TOPS IN COMPUTER GAME COVERAGE!

electronic GAMES

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DELL 04114

PLAYERS GUIDE TO SCIENCE FICTION SOFTWARE

EG's THIRD ANNUAL GAMES PREVIEW

FIRST EXCLUSIVE REPORTS ON: COLECO ADAM and COMMODORE 264/364

HERE COME 1984's HOT COIN-OPS!

CONTENTS

MineStorm

ESCAPE   THRUST

SWITCH-ON

Dedicated Followers of Fashion

By ARNIE KATZ

"There's another one of those stories," fumed Joyce Worley, senior editor. The Mae West of the electronic gaming world threw the magazine onto the growing pile on my desk. Disgust twisted her sensitive features.

I knew how she felt. After a six-month honeymoon during which the mass media couldn't find a single blemish on the face of gaming, the pendulum has swung to the opposite extreme.

The current pessimism is just as unrealistic as the previous optimism. The gaming business has always had plusses *and* minuses, but too many writers can only see one or the other at a time. Sure, some manufacturers are teetering on the abyss, but most of them were already at the edge in early 1983, when article after article trumpeted their achievements with nary a yellow caution light in view. It sometimes seems that those who wrote highly favorable stock-tip stories about game companies a year ago now feel compelled to churn out doom-and-gloom pieces to alibi their previous over-enthusiastic stance.

Let's not kid ourselves. One reason for so many "down" articles is that some major hardware and software makers have had a tough time since early 1983. "Can Gaming Survive the Big Shake-Out?" in last issue, points out that complex market forces are at work here that will ultimately weed out many marginal companies in the electronic gaming field. Any fast-growing business attracts fly-by-night and under-financed companies that are looking for a quick score. Those who don't achieve instant success often end up moving on to, hopefully, greener pastures.

Yet the competitive nature of publishing has also had an appreciable effect on printed coverage. Once a certain number of favorable stories appear on a given subject, many publications feel that the only subsequent stories worth printing are the ones which take the previously de-emphasized side of the situation. It's much easier, today, to sell an article critical of the "Star Wars" saga than one which lionizes it.

Are videogames passe? We don't think so, though it's obvious that gaming computers are starting to take the spotlight away from the programmable videogame systems. As long as you enjoy the system you own and the software made for it, there's no reason to mothball your equipment just because its manufacturer's stock dropped.

If reading lots of upbeat stories about your hobby really boosts your enjoyment, check out the current computer boom which is sweeping the nation. Videogames aren't going to die, they will continue to improve and mutate into the super computer simulations of tomorrow. And, naturally, **Electronic Games** will be right here to help gamers get through the troubled transition with a minimum of bad experiences and wasted purchases.

Meanwhile, let's all try to take both positive and negative stories about the electronic arcading hobby with a grain of salt. It's up to us, the real gamers, to supply the objectivity when the media gets too far out on the fringe. ⊖

YOU'RE INTO ATARI™ COMPUTERS? SO ARE WE.
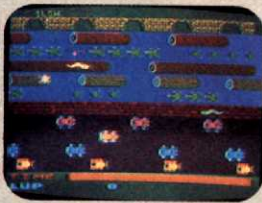
Your Atari is a great computer system. And one of the things that's great about it is it can play three of the greatest Arcade Action games ever. Frogger,*™ Popeye,® and Q*bert,™ from Parker Brothers.

The award-winning FROGGER is one of the top selling Arcade Action games of all time. With graphics that are nothing less than ribbitting and game play that gets tougher as you get better.

And POPEYE has you running through three screens of non-stop action, where you try to capture Olive Oyl's heart while avoiding untold dangers, including Brutus and the Sea Hag.

As for Q*BERT, he's irresistible. Jumping from cube to cube, trying to avoid an army of nasty critters, he's jumped into the hearts and minds of millions.

Frogger, Popeye, and Q*bert, from Parker Brothers' Arcade Action Series. They make your Atari computer feel as close to the arcade as you can get.

PARKER BROTHERS

HOTLINE

Dirk isn't the only denizen of the arcdes reaping rewards!

DON'T COUNT OUT ARCADES

No one is throwing big celebrations, yet, but it looks like the infusion of new technology, both laser disc and computer, has brought a lot of the excitement back to the family amusement centers. **Dragon's Lair** not only rewrote the record book for dollar-earners in the pay-for-play world, but its traffic-building presence in the fun parlors is said to have boosted revenues as much as 40% across the board.

Many arcade operators capitalized on this powerful drawing card by setting up a monitor on top of the actual machine so that bystanders could watch Dirk go through his paces. One enterprising arcade operator on the West Coast even went so far as to set up theater-style seating to accomodate viewers.

ODYSSEY EXITS VIDEOGAMING

The company that created the home arcading field back in 1970 has decided to pull in its horns while it takes its future marketing plans back to the drawing board. The Odyssey Division of North American Philips has announced that it will no longer produce hardware for its Odyssey standard programmable videogame system. The publisher went out with a bang by marketing the already completed **War Room** and **Power Lords** cartridges for ColecoVision, but has shelved plans for future videogame releases.

Is this the end of Odyssey as a force in the gaming world? Only temporarily. The publisher plans to keep a low profile for a little while until its R&D department pushes forward with "Operation Leapfrog", the creation of N.A.P.'s first true home computer. See page 24 for an in-depth discussion of this subject.

Bidding a fond adieu to the Odyssey²!

Pulling rabbits out of a hat is small stuff for the revolutionary Movie Maker
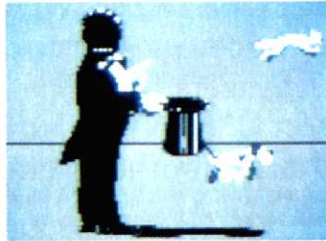
RESTON UNVEILS MOVIEMAKER

MovieMaker, an impressive software package for the Atari family of computers by Reston Software, is a state-of-the-art graphic aid which permits a computerist to create short animated movies right on the machine. These can be integrated into the design of a game or can stand alone as computer movies.

Over 18 months in the making, *MovieMaker* is relatively simple to use, even for someone without programming experience. Nor will non-artists be left out, since they can pull on-screen characters from a moderately large shape file. Reston plans editions of *MovieMaker* for several other popular home computers, including the Apple II and Commodore 64. The company has already licensed the use of the program as a professional development tool to a number of software producers, including Atari. Is that the computer community we hear singing "Hooray for Hollywood"?

SHAKEOUT CONTINUES

20th Century Fox Videogames left the videogame business shortly before Christmas, 1983. According to company sources, the power-that-be felt the future wasn't too bright for their brand of videogames. . .

Epyx has purchased Starpath Corp., the company that invented the SuperCharger. Starpath will continue to sell out its inventory of Super-Chargers, while the company's 10-man design staff, headed by Dr. Bob Brown, will join Epyx.

Supercharger and co.: now in Epyx's stable!

First Star's Flip and Flop

FIRST STAR OFFERS REWARD

Who says the competition for the best game-creators isn't getting fierce these days? First Star Software, publisher of such popular computer games as **Flip & Flop** and **Astro Chase**, is offering a $500 reward to anyone who helps the company acquire a marketable program.

The offer, which is spelled out on an insert card included with recent First Star releases, requires that a programmer mention your name when selling a program or accepting commissioned work. First Star's main needs, says the flyer, are "arcade quality, high resolution graphics; interesting use of sound; action/adventure; unique educational utilities or business programs. Machine language is preferred though not critical."

Start hunting!

NEW STORES ENCHANT SHOPPERS

The first two Enchanted Villages opened in Pittsburgh, Pa. and Fairfax Va., offering educational and strategy games and toys, books, and computer hardware and software in an environment resembling a prehistoric village in a futuristic 21st century setting. Each Enchanted Village has five separate environments: an edu-tainment center (a theater housing a variety of live events, workshops and seminars); a computer resource center where customers get hands-on computer experience; a glass aviary with live birds; the library filled with kids' and adults' books; and a playroom supervised by a registered preschool teacher where tots can relax while their parents are in the store.

"Our goal is to provide an educational and entertainment environment for the entire family," says founder Bernard Tessler. "We designed the Enchanted Village to be a unique family experience, giving family members the opportunity to spend time together in a stimulating environment."

Welcome to computer heaven (top and bottom): the Enchanted Village

GAMES FLY HIGH IN CANADA

Canadian gamers don't have to endure a separation from their favorite pastime even when they're traveling by airplane. Canadian Pacific Airlines tested rental of videogames during last June, and the company was so pleased by the results that it will extend the service to other flights.

During the test period, CPA used systems which snapped over the dinner trays that fold

Coffee, tea or. . .Pac-Man?

down for meals. Down the road, more sophisticated units will probably be installed permanently in the passenger cabin. Among the games available to airborne arcaders are Black Jack, baseball, boxing, **Donkey Kong**, **Snoopy Tennis** and **Mickey Mouse**.

PAMPERED HOTEL GUESTS

International Anasazi, Phoenix, Ariz., has the latest thing in in-room video systems for hotel guests who like to relax in comfort with all the amenities computer technology can provide. The Personal In-Room Communication System (PIRCS) lets guests use a remote channel selector to tune in special services on their t.v. sets, downloading information from the hotel's central computer. PIRCS lets guests tune in a video games channel to play a broad selection of currently popular games and, unique to the PIRCS system, actually lets guests in different rooms compete with one another. Gamers let the computer know they're hunting an opponent on a specific contest, and the message is relayed to other PIRC-users in the hotel until a match game is set up. Other services available to PIRC-using guests include a message channel, wake-up calls via computer, on-screen information about hotel attractions and amenities, express checkout, a "where to go" channel (list-ing area highspots) and even video music. The music channel operates like a jukebox, playing each selection in turn so all the guests can see and hear the choices made by other rooms in the hotel. PIRCS lists limo and flight schedules, and even has word processing and financial spread-sheet calculators available. It also allows business travelers to access corporate computers through switching networks right in their own rooms.

The PIRCS service got its first test in the Doubletree Hotel, Scottsdale, Ariz., and International Anasazi is currently negotiating with several chains planning to install two-way interactive system this year.

QUOTE OF THE MONTH

"The suggestion that IBM will take over the home computer market is similar to suggesting that Porsche will take over the auto market. Everyone might want one, but few would buy one to teach their teenager to drive."

(TALMIS spokesperson)

IBM's PC JR.

CAL/OSHA BLIPS "HARD HAT MACK"

In **Hard Hat Mack**, the construction-project game from Electronic Arts, a representative of the Occupational Safety & Health Administration (OSHA) dogs Mack, and if he catches him, Mack dies. According to the game package, the OSHA representative lacks a sense of humor, and is "living proof of the banality of evil". OSHA, responsible for enforcing workplace safety standards, didn't appreciate the joke.

OSHA official Thorne Auchter wrote to Electronic Arts, saying, "Let's be fair. Hard Hat Mack is a lot safer on the job with OSHA around."
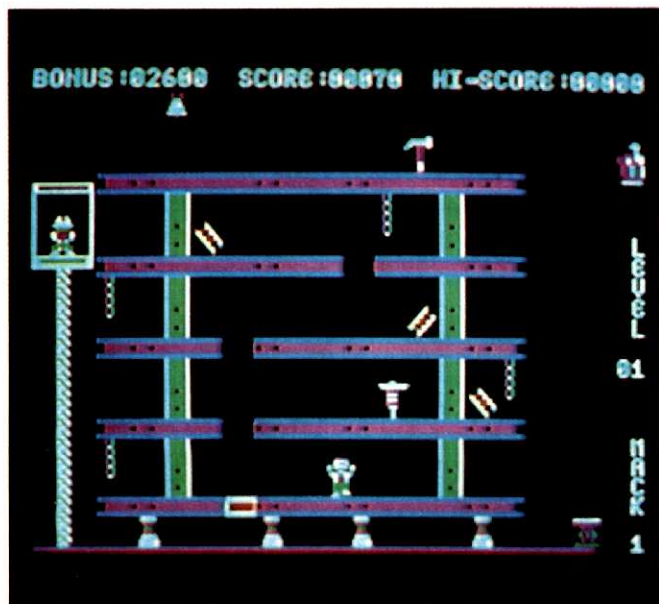
Blue collar videogame: Hard Hat Mack

Another OSHA employee said the company didn't understand the function of OSHA, and sent along a pamphlet explaining the purpose of the safety agency. A state senator even got involved by writing an angry letter to a department store chain expressing "dismay and disgust" over how the safety officials were presented.

Trip Hawkins, president of EA, says the controversy was overblown. He says the game is meant to satirize what can happen when constructing a building.

At least some OSHA officials took the whole thing in stride. One federal OSHA spokesman said, "After all, people have called OSHA a lot worse."

FIREFOX

*

◉ A LASERVIDEO GAME

When you take the controls of this game, you'll be flying the fastest, most sophisticated video game on the face of this earth. You don't just play it, you live it!

Incredible film footage, Clint Eastwood's voice, original music, stereo sound effects, and a headset jack work their magic to expand your total flying experience.

Each mission is a new adventure with up to 128 game play challenges!

It's all up to you. So grab your helmet and fly ATARI FIREFOX today. Nothing else even comes close.

ATARI

A Warner Communications Company

ROCK-OLA HELPS HOSPITALIZED KIDS

Electronic games are a big help to hospitalized kids, not only in providing ways to pass the time, but also in giving incentives that actually help them get better. In a recent report to Rock-Ola Manufacturing Corp., Patricia McKinlay, Senior Development Officer of the Children's Memorial Hospital in Chicago, thanked Rock-Ola for their donations of games, saying they provide a great attraction for patients and their visiting siblings. But in addition to that, Ms. McKinlay said the games provide a valuable service by giving

HOTLINE

"incentive for youngsters who need reasons to fight to regain good health."

AMIGA READIES 'LORRAINE' COMPUTER

Amiga, a company previously best-known for its pint-sized joysticks, will plunge into the bundled computer market next month with a machine nicknamed "Lor-

raine". The 16-bit system comes with 64K of ROM, has a built-in high-quality disk drive and can run a variety of disk operating systems, including PC DOS and C/P M.

Lorraine is expected to sell for under $1,000, making it a competitor for both the Coleco Adam and IBM PC Jr. Amiga officials report success in lining up third-party software support, including a wide selection of game programs.

THINGS TO COME

William Mataga, author of **Shamus**, **Shamus Case II**, and **Zeppelin**, is turning his hand to a completely different type of game — text adventures. The noted game author is currently working on a new language for text adventures, a type of game not previously produced by Synapse. Ihor Wolesenko, president of Synapse, asserted that the new system would allow for adventures that include casts of characters capable of thinking, feeling and acting with an independence never previously available in any prose quest. Noted science fiction and mystery writers are currently working on five games for the projected line.

SOFTWARE BEAT
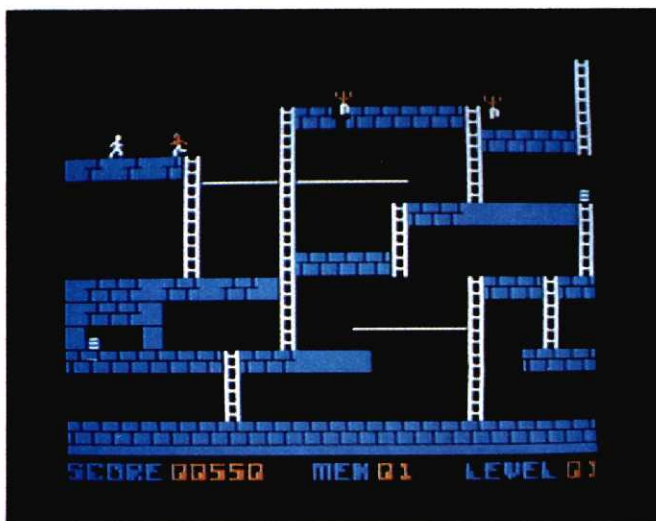
Lode Runner (left) is a multi-scenario rave-up while Spare Change (right) lets gamers run their own arcade.

Standardization looks just as far away as ever, but a number of major publishers primarily known for their Apple II games are throwing their translations programs into high gear. Broderbund has released **Lode Runner**, **Spare Change** and **Drol** for both Commodore 64 and Atari and has produced **Sky Blazer**, **Mastertype**, **Seafox** and **Lode Runner** for the VIC-20. Meanwhile, MicroFun is making its Atari debut with **Crisis Mountain**, Sirius Software has **Wavy Navy** and **Critical Mass** for the C-64 and **Gorgon II** and **Type Attack** for the IBM PC. Edu-Ware is also going down the Big Blue highway, offering

Prisoner 2 for the PC.

Imagic, thanks to an agreement with IBM, figures to be the one of the first outfits to publish game software for the PCjr. **Demon Attack** is a greatly souped-up version should already be in the stores with more to follow this summer.
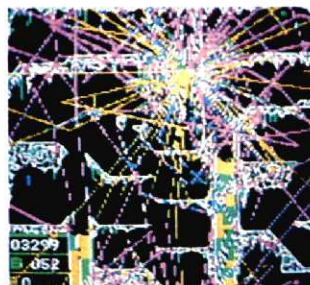
CRISIS MOUNTAIN

The hot-selling Commodore 64 is pulling lots of third-party software support, and not all the titles are translations. Access Software has **Beach-Head**, a six-screen contest that combines elements of wargames and action games. Tronix is rolling out a quartet of titles: two action-adventure games (**Waterline**, **Suicide Strike**) and two arcade-style programs (**Motorcross**, **Slalom**). **Castle Wolfenstein** is Muse Software's first C-64 venture, but the company will shortly issue **Rescue Squad**. This program, designed expressly for the Commodore, has players trying to save people trapped in a burning building.

Timeworks also has a new entry, **Star Battle**, a 3-D space romp with heavy strategic overtones.

Coleco signed a licensing agreement to use characters from Richard Scarry's children's stories, in videogame and home computer software. Scarry has authored over 200 kids' books, that sell at a rate of approximately 8 million per year. . .The Dovetail Group is developing musical computer activity programs for CBS. They'll feature The Jazz Scats, animated characters who'll help gamers use the computer to compose original melodies and play musical games on the C-64 and Atari computers. . . .Ava-

Ion Hill has **Computer Diplomacy** for the TRS-80 and IBM-PC. Up to six players can compete, and the computer takes the role of nations that aren't controlled by human gamers. A scrolling map tracks all units, while status reports keep all players up to date. The computer times each diplomacy period.

Lord British (best known for designing the **Ultima** series) is currently transposing **Car Wars** from its present boardgame format to the computer. This contest of automobile combat has reached craze proportions for Steve Jackson Games, even spawning its own quarterly magazine, supplements and player-aids. The electronic version should be an even bigger blast.

Sunrise Software, headed by Ed Salvo (late of Games by Apollo) has four games for ColecoVision on the way. The most interesting is probably **Gust Buster**, a balloon-flying game in which the player must navigate through a tricky amusement park. Other titles include **Rolloverture** (a music/arcade game), **Quest for Quintana Roo** (adventure) and **Campaign '84** (political strategy). Sunrise also plans Atari computer and Commodore 64 editions of all four.

Distro Enterprises has released **Her Majesty's Secret Weapon**, the first adventure game which uses a pre-recorded soundtrack to enhance the audio-visual displays provided by the floppy disk. This Atari computer game, says Distro president Randy Vaughan, is the first step toward the development of computer/laser movies for the home market.
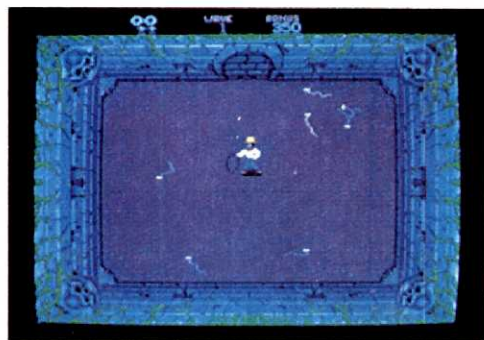
Sente's first coin-op out of the box is Snake Pit, a breathtaking multi-scenario odyssey through a treasure-and danger-laden trip to "Alaron"!
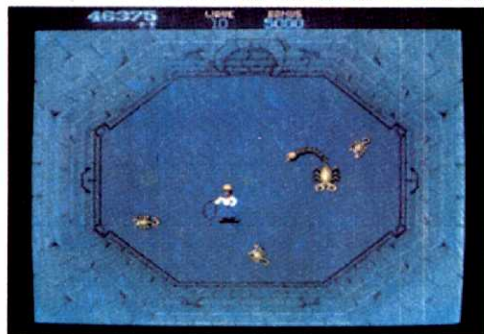
BUSHNELL INTRODUCES ARCADE GAME SYSTEM

Nolan Bushnell, the founder of Atari, is back in the gaming business again with a new firm, Sente Technologies. Among the first products shown by the new enterprise is a coin-op conversion method that Noland hopes will revolutionize the play-for-pay field. The Sente Arcade System includes a special game frame and adjustable screen that will host all SAC videogames, so the arcade manager only has to plug in a new cartridge, change the exterior graphics panel, and alter the control system in order to have a brand new Sente game.

The first entry in the SAC System is **Snakepit**. The arcader uses a trackball and B-position joystick to move a whip-wielding hero through a secret city, in 12 screens of strategy and adventure accompanied by five classical music pieces, plus special effects and mood music.

COIN-OP BEAT

Bally's **NFL Football** uses National Football Legue footage, edited from NFL film shot at Charger-Raider games, to provide the action. Gamers pick offensive and defensive strategies, and over 400 plays are illustrated on videodisc. . .Konami has increased its holdings by purchasing additional shares of Centuri stock. Konami now owns roughly 4.9% of Centuri's shares outstanding. . . The National Coin Machine Institute (NCMI) is firmly against the illegal operation of so-called "gray-area" games. These are machines that pay off in money, tokens or other merchandise. NCMI recently

passed a resolution strongly opposing operation of such games in areas where gambling is prohibited. . . .David Rosen, founder of Sega Enterprises, resigned January 1, 1984, to pursue other interests. The coin-op pioneer started the coin-op company in the mid-1950's. . .Star Rider, the 3-D laser disc contest from Williams, uses handlebars and motorcycle-type controls to let players operate a futuristic space-cycle. Instead of cartoon images, VideoCel animation produced by Computer Creations, takes gamers on a race through nine separate planets. . .Spy Hunter, the high-speed chase game from Bally, lets arcaders control a vehicle equipped with an arsenal of weapons which are replenished by driving into a moving weapons van. Tire-slashing enemies and helicopters are just some of the problems as spy-battles-spy, just like movie secret agents. . .

HARDWARE UPDATE

Apple's new disk drive package ($2000) includes twin 360K disk drives and microprocessor, and lets Apple-users run programs designed for the IBM-PC. . ."Monty Plays Scrabble", the computerized self-contained crossword puzzle game from Ritam Corp., is now available in French and British editions. . .Telesys has exited the videogame field to concentrate on computer peripherals. The company has marketing rights to products developed by Micro Systems Development, including single- and double-density

HOTLINE

disk drives for the Commodore 64 home computers ...Activision and Atari, both leaders in VCS software design, are both working together on a new service that will broadcast Atari 2600-compatible game software to home receivers. The service should be nationally available before year end, and will be expanded to include computer software at a later date. . .

Tri-Dimensional Televi-

sion "is the first major enhancement to TV since the inception of color," according to Garry D. Silivanch, President of 3D Systems, Ltd. The device, invented in Germany, will be introduced in the U.S. in June, for under $100 installed. When the Tri-Dimensional is used, specially designed sunglasses allow viewers to see more detail, depth, and a clearer picture overall. The product works on

any color program on TV, and on all videogames and other peripheral devices. . . .

Synetix has two additional versions of the sprite animation peripheral card for Apple computers. **Sprite I**, retailing for $149 with software, lets users define, assemble and move sprites (large programmable objects). **Sprite II**, $249, adds a sound generator, speaker and software for realistic sound effects synchronized to the sprite action. The **Sprite I** and the **Sprite II** are both derivatives of **Super-Sprite**, a device which combines actual speech with computer-generated sound effects and animation.

CONSUMER BEAT

Starcom, the company that created **Dragon's Lair**, has changed its name to Magicom, and entered into licensing agreements for *Dragon's Lair* products such as lunch pails, transfers, stickers, trading cards, party favors, hats, books, board games, puzzles, kids' sleepwear, and many others. . .Is your computer tax deductible? Probably, according to a 26-page report, "Tax Breaks for Computer Buyers", $9 from Research Press, Box 8137-P, Prairie Village, KS 66208. . .Atari has filed suit to block JS&A Group from marketing a device that copies Atari videogame cartridges, saying it violates their copyrights by promoting the machine as a way to make inexpensive copies. . .Sage Enterprises, Route 2, Box 211, Scrivner Rd., Russellville, Mo. 75074, is starting a public domain software library and exchange service for Adam computer users. A bi-monthly newsletter will provide information about software, user groups, and new products of interest to Adam-ites. . .Through an agreement with Coleco, Honeywell's customer service centers will provide service for buyers of the Coleco Adam home computer system. . .John Wiley & Sons, Inc. has announced new Quick Reference Guides, $2.95 each, for the VIC-20, Commodore 64, and Timex Sinclair 1000. The guides give

instant access to all the information users need to have at hand, such as programming symbols and statements, commands and controls. Wiley also publishes guides for the IBM-PC, Apple and Atari computers.

GESSLER GOIES MULTI-LINGUAL

Gessler Educational Software has introduced games in French and Spanish. **Poker Pari** is an all-text French card game that lets players review information about French culture, grammar or vocabulary, then tests their knowledge by asking questions that help perfect their French lessons.

Anagramas Hispanoamericanos is a Spanish geography lesson. Unscramble the names of countries and their capitals, as the map zeroes in on the appropriate place.

Two additional games are based on "Hangman". **La Guillotine** requires gamers to save a French aristocrat from the blade; and **La Corrida De Toros** lets players help a bullfighter stop the charge of el toro by practicing Spanish language lessons.

MICRO LAB WANTS YOU TO 'LIVE YOUR GAME'

Micro Lab plans to back several of its new titles with

special sweepstakes in conjunction with **Electronic Games**. The contests are called "Live Your Game", because each of the prizes connects to the theme of the game which is the subject of the sweepstakes.

The first contest — see Micro Lab's ad elsewhere in this

issue for full details — covers **Dino Eggs**. The winner will get a free trip to Chicago which will include a visit to Micro Lab's headquarters and a behind-the-scenes tour of the city's Field Museum to view the relics of the prehistoric age. ⑤
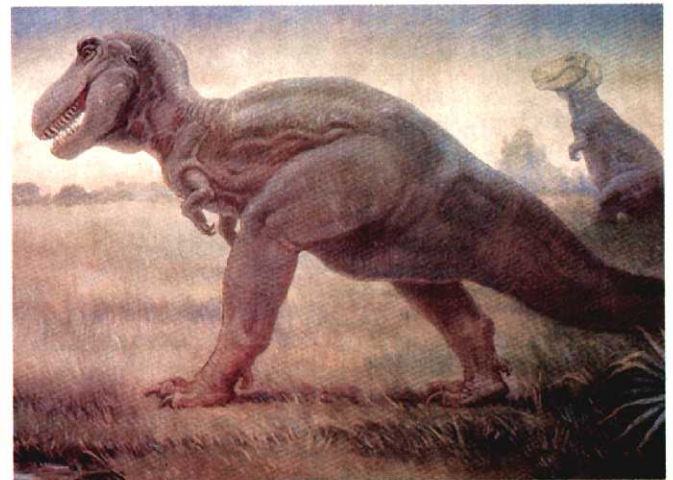
Winners of Micro Lab's contest get to see *real* Dino Eggs!

WELCOME TO APSHAI.
YOU'RE JUST IN TIME FOR LUNCH.

Boy, have you taken a wrong turn. One moment you're gathering treasure and the next you're being eyed like a side of beef.

You're in the Gateway to Apshai." The new cartridge version of the Computer Game of the Year,* Temple of Apshai."

Gateway has eight levels. And over 400 dark, nasty chambers to explore. And because it's joystick controlled, you'll have to move faster than ever.

But first you'll have to consider your strategy.

Is it treasure you're after? Or glory? You'll live longer if you're greedy, but slaying monsters racks up a higher score.

The Apshai series is the standard by which all other adventure games are judged. And novices will not survive.

They'll be eaten.

One player; Temple of Apshai, disk/cassette; Gateway to Apshai, cartridge, joystick control.

EPYX
COMPUTER SOFTWARE

STRATEGY GAMES FOR THE ACTION-GAME PLAYER.

Readers Replay
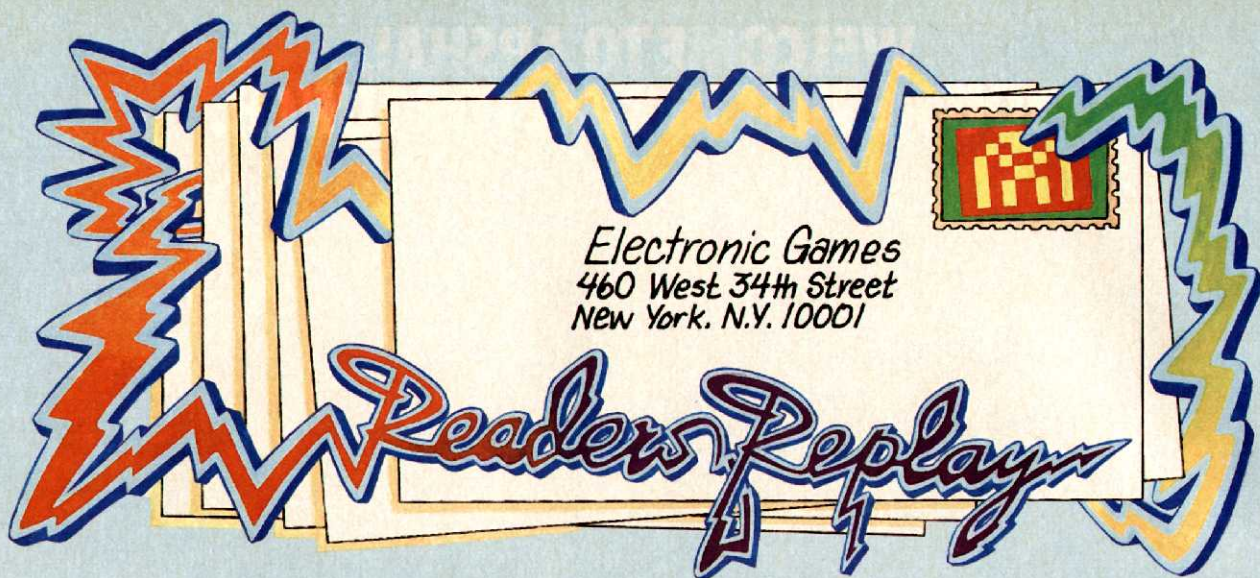
A WISE WARNING

First of all, I'd like to say, "Congratulations!" My friends and I had an election about which magazine was the best, and yours won hands down.

Second, my friends and I read about someone who tried to copy Starpath's games (November 1983). Please advise your readers not to try pirating games or do something stupid like my friends and I did.

We broke into a company's computer and stole information, erased some information, and fooled around with the company's finances. We realize what we did was a big mistake, and we'll probably never forget it.

We are now in a juvenile detention center. Since it was my computer and I'm the main hacker, I will be here longer. I'm sixteen now, but when I turn eighteen I will go to jail and don't get a chance for probation until I'm twenty-three.

Please print this letter so your readers will know what can happen if they fool around like we did. I can't stress this enough: Don't try anything stupid!

The Hacker
Address Withheld

*Ed: Thank you for letting us in on your sobering experience. Attention all readers: Piracy and theft of service are **crimes** that can result in a long jail term. There are plenty of games available for computer owners who want them — but breaking into someone else's computer file isn't a game. It's a serious crime with serious consequences.*

ERRATA

The playfield photo of Avalon' Hill's **London Blitz** (EG, November 1983)
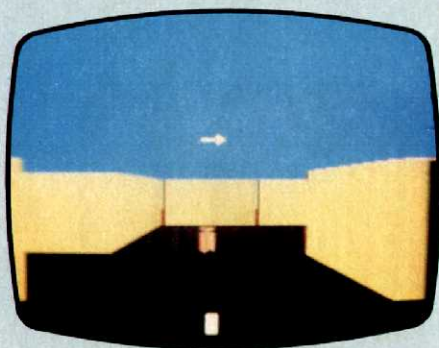
LONDON BLITZ (Avalon Hill)

was upside down. **Electronic Games** regrets the error and offers our apologies for the confusion.

CASE OF THE MISSING MATCHBOOK

The packet of matches enclosed with Infocom's **Witness** contains *no flammable materials* (which cannot be mailed under Post Office regula-

WITNESS (Infocom)

tions). Our reviewer could not have used up the matches, then thrown the packet away, as stated in the review. What happened to the matchbook remains a mystery!

GLITCH OF THE MONTH

On my Colecovision **Front Line** I found a way to move through the ruined walls as you near the fort. (It

can only be done if you have a heavy tank.) Here's how: If you're on one side of a wall with a hole in it, get as far into the hole as possible. Then rotate your turret in either direction and, at the same time, push the joystick so the tank moves through the wall. You'll find yourself on the other side!

Mark Rominger
Indianapolis, IN

Ed: Congratulations, Mark, you're the lucky winner of this issue's Paxxon Pac-Man wall clock! And thanks to the hundreds of readers who take the time to send in their favorite glitches, easter eggs, and quirks. We can't print them all, but we sure like to try 'em out!

EG BI-MONTHLY?

Are you becoming a bimonthly publication? I bought your January issue and just bought your March issue today. I never saw a February issue on the newsstands. I hope you won't go bimonthly. You are definitely by far the best video game magazine available.

Raymond So
Forest Hills, NY

*Ed: As **EG**'s editor Arnie Katz explained in the March "Switch On!" column, Electronic Games Magazine slowed our publication rate to reflect the traditional summer slump in the electronic gaming industry. Have no fear, though, Raymond — as of September, we'll be back on the stands each and every month, with the news, reviews, and insider's info that readers expect from the number-one electronic gaming magazine! In the meantime, stay tuned for three special issues, including **two** all-new Software Encyclopedias.*
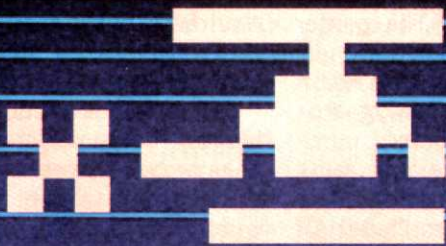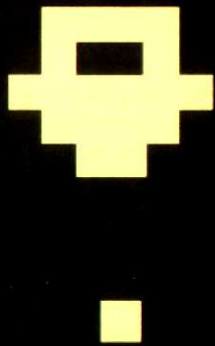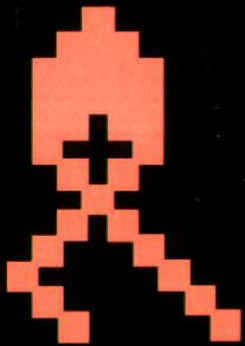
INSIDE
COLECO'S ADAM

By NEIL SHAPIRO

Is This the Next Generation?

f or a while it seemed it would be harder to adopt an Adam computer than one of the same company's Cabbage Patch dolls. But those lucky enough to take Adam home have found it worth the wait.

The Adam is a complete computer and game system, sold as a package containing a keyboard, computer unit with tape drive, a printer and a built-in ColecoVision. Those who already have a ColecoVision can buy the keyboard, CPU, tape drive, and printer as an all-together expansion add-on for that popular videogame machine. No matter how you buy it, most home arcaders will find that Adam expands their gaming horizons as well as introducing a whole new world of computing applications.

Assembly took less than a half-hour from opening the box, and most of that time was spent reading over the setup manual. Adam, after all, is a computer and this reviewer just didn't expect the initial setup to go as

Zoom down trenches with Buck Rogers!

easily and smoothly as it did.

The printer plugs into the side of the main tape/memory unit. There's only one way to plug it in, only one possible location. The keyboard attaches to the main unit with what appears to be a coiled, modular phone cord; it snaps in at both ends. A coaxial cable goes from the back of the main unit to the usual game/TV switch attached to the television's VHF antenna terminals (or another outlet can be cabled directly to a video monitor). Plug the Coleco-Vision-style controllers into the main unit and that's the set-up. (A special tray may be snapped into the side of the keyboard to keep one of the controllers handy).

Turn on Adam — the switch is located on the back of the printer — and you're ready to begin. Without a cartridge or a tape plugged into the main unit, the screen first comes up as a sort of electronic typewriter. The printer keeps pace with whatever the operator types. A touch of a key puts Adam into a special word processing program, but more on that later.

If you're like me, the first thing you'll do is to play the included data pack game **Buck Rogers: Planet Of Zoom**, the first of Coleco's "Adam Super Game Packs." The digital tape, which is thinner than the usual cassette variety, is placed in the tape drive bay before starting the unit. When the Adam is on with the cartridge slot empty, the tape automatically loads.

Loading speed is slow compared to systems that use a floppy disk
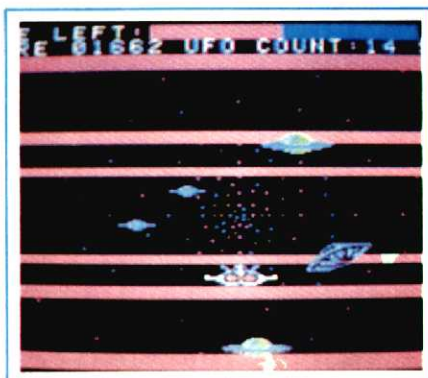
A color bar displays time remaining.

machine, such as the Apple IIe and the Atari 800, but it sure does beat the snail's pace of an unmodified audio cassette player.

Just as with most ColecoVision cartridges, the gamer chooses between one- or two-player modes at various skill levels from a menu. As always, this is done by pressing the membrane-keys on the Colecovision-style controllers.

The controllers are the first, and perhaps expectable, disappointment to a gamer whose hands automatically cramp up just thinking about ColecoVision controllers. Except for color, they are exactly the same as on the ColecoVision console. It's short throw

In *Buck Rogers: Planet of Zoom,* gamers must guide their ship through a number of different playfields.

joystick on the same hard-to-hold, rectangular base. The Adam also accepts Coleco's new, better-designed and more advanced controllers, including the trackball.

But you won't have long to think about that, because the game quickly comes up screeching with the first screen of action in this multi-screen game. You'll be flying Buck's fighter down a long, *Star Wars* sort of trench. The left side button on the controller is your warp speed accelerator and the right button fires your fighter's lasers.

High speed is of the essence, because the rate of speed is one of the factors scored in the game. As you hurtle down the trench you'll have to

outmaneuver and attempt to destroy enemy ships coming at you, whizzing by and even attacking from behind. Flying saucers that look a little like celestial fried eggs, bouncing tripeds that look more like fighter-stomping aliens than highly maneuverable kamikaze ships, and streamlined enemy planes will all try to make this first screen your last.

The animation of the tunnel whizzing by is absolutely top-notch, and the gamer's fighter is shown with great attention to detail. There is, however, a flickering quality to the onrushing enemy hordes that remains throughout most of the game. While this first "Super Game" does· have

many features that enhances it beyond a cartridge game, the animation is sometimes less than gamers have come to expect of ColecoVision. We doubt that this is in any way related to Adam's capability, as Adam plays all ColecoVision cartridges to the usual high standards.

After a preset amount of time (shown as a bar at top of screen) action moves to the next screen. This second screen shows up in various guises two more times during the program. Players guide the fighter on a screen overlayed with a colorful lattice design of diminishing stripes which gives an illusion of distance. Enemy missiles and flying saucers spi-

ral from the distance, changing in size to increase the illusion of perspective as they shift and dance about.

Then, the third screen (my own favorite) is a challenge to maneuver the swiftly cruising craft between futuristic, towering cities. Players have to quickly gauge both speed and distance to avoid crashing into a twenty-first century balcony. And, meanwhile, the usual enemy flying saucers harass you. In this screen, the animation of the towers coming toward you is superb.

The fourth screen is a repeat of the striped second screen, but now with enemy mines added to the oncoming arsenal. Beyond this screen, the fifth screen is a trench as in the first screen. But, in this fifth screen, the trench now has colorful walls which block the path.

More outstanding graphics and animation are visible on screen six, as the gamer must steer under rapidly

Huge bridges limit maneuverability.

approaching bridges while avoiding enemy tanks, planes and a new enemy callled the walker. The next screen, the seventh, is yet another repeat on screen two, the stripes giving illusory distance this time helping to mask the approach of cratered asteroids as well as enemy ships.

The eighth screen brings players the surface of the planet called Zoom, where they must dodge aliens of all varieties. The background moves, giving the illusion of a horizon stretching around all of 360 alien degrees.

Past this, on screen nine, the gamer sights an approaching alien command ship. The middle of the ship is a Space Warp tunnel and the mission is to enter that tunnel. But first, the ship's four engines must be shot out — and the rest of the alien armada is downright angry! But once inside the tunnel, screen ten takes the ship screaming down a psychedelic corridor of rapidly shifting and colorful lights. Finally, through the tunnel, a reward screen awards a new fighter and starts the

ADAM

game again at a higher level.

And, for earning a high score, players are asked to enter that score in an arcade roll of honor. The joystick spells out names, and the computer will store it on the same digital tape as the game.

All in all, we found *Buck Rogers: Planet Of Zoom* to be an exciting foretaste of Adam's gaming future. We expect that later games will use the digital tape much as many computer games use a floppy disk to do such additional things as allowing Adamites to choose a screen at will, modify and store levels, and perhaps even change the playing field. Possibilities are endless.

Of course, gamers don't have to wait for more tapes to keep enjoying this system as a game. We tested at least two dozen ColecoVision cartridges and all of the ColecoVision expansion modules and controllers on Adam with fine results. It seems to be absolutely and perfectly compatible with the previous system.

And, let's not forget that when the gaming is over, the fun is really just beginning because Adam is also a complete computer. While it would take a separate article to detail Adam's computer personality (and Electronic Games will be doing that soon) it's worth just mentioning a few of the other things that Adam can do.

Adam's built-in word processor will not make anyone a best-selling author (unless they have such talent), but it makes everything from school reports to home correspondence far easier to create. Basically, the word processor allows you to write on the video screen. Then, on the video screen, you use some of the easy-to-learn commands to do such things as delete words, move words to other parts of

the document, and generally get everything the way it should be. Only then do you print it out, so that your printed copy has no mistakes.

The printer itself is what computer dealers call a "daisywheel" printer. It gives a high-quality printout that looks as if it came off an electric typewriter, no "dotty" looking matrix type here. The printer, however, is noisy and somewhat slow, but for everyday use these are acceptable tradeoffs for having access to such accepted-everywhere type style.

A tape-loaded BASIC language will also have Adam users programming their own, if they wish. Anyone who has used Apple Inc.'s "Applesoft BASIC" will have no problem learning Coleco's "SmartBASIC", as the two are very similar. (But similar does not mean the same, and it would be impossible to use Apple tapes or disks. Also, as Coleco's graphics are different from Apple's, most Apple programs

The battle continues on the planet.

cannot be used anywhere near as-is, even typed in on the Adam.)

One drawback to Coleco's SmartBASIC is that most graphics and all sound commands seem to have been left out. Coleco promises that, by the time you read this, new programs will be available which will allow the at-home programmer to access Adam's graphics and sound.

All in all we think that the Coleco Adam ushers in a whole new realm of fun to the gamer and also satisfies the computer user. **G**
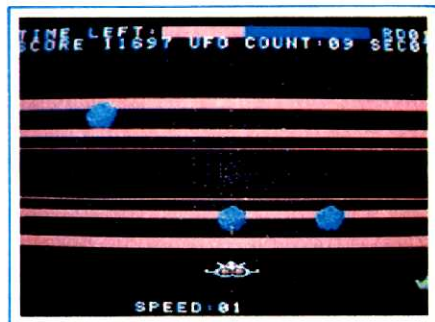
After the asteroid screen, Buck fights a starship and enters the warp tunnel.

⊖ SOFTWARE

Let's face it, it's hard to avoid getting at least a little depressed about all those videogame cartridge makers going out of business. Concerned gamers can be forgiven for wondering whether enough manufacturers will survive to keep up the supply of new cartridges.

Banish those cares and woes, and get set for another banner software year! EG's third annual report on forthcoming games is packed with good news for videogamers and computerists alike. As the carnival stripper said halfway through her act, "You ain't seen nothin' yet!"

Game publishers have come up with the perfect way to cure out shake-out blues: Produce plenty of top-quality new games in 1984. Whether you most enjoy playing on the old reliable Atari 2600 or the newer-than-new IBM PCjr., a bumper crop of programs is heading your way. Strong sales during the 1983 holiday season made retailers clamor for fresh titles, and the game software houses are ready to oblige.

It's true that some of the new entries are little more than minor variations of tried-and-true themes. Some companies are finding it tough to give up the idea that the quickest way to have a hit is to mimic an existing program as closely as the law allows. Even as the number of invasion and maze games declines, there's a definite increase in the production of climbing contests and color-changing games.

Yet a surprising number of the games which suppliers plan to release this spring, summer and fall are highly innovative. This is partly due to the sincere desire on the part of most electronic publishers to emphasize quality and uniqueness in their lines — and also partly because retail shelves are starting to get crowded and a straightforward "me, too" game has more trouble getting adequate display.

Crowded retail shelves have also spurred most software manufacturers to prune weaklings from their catalogues. Companies which pursued the policy of firing out a dozen games at a

By THE EDITORS
OF ELECTRONIC GAMES

time to see which would fly and which would die have run into heavy consumer and industry resistance. Producers are, therefore, concentrating on developing a smaller number of better games, leaving marginal-quality product for those outfits which are aiming at the low-price segment of the market.

Also acting to reduce the number of different titles is the trend toward multiple editions. Many game makers must allot resources that would otherwise go into the creation of new games toward putting their most popular contests into formats usable by the most popular computers and videogame machines. Until and unless some form of standardization comes to electronic gaming hardware, this is the only strategy that really makes marketing sense. After all, in most cases it's a lot harder to concoct a home gaming hit than to adapt an existing winner to another system. Manufacturers get more bang for their development buck by blasting each new title across the entire range of systems. (The benefits the players derive from the vogue for multiple editions are no less important. Now a gamer can look forward to being able to buy just about any popular design, no matter which system he or she actually has at home.)

A few of the programs coming to market over the next 12 months are so

RELAX (SYNAPSE)

distinctive that they actually enlarge the boundaries of leisure electronics. Creations like **Relax** (Synapse/Atari computers) and **Construction Crew** (Epyx/popular computer systems) may not be *games* in the strict definition of the term, but they are electronic entertainments that further enhance the fun-value of the home computer.

VIDEOGAMES LIVE!

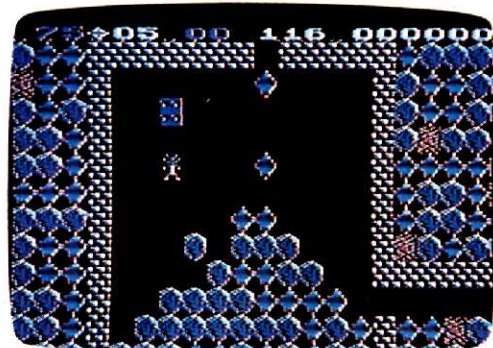There's plenty of life in videogames after the Big Shake-Out, although manufacturers no longer approach the market with the simplistic optimism that ruled during 1982 and early 1983. Atari, Activision, Coleco, Parker Brothers, and several other videogame mainstays expect to continue production of cartridges, despite the departure of such brands as CBS, U.S. Games, Games by Apollo, and Odyssey from the ranks of software producers in the videogame field.

Don't expect new videogame systems. There's little market for such devices, and the R&D departments are focusing strictly on computers. Production of several existing videogames will continue through 1984, though the Odyssey^2 and Astrocade are down for the count (barring after-market activity by devoted bands of fans). There may well be as few as three "pure" videogame machines still being produced by next Christmas. The fates of the Intellivision II and Vectrex have not yet been decided at Mattel and Milton Bradley, respectively, but the picture will certainly be a lot clearer by mid-year.

Videogame cartridge manufacturers have learned the folly of producing more and more titles without reference to overall consumer demand. The problem that tripped up the videogame business last year was not lack of buyer interest, but rather a surplus of games that no level of interest could possibly absorb.

"Quality" has become a watchword at most of the firms which hope to continue making money in the car-
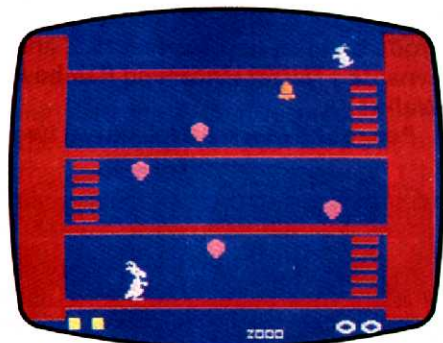
KANGAROO (ATARI)
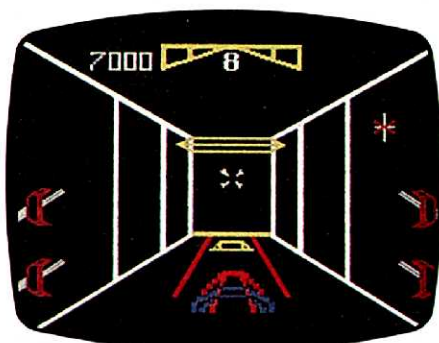
STAR WARS (PARKER)

GYRUSS (PARKER)

tridge business. There simply isn't a broad enough audience for games which don't deliver something new, so expect major manufacturers to concentrate on preparing a handful of real knock-your-socks-off titles rather than putting out a large selection of decent, but unspectacular, games.

Impelling manufacturers toward greater selectivity is the current cartridge pricing situation. More than 40% of all carts sold in 1983 went for super-discount prices ranging as low as $5. The supply of such remaindered merchandise, created by the bankrputcies of various publishers, is limited, and most industry observers expect ultra-low-prices to become rarer by this summer.

Once the competition from discount carts falls to a manageable level, most videogame software houses are looking to establish a multi-tier pricing structure. The idea is to put new product in the stores at full retail price, with older titles going for correspondingly less.

Taz, an action game for 7-to-12-year-olds based on the Looney Tunes character, is but one of many forthcoming 2600 cartridges from Atari. The Tasmanian Devil spins his way across the playfield like a miniature tornado, wolfing down every snack in sight. The player gobbles up all the edibles while avoiding obstacles like dynamite.

Millipede and **Mario Bros**. are two arcade-to-home translations we'll be playing by mid-year. Like many of Atari's 2600 editions for play-for-pay games, both do a better job of simu-

lating the basic play-action than of aping the graphics of the originals. Also in store are 2600 editions of such well-received 5200 titles as **Kangaroo**. The graphics for this one are spare but decent, and the play action may actually be a little more fluid than on the 5200 cart.

Atari is also ready to roll a slew of educational and kideo games. Sesame Street, Muppet and Disney licenses will be used extensively. A special controller developed for **Cookie Monster Munch** makes playing easier for the littlest arcaders.

One of the year's most eagerly awaited 2600 games must be David Crane's **Pitfall II: Lost Caverns** from Activision. This time Pitfall Harry is traveling through the lost caverns of the Incas in search of treasure and

H.E.R.O. (ACTIVISION)

adventure. The graphics on this 27-level maze-adventure are truly outstanding, among the best ever created for this system.

John Van Ryzin's first design for Activision (he previously wrote several computer games for Hayden Software) is **H.E.R.O.** Roderick Hero, the player's on-screen representative, is an airborne rescue expert who must save the miners dropped in the shafts deep beneath the Earth.

Parker Brothers' biggie for 1984 will be **Star Wars**, a translation of the 1983 Atari coin-op. The first-person flying and shooting contest has not reached its final finished state, but the advance peel given EG looks promising. Other Parker Brothers titles, which will also be available for the Atari 5200, ColecoVision and several popular computer systems, are **Gyruss** and **James Bond**.

Imagic has trimmed its sails somewhat, but it still expects to release a quartet of programs for the 2600: **Microsurgeon**, **Wing War**, **Quick Step** and **Laser Gates**. Imagic's huge Intellivision-compatible line appears to be no more, though the last few titles put into distribution are probably still available.

Miner 2049er Volume II leads the 2600 parade from Tiger, which also includes **Matterhorn**, **Espial**, **Sky Lancer**, **Changes** and **Super Crush**. *Miner II* features three more challenging screens and should keep Bounty Bob fans happy until **Scraper Caper** (also from Tiger) is ready for release during the second half of the year. *Changes* is based on an unreleased coin-op in
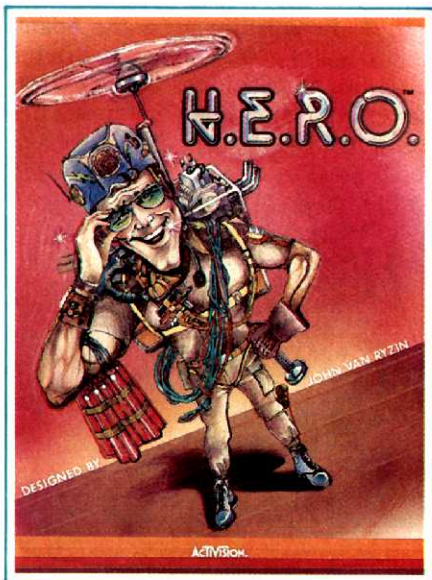
SOFTWARE PREVIEW

which the player helps a caterpillar turn into a butterfly. *Matterhorn* simulates mountaineering, with bolt-throwing birds as an extra danger.

Amiga's Power Play Arcades put up to five games on a single cartridge that costs about the same as two regular games. Among the titles is a bundle of games for use with Amiga's Joyboard foot-operated controller. **Surf's Up**,
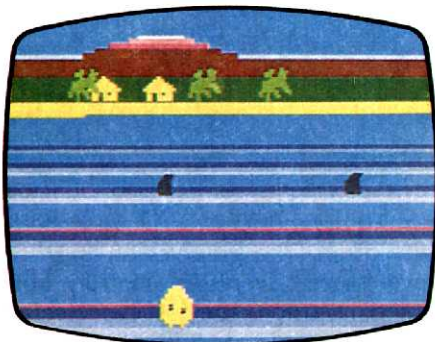
SURF'S UP (AMIGA)

the best of a good group, produces a satisfying illusion of hanging ten at Malibu.

Xonox is continuing to produce its double-ender carts. These two-fers are high quality, especially the graphics. The most intriguing of the new titles is **Sir Lancelot/Robin Hood**. **Chuck Norris** and **Artillery Duel**, due shortly for the 2600, are also scheduled for the Colecovision.

The ColecoVision figures importantly in the plans of several third party software houses, probably because it has the advantage of compatibility with the Adam computer system. Imagic plans ColecoVision editions of **Dragonfire**, **Fathom**, **Moonsweeper** and **Nova Blast**, Activision will produce **River Raid**, **Pitfall** and **Beamrider**, and Parker Brothers will have *Star Wars*, *Gyruss* and *James Bond*.

Interphase, which began with a pair

of Intellivision carts last year, is converting **Blockade Runner** and **Sewer Sam**. The company will also release a pair of games which achieve voice synthesis on ColecoVision without additional hardware, **Aquattack** and **Squish 'Em Featuring Sewer Sam**. The latter is a re-tooled version of the game Sirius Software published in 1983 for several home computers.

MicroFun will follow its **Miner 2049er** success with a trio of ColecoVision designs. Planned are editions of **Dino Eggs**, **Scraper Caper** and **Heist**. A new Texas-based outfit, Sunrise Software, is promising three ColecoVision carts for 1983. **Gust Buster**, a game in which players navigate a hot air baloon through an amusement park obstacle course, is the most innovative of the group, but Sunrise has quickly moved to stamp itself as a producer of one-of-a-kind software for this system.

Coleco is responding to consumer demand by producing more cartridges for its special controller modules. **Football** is playable with the Super-Action controller, while **Destructor** and **Dukes of Hazzard** are designed for the steering wheel module.

Coleco is also going to get into educational games, not exactly a unique thought among software manufacturers these days. Games that make learning fun are planned with the Smurfs, Telly Turtle, the Cabbage Patch Kids and the characters of Dr. Seuss pencilled in as the stars.

Despite its current preoccupation with readying software for the Adam, Coleco is also going forward with a full program of cartridges for the ColecoVision. Slated for 1984 are games featuring Tarzan and the Cabbage Patch Kids, as well as a design based on the movie "WarGames".

The best news for ColecoVisionaries is the forthcoming availability of some of the top computer games of recent times in cartridge form for the "third wave" system. Among those expected to reach stores soon are Broderbund's **Choplifter!** and **AE**, and Synapse's **Necromancer** and **Rainbow Walker**.

Pengo and **Moon Patrol** are just two

DINO EGGS (MICROFUN)

of many 5200 cartridges Atari plans to publish this year. The company's efforts won't be confined to importing hits from the nation's commercial fun palaces, however. One of the most exciting projects is **The Legacy**. It's a multi-scenario action mission in which players will be asked to demonstrate their ability to master a wide variety of play-mechanics.

Parker Brothers will publish *Star Wars*, *James Bond* and *Gyruss* for the 5200 as well as the other videogame systems previously mentioned. In some ways, the 5200 edition of *Gyruss* is the best home videogame version of that game, because the system is able to present much of the audio-visual splendor that made it an arcade winner.

It's quite evident that third-party support for the 5200 is only just developing in response to the outstand-

DRAGONFIRE (IMAGIC/COLECOVISION VERSION)

NOVA BLAST (IMAGIC)
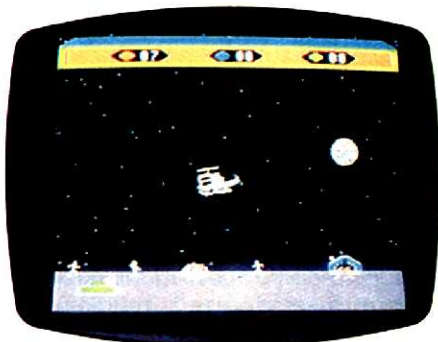
CHOPLIFTER! (BRODERBUND)

HEIST (MICROFUN)

ing sales the system recorded during the second half of 1983. It's a safe bet that some manufacturers won't be able to tear themselves away from the prospect of over one million cartridge-hungry 5200 owners, so it's reasonable to expect that previously unpublicized 5200 games will crop up this summer. Fortunately, Atari is supporting the system so forcefully that 5200-ites will have quite an extensive library of titles from which to choose until the electronic cavalry rides over the hill.

JR. JOINS THE HARDWARE HEAVIES

The IBM PC hasn't turned out to be much of a gaming computer. Its high-end price and graphics limitations have kept the machine firmly in the personal computer market for which it was designed. IBM is hoping for a different outcome with its just-introduced PCjr. It is attracting a lot of interest from independent software producers, guaranteeing that folks who bring Jr. home won't have to go gameless.

Actually, PC owners who've been wishing for more entertainment software will get their wish in 1984, thanks to the PCjr. Several companies have announced the intention of producing games on disk programmed so they will run indiscriminately on IBM's PC, XT and Jr.

Commodore isn't going to rest on its corporate laurels this year. It will introduce a pair of machines, the 264 and 364, which offer several advantages for those primarily interested in programming or applications such as word processing, spreadsheet and database. Will they be gaming computers? In light of their limited sound capability and the absense of sprite graphics, it doesn't seem likely. On the other hand, some of the technical improvements introduced in these new models could well find their way into whatever system Commodore eventually creates to supplant the C-64.

Let's all hope that this machine of the future, unlike the 264 and 364, is software compatible with the existing C-64 system.

Adverse — and in some cases grossly unfair — publicity concerning the problems of the Adam isn't keeping Coleco from enthusiastically announcing a whole range of peripherals, accessories and services. The most important items are a 64K memory expander and a disk drive. Coleco hopes that retailers will be willing to stock some of its programs in as many as three formats (cartridge, data storage pack and disk), but the jury is still out on *that* one.

The toughest new entry into the computer market could come from an unexpected source — Amiga. The

DEMON ATTACK (IMAGIC/PCjr VERSION)

Quality — Not Quantity — Is The Watchword For '84

FOOTBALL (IMAGIC)

joystick-maker has marshalled a lot of technical expertise to create a "next generation" machine for the under-$1,000 market. The system, currently known only by the code name "Lorraine", is said to have graphics capabilities not dissimilar to costly hardware

MOON PATROL (ATARI)

like Apple's Lisa. The system is expected to come equipped with a high-quality disk drive, and Amiga claims success in rounding up third-party publishers to make the game disks to give its drive something to do.

"QUALITY" IS SOFTWARE WATCHWORD

There's no doubt about the fact that producers of entertainment software for computers — the smart ones, at least — have learned plenty from the Great Videogame Shake-Out of 1983. Though a few houses persist with plans to bring out great quantities of essentially nondescript programs, knock-offs of established hits and simpleminded games decked out with licensed characters, most companies are trying to stake out fresh design territory. The reasons are a mixture of idealistic pride in their product lines and good business sense. There are just too many excellent products to leave much room for "me, toos" and besides, experience shows that innovative titles sell better than carbon copies.

Arcade-style games haven't lost their appeal, but the computer's great order-entry capacity has spurred the introduction of more games which test the mind as well as the reflexes. Strategy games and adventures will be more numerous this year than last, and there'll be an absolute flood of action-strategy designs which incorporate both mental and physical tests.

Educational games will also become more plentiful as the months pass. In fact, if all announced titles actually come out, it might lead to an over-supply situation such as the one which sent videogame cartridges into a tail-spin last summer. Some "soft educational" games — those which subordinate learning to entertainment pretty strongly — will probably end up published as family, social or strategy titles.

SOFTWARE PREVIEW

TOP PROGRAMS POINT TO HOT NEW TRENDS

Before launching into the usual company-by-company survey, It's examine some of the individual high points of the coming software season. These aren't necessarily the best games, but they appear to be the ones which will do most to shape the future of computer entertainment software over the next year or so.

One on One (Electronic Arts/Apple, soon to be released in other formats) may not be the best game invented in the last 12 months — though hoop-crazed gamers may dispute the point with you — but it is arguably the most significant. What sets this half-court basketball showdown between Larry Bird and Julius "Dr. J" Erving apart? For the first time, the gamer gets to direct an on-screen object that is something more than an animated cursor. Both players are programmed to display the characteristics and tendencies on their real-life counerparts. When the computer-controlled Dr. J. drives to the top of the key, fakes your Larry Bird out of his Adidas with a 180-degree spin and slam-ducks the ball for two points, the phrase "machine intelligence" will take on a concrete meaning it previously lacked.

Air Support (Synapse/Atari) is the most successful attempt to make military strategy games accessible to people who want action thrills when they play. This landmark lets the player use the joystick and a few single-stroke commands to direct an entire army, complete with helicopter support, on a variety of missions.

Dallas Quest (DataSoft/Commodore 64) and **The Institute** (Screenplay/Atari) are notable illustrated adventures in that they don't easily fit the
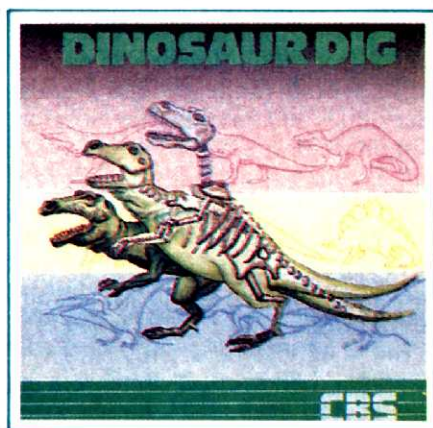
DINOSAUR DIG (CBS)

usual mold of quest game subject matter. In the former, the player gets to participate in the world of the "Dallas" TV series, while the latter challenges the gamer to use five Freudian dreams to escape the institute.

Dinosaur Dig (CBS Software/Apple, C-64, IBM PC & Jr.) is the most impressive of the first group of educational programs NeoSoft produced for CBS. This one presents a computerized "book" about dinosaurs on one side of the disk, with games that utilize the just-learned facts to be found on the flip side of the disk. The non-game side is nearly as riveting as the entertaining strategy games, if not more so, as the computer makes the hard facts seem to come alive. Dinosaur Dig, like other NeoSoft creations, employs a plastic keyboard overlay to make it simple for a child to use.

The World's Greatest Baseball Game (Epyx/C-64 and others) may well live up to its grandiose title. Like most of the Epyx line, it combines action game graphics with strategy by offering two modes of play, including a version that simulates actual player performances for purposes of statistic

al replay and "what if?" contests. Since the visuals are as good or better than most arcade-style video hardball programs, the result is a game that delights the eye while it tests the brain.

Relax (Synapse/Atari, Apple, C-64, IBM PC & Jr.), **The Fitness Game** (BioTechnology/IBM PC), **Total Health** (Computer Software Associates/C-64). **Aerobics** (Spinnaker/Atari) and **The Model Diet** (Softsync/Atari) are examples of an entirely new category of software. Not exactly games, they are activity programs that, used properly, are said to lead to personal improvement. Synapse's *Relax*, based on biofeedback techniques, is the most impressive — and, with its headband monitoring device, is quite pleasant to use.

And now, having singled out a few of EG's "picked hits", let's get down to the real nitty-gritty. . .

DataSoft will continue to translate arcade games for the home in 1984. **Juno First** (Apple, Atari, C-64, PC) and **Nibbler** (C-64, Apple, Atari, PC) will be the releases to follow up DataSoft's **Zaxxon** and **Poo Yan**.

Meridian III (Atari, Apple, C-64, PC & Jr.) is the most novel and exciting of Datasoft's forthcoming action titles. It's a first person flying and shooting games in which the player pilots an attack helicopter. The graphics, especially the "radar screen" for pinpointing enemies, are excellent.

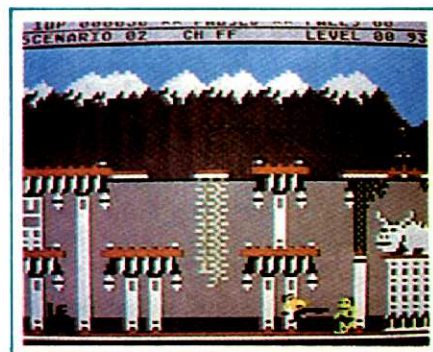**Bruce Lee** (Atari, Apple, C-64, PC & Jr.) and **Lost Tomb** (Atari, Apple, C-64, PC & Jr.) straddle the line between arcade mission games and action adventures. The former casts the player as the famed martial arts movie star, while the latter is a Stern coin-op design in which the gamer can explore more than 90 perilous chambers. Also
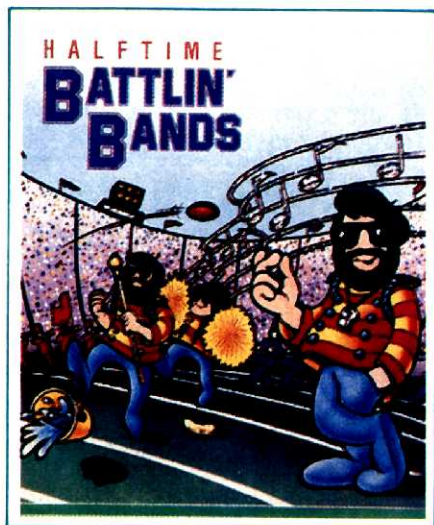

DALLAS QUEST (DATASOFT)

MANCOPTER (DATASOFT)

BRUCE LEE (DATASOFT)

HALFTIME BATTLIN' BANDS (CBS)

along similar lines, though leaning a trifle in the direction of action-adventure, is **Mancopter**. Developed in cooperation with Japan's Nichibutsu group, *Mancopter* challenges players to steer a safe course through a variety of obstacle-filled screens.

DataSoft also plans to enter the educational game field this year with programs featuring well-known licensed entertainment characters. Set to star are Gumby, Heathcliff and Heckle & Jeckle.

Those who own non-Atari computers will finally be able to play some of that company's biggest software hits thanks to the efforts to Atarisoft. Best of a strong bunch of games is **Robotron** (Apple, C-64, TI and others to come), but the editions of **Choplifter!** and **Dig-Dug** for the VIC-20 are amazingly good.

Soft educational games with a generous serving of pure fun dominate the forthcoming releases from CBS Software. Gone are the videogames and somewhat uninspired translations of coin-ops, replaced by some of the most innovative programs likely to appear this year. **Fleet Feet** developed by the CTW Software Group, is a race game in which the player may choose from 16 different pairs of feet, each having its own advantages and disadvantages. For instance, sneakers are faster, but boots will get you through the watery squares on the escalator-type track that rises vertically on the scrolling screen.

The Jazz Scat series of three titles from CBS (for Atari and C-64) give a sugar-coated introduction to basic music concepts while involving computerists of all ages in highly playable contests. **Half-Time Battlin' Bands**, in which two players vie to create on-

the-field formations representing the notes of a marching song, looks like the best bet. **Movie Musical Madness** (Atari, C-64), also in this series, is less a game than a computer toy for creating little animated movies with sound and graphics. The process is so simple even a young child will quickly gain facility with the various props available for creation of these mini-movies. The Jazz Scat games are further distinguished from the ordinary by their approach to documentation. Having the three members of this musical design group sing the rules is a refreshing
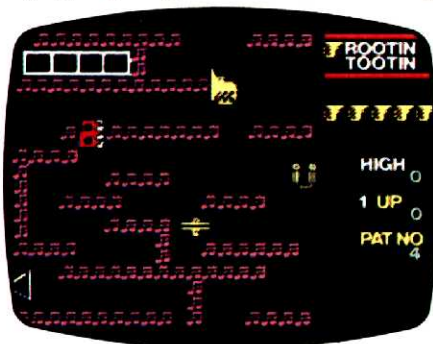
ROOTIN' TOOTIN' (CBS)

FLIGHT SIMULATOR II (SUBLOGIC)
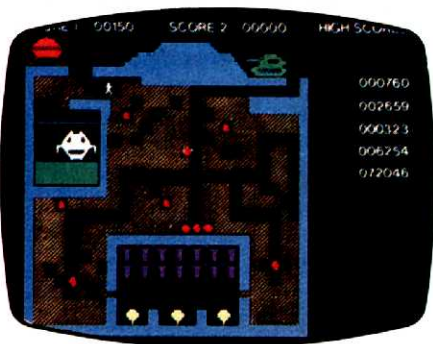
MR. TNT (HES)

change-of-pace.

Blast brigaders will definitely want to check out the latest game from Jeff (**Gridrunner**, **Attack of the Mutant Camels**) Minter. This perimeter target shoot for one or two joystickers will first be available for the C-64.

Rootin' Tootin', **The Pit** and **Mr. TNT** are a trio of coin-op translations
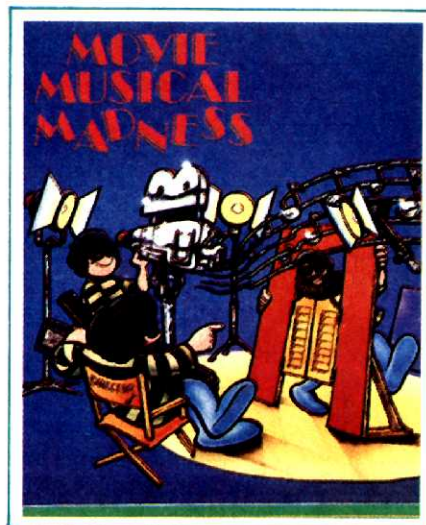
MOVIE MUSICAL MADNESS (CBS)

from HES. The first-named looks especially interesting and has players guiding a tuba around a maze to get the notes and avoid rival musical instruments.

Minnesota Fats' Pool Challenge and **HES Games 84** are the two sports titles on the way from Human Engineered Software. The former is video pool, while the latter tests skill in a variety of olympic events. Both are offered for the Commodore 64, and the pool program will also be available for the IBM computers.

Electronic Arts is concentrating on putting such popular titles as **Hard Hat Mack** and **Pinball Construction Set** into editions for a wide range of different computer systems. This hasn't stopped the development of new games, however. Those who dote on **M.U.L.E.** will be particularly interested in **The Seven Cities of Gold** from the same design group, Ozark Softscape. It's a simulation of the activities of the 16th century Spanish Conquistadors. Explore the New World and claim the richest prizes!

The Heist (Micro Fun/Atari, Apple, C-64, PC) is the introduction of the lovable art thief Graham Crackers to the gaming public. The mission is to guide the fleet felon through 90 rooms — 144 in the Apple edition! — on three levels and help him swipe all the famous paintings. Crackers is exceptionally well-drawn and animated, and he'll probably star in future games if this one is the smash many expect it to be.

SubLogic is extending its selection of computers served beyond the Apple. Look for editions of **Night Mission Pinball** for the Atari, Commodore and IBM as well as versions of the company's new **Flight Simulator II** for the

SOFTWARE PREVIEW
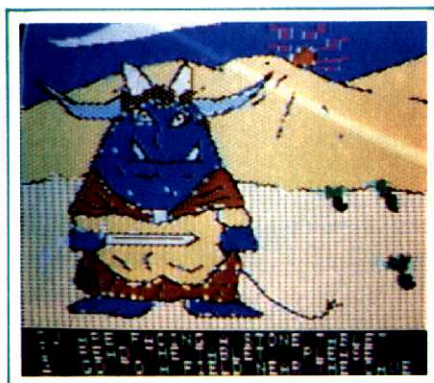
TROLL'S TALE (SIERRA ON-LINE)

same machines.

Computer War, based on the hit movie "WarGames" heads the list of new games from Thorn EMI. It will be possible to imitate the movie by saving the world from nuclear holocaust on the Atari, TI, VIC-20 and other popular computers. The company will also release its first Apple disk, **Liberator**, in which the arcader must defend Earth's last city from destruction.

Commodore inagurated a series of "Gold Medallion" games, a designation it says it will reserve for its top-of-the-line software. If subsequent titles live up to the standards set by **International Soccer**, this will be a line to watch. The first follow-up release is expected to be **Pro Basketball**.

Action game goodies from Commodore include a home version of Bally's **Solar Fox** and **Jack Attack**, a hot new multi-screen arcade-style contest.

The biggest news on the Adam computer software front for gamers is that Coleco has struck deals with several major publishers for "Best of" albums compatible with the system. Outfits involved are Broderbund (**A.E.**, **Choplifter!**), Electronic Arts (*Hard Hat Mack*, *Pinball Construction Set*),

Synapse (**Necromancer**, **Rainbow Walker**), Sierra On-Line (**Jawbreaker II**, **Troll's Tale**) and Sirius (**Capture the Flag**, **Gruds in Space**, **Type Attack**).

Dragon's Lair is also headed to the Adam from Coleco, but it won't be the laserdisc version from the arcades — at least not at first. The company plans to introduce a laserdisc module late in 1984 and, presumably, a more authentic edition of the trailblazing title will be made available at that time. Souped up home versions of former coin-ops like **Zaxxon**, **Buck Rogers**, **Congo Bongo** and **Sub-Roc** are also on Coleco's schedule.
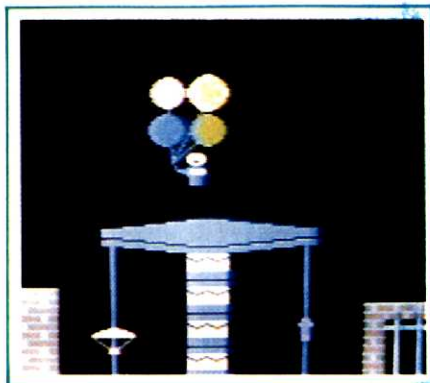
Coleco isn't neglecting its licensing program, either. Games based on Tarzan, Tunnels & Trolls, the Cabbage Patch Kids, the Smurfs and a half-dozen popular TV game shows are included in the 1984 line-up.

Synapse has a surprise for those

COMPUTER TITLE BOUT (AVALON HILL)

who think they've seen enough home versions of *Zaxxon* to last a lifetime. The company's C-64 edition may well be the finest programming job yet accomplished on that popular system. This gilt-edged edition even has a extra scenario not found in the play-for-pay edition.

Steve Hales' **Dimension X** (Atari) is finally ready after more than a year of

tinkering. The op-art effects found in Synapse's newest flying and shooting extravaganza will have gamers' eyeballs doing cartwheels. Synapse also has a purr-fect entry in the cute-game sweepstakes with **Alley Cat** (for C-64), a kind of action-adventure in which the player handles the affairs of an adventurous back-fence feline.

And speaking of cute, it would be hard to top the hero of First Star's **Boulder Dash** (Atari, C-64, PC & Jr.). When Rockford thinks the human arcader isn't having him dig fast enough for the jewels buried among the rocks, he looks out at the computerist from the screen and taps his foot impatiently.

Captain Twinkletoes is the hero of **Jet Star** from T & F Software (for C-64). The idea is to zoom through the twisting and turning caverns in a hunt for booty while an assortment of space creatures try to thwart the mission. **Leafer Madness** (Atari, C-64) draws inspiration from the animal kingdom to simulate a caterpillar's quest for the cocoon flower so it may transform into a butterfly. The graphics of this vertical scroller are most unusual, basically consisting of the caterpillar's favorite plant's lush foliage.

GUST BUSTER (SUNRISE SOFTWARE)

BOULDER DASH (FIRST STAR)

DRAGONRIDERS OF PERN (EPYX)
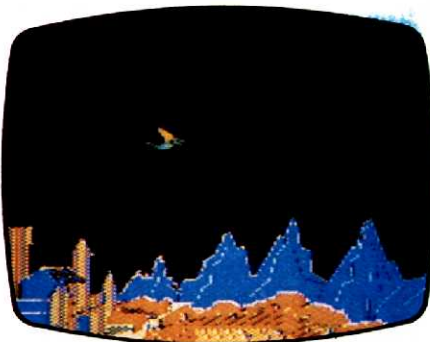
Quicksilva Inc. shows that gaming is definitely taking on an international flavor. This division of UK-based Quicksilva Ltd. is specializing in bringing some of the hottest programs developed overseas to these shores. The company's extensive line, which should start showing up in retail outlets very soon, includes a host of action and strategy games including **Bugaboo**, **Aquaplane** and **Sting** (for C-64).

In the Chips (Creative Software/ VIC-20, C-64, PC & Jr.) and **Run for the Money** (Scarborough/PC) are action/strategy money games for the whole family. The former is somewhat more lighthearted than the latter, but both give players the opportunity to demonstrate quick thinking and business savvy.

Action/strategy is the name of the game at Epyx, which is currently doing so well with **Silicon Warriors** and **Dragonriders of Pern**. Besides Olympics-themed **Summer Games**, with its gorgeous graphics and fluid anima-
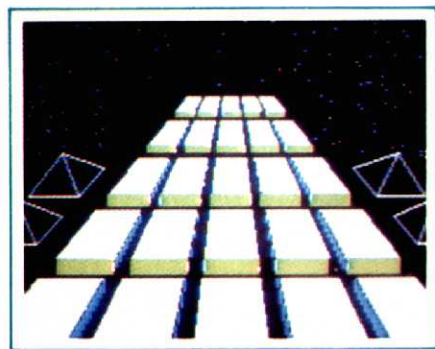
SILICON WARRIOR (EPYX)

tion, Epyx will also publish **Mission Impossible**, **Fire!** and **Puzzlemania**. **Construction Crew**, on the other hand, is less a game than an electronic activity for youngsters in which they can direct one of several workers to perform a range of on-screen tasks in a quasi-game setting. This one, too, is visually superb.

Kings Quest and **The Prisoner** are the next adventure programs On-Line is readying for its legion of fans. *King's Quest*, first offered for the PC, is dubbed a "third generation" adventure game because it features enhanced audio-visual effects, animation and 3-D screens. Designed by Roberta Williams, this quest game is believed to be the first that gives players variable amounts of points depending on how clever their solutions are for the various brain-teasers the game presents.

Sierra Championship Boxing (PC) gives the gamer the chance to create a boxer and match him against the all-

SPORTS ILLUSTRATED TOURNAMENT GOLF (AVALON HILL)

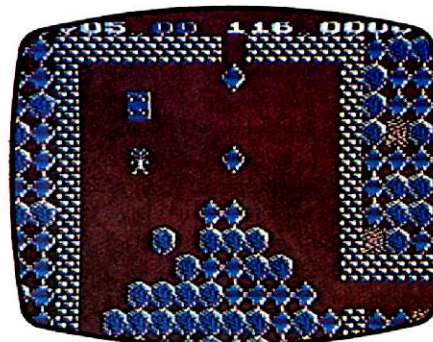time greater. On-Line has also acquired **Snokie** from Funsoft and is bringing out this seven-screen arcade mission in the frozen North for the Atari. Now that B.C. has starred in a game for Sierra On-Line, it's the turn of the Wizard of Id, who is the lead character is a new educational program called **Touch Type**. Frills such as surprise gag intermissions are said to make it much easier to master this important skill.

Adventure International and Marvel Comics will be combining on a project sure to appeal to adventure gamers who've always wanted to find out what it's like to be a super hero. A line of 12 illustrated adventures, themed to tie into a Marvel comic book project called "Quest Probe" is in development for just about every computer system under the sun. The first game is expected to reach stores this month.

Jupiter Mission 1999 (Avalon Hill/ Atari) is a truly remarkable four-disk tour de force by designer Scott Lamb. It challenges mind and body with intricate puzzles interspersed with arcade action. And the incredible range of screen displays must be seen.
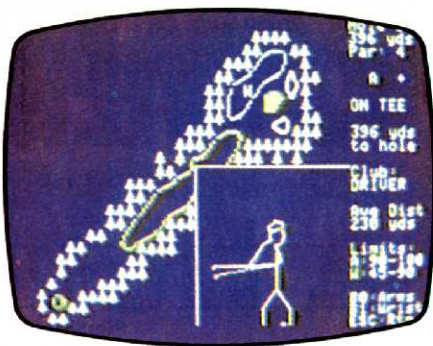
Avalon Hill's Sports Illustrated line is
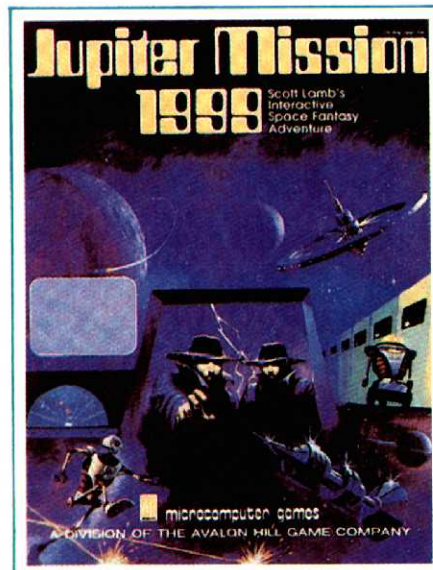
JUPITER MISSION 1999 (AVALON HILL)
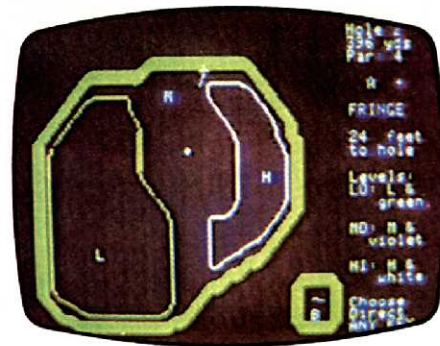
also getting a pair of powerhouse additions. Duffers will enjoy the minute simulation of their favorite sport in **Tournament Golf** (Apple), while followers of pugilism can recreate the great matches of history — or concoct dream bouts — in **Computer Title Bout**. More than 500 boxers are represented on the two-sided game disk for the Atari computers.

Another links simulations, **Professional Tour Golf** will be published by Strategic Simulations for the Apple

HARD HAT MACK (ELECTRONIC ARTS)

and Commodore. The abilities of more than 20 topflight pros have been simulated for play on either of two courses, which are rendered in super-detailed hi-res graphics.

Of course, SSI isn't neglecting the wargames which made the company famous. **Carrier Force** (Apple, Atari) showcases four World War II naval battles involving flat tops, **Norway 1985** is the third title in the "When Super-Powers Collide" series and an-as-yet-unnamed disk will present the Eastern Front of World War II on a grand scale.

Are these all the good games will be seeing this spring and summer? Of course not. It would take an article the size of this entire magazine to even list all the software and videogame cartridges manufacturers are planning. It looks like the best quality and quantity year yet, so keep watching **EG** for further news of upcoming games. **G**
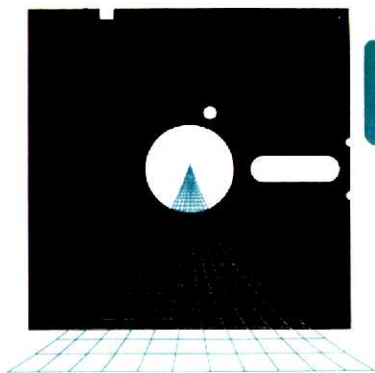
SOFTWARE SHOWCASE

SPARE CHANGE

Designed by Dan & Mike Zeller
Broderbund/Apple II/48K disk

As if commercial arcade operators don't have enough problems, here come the laugh-a-minute Zerks. Two of these creatures have escaped from their coin-op, The Zerk Show, and rampage through the amusement center in this delightful "cute game".

The Zerks, which look like animated barstools with feet, syphon tokens out of the arcade's coin-changers and throw them into the piggybank to build up a nest egg for their retirement. The operator removes tokens from the changers and deposits them in a dump bin for safe-keeping. The operator can also try to snatch tokens back from the Zerks and deposit as many as possible. If the gamer can collect at last 10 tokens before the Zerks bank five, the action proceeds to the next playfield.

Completing a level gives the arcader the chance to enjoy an animated intermission—one of the cartoons from the Zerk Show. Finishing off four levels earns the player a Zerk Show unit filled with a half-dozen such interludes. There are a total of 12 cartoons, most of them capable of drawing a chuckle with their wry commentary on the play-mechanics of **Spare Change.**

This may well be the first true-blue cute game designed expressly for the home market. *Spare Change* isn't the ultimate gaming challenge, but only a stonehearted grump could fail to be amused by the Zerks' madcap shenanigans. For instance, the arcader can often delay the Zerks from collecting the needed five tokens by capitalizing on their peculiarities. One token put into a telephone (on Level 2) causes the Zerks to drop everything, run to the two phones and engage in excited conversation. The Zerks also can't resist the melodies of the jukebox or the cheery action of the popcorn machine. And if the operator takes a token away from a Zerk before it can be banked, the little critter jumps up and down in impotent rage, which wastes a few precious seconds. The Zerks are also less than acrobatic, and it isn't unusual for them to run into each other—sometimes two or three times in a row.

Spare Change doesn't have skill levels as such, but it is possible to adjust seven different facets of the action, from how likely a Zerk is to take a token directly out of the dump to the accuracy they display when passing a token back and forth on the way to the piggy bank. Making the changes is simple using joystick commands, and adjustments really do alter the situation in a major way.

So if you're looking for something fascinating and fun—and definitely not just a rehash of an earlier game—check out *Spare Change.* And bring plenty of extra tokens!

(Arnie Katz)
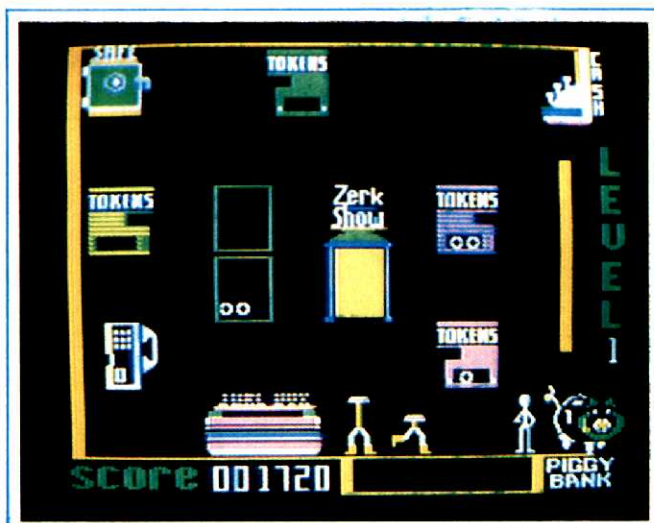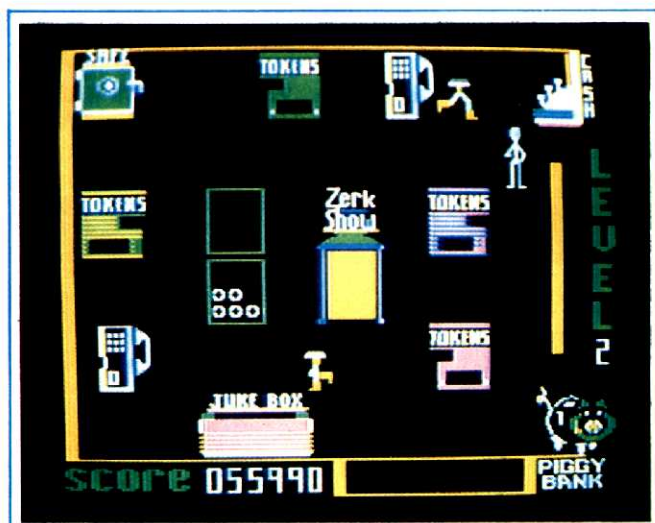
In *Spare Change,* a pair of Zerks run rampant in an arcade; gamers can keep them busy by calling them on the phone.

I WAS A TEENAGE ZOMBIE!
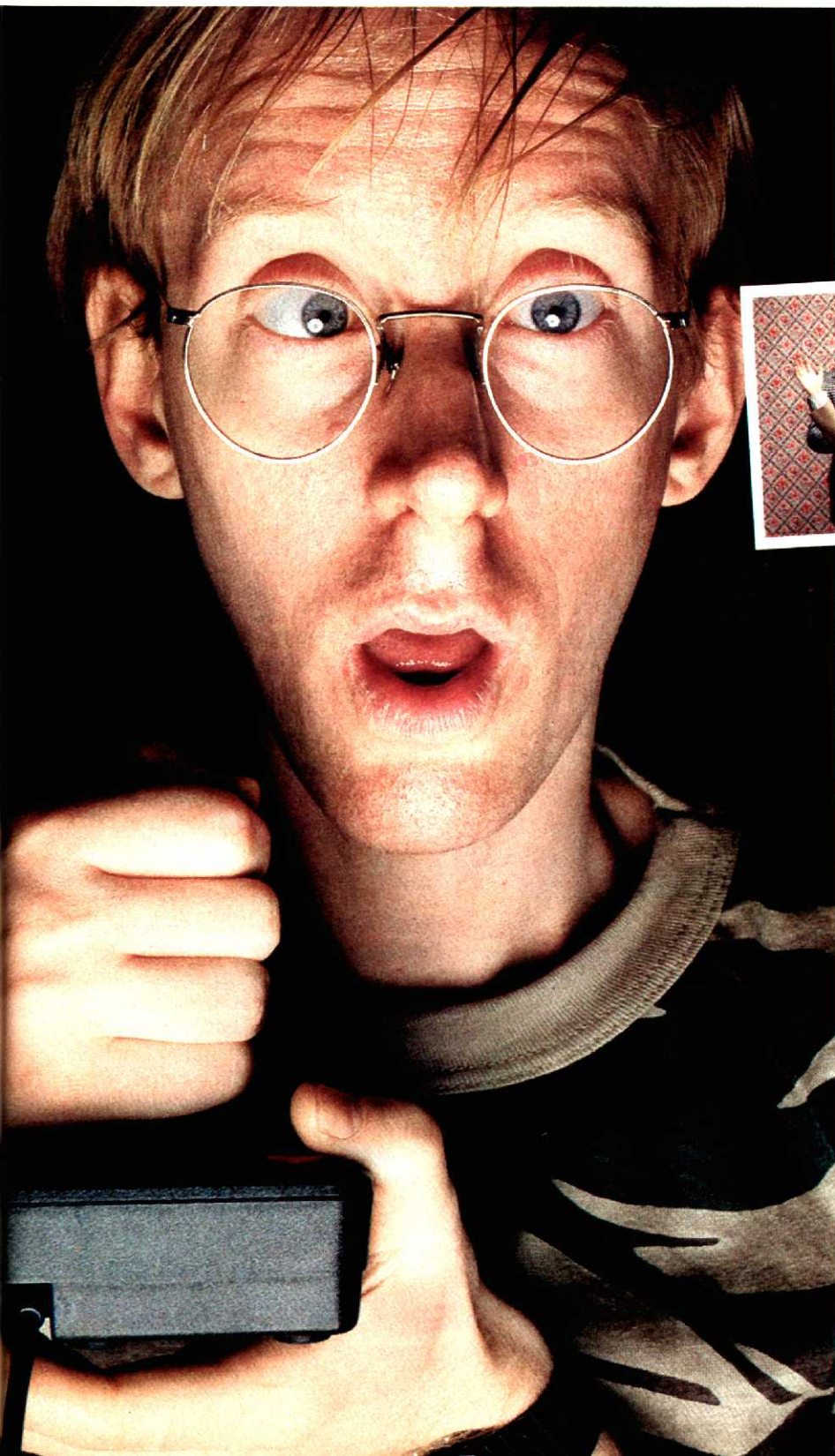
MIDWESTERN YOUTH TELLS HOW INFOCOM DEPROGRAMMING BROUGHT HIM BACK FROM A LIVING DEATH.

"IT GOT SO I COULDN'T LET GO," confesses John Carlson of Hickory Falls, Iowa. "My hands were welded to my joystick 24 hours a day. Blisters covered both my thumbs, my wrists ached, my eyes throbbed . . ." It had started as mindless play for young Johnny. But now it was turning his mind to green jelly.

Finally, concerned relatives decided to seek help. Johnny remembers: "I'd passed out after 63 million points—I forget which game. When I came to, I saw a personal computer in my room, with an Infocom game in the disk drive. I just sat there, numb, staring at the words on the screen."

Then—the revelation. "There was like this voice inside the computer, talking to my imagination. Suddenly, I was inside the story. I'd never experienced anything like it—challenging puzzles, realistic people, true dangers. Infocom had plugged into my mind, and shot me into a whole new dimension."

"Sure, I still play video games. But now I know there's more to life than joysticks."

Johnny's folks agree. "We've got our boy back," says Mrs. Carlson, "thanks to Infocom."

We can't save all the Johnnies. But many can still be reached through the remarkable prose of such Infocom games as ZORK,® DEADLINE,™ The WITNESS,™ INFIDEL,™ PLANET-FALL,™ and ENCHANTER.™ So please— before it's too late—step up to Infocom. All words. No pictures. The secret regions of your mind are beckoning. A new dimension is in there waiting for you.

(For more information on Infocom games, contact: Infocom, Inc., P.O. Box 855, Garden City, NY 11530.)

INFOCOM™
The next dimension.

For your: Apple II, Atari, Commodore 64, CP/M 8; DEC Rainbow, DEC RT-11, IBM, MS-DOS 2.0, NEC APC, NEC PC-8000, Osborne, TI Professional, TI 99/4A, TRS-80 Model I, TRS-80 Model III

NEUTRAL ZONE
Access Software/Commodore 64/disk

Neutral Zone is a masterpiece of programming on the C-64: the animation, resolution and graphics are superb, the sound effects first-rate, and the play action hot and heavy.

One or two players pilot a combat craft based at Alpha IV, an early-warning station located on the edge of the Neutral Zone. Alpha IV is being attacked by aliens from another galaxy, and it must be protected so that vital information can be transmitted back to earth. The joystick controls horizontal and vertical movement of the cannon's cross-hair sights. Use the laser cannon in the ship's gunnery pod to destroy the invaders.

The objective is to destroy all enemy ships before they attack the Alpha IV base or your craft. Both the combat ship and the base can only sustain a limited number of hits, and the player must decide whether to stop the enemy fire aimed at the ship or to go all-out to protect the base. There are five play levels, and each is progressively harder. Level 1 pits 10 enemy ships against you, Level 2 has 20, etc. and with each ascending level the enemy moves faster, is more elusive, and is harder to zero in on. The gamer's gunnery pod is equipped with instruments signaling which direction the enemy is approaching from, the bearings of the sights and that of the enemy target, damage indicators for the pod and the base, elapsed time of

Damage charts keep track of battle's progress.

the mission, and the current number of enemies destroyed.

At the end of the game, a comprehensive evaluation of each player's performance is given, and the rating is based on how much damage the pod and base have suffered and the amount of time required to complete the mission. Ratings range from "tourist" for the slow-moving, klutzy player to "superman" for the true cosmic hero. *Neutral Zone* is one of the best disk-load games for the 64 I've played yet, and it's sure to be a "super-nova" on any gamer's list!

(Tom Benford)

SUPER COBRA
Parker Brothers/Atari/cartridge

Here comes the **Super Cobra** explosion! Parker is obviously taking the multi-format message to heart and one of the nice benefits for game players is the availability, if not saturation, of *Super Cobra* for every system short of the Timex/Sinclair.

Super Cobra is a fine adaptation of the Konami coin-op featuring a cannon-firing, bomb-dropping helicopter that must be maneuvered through a horizontally scrolling scenario. Tanks, ack-ack guns and even surface-to-air missiles bristle along the topography and must be dealt with or avoided by deft joystick manipulation as the computer charts the war-chopper's travelled distance in a bar graph at the top of the playfield. Each territory-segment brings a new wrinkle in the play action or difficulty level.

Much of *Super Cobra*'s popularity is owed to the game's navigational chal-
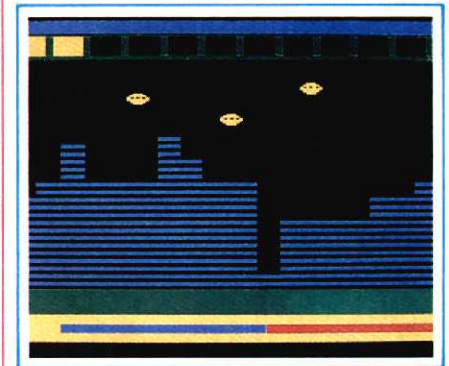
Enemy craft line "corridors" in *Super Cobra.*

lenge. In addition to the ground and ground-to-air targets, the Cobra must be maneuvered through a labyrinthian mountain maze with an ever-expanding offensive capability. This element is perfectly captured in the Atari computer translation, as are the spartan but effective graphics and the martial musical soundtrack. Since the joysticks for these systems have but a single action button, however, it is not possible to reproduce the coin-op's independent cannon and bomber capabilities. A single press of the button accesses *both* functions, instead.

Like the original coin-op, it's also possible to continue a game from the point where it ended, rather than starting over again at the beginning. This is a boon both to compulsive gamers and those who want to see every bit of available playfield in a single, stubborn sitting.

(Bill Kunkel)

ZEPPELIN RESCUE
Computer Software Associates
Commodore 64/disk

Things are getting rotten in Los

Neutral Zone's **high-resolution graphics add realism to game play.**

Angeles, especially the environment. The people must be picked up from the roofs of skyscrapers, ferried to a collection point and ultimately moved somewhere they can safely breathe the air. The problem is that the only available flying machines are zeppelins.

That's the situation in **Zeppelin Rescue,** a top-notch scroller that takes a delicate touch with the joystick to play successfully. The setting is a five-screen-wide depiction of Los Angeles. The zeppelin flies from screen to

The Zeppelin rescuer takes to the skies!

screen and, somewhat in the manner of **Choplifter!,** plucks up to 48 people from the buildings, dumping them in the collection chute on the second screen to the right.
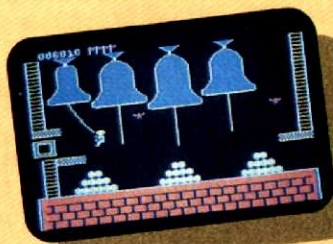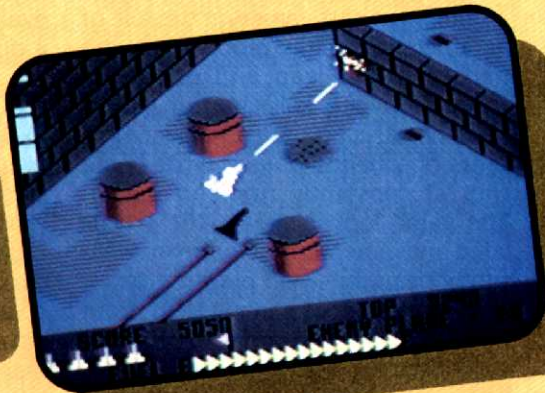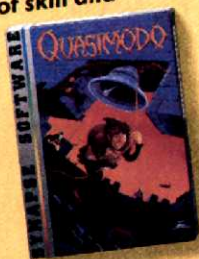
Steering the leviathan of the air isn't a snap. Pushing the joystick in any direction sends the zep off at a slow speed. Pushing the stick the opposite way brings the aerostat to a halt. Two pushes in the same direction kick the craft into high gear.

Zeppelin Rescue offers practice as well as normal play. The difference is that the easy mode omits such obstacles as the acid rain clouds that restrict the movements of the zeppelin even more than usual.

There aren't too many completely original games for the C64 yet. *Zeppelin Rescue* has never previously appeared for any other system, and it should provide lots of entertainment for 64ers.

(Arnie Katz)

JUMPMAN JR.
Epyx/Atari/cartridge

When Epyx introduced **Jumpman** about a half year ago, it had the look of an afterthought. Dull, unmemorable packaging almost obscured the fact that, encoded upon a floppy disk within, *Jumpman* was a genuine classic. Even the program itself—hurriedly written and speckled with annoying glitches—attempted to obliterate its

own achievement. But *Jumpman* was so strong that attempted suicide couldn't dent it.

Just as gamers were recovering from the awe and wonder generated by **Miner 2049er** and its ten (or eleven, depending upon the version) playfields, here came *Jumpman* boasting no less than 30!! And not just any 30 racks, either, but a coherently written collection of some of the most interesting play mechanics ever devised.

Jumpman cast gamers in the role of an athletic, springy protagonist who had to climb, leap and otherwise scramble over a collection of girder-level construction sites, collecting a series of spherical objects while being shot at constantly from off-screen. The game looked great—the articulated movements of Jumpman were subtly beautiful—and played greater, with all manner of gaming skills, from hand-eye smoothness to puzzle-solving, being tested by the 30 scenarios.

When Epyx saw how well *Jumpman* was doing with consumers, in spite of itself, it realized the better-late-than-never potential by producing **Jumpman Junior,** a remarkable restatement in cartridge form. The memory limitations of the format compelled the reduction of playfields from 30 to 12 and the subsequent re-scaling in difficulty. The difference in difficulty between

Rack 3—Dumbwaiters, a scenario that must be learned rather than mastered—and Rack 4—Hellstones, a joystick wizard special—is steep, indeed.

Nonetheless, *Jumpman Junior* is a slick, cleaned-up distillation of everything that made its progenitor such a fantastic gaming experience, unmarred by programming flaws and available to every Atari computerist with a cartridge slot.

Jumpman Junior is a mass market version of a software classic that's so good—the playfields are reminiscent of the original, but are all new—that even veteran Jumpmen should check it out.

(Bill Kunkel)

DANCING FEATS
Designed by Christopher Chance
Softsync/Atari/32K disk

Music composition programs that capitalize on the Atari's excellent audio are plentiful, but **Dancing Feats** is special and unique even in this crowded category. Billed as "the one-man joystick band", *Dancing Feats* lets even non-musicians fool around with a flexible, easy-to-play musical instrument that practically defies you to make it sound bad.

Don't expect to write your first electronic symphony using *Dancing Feats.* It's not an impossible task, but the true strength of this program is that it is the closest thing to a computerized kazoo on the market. The home gamer uses the joystick to make the program

Jumpman Jr. **carries on the** *Jumpman* **legend—without bugs!**
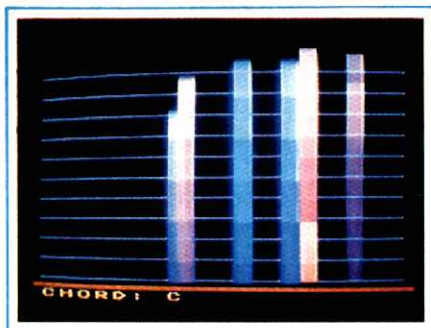
Non-musicians can doodle with the "feets".

generate a note somewhere in its two-octave range, and each note is represented on the screen by a colored vertical bar. Whipping the stick back and forth can create multi-note runs, while zig-zagging it cranks out the choppy, staccato beat favored by such guitarists as Eric Clapton.

The joystick is also used to set up the backing band prior to actually starting a song. The player can select a bass line, tempo, scale, style and ending from a series of menus. Hitting the space bar during a song throws it into the coda, which is automatically capped by the previously selected finish. Really confident musicians can even play *acapella*.

This novelty program should give all but the totally tone-deaf hours of pleasure. Strike up the band!

(Steve Davidson)

PHAROAH'S PYRAMID
Master Control Systems/Atari/48K disk

Pharoah's Pyramid—the right spelling despite the logo on the rulebook and package—shows that pattern-changing programs are moving into the mainstream. This disk shares features like its pyramid-of-blocks playfield with **Q*Bert**, but its original elements give it a special flavor all its own.

Helping Little Achmed build Ramses' tomb is the main goal. Achmed hops from block to block, changing their colors each time he lands, while ferrying bricks from the river's edge to the apex of the construction. He finishes off a round by turning all blocks the same color.

Achmed starts as a slave and gradually progresses through the ranks to builder, architect, wizard, prince and pharoah. Each level consists of six rounds, plus a seventh during which Osiris, god of the underworld, chases Achmed relentlessly. It seems that Osiris and Achmed are both vying for the love of Isis, goddess of beauty, and the deity grows increasingly trouble-

some as the little Egyptian gets closer to winning his immortal heartthrob.

Other perils include a Moses Snake that follows Achmed around the playfield with its deadly touch, and a series of five plagues that start bedeviling him at level two. Other nasties include Artemis the evil alligator (level two) and Osiris' brother Set (level three), who can even push Achmed off the usually safe top step. Touching Isis endows Achmed with her magic, and he can then drive Osiris and the plagues from the screen at least for a while.

The visual treatment is exceptional. Each block looks as though it is completely outlined in small footlights, the characters are all attractively rendered, and even the background is a subtle masterpiece that slowly shifts from day to night as Achmed races up and down the sides of the tomb.
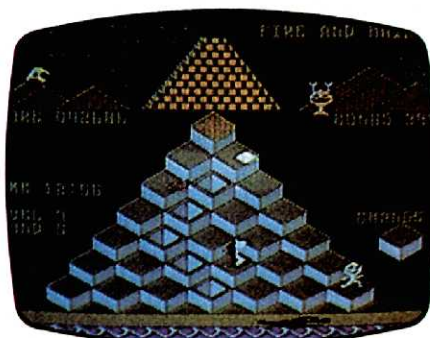
It takes quick reflexes and a quicker mind to outsmart Osiris and his minions.

Like most games of this type, *Pharoah's Pyramid* requires the player to orient the joystick in a special way, with the action button pointing directly at the display terminal. As long as the home arcader remem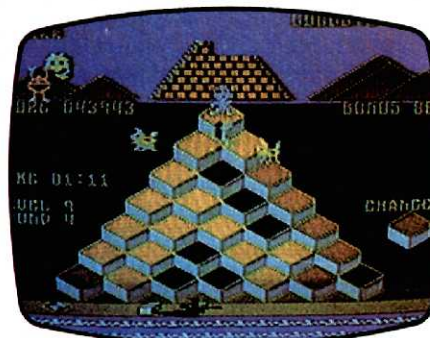bers to hold the command device that way, Achmed can really zip around the playfield at any of the five available speeds. Incidently, the "just for fun" option should be attempted only by star athletes and the hyperactive. It's *fast*.

So if you enjoy the pattern-changers, climb onto *Pharoah's Pyramid*. You'll really dig it.

(Arnie Katz)

CAPTURE THE FLAG
Sirius/Atari/16K disk
Designed by Paul Edelstein

Although many games are designed for one- or two-player options, only a few really cry out for a human opponent. **Capture the Flag** is one of these. It's not that there's anything wrong with the solitaire game — only that the computer refuses to laugh or scream at those points during game play that a human would.

Capture the Flag is truly a maze game. There are no pills and no ghosts, only the maze, one prize (the flag), two doors and two characters — the Invader and the Defender. The object is to go through the maze to one of the doors and capture the flag. Easy, right? That depends on which screen the gamer uses.

There are two main screens in *Capture the Flag*, and each uses a different play mechanic. The lower screen, an overview of the labyrinth, uses "Compass Movement" — the fire button is depressed at all times and movement is in one of four directions. (Oh yes, in the beginning the screen is blank and the maze becomes visible only if the player has traversed that area or "seen" it.) The upper screen (actually a split-screen, one for each player) is a 3-D, first-person view of the maze. It uses "Walking Movement". (In this mode, the fire button isn't used.) Although there are six types of movement, only two of them enable the character to walk; the other four are used for turning left or right.

By far, the upper screen is the more difficult to navigate through. It is also the preferred screen for the two-player option. To make sure neither player feels tempted to gaze at the lower screen, the map can be switched off by hitting the Select button.

Gamers are very likely to crack up with laughter during this option. What generally happens is the gamer walks into a dead end and then can't find his way out. Meanwhile, the music which gets louder with the close proximity of the opposing player begins to get more frenetic, and so the gamer slams into even more walls.

There's no need to look around any corners to see that Sirius' *Capture the Flag* is a winner.

(Vincent Puglia)

RANDAMN
Magnum/Apple II/48K disk

Ever have a dream (or nightmare) about a game with seven hi-res screens of adventure, each with seven stages with a total of 28 randomly chosen adversaries? Well then, wake up and scream **Randamn**. This is it.

The gamer takes the role of the next hearty candidate to attempt to replace Randamn, the Demi-god of random

The stuff nightmares are made of:
A sampling of *Randamn's* screens.
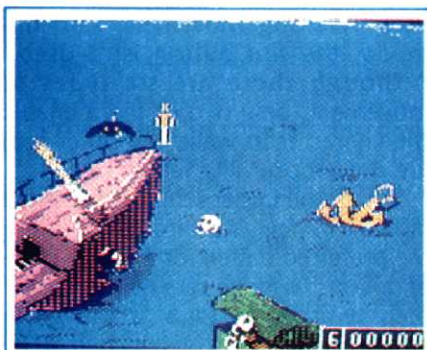
events. To pass the test you must conquer all the foes in each of seven distinctively different worlds.

In each world there are seven unique opponents, each with its own characteristics and individual deadliness. In the order to which they appear, the worlds are; Graveyard Universe, Water World, Endless Swamp, Orange Planet, Snow World, Stonehenge and the Land of the Damned.

Each of the monsters carry different point totals, but the game is much less about earning points than it is about conquering all seven worlds.

As each screen is cleared of foes, a new world is introduced, along with a special place to enter the letters of a spell that allows the gamer to bypass worlds already conquered. Each player begins with seven lives. An additional life is earned when a world is cleared of evil creatures.

The method of generating opponents is where *Randamn* really stands above the rest. At the first stage of

each world there is only one enemy. At the second stage there are two, and so on until the seventh and final stage where seven foes try to gang up on our fearless adventurer.

With true slot machine-like action, the gamer's opponents are called up to battle randomly. For example, at the seventh stage you could have seven identical foes or seven different ones, though the odds say it will most often be something in between. Then again, events are randomized.

Play is accomplished through use of keyboard, joystick or paddles. Joystick provides the best method.

Some of the screens are remarkable in their detail and colorfulness. A few, like Snow World, are hard on the eyes. The game is well documented and has one of the most attractive package designs in gaming history.

According to legend, it has been 11,000 years since anyone has successfully conquered all seven of these hostile lands. Perhaps it won't take you that long, but don't be surprised if *Randamn* becomes an expletive non-deleted from the games you often play list.

(Rick Teverbaugh)

GAME-A-THON

QUEST FOR TIRES
Sierra On-Line/Atari computers/40K disk

Johnny Hart's "B.C." characters star in this one- or two-player action/adventure that goes heavy on humor without sacrificing challenge or excitement. Programmer Chuck Benton has translated all of the comic strip's considerable charm to the electronic game screen using graphics that will certainly please all Hart fans in the audience.

The player uses the joystick to steer Thor, mounted on his stone age unicycle, through a multi-screen panorama on a mission to rescue the Cute Chick from a dinosaur. And though the various menaces — such as the club-wielding Fat Broad — are handled with a feathery light touch, they're no less deadly. Pushing the stick north makes Thor's cycle jump, pulling it south causes the caveman to duck, and left and right movements regulate the speed. The faster Thor gets through the obstacles, the more points the gamer scores. The cumulative
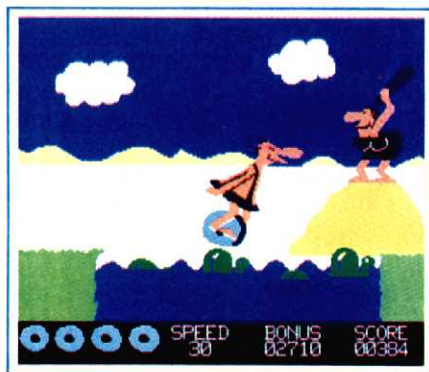
Thor meets Fat Broad in *Quest for Tires.*

effect of acceleration is to move the character toward the right edge of the display, which makes it much harder to see the on-coming terrain quick enough to jump or duck as required. Happily, the program contains the solution to this dilemma: It has four skill levels. The higher the level, the faster Thor travels and the higher the speed he can maintain without drifting over to the right. In other words, once a gamer notices that he or she can get Thor moving at higher-than-minimum

speed, changing to the next skill level may actually make some aspects of the contest easier instead of harder.

Quest for Tires will inevitably be compared to **Smurf Rescue** (Coleco/ColecoVision), because both are action adventures with a similarly light-hearted ambience. The play in Sierra On-Line's game is much more fluid, since there is no need to stop to carefully line up each jump nor to bounce up and down to increase the height of the leap. And although *Tires* should be as appealing as *Smurf Rescue* to youngsters, adults are apt to derive much more enjoyment from the Sierra On-Line disk.

One small defect in *Quest for Tires* is that it starts much too abruptly. The first action screen comes up with no preamble of any kind, and it's frustrating to watch Thor trip on a rock or log before the player can twitch a finger on the joystick. A little theme music to announce the start of play, and perhaps a few seconds' hesitation before the on-screen animation gets going in earnest, would cure this defect.

Humor pervades the program from start to finish, making it fun as well as challenging. And watching Thor's comical pratfalls even takes a little of the sting out of failure. Overall, *Quest for Tires* is a polished gem, brilliant and beautiful.

(Arnie Katz)

Q*BERT
Parker Brothers/Atari/cartridge

The Atari computer translation of **Q*bert** is certainly no disappointment, in either graphics or play-mechanic. All the elements that made the coin-op a supersmash are packed into the cartridge—with the exception, of

course, of the sharp "click" that accompanies each fall off the pyramid cube and the muttered curses that spew when the cube-climber errs.

As with every other version of the classic coin-op-come-home, the only major criticism that can be leveled is the control scheme. Everyone knows

*Q*Bert's* **curses are only visual.**

that the coin-op featured a four-way movement pattern, each direction on the diagonal. When Parker Brothers licensed the game from Mylstar (formerly Gottlieb), the company decided that, since most joysticks are built for north, south, east and west movement, the home adaptations should play to their joystick's strong points. A nice thought.

Unfortunately, what that *really* means is that players must hold their joysticks on the diagonal while they play. It can be gotten used to, but in this reviewer's opinion, it's a needless, if well-intentioned, complication to one of the simplest games in the arcades.

Still, if you like *Q*Bert* (and who doesn't these days?), this is a nicely

styled rendition of the cube-hopping contest. After mastering the "new" control scheme, gamers are sure to fall in love with the fuzzball all over again.

(Tracie Forman)

SQUISH'EM
Sirius/Commodore 64/disk

There's a suitcase full of money atop a 48-story building under construction, and all the gamer has to do is ascend to the top floor to collect it. Sound simple? Well, it's not, especially when such hazards as falling bricks and creepy-crawlies are placed on every floor to hinder the quest!

Squish'Em's color, sound and graphics are superb, and the play action is lively and fun-packed. Fifteen levels assure many hours of entertaining and challenging fun.

The objective is to scale the building and collect the satchel full of cash. The gamer may choose to evade the menacing creatures, jump over them, or squish them by having the climber stomp right on their heads. The squish action is controlled via the fire button. Squishing is the most satisfying playing style, since it's not only fun to do, but each 'squish' racks up the points on your score. A game consists of four climbers, although players can accumulate bonus men by collecting prizes (which appear only once per building, so look for them!). Each successive level is harder than the last, as the menacing creatures increase in number and the falling objects plummet downward with more frequency—the last five levels are very hairy.

Kudos to Tony Ngo, the game's designer, for a laugh-and-fun-filled game that's sure to please every Commodore-64 owner.

(Tom Benford)

**Evil predators lurk above and below. One touch is fatal.**

The only way to get rid of them? Squish em!

CLOWNS
Commodore/C-64/cartridge

Hurray! There's finally a game that uses paddles! **Clowns** can be played by one or two people, and the paddle plugs into the C-64 game port one.

At the top of the screen is a continual stream of blue, green and yellow balloons. The yellows, at the lowest level, are worth 20 points each; the greens count for 50 points, and the blues at the very top of the screen score 100 points apiece. Clearing all of the yellows earns 200 bonus points,
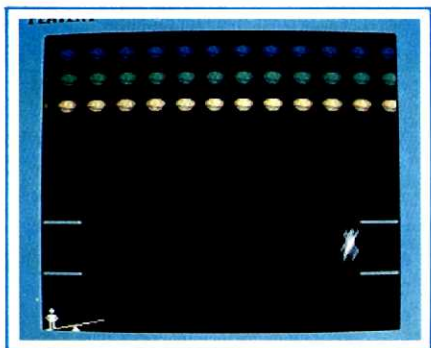
Clowns **uses a paddle for game-play.**

eliminating all of the greens awards a 500-point bonus, and clearing the blues means an extra 1,000-points plus an extra jumper.

The game strategy is to propel the jumpers via a seesaw by skillfully positioning it so that the landing clown bounces his partner as high as possible to burst the balloons overhead. Each bounce is worth 10 points. Additionally, the game can be played by either one or two players.

Clowns is a home version of the Bally/Midway arcade classic, and the graphics, sound, animation and play action are all superb, virtually on a pan with the original.

The game depends entirely on timing and judgement, and a good working knowledge of geometric deflection patterns is a definite plus. Though it can be quite challenging, it's definitely a game that the whole family will be able to enjoy.

(Tom Benford)

OIL'S WELL
Sierra On-Line/Atari/32K disk

Oil's Well takes players to an oil-rich drilling site practically dripping with black gold ready for the taking. All the gamer has to do is touch the oil pellets with the drill bit to pump the precious stuff to the surface. The only problem is that maverick oil barons, jealous of the fortune, have planted

COMPUTER GAMING

land mines and evil, lurking Oozies in the field to work their mischief. If the Oozies touch the pipeline, they eat right through its metal casing, and it's back to step one to try again.

There's only one way to eliminate an Oozie, and that's to gulp it down in the drill bit. But the roaming land mines are a different story — while they can't harm the pipeline itself, one touch destroys the drill bit completely.

The best — and most innovative — part of the game is the player's option to retract the pipeline with a press of the joystick's action button. Since the drill bit can't reverse its direction once it establishes a pipeline, retracting the line is the easiest, and best way to deal with approaching Oozies — or just to change direction. The pipeline can be shortened a little (press the button quickly) or a lot (a longer press), depending on the situation at hand.

Munching a petromin slows down the enemies, while gulping a goblet is worth plenty of points. Eight different levels, as well as three skill settings, make this a challenge to any home arcader.

(Tracie Forman)

PASSPORT TO ADVENTURE

PLANETFALL
Infocom/Most Computers/48K disk

Swabbing the decks of the S.P.S. Feinstein is routine work. (When you joined the Stellar Patrol, you knew you'd have to clean up your act!) The bane of your existence, Ensign Blather, is breathing down your neck as usual. . but the next thing you know, you're the sole survivor of a shipwreck in space, hurtling toward an unknown planet in a tiny escape pod.

That's the opening sequence of **Planetfall**. Infocom's science fiction text adventure is energized by a definite sense of humor, and its packaging lives up to Infocom's excellent reputation. The game comes complete with a plastic Stellar Patrol I.D. badge, three interplanetary post cards, an incomplete letter to the folks at home, and a witty, easy-to-read instruction manual entitled "Today's Stellar Patrol: Boldly going where angels fear to tread."

As in all of Infocom's text adventures, the computer understands a wide vocabulary of complex commands instead of the usual two-word entry. For example, instead of typing in "Go door," players can try "Examine the door, then give the book to Floyd" and be understood.

The game begins with a routine day aboard the S.P.S. Feinstein, progressing automatically to the inevitable blow-up. Figuring out how to escape the disaster is easy enough — it practically hits the player over the head.

Planetfall **takes the player on a one-way trip to a shipwreck in space!**

However, because the escape pod is fully automated, there isn't an awful lot to do for a number of turns, and it would have been nice if all that wonderful description of the scenery in space ran without offering so many prompts.

Once on the planet, the gamer must face a number of challenges. The most pressing is to explore the deserted city for food, water, and a safe place to bed down for the night (a new concept in adventure gaming). Eventually, the shipwrecked spacefarer meets Floyd, a playful, childlike robot with a sensitive soul. Together, they have to devise a way to save the planet from certain doom — and signal for help — to win the game.

This tongue-in-cheek brain-teaser is one more excellent addition to Infocom's terrific product line. Be warned that there are a few challenges that seem nearly impossible — like figuring out a number between zero and 1000 that opens a locked door — but with patience, players are likely to stumble on the answer (no, you *don't* have to dial each and every number).

Planetfall is difficult, but not impossible, taxing but not too frustrating, and Floyd has a way of growing on you.

(Tracie Forman)

GATEWAY TO APSHAI
Epyx/Atari & C-64/cartridge

Gateway to Apshai is a solid contrast to many of Epyx's older action/adventure games. For one thing, the company has finally eliminated the need to boot the game with a BASIC

cartridge in the slot, which generally results in choppy, frustratingly slow action. For another, *Gateway to Apshai* is available on cartridge, a welcome boon to would-be adventurers who have yet to add a disk drive to the computer collection.

This is unquestionably one of the finest action/adventure games on the market today, and is definitely the top choice among the cartridge games. *Gateway to Apshai* packs more punch than many games on disk. This action-oriented dungeon exploration game features 16 different eight-level dungeons. More than 7500 different areas await the stouthearted, and the player can even mix and match dungeons — and levels — during the course of each game. It all adds up to more variety than you can shake a joystick at.

The gamer uses a joystick to control an on-screen hero (seen from a bird's-eye view) as he makes his way through a multidirectional scrolling playfield. Each section of the dungeon is only made visible *after* it's been entered.

Each dungeon chamber might contain chests crammed full of riches, weapons and/or armor, spell scrolls, locked or secret doors, traps. . .and, of course, monsters. On the first level, they're your basic sewer vermin — large bats, sewer rats, and garter snakes, for the most part. Subsequent levels are a bit harder to survive in, with the likes of trolls, evil wizards, and

zombies strategically placed to make life miserable.

With the help of the option, select, and start keys on the Atari, gamers unlock doors, cast spells from scrolls, pick up bounty, check on their status and weapons, search out secret passageways, and brandish their swords (or bows and arrows) at villains.

Players start the game with five lives, plus strength, agility, luck, and health scores. The former three statistics influence the hero's fighting (or fleeing) ability, while health is affected by wounds suffered during the course of play. When health reaches zero, the character dies. After finishing each level or choosing to go on to the next, bonus points may be added to the player's strength, agility, or luck, and health points always increase as well.

As the levels increase in difficulty, treasures get better. Adventurers are advised to explore thoroughly, because better armor and weapons are scattered around to help gamers face even greater dangers. Bows, arrows, chain mail and healing potions are just a few of the pickings for sharp-eyed swordsmen.

Gateway to Apshai deserves the highest recommendation. With its fast action "real time" fights, attractive graphics, variety of pace, and emphasis on both brains and brawn, this is one of the best bets on the block for any action/adventure fan.

(Tracie Forman)

ENCHANTER
Infocom/Most computers/48K disk

Enchanter begins the second sword-and-sorcery trilogy from Infocom, the company whose name is synonymous with high-quality text adventures. Unofficially dubbed "Zork IV," *Enchanter* owes a lot to its legendary predecessor, both in authorship (**Zork** creators Marc Blank and Dave Lebling collaborated on this effort) and in genre (the full-text fantasy uses the Interlogic prose, making the computer capable of understanding complex commands).

But *Enchanter* sports some interesting twists on the old puzzle-solving theme. For one thing, food, water, and rest are required for any magician's acolyte who hopes to stay alive, a concept pioneered in Infocom's **Planetfall**. Also, there are far fewer objects just lying there to be used. Instead, the majority of treasures are actually scrolls containing powerful spells, which must be cast appropriately.

Adventurers face unspeakable horrors in *Gateway to Apshai.*

ENCHANTER (INFOCOM)
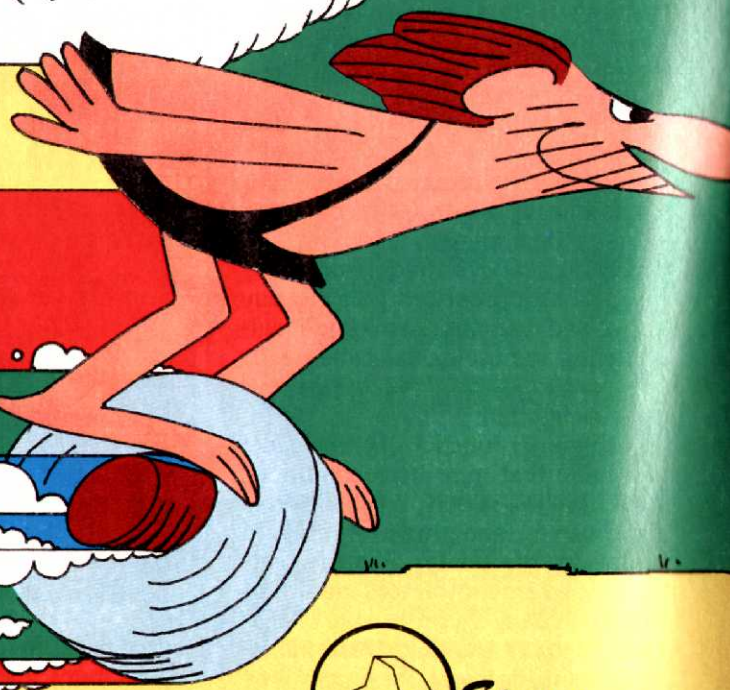
The young Enchanter starts out with four spells in a spell tome. When a new spell is found, it must be written into the pages of the book if it's to be reused, because once the spell is cast, the scroll vanishes. To use any magic contained in the tome, the wizard must first memorize it.

The scenario is explained in a beautiful, antique-looking scroll, while game instructions are contained in a "guild directory" pamphlet. While the packaging isn't as out-and-out bril-

liant as some of Infocom's other releases, like **Witness**, it's both attractive and functional.

The game begins with a meeting of the Elders of the Circle of Enchanters. It seems the evil Warlock has slowly gained power in the eastern lands, and he must be stopped to free the subjugated population. But the Warlock is alert to powerful intruders, and the aura generated by an Elder is far too strong. Therefore, the Council has decided to send you, a mere acolyte, because your mind is so weak it presents no immediate threat.

Unarmed save for a spell tome (the beginning spells allow players to create light, speak with animals, write magic, and guard their most precious possession in a strongbox), the player must find enough food and water to survive the trip, then journey to the inside of the eastern fortress — where the Warlock and his foul servants pay homage to an evil deity.

Good luck! Just one word of warning — those aren't ketchup stains on the temple altar!
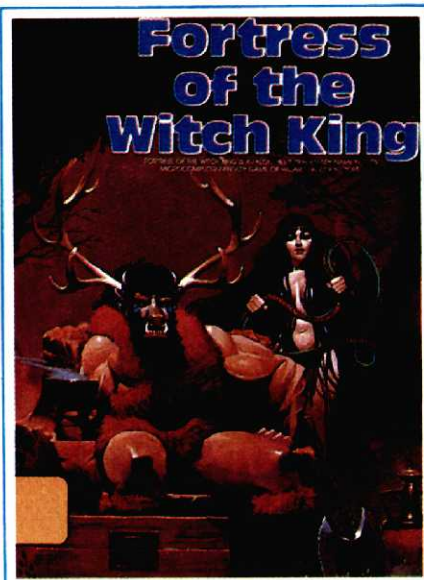
(Tracie Forman)

ty toward that final confrontation with the Witch King.

Pushing the appropriate key lets the party leader look at the strategic map, view the tactical display, cast a spell, review the inventory of men and equipment or switch to the movement screen. By moving to one of the numerous towns, a party can buy provisions and hire all kinds of useful people, including clerics capable of raising those killed in combat and wizards who can toss spells in the heat of battle. When buying provisions or hiring the services of some of the more exotic adventurers, gamers should remember to make their band as diverse as possible. This way the party is prepared for anything.

Fortress of the Witch King can be played at any of four skill levels. In addition, there is an option to change the difficulty of the terrain on a one to 20 scale, with the higher numbers producing a landscape with more mountains and lakes.

An encounter occurs when a party moves into a terrain space that is already occupied by a non-party group. Sometimes, there is the chance to parley and so add the strangers to the retinue. More often, the leader must choose whether to fight or flee. If there's a fight, the program prints out periodic messages indicating how each round of battle is progressing, noting the use of magic and any casualties on either side. Appropriate martial music accompanies each major turn in the tide of combat. If the party wins, a list of the captured booty appears toward the bottom of the screen. This almost always includes some gold, and there may be magic maps, spells and other bonus goodies as well.

Fortress of the Witch King is the latest proof that sleeping giant Avalon Hill is rousing itself. This is a polished, smooth-playing game. Though the visuals aren't outstanding — there is no animation, the player's force is just a cursor and so forth — they are more than equal to the task of helping the computerist navigate this somewhat complex program. The play-action, in particular, is fascinating, and it takes a cold-hearted home arcader to sit impassively while the party goes one-on-one with the Witch King himself.

Fortress of the Witch King is mentally stimulating — and, more important even, great fun to play.

(Arnie Katz)

THINK TANK

FORTRESS OF THE WITCH KING
Designed by Matthew Mehlich
Avalon Hill/Apple II/48K disk

One to four computerists can dare the dangers of the Witch King's realm in this fantasy strategy contest which also has heavy overtones of adventure games. Each player leads a party which must survive attacks from monsters, scoop up needed gold (to buy troops and maintain them) and magical items, and then assault the nearly impregnable stronghold of the evil master magician.

Each gamer functions as the leader of a band that may include warriors, scouts, clerics, raiders, a wizard, elves and dwarves (and a train of mules to haul away the booty). A player gets three movement factors per turn, which can be spent on a range of activities. Once a party exhausts its movement point allotment, it's time for the next party leader to take command of the keyboard. During the course of

Gamers need all their wits to survive.

play, a party may win one or more magical items through combat which increase the number of movement points per turn, which speeds the par-

ELECTRONIC PRESSBOX

RALLY SPEEDWAY
Designed by John Anderson
Adventure International/Atari/cartridge

John Anderson has packed a pickel barrel-and-a-half's worth of variety, action and cute graphic quirks in **Rally Speedway.**

Rally is a virtual role model for games of this type, with the most extensive graphics and menu selection ever seen in this format. Also, unlike the first-player contests, two gamers can race head-to-head.

This, alas, brings with it a built-in drawback. Since the screen must scroll in all directions at a pace with the lead car, unless the two racers stay close together, the computer can't track both autos. So, if one auto skids off the road or falls too far behind, the program assigns a penalty. Fair, of course, but this also stops the action dead. The situation can't be avoided, but it does make the average gamer yearn even harder for a perfect world.

Visuals are presented with studied realism, including every type of topography (with the exception of a bridge over troubled waters) imaginable in such a contest. The cars putt along smoothly, steering in true fashion (that is, the player must always imagine himself as sitting inside the car). Moving the joystick controller to the left will not produce a compass-west maneuver, but simply a left turn, determined by the car's present direction and position. The action button serves as the all-important brake, transforming high-speed turns from impossible to negotiable with skill.

There's even a twisted-but-amusing visual stroke that will find most players laughing in spite of themselves. After a spill into a tree, house or whatever, the car cracks up and the driver leaps from the wreckage and quickly douses any burgeoning flames licking at his jumpsuit. After particularly nasty mishaps, however, the poor pilot comes out of the gnarled vehicle aflame! Discovering his situation, the driver quickly goes into a tuck-and-roll along the ground, finally arising to beat out any remaining fires!

Where *Rally Speedway* truly rises above the competition and sets new standards is in the incredible menu selection. Talk about life in the fast lane — *Rally* also offers an optional set of existences in the slow and medium lanes as well!

After determining whether one or two players will compete, road conditions are preset, opting for dry, wet or icy. Tip speeds can come at 40, 60, 80 or even a realistic 160 mph, with selection for slow, normal and fast acceleration.

An especially neat feature is the "Real Life" vs the "Only in a Compu-

COMPUTER GAMING

ter" option. Real life is just that — hit a tree and your car gets bitter and twisted, and so, in all likelihood, does your driver. Try living life in a computer, however, and you'll be amazed at how deftly trees, houses and other natural and manmade obstacles can be navigated. There is a good reason for this: in this version, the car becomes a phantom once it departs the track, zipping right through wood and metal as if they were air!

Players can also construct their own track, load it onto disk and save it — or simply amuse themselves by obliterating portions of the gamefield. This should keep *Rally Speedway* on the road long past the point where other versions would crack up from memorized formats.

Once this lavish menu is selected, players can reset their best lap time before moving onto the next screen, where the computer offers two choices: "Fer Sure" (everything is Kosher and the player is ready to gun the motor) or opt for the "Emily Littela" mode, better known as "Never Mind", meaning a last second revision is requested.

So there it is. Overall, *Rally Speedway* not only passes inspection, but should break some land speed records in terms of player enjoyment as well.

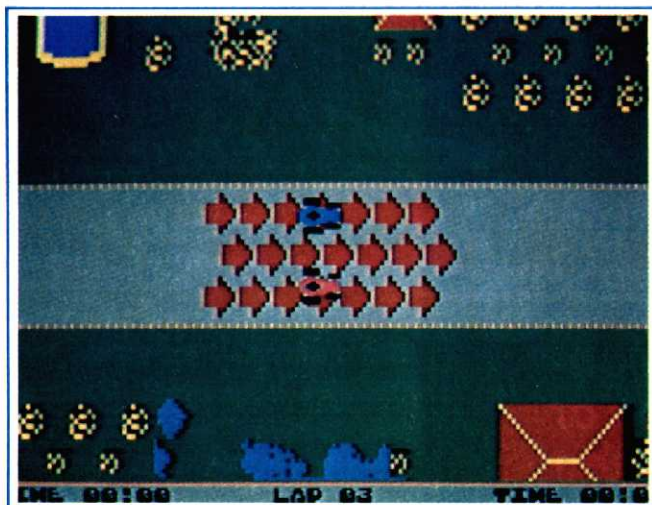*(Bill Kunkel)*

RINGSIDE SEAT
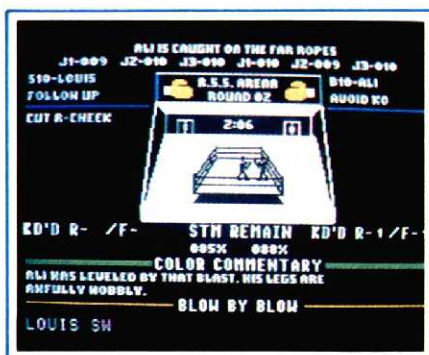*Strategic Simulations/Apple II/48K disk*

In this corner, from Easton, PA., the current heavyweight champion of the world, Larry Holmes!

And in this corner, also from Easton, PA., programmer for a new computer boxing simulation, **Ringside Seat**, Carl Saracini.

The best way to describe this

Rally Speedway **gives players a birds-eye view of the action.** ·

Slugging it out in the ring

Strategic Simulations entry — pure delight! Any sports fan who's ever argued Marciano vs. Dempsey vs. Louis vs. Ali as to who's the greatest heavyweight of all time — or anyone who has even ever wondered whether the old Sugar Ray (Robinson) would do against the modern Sugar Ray (Leonard) — will want *Ringside Seat* for their very own.

"Larry (Holmes) and I happen to know each other," says Saracini. "When Larry started to get good in boxing, I started to follow boxing more. I looked through old Ring magazines and chose things that I thought would be interesting to put into the game.

"Then we just played it and played it and played it to get everything just the way we wanted it. Originally it was going to come out without any graphics, but then we found a way to break the program into two modules," says Saracini.

When the gamer boots up *Ringside Seat* he or she can get listings on the 47 fighters included on the disk, or a blank disk can be formatted so that he might create his own fighter or he can fight a bout.

Either of the first two options are child's play, despite the fact that, to create a fighter of your own you need to put together ratings in 30 different categories. The program is user friendly for creating new fighters or merely changing the ratings of those fighters included with the game.

As a word of warning, don't tinker too much with those ratings for the included fighters because there are no detailed statistics available for most of the historical fighters and Saracini has done a fine job in creating ratings and a game that produces realistic, believable results.

There are several options still open to the gamer once he decides he's ready for some fistic frolics. Besides selecting the fighters and deciding which fighter, both or none, the com-

puter will control, the gamer must then select the number of rounds, whether he will see the judges scoring as the bout progresses, whether one of the judges will have human control and even whether the bell will ring at the end and beginning of the rounds.

For each round a fighter will have a predetermined strategy. The seven that can be selected are: flat-footed, cover up, charge in, stick and move, stay away, go for the knockout and protect cuts. The computer keeps track of remaining stamina, cuts incurred and even provides a ringside color commentary on the action.

In the center of the screen is a limited, yet entertaining display of the action in the ring, much like that in

other SSI sports games like **Computer Baseball** and **Computer Quarterback**.

If the game has a drawback, and this would have to be considered minor, it is a lack of printing capabilities. This would have come in handy to print out results at the end of the fight or printing out fighter ratings so that the gamers could become more familiar with each fighter's strengths and weaknesses.

Ringside Seat gives gamers a manager's eye view of the greatest ring matchups of all time. That alone makes the program a bargain, even if it costs as much as a heavyweight title fight ticket. Without a doubt, this game is a knockout!

(Rick Teverbaugh)

Each match is "scored" by a panel of unseen judges, who pick the winner

PLAYING IT SMART

THE CHAMBERS OF VOCAB

Reader's Digest/Apple II/48K disk

The Chambers of Vocab helps grade schoolers learn vocabulary skills by casting its spelling lessons as games. The program bombards the arcader with a list of words, repeating each one in several contexts, while providing synonyms, definitions and sentences, so that it's not just a spelling lesson, but also a guide to correct word usage.

An on-screen instructor shows the gamer how it goes. Enter the number and names of players (up to four), then choose from three difficulty levels or enter your own list of words. *Chambers of Vocab* is preprogrammed with a 300-word dictionary of words appropriate for nine-year-olds and over, but using the edit option permits the entry of specific words that the child might be having trouble with, or the weekly spelling assignment from school. This is an easy pro-

cedure. First the program invites you to enter a word up to 15 letters long, and then its synonym. Next enter a definition up to 40 characters maximum, and finally, a sentence using the word.

After choosing the list of words, the warm-up session previews each one, its synonym, definition and sentence using it in context. The gamer should continue studying the list of words until they're all familiar, then go on to the games.

The title game lets the on-screen hero move through a maze, using the keyboard to go North, South, East or West. With him in the maze are four words from the list snaking through the maze passages like giant serpentine beasts. The player begins each round in a safety house in center screen, and must move around the maze avoiding contact with the word-beasts until he eats one of the four amulets randomly scattered around the chamber. Each amulet powers him to conquer one particular word. As soon as he touches the amulet, a definition appears on screen. Then there's a list of the captured beasts, followed by a list of the words that are still free. The computerist has to move to where the correct word is lurking, and when the child touches the word-monster, it disappears. The screen recaps the score, the word that was captured and its definitions. If the gamer touches the wrong word, the monster chases him back to the safety house, and the player has to work back through the maze to where the correct word is.

Play continues until the gamer captures the four words on screen. A new field then appears with the next four words from the day's lesson. When the young computer gamer catches all eight words, it's on to the next chamber. As the game progresses through multiple levels, the computer jumbles up the words and twists them around, even omitting letters to make words harder to recognize.

The entire game is played against a time clock that counts down from 30,000. The game ends with a visual reward. The triumphant student is pictured standing on a pedestal, with crowds of admirers at his feet waving their arms at him.

The second game, **Sizzlin' Sylamanders**, is a lightning fast word-recognition game that students will actually enjoy playing. First the definition of the word appears, then the screen

spells out a word, letter by letter. If it's wrong, type "N" for no, and an on-screen dragon flames the incorrect letter. If it's correct, type "Y" for yes, and go to the next challenge. Points are awarded according to how quickly the player responds with the correct answer, so this electronic flash-card is for students who have correctly memorized the definitions from the first game. This is lots of fun, and serves almost as a reward for a lesson well-learned in the first part of the program.

The Chambers of Vocab's secondary lessons are almost as valuable as
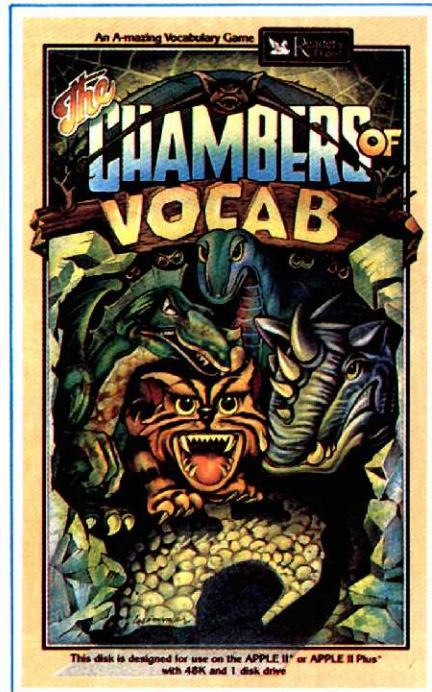
THE CHAMBERS OF VOCAB (READER'S DIGEST)

the spelling for young gamers. Moving North, South, East and West through the maze sharpens map-reading skills. Obviously, reading ability is also reinforced. And, of course, the entire experience is a lesson in computer literacy, as Junior gets comfortable using the Apple.

No arcader would ever call this the greatest action contest ever seen. But if being a better speller and knowing the correct definition of words are the skills Junior should be developing, then *Chambers of Vocab* could just be the answer to the next literacy skill level. Of course, there is always the added bonus of having fun while learning!

(Joyce Worley)

COMPUTER FACTS IN FIVE
Avalon Hill/Atari/48K disk

Essentially, **Computer Facts in Five** is an exercise in the organizational relationship between general and specific. At the beginning of each game, five categories are displayed on the screen. Alongside each of the categories, the computer supplies five letters. The object of the game is to enter specific names which begin with those letters and are associated with the more general category. (For example, if the category is "Famous Novelists" and one of the letters is "F", the player can enter "Faulkner".) If the player cannot supply an answer for any given letter, he may skip to the next letter within the category or go on to the next category. Because each match is timed, scoring is determined at the end of the match.

Variations and options abound. The gamer can choose from three basic game modes (solitaire, doubles and party) and five variations for each mode (normal play, sequential play, random play, timed sequential play, and timed random play). Either the computer or the player selects the categories, depending upon the option used. The player can also determine the type and manner in which the letters are chosen.

One of the game's variations even includes the use of wild cards; that is, instead of having a preprogrammed category appear on the screen, the user can type in his or her own subject. It is this variation which enables the program to be used as an educational tool. By writing in their own categories, parents can test their children's knowledge on any given subject.

Unfortunately, the biggest drawback to the program is that *Facts in Five*, unlike a crossword puzzle (to name another game based on knowledge), doesn't provide any answers. Players are told to challenge any dubious answers and decide on the answer's validity by either a vote or by referring to a reference book. This means that any parent using the program for educational purposes must make sure he or she knows all the possible answers beforehand.

The existence of Avalon Hill's *Computer Facts in Five* raises an important question: Why create a game for the computer if all the program does is the book and time keeping? In its original non-electronic version (designed for party use), "Facts in Five" was an ex-

cellent way to spend some time. The computer version, on the other hand, has not only added very little to the traditional game, but perhaps has taken some of the enjoyment away from it. The graphics, except in the title page, are virtually nonexistent because text is the primary form of on-screen data. The color scheme — white lettering on a maroon background — is definitely not user-friendly.

Despite all of this, *Computer Facts in Five* can stimulate learning — when used appropriately.

(Vincent Puglia)

NUMBER RELATIONSHIPS
Edupro/Atari/24K disk

Many critics of educational software claim the child who uses such software will become antisocial because of a lack of interaction with other students. That claim can never be made against Edupro's Microgroup Software. Designed to be used by as many children at the same time as possible, the programs encourage their users to compete and cooperate with each other. Nor can the critics claim the programs have no educational value, for in **Number Relationships**, part of the Math-Hunt Storybook Friends series (for five- to nine-year-olds) all of the lessons are geared toward basic mathematical concepts.

Up to four children at a time can play with *Number Relationships*. They simply connect their joysticks into the four joystick ports in the Atari 400 or 800. (If fewer than four are playing, the program adjusts itself accordingly.) The lessons come in the form of track races, fill-ins and search/identifications.

Three of the four lessons in the program — "There Was an Old Woman", "Numbers and Numerals", and "Shapes and Stars" — focus on whether numbers or quantities are greater than($>$), less than($<$), or equal to ($=$) each other. The fourth
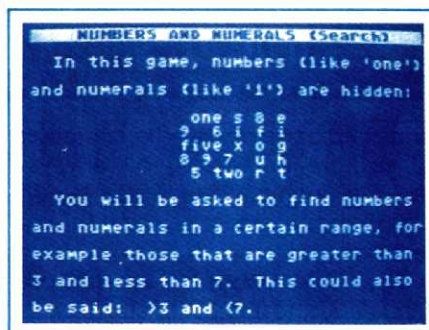
In *Number Relationships*, instructions are displayed prior to each new game.

lesson — "Step Up and Down" — relates to progressions. Of the four lessons, only one — "Numbers and Numerals" — has no variations, and that's because the object of the game is to find all the numbers and numerals between two given numbers.

In the Track games (such as "There Was an Old Woman"), the users are given a group of numbers separated by dots. When the cursors are placed over the dots, the three mathematical symbols ($<$, $>$, and $=$) appear one after the other. The child hits the fire button when the appropriate answer is on-screen. For example, if the numbers are "8" and "9", the answer would be "$<$".

When playing Fill-In games (such as "Step Up and Down"), the youthful gamer is provided with the first three numbers in a series. The object is to determine the progression and then fill-in the next few numbers. For example, if the numbers given are "2", "4", and "7", the next number in the

series would be "11".

Though *Number Relationships* features varying difficulty levels, its main strength is in drill and practice. Children can continue playing the same game with different numbers until they learn the concepts being taught. Cooperation is encouraged through messages printed on the screen. As with other good educational software, a comprehensive booklet describes the goals and uses of the program.

(Vincent Puglia)

COUNTING BEE
Designed by John Conrad
Edu-Ware/Apple II/48K disk

Counting Bee helps kids from kindergarten through third grade get a better grasp of quantities, measurements and basic number skills by putting simple lessons on-screen, then reinforcing them with child-pleasing graphics. Parents can customize the system to address a specific learning problem, and get accurate reports of how the child is progressing from a computer-prepared summary at game end.

Counting Bee is designed for use by youngsters under supervision of a parent or teacher. Younger gamers especially will need a helping hand to get the program started. It features a Learning Management System so that the parent can tailor each lesson to suit the needs of his own child, or even skip certain sections altogether if the parent feels the kid is too young to profit from the exercise. Change the order in which the lessons are presented, the number of trials in each contest, or the name of the learner.

A demonstration mode shows each of the eight lessons before processing to the drills. In each contest, a large face appears in the upper right corner of the screen, with two small faces below it. The large face monitors each game, smiling at a correct answer and frowning at mistakes. The two smaller faces, one grinning and the other gri-
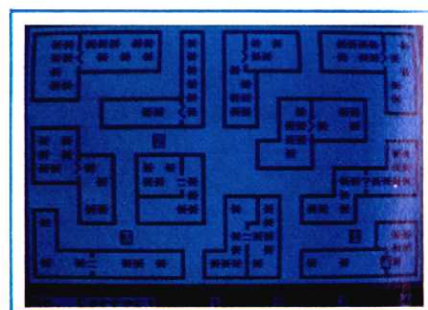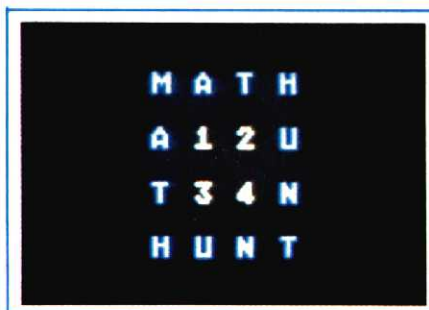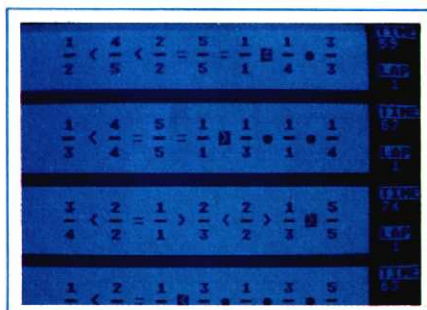
Although the graphics leave much to be desired from an adult's point of view, children don't seem to notice.

macing, indicate the number of hits or misses so far.

Lesson One is counting blocks. On the left side of the screen are three boxes containing colored squares. On the right side is a number between one and nine. The child must select the box containing the correct number of blocks to match the numeral. The space bar moves a check mark from box to box, and pressing return enters the choice. A correct answer gets a burst of melody and smiles from the cherry on-screen monitor. If the response was wrong, the computer counts the blocks one by one to show the child the correct answer.

The second contest is to count the number of balls bouncing over a series of ramps into a container. The third game shows 25 shapes (squares, triangles and circles) in a field, selects one shape, then asks the learner to count how many are on-screen.

Game Four helps kids judge water depth, by filling a water glass from an electronic faucet to varying heights. Game Five produces a picture of a balancing scale, then puts blocks into each balancing pan. The child has to use a small scale at the bottom of the screen to show which holds the most weight in the upper scale.

The sixth module compares the length of five vertical bars. The child indicates, using the numbers one through five, which is shortest, and their respective comparative lengths.

The seventh learning lesson is simple addition. The gamer has to add two sets of squares to tell how many there are. This is really easy, since no sum is beyond the number nine.

The final problem is simple subtraction. Colored squares are shown on-screen, with the number in each group

displayed underneath. The computerist has to enter his solution, always a one-digit number, and a graphic display then confirms or provides the correct answer.

The lower modules are for preschoolers, and at least to start, parental supervision is necessary to explain exactly what the child should do. These simple problems are perfect for a toddler sitting on his mama's lap, just getting a start at learning to count.

The upper lessons are only a little harder. Comparing weights and lengths, lessons five and six, help a youngster develop an ability to measure things "by eye," a skill we all take

for granted, but which takes a little practice to acquire.

Lessons seven and eight, addition and subtraction, are for slightly older kids, and should give them a leap forward in understanding mathematics. Seeing each part of the problem pictured in blocks helps children understand the concepts of arithmetic, by letting them visualize the problems.

Counting Bee is a close cousin to the counting books most of us grew up on, but with computer graphics to make the lessons livelier. Preschoolers and grade school beginners can, using the program and with parental guidance, get a better grasp of some hard-to-learn lessons, in an entertaining manner that should help reinforce their natural desires to learn.

(Joyce Worley)

ARTICLES OF WAR

T.A.C.
Avalon Hill/Apple II, Atari 800/48K disk

Me and my old tin can had been bouncing around a good part of Europe together for what seemed like about 20 years, even though the calendar said it was still only 1943. It was getting so I hardly even noticed the sweltering heat, and the stifling air inside, the jolting force of even the "smoothest" ride and the occasional earthquake of the 76mm gun.

We were moving in on a couple of PZK IV's (one heck of a lot easier to say than Panzerkampfwagen, at least if you were born in Brooklyn) when suddenly off to one side of the clearing a few trees just sort of fell away like a green and brown wooden curtain.
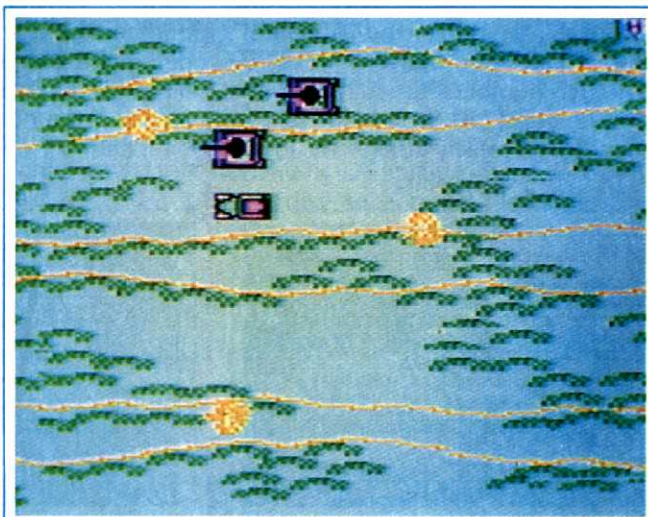
Two Tigers roared out at us, while the outgunned PZK's shuddered away. We buttoned up quick. I thought I had seen it all. Hell, the war was just beginning. . . .

The game is called **T.A.C.** which stands for Tactical Armor Command, and it's the best simulation of tank warfare this reviewer has seen on or off a computer screen. From the high-resolution display of the battlefield to the canny, computer opponent, just about every aspect of both simulation and play is tops.

When the game starts, the participants first give each side a nationality and assign purchasing points. The nationalities available are the U.S.A., Germany, Russia and Great Britain.

In *T.A.C.*, gamers can become another Patton or Rommel.

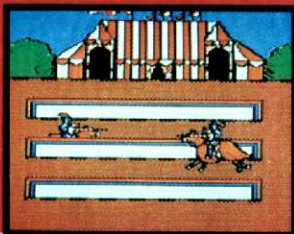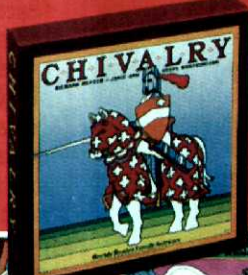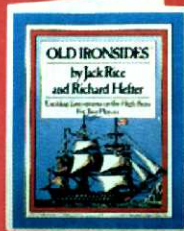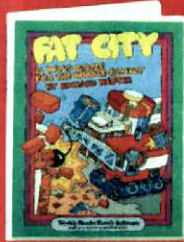Tanks and mounted infantry units must avoid indirect fire.

The purchasing points are a way of controlling the complexity of the various scenarios.

With a side's 12 to 224 purchasing points, its commander can "buy" needed military equipment from a surprisingly complete assortment. Each nationality has light, medium and heavy tanks, assault guns (small tanks), field guns and infantry squads.

The tank lists are complete. Just as an example, the United States player may choose from Sherman, Cobra, M-10, Pershing, and Grant tanks as well as the M4/105 assault gun and the Greyhound armored car and, of course, supporting infantry. The computer rates each tank or unit not only for speed and maneuverability, but also such factors as the variation in armor thickness on front, back and sides and the area the main gun can cover.

Once each nationality is assigned its units, play can begin in any of the five scenarios. Each has a distinct flavor of play and calls for different overall strategies. The Meeting Engagement scenario is the simplest: a meet-and-shoot game. The Static Defense and Break-Out scenarios impose the idea of minefields and improved positions. The Rear Guard scenario is an Armageddon of suicide missions and striving for destruction, and the Stalemate scenario allows for either side to surprise the other.

Play begins on a beautifully executed battleground which is 15 screens in size. The entire field of battle stretches three video screens East and West by five North to South. Each of the screen-sized areas is numbered and represented on the record pad

maps which accompany the game. On these record pads, each player can track the location of enemy tanks, as well as record any other useful information.

The first phase of play, the Search Phase, allows commanders to spot enemy units. Each friendly unit becomes active in turn, and the computer decides if the active force can see any enemies. When a unit is active, the player can see such information as the exact heading, the facing of its weapons, the maximum allowable speed, and the current speed. The unit itself is pictured on the screen from an overhead view. The gamer may examine any sighted units during the Tactical Sighting phase which follows.

In this Tactical Sighting phase, the player may scrutinize just the one sector or, as is often the case, switch to an overall but less detailed view of the entire battlefield. This is handy if the enemy is in a sector other than the one being viewed. When an enemy is sighted more info on the enemy is given as well as the pictorial view. The player may read the enemy's range from the friendly, active unit, the enemy's bearing in compass degrees from the active unit, as well as the enemy's weapon facing and current and maximum possible speed.

Once friendly forces sighted the enemy, the Maneuver and Fire phase ventures into the heat of battle. After entering the enemy's ID# the wargamer must decide if he wants to fire at the target or continue tracking it.

Tracking will improve the aim to fire in a following turn. Once the direct fire is finished, enter the speed each unit should move in the next phase — up to each unit's maximum allowable pace.

Each unit's weapon facing can be changed, and such things as firing smoke mortars to block spotters during the next turn can be attempted.

At this point, the player can also plot indirect fire. Indirect fire allows the armchair general to move a cursor to anywhere on the battlefield and fire (but not within 700 meters of a friendly location or more than 45 degrees from the active unit's weapons facing). Either high explosive or smoke may be indirect fired. In this way, if one unit spots an enemy, others can join in on the fun. Or it can be used on a hunch that the enemy is hiding in that very suspicious grove of trees — blam!

The most innovative part of T.A.C. is its Movement phase. The skills of the arcade are used in order to achieve the frustration experienced by real-life battlefield commanders.

Each unit is individually moved by means of the keyboard. Four keys and the space bar control the direction the unit will travel. The active unit moves at the pre-programmed speed — but it is up to the gamer to steer!

At first, expect to run into a lot of trees and causing quite a bit of damage to the troops. Frankly, the first few games, this reviewer hated this method of moving. After all, the typical computer simulation just says, "OK, you want to move that piece? Here we go, it's moved." But, once mastered, it really put the gamer into the spirit of things. It really feels like driving the tanks and giving marching commands to the infantry. Now, I wish other such games had this feature.

Besides the tank to tank combats, other specialized situations are also simulated. Overruns of infantry squads (so-called "soft" targets), close assaults (by infantry on tanks), and firefights (infantry vs. infantry) are all in the game. The wargamer will also be able to take advantage of improved position rules and minefields, all of which add up to true reality simulation.
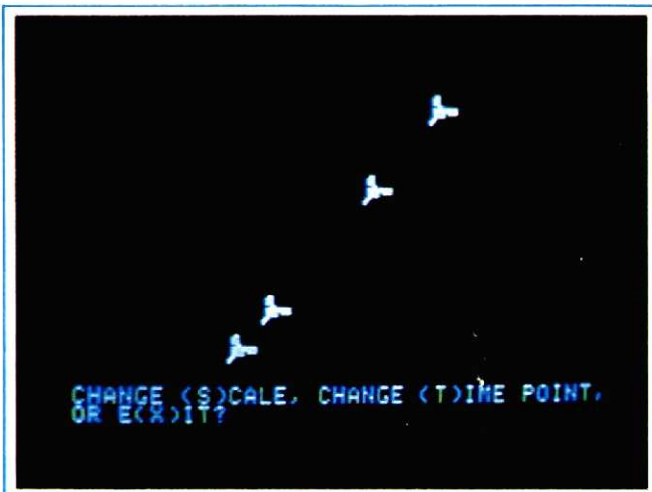
The sound quality of the game, on both computers, is also fantastic. While the Atari already has the built-in sound capability, owners of the Apple may want to investigate the plug-in

Gamers "buy" equipment from an onscreen shopping list.

While *The Cosmic Balance* focuses on tactics, *Cosmic Balance II* revolves around strategy.

Mockingboard printed-circuit board from Sweet Micro Systems. This game, as with many others coming out today, supports that accessory and delivers pounding sound effects (without the board, the Apple speaker delivers more stunted, but still acceptable, sounds).

About the only feature lacking is terrain. While the simulated "wooded plain" does have groves of trees in which to hide, such things as gullies and hills would have enriched the contest. Many of the board games which simulate such tank warfare take great advantage of the ability of tanks to hide. Granted, it's not easy to program.

Playing the game, you will be likely to develop your own strategy. But, keep in mind that the ability to indirect fire your guns makes your tanks very omnipresent on the board. And, that the enemy will usually have this same ability sure does make the groves of trees look handy.

And now. . . . Wait, what's that rumbling sound? Funny, the whole computer seems to be shaking. . . . And the wall, it's. . . . Oh, no, a Jagdpanther in the living room! Well, luckily I have a few Pershings lying around.
(*Neil Shapiro*)

THE COSMIC BALANCE AND THE COSMIC BALANCE II

SSI/Apple II and Atari/48K disk

The Emperor looked deep into his space-phone's screen. The display was as black as space itself, the ships of his fleet shone as tiny, lit-up silhouettes almost lost among the diamond speckles of the stars. Hushed voices came from beyond the throne in the

darkened room. The Emperor hunched himself closer to the screen, his fingernail slowly traced the outline of one ship on the glass screen. The conversation behind him peaked louder for a moment, then ceased. The Emperor waited; soon enough a polite cough told him they had delegated a spokesman.

He tore his attention away from the screen, from the pending fleet-to-fleet battle, to receive this new item of news. The planets in Sector K had, he learned, reported turning back the enemy's latest raiding parties. But the effort had cost them in both ships and supplies. Two of the most important industrialized worlds in K Sector along with a few farming worlds were in the grips of economic collapse. Without those planets at full efficiency, the entire industrial output of Sector K could fall off and without Sector K.

The gamer can be an Emperor and have all this power and more — thanks to **The Cosmic Balance**, a tactical space-combat game, and the new **Cosmic Balance II**, a strategic and economic module. While either game can be played on its own, put the both together for a simulation of running a Galactic Empire that verges on the unbelievably realistic. And, with the two together, you also have the first computer rendition of what boardgamers refer to fondly as a "monster" game. Such a game as this cannot be played in one sitting, nor even a week of normal play.

The overall design of *The Cosmic Balance II* is to place the players (it is either two-player or solitaire against a computer-run opponent) in the position of controlling the strategy of an expanding Galactic Empire. Attention must be paid to economic considera-

tions as well as to military objectives — indeed military maneuvers are indulged in for the sake of economics with territorial gain being seen as a secondary point among all the vast worlds available in space.

The area of the galaxy that the action takes place in has been divided into 16 sectors. The sectors are shaped, on the two-dimensional sector display, rather randomly. Their borders are drawn so that each one contains 40 inhabitable planets. Colonizing these planets, raising their economic levels high enough so that they can all trade within groups called "commerce nets" and so develop into a healthy empire is each player's long-term goal. It won't be easy, especially if the two opponents wage interstellar battle as they almost always must.

A typical turn in *Cosmic Balance II* begins with the Production Phase, which is subdivided into a Ship Supply Segment and a Construction Segment. During the Ship Supply Segment the player will have access to a number of displays which detail all the ships and planets within his Empire. Once the player decides to give orders he will first see how many Industrial Output points (IOs) the planets in his empire are supplying this turn. With them he will first supply his existing starships. Then he can build new starships. There are 15 varieties of ships which may be built, divided among five size classifications of (from smallest to largest) corvette, frigate, destroyer, cruiser and dreadnought. The ships further differ in their cargo carrying capacities, their range of operations, their attack and defense strengths, their armor, and of course how much each type costs to build and maintain.

For instance, a trader ship is the same size as an escort ship (both size four or at the cruiser level). But the trader has a hold of size five (it can carry 5 × 250 = 1,250 supply points from star to star) as opposed to no room at all for cargo in the escort. But the militarily-oriented escort has an attack value of eight (meaning it mounts the equivalent of eight "siege phasors") as opposed to the trader's one. While both ships have a defensive capability of 12, the trader has very little armor while the escort is heavily armored. Most of the ships available have a range of one. This allows such a ship to move to or from a friendly sector each turn. But only the few ships with range of two can move once more during a second movement phase. All of these factors contribute to making every ship-buying spree a juggling act of decisions and worry.

Following the Construction Segment is the First Movement Phase. Here orders are given to each individual ship as to possible missions within the Empire or against the enemy in enemy-held sectors. There are eight missions which may be assigned: garrison, commerce, supply, patrol, invasion, commerce raid, planetary raid and scouting.

The supply mission will, later in the game turn, allow the player to use ships with cargo capacities to supply worlds which are not yet viable enough to be self-sufficient. Commerce missions, on the other hand, assign ships to worlds that have formed into commerce nets and which can be self-sustaining — and very profitable — if given a small number of ships to maintain the commercial lines. A planetary raid mission sends the ships involved on attack and run missions against enemy planets in the hopes of ruining them economically. An invasion mission will send cargo ships carrying seasoned space veterans along on a raid in the hopes of occupying an enemy planet, garrisoning and conquering it for the home Empire. Patrol missions attempt to intercept enemy raids and/or invasions throughout friendly space while ships on garrison protect their one planet. Meanwhile, ships on scout missions continue to find new planets to colonize and bring into the fold.

Following this movement phase is the execution phase. At this point the ships try to complete their missions. Depending on the enemy's own ships, they may run into combat situations. A

force of a half-dozen Attack-class ships on a planetary raid, for example, may find itself facing a heavily garrisoned world (with maybe five Watcher-class ships) or perhaps will run into a fleet of ten Lancer-class patrol vessels.

At this point the computer will decide the results of each combat — or the players can play out every tactical decision of the more interesting combats using The Cosmic Balance, the first game in the series. At this point the proceedings of The Cosmic Balance II are saved to disk and the other game is played. But, before examining, briefly, the first game — let's finish looking at Cosmic Balance II.

Following the First Movement
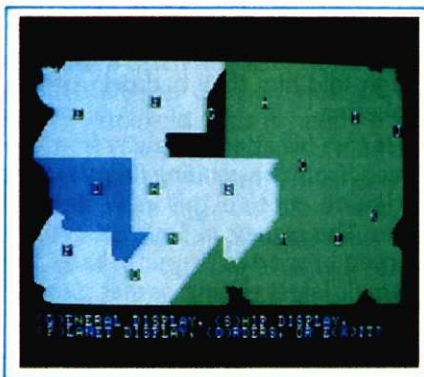
The galaxy is divided into sectors.

Phase is the Colony Supply Phase. During this phase all existing colonies that have not progressed far enough (10 levels) to form commerce nets must be supplied. Colonies which are not supplied will likely fall a level or more in their progress.

After the Colony Supply Phase there is a Second Movement Phase during which ships with ranges of two may move again.

The Cosmic Balance uses much of the same gaming background as the newer, strategic module. But in this game the wargamer becomes the Captain and designer of a starship and is more concerned with ship-to-ship tactics than the big picture among the stars.

In The Cosmic Balance, the player first designs the ship. (If you are coming to fight a battle from Cosmic Balance II, its rules book details the style of ship to design to best simulate the battle being fought.) This is done on the design display. On this display are listed most of the variables that go into

ship design and, when changes are made, the effects on the rest of the ship's design are instantly shown.

In the Design Phase the gamer must determine, how many engines (range) a ship has, the efficiency of the crew, and among other things, the overall size of the ship. Then, getting down to details, the computerist can specify the number of mobile one-man fighters onboard, "light seeker" missiles (electromagnetic guided warheads), "heavy seekers" (more destructive versions), phasors (and where they are positioned on the hull), plasma torpedos, and belts (which are small satellites each with a single phasor that orbit a large ship) that are onboard, as well as what type of armor and the strength of the shields each ship has.

Once a ship has been designed it can be saved as a set of specifications to disk. Then it is very quick to put together a fleet of these previously designed starships.

Once the ships are ready and designed, they are shown on the stellar map and orders can be given. Orders are given during each second, or time-point, of a sixteen second turn. The player can change course and speed, adjust shields and charge or fire weaponry as well as engage in electronic countermeasures (ECM) or electronic counter-countermeasures (ECCM) and even get transporters ready to beam a party of space marines aboard an enemy vessel.

Once orders have been given, the main map will show a time-point by time-point animation, a computer "movie" of the programmed action. Damage is calculated and applied to the various ships.

If the gamer is playing the solitaire version, he can battle through one of six on-disk scenarios which range from a dreadnought raiding a planet to squadrons of fighters in celestial dogfight. Each of the scenarios is easily adapted, however, to fight battles begun in Cosmic Balance II.

The Cosmic Balance is a complex but easily learned tactical game. If you have ever wanted to command a starship, this is one good way to go about it.

But when you put these two games together, you have an entire sub-creation, a fantasy world that has been so well simulated that it takes on a life of its own. The universe of The Cosmic Balance, both I and II, is so well-designed that it seems to exist. ⊙

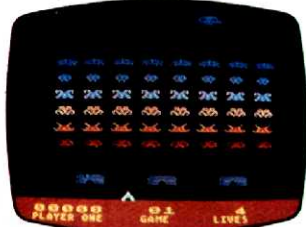# SCIENCE FICTION GAMES

# CLASSICS OF SF GAMING

LAUNCHING THE INVASION

The first electronic game, **Pong**, was a sports simulation, but it didn't take manufacturers very long to latch onto science fiction as a major gaming theme. This was, at least partly, a matter of convenience. Computer technology, circa 1972, didn't allow for today's hi-res visuals, and most pioneering

SPACE INVADERS (ATARI)

designers exulted over the discovery that a circle flanked by two tangent lines looks like a spaceship to most people.

It was the invention of **Space Invaders** in Japan in 1978 that, in a very real sense, paved the way for the current popularity of electronic gaming. This Taito creation sports what was, for the time,
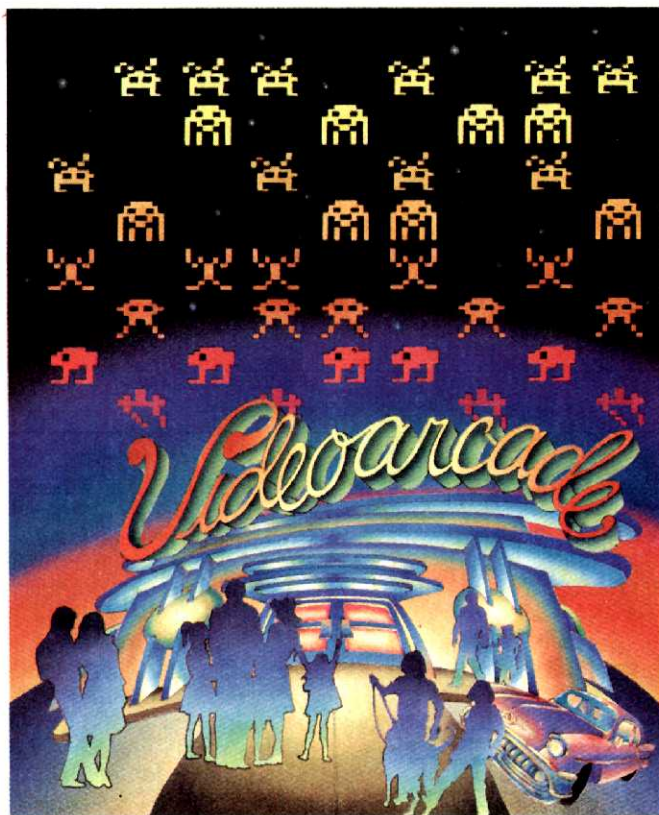
novel play-action and features graphics that clearly out-do any previous videogame.

Space Invaders is still mighty impressive, even though designers have had

over six years to surpass this electronic landmark. It introduced the much-used invasion game format that has served as the basis of so many newer games and showed

that strategic thinking could affect scores nearly as much as quick reflexes.

Few games are as widely available as *Space Invaders*. Atari makes versions for its 2600, 5200 and computer systems, and more than one other manufacturer has light-fingered the essential concept and adapted it to play on non-Atari machines.

BEYOND SPACE INVADERS

The major drawback of the invasion game concept, as presented in *Space Invaders*, is that the action follows a rigid pattern. The alien creatures march back and forth across the screen, dropping down a line each time they change direction, in lockstep formation. That's why it was relatively simple for arcade aces like Bill Heineman (winner of Atari's world *SI* tournament in 1981) to concoct "perfect plan" strategies that rolled up some pretty fabulous scores.

Letting the invaders peel out of the formation and swoop low across the field to

standing visuals. (An earlier version of this game, under its original title of **Protector**, is available from HES Games for the VIC-20.)

Zeppelin Rescue (Computer Software Associates) gives Commodore 64 gamers the chance to snatch residents of Los Angeles from the jaws of death after an attack devastates the city. It is not quite as fast-moving as, say, *Defender*, but presents some unique challenges, especially when it comes to accurate piloting.

DEATH RAINS FROM THE SKIES!

Missile Command has

MISSILE COMMAND (ATARI)

never gotten as much coverage and acclaim as *Space Invaders*, *Asteroids* and *Defender*, but it has turned out to be at least as popular in the long run. Atari's play-for-pay machine still draws attention when it turns up in an arcade, and the same company has released authorized editions

WARRIORS OF

THE ARENA OF THE FUTURE

Even when humankind dreams about ultra-technological tomorrows, it is hard for members of our species to entirely let go of romantic notions about individual bravery and heroism. Some games mimic the sub-genre of SF that seeks to have it both ways by predicting a future in which society revolves around some form of personal combat.

Galactic Gladiators (Strategic Simulations/Apple, Atari computers) and **The Last Gladiator** (Electronic Arts/ Apple) portray combat on the
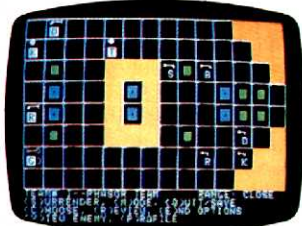
GALACTIC GLADIATORS (SSI)

individual level in the arena of the future. The former puts a much greater emphasis on strategy and coordinating the tactics of a team of fighters, while the latter is an arcade-oriented set-to with all manner of mutant, mythical and mechanical opponents.

Cytron Masters (Strategic Simulations/Apple II, Atari) is, like *Galactic Gladiators*, part of SSI's brilliant rapidfire series of games which combine thoughtful strategy with movement only a shade slower than many action contests. All of the titles in this line are

worth examination, and this duel between rivals mounted on flying platforms is one of the best of the group.

WAR AGAINST THE ROBOTS

Stern's **Berzerk** is only a little less popular than the classic science fiction games discussed earlier in this article. It firmly established the fact that robots are convenient targets for shoot-'em-ups because rubbing them out isn't quite like skragging a human. It also introduced the highly successful maze-shoot-out genre which includes such hits as **Wizard of Wor** and **Lady Tut**.
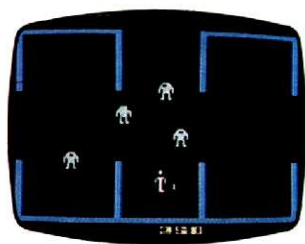
BERZERK (STERN)

for the 2600, 5200, and computer systems. All are superb, and they've done much to spark sales of trackball controllers, since this type of command device makes shooting down the assortment of rockets, planes and bombs even more fun.

Atlantis (Imagic) crosses

ATLANTIS (IMAGIC)

Missile Command with scrollers like *Defender* to produce a fast-playing contest for both the Atari 2600 and Mattel Intellivision. The gamer directs the fire of three different guns to repel those who would otherwise reduce the fabled city of Atlantis to rubble.

War Room (Probe 2000 for

ColecoVision) shares theme, if not play-mechanics, with *Missile Command*. Its major contribution to the art of gaming is that it enhances the action — shooting down incoming attackers with hunter-killer satellites — by adding a strategic level of activity.

TOMORROW!

WIZARD OF WOR (CBS)

Berzerk was slow coming to the home screen, but two excellent programs have become available in the last year. Atari produces the game for its 2600 and 5200 systems. The latter cartridge even presents a good facsimile of the voice which became so familiar to players of the coin-op. GCE has recently produced its own talky version of the game for the Vectrrex.

Similar to *Berzerk*, but more linear in its goals, is K-razy Videogames' **K-razy Shoot-**

MARAUDER (SIERRA ON-LINE)

out for the Atari 5200 and Atari computers. Rather than rampaging through a sprawling maze, the player's character must conquer each of seven increasingly more deadly rooms in succession. **Guardian** for the Apple is somewhat similar in conception, but it features fewer different playfields. **Marauder** (Sierra On-Line/Apple; Tigervision/Atari 2600) is also squarely in the same groove, though it adds a nifty rule in which all viewings of possible antagonists depend on line-of-sight considerations.

Night Stalker (Mattel/Intellivision, Apple) and **Dark Cavern** (Mattel M-Network/

Atari 2600) are essentially the same maze-war against mechanoids. Ironically, the Intellivision edition, though all right, is the weakest of the three.

FLASHING DOWN THE TRENCH

Would anyone seriously question the idea that "Star Wars" has greatly influenced electronic gaming? The existence of so many programs that draw on the film's climactic scene in which the rebel fighters are rushing down the Deathstar's trench furnishes further proof of this.

In some ways **Mothership** (SoftSync/Commodore 64) is one of the more creative

attempts to do something original with the situation. Despite some small nagging flaws, this disk's first scenario — there are two others of average quality — is a cat-and-mouse duel between
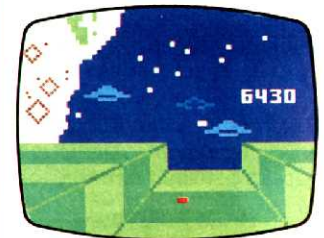
STAR STRIKE (MATTEL)

starfighters that demands a patient trigger finger.

Star Strike (Mattel/Intellivision, Atari 2600) is subtler

PLAYERS GUIDE TO
SCIENCE FICTION GAMES

Although the vector graphics display system had much to do with *Asteroids'* success in the amusement centers, it has made this a tough program to translate to the home systems. That hasn't kept Atari from trying very hard, however, and the Sunnyvale, Ca. manufacturer

ASTEROIDS (ATARI)

offers carts for both the 2600 and the computer systems which substitute extensive use of color as partial compensation for the trimmed-down play-action.

Atari brought out a coin-op sequel in 1982 called **Space Duel**. The human pilot attempts to blast various geometric shapes while navigating through the void using the thrust-fire system which

bomb the player's movable cannon at close range is the principle behind **Galaxian**. The *SI* sequel combines less predictable invader movements with a more exciting visual treatment. Atari produces a *Galaxian* cartridge for

GALAXIAN (ATARI)

each of its home fun machines, while Coleco offers a tabletop version of Midway's coin-op hit.

Gorf ventures even further from the original invasion

GORF (COLECO)

game scheme by introducing multi-scenario play. Here, the invasion screen is just the beginning, because the player must then also vanquish a Gorfian squadron, reinforcements that erupt from a hyperspace vortex and a giant mothership. CBS Videogames produces *Gorf* cartridges for several Atari systems, Coleco markets the game for its ColecoVision and Commodore has the title available for both

the VIC-20 and C64.

Galaga is the most feature-laden of all the direct successors to *Space Invaders*. Its popularity hasn't been hurt by its association with the 1983 movie "Wargames", either. Home versions do not yet exist, but several are expected to appear — first for the Atari computers — sometime this year.

CLEARING THE SPACELANES

The seeming randomness of **Asteroids** is a sharp contrast to the compulsive orderliness of *Space Invaders*. The Atari coin-op utilizes a vector graphics monitor to achieve the effect of different-sized meteorites flashing across the screen in every possible direction.

made its debut in *Asteroids*. *Space Duel* had the additional advantage of color vector graphics, but it never generated the same degree of interest as the earlier game.

Other software publishers have adapted the basic *Asteroids* play-mechanic in programs for other videogame

SOLAR FOX (CBS)

and computer systems. For example, Vectrex has **Minestorm** resident, and CBS offers **Solar Fox** (a Bally coin-op design) for the 2600 and other systems.

EARTH'S LAST DEFENSE

Williams' **Defender** looks like the world's most frenetic blastathon to the uninitiated, but the underlying theme of

MINESTORM (GCE)

rescuing survivors of an interplanetary war is probably nearly as responsible for this scrolling shoot-out's enduring popularity in arcades and on the home screen. Although the multi-button control panel made *Defender* significantly harder than most other coin-ops, its multi-screen

DEFENDER (ATARI)

magic draws competitors like a magnet.

And if *Defender* grows wearisome, there's always **Stargate**. Williams billed this one, quite correctly, as an even more taxing extension of *Defender* and even suggested that arcaders practice on the earlier machine before trying the sequel.

Although all of Atari' *Defender* cartridges for its systems are good, some purists have complained about the graphics on the 2600 edition. The machine can't keep the ship on-screen when the player is firing its gun, which means that putting out a constant barrage is a defense against enemy fire.

Synapse offers **Protector II** (by Mike Potter) for Atari

PROTECTOR (HES)

computer owners who particularly enjoy this genre of game. It builds on *Defender* with some innovative play concepts of its own and dresses up the action in truly out-

PLAYERS GUIDE TO
SCIENCE FICTION GAMES

than it might at first appear. The enemy zooms in from behind — a more sensible tactic than the usual frontal assault, you'll admit — and avoiding their fire while remaining in position to hit the target on the floor of the trench requires some cunning.

THE SUPER TANKS

Robot Tank (Activision) and **Battlezone** (Atari) are two cartridges for the 2600 based on futuristic tank war-

BATTLEZONE (ATARI)

fare. (Of course, the home edition of Battlezone could not possibly duplicate the distinctive visuals of the Atari coin-op.)
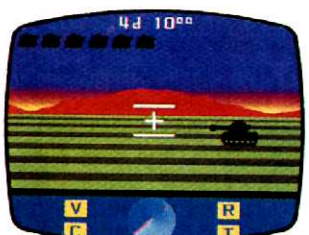
ROBOT TANK (ACTIVISION)

Stellar 7 (Software Entertainment/Apple/48K disk) matches the Raven super-tank against seven Arcturan bases stretching from Earth to the homeworld of our planet's conquest-bent foe. Superb line graphics are the icing on the cake.

Bolo (Synergistic Software/ Apple II/48K disk) might be called a tank-lover's approach to the same general idea as *Star Maze*. The idea is to steer the powerful Bolo tank through the macro-maze on a mission to destroy the enemy bases and the drones they steadily release.

PLAYERS GUIDE TO
SCIENCE FICTION GAMES

A GALAXY OF SCIENCE FICTION ACTION GAMES

WHEN THEY COME FROM SPACE

It is possible to reach the saturation point with invasion games, as with any genre. The number of such titles decreased markedly during the second half of 1983 and is still not increasing at the present time. Still, the heyday of the invasion game — roughly 1981-1982 — left behind a legacy of terrific programs of this type.

Imagic's **Demon Attack** won the 1983 Arcade Award as Videogame of the Year. Its varied and detailed graphics were a revelation for owners of the Atari 2600, and its use of successive waves of different creatures has been much-imitated. Besides Imagic's 2600 cartridge, *Demon Attack* is available for the Odyssey[2], Intellivision and Atari computers. The best edition may well be the one for Mattel's senior programmable with its dramatic second screen.

Somewhat similar to *Demon Attack* is **Phoenix**. This Centuri coin-op came to the 2600 last year via an Atari manufactured cartridge and

DEMON ATTACK (IMAGIC)

sold very well. Its unique feature is that an off-target shot can "wing" one of the avian attackers, forcing the player to blast it again to administer the *coup de grace*.

Roundabout (Datamost/ Apple), **A.E.** (Broderbund/ Apple, Atari) and **Attack of the Timelord** (Odyssey/ Odyssey[2]) share a similar approach to the movement of

PHOENIX (ATARI)

the attacking aliens. They swirl around the screen in single file, executing rolls and loops which are as pleasing to look at as the creatures are hard to hit.

Sirius Software often mixes a dash of humor with the arcade action, as demonstrated in its two invasion contests, **Sneakers** and **Bandits**. *Bandits* challenges the player
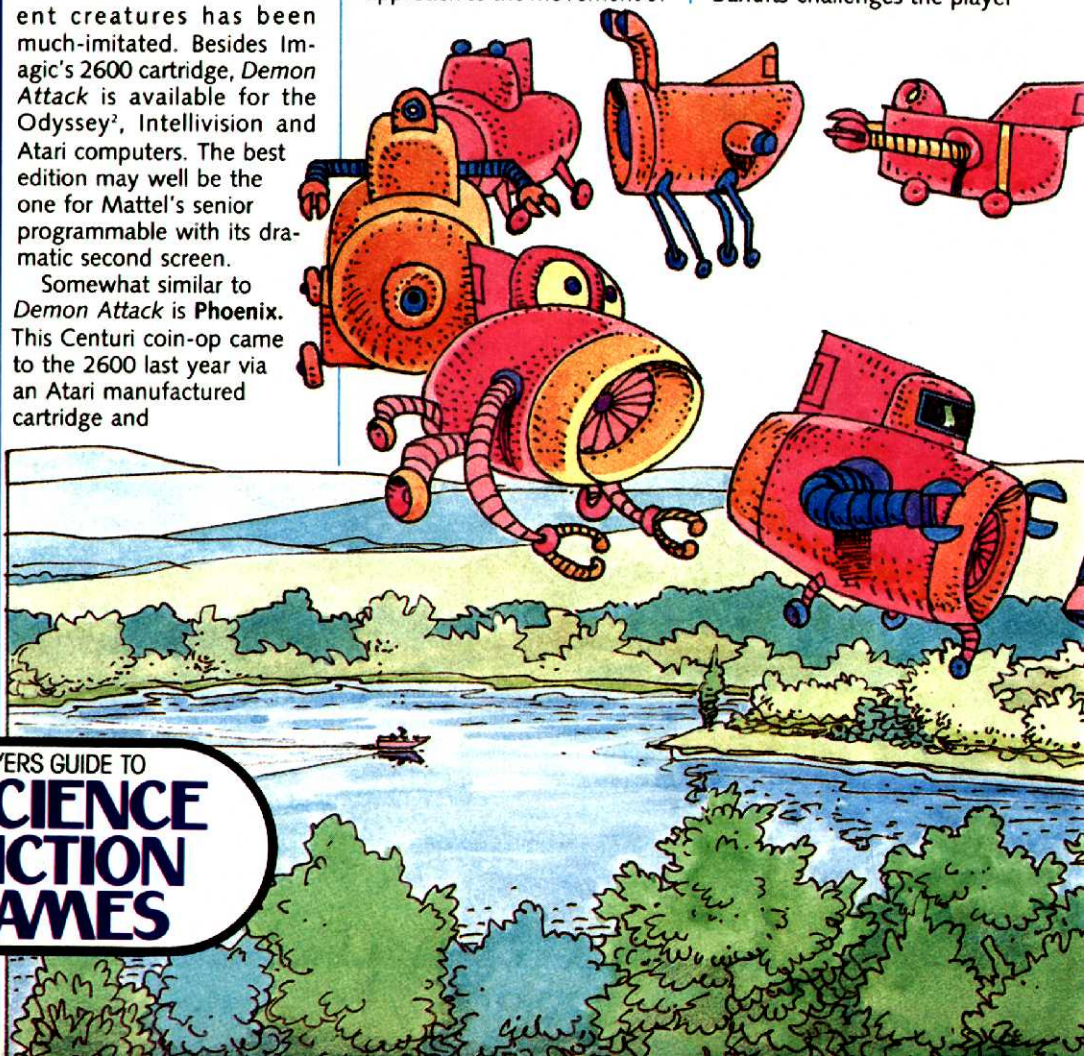
to foil the plans of a vast number of spacefaring scavengers who will otherwise carry off all the supplies from the moonbase. Exceptional

BANDITS (SIRIUS)

visuals and a surprising degree of differentiation among the various types of assaulting aliens are a big plus.

Mark Turnell's *Sneakers* is even more obviously humorously intended. That doesn't make this multi-scenario invasion game any easier, though.

THRESHOLD (SIERRA ON-LINE)

Most players develop a finger ache as a result of pressing the action button on the Apple's paddle controller so rapidly during the attack by the H-wings.

Threshold (Sierra On-Line/Atari, Apple; Tigervision/Atari 2600) resembles most multi-scenario invasion games with one major difference: Some vertical movement is permitted. This idea, adapted from the world's most popular *non*-SF invasion game, **Centipede**, further reduces the stifling effects of patterned target movement on overall play.
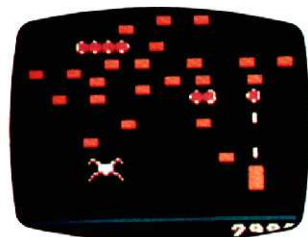
CENTIPEDE (ATARI)

WIN PILOT'S WINGS!

Back in the 1930's and 1940's, when atom bombs were the stuff of speculation and spaceships only a flight of fancy, the most popular SF was space opera. It earned this nickname because its presentation of a lone hero plying the spaceways in his trusty cruiser is little more than a futuristic version of the western. This concept is the central science fiction myth — one brave adventurer against a universe of peril.

Electronic gaming thrives on the interaction between the player and the program. And nothing builds interaction like games which take a first-person perspective on the action and put the arcader into the pilot's chair. That's why first-person flying and shooting games have become such a staple of the hobby, equally popular as videogames, computer simulations, coin-ops and standalones.

It's no secret that the most popular space piloting simulation is **Star Raiders** (Atari). This member of the Electronic Gaming Hall of Fame has consistently remained at or near the top of **EG**'s monthly popularity poll for computer games (it's on the Atari machines), proving that all action games

STAR RAIDERS (ATARI)

don't have a prime lifespan that can only be measured with a stopwatch. Atari brought out editions of the game for its 2600 and 5200 videogame systems in 1983.

Activision's **Star Master** (Atari 2600) employs the often-used slide switches on

STARMASTER (ACTIVISION)

the 2600 to allow the space pilot to toggle between a strategic view of the whole galactic sector map and a tactical display of the local
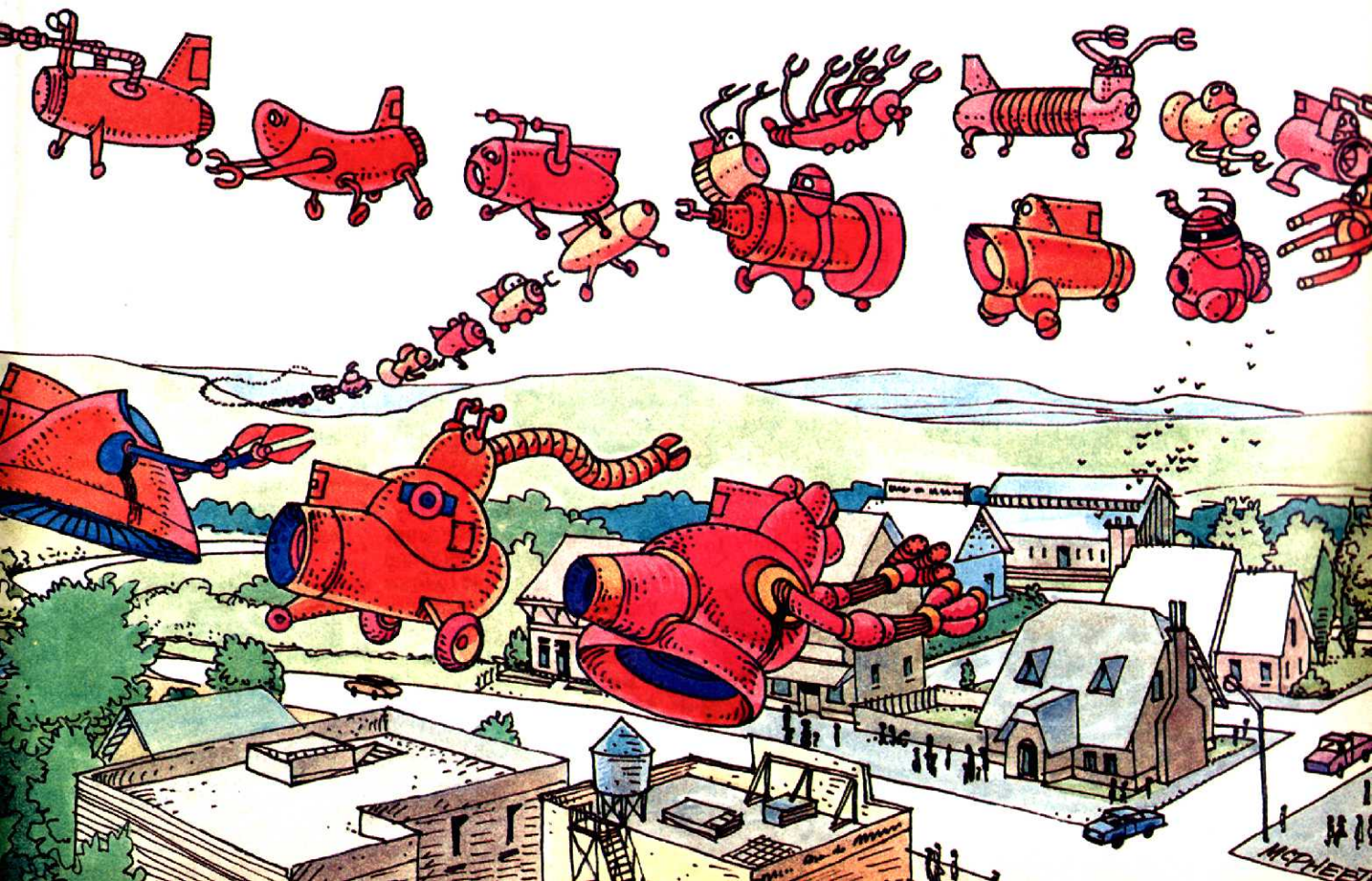
situation. As in *Star Raiders*, it's up to this single ship to patrol all of known space to prevent the aliens from obliterating friendly star-bases. Similar in general concept are **Star Trek: The Game** (GCE/Vectrex) and **Blockade Runner** (Interphase/Intellivision). The latter has especially fine graphics for an Intellivision-compatible cart and will soon be available on ColecoVision as well. Other good

STAR TREK (GCE)

titles include **Space Battle** (Mattel/Intellivision) and **Star Voyager** (Imagic/Atari 2600).

SUPER SCIENCE SCROLLERS

Scrolling shoot-outs deliver just about the ultimate in electronic action. Some utilize other themes, but a surprising number of the programs in this category are futuristic in tone.

Caverns of Mars (Atari/Atari computers) is a rarity on two accounts: It's one of the few games to migrate from the Atari Program Exchange

STARMASTER (ACTIVISION)

to the company's regular computer game line, and the playfield scrolls *vertically*. The unusual design of the player-ship, with its dual-firing cannon, is the game's biggest plus. That's what stamps *Caverns of Mars* as a genuinely exciting contest.

Tail of Beta Lyrae (Paradise/Atari computers) and **Star (Sky) Blazer** (Broderbund/Apple, Atari computers) are more orthodox in that they scroll hori-

zontally, but otherwise have features which set them apart from the crowd. The former is distinguished by extensive animation, a charming musical score and sophisticated programming that gives the bad guys an extra weapon just when the challenge is starting to fade. Tony Suzuki's creation, on the other hand, is notable because it forces would-be space cadets to

REPTON (SIRIUS)

ZAXXON (COLECO)

think as well as whip the joystick around. Even the kings and queens of coordination will find it impossible to force their way past the tank which speeds up whenever the gamer's ship accelerates.

Repton (Sirius/Apple, Atari) is the uncontested action champ. Its variety of attackers, each with an individual power, and its goal of thwarting the aliens' con-

struction of a doomsday device, make it a super disk.

Zaxxon (Coleco/ColecoVision, Atari 2600, Intellivision; DataSoft/Atari, Apple computers) creates the illusion of three-dimensional movement with its mono-directional diagonal scrolling. The player maneuvers a rocket plane in a fight against two heavily armed sky fortresses in this
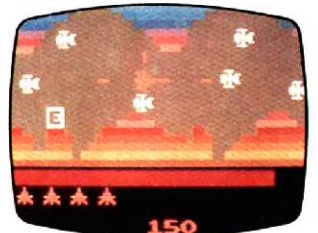
VANGUARD (ATARI)
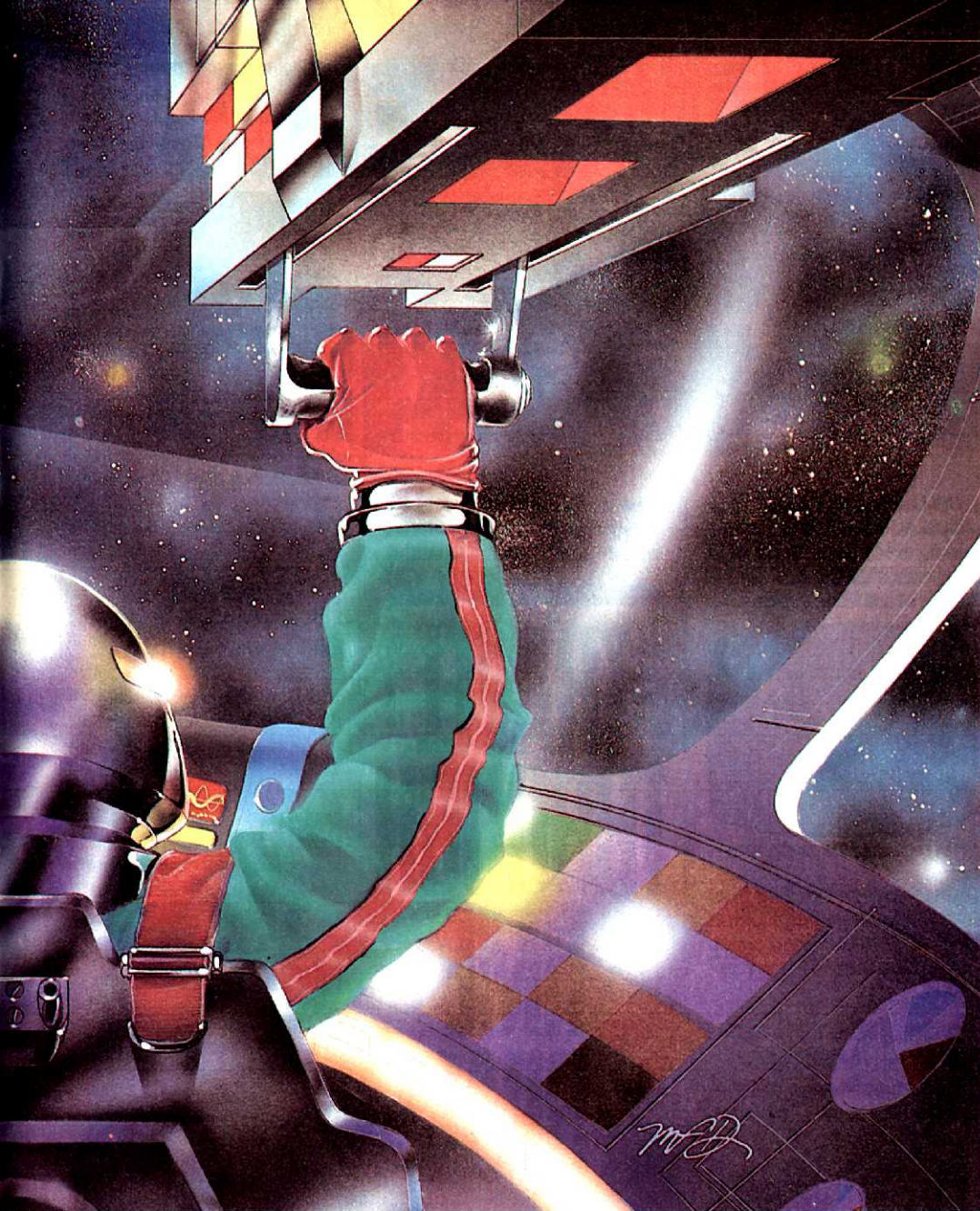
games since the beginning. Atari's **Tempest** treats the topic semi-abstractly, but several programs for the home market have elaborated the concept considerably. Among the best are **Axis Assassin** (Electronic Arts/Apple, Atari computers, Com-
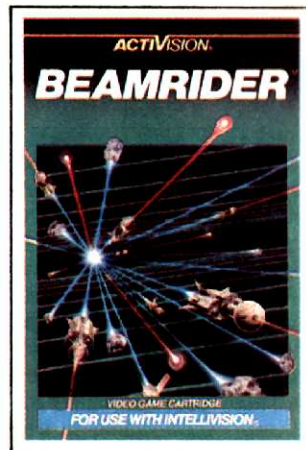
BEAMRIDER (ACTIVISION)

modore 64), **Beamrider** (Activision/Intellivision) and **Tubeway II** (Datamost/Apple). Best of the space-mazes is Sir-Tech's **Star Maze** for the Apple. This beautifully programmed masterpiece throws quite a set of challenges against the player, including asteroid storms.

Astro Chase (First Star/Atari computer (disk); Parker Brothers/Atari computer (cartridge), VIC-20, Atari 5200) is highlighted by the kind of stirring martial music that makes blasting alien invaders seem like a special privilege. The program's unique thrust-fire system, developed by designer Fernando Herrara, is the first that permits a ship to move in one direction while shooting in another. **Star Ranger** (Commodore/Commodore 64 cartridge) doesn't have an omni-directionally scrolling playfield like *Astro Chase*, but its graphics are also a major attraction. Especially well-rendered is the rocket exhaust — and the explosions which occur when a rival ship gets caught in said exhaust are nothing to sneeze at, either.

design introduced to the world by Sega as a coin-op machine in 1981.

Vanguard (Atari/Atari 2600 & 5200), **Zeppelin** (Synapse/Atari computers) and **Cosmic Avenger** (Coleco/ColecoVision) are all topnotch science fiction scrollers. *Zeppelin*, obviously the least well-known of the trio, is a superb effort by William (**Sha-**
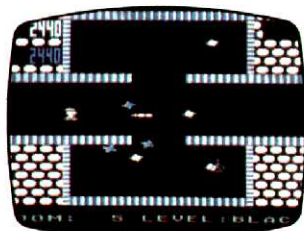
SHAMUS (SYNAPSE)

mus, Shamus Case II) Mataga. The player explores a deadly underground labyrinth in a zeppelin, and the multi-screen maze scrolls mono-directionally as needed.

FIGHT AMONG THE STARS

The blast brigade *loves* science fiction. Outer space

offers a wonderful arena for a no-holds-barred showdown with each side throwing and ducking heymakers with abandon. There's a fluid quality to deep space maneuvering that raises the level of excitement to towering intensity while offering wide scope for both strategic and tacctical planning.

The idea of a massive grid or maze in space has fascinated designers of electronic

COSMIC AVENGER (COLECO)

PLAYERS GUIDE TO SCIENCE FICTION GAMES
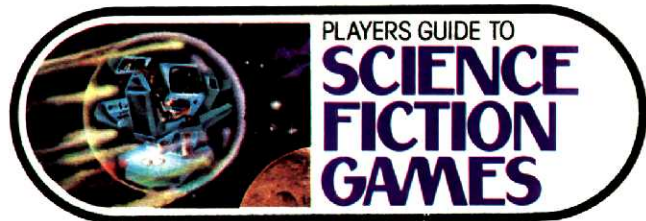
THE THINKER'S GUIDE TO SF GAMING

STRATEGY IN THE SPACE AGE

Science fiction gaming isn't all spectacular shoot-outs and even more sensational explosions. Those whose greatest gaming thrill *isn't* beating a tattoo on the action button can choose from a small but high quality group of programs that stress the mental tests the future may pose.

COLONIES IN THE VOID

Conquering Worlds (Datamost/Apple II) is, as its name implies, a race to carve an empire out of the hides of one's neighboring stellar powers. By subjugating an entire solar system, a player can produce more starships to extend imperial sway yet further.

Titan Empire (Muse Software/Apple II) is similar to

TITAN EMPIRE (MUSE)

theme, though somewhat more restricted in scope. The idea is to orchestrate offense and defense to liberate captured worlds and wipe out every last vestige of Titan rule.

M.U.L.E. (Electronic Arts/Apple, Atari computers, Commodore 64) focuses on what happens after the military has made it safe for peaceful
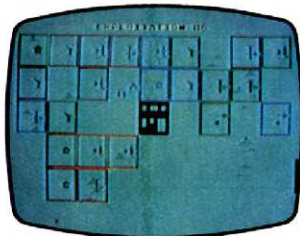
M.U.L.E. (ELECTRONIC ARTS)

settlers. This compelling one-to-four player game simulates the competition to develop the resources of a virgin planet.

TERROR STALKS THE SPACEWAYS

The Alien (Avalon Hill/Apple II) puts a stock SF situation into game form. The com-
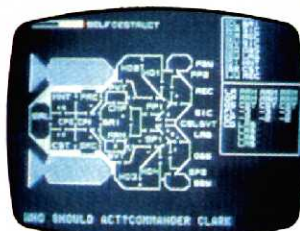
ALIEN (AVALON HILL)

puterist directs the individual crew members of a spaceship in a hunt for an alien which turned deadly after it was brought on board. The idea, as noted, is hardly a

new one, but this is a lively treatment of a situation that is rich in gaming possibilities.

TRAVEL THROUGH TIME & SPACE

FORWARD INTO THE PAST

Time Zone (Sierra On-Line, Apple, Atari computers) and **Adventurers in Time** (Phoenix Software/Apple II) are the

ULTIMA II (SIERRA ON-LINE)

two best computer adventure disks which utilize the concept of time travel. **Ultima II** (Sierra-On Line/Apple, Atari computers) is also a game in

PLAYERS GUIDE TO SCIENCE FICTION GAMES
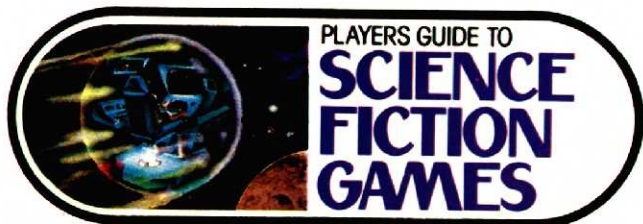
which journeys to other temporal periods are possible, but it's only one element in a very detailed simulation. **Dino Eggs** (Micro Fun/Apple, Atari,
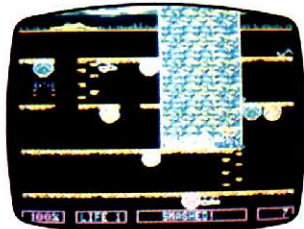
DINO EGGS (MICRO-FUN)

Commodore 64 and IBM computers) takes gamers into the Mesozoic Era so they can bring dinosaur eggs back into the future.

WHEN SCIENCE MEETS FANTASY

Computer SF games, like other expressions of science fiction, run the gamut from super-technical ''hard'' SF (lunar landers and space shuttle simulations would fall into this category) to impressionistic flights of fantasy that echo the slam-bang excitement of sword and sorcery.

Infocom's three-volume

ZORK TRILOGY (INFOCOM)

Zork series, available for all popular microcomputers, is a prime example. Though fantasy elements are certainly present, the meticulous way in which Blank and Liebling have worked out the various facets of the great underground empire is reminiscent of Heinlein, Pournelle and Haldeman.

Empire of the Over-Mind (Avalon Hill/ all computers)

also blends fantasy and SF elements in a single program. Though the program could stand upgrading to current state-of-the-art, the struggle to depose the mysto-mechanical Over-mind is still gaming at its exciting best. woke up your mind because there's some kind of world-

threatening emergency. The trouble: You don't know exactly what it is. Finding out and fixing the problem is the mission in **Suspended** (Infocom/all computers). This all text adventure requires the computerist to manipulate a squad of robots, each capable of only limited action, to get the job done.

THE EMPIRE TRILOGY

The most ambitious science fiction contest is Edu-Ware's three-disk series **Empire I, II, and II.** These give players the vicarious experience of taking one of a number of possible roles at various stages in the development of a powerful, star-spanning civilization.

Two volumes in the series are already available in stores, with the third likely to reach market during the first half of the current year. *Empire* is characterized by subtle play. and a wide range of options for the players, including some paths which stress qualities other than the ability to draw and aim a blaster.

ELECTRONIC GAMES:

DO THEY HURT YOUR EYES?

Here's One View on a Controversial Topic

By JEFFREY HANSEN AND TIM COLEMAN

No doubt, there will be people who don't believe a word of this, but you can actually train your eyes to do exactly what you want them to do in any sport — including electronic gaming. Now the best athletes in the country know this, partly because the United States Olympic Training Center teaches them. And it helps them win.

Ah, so you don't believe a word of it? Just as I thought, but to tell you the truth, I didn't believe it either back when the doctors discovered I couldn't use my eyes very well in situations that required me to see-and-react.

Ever watch somebody play **Stargate** and get their pants shot off? Or **Pac-Man** and just sit in the corner and get eaten alive? That was me before my eyes were trained to perform a lot better.

If you want to gobble more dots, cherries and blue meanies — and maybe even win a bonus game — consider what your eyes are doing when you're playing an arcade game. How well you treat your eyes can

BOB AIESE

Studies have shown that gaming might actually help the player's eyes.

make all the difference, according to Dr. Donald Getz and partner Dr. Gary Etting, Van Nuys, Ca. They're considered the best sports vision optometrists in America.

And they should know. They have trained the eyes of Wimbleton tennis players, pro baseball and basketball players and Olympic athletes, just to cite a few examples.

What it comes down to for Dr. Getz is some electronic games actually wear your eyes down and cause you to make mistakes. There are others, he
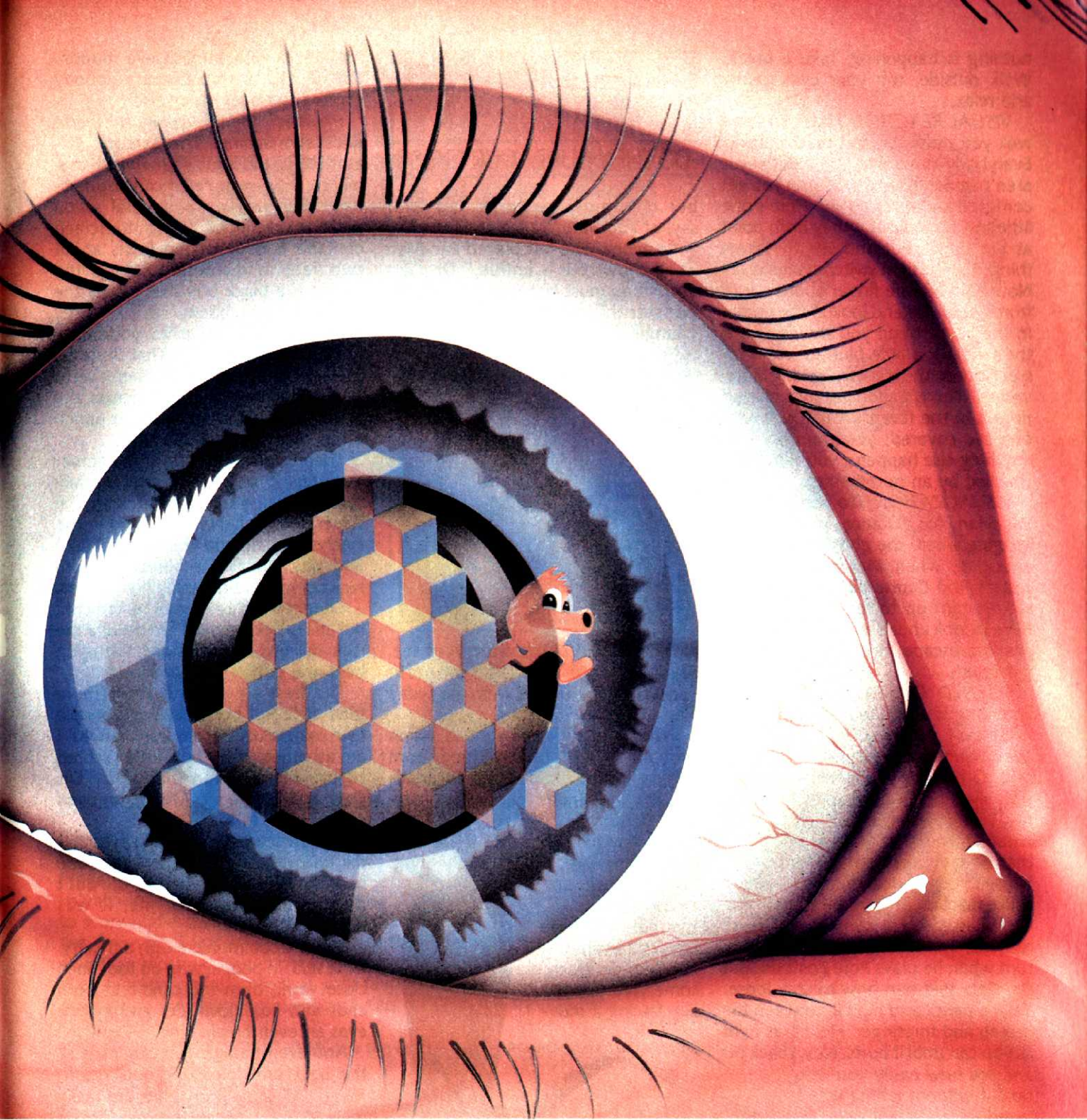
said, especially *Pac-Man*, which can be helpful to your eyes. But, of course, you *can* have too much of a good thing! So what you have to keep in mind is this: It's quality time, not quantity, that will help you run up scores on *Pac-Man* and other games.

It's not as impossible as it sounds. The visual exercise you give your eyes in playing *Pac-Man* can only make you sharper on other games. Here's a good 'game plan' for sharp-eyed arcaders.

OVERKILL: Don't spend your last quarter — and eight hours a day —

playing any arcade game, or you'll wind up going to the great arcade parlor in the sky holding a red-tipped cane. The very first rule of training your vision is it learns exactly what you teach it. Stare into a cathode-ray tube long enough and your eyes will learn so many bad habits that you won't even be able to read a comic book cover to cover.

PERIPHERAL VISION: In any game, players must always try to see the entire board before they can actually anticipate the action and be ready for

it. If you concentrate too hard, too long, your eyes lock into a close-up focus. Then it's like looking into a tunnel, and you lose all feel for time and space in the real world. Most people don't even realize when it happens. *Pac-Man*, Dr. Getz said, is one game that helps train peripheral vision, but other exercises work. Guys can do this: The next time you walk down the street, without moving your head, try to spot a pretty girl out of the corner of your eye — and still look cool. Girls, that goes for you too. And even if

nothing is happening, take a break: Walk outside, rub your eyes **gently** and relax.

VISUAL REACTION TIME: To score well you must see and react quickly. Everybody know that. But if both eyes aren't working as a team, then you get confused and react slowly. Here's one little test to find out if they both point at the same spot and see the same thing. See the light switch on the wall? Now hold up one finger about a foot from your nose and look at the finger. In the background you should notice the switch is a little blurred and double. Now do the reverse, looking at the switch. You should see two blurred fingers in the foreground. Try it with one eye covered; you can't do it. If anything else happens, you should be checked by an optometrist.

VISUALIZATION: To score well in *Pac-Man,* for instance, players must imagine where the ghosts will be and anticipate when they change color. Just as Rod Carew pictures a fastball sliding right up to meet his bat, you have to look ahead and rehearse some possible escape routes before things get tough.

TURNED ON EASY APPROACH: Squinting is absolutely a cardinal sin! Whenever you play, you want your eyes "turned on easy," as Dr. Getz says. Otherwise you create stress and your eyes begin playing tricks. Now, my friend Tim tenses up so much when he walks up to an arcade game that he feels like he has to introduce himself: "Hi. My name is Tim. Are you a nice machine? Please be good to me. Uh, okay. . ." For some pretty good reasons, Tim also crashes in the first turn when he plays **Pole Position**. But Dr. Getz told him how to stay loose: Take a pencil and hold it between the thumb and forefinger. Hold it as tight as you can until it hurts. Now, back off and see how easily you can hold it without letting it fall.

"The point is," said Dr. Getz, "the harder you try to see well, the tougher it is. It's as simple as that."

Now do you see what Dr. Getz means by "easy?" Suddenly, arcade games sound a lot more complex—visually speaking, anyway—than they ever seemed to be. Still, there are a lot of people will argue that anybody with an I.Q. one notch above a stone can remem-

ELECTRONIC GAMES:
DO THEY HURT YOUR EYES?

ber repetitious patterns and win, say, at *Pac-Man.*

"Anyone who has played *Pac-Man* at all knows this is untrue," Dr. Getz said. "You must interpret the patterns constantly, because the patterns change — and hand responses are

directly related to what the eyes see. Almost every visual skill that you use in *Pac-Man* is transferrable to everyday life.

When people have serious vision problems that prevent them from playing sports, arcade games or reading, Dr. Getz trains their eyes to perform better.

Like anything, some of these eye-training exercises can be pretty tiring. Some of them are actually fun, though. For awhile, Dr. Getz even used *Pac-Man* to teach some vision skills, like tracing a mov-

ing object with smooth eye motion. But he had to stop because nobody wanted to do anything else!

However, the line simply shifted to another machine: The Saccatic Fixator. Now this isn't your run-of-the-mill arcade game. Yet, it can be addictive while training peripheral vision and quick reactions. The fixator screen contains a circle of red lights about two feet in diameter. Behind the screen is a black box that makes the lights flash at random.

Each time a light flashes, you smack the button alongside it. That shuts off the light and triggers another one to turn on somewhere else across the board. You get one minute to punch off as many lights as possible.

There is only one rule in the game: You must hold your head absolutely still and use your eyes to scan the screen for the lights. So, if you're the kind of person who cheats at solitaire and tilts pinball machines, you can rack up some abnormally high scores.

Otherwise, this "game" is difficult, but still rollicking good fun despite the lack of missile explosions, clanging bells and gobble-gobble sounds.

The best players can score more than 100. But below average people (like me), usually score less than 40. I am ashamed to say how little I scored before being vision-trained by Dr. Getz and Dr. Etting. Much improved now, I score in the 70s.

My low scores were due to eyes that did not work well together; each one had its own idea of what to do. But I didn't know that. For me, it was normal.

This is a common enough difficulty, Getz said, in people who do too much close work, burn the candle at both ends and never consider giving their eyes an even break.

And even though you can learn all the best principles of good vision, some bad habits are really tough to break. Tim is a classic example, and I'm beginning to think the poor guy needs some serious help, if you know what I mean. When Tim thinks nobody is watching, he still talks to the machines. **G**

TOPS 'N FLOPS

The You-Can't-Tell-a-Book-by-Its-Cover Award

To Fox Video Games and Sirius Software, which published the same game design as, respectively, **Flash Gordon** and **Spider City**.
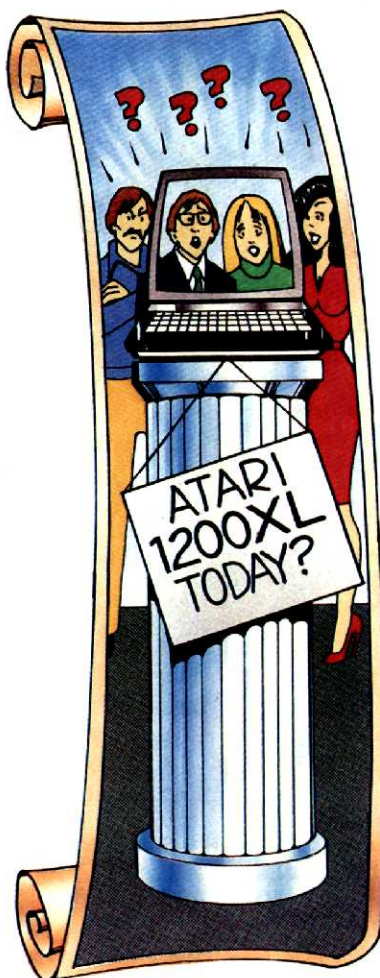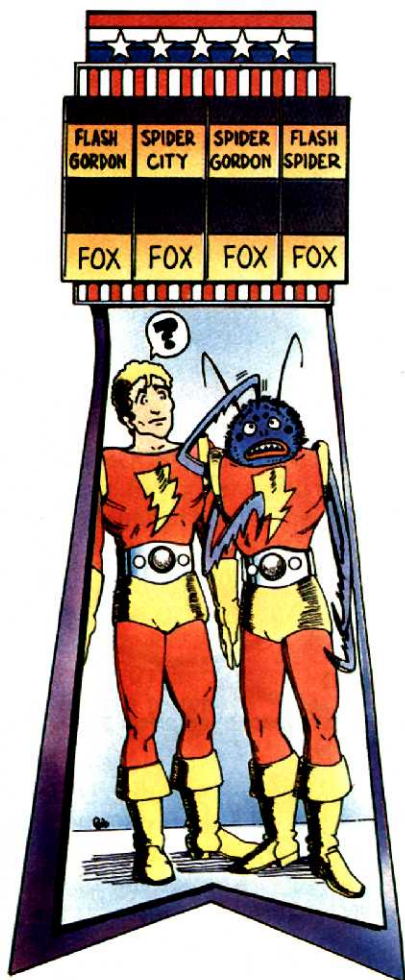
The Not-with-a-Bang-But-a-Whimper Citation

To the Atari 1200XL computer. The reporters had hardly left the gala introductory press conference before the company put this model back on the shelf.

The All-Cats-Are-Grey-in-the-Dark Medallion

To the anonymous Atari designers who programmed **Raiders of the Lost Ark** and **E.T.** using the same object code. In this case, a choice of graphics evidently made no difference, since neither title did well.

# of 1983

in the Gaming Year Gone By

By THE EDITORS
OF ELECTRONIC GAMES

Last month we proudly announced the winners of the 26 1984 Arcade Awards, but this month we're back with something completely different. **EG's** editors have studied the 12-month period just ended, and we've come to the conclusion that there are some, er, ah. . .achievements which must be recognized in the pages of gaming's number one magazine.

So with our tongues firmly planted in our cheeks, the envelopes, please!

The Sam Houston Memorial Plaque

To the president of a Texas-based videogame publisher, who evidently bought a helicopter instead of hiring a decent graphics programmer.

The He-Gave-His-Soul-for-Rock-'n'-Roll Medal

To Data Age, which pinned its corporate hopes on the big-selling, but largely anonymous Journey. Maybe if they'd tried the Rolling Stones. . .
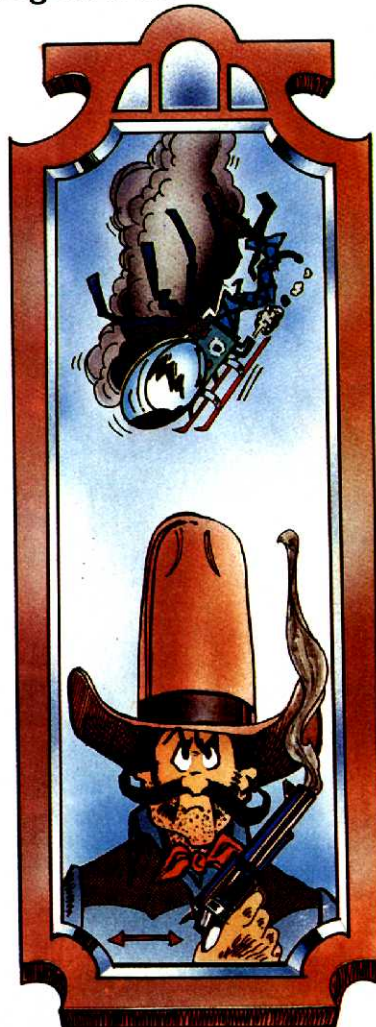
The-Lights-in-the-Sky-Are-Stars Trophy

To Broderbund, which spared us the further confusion of yet another game with "Star' in the title by renaming Tony Suzuki's **Star Blazer, Sky Blazer** when it published it for the Atari computers.

By BILL KUNKEL

uestion: Why would you go to an arcade, pump up to four bits into a Wico Double-Frame Over/Under coin door assembly (dual rejector style), then play a videogame whose optical wizardry and gut-wrenching action doesn't far exceed what is generally available on a 48K computer disk?

Answer: You would not.

If this explains why **Dragon's Lair** reigned as the hottest item in arcades everywhere during the summer of 1983, then also consider this: At a trade show held just a few months later, the Don Bluth/Cinematronics groundbreaker looked about as hot as an *Asteroids* machine with a varicolored monitor overlay.

Laserdisc games are definitely the Hot Thing in arcades, many packaged in sit-down casings right out of the cinema. As a matter of fact, gamers are now regularly being treated to the previously unheard-of spectacle of videogame *credits*, with the names of

programmers, animators and everybody short of the kid who plugs in the circuit boards. More perilously for the *Dragon's Lair*-type coin-ops, the big guys are getting into the race — the efforts of Midway, Atari, Williams, Mylstar (formerly Gottlieb), etc have boosted the quality of the new breed of laserdisc-genre games into hyperspace. Certainly, there are dozens of car race retreads with videodisc images that replace the computer-generated optics, but the best new games are using this novel technology much more cannily.

In *Dragon's Lair*, players move directional joysticks and push a button, after which the game's brain scans the disc to find the appropriate point at which to revive the adventure. A gap clearly existed, gentlemen. What they did about it was, for one thing, to improve the videodisc technology, allowing the "needle" to scan a complete disc in five — count 'em —

seconds. More importantly, the entire game mechanic was turned around.

The most immediately conspicuous example of a laserdisc game with its head screwed on right is Mylstar's **M.A.C.H. 3** — at least, that's what the big companies are betting. In *M.A.C.H. 3*, players opt for either fighter (straight-ahead perspective) or bomber (bird's-eye) options. Actual topographical footage is used as these videodisc-generated graphics are flung at the screen with enough force to knock the tokens out of an arcader's pockets.

As the scenery rolls by, audio commands bark through the speakers of the upright or sit-down format games. While all this is happening, the computer picks up and targets enemy bridges, anti-aircraft weaponry, and all sorts of things that gamers can blow to tiny little pieces in a veritable "Apocalypse Now" of a videogame!

Atari, meanwhile, is offering its own entry into the airborne sweepstakes, **Firefox**. Teeth gritted in grim homage to Clint Eastwood, the pilot sits safely encased in a black fiberglass shell that would make Darth Vader envious. Serene within this ebony, plastic womb, the would-be Chuck Yaeger participates in a laserdisc dogfight.

No longer do players have to make a choice, and then have to wait while the scanner searches for the correct frame to return to the action. The images the laserdisc shows are moved merely in directional terms and on the basis of whether or not the human pilot hits the target.

The other things these games prefigure is a heavy trend toward macho games. Whether secretaries, female lawyers and other women will feel the irresistible urge to crawl inside a mini-

A day at the races: four scenes from Tatio's *Laser Grand Prix*

PAC-MAN JUNIOR (BALLY/MIDWAY)

ature Tie-Fighter and blow the guts out of some prefabricated, laser-generated lanscape remains to be seen.

With movies and videogames getting so chummy, it certainly took long enough to get the earliest of the arcade videodisc games into the "theaters". **Astron Belt** was first selectively showcased to members of the industry and press at a November, 1982 trade expo by a company then known as Gremlin/Sega. Gremlin/Sega later became plain Sega before being picked up by Bally Midway and becoming a memory. But its great legacy, *Astron Belt* was beginning to take on the look of a white elephant.

When a then-goggle-eyed press corp was first sat down, strapped in, handed the controls to a laser-spitting fire control and a set of stereo headphones to begin playing *Aston Belt* in those halcyon days, it was one pretty impressive piece of hardware. Even Sega was being cloudy on hard data — "sometime in the next two years" was about as close as anyone came to actual specifics — and seemed to be demonstrating this collection of Japanese-created imitation "Star Wars" special effects mostly for the

hell of it. Let people know what the coin-op industry could do when they set their minds to it.

Well, folks, *Astron Belt* has finally buckled into position on the arcade floor, courtesy of its new owner, Midway, and while the effects are not

nearly as breathtaking or avante-garde as they were two years ago, there are plenty of visual treats in store. The bottom line: this is as close as anyone has gotten to actually putting game players *into* a Star Wars-type science fiction film.
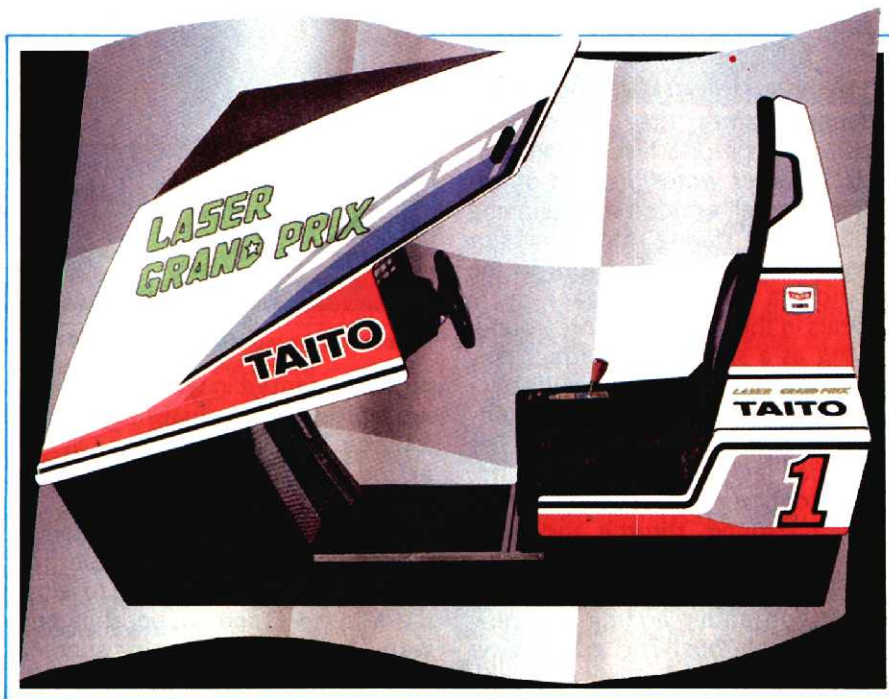
LASER GRAND PRIX (TAITO)

THE NEW COIN-OPS

THE NEW COIN-OPS

Nowhere is the new attention being lavished on the construction of coin-op cabinetry more obvious than on Williams' head-turning "Discan" system game, **Star Rider**. No gamer idly cruising an arcade could fail to be amazed by the configuration of *Star Rider:* this coin-op resembles nothing so much as a heavy duty arcade machine through which a Harley-Davidson has been driven.

Players mount the chopper's seat, legs straddling the science-fictional rear exhaust jet, hands firmly wrapped around the trigger-mounted handlebars. The illusion is completed by the macho front wheel protruding brashly through the back end of the coin-op.

Like most of this new generation of videodisc games, they can only be classified as pseudo-first person contests. In other words, instead of imagining oneself astride a star-spanning chopper and staring into a monitor serving as a front-view mirror to the cosmos, a surrogate space-cycle appears in the immediate foreground, serving as a steering and attack cursor-device. Even this illogical distraction can't put a dent in the gut-churning excitement a game such as *Star Rider* can generate, with its weird, blurred optical effects. A combination of stereo sound, throttle and dual-level brake action and even a rearview mirror simulation make this a strong contender among the new videodisc coin-ops. The graphics on the bizarre, futuristic scenarios look like something the Italian horror director Mario Bava might have created if

allowed in a videogame lab.

The final area of potential videodisc entertainment to be plumbed by the coin-op potentates are sports contests, several of which have been offered by Taito. Most of these are pretty much what one would expect. **Grand Prix** is a **Pole Position**-type auto race contest in which real images are replaced with actual images, while a similar Taito coin-op offers Olympic action events with visual enhancement.

And speaking of "enhancements", it's simply impossible to escape from sequels. We go from Movie, to Movie II to Movie 3-D and end up, apparently, with "Rocky 426". Nothing succeeds like success, the thinking goes, so if it succeeded once, why not six or seven more times. Pac-Man, whose family

"tree" had already been seemingly defoliated of even its beer pretzels, discovered a new sibling in an upgrade kit being offered to arcades as **Jr. Pac-Man**. The surprise here lies in the fact that the designers have actually concocted an interesting new twist on what was thought long ago to be scorched earth, creatively-speaking.

The new gimmick is a macro-maze which scrolls to the left and right, and gamer's eyes actually lit up the first time that maze kept chugging along! The other distinctive touch is Jr.'s cute little propellor-beanie — the sort of cutesy touch that helps make or break a videogame.
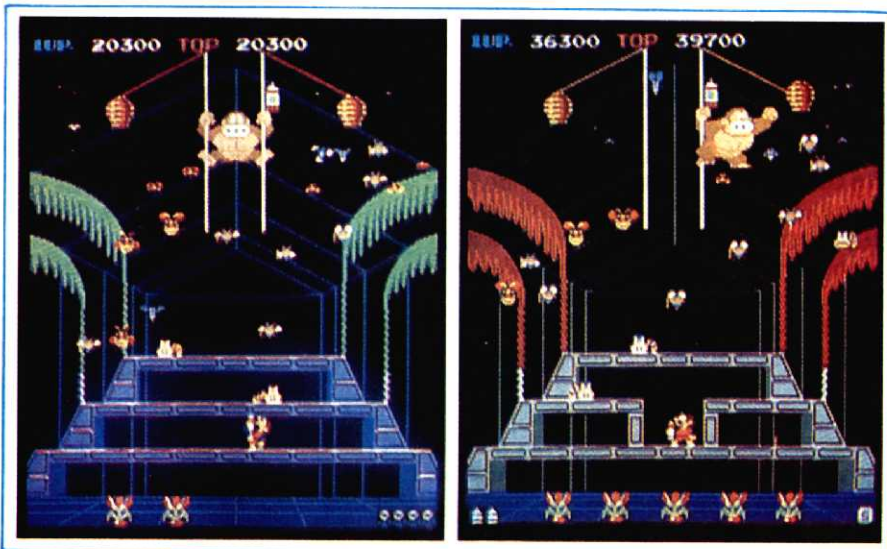
Mario may be working in the cement factory, but Stanley goes bananas in *Donkey Kong 3.*

Atari has also entered the upgrade sweepstakes — in which they allow operators to turn their old games into reconverted models — with **Pole Position II**. No new graphic or play action wonderment here, but several new course tracks have been programmed for racing fanatics with good memories.

Nintendo, meanwhile, continues to beat a dead ape with — you guessed it — **Donkey Kong 3**! It's still more of the same, and fans and foes of DK con-
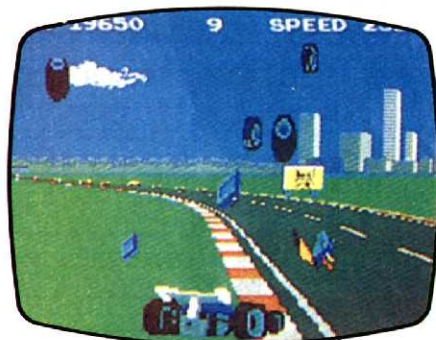
New tracks and plenty of scenery heighten the thrill of *Pole Position II*. Speed demons, this one'll really wipe you out!

tests will not be converted or repulsed. Mario, however, is seemingly still stuck at the cement factory because Donkey Kong has another protagonist to cope with, a dippy-looking nerd named Stanley who is busily spraying insecticide at "buzzbees" while the ever-present ape is dumping coconuts on him from above.

The most intriguing of the game sequels is clearly Midway's **Discs of Tron**. Unlike the original multi-game format employed on **Tron**, *Discs* goes in a totally new direction, with a single play mechanic that just gets rougher as time goes on.

The scenario is rearranged slightly here, but all for the better. This time is Tron vs. Sark, head to head (to head to
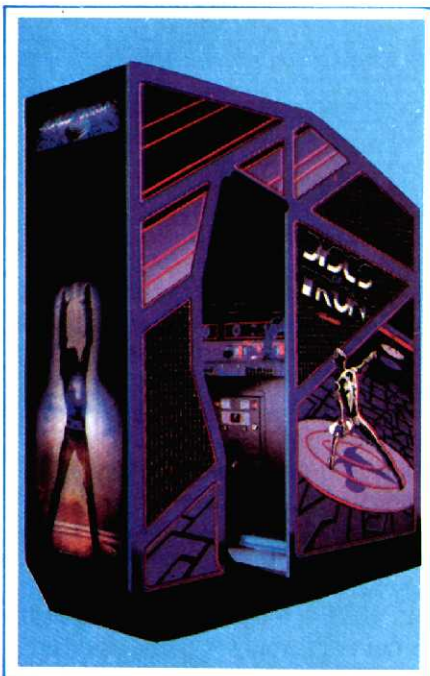
DISCS OF TRON (BALLY/MIDWAY)

head to head, eventually), standing on discs that hover over the interior of the microcomputer cosmopolis. You don't want to fall off, have your disc shattered or any number of other unpleasant occurances, and a bit of time spent in this cabinet-only coin-op will be required of even the hottest gamers. The graphics demonstrate the still-breathtaking capabilities of digitized computer graphics, even in this laser-crazy era.

Another charmer of a sequel — and a somewhat unlikely number at that — is Universal's follow-up to **Mr. Do**. The graphics are cleaned up and a far greater number of play elements have been introduced into the game design soup, such as levels of ladders that can be tilted to the left or right bridge to gain access for your player surrogate,

MR. DO'S CASTLE (UNIVERSAL)
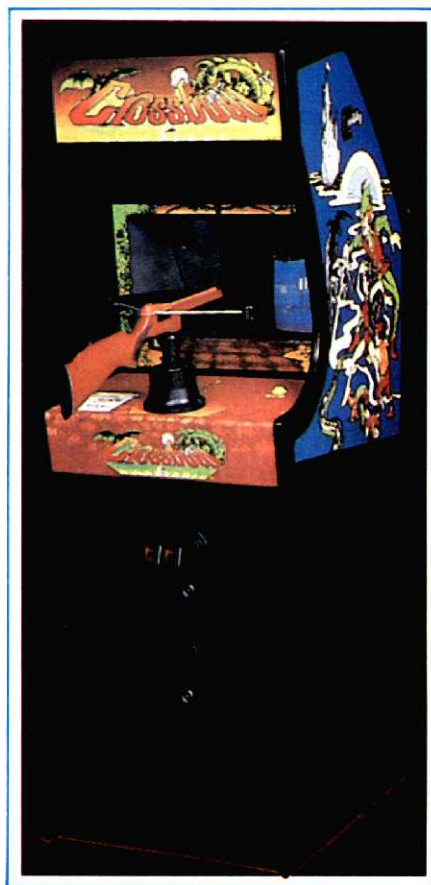
or impede entry by an antagonist.

With *Mr. Do's* dark horse popularity in home format, courtesy of Colecovision's version, this sequel looks a likely candidate for the home screen in the not-too-distant future.

One thing that everyone — even the manufacturers themselves — agree upon is the fact that sequels and laserdisc games are only a way station and not the end of the rainbow. Already games such as **Crossbow**, in which players use a combination wooden crossbow and a light beam to not only do battle but to select the direction the scenario will follow. At the successful conclusion of every round, several colored blocks appear at the bottom of the playfield, the gamer firing at the color dictating the

CROSSBOW (EXIDY)

storyline desired.

"Computer graphics we have under development can already produce laserdisc-quality graphics," states Midway's Jim Jarocki. And all-computer graphics mean a far greater degree of interaction.

In fact, ample proof of just how far digitized computer graphics have come is already on view in the oddball favorite, **Bouncer**, a game that makes up in eyeball-massage anything it lacks in terms of game play.

Technology in this field is already galloping beyond the ability of even the top programmers to harness, so while you're up there in the skies blowing the cheese out of mountaintops remember the arcader's motto: and it's going to get even *better*. 𝗚
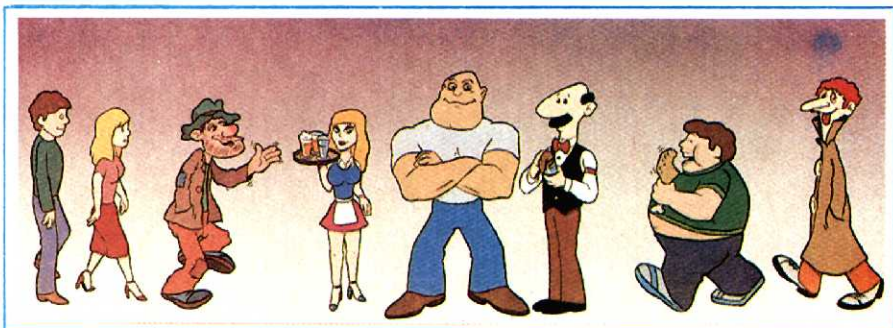
BOUNCER (ENTERTAINMENT SCIENCES)

INSERT COIN HERE

M.A.C.H.-o, M.A.C.H.-o, Man!

By BILL KUNKEL

Does it seem possible that within six months a game as revolutionary, as innovative — as great! — as Don Bluth and Cinematronics' **Dragon's Lair** could seem so...dated?

Possible or not, this is the fact of the matter. Through a mutant marriage made in high-tech heaven, laser disc technology and computer interaction have wed and borne children — a veritable litter, in fact.

Here is the problem: *Dragon's Lair* is basically just a well-animated cartoon that arcade dwellers view in a series of permutations by simply pushing a button at selected intervals. This denies gamers the one element that has always defined their interest in videogames: interaction. The first

generation of computerized laser disc game was too simple. Pushing the single play button sent the laser trotting across the surface of the internal disc to the appropriate frame and broadcast it onto the monitor. Arcaders just don't have enough control over the actions of Dirk the Daring.

Generation Two, however, solves almost all these problems with a single masterstroke: use laser-disc optics for the background, while foreground and player-controlled elements are all computer-controlled.

In addition to Atari's **Firefox**, which has not been ready for hands-on testing as of this writing, the clearcut early leaders in this new category of coin-op are Mylstar's (formerly Gottlieb)
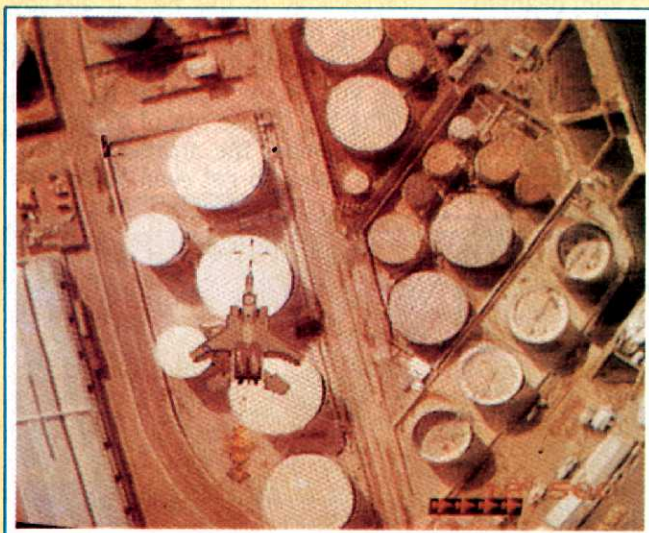
In Mylstar's *M.A.C.H. 3*, arcaders have the option of playing with either a bird's eye view or a face-to-face perspective.

CATCH A MUG FULL OF FUN!

TAPPER T.M.
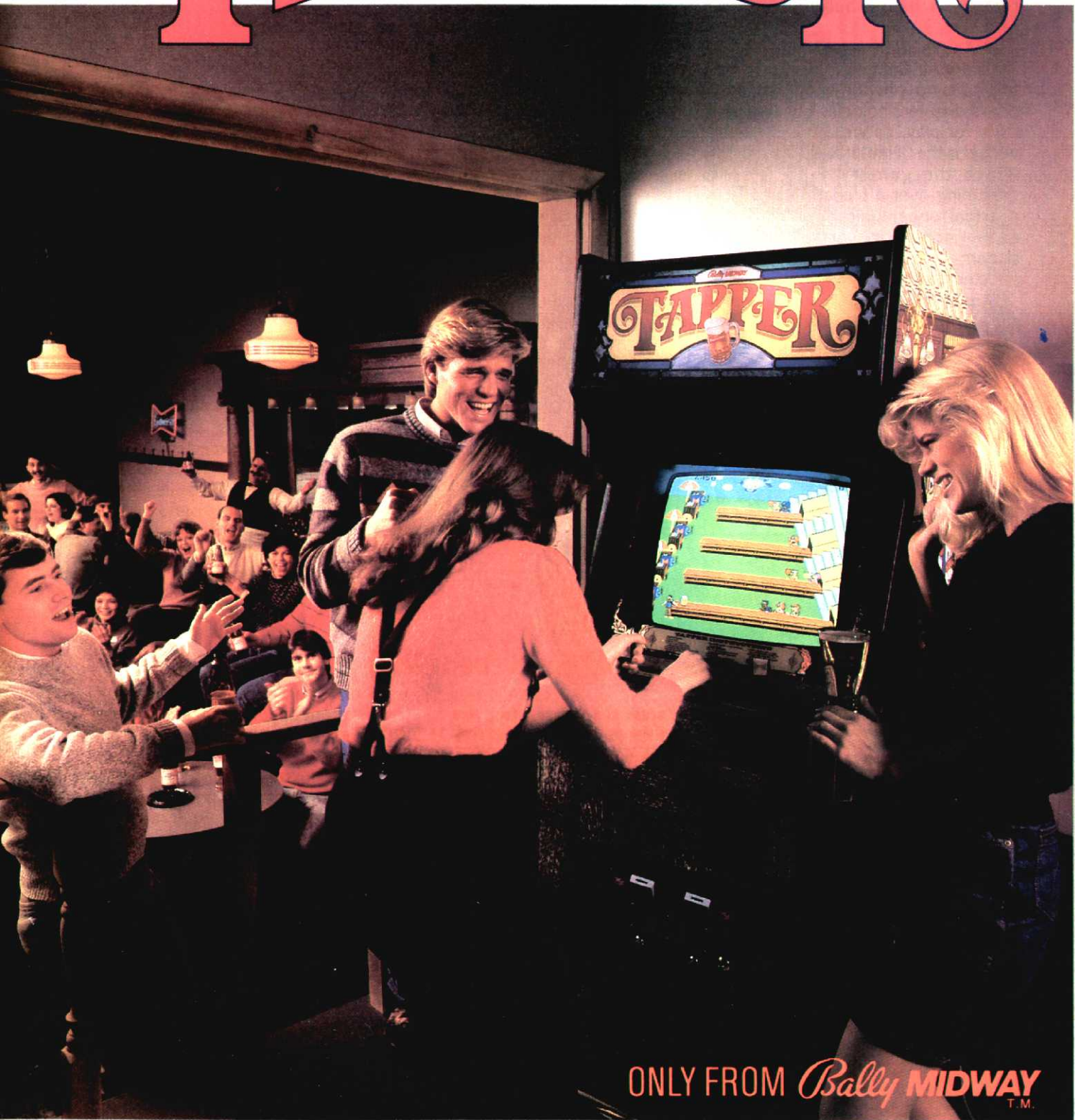
ONLY FROM *Bally* **MIDWAY** T.M.

M.A.C.H. 3 and Midway's **Astron Belt**.

M.A.C.H. 3
Mylstar

M.A.C.H., as readers of Tom Wolfe all know already, is the speed of sound. An aircraft capable of flying, say, twice the speed of sound is moving, therefore, at M.A.C.H. 2.

When a videogame has as much of the "Right Stuff" as Mylstar's milestone, it is hardly hubris to dub it *M.A.C.H. 3*.

M.A.C.H. itself is an acronym for "Military Air Command Hunter", and this coin-op phenomenon not only offers dual technologies but two formats for play, as well. The clear-cut winner is the "Fighter Raid" format, in which the gamer's F-15 is sent screaming over a scenario comprised of actual topographical color film footage — oceans, mountains, field and stream — in search of computer-selected targets.

As play begins, audio speakers begin a constant stream of base-to-air

chatter which helps the player pick off targets. This is augmented by the on-screen appearance of symbolic computer target selection. Bridges, ammo dumps and anti-aircraft artillery are pinpointed by sighting squares and the heavy-duty military joystick must then maneuver the on-screen plane (seen from a rear view in this scenario) in order to obliterate these targets. Point values are assigned only *after* each successful hit.

In the "Bomber Run" format, arcaders are provided with an overview of their F-15 and the targets below. A targeting cursor is provided just beyond the tip of the aircraft's nose, allowing would-be bombardiers high precision.

It's the "Fighter Raid" scenario that really gets the gamer's pulse pound-
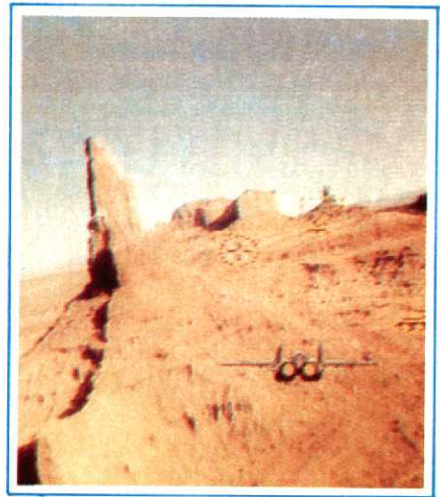
Targets are displayed by crosshairs.

ing. The killer craft mad-rabbits over the landscape, players shredding ground targets with blood-curdling passion. Everything about this game shrieks with excitement — the speckled audio commands, complete with appropriate blips and crackles; the lurid explosions as tracer bullets chop up the scenery; and the unbridled exhilaration of speed and the high-tech simulation of movement that creates the most astonishing videogame vertigo ever experienced.

M.A.C.H. 3 is, as they say in the trade, *hot*. As expected, the sit-down version is the preferred mode of play, but the upright holds its own against anything on the ground or in the air. Military mavens, or pacifists in search of harmless cheap thrills, will find a bounty of enjoyment in this fantastic title.

ASTRON BELT
Midway

When Midway acquired Sega in a recent buyout, one of the most tempting morsels for the boys from Bally must certainly have been **Astron Belt**, the videogame that's been well over a year in the making, testing and refining.

First shown at an industry trade show two years ago, this science fiction rave-up used earphones, an experimental, oversized cabinet and lots of *Star Wars*-style film footage. Well, the final version has been cleaned up a *lot* in the ensuing time period, with extensive testing and revamping (mostly in Europe) by Sega and, later, Midway. The images are Japanese-produced, and comprise a fairly high-quality compendium of post-*Star Wars* special effects: humongous battlestars, flaming stars, crater-pock-
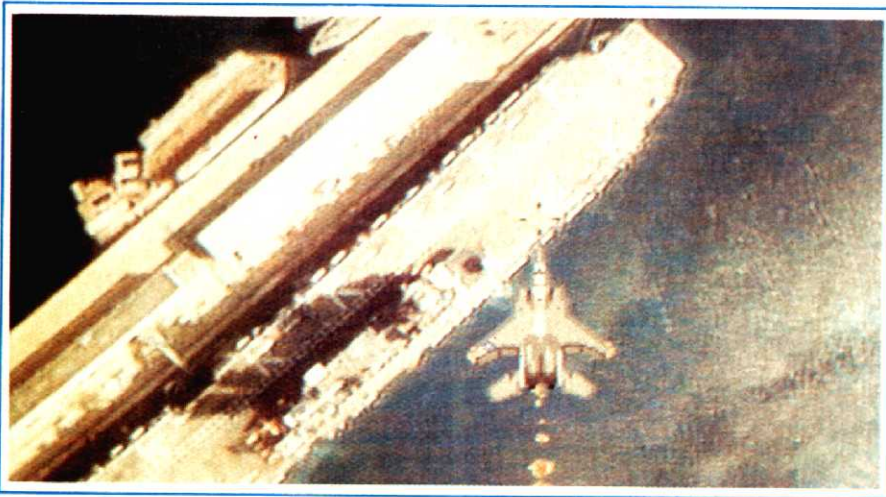
By superimposing computer graphics over actual film footage, *M.A.C.H. 3* provides gamers with realistic battle scenes and no "please wait" screens.
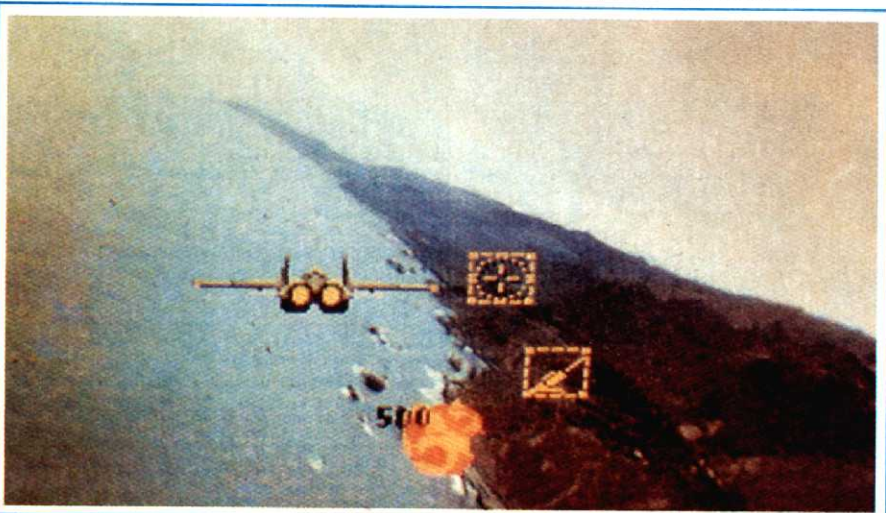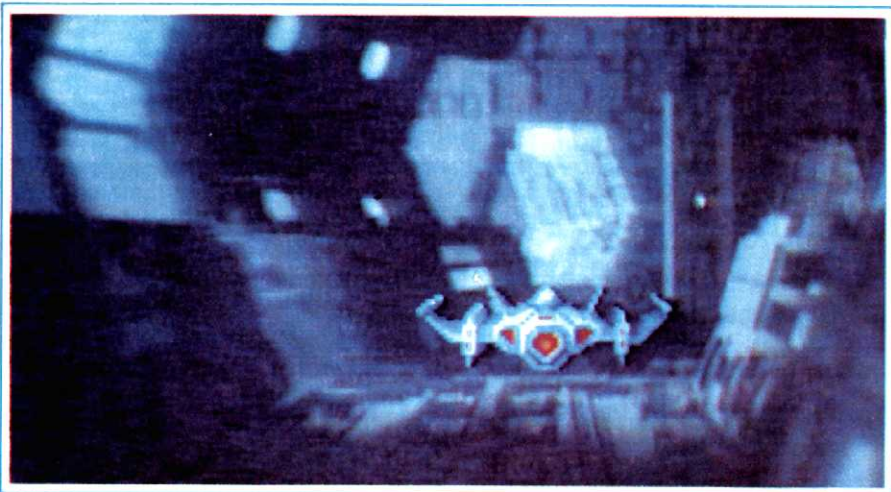
Midway's *Astron Belt* also gives gamers realistic settings to fly through.

CONGRATULATIONS
YOU HAVE REPULSED THE
ENEMY BUT OTHERS
ARE ON THEIR WAY TO
CONQUER THE EARTH!
PREPARE FOR THE NEXT
CHALLENGE.

GOOD LUCK TO YOU.

Special effects and awesome visuals are commonplace in *Astron Belt*.

ed moons and some truly eye-popping surprises.

Using an ergonomically designed analog-type joystick to maneuver the on-screen spaceship (seen from rear view), players move over a score of fantastical scenarios, blowing up oncoming invaders, fireballs and space monsters. The scenes are juxtaposed in such a fashion as to lure the unsuspecting player into a false sense of familiar security. Just when the arcader begins to feel at home doing battle over a planet's surface, the ship is abruptly dropped through a planetary trapdoor into the belly of some new and imminent danger.

While *Astron Belt* lacks the gut-wrenching spindizzy of a game such as

M.A.C.H. 3, it just about makes up for it in the variety and quality of the special effects sequences. This is much less a simulation than a new form of entertainment — a cross between your standard videogame target-shoot and a gamer-created on-the-spot science fiction film. A little bit of Luke Skywalker and a little bit of George Lucas have gone into the creation of this long and eagerly awaited epic coin-op.

Players will obviously determine their favorite more through game and entertainment preference than as the result of a qualitative value-judgement. Or: Don't miss either of these ground breaking, space blasting arcade classics. Ⓖ

RealSports Baseball Is Definitely a Hit!

REALSPORTS BASEBALL
Atari/Atari 5200

So who needs a voice module?

Not the 5200, that's for sure. With each new piece of software, Atari is treating gamers to yet another arcading revelation. After proving it is more than just a 400 computer in a pretty plastic casing with **Qix**, **Centipede** and **Pac-Man**, the 5200's latest batch of cartridges adds astonishing audio to the already stunning visuals.

RealSports Baseball is the nicest piece of sports videogame software produced to this date. From the opening strains of "Take Me Out to the Ballgame," players will find themselves double checking their eyes and ears lest they think they've died and gone to electronic gaming heaven. The field is rendered with breathtaking verisimilitude in a remarkable three-quarter perspective that recreates the downward slanting view from behind home plate to the letter. Everything — bases, pitching rubber, foul poles and even the rippling, multi-colored crowd in the outfield seats — is recast in high tech imagery with enough realism to give those afraid of heights a severe case of vertigo.

Arcaders won't have to scour the neighborhood for a second player, either (though once word gets out that you own this stunning title, you will most likely be forced to beat off prospective playmates with a joystick) since the 5200 will be more than happy to whip your inexperienced buns right through the learning curve.

The bat is swung via horizontal manipulation of the joystick controller in four stages, allowing the surrogate batsman to swing for the fences, streak line singles, bunt and follow through. Pitchers are hurled via the forward right action button and selected with the joystick. The computer assigns defensive control to the appropriate player once the ball is hit, and the human coach uses the forward right side action button to peg the white pill to the correct base.

As might be imagined, it takes some doing to make the audio accompaniment stand out amid all this graphic splendor. Never fear. In addition to the aforementioned baseball ditty, the computer organist periodically leads a rousing fight cheer, and each pitch and play is *announced* by an unseen p.a. speaker.

That's right, sports fans, every ball, strike and foul is articulated in crisp tones with any successful defensive play punctuated by an authoritarian, "You're *out!*" The game is captioned as well, and a complete scorecard is maintained at the top of the screen.

It sounds great, it looks great, it *is* great — easily the top of the 5200 pro sports line. And, if this description alone hasn't galvanized your curiosity to near madness, then you are no true electronic sportsman.

(Bill Kunkel)

BOING!
First Star/Atari 2600

First Star's first game for the 2600 is a credit to the company's sterling reputation. **Boing!** is a pattern-changing game — the genre pioneered by **Q*bert** — with a few nice twists and an easier control scheme. It certainly

REALSPORTS BASEBALL (ATARI)

BOING! (FIRST STAR)

stands quite well on its own.

Boing! turns the player into a bubble, which has to light up each of the 36 blocks on the playfield. To do this, the bubble jumps from block to block, dodging the evil Bubble Eater and the pin that can pop pursued and pursuer alike. Players lucky or skillful enough can maneuver it so that the pin pops Bubble Eater, immobilizing it temporarily.

Higher skill levels require the gamer to touch certain blocks before the next ones can be lit, or to light alternate sets of squares in sequence. It ain't easy, especially when you consider that Bubble Eater gets faster and more accurate with every round.

Unlike *Q*bert*, it's impossible to jump off the blocks to a grisly death. The only things the player must watch out for are Bubble Eater and the pin.

Considering its eye-pleasing, colorful graphics, its fast-action play and its sensible controller functions (no need to slant the joystick to play this game), *Boing!* is unquestionably *the* definitive color-changing game for the VCS.

(Tracie Forman)

PENGO

Atari/Atari 5200

It does a gamer's heart good, to see how Atari has mixed and matched its library of coin-op translations for the 5200 super-system. While stocking up on the mega-hits, such as **Pac-Man**, **Missile Command** and **Centipede**, it has not neglected the arcade's quieter classics. Such worthy examples of the program designer's art as **Qix, Space Dungeon** and now **Pengo** never set the token-oriented arcade world on fire, but the awesome capabilities of the 5200 provides these undiscovered jewels with a beautifully furnished stage.

Pengo was an unsuccessful entry into the "cute" coin-op sweepstakes of 1982, but in the home environment, relieved of having to constantly feed the token-chomping coin slot, gamers will find themselves getting more deeply involved with this game's strategic possibilities and its challenge to hand-eye coordination.

The player controls a cute little Emperor Penguin, dubbed "Pengo", as it zips about a dangerous arctic landscape. The little fellow is surrounded on all sides by gigantic ice cubes and constantly hatching eggs, bearing sinister, avian predators. Pengo must slide the blocks of frozen water in such a way that they roll right into one of the feathered hunting skewers and pin it against either another big ice cube or the border of the playfield (the cubes are employed similarly to the apples in **Mr. Do**).

The ice blocks are of two types: breakable and unbreakable. The plain, unmarked species melts when Pengo pushes one against either the wall or another cube, while those marked with white corners and center are unyielding. Also, since the skewers are hatched within the breakable blocks, they can be eliminated prior to birth by destroying the cube during the hatching process. However, once the hunting birds do hatch, they must be dealt with indirectly, by way of the previously-mentioned rolling ice blocks. Otherwise, once the skewers make physical contact with Pengo, they peck him into the next turn (in a nicely animated but somewhat distasteful sequence). The animation is wonderful, with appropriately light-hearted theme

"PRESTONE"
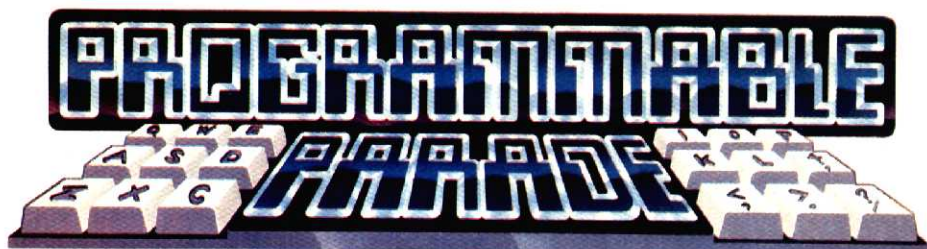
credibly, the oddball joysticks work just great with *Pac-Man* and should give players no trouble at all in making the globetrotting gobbler follow instructions.

Pac-Man is another solid gold brick in the ever-growing wall of 5200 software.

(Bill Kunkel)
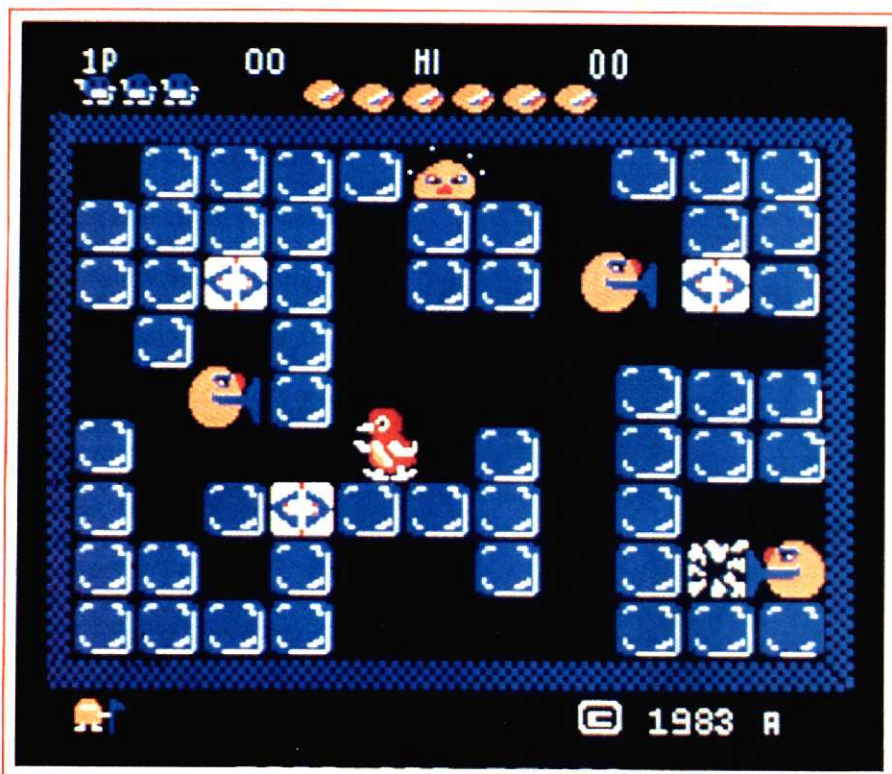
PENGO (ATARI)

music churning happily throughout the game. Pengo flaps his little flippers, the skewers peck and chomp menacingly and the blocks roll easily across the ice. Even the near-legendary (with dubious distinction, to be sure) joysticks won't gum up the works in this contest. For fans of arcade games, cutie concepts and visuals, *Pengo* will make an excellent addition to the already imposing 5200 collection.

(Bill Kunkel)

PAC-MAN
Atari/Atari 5200

Okay, friends of the "52", now you've not only got what every other system owner in the world has — a maze chase contest — you've got the best version of the best maze chase videogame ever to light up a playfield: Sir **Pac-Man**.

This is a remarkably faithful translation of the Midway/Namco coin-op king, even more faithful than the Atari computer version. This one's got ev-

erything right down to the intermissions.

Those gamers who've looked toward the release of this cartridge with mixed feelings, owing to the 5200's eccentric controllers, can rest easy. In-

MOUNTAIN KING
CBS Electronics/Atari 2600

With the help of its own RAM-cram chip (which just about doubles the memory capabilities of the 2600), CBS Electronics has translated **Mountain King** from its original Atari computer format to the ever-popular standard programmable system.

All the elements of the higher-memory versions are intact, including the vast, scrolling playfield, high-resolution graphics, and the haunting theme song that leads to the elusive Flame Spirit.

The object of the game is to explore the ancient diamond mines that lead to the hidden temple, collecting diamonds along the way. To gain access to the ancient shrine, gamers must appease the wraithlike Skull Spirit that eternally guards the door. It will be satisfied only by the Flame Spirit, which appears only after enough diamond points have been collected.

The Flame Spirit can only be seen in the glow of the explorer's flashlight, except as an occasional brief flicker. To find it, players have to follow their ears. The louder the Flame Spirit's signature theme, the closer it is.

Once the dancing flame has been captured, it must be presented to the Skull Spirit guarding the temple. Now,
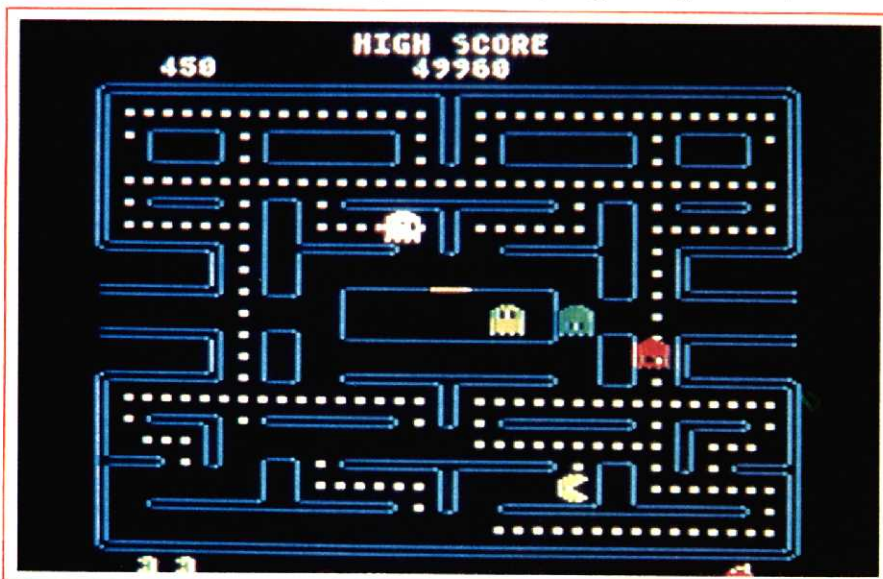
PAC-MAN (ATARI)
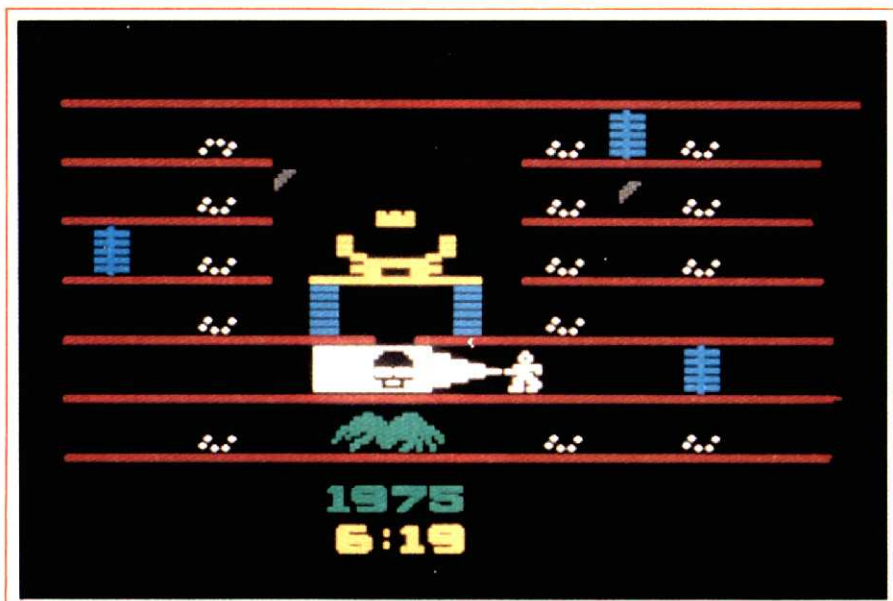
MOUNTAIN KING (CBS ELECTRONICS)

gamers gain access to the ultimate prize — a golden crown — and must bring it to the Perpetual Flame burning on top of the mountain before time runs out or a cave bat steals it back.

All of this is a race against the clock. Few mortal enemies pop up to threaten life and limb, with the exception of a huge, carnivorous spider that lurks on the bottommost level.

With its increased memory chip, the VCS version of *Mountain King* is pretty darned close to its higher-RAM cousin — and with eight levels of challenge, it's just as much fun.

(Tracie Forman)

BEAMRIDER
Activision/Intellivision

Beamrider is Activision's fifth offering for Intellivisionaries. It is easily their best to date.

As commander of a light ship you must launch from a space station to do battle with enemy ships, while avoiding their lethal hail of fire and any collisions with assorted space debris.

Unlike other space battles, gamers can't roam where they please because the craft can only travel along brilliant blue beams which form a curved net around Mother Earth.

Tapping the disc edge moves the ship left or right between the beams. Horizontal beams rotating towards the vessel complete the 3-D grid illusion so crucial to game play.

The graphics, sharp and colorful as they are, are not highly detailed. The sound effects, which alert beamriders to different dangers and targets, are not exactly overwhelming.

It takes a while before the action really begins to come together. Succeeding sectors gradually grow more involved and difficult and the arcader encounters a new danger every second level, up to and including the 14th. In addition, the 15 enemy saucers per sector move quicker, become more cunning, and pack more of a punch as the game progresses.

Though the fleet originally consists of three light ships, more can be added by allowing a yellow rejuvenator to dock with the active light ship. Of course, this is generally easier said than done and can be quite a feat to accomplish when the fur is really flying at the upper levels.

Once a sector has been cleared, there are three torpedoes available to destroy the Sector Sentinel for bonus points. This also becomes more difficult because of the ever increasing number of obstacles encountered along each beam. Also in this scene, the curvature of the net really stands out!

The disc controller is ideal for this game. A joystick would require too much concentration to make the precise movements needed, distracting the pilot from the devastating attack force. That's the one thing you can't afford to do in this game.

(Ted Salamone)

M*A*S*H
Fox Video Games/Atari 2600

Attention all personnel! Now gamers can take on the role of good ol' Hawkeye Pierce, Chief Medical Surgeon of the 4077th MASH unit, in the video version of the renowned book, movie and TV series.

Playable by one person using the left joystick controller, the object of **M*A*S*H** is to rescue injured soldiers from a chaotic battlefield. Rescues are attempted by means of a chopper, which is maneuvered about the screen by tilting the joystick forward, backward, left and right. Movement isn't as easy; pilots must carefully navigate their copters around trees, while simultaneously avoiding shells from a North Korean tank located at the bottom of the screen.

There are a total of eight game

BEAMRIDER (ACTIVISION)

variations in *M*A*S*H*, each consisting of several rounds of play. The first game requires the gamer to rescue more wounded than his computer opponent. This entails returning to the home MASH unit, via chopper, every time five men have been saved since the chopper can't hold more. Each time gamers return to base, the value of each rescued man increases by two points. The maximum possible score
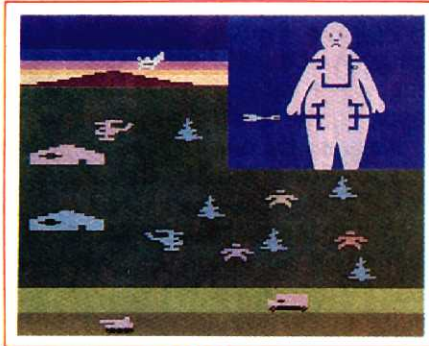
M*A*S*H (FOX)

for a rescued man is 25 points. After 30 men have been rescued, the round ends.

The next scenario unfolds as gamers begin operating on a patient, who's laid out in much the same fashion as the popular non-electronic kids' game, "Operation". Just one wrong touch may very well prove fatal to your patient -— so remember, steady as she goes! A video surgeon must work quickly here, since one 15-second interval is all that's allowed to remove as many pieces of shrapnel as possible from the poor victim. Fail, and "FERRET FACE" flashes on the top of the screen.

Gamers will find that play on more difficult game levels is somewhat similar to **Space Invaders** in that medics and wounded descend to the bottom of the screen in ever-increasingly frenetic action as the pace speeds up.

*M*A*S*H* is a nice enough game to play, but it can't exactly be called startlingly innovative. Fox can't do *too* poorly with this one, seeing as how several of the game's variations seem to be based upon an already proven game concept.

(Lisa Honden)

BLOCKADE RUNNER
Interphase/Intellivision

A space adventure game, **Blockade Runner** sports simulated 3-D graphics created through exceptional use of size and depth perspective.

As commander of a fleet of armed cargo vessels, the player has to ferry much-needed supplies to Earth, avoiding or defeating enemy ships which are blockading the space lanes along the way. Now that's *really* restraint of trade!

If the commander is a bit devious, if not downright foolhardy, he can pilot his fleet through an asteroid field to avoid detection. The enemy is way ahead of that though; they have mined these areas with tracking robot mines which will almost always destroy the ship, unless they're destroyed first. Combining careful use of the thrusters and good aim with the limited supply of homing missiles can obliterate the mines and any unavoidable asteroids.

Pressing the disc edge causes thruster burns, thereby adjusting the flight path. Having the flames leap out and flicker is a great touch! The detail and action of the ship's flank firing missiles also looks good. Once the target is locked in the crosshairs, the missile follows it, even offscreen. It's most exciting when both the mine and missile disappear from sight momentarily; only to be followed shortly afterwards by a beautiful sight and sound explosion which comes in from the edges of the screen. This is as close to reality as most gamers would like to get in this type of situation!

The player's ship refuels by capturing ice crystals, which are used as reaction mass in the nuclear propulsion system. These crystals also come in

At the end of Blockade Runner, a mission analysis chart shows gamers their final scores, as well as the mission's details.

handy in cooling down the shields, which may explode and destroy the ship.

All this action takes place in a sea of colors and sounds that warn the blockade runner of impending attack, a possible shield-overheat situation (if the ship collides with too many objects), and the arrival of much-needed fuel.

One thing about fuel consumption: These ships must have been built where fuel is plentiful, because they are real hogs. Miss the very first refueling stop, and that ship is a goner. The
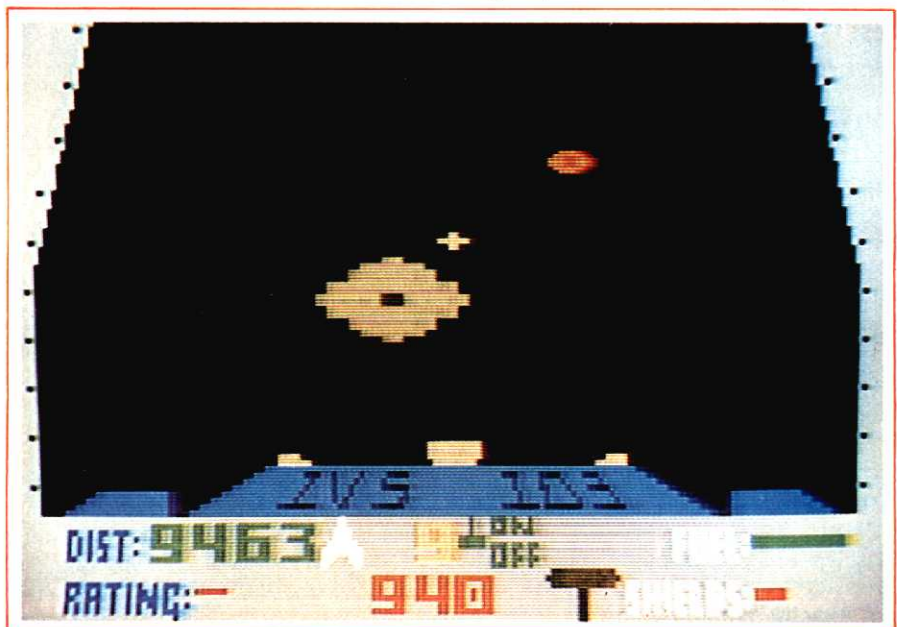
BLOCKADE RUNNER (INTERPHASE)

player must transfer to the next ship in the fleet to continue the mission.

The mission ends when — and if — the player's craft reaches Earth. Other missions can be mounted from that point if more supplies are needed.

Blockade Runner isn't just a straight shoot-out, however. A wise captain learns when to fight and when to evade. This makes all the difference in the world when the player is up against the enemy with their fantastically powerful plasma weapons.

Though it takes time to get oriented to the game play, the overall combination of sight, sound, and action make *Blockade Runner* a fantastic game for the Intellivision.

(Ted Salamone)

WEB WARS
GCE/Vectrex

The sky is filled with a giant living spider web, and alien creatures spew forth from the epicenter, racing toward the player's command post on the edge of the web. The Hawk-King, a winged fighter, zooms around the edge, trying to capture the creatures invading our universe from the insect world.

Each wave of attackers is made up of one alien accompanied by drones. But watch out! Any drone that gets past Hawk-King returns, either from behind or by reappearing in the web. If the electrogamer captures the alien creature, a portal floats toward Hawk-King from the center of the web. Hawk-King flies through this gateway into the Trophy Room to mount his living captive on the wall. Then it's back to the web world again.

Web Wars, which brings the perimeter target-shoot to the Vectrex screen, is a virtuoso piece of programming. The web is a masterful piece of designwork, twisting and turning like it's alive. And when the aliens and drones start pouring toward the edges of the screen from the center of the web, the images are sharp and clean. Holding down the fire button gives Hawk-King unlimited blast power, and the joystick controls his speed and direction of flight.

Hawk-King has to capture the alien creature on each level in order to progress to the next. As the creatures fly down the lines of the web, place the Hawk-King on the line, then time the impact carefully. When the alien is just about one second away from impact with the fighter, Button 3 on the con-

troller causes a capture rod to extend from Hawk-King's bill. Spear the creature with the rod. When Hawk-King shoots the next drone, a portal appears so Hawk-King can advance to the next level.
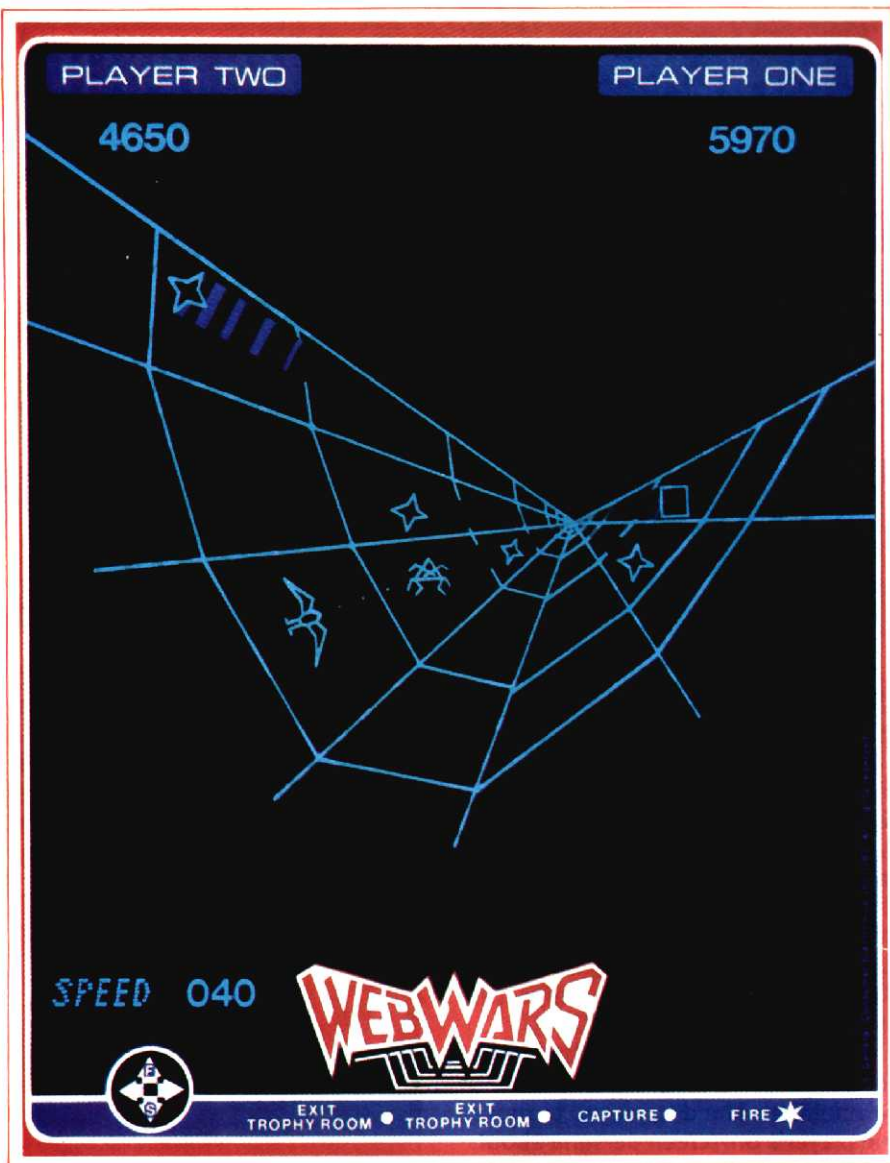
Hawk-King can fly through the square portal by zipping down the same line. But that makes all the enemy fighters on the screen redouble their efforts to keep him from escaping, so it takes a lot of fire-power to make it through the exit.

When Hawk-King flies into the portal, a series of hexagons radiates from the center of the screen to the edges, creating a transitional illusion of travel through space. Inside the Trophy Room, the creature Hawk-King captured is mounted on the wall, still animated but unable to move from its place. The gamer can rest here for a few moments before pushing Button 2 to return Hawk-King to the web.

If the player lets two aliens slip past him in the web, a Cosmic Dragon appears in the sky, spitting fireballs. Hawk-King can only dodge these projectiles; his weapons are powerless against the giant flying creature. The only escape is to capture the alien that controls this level, then fly through the portal to the next screen.

The web speed, controlling how quickly aliens fly down the lanes toward Hawk-King, increases with each level, and so does the minimum speed that Hawk-King can maintain. Every level has its own alien creature, different from all the rest, with individualized movements and animation.

Hawk-King loses a life if he collides with anything or gets hit by a fireball from the Cosmic Dragon.

Web Wars is a habit-forming game that shows off the Vectrex videogame system to best advantages.

(Joyce Worley)
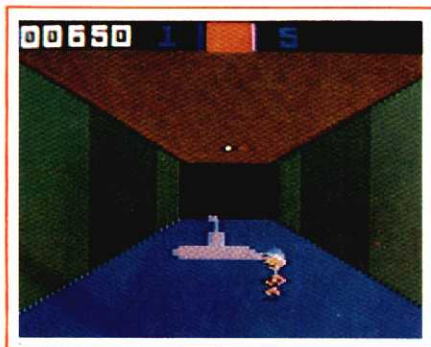
Sam meets sub in a waterlogged tunnel. He must prevail to win the game.
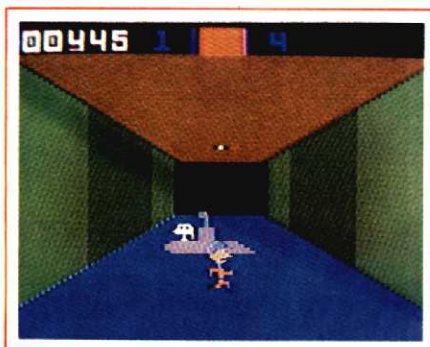
SEWER SAM
Interphase/Intellivision

Riding the current wave of light-hearted cuteness, Interphase revised **Sewer Sam's** original format so it wouldn't appear too gruesome. To make this cart even more appealing, the publisher has created an imitation 3-D effect through the skilled use of height to width ratios. It isn't truly three dimensional, but the impact is still strong.

Gamers can play to beat their own high scores, or engage in head to head competition. The disc is used to move the player's on-screen persona about, even up and down the sewer walls. Sam's only defense, besides being fast on his feet, is a six shooter which can handle any nastie. When out of ammo, Sam takes about six seconds to reload; and unless well timed, those six seconds can be an eternity!

As Sam enters the underground works to check out some mysterious happenings, he meets deadly birds and snakes. There are also rats which slow him down, and spiders whose webs cause temporary paralysis. Once

affected, the gamer's alter ego is easy meat for the spider itself.

Other members of the cast include numerous bats, which carry the intrepid adventurer back to the tunnel entrance; and crocodiles which appear
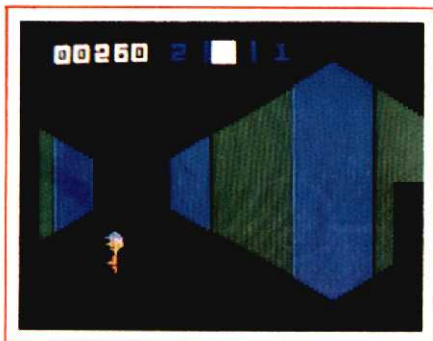
Sam hesitates at a junction.

without warning. All these are only the lead-in for the encounter with the three enemy submarines lurking in the half flooded tunnels.

There are 15 tunnels per level, none of which can be re-entered once the on-screen character exits.

The trick is to get Sam to the flooded tunnels so he can defeat the subs and
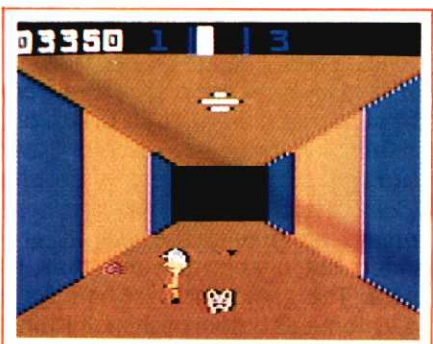
advance to harder levels of play. The catch is he moves slower in water, and has to deal with the crocs in addition to all the other nasties.

The simulated 3-D effect is marvelous, especially at faster speeds because the brightly colored walls provide a dazzling, hypnotic effect as Sam races deeper into the unknown.

An indicator marks the depth of penetration into the tunnel, as well as the presence of any subs. The number of lives and shots remaining are also displayed. It's almost too bad there are only three game lives per contest because the combination of Sam's death throes and the music signaling his demise are so entertaining, gamers may just knock him off a few times to see the show!

The graphics are very good and the actions of the sewer inhabitants blend well to provide an action packed adventure. Until the secret is learned for destroying the sub's missile launcher, Sam will get nuked every time.
(Ted Salamone)

FROGGER
Parker Brothers/Intellivision

Frogger has the honor of being one of the most extensively licensed games for a variety of systems. And Parker Brothers' edition for the Intellivision does the honor justice.

This one- or two-player version will undoubtedly become a must for Intellivisionaries. The color, graphics, sound, and game play are all very close to the arcade game's. The only exception is the missing theme song.

The screen is no barren wasteland in terms of objects displayed. Frogger starts on the sidewalk at the bottom of the screen, moves across four lanes of highway traffic, then takes a break on the river bank. After his brief respite, he crosses a five "band" river. Each band alternates between swimming turtles and floating logs going in opposite directions. (Some of the turtles occasionally dive, so watch out!) Finally, he must leap into one of the slots at the top of the screen. Needless to say, all of this crossing must be completed within a time limit. If the sixty ticks or thirty seconds elapse without a successful crossing, our frog becomes a ready specimen for a biology class.

What else can be said about a classy rendition of the ol' classic coin-op? Intellivisionaries out for a hopping good time won't be disappointed in *Frogger*.
(Brian Scott)

In his travels, Sam encounters snakes, gators and others.

Looking For Electronic Games?

If you have trouble finding ELECTRONIC GAMES at your local newsstand or want to know where to send a friend to pick up a copy, the following will help. It's a list of retail stores across the country that carry at least 25 copies of ELECTRONIC GAMES every month.

ALABAMA
Video Box Office, Birmingham

ARIZONA
Hollywood Connection, Phoenix

ARKANSAS
Video Express, Jacksonville
Pine Bluff Video, Pine Bluff
Hastings Books & Records, Rogers

CALIFORNIA
Game Room, Agoura
Video Station, Alameda
Prime Time Video, Anaheim
Stillwell Sales/International Video, Anaheim
Dimensions In Video, Auburn
C&W Video, Camarillo
O J Products, Campbell
Video Connection, Citrus Heights
Video Station, El Monte
The Works, Eureka
Coast Video, Fountain Valley
Computer Place, Glendale
Picture Show, Huntington Beach
Video Station, Laguna Hills
Video Co., Larkspur
Back Stage Video, Long Beach
Computer Seen, Long Beach
Show Industries, Los Angeles
Video 2001 Inc., Los Angeles
The Video Station, Mariposa
Video City, Ontario
Electronic Games, Orange
Sound Machine, Orange
Software Central, Pasadena
Brown Knows Computing, Redlands
In Home Video, Riverside
Video Station, Rowland Heights
Access To Software, San Francisco
Videoland, San Francisco
Computer Center Stores, San Jose
Moviola, Santa Clara
Games, Gags, Gifts, Tahoe City
Games, Van Nuys
Video Etc., West Covina

COLORADO
Sweets Tapes & Records, Arvada
National Video #06003, Aurora
American Home Theater, Colorado Springs

CONNECTICUT
Video Connection, Bridgeport
Video Studio II, East Windsor
Family Hobbies, Norwalk
Video Studio Six, Wethersfield

DELAWARE
Video Station, Wilmington

WASHINGTON, DC
Program Store #5200

FLORIDA
Electronics Depot Inc., Altamonte Springs
Video City, Fort Lauderdale
Fort Myers Video Movie Center, Fort Myers
Movie Market #2, Melbourne Beach
Jeff Vid Inc./DBA Video, Miami
Orange Blossom Hobbies, Miami
Specs Music, Miami
Hastings Records, Pinellas Park
Video Corner, Pinellas Park
Hastings Records, Tampa
Video X Tron North Inc., West Palm Beach
Video Trends, Winter Haven
Independent Computer Systems, Winter Park

GEORGIA
Video Connection, Marietta

IDAHO
Video Connection, Boise

ILLINOIS
Rich Little Presents, Antioch
Video Shop, Brookfield
Devon Hobby Models Inc., Chicago
Les-On Drugs, Chicago
Video Connection, Chicago
Video Tape Gallery, Chicago
Glenwood Distributors, Collinsville
Countryside Home Video, Countryside
Electronic Playground, Decatur
Video Dimensions, Des Plaines
Video Show, Des Plaines
Video Basics Inc., Joliet

Video Station, Kankakee
R. J. Hobby & Electronic Center, Murphysboro
Classic Video, Oak Lawn
Sound Warehouse, Oak Lawn
Westchester Video, Westchester
Video Hotline, Winnetka

INDIANA
Bytrex, Fort Wayne
Ark of Indy Inc., Indianapolis
Video Shack Inc., Indianapolis
World of Video, Indianapolis
Record Cellar Audio/Video, Vincennes

IOWA
National Video, Cedar Rapids

KANSAS
Hollywood At Home, Overland Park

LOUISIANA
Video Connection, Metairie
Hastings Records, Shreveport

MAINE
Discount Video Order, Bar Harbor

MARYLAND
Program Store Inc. #5201, Baltimore
Video Explosion Inc., Baltimore
Video Connection, Beltsville
Video Connection, Bowie
Video Connection, Cockeysville
Video Worlds, Ellicott City
Lou-Ryan Inc., Hagerstown
Program Store #5203, Kensington
Video Connection, Olney
Reisterstown Video Inc., Reisterstown
Computerland, Rockville
Computer Age, Silver Spring
Greetings & Readings, Towson

MASSACHUSETTS
Game-Tech, Arlington
Name of the Game, Boston
Video Connection, Burlington
Video World, Carver
Act I Video Inc., Dracut
Corner Sports Store, New Bedford
LCA Video Center & Studio, Norwood
Taylord Sound Inc., Pittsfield
Video Paradise, Plymouth
Freeze Frame Inc., Saugus
Straight Cut Exchange, Springfield
Video Connection, Worcester

MICHIGAN
Motor City Drugs & Video, Dearborn
Mousetrap Model, Detroit
Just Software, East Detroit
Video Connection, Farmington Hills
Live Wire, Gladwin
Video Today, Holland
Home Video Outlets, Lansing
Video Connection #140, Madison Heights
Horsley's Village Green, Midland
Signal Service, Napoleon
Futuristix Inc., Port Huron
Abbot Video, Roseville
Record Cellar, Sterling Heights
Maxaron Corp., Warren
New York Video World, Warren
Rite Way Enterprises, Warren

MINNESOTA
Video Connection, Bloomington
Adventures in Video, Crystal
Games By James, Edina
Discount Video, Minneapolis
Games By James, Minnetonka

MISSISSIPPI
Take-One Video, Long Beach

MISSOURI
Show Biz Video, Chesterfield
KC'S Videorama, Florissant
Music Box, North Kansas City
Harvest Plaza Video, St. Charles

MONTANA
Video Computer Store, Great Falls

NEVADA
I. C. Electronics, Las Vegas

NEW HAMPSHIRE
Video Biz of New Hampshire, Bedford
Foster Radio & Video Inc., Pelham
Home Video Shop, Seabrook
Video Station, South Merrimack

NEW JERSEY
Sound City Electronic, Bayonne
Software City, Bergenfield
Video Aids Inc., Bloomfield
Video Vision, Bridgeton
Mr. Melody, Caldwell
Gemini Enterprises, Cedar Knolls
Video Connection, Cherry Hill
Video Depot, Cherry Hill
O'Johnnie s, Clark
Accent On Video, Closter
Video Store, Elmwood Park
Video Trek, Fort Lee
Nu-Video, Lakewood
Video Junction, Leonia
DC Video Inc., Manasquan
Ippy's, Manasquan
Video Track, Marlboro
Video Studio, Metuchen
Babyland Gifts, Millburn
Video Access, North Bergen
Video Plus, Old Bridge
Video Fantasy, Palisades Park
Mr. Movie, Paramus
Record Record, Pompton Lakes
Software City, Ridgefield
Video Dynamics, Ridgewood
Video Connection, Somerset
Opening Night Video, Wayne
Video Odyssey, Woodbridge

NEW MEXICO
Video Station, Alamogordo
Hastings Records, Farmington
Hastings Books & Records, Hobbs
Hastings Records, Las Cruces

NEW YORK
Video Shop, Albany
Video Station, Amherst
Video Emporium, Amsterdam
Videovision, Baldwin
Village Video, Briarcliff Manor
Videotronics, Bronx
Flatbush Video, Brooklyn
Kingsway Video, Brooklyn
Parkway Video & Electronics, Brooklyn
Tasos Video Fair, Brooklyn
Video Haven Ltd., Brooklyn
Video Store, Brooklyn
Video Connection, Cedarhurst
Moriches Vantage Mart, Center Moriches
Video-Deo, Cooperstown
Video Emporium, Coram
Anytime Video, Deer Park
Video Connection, Delmar
Video Network Center, Flushing
Video Wizard Inc., Flushing
Video Station, Forest Hills
NSB Video, Franklin Square
Video Villa, Freeport
Video Ect., Great Neck
Huntington Video & Computer, Huntington Station
Video Enterprise, Kenmore
Castle Video Inc., Lindenhurst
Delman Television Co., Long Beach
LVR Video, Manhasset
Video Connection, Merrick
Captain Video, New City
Computer Center Inc., New York
Leighs Computers, New York
MAV Corp., New York
Video On First, New York
World of Video, New York
Software Supply Int'l Inc., Niagara Falls
Computer World, Orchard Park
Video Connection, Oyster Bay
Ozone Park Video, Ozone Park
Video Connection, Pearl River
Captain Video, Pomona
Commander Video, Port Chester
Aimi Electronics Inc., Port Washington
Video Adventure, Pound Ridge
Prestige Video, Rego Park
STC, Richmond Hill
Rocky Point Video Palace, Rocky Point
Video Den, Scarsdale
Video Spectrum, Scarsdale
Video Entertainment, Sidney
Jenco Home Entertainment Center, Staten Island
Video Station, Suffern
Video Connection, Sunnyside
Video Connection, Tonawanda
Video To Go, Utica
Selgen Enterprises, Valley Stream
Silver Dollar Coin Co., Woodhaven

NORTH CAROLINA
Video Station, Asheville
Video Connection, Goldsboro
Video Connection, Greensboro

OHIO
Video Replay, Akron
APC Video Centre, Canton
Video Barn, Cincinnati
Video Depot, Cleveland
Magic Coastal Video, Columbus
Program Store #7400, Columbus
Video Biz of Couton, Couton
Video Plus Inc., Garfield Heights
Eric Martins, Maple Heights
American Video, North Olmsted
Cartridge Connection, Proctorville
Video Den, Willoughby

OKLAHOMA
Video Computer Inc., Lawton
Hastings Records, Oklahoma City
Kaleidoscope, Oklahoma City

PENNSYLVANIA
Video World, Coraopolis
Dalton Videoware, Dalton
Video Connection, Dresher
Program Store #7102, Greensburg
Video Store, Levittown
Hollywood At Home, Moosic
Video Connection, Narberth
Home Video Center Inc., Newtown Square
Delta Video, Philadelphia
Movies Unlimited, Philadelphia
Psyco Electro, Philadelphia
Video Games Plus, Philadelphia
The Video Inn, Philadelphia
Games Unlimited, Pittsburgh
Program Store, Plymouth Meeting
Video Connection, Quakertown
Computers & Games, Reading

RHODE ISLAND
Video Connection, Johnston
Video City, Providence

SOUTH CAROLINA
Game Exchange, Greenwood
All That's Video, Spartanburg

TENNESSEE
Eye-Magic, Donelson
Take One Video Inc., Maryville

TEXAS
Hastings Books Records Tapes, Amarillo
Record Town, Beaumont
Hastings Books & Records, Borger
Record Town, Brownsville
Hastings Records, Dallas
Hastings Records, Fort Worth
Video Rainbow, Fort Worth
Wedgewood Rental, Fort Worth
Hastings Records, Greenville
Video Station of Houston Inc., Houston
Hastings Records, Killeen
Hastings Records, Lubbock
Hastings Records, Lufkin
Hastings Records, Mesquite
TV Games Limited, Midland
Hastings Records, Plano
Record Town, San Angelo
Software Store, San Antonio
Hastings Records, Victoria
Hastings Records, Waco
Record Town, Wichita Falls

VERMONT
Video Connection, Brattleboro

VIRGINIA
Video Station, Alexandria
Program Store Inc. #5202, Falls Church
Video Station, Roanoke
Video Express, Virginia Beach

WASHINGTON
Kent Video & Computers, Kent
Sunset Video, Renton
Video Int'l Corp./DBA Video Hut, Seattle

WEST VIRGINIA
Tronix, Charleston
Video Centre Inc., Charleston
Computer Plus, Inc., South Charleston

WISCONSIN
Video Exchange, Glendale
Total Eclipse, Mehornee Falls
Galaxy TV Games, Racine
Drakes Super Valu, Salem

PUERTO RICO
Video Vision, Guaynabo
Video Sonics, Hato Rey

CANADA
J. D. S. Holdings Ltd., Coquitlam, British Columbia
Video Games Galore, Courtney, British Columbia
Future Shop, Vancouver, British Columbia
Home & Business Computer Center, Mississauga, Ontario
The Home Computer Store, Niagara Falls, Ontario
National Video, Timmins, Ontario
World Wide Video, Toronto, Ontario

AN INSIDE LOOK AT
COMMODORE'S NEWEST COMPUTER

## Is Commodore's C-264 the Next Big Gaming Machine?

By TOM BENFORD

Commodore Business Machines will release a new personal computer this year. Unveiled at the Consumer Electronics Show in Las Vegas in January, the Commodore-264 Personal Computer is being marketed primarily as an "applications" computer. I was fortunate to be visiting the Commodore plant in West Chester, Pennsylvania in early December when the decision was made to "leak" the news of this new product, code-named "TED" at that time. The code-name is derived from the Text Editing Device chip, which is an integral part of this new microcomputer's circuitry.

Sources at Commodore told me that the planned release date of the Commodore-264 is currently scheduled for "early summer," but it's possible that it may be available as early as May. Commodore stresses that the C-264 is intended as an applications computer rather than a recreational or gaming machine, and it is not intended to supplant either the VIC-20 or C-64 product lines, but instead to augment their family of computers.

As of this writing, it is known that the joystick ports will not be compatible with the VIC-20 and C-64 models, and in all probability, the cartridge slot will not be compatible with the C-64 (although the prototypes I saw were still undergoing changes). I would venture a guess that the cartridge slot will not be compatible, though, since the C-264 does not have sprite capability and there are only two sound generators in the new machine; hence, even if the slots are the same, C-64 game cartridges will not work properly, if at all, since the memory mapping is quite different on the two machines.

Integrated software, or "software on silicon" as Commodore refers to it, is an innovative feature of the 264. Several built-in software packages will be available, including word-processing, data base capability, electronic spreadsheets and graphics capability. Another noteworthy feature is the 16
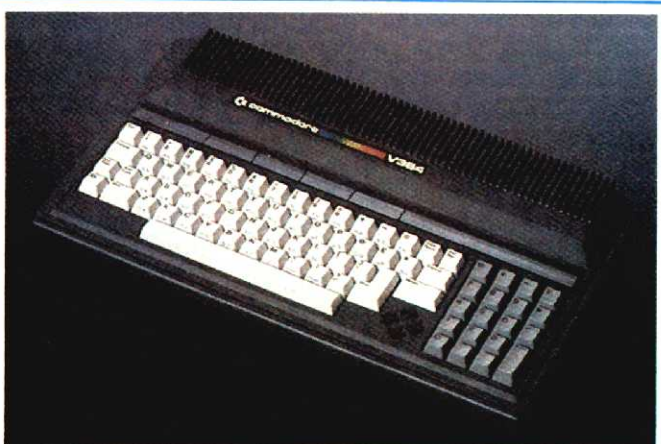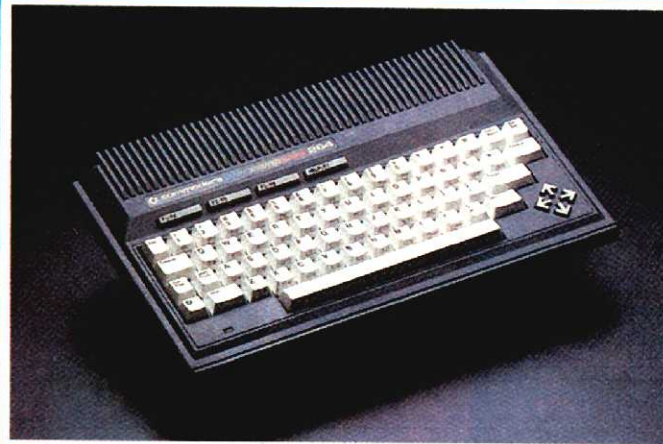
Commodore's 264 and 364, incompatible with the C-64 and VIC-20, are aimed at the more serious computer user.

colors with 8 luminence levels each, effectively yielding 128 color combinations. The stand-out feature is 60K of RAM available to the user for BASIC programming applications. The projected price tag for the 264 will be in the $300-$400 range, depending on the software "flavor" in the machine.

Commodore states that the place of the 264 is above the C-64 in their product line, and the primary market is aimed at the user requiring dedicated applications from the computer. Therefore, the 264 will not replace the C-64 as the premier gaming machine. Watch for updates on this product as information becomes available. Ⓖ

C-264 FEATURES

* 60K RAM available for BASIC programming
* Full typewriter-style keyboard
* Optional built-in software
* Screen window capability
* Help key
* 8 programmed, reprogrammable function keys
* 4 separate cursor keys
* Compatibility with C-64 peripherals
* 128 colors (16 primary/8 intensity levels)
* Over 75 BASIC commands
* High resolution graphics plotting
* Split-screen text with hi-res graphics
* Graphic character set on keyboard
* 320 x 200 pixel screen resolution
* Reverse and flashing characters
* 2 tone generators
* Built-in machine language monitor with 12 commands
* Different built-in software "flavors"
* Keyboard color controls

By THE GAME DOCTOR

Answers to Your
Electronic Gaming Questions

⭐ pen wide! Let me have a *good* look... Say "ah-h-h..."

Tsk-tsk, it looks like a definite case of computeritis. This miserable malady is finding its way into more and more homes these days as "com-fusion" spreads throughout the land.

Every day that doesn't bring a new computer or a major price cut into the office of your favorite digital doc includes newspapers and magazines with one convoluted story after another about what's really happening in this hobby.

Right now, it almost seems to this game-loving medico that the questions definitely out-number the answers. If I could tell you definitely whether the Adam was going to be the success Coleco hopes it will be or if the IBM PC Junior will become a major force in the home market or any of a dozen other, similar things, I'd have enough money to open my own medical college—or at least put a few extra comfy chairs in the waiting room.

Now that the ol' doc has gotten that off his chest, it's time to dispel a few of those clouds of ignorance by handling a few of your questions:

Q: *This letter is about the ColecoVision adapter for the Spectravideo computer. I think that it is unfair that I had to pay $214 (with tax) for the ColecoVision and all Spectravideo has to do is make an adapter for under $70.*

Should I sell my ColecoVision for this reason or should I buy an Atari 5200 game system instead?

(Floyd Browning, Chicago, IL)

A: Pardon me a minute, Floyd, I want to go take a reality check.

Okay, we're back.

Huh?!

First off, Floyd, buying a 5200 as a resolution of your unhappy dilemma seems more than a trifle strange to me. I may be crazy, but how does a 5200 settle the question? I can understand your, perhaps, wanting to sell your ColecoVision and buying a Spectra-

Spectravideo's Coleco adapter

video computer and C-V module, but why a 5200? Maybe it's me?

Okay, on to less bizarre subjects. Of course nobody *really* forced you to pay that two hundred plus bucks, right? I mean, the prices on videogame systems have never had anything to do with the actual cost of the hardware to the manufacturer. As with the rest of the electronics universe, prices are determined by what the market is currently capable of carrying. And those early, higher prices *invariably* drop as time goes on. In fact, you paid for the privilege of owning an *early* ColecoVision. Today, the system would cost you quite a bit less. Next year, it may be selling for $70 —

but do you really want to wait that long to play with it?

Because of their nature, adapter modules *must* be inexpensive, lest it look like the manufacturer is attempting to sell you a second hardware system. Was it "fair" that the Atari VCS used to cost $200 and now you can buy a C-V or 5200 adapter for the 2600 at under $100?

Finally, consider this: To buy the Spectravideo computer module that emulates the ColecoVision, you must *first* purchase the Spectravideo computer.

To sum it all up, friend Floyd: Life ain't fair.

Or maybe you should buy that 5200. . .

Q: *When is Atari coming out with the voice, computer and 2600 adaptor module for their 5200? Do you know of any cartridges scheduled for release with the voice module? What other companies (besides Parker Brothers) are planning to support the 5200 with software? Also, are any of these cartridges coming out for the 52:* **Joust, Moon Patrol, Xevious, Food Fight, Tempest** *and* **Pengo***?*

(Eric Addington, Flint MI)

A: Boy, Eric, you sure ask a lotta questions!

But that's okay, cause the Doc likes to answer them! Okay, let's go: Atari has yet to announce any plans for a "computer" module for the 5200. Do you mean a keyboard? In any case, there already is a system virtually

The 5200 version of *Joust*: Graphics and play-action like the coin-op!

identical in its hardware configuration to the 5200 and it comes with a keyboard for a lot less $$$. It's called the Atari 400 — get 'em while you can, they're one of gaming's great bargains.

The 2600 player is already available, unless you were one of the faithful who plunked down your hard-earned cash as soon as the 5200 came out, in which case you may never have one. You see, Atari took much of the criticism originally laid on their 5200 to heart and redesigned the system. So, the 2600 module only works on *new* model 52s. Great, right?

Gasp! I don't believe it, but I actually have *good* news for you on your next "Q" — you won't *need* a voice module for the 52, since Atari is being nice enough to design fantastic games — such as **Baseball** and **Berzerk** with super-articulation already built in!

As for the titles you guessed at for the Atari super-system: very perceptive! Everything you mentioned, with the exception of *Xevious*, *Food Fight* and *Tempest*, is already available, and *Tempest* is scheduled for release any day now. And, since the remaining duo of coin-ops were produced by Atari's arcade division, they're pretty good bets for eventual translation as well!

Q: *In your September issue, the 'doc' said the Commodore 64 had only 40K ROM. He certainly didn't do any research on the subject. The 64 has 20 kilobytes of Read Only Memory (ROM). Its name was taken from its Random Access Memory, for it has 39K of user accessable RAM for BASIC programs, 52K of RAM for machine language programs and 64K, yes 64K, of user-memory RAM can be used by the built-in 6510 central processor when using the Commodore CP/M cartridge.* (Jeffrey A. Haremski, Saginaw, MI)

Q: *September's "Q&A" stated that the Commodore 64 had about 49K "user-accessible ROM." In the first place ROM is "Read Only Memory" and cannot be user accessible, but such can be passed as a printing error. In your column, you stated that the 64 had about 40K (actually, 39,911K) of bytes available for original or commercial programming. In part this is true. However, if the user would happen to know machine language he could access 53,247K bytes for his programs.*

(Jim Perez, no address given)

A: Okay, folks. First off, as Jim guessed, that "ROM" should have been "RAM" (but then the words "user accessible," contrary to Mr. Haremski's opinion, should have given that away. Jim is right — RAM refers to

The Commodore 64 computer

Random Access Memory, not ROM.). Sorry. But the point is, in my opinion, Commodore began this whole fudging of terms with regard to a machine's power. The key here is Jim's: "If the user would happen to know machine language." My guess is that one game player in a thousand is conversant with assembly language.

The facts (or three people's versions — not the difference in Jim and Jeff's data regarding the amount of machine language RAM) are presented here.

The Game Doctor is not here to talk computer workshop, guys — we're talking to *game players* who are *using* computers. CP/M cartridges are sort of irrelevant to an arcader's existence — unless he or she is also a computer hobbyist.

What I was saying in that column was that the "K count" was going overboard. Before the advent of the 64, counts were straight. Then, suddenly operating memory and potential memory and everything but the kitchen sink have been tabulated in, in order to further enhance the system's sales potential.

Draw your own conclusions, folks.

Q: *Did Odyssey drop out of the computer race because it's going into the software race, making games for ColecoVision and Atari systems? Also, since Coleco's built-in BASIC for the Adam computers is so much like Applesoft, can Adam software be run on Apple and vice versa?*

(Mark Lopez Broderick, CA)

A: Odyssey (or rather North American Philips, its parent company) was, like Mattel, pretty much knocked out of the small computer sweepstakes at the same time: Right after Coleco announced its ADAM computer. The original price and specs on the Colecomputer were so awesome that virtually half the industry backed out of plans to produce similar systems. Unfortunately, ADAM's price has gone up and the specs have dropped during the interim, but the one-time Connecticut Leather Company's success with ColecoVision made them wonder just long enough to knock them out of the P.C. box.

Once Odyssey discovered its hardware systems failed to put a dent in the big guys' market shares, they tried to produce software for the ColecoVision and the VCS. Sometimes, though, it seems as if nothing goes right for the

unlucky company. No sooner did N.A.P., under the Probe 2000 logo, publish the excellent **War Room** than they realized they couldn't obtain enough compatible chips to put out anything beyond that one title. Meanwhile, they showed a first-rate game for the Atari VCS, based on the Pink Panther films, just when the 2600 market is fast disappearing down the drain.

The end result? N.A.P. has decided to throw in the towel and get out of the videogame business. Some days, it just doesn't pay to get out of the corporate bed, eh?

As for your very good question regarding Adam and the Apple, I can only marvel at your lack of cynicism. The BASIC dialects are similar, but other differences, such as graphic resolution and memory locations, make true compatibility impossible.

Q: *A friend told me that he knew someone who threw an* **Ice Hockey** *Activision cartridge against the wall in anger and broke it open. Inside, he found a flat chip about three inches long. When he stuck it in his 2600, it still worked. Is this possible?*
(Dave Kadlitz, Brownstown, MI)

A: Boy, isn't it amazing how great discoveries are so casually made! While your friend's friend will never win a computer-compassion award and probably needs housebreaking as well, he is quite correct. In fact, the Doc must admit that, as a curious pre-med student, he once performed a similar operation upon a cartridge that couldn't quite fit into his computer.

Casings are, after all, just shells to protect the little chip inside, and guide it snugly and safely into its slot. So if you're about to go crazy over that cartridge that won't fit in your Colecovision adapter or 1200 XL, remember our little friend with the horrible temper.

Or, as a professor of mine once put it: "When all else fails, smash the sucker open with a nine iron." Just make sure you don't hurt little "chip"!

(By the way, Dave, thanks for the wonderful TRON drawing you included with your letter. I seldom get

the opportunity to personally offer my "gracis" for all those tokens and wonderful drawings that fans send along with their queries. The Doc reads each and every one, and they warm the cockles of my crusty old heart, they do. Really, folks, let this serve, for now, as an all-inclusive tip of the hat!)

Q: *With many of my new Atari cartridges (**Frogs & Flies**, **Berzerk**, etc.) the black and white/color selector switch has no effect on the color of the screen (when played on a color TV). Why is this so?*

(Jon Boss, Marysville, KS)

A: Boy, they can't slip a hummingbird past you guys, can they? If the videogame companies realized what hawkeyed consumers they were dealing with, the quality control standards would probably be enforced by retired storm troopers!

Actually, since the vast majority (approximately 78%) of American households with televisions own color tv sets, the b&w/color toggle has lately been incorporated into the games themselves as a control. On Activision's **Starmaster**, which is playable only on color sets as the box clearly warns, the b&w toggle summons the galactic grid and then returns the ship to its normal combat display after the player warps into a particular sector. It can't be played in B&W.

COLECOVISION CORNER: So many letters have been pouring into the game sawbones' office these days that it has become necessary to give you ColecoVisionaries your own little corner in my waiting room.

Lynn R. Puhr of West Fargo, North Dakota wonders at the discrepancies between some of the ColecoVision controllers and the VCS expansion module as they appeared in early photos and the unit Lynn has. First off, that little wheel depicted in early shots of the joystick/keypad was intended to be a "roller controller" — a sort of sawed-off tracball. It was scrapped before the initial production run, just as the external design for the VCS module was.

Early photos of a system are usually taken of mock-ups: casings built to generally reflect what the current view is of the finished product. There are many a change twixt the pix and the product as it arrives in your home.

Many readers have also been wondering about a ColecoVision

Early Colecovision prototype: Note the wheel on the controller

"club" similar to those started by Atari, Activision, et al. The Doctor has decided to track this one down personally and will be reporting back next issue with the full poop. Anyone have input? Send it on in!

So much mail arrives at the Game Doctor's office that I'm constantly searching for a means of expanding my power base. Fortunately, over 90 percent of all your penetrating queries are already answered within **EG**'s impassioned pages. So remember, there's lots of Q&As scattered through this great magazine — you just have to know where to look: everywhere!

Till next month, may the bluebird of happiness lay an egg containing an Ostrich-Rider on your playfield. Keep the faith, and the buzzard-riders at bay! G

STAND ALONE SCENE

Eat Your Spinach — And Win!

By JOYCE WORLEY

POPEYE
Nintendo Co., Ltd./$55

It's Popeye the sailor-man, straight out of the Sunday funnies! Nintendo's latest stand-alone game utilizes characters from the famous comic strip in a stirring drama as the sailorman fights Brutus to rescue his lady love, Olive.

The fair Ms. Oyl, kidnapped by Brutus, is lashed to the prow of a ship. This distressed damsel can't do anything but squall for help and shed copious tears (a condition common to most game-gals! Come on, you designers! Let's have a few heroines for a change!) Fortunately the spunky seadog is ready and able to fight for the femme, in a round of furious fisticuffs that keeps gamers punching the controls trying to dunk Brutus in the drink.

Popeye and Brutus face off on the pier. The bully Brutus slings punches at Popeye, knocking him backwards toward the right edge of the dock, trying to push him into the water. If he manages to do this three times, the game ends. But Popeye's no piker; he can sling a mean punch himself. The two characters duke it out, trading blows that knock each other backwards. Each time Popeye lands punches, Brutus retreats a couple of steps. But the ham-handed Brutus can hit hard, too, so it's back and forth, from one end of the pier to another, as the two mighty

POPEYE (NINTENDO)

men battle until one gets knocked into the water.

The control lever moves Popeye left and right on the pier. When the two fighters engage, the punch button unleashes the steely-sailor's right arm, as he hammers at Brutus with roundhouse swings. Brutus retreats one step toward the left side of the dock when Popeye lands two punches, and Popeye retreats a step each time the burly Brutus' fist connects with his jaw. When Brutus gets to the left edge of the pier, he flies right over the edge if Popeye hits him four times, and

lands in the water with a satisfying splash. If Popeye knocks Brutus into the ocean three times, he gets some help from Olive. She manages to kick a can of spinach from the ship's deck down to the pier. If Popeye can reach it, Brutus catches a fist to the jaw that sends him flying through the air to land on a longshoreman's dangling hook. Olive, freed from her bonds, gives Popeye a big kiss, and the defeated Brutus scowls at them from his perch on the hook.

Nintendo stuffed the characters from the popular King Features comic strip into a tabletopper that should charm younger arcaders. The cartoon graphics are lit through a skylight that uses room illumination to make the game screen glow with life. The figures are matrixed full-color drawings that are exactly like the funny-paper characters. The animation is smooth, and the entire visual result is completely engaging.

The action is less satisfying than the graphics. The trade of blows doesn't take a lot of technique, though a good sense of timing helps armchair arcaders get an upper hand over Brutus. Brutus and Popeye pound away at each other, and the gamer maneuvers the heroic tar to avoid each pummel from the big-fisted villain. When the score advances, this gets trickier, since

Popeye has to land more blows to make Brutus retreat and fall off the pier. It takes two blows to make him backup when the last digits of the score are between zero and 30, three hits when the score ends in the 31 to 70 range, and four hits when it's between 71 and 00. Similarly, to knock Brutus into the ocean takes four hits when the last digits of the score are between 01 and 30, five hits between 31 and 70, and six hits between 71 and 00. However, this schedule of advancing difficulty lets the game return to the easier setting after each 100 point-round of play.

The gamer scores two points each time Popeye makes Brutus retreat one step, and five points for knocking him into the ocean. When Popeye saves Olive, he gets a kiss and 15 points, up to a maximum score display of 999. When the score reaches 300 points, if there have been any misses, these are cleared away and the gamer has three new Popeyes to play with. If there have been no errors, the game goes into chance time and awards double points until the arcader makes a miss.

Game A is for beginners, and most arcaders will choose Game B. In the more difficult contest, there's a swordfish in the water under the dock. It leaps into the air and spears at Popeye through the cracks between the boards of the pier. If the swordfish sticks him, Popeye gets knocked through the air, back one step. But the swordfish, although definitely a cute addition, isn't hard to avoid, so it really doesn't add much difficulty. Brutus' flying fists are the hazards that Popeye has to overcome, and it gets harder as the game progresses, since Brutus throws more and more punches at advanced levels of play.

But it's not a very challenging contest. Youngsters should have no difficulty in overcoming Brutus at the lower levels of play. A bit of practice quickly gets gamers in the routine of punch-punch-dodge to avoid Brutus' hammering hits.

Popeye is also an alarm clock. A digital readout gives the correct time, and Swee' Pea sounds the alarm at the appointed hour, in a cleverly cartooned sequence. Swee' Pea is sitting on the deck of the ship next to the bound Olive. When the alarm sounds, Swee' Pea tolls the ship's bell.

Though not the most complicated contest in the world, Popeye is sure to please younger arcaders, as well as being a good example of cartoon
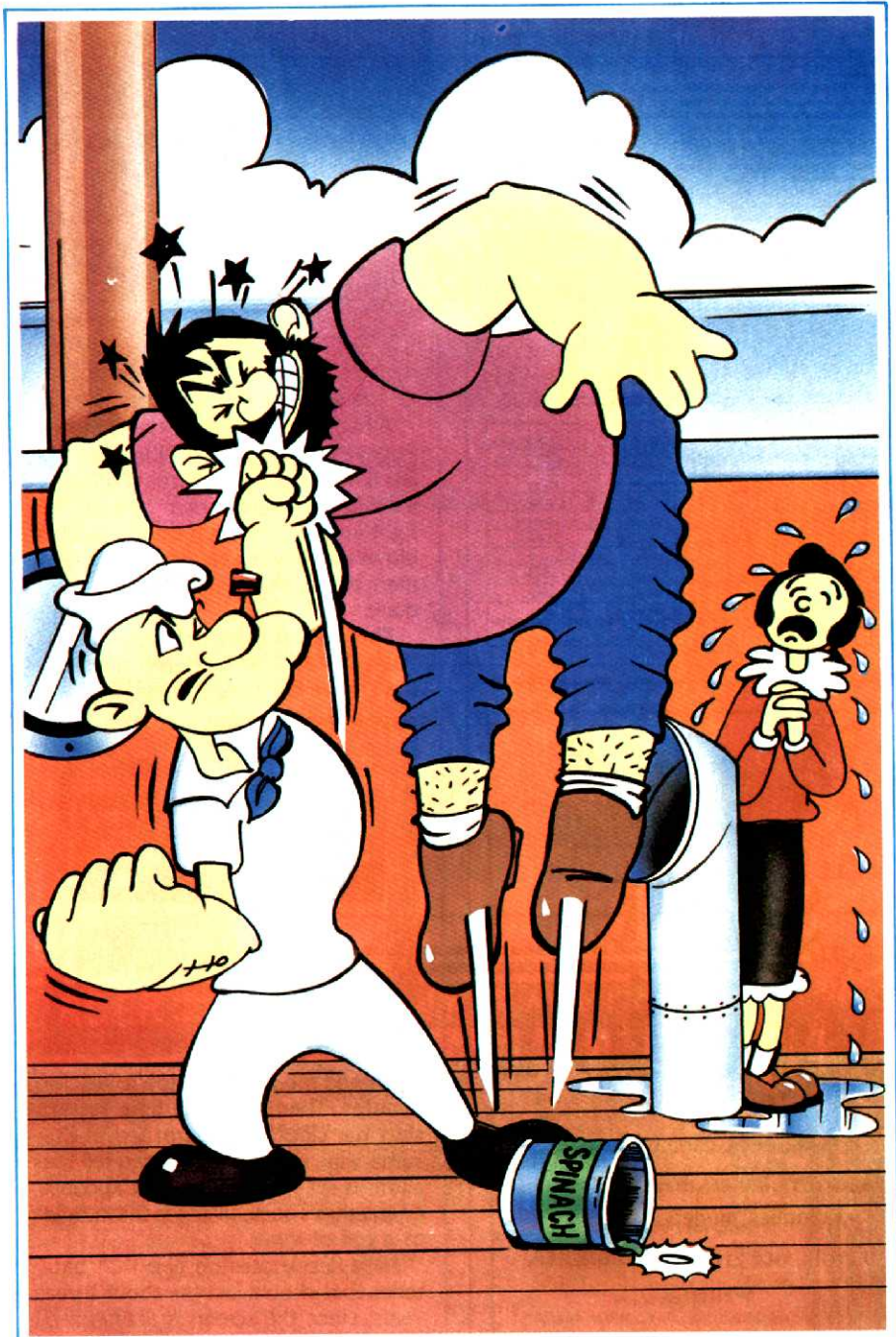
It takes more than a quick one-two to knock Brutus into the drink.

graphics in a tabletopper that belongs in the collection of every serious gamer.

BASKETBALL
Hattori POP Game/$24.95

The teams are on the court, the cheerleader is revving up the crowd, and it's time to play ball with Hattori's **Basketball**. This slim unit fits in the palm of the hand, and cuts the thrills of the gym down to pocket-size so that electrogamers can dribble, pass and shoot baskets just like Walt Frazier.

Because Hattori stuffed a big sport into a small package, basketball fans can have a pocket-sized team to take along with them. Pushing buttons maneuvers the ball as the human-coached side tries to score against the computer's team, in a stunning graphic display so far unequalled by any other hand-held sports simulation.

A large (2 in. by 1½-in.) LCD dominates the unit, flanked by four buttons that control all the action. Six ball players appear on court, and cheering fans watch the game get under way. The armchair Wilt Chamberlain passes the ball to a team mate, dribbles, or shoots for the basket. But the computer's team doesn't just stand by looking cute. The electronic champions battle for every point, so it's not easy to get past their defenses and put one in for the hometown boys.

The arcader controls the team in dark jerseys. The home team's star player is Number 15, in the center of the court. He dribbles either with left or right hand, passes the ball to a teammate across the court, or shoots toward the net at the left edge of the screen.

The computer's defensive players are all over number 15 like white on rice, and it's these cunning opponents the gamer has to outwit. The visiting team works hard to block the plays, and the gamer must use misdirection in order to get the ball in the basket, by passing the ball back and forth across the court, or dribbling first with one hand, then the other until the computer's defensive player is off guard. Then shoot for the basket. There's no point trying to score while he has his hands in the air guarding the ball, since it's not possible to shoot over his head. Any failed attempt to pass or score costs the hometown team one error, and the game ends after five such errors.

Successfully shooting the ball into the basket scores two points in regular play, or six points if the shot is made while the cheerleader is actually on-screen. Rack up 100 points, and there's an intermission with a special floor show — the cheerleader appears, and does a little dance for about six seconds, then the game recommences. The maximum score is 1000 points, and there are two skill levels. The computer's team plays more aggressively at the higher setting.

The graphics are unusually complex for an LCD game. The basketball play-

ers are not just stick figures, but actual line drawings of uniformed competitors, complete even to the numbers on their jerseys. The key and the free-throw line, painted directly on the glass screen, add a little color in the display. Shadowy faces of the spectators ring the court, and when she appears, the cheerleader is as cute as a Dallas Cowgirl.

Unfortunately, the game itself isn't as well developed as the graphics. As is usually true in these handheld mini-games, the play action is limited. Although the gamer-controlled basketball champ can dribble, pass off to a teammate, or shoot for the basket, there's no running in this game, nor fouls, nor free throws. This would never take the place of a trip to see the Globetrotters.

But what *Basketball* lacks in playability, it makes up for in cuteness. The athletes are very cleverly rendered, and even though the action is restricted in scope, the maneuvers available to the electrogamer are fairly challenging.

Basketball is more than just a game. The unit also houses a dependable clock and alarm, plus a stopwatch —

an unusual inclusion in pocketsized entertainments. The stopwatch counts hours, minutes, seconds, and 1/100 seconds, so it's just the thing for

timing real life sporting events, computer game contests, or how long 'til the next month's issue of **EG** hits the stands.

HOW IT PLAYS: BASKETBALL

All the moves in **Basketball** are controlled by three buttons. Button A changes the display to select the desired skill level. During play, Button A changes the dribble from left to right hand or back again. Button B activates the time and alarm settings. During play, Button B is not used ex-

cept to stop the game. Button C starts and stops the stopwatch, sets the digits of the time and alarm functions, and starts the game. During play, Button C shoots the ball toward the basket. Button D is used in setting the time, alarm and stopwatch. During play, Button D passes the ball.

Coming ATTRACTIONS

PLAYERS GUIDE TO ELECTRONIC BASEBALL

Baseball games are better than ever, with major new releases for virtually every videogame and computer system, not to mention the most exciting coin-op ever inspired by our National Pastime. You'll read all about their strong and weak points in next issue's magazine-within-a-magazine.

ILLUSTRATED COMPUTER GAMING DICTIONARY

Getting into computers means learning a whole new language, and we don't mean BASIC or Logo. Here's everything the computer gamer needs to know about the sometimes-cryptic words and phrases that make up the specialized lingo of home arcading.

EG'S SECOND ANNUAL GAME CONTROLLER UPDATE

Whether you want the latest in lap boards or just a low-cost and dependable replacement stick for your 2600, this article can point you in the right direction.

EG's staff has tested just about every joystick, paddle, trackball, pad and novelty controller on the market to prepare this comprehensive review.

DO EDUCATIONAL GAMES REALLY TEACH?

What makes a game educational? It's a question which comes up more and more frequently these days as programs which purport to combine learning with fun pour into retail stores across the land. EG asks this tough question of some of the people most involved with the educational game explosion — and gets some informative and downright surprising answers.

SUB HUNT!

It's getting tough to tell the world of gaming from the armed forces' futuristic weaponry. The unusual piece takes you on the trail of enemy submarines prowling our country's territorial waters with a crack bunch of Navy personnel who utilize game-like displays to track these menacing craft.

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There'll be plenty of other exciting articles and features of interest to arcaders, plus these regular columns:

★ Passport to Adventure
★ Q&A
★ Inside Gaming
★ Arcade America
★ Computer Gaming
★ Programmable Parade

★ Switch On!
★ New Products
★ Test Lab
★ Readers Replay
★ EG Hotline
★ Games Library

★ Stand-Alone Scene
★ Mini-Arcade Gallery
★ In Control
★ Strategy Session
★ Insert Coin Here
★ Articles of War

So watch for the exciting July issue of ELECTRONIC GAMES On Sale May 15, 1984

What Has Your TV Set Done For You Lately?

Sure, watching "the tube" is enjoyable a lot of the time. But today, home entertainment is much more than just broadcast TV. Today, your TV set can bring you movies you choose yourself to play any time you like. Fun and games. Problem-solving, self-improvement, and personal security. Unique, priceless memories of family and friends. Art you create yourself. It's a whole new world . . . the fascinating world of video.

Whether you're a video veteran, a beginner just getting your feet wet, or someone intrigued with the thrilling possibilities the field offers now and for the future, VIDEO Magazine should be your guide to this world.

Every month, VIDEO will show you how to *use* your TV, not just watch it. You'll read news of and invaluable test reports on the latest video equipment. You'll find sources, previews, and reviews of pre-recorded programs to buy or rent. You'll learn helpful home taping techniques: using a video camera, lighting, dubbing in audio, creating video art. You'll profit from expert technical advice. You'll explore all the alternatives to broadcast TV available today and the developing technologies coming tomorrow.

In short, you'll enjoy the most comprehensive information possible from the first and foremost video publication—and in a lively, thoroughly entertaining way.

video
It's worth watching every month!

READERS POLL
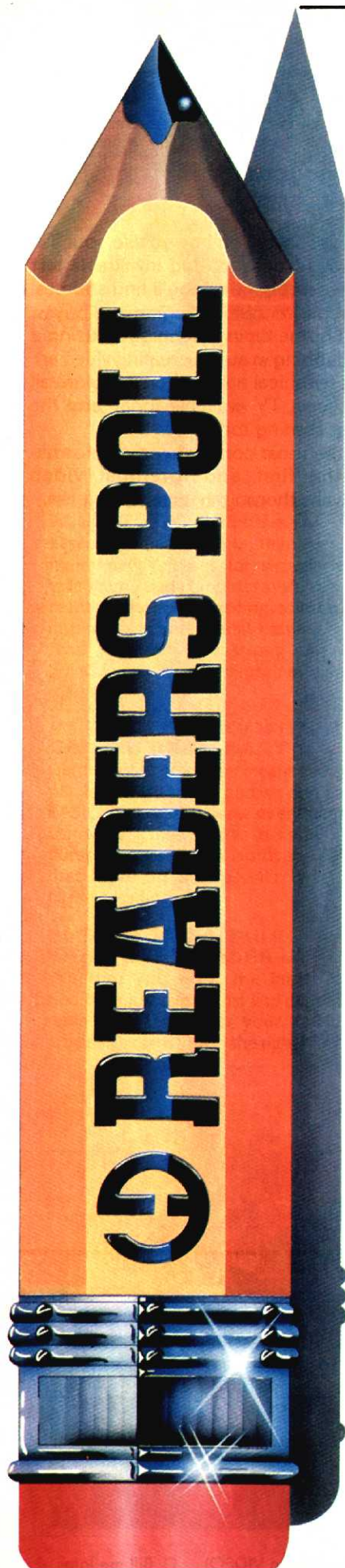
Interaction between the readers and editors of **Electronic Games** helps make this a better magazine. The more we here at **EG** know about who you are and what you want to read, the better we can satisfy your needs and desires. That's why we run a Reader Poll in every single issue of this magazine. Rest assured that even though we protect the anonymity of every respondent to our survey, the editor personally reads each and every ballot received. And of course, this is also your ballot for casting your vote for the most popular videogames, computer game programs and coin-op arcade machines.

Please return this poll sheet — or a photocopy, if you prefer to keep your **Electronic Games** in perfect condition — to: **Electronic Games,** 460 West 34th Street, 20th Floor, New York, NY 10001.

SEX AND AGE:
☐ Male   ☐ Female   Age _____

HOUSEHOLD INCOME:
☐ Under $5000   ☐ $5000-9999
☐ $10,000- 14,999
☐ $15,000- 19,999
☐ $20,000- 24,999 ☐ $25,000+

MARITAL STATUS:
☐ Single   ☐ Married

NUMBER OF CHILDREN IN HOUSEHOLD: _____

AGES:
☐ Under 2   ☐ 3-5
☐ 6-11   ☐ 12-17

Please indicate the number of cartridges, disks, etc. which you own or plan to buy within the next 12 months for the systems below:

	Own	Plan to Buy
Atari VCS	___	___
Intellivision	___	___
ColecoVision	___	___
Odyssey²	___	___
Atari 5200	___	___
Other Videogame System	___	___
VIC-20	___	___
Atari 400/800	___	___
IBM Personal Computer	___	___
Apple II	___	___
Commodore 64	___	___
TI 99/4A	___	___
Other Microcomputer	___	___
Video Cassette Recorder	___	___
Videodisc Player	___	___

How many hours per week do you spend playing various electronic games:

☐ Less than 2 hours ☐ 2-5 hours ☐ 6-10 hours ☐ More than 10 hours

How much do you spend per week on electronic games:

☐ Under $2   ☐ $2-5   ☐ $6-10   ☐ Over $10

How many people, besides yourself will read this issue of Electronic Games:

NAME OF GAME	SYSTEM

My favorite videogame cartridges are:
1. _____
2. _____
3. _____

My favorite microcomputer games are:
1. _____
2. _____
3. _____

My favorite coin-op games are:
1. _____
2. _____
3. _____