-play historical scenarios wait to test your armored mettle!

Available for IBM & COMPATIBLES.

TO ORDER: Visit your retailer or call SSI Direct Sales at (408)-737-0800 (in USA & Canada) with VISA/MC.
Opponents Wanted

Those wishing to place their own (free) ads need only send us a postcard with the name and address section of the RID card, letter, fax, or email (Prodigy "EX108", CompuServe "267G.02", The Preview Network "1040", GEnie or America Online at [CGW]). Generally, we run ads once, so send another each time you want to keep your name listed! The ads themselves should serve as reasonable examples as to how to write your own. However,

- Include a brief description of the types of opponents and games you are interested in playing. Games being played other than by modem can be listed (tradition-savvy RPGs, etc.).
- At least one (possibly more) telephone number(s) must be included. Do not forget the area code and mention whether they are Home, Work or Modern numbers.
- Include your city and state so that people who call you will know: a) have a clue as to what time zone you are in and b) recognize it when they see it on their phone bill.

The Networks

The following are voice contact numbers for many of the various on-line network services that connect gamers. Call them for more information on these networks.

America On-Line: (800) 827-6364
CompuServe Information Service: (800) 848-8900
GEnie: (800) 638-6366
The ImagiNation Network: (800) IMAGIN-NET
Multi-Player Games Network: (800) GET-GAME
National VideoNet (NvNet): (800) 336-9096
Novanlink Network: (800) 274-2814
Prodigy: (800) 822-9222 x556
USA Today Sports Network: (800) 826-9088

Bulletin Board Systems

The Assault BBS is looking for game players! Play Trade Wars 2002, an exciting space adventure game. Challenge other fighters in The Pt. Go head-to-head in Chess. Play golf or bowling and challenge other players for the best score ever (yes, we have an on-line course). New games are always being added. Call (705) 490-8384 at 2400 baud. Shaun McDonald SYSP. We need you now!

Opponents wanted for Legend of the Red Dragon and Userpe. Alternately, tackle over 30 other on-line challenges, including role-playing, chess, trivia and casino games. Call Dimension Z in Queens, NY at (718) 381-1643 where we support 14,400 baud. We have over 400 MB of files available to download and access to World Message Exchange conferences. Free access, 24-hours a day, 7 days a week.

Check out The Informer BBS at (415) 468-6713/14/15. We have all of the latest flight sim updates and hacks, plus flight simulation conferences. Find new drivers, e-mail and more. For more information, contact John Conner, 204 Orange Street, Daly City, CA 94020-1316.

The Impress BBS at (918) 437-3754 has the latest Apogee, id, Software Creation and Epic MegaGames. We support 2400 and 14400 baud modern modem standards. FT-Test is strongly recommended and can be downloaded when you first log on.

In Southern California, check out the Techno Surfing BBS! We have six phone lines available. There are tournaments scheduled for War in Russia, CHQ, Conquered Kingdoms, War in the Pacific, Air Warrior, Falcon F-16, MUG, and others. A game hint information service is also available. Call for more information and modem-player BBS games. Check out our large shareware and shareware list and our online news service. We support 1200 to 38400 baud and offer a free trial period. Call (818) 769-0691.

Modern Gamers Forum BBS: Home of the Game Matcher Door for finding head-to-head gamers like you. A message area devoted to every modern capable game known to mankind. Find opponents for games like War of the Worlds, Dark Angel, Army Men, etc. Games include: Modem War, Space War, et al. Offers on 2400 baud, 2800 baud, 14400 baud, and make your modem player compatible with others like War in Russia, Naval Battle. Tournaments are on-line and free, 24 hour access. Call (701) 674-8115, 24 hours a day, 7 days a week.

Call Little Caesar’s Nightclub at (416) 238-8285. All gamers should check out message base #13 for discussions on computer wargaming. Find an opponent or leave a review. All computer platforms, types, and listers are welcome. Remember, it’s just about making new friends! The Modern Gamers Forum is a free role-playing game Master’s resource bulletin board. We feature role-playing echoes, on-line games, fantasy art and much more.

1200-9600 Baud. (415) 595-2387.

Will you hack and slash your way through a real-time, multi-user dungeon (MUD) or attempt to conquer an entire galaxy? It’s your choice when you call the Boardmouseover BBS in Columbia, MO. Enjoy the true AD&D action of Legends and the professional Star Wars games (with an off-line VQA interface) or talk over on-line MUDs, including ANSI Pro Football, Chat Roulette, Band Wars, role-playing, strategy, trivia and casino games. Prizes awarded for highest monthly scores, with full access on your first call (and it’s free)! Two CD-ROMS on-line, with the latest in quasar shareware games! FidoNet echoes (including GAMES) and multi-line chat, the adult role-playing game WildSide — visit today for the best in multilineline! We’ve always been open 24 hours a day, 7 days a week.

The Delphi Oracle is an on-line gaming BBS. Play RPGs (AD&D, GURPS), play e-mail games (Diplomacy, OGL), Empires at War & Galactic Empires on-line and other on-line games. Find modern game players. Gamemasters and players wanted. Simi Valley, California (805) 582-9004 (2400 8-11) Free access.

The Gaming Connection BBS in Everett, WA specializes in connecting modern-modem players. Give it a call at (206) 742-4041, twenty-four hours a day. Join a Gaming Ladder and make new friends to share your Empire Deluxe & harvested scenario. Access to everything (including over 5000 files) available on your first call.

The Ho-Down BBS wants you to test your mental agility in multi-player games of Quarters, Has! You’re tired of being 19 smart computer players in a small galaxy! Want a real challenge? Try competing against the most devious, devious, devious, dangerous, diabolical, double-crossing dealers of chaos and destruction this side of Druth. In other words, you’re just like us! Call with modem at set at 8-11, up to 14400 bauds. (206) 577-8588.

The Imperium BBS is looking for modern gamers like you! Our Tournaments are run for Knights of the Sky, Conquered Kingdoms, Armada, and Galactic Conquest (just to name a few). We have our on-line games, message boards and 3 games and files. Call one of our three numbers in Milford, NJ. At either: 1200/2400 (908) 706-0342, 9600/1200 (908) 706-0345, or 1200 (908) 706-0321.

The Mac Commonwealth BBS in metro New Orleans, LA is sponsored by the National Home & School Mac User Group, a nonprofit organization promoting excellence and learning on the Mac. Our multi-line system features over 1 gigabyte of downloadable files, with emphasis on games and educational materials. Our Mac users, Neosoft conferences, and Internet e-mail support files for over 60 commercial games FirstClass Graphic user interface, all on-line support, Macs, and group activities. Send inquiries to NIMHUG, P.O. Box 640641, Kenner, LA 70064. BBS line 1: (504) 837-7984.

Call the Missile Silo BBS, Contestants wanted for Command HQ, F-22 Raptor and many others. To be held on site. Files, message boards, and Base game on-line games. Running on 1280 2.7/2.5 hours a day, 24 hours a day. Located in Skokie, IL, outside of Chicago. Call (708) 851-1735. Mention this ad to CGW for no-base access validation.

Gamers By Area Code

I’m looking for local opponents for The Perfect General via modem. Please call Rich at home. (203) 651-1314 if you’re anywhere near the Hartford, CT area.

Seeking modem or face-to-face opponents for Empire Deluxe. I can play at 14,400 baud evenings and weekends. Call Chuck Beattman at (203) 265-3440 extension 12 in Wallingford, CT.

Looking for anyone interested in modem play for Inductor Racing. World Grand Prix or MUG-29 (other possible). I live in the Miami, FL area. Call Eddie at (305) 274-2858.

I’m looking for a few good men and women to play Doom head-to-head via e-mail modem or the modem in the Melbourne, FL area. If you think that you’re good and you’ve got what it takes to take me on, call Mike at (407) 676-5361. Just send me your score.

Portland, OR war gamers need other like-minded nutes to play The Perfect General. Contact your favorite board or CompuServe or on-line BBS for more information on BBS and group activities. Send inquiries to NIMHUG, P.O. Box 640641, Kenner, LA 70064. BBS line 1: (504) 837-7984.

Looking for a local opponent for head-to-head or modem gaming on an Amiga or IBM clone. Your game or mine. Call (415) 758-7823. Ask for Nick. I’m in Petaluma over BY Minicom.

Flagstaff area BBS players sought for serial connection or up to 9600 baud game play. I also need someone to back me up in Paddenwood. Contact Jon on the Internet at: biggles@alpine.fro.net or at (612) 773-0390 or (612) 523-1482.

Seeking modem or BBS opponents for V for Victory. Clash of Steel, Battles of the South Pacific, Empire Deluxe or Second Front. I’m a mature gamer, not a beginner. I can’t afford much distance long distance, so modem opponents should be local. I’m a member of the Manchester Gaming Group of Amiga On-line (for BBS). Contact John Loy in the Norwich, OH area at (614) 878-0991.

Jen Gallagher or Noel Garruch are looking for partners for Battle Chess, Global Conquest or Justic-Jacket in the San Diego area. Write us at info: 689-11847155-0540, Solol, CA 93960-1088 or call (619) 278-6024. CBW
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June's Top Titles:

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Campaign Wishes And Carrier Dreams

SSG Sticks To Their Warplan In Carriers At War II

by Terry Lee Coleman

Dawn breaks over the South Pacific, the sun's early morning majesty dispelling the last of yesterday's storm clouds. I give orders to launch our search planes to the East. The old Walrus "flying boats" look tired, as if they, too, must stretch and yawn before going out on their deadly mission. I decline to place 500-pound bombs on the ancient war-horses, in the hope that they can find our enemies and return unseen. Their armament of three Vickers "K" guns will do them little good should they be discovered by patrolling Zeros.

Hours later, I receive reports of what appears to be a large carrier force off the tip of Ceylon. Could it be that my enemy is so unpredictable that he avoids not only me, but our land-based air as well? A Japanese fleet loose in the Indian Ocean would not only wreak havoc with our merchant ships, it could even break out towards Africa. I cannot hesitate. My limited resources do not allow me to split my forces. Trusting that the land-based air can engage the other Japanese ships in the area, I pursue the main enemy force at flank speed. God save the Queen! And hopefully, save my brave lads as well...

More Than Just A New Paint Job

When Carriers At War was first released on 8-bit machines, it had the distinction of being one of the first computer wargames to approach the complexity of board wargame simulations while still remaining playable and fun. The revamping of Carriers At War for the IBM 386 machine was a milestone in computer wargame history. Carriers At War II continues the tradition of fine wargames from SSG, with many improvements, both obvious and subtle.

Detractors of the Carriers At War system laud its detailed graphics and interface, one critic even calling Carriers At War "wargame for the MTV set." Carriers At War has been criticized for its lack of a campaign game, in that, since there is no need to save resources for an upcoming battle, this supposedly leads to each scenario being played as an all-or-nothing affair. While this viewpoint has some validity, it lacks a basic understanding of the design philosophy underlying the game.

Roger Keating and Ian Trout have been designing computer wargames for about a decade now, and have a good understanding of where to focus in successful game design. Unlike Gary Grigsby's Pacific War, Carriers At War II is not grand strategy in scope. To introduce a campaign scenario into what is essentially an operational game risks distorting the solid historical underpinnings of the Carriers At War design. Carriers At War II is no more suitable for a broad view of WW II in the Pacific than a simulation of Antietam would be if it were expanded to cover the entire American Civil War.

While the basic idea of Warplan is the same as in Carriers At War, the AI has been enhanced both strategically and tactically. When the AI finds a task force, it is very efficient in sending out strike forces to sink your hapless ships. What I find most impressive, though, is that the AI does a much better job of hiding than in the first Carriers At War. Also, the defense of the AI is much more sound, especially in the amount of planes it places on CAP. The US carriers are very tough to sink when commanded by the AI. This is a tribute not only to the improved AI, but also a good simulation of the his-
torical effectiveness of US damage control.

The AI now seems to plan more effectively from a strategic standpoint. This is important in terms of game design, because traditionally the Achilles’ heel of AI has been an inability to carry out an overall plan. I will leave it to those more philosophically inclined to discuss the semantics of whether the AI really plans, or simply follows deviously random instructions. For the gamer, the important thing is that the AI simulates a reasonably good opponent in ways that most wargames only dream about.

**Stealth Fighters WWII-Style**

In a WWII carrier simulation, surprise is everything. The ability to find and sink the enemy before he finds you is the heart of success in *CAW II*. Searches are simple to implement, but the game requires that you allocate resources properly and that you understand the limitations of your forces. In *CAW II*, the data offered is not merely a bunch of numbers. The different ship and plane types have a variety of characteristics for you to use or misuse. Unlike many games, it is easy to believe that you are flying a Hurricane, since it has different strengths and weaknesses than, say, a Hellcat. Nor does the data seem to have been fudged to fit the scenarios, as the performance (or lack of same) of your forces flow effortlessly from the soundness of the design.

And what a tremendous amount of data is available! Of the 184 pages found in the game manual, 75 are devoted to ship and aircraft statistics. If you ever wondered why the British Commonwealth submarine class *Grampus* failed to sink many ships, you will soon realize from the information provided that it was aptly named. Ironically, one of the nicest things about *CAW II* is that gamers may enjoy the game without ever looking at the database, due to the user-friendly interface.

**Don’t Worry, It’s Just A Tutorial**

Despite the elegance of the interface, the design team takes no chances with player confusion. Whereas the tutorial in *CAW*, Pearl Harbor, was quite simple and effective in teaching the system, it was an obvious bust as a game. Here, the exotic Trincomalee provides the setting for a greater challenge, and it can be enjoyed long after the basics of *CAW II* are second nature.

For the *CAW* veteran, the real delight of Trincomalee is that the British are finally given their due. Even in the rich history of board wargaming, the Pacific has seemed largely a US-versus-Japanese affair. Gamers familiar with the British only from their struggles in the Atlantic will find them in a less than dominant role in this theater of war. Here, you may suffer through the loss of the Prince of Wales, or lead Her Majesty’s naval forces to victory off the coast of India. From a gameplay standpoint, the British forces in general are not quite up to US/Japanese standards. Still, the possibility of having Spitfires in the Pacific is well worth suffering through the lesser models. The Dutch are also included, but lack the firepower and the charm of the British navy. For the player who prefers the Japanese, this gives two more opponents with widely different ship types and objectives than the traditional American opponent. It is safe to say that winning with the British versus a human opponent playing the Japanese, gives more than the usual bragging rights.

While the British are featured in half of the game’s scenarios, they are not the only new delicacy for *CAW II* players. For those who simply must play the U.S., Leyte Gulf has enough action for hours and hours of carnage. For the player who loves a challenge, Leyte offers a chance to avoid the destruction of most of the Japanese navy. Okinawa would be nothing special, were it not for the inclusion of kamikazes. Especially as played by the computer, these weapons are every bit as deadly and demoralizing as they were historically.

Where Keating and Trout stretch their creativity, though, is in the two “what-if” scenarios included. Operation Olympic is a very sober look at what might have happened if the U.S. had decided to forego dropping The Bomb. In preparing the Japanese mainland for invasion, this scenario plays much like Okinawa, but with 10 times the ferocity. The designers should be commended for exploring such a potentially controversial route, while still staying on solid historical ground.

The biggest departure from the norm, however, comes in the Plan Orange scenario. This postulates that tensions between Japan and the Allies caused war to break our years earlier. As a result, carrier forces are much less effective. Biplanes are the standard, and CAP is weak, with the ranges of aircraft cut back severely from the *CAW II* norm. Radar is only dimly understood, so the cat-and-mouse style of carrier warfare gives way to the battleships, which are for a last brief moment the dominant force of the naval battlefield. For those *CAW* players who never seem to get enough surface combat, they will have plenty of chances to slug toe-to-toe in this battle.

*CAW II* is not merely an excellent game, it is a shining example of why SSG is a leader in the computer wargaming genre. The amount of care shows clearly in the professionalism of the final product, which is remarkably free of bugs and crashes, almost unheard of these days. The ability to upgrade both the graphics and AI of several scenarios in the original *CAW* to *CAW II* standards shows the commitment to support that the design team has for its products. (Although when upgrading, you will lose your save games. This is fairly common throughout the industry, and a small price to pay considering the quality of the enhancements.)

By sticking to their guns both figuratively and literally, Keating and Trout have produced a game which will satisfy both newcomers and veterans of the *CAW* system. I would even venture that this is one of the few games that goes beyond even the best boardgames on the subject, so appropriate and challenging is the system. Certainly it’s less difficult to get one person to play *CAW II*, than to try and round up half a dozen for a decent game of *FlatTop*. Trincomalee, anyone? *C AW*
Saxon Violence

Medieval Warfare In Kingdoms of Germany and Vikings II

by M. Evan Brooks

Medieval warfare does not provide the grand scope of warfare seen in later epochs. Horses weighed down by armor-clad knights would have had a tough time performing elegant flanking maneuvers, and siege warfare was, most of the time, about as glamorous as a slug race down the banks of the Rhine. Medieval battles tended to be smash 'em, bash 'em affairs where endurance counted for more than tactics. Wars were still, in the anachronistic wisdom of Napoleon, won on an army's stomach, but less emphasis was spent on orchestrating elaborate maneuvers than on eventually arriving in one field or another.

Vikings, Kingdoms Of England was Brian Vodnik's first attempt to capture the bludgeon-style strategy of medieval warfare. Released in September of 1992, the design had a modest amount of success. Now, with the release of Kingdoms Of Germany (KOG), Vodnik invades the continent. Assuming he is victorious in this market, he hopes to conquer the whole of medieval Europe through another release: Kingdoms Of France/Kingdoms Of Russia (a two-for-one conquest).

Knowing also that it is as important to hold territory as to conquer it, he has already spruced up his original design, re-releasing it as Vikings II. Here we take a look at Vodnik's medieval Vikings in both Kingdoms Of Germany and Vikings II.

Hand-Drawn Hamlets In Hun-Worn Helmets

The graphics are colorful and more than sufficient for a semi-abstract strategic/operational simulation. The strategic map offers an oblique perspective of the territories (a total of 199), while the more usual operational map offers a bird's-eye view of the territories which may be readily scrolled. Interestingly enough, Realism's advertising emphasizes the hand-drawn graphics. The territories have no relation to history, and one will look in vain for such areas as Thurn and Taxis, Bavaria, Hannover, etc. Yes, the graphics are adequate, but I fail to see why hand-drawn graphics are a coup in computer gaming. To be fair, the close-up shots of castles are much more detailed and pleasing to the eye than the strategic map, but to be honest, I much preferred the artwork in Kingmaker.

Vodnik's games share similar mechanics. Mouse input serves all major functions of gameplay. Up to six human and/or computer players may contest the fields of Europe. Since victory in a typical game may require seizing from 50 to 125 territories, Kingdoms games tend to be somewhat lengthy. Given the sequential nature of game turns, face-to-face play (via hot-seating) will be rather tedious, although it can be done.

Players are initially spread across the map, each in a single territory. All participants begin with a single territory and strive to amass as much territory as possible. Economics merge with conquest in that armies need an economic base, and larger armies require more assets to provide food, arms and manpower.

Natural Insurrection

Initially, most of the provinces are in a "state of nature." Owned by the peasants, they are ripe for conquest and may be seized relatively quickly and painlessly (although an occasional peasant province will cause more losses than expected). However, eventually, lebensraum does become exhausted, and the players then begin to assault one another until one player emerges triumphant, having vanquished all of his opponents.

Armies may be composed of up to seven different unit types. Swordsmen seem to be pretty much expendable. Archers and crosser-
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bownmen provide missile fire, with the latter possessing more accuracy, but a lower rate of fire. Pikemen are useful for defensive situations, while foot knights form an elite infantry. More traditional are the mounted knights (cavalry) and champions, which comprise elite cavalry a la Sir Lancelot or El Cid. As may be surmised, knights and champions do better in open terrain than forest or mountains.

Field armies may be raised assuming one has the economic surplus to afford such "luxuries." Each new army costs 30 gold, one iron unit and 11 men. Upon raising its standard, the army has ten swordsman and a champion. Before sending it into the fray, you would be well-advise to train your force and add more troops.

Of course, you are not alone in seeking hegemony. Therefore, you will be forced to adopt a defensive posture in certain areas. Here, castles are the near-ultimate deterrent. Castles can become horrendously costly, as they grow from a tower outpost to a keep, a small castle, and finally a large castle. You may often maintain a less than optimal balance simply because of economic costs—but such is the life of a liege lord.

Each turn consists of 15 days, but marching into enemy territory is more time-consuming than merely traversing friendly terrain. Forced marching accelerates one's pace, but at a countervailing cost in fatigue. The field armies cannot be used as Achtung—Panzer Vorwarts, but should be used with a goal in mind. Exploiting success must be weighed with the costs of leaving the army ripe for counterattack.

Finally, you must pay attention to economics. Manpower for troops will only be available if sufficient food is available. This requires arable fields, and additional assets must be spent for clearing away land. Similarly, resource exploration (ore mining) will generally prove a profitable enterprise—assuming that you have the leisure and security to enjoy its fruits. Such exploration has an economic cost and may not be successful until the fourth search. However, once ore is found, the territory offers it in abundance. While the particular ore might run out, a new search will reveal a different ore among gold, silver and iron.

Where In The Game Is Barbarian Sandiego?

The game design and interface approach for both Kings Of Germany and Vikings II are similar. Differences in geography, however, engender a marked difference in tactics. The territories in Germany are relatively land-locked. Thus, while the north is susceptible to sea invasion, the vast bulk of the map offers one land-locked mass after another. Therefore, a human player would be well-advised to choose a beginning territory away from the sea. Seek to expand into territories which are at the "world's edge." Such conquests offer a secure linchpin upon which to expand your conquests.

Naturally, the English territories are surrounded by water, which offers both opportunity and risk thereof. Seaborne forces may be considered the airborne of the medieval army. Striking far into the enemy rear, they can rapidly cut a fatal breach in his defenses; obviously, the converse is also true. So, until you feel comfortable in dealing with such sudden invasions, it is better to seek a secure homeland surrounded by defensible terrain, away from water boundaries.

Thus, KOG offers a better scenario in which new users can learn to master the system. At the same time, battles tend to be downright Hobbesian—nasty, brutish and short. After beating up on the peasants (a common medieval preoccupation), the land forces will grind one another into a series of thrust and counter-thrust. Subtlety is not an emark of the German territories. If Germany is a saber, then England is a rapier. That is, invasions by sea tend to open up your territories and require a much larger reaction force and defense in depth.

Actually, territorial goals will often be determined economically. Stone and iron, useful for building castles, catapults and elite forces, are only found in hills and mountains. Wood, necessary for castles, catapults, ships and arming troops, is limited to forested terrain. The "middle game" will thus be driven by the need for raw materials in order to fund the war machine.

Catapults are essential for successful siege operations. The Kingdoms engine now allows you to build siege engines either instantaneously or delayed, the latter being more realistic. There is a built-in offset with catapults. Manufacturing them near the front allows rapid access to their intended target, but simultaneously, it allows the enemy to offer a rapid riposte and destroy the results of one's labors. The computer AI is a rather unforgiving opponent.

How Doth Yon Viking Sail?

Both Kings Of Germany and Vikings II are challenging games. Although easy to learn, both are difficult to win consistently. With the randomness of start positions, each playing will offer different lessons and more enjoyment.

And yet, the abstractness of the game is somewhat bothersome. While I loved Risk! and Lords Of Conquest, these games could be played in a few hours. The Kingdoms series requires play times in excess of 10 to 15 hours. While Sid Meier's Civilization required such playing times, the race for technological and material superiority offered an incentive to play that made the time commitment worthwhile (much to the consternation of "gaming windows" everywhere).

With future expansions of France and Russia, one may well ask whether the system justifies such titles. Vikings II offers the most geographically challenging scenario and the others are simply variations on a similar theme. In effect, the Kingdoms series is Wartards sans both fantasy and scenario editor.

Overall, I found the series to be entertaining, but ultimately unsatisfying. The economics and battles are grounded in medievalism, but are so ahistorical as to negate any valid historical lessons. If abstract challenges be your game, enjoy! If you are interested in medievalism, try Hundred Years War on GEnie instead.
My son and I love this game!!!
Great work!!

Robert Strauss, Barbaux

My daughter (11 years old) and I have become "Oxyd" addicts. We cannot wait to begin exploring the many other levels. Thanks for creating such an excellent product.
R S. Gavvantown

This is, without question, the most impressive game I have ever seen. I am amazed at the audio, visual and action. George E. Tarny, Arlington Heights

Outstanding program!!! John Bernouer, Los Gavos

Wow! That's all I can say about Oxyd. What an incredible game! Hurry! I can't wait to play!!

This game is highly addictive. Stuart Richre, Canada

One of the nicest games I have seen in a long time.

Thanks for creating such a challenging piece of software.
Steve Broman, Canada

I'm completely hooked! Patricia B. Smith, NH

The game is the best! Excellent graphics, extremely well done. Interesting challenges in each landscape also. I look forward to the next 90 landscapes.
David Mongold, CT

The game is really slick, well designed. Those first X levels alone were worth paying for!

One of the most elegant games I've played. Thanks a lot for a great game.
Jeffrey Jondahl, San Diego

OK, so we got hooked!

I enjoy this game a great deal and so do my children and their friends. It is just what I have been looking for!!
Jerome Wescott, Minneapolis

My whole family enjoyed your game a great deal.
Michael C. Moore, Columbia

Oxyd has to be the most artistically superb piece of programming that I have seen. From my position of having completed about one third of the single-player levels, the landscapes have been continuously varied with a marvelous attention to graphic and audible detail that makes each new one a continuing delight. I especially appreciate how the marble interacts in seemingly realistic but different ways when rolling over or bouncing against different "natural" (or unnatural) substances like stone, wood, swamp, freetail etc. At this point, I'm already worrying that I'll run out of levels (assuming I keep solving the puzzles).
Jeffrey R. Harrow

Even our 3 yr old enjoys the game.

I just had to write to tell you how much fun I've had playing Oxyd. The attention to detail - the sounds, the textures of the surfaces - really adds to the fun of the game. It invites the imagination for a ride.
Thanks also for making all of the landscapes challenging but not impossible. At first I thought that landscape 76 was unfairly difficult, but when I found the way through it, I really admired the ingenuity. Tom Phoenix, Portland

It is rare to find such a visually appealing, addictive and playable game.
Kathryn Wilson, Australia

I'm really impressed with your game, Oxyd. Congratulations on a unique and fun product, and best luck to you all.
John M. Dodd, Thousand Oaks

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Dunkin' Donizt
Making a Splash with Deadly Games' U-boat
by Alan "Alarm!" Enrich

Putting history in the movies has always been a hit-or-miss proposition. For every winner like The Last Emperor or Schindler's List, there are a dirty dozen turkeys like The Decline and Fall of the Roman Empire or Atila The Hun (with John Wayne in the title role). One movie that left a particularly powerful impression on me was Das Boot. The film follows a German U-boat and its crew as the tide of battle turns against the Axis during World War II. So well-crafted is this movie that nervous claustrophobics will almost certainly have nightmares after seeing it.

Das Boot begins with a message stating that, of the 40,000 German men who put to sea in U-boats during World War II, 30,000 never came back—a sobering statistic. After visiting a captured U-boat at Chicago's Field Museum of Science and Industry last summer, I found myself moved while examining its cramped quarters. What a squalid existence these sailors must have led for weeks upon weeks at a time. U-boat duty consisted of almost endless hours of pure boredom punctuated by minutes of sheer terror. Deadly Game's U-boat manages to really capture that feeling very well.

Submarine School 101:
Reflexes Not Required

You assume the role of an Unterseeboot (U-boat) Captain commanding a Type VII-C, 770 ton Atlantic U-boat, commissioned in May of 1940. These are the “happy times” for you and the rest of the Ubootwaffe (U-boat fleet). Although you and the 43 others in your crew are inexperienced, the Allies have not yet adopted proven methods for countering the U-boat threat.

Moving ships in protective groups of convoys, and committing more of the Allied air resources for anti-submarine warfare are far off in the future. Much of what you will initially encounter will be individual ships at sea (in the words of submariners, “there are only two kinds of ships—submarines and targets”), but the supply of easy prey won’t last long.

Commanding your U-boat is as easy as clicking the mouse, reading the very realistic looking and functional gauges, and listening to the even more realistic and essential sounds. In fact, the game is designed to center around its audio, from which you will receive the majority of your feedback. The digitized crew members reporting in, the opening and closing of hatches, the cacophony of diesel engines running at flank speed and, particularly, the sounds of flooding the dive tanks add a convincing “you are there” feel to the game. If the phrase “playing it by ear” could be taken more literally, I don’t know how.

There is not a lot of color in this game, and deliberately so. In the designer’s words, “Having spent many months sailing the waters of the North Atlantic, let me assure you there are very few days when the sea is not a leaden gray, the sky a milk-white haze.” So things seem through the periscope and binoculars that you spend much of the game peering through.

Most of the remainder of your time is spent monitoring trans-oceanic progress on a black & white map, giving an appropriate classic movie feel to the whole game. While it is possible to maneuver around inside the ship to its various sections, doing so is pointless. There is nothing to control in most of these areas, unlike in say, Silent Service. The action takes place primarily on the bridge or the Kommandoturm (i.e., the conning tower), for those seeking a breath of fresh air. The other stations are mostly wallpaper.

Consequently, it’s a good thing U-boat has such an engrossing overall look and sound to it. Though the time compresses while making those long, boring trips (slowly, as the best speed this ship can make is a crummy 16 knots), players will appreciate the tedium their historical counterparts suffered. Fortunately, the odd radio message or random sighting punctuates the monotony before it becomes too grinding, adding an element of anxiety while closing with a ship spotted on the horizon. For any who tend to let their attention drift, there are ample sound cues to bring them back to the game, and time instantly...
TIGERS ON THE PROWL

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ly telescopes down when closing for an encounter.

Closing In For The Kill

The skill you must develop is shadowing enemy vessels, waiting for night, and setting them up for the kill. Here you must learn by feel the range of your torpedoes. Eventually, you will figure out how to set up good attack angles, and in emergencies, how to get out of trouble. A great help is the U-boat Fahrer Handbuch, sporting a "Groner, 1938" publishing date. Although this brief manual consists primarily of patrol maps and ship silhouettes, it does include some tactical advice and a wonderful glossary. Even so, much of the game must be learned through trial and error.

Generally, U-boats should approach a target while sighting it via periscope or binoculars. The trick is to observe targets when they can't see you, which can be accomplished since U-boats have very small silhouettes. Should you close too soon to within firing range (whatever that might be) without being spotted or "pinged" by enemy ASDIC (sonar), your target will be lined up and waiting for you to calculate the torpedo shot. Switching to the rudimentary attack computer that the Germans employed in 1939, you must input the ship's size and its height at the waterline into the viewfinder. You only need to hit a couple of buttons for the necessary calculation, after which you simply select which tubes to flood (four bow and one stern), and give the order to fire.

Alarm!

My problem was knowing "when to fold 'em." I quickly learned, for instance, it was not a very bright idea to stalk a destroyer. Once they know you're out there, you will find yourself in some deep saltwater (if you're lucky) very quickly. Other dangerous opponents include patrol boats, cruisers, battleships and aircraft carriers. More likely encounters are with the four different types of merchant ships, which is good, because they don't shoot back. Diving and conducting those slow, battery-draining maneuvers can be quite nerve-wracking. Great sound effects amplify the experience, rattling through headphones provided with the game, as you wrestle with your inability to shoot back from below the 20' mark.

Players won't have to fight the game's smooth-as-glass interface, though. In fact, because of the low skill level required to fully embrace U-boat, some will see it simply as a nice, light simulator. Although the systems are simple, a realistic feel has not been completely sacrificed on the altar of playability. I thoroughly enjoyed this fine, easy going simulation. Of course, I had to watch Das Boot again, but that's just U-boat getting me back into "submarine mode." For a game that you can pick up and start playing with nary a look at the documentation, this submarine simulation can still maintain a respectable depth.

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Now The Shoe's On The Other Pseudopod

A Strategy Guide for Tim Wisseman’s VGA Planets, Part 2

by Ted Foster

In our last installment, we took a broad view of Tim Wisseman’s multi-player strategic slugfest, VGA Planets. This month, we’ll get into specifics with each of the various star-faring races that you can play. Whether you prefer the cold-blooded Lizards, the mechanistic Cyborgs, or even the Evil Empire, every race has unique strengths and weaknesses, and each requires a very different style of play. It is this diversity that keeps VGA Planets interesting and challenging over many games.

The Solar Federation: The Federation’s Nocturne-class destroyers, Nebula-class cruisers, and Missouri-class battlecruisers can be used as pseudo-fighters, giving you lots of transporting capabilities with well-armed ships. The early use of these classes of vessels will give you an edge when you reach the Phony War (see last month’s article for an explanation of the “Phony War” phase).

The Nova-class Dreadnought is one of the best battlecruisers in the game with 10 beams and 10 torpedo tubes. However, be aware of its limitations, since even if fully armed with tech-10 weapons, a single Nova will be destroyed by a large fighter-carrier. The Nova will cause some damage, but it will lose nonetheless, so send these ships out in packs whenever possible.

Use your excellent medium-sized ships to give an opponent grief during the Phony War. Since all of your ships carry torpedoes, use them frequently to lay mines to keep other ships out—especially those that are cloaked.

The Lizards: This race has a good array of medium sized vessels, with my favorite being the Lizard-class cruiser. Be careful when using the Serpent, Reptile, and Vendetta-class ships, as they are easy to capture when their shields are knocked down.

The Madonzilla carrier can end up being too large to be used as a light carrier and too small to compete with the other large carriers in the game. Fighters are very expensive for this race as well, so use this ship with caution. The T-Rex battleship, however, is one of the best battlecruisers for its size available. Few enemy battlecruisers can get it to 150% damage before succumbing themselves.

The improved ground combat of the Lizard race is very valuable as it allows them to take worlds without necessarily having to fight for them. Because the attack ratio is usually set to 20:1 or better, this means that a mere 501 lizard class (50,100 colonists) can conquer an enemy world of 1,000,000 colonists. Since most starbase worlds are about that size, Lizard troops are exceptional for taking worlds with starbases intact, inheriting whatever tech levels and defenses already established by your foe.

The Empire of the Birds: Nearly all of the Feathered One’s ships have large crew complements, making them very hard to capture. Additionally, almost all of them can cloak, creating some difficult defensive problems for your opponents. Two of the best vessels are the Fearless Wing cruiser, with its ample cargo space, and the Deth Spectula-class frigate with its tremendous firepower.

Similar to the Lizards, the two carriers that the Bird Men can build are generally not worth the cost. The Dark Wing-class battleship, on the other hand, is a fine capital ship, the only Dreadnought in the game that can cloak. Imagine an enemy commander who looks at his own worlds and never really knows if a cloaked Dark Wing is there waiting to strike. The only drawback of this deadly ship is its relatively small fuel load, which limits its range.

When the fighting starts, use your ships to choke off enemy supplies and to lie in wait until the perfect time to take a ship or colony. Use your battlecruisers in wolf packs to invisibly penetrate enemy lines and deliver heavy strikes to starbases. Be wary if the cloaking fail rate is set to a high percentage (20% or higher) as you run the risk of detection when crossing large distances.

The Fascists: Utterly evil, these beings seem
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to exist only to cause pain and suffering to neighboring empires. The aptly named D7a Painmaker and Little Pest scout are ideal raiders, while the cloaking D7 Coldpalm and Deth Specula frigates can make mincemeat of other medium warships. A masterpiece is the III Wind battlecruiser, which manages to cram 10 beams and two torpedoes onto a tech level 5 hull, making it one of the most potent cruisers in the game. The Victorious-class battlecruiser is an average Dreadnought which should be used with caution, especially if fighting alone.

Especially in a mineral-poor game—PLUNDER!—it's quick and easy way to turn natives (or colonists if you can afford it) into supplies and cash. Be careful—it is all too easy to over-plunder a world into ineffectiveness. Use your fine raiders to greatly upset your enemy’s backfield, preventing him from restocking the warships at the front lines. If you keep the war in his interior, victory shall be yours. Kup’Lah!

The Privateer Frigates: The Privateers don’t win the game by defeating you with their fleet. Instead, they defeat you with your own fleet. Of the many ship types they can build, the Meteor blockade-runner is the top performer. I recommend you build them in groups of five or more, so that they can make more efficient pickpockets. Your larger cruisers and carriers are generally too small for extended combat, so build them only as a last resort.

Have BR4 and BR5 ships cloak near enemy lines and wait for a freighter to come within 162 light years. They can hit it, wipe the crew, capture the freighter, and be gone before help can arrive. Beware of the Privateer’s Achilles’ heel—large minefields and situations where the cloak failure rate is higher than 0%. The Meteors are ideally suited for obtaining a fleet for you. Send out cloaked in wolf-packs, they can rob a large ship of fuel. Within 1-2 turns the ship will be helpless and ready for towing to the nearest Privateer starbase. These ships are so fast that they can actually tow a carrier or battlecruiser faster than normal ships can pursue, making them deadly foes indeed.

The Cyborgs: The only race to have both an excellent battlecruiser and carrier, Cyborgs are the strongest race in the game offensively. The main limitation for the Cyborgs is their inability to build automatic fighters as other races can. The Fire Cloud-class cruiser is one of the better medium ships, and the B222-class destroyer has seven beam weapons, incredible for its small size. Other ship types such as the B41 Explorer, Quietus cruiser, and Iron Slave base ship, are too small to be very useful, so hold off building them in favor of the larger ships and freighters.

The Cyborgs’ two capital ships are both brimming with mass and firepower. The Annihilation-class battlecruiser is equal in armament to the Federation’s Nova-class with 20% more mass, making it vulnerable only to the larger fighter-carriers. Even more powerful, the Biocide-class carrier is only a tech 9 hull, so build it frequently and often!

Use your assimilation ability to quickly establish large populations and get starbases built. Dedicate several bases to doing nothing but building fighters, something they can do with no tech level increases. Use the fighters to support the Biocide carriers, then keep those supply lines open. After that, it’s time to assimilate, assimilate, assimilate....

The Crystal Confederation: Although suffering from a deplorable lack of good small vessels, this race can still be a formidable opponent. The Ruby-class light cruiser and Sky Garnet-class destroyers have good punch, but like all of their smaller ships are far too easily captured. The Emerald-class battlecruiser fares better with its eight guns and an incredible 510 unit cargo hold, making it your premier medium ship and incidentally, one of the best mine-layers in the game.

The two capital ships are similar to the Lizards’ in size. The Crystal Thunder carrier is the weakest large carrier in the game, requiring judicious use for good results. The Diamond-class battlecruiser is a good ship in terms of power and defensive strength, but should still be used in groups to maximize its worth.

Your entire economy should be set up to produce as many web mines as possible. Employ your Emeralds to unload large minefields in both your space and your enemies. Then tow the enemy’s vessels home when they are trapped and drained of fuel. Use this technique to simply take away any fleet trying to invade and to make it your own.

Your Onyx-class frigates are best used to make ordinary planets into the broiling lava balls that you like best, so use them often. It becomes another tool to deter aggression—who wants to capture worlds that are the worst to colonize?

The Evil Empire: Our other ultimate villain has been blessed with an array of fair crusier-size ships and an awesome knock-out punch. The PL21-class probes are hyperspace-capable to cover a lot of ground in a hurry, though they have little cargo space. The Super Star carriers and cruisers are weak in combat but make excellent fighter supply ships.

The Star Frigate is your only ship with torpedoes, so it should be used wisely as a mine-layer. The Super Star destroyer and Moscow-class escort are too small to be much use in combat, but can be an effective deterrent when fighting the Privateer or other group with many small ships. The Empire’s crowning achievement is the Death Star look-alike, the Gorbie-class carrier. It is unquestionably the strongest individual ship in the game.

Build as many starbases as you can to take advantage of your “free” fighters which are made there. Keep good supply lines of fighters and fuel to your Gorbies using the Super Star carriers. Use your Dark Sense ability to gain optimum intelligence on your opponent, and then loose your “Ping-pong balls from Hell” into his most vital systems.

The Robots: These mechanical types rely almost solely on fighter-carriers for their fleet. What an irony, then, that their only torpedocapable ship, the Cat’s Paw-class destroyer, is one of the best small ships in the game. Heavily gunned and impossible to capture, it
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augments these abilities with a large cargo capacity.

Of the Robots’ many base ships, the Iron Slave-, Pawn-, and Cybernaut-class ships are too small to be worthwhile. However, the Instrumendity, Atona, and Golem classes are exceptional ships, each capable of launching large waves of fighters which will devastate even a battleship. The larger Golem carrier needs only four packs of energy capital ships.

Use your excellent Cat’s Paw ships to colonize and patrol your perimeter. They make great mine-layers as well, so use them to take full advantage of the Robots mine-laying bonus. Try some of your base ships as “fighter factories” to produce the many small craft you will need to make your carriers effective. Q-Tankers may be employed in similar fashion.

The Rebels: The Rebels suffer from a lack of good medium ship designs.

The Taurus and Deep Space scouts make excellent armed merchantmen, but are prone to capture by warships. The Falcon-class escort is one of the few ships capable of hyperspace travel, and should be used to settle distant regions quickly. The Cygnus-class destroyer has good guns but cannot absorb much damage.

Of the medium-sized ships, the Tranquility-class cruiser is the best, but has much less armament than similarly-sized cruisers of other races. The Sage, Guardian, and Iron Lady-class frigates have good armament, but once their shields are down, those hulls belong to the enemy.

The Sagittarius and Gemini transports make wonderful fighter factories. Simply park them over a world and keep them supplied with minerals and supplies, and they will cheaply keep your fighter wings stocked. The Rush-class ship is a great carrier in this game. Though equipped with only five beam weapons, it makes up for this fault with its large mass and 10 fighter bays.

Use armored transports like your Deep Space scout to expand and to defend your early borders. Try to quickly build up to the Rush ships to make up for your lack of good secondary ships. Use Tranquility ships as mine-layers and Gemini freighters as traveling fighter supply bases to support your carriers.

The Lost Colonies Of Man: The Colonies share many designs with the Rebels, including a deficiency in good medium ships. The Little Joe escort has good punch with its six guns, but suffers from low mass and is unable to take punishment. Moving up to the light carrier, the Scorpius makes a good fighter manufacturing ship, and is also useful as a minesweeper during invasions. The real carrier is the Virgo-class battleship, which actually matches up well with opposing carriers. Ten guns give it excellent punch, and its only failings are its lower mass and two fewer fighter tubes than some of the other heavy carriers.

Build fighters on your ships, particularly the light carriers and Gemini freighters, to manufacture them in large quantities for your battleships and starbases. Make the most of your ability to sweep mines at long range. The Colonial-fighter carriers are the only vessels in VGA Planets able to sweep mines faster than they can travel at warp 9. If a light carrier is available, send it along during invasions to sweep mines, while keeping the battleships ready for combat.

That wraps up this strategy guide. One sign of quality in a game is how much versatility it gives you to develop your own tactics and strategy tricks, and VGA Planets gives you ample room to add upon what I’ve suggested here. Now it’s time for all you would-be Emperors to find a new game at a local bulletin board near you and start building!
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Home Before the Leaves Fall

Winning at SSI's The Great War

by Josh Bruce

World War I lasted four years, caused 16,000,000 casualties, saw the collapse of three empires, and planted the seeds for Stalinist Communism and Hitler's Nazism. Now, you can join in on the fun.

SSI's The Great War recreates World War I in generic fashion. Every scenario that you successfully complete moves the calendar ahead two months, and makes new technology, such as tanks and airplanes, available for your use. Although each scenario is different, there are certain approaches applicable to every situation. What follows are a series of tips I've picked up "living in the trenches." These hints should improve your chances for success during your movement from Private to commanding General.

The true secret to victory in The Great War is an understanding of three key elements: strategy, tactics and unit experience levels. The Strategic elements consist of positioning, defending and counter-attacking. During the positioning phase, the two sides will be separated to a degree. Since it will take some time before combat begins in earnest, use this time wisely. Sending forces to capture neutral factories or depots is a good decision early on. Be sure to choose good, defensible terrain such as woods, mountains or rivers between the enemy and your headquarters and factories. Once you've decided where to defend, create a continuous line of troops in this area, placing artillery and anti-aircraft behind the line, with a small cavalry detachment in reserve. Optimally, this line will be created a short distance in front of a building to facilitate repairs. Production should focus on artillery or mobile anti-aircraft, if available. Never charge forward to attack the computer's forces, but let them come to you instead.

If You Build a Line, They Will Come

Appropriately for a WWI simulation, the defense enjoys a big edge. The computer AI will throw every unit it has at you, so be ready for the waves of frontal assaults. Employ your sappers to entrench your units, and use the benefits of defensive terrain to improve your chances for survival. Don't attack enemy units with infantry unless it's a clear cut victory, and be cautious even then. During this period, continue producing artillery and anti-aircraft, with an occasional infantry unit should the need arise. Friendly buildings are crucial to repair any damaged units. Whenever a unit is reduced to two or three steps, it should be immediately withdrawn from the line to be repaired and replaced with one from the reserve. Many scenarios have your forces outnumbered by four-to-one, and every unit completely eliminated hurts your chances of winning.

Artillery can do devastating damage to the enemy during this stage, with no danger of loss to itself. Mass the artillery fire against a few units until they are destroyed, and then repeat the technique with other units. While you could theoretically destroy all of the opposing units in this manner, you are better off thinning out the enemy forces for a counter-attack. Pick a target building in a weakened area and throw every unit you have at it. Most enemy units you encounter should be encircled with everything available and attacked immediately. When confronting bunkers, bring up medium or heavy artillery units by truck and place them just outside the range of the bunkers. While it might take a few turns to destroy the bunkers, this effective strategy involves no casualties. Production should be shifted to light artillery, infantry and trucks to give mobility to your forces.

A simple and effective maneuver to use during this stage is to load a truck with a light artillery unit and several elite infantry units (such as Kampfgruppe Hutier), then send it running at an enemy factory. Concurrently, save build points for several turns, so that you have 150-250 accumulated by the time the truck reaches the factory. Upon reaching the destination, immediately overwhelm any defenders and send one infantry unit into the factory. In the following phase, start mass-producing infantry. Soon,
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instead of one truck on the enemy’s flank, you will have a number of combat units with which to tip the balance of power on that front in your favor. Don’t try this trick if the enemy still has an air force, and remember to steer clear of any artillery. While proper tactics in combat are still important, adhering to this strategy should greatly increase your chances of victory, regardless of how difficult the scenario.

Dreadnoughts And Aeroplanes

Though there is a rich arsenal of weapons available to the player, four types deserve special mention on their usage and tactics: aircraft, ships, artillery and armor. Aircraft are very powerful weapons due to their maneuverability. Aircraft are also immune from the attacks of infantry, artillery, tanks, cavalry, and sappers, so special care should be taken to eliminate any enemy aircraft immediately. Begin by using all of your fighter airplanes to attack a single enemy air unit and destroy it, continuing in this fashion until you have complete control of the sky. Keep your bombers in a safe rear area until the enemy’s air force has been destroyed. Once you have control of the skies, use your bombers to attack artillery positions and tanks, as these dangerous units cannot defend against bombing runs.

Use the maneuverability of your air units to continually gain attack bonuses in combat and to retreat to a friendly building for repairs when damaged. Air units are both fragile and expensive. A brand new Handley Page bomber costs 115 build points, but a mere 15 to repair. With production costs of most aircraft bordering on the prohibitive, once destroyed, they are usually gone for good.

Naval units enjoy similar immunity from the attacks of most land units, with the notable exceptions of Charrons and artillery, and also have a devastating ranged attack. At the start of any naval scenario, deploy your naval units in three lines. Torpedo boats, gunboats and submarines form the outer shell, acting as skirmishers. Next in line are destroyers, with any battleships bringing up the rear. By using this three-tier approach, combined with the familiar tactic of waiting for the enemy, you utilize each of the units at its most effective range. Any force which attempts to attack you will have to face the concentrated fire of your entire fleet. When firing at naval units, remember to mass the fire against a single ship, and make submarines a prime target. Don’t overlook any opportunity to use land artillery or even Charrons (if the situation warrants) against enemy naval units. Ships cannot be built or repaired, making any damage to them permanent.

After the enemy fleet has been swept from the seas, use your ships as mobile artillery platforms against the enemy land forces. Gunboats and torpedo boats can move into coastal hexes making them very effective as extra artillery, and battleships are devastating in this role. Despite the critical nature of naval actions, airplanes attacking ships are almost worthless. Rather than pursue this suicidal strategy, use your ships in concert with artillery.

Those Caissons Keep Rolling Along

Artillery units come in five varieties: light, anti-tank, medium, heavy, and train-mounted guns, each with its own strengths and weaknesses. Light artillery and anti-tank guns are probably the best units in the game, as they are cheap to produce, have a ranged attack, a good attack strength, and can defend against close assaults. The weakness of these units is that their range is so short that they are easy targets for heavier artillery.

Heavy artillery units can dominate the battlefield with their power and exceptional range, but have a number of deficiencies. Lacking mobility, they cannot move and fire in the same turn, and are defenseless against close assault. The best way to dispose of these units is to get a ground unit next to them and attack with impunity. The train-mounted guns enjoy the greatest range of any land unit, combined with the greatest land attack value in the game. They share many of the problems of heavy artillery and are further restricted to rail lines for movement. Train-mounted guns are particularly effective when used defensively, but movement restrictions render them practically worthless for an offensive operation. Taking out an enemy train-mounted gun will require that you send several waves of infantry units. You should expect to take losses just closing the range. Once your forces are adjacent to these behemoths, attack with everything available and pull the remainder of your forces back out of their range. The best way to deal with any enemy artillery is by using your air force, provided you have air units to spare. Unlike ground units, aircraft have the speed to get behind the enemy’s lines and wreak havoc with his artillery.

To The Green Fields Beyond

Armor units have a good attack strength, an excellent defense strength, and the ability to roll through trenches, but are extremely slow. Offensively, they are a natural to spearhead the attack, with other units following in their wake for mop-up purposes. Defending against armor requires that you use artillery and air power, as they expose the Achilles’ heel of any armor unit—it’s lack of speed. Light artillery and anti-tank units have the ability to move and fire. They can retreat from armor while keeping up a devastating fire, and the tank’s low movement allowance prevents it from escaping. Even so, the defense value of armor is so high that the most concentrated firepower often causes less damage than expected.

Experience is in many ways the most important element of the game. Level six units will beat the pants off of level one units every day of the week. So, how do you get your units to become level six? For artillery, it is simply keeping the guns firing at any available target, but for other units the process is not so simple. In most one-hex range attacks, your units will lose at least one step, but they will also gain at least one level of experience. By the time a unit is reduced to two steps, it will also have approximately four levels of experience. The key is withdrawing the unit to be repaired. Not only is the unit returned to full strength cheaply, it will also retain any accrued experience. Repairing units is therefore not just cost effective, but mandatory.

Now the time has come to grab your favorite shovel and head off into the trenches to try these tips and tactics out for yourself. Remember to concentrate your fire, keep casualties low, attack the enemy air force every chance you get, and you will soon be developing strategies of your own. By following these guidelines, your men will perform as seasoned poilus, and maybe you’ll last long enough to see the end of the war. cvw
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Market-Garden, Modem-Style

MPG-NET
Paradrops Wargamers Into Cyberspace

by Richard Savage

On September 17, 1944, Allied forces dropped three divisions of paratroops into a narrow corridor stretching 60 miles in Nazi-occupied Holland. The purpose of the attack, code named Operation Market-Garden, was to seize a series of bridges so the British 30th Corps could advance across the line, link up with the paratroopers, and drive a wedge into Nazi Germany. The Germans met the Allies with scavenged units formed from the remnants of their forces defeated in France and two SS Panzer divisions that were refitting nearby at the time, unknown to the Allies.

Good wargame simulations of Market-Garden have been rare. Most attempts have suffered from complex rules, poor computer intelligence, and unwieldy game systems. The best boardgame version so far has been Game Design Workshop’s Operation Market-Garden, an award-winning game released in the mid-eighties that attempted to put the “fog of war” into board games. Each player had his own board, identical to that of his opponent, where he kept his own force deployment secret from his counterpart. As units were moved into enemy territory, every space entered had to be announced, with the opponent checking for his own forces in the given space—sort of like Battleship for adult wargamers. Although tense and exciting, the game was clumsy, placing a lot of emphasis on each player’s honesty and knowledge of the rules.

Of course, a computer makes a perfect “rules lawyer” and umpire in this situation. The folks at the Multi-Player Games Network recognized this, and so married the GDW board game with a computer judge to create an on-line game that could be played by two gamers from any part of the country. Players cannot cheat, even unwittingly, and the program also keeps track of every unit and its supply state. Thus, players are freed from many of the mundane details of board games and have the luxury of a live human opponent rather than a predictable AI. The computer handles the details of masking enemy troop movements, calculating combat resolution, and analyzing the availability of reinforcements, leaving the players time to develop a winning strategy.

Paradrops Into Darkness

Before any movement, the Allied player drops airborne units. Several different hexes may be targeted at the same time, but units which drop in rough terrain, cities or villages generally lose a combat step. Should a unit paradrop on a hidden German unit, combat immediately results, and one of the units will inevitably be destroyed, displaced or forced to retreat. The German player may only see which drop points are occupied by the Allies, not how many units are in each hex.

Next the Allied player picks which 30th Corps units will spearhead his drive across the bridges. Tanks seem an obvious choice, but engineers will be needed to help repair any bridges blown by the Germans. Triggered by Allied units moving alongside, the destruction of bridges isn’t automatic, but it seems that all the wrong bridges are blown at the wrong times, at least for the Allied player. Mechanized infantry is desirable, both for its high combat factors and quickness, and the Allied player can’t neglect infantry, as the foot-sloggers are needed to dig the Germans out of all the places tanks can’t quite reach.

Hide-And-Seek With Armor

After the Allied player sets up his forces, he then decides which travel mode to use, either road or off-road. This is a sticky decision, since he is unable to see enemy units. The only clue he’ll have to the enemy’s whereabouts is a light-blue tint that appears any time an enemy unit moves through a hex. Pretty soon the whole map seems to be light blue, leaving one to puzzle out where the enemy is. Should one move into a hex containing an enemy unit, a lightning bolt appears and his unit immediately halts its movement. He must then decide whether to reinforce, retreat, or try and surround the enemy.

Road movement is quicker, but has combat liabilities, as units that engage in combat in the road movement phase face doubled firepower from the enemy. Units on roads are further restricted by an inability to stack unless they started the turn together. Off-road movement is

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often used in attempts to blow a hole through the enemy’s lines, allowing armored vehicles to go roaring down the roads. If the off-road combat phase fails, however, usually a traffic jam develops. This plays out well historically, causing the Allied player to curse his stupidity in not choosing the right mode, or to berate himself for not being careful enough in the stacking of his units. Both sides have to plan ahead, making for a good, tense, and often realistic game.

Terrain and modes affect the combat in Market-Garden to a great degree. During a road impulse, all defending units have their firepower doubled. In an off-road impulse, defenders need to have the benefit of good terrain, such as hilltops, bridges or ferries. The units are displayed with regular NATO symbols for mechanized infantry, paratroopers, and engineers, but the tanks get silhouettes and add a bit of pizzazz to combat. All units have their fire strength, defense strength, and movement factors listed, just as any familiar counter from a standard board wargame would. Combat is initiated after each movement phase, presented as an enlarged version of the hexes and units involved. Incidentally, combat is the only occasion in which one can see enemy units. Once terrain effects are calculated, the defender fires first, and he can cut down the attacker’s firepower significantly before he has a chance to reply. Targeting enemy units forces one to decide whether to take out the unit in the open field or pounce on the hilltop defender, hoping that there aren’t more defenders just out of sight. Effective fire will either reduce enemy units or send them into digital oblivion in a ball of flame.

The Long And Winding Supply Road

Supply is key to success, which is appropriate for a mobile WWII campaign. There are two types of supply, regular and airborne. The Germans have a large degree of latitude, since they may use three board edges as sources of supply. The Allied 30th Corps traces supply via the main road back to Allied lines. Airborne units must trace to their supply depots, which are only dropped if the weather is right. Many times crucial airborne reinforcements will be delayed, so that needed supplies are dropped instead, as the Allied player has a limited number of drops each turn. Units out of supply at the beginning of their turn remain that way for the rest of the day, even if a supply route is later opened to them. Unsupplied units are outlined in red as a reminder, and they are not revealed to one’s opponent. This is very significant when the fires start, since unsupplied units are halved in firepower.

Engineers were vital at Market-Garden, and they are a primary focus of the game. Bridging engineers, while crucial, are used up once they repair a bridge. Airfield engineers may fix any one of the three airfields in the Arnhem area. Once an airfield is repaired, units of the British 52nd division can arrive, and their powerful battalions are a welcome sight to the beleaguered Allied paratroopers. Regular engineers can cross rivers and canals, and are helpful in encircling enemy-held bridges. The Allied player should take care in guarding his bridge engineers, as there seem to be enough of them, and with the double-blind system, a couple of panzer battalions attacking a lone engineering unit can be a disaster later in the game.

Victory is determined at the end of the tenth turn. While this doesn’t seem like many turns, the double-movement system gives the Allies plenty of time to attempt a breakthrough. The Allied player achieves a strategic victory if an Allied AFV unit exits off the North edge of the map, provided his forces can trace a line of supply through regular ground routes. An Allied Operational victory, while easier to attain, still requires that a line of shaded hexes can be traced from an allied unit north of the Lower Rhine/Ijssel Rivers to a regular Allied ground supply source. For a tactical victory, the Allied player need only break the line of the Lower Rhine/Ijssel River. The German player wins a tactical victory if the Allied player doesn’t fulfill any of the above conditions, plus his wins an operational victory if there are no Allied units north of the Maas River. Can you say “Good-bye, 1st Parachute division!”

During my more than 60 hours of play with both sides, I can sincerely say this is a great on-line wargame. With the variable weather, landing zones, and German setup, no two games of Market-Garden have ever been alike. Any true wargamer that has a modern owes it to himself to play this game at least once. A warning is in order, though. The game is very addictive. After playing a single game, you’ll be thinking about how you could have taken that bridge, if only one or two small things had gone differently. cgc
Access Software, Inc.
4910 West Amelia Earhart Dr.
Salt Lake City, UT 84116
(800) 800-4880

LINKS CASTLE PINES GOLF: More than a year since it shattered the existing conventions of computer golf, Links 386 still seems ahead of the times technologically. Early courses in the series were somewhat easy to play, once you got a handle on the game system. Castle Pines, though, is a very difficult course even for the seasoned linkster. The computer version is quite faithful to the Jack Nicklaus-designed course layout, and features the longest hole—some 644 yards—to be found on the PGA tour. Bunkers, menacing trees, water traps and other pitfalls rendered in photo-realistic detail await the computer golf enthusiast. IBM ($24.95). Circle Reader Service # 1.

American Laser Games
4801 Lincoln Rd. NE
Albuquerque, NM 87109
(800) 863-4263

WHO SHOT JOHNNY ROCK?: They call her Red. She was Johnny Rock's girlfriend, his fiancée. That's how we met. It seems that Johnny got in with some bad company, four creeps to be exact. He had the goods on one of them, so they decided to ventilate his carcass. End one singing career. Now it's my job to solve the crime, get past the goons protecting these four "upstanding" citizens, and find out Who Shot Johnny Rock?

American Laser Games follows up Mad Dog McCree with another point-n-shoot game, only this time you are cast in the role of a prohibition-era gumshoe trying to solve a crime and stay alive. Sharp wits will help, but a quick draw with a mouse will serve you best. The storyline and acting are decent for this sort of game, but the gameplay is simplistic to the extreme. IBM ($49.95). Circle Reader Service # 2.

Expert Software
P.O. Box 144506
Coral Gables, FL 33114-4506
(305) 448-2074

EXPERT BINGO: Now you can shout "Bingo" in the privacy of your own home with this Windows program, an accurate recreation of the "gambling" game for the slower set. You can play several varieties of Bingo for $10 a card (in virtual money, of course), though the program doesn't allow you to input your own home variants. While your home Bingo hall may lack the Sisters of The Sacred Heart, the digitized female voice that calls out the numbers does a passable imitation. IBM Windows ($14.95). Circle Reader Service # 3.

Frogman Software
PO Box 144506
Miami, FL 33114-9776
(305) 567-1363

PINBALL 2000: Frogman's digital steel ball package is actually a budget version of 21st Century's Pinball Dreams, offering two of the four pinball tables included in Pinball Dreams at half the price. Rocket, a descendant of 70s-era pinball machines, is the more challenging of the two included, with a straightforward design that emphasizes bumpers and targets. Graveyard is more modern in its design with its two looping ramps. Both tables are seen through smooth-scrolling views, and offer the obligatory TILT function. In all, Pinball 2000's an average title at a better than average price. IBM ($14.95). Circle Reader Service # 4.

Koei Corporation
1350 Bayshore Highway, # 540
Burlingame, CA 94010
(415) 348-0500

GENGHIS KHAN II—CLAN OF THE GRAY WOLF: This game is more than just Genghis Khan with a face-lift; it sports a much stronger AI, with some of your enemies hostile, some intellectual. Instead of the four leaders of the first version, you may now select from 15, all with role-playing-like attributes. Advisors are quite eclectic: you may debate with Thomas Aquinas, drink tea with Marco Polo, or share mutton with Robin Hood. Novice Khans may vent their conquering spleen on Mongolia in the basic scenario, but the true challenge for the veteran wargamer is the World Conquest scenarios, wherein you try to unite all of Eurasia under your benevolent rule. Retaining the combative core of its previous edition, this version now offers 16 different unit types. Samurai are as tough as
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they were historically, Knights charge courageously, and elephants trample everything. Still, the star here is the Mongol cavalry, possibly the greatest mobile strike force in history, which gives Medieval fans and Panzer freaks alike plenty to enjoy. IBM ($49.95). Circle Reader Service # 5.

Maxis Software
2 Theatre Square, Suite 230
Orinda, CA 94563-3346
(800) 33-MAXIS

SIMCITY 2000 SCENARIOS VOL. 1—GREAT DISASTERS: Although Maxis prefers to call it a “software toy,” SimCity 2000 nonetheless offers quite a challenge for any gamer. The detailed graphic worlds in this package open up 10 new urban vistas for your entertainment, each with its own unique disaster. Some, like volcano eruptions in Portland, are natural; more man-made calamities include riots, pollution, and a nuclear meltdown (for those who missed The China Syndrome on cable). There is even a trendy earthquake and fire in California. While some may tire of being, in effect, humanity’s janitor, most gamers will jump at the chance to deal with UFO invasions and eruptions of the volcanic kind. IBM, Mac (24.95). Circle Reader Service # 6.

Megasoft Entertainment
137 West Bay Area
Webster, TX 77598
(713) 554-7137

DISCIPLES OF STEEL: Perhaps this game might be more appropriately titled Disciples of Stainless Steel, because it appears to be a role-playing game with the kitchen sink thrown in. Long time role-players will recognize elements from all of the major games of the past decade. The combat system will instantly bring SSI’s Gold Box engine to mind. The main interface is somewhat akin to Crusaders of the Dark Savant, while the documentation has a certain Wizardry I element of discovery to it. The usual table of party members has been widened somewhat to include a party of eight, with a variety of skills and classes to choose from. Beyond the typical party concerns, the game also has a broader strategic element, as you can raise armies to conquer and control castles. IBM ($59.95). Circle Reader Service # 7.

Microsoft Corporation
One Microsoft Way
Redmond, WA 98052-6399
(206) 882-8080

MICROSOFT GOLF COURSE DISKS: Windows users often complain that there aren’t enough games for their OS of choice. Well, the creator of that OS, Microsoft, is trying to do something about that with their relatively new Microsoft Home line. The latest releases from that line include three new Microsoft Golf courses that are sure to put some fire under golfers’ irons. Banff Springs puts the Canadian Rockies in your picture window. For those preferring a course nearer sea level, Pinehurst offers the masterpiece of Donald Ross, without the usual 60-day waiting period for reservations. Of all the courses, Matama Kea is the most exotic. Its Hawaiian beauty hides a difficult course, quite unlike the others, and is a good choice with which to impress the neighbors. The interface is elegant, and the game’s pro tips and different camera angles add to the enjoyment. IBM ($24.95). Circle Reader Service # 8.

Origin Systems, Inc.
12940 Research Blvd.
Austin, TX 78750
(512) 335-5200

ULTIMA VIII PAGAN: In a notable departure from previous Ultimas, Ultima VIII Pagan leaps forward in technology but drops, in favor, some traditional baggage that Ultima fans have grown fond of lugging around. Though the imagery is gorgeous and the perspective improved, the Avatar’s interaction with the world more resembles Prince of Persia than anything the previous Ultimas have offered. Also lost in the transformation are all previous companions, and the ability to travel to different towns and sail the seas. While the graphics and digital audio have increased in quality, the world itself has grown smaller. Those who find their greatest pleasure in visuals and action sequences will be pleasantly surprised, as may be those new to the lands of Britannia, but traditional RPGers and longtime Avatars may find more vices than virtues in Lord British’s latest effort. IBM ($79.95, Speech Pack $24.95). Circle Reader Service # 9.

Sanctuary Woods
1875 South Grant St.
San Mateo, CA 94402
(415) 578-6340

DENNIS MILLER—THAT’S NEWS TO ME: It’s ironic that a comedian known for puncturing the puffied egos of the rich and famous would come in an oversized package largely filled with air. Dennis Miller stars in an “interactive” comedic monologue (a direct spin-off of Miller’s stint as Saturday Night Live’s newscaster) where you play the producer, selecting which of the many Dennis Miller jokes you wish to hear. The witti-
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Goblins Quest 3

Goblins Quest 3: In keeping with the charm, wit, and animated antics characteristic of the first two games in the series, Goblins Quest 3 is designed to thoroughly amuse and puzzle all who set foot into this zany world. The unlikely hero in this offshoot of the Goblins tale is Blount, a journalist by trade and an adventurer by heart. With a strong desire to frequent faraway lands, this headstrong writer and hard-headed goblin sets off for Foliandre Mountain in search of a famous artifact thought to bestow special pleasures upon the individual who returns it to his people—the Jewel of the World. In the course of his quest, Blount changes from weakling to strapping hero as he alters size, sprouts wings, and transforms into a werewolf. Puzzle lovers are guaranteed an enjoyably bizarre experience. IBM CD-ROM ($29.95). Circle Reader Service # 11.

GETTYSBURG MULTIMEDIA BATTLE SIMULATION: A fine example of the merging of Hollywood and computer gaming can be seen here, where Swite’s previously released wargame is mated with Ted Turner’s Gettysburg film, producing a rather unique product. Gameplay is much the same as the original release, although the icons are more stylized than in the floppy version. Arcade elements, such as aiming cannon fire, persist in this “simulation.” The battle scenes were the best part of the Turner film, and they are certainly one of the high points of the game. Similarly, the voice-overs by noted Civil War historian Shelby Foote help bring the campaign descriptions to life. Much more accessible for the novice or casual gamer than in its original form. IBM CD-ROM ($69.95). Circle Reader Service # 12.

Villa Crespo Software, Inc.
1725 McGovern St.
Highland Park, IL 60035
(708) 433-0500

ARCADE ACTION KIT: Villa Crespo has gathered five action games previously sold separately in their Coffee Break series into one budget-ware box. International Ninja Rabbits is a cartoonish spoof/imitation of the Street Fighter games. Canyon Capers and Demon Blue are your typical scrolling-running-jumping-dying-a-lot games. More of the classic arcade style can be found in Turn n’ Burn, an Asteroids wannabe, Space Vegetables’ silly plotline has you harvesting colorful and improbable extra-terrestrial fauna to fill the starving bellies back on earth, and sports a more professional look than the rest of this budget-ware collection. All of these games run in the lower-end of the quality spectrum, but action lovers may not be able to resist the value. IBM ($49.95). Circle Reader Service # 13.

ELEMENTS LOGIC: Another in the seemingly endless maze of maze games, this one requires you to maneuver a spherical “element” through several mazes on a number of levels. You are confronted by locked doors and insidious traps that can swallow your brave element before it even has the chance to run out of energy, but the mazes are filled with colored keys, extra energy and life pills, and point spaces galore. Should you find yourself in a no-win situation in any maze you can always hit the Suicide key to start over. Whatever would the Senate Subcommittee on Video Game Violence say? IBM ($29.95). Circle Reader Service # 14.

GAMES MAGAZINE PRESENTS WORD PUZZLES: The monthly magazine for puzzle players comes to the computer in an interactive, user-friendly form. For traditionalists, there are the classic crossword puzzles, but the more adventurous will find the Double Crosses a worthy challenge. Closet code-breakers will find no embarrassment in the time pressure of Cryptograms, while the more casually puzzle-minded can while away their time with amusing Quote Boxes. All the puzzles are graphically enhanced, with lots of colorful screens adding splash to the tranquil pool of the puzzler’s mind. With over 200 puzzles included, it’s comforting to know that you can’t wear out your electronic eraser. IBM ($29.95). Circle Reader Service # 15.
Welcome to the Cooperstown of Computer Games. Here, raised upon pedestals, you’ll find the games that broke the records, established the benchmarks, and held gamers in delighted trances for hours untold.

The Bard’s Tale (Electronic Arts, 1985)
Battle Chess (Interplay Productions, Inc., 1988)
Chessmaster (The Software Toolworks, 1986)
Civilization (MicroProse, Inc., 1991)
Dungeon Master (FTL Software, 1987)
Earl Weaver Baseball (Electronic Arts, 1986)
Empire (Interstel, 1978)
F-19 Stealth Fighter (MicroProse, Inc., 1988)
Gettysburg: The Turning Point (Strategic Simulations, Inc., 1986)
Gunship (MicroProse, Inc., 1989)
Harpoon (Three-Sixty Pacific, 1989)
Kampffgruppe (Strategic Simulations, Inc., 1985)
King’s Quest V (Sierra On-Line, Inc., 1990)
M-1 Tank Platoon (MicroProse, Inc., 1989)
Mech Brigade (Strategic Simulations, Inc., 1985)
Might & Magic (New World Computing, 1986)
M.U.L.E. (Electronic Arts, 1983)
Pirates (MicroProse, Inc., 1987)
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Red Baron (Dynamix, 1990)
SimCity (Maxis, 1987)
Starflight (Electronic Arts, 1986)
The Secret of Monkey Island (LucasArts Entertainment Company, 1990)
Their Finest Hour (LucasArts Entertainment Company, 1989)
Ultima III (Origin Systems, Inc., 1983)
Ultima IV (Origin Systems, Inc., 1985)
Ultima VI (Origin Systems, Inc., 1990)
War in Russia (Strategic Simulations, Inc., 1984)
Wasteland (Interplay Productions, Inc., 1986)
Wing Commander (Origin Systems, Inc., 1991)
Wizardry (Sir-Tech Software, 1981)
Zork (Infocom, 1981)

Wing Commander
Amiga, IBM, Sega

Wing Commander was and is, in many ways, the ultimate action game. Chris Roberts’ design combined the smooth performance of a polygon-filled flight simulator with convincing bit-mapped overlays that were artistically superior to the ordinary flight simulation. The “shoot-em-up” world was satisfyingly realistic in that it allowed gamers to shoot at everything—even their mother ship! The truly unique aspect was its cinematics. It wrapped the intense action around a well-paced cinematic story, complete with a soundtrack that sped up and slowed down according to the pace of the action. When Wing Commander debuted on our Top 100 it broke the record for the highest rated game and held its top spot for many months.

Wizardry
Sir-Tech Software, 1981
Many Formats

Wizardry was almost an instant classic. It offered a first-person perspective dungeon crawl using line and fill technology, as well as role-playing characteristics, spells, and skills with which people and paper* role-players could identify. Forcing players to save games at “inn” reinforced the suspended disbelief that you were actually exploring a dungeon in a real world where your character had real needs. The Wizardry series is, of course, one of the Big Three role-playing epics in computer gaming, along with the Ultima and Might & Magic series.
### Top Adventure Games

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<th>Company</th>
<th>Score</th>
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<td>LucasArts</td>
<td>9.94</td>
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<td>Monkey Island 2: LeChuck's</td>
<td>LucasArts</td>
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<td>Indiana Jones: Fate of Atlantis</td>
<td>LucasArts</td>
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<td>Gabriel Knight</td>
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<td>Quest for Glory III</td>
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<td>Sierra</td>
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<td>King's Quest VI: Heir Today...</td>
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### Top Role Playing Games

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<tr>
<td>Ultima Underworld</td>
<td>Origin</td>
<td>10.22</td>
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<td>Arena: The Elder Scrolls</td>
<td>Bethesda</td>
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### Top Simulation Games

<table>
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### Top Strategy Games

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<td>Maxis</td>
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<tr>
<td>Solitaire's Journey</td>
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**Top 100 Games**

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## Top Wargames

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## Top Action Games

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<td>Lemmings</td>
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<td>Out of the World</td>
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## Top Sports Games

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<td>Handball III</td>
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<td>Bethesda</td>
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Poll is based on reader survey cards in each issue of CGW and published two issues subsequent. Data on more than 100 games is archived and top ten lists may contain games which scored below the Top 100 cutoff.

Games on unnumbered lines have scores equal to the line above. ⚫ = Top game of the type. Magenta = New Game

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**The Computer Gaming World Poll**

A monthly survey of the readers of Computer Gaming World Magazine.
PC Research
Hits List
Of Top-Selling Software

February, 1994

PC Games (MS-DOS/Windows)

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<thead>
<tr>
<th>Rank</th>
<th>Title and Source</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Sim City 2000 (Maxis)</td>
</tr>
<tr>
<td>2</td>
<td>Microsoft Flight Simulator (Microsoft Corp.)</td>
</tr>
<tr>
<td>3</td>
<td>Star Wars Rebel Assault (LucasArts Entertainment)</td>
</tr>
<tr>
<td>4</td>
<td>The 7th Guest (Virgin Interactive Entertainment)</td>
</tr>
<tr>
<td>5</td>
<td>Wolfenstein 3D/Spear of Destiny (Formgen)</td>
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<tr>
<td>6</td>
<td>X-Wing (LucasArts Entertainment)</td>
</tr>
<tr>
<td>7</td>
<td>Leisure Suit Larry VI (Sierra On-Line, Inc.)</td>
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<td>8</td>
<td>Aces Over Europe (Sierra On-Line, Inc.)</td>
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<td>9</td>
<td>X-Wing, B-Wing (LucasArts Entertainment)</td>
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<td>Police Quest IV (Sierra On-Line)</td>
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<td>Microsoft Arcade (Sierra On-Line, Inc.)</td>
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<td>Gabriel Knight (Sierra On-Line, Inc.)</td>
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<td>20</td>
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Amiga Games

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<tr>
<td>2</td>
<td>Star Quest IV (Sierra On-Line, Inc.)</td>
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<tr>
<td>3</td>
<td>Powermonger (Electronic Arts)</td>
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<td>4</td>
<td>Heart of China (Sierra On-Line, Inc.)</td>
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<td>Castles (Interplay)</td>
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Macintosh Games

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<td>3</td>
<td>Sim City (Maxis Software)</td>
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<td>4</td>
<td>Leisure Suit Larry VI (Sierra On-Line, Inc.)</td>
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<td>Hoyle's Classic Card Game (Strategic Simulations, Inc.)</td>
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CD-ROM Products

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<td>2</td>
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<td>Microsoft Encarta (Microsoft Corporation)</td>
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<td>King's Quest VI (Sierra On-Line, Inc.)</td>
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<tr>
<td>10</td>
<td>Star Trek 25th Anniversary (Interplay)</td>
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What You've Been Playing Lately

Every month our mailbox bulges with hundreds of Reader Input Cards from our most loyal and outspoken readers. Over the years we've found these cards to be an invaluable source of feedback. Within 10 days of releasing our latest issue we can expect to see cards pouring in with suggestions, encouragements, trades and many good laughs, in addition to the data for our Top 100 poll. Through your efforts, we know exactly where we stand with our readers (you don't mince words!), and we are treated to well-articulated opinions on anything and everything related to gaming. This column is a forum for these responses and for the results of our "Playing Lately?" query on the Reader Input Card. Thanks for taking the time to fill them out...keep 'em coming!

Playing Lately? Results For CGW #117, April 1994

1. Doom (id Software)
2. Master of Orion (MicroProse)
3. SimCity 2000 (Maxis Software)
4. Elder Scrolls: Arena (Bethesda)
5. Privet 4 (Origin Systems)
6. X-Wing (LucasArts Entertainment)
7. Warlords II (Strategic Studies Group)
8. Aces Over Europe (Dynamix)
9. Fleet Defender (MicroProse)
10. Falcon/ Hornet (Spectrum HoloByte)

The Players Speak

"Where is the Paramutual racing game where one to eight players can squeeze the person on the favorite, beware the longshot, and lose it all due to random factors—while networking like Doom?"

—Rick Schwartz, Winnetka, IL

"Like A Emrich & F Schluin, I bought Red Crystal specifically to play the game over (null) modem. I was never able to get the #67th thing to run. I think that the orbital Mind Control Lasers have taken over QQP."

—Ex-Illuminatus, San Diego, CA

"Fleet Defender. Finally, a flight sim that does most of the things that Falcon 3 promised a few years ago—and in a virtually bug-free format. A round of applause for MPS."

—F. McKenna, Bowling Green OH

"The Pebble Beach course for Links 386 Pro has made it impossible for me to concentrate on anything related to making a living."

—Bruce MacLeod, San Francisco, CA

"Just when you got tired of shelling our good money for dubious sequels (unchanged except for Gold or Deluxe in the title), along comes MOO to make it all seem like money well spent."

—K. Thommes, Lawrence, KS

"We want modems and/or multi-player MOO & Civilization. Is anybody home at MicroProse?"

—Colin Blackburn, Allenstown, PA

"My wife said it's either her or Master Of Orion. Let the clackous rule."

—soon-to-be-single, Brockton, MA

"Let's see—should I use my computer to prepare my tax forms or to play Doom? id Software is doomed to be deficient this year.

—Bill Chapman, Salem, OR

"A dog detective? A psychotic rabbit with a propensity for violence? What kind of game is this? The only thing I'm totally sure of: Sam & Max Hit The Road is totally addictive."

—Eric Novak, Tuscarora, PA
The Patch File

Computer game programs have grown so massive and the number of possible configurations has become so huge that incompatibilities and glitches are frustratingly common. Patches for “buggy” programs have become a necessary evil until we reach the golden age of standardized platforms and bug-free programs (“Close your eyes, Dorothy…”).

These patches can usually be downloaded from most major networks (CompuServe, GEnie, or ZilNet), but can also be obtained from individual software publisher’s own BBS or direct from the publisher with proof of purchase. We continue to urge publishers to keep us updated on the latest versions/patches to their games.

Air Warrior V1.13 Update: New execute files, fixes several problems. 3/1/94

**Arena V1.04 Update: Fixes several map, music, scrolling and magic problems. Provides new hot keys and allows you to sell magic items and delete spells. Particularly helpful for 386 machine users. 3/1/94

Comanche: Maximum Overkill Update: Includes several hardware fixes, including a fix for the Pentium and the Diamond Stealth Pro video card. 1/27/94

CyberRace CD-ROM V1.2 Update: Updates the base memory requirement, fixes the save game problems, and remedies joystick problems (especially with Phoenix BIOS). 1/20/94

**Diamond Dreams Upgrade: Fixes all known bugs, and features greatly improved AI for computer manager strategies. 3/29/94

**Falcon 1.02 Mac Upgrade: Fixes sound problems on Macs. 3/20/94

Front Page Sports Football Pro: Fixes player draft error and includes 26 AI enhancements. 2/11/94

Gabriel Knight CD-ROM Update: Fixes all known problems. 1/21/94

Goblins CD-ROM Patch: Fixes sound card and CD-ROM drive problems. 1/19/94

Hornet Patch: Fixes many bugs and adds a new feature to Spectrum HoloByte’s combat sim. 2/10/94

**IndyCar Racing V1.02: Fixes several sound problems, as well as more minor corrections. 3/1/94

**IndyCar Racing Patch: Allows use of the Gravis Ultrasound Card. 3/20/94

**Justland V1.1 Upgrade: Allows non-penetrating shells, adds more graphics, runs smoother, and most significantly, includes time compression. 3/30/94

**Lands Of Lore CD-ROM V1.22 Upgrade: Fixes lockup problems on fast machines, allows retrieval of Dawn’s key and allows use of Waveblaster/Soundblaster 16 combo. 3/7/94

Legend of Kyrandia V1.3 Update: Fixes lockups and corrects phrasing used by the characters. 2/10/94

Links 386 Pro Version 1.21: Corrects major bugs and minor bugs. 1/28/94

Lost In Time CD-ROM Update: Fixes problems with several CD drives and certain Sound Blaster-compatible audio cards. 2/20/94

Master of Orion V1.3 Update: This patch features tougher opponents, adjusted play-balance, and legions of minor combat tweaks. 2/6/94

**Merchant Prince Update: Newest version of QQP’s strategy game. 3/1/94

Metal and Lace V1.42A Update: Fixes a few minor bugs and adds an Easy and Difficult mode. 1/20/94

Mortal Kombat PC Update: Improves sound card support, fixes crash bugs, and requires less conventional memory. 1/21/94

Nomad Patch: Gets rid of inventory bug for trade. 3/1/94

**Police Quest 4 Patch: Fixes all known problems and speeds up restoration of saved games. Disk version only. 4/5/94

Quest For Glory 4 Patch: Corrects various memory allocation errors and lockups that some players have been encountering, in addition to a few puzzle bugs. 1/21/94

Quest For Glory 4 Patch: Allows players to receive note from Katrina. 2/17/94

(** indicates new files)

**Rally V1.1 Upgrade: Fixes joystick calibration and other problems. 3/24/94

Real Weather Pilot Patch: Contains aircraft ID patch and fixes install problems with bios. 3/1/94

Real Weather Pilot Patch: Allows players to use letters only, as suggested by the FAA. 3/1/94

**Red Baron Patch: Configuration fix for IBM only. 3/29/94

**Seawolf Patch: Allows 16-bit Sound Blaster sound effects and music. 3/30/94

SimCity2000 V1.1 Update (Mac): Latest version, it fixes the budget problem among others. 3/1/94

**Terminator Rampage Patch: Allows Pentium users to play the game. 3/8/94

TFX Patch: Fixes the unexpected interrupt error message due to hardware conflicts, in addition to unexplained crashes. 1/24/94

TFX Patch: UK V2.0 Upgrade: Makes UK version equal to USA V 2.0, including several new features in addition to bug fixes, but only works if you downloaded first patch as well. 2/24/94

**Unnecessary Roughness Revision: Changes graphics, avoids lock-ups, and allows use of Sound Blaster. Team stats are actually used, hand-offs work correctly, and players do not vanish when tackling. CD-ROM versions will now load without error. 3/8/94

**Victory At Sea V1.01 Upgrade: Corrects numerous problems with the initial release. 3/14/94

War in Russia V1.1 Update: Adjusts the game mechanics and fixes minor bugs. 2/8/94

World of Xcen CD-ROM Patch: Fixes the problems with switching CDs and with the boat ride into Rivercity. 1/13/94

**WW2 Battles Of The South Pacific: Latest upgrade for QQP’s naval wargame. 3/11/94

The PRODIGY Weekly Top Ten

Computer Gaming World is Prodigy’s on-line games expert. Look for us in their Game Center, a forum where users read articles posted online by CGW and exchange messages on the bulletin boards (we can be reached there at EXT404B). The Prodigy Game Poll is run by Prodigy based on a list of games provided by CGW and is updated weekly. Note that it is not a cumulative rating over time (like the CGW Top 100 Poll). Instead, the Prodigy Game Poll is a weekly “snapshot” of game popularity with gamers rating their favorites on a 1-10 scale. The highest total point earners make their Top 10. We provide this data to our readers as another barometer of “what’s hot” in computer gaming.

COMING SOON!

EDITORIAL CARTOONS from some of the nation’s top cartoonists!
I pulled into someone's front yard and paid the requisite $15 to park on someone's once proud bluegrass. I was headed for historic Churchill Downs on Derby Day and had a hot tip on Tank Girl. If this filly was in the classic race, I would bet on her like the feminists used to bet on Ruffian back in the early '70s.

I headed for the main entrance and collided head-on with a group of trident-wielding Baptists. When they asked someone in front of me if he knew the Lord, I said he did. When they asked what he was doing at the racetrack, he mumbled something about preaching to Republicans and sinners. So, they left him alone and came after me. I told them I was part of a Neo-Norse cult that believed only Thor could save us from Ragnarok.

Their witnessing training hadn't prepared them to deal with mischievous mystics, so they didn't know what to think as I started describing some of the interesting features in New World Computing's upcoming Hammer of the Gods as though it was my personal theology. The product is being developed by Several Dudes Holistic Gaming, the Georgia crew that designed Battles of Destiny and Merchant Prince for QQP. I explained that this strategy game was sort of like Sid Meier's Civilization, except that, instead of working your way up a technology tree, you work your way up the deity chain as you become Odin's right hand god. I didn't bother telling them that the game is due in the late third quarter.

I made my way through the pedestrian underpass that leads to the infield at Churchill Downs and shelled out a couple of bucks for a tourist sheet that turned out to be an unsolicited manuscript talking about id Software's Quake. So, I read about the impressive new game engine that is supposed to offer a true 3-D world and the fascinating idea of you becoming a Thor-like god with a mighty hammer.

Then, before I could get an actual racing form and place a bet, I had an embarrassing experience. I noticed a woman standing atop a fountain and the crowd was yelling something about wanting to see some bits. Figuring she was a fellow computer game journalist being encouraged to share her latest scoop, I moved closer to the fountain. I thought she might talk about Jeff Johannsingl's current project. The producer of Master of Orion is working on a game called Little Wars with classic SPI boardgame designer Redmond Simonsen. He describes it as a wargame with a 45-degree view where Populus and SimCity gang up on The Perfect General.

That wasn't what she was doing, however. The nicest thing I can say is that she was splattering those of us close enough to her with water from the fountain. On a humid May Day in Kentucky, the little impromptu shower made me think I had stepped into a scenario from Maxis' SimRainforest. On the other hand, I had misheard "bits."

I quickly redirected my steps toward the betting window and my mind toward computer games. MOO's creator, Steve Barcia, has been very busy working on MechWar. It's supposed to have a Dune 2-style interface that is more up close and personal. Also, the vehicles/robots become more and more sophisticated as game play improves. It's due from New World Computing around the first of next year, just like Empire Deluxe 2. The sequel is supposed to have an easier network and modern interface.

Suddenly, a young lovely appeared in front of me with a mint julep in each hand. She handed one to me and dawdled, "Looking for Tank Girl?" I told her I was just going to take a bet on her and she giggled with her most coquettish southern accent. "Why Willie," she whispered, "she's not a horse. She's an underground comic character being turned into a Macintosh CD-ROM game. I just thought we'd spend Derby Day together and you could tell me who was publishing it."

Unfortunately, I didn't know who was publishing it. I mentioned that Electronic Arts is supposed to be working on a Nancy Drew game to appeal to young girls, but that was a far cry from the Tank Girl concept. We downed our mint juleps and as we drank another, I told her that Simutronics is supposed to be teaming up with Time Warner to do a multi-network murder-mystery game using the Gemstone engine. I told her that they might even be using some well-known mystery series licenses and, on the third julep, suggested that there is no word yet concerning which on-line networks will be participating.

Unfortunately, my memory is rather hazy concerning the winner of this year's Kentucky Derby. That third julep had my head spinning and I'm still not sure if it was Tank Girl or Hammer of the Gods.
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