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The Destiny Knight
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Special Report: Winter Consumer Electronics Show

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Mindscapes' 3-D Space Adventure / Alan Roberts

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I Can't Believe Grown-ups Do This For A Living

On the Eve of "Corruption"
Rainbird's Game of Greed and Deception / Frank S. Eva

Scorpion's Mail
Hints on "Wasteland," "King's Quest IV," and more / Scorpia

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Descent Into the Maelstrom
The Latest in the Wizardry Series / Dennis Owens

Insights Into Game Design
Abstracts from the Journal of Computer Game Design

Revenge of the Death Angel
Sierra's "Police Quest 2" / Michael Chaut

F-19 Designer Notes
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A Survey of Construction Kits / Scorpia

Taking a Peek

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**Taking A Peek**

**Absolute Entertainment**  
251 Rock Road  
Glen Rock, NJ 07452

**F-18 HORNET:** Players engage in ten combat missions around the globe in this naval air combat game. This is the C-64 version of an Atari 7800 game. Each player is a graduate of the "Top Gun" Flight School, so takeoffs and landings on aircraft carriers are a piece of cake. Right? Smooth scrolling graphics and 3-D solid-fill terrain all enhance the feeling of actual flight. Missions cover air combat, supply drops, and bombing and strafing runs. I could tell you more, but then I'd have to kill you. C-64 pictured ($34.95). Circle Reader Service #1.

**Activision**  
3885 Bohannon Dr.  
Menlo Park, CA 94025

**CHOP 'N DROP:** The last man standing takes all in this full contact karate game. One or two novice Chuck Norrises compete with the computer in a joystick driven free-for-all. Players can use up to 16 different karate moves while trying to land the most blows in timed rounds. C-64 (29.95). Circle Reader Service #2.

**Antic Software**  
544 Second Street  
San Francisco, CA 94107

**PREDATOR:** Players fight their way through enemy soldiers, the jungle and an alien manhunter in this computer version of "Arnold vs. the Alien." Rescuing US diplomatic hostages becomes secondary to staying alive in this fast moving action game. Machine guns, hand grenades and flamethrowers prove to be man's best friend in this one. C-64 ($14.95). Circle Reader Service #3.

**Arcadia**  
711 West 17th St. Unit G9  
Costa Mesa, CA

**DOUBLE DRAGON:** The coin-op Kung Fu game comes to the home computer as one or two players control twin brothers in a battle to clean up the streets and recover their girlfriend from the Shadow Boss. Players choose from a variety of Kung Fu moves and street weapons in this joystick driven action game. To fight is to win, eh Grasshopper? C-64 pictured on p. 59, IBM ($34.99). Circle Reader Service #5.

(Continued on page 59)
Some of history's most brilliant naval commanders want to pick a fight with you. They'll let you choose from among 11 classic naval campaigns. They'll even let you decide which of them you're willing to challenge. After that, it's no holds barred.

Get ready for a rousing blend of real-time action and strategic planning. In *The Ancient Art of War at Sea*™, your opponent will fight using his own characteristic style and tactics. It's up to you to plan your fleet's movements skillfully. Zoom in to take command of individual ships. Lead your boarding party in hand-to-hand fighting.

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Heart of the Maelstrom is a complete revision of the Wizardry Gaming System, with more story and game depth than ever before. You may create your own party of adventurers, or use characters from other Wizardry scenarios. In this new world of Wizardry, you will find:

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Over 40 brand new spells, 60 in all. A unique and totally new magic system.

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Diabolical monsters with more deadly abilities than ever before, and an arsenal of ranged weapons and new combat situations will test your strategic powers as well as your strength.

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For the most exciting experience available in fantasy role-playing, enter Heart of the Maelstrom!

Now available for:
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Screens from Apple II version of the game. Screens for other systems may vary.

STAND-ALONE SCENARIO

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Sense of Omission

I wish you would give the listings of all computer systems for a game. For example, Manhunter is not just for the IBM, but also for Apple IIGS and C-64/128. I have the feeling I've missed out on more games through your magazine, simply because you didn't list all computer types available.

Julie Freeman
Cupertino, CA

I counted three games in "Taking A Peek" that are in IBM format, but were not listed. Is your magazine entitled MS-DOS World or Computer Gaming World?

Bob Campbell
Downers Grove, IL

Ed: "Taking A Peek" is based on actual product received. Many times, we receive one version of a game prior to press time and publish the "peek" from a look at that version. Then, it may take anywhere from a week to several months before we get the other versions of that game. For this reason, we started a "Conversions Received" column to keep readers updated on products for their favorite computer systems. Remember, CGW works on a minimum of two months lead time. A program that arrives in December usually will not show up in "Taking A Peek" until February. We are constantly working on three issues at once and it is possible that a version can arrive after we have printed the "Game Ratings" or "Taking A Peek." It is not our intent to slight any computer system. However, we do not want to mislead our readers by printing that conversions are on the shelf before they actually are, either.

Final Exposition

As the author of First Expedition, I am writing in response to the review of same appearing in your November issue. I can not read that review without a strong sense of disappointment and a feeling that the reviewer was surprised to match this review to its adventure. His "Bad Tidings" section begins with "Part simulator and part quest game. First Expedition is not a role-playing game" as if he were striking at a claim that it was the ultimate in role-playing games.

Then, he proceeds to demonstrate that it fails as a role-playing game and, in fact, is trivial. It reminds me of a recent encounter on television that was highly publicized. I can see the reviewer stating, with no small degree of contempt, "First Expedition, you're no Role-Playing Game." I guess my first and most immediate point is that it was never intended to be one in the first place. So, I am confused at the vigor with which he attacks some imaginary premise that it is one. He feels that it is trivial, yet has a too difficult and cumbersome means of navigating about the world. I would like the opportunity to address this review, as I feel it was unjust in its treatment of First Expedition. The biggest sin I feel committed in this review was one of omission. I hope to throw some light on what First Expedition is for those who might find it enjoyable.

First Expedition is a first-person color graphics adventure that places you on a fictional ocean world and gives you the task of finding three missing Sun Spheres before a certain number of days have elapsed. A full day is four minutes of daylight followed by a four minute night. At night, there are stars. These are used for navigation and can be used in two ways: a compass is provided to permit triangulation for those who wish to become involved with manually charting their position and, there is an option that can be set at any time which activates the Autopilot feature for those who do not want to deal with the task of plotting their position. With Autopilot, you merely have to identify two stars currently in the sky from the star chart and you are given your coordinates on the planet.

And so, you rove from island to island. During this roving, you meet ships coming over the horizon who may be friendly or hostile (you are advised how to tell the difference), sea beasts that can be shot for food, storms, fog that hides the islands on the horizon during day and hide the stars at night, and of course, islands which rise out of the sea as you approach. As you search for uncharted islands, you can use survey rockets to scan the area about you. There is always an island within a full day's cruise from another (unless you head out across the Great Sea, an area of open ocean lacking islands which is marked on the island chart).

That means you may have as much as eight minutes during which you may run into sea beasts, other ships, storms, plot your position during the evening, and be beset with fog. Not all these events happen every day and so, there will be times where your main concern is staying on course by use of the rudder, working against the currents which vary in strength and direction in different parts of the world.

Granted, this can result in several minutes of relatively idle time in your quest for the next island, but just when you forget to look behind you, you may get boarded and lose food and fuel.

As the author, I agree that First Expedition is not a difficult puzzle type of game, nor is it a complex role-playing enterprise. If it was, I would have failed in my efforts. It is a user-friendly ongoing adventure presenting a world that many have had fun exploring. Users I have talked with have called it "captivating" and "quite addictive." Of course, these may be the very folk who find some of the more complex and involved software entertainment packages too difficult to figure out or, like me, merely do not want to spend that much effort in figuring out how to solve the problem presented. First Expedition is not for hard core problem solvers. I wrote it because there seems to be a gap in entertainment software for the many who want something they can return to and continue "playing" without the burden of long learning curves and the complexity of many of the quest and role packages.

Ironically, First Expedition was originally conceived to be a navigation-oriented sea-going adventure. The navigational aspect of First Expedition was what first caught the interest of this letter will further establish what kind of product First Expedition is.

(Continued on page 44)
Soaring Into 1989

Winter C.E.S.

In order to publish this fast-breaking report on the Winter Consumer Electronics Show, our review/strategy for Neuromancer has been postponed until CGW #57.

Our fabled editorial jaunts to cover the fast-breaking world of computer entertainment software, often start with disconcerting experiences with the airlines. Our trip to the Winter Consumer Electronics Show in Las Vegas was no exception. Our flight was delayed for two hours because the plane originally assigned had mechanical problems. We boarded the new plane in grim spirits and the pilot almost immediately broadcast what we expected to be the obligatory welcome speech. Instead, we heard,

Good evening, ladies and gentlemen, welcome to Flight 2222. They tell me we’re running a little late. I wouldn’t know. I had a nighttime assignation with a lady in San Jose until getting the call. But, don’t you worry about her, she’ll probably just make the loop around the airport a few times until she runs into another pilot … or an ex-marine. Ah, well, probably saved me from a fate worse than death. Anyway, since I saved all that money I was gonna’ spend on her, you folks can have anything you want to drink on me. Don’t forget to thank these ladies doing the serving. Instead, we heard,

Fortunately, many of these titles, for both game system conversions and coin-op translations, are pushing their respective hardware platforms to new heights. In coin-op conversions, in particular, there was an emphasis on side-by-side comparisons. At Data East, the conversions of Bad Dudes (a street fighting game where players fight dogs and thugs to "rescue the president") and RoboCop (the arcade game based on the movie) were being demonstrated on personal computers stationed adjacent to their "older cousins." Arcadia and Melbourne House had coin-ops in their booth to demonstrate how well their arcade games stack up against their "big box" games. The company announced Magic Johnson’s Fast Break Basketball (an action game for 1-2 players which compares in style with their John Elway’s Quarterback football game) for Amiga/IBM (due around April 1) and Artura (a "Barbarian"-style game where the hero throws axes and casts spells to rescue the maiden) for Amiga, ST, and C-64 to be released this month. Taito is now using the actual graphics files from their coin-op hits on Amiga and ST versions of Operation Wolf and Renegade. They plan to utilize the graphics files from the arcades whenever possible in their 16-bit versions. Broderbund raised the curtain on their Amiga version of Star Wars, based on the Atari Games coin-op version. The program utilizes wire-frame graphics enhanced by color and digitized music.

Graphics resolution and faster frame rate seem to be the order of the day. Taito has an impressive line of MS-DOS conversions which are getting substantially closer to the Amiga and ST versions of Arkanoid, A.L.C.O.N., Bubble Bobble, and others. Also, according to Alan Fetzter (Taito’s President), the programmers working on their conversions work right alongside mini-workstations using the coin-op hardware with the goal of matching the bigger machines normally faster frame rate.

Action Speaks Louder . . .

Epyx has developed a game with a 3-D cutaway view of a mansion’s interior as seen from an oblique overhead perspective. In Deponia Air in the Hidden Diamond Caper, players manipulate their cat burglar characters through a dynamic environment where almost everything but the bathtub can be manipulated or moved. Players try to find the hidden diamonds in the mansion while avoiding cute "pig mice" and "giant canaries." The game is a first quarter release for Amiga, C-64, IBM, and ST.

Another interesting approach can be found in Paragon’s Spiderman and Captain America in Doctor Doom’s Revenge. The story is told on-screen in comic book style layouts (and an actual Marvel comic forms part of the documentation). Full-screen action sequences where heroes utilize both fighting skills and projectile weapons (Spidey’s web and Cap’s shield) resolve portions of the story (second quarter release).

Konami, publisher of both Konami and Ultra cartridges for the Nintendo Entertainment System, is stepping up his emphasis on personal computer software of its NES hits. Lynn Heitmanek explained, "Because of the success of our NES products, the personal computer software was moved to a back burner." Now, the company plans to tighten the conversion process and release MS-DOS, and C-64 versions of Boot Camp, Jackal, Metal Gear, Teenage Mutant Ninja Turtles, and Double Dribble before the end of the year and Amiga versions of Rush’n Attack and Contra before June (with Ajax and Metal Gear close behind).

Rainbird’s IBM versions of Carrier Command and Starglider II look like the 68000 machine versions and offer more (the new Carrier Command offers a feature with four real-time windows to keep track of those Manta fighters). The company also plans a first quarter release of Savaged, a three-level arcade adventure in which the character utilizes the viewpoints of a barbarian, an escape sled, and finally, an eagle. The graphics look better than those on dedicated game systems and the sound is the typical upbeat Rainbird “rocker.” Sierra’s Stilpheed offers extremely fast scrolling and frame rate in a Japanese hyper-version of a "Centipede"/"Defender" hybrid, complete with
an American version of the Japanese soundtrack that really "cooks."

Box Office plans a February release of their licensed Ringling Bros. and Barnum & Bailey Circus game. Players compete in tight rope walking, trick horse riding, trapeze, and lion taming through nine levels of difficulty (Amiga, Apple C-64, IBM, and ST—February release).

Cosmi plans to introduce new splash to the Pac-Man genre. Their Chompi game enables players to jump from fish bowl to larger and larger aquariums, devouring other fish and attempting to avoid being eaten oneself while growing from goldfish to "Jaws" size. The aquariums are not mazes, but play mechanics are similar to other "eat and run" games.

Hewson Consultants Ltd. (designers of Uridium), is part of Medallist International, a new affiliated label program at the Microprose. Excelon (science fiction action with graphics reminiscent of Terrordroids), Netherworld (a tougher looking Uridum-style game), and Eliminator (which looks like a space race with jobs) should be the first titles on the shelf.

Titus Software introduced a game within a game idea with Titan, a fictitious game in another continuum. Where players must guide a power sphere through eighty synthetic worlds (i.e. levels) in order to succeed (Amiga, C-64, IBM and ST) and Knight Force, a twelve level action-adventure using the company's familiar 3-D graphics driver (Amiga, ST, and IBM).

Epyx demonstrated Axe of Rage and Curse Buster (first quarter—Amiga, C-64, IBM, and ST), two medieval action games. The former has four maze-like levels that must be cleared out by the axe-wielding hero and the latter uses voice synthesis and 3-D graphics to enchant players through 100 smaller mazes.

Data East should release Heavy Barrel (C-64 and IBM) and Super Hang On (a Mac II, IBM, ST, and Amiga title based on a Sega license) in the second quarter. Besides the familiar motorcycle race from the coin-ops, the latter is a mouse-driven version which includes an icon-based course builder with different shapes and varying terrain. Courses can be saved to disk and the player can establish checkpoints for fractional times.

MicroIllusion's Dr. Plummet's House of Flux is an arcade game in which one pilots a ship through 28 levels of varying gravity while facing tight spots and alien creatures.

In addition to Aussie Games (see Rumor Bag, CGW #55, p. 14), Mindscape introduced Sgt. Slaughter's Mat Wars (a wrestling game which allows players to both manage their fighters and perform the fighting); International Team Sports (volleyball, water polo, soccer, swimming, and track); and Combat Course (an obstacle course course competition with its own construction kit). The company also unveiled After Burner, Action Fighter, and Shinobi as the three newest versions in the Sega line.

Adventures on Land and Sea

There is a renewed emphasis on introductory style adventure games. Icon-driven games like Origin's Tangled Tales: The Misadventures of a Wizard's Apprentice, a tongue-in-cheek approach to fantasy adventure and Interplay's Amiga version of Neuromancer, as well as

menu-driven games like MicroIllusion's Scooby Doo (due later this year on IBM) with its refined Zak McKracken look and Epyx's Omniconr Conspiracy were announced. The Scooby Doo adventure will contain four adventures in one (Mystery of the Aztec Sea God, Ski Village, Haunted Mansion, and Western Town). The Omniconr Conspiracy is a space detective who has 250 rooms, is not combat intensive, has an estimated 20-40 hour solution time, and offers what the company calls "tongue and cheap" humor. For example, what do you say to a pusher who offers you a drug called "Dex-Boost?" "Just Say No!"

Undersea adventure will be a recurring theme in 1989. The Infogrames (French company purchased by Epyx in November of 1988) division has prepared Undersea Commando, a "James Bond" superspy adventure where players try to foil the "Yellow Shadow." It is an essentially action game with a strategy wrap. Cosmi is offering a challenging action adventure called Navy S.E.A.L.. Players "qualify" for active service in four different disciplines and then, participate in realistic commando style missions. Sierra's Jim Walls, designer of Police Quest, has now collaborated with a former U.S. Intelligence officer to create Code Name: Ice Man, a 3-D adventure game based on S.E.A.L. service.

In addition to these military/intelligence themes, Intracorp will release the IBM version of Search for the Titanic in February. The program offers 75 wrecks to explore, 100 navigational maps/charts, and 47 ports of call. The game uses digitized photos from the expedition.

Action style adventure will also be prevalent in 1989. Kyodai, a consortium between Broderbund and 11 Japanese companies, will release its first three products by summer of 1989. Ancient Land of Ys is an action/adventure quest for the six lost Books of Ys (IIGS and IBM). Hydilide (IBM) takes the player from medieval villages to outer space. The game uses a fascinating combination of overhead view and 3-D terrain with excellent resolution. The story line begins with as little information as possible. There is a crack in the earth with monsters coming through. The player's job is to find out why. Terrain includes forestland, tunnels, cloud city, a medieval castle, futuristic castle, parallel dimension, and 200 screens of outer space. Psychic War (IBM) is another sci-fi fantasy game from Kyodai in which strategy and puzzle-solving are as important as arcade action.

With the action-adventure approach, Mindscape allows players to command a six person S.W.A.T team during a Hostage Rescue Mission. Adventures in the AD&D line with an arcade style combat arena - IBM and C-64, March release).

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Epyx's Trials of Honor (a French "Defender of the Crown"-style game); Microprose's Space Crusade of the Samurai (a working title for a game built on the Pirates technology and offering more emphasis on diplomacy); Activision's Last Ninja 2 (set in New York and much friendlier as it is easier to pick up objects and there is no ninja magic); Electronic Arts' Project Fisertart (a sci-fi/horror game for the C-64); and SSI's Hillisfar (a role-playing game in the ADE* line with an arcade style combat arena - IBM and C-64, March release).

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Presumed Guilty. The pacing is supposed to be faster than the original game.

In a different direction, Roberta Williams has returned to her love of Agatha Christie mysteries, added a distinctive Sierra "Mel Brooks" touch of humor, and developed a murder mystery set in New Orleans in the 1920s. Another Sierra 3-D adventure to watch for is King Arthur (a quest for the holy grail presented by two professional animators of television cartoons). Long term projects to be expected from the company are a female version of "Leisure Suit Larry" (working title is Patty), a 3-D horror game from Mark Crowe, and a space game not related to Space Quest from Scott Murphy. The Magic Candle, available from Miles Computing offers more than 200 hours of play. Players select their parties from pre-designed characters by means of an interview and resume process. There is an ability to split the party and assign different tasks to each, day and night vary according to season, and there are no experience points in the game. Instead, the party grows by using and learning skills through experience and "reading" books.

Other adventure products include: First Row's The Honeymoons game (an animated adventure built around three basic puzzles); Twilight Zone for the Amiga from the same company, Faery Tale Adventure for the Macintosh II from Microusions; the same company's Donkey for the IBM's Microprose's Court Action (a menu and window driven spy adventure where you use your gun last); and Koei's as yet untitled ancient chinese adventure game.

Strategic Mission

Wargames are few and far between. Koei expects to release Nobunaga's Ambition 2 with use of generals and other subtle improvements.SSI just released Battles of Napoleon and First Over Germany (sequel to 50 Mission Crush and B-24) is due this quarter. Interstel is releasing a C-64 version of Empire and SSG has just released Halls of Montezuma on IBM. Otherwise, the strategy games are basically non-standard. Cinemaware's Lords of the Rising Sun (Amiga - first quarter) utilizes an interface for its tactical battles that is so elegant it may well become a standard. Unlike other Cinemaware titles, this one can be played with or without the arcade scenes. The game involves a classic struggle between two brothers during 12th Century Japan. Both the maps and the strategy are dynamic and real-time. Microprose's Sword of the Samurai for the C-64 uses some similar approaches in its battle sequences.

Melbourne House will offer War in Middle Earth during the first quarter. The game features arcade quality graphics and a Risk style level of difficulty. Players control the party from the "Ring" trilogy, as well as any allies which the party can convert through offering important artifacts. The map from Tolkien's world and the characters seem carefully treated in this strategy game of fantasy conquest.

Abstract strategy games may be making a comeback with Taito's revivial of QIX. It is a territorial conquest game that was a big hit in college and university towns a few years ago. In addition, Leisure Genius is offering computer versions of Risk and Clue: Master Detective, based on the expanded version of the popular board game. Card games will also make their appearance in 1989 with Trump Castle from Intracorp and Hoyle's Book of Cards from Sierra.

Stimulating Simulations

One area of strategy gaming that is not suffering is the simulation. Velocity Software has released Jetfighter, an IBM flight simulation of the F-14, F-16, and F-18. Designed by Robert Dinnerman and Moses Ma, who designed F/A 18 Interceptor for EA, it is everything the Amiga product was and also has an external view from any angle, and a full detailed terrain map of California as added features. Chuck Yeager's Advanced Flight Trainer 2.0 from Electronic Arts will teach advanced skills necessary to perform aerial stunts such as the Blue Angels or Thunderbirds would use. EA also plans to market a Chuck Yeager audiorecipe where the veteran pilot offers specific advice on situations included in the simulation. Activation is pushing the graphic capability of the C-64 with their F-14 Tomcat, a game which emphasizes dogfighting. There are 80 different missions which can be accessed separately or played as a campaign game over an entire "career." In addition, Lucasfilm Games is expected to publish a third quarter follow-up to Battlehawks 1942, building on the technology introduced in that game.

Tank simulations, as we noted in our December review of Steel Thunder, will be a major factor in 1989. EA's Abrams Battle Tank is an IBM product with slick graphics. Bing Gordon, EA vice-president, told us, "Think of it as a tank simulation for one commander rather than a squadron leader." Microprose's Tank (working title) will take modern battle doctrine seriously. Our sneak look at the product was impressive. It looks like Microprose has another hit under development. In yet another approach, Spectrum Holobyte revealed that they are working on the Electronic Battlefield series, to be marketed in conjunction with several of the information networks. The company has not officially confirmed that the series will include "tanks," but there will be three different products reflecting air, land, and sea. It seems like a safe bet, though.

Electronic Arts has 688 Attack Sub in their Quality Assurance process, so release is imminent. The product supports the Ad Lib sound board and features IBM graphics that really push the hardware.

Finally, a non-military vehicle simulator is under development at Spectrum Holobyte. A series of big city driving simulations using 3-D filled graphics, maps, and authentic skies is projected. The IBM demonstration looked great and the game is expected to support human vs. human competition by utilizing null modem hook-ups.

The Sporting News

Beyond Epyx's introduction of the IBM conversion of The Sporting News Baseball, there are a number of new baseball games in the near future. EA plans to release Earl Weaver Baseball 2.0 which features more emphasis on the pitcher/batter confrontation; Data East plans to develop a unique approach to baseball with Scott Onn, founder of Gamestar. (Orr says it will be "somewhat" stat-based and enriching); and Cinemaware plans a TV Sports: Baseball game (other games expected to be published in the series include: tennis, basketball, and possibly, ice hockey). For different sporting events, Gamestar has developed MotoCross for the IBM, EA is expected to release Kings of the Beach, a professional beach volleyball game for first quarter release; and the long awaited John Madden Football will ship "For sure, by April 1st."

Technical Advances

Those who are looking toward CD-I (Compact Disc - Interactive) might be looking for that system in first quarter of 1990 rather than Christmas of 1989. However, one keynote address at WCES noted that the current CD-ROM extended architecture is providing a bridge between CD-ROM and CD-I. Cinemaware recognizes this and is releasing Defender of the Crown CD-ROM for the IBM. It is the familiar game with a tremendously enhanced soundtrack.

Others are not confident about the system. Alan Fetzer of Taito pointed out to CGW that the coin-op laser-disk based games had tremendous maintenance problems and expressed his reluctance in believing that the hardware can hold up.

Here, We Go Again

All in all, the show demonstrated that there will be a great number of titles in 1989 and hopefully, something improved and exciting for everyone. So, as pilot commented upon our landing, "There you have it folks. Another victory for technology and skill over fear and ignorance."
$200,000 JACKPOT

The latest multi-player multi-format PC game from Australia is different to all forms of Poker.

Aussie JOKER POKER features 90 player capacity, open-ended discard ability, selectable deck size and hands per player, password controlled gambling system with automatic accounts — and 5 free entry forms for the $200,000 Aussie JOKER POKER Contest.

Each month from December 1988 through April 1989 winners of 240 JOKER SOFTWARE games and 4 finalists will be randomly drawn from all entries received that month.

With a guest, the 20 Finalists will be flown to Las Vegas to play Aussie JOKER POKER for a first prize of $100,000 in cash at the Golden Nugget.

1,220 Prizes Value $200,000

1,200 Joker PC software games at $29.95 to $49.95 dependent on disk format. Game prizes at sole discretion of sponsor.

Cash Prizes for Aussie JOKER POKER Contest Grand Final:

Highest Scorer: $100,000
Second Highest Scorer: $5,000
Third Highest Scorer: $2,500
Lowest Scorer: $1,500
16 Consolation Prizes of $1,000 each to eliminated Finalists $16,000

Aussie JOKER POKER is available for SIX major PCs

If your PC has a mouse or keyboard, a mono or color monitor and a 512K minimum ram (except Apple II and C64/128 use 64K and keyboard only) you and your family can practise at home for the Las Vegas final of the Aussie JOKER POKER contest.

Suggested retail prices:

IBM & compatibles (CGA Board required) $39.95
Amiga & Atari ST $49.95
Macintosh (mono only) $49.95
Apple II $39.95
C64/128 $29.95

If ordering by telephone add $3 shipping & handling and check that your PC meets the minimum hardware requirements as no cash refunds apply. Warranty is limited to free replacement of faulty products returned by prepaid post.

Aussie JOKER POKER Contest Rules

1. No purchase necessary to enter.
2. Void where prohibited by state or federal law.
3. To enter, simply complete and return the official entry form.
4. Limit five entries per family or household. Five free entry forms and full contest rules are included with "Aussie JOKER Poker" or may be obtained by sending a stamped self-addressed envelope larger than 5 x 7 with a handwritten request to: Aussie JOKER Poker Contest Entry Forms, P.O. Box 22381, Gilroy, CA 95021-2381. Mail-in requests limited to one per person, household or family and must be received no later than 3/31/89. WA & VT residents need not include return postage. Full rules also available from participating Mindscape retailers.
5. Monthly entries must be received no later than the last day of the month in which a drawing will take place in order to participate in the monthly drawings. Drawings will be held from December 1988 through April 1989, inclusive. Final entries must be received by 4/30/89.
6. Contest open to legal residents of the U.S.A. and Canada (other than Quebec).
7. Odds of winning depend on number of eligible entries received.
8. Contest subject to complete official rules.

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It's time to get serious here. Board up your windows, yank the phone out of the wall, and tell everybody you know that you're moving to Tibet. Finishing this game will take some time and dedication.

In *The Colony*, players take on the role of Regional Marshal for a given sector. As the marshal, you find yourself responding to a mayday signal from a scientific research colony. You have a near-miss with a black hole and crash-land on the planet. Therefore, the game begins when you regain consciousness. You have to: 1) rescue survivors, if any; 2) repair your damaged ship; 3) use whatever force is required (it'll take quite a bit) to destroy an unknown alien race on the verge of invasion. As Marshals from a more primitive era might say "It's all in a day's work, Ma'am".

**Interfacing With the Future**

Imagine a cross between the arcade game "Battlezone" and the movie "Aliens." Then, combine that with the same style of malicious puzzles that kept people awake late at night with "Shadowgate" and "Uninvited." Now, you have a mental image of *The Colony*.

Using a mouse, players maneuver their characters through the marshal's crippled ship, the planet's surface and an eight-level colony. Players can choose to view either see-through "wire frame" graphics (like the original "Battlezone") or slower-moving hidden-surface animation. Steering the characters takes a bit of getting used to; putting the cursor slightly above the center of the viewscreen moves one slowly forward, below the center moves one slowly backwards, and left and right spins the character in place. The further from the center, the faster one moves.

Combat is straight-forward: put the enemy in the marshal's crosshairs and click the mouse. Damage received is taken from the character's energy levels (shown in the gauges in the upper left).

When a character gets close enough to an object that can be manipulated (a desk, a door, a chest) the animation is replaced with a bit-mapped illustration. Clicking on an article allows it to be examined. To return to the real-time animation, either click on the "Exit" dialogue box or press return (I recommend the second option; moving the mouse to the bottom of the screen hurls your character backwards across the room).

**Coming under Alien Fire (My Gripes)**

The game is not copy-protected, and works well on a hard drive. *Mindscape* uses a decoder scheme where you have to key in a secret combination periodically (to start a saved game, to exit the ship, etc). Although this is normally fairly unobtrusive, at one point the marshal must find a code and travel to the very depths of enemy-held turf to key it in. One cannot save the game at this point, because saving the game will change the code. This is sadistic.

Death comes by running out of energy. This is portrayed by showing the energy levels plummet on screen before you are turned into a pile of scrap. Still, there are a few times when marshals can be killed instantly and players have to guess what got them. Being given some sort of post-mortem would only be fair.

There are a few tough mazes in the colony. Using the standard ploy of dropping different objects doesn't work in this game, because the only objects one can pick up and take are virtually indistinguishable from each other. If one returns to a room he has just ransacked, everything has been tidied up. More than once I wasted time double-checking rooms that had already been searched.

Although the sounds are an enhancement, there were times when they slowed the game to a crawl. It would be tempting to remove the sound files.

Finally, even after some practice, maneuvering can be a problem. Desks and chests can pop you out of the animated game play at annoying times (holding down the "option" key will disable this problem).

**Marshalling Your Forces (Conclusion)**

Although many games claim to be "the first of a new generation", this one can do so honestly. Most games give players a detached overhead (or side) view of what's going on. It's easier to take on the character's point of view (figuratively speaking) if you literally see things from his perspective.

Along with lots of action, there are several mysteries to solve: the fate of the scientists, the nature of their research, and the origin of the aliens. More practical problems include operating machinery and mapping a complicated complex that seems to exist on more than three dimensions. Although there are some poignant spots in the game (finding a child's abandoned toy, for example) there is only a limited (Continued on page 56)
FLY THE DEADLY SKIES

JETFIGHTER:
THE ADVENTURE

"THE ULTIMATE FLIGHT SIMULATOR!" JOHN DVORAK

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simulator around. Industry guru John Dvorak called it:

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Notes on the Conference on Computer Game Design

Imagine Chris Crawford (Balance of Power) wielding a bullwhip as an analog to creativity, Dan Bunten (M.U.L.E.) challenging game designers (with tongue in cheek) to admit that they are nerds/geeks, and the creators of computer role-playing games debating over what storytelling really is. Those events were but three of the many fascinating discussions held at the recent Conference on Computer Game Design last September. The brainchild of Chris Crawford, this foundational conference was held by and for subscribers to Chris' Journal of Computer Game Design (see abstracts in this issue). Over 150 designers, developers, programmers, and producers from all over the entertainment industry gathered to discuss the future of interactive entertainment.
software industry converged on the Milpitas Holiday Inn in order to continue building a sense of an independent artist's community and improving the games we play.

**Chris Crawford - Creativity and Game Design**

Chris Crawford is always stimulating. He began his lecture with the assertion that creativity is "magic" and defies rational definition. Then, he proceeded to examine the creative process rationally. He suggested that there are two basic methodologies toward creativity. One method is to approach something old from a new perspective and the other is to develop something completely new and different.

The former is *incremental* creativity, to take an existing idea and do it one better. The latter is *grand leap* creativity, which makes a clean break with the past and attempts to do something totally new and different. Crawford admits that grand leap creativity doesn't really occur on a pure scale, but it is what he personally strives for.

The incremental method involves fine-tuning a few systems rather than every system. "A game," espouses Crawford, "is a system with a huge system of interacting sub-systems." Crawford stated that 99% of games are incrementally created, but said, "Don't take my word for it. Take CGW's." He, then, read "Taking A Peek!" from various issues of CGW which illustrated his point: "...an attractive 'Arkanoids'-type game . . . ." "Think of Pacman in hyper space!" "...a Zaxxon type game . . . ." "...another arcade spaceship shoot-'em-up . . . ." and so forth.

Chris noted that typically one game in 50 (2%) is a hit. Using his own criterion, he states that 20% of his games have been hits. Since, therefore, he has a better than average "hit" rate and he puts his energy into "grand leap" designs as opposed to "incremental advance" designs, he stated that he felt qualified to offer suggestions to the designers at the conference on grand leap design.

**Don't be seduced by technology, because that is getting the cart before the horse. Instead, the optimal approach is to** (Continued on page 28)
Imagine this: Your name is Derek Rogers, an ambitious yuppie on your way up the London business ladder. Your ability at stock market maneuvering catches the eye of David Rogers (apparently not related), who makes you a full partner in his firm, gives you your own office, a big money salary, and your own BMW. Now, just as soon as you begin to celebrate your achievement, things start going terribly wrong. You have become the chief suspect in an insider trading scandal, and no one is rushing to your defense!

In the past, Magnetic Scrolls has produced The Pawn, Guild of Thieves, and Jinxter. With no mythical lands, sorcerers, or elves here, Corruption is a "true-to-life" adventure.

The Amiga and ST versions feature 80 column text and have excellent illustrations in a style akin to artistic paintings. These can be pulled down over the text, but pure text adventurers can play without the use of the illustrations, since they do not figure heavily in the resolution of the actual adventure. For example, in an early scene, you can plainly see a cleaning lady, but try as you may, the program keeps saying she is not there. Obviously, at this point in the game, her part in the adventure is only atmospheric.

Pull down menus also provide for some other nice features, such as the ability to instantly reveal all exits for the current location. Other items allow for easily saving and reloading game positions that have been stored on a separate data disk, turning graphics and printer on or off, and also toggling the speech mode. The speech mode, which initially seemed a positive addition to the Amiga version, becomes nothing more than a novelty once you realize that phonemes are not used. Thus, a word such as 'office', is pronounced 'O (long) Tice (as in ice)'.

The documentation includes a 'quick start card' providing loading instructions, an 'adventure guide' or quick reference card detailing special functions, a 'gameplay manual' that explains methods of communicating with the game, as well as providing encrypted hints, and an audio cassette which contains the basic story (it also contains the program's original musical score for those who, due to system limitations, cannot access the music).

Another nice feature is that the player is allowed to define the ten function keys for frequently used phrases. This should save typing time, but since there seems to be no way to save those definitions, this feature is only of value when one intends to play for an extended length of time.

The parser is limited, but should suffice. The main thrust of the game is away from object manipulation and toward character interaction. There are fifteen personalities that the player must learn to communicate with.

Each action adds one minute to the game clock. This means that certain developments are going to happen at specific times. You will have to be in the right place at the right time in order to catch the action. It also means that the player has a limited time before he will be hauled off to jail. Once there, the game is over. Maintaining your freedom is essential in order to untangle yourself from the long arms of the law.

Although Rainbird recommends Corruption for "Adult minds only," this does not mean that the language or illustrations are 'R' rated. This reviewer saw very little to give the game the air of "adults only." However, Corruption is not a game that children could readily comprehend or even enjoy. The themes are adult and the game play moderate to difficult.

One minor drawback, relative to software coming in to this country from overseas, is the cultural barrier. Certain expressions may leave the player somewhat puzzled. For example, in one scene you are told that the secretary has made her office 'homely' by the addition of family pictures on the wall and brightly colored flowers on her desk. Over here, something that is homely looks rather unattractive. This cultural barrier is more interesting than inconvenient, however.

By all means, make a map of the game, and explore all locations. There seem to be no really illogical procedures required to be successful at Corruption. Just remember that you are thrown into the world of cutthroat business with its power plays, greed, deception, and double dealing. You must become ruthless in order to survive.

Adventure gamers who have had their fill of slaying dragons, etc., will surely find Corruption an intriguing change of pace.
Welcome to the world of Bantross. Where monsters don't just look menacing. They lunge directly at you, ready to wound, paralyze or kill.

Where whistling wind, roaring surf and echoing footsteps mix with the sound of your own heart pounding.

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From time to time, Scorpia leaves the common room at that famous tavern of the mind, "Scorpion's Tale," and answers the mail delivered to the back room.

**Warning:** There are specific hints about popular adventure games located in this vicinity.

It’s time to trek into the cozy back room and rummage through the mail bag. Sorry to say, tho, that mail service has been pretty bad lately. Through most of November and December, letters have been taking almost a week, if not more, to reach me. That, mind you, is domestic mail. Usually service improves as the post office gears up for the December rush of Christmas mail, but not this year. CGW sent me a card. It took 9 days to get here! My apologies to all for slow responses to your queries. There isn’t, alas, much I can do about it.

**Manhunter**

There is both a Harry and a Harvey (easy to confuse). You have to figure out the last names of both of them to proceed with the game. Harry is day two, and Harvey is day three. Some people, on the other hand, haven’t managed to get past day one. This is probably because they didn’t do the right thing at the video game in the bar. Remember: less is more.

**King’s Quest IV**

The bridle remains an elusive prize for many (and this comes as no real surprise, being one of the nastier puzzles in the game). You won’t find it until after you’re out of the whale. Be sure to look everywhere. Also, if you are having trouble finding the whale in the first place, it doesn’t show up until after you’ve been to Lolotte’s and gotten her first quest. Save the game after that so you won’t have any problems (well, not too many... grin!). The gold ball, which a few are having trouble locating, is actually in plain sight, although not obviously so. Look carefully at screens near water. Keep in mind that Rosella’s position on the screen is often crucial to finding or obtaining items.

**Bard’s Tale III**

Several people have been unable to obtain a rainbow rose in Lucencia. Have you seen anything else that was rainbow-colored? There is a connection between the two of them. Also, for those who are having problems handing out flowers, the bard’s song at the hall is helpful.

**Leisure Larry II**

A number of folks are having a hard time getting started. Remember it doesn’t pay to be too honest here. For those who have gotten a little further along, the spinach dip is just for points, and isn’t otherwise useful. The trick is figuring out the right way of getting rid of it (There are, by the way, a number of actions you can do in this game that will bring points, but do not advance the plot, so you could finish the game without a perfect score. So unless you’re a perfectionist, don’t worry about it too much).

**Future Magic**

Several have written to me, asking if there is more to the game than shooting down raider ships. There certainly is, but it will take awhile before the "real" action starts. Just keep after the ships, and watch for a new beacon on Caldorre. Also, there really is no place where you can purchase prohibited weapons. All of them must be found in various places throughout the game. One more thing:

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some of those who have gotten far along have complained that their energy levels are too low to perform certain important tasks. Be kind to animals, even hostile ones. Look at them sometimes; they can use a little help.

Wasteland

I have been advised by a couple of readers that it is possible to kill the Night Terror, if you keep at it long enough, especially with a Proton Axe (which requires no ammunition). There isn't any reason to do this, but if you're feeling especially hostile, go ahead (grin). The helicopter is only good for one ride, and you need a high agility to train for it. Since you can walk to anywhere the helicopter can take you, you may want to skip it entirely. Finally, you will not be able to get into Darwin Base until after you have been in Sleeper Base (which in turn means having successfully gone through the sewers).

Ultima V

Food is a problem for many, especially now that almost everyone knows it's bad to steal crops from the fields (including lolo's). Unfortunately, there isn't any secret method for making money quickly. The best thing to do is keep your party small at the start (no more than four), sell everything you don't really need, pray for trolls under bridges (heh), roam around a lot at night (when chances of encounters are better), and always have the most intelligent person in the party do your buying and selling, to get the best prices. On another matter, a number of people, especially those who have not played IV, are having a hard time finding dungeons (which are not marked on the maps). They're all in the mountains; look for a little pile of boulders, which marks the entrance (the words to open them, however, you'll have to learn on your own).

Wizardry V

There are several locked doors on the first level. All but two (the silver door and the bronze door) can be opened eventually by either lockpicking or the Desto spell. If these aren't working for you, wait awhile and try again when your party has gone up a level or two. Unless a door has some special description to it (aside from being locked), you can usually get it open without needing a special item.

Demon's Winter

I have heard from Craig Roth, author of the game, that the problem with the orb/crystal has been fixed. It is now impossible to get the orb before you have the crystal (which will save the lives of many a party). Also, he tells me that, although this is not mentioned in the manual (left out by accident?), you can erase characters you don't want during their creation by simply hitting return at the name prompt (wish I'd known about this one a lot sooner!). This will help you avoid having to save and then delete unwanted characters. Thanks for the info, Craig.

Hmm... seems we've reached the bottom of the bag in the meantime, if you need help with an adventure game (I'm not too helpful with arcade games, as I don't play many of them), you can reach me in the following ways:

On Delphi: visit the GameSIG (under the Groups and Clubs menu). On Genie: Stop by the Games Round Table (type: Scorpia to reach the Games RT). On The Source: send SMail to ST1030. By US Mail (include a self-addressed stamped envelope if you live in the United States and expect an answer): Scorpia, PO Box 338, Gracie Station, New York, NY 10028.

Until next time, happy adventuring!

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If you've ever flown a PC, you know how it can simulate every nuance of an airplane's performance envelope. And if you concentrate hard enough on the instruments, you'll soon learn what the limits are.

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The technical detail and historical depth of *Battlehawks 1942* are bound to satisfy the most hard-core simulation buffs. Everything has been exhaustively researched, right down to the optimum airspeed and attack angle for dropping torpedoes.

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1942 feel like the real thing. To a man, they said make it intense.

So instead of polygon-block

Bombing a moving ship half a mile below, diving at 250 mph and dodging flak, can be a little tricky.

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*Battlehawks 1942* is available for IBM and clone compatibles. Amiga and Atari ST versions will be available in early 1989. IBM is a trademark of International Business Machines, Inc.

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Question: What metamorphoses from a lifeless lump of stone into a grinning hulk of a monster, thunders across the battlefield, grabs the fairest of the fair, and gobbles her up like a stick of gum?

Answer: A rook taking a queen in Interplay's new Amiga version of Battlechess. You have to see it to believe it.

Battlechess reminds me of Archon. The pieces act out the combats, but they follow Chess rules--the taker never becomes the take.

I haven't matched Battlechess against Sargon 4 or any of the celebrated near master level programs, but it's good enough to beat me on an intermediate level, and if one set it on any of the higher levels (level 7 or higher), I think it would give any player or other program a good run for the money. Interplay has a level control in the program that allows you to set the thinking time anywhere from 1 to 10,000 minutes. The latter may be a bit excessive, and it would be nice to have fractions of minutes allowed, for those times in the end game when even 30 seconds is an eternity.

Still, the fact that Battlechess can play a mean game of chess is not the point of this game, nor is it what makes it enough fun to drag me away from Pool of Radiance or another CRPG. Watching the carefully storyboarded and choreographed battles when the pieces take each other is the true kick. If you ever want to see your Amiga at its full power, then you must play this game. Battlechess is an artist's program and, while Mike Quarles deserves full marks for packing the program into one 800K disk, the real star is Tod Camasta, and whoever helped him with the art.

By my calculations, there are 35 possible combats, and one variation to cover pawns taking each other en passant. Five of those combinations are very, very rare, and are only seen when checkmate occurs. Technically, a game ends with checkmate, and kings are never taken, but Interplay has included story-battles, but they followed Chess rules--the taker never becomes the take. Checkmate occurs. Technically, a game ends with checkmate, and kings are never taken, but Interplay has included story-battles, but they followed Chess rules--the taker never becomes the take. Interplay has a level control in the program that allows you to set the thinking time anywhere from 1 to 10,000 minutes. The latter may be a bit excessive, and it would be nice to have fractions of minutes allowed, for those times in the end game when even 30 seconds is an eternity.

By my calculations, there are 35 possible combats, and one variation to cover pawns taking each other en passant. Five of those combinations are very, very rare, and are only seen when checkmate occurs. Technically, a game ends with checkmate, and kings are never taken, but Interplay has included story-battles for the final coup-de-grace. Each battle, from pawn takes pawn to king takes queen has something distinctive and amusing about it. I wish I had a large screen TV to display this game, since some of the hilarious detail gets lost on a 12-inch monitor.

Interplay tried hard to include those features most wanted by chess players. The program allows you to set up your own chess problems, or rearrange the board to achieve any desired configuration. Once you have placed your pieces on the board, the program then switches back to regular game mode, and you take it from there. You may also play chess in the regular two-dimensional top down mode if the 3-D perspective makes it hard for you to concentrate or visualize the board. 2D chess doesn't include the great visual and sound effects, but it is easier to understand who's doing what to whom.

Battlechess contains several standard chess program options; for example, one can play human vs. human, human vs. computer, or computer against itself. One can also link to another Amiga via modem and play an opponent in another location. This requires the other player to use Battlechess and an Amiga--no inter-machine compatibility exists. Other features include the option to take back moves in sequence, thus allowing one to undo a disastrous move, and the option of having the program suggest your next move at any given time.

However, the guys at Interplay missed some opportunities to make Battlechess an even better program than it now is. One thing they should have included was a printed listing of the moves in each game, with an option of dumping it to the printer. They could have easily included chess clocks to give one the same feeling of time pressure that tournaments create.

Redefine variable color values for the chess sets would have given the game a personal ambiance. I may be perverted, but I really would have liked to see that slinky queen in widow's black or virginal white. The basic colors used in the game are lavender and blue. For something called Battlechess, it would have been nice to have a 'Fairy' chess version where the battle results were not predetermined and where the defender could win.

Lastly, while the individual combats are exquisite, there really should have been more variety. If each piece had four possible combat sequences versus every other piece, the game would retain its capacity to surprise the players much longer than it does now. Sure, it would take a lot more memory, but memory is cheap now. If Interplay ever does a port to another machine, I'd suggest they put it in a chess playing game designer and really pull out all the stops.

Quibbles aside, every chess player will want a copy of this program, and every Amiga owner owes it to him/herself to see Battlechess in action. Highly recommended.
decide what you want to do, then, decide HOW!
Don't internalize marketing thinking. Do not allow the marketing department to intrude on creativity. Marketing is based on yesterday. It is similarity thinking and this is fundamentally opposed to creativity.

Live in the world of IDEAS. All new ideas come from relationships with other ideas. The best designers have enormous intellectual curiosity. Talk to different people and read lots of books on different subjects.

Develop respect for the psychology of the creative process. Here is where Crawford used the whip analogy. He noted the physics of how a whip works. A whip works on the wave principle where the larger mass is translated to smaller and smaller portions until it moves faster and faster and goes beyond the speed of sound and pops. In the human psyche, the tip of the whip represents the concrete, rational portion of the mind. Farther up the whip is the subconscious and the huge mass at the handle is the universal memory and unconscious archetypes. In keeping with the Jungian analogy, Crawford quoted Jung, "One of the basic aspects of man is the invention of good games."

Crawford's Creative Approach:
1. Identify the problem (How to portray the subject to be simulated in the program).
2. Communicate the problem through your entire mind:
   a) Say the words out loud
   b) See the problem
   c) Attempt to feel the problem tactiley
   d) Use the "killer step," Creative Agony to feel the problem emotionally.
   Then, rest - "sleep in the arms of the dragon."

Remember: "You cannot control this process. You are a puppet on a string." The answer will come some day. It does not work on a deadline, but publishers do. Therefore, schedule projects in such a way as to accomplish the creative work early on - the easy stuff at the end (i.e. Work on creative issues of project B while doing programming of project A).

Creativity is draining. It is not fun. It is hard work. Why? The pay-off (after the wounds have healed) is to say, "I have created a thing of beauty and truth. It's worth it. It really is."

As is typical of Chris' industry-famous speeches, this one was complex, hot, and deep.

"The finest and most enduring stories in other media succeed because they offer more than simple entertainment."

Next, Moriaty asked where the author of interactive stories had advantages over other modes of entertainment. He suggested the advantage rested in replay value and involvement. "It is one thing," he contended, "to watch a movie and see someone else pull the trigger. It is quite another thing to pull the trigger yourself." He went on to argue that interactive stories offer a tremendous tool for persuasion.

Moriaty noted that the point of Trinity was inevitability. The point was that survival depends on doing unpleasant things. The designers noted that people resent being manipulated and if you manipulate them too much, they will lose them rather than persuade them. Moriaty suggested that this was what play balance is for. Cliff Johnson (The Fool's Errand) suggested that Trinity is not interactive. If you do the wrong thing, you come to an end. Moriaty insisted that it is interactive. It is possible to make wrong choices, but they are choices that the author wants the person to make.

Moriaty observed that, in life, there is ultimate interactivity. People always have choices and are continually forced to make them.

He then presented the following

"Richter Scale of Interactivity" (from highest to lowest)
- FTF RPGs with human moderator
- Infocom adventures
- Menu-driven adventures (e.g. Maniac Mansion)
- Infocomics, Portal (fixed content with variable sequence and perspective)
- "What Next?" books
- Radio programs (require some imagination)
- Movies (least interactive - nothing to the imagination)

Moriaty went on to remark that in order for the reader/player to care, "The participant must be persuaded to make an emotional investment in the story." In order to accomplish this, the story needs plot, characterization, and unity of purpose.

The latter part of the discussion revolved around "Selling the Story to the Publisher." In order to do that, the designer must: 1) prove it is entertaining and 2) emphasize the familiar (usually with one sentence or easily expressible concept).

The conclusion of the discussion was a

Students and writers in the audience asked Crawford, "What is the key to good story telling?" Crawford answered, "The key to good story telling is to be a good story teller."
plea to get away from the feature list and figure out what the point of the story is.

Brian Fargo (Interplay) and Dave Albert (Electronic Arts) presented a different focus concerning games which tell stories. Fargo promised, "No more 'kill the evil wizard at the end of the game' products." They suggested three new matters of focus: new themes, use of non-player characters, and storytelling art. New themes include western, science fiction, Japanese, and horror settings. With regard to NPCs, future games should learn about supporting characters from the movies. Both agreed that this doesn't have to be complicated. Finally, designers should learn from cinematic use of plot points, confrontation, and resolution (climax).

The audience responded to the discussion with suggested alternatives to combat in CRPGs, such as: mining, economics, and skill development. The designers also challenged each other to emphasize personality quirks in NPCs and to spend more time modelling human behavior.

Brenda Laurel (of Apple's multi-media group) began a panel discussion on artificial personality with the assertion that, "We have not yet created interactive characters. We need to begin by studying dramatic characters. Drama is a short cut for understanding people because it embodies enough heuristics to help us understand ourselves." Good drama is based on rules about cause-effect and enables us to see clear good, evil, heroism, and emotion.

Laurel, known throughout the industry as a student of Aristotle, referenced the ancient philospher/dramatist as to why drama works. It is entertaining, the ancient wise man theorized, because it visualizes relationship between cause and effect. In short, it is "universalized." Therefore, a play is not about people, it is about actions. Characters must have traits that presuppose how they will act. Laurel believes that the technology is already here for interactive characterization.

Nevertheless, she argued that today's interactive fictions depend more on appearance or description to indicate character than on characterization itself. Appearance is not what is most important in characterization. For example, Hamlet wears black, but so does Johnny Cash and Hamlet looks sad, but so does Pat Paulsen. That doesn't tell much about a character.

What constitutes decision-making in a given character? For some, it is a moral imperative—man and god (higher law). For others, it is an ethical imperative—man and man (social relations, politics.

"Bringing characterization to games will be the major issue in the mid-1990s."

law and civilization) or expedient imperative—man and himself (simple means to the ends). With this in mind, she presented "Laurel's Laws for Creating Characters in Interactive Fiction." These are:

1. generate event,
2. cause character to interpret the event and update his/her "awareness,"
3. enable character to plan his/her next actions, and
4. give character enough data to evaluate said actions.

In order to accomplish this, one can use mini-scenarios, a simple AI approach, or anything that enables characters to make their own choices. Once implemented, the day of the hard-wired plot is over!

David Graves (of Hewlett-Packard) stated that the main problem with the standard approach to artificial personality is that we currently treat actors as objects. "One cannot presently talk to characters," he protested, "because there is too little to talk about. We need a representation for emotions, knowledge and beliefs, as well as a rich media for communication."

Chris Crawford (Trust & Betrayal: The Legacy of Siboot) asserted that bringing characterization to games will be the major issue in the mid-1990s. He sees three problems to be overcome. The first is development of artificial personality (using algorithms). This can be readily solved. The second is that these characters must be able to talk to each other and that means designers will need bigger vocabulary (5,000 words or more), a system for syntax, and a capacity for context. The third problem is that audiences can't accept too rapid a rate of change.

Crawford posited that context is the major problem. However, since social situations create expectations, those situations can be used as delimiting walls to reduce the context to a manageable amount of data." To illustrate the latter point, Chris told about being in Germany and picking up enough German to use a few words. He got into a cab, answered the driver in German, and received a torrent in reply. Chris sheepishly asked for the driver to speak in English. He has suggested that the standard text parser is in the same boat. To avoid this, has suggested that programmers use a "Creole language" (second generation language spoken by immigrants). For example, an Arthurian game might use a fake Old English.

Simulations

During a provocative panel on simulations, Gordon Walton of Digital Illusions (PT-109) observed that simulations are fun because they move quicker than real life, eliminate that which is not fun, and provide a visceral feel. Gilman Louie of Sphere, Inc. said that real pilots hate simulators. They "would rather be flying," as it were. Therefore, he believes that the challenge for simulation designers in the entertainment market is not only to create realistic simulations, but simulators that are fun. The challenge is to understand the feel, the excitement, and the thrill. It is to identify the five minutes of fun in hours of reality and emphasize those five minutes.

Many designers of simulations are concerned with the problem of their war-mongering image. Walton asserted, "We don't develop our products to glorify war, but to help the general public understand the problems warriors face. We deliver war! We teach reality. You can win at the simple level, but at higher levels, you're going to die. We believe in being responsible."

Gilman Louie responded, "I got upset because I got a letter from a customer who said Falcon was too tough. He was angry because he kept getting killed and wasn't getting points. If anything, we glorify war by making games too easy. War is not pretty. We shoot our own men by mistake. Men fly knowing that only some are going to return. Part of the job with Falcon is to scare the hell out of people and let people know that people die!"

Noah Falstein (Battlehawks 1942) was more concerned about moral responsibility. He asked, "If we're doing our job right and we make the game fun enough, what happens when people like the game and decide to opt for the reality"
The theme song’s running bass line suggests the tension of the upcoming clash between two football titans. The camera pans across the field of a packed stadium. A camera moves in for a close-up of the blazer-bedecked reporter behind the desk. The Cinemaware Football League is on the air!

From the opening shots described above through the detail of the coin toss, the spoof commercials (e.g. "In and Out Brake Centers: We hardly slow you down!"), the halftime show, and the animation of the teams themselves, TV Sports: Football offers an exceptional amount of atmosphere. True to the company’s tradition of building showpiece games which capture a style from a particular genre of entertainment and developing a game around it, the first of a projected series of sports games blends sound, action, and color into a unique approach to football.

Pre-game Report

The realistic animation offers some of the flavor of watching football on television. Human players have the option of competing solo against the computer opponent, head-to-head against each other, or teaming up against the computer opponent. Sound effects are comparable to the impressive Head Coach and are enhanced by the lively musical score. The graphics and animation are exceptional. In addition, the "camera angle" with the player's oblique (from behind) top-down view offers a chance to see plays developing and exploit the opposition's weaknesses. It is a familiar enough view to make the player instantly comfortable and is less unsettling than the "inside-the-helmet" perspective with its lack of peripheral vision in GFL Championship Football. Also, the flow of play is more forgiving than either GFL or 4th & Inches with their demands for precise patterns.

Play selection is less sophisticated than NFL Challenge, Head Coach, Pro Football Simulator, or MSFL Pro Football. Unless one is statistics-oriented, however, this may not be as limiting as it originally seems for two reasons. First, it is possible to extemporize plays by not handing off to the intended ball carrier, keeping the ball oneself, or passing unexpectedly.

Second, it is possible to call a mirror image of the plays. After selecting the formation, one simply holds down the fire button when choosing a particular play and the pattern will be reversed.

League play is facilitated by a built-in statistics package that automatically updates the league after each game. The clipboard even keeps track of individual statistics for most positions. Unlike some earlier sports games where only one human player could play against a league of computer operated franchises, TV Sports: Football offers several human "owners" the chance of playing against each other and the computer operated teams in the league. This even adds additional color to the "telecast" of the game in that the scores of computer owned teams versus computer owned teams can be "broadcast" during games that involve human owned teams. That is the good news about league play. The bad news is that the teams are rated according to an arbitrary points system rather than actual NFL statistics. This approach will more than likely make "Draft Day" a rather controversial event in most multi-player leagues, since one cannot simply type in a verifiable statistic but must come to agreement on a subjective rating with regard to the player's Speed, Strength, Hands, and specific Ability for each position. These ratings, in turn, are added together to create a talent point total. Unfortunately, one cannot perform a complete edit on a team because each player's total talent points are already locked in. If a team's quarterback starts with 24 points (indicating he is the team's best player), one cannot change him to 23 points and make the halfback into the 24 point player. This also minimizes the importance of trading since one cannot edit substantially different players at a given position. One cannot give up an excellent linebacker to trade up from a mediocre to an excellent quarterback, for instance.

Scouting Report

Game play is entirely joystick-driven. This helps the pacing so that one does not have to keep looking up plays in a complex playbook. Players choose from four basic offense and four basic defensive formations, followed by four basic patterns. Active players (those controlled by the human player) are marked by a flashing cursor, but the other players on the team play "intelligently," as well. If the human player decides to go with a designed running play, he simply presses the fire button and the computer will execute the play as selected. If the human player wants to control the flow of play himself or definitely wants to throw a pass, he simply pulls back on the joystick.
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The best way to understand what Modem Wars is, is to realize that its original title was "Sport of War." In many ways, this is a better title than Modem Wars. Why? Because Dan Bunten's new game distills many of the basic elements that make up war as well as sport. Competition, ability to develop strategy and tactics in real time, tension, and lack of information as to the opponent's intentions are all basic elements in both war and in sport (as well as in Modem Wars).

The basic units of "play" are similar as well. In warfare you have infantry, cavalry, artillery, leadership. In football, the sport that may come closest to emulating war, you have linemen, backs, quarterback, and coaches. In Modem Wars you have grunts, riders, boomers, a command center and spies.

So, why did EA decide to call the game Modem Wars? Simple, the title tells you a basic fact about this game: it is a wargame designed to be played by humans via modem. Most computer war games are historical simulations of famous battles or combat environments. They are most often played versus a computer opponent. Modem Wars has the option of a computer opponent, but as you will see below, the computer opponent is not what this game is about. This is a game for humans to compete with humans and the best way to do that is to have each player seated at his own terminal. Modem Wars was designed with this in mind.

**Calling the Play**

(Play Elements)

In Modem Wars you are the quarterback or general of an army of mechanized warrior robots. From inside your Command Center (comcen) you control the actions of your units which are organized into battle groups. Terrain varies with each battle. Plains, streams, forests, slopes, and plateaus all play a role in your planning. Although the terrain varies from battle to battle, the basic playfield remains constant. Forces set up on opposite sides of the center line.

There are two back lines, one in each player's territory. Crossing the center line adds points to your score, as does crossing the opponent's back line. You play the game as a wargame, but you accumulate points as if it were a sports game.

You win by either knocking out the opponent's comcen or by outscoring your opponent.

In addition to getting points for crossing the center and back lines, you gain points by damaging the enemy comcen. After you master the basic elements of game play you, and your friends, will move on to develop personalized strategies to maximize scores.

Modem Wars is more like Chess or Stratego or any of the computer sports games than it is a wargame (which often have a low level of repeat play interest). You will play a lot of games, and will begin to keep records of scores. Perhaps you will even set up a league. Modem War interest groups are already in operation on Quantum Link and getting started on other systems such as Compuserve.

Note: There is an error in the documentation in regards to the scoring system. According to the rulebook, the points you receive when you win "by terrain points" equals "the number of terrain points earned divided by two and added to 300." In reality, the number of points you receive in a win "by points" is "the difference between the scores (as they appear on the screen) at the end of the battle divided by two and added to 300, but not higher than 450."
Special Teams (Features)

Beyond land combat, there is an air game. In most scenarios, the comcen is armed with missiles and drones. The drones are primarily used as offensive firepower against the enemy comcen (although they can be used to bomb enemy troop concentrations). Missiles are primarily used as defensive weapons against drone attacks and, to a lesser degree, against land units within missile range of the comcen.

There are seven scenarios. "Scrimmage" is a learning scenario. "QB Sneak" features a small mobile offense versus a larger but slower defensive force. "The Bomb" is a training ground for air combat where each side has only a comcen with drones and missiles. "Face-Off" features 14 speedy riders per side (a lightning warfare scenario). "Sluggers" is a heavy artillery (boomers) slugfest. The two big scenarios are "Full War" and "Defender." "Full War" is just what it says. All unit types and game features are available to you in fighting an equally well-armed opponent. "Defender" is similar to "Full War" except that the attacker has more drones and a movable comcen and the defender has more missiles and an immovable comcen.

In "Full War" and "Defender," you have available a list of advanced commands such as cloaking, digging in, blitzing, changing formations, and setting individual targets for your artillery (normally units select their own targets).

Training Camp (The Solo Trainer)

The solo trainer is just that: a trainer, not an opponent. Do not buy this game if you only plan to play against the computer. Playing against the solo trainer is a frustrating experience. The solo trainer is predictable, but deadly. In "Full War," the trainer opponent will mass most of his units into one huge force which will march relentlessly towards your back line. This can be countered by well-placed dug-in groups just on your side of the river. However, the solo trainer is deadly with his drones and missiles. You will rarely get a drone hit on his comcen (at least I couldn't), but he will rarely miss yours. He rarely misses with his drones, you will rarely hit his drone with your missiles.

Modemless Wars

by Tom Cleaver

Dan Bunten's Modern Wars allows you to humiliate an opponent across the miles. The miracle of the modem makes this possible, but suppose you want to destroy an opponent across the table? Is there any way you can play Modern Wars in person? You bet there is. In fact, there are two ways. Two Commodore-64s can be wired together if each of them has a modem. Instead of connecting your modem to a phone, just connect it to the other modem. This is commonly known as a "null modem." If the two modems are not identical, they may be incompatible and this technique may fail.

If you do not have a modem, you can still play Modern Wars by connecting two C-64s together via the User Ports in the back. This is done with a "null modem cable" which simply connects User Port to User Port. So far as I know, a C-64 null modem cable is not available commercially, but it's easy to make.

Simply go to an electronic parts store and ask for 12 feet of telephone cable and two 24-pin card edge connectors (12 pins on each side). The telephone cable is the standard kind with four conductors—black, yellow, green, and red. The card edge connectors have 12 "pins" on the top labeled "A" through "N" with letters "I" and "G" omitted. The cost should be about $10.

Now, wire the two connectors together using the phone cable as shown below. This will require a soldering iron.

<table>
<thead>
<tr>
<th>User Port Pin No.</th>
<th>B</th>
<th>C</th>
<th>M</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>red</td>
<td>yellow</td>
<td>black</td>
<td></td>
</tr>
</tbody>
</table>

Since it is possible to plug the connectors in upside down, mark "Top" on the appropriate side of each one.

When you initialize your "Play Disks" for Modern Wars, use these parameters:
- Type of modem: Hayes & RS232
- Carrier: Force On
- DTR Logic: Normal.

Give your phone a rest, get wired, and enjoy!
Explore the Enchanted Lands of Deruvia!

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Those drone hits on the comcen are deadly. When stunned your comcen loses its vision for a time. That’s when
the solo trainer gets in his most devastating blows.

When playing a human opponent things are much more evenly matched, and if not, you can handicap the better
player.

A League of Warriors

One of the nicest features of Modern Wars is the game film utility. After a battle you can replay the "game film" which
plays back the battle in high speed. You can save those game films for study, sharing, etc. By the time you read this review
Dan will have uploaded to Quantumlink and Compuserve a utility called the
"Modern War Game Film Utility" which will allow you to upload your game films to BBSS. The program will also allow you to
calculate your "batting average", and con-
tains documentation on how to write
special utilities to analyze battles. Look in
the EA area of Quantumlink. At press time it
was not determined where the program
would be located on Compuserve. You
might drop into the Gamer’s Forum and
look there.

Can You Cut It?

Dan would like us to believe that
Modern Wars is “a wargame for the rest
of us”. That is, Modern Wars is a fast
moving game that does not get bogged
down in the minutia of detail so often as-
associated with wargames. Dan feels that
Modern Wars is for those gamers who
want to “play war” but are turned off by
the detailed rules of the typical wargame.

Has he succeeded? Well, yes, sort of.
There is no question that Modern Wars
distills the essence of warfare into basic
elements that can be quickly learned.
There is no question that Modern Wars
plays fast and is exciting. The problem is
that its strength (real time play) might
also be a marketing weakness. A sizable
number of gamers are not used to com-
bining complex strategic thinking with
real time situations. They can spend
hours ordering tens of thousands of men
into mortal combat, but they wimp out
when they have to think under fire. They
want to play chess instead of speed
chess. They want to analyze instead of
act. As the enemy drones zero in on their
comcen, they throw up their hands in
frustration when knocked out before they
can extract themselves from the
maelstrom of fire that has engulfed them.
Hey! War is Hell! You will learn this when
you play Modern Wars. Some of you will
not like it, but for “real” gamers, those of
us that don’t eat quiche, Modern Wars is
swell!

The Editor Versus
The Designer

A Battle For Bragging Rights

In September 1988, Electronic Arts
brought together two of computer
gaming’s "heavyweights": CGW Editor
Russell Sipe and Award Winning
Designer Dan Bunten. The occasion
was a pre-release Modern Wars
match. On the one side, there was
Sipe who, over the course of eight
years, has probably seen more com-
puter games than anyone in the
hobby. His advisors were Dave
Maynard (product manager for
Modern Wars) and CGW Associate
Editor Johnny Wilson. On the other
side, there was Bunten who designed
Modern Wars.

The first battle was a toss-up until
the 3/4 way point when a group of
Bunten’s riders found Sipe’s drone-
stricken comcen crossing the river.
With zealous glee, Bunten pummel-
ed Sipe into oblivion. Using the
communication feature of Modern
Wars, Dan took multiple oppor-
tunities to gloat on his way to victory:
"I’ll teach you now! Here’s for that
bad review you gave me a couple
years ago!" In the second battle, Sipe
was secretly given additional drones
as a handicap. Bunten screamed
bloody murder when the additional
drones were unleashed. As the
drones did their dirty work, Sipe typed
a message "You think that review two
years ago was rough, wait ‘til you see
what happens if I lose this battle!"
Now, we are sure that Dan knew we
were kidding, but it was shortly after
this that two of Sipe’s groups found
Dan’s comcen skulking through a
forest. What happened next wasn’t a
pretty sight. Score: Dan-1 Russ-1.
Electronic Arts media relations direc-
tor Dave Dempsey then suggested
that the match be ended in a 1-1 tie.
Good move Dave!

Caption 1: Dan cheers as the
knockout blow hits in battle one.

Caption 2: Wilson (left) tells a
stunned Sipe "I told you not to try to
cross the river with your comcen!"

Caption 3: The smile is wiped off
Dan’s face as he concentrates on the
enemy drones in battle two.

Caption 4: Maynard (left) and Sipe
enjoy a film replay of battle two.
Descent Into The Maelstrom

Sir-Tech's "Wizardry V: Heart of the Maelstrom"
by Dennis Owens

Described in the tradition of the classic first three scenarios of Wizardry, Wizardry V: Heart of the Maelstrom offers a mystifying, satisfying romp through the temple of La-La, the caverns beneath it, and, finally, into the abyss itself in search of the aged Gatekeeper who guards our plane of existence from the forces that swirl amid chaos.

A return to the format of six adventurers questing through the darkest, dampest reaches of a cavern in search of world-salvation and monsters to whom, Heart of the Maelstrom is, at once, both more simple than Return of Werdna and improved over the first three scenarios.

The game boasts a stronger storyline than most of its predecessors (Wizardry IV: Return of Werdna being the exception), larger game maps, and enough other changes to its set of magic spells and method of play to offset its still basic (after all these years) graphics display.

There are, now, characters to talk to in the dungeons, pools to swim in, door locks to pick, monsters to summon, and enough treasure and magical artifacts to stock a well-supplied retirement castle for many decades to come.

The NPCs (non-player characters) are unmistakable. They 'approach' rather than simply appear and 'wait' prior to attacking or being attacked. You can talk with them, fight them, barter with them (either to buy or to sell some item), give them items or gold, "Katu" them (to make them like you), steal from them, or give them items or an item which seems, at least, relatively odd or almost any item which Bollac's won't buy should be held onto.

Wizardry V: Heart of the Maelstrom comes on five double-sided disks (of which, only nine sides are used) and contains eight levels of dungeon. The maps no longer fit neatly inside 20x20 grids. Instead, the dungeons twist and turn, much more like natural caverns. Also, there are no longer wrap-around dungeons in the Wizardry universe. When characters start to walk west in this game, they really walk west. The only way back is to walk to the east.

Such a significant change in Wizardry's mapping design is especially curious at a time when many maze games are trying to de-emphasize paper and pencil mapping. The game is difficult to map (at least without erasing, cursing, and using lots of graph paper) because, upon entering a new level, there is no way to tell which way the dungeon will stretch out and whether it may branch away in a number of directions or not. You must also pay attention to whether you are north, south, east, or west of the exit up to the castle. Otherwise, a "Dumaptic" spell will only confuse you.

Also, there are pools in the caverns and your characters have swim ratings which can only be improved by swimming. Some waters in the pools help, some hurt, and some hide neat things that you can get if you reach bottom. You have to be careful, though, not to swim much deeper than your character can handle. Should you dive more than one level beneath your ability, for example, you might not be able to make it back to the surface.

It Must Be Magic

The spell system has been slightly revamped. You still learn spells only by advancing and returning to the Inn, but there are now 63 to learn rather than the earlier 50. Gone are old standbys like "Matu" and those spells that were never really useful or were semi-redundant (like "Manifo", "Lorto", or "Badialma"). Now, some spells have been enhanced and used to replace older spells, but some seem to have only had their names changed. Others, like "Litofeit" (which allows the entire party to levitate a few inches above the ground) because, upon entering a new level, there is no way to tell which way the dungeon will stretch out and whether it may branch away in a number of directions or not. You must also pay attention to whether you are north, south, east, or west of the exit up to the castle. Otherwise, a "Dumaptic" spell will only confuse you.

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Unrefined Observations

Not all refinements in the game play have made the game smoother. Hidden doors are now only visible if you specifically search and/or cast a "Callific" (reveal door) spell. The old system, where "Lomilwa" revealed secret doors, was much more efficient and did not slow down game play nearly as much.

Another problem is that the game sometimes is slow because the game requires so much disk access. An emerging problem in the Wizardry series (first evidenced in Return of Werdna is that...
the increase in the number of disk sides and game size seems to have overwhelmed the 8 bit machine's ability to access the information needed for game play.

In spite of the requirement that the entire game must be loaded before you can play it and the fact that such a lengthy boot-up is supposed to enhance game play, the game continues to access the disk for every message, battle, discovery of treasure, special item, etc. Very little can happen in this game without disk access. You can now leave a party in the dungeon, return to the castle, and start a new party if you desire. Several parties can be left in the maze at the same time, so you can even launch rescue missions and only pick up the characters you want from the party you leave behind. Be sure, though, not to quit and leave the game while your party is in a hard-to-reach place. The quit option resets the level, so a party behind a magical door or somewhere inside the jigsaw bank may have to wait a while before you can equip and prepare a rescue party to go and recover them.

It is no longer necessary to keep going back to the castle, unless you just want to learn new spells or sell off all your loot. Pools of water located here and there will keep characters stocked up on magic and health points.

In addition, experience points build up fairly quickly and characters can transfer into the game, but only from earlier Wizards' scenarios.

Note that in the first versions of the game released to the public, certain sets of monsters (located on level four) will freeze the game when a battle is initiated. They are easily recognizable, because they either have nothing listed where their descriptions should be or they fill the description box with colorful computerese gobbledygook. Whenever you contact one of these sets of monsters, simply run away. This has always succeeded at running them off at those times. If you do not run, you will have to reboot as soon as one of those monsters either attacks or is attacked. If you have not saved the game recently, you will find yourself very sorry, indeed. [Ed.: According to Andrew Greenberg, the program only does this when a disk swap has occurred which the program did not initiate. The program is problems easily repaired, however, by making another backup disk straight from the master disk and transferring the characters in the party to the new disk. Apple users with two disk drives and extended memory should make certain that they load the game from only one disk drive.]

This game is a must for any adventure gamer's computer-game library.
Abstracts From The Journal of Computer Game Design

by David Mullich (The Prisoner and Wilderness)

David opened his article by quoting a motion picture studio executive who had recently stated, "Computer game designers are a much brighter bunch than screenplay writers. Unfortunately, most of you computer people don't know the first thing about composing a story." David used this remark to challenge his readers to consider "... how the principles of writing can be applied to computer game design, making it as valid a medium for storytelling as is film, theater, or even literature."

He stated that the focal point of any creative work is the concept. He defined story concepts as composed of three parts: character, action, and conflict. Without a main character that makes decisions based upon his dramatic need, the story is lifeless. "Story is action" he emphasized. Finally, Mullich reminded his readers that "Conflict is the basis for all drama in all mediums. In high school English, you've probably heard conflict categorized as Man vs. Man, Man vs. Society, Man vs. Nature, Man vs. God, Man vs. Himself, etc." Without conflict, there is no satisfying resolution to either story or game.

Mullich's final point was that too many games are poorly constructed from a dramatic standpoint and degenerate into an empty series of confrontations. He challenged designers to utilize a plot with a beginning, a middle, and an end. "The beginning presents the story's premise, introduces the main character and initiates

(Continued on page 41)
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Though the Demon's Winter may chill your bodies, may courage, honor and perseverance warm your souls!

APPLE, C-64/128.

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Abstracts from the Journal of Computer Game Design

the action." It is the story's "set-up." In the course of the article, he suggested that too many games leave the set-up to the documentation or, worse yet, one screen at the beginning of the game. Next, he spoke about the middle story segment—the confrontation. He stated that game designers seem to be doing a great job in terms of providing confrontation.

The final portion of a game/story is the end—resolution. "Few games," he noted, "have made any progress toward expanding the game's ending, the Resolution, beyond a single screen display announcing the results of the final conflict. This may be due to the binary thinking of game designers, for most games have only two possible outcomes. Either the player accomplishes his goal (destroyed Werdna, found the Holy Grail, beat the end—resolution). "Few games," he noted, "have made any progress toward expanding the game's ending, the Resolution, beyond a single screen display announcing the results of the final conflict. This may be due to the binary thinking of game designers, for most games have only two possible outcomes. Either the player accomplishes his goal (destroyed Werdna, found the Holy Grail, beat the end—resolution)." It is the story's "set-up." In the article, he argued that in most games, the players have either won or lost. Perhaps there is an even greater evil behind Mordor. Perhaps the South will rise again." He concluded his article by voicing the desire that designers could come up with some "novel" approaches to game design by looking through the eyes of a writer.

**Bringing Characters to Life**

by David Graves

(Hewlett-Packard engineer)

In JCGD 2.2, David Graves followed up on his comments in the second issue of JCGD (and abstracted in Computer Game Forum—Winter 1987, p. 23). In that first article, he talked about making characters more realistic by resolving lower level logistic problems. In the most recent article, he emphasized the need for characters to have motivation. He observed that, "No organism's behavior is ever unmotivated. Thus, in order for characters to display behaviors that appear reasonable and believable, they must have their own motivations. These motivati-

**Interface Sophistication, not Process Intensity**

by Greg Costikyan

(a pen and paper game designer who goes way back)

In JCGD 1.6, Greg submitted a short rebuttal to Chris Crawford's "Process Intensity" article (abstracted in CGW #47, p. 51). In responding to Chris' contention that an intense number of mathematical calculations (high crunch per bit) was important to a successful game, Costikyan argued that the calculations are not important if the player does not realize what is going on. He offered an insightful example:

"Suppose that we have a computer war-game, in which weather is an important variable, but the interface never makes this fact clear. On turn one, units can move from Brussels to Le Havre. On turn ten, they can't—because it's raining. The player doesn't know it's raining and is disgusted and puzzled when he can't make the same move he made before." He went on to point out that in a pen and paper game, where the players drive the system, this problem cannot occur because the players have to read the rules and apply the movement modifiers. However, any number of systems can be impenetrable to players if the interface does not communicate successfully. "In other words," he concluded, "the game should only process information to which the player has access.

**What is a Computer?**

by Chris Crawford

Chris began his discourse with a conventional engineering definition of "computer" that did not really accomplish anything. Then, he indicated that the reason that the engineering definition fails is because, "... the computer is first and foremost a tool, not an object... defined not by what it is but by what it does."

From there, Crawford offered examples of successful personal computer products and pointed out the primary element in the success for each one: interaction. He noted that spreadsheet users play with the numbers, word processor users play with the words, and BASIC users play with the programs. "Play," he contended, "and interaction are closely couple concepts. Rich, deep interaction is indistinguishable from play." He concluded that play comes closer to the essence of personal computing than any other experience. Because the total flow of information—volume times speed—remains higher for games than for other applications, Crawford suggests that games offer more interaction than any other software product.

CGW
Curse of the Fallen Angel

Sierra's "Police Quest II: The Vengeance"

by Michael Chaut

One year has passed since Officer Sonny Bonds brought Jessie Bains (the Death Angel) to justice for his crimes. The world of drugs and violence has been silenced and the city of Lyton is once again peaceful and serene. In Police Quest II, the latest edition to Sierra's "Quest" series and sequel to Police Quest, the story begins with Officer Bonds promoted to the position of Homicide Detective. All is calm until Bonds learns of the upcoming retrial and ultimate escape of the Death Angel. (Bains apparently appealed on a technicality and was granted another trial.)

What's New On The Beat?

Once the credits start, the viewer realizes that the graphics are getting better all the time. Through use of their new SCI (Sierra Creative Interpreter), Sierra has doubled the graphic resolution capabilities of their previous release. They are now able to add cinematographic touches such as zoom shots, split screens and film wipes.

The game starts with Sonny arriving to work in the Lyton Police Station. After parking, one should give the car a "once-over." As in all Sierra games, it is important to take, look, and/or read everything that can be seen (in some cases, things that are not immediately visible). Once inside the station, it is time for a little exploration. The area should be canvassed to find out where things are; Sonny should check-in at the homicide office; and locate his desk, check messages, and gain computer access. Before leaving the station, players will need to make sure Sonny has his keys, picks up his gear, visits the firing range, and most importantly, finds and takes his field kit. By this time, it should have become apparent that Sonny's mission is to recapture Bains before the murderer can fulfill his death threat made at the conclusion of Police Quest I.

In order to win the game, players will experience the daily ordeals of a homicide detective (i.e. fingerprinting crime scenes, questioning witnesses, booking evidence, etc.). One must not only capture Bains, but must do it "by the book," building your case as you go. When he is caught this time, he needs to be put away for good!

The game forces players to vicariously face life-threatening situations where split second timing and decisions make a difference between life or death. Players learn about working hand-in-hand with other branches of police work such as the underwater investigation squad, coroner's office, and S.W.A.T. Team. Above and beyond all else, one must always follow proper police procedures in order to succeed in this game. When in doubt about procedure, it is helpful to refer to the Homicide Officer's Guide which is included with the documentation.

Sierra has made some major strides in technology across their product line. First, this game supports a mouse and three (3) different music cards (the Roland MT-32, the AdLib & the IBM). This reviewer used the Roland Multi Timbre Sound Module (MT-32), a 32-voice synthesizer for the IBM which is comprised of eight individual synthesizers and a percussion sound module. Included with the MT-32 is the MIDI Processing Unit that provides the interface between the MT-32 and the computer. Mark Seibert's first venture utilizing this new technology offers a musical score that is simply spectacular. It actually changes rhythms and themes as one moves from one scene to another. So, when Sonny is in a scary and dangerous scene, one hears foreboding music and when Sonny is reunited with his girlfriend, one hears happy music. Although it is expensive, the Roland MT-32 seems well worth the expense. Having used the MT-32, it is hard to go back to games without music card support.

Second, the command interface has also been changed. The player no longer sees a command line and cursor at the bottom of the screen. Now, to interact with the game, one simply begins typing and a Message Input Window appears. In addition, the "F3" (for the MS-Dos version) "retype" or "echo" key only works for the current command sequence, speeding up the game. Those who enjoyed the earlier game will be pleased to note that Sierra has kept the handy "action keys." Also, the difficult and tricky manual driving sequences have been eliminated. Once Sonny is in the car, one simply types in the location where he needs to go and the game does the rest.

Avoiding Internal Affairs

Warning: This section of the review contains specific hints. Players should make certain they read the Lyton Police Department Homicide Officer's Guide included in the documentation. It is a major source for clues. One must know and utilize proper radio codes, vehicle codes, and penal code citations, as well as correct police operating procedures for running an investigation, in order to win.

Further, the player should save the game regularly as Sonny moves from situation to situation. Since Sierra now
conveniently provides the player with the ability to save twenty (20) different game positions within a directory, this provides the player with an easy method to backtrack.

It is important to visit the shooting range and adjust Sonny’s gun sights. This assures that when his gun is fired, it will find its mark. When you are at a crime scene make sure everything is dusted for fingerprints. Everything in your field kit should be used. It is there for a reason.

If someone offers an item to Officer Bonds or he finds something that appears meaningless, have him hold onto it. In actual police investigative work, one never knows when something that seems to be insignificant will turn out to be the key to solving a crime. When arresting felony suspects, make sure Sonny calls for a back-up, has his weapon drawn, identifies himself as a police officer, etc. He should be certain to question all witnesses. When reluctant witnesses are encountered, they should be questioned again.

Don’t allow Sonny to overlook using other branches within the force, the computer, and the telephone to help with the investigation. It is even possible to dial “411” for directory assistance during the course of the game. Make sure that Sonny pays close attention to the instructions given by fellow officers and superiors. It may even help to write down their instructions. Remember always how important it is to stay in touch with your partner, he is your lifeline.

Players should look for clues on the screen. If an object on the screen cannot be identified, it is time to investigate. In order to win this game with all possible points, players will have to really do some old fashioned police work. One can win without getting the maximum number of points, though.

Press Conference

It is obvious that in this game as in its predecessor, Jim Walls’ “on the job” experiences add to the element of realism and danger that are evident throughout the game. In fact, Walls confirmed in an interview with this reviewer that all of the situations in this game actually did happen to him or a friend. For example, the sequence with the diver actually occurred and the real Jessie Bains (his name was changed) did escape (and is still on the loose).

Police Quest II is basically linear in nature. In order to win, players have to accomplish one task after another. However, the designer has given us many more puzzles and pitfalls than in his earlier outing. In any case, this reviewer is convinced that Police Quest II: The Vengeance is going to be hard to beat! The advanced graphics, intriguing story, and flowing animation make this story come alive. The whole package leads us toward a new apex in interactive game fiction.

Once again: Remember to “Be careful out there!” CGW

GRAND ALLIANCE

“Grand Alliance” is a fully computer moderated play-by-mail game which involves the battle of survival between human and alien races. Players represent either a member of the human race or of the alien race with the universe as a setting. The game is played on a map of three parallel levels where each level is composed of 240 planetary systems. Each player must solve military and political problems within own camp before war can be waged effectively against the opposing race. Each side is faced with the same situations and problems to overcome.

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In the November, 1988 issue of your magazine, you review the air combat simulator, Battlehawks 1942. You preface your remarks with a few notes about air combat board games and air combat in general and you are indeed correct in asserting that in air combat (real or simulated), "Altitude is life." But you err when you state that the credit policy for German air-to-air kills was more lenient than that of the Allies, which implies either that German victory totals are inflated or that Allied victory rosters are more creditable or both. 

Most air war historians consider that Germans (and the Finns) kept the most accurate records of air-to-air kills and had the most stringent requirements for being credited with an air-to-air victory. German policy was not to accept a claim without documentation in the form of eyewitnesses, actual wreckage, killed/captured aircrew, or gun camera footage. Also, there were no shared kills. If any doubt existed about the victory, credit was assigned to the unit involved, not to any individual pilot or crewman.

In contrast, there was no definitive American policy, each Air Force determining its own criteria. The 8th Air Force, probably the best known of the U.S. Army Air Forces, enabled aircrews to claim strafing results (ground kills) in a pilot's totals. They also caused confusion by counting shared kills into victory totals—one pilot ended the war with 21.84 kills (whatever that represents)! It is generally accepted that American airmen wildly overclaimed early in the war, but later, when most aircraft were fitted with film cameras, victory claims became much more accurate.

The British had no official policy concerning air-to-air victory claims and it is thought that most British airmen overassessed their performance. If anything, the Russians were worse than the British. The real reason why German pilots were able to run up such astounding victory totals lay not in the record-keeping, but in the nature of the war.

The Germans initiated war in September of 1939 and were involved until 1945. Poland, France, Britain, The Eastern Front, the Defense of Germany—German pilots were involved from day one and remained in action until the war was over or they were dead! There was little opportunity for rest and recreation—small wonder the German pilots scored such high totals—they were at war every day for five and one half years.

Contrast this with the Allied experience. Britain did not get involved in the war in earnest until the spring of 1940; Russia entered the war in June, 1941; and, of course, the Americans entered the war after Pearl Harbor. Russian pilots, like their German counterparts, were in the fighting for nearly all of the war. The British and the Americans, however, had a policy of rotating aircrew out of combat once they had completed a certain tour of duty.

This misunderstanding concerning German victory credits is an old one, stemming in part from confusion with the almost lenient criteria for awards and decorations in the German Air Force, but mostly from an unwillingness on the part of the Allies to accept the German figures.

Roger Horly
San Antonio, TX

Ed: All right, I'll erase the 84/100ths of an airplane silhouette from my fuselage, but I want Lucasfilm to install the German award criteria immediately. Thank you for your enlightened opinion on a longstanding debate. You might note that, in contrast to one of your points, The Simon and Schuster Encyclopedia of World War II states, "... while the Luftwaffe gave one credit per plane on shared kills, the participating pilots had to decide among themselves which one got the credit, since no shared credits were allowed; generally the junior pilots were given the shared credits to build up morale and scores." (p. 3).
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Designers' Notes
by Arnold Hendrick & Sid Meier

When Microprose finished Project: Stealth Fighter for the C-64 in October of 1987, it was clear than an IBM version was next. Inexpensive PC clones were flooding the market, making 16-bit computing affordable within the American home.

The marketing debate revolved around whether "me too"flight simulator releases had glutted the field to the degree that our time would be more profitably spent elsewhere. Sid Meier was unconvinced by this viewpoint. His philosophy was and is "If you do a really neat game, people will buy it, regardless." Bill Stealey, marketing maestro, was more direct: "I don't care what the other guys are doing, give me a hot IBM product and I can sell it, guaranteed."

Normally the original creators have a big say in conversion design, but in this case the original designers (Jim Synoski and Arnold Hendrick) were burnt out by that effort. Fortunately Sid Meier had a barrel of new ideas for improvements. These included cockpit situational displays with more data, new algorithms for greater mission and radar variation, expanded enemy AI (artificial intelligence). At the same time Andy Hollis had just finished the IBM Gunship conversion. With that experience (his second major 3D graphics package), he was full of new ideas for further improvements in our 3D graphics technology.

It was clear that Sid and Andy weren't talking about a C-64 conversion any more, but an entirely new design. The only thing borrowed from the C-64 would be the game scenario concepts, military equipment research data, and perhaps some flight dynamics algorithms.

The original schedule called for an optimistic 106 man-weeks of work spread over six calendar months and six or seven people. In reality, it took about double that effort over nine to ten calendar months.

Building the Product

Developers at Microprose have specialties: design, data, programming, art, sound, testing, documentation, etc. Fourteen different people worked on the IBM F-19 Stealth Fighter, half of them jumping in when their talents were needed, then moving elsewhere when the job was done.

The biggest single task in a computer simulation is the programming. F-19 Stealth Fighter was planned for three or four programmers, working together, who spent over two work-years writing code. In team programming, it's vital that somebody write the "glue", the "master loop", the main program that calls the other components as needed. The responsibility of the "master loop" fell to Sid Meier. His former life as a Systems Analyst prepared him well for this task.

Other areas of responsibility fell to Andy Hollis (3D graphics system), Bruce Shelley (3D world databases), Max Remington (3D objects), Jim Synoski (the "everything else" man), Arnold Hendrick (documentation), and Ken Lagace (music and sound).

Testing The Product

The final hurdle for F-19 Stealth Fighter was testing. The entire Quality Control group got into the act, working late nights and through the weekends. Before the dust cleared over 600 man-hours had been spent hunting bugs, not to mention the programming time spent fixing them. Bug lists run many pages, with bug ID numbers in the hundreds, for weeks on end.

The complexity of testing long ago forced MicroProse to abandon outside testers. A full-time professional Quality Control (QC) (or woman) can find more bugs, and more important bugs, in one day than an "evening amateur" can find in a week. Complicated products like F-19 Stealth Fighter require special testing tricks, including special game data files that "force" uncommon situations, and special testing hardware systems that let a programmer "break into" the game to see what's going wrong. Even "silly" bugs require a knowledgeable tester. For example, if play tester Al Roireau didn't know that the F-19's maximum speed was Mach 1.1, he might have never realized level flight reading 1500 knots on the HUD was a bug!

Success out of Failure

The original schedule planned for F-19 Stealth Fighter's completion in August and shipment in September. Shipment before September 30th is deemed vital in marketing and sales because many large distributors and stores "close off" purchasing for the year on that date.

Unfortunately, development stretched to the end of October. Worse, the printing company selected to produce the manual took five weeks to do a two-week job. Shipments didn't begin until mid November. Traditional marketing and sales wisdom says that a release that late in the season will greatly injure the sales volume.

However the MicroProse's sales force is used to feeling like the Light Brigade at BalACLava. Against all odds they succeeded in getting, at least, distributors and stores to carry the product. The result: F-19 Stealth Fighter is the most successful release in MicroProse history. The initial production run will sell out sometime in January 1989, just two
months after the release, surprising everybody (including the MicroProse product management people!). The investment of 4.2 man-years, including over 2 man-years of programming time paid off.

The F-19 versus the F-117A

On November 10th 1988, the US Air Force publicly released a photo and some brief information about the Stealth Fighter they’ve been flying since 1983. How does the “real thing" stack up to the stealth fighter created by MicroProse?

Size: The F-117A is dramatically smaller than the F-19. In fact, it appears smaller than most known combat aircraft. Pundits have called it “a kite with a cockpit". Although both stealth fighter designs have one pilot and two engines, the F-117A almost certainly has much smaller power plants than the two monstrous F404’s MicroProse put into their F-19. Smaller size does mean that more airframe can be built from composites, making the plane lighter and less reflective to electro-magnetic radiation. In short, the tiny F-117A is probably more "stealthy" than the F-19.

Performance: Compared to dogfighters like the F-16 and MiG-29, all stealth fighters are presumed inferior. For example, the F-19 has good instantaneous turn rates, but sustained turning is poor, causing it to "stall out" in lengthy turning duels. The F-19 also lacks afterburners, since it uses slats to mask the exhaust signature. Even with huge F404 engines the Mach 1.1 speed is possible only after some fuel weight is burned up. The F-117A’s size would give tighter turning, but the large cockpit hump probably causes significant handling problems. On the other hand, the F-117A may borrow the exhaust suppression technology of the B-2, which might permit afterburners. With these lighted, F-117A maximum speed should be higher than the F-19.

Armament: Stealth aircraft must carry all their ordnance internally. Here the large size and big engines of the F-19 give it enormous advantages. It has four internal stations, each holding two or three missiles or bombs (for a total of eight to twelve items, plus a 20mm cannon. The F-117A has perhaps one or two stations, each holding one or two missiles or bombs for a total of 1 to 4 items, one or two being most likely. The shrimpy F-117A almost certainly lacks a gun, since the 20mm Vulkan with ammo is too large and heavy, while no smaller gun is useful in air-air jet combat.

Avionics: Given sufficient miniaturization technology, size does not limit avionics. However, avionics are never cheap. An F-16 with minimal but modern avionics costs $10 million per plane, while the otherwise similar F-18 with full-range modern avionics costs over $20 million each. The USAF bought over 50 F-117A’s without knocking a huge hole in the defense budget. This means the F-117A almost certainly lacks all those useful devices on the F-19: zoom tracking cameras, FLIR imaging for night flying, laser designators, signal processing for cockpit “situation” screens, and state-of-the-art infrared and radar jammers. In comparison, flying the F-117A could be a “seat of the pants" experience where the most advanced device is the pilot’s eyeballs.

Summary: Overall the F-19 probably has superior avionics and weaponry, while the F-117A could be faster and is almost certainly more "stealthy." As a spy plane the F-117A does well. It would sneak in and out better than the F-19. However, air-ground attacks are probably more effective with the F-19. Note that the military advised President Reagan against using the F-117A to bomb Libya. Q probably because the F-117A couldn’t guarantee sufficient accuracy! In air-air combat the F-19 also appears superior. It has a cannon the other lacks, can absorb more damage, and has a unique zoom camera system that gives a pilot constant close-ups of his opponent’s maneuvering. The F-117A is probably appreciated more by the CIA than the USAF; it’s a stealth plane for peacetime. The F-19 is a fighter pilot’s dream: big, powerful, and rewarding to the smart warrior. It’s a combat plane, with plenty of punch to back up its stealth.

Top: F-19 as portrayed in Microprose’s F-19: Stealth Fighter’s documentation. Bottom: The Stealth Fighter (F-117A) as unveiled by the United States Air Force.

February 1989
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Running plays primarily depend on speed and the offensive player's "Ability" rating. Success at these plays will require quick cuts to the right or left of the defending player at the last possible second. It can be frustrating until the timing becomes natural. After one gets the timing down, though, it is exhilarating to beat the defender in such a way as to feel like you yourself have actually executed a great open field move against the opponent.

Nevertheless, there are weaknesses to the system. First, the active player flashes in the same color as the opposing team. It is extremely distracting to attempt to run from tacklers in your own colored jersey or even to find your player visually in an opposing backfield as you attempt to sack the quarterback. It would have been better if the player had flashed in a neutral white. Second, one's view of the playing field is limited by the camera angle. Therefore, one can only see around 20 yards downfield from the line of scrimmage. It is difficult to complete a long pass when one cannot see the receiver well enough to line up the throw. This makes a short passing game much more viable than a long game for all the wrong reasons.

Third, the documentation could have been more helpful. It seems extremely uneven to print a booklet in excess of 40 pages to describe the basics of football (so basic as to explain what a halfback is) and spend less than eight pages discussing the control system and features of the computer game itself. Further, the smaller booklet has a much more cluttered layout, uses different terminology ("Agility" rather than "Ability"), and is more difficult to read, even though it is extremely important that players master its contents.

Fourth, the offensive and defensive lines are treated as a lump sum entity (as in Computer Quarterback) rather than as individuals as in NFL Challenge, Pro Football Simulator, MSFL Pro Football, and the soon-to-be released John Madden Football. This takes away some of the strategy of getting the right match-ups. In Head Coach, one can exploit the computer opponent by using fresh substitutes to open up important holes on a given play. In Pro Football Simulator, it makes a difference whether the blocker is a good pass or run blocker. John Madden believes that individual match-ups are the key to the game. TV Sports simply "levels the playing field" on this matter.

Game Plan

TV Sports: Football is an ideal product for the casual fan who wants to compete against his buddies in an exciting league. The statistics compiler keeps league statistics so there is no hassle for the "commissioner" (although there is, as yet, no built-in utility for printing those stats). In addition, the commissioner has the option of using the "AUTO-play" mode enables the computer to resolve games when human "owners" fail to show up. Fans who want the detail, sophistication, and player identification of the National Football League will be disappointed with the current product (but might be interested should Cinemaware decide to publish an NFL team disk). The rosters can be edited so that actual professional athlete's names could appear and the ratings can be edited to generally reflect an actual player's abilities, but as mentioned earlier, this is not entirely satisfactory. Action game fans who want a difficult game may not like this game as well as a strict arcade game like John Elway's Quarterback, but players who want to capture the atmosphere, flow of play, and fast-moving competition of professional football should love it. CGW
Tales of a Martian Manhunter

Electronic Arts' "Mars Saga"

by Joe Sherfy

The good news is that the governments of Earth have finally figured out what to do about the overcrowding of prisons. They sent all of the convicts to Mars to work in the mines. The bad news is that you're stuck on Mars.

You were taking a leisurely trip when your ship developed engine trouble and this is where you've ended up. Well, at least, the Controllers of Mars have offered you a job. They want you to find out what happened to the outpost called "Pros-cenium." Should you be successful, they will do whatever it takes to help you get off planet.

Such is the situation characters find themselves in when they play Mars Saga, a computer role-playing game set in the far future. The game begins from the perspective of Tom Jetland, the character described in the fictional introduction. Next, players recruit additional team members to create the typical adventuring party. Each character is rated in several critical areas (might, agility, stamina, health, wisdom, education, and charisma) and has a particular background (e.g. police) to justify the acquisition of his individual skills (administration, battlearmor, language, etc.).

Should the characters need more development, players have the option of enrolling members of the party in the University. There, characters can improve their skills for a small fee. Improving a character's computer skills, for example, will enable the party to break into computer terminals all over the Martian settlement of Primus. There is also a Personal Development Center where characters can improve their attributes for a nominal charge.

Of course, it is possible to build up a character without tuition payments. Since, combat skills are improved by means of actual combat, one simply helps the badly understaffed police department in disposing of some of those nasty fellows running about the streets of Primus.

Warlords of Mars

The game's combat system is fast-moving and exciting. The screen brings the battle to life and shows the dispositions of each force. Then, players are given the option of taking control of all, some, or none of the characters. The computer can be assigned to handle any team members not under direct player control. Combat is played in turns with orders being given to each character in sequence. These orders are joystick-driven and characters with more agility are allowed to perform more functions in a turn. After all orders have been input, combat begins. Battles are resolved very efficiently. Then, it is "spoils" time for the victors and on to the hospital to treat any wounds received in the skirmish.

On the "Mars" of the game as on the earth of our reality, money is important. Within the game, money is necessary to better equip the team or improve the characters' abilities. Characters can check the computer system for want ads to respond to or visit the police station to find out about bounties to be collected. A lot of the money can be earned by gambling, but it is also easy to circumvent the system and earn money by enlisting team members, fighting a battle or two, and then, taking their credits. After that, one simply drops them from the team, enlists new troops (making sure they have a decent amount of funds on hand), and repeats the procedure. Of course, the sale of captured weapons is also a good source of income as in any standard adventure game.

The game has much to recommend it. First, it is very accessible. One can read the instructions and begin play in just a few short minutes. In addition, the game utilizes near-industry standards such as auto-mapping and joystick-driven interface to keep the game moving at an enjoyable pace. Newcomers to CRPGs should enjoy the combat system because they can allow the computer to handle the team until they are more comfortable with the game. Further, those who are more interested in the storyline than in combat can also have the computer resolve the combat without having to view it. Finally, it offers a user-friendly option in the ability to save games without having to switch disks.

Warts of the "World"

Yet, there are some drawbacks to the game. First, one of the methods of earning more money is gambling. However, building up large amounts of cash in this way is a very time-consuming process and encourages one to short-circuit the rules. Second, the documentation could have given the player a little more information on the various opponents to be encountered in the course of the game. It would have been nice if the documentation would have included a rundown of the characteristics of one's opponents. This could even have been incorporated into the game as information to be obtained from the computer bank on Mars.
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PETE ROSE PENNANT FEVER
BASEBALL AT ITS BEST.
Soon or later, just about every adventure game player gets the urge to write a game of his or her own. For most, however, the urge ends up being nothing more than a dream, unless the person has some programming skill to go along with the idea.

Enter various adventure game construction programs. These commercial programs are written primarily to allow the non-programmer to design and run adventure games without having to learn to code in a particular language. This article examines three such programs.

Keep in mind, however, that these programs are all copyrighted. You can create games with them to give to friends, but you cannot sell them without permission of the copyright holder. The game idea you have belongs to you, but the underlying code that makes it work belongs to someone else.

If your inclinations are toward text adventures, you may want to consider Figment or Adventure Game Toolkit.

**Figment: The Imagination Processor**

Figment is a complete package that provides various templates for creating adventures, as well as the means to jump between the game and the editor to make changes "on the fly". This is a handy feature, as you don’t have to stop the game to fix problems and then recompile and re-run the program. Also, Figment is heavily oriented towards CRPG aspects, so a character’s attributes and fighting/spell casting ability are important.

Creation begins at the "Stuff" menu template. "Stuff" is everything except the rooms: the player, objects, creatures and people, etc. All of these have a variety of attributes and descriptions to be filled in by scrolling through the menu.

After that, come the "Scenes" (rooms) where you get to unleash your creative writing abilities, followed by the Map which is used to define the connections between the rooms. Another menu allows for creating synonyms for commands.

This is easy, but things tend to become a little complicated after this. In order to actually make things happen in the game, any special circumstances meant to occur have to be defined, room by room, by means of the Pre and Post Command Testing menus. This is done in a sort of quasi-programming style that is not always easy to follow, particularly if the sequence of events is complex.

The Pre-Command Tests check for certain conditions before the command is evaluated by the program, while Post-Command tests are checked after the player issues a command. This is necessary for every room except those where nothing is ever going to happen. There, the Pre and Post tests will just be blanks.

A room can have as many as 14 tests of each type, so you can work up some pretty sophisticated routines, keyed to current or future events. However, even the simplest ones must be carefully worked out and tested because of the way they are set up using the programming language. Here is an example from the demo tutorial game that comes with Figment:

```plaintext
If{
  Player_is_linked_to Metal Vest
}Then{
  Metal Vest_is_locked

msg_to_desc Weather
inc_msg
Msg_to_exam Metal Vest
```

The above code checks to see if the player is in possession of (is_linked_to) the Metal Vest, and if the Metal Vest is locked, it can’t be removed (is_locked). If both these conditions are true, the program will display a message about the weather, as well as one about the metal vest (which, by the way, is cursed).

On the template page, the If and Then are separated by blank lines where the designer can fill in the test conditions and results. This is done simply by positioning the cursor on a blank line and using up and down arrow keys to scroll through possible choices. All items previously defined (objects, people, scenes) are available through the scrolling. So are the various conditions (is_locked, is_linked_to, etc), which are preset and cannot be changed (except to negate, so that is_locked could be not_locked). No typing is required.

You just plug in variables from a common pool by scrolling until what you want shows up.

Working out the exact sequence of what you want, however, is the tricky part. Each test (pre or post) is stand-alone. It simply checks the current condition every time the player is in that particular room and "fires" or not depending on the results. Some really odd things can happen, especially with multiple tests, if you don’t carefully think out the exact sequence in advance.

You should also be careful when jumping between the game and the editor. Invisible pointers are being updated while you fiddle around in the editor and you may return to the game to find yourself in the wrong room or with the wrong message being displayed.

*Circle Reader Service #19*
Adventure Game Toolkit

The Adventure Game Toolkit (AGT) is the most Spartan of the packages and is, essentially, a sophisticated compiler. You create a data file containing all the necessary information by using your word processor (no templates here!). Then, you compile it into a playable game.

AGT's parser reminds me of Infocom's. It can understand and operate on such commands as "Put on the cloak, then examine it; read its label." "Place the green rock and the small pebble behind the tree;" and "Scotty, beam down a tricorder and the QWERTY module." That's powerful.

Constructing games with AGT is not difficult, although a fair amount of typing is necessary. You simply create a data file and start entering data. No programming, as such, is needed. The program doesn't much care about the order (since it will create the actual run time files during the compile process), but for debugging, keeping similar things together is essential.

Thus, you should create all the rooms first, then objects, then people (if you intend to have special characters wandering around the place). Everything has a number associated with it, in particular ranges, so the program knows by number if an item is a room, object, or person. For instance, a room could be described as follows:

ROOM 2 Reception Room North 5 Southeast 6 END_ROOM

This creates room 2, the reception room. Going north from here would bring you to room 5 (whatever it is) and southeast to room 6 (whatever that one is). A separate ROOM_DESCR is also necessary for each room, in which its full description is given.

Objects are created in much the same way, although they have characteristics instead of directions and these determine what can be done with them (taken, dropped, played, pushed, opened, closed, etc). If an item is something such as a locked door or box, the KEY to the item also must be specified. Special events, such as opening a locked door, are easily set up using a few commands. Again, no programming is necessary.

Creature set-up is also similar, although care needs to be taken if the creature is hostile. Characters cannot leave a room with a hostile being in it (rather a drawback, as there ought to be a provision for running away). Thus, a weapon must be placed somewhere in the game that can be used to remove the hostile being. Creatures can also be "group members" who follow the player character wherever he or she goes.

You can also create synonyms for any verb or noun (including creatures) in the game, such that "take" can also be expressed as "get, snarf, grab", or "coins" can be called "money, gold, cash", etc. Those who are unsatisfied with this basic way of creating a game with AGT can utilize the program's slightly more complex meta-language. This allows for some truly professional results. These commands include counters and flags to allow for a variety of events, custom-
"Trying to sell your product by first changing society is a tough proposition."

In the discussion period, Bob Lindstrom (editor of A+ magazine) stressed, "We are doing a good job of simulating the mechanics of warfare and strategy, but we haven't captured the human experience... until we manage to simulate a buddy being blown out of the cockpit and we care." In relation to this, Noah Falstein noted that in the bail-out sequences in Battlehawks 1942, people have asked if they can shoot down the pilots that bail out. The decision of Larry Holland and Falstein was that they could, but they put a counter into the game where the enemy fighter pilots come after the player if they themselves are ever shot down. Louie mentioned that in Vietnam, there were rules of engagement. If a person bombed a church, for instance, they lost social status and the chance at a medal.

The session closed with questions and answers. A question about mixing FRPs with simulations evoked the answer, "It's a natural." The reason it hasn't yet happened is because of lack of machine power, memory, and publisher interest. Asked about naval simulations, Walton answered that ships are harder to simulate than jets and helicopters. There is more to model. These will probably be command simulations as opposed to cockpit simulations. Asked about land simulations? Louie commented that there are apparently going to be about 20 of them in the next year, particularly tank simulations.

For final thoughts, Rich Hillelman (executive producer of simulations for Electronic Arts) observed that the simulations business is to computer entertainment what the special effects teams are to the movie business and Louie concurred, "We are the model builders for the future."

Multi-Player Games

The problem with multi-player computer games is getting the computer into the right room (computers are usually in a study, home office, or back bedroom rather than the family room) or going out
the back door (via modem to a network or point to point). Dan Bunten revealed that only 30,000 units of M.U.L.E. were sold. Everybody has played it, but not everybody has purchased it. Even though multi-player games have not, heretofore, been great commercial successes, theory is that networking and point to point gaming changes the economics of socialization—anyone can be equal. Multi-player games may be a cultural issue. "Trying to sell your product by first changing society is a tough proposition."

Real interaction is not between player and the screen, but between players. We really liked the term, electronic campfire, which came to be used to reflect the community and family building aspect of multi-player games.

Several designers were excited about the use of BBSs for "play-by-electronic-mail" games. CGW editor-in-chief Russell Sipe was very involved in the early days of PEBM when he founded "The Armchair Diplomat," an electronic newsletter which reported on PEBM Diplomacy games on Compuserve and the Source.

Several designers were excited about what fiber optics in the home will do for the future and what LANs may do for office gaming.

In the question period, Bunten responded to one major problem. "What happens when one computer is faster than another?" To keep from diverging, there are various states where the computers are put into lock-step. Bunten uses a "send a delta" approach.

**Award Winning Performances**

One highlight of the conference was the awards banquet in which the designers gave awards to the publishers. The winners were:

- **Best Technical Support:**
  - Electronic Arts
  (Runner-up: Epyx)
- **Best Quality Assurance Operation:**
  - Microprose

**Most Innovative Publisher:**

- **Best Producer:**
  - Matt Householder (Epyx)
  (Runner-up: Dave Albert (EA), Christopher Erhart (Infocom), Rich Hilleman (EA), and Terry Ishida (Activision))
- **Best Publisher:**
  - Origin Systems
  (Runner-up: Broderbund, Electronic Arts, and Epyx)

An honorary award was presented to Chris Crawford as Zee Greatest Game Designer in Zee Universe.

The game designers plan to hold such conferences twice per year and the results seem certain to improve the quality of various games.

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Circle Reader Service #44
Writing Your Own

Adventure Construction Set

Finally, one might consider an old-timer, the Adventure Construction Set (ACS), which lets you design graphic adventures in any of three settings: Fantasy, Modern, and Science Fiction. ACS is menu-driven in the creation phase, which makes it relatively easy to use. You can move around and edit different parts of the game quite easily, going from the world map to particular areas to specific rooms to changing creature attributes with no trouble at all.

Virtually every feature of the game, including terrain, treasures, monsters, friends, traps, magic, weapons, armor, etc. can be altered to suit your tastes (or deviousness), thus giving you practically unlimited control over the final product. In addition, characters (monsters, animals, friends, enemies, etc.) can be set to follow a wide range of behavior patterns such as: peaceful, aggressive, brave, or cautious.

Even the graphic depictions of everything in a game can also be changed by using the graphic editor. This lets you modify the shapes and/or colors of any item or add new ones should you feel so inclined (Special note to IBM owners: while the label on the package says CGA, the program supports the full range of EGA colors, as well). Care needs to be taken when fooling around with changing colors, however, since cycling through the palettes automatically changes the colors of all items (not simply the one you may be working on at the moment) and can leave you with purple water or gray trees.

Music is also part of ACS and allows you to add tunes to the game. There are different ones for each of the three main types (fantasy, modern, and science fiction). This is optional, and you can turn the sound off entirely if you prefer.

The major drawback to ACS is that, even for a simple project, it can become a very time-consuming process to create a game. The world map has to be made, followed by the regions (which contain the rooms), the rooms themselves (complete with resident beings, goodies, and so on). Then, to edit existing items or create new ones adds even more time to the effort.

To somewhat get around this, you can partially construct a game and have ACS finish it. Thus, while you may know some of the game, the rest will come as a surprise. It is also possible to have ACS construct a completely new game from scratch by specifying the type of game and difficulty desired and letting ACS do all the work.

Each of these packages has its strengths. ACS offers graphic screens, Figment offers a game/editor gateway that allows easy fixing of bugs and a template system that removes most of the typing drudgery; and AGT acts as a compiler which allows for creating (especially with meta-commands) remarkably complex and sophisticated games in a fairly simple way.

Having a Blast (Cheaters’ Corner)

Warning: This section contains specific information about the game.

One way to play this game and keep your sanity is to rely on teamwork: have one person mapping and the second "steering."

Some people can’t seem to get out of the ship without getting killed. This is hardly surprising, considering the pressure they’re under.

Once on the planet’s surface, find the colony as soon as possible. In some games, your enemy is polite enough to come at you one at a time; this is not the case in this one. If you need extra help finding the colony, subtract one from each letter (make “b” into an “a” etc.): lffq uif npo po uif mgu tfj pgpvvs tdsfio.

You will find extra fuel for your suit and ship in the colony, but getting it into your ship after you’ve removed the old core might be a problem.

There is one spot where the author pays tribute to the movie 2001. If you end up here, you’re finished. Good luck.

---

The COLONY

amount of interaction with the objects around you, and none to speak of with non-player characters.

If you’re a purist and like your action games brainless and your adventure games run from the keyboard, this may not be your game. If, however, you are looking for a challenging game that successfully combines the two genres, this is it.

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Circle Reader Service #45
A Primer On Mars

As far as strategy is concerned, it is important to recognize that the team will be fighting a number of battles against a host of different opponents and it is a good idea to "practice" and improve the characters' combat skills prior to leaving Primus. As soon as the characters' skills have been somewhat developed and enough money earned, it is time to move on to Progeny (where it is somewhat safer).

Once the team of adventurers arrives in Progeny, it is most important to break into the computer system. It is advisable to recruit someone who already has some basic computer skills and spend whatever it costs to improve them. Once one cracks the computer system, this opens up numerous opportunities.

Further, the mines can be a real treasure to the bold adventurer. If the team confines its activity to the city, it is possible to miss some of the delightful aspects of "Mars." More importantly, one can find items in the mines which will help in other situations. The outlying inhabitants are pretty nasty, though.

Finally, don't be a tightwad. Use the team's credits to improve their skills and equipment. Characters must continually improve in order to have a chance to win. Weapons, programming, battle armor, and medicine skills pay the most dividends. Who knows, that extra suit of Golum armor just might be the difference between winning and being someone else's lunch.

Martian Kudos

All in all, this reviewer found the trip to "Mars" to be an enjoyable excursion. The game does not follow the recent trend toward more complexity, so it can be highly recommended as a good introduction to those who want to try a CRPG for the first time. It is also recommended to those who want a user-friendly and fast-moving game with a challenging stable of different opponents.

CGW
DOWNHILL CHALLENGE: One to six players compete in four different skiing events in this fast moving, 3-D race game. Downhill, slalom, giant slalom and jumping are available for competition on beginner, intermediate or advanced runs. Be prepared for plenty of nose plants! C-64 pictured on pg. 4 ($29.95). Circle Reader Service #6.

SWORD OF SODAN: Players seek the evil necromancer, Zoras and attempt to avenge the death of their father in this joystick driven role playing/action game. Great graphics (reminiscent of Dungeon Master) and digitized sound enhance the action as players work through 11 levels of the dreaded graveyard spirits, giant scorpions, and castle guards. Amiga pictured on pg. 4 ($49.95). Circle Reader Service #7.

SCAVENGERS OF THE MUTANT WORLD: Players scrounge and scavenge their way across up to four million worlds in this post-holocaust, strategy adventure game. Parties of four explore, map, plunder, and fight through civilization's rubble while trying to stay alive and avoid radioactive contamination. Top-view graphics enhance the combat screens and individual, tactical combat provides the player with options-o-plenty. IBM pictured on p. xx, ($54.95). Circle Reader Service #9.

ANNALS OF ROME: One player has the thankless task of trying to expand the Roman Empire while fighting off hordes of barbarians and dissatisfied rebel legions in this intriguing strategy game. It's all here: tax the citizens; bribe the legions; promote and demote senators, tribunes and legates; conquer barbarian homelands; and recruit auxiliaries. The only thing missing are those great tailgate parties after the chariot races! IBM pictured, Atari ST and Amiga ($34.95); C-64 ($24.95). Circle Reader Service #11.

FIREZONE: Outstanding graphics highlight this one or two player strategy/wargame set in the 22nd century. Players maneuver gray tanks, infantry and a variety of other futuristic weapon systems over a wide variety of realistic terrain in an attempt to wipe out the enemy. Hidden movement, nine different campaigns, scenario generation, and map creation modules add depth to this game. Atari ST pictured, Amiga and IBM ($34.95); C-64 ($24.95). Circle Reader Service #12.
SORCERER LORD: Another in the "Wargamers Series," this time the player must fight off an invasion from the evil Shadowlord's Wolf Riders while gaining control of the enchanted Rune Rings. Elements of role playing combine with the strategies of wargaming in a graphically gorgeous fantasy world. Sorcery, fatigue and leadership ratings all factor into combat. This could be an updated version of the Lord of the Rings. Atari ST pictured, Amiga and IBM ($34.95). Circle Reader Service #13.

Scorpion
19 Harbor Drive
Lake Hopatcong, NJ 07849

OVERLORD: One player oversees the Allied invasion of Normandy from D-Day to the final destruction of the Wehrmacht in France. Colorful graphics enhance this strategic wargame which includes hidden movement, airborne operations, morale, supply and multiple difficulty levels. This is similar to Sim Can's Operation Overlord, but with colorful graphics. Atari ST ($39.95). Circle Reader Service #14.

SPACE SCHOOL SIMULATOR: The player takes part in 20 training missions in an attempt to graduate from this futuristic "Top Gun" flight school. Lasers, shields, scanners, missiles, flares, infra-red and delay bombs are all available along with an option to design your own ship. Shades of Tom Corbett, Space Cadet! Amiga pictured, Atari ST and IBM ($34.95). Circle Reader Service #15.

VULCAN: One or two players fight out the Tunisian Campaign from WWII. The game features hidden movement, air attacks and multi-scenarios. This is a companion game to CCS's Desert Rats. Make sure you take a good sun block with you on those long desert treks! IBM (39.95). Circle Reader Service #16.

Spectre Software
P.O. Box 6614
Lakeland, FL 33807

FRIDAY NIGHT POKER CLUB: Players compete against four of the twelve members of the Friday Night Poker Club in this poker simulator. Dealer calls the game, and each computer player plays according to his own style. The player can watch, practice or blow his dough in this easy to follow game. All you need to add are the chips and dip. IBM pictured ($49.95). Circle Reader Service #17.

Strategic Simulations, Inc.
1046 N. Rengstorff Ave.
Mountain View, CA 94043

BATTLES OF NAPOLEON: Miniatures come to the computer in this multi-scenario, wargame/construction kit. Refight Waterloo, Quatre Bras, Auerstedt and Borodino, or let the computer design a random battle. Better yet, players can design their own with this powerful game system. The game includes skirmishers, infantry squares and cavalry charges. Oh those Greys! Apple II pictured, and IIGS ($49.95). Circle Reader Service #18.

Conversions Received
For the Amiga
Captain Blood (Mindscape)
Rebel Charge at Chickamauga (SSI)
Reel Fish'n (Interstel)
Tetris (Spectrum Holobyte)
Twilight's Ransom (Paragon)

For the C-64
Crazy Cars (Titus)
Jack Nicklaus Greatest 18 (Accolade)
Jordan vs. Bird (EA)
Rampage (Activision)

For the IBM
Bard's Tale II (EA)
Battle Chess (Interplay)
Fast Break (Accolade)
Halls of Montezuma (SSG)
Indoor Sports (Mindscape)
Platoon (Data East)
Sidewinder (Arcadia)
Skate or Die (EA)
Wright

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Circle Reader Service #46
The game ratings in CGW have become an institution in the computer entertainment hobby and industry. Many of you have told us that you use the game ratings to assist you in making your own game purchase decisions. The manufacturers follow this list closely, as well. It is not unusual for a company to call in and ask if we have added our numbers correctly when one of their products gets a lower rating than they expected. Wild Bill Stealey, CEO of Microprose, says he values a #1 ranking in CGW's Reader Input Device Ratings above all other awards. Another publisher bought the rights to a number of older titles in order to repackage them and sell them in his economy line. He used R.I.D. in deciding which products to market. We are proud that so many of you have gotten value out of this service.

However, we think R.I.D. can be even better. One thing that can help is to insure a uniform rating scale that is easily understandable by all. We all can articulate the difference between a "1" game and a "9" game on the R.I.D. scale, but can we articulate the difference between a "6" game and a "7" game?

After studying the matter, we have decided to swap our 1-9 numeric rating scale for a letter grade scale (i.e. A to F). We now ask you to rate games as if you were an educator. Assign the games a letter grade of A through F. As with the world of education, the scale will translate to:

A = Excellent
B = Above Average
C = Average
D = Below Average
F = Failure

If you wish, you may assign pluses (+) or minuses (-) to your letter grades (i.e. B+, B-, C+, C-, etc.) As always, rate only those games that you have played.

This is the third of three issues in which we are rating all of the games on our current R.I.D. list and a number of other titles, as well. Remember that thousands of games will be making buying decisions based on the results of these ratings, so help your fellow gamer out and let him know what is a worthy purchase and what is not.

Additionally, CGW will be working with a statistical psychologist to begin studying what are the common elements of the games you like and why different gamers like different kinds of games. To that end, we will continue to ask you a set of demographic questions at the beginning of each R.I.D. Please be sure to answer these questions each month, even if you have answered them before. We are looking forward to sharing some interesting insights from this data in the months ahead.

Demographics
(List the appropriate number)

1. What is your age?
   1 = Under 14 years old
   2 = 14-17 years old
   3 = 18-20 years old
   4 = 21-30 years old
   5 = 31-35 years old
   6 = 36-40 years old
   7 = 41-50 years old
   8 = 51+ years old

2. What machine(s) do you play games on?

(List all numbers that apply. List the machine you use most often first, the others in descending order of use.)

1 = IBM, clones, Tandy
2 = Amiga
3 = Apple II
4 = Apple IIC
5 = Atari ST
6 = Atari 6-bit
7 = C-64/128
8 = Macintosh
9 = Other (please specify)

3. How much time do you typically spend playing computer games each week?
   1 = Less than 2 hours
   2 = 2-5 hours
   3 = 6-10 hours
   4 = 11-20 hours
   5 = 21-30 hours
   6 = 31+ hours

Games

1. 668 (EA)
2. Stealth Fighter (Microprose)
3. Q*bert (Atari)
4. Star Trek (Atari)
5. Strategic Simulations (SSI)
6. Superior Command (Microprose)
7. Star Wars (Lucasfilm)
8. Star Wars (Activision)
9. Star Trek (Microprose)
10. Star Trek (Atari)
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18. Star Trek (Atari)
19. Star Trek (Atari)
20. Star Trek (Atari)
21. Pinball Construction Set (EA)
22. Carrier Force (SSI)
23. Legacy of Lyrikk (SiTech)
24. Space Station (SiTech)
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Strategic

1. Kampfgruppe Gettysburg
2. Mech Brigade
3. Chessmaster
4. War in Russia

Action/Adventure

1. Ultima IV
2. Wizardry
3. Starflight
4. Gunship
5. Ultima III
6. Might & Magic II
7. Bard's Tale

Demographics

(List the appropriate number)

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The game ratings have been frozen for three months while the new Reader Input Device database is under construction. The ratings printed here are those compiled with the last figures received prior to adopting an A through F grade scale. Be sure to tune in two issues from now when we unveil the results. In the meantime, the response has been fabulous. If you haven’t mailed in your responses for the new database, turn to the R.I.D. and let us know how you feel.

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