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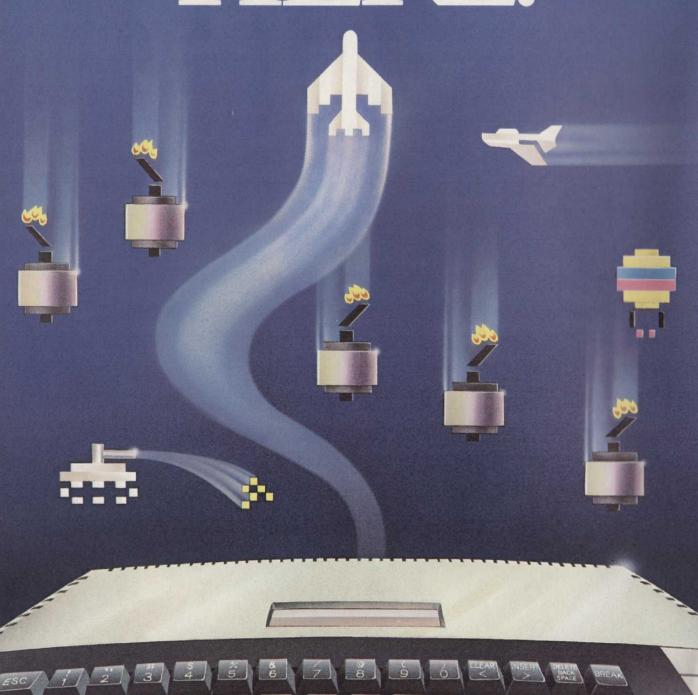


Intellivision And And Odyssey Going

Down The Orain?







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To the ever-quickening pace of the 1812 Overture.

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Kaboom! and River Raid for

your Atari home computer.

They're here. Just for the fun of it.



Industry Whispers and Meditations by Profunda

The industry-or at least the industry press-is obsessed with IBM's rumored Peanut home computer. IBM isn't talking, won't even so much as confirm that such a unit exists. In fact, a friend of mine has a brother at IBM and, brother to brother, the guy wouldn't talk!

Rumors: The base price of the Peanut will be \$600, for the system around \$1200. It will be 64K capable, fully compatible with IBM-PC software, and it might—might—have an infrared device that will allow remote control input. One more rumor: IBM will not release this Peanut until next year, rather than the October 1 (rumored) target date. They have been surprised, you see, by the steady and satisfying sales of their PC and fear that this Peanut will undercut those sales.

Meanwhile, the employees at Coleco are putting in hundred hour weeks, straining to clear the bugs out of their Adam computer. With its quitejustified obsession with getting this much-awaited product out on the market, Coleco has stalled production on many other projects, games included. Wall Street types estimate that for every month Coleco misses its September 1 ship date, they will lose sales of 100,000 units.

By the time these above two items see the light of a newsstand, they may very well be old news. The nature of this game.

One more quicknote on Eduware's Prisoner 2, which I praised to the skies last time. I understand that the CIA is using the game to screen embassy personnel, to see how they stand up under stress and interrogation. Stress? Interrogation? They won't know the meaning of the words until they're grilled by . . . Profunda!

A certain new game company has released publicity game screen shots that are considerably more elaborate than the actual games, a temptation that the game companies have, up to now, resisted.

The editors of this magazine inform me that representatives of that same company, when told that their games were receiving bad reviews in these pages, accused the reviewers of not playing the games at all!

If they hold their initial release in such high regard, I have to wonder if they've played the game.

Worst videogame commercial ever: the first half of the punkish Atari 5200 ad with new wave voluptuaries (focus on the T&A) being followed down the beach by drooling, sun-lobotomized beach boys.

Best videogame commercial (maybe ever): the second half of that same ad with the games, as if projected from Mt. Olympus, appearing in mammoth proportions in the sky.

"Copying something that has already been done, even from another medium, is sort of a quick and dirty way to immediate sales and profits." These are the words of Activision president Jim Levy, interviewed in VCI 8/82.

Perhaps the very act of making a public stock offering has spurred Activision to sell out; the Pitfall Saturday morning cartoon show represents an all-new low for that pathetic line of commercialized swill. Poor animation, stories and characters are the show's hallmarks. Activision should have taken a more active part in its production. Even more frightening: perhaps they did.

VCS games of the month: Enduro and Moonsweeper. Both are hypnotic and addictive and have temporarily put River Raid on my shelf.

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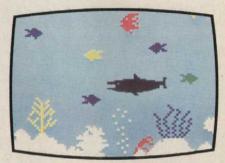
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& COMPUTERGAMING ILLUSTRATED

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COVER PHOTO: ROSS M. HOROWITZ

eye on

GOLD RUSH

Halloween is upon us and Thanksgiving is around the corner...but as far as the videogame software manufacturers are concerned, it's the height of the Christmas rush.

October should have seen a flood of new titles into the stores, which will gradually decline to a trickle through November and December. Here is a roundup of the latest titles. Again let us emphasize: release dates and titles are tentative.

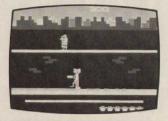
Atari 2600

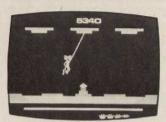
First Star software, a leading creator of computerware, has announced the release of its first videogame. Boing! is a Q-Bert-style multilevel hopping game. The player controls a bubble which must hop from square to square while avoiding a malevolent Pin and Bubble Eater. Six levels of five waves each and complex musical themes are the game's highlights.

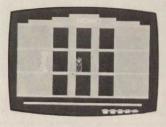
From Probe 2000 (the new moniker for the N.A.P./Odyssey brand of software) comes *The Pursuit of the Pink Panther*, a comic adventure in multiple screens starring a clever jungle cat and an infamous bumbling detective.

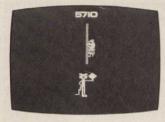
CBS Electronics is delaying release of their Ram Plus games Wings and Tunnel Runner. But two new games featuring that











Probe 2000's Pursuit of the Pink Panther.

graphics-boosting software should see the light: Omega Race, a mad scramble in space, and Mountain King, a scramble of another sort: the player must scoop up diamonds in a multilevel labyrinth while the clock ticks down.

Imagic is offering a 2600 version of Wing War (play a dragon, protect your young). CommaVid has two offerings: Stronghold (blast through whirling forcefields and destroy planet crawlers) and Rush Hour (blast and destroy, 20th century style).

Activision has shot its Christmas wad, so to speak, but spokesmen for that company let it be known that their programmers were working on a game to be titled *Space Shuttle*. This will be a flight simulation with a view outside the pilot's

2000

shield; the view will shake, rattle and roll in accordance with the action.

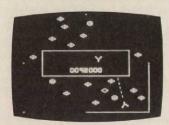
20th Century Fox Games of the Century offers two titles by the end of the year: *The Fall Guy* (climb a building while Hollywood monsters try to knock you off) and *M*A*S*H II.*

Coleco projects a
December release for a
2600 version of *Front Line*,
the arcade hand-to-hand
and tank game.

ColecoVision

Don't shoot! We're only reporters!

Coleco spokesmen say that by the end of October their Roller Controller should be on dealer's shelves, and two games to be played with it: Victory and Omega Race. The spokesmen also said that, in so many words, "dealers are expecting



Imagic's Wing War and Quick Step, and CBS' Omega Race.

delivery" of the following titles from Coleco: Destructor (to be played with the expansion module #2), Slither, Subroc, Buck Rogers, Front Line, Football, and Boxing.

A December release is promised on two additional titles: War Games and Dukes of Hazzard.

Imagic should have its ColecoVision Wing War in the stores in November; Probe 2000 should have Pursuit of the Pink Panther.

Another company has announced that it will be releasing games for ColecoVision, perhaps to be released in this quarter. More details are forthcoming in this selfsame column, but we'll give you a hint: Galaxian, Centipede, Jungle Hunt and Defender are the game titles.

Intellivision owners should take note of the abovementioned item, and rejoice in this following notice as well: an allnew company called Interplay is entering the videogame field, and setting its sights on Mattel. Interplay slated two games for this system for release in September: Sewer Sam and Blockade Runner. No further details were available at presstime.

Also for Intellivision: Imagic's Wing War, Mattel's Masters of the Universe (He-Man vs. the Skeletor), Mission X (reviewed in our last issue) (unfavorably, alas), the long-awaited, much-ballyhooed Advanced Dungeons & Dragons: Treasure of Tarmin, Bump 'N' Jump, and Probe 2000's Pursuit of the Pink Panther, and Col-

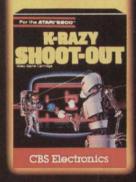
Introducing five ways to make your Atari 5200 more exciting.











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Bynere hever er

eye on

eco's Turbo and Donkey Kong Jr.

Atari 5200

We may have jumped the news gun for the 5200; these are, no kidding, the games scheduled for this period: Atari's Pengo (from their arcade game), Robotron, Berzerk (with self-contained voice), Imagic's Fathom and Quick Step (multilevel, abstract, fast-as-hell strategy game), and Pursuit of the Pink Panther.

BUSY SIGNALS

Hard on the heels of their Adam gamble, and the mysterious acquisition of the home rights to the *Dragon's Lair* arcade game, aggressive Coleco Industries is jumping head first into the telephonetransmitted videogame business.

American Telephone and Telegraph announced a joint venture with Coleco to develop a home videogame service to be delivered via telephone lines. The service is in the very early development stages, and no further details were forthcoming. It would seem likely, however, that AT&T would develop the modem while Coleco produced new games and gathered licenses. The system will probably be compatible with many home videogame systems, not just ColecoVision. The price for the subscriber service has not yet been determined.

The agreement is generally considered to be a major coup for Coleco. Having an ally as powerful as AT&T will greatly ease Coleco's entrance into the alternative-





Atari's Robotron and Sorcerer's Apprentice.

distribution-of-software business—a highly unproven and uneasy business at present.

Mattel's Playcable service did not set the world onfire, nor has AT&T's videotex performed as anticipated. CVC's Gameline and The Games Network are sputtering at the starting gate, and Ataritel is little more than rumor at this stage.

For the videogamerelated services, the problem is this: they need companies to license their games—to lend their games to the service. But thus far, the videogame manufacturers are unconvinced that such services will not severely cut into their cartridge sales.

And for the public, the problem may well be this: they can only digest so much technology, and at only a limited rate. The companies may be going a mite too fast for their own good.

ATARI REACHES OUT!

"The news of our death is premature," said Dave Ruckert of Atari. "The press jumps on Atari and announces its death every five days. It drives me crazy."

VCI was invited to meet with Atari senior marketing executives Bruce Entin and Dave Ruckert to discuss the company's past, present and future ... and to play some of the games in their fall line.

Having been dragged kicking and screaming from *Pigs in Space* and *Moon Patrol*, we settled down with Dave Ruckert. "Cartridge sales are up about fifty percent over this time last year," Ruckert continued. "And we look forward to the fall. We're very excited about the titles we've got."

Not only is Ruckert excited about Atari's future, but the future of the industry as well. He offered in evidence a study by Marketing Support Sciences, "which is probably the research company that has more experience than any other. They project a very substantial business in videogames through the decade."

Citing two other studies, one a Gallup poll, Ruckert projected penetration in American homes of videogame systems to be around forty percent, computers sixty percent.

Other salient points of the meeting:

* Under the corporate stamp of AtariSoft, Atari will be adapting some of its monster titles to ColecoVision, Intellivision, Texas Instruments, IBM, Apple and Commodore computers. Two to five games will be released per unit, with the core being

Defender, Galaxian, Centipede, and Jungle Hunt.

Other titles being considered, based on various units' capabilities, are Pac-Man, Dig Dug, Stargate and Robotron. Home management and education programs will follow next year for the computers.

* The Atari coin-op division will most probably release a laserdisc game by the end of the year.

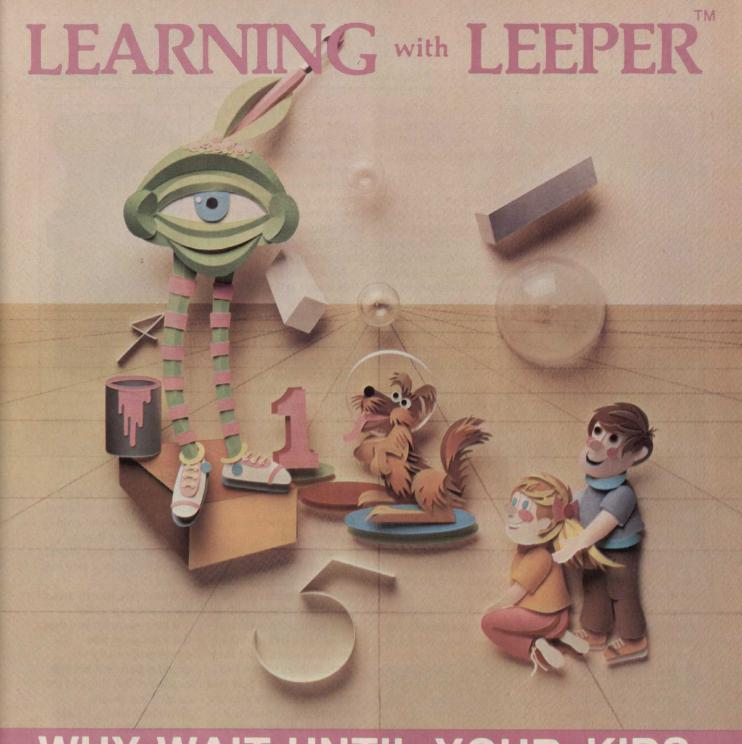
*In an ongoing collaboration with LucasFilm (a collaboration that has already produced the wondrous *Star Wars* arcade game), a series of games will be released in 1984 that will represent "a new generation in graphics."

First person perspective games with 3D graphics will be possible in the home with the use of fractiles. Fractiles? "They are a software computer animation device," explains Dave Ruckert. "You describe a scene with one set of data, and then describe the same scene from a different angle with a second set of data. The computer will compute all the angles in between. So in effect, without having to write the code for the software you can do multiple angles from the same scene. The terrain can change very rapidly."

George Lucas is said to be overseeing the project at that end.

*A computer for the 5200 is a "backburner project." There are no present plans for one, but reviving the project is a possibility. Atari will be watching the Christmas market very closely.

*Likewise, the



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CONNAVALIABLE FOR E 60



Sega's Baseball-new.

Graduate, the computer add-on for the 2600 "is on hold right now. The reason is the instability of the home computer market. But it is still a possibility."

*The Voice Controller that was announced in June for compatible 2600 games like Baseball (VCI covered the device last issue) will not be marketed . . . for legal reasons this time. A voicecontrolled flight simulation is in the works for the distant future; however.

*Finally, Dave Ruckert was asked why Atari announced titles so far in advance and released game screens for them, allowing other companies to beat them to the market with similar games (granted, a number of the blatant instances involve arcade adaptations, which are displayed for all to see). "We have to balance the needs of our customers,' replied Ruckert. "Very important customers such as K-Mart and Sears which require alot of lead time. We give them the time

they need and in doing so we may give our competitors more information than we would like to."

ARCADIA JUNIOR

Giving more information than we would like to is a problem editors face with arcade game news, more so than in any other facet of the industry. The news is often stale by the time it reaches our readers.

Regardless, here are some random notes on the arcade scene.

*Pizza Time Theatres has been forced to close ten of their stores nationwide. due to disappointing earnings. Company spokesmen cite increased competition and a lack of emphasis on quality food as reasons for the division's difficulties.

Meanwhile Nolan Bushnell's company is reportedly going full steam ahead with Sente, the videogames division, Androbot, and Kadabrascope, an animation and cartoon project.

*Arcade whiz Randy Palmer was preparing to



A game you never saw.

conquer the Bally Midway game Wacko... when it was abruptly vanked from the floor! Apparently the game's askew screen and controls put off many players, players who have never been accused of being entirely sane. We present a photo of the cabinet for posterity.

*A few notes to update this issue's article on laserdisc:

Cinematronics not long ago filed for bankruptcy. Now their game Dragon's Lair is so popular they cannot fill their orders. Problems come in many guises, apparently. More specifically, there has been a scarcity of quality discs, and the players have not been as reliable as wished. New discs and an improved player are expected soon.

Exidy, meanwhile, is planning a mid-November ship for their laserdisc offering, Crossbow. Exidy claims that it has improved the player technology with a mass solid state memory system; this will eliminate the "dead spots" that they claim bothers players so much in Dragon's Lair (we haven't heard any players complaining). Crossbow is eight fantasy adventures in one.

DONKEY KONG SR.

When was the videogame invented? We're talking simple bouncing balls, nothing fancy. And nothing with a coin slot, or a TV hookup-we mean the original laboratory prototype. So, when was the videogame invented?

We'll give you a hand. Pong appeared in the mid 70s, right? And



New game from Williams.

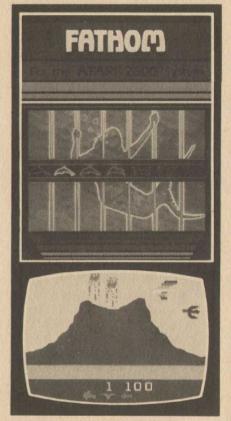
Odyssey a little before that. So the technology couldn't have been developed much earlier, could it? No one would sit on such a clear-cut gold mine for more than a year-would they? Would you like to play it safe and guess: 1970?

Would you like to guess again and say: 1958?

It may surprise you that the videogame was developed nearly two decades before it became available. But think of the case of television. demonstrated by a German scientist in 1884, a half century before virtually anyone had stretched out on his/her living room rug and bathed in the blue glow.

William Higinbotham can join Paul Gottlieb Nipow in the category of scientists whose inventions went almost unnoticed at first, only to wind up as part of the daily lives of hundreds of millions. It was William Higinbotham, the New York Times

Continued on page 47



FATHOM Imagic for the 2600 Object

he Greek Titans have captured Neptina, daughter of the sea god Neptune. And he's helpless to save her, since the Titans also shattered his magic Trident.

Proteus is a suitor of Neptina, and longs to save her. Using his ability to change into a dolphin and seagull, he roams sea and sky searching for pieces of the Trident—all the while avoiding Octopi, Kelp, flocks of Birds, and erupting Volcanoes, all of which slow him down.

Proteus gains "strength" from consuming Sea Horses, losing strength each time he collides with an obstacle. When all of Proteus' vigor is sapped, not even his great love for Neptina can save the day.

E.C.M.: Imagic's got a real problem. They keep coming up with nifty games, which, from a marketing standpoint, have no guts. Consider: who's going to be wowed by the aesthetic, magical packaging of *Fathom* or *No Escape* or

Moonsweeper when they can get their hands on the macho, superaggressive Enduro or Robot Tank? Most consumers aren't going to read the reviews, they're going to buy the entire package. And really—who'll be satisifed acting the role of a bird when they can get behind the controls of a terrain-destroying tank or road-eating sports car?

All of which is too bad, because *Fathom* is a new high in terms of 2600 play and graphics.

The sea phase of Fathom is like Activision's Dolphin, the air mode reminiscent of Barnstorming, playwise. But the ability and need to jump from one to the other will keep you hopping. And, as the bird, you must keep up your airspeed by pumping that action button—a splendid touch.

The animation of the creatures is simply outstanding, especially the Seagull, and the colors are extremely sharp.

Each time you free Neptina, Fathom serves up more terrain to search without giving you any extra time. It may not be the loudest game on the market, but it's never going to bore you.

Graphics: A Gameplay: A-

J.C.: Rarely do we differ so strongly about a game: *Fathom*, to me, is like a visit from the Sandman.

Once again, as in so many videogames, you've seen it all before. Dolphin, Barnstorming, Journey/Escape, Adventure—all the key skills, strategies, and developments had been milked dry when Imagic was young. And because Imagic tried to give you so many different games in one, none received the designer's fullest attention.

The graphics are wildly impressive, even beautiful; if that's worth thirty-odd bucks to you, rush out and buy Fathom.

The industrywide rumors of Imagic's pending demise may or may not prove true. However, games like this aren't going to hasten a renaissance over in Los Gatos.

Graphics: A Gameplay: D



CRACKPOTS
Activision for the 2600
Object

n infestation of bugs is the crazy scenario for this game. Brick-eating pests are crawling from the sewers and trying to get into your upper-story windows.

As they swarm up the outside wall of an apartment, a youngster named Potsy tries to bop them into oblivion using Flower Pots. There is one Pot, complete with petunia, on top of each of the six windows.

You get a new Pot each time one strikes the ground or clobbers a

At the bottom of the screen are six Bonus Bugs. One Bonus Bug disappears each time an insect crawls into a window. Lose all the bugs, and your building's lowest level is eaten away—making for less ground the next insect wave has to cover.

There are twelve bugs per wave, each wave moving faster and in one of three different patterns (straight up, diagonally, zig-zag).

J.C.: I think Activision has finally reached the point of saturation with the old *Kaboom!* theme of having to catch or toss objects. *Crackpots* is *Spider Fighter* turned upsidedown, *Oink!* played with insects, *Megamania* patterns done with bugs

Enough already! If they're going to be unimaginative, I prefer seeing them exploit the hot-license themes of Pole Position/Enduro, Battlezone/Robot Tank. At least those games haven't been done to death.

It's going to seem awfully hypocritical to turn around, now, and report that *Crackpots* is another good Activision game, fast and demanding excellent reflexes. But when you're asking for thirty or forty dollars of a customer's money, it would be nice to give them something more than just a slickly done formula.

Graphics: B Gameplay: B-

E.C.M.: Jim must've gotten up on the wrong side of the bed again. His comments about *Crackpots* are as ontarget as Mariner I. (The Venus probe never got closer to the second planet than blowing up over the Atlantic Ocean.)

Yes, Crackpots is Kaboom! turned over. But what's wrong with getting to play the bomber? And apart from dropping objects, Crackpots and Oink! have nothing in common. Filling holes with little bricks and clobbering scurrying insects with large flower pots is not my idea of a clone.

Shelving the comments of my gloomy colleague, I'm convinced Activision has created a new life form in these bugs. They're so realistic you may start scratching under your shirt—or else honing your hand-eye coordination to try and hit them with pots.

It's going to take you weeks to master the faster levels of this game, particularly if your building is foreshortened by a few floors. These insects have got to be the fastest buggers ever to populate a videogame.

Complete with Activision's typically vibrant colors— though the wall is necessarily sparse so you can see the bugs—this is a winner all the way.

Graphics: A-Gameplay: A



DECATHLON Activision for the 2600 Object

ne to four players get to compete in ten different athletic events: 100-Meter Dash,
Long Jump, Shot Put, High Jump,
400-Meter Race, 110-Meter Hurdles,
Discus Throw, Pole Vault, Javelin
Throw, and 1500-Meter Race.

Distances and/or time-elapsed are automatically translated into points by the computer, and the top score of the four participants is posted at the conclusion of each event.

If you don't throw the discus, javelin, shot, etc., before you reach the Scratch Line, you are disqualified from the match.

E.C.M.: Activision has created the best party game in years. This is one which novices will get a kick out of, pros will find challenging, and all age brackets will enjoy.

Though there is a real sense of redundancy in several of the contests—the races and the discus/shot put, for example—those are part of the Olympic Decathlon, so Activision couldn't really have left them out; in any case, no game is so long as to detract from the overall enjoyability of the game.

My biggest complaint is that you're going to wear out your joystick right-quick with *Decathlon*. You make the video figure run by quickly jogging the joystick from side to side; the faster you push it, the faster the figure runs. Your biceps will surely benefit, but not the hardware.

It'll be interesting to see whether Activision can reach more than the sports-cartridge audience with this one: if fantasy/science fiction-oriented players will give this one a chance, they'll find it an exciting change-of-pace.

Graphics: B-Gameplay: B

J.C.: Like the mythological "quest" videogames, *Decathlon* requires you to carefully address a variety of problems one after the other. I like that sense of substance and continuity in a game. What's even more refreshing, however, is to see a cartridge which offers more than instant gratification by blowing something or someone up.

Also, this is one of the few 2600 games in which players can compete directly, though not simultaneously. Simple point tally comparisons are not competition in my book.

Decathlon is the kind of cartridge which, as E.C. hinted, is fun alone, but great with a group. What's nice is that it will have families huddling over their 2600s and having a great, cheering, laugh-a-lot time. The variety of contests will be especially useful helping children to develop good hand-eye coordination.

This isn't the fastest or most challenging or most colorful videogame on the market—the animation of the human figure is very good, but the landscape is surprisingly barren. It's just one of the most entertaining.

Withal, I'm a little disappointed to see so blatant a ripoff of Microsoft's computer game of the same name (See VCI *5). Granted, the name and events are in the public domain, and Activision had every right to adapt them to the 2600. But, once again, imagination and originality are as important to the growth of a company as brilliant programming. Of late, Activision has been showing gobs of the latter, but just too little of the former.

Graphics: C+ Gameplay: A-



MR. DO! Coleco for Coleco Vision **Object**

r. Do is trying to harvest an orchard of Cherries. As he mows over the terrain, he is pursued by Badguys, who can only follow in his path; Diggers, which can mow; and Blue Chompers, which do likewise.

Mr. Do's three defenses are to flee; to try and push one of the orchard's Apples into a vertical path and bean the baddies; or to launch a Powerball, an orb which pongs along the tunnels until it strikes something or returns to Mr. Do. Only one Powerball can be dispatched at a time.

When all the Badguys have emerged from their hovel at centerscreen, Treats will appear: these freeze the action, grant up to ten thousand bonus points, or unleash an Alphamonster, a beastie with a letter (E, X, T, R, or A) on its chest.

Gameplay begins with five Mr. Dos; each time "EXTRA" is spelled, the player is awarded an extra Mr. Do.

Alphamonsters also appear when you reach any multiple of ten thousand points.

E.C.M.: It's beginning to look as though, gamewise, Coleco can do no wrong. (Releasing them ontime and in sufficient quantities is another question, one which will be addressed in our December issue.)

Mr. Do! based on the moderately successful arcade game, resembles the infinitely more popular Dig-Dug. However, I prefer the Powerball to the Dig-Dug pump. There's a perversely satisfying sense of unrest when your misfired ball is off bouncing in a remote corner when you need it now.

I also like the fact that the Apples are versatile: you can push through the unmown orchard, using them to block a path as well as to clobber an adversary.

The variety of monsters will keep you on your toes, and as the game progresses their population increases to panic-inducing proportions.

The graphics are not quite as punchy as in Coleco's other cartoon games, but the Etch-a-sketch aspect of the game-mowing away small chunks of the orchard-is superbly done.

Graphics: B-Gameplay: A

J.C.: Maybe I'm becoming jaded, and it's not Coleco's fault; they were only adapting an arcade game. But I'm sick of pushing little people around complex paths.

Pepper II, Ladybug, Mouse Trap-enough already! The games may be dynamite, but their playvalue is subliminally undermined by their familiarity. A ColecoVision owner who tries Mr. Do! at a friend's house may well not make the purchase for her/himself because they've seen it all before.

But—yes, it's Catch-22 time again, folks-this is a brilliant game. Better, in my judgement, than the abovementioned cartridges because of the strategy variations pointed out by E.C. In fact, if you're a beginning ColecoVisionist, and are looking to start your videogame library, I'd recommend Mr. Do! and Ladybug, with Pepper II strong but less-so, and then Mouse Trap. (I would point out, however, that Mr. Do! is for experienced players, whereas Mouse Trap can be enjoyed by the very young.)

Still, I'd like to see some new

direction from the leaders. They are pursuing dominance in all other respects; why not software? Odvssey's the only one trying new themes (they have to: they're a distant number five in the software department). How about Killer Bees or Smithereens for ColecoVision?

Graphics: B Gameplay: B+



POLE POSITION Atari for the 2600 **Object**

Tou're racing around sundry courses, with long straightaways and sharp curves. The point-of-view is from the driver's seat: using your joystick, you must stay on the road and avoid colliding with other vehicles.

Sloppy driving on the shoulder will slow you down, hitting another car will blow you away.

J.C.: It's a shame for Atari that Enduro beat this one to the marketplace. It's bad enough that fans of the arcade Pole Position will be disappointed; now, anyone who has already purchased Enduro will have no reason to bother with this

new cartridge.

Atari has put on a fine show, graphically. Considering the limitations of the 2600, the visuals are very impressive, particularly the twining roadway and the shifting horizon. I miss the "starting gate" and so will Pole Position buffs, but compromises are to be expected.

There are, however, two major failings. First, the graphics on the automobiles are inadequate. Featureless and drab, they look like something cheap you'd get as a breakfast cereal premium.

Second, and more importantly, the game is just too slow. Those hairpin turns come at you madly in the arcade, and you can, if you elect, take them at speeds which belie sanity. Comparatively speaking, this game kind of just tootles along at moderate speeds.

Not a crashing disappointment, but not a good commercial bet either.

Graphics: C+ Gameplay: C

E.C.M.: In trying to bring the arcade game home. Atari has actually made a worse game than their 2600 classic Night Driver-which is less ambitious and far, far better. Atari could have chosen to recreate the look or feel of the game; the 2600 couldn't have handled both. They opted for the look, since that's the most immediately distinguishable aspect of the arcade game. It was a mistake. When companies sacrifice gameplay to be able to cash-in on the recognition factor a top arcade attraction can provide, it's a quickbuck shortcut to oblivion.

The essence of Night Driver was simplicity: little white pegs passed for "rail guards" and defined the parameters of the road. You didn't see, or need to see, the surface itself. All the game's memory went into making the course twist like a snake in a blender. Play it, even today, and you'll forget that it's years old and coloring book simple.

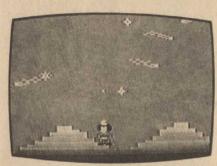
(You'll notice I refer to Night Driver in the past tense. That's because it's a forgotten game, overshadowed by the hype given the "big" driving games. It's a shame, really; our tastes have become more sophisticated now and, paradoxically, we're poorer for it!)

Pole Position, taken alone or as an adaptation, considered individually

or as part of the Turbo/Enduro triumvirate, is no more than adequate. It was fast enough for methough it won't be for many-but there are too many places where the road is arrow-straight and boring, the curves too easy.

With simpler graphics disguised by well-used pastels, Enduro is the superior cartridge.

Graphics: B-Gameplay: C-



SORCERER'S APPRENTICE Atari for the 2600 Object:

ickey Mouse is in the midst of his dream from Fantasia. Having donned the magician's magic hat, he must play "catch" with the stars and meteors; tiring of that enterprise, he can march down the steps and try to collect the rampaging Brooms with their buckets of water.

The player must fire magic bolts at the heavenly bodies as they fall from the sky or, missing them, run over and catch them before they hit the ground.

Unlike Astrosmash, points are not deducted for missed objects. Toppoints are scored for hitting them with bolts, less for catching them.

In the Broom mode play is like Fast Food, with Mickey sweeping around the screen, gathering the pesky waterbearers.

The game offers four different speed levels.

E.C.M.: Although packaged and aimed at children, the fastest level of this game will give even seasoned players a run for their money.

The opening game is Astrosmash, Kaboom!, any number of programs vou've seen before. But if we allow that there are basic themes which are going to be recycled, this is one of the finest examples of the slideand-shoot genre.

The falling objects are plentiful and unpredictable, and the fact that

Mickey has to negotiate a pair of pedestals on either side of the field adds to the handicap.

In the Broom game, the twisting route of the Brooms makes them difficult to catch. Don't be misled by the theme; this is one tough game!

Furthermore, this is one of the few games in recent memory where the visuals really add to the appeal. The stars scintillate as they fall, in the finest Disney pixie-dust fashion, and Mickey is accurately rendered. Especially impressive is the way some of the objects change to 'shooting stars' as they drop, necessitating that Mr. Mouse hightail it over to where they're going to hit.

The Broom room is dark and ominous, not only faithfully duplicating the feel of the movie. but contrasting dramatically with the celestial level. The Broom animation is superb.

Atari has gotten back on the track with this one and others of its 'children's games.' Encore, maestros!

Graphics: A Gameplay: B

J.C.: The most valuable aspect of Sorcerer's Apprentice is its ability to bring kids and adults together for a good time. Commercially, Atari has an unbeatable combination: even if grandma or dad has deep reservations about videogames, who's going to think bad thoughts about the Mouse? Look for this one as a holiday blockbuster.

I don't like this game as much as Pigs in Space, reviewed next-up. Though the star game is faithful to the surreal nature of the Disney film, I found it boring shooting at a rain of objects which look like sugarcoating on a Frosted Flake. I'm not annoyed because they were so small: some very young children may find them so, but the game allows you to maneuver your bolts once-fired. That's good for honing hand-eye coordination.

No, I just lost interest in the lack of a tangible antagonist. Anti-gamers may praise the non-violent nature of this slide-and-shoot, though without conflict there's no drama, hence no sustained interest.

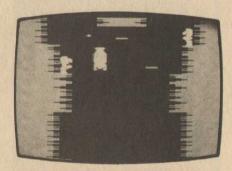
The Broom game is much better because there are tangible nemeses. However, the simplistic set decoration leaves a lot to be desired. This sequence, in greater graphic detail,

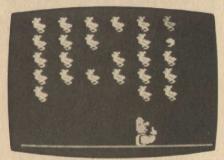
should have been the entire game.

Since Atari neglected to mention it anywhere in their packaging, I'd like to give a tip of the magic hat to M. Paul Dukas, who wrote the music on which the Fantasia segment, and this game, were based. The tune is used throughout gameplay.

It's bad enough people think Walt Disney created Mary Poppins, let's not hand the guy classical music as well.

Graphics: B-Gameplay: C+





PIGS IN SPACE Atari for the 2600 **Object**

he Pig Commander and his crew stumble upon a dangerous anomaly in deep space: ranks of Chickens coming your way at warp drive.

Dropping eggs on your craft, the Chickens are commanded by a whirling Gonzo, who streaks from side to side at the top of the feathered space soldiers.

Your job: impersonating the crew members in turn-including, yes, Miss Piggy-you must blast the foul from the heavens before they hit you with an egg, which metamorphoses the swine into feathered, flying dumb clucks.

J.C.: What a surprise this one was! I'm not going to pretend Pigs in Space is the most difficult game I've ever played, but it's certainly one of the most entertaining.

While the resemblance to Space Invaders is more than passing, this

game comes across as a parody of that game, just as the Pigs in Space segment of The Muppet Show poked fun at Star Trek. Star Wars, et al.

However, Atari hasn't sacrificed gameplay just to give you a chuckle at the outrageousness of the satire. While the chickens do descend, they don't ultimately nest upon you like the Space Invaders aliens. However, when the chickens are at their lowest level, the pigs are just tall enough to ruffle the tailfeathers of the lowest phalanx. Thus, when this level drops their eggs, it's all you can do to get out of the way.

The animation and graphics are topnotch in a game which has something for everyone, from four years on up.

A very satisfying release from the former champ.

Graphics: A Gameplay: B

E.C.M.: That innocent crack about "former champ" is premature. If Atari markets this and its other more juvenile cartridges right, it can have its best Christmas season ever.

(Begging the reader's indulgence, I would also like to usurp this opportunity to comment on Jim's review of Sorcerer's Apprentice. In a phrase, it was overintellectualized to the tune of several megatons. Granted, the stars and meteors don't make as imposing a foe as the Pac-Man ghosts or the Super Zaxxon Dragon. But ambience is a much-neglected quantity in videogaming, very wrongly so. The emphasis of this game is on mood and movement rather than impromptu hatred. While no one at VCI is more action-hungry than I, that doesn't mean I have to see the whites of someone's eyes to get my jollies.)

Though we comment later on about Snoopy, Cookie Monster, and so forth, Atari has not just taken the license and run, as Parker Brothers does with Super Cobra (see below). They have lavished thought, care, and great skill on these games, and I hope they go through the damn roof. They deserve to, and it would be a nice upbeat legacy to Ray Kassar's reign.

My one complaint is a small one: I wish they'd done something a little more inventive with Gonzo when he's struck by pigfire.

Just having him spin faster isn't enough. Perhaps he should have turned into the virtuous Kermit . . .

While less satisfying to adults than

Sorcerer's Apprentice. Pigs in Space is a youth-oriented cartridge which grownups won't mind playing.

Graphics: B Gameplay: B



SUPER COBRA Parker Brothers for the 2600 **Object**

ou must pilot a chopper through ever-changing territoryover mountain tops, through tunnels, around buildings-while shooting away rockets, ground-based artillery, mines, and fireballs.

There are ten thousand miles in the course, the terrain becoming more challenging every thousand miles.

Your copter is equipped with forward-firing guns and a bomb bay. It also has a limited amount of fuel, which must be replenished by hitting a gas storage tank.

E.C.M.: Parker Brother's Super Cobra is a ragged, amateurish, annoying waste of a good license. The arcade game offered solid Cosmic Avenger-like play; this rendition is graphically bare and imprecise playwise: the blurry, blob-like bombs are tactically laughable; the bullets pack the wallop of an H-bomb instead of moving with the surgeon-like slickness this format requires.

This cartridge doesn't merit a discount-table purchase; even if you get one for free, I advise you to think twice about wasting the shelf space.

Graphics: F Gameplay: F

J.C.: Whatever term means "antithesis of state-of-the-art," that's the phrase I'd use to describe Super Cobra. Though I'm sure the language provides us with something more suitable, I opt for "state-of-the-arrrgh," since I groaned aloud with disbelief at the amateur translation of this sturdy arcade oldie.

My comments echo those of EC, though I'd like to add my disgust with Parker Brothers for ripping the public off. The company's philosophy has always annoyed me: that they grab hot licenses to get a leg-up on competition. Top-man Richard Stearns has self-righteously trumpeted a licensesaren't-enough philosophy in our pages and elsewhere, stating that cartridges have to have good gameplay or the licenses are worthless. Well, having played Super Cobra, I submit that he a) is obviously not playing his own games, b) is patronizing consumers by expounding upon good gameplay without knowing what it is, or c) knows that this is a stinker but had to release it for various marketing reasons.

Do yourself a favor and pick up the Atari Vanguard if you want a good game of this type. This one'a a granite balloon. (Incidentally, in my Sorcerer's Apprentice comments, nowhere did I say to do away with mood or ambience. I was simply asking Atari to try and create a total package, one in which the environment serves as a suitably involving proscenium for an engaging confrontation. For my money—and that of the consumer—sparkling images and fidelity to a musty old movie is no reason to rush out and buy a videogame.)

Graphics: F Gameplay: F

DREADNAUGHT FACTOR Activision for Intellivision Object

Zorbax juggernaut of incredible size and firepower is headed for the planet Terra. As the screen ticks-off the parsecs it has to go before being within firing range of the world, your squadron



of Hyperfighters assaults the ship a plane-at-a-time.

Flying through space, you listen for a droning sound which tells you how close you are to your prey. You can then approach from any angle. However, your ship cannot retreat: once you've passed over a section of the invader's craft, you will have to return to your squadron and launch again in order to have another crack at it.

The view is from directly above the invasion fortress. Your own vehicle breaks from the earth defense pack and, equipped with Laser Bolts and Strontium Bombs, uses both to take out the alien weapons centers as well as immobilize and ultimately destroy the intruder by hitting its sixteen Energy Vents.

During the attack, the extraterrestrials will launch both laser bullets and "Cruise" missiles at your vessel

All the while, time is running out . . .

E.C.M.: A crackerjack action game which can be described as *River Raid* in space or *Zaxxon* from above, take your pick.

Dreadnaught Factor is a suspensefilled contest which can be played by amateurs (the invader hardly fights back in the simplest level) to pros (you'll spend more time dodging than attacking in level seven).

I was wildly unimpressed with the visuals. The scroll of the alien vessel is good, but its surface is one dimensional. Compared to the full-bodied hardware of Zaxxon for Intellivision, this is a big letdown—especially since Activision usually does so much better.

But the bottom line is action and entertainment. *Dreadnaught Factor* may not be the most original game on the market, but no one who plays it will doze.

Graphics: D+ Gameplay: B

J.C.: I didn't doze over *Dread-naught Factor*, but I've certainly played much better games. For example, the aforementioned *Zaxxon* for this system.

The big problem with the cartridge is not the sense of deja vu, though that doesn't help. Rather, the alien ship simply isn't much of an adversary. I didn't do all that much ducking on level seven: I listened for the ship's hum, snuck up on the side, hit a few targets, then left. Playing this way, you've got to hurry to make sure you get everything before the hostile E.T.s reach earth. But you're far less likely to get shot down.

This'll be a tough sell for Activision. It lacks the pictorial quality and play-pizzazz consumers have come to expect, and has some stiff competition in the superior Zaxxon and Intellivision's own Star Strike.

Graphics: D Gameplay:D

BATTLEZONE Atari for the 2600 Object

You're at the controls of a supertank and must deal with enemy tanks and aircraft attacking from all sides.

Using the radar at the top of the screen, you look out at the horizon, swing your turret into position, wait until the target is within range, then fire.

But don't wait *too* long: if the enemy fires first, the only way its computer-controlled projectile can miss is if you hurry out of range.



J.C.: Purists of the arcade graphics are going to resist this cartridge; everyone else is going to have a great time.

Atari wisely elected not to try to imitate the vector (green line, full animation) graphics of the original. Rather, they've colored everything in and put all the memory into giving the player a real sense of traversing the countryside. The treads turn, the ground passes by, and wherever you turn along the 360 degree sweep, the horizon turns with you.

Playwise, you've got to be virtually as accurate as in the arcade game to blow up your adversaries. If you don't hit 'em square, they ain't gonna explode. I don't mean it as a backhanded compliment to say that you've got to aim more precisely here than in War Room or Dreadnaught Factor.

Because the significantly similar Robot Tank was first into the marketplace. Atari sales will suffer: there isn't a large audience holding their breath for Battlezone (it was the surprise arcade flop of its year). Fact is, the games are close enough that you don't need both. I'm partial to the "stealth" aspect of Robot

Tank, the invisible enemies; overall, however. Battlezone is the faster, more enjoyable cartridge.

Graphics: B Gameplay: B

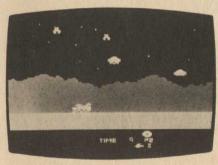
E.C.M.: For me, Battlezone and Robot Tank are quite different. The latter has a "cartoony" flavor; Battlezone has guts, with grinding treads and more somber colors. The fact that Robot Tank allows the enemy to shoot out your radar, cannon, turret, etc., and makes weather a factor, gives that game a different kind of depth; on the other hand, Battlezone is faster overall.

Taken on its own, I particularly relish the capacity of the Battlezone enemy to sneak up on you. For example, if you're busy blasting at an ever-shifting saucer, and not watching your radar screen, the enemy can sneak up from behind and cream you.

Battlezone is videogaming in the round!

I am, however, quite sick of hearing the 1812 Overture in home videogames. May I humbly suggest some Sousa?

Graphics: B+ Gameplay: B+



MOON PATROL Atari for the 2600 Object

ou are at the wheel of a lunar excursion buggy. Before you are two kinds of danger: craters galore, which must be jumped lest they disable your car; and obstacles, from tanks to rocks, which must be blown away. Above you are alien vessels which also must be reduced to their component molecules before they blast you to atoms; behind you, ultrafast missiles which can only be jumped.

The player has control over the acceleration and braking of the moon buggy.

E.C.M.: When I first switched on Moon Patrol, my reaction was

"You've got to be kidding!" The graphics-except for the excellent starfield-are that awful. The worst I've seen in years.

With my sensibilities aflame, I reluctantly began to play. Within five minutes I was hooked.

Oddly, without the realism of the arcade game, Moon Patrol is in some ways more effective. You're not distracted by the realistic movement of the wheels and axle, you don't pine to discover what lies beyond the beautifully drawn . horizon.

Nope. In this game, it's only you vs. the terribly rendered obstacles-but that's enough. The spacefaring vessels are elusive, the one-two-three punch of doublepit/single-pit/tank in the difficult levels will raise sweat on your palms, and you'll jump, all right, when that rocket stands poised to burn you from behind.

The rocket, incidentally, in coordination with that absurd buggy, contributes to an overall comical element in Moon Patrol.

Probably the only game in memory where less is better.

Graphics: F Gameplay: B+

J.C.: In contrast to my colleague, I give this one an across-the-board thumbs-down. To be sure, the graphics are embarrassingly bad, which detracts from the realism, hence player-involvement in the game. But that's nothing compared to the fact that gameplay itself is inadequate.

Moon Patrol's individualistic drawing card is combat on three fronts. Unfortunately, none of those fronts is going to knock you for a loop.

If you've mastered Demon Attack or Phoenix, you'll have no trouble nailing the overhead ships. If you're up on Donkey Kong, multiple jumping is no big deal. (Three pits and a tank are no different than a bunch of barrels.)

As for the anterior assault, I'd rather have seen the missile come charging onto the screen rather than standing there for several moments before thrusting.

Moon Patrol should never have been launched.

Graphics: F Gameplay: D TIME PILOT Coleco for ColecoVision Object

our aircraft is trapped in a time warp, and you must dogfight with successive squadrons from different eras: Biplanes of 1910, Monoplanes from 1940, Choppers from 1970, and supersophisticated Jets of 1985.

Capturing Parachutists earns extra points. Likewise, each era features extra-point aircraft: Dirigibles, Heavy Bombers, Double-Prop Helicopters, and Black Jet Bombers, respectively.

E.C.M.: While Coleco has done a very good job bringing the arcade hit home, this is a surprisingly superficial game. I can't fault Coleco for going with a proven draw, but it's easily their weakest action cartridge.

The pivot-and-shoot theme begun years ago with Asteroids really isn't improved upon here. Though the action is fast, strategy is less important—indeed, virtually nonexistent—than a fast trigger finger.

The graphics are sparse: clouds and planes, and nothing else. In the arcades, this was fun for a quarter. In the home . . . let's just say if you've already got the ColecoVision Space Fury, you've got it all.

Graphics: C Gameplay: C+

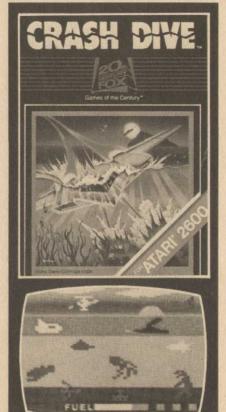
J.C.: I found this game surprisingly addictive. *Time Pilot* is one of those rare games where there may not be much substance, but you'll be too busy to think about it.

Compared to Coleco's other flight game, Looping, this one allows you a far freer hand. There's room to maneuver, enemies firing back, challenges from a new corner every time you start to make headway against your foe. In contrast to Looping, the challange escalates throughout game-play. Once you overcame the initial challenge in Looping you were free to snooze.

The graphics could have been more interesting; but this doesn't detract from the good job Coleco did in replicating Konami's hit.

Not very complicated, *Time Pilot* is nonetheless swift, straightforward, trigger-happy entertainment.

Graphics: C Gameplay: B



CRASH DIVE Games of the Century for the 2600 Object

ou're at the command of a Supersub, able to travel by sea or air. In both elements, various targets will pass by, from Helicopters to Stingrays to Sea Monsters. You must blast as many of them as possible, while trying to retrieve treasure from the sea bottom.

There is only a limited amount of fuel. You can replenish your stores by docking with a submarine which passes every now and then.

J.C.: I didn't know anyone was still making games like this. Play is so straightforward and so dull as to make one wonder why someone at Games of the Century didn't give *Crash Dive* the heave-ho in prototype. Besides, Activision made the ultimate game of this type with *Seaquest*. This one's a thematic clone, with play which is vastly inferior to the original.

I hate to dwell on this, but I'm simply astounded at how pathetically easy the game is. Evading enemy fire is a cinch, and blasting moving objects requires less skill than those you mastered way back when for

Air-Sea Battle.

The colors are nice, and the air/ocean option is interesting—for about five minutes.

Don't waste your time or your money on this one.

Graphics: D-Gameplay: D

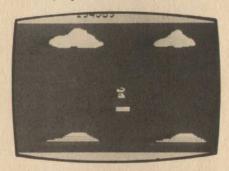
E.C.M.: With *Crash Dive*, Games of the Century does indeed take another well-deserved step toward the grave. Considering all the resources at the company's command (it's a division of Twentieth Century-Fox), I continue to be aghast at the garbage they produce.

I could have seen a game of this type if it were a view from the window of the sub: looking out at the oncoming monsters, ships, etc. But rehashing what's been done to death (see our recent Video Devils of the Deep issue) is extraordinarily pointless.

I'm particularly surprised at the lack of detail in the graphics. Hey, Century—the state of the art has left you people waaay behind.

Look for this one soon on the seven dollar table.

Graphics: F Gameplay: F



SNOOPY AND THE RED BARON Atari for the 2600 Object

he skies are full of enemy biplanes. Snoopy, the dogged World War I ace, is out to plug them all. Goggles in place, scarf fluttering in the breeze, he rises skyward atop his Doghouse.

As the *Peanuts* character does battle, the enemy tries to riddle his doghouse with gunfire. When too many bullet holes appear in the roof of Snoopy's house, down he goes.

The more difficult levels of the game offer a greater number of planes and faster action.

E.C.M.: Three cheers for Atari! In Continued on page 37



I/O Breakdown!

Not a breakdown of Input/Output, but of Intellivision/Odyssey. After years of prosperity, these systems may well be on their last legs.

By Vincent Papa

t isn't fair, when you get right down to it—abstractly speaking, of course. Odyssey was out there first, in 1972. It was the first home videogame, a simple unit with paddles, no color, and transparent overlays which had to be affixed to the picture tube to create maps, mazes, sports fields, and so on.

Intellivision was first, too. When everyone was producing games which were glorified blobs of light, Intellivision gave us videogames of sophistication and depth. Now, both brands are on the list of Endangered Electronics Species. And there may be nothing anyone can do to save them.

THE ILIAD OF ODYSSEY

Odyssey's parent company, Magnavox—itself a division of the mammoth North American Philips—launched their videogame division in high style. They did endless advertising and, helped by an existing marketing force which sold Magnavox TVs, made Odyssey a hot item.

Odyssey ruled the roost for four years. Then the integrated ciruit came along which meant, in lay terms, that a board one and one-half inches long, a half-inch wide, and 1/20 of an inch thick could now do more, *much* more, than had ever been done before. It not only caused points of light to bounce around a screen, but could vary the speed, provide digital scorekeeping, generate a playfield, add color, and create nifty new sounds.







Mattel's Mission X, Shark! Shark! and Bomb Squad: gameplay runs the gamut from simple to overwhelming.

What it also did, in a phrase, was make Odyssey obsolete.

Magnavox responded to the new technology by introducing Odyssev2 in 1978. It was infinitely better than its predecessor, with attractive sports cartridges like Computer Golf and Pocket Billiards, and adventure games such as Invaders from Hyperspace and Out of This World. No more overlays, no more black-and-white.

But Magnavox was out with their product a year too late. By that time Atari had established itself in the marketplace. Not only did the 2600 offer crisper, livelier graphics, but when Warner Communications bought the company from founder Nolan Bushnell they courageously poured megabucks into promoting home videogames. They also paid handsomely for licenses like Space Invaders and Pac-Man.

Magnavox was more cautious and got clobbered. They've been playing catchup ball ever since, losing ground with each quarter. They finally took an arcade license a few months back, but Turtles has proved a plodder in the stores; and even though the bloom has faded from the 2600 rose, Odyssey2 now has ColecoVision to contend with.

MORE 'INTELLI' THAN 'VISION'

Meanwhile, Intellivision's fortunes have taken a different course to ruin.

Mattel entered the electronics field in the mid-seventies with handheld games. These were successful. but Mattel saw the writing on the picture tube: videogames were a potential goldmine.

But not Odyssey-like videogames, or even 2600-like videogames. Videogames for grownups.

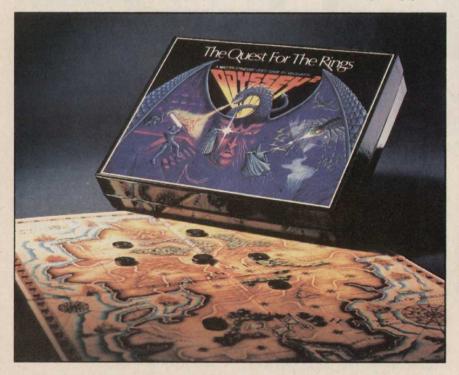
The result was Intellivision, which hit the market in 1980.

"Intellivision was originally posi-

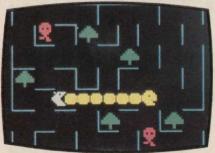
tioned as the most sophisticated videogame," says Mattel spokeswoman Charlene Margaritas. "At that time Atari was really the only competition of any consequence. Clearly the Intellivision had the superior graphics. And so our advertising was skewed toward the more sophisticated, or older, audience."

The Master Component sold in the \$250-\$300 price range—roughly one hundred dollars more than Odvssev or Atari-but Mattel was offering, in addition to the superior graphics, more complex gameplay. Even today, their NFL Football is every bit as good as the 5200 or ColecoVision games, created three vears later.

The Mattel unit emphasized sports cartridges, since the company felt that the adult sports enthusiast market would most likely plunk down the big dollars for the Master Component. Hence, we had car-







Odyssey's UFO (top), K.C's Krazy Chase (above) and Quest for the Rings.

tridges which offered excellent renditions of football, baseball, hockey, soccer, basketball, horse racing, golf, and bowling.

All of these sports games were endorsed by the professional associations affiliated with the sports: the NFL, NBA, NHL, and so forth. From a play and marketing standpoint, they had the ring of reality to them.

Thanks to this affluent following, Intellivision became a hugely profitable number two-albeit a distant number two. Cheaper, more diversified, shoot-em-up-oriented Atari held eighty percent of the videogame market, Intellivision fifteen percent, and Odyssey five. Try as they might, Mattel was never able to rise above that share for two reasons. Intellivision had no fantasy action games. And those they did finally release, like Space Battle, were comparatively complicated. Adults didn't care, and youngsters found them too rough to play. By the time the straightforward slideand-shoot Astrosmash hit the stores early in 1982, sales of the Intellivision Master Component were slipping.

Secondly, even though the heavily promoted Astrosmash could have boosted sales of the console, Mattel was hamstrung by its keypad controls. Most videogamers were accustomed to, and preferred, arcadetype joysticks. Intellivision offered a disc. Granted, the disc could move objects in sixteen directions rather than eight, but it was, bluntly speak-



The Intellivision system with computer and music synthesizer.

ing, inconvenient to use.

Sophistication' is again the key to Mattel's thinking in the conception of their controllers' design. The combination of a sixteen-directional disc, multiple firing buttons and keypad with overlay (not possible with a joystick) was designed to present consumers with more complex gameplay than was otherwise possible. Also, Mattel spokesmen explain, the flat controller is more easily stored than a joystick.

Nevertheless the combination of clumsy controls and adult-oriented cartridges, in a youth-dominated, precision-control market, brought Intellivision sales to a groaning halt. The emergence of ColecoVision didn't help matters any.

Unfortunately, Mattel's inadequate answer was Intellivision II, a lowcost edition of the original Master Component. With all the flaws of the original, it didn't move as expected. How could it, especially, with fresh competition in the form of ColecoVision?

As a result, Intellivision cartridges died on the vine. Then too, Mattel's M-Network line, introduced last year, also failed to set the world onfire. The problem was no hot licenses combined with a sudden glut of cartridges for the 2600. All of which combined to generate bad financial news for Mattel Electronics.

THE CHIPS FALL . . .

Collectively, Odyssey and Intellivision suffered inflated expectations for their voice modules, released in 1982. What does it matter that games can talk when they're saying things no one wants to hear? Odyssey's Type & Tell! can't distinguish between long and short "i's" (if you want "Linda" you've got to type in "Lynda"), and their voice games nag players rather than provide information; the IntelliVoice, while technically better-made and less audibly garbled, can't be programed to say what you want.

(While this probably has little to do with overall sales, the two companies also bobbled the ball when they failed to convert to component controls. If one breaks down, the



Odyssey 2 was way ahead of the pack at the time of its release.

consumer must return the entire game unit rather than plug in another joystick or keypad. Many people can't be bothered so they stick the console in a closet and forget about it. Not the kind of situation which hypes cartridge sales.)

Odyssey has no plans to continue their unique Master Strategy series. Spokesman Jerry Michaelson cites this reason: "It is simply because of the availability of personnel to do the programming. We needed to use the personnel for projects that we felt had higher priority.'

This "higher priority" is N.A.P.'s new Probe 2000 line of software that is being developed for ColecoVision, the Atari 2600 and selected computers. Four titles are now in the works for this line: War Room, Caverns and Creatures, The Pursuit of the Pink Panther and Power Lords. These last two will also become available for the Odyssey2 before the end of the year. No other titles are expected for the Odyssey system until next year.

"The product being called the Command Center is being sold in many parts of the world by Philips," reveals Jerry Michaelson. "We chose not to bring that particular generation of product to market in the United States; we are leapfrogging to the next. There is a transition taking place in the business world and we are moving with that. We are in a transitional phase."

Also attempting to swim with the shifting tide of the industry is Mattel. Both their Aquarius and Intellivision computer systems should be fully shipped by the end of the year. Six titles in their M-Network line for the 2600-and an equal number of games for Intellivisionshould see the light of day before 1984. Intellivision 3, however, will

Instead, Mattel will be trying out a new marketing strategy for Intellivision 2. Charlene Margaritas describes the new tack: "We will position the Intellivision as simply the most fun and enjoyable videogame system, as well as the system that plays more games than any other because of the system changer that will be available this year. It allows you to play 2600 titles as well as Intellivision titles."

In addition to the 2600 system changer, Mattel will be delivering joystick controllers for the Intellivision 2 late this year or early next. Owners of the original unit are out of luck, of course, because their controllers are not detachable. There are joystick attachments that slip over the Intellivision disc available now, but neither Mattel nor this magazine can recommendthem. The ones we've tested break.

Charlene Margaritas says that morale is very good at Mattel's electronics division, despite the lavoff of hundreds of employees and the announcement of \$100 million pre-tax

losses for the first six months of the year. "We're plugging along and doing just fine," reports Margaritas.

All of which brings us pretty much up-to-date.

As we near a second potentially catastrophic Christmas buying season, the picture isn't pretty for either company.

You can now buy an Odyssev2 for around fifty dollars, or just about cost. The strategy is to sacrifice profit on the unit and hope to pick it up by selling cartridges. That may help to clear out some inventory, but it won't revitalize Odyssev2.

Intellivision II can be found for between \$100-\$150, but with 2600s going for half that, and 2600 cartridges being remaindered all over the place for a pittance, Mattel will be lucky to make a dent in their own massive overstocks.

For the moment, this situation won't radically affect people who already own those two systems. To generate cashflow, both companies are going to keep releasing cartridges. Unfortunately, firms like Imagic and Coleco, with no vested interest in the consoles, will curtail the manufacture of compatible videogames. Imagic is redirecting its output to computergames, while Coleco is generating such huge profits with ColecoVision that they're going to make games which keep moving those units.

Any life which the Mattel and Odyssey units may have enjoyed, even in the face of the Coleco onslaught, will be further stymied by the burgeoning computer field. Even Coleco is certain to suffer in that battle. Low-cost computers can play videogames and perform business/housekeeping/financial/educational functions; even at twice the price, a Vic-20 is more appealing than a deadend Odyssey2 or Intellivision.

Thus, it's not difficult to imagine the coming demise of both units. We may see that happen as early as the beginning of next year. Cartridges will be released with less frequency as research and advertising dollars are funneled into new hardware/software.

Some consumers will be angry if this comes to pass, feeling that they've been stuck with obsolete equipment. They will be reluctant to buy again: not only computers,



Odyssey declined to release their Odyssey 3/Command Center in the United States, having seen higher-capability competitive units die in the market. Mattel, however, is gambling with Aquarius.



Master Strategy for fun & profit.

but video equipment (look at how the portable market has exploded, leaving tabletops in their dust; the Beta format, likewise, is falling before VHS), audio equipment (why purchase needle turntables when the laser stylus is just becoming available?), and even typewriters (it's pointless to pick up a Xerox typewriter with memory when printers are cheaper and work right off a computer).

Projection TVs, high-resolution television, computer-fueled automobiles, and so forth will also keep

those fields hopping.

Everything is increasingly electronics-related, and the nature of the field is continual change. The lesson of Odyssev and Intellivision is that manufacturers won't have staples, while consumers will have to readjust to product lifespans of just a few years. Add-ons like computer keyboards for the 2600, or 2600 modules for Intellivision may squeeze an extra season or two from certain products but, in the end, the old will have to make way for the new.

(Milton Bradley's Vectrex, which has remained pretty much in the background, may come from left field to point the way for a new generation of videogames: not only are the vector graphics state-of-theart in terms of clarity and animation, but the vertical breadth of the screen accurately reflects the popular arcade ratio. Not even the best computers can provide both.)

All of this is nothing new: it's a process called evolution. As ever, only the fittest will survive.

I/O-PINIONS

Editor's note: Following are excerpts of reviews of recent Odyssey and Intellivision games. The reviews, reprinted from previous issues, were written by E.C. Meade and Jim Clark. Though our dual reviewers have gained the reputation of being the toughest game reviewers in the business, these pieces are, for the most part, positive, even enthusiastic.

everchanging circumstances require players to remain constantly alert, and they must plan their strategies well in advance.

E.C. has said it all as far as the quality of Utopia is concerned, though I urge parents to get and play this game with their children. Not only is it fun, but it's a great way to learn about finances and responsibility to others.



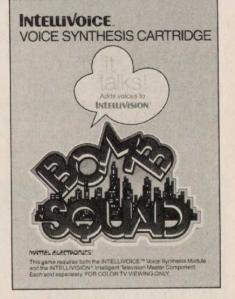
Utopia

E.C.M.: Utopia is one of the most original games on the market. Designed for the Intellivision console, it's not convoluted like Bomb Squad: the player has the freedom to make it as simple or as complex as he or she wished. You can build a militaristic society, heavy with forts; or you can try to create a civilization where there is an equal blend of arms and education. You can skip the crops and rely solely on fish, counting on the fickleness of the waters; or you can emphasize crops and hope that the storms are not too severe. Or you can do both.

In short, there is no end to playcombinations-which will, of course, constantly be modified because of what your opponent does.

Action fans will find nothing of interest here. But adults and all those interested in videogames which have boardgame-like dimension will revel in Utopia.

J.C.: This game is a marvel, like chess without the squares. The



Bomb Squad

E.C.M.: Bomb Squad is a topnotch game. You've got twenty minutes to remove and replace wiring components, put them back if you took out the wrong ones, go on to another circuit, and save the city. No question in my mind that the designer should get a medal: you actually feel the pressure thanks to the whirring clock, intimidating mass of circuitry, background sirens, and other ominous sounds.

But this game really does require a certain kind of player. It's like a pet skunk: not everyone can enjoy owning one. Bomb Squad requires an equal blend of logic and luck. But most of all it calls for patience. It also helps to have a mechanical bent, since you're going to spend most of your time with a tool "inhand."

In case you haven't gotten ahead of me, this cartridge put me to sleep. Yet, there's no disputing its quality; the audience for which it was designed will have a field day.

J.C.: This is a near-perfect videogame. The excitement is internalized: you don't have to keep on the lookout for dancing aliens or meandering dragons. It's you vs. the clock. In other words, the mind has got to work faster than the hand.

One aspect of this game which I found especially appealing is the "code screen," a twenty-square screen. As you repair circuit boards, they change the order in which the squares are lit. Referring to the instruction booklet tells you what this means and how it can be used to disarm the bomb posthaste.

This is the kind of game that Reactor should have been.

Tron: Solar Sailer

E.C.M.: Like *Bomb Squad*, I found this Intellivision game hideously complicated. You'll have to study the manual for a few hours, and experiment with the game for twice that time before you can play with any skill—and even then, you'll have mastered a game which is neither as challenging nor as fast as the superb *Tron: Deadly Discs*.

It's difficult to mount the necessary drive to win when the theme is reminiscent of Intellivision's Electric Company cartridges. The programmers should have used Tron's identity disc to batter away at the MCP.

On the plus-side. I've got to admit I was knocked-out by the way the programmers recreated Wendy Carlos' electronic score for the Solar Sailer sequence of the film. It's virtuoso work, though I wish I could say that about the rest of the game.

J.C.: E.C. understates the excellence of the audio: it's so good that you're liable to ignore the characters talking to you in this Intellivoice cartridge.

Tron: Solar Sailer is another of Intellivision's efforts to give consumers what neither Atari nor Coleco offers: longplaying, multifaceted games for adults. While I agree that this cartridge has its flaws, which E.C. well-summarized, the Intellivision owner will find it an unusual and interesting addition to her/his cartridge library. I wouldn't advise purchasing it at the expense of B-17 Bomber or Bomb Squad, but it's a solid game which requires patience and thought more than a quick trigger finger.



Shark! Shark!

J.C.: A positively *delightful* Intellivision game, certainly one of the finest cartridges for this system.

Shark! Shark! is a truly family game. That doesn't mean it's easy: it means that kids can play it, avoiding the shark, growing as far as they can; or that adults can go for the points, daring the predators and chasing the crustaceans, who are only vulnerable when they are descending in the water. The theme, though still of the only-the-strong-survive school, is not so graphically violent as to trouble young children.

One aspect of this cartridge which must be singled out are the sound effects. You'd think you were playing underwater, they are *that* good. Likewise, the animation of the fish and seaweed both is excellent. A "must" cartridge for Intellivision owners.

E.C.M.: No argument here. I've heard a few videogamers carp (no pun intended) that they would have had more fun playing a diver spearing the fish instead of making like the Incredible Mr. Limpet, but that's a matter of personal taste and a vicious streak.

This is actually a *sweet* game and, as Jim noted, a superb technical achievement. There's nothing quite like it on the market which, regrettably, is something I find myself saying less and less as time goes on.

Videogamers have but one means by which they can educate the game companies: avoid the derivative designs and gobble up the originals: games like Shark! Shark!



Sharp Shot

E.C.M.: Billed as a game for children, this is a handy introduction to videogaming. The quarterback, missile-firing sub, etc., are all controlled by the computer: all the novice has to do is fire when something is in range.

A useful primer to develop handeye coordination, as well as give little kids a videogame they can actually play.

J.C.: This is not just an "innocent" Reader's Digest version of four popular videogames.

When shooting is attached to some other aspect of gameplay, such as targeting, employing decoys, or stalking an enemy, there is at least suspense and a flimsy narrative to justify the action. Sharp Shot is a cartridge which caters to the lowest and least meaningful facet of videogaming—blowing objects away.

Intellivision obviously wants to nurture an audience for its action games. Fair enough. In that case they should have done as Starpath does and tag them onto another cartridge. To cater solely to the urge to fling and destroy things is beneath the relative sophistication of the Intellivision system.

Sorry for (I admit) the kneejerk reaction. But a cartridge like this only fuels the antivideogame forces who, wrongly, say that simply blasting things is our hobby's raison d'etre.

And, objectively speaking, none of the four abridgements is going to Continued on page 73

LASERDISC!

Dragon's Lair was not the first, and it's only the beginning.

By Bernhardt J. Hurwood

f's wild!" the arcade manager said to the customer.
"It's like a zoo in there! I couldn't even get near the machine there was such a crowd in front!
And the way they were pushing and shoving! I can imagine what it'll be like when we get it here next week."

The eager arcade manager was talking about a game which he had seen in a competitor's arcade; it was the first fully animated arcade game using a high resolution laserdisc.

The game, of course, was *Dragon's Lair*.

When it first became available last July, *Dragon's Lair* was an overnight sensation. According to Gary Goldman of Don Bluth Productions, the animation firm that filmed *Dragon's Lair*, "There was such a barrage of orders, they couldn't all be filled at once."

This arcade extravaganza starring Dirk the Daring was perhaps the first to make the general public aware of the unique interactive and graphic possibilities in laserdisc technology. But laserdisc research has been going on for some time, and arcade games are but one facet of the phenomenon. With laserdisc, users can visit distant cities, learn to relieve stress or change a transmission, solve a murder mystery, and



Only the luckiest, pluckiest players face the dragon. Some luck!

examine the life and works of Vincent Van Gogh.

MUDMEN, SLIME, AND SO ON.

The idea and the technology for *Dragon's Lair* were developed by Rick Dyer of Advanced Microcomputer Systems of Pomona, California. The animation was realized by Don Bluth Productions of Los Angeles. The game is manufactured and distributed by Cinematronics of

El Cajon, California. Due to its use of full animation, *Dragon's Lair* has all the visual advantages of a feature-length animated film. Thanks to the horizons opened up by interactive laservision, *Dragon's Lair* enables players to control the outcome of the story.

Essentially the story line is simple. Dirk the Daring, a brave but occasionally clumsy knight is on a quest to rescue beautiful Princess Daphne from the clutches of an evil,

ferocious dragon, who dwells in an immense castle fraught with terrors. During the course of his quest Dirk must pass through forty two rooms, each of which is infested with something more ghastly, dangerous, or disgusting than the last.

These horrors include the Robot Knight, the Flaming Sword, the Giant Chicken Foot, the Acid Creature, the Mudmen, the Magical Orb, the Sorcerer's Laboratory, as well as bats, skulls and slime, goblins, tilting floors, water creatures, and Heaven knows what else. If Dirk can successfully elude these lethal obstacles he will win the princess, if not he dies. Whether or not Dirk lives is strictly up to the player who has control over the hero's actions.

If you are really good, says Gary Goldman, theoretically you should be able to get through the whole game in six minutes if you don't die. Ironically, if you, or more accurately, your alter ego, Dirk the Daring, do get killed you buy a little more time, because you are allowed three to five deaths before you go down for the final count. It is not all that easy, though, and in play testing the average game lasts only about two minutes. This means increased profits for arcade operators. It also requires rapid decision making and good reflexes on the part of players.

The impact that the laserdisc has had on the industry is phenomenal, and hard to assess correctly at present. Says animator Don Bluth, "Our concept in this game will act as a catalyst for the development of countless new uses for video computers." And he is right on target. The home distribution rights to Dragon's Lair have already been bought by Coleco for two million dollars; the means of exploiting the game in a home version are at the moment unclear, though there are hints, as we will see later.

But meanwhile, Mylstar will soon be releasing M.A.C.H. 3, an aerial combat simulation. Sega should have Astron Belt in the arcades by the time this sees print. Laser Disc Computer Systems has a game in the works called Eon and the Time Tunnel, in which the player may travel through fantastic landscapes which include gloomy Welsh castles and futuristic cities. Microcomputer Systems and Cinematronics were so

certain that *Dragon's Lair* would be a smash that they went to work on their second project, *Space Ace*, before *Dragon's Lair* was ever shipped.

INDESTRUCTIBLE!

At the moment it is estimated that there are less than 100,000 laserdisc players in the entire country. They are still fairly expensive-\$600 to \$800 apiece, and the discs run from the \$30 range on up. For the moment there are only three players

on the market from Pioneer, Magnavox, and Sylvania, the latter two brands belonging to North American Philips. Purchasers should be aware that not all laserdisc units have interactive capabilities.

The principal use to which players are being put for the time being is the showing of feature films, and the market must be good. According to Pioneer Video President and CEO, Ken Kai, their warranty card studies indicate that the typical





Players who withstand the assault of the vicious Chicken Foot . . .

videodisc player purchaser may buy as many as thirty discs a year. He said, "We now have over 450 available laser video discs to offer and that number is being increased by twenty five to forty new titles every month."

A videodisc is a plastic disc, thirty centimeters in diameter, which contains 54,000 data tracks per side. The tracks are arranged in a continuous spiral; the information is arranged from the inner circumference of the disc, proceeding

to the border. Each data track represents one frame of action.

In each data track there are myriad microscopic depressions, or pits, etched in the surface. The laser beam passes over the disc, reads the digital information contained in the depressions, and passes the information on to a complex of beam splitters and mirrors, plates, lenses and much more before it reaches the screen to dazzle the eye of the beholder.

The surface of the discs are

coated with aluminum oxide and a thin plastic. They are virtually indestructible. You can sit on them, handle them with bare fingers, or spill drinks on them with no ill effects. The sound and picture quality is superb. Due to the lack of friction or contact with anything (including the laserbeam arm), freeze frames can be held indefinitely. Also possible is slow and rapid scanning. Each data track is numbered; the speed at which any one frame can be reached is limited only by the controlling mechanism. For the arcade game, the interac-

tive laserdisc presents only one minor problem. There is not the kind of rapid access that can be achieved with a microprocessor; the laserdisc player goes only so fast and no faster.

A solution to the problem of speeding up the action has been reached by a company called Laser Disc Computer Systems, Inc. They have worked out a technique using two laserdisc players in tandem. When one shows the action appearing on the screen, the other scans ahead so that when a player makes a move the machine can display whatever sequence may have been chosen without a pause to break the flow of the action.

A similar problem in home laserdisc units is being anticipated, and solved. Any laserdisc player with an RS 232C port can be hooked up to a computer, thereby giving the player the same sort of capability as laserdisc games in arcades.

According to John Messerschmitt of North American Philips, every major manufacturer in the field will have come up with at least two games by now, which makes the home market something very much for them to aim their sights on. Said Messerschmitt, "We believe that arcade games will be moving into the home because of the video interactive laser system with instant access." This, of course, is a marriage between the laserdisc player and the personal computer.

HARDBOILED

Applications of laserdisc other than arcade action have already been available for some time. One of the most intriguing, literally, is the Mystery Disc series developed by Vidmax of Cincinnati and New





. . . must eventually face the reptilian wrath of the Lizard King.







The Aspen Map. (photos courtesy of Andrew Lippman & The Architecture Machine Group at M.I.T.)

York.

Formed in 1980. Vidmax was the corporate offspring of two former college friends, Bob Robbins of Cincinnati and Erik Nowlin of New York. Firm believers in the future of interactive laservision. Nowlin and Robbins decided to do something about it, but something that was original. They mentioned the idea to a friend, playwright Hy Conrad of Modesto, California, who among other things was a mystery fan from way back. Conrad suggested that they construct an interactive game around the classic whodunit theme; he wound up with the task of writing the script. The result was Mystery Disc # 1, Murder, Anyone?

It was an immediate success. Here was a game which gave players the kind of entertainment that they would derive from seeing a film, but with an exciting extra ingredient. Here they were afforded the opportunity to participate in the outcome, making them a part of the drama. Not only did the audience love it, it got rave reviews and three awards. Video Review magazine awarded Murder, Anyone? three of their Vera awards for excellence in home video: Best Video, Best Director (Phillip Goodman) and Best Interactive Video.

There was only one thing to do: produce a sequel. Before long production was underway on Mystery Disc # 2, Many Roads to Murder. Private Eye Stew Cavanaugh and his assistant, Maxine Blair, were off and running on their second case.

Stew and Maxine are characters who were created in the great tradition of the 1930s. They look, talk, and act like the figures who populated the works of Hammett, Chandler et al. One of those guys who grew up as a tough kid on the streets of New York and somehow wound up graduating from Harvard,

Stew is equally at home in the company of hoods, cops, or the high living denizens of the social register. Maxine, too, is no ordinary secretary. A former editor of *Vanity Fair*, she is a sophisticate who has been around the block a few times.

Many Roads to Murder involves the kind of dramatis personae that Agatha Christie might have dreamed up. Granville Lowe, Bill Donovan, and Lenore Krieger are upper crust types out of Stew's Harvard days. Lowe and Donovan are old college chums, and Lenore Krieger is a hard, unsmiling woman who has no use for the three men because back at Harvard they were involved in a boyish prank that cost her brother his life. Tracey Lowe is Granville's kid sister. There is a visible friction between her and Granville because he is her guardian, and as such, controls the purse strings. Sabrina Todd is a mysterious woman who may or may not have a secret. Percy Wilder is an aristocratic mooch, an inventor and former explorer. Marcus Sandor is an African who has only been in the United States for about three months. He is a waiter at the Explorer's Club and also at a funky Harlem jazz joint, where sultry Juna Jumael is the resident thrush.

The player is introduced first to



Murderer's moniker, motive & means.

Granville Lowe, who comes to his old friend Stew Cavanaugh to investigate the disappearance of a valuable brooch. From that point on it is up to the player. Depending upon which direction is taken the rest of the characters are introduced in different contexts. Although each character in the cast has the same name, and essentially the same relationship to the others, there are differences which depend upon the story line chosen by the player. There are different murderers, different victims, different motives, and totally different situations. The plot possibilities include such diverse topics as espionage, patent theft, drugs, and of course, money. It is great fun, and the beauty of it all is that there are sixteen different possible solutions. Unlike arcade games where speed is essential, the Vidmax Mystery Discs are more cerebral. There is time to make choices, and rapid reflexes are not necessary.

Regardless of which story line any player chooses, there eventually comes a point where each player must determine three essential elements: the murderer, the method, and the motive. There are plenty of clues which employ the kind of gimmicks that were popular in movie whodunits of the thirties: graphics, still photos, newspaper clips, excerpts from Stew Cavanaugh's diary, flashbacks, and closeups of objects germane to the solution.

Thanks to the versatility of cinematic techniques and the laser-disc system, all of these elements can be neatly integrated into a tight, dramatic package, or sixteen packages if you will. One technique will serve as an example.

On one story line, you see Stew, Maxine, and Granville sitting at a Continued on page 52

Videogame Role-Playing!

Bring new life to your videogame system with a role-playing tournament.

By Robert J. Sodaro with Georgene Muller

R ole playing games are games in which each player takes on the persona of an imaginary character, and then plays the game as that character would. These games are played with approximately four to ten people. They deal with fantasy, science fiction, and adventure themes. The most popular of the role playing games is called *Dungeons and Dragons* (D&D).

In D&D, the object of the game is to survive, as there are no rules as such. Nobody wins and nobody loses. As a matter of fact, there is no "correct" way to play the game. The D&D players handbook states that all of the rules provided can be altered to suit the wants and desires of the players. To be sure, play is standardized, but anything goes.

Each game has a Dungeon Master (DM) who directs the play of the game. He or she lays out the dungeon, controls the play, and interprets the rules. It is the DM's function to inform the players what each room that they enter is like. The DM also informs the players when they come across dragons, demons and other assorted monsters which the player must



A navigation exercise such as Skyjinks can be used to simulate Starbase docking procedures.

fight. In addition to slaying dragons, there are treasures to be found and riches to be had for players in a D&D adventure.

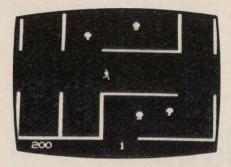
How exactly does all of this relate to videogaming? If one were to apply the concepts behind D&D to the art of videogaming, you could set up your games in such a way that they become an adventure, and then invite all of your friends over to play.

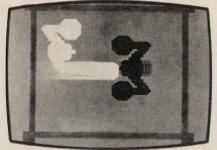
Before you do this, though, a few preparations must be made, the first and most important of them being that you have a variety of games at your disposal. We have chosen thirty VCS games in three separate

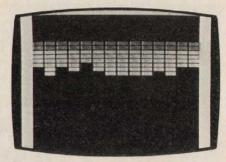
categories that will fill the bill. These categories are space battles, atmosphere attacks, and ground warfare & rescue (see list). To be sure, you need not have all thirty games, nor even the ones mentioned. You need not have a VCS; any game system will do. Remember, these are all just suggestions. If you are able to think of better or newer games to use, by all means use them. Look at the games you own and devise a narrative, an adventure.

The scenario of this particular game is that you and your friends are cadets in the service of the Space Patrol. Your adventure is just another routine run of your sector of space. The person who is setting the game up will become the Games Master, or the Galactic Overlord (GO). The GO will map out a quadrant of space, complete with asteroid belts, neutral zones, hostile sectors (where enemy aliens or space pirates reside), and Starbases for refueling. The GO should also remember to include uncharted sectors as well as habitable planets where various colonies of the Confederation have settled.

In addition to your 2600 and







The murderous and insidious Krylon warmonger, Dufus the Destroyer, must be put out of action once and for all. Fight your way through Dufus' palace guards (Berzerk), confront Dufus face to face and defeat him (Boxing) and then escape from the palace before the guards can overtake you (Super Breakout).

game cartridges, you will also need graph paper, pencils, and a pair of multi-sided dice of the type that are used in D&D. It will probably be necessary to utilize a twenty or thirty sided set. The graph paper will be used by the GO to plot out a map of the quadrant of space that the Space Cadets (SC) are patrolling. Another piece of graph paper will be used for the Cadets so that they will be able to follow the action.

Your map should be marked out in grids with numbers along the top and letters along the side. This makes for a 2-D game, while space is 3-D, but compromises must be made. Allow enough area for a number of encounters. Games that are more time-consuming should be granted more space. As the GO, your map should be kept out of view of the cadets; they will never quite know what to expect.

Homeworld should be marked on their maps, however, so as to give them a reference point. Perhaps even a portion of known space could be included on the Cadets' map. The adventure itself could last for as long or as short a time as the SCs and the GO decide. Patrols could begin and end at homeworld, they could quest to the other side of the quadrant, or just patrol around, keeping the peace.

The SCs will need to elect a leader, or Flight Lieutenant (FL), who will act as the spokesman for the group and deal directly with the GO. One player should be responsible for mapping out the sectors of space through which the fleet patrols. This person will be called the Chartsman. It is also up to the Chartsman to map out the various worlds that are visited.

Before beginning the patrol each player must choose what type of

ship (s)he wants to pilot. All ships are single person fighters, but each serves a different function in the course of the Patrol. The various types of ships are as follows:

S-14 Scout: A reconnaissance ship. Light armor and extra fuel tanks are this bird's features. It is the fastest ship in the fleet, though its lighter shielding makes it more prone to damage. Its sleek design and high-tech propulsion units come in handy, as it is usually within striking distance of a starbase and supplies.

Starjammer: This ship is capable of recharging its atomic generated plasma fuel by the solar winds in deep space. Therefore it will virtually never run out of power. However it is, generally speaking, a slower ship than its companions. It also carries extra supplies and equipment for the other members of the flight. This is a medium class ship.

Ion Fighter: This is the most powerful of the ships in the fleet: It has the best combination of shielding and firepower. Most SC Patrol ships are Ion Fighters. It has extensive range and heavy shielding, as well as awesome firepower. It has been the skill and daring of the SCs in the Ion Fighters that have kept the peace in the galaxy for the last thousand years.

Dreadnaught: While this ship actually has superior firepower and shielding than the lon Fighter, it has a number of disadvantages. It is a slower ship, and its heavy shielding and bigger guns cause it to use fuel at a faster rate; thus, it has a lower fuel rating. However, when the fighting becomes intense, the Dreadnaughts are called in.

Skimmers: These sleek jobs are medium class ships with good firepower and shielding as well as a high rating for fuel. Skimmers are best used in very close quarters, such as planetary systems, and airto-ground attacks. Though not as powerful as the lon Fighter, they are a very important asset to the SC Patrol.

Cruiser: This is the best multiple class ship in the fleet. Thus it is usually, though not necessarily, considered to be the FL's ship. Many FLs prefer the swifter Ion Fighter or the heavier Dreadnaught. Some FLs prefer to lead each patrol by commanding from a scout.

The ratings for all these ships are contained in the accompanying graph.

All of these ships should be named by the SCs, so that during the course of the patrol it will be easier to keep track of them. Each of the SCs should take a character name as well, to really get in the mood of roleplaying. Cadets could make up entire histories of themselves. The Cadets do not necessarily have to be earthlings. Whatever the player feels (s)he needs to get involved in the action of the game is encouraged, including gamepieces and character profiles.

During the play of the game it is not necessary for each SC to play each game cartridge; it would be ludicrous to send a scout ship up against one of the powerful Star Destroyers in *Star Master*. This does not rule out the possibility that a scout (or any other ship) might accidentally blunder across the path of superior numbers of murderous aliens. The shrewd GO will include ambushes, impossible obstacles, no-win situations.

Each encounter eats up one or more units of fuel, whether or not the SC participated in the encounter. If, however, the player actually engages the enemy (or natural space hazard) fuel is used faster. If the SC is not actually involved in the engagement only one unit of fuel is used; involved SCs use a minimum of two. If, while they are engaging the enemy, they should lose a life, they also lose an extra unit of fuel for each life that was lost. Further, if they should lose lives in the game, they will likewise lose one extra unit of firepower and shielding.

Therefore, even though the Scoutship "Planetfall" does not fight the Krylons in Star Raiders, she still forfeits one unit of fuel. Her shield and firepower ratings will remain the same, for she did not use either. The Ion Fighter "Excalibur" did fight the Krylons and survived the two minute encounter without the loss of life. "Excalibur" is thus down two units of fuel, as well as one unit each of firepower and shields.

During the engagement the Cruiser "Starshine" did not fare so well. She lost two lives to the Krylons, and therefore is down four units of fuel (one for the encounter, one for engaging the enemy, and one each for each of the two lost lives). In addition she is out three units of firepower and shields (one each for engaging the enemy, and one for each lost life).

If the Patrol wishes to pass through a sector but not stop, each ship will only use up one quarter of a unit of fuel. It is necessary to keep an eye on your fuel consumption at all times, so that you do not run out of fuel while you are too far from a Starbase to attempt docking. The Skimmer "Thor" is six sectors away from Starbase 11, but it only has one and a quarter units of fuel. Thus it will need to be towed through the last sector to arrive at the

When towing, the powered ship uses an extra one quarter unit of fuel per sector. That is to say, while the Cruiser "Avalon" is towing the Skimmer "Lady Luck" the "Avalon" is using a quarter unit of fuel for herself and a quarter unit of fuel for the "Lady Luck". Should the "Avalon" stop in any sector she will use one and a quarter units of fuel.

Only Starjammers and Cruisers have the ability to tow ships, except for the Scout, which anyone can tow. This is due to the lack of heavy shielding on the Scout. A Dreadnaught must be towed by two ships, either two Cruisers, two Starjammers, or a 'Jammer and a Cruiser. If only one of these ships is available, then the single ship that does the towing does so at the cost of a full unit of fuel per sector; two, if they stop in any sector.

Since 'Jammers draw power from the stars they will never run out of power. They recharge their fuel at a half a unit for every sector they stop in. It does not matter how long they might stay in that sector, they still only acquire a half of a unit of fuel.

During towing they do not gain any fuel but they do not lose any either. An exception: if they are towing a Dreadnaught by themselves. Here they would actually lose a quarter of a unit of fuel for each sector they pass through. When not towing and passing through a sector without stopping, they will pick up only a quarter of a unit of fuel.

If any ship, or ships, encounter an alien while towing and are forced to do battle they will lose fuel accordingly. They will lose the normal amount of fuel while engaging the enemy, as well as what they are losing by towing the disabled ship. The disabled ship will also lose shielding units as it too is involved in the engagement.

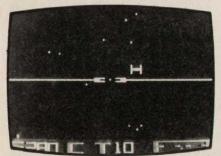
An SC never has to engage an enemy ship, but if they turn and run they will automatically lose a half of a unit of shielding. The only exception to this is if there is another ship in the sector who does engage the enemy. If you are towing and flee, and there is no other ship to protect your retreat, both you and your passenger ship will lose a half of a shielding unit.

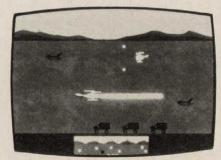
An alternative to towing is transference. 'Jammers are the only SC ship that are capable of transference. Not only fuel can be transferred, but shield and firepower units as well. There is a price, though, for this service. For every full unit that is passed, a quarter of it is lost in the transfer. Also, a 'Jammer is only able to transfer a maximum of half of its current levels; they need to resupply before doing this again.

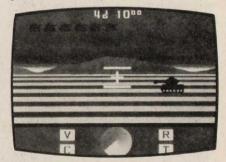
The scoutship "Endeavor" is stranded with no fuel or shields, and only a half of a unit of firepower. The 'Jammer "Maggie O" has eight units of firepower, five units of shields, and 121/2 units of fuel. This means that she is able to transfer as much as 4U/FP, 21/2U/S and 61/2U/F. Since transfer is always charged to the receiving ship the "Endeavor" will only receive 3U/FP, 2U/S and 5U/F. Transference does not always have to be for all supplies. The "Maggie O" could have just transferred fuel, and let the "Endeavor" run for cover, hoping that it stays out of trouble.

When any ship docks at a starbase all of their supplies are fully restored. Ships are not able to overstock, that is, carry more than their full rating of supplies. Ships are not charged for fuel when leaving a Starbase sector, but they do need the full amount when entering. For example, the Dreadnaught "Star Killer" is four sectors away from Starbase 9, therefore it needs at least one full unit of fuel to arrive. If it is at the Starbase, and wishes to travel four sectors away, "Star Killer" will only use up three quarters of a unit of fuel.

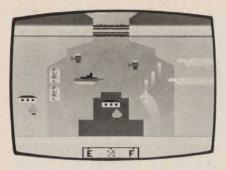
Occasionally you will need to land your craft and fight enemies on the

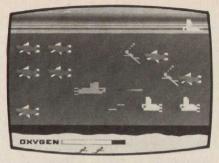






Vital supplies to Confederation settlers on Bozocron Two are being destroyed. Blast your way through the Krylon space armada (Star Raiders), skim the surface of the planet and protect the convoy (Chopper Command), then seal the perimeter with vigilant search and destroy from the ground (Robot Tank).







A Confederation outpost on Omigod Nine desperately needs manpower, but a troop ship has been torpedoed by Krylon seaships. Fight your way across enemy lines (River Raid) to the Confederation sub base. Once in your sub, rescue the helpless troops while fighting off sharks and Krylons (Seaquest) and then fortify the outpost and fight off the vicious Krylon attack (Atlantis).

ground. When the need arises you will be using an extra half unit of fuel to land, and another half unit to take off. Therefore, to enter a sector, land, and take off again you will need two units of fuel. Sometimes fuel and supplies can be acquired on a planet. The GO will inform the SCs when this is possible. If the planet in question is under attack, the SCs are only able to stock up after the invaders have been driven off.

When you receive a distress call from a planet and decide to land, the entire flight need not land. All of those who do land do have to participate in whatever engagement takes place. On the surface, and outside of their ships, all of the Cadets are equal. They therefore all have the same number of hit points (HP). For every life that is lost they lose one HP, for every two minute encounter where they lose no lives one HP is added. When restocking on supplies HPs are returned to normal if a resupply is required.

A SC who has no more HP left is dead. The only exception is if one of the ships on the ground is a Cruiser. Cruisers are fully stocked as medical ships, and thus a player may be able to be revived, but only once during each patrol run. To be revived, the dead player must be carried to the Cruiser, and placed in the resuscitator. This done, it will take one turn (that the dead player must sit out) while (s)he is revived. During this time the Cruiser is planetbound, and the rest of the fleet must remain in orbit. This means that whatever game cartridges that were just played, must be played all over again. Also, one unit of fuel (charged to the dead player's ship) is used in the revival process.

The Patrol fleet will begin each

patrol run at Homeworld. As the patrol begins the FL will inform the GO something to the effect, "We are now leaving Homeworld, and traveling to Sector E3." The GO will then inform the FL that they have blundered into an asteroid field, and must shoot their way out. At this time the GO will plug in *Asteroids*, and each member of the fleet plays.

Players determine the level of cartridge gameplay by rolling the dice. Whatever number comes up that is the number of the game. (This is the reason for the D&D dice, as most of the games listed have more than just six versions.) On cartridges with one or two player options, play singly. Asteroids lists sixty six different games, but only thirty three are one-player games. Thus the SC must keep rolling the die until (s)he comes up with a number thirty three or less. If there are only two player games on the cartridge, as in Combat, the GO will assume the role of the enemy.

A time limit of two minutes (as stated earlier) will be imposed on all games. In this manner, you will be able to prevent the problem of being able to go out for a pizza and a show while one gamer plays the same game. This two minute rule should be strictly enforced. If two minutes seems to be too long and the patrol begins to drag, reduce the time to one minute.

To return to our heroes in the asteroid field, once each member has made his/her run through the field and the scores are tallied, the FL could then inform the GO that they are moving on. "We are now heading into sector F4." When they enter F4 the GO might tell the FL that there is a squad of renegade space pirates in the area and they

are staging a raid on the planet Euforex.

The FL must then deploy his/her ships to best meet the pirates in force. Before arriving at Euforex the flight encounters the enemy ships. The GO then plugs in *Star Master* for the battle. Realizing that Euforex is an important mining colony to the Confederation the FL sends three ships on ahead to defend the planet. Meanwhile (s)he and four others engage the enemy, and his/her two scouts deploy to the surrounding sectors to discover if there are any more enemy ships.

Two of the ships that were sent to Euforex engage the pirates in the air (Defender), while the third ship lands and routes out the land forces (Robot Tank). The two scout ships discover that the surrounding sectors are clear, and that a nearby planet, Haller's Gate, has supplies. After all engagements are over, the entire fleet makes planetfall on Haller's Gate, and stocks up. They also celebrate their victory at the local tavern, drinking and having a good time.

During their celebration the GO informs them that one of the space pirates' allies has come to their aide, and are now attempting to invade Haller's Gate. The Cadets rush to their ships to meet them in the sky over the planet, but it is too late, as the invasion has already begun. Thus they must defend Haller's Gate with ground-to-sky missiles (Space Invaders). Perhaps the Cadets drank or ate too much in celebrating. Difficulty levels or game-time could be adjusted accordingly.

It is in this manner that the Patrol moves from one adventure to another. This type of gaming allows

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conquering

MOONSVVEEPER

BY Mike Sittnick

escue games are very hot this vear, as was noted in the 'Ouesting Games" article in VCI's October issue. Moonsweeper, from Imagic for the Atari 2600, is a rescue game. A very graphic rescue game. Imagic's clever animation adds a suspenseful touch to this game.

The folk to be rescued (marooned miners) appear on the horizon as you skim over the surface of a moon. These unfortunates wave their arms hopefully at you. The problem is that there are also a number of bobbing and weaving alien enemies to contend with. In the heat of gameplay, the player can mistakenly fire a salvo at one of the innocent miners and . . . KBOOM! It's almost as if they are wearing grenade belts or some such . . . they don't just fall and die with a Q*bertlike wail: they explode! These grotesque pyrotechnics serve as an incentive to the player to be merciful, to be careful, to be skillful.

THE GAME

The pilot flies his ship, the U.S.S. Moonsweeper, around the sun of star quadrant Jupiter2. On the first screen the captain must land on a moon while avoiding aurora flares, photon torches, and space bullets. When the pilot lands on the moon, the action on the second screen takes place.

As the terrain scrolls right at him/her, Buck Rogers/Turbo style, the protagonist must destroy or avoid towers, hovering surface destroyers, and shots from the surface destroyers. In addition, (s)he has a challenge that Buck Rogers never encountered. The ship must pick up six stranded miners while avoiding the aforementioned obstacles. Rescue is the primary goal; destroying aliens is secondary.

The accelerator rings necessary for take-off do not appear until six miners are rescued. Ignore the poor stranded devils, and the pilot will not be able to leave the moon. When the miner quota is complete, the ship will be full; no more miners can be collected. At this point the flight rings appear. Fly cleanly at top speed through two or three of them in a row and the pilot-that's you-will zoom into space, back where you started from. Pick another moon and rescue more

miners until you run out of ships.

SECRETS OF THE SUN-SCREEN

This has nothing to do with sunbathing; rather, a sparkling sun oversees the action, but, oddly, sheds no light. This screen should be dealt with as quickly as possible.

There are three kinds of space debris, contact with which can destroy you. In an emergency, activate your protective forcefield by pulling back on the joystick while pressing the fire button. You have unlimited use of the forcefield, but you cannot land on a moon while it is activated. Moreover, using the forcefield costs precious points. At the beginning of the game, keep the forcefield on until a moon that you want to land on comes along. You have nothing to lose because you have no points to take away. Do not be afraid to use your forcefield at other times either; it is better to lose



Moon-bound mission of mercy.

a few points than an entire ship.

Often, you can avoid using the

forcefield by anticipating the orbit of the space objects. By thrusting, you can make the orbit steeper in relation to your ship, reducing the chance of a collision. It is also a good idea to monitor the degree of orbit because the space objects sometimes go off the bottom of the screen and appear again on the opposite side, in order to stay true to its orbit. Thrusting can help you avoid these objects, if necessary, but staying towards the middle

reduces your chances of being hit by surprise without speeding up the moons that you are trying to land

LOOKING FOR THE **MOONSHINE**

The object of the "sun screen" is to land on a moon by touching it

with your ship. To position yourself to land on a moon, scoot slightly but quickly left or right of the center of the screen. Moons rarely orbit through the exact middle, and the ship doesn't have enough room or reaction time in a corner should a deadly flare, torch, or bullet be aimed at it.

There are four different moon types, differentiated by color. Blue moons are the easiest, followed by green, yellow, and finally the impossible red moons. "No big deal. I'll just land on blue moons," you say? It isn't that easy. The harder moons are worth more points. Moreover, as the game continues, all of the moons become more difficult. It is a good idea to land on yellow and green moons early, when they are more easily handled, and blue moons when the game is at maximum speed. Red moons are extremely difficult and are not worth the risk, even though they are worth the most points (Miners trapped on these satellites can kiss their moons good-bye.)

ONCE IN A BLUE (GREEN, YELLOW, OR RED) MOON

Once your spaceship lands on the moon, decelerate to the slowest speed. To shoot at ground targets such as towers, push the joystick up, or at an "up-diagonal" for a diagonal shot. To shoot at targets in the sky, a satellite for instance, pull back on the joystick and fire. You cannot shoot diagonally at sky targets. Keep in mind that aiming the ship's guns also affects the speed of the ship. Pushing the joystick forward causes the ship to accelerate while pulling it back to shoot at the sky causes the brakes to be applied.

Do not waste time shooting at the ground towers. They are not worth very many points and they can be useful. Surface destroyers are released by the launcher ship in the sky. Although you can often shoot the surface destroyers as they are being hatched by the launcher ship, the launcher ship will sometimes decide to continue dropping the surface destroyers until the frustrated pilot eventually misses.

Fortunately, surface destroyers are fairly predictable. Change your rate of speed often, move a little from side to side, and contact with

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Atari Vs. Coleco Rehashed

I compared ColecoVision to the Atari 5200 and I agree with your published judgement: the 5200 is the system of choice for the seasoned arcade buff! In your August issue you clearly state what no other magazine has: the 5200 is superior in terms of quality of design, construction, and operation of its microprocessor.

James Balkes Birmingham, AL

I was shocked at reading all those anti-5200 letters in your September issue, especially the ones with false information.

True. ColecoVision has outsold the 5200, for these reasons: it was released sooner, it was better publicized, it cost less, and at the time it had more games.

But . .

The 5200 console is more convenient because everything is stored out of sight. The controllers don't self-center because it eases the play of games like Super Breakout and Missile Command. To compare arcade adaptations is ludicrous: you're comparing games that are in release (Atari) to games that are promised (Coleco). Price? I can find the 5200 for \$129 easily.

Julian Velasco Perth Amboy, NJ

The colors of the 5200 graphics are washed out compared to Coleco's (I own both). There is no comparison. Coleco crushed Atari in this category. Coleco has three times the memory; it provides far sharper resolution. As to price, ColecoVision is on the average thirty dollars cheaper. As to controls, the controls on the 5200 are the pits. I have come close to smashing my 5200 on account of its controls. The Coleco controls are far more precise. The firing buttons are a joy. The 5200's buttons stick like mad.

My advice: take back your 5200s, people; it's pitiful. I am selling mine very soon.

By the way, your magazine is among the best. The pictures of the games simply cannot be found

anywhere else.

Nicholas Calleo Brooklyn, NY

I cannot believe what some of your readers say about the 5200! Half of it is untrue and the other half can be accounted for here:

Price. At Toys 'R' Us, the 5200 sells for \$159 while ColecoVision costs \$169.

Consoles. The 5200 has a sleek and easily cleanable surface while players with a ColecoVision have to cope with mounds of dust getting into all those nooks and crannies.

Controls. Any system's controls can be gotten used to. If not, Coleco owners can buy different controls, those with a 5200 can buy "joy clips" or wait for Atari's promised new sticks.

Games. Atari has instant classics,

adaptations of the best arcade hits.

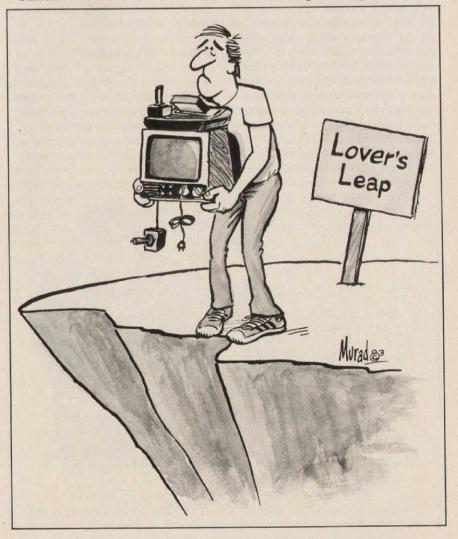
Modules. Coleco has the lead here but Atari is coming on strong. Their Trak-ball is excellent! Voice games will soon be in release . . . without hardware! The VCS adaptor is sure to be a smash! And with all the time they are taking on it, their computer for the 5200 is sure to best Adam.

From my point of view, ColecoVision is nobody's vision.

> Ben Fischler New York, NY

I own an Atari VCS. I was about to buy a ColecoVision when I became aware of the 5200. Now I am unsure as to which I should buy. I thought I would share some of the thoughts that have run through my mind as I try to make a decision.

The existing Coleco games are



lively and colorful while the Atari graphics are dark and chilling. Still, Atari has proven that they can produce lively cartoon graphics in games like Kangaroo. Coleco often adapts a game just because it was an arcade game. Sometimes these are copies of Atari games (Mr. Do/Dig Dug; Slither/Centipede).

When it comes to expandability, Coleco is the winner. All of their modules are good, but let's face it: there are only so many ways they can go. At this rate, we'll soon be seeing "Expansion Module #26: the ColecoVision Popcorn Popper!"

Coleco is currently using every part of their system for games, so when they need something new, they make an expansion module. The 5200 still has ports and components that they haven't used yet. With those unused secrets, I expect that the 5200 will last longer than ColecoVision.

> Joseph Anstett Hillside, NJ

A Lady's Place

I'd like to give Donald Smith a pat on the back for raising some valid points in the Input section in your August issue. You guys should take a good hard look at your reviewers, as well as the format: dual reviewing might be interestingly different, but it tends to become a bit confusing and muddled. As for Mme. Meade, maybe a lady's place is not

reviewing cartridges. (Oops! I don't think I should have said that!)

Secondly, I agree wholeheartedly with Jeff Silva: Atari should make games for other systems. However, Coleco and Atari are in a pretty vicious battle. With all of its expansion modules, I would say that Coleco has the better system. Atari has got the licenses to alot of great games; but if Atari were to make versions for ColecoVision (which would be good if not better than their own), many people (myself included) would not think twice about buying ColecoVision over Atari. This would virtually make the supersystem obsolete.

> Robin Grav Winnipeg, Canada

The dual reviewer format seems to be growing in popularity; a number of videogame and computer magazines and newspapers are now adopting that arrangement. As far as Atari marketing games for other systems, see this issue's Eye On section for Dave Ruckert's announcement of AtariSoft.

Smear 'Em Again

I completely agree with the item in Nybbles in the September issue: the first thing I thought when I saw the 2600 and Intellivision versions of Donkey Kong was that the graphics were the equivalent of Pong! The Intellivision version is

purposely faded and flawed. (I made th mistake of buying it before seeing it.) Coleco, are you listening? All your cartridges are lousy. I would not pay two cents for them, let alone thirty two bucks!

> Dave Hartl T.C. MI

And After the Popcorn Popper. . .

I recently read that Coleco had purchased the rights to create a home version Dragon's Lair. How is this possible? Dragon's Lair is a laserdisc game. Will they try to conform it to normal videogame graphics or will they be coming out with a laserdisc expansion module?

> Gordon K. Wilson Phoenix, AR

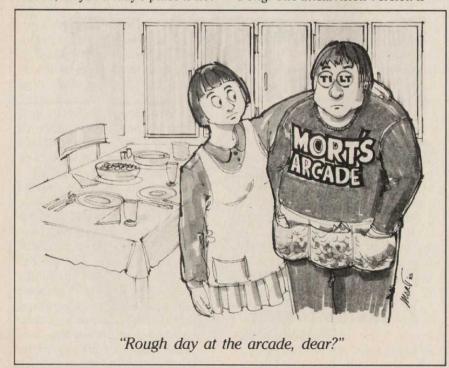
It is true that Coleco bought the home rights to that splendid game. We don't know what they plan to do with those rights. Coleco is not talking, so it is up to readers and editors alike to speculate. You've already indicated a couple of their options. Gordon. They will most likely adapt the game to normal raster graphics. Otherwise, they would have to produce either an interface to existing laserdisc players or their own laserdisc expansion module. Either of these last two options would result in a player spending nearly a thousand dollars to play one existing game. Of course they could be planning to adapt it to the digital datapack format, hoping that Dirk the Daring will lure players to the Adam computer. This is all pure speculation.

Y Me?

I have both a Bally Arcade and a ColecoVision. I was wondering if there was a way to connect them both to my TV. To constantly switch back and forth between them is a pain, and purchasing one of those expensive switching boxes would be a bit much.

> Robert W. Dahl Racine, WI

Bring your TV/Game switch box down to your local audio store and see if they can match the plug. They may have what is called a "Y" plug. This will enable you to plug both units in and play only the one you wish to.



PREVIEW

Continued from page 18 addition to Pigs in Space and Sorcerer's Apprentice, they've given us another smash-hit "juvenile."

Sophisticates are probably going to slam me for calling this the finest dogfight game on the market, but so it is. The rapidfire element is cathartic; even so, the enemy planes are extremely difficult to tag. So are the foodstuffs which fall from the sky.

What's more, the charm of the protagonist makes those trying to get him seem more dastardly.

I also want to single out the animation of the enemy biplanes. It's superb, the vehicles swooping and looping like a scene from The Blue Max.

There are kiddie levels and adult levels; this is a must-have game for everyone.

Graphics: A Gameplay: A

J.C.: I'm not so sure adults are going to have a great time with this one. The biggest problem is that the Doghouse is too big. That's necessary to keep the kids happy, and in order to allow players to see the bullet holes and thus keep track of their status. However, it limits mobility in the extreme. Though Snoopy can turn to the left and right, he can only ascend and descend within a very narrow window.

I feel heartless for saving anything bad about the ole comic strip favorite. However, I'd feel worse if you plunked down a sawbuck and change expecting action comparable to Looping or Time Pilot.

I mean really, E.C. The best dogfight game? Maybe if you take "dogfight" literally.

What you're getting in Snoopy and the Red Baron is a kid's game which adults will get a kick out of, nothing more.

Graphics: B Gameplay: C

MARIO BROTHERS Atari for 2600 **Object**

ario-hero of Donkey Kong and Donkey Kong, Jr.-and his brother Luigi must clear four levels of creatures who come slithering from drainpipes. The extermination is accomplished by jumping one of the Brothers to the level beneath a creature and hopping up,

thus propelling his head against the creeping pipedweller's level. This paralyzes the creature, after which the Brother jumps to that level and kicks the helpless monster into oblivion.

Of course, Mario and/or Luigi must be careful not to bump into any of the other creatures roaming that level, or it is the mustachioed hero who will perish. Then, too, our heroes must be quick, since their adversaries do not remain comatose forever.

Some creatures require more than one bop to paralyze; others hop up and down and can only be stunned when they are touching the floor.

For one or two players.

E.C.M.: When I first saw Mario Brothers in the arcades, I thought, "Well, if you're gonna do a spinoff, this is better than Mrs. Donkey Kong." I didn't feel quite so ripped off as when Bally ran the Pac-Man theme deep, deep into the ground with all the clones. I mean, after Ms. Pac-Man, who cared any more?

Unfortunately, the catch-22 was that when I played Mario Brothers, I found myself missing the big lug of a gorilla. Without his looming presence, this game is lighter-thanair. No atmosphere, no characterization, and only mildly interesting gameplay.

All those faults are magnified in the home version.

Once you've jumped Donkey Kong, Jr., Mario's a cinch. Once you've hopped Donkey Kong's barrels, leaping the unstunned creatures is easy. Once you've bought this game, you'll realize that it was hype-at-work, not any other must-have qualities.

Withal, the animation of Mario

and Luigi deserves to be singled out, particularly the way their heels dig in when you hit the brakes. It's as though Atari realized the game's appeal lies, in good part, on the charm of the two Brothers.

Graphics: C Gameplay: C-

J.C.: While the similar nature of Mario Brothers and what has gone before cannot be denied, that should not overshadow the game's good qualities, of which there are many.

Foremost is the variety of creatures, and the tenaciousness of same. E.C. neglects to mention that the levels have breaks through which the creatures tumble: you haven't got a lot of time to get to them and do your job. Indeed, in the faster phases, if you don't get the two-hit Side-steppers the first time out, you might as well abort. They'll drop a level before you get in another two jumps.

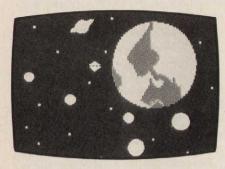
I particularly enjoy the action when the screen becomes crowded with a variety of creatures, requiring the player to make continual adiustments in offense.

Mario Brothers is a very good game, and I think its virtues actually come across better at home. In the arcades, where graphic capabilities are so powerful, players gravitate toward the stunning displays of a Pole Position or Star Wars. The simpler look of a game like this tends to keep it in the background.

At home, where gameplay is virtually all the 2600 has to offer, Mario Brothers is one of the better buys.

Graphics: C Gameplay: B





ASTRO CHASE Parker Brothers for the 5200 Object

arth is being threatened with total destruction. The perpetrators are aliens who have littered our solar system with Megamines. These star-like globes move slowly, inexorably to our world; if just one of them strikes, the planet pops like a balloon.

You must take off and use your spaceship's lasers to blow the Megamines from the heavens.

However, helping to see that the Megamines reach their destination are eight varieties of alien vessel, from Ramatrons, which ram and destroy your ship, to Firelon Jets, which can ram your ship, shoot it down, and actually travel through the planets which hang stately upon the screen.

J.C.: While I felt Parker Brothers had sullied themselves irrevocably with the superdumb *Super Cobra*, they manage to earn back a portion of my respect with *Astro Chase*.

This cartridge is the company's second 5200 release, and is more appealing to me than the unimposing Frogger. (We never got to review that one; suffice to say the 5200 version looked like Frogger, but it was a pain to control!)

Astro Chase is, first, a handsome game. The planets and stars are recreated with arcade-quality graphics; they look almost three-dimensional at times. Only the explosion of earth is a letdown. I couldn't keep myself from thinking how much better Astrocade did a similar blast in their Space Fortress cartridge.

The game itself is swift-paced action. It reminded me of Odyssey's UFO in that the saucer's rapid-fire capacity is kept busy as the ship is

attacked from all sides. However, this game has planets for the player to use as blockers—or from behind which the enemy must be flushed. The only drawback to the worlds is that they tend to get in the way when you want to tear out and do some serious dogfighting.

At the risk of handing Parker Brothers a free ad line, next time you're at the stores, make 'Chase' your choice.

Graphics: A Gameplay: B

E.C.M.: I think I'm going to be sick. Not so much from Jim's lousy ad copy, but from his misguided enthusiasm for this game. For me, *Astro Chase* is another Parker Brothers stinker.

It doesn't deserve to be in the same game slot as Atari's 5200 Space Dungeon—which is the champ of the space games. To reiterate what I said two issues ago, Space Dungeon, in and of itself, is a good reason to rush right out and buy the 5200.

Astro Chase, on the other hand, is a good argument to return the unit to the store.

Playwise, I was frustrated by the claustrophobic nature of the game. The screen scrolls, but for only a few inches in any direction. Then you run into an idiotically contrived "force field" surrounding the space sector—Parker's way of saying they couldn't fit any more graphics into the game. Yes, what they have is visually impressive. But after the first "oooohs" and "aaaahs," who cares? And as impressive as this game's outer space is, the saucers are flat and drab.

Whoever designed the controls should be keel-hauled. You can't guide the ship and direct its gunfire at the same time. What's more, you can't stop your ship! Clever, huh? No serious videogamer will be happy with this. Me? I'll take the two-control action of Space Dungeon any ole day.

Only the attract mode is truly impressive. It portrays an astronaut leaving an extraterrestrial base, walking onto the saucerpad, entering a spaceship—you can actually see the spacefarer inside, through a window—and thrusting spaceward, all to the tune of the 1812 Overture.

If someone ever makes a videotape of Parker Brothers'

greatest hits, that opener should be on it. Maybe twice, since it'd otherwise be a very short tape.

Graphics: B - Gameplay: D+



WAR ROOM Probe 2000 (Odyssey) for ColecoVision Object

The United States is being attacked by nuclear missiles. Your task is to watch the incoming rockets on the radar atop the screen, then rush across a scrolling map of the U.S. to meet the destructive barrage.

The player can destroy missiles with a laser satellite.

Each major U.S. city is vulnerable; each produces resources vital to the defense effort. When the onscreen chart indicates that supplies are low, you must enter the city which produces that raw material and gather it up.

The view changes to a screen littered with resources—and with Communist spies. Gather as much as you can without being impaled on a roaming sickle. If the Commies get you, the city automatically becomes an enemy launching base.

E.C.M.: An extremely disappointing debut for the Probe series. Not only is the game, as it stands, less

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The Hills Are Alive With

Arcade Sound Effects

By Richard Meyers

ust imagine. You wander into your favorite entertainment center and the only sounds to be heard are human. Suddenly the arcade takes on an emptiness it never had before. Somehow, your favorite game of strategy or destruction doesn't have the punch or power it had before.

No more does the Jungle Hunter "swoosh" through the air. No longer does Donkey Kong pound his chest with a reverberating "thump."

Never again does Pac-Man "wackawacka-wacka" his way across power pills. Quoth the Q-Bert, "nevermore."

Try it some time. When a friend is struggling on one of the new machines-be it Gyruss, Star Wars, Joust, or any number of othersclose your eyes and just listen to the machine. All too often, the subtle and complex sound effects are drowned out by the frenzy of mass playing.

But these videogame soundtracks are labors of love, carefully wrought by some of the best technicians in the business. And their work has to be laborious, for making game noises takes as much invention as the games themselves. What did you think; that all that music, explosions, splats, beeps, boops, and words were on some Sony tape recorder that's turned on every time you press a button?

Oh, no, those sounds are the

results of state-of-the-art machinery that takes a computer summer school's education to understand—manned by nameless, faceless artists. That is, until now. Videogaming Illustrated is proud to rip the mask of anonymity from the visages of two of the pioneers of this technique.

In our search for the rhyme and reason of sound effects, the editors decided to investigate the one machine they decided had the best effects of 1983. The editorial vote resulted in a study of *Sinistar*, a space game in which the player must mine crystals that are changed into bombs which can destroy the Sinistar itself, a demonic, rocketeating space-face that is constructed by red robots and guarded by grey cannon-crafts.

Not only does the player's ship shoot missiles with an individual sound effect, but it can blast open asteroids and destroy the Sinistar's guards with other sizzling, explosive sounds. When it or the robots swallows up a crystal, another sound is heard. Ah, but once the Sinistar is completely constructed, it speaks. "I live!" it warns, alternately advising "I hunger," and "Run, coward!"

And when its devilish face appears on screen, its lips move in syncronization with its words. All in all, *Sinistar* is quite an accomplishment in sound effects. An accomplishment the technicians at Williams Electronics take in stride.

"Actually Sinistar was just an extrapolation of techniques people at Williams had been using for a long time," says Michael Metz, the Software Engineer responsible for the game's noises. "All the tools I needed were basically here already. They already had a very good base of technical knowledge that Paul and other people here developed."

Paul is Paul Dussault, Williams' Director of Special Projects and one of the people on the ground floor of the sound effects revolution in 1978. "We were the first company to use a 'dedicated sound board' with its own microprocessor," Dussault reveals. "At that time, some other companies were using Electro-Mechanical Chimes which were very similar to doorbell arrangements. Other companies were using what are called 'non-







Sinistar: "I live!"

programmable' systems. Those were fixed hardware systems with three or four oscillators which would be turned on or off. They made beep, boop, and chime sounds. But we had our new sound system."

That system was first used on the pinball machine World Cup. But its real possibilities were revealed on the pinball machine Gorgar, the first talking game—which was Dussault's responsibility. Both Dussault and Metz were quick to downplay their own accomplishments, stressing that Williams' achievements were the result of teamwork; no one could afford to be a prima donna. But Videogaming Illustrated couldn't bring itself to honor their request to be completely nameless. Their assistance in compiling this article was just too exhaustive to go unsung as "sources inside Williams."

For instance, Metz explained the Sinistar process. "What I did was sit down with the game designers and programmers who identified pieces of the game that would need sound—things they'd like to stand out or give audio cues to. We sat down at a meeting and they said, "We'd like it to sound like this," and then made the sound themselves with their mouths."

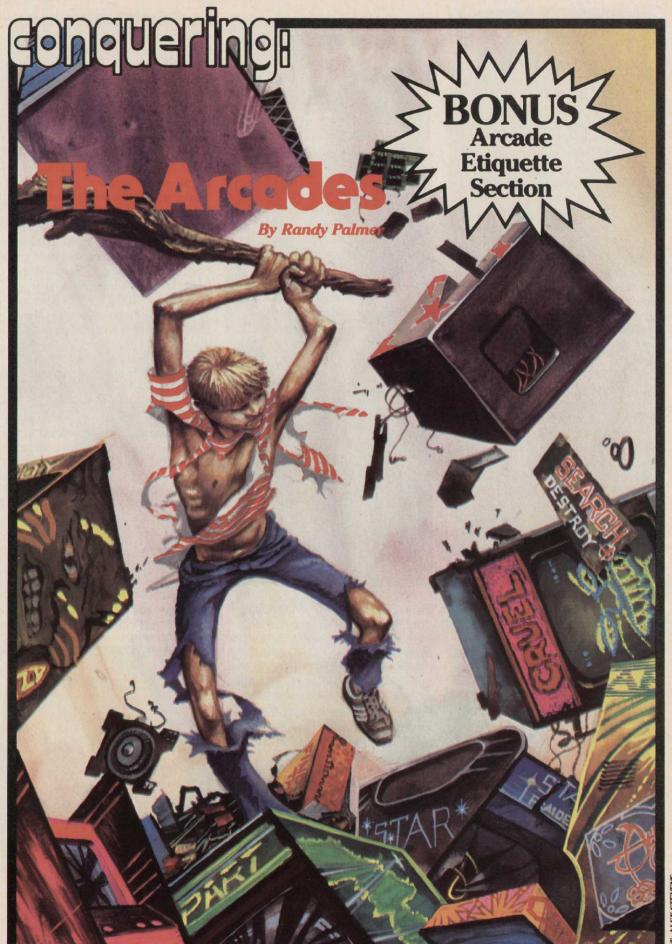
The Sinistar team was very particular about what they wanted. That left Metz with a list of the types of sounds he needed to work up. His next stop was the computer. "Our sound boards are 'slave processors' which are tied into other computers. Basically, they work as 'slaves' to the main computer.

"We take our list of sounds and start programming," Metz continues. "The programming consists of listening to sounds we already have and determining which ones sound similar enough to the ones I need to modify and which new sounds I'll need to create."

Sound simple? Sound complicated? Well, it is. Enabling Metz to do his work was the ground breaking of Dussault and his contemporaries. Making things a bit clearer—or a bit more complex, depending on one's education and point of view—Dussault takes up the story of how sounds go around and around and come out here.

"We have a 6808 Motorola microprocessor which is operated as slave microprocessor to the game microprocessor, which, in our case, is a Motorola 6809. Now, the game decides it wants to make a certain

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KRULL

The distant world of *Krull* is the setting for Gottlieb's five-screen game based on this summer's fantasy movie of the same name.

In the first screen, the player must pick up the pieces of the glaive, a star-shaped enchanted weapon, while an onslaught of boulders threatens to reduce him/her to a human pancake.

Moving in a loop, picking up the pieces on one side of the screen and then the other, is probably the safest bet. Rush up either side, moving through the pieces and claiming them as your own. Watch for tricky boulders near the top of the screen; they can shift sideways unexpectedly. After getting all the pieces from one side, move to the other and come back down. Don't leave the top two pieces of the glaive until last.

When entering screen two, think *Robotron*. The two joysticks at your fingertips are patterned after the earlier Williams game, and the action is also similar.

Move horizontally near the bottom of the screen to pick up your men as they appear. Throw the weapon as soon as an enemy appears and move away without delay. The enemies' lightning-bolts can't change course, so keep moving to avoid them. You'll want to stay as far away from the white devils as possible, forcing their lightning-fire to travel some



Collect pieces of the glaive, knave.



distance. This of course gives you time to get out of the way. Watch for black holes appearing in the soil from which the enemy emerges. Blast the creatures before they emerge completely and have time to emit fire.

Stay away from the center of screen three. The landscape inhibits the movements of your "pawn" which can result in the quick loss of a game life.

Hovering in the bottom left hand quadrant of the screen at level three will allow you to pick off the aliens at midscreen from a distance; also, your attention can be diverted quickly to those aliens which crawl up from the depths behind you.

Move toward the center of the screen (but not into the trap) whenever one of your own men approaches, but always return to your starting point and fight from that one spot. The Hexagon will float by enough times to allow the quick deposit of accumulated men.

When screen four opens, throw as many glaives as possible at the front wall of the Hexagon. Move in close, but allow room for diagonal throws to either side along the other walls of the Hexagon. After several glaives have been implanted in the front wall, an infestation of aliens will require that you surrender your positioning momentarily to do battle with them.

Make several diagonal throws to one side, then move to the opposite side to fight the other approaching creatures. As you pass across the front wall once more, toss more glaives at it. Make the trip back and forth in this manner, keeping the creatures at bay, and continue pitching glaives at the wall on each pass until the Hexagon opens up and allows your troops to escape.

Completion of the final screen requires passing the ugly Beast, which can throw double and triple sets of weapons. Push forward as the screen opens, keeping a bit to the right. Throw a glaive toward the creature's hand, exploding its weapon soon after it leaves its grip.

Stay to the right so you'll know from which direction the monster's weapons will attack. Be prepared to fire behind you as you pass him by. Keep midway between the creature and the wall when passing, then move back close to screen-center as you approach the exit door. Once you've come close to the doorway,



Slayers attack with laser-weapons.





Players should avoid the fate of the movie Krull: an undeserved death.

watch for weapons approaching from different directions. Fire in an arc as you move through the doorway . . . and on to victory.

CONGO BONGO

In Sega's Congo Bongo, the hunter (that's you) seeks to reach the mischievious gorilla, Bongo; you are determined to give the beast one helluva hotfoot in retaliation for the pre-game sequence.

In screen one, move the hunter to the extreme left and begin climbing the steps. (Use only the joystick for climbing; the jump button comes into play only for jumping across crevices, canyons and the like.) Bongo will be tossing handfuls of coconuts from

above, but they can't clobber the hunter as long as he's poised on the extreme left side of the screen.

Once you have reached the ledge, move the hunter to the right. Wait for a coconut to bounce past before moving him onward. Let him slide down the hill. The monkey sitting at the bottom of the hill will topple off when the hunter touches it. Jump over the gap and climb the few steps to the second ledge. Some of the monkeys there will attempt to climb onto the hunter's back. They can be shaken off easily (using the jump button several times in succession), but try to move between the monkeys when possible.

Move toward the stream. Pause and wait for an empty space between Bongo's coconuts, then jump over the river and move quickly once again to the left edge of the screen. Climb all but the last step. Wait for Bongo to shift his position to the right; then move the hunter slightly to the right and push him up the last step, completing screen one.

At the beginning of screen two move the hunter immediately to the edge of the water and jump him over onto the center island. Don't go directly to the far side of the screen; instead, using the walkways between the islands, move the hunter right onto the far right island. Pause and wait for a snake to slither across the walkway, then move the hunter toward the same walkway. Jump over the snake and continue on to the next island. If there is another snake there, jump it quickly and move without delay to the left. A snake from the next island will be approaching. Jump it as well and turn to face Bongo. Another snake will move in to strike, so jump once again without delay, this time onto the hippo's back. (The hunter can land on his head as well, but risks submersion in the stream that way.) Jump a second time off the hippo's back and into Congo Bongo land.

The third screen is the easiest to complete. Move the hunter out of the mole hole (using the joystick only). Bypass the first pool of water and move into the second mole hole. Press 'jump' in order to make the hunter duck into the hole. Wait for a rhino(s) to charge over the hole three times. Immediately climb out and move toward the next mole hole-the one situated more on the left than the right. Duck into that hole and once





The lighter side of revenge is explored in Sega's Congo Bongo.

again wait for a total of three rhinos to charge over the hole. Move the hunter out of the hole and pause. A lone rhino will be readying itself to charge at the hunter. When the rhino begins charging, move the hunter straight for it and hit jump so the hunter will clear it. As soon as he touches ground, move him left and up the two stairs toward Bongo, completing screen three.

Screen four: jump the hunter onto the lilypad which is second from the right. Immediately jump him to the left onto the hippo's back. Stay put until the hippo travels back through the water, and jump to the left once again, landing the hunter on the small islands. When it reaches the midpoint, jump the hunter onto the hippo's

back; wait for the return trip to jump from the hippo's back onto the larger island.

From the larger island, jump onto the fish as it swims toward the right side of the screen. Wait for it to turn around and head west. As it swims by its mate (which will be heading in the opposite direction), jump onto the mate's back unless the mate is changing color. The two fish close to the far edge of the screen pattern occasionally turn yellow and open their mouths wide. If the hunter is perched on a fish when it opens its mouth, he'll fall into the stream. It's best to ride up and down stream at least once on the back of the first fish to see if the second fish is changing colors. if it is, wait until the fish pass each other a second time before jumping.





The gorilla as lovable villain has become a videogame staple, alas.

Once on the back of the second fish, jump off onto the land strip as soon as possible. Turn right to face the charging rhinos. The rhinos can be jumped with no problem as long as your timing is precise. After jumping two rhinos, the hunter will be fairly close to the right edge of the screen (from which the rhinos appear). Wait for a third rhino to appear. When it does, jump over it and immediately make a u-turn to climb the steps.

Once atop the steps, the hunter automatically gives Bongo his comeuppance. But as luck would have it, the player and hunter must retreat to screen one and begin the action all over again—at a higher difficulty level.

JUNO FIRST

his, the latest space game from Mylstar, is another slide-n-shoot number with a unique twist: the four-directional joystick also enables players to speed up the onslaught of alien invaders or slow it down (slightly), at his or her whim.

The faster a player completely annihilates one wave of enemy starships, the larger the bonus becomes, which is calculated by the game's built-in timer. However, it becomes advantageous, under special circumstances, to slow down the action to accumulate a screenful of aliens. And, of course, slowing down the action also makes it possible to escape some enemy bombs.

Although the action button provides a burst of rapid-fire, it's best to constantly tap away on the fire button so that an uninterrupted stream of fire is emitted by the player's ship. The "warp" button will disintegrate the ship momentarily, which is a good escape mechanism when the player is besieged by enemy fire; however, use of the "warp" tends to aggravate the foe, so use it sparingly. Always try to slip away from bombs (scoot right or left) or back away (pull back on the joystick so your ship doesn't thrust forward as fast).

Each screen is best started by moving your starship to the left, where several aliens will materialize just above you. Destroy the enemy by moving sideways as you unload the ammunition (so that the ammunition streaks across



The resplendence of Juno First.

the sky). After obliterating a number of aliens on one side of the screen, move to the other.

One time during the course of each wave, a planet will materialize in space. When this happens, points can be racked up rapidly by using the following method:

Shoot the planet without delay. A spaceman will appear in its place. Engage full thrust (joystick in up position). As soon as your ship moves across the spaceman, all the enemies on the screen will change color for about seven precious seconds. During this period, the alien ships will not fire at you, and their point values are increased dramatically. Rush forward, firing at the ships without fear of reprisal.

The planet usually appears about midway through any given wave. If you eventually are able to make a guesstimate as to when the planet will appear, you can increase your point gain by using the joystick's capacity for speeding up and slowing down the game's progress to allow a large quantity of alien ships to enter play just prior to the planet's appearance.

Since alien ships enter play from the top of the screen, thrust forward at full speed to bring them down. Then decrease thrust, keeping those ships above your own. Wait for the planet to appear, then proceed as outlined above. Your first "kill" after capturing the spaceman will prove significant, since all of the ships which just previously entered into play can be destroyed swiftly. As soon as they are, engage full thrust again to bring down another layer.



ARCADE ETIQUETTE

A VCI Exclusive by Randy Palmer

ith the introduction of plush carpeting into many arcades, this form of entertainment has finally achieved a status that cries out for social codification. Knowing how to act and react in an arcade setting is sometimes just as important as knowing how to play videogames. The well-mannered videogamer will become a welcome fixture at many of the better arcades. Here are some useful tips on how to become such a fixture.

Never walk into an arcade with quarters already in your pocket. Let the management know how much money you intend to spend by going to the change booth and producing a wad of bills. Be sure to count the change carefully after receiving it. Not only do change people admire individuals who prove they are

too smart to be shortchanged, they need your distrust. Such people want to be put in their place.

Once you have quarters on your person, don't put them in your pocket. Cup your hands and jingle all the coins so that they make loud tinkling sounds. This will alert the other videogamers to your presence. You can gain the attention of those who are concentrating intently on their games and haven't noticed you by dropping some quarters nearby and crawling around next to them to dig the coins out from beneath their machines. If none rolled under a machine in use, just pretend that they did.

Once the people have noticed you, you'll want to impress them with your knowledge and skill at videogames. There are several ways to do this.

The easiest method is to stare at people who are playing and make knowing comments to other spectators. For example, walk up to a Defender player and wait until (s)he loses a ship. This is the time to say, "Should've used a Smart Bomb," or "You only have two men left!" (This last comment can help instill fear in the player.) Remarks such as these go a long way toward making players appear as if they don't know exactly what they're doing.

Don't pick on persons who are terrible at videogames to begin with. This is simply not done. No, it is best to locate halfway decent players and make them look bad by convincing spectators that the

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The World Has Never Before Seen A Micro FM Stereo So Small In Size. . . Yet So Big In Performance!

This is the incredible MI-FI SHIRT POCKET STEREO! It's smaller and thinner than a deck of cards ... compact enough to slip into a pocket or purse ... yet so dynamically powerful, it pulls in distant stations with ease!

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Designed Exclusively For Unsurpassed FM Stereo Reception!

The MI-FI SHIRT POCKET STEREO brings you exceptional FM reception because it has NO OTHER circuits or connections to interfere with selective tuning and sound reproduction.

Employing state-of-the-art micro circuitry and advanced amarium cobalt magnet earphones, the MI-FI SHIRT

samarium cobalt magnet earphones, the MI-FI SHIRT POCKET STEREO delivers performance undeniably comparable to a stereo system many times larger!

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And 30 milliwatts per channel bring you "driving" stereo sound WITHOUT minimizing the impressive 18-24 hour playing time you can expect from the STEREO's 2 "AAA" batteries (not included).

Features To Surprise And Delight You!

At less than 3 ounces, the MI-FI SHIRT POCKET STEREO is practically "weightless"! Yet its outstanding features make for EASY, INSTANT operation!

Its rugged and durable case is as handsome as it is protective. Its thumbwheel volume control and precision

SPECIFICATIONS:

SPECIFICATIONS:
Frequency Range: 88MHZ-108MHZ
Sensitivity: 15db
IF Rejection: 45db
S/N Ratio: 45db
S/N Ratio: 45db
Separation: 30db (1KHZ)
THD of Amplifier: Less than 1%
Power Out: 30 mW per channel
Frequency Response: 330HZ-15KHZ
Power Sou: 3e: 2 "AAA" batteries (not included)
Dimension: 3½" H x 2½" W x 9/16" D
Weight: 2.7 ounces
Headphone Weight: .5 ounces per set
Headphone Magnetic Material: Samarium Cobalt

FM tuning dial provide sensitive response. The LED lighted stereo indicator lets you "browse" through the FM band and then lock onto a desired stereo transmission. A handy, top-mounted earphone jack can also be used as an output to full-sized amplified speakers. And the MI-FI SHIRT POCKET STEREO even comes complete with its own velvet-suede drawstring carry pouch.

But one feature most MI-FI owners like best is actually something that's missing — an awkward, protruding metal antenna! On the MI-FI SHIRT POCKET STEREO, the super sensitive FM antenna is built right into the earphone cord!

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While its true that today's modern headphones have come a long way, THEY'RE NOW OBSOLETE when compared to the advanced mini-earphones supplied with the MI-FI SHIRT POCKET STEREO.

Tethered to a handy, 36" antenna cord with attached mini plug, these astounding contoured foam earphones are soft, cushiony and fit comfortably right in your ears.

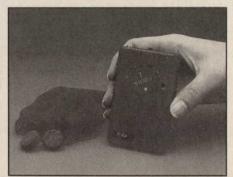
They're so lightweight and miniature - and fit so securely even when you're wearing a hat—you can count on them to stay in place throughout the most vigorous exercise.

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The Price Is Incredible, Too JUST \$29.00

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If, for any reason whatsoever, you are not totally satisfied with your order — if the MI-FI SHIRT POCKET STEREO should not perform exactly as you expected — return your order within 30 days for a full refund...no questions asked!

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KONG SR.

Continued from page 10

recently reported, who invented the videogame in 1958.

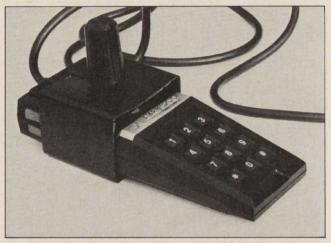
Working at Brookhaven National Laboratory in Long Island, New York, Higinbotham wanted to come up with something a little different for the lab's annual open house. Using a manual that explained how to produce bouncing balls on the cathode ray tube screen of an analog computer, Higinbotham designed a tennis match not very different from the games that caught fire twenty years later. "It took me about two hours to rough out the design and a couple of weeks to get it debugged and working," says Higinbotham. "It didn't take very long. And it was a great hit."

Searches conducted by patent attorneys and computer editors have turned up no one whose pioneering videogame efforts preceded Higinbotham's. If, as it seems clear, he did invent the videogame, why didn't he take out a patent on it? "It seemed so obvious to me," he says, "that I didn't think it was worth it."

Don't feel bad, Mr. Higinbotham. The inventor of the wheel made the same mistake.



Intellivision joystick is due late this year.



The Control-Guide for the Atari 5200.

HOME IMPROVEMENTS

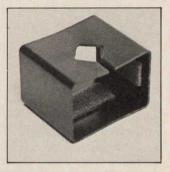
As reported elsewhere in this issue, Mattel has finally realized that its flat-disc joystick surrogate has left many potential Intellivision buyers flat. They hope to do better with their new units equipped with the pictured joystick, featuring full handgrip control and a healthy-sized fire button.

Less urgently needed, but a possible welcome add-on for ColecoVision owners, is the Easi-Grip joystick attachment from C.&T. Creations. It replaces the control knob to provide what the manufacturer assures us is increased comfort and manueverability, along with the complete elimination of finger and hand fatigue. Suggested retail price is \$6.99 per package of two.

Picking up on negative player reaction, Entertainment Systems has produced Control-Guide for the Atari 5200. The flyer you may see in your video store is noncommittally worded, never stating exactly what the attachment does: basically, it's an aid to centering the joystick, which happens sluggishly on the unaided 5200.



The Easi-Grip for Coleco Vision controllers.



Centering template.

Control-Guide consists of a plastic disk that protects the rubber diaphragm of the controller, and a plastic template that slides easily onto the controller. Both parts can be removed to regain easy 360° movement. Retail price is \$6.99 per pair, plus \$1.00 postage and handling, from P.O. Box 376, Oakhurst, NJ 07755.

For the videophile who must have everything. Atari is including a twocontroller brace with its Space Dungeon game (reviewed last month). It's useful for that particular game, which requires you to manipulate two controllers at once. Its uses beyond that are up to your imagination. You can have two-player games with yourself. You can force your date to sit close to you on the couch.

Of undoubted use from Atari is the VCS cartridge adaptor that lets you play 2600 cartridges on your 5200. The adaptor plugs right into the 5200 without wires or additional TV connections. The unit is designed for 5200 systems with two controller ports; those with four controller ports can use the adaptor after a minor modification which Atari promises its service centers will perform free of charge.

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THE KING'S ENGLISH

It's been said many times that, as time and technology march on, computers will learn to talk more and more like people instead of the other way around. And Epson American Inc. has certainly taken a step in that direction with their OX-10 personal computer. Its HASCI (Human Applications Standard Computer Interface) keyboard features keys with simple English language instructions. And the new VALDOCS software produced by Rising Star Ind. for the QX-10 enables the user to perform a variety of automated office functions without knowledge of computer jargon.

The completely menudriven VALDOCS (short for Valuable Documents) program combines word processing, scheduling, calculations, graphics, filing, and electronic mail. Powering up automatically enters the user in the word processing mode. "It's so simple," says director of sales Ron Ockander. "we've found that people don't experience the fear and frustration that many normally encounter in



Epson's QX-10 retails for "under \$3,000."

their initial use of computers."

The VALDOCS program is being distributed by Epson. The 256K RAM-equipped QX-10 also runs CP/M software, available through Software Distributors.

Tough break for all but the most recent purchasers of the HX-20 notebook computer: Epson has just added a microcassette drive and wordprocessing program at no additional cost. But a special package of both now-standard features will soon be offered.

The wordprocessor, SkiWriter (by SkiSoft, Inc.) features a contextsensitive HELP facility to prevent user errors and an overlay for the HX-20's programmable function keys.

Epson contracted some months ago with a number of software developers to design programs for the HX-20, under the categories of Business and Accounting. **Education and Personal** Development, Entertainment and Recreation, Home Management and Record Keeping, Personal and Professional Productivity, and Program Development and Utility. SkiWriter was the first to come available, followed by Typing Tutor and the

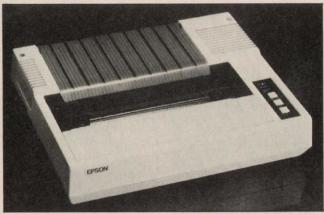
EpsonCalc electronic spreadsheet. Other entries include business graphics, statistics, name and address list, blackjack, and electronic checkbook software.

The computer's standard features include 16K of RAM, expandable to 32K; 32K of ROM, expandable to 64K; serial communications port; built-in printer; and full-size typewriter-style keyboard. Price is \$795.

The name of Epson's game, though, is printers. Their latest, the dot matrix FX-100, toodles along at 160 characters per second and offers elite and pica spacing, one-toone graphics ratio for accurate drawing, and the ability to create and store original character formats. Two paper-feeding systems are standard: a rubber platen that accommodates single sheet or roller-fed paper, and a removable tractor to handle pin-fed paper and forms. Price is \$895.

More within your budget may be the previously released RX-80. Features it shares with the FX-100 include 128 user-selectable type styles, disposable prin-





The HX-20 (left) Notebook Computer. Above, the Epson FX-80 dot-matrix printer, all new.

thead, and logic-seeking, bidirectional printing. It prints 100 dot matrix characters per second. Price: \$495.

Epson is located at 3415 Kasiwa Street, Torrance, CA 90505.

PACESETTER STUMBLES

The Osborne Computer Corporation, which leaped to the forefront of the computer market three short years ago, filed for bankruptcy in September.

Adam Osborne, 43 years old, sent shockwaves through the industry in 1980 with his Osborne I, a twenty two pound briefcase-size computer with two disk drives, a monitor, and keyboard. At the time, the uniqueness of the computer and Osborne's flamboyance made the Osborne I a huge success when it was first introduced.

Since then several other companies have produced briefcase computers. Kaypro's was less expensive, and Compaq's was compatible with all IBM-PC's software.

In fact, industry analysts blame much of Osborne's troubles on his inability to predict the popularity of the IBM computer. He won't have been the first, or the only, one. IBM seems to be wreaking havoc in the industry without even trying.

Alexander D. Stein, a computer analyst for a market research firm in California, says that this is the first casualty in what will become a major industry shakeout. There are now three hundred companies making computers in the \$1000 to





Work and play from Eduware. Top, the Hands On BASIC Programming and, above, Prisoner 2.

\$5000 range; that number will shrink to one hundred by 1987, be believes.

FOOD FOR THOUGHT

"Educational games are like breakfast cereal," says Steve Pederson. "The graphics and the gameplay are the sugar. But—how much nutrition is there?" That's how the young president of Eduware Services, Inc., sums up his philosophy on educational software.

It's a philosophy that his California-based company has translated into over thirty titles embracing mathematics, language skills, computer literacy, problem-solving, and more. But Eduware is not above producing games— "providing they are interesting and thoughtprovoking."

Says Pederson: "We want to educate the public to the nature of learning." It is untrue, he claims, that kids are unmotivated to learn. Concerning subjects that interest them, say cars or rock music or comic books, kids are eager to digest all the information that is available. It's Eduware's aim to make such enthusiasm possible with arithmetic or spelling, by producing programs that are "not only palatable, but fun."

The company's software falls into four categories. The Science of Learning builds specific skills, like programming or mathematics. DragonWare provides educational gameplay for young minds. Interactive Simulations poses real-world challenges that require scientific inquiry. Interactive Fantasies supplies challenging gaming, with adventures "straight out of science fiction."

"Hands on BASIC Programming" is a recent software offering. The interactive program (requiring 48K) and 200-page workbook provide a learnby-doing experience for the novice. Price of the package, designed for the Apple II and emulative computers, is \$79.00.

Previously released in Apple II format, "Algebra-Volume I" has just been made available in IBM-PC. It is the first of a six-volume algebra series. Requiring 64K with IBM DOS 1.1 and 128K with IBM DOS 2.0, the price is \$39.95.

The company recently

eye on



Eduware's Algebra.

released their popular "Prisoner 2," for the Atari 800/1200. Based on the PBS series (and the Apple II "Prisoner"), Eduware bills it as a "thinking-man's adventure game." It requires 48K and retails for \$39.95 It has been a bestseller in the Apple format.

How does Eduware insure that its programs fulfill the dual function of teaching and entertaining, with just the right balance between the two? One aid is their nationwide network of nearly two hundred educators and institutions across the country—Eduware's "educational laboratory" of in-school testing sites for trying out programs in real-life educational situations.

Aid of a different kind will be coming from Management Science America, Inc., which purchased Eduware in July. The distribution channels, manufacturing operations, and marketing expertise of MSA's Peachtree Software subsidiary will now be available to Eduware. All of which should enable Steve Pederson and company to pour milk over millions more cereal bowls in years to come.

SHOOT THE STARS

The hardest of the hard core may not realize that, by adjusting the proper controls, the standard home videogame system can be turned into a television set. Which will generally not result in anything worthwhile appearing on the screen, but two new PBS offerings set for this fall may rate as exceptions.

A joint venture of the non-profit Educational Products Information Exchange and Kentucky Educational Television, Educational Computing Profile consists of nine monthly half-hour reports updating parents, teachers and administrators on developments in the microcomputer field and how hardware and software products compare. The show's producers promise to "take a tough look at the educational hardware and software available to consumers and provide unbiased consumer research to help potential customers avoid costly mistakes."

The magazine-format program is divided into three segments: trends and news (reports on new products, current best sellers etc.), commentary and product evaluations.

Viewers should consult their local public television station for dates and times.

Widening its scope, PBS is also presenting *The New Tech Times* beginning Thursday, October, 13, at 9:30 p.m. The thirteen half-hour programs are designed to take viewers behind the scenes in the communications and home electronics industry with a blend of news.

entertainment, and information. Host is Nicholas Johnson, former Federal Communications Commissioner and author of a nationally syndicated communications column.

Regular segments will include reviews of new products and games, commentaries by experts in various fields, interviews, and in-depth feature articles. Says Johnson: "It's a show to help us cope with the changes and challenges of the electronic age . . . not just computers or video but a new communications environment. It's a show long past due."

And what of commercial TV? While you'd hardly expect the major networks to let a bandwagon roll by without taking a stumbling, arms-flailing leap at it, this fall's three commercial TV video ventures are syndicated series.

Viacom's The Video Game Challenge, execproduced by Ward Sylvester and hosted by Bobby Sherman, will include segments on the ten most popular games, playing tips, game reviews and previews, reports on accessories, visits to arcades, and matches between top players. The half-hour program will appear weekly. Golden West's Videogame Previews will presumably be similar in structure.

And . . . it had to happen . . . from Turner Program Services comes Starcade, which they describe as "television's fired-up video arcade game show." Geoff Edwards, having survived the embarrassment of hosting stints on Jack Pot!, Treasure Hunt,

and Shoot For the Stars, will be leading contestants through videogame competitions and quizzes. Special features will include teaming computerselected home viewers with on-air contestants, and a twenty-second news update. (That can presumably be cut to ten if it proves too taxing for the audience.) Starcade's 26-week, five-times-aweek run will begin September 5.

Finally and regionally, VCI contributor Michael Sittnick is producing and directing Video Games Report for Connecticut cable viewers. The show may soon be available elsewhere on the east coast, so watch your cable listings. In fact, watch your VHF listings. If Michael really catches on, he's liable to be hosting Starcade next.

MERGER

Back in the make-abuck world of corporate mergers, Bally Manufacturing Corporation has acquired the U.S. coinoperated amusement game inventory assets of Sega Enterprises. These include license rights in new laser disc games. The deal also anticipates an arrangement for Bally's producing and distributing coin-op games developed by Sega and Paramount Pictures (both subsidiaries of Gulf + Western Industries).

The aim, says Barry Diller of Gulf + Western, is to combine Sega and Paramount' creative strengths, particularly in laser technology, with Bally's "acknowledged leadership" in manufacturing and distribution.

Ahoy!

Serving The Commodore Market With A Circulation Of 190,000

SETS SALE NOVEMBER 17TH:

Ion International Inc.,
publishers of VIDEOGAMING
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The time has come for a dedicated computer magazine that incorporates readability, informality, and a measure of wit.

The time has come for AHOY!
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things to all people; the gulf between advanced computer enthusiasts
and novice users is wide. But there is
no law that says a computer magazine
must be intimidating, overly technical
and dry. Nor, on the other hand,
must it condescend.

Each issue of AHOY! will present programs and utilities that any owner of a Commodore 64 or VIC 20 will find useful, will find challenging. Each issue will also contain Scuttlebutt, news of the latest hardware and software as well as industry trends, new technologies and points

of human interest; reviews of the most interesting software currently available; and a unique feature: Commodares—programming puzzles and challenges which the reader/programmer must unravel.

This is the dawn of the computer age. The time has come for AHOY!

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Astron Belt, Sega's new laserdisc arcade game, may breathe new life into the space game genre.

LASERDISC

Continued from page 28 table in the Harlem nightclub. They are having a conversation. In another story line the same scene can be used, but different information and different clues will be conveyed through clever use of voice over, off-camera remarks and editing-none of which is distracting or uncinematic. In still another variation on the same scene, Maxine may not be Maxine at all: she may be a mystery woman from some Eastern European country, complete with accent you can cut with a stiletto.

All in all, Mystery Disc # 2 has more pizzazz than the award winning # 1, and it promises to be a hot item; it has already been dubbed into Japanese. As for the future, no one at Vidmax will say more than that number three is now in the works. John Messerschmitt of North American Phillips put it succinctly. "This is a business that aims to make hits like the movies. That's why there is so much secrecy."

IMPRESSIONISTS

With the advent of interactive laserdiscs the entire field has been radically revolutionized. Where before players had to rely solely on computer-generated images, now live action, animation, or a combination of all three can be used.

But games are only the beginning, and judging from the early entrants to the race, the competition is going to be keen. This means that with all the laserdisc producers vying for the consumer dollar there will be some quality products to choose from.

Already available from North American Phillips is Vincent Van Gogh: A Portrait in Two Parts. Featuring Leonard Nimoy as commentator and in a dramatic role, the disc has two tracks, a play about the artist's life, and two hundred of his works which can be accessed by the viewer at will. For anyone to experience what is available on this interactive disc they would have to go to the theatre, study a number of art books, and visit forty six museums.

From Optical Programming Associates, which is a joint venture of MCA Videodisc, Pioneer Video, and Magnavox Productions, come a variety of interactive laserdiscs, all in the suggested price range of \$29.95. First is The Joy of Relaxation, which offers viewers a complete, clinically tested program including a questionnaire designed to help the individual determine his or her stress limit in advance. There are two soundtracks, one simple and one more detailed. And, as in any interactive disc, any of the 54,000 frames may be viewed singly for as long as desired.

Next is the *History Disquiz*. Hosted by Steve Allen, this educational quiz-game utilizes newsreel footage of memorable historical events of the 20th century. The subjects include sports, movies, personalities, music, politics, and more. To play the game all the way through requires many plays, and to acquire real skill could take years. At least, so say the folks at OPA.

Maze Mania is, as the name implies, a potpourri of maze games, four to be exact. Each requires players to answer questions in order to make it through the mazes. There are scores of detours, adventures, dead ends and other obstacles. Each game has three rounds and a second audio track offers a bonus round so tough it makes the others look easy.

The World of Martial Arts offers both instruction and entertainment, with two audio tracks providing two different levels of instruction.

For football fans, NFL Films Video has put together three years worth of San Diego Chargers-Los Angeles Rams plays to offer arcade devotees their first live-action sports laser-disc. The game can be played alone or against others. The player(s) can control which plays are used in any given situation, which effectively puts them in the cleats of a coach.

Finally, in what really seems like science-fiction come to life, is Simutron. Using flight simulators







Astron Belt is a unique combination of a number of animation processes.

and interactive laserdiscs, Simutron has created a game based on Star Trek-The Motion Picture. Instead of feeding coins into a machine, players pay in advance on a perhour basis—approximately \$10 each. They then take their places in plush chairs facing terminals, don headphones, and check the controls, which resemble a cross between the operations room of a military radar early warning station and the flight deck of the starship Enterprise. It may well be the closest thing to the ultimate fantasy trip within reach today.

SURROGATE TRAVEL

But in the fast-moving technological world of today, 'ultimate' is the ultimate in relative terms. For years, MIT's Architecture Machine Group, founded by Nicholas Negroponte and now under the leadership of Andrew Lippman, has been making startling strides with laserdisc. Their work is ongoing.

One of the Group's first achievements is the Aspen Map. Dave Backer explains how it was created: "The crew had a truck with cameras and actually drove up and down all the streets of Aspen, shooting a frame every ten feet. We also animated the entire town. Walter Bender, a staff person in the lab, had a 3D animation program. He used a data base to draw in some block-like buildings; we then digitized photographic detail and then sort of billboarded it on to the side of the buildings in perspective. It is a blocks representation but certain landmarks have photographic detail."

The result? An electronic map of the city, or a surrogate travel system, as the people at MIT like to call it. The user can hover over the city, select an intersection and zoom in on the intersection, then "drive" through the streets. A schematic map or a detail map can be summoned, and the user can choose to visit Aspen in either fall or winter.

The Aspen Map project was funded by the Advanced Research Projects Agency, an arm of the Defense Department. During the time of the Israeli raid on the Entebbe airport, the military wondered if there was some way that troops could be

oriented to, and taught to move around quickly in, a location without ever actually visiting that location. The technology would have been quite welcome during the planning of the attempt to rescue the Iranian hostages.

The technology has obvious commercial uses as well: travel and real estate agencies could demonstrate a geographical area to a prospective client with the touch of a button. But the people at MIT, not surprisingly, had their own applications in mind, as Dave Backer reveals: "We were more interested in using the same kinds of techniques to navigate in other kinds of spaces. How about taking a drive through the human body? We were trying to develop spatial ways of working through large bodies of information. Aspen was the project we chose; we've done that and now are through with it."

Though MIT has moved on to other things, Backer reveals that there are companies that are creating surrogate travel systems with the existent hardware and software, but of course none are doing it with the care and attention that MIT lavished on their project.

Backer is currently working on The Movie Manual, sort of a How-To manual using a touch sensitive screen and a laserdisc. "Touch the picture of a tool that you don't know how to use," reveals Backer, "and the picture will turn into a movie, demonstrating its usage. A man may appear and demonstrate the repair that is talked about in the text. This is personalized training and instruction, repair and maintenance. We also have been working on teleconferencing using laserdisc, and face synthesizing.'

As to the future of laserdisc technology and its impending marriage to home computers, Dave Backer has a few thoughts: "You will be able to lay out information on the disc and have a data base that allows you to access it; faster, more precise access at that. It also gives you the possibility of dynamically editing material together from a videodisc. Instead of sitting there passively watching a presentation, you could react with computer generated controls; you could tailor the presentation to your own interests. Mix live video with still frames. The movie that you would see would be different from the one I would see.

'The discs that are out now are read-only. They're coming out with erasable, writable discs now on an industrial level. It will be a while before they're available on a consumer level. When they become affordable, you could get discs with material on them with blanks that you could fill in with your own material: personalize it, update it with your own CCD camera."

These are, 'only a matter of time' type speculations. But with fever over the arcade laserdisc games running wild, wilder speculations are engendered.

There is this rumor going around about a new technique that makes all the others seem tame. The way the story goes, it is a new machine with a hidden camera that videotapes your face as you play a game like Dragon's Lair. The gimmick is that it places your face on the body of the hero.

Of course, it may just be somebody's imagination gone wild. But who knows? It may really be just around the corner.



Mid-Price Challengers:

TIMEX 2000 AND SPECTRAVIDEO SV-318

by Mike Sittnick

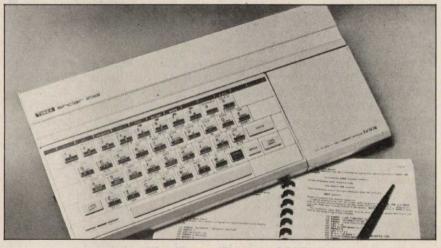
TIMEX 2000 SERIES

he Timex/Sinclair people, who brought us the original \$99 computer (now available for \$50), have done it again. This time they are invading the medium price color computer market. Their entry, the Timex/Sinclair 2068, lists for \$199.95, and is packed with features never before available at that list price. Its main features include 48K RAM memory, 24K Sinclair Basic ROM, 256 x 192 graphic resolution, and four channels of sound. Perhaps its main defect is the lack of disk drive; none is available now and none is scheduled.

THE KEYBOARD

The Timex/Sinclair 2068 has a keyboard unlike any other. It is a hybrid of a typewriter keyboard and a calculator-style keyboard. The keys are "full travel" but they do not have as good a feel as a fullsize typewriter keyboard.

Another unique feature of the keyboard is the number of functions each key has. While some computers may have three or four different symbols and functions per key, the Timex can have as many as seven! This will certainly facilitate computer use after a time, but initially the user will have dif-



The Timex/Sinclair 2068.

ficulty in simply finding the desired command.

The fact that the keyboard only has 42 keys necessitates the "keyword" system that is employed in the internal Basic language. Instead of typing out "Print" as P-R-I-N-T, there is a special key that will input it in one stroke. The user cannot possibly misspell commands with this system. Another feature that lessens the difficulty of using the keyboard in Basic is the automatic mode change. The language is structured so that the computer knows when you are supposed to type a command and when alpha-numeric characters should be typed. Moreover, it changes the

mode for the user so that (s)he does not have to hit a shift key half as many times as (s)he normally would have to. This constant monitor function also checks for syntax errors as the line is entered. This feature allows the user to spot minor errors before (s)he runs the program.

An outstanding feature of the keyboard is its impressive twenty one separate user-defined graphics keys, in addition to about half as many permanent graphic characters. There is no computer anywhere near the 2068's price range that can support that many user-defined keys.

Overall, the keyboard is both Jekyll and Hyde. That is, most of



Spectravideo's SV-318.

the features are either extremely useful and innovative, like the twenty-one user-definable keyboard graphics symbols, or the features are very irritating, like the scarcity of keys. Overall, the Timex does have a lot of excellent keyboard and editing features that allow the good features to overshadow the shortcomings, especially in that price range.

GRAPHICS

Not only is the graphics resolution a hearty 256 x 192, which is the standard of most Z-80A microprocessor-based computers, but it is very easy to get to the graphics. Some computers, like the TI99/4A, make it impossible to access the hi-res graphics from the built-in Basic. Not so with the Timex/Sinclair color computer. In fact, several convenient graphic functions are included to make graphic plotting much easier. These special commands include the line and circle commands, which make it very easy for even a neophyte user to display professional-looking graphs. The computer supports eight colors in two different modes, regular and bright. In actuality, there are sixteen different colors. but only eight different colors can be displayed at a time. This is a

minor setback, as many personal computers allow 16 or 128 colors. But for most uses, eight is enough.

SOUND

Sound is one of the Timex Color Computer's strong points. The sound generator produces four different channels of sound, in a range of eight octaves. That is comparable to any other home computer at any price, and better than almost all of them. The bad news is that these wonderful sounds come out of a tiny speaker built into the keyboard instead of through the television. However, there is an output jack that allows the sound to be piped through a quality amplifier. The built-in speaker may also be a plus for users with a monitor without an amplifier. For full tonal flexibility the computer includes an ADSR envelope to create the noises of a good videogame as well as fourpart synthesizer music.

MEMORY

The Timex/Sinclair 2068 comes with 48K user RAM and 24K ROM Basic. All 48K is accessible to the user. Many so-called 64K computers (e.g. Commodore 64, Atari 1200XL) use a large portion of the RAM memory for graphics, or other machine functions. The memory of

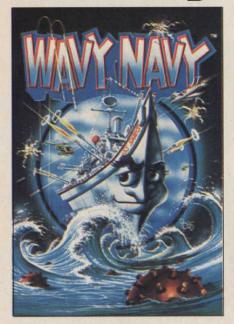
the computer cannot be expanded, but 48K useable should be enough for most home and personal uses.

The 24K Sinclair Basic in ROM is powerful and very fast. It has many features not found on other standard Basics, especially in the graphics department. It is fairly easy to invoke machine language subroutines with it, but they better not be too long; Timex is not rushing out with a machine language compiler. This is because they are aiming the marketing of the computer at families and firsttime owners rather than at hardcore computer programmers. This is not a toy, however. This computer has enough memory under the hood to be a useful tool.

PERIPHERALS & EXPANDABILITY

Timex will continue their tradition of lower prices on their products. An Atari 400 or TRS-80 color computer may sound like a good deal, until the poor Joe who buys it shells out big bucks for extra memory, expansion interface, or a powerful Basic. The problems and cost of expansion have been lessened by Timex's approach. For example, it is not necessary to buy an expansion box to hook up peripherals to the T/S 2068. One peripheral at a time can be linked directly to the back. For added peripherals (up to four at a time), an inexpensive bus expansion unit will be available. Two bus units can be used simultaneously to allow a possible hook-up of seven peripherals at once. It is possible, however to add a modem or printer without the interface.

Timex's modem will cost \$99 and will achieve a 300 baud rate (slow, but typical). The Timex 2080 letter quality printer will sell for a scant \$199! That is by far the lowest price available on a letter quality printer that can be purchased separately. Do not expect the printer—which is due out early in 1984-to be a speed demon. But it does have a full eighty columns, and is being sold at an amazing price. Timex's 32 column 2040 printer will work on the



WAVY NAVY Sirius Software Atari 800, 1200 48K and 810 Disk Drive

his one might well be called Galaga meets Moon Patrol on the high seas.

You are in command of a PT boat which has to sail upon seas which literally roll and crest from side to side. At a wave's peak, you can be halfway up the screen; in a valley, near the very bottom.

While you navigate the seas, there's a small matter of fending off Kamikaze Fighters and Helicopters, all of which cluster above and then suddenly dive-bomb your vessel.

No simple slide-and-shoot, this: it's virtually impossible to maintain rhythm when the surface of the sea keeps changing. While the aircraft glide and descend in smooth patterns, it's all you can do to get off a steady shot!

Good thing Wavy Navy gives you up to nine PT Boats in drydock. You'll need them.

Points are awarded for shooting down the enemy. As in Galaxian, you score more for an adversary shot down when it's attacking. Extra points are granted for the number of PT Boats still in reserve at the end of each round.

The graphics are slightly cartoonish, though the animation is excellent. It's almost worth getting destroyed to see the ship blown out of the water: it does several neat somersaults through the air before plunging into the ocean.

There are three difficulty levels, the option to use keyboard or joystick, and a very useful demonstration mode.

Up to four players can partake in the oceangoing combat.

-Vincent J. Papa



NIGHT STRIKE TG Software Atari 400, 800, 1200 **ROM Cartridge**

big disappointment from TG. Night Strike is a game which I'd have difficulty recommending even for the 2600, but for a computer it's painfully simple and outdated.

Planes soar overhead, bombing the hell out of a city which you're trying to protect. At your command is a tank which can be maneuvered to any horizontal position, its turret raised to any angle.

Each time a plane makes a successful pass, the horizon lights up with a flash of fire and part of your skyline falls to ruin.

What Night Strike is, really, is Missile Command with Air-Sea Battle hardware.

There's little new here. The tank is remarkably crude, more or less a box with wheels, and the city has even less detail than Atlantis for Intellivision. The night sky has a glittering authenticity, but I can't imagine anyone but planetarium buffs being interested enough in a starfield to run out and grab this game.

Even the explosions of the planes and tank are unimpressive, like someone rubbed the disk with steel wool.

In later waves, apart from low and high flying planes, the game dishes up rocket bombs which arc relentlessly toward your tank. It's a unique twist, but, again, too little in a game which is fundamentally vesterday's soup warmed over.

-E.C. Meade

CANNONBALL BLITZ Sierra On-Line Vic-20 Cartridge

'd seen this game in other formats, and was looking forward to this new Vic-20 release for the chance to review it.

The player takes the role of a rebel soldier during America's Revolutionary War. The rebel must storm Nutcracker Hill and destroy the Redcoats' fortress at the summit.

Cannonball Blitz, make no mistake about it, is Donkey Kong in dress blues. Not a bloody thing new here. However: you're going to find it a barrel of fun.

There are three different games: 1) ascend the sloping levels, jumping cannonballs (or hammering them for points) and capturing the flag on top; 2) climbing ladders, riding elevators, etc., to reach the flag, all the while avoiding cannons and such which pursue you; and 3) crossing over and thus removing the "plugs" from floors on each level, ducking cannonballs which are constantly being fired as you do your duty.

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But the animation is lovely to behold- if drab; only the flag and its soldier guard are brightly colored: and the sound effects are unbelievable. It's almost worth being blown up to hear the "roar of thunder" generated by the cartridge.

What's especially appealing about Cannonball Blitz is that you can play any level you want when you want. You don't have to suffer through a screen which you find boring or unconquerable.

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SPYDER Mirror Images Software IBM-PC

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Fortunately you've got a "lazer gun" and plenty of "lazer shots". Now if you have a steady hand and a keen aim, maybe you can zap 'em between the eyes before they web

The game is reminiscent of the Invaders type of action game, but there are a couple of twists that make it unique. You move left and right with two keys and fire upward with another key. At various times throughout the game, you may pick up an energy pack which gives you more shots.

The spiders dangle down on filaments attached to the ceiling at random locations. Running back and forth on the floor at the bottom of the screen, you fire directly upward. But be careful! A near miss may cause the filament to disappear and that spider descends even faster.

If a spider reaches the floor, not

all is lost, since you also have the ability to stomp the spider. It then disappears with a tiny "splat." In the meantime its cousins are inching ever downward. If one lands on you, that's it! You are immediately cocooned by spider web, and suddenly the whole screen is filled with creeping, crawling, screeching spiders.

The sound and animation in this computergame are excellent. You almost see a look of desperation on the little character at the bottom of the screen as a dozen spiders come stalking toward him. The keyboard action is quick and responsive.

There are two shortcomings to this game. One is the annovance of the time-consuming disk accesses between games. When you're anxious to get back and play again, you must wait thru several seconds of disk grinding to continue. According to the manufacturer, the game is being updated to improve the speed.

The second problem is more significant. The colors vary from scene to scene. In some scenes, some of the objects are nearly invisible against the background. This is especially true during the Bonus

Frame when spider eggs appear (or should appear).

Generally the beasts are quite visible and very menacing. You may choose the level of play from "easy" thru "wicked intense" to "at your own risk." At the highest level, the speed is incredibly fast and the attacking objects are nearly invisible. Furthermore, a diabolical pair of scissors flies back and forth clipping the threads, and the spiders fall to the ground from all directions.

If you like fast-action arcadequality games, you'll like Spyder. It really shows off the audio and video abilities of the home computer. If you empathize with Little Miss Muffet, here's your chance to get revenge.

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HIDE AND SINK Mirror Images Software IBM-PC

You remember that paper and pencil game called Battleship. don't you? It's played on a grid with each cell identified by a letter and a number. Each person hides several ships by encircling groups of cells. Then each person takes turns calling out cell coordinates, hoping to hit his/her opponents' ships.

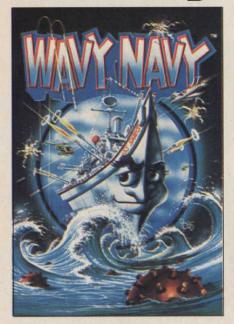
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Adventure

To the Editor.

I have found the fabled hidden room in Atari's Adventure. To begin with you must start off on the second or third level. The first object you must find is the black key, for the secret room lies within the black castle. The next thing you should do is kill off all of the dragons, as they will only hinder your progress. Then seek out the bridge, and bring it back to the black castle.

Now here is the difficult part. Take the bridge up into the beginning of the catacombs and move one screen to the left. Travel to the bottom middle of the screen and imbed the bridge into the wall to the right. Walk through the wall and you are in the secret room! Search around on the bottom of this room until you hear that you have picked something up. What you have in your possession is a small dot, the same color as the floor.

Take this dot to the hallway that enters the catacombs just before the white castle. Place the dot through the wall as far to the right as possible. Now find the sword and place that with the dot. If the barrier to the right does not disappear, leave the room and wait about thirty seconds, then reenter. Try this several times until it does disappear then enter the room and find the

secret message there.

Joe Simpson Anchorage, AK

Thanks for the info, Joe, but we do have something to add. We found the secret room a while ago ourselves, only we did so by placing the dot beyond the wall, then placing any two objects in there along with the dot (it never seemed to matter which two objects as they all apparently will work). In this manner we were able to walk right through the wall, without having to leave the hall or wait.

Star Raiders

To the Editor.

When battling Destroyers, try to position them where your left or right photon torpedo leave the tube. When they are in this position one shot will do them in. Also, when your engines are destroyed and you are looking for your star base, get the target marker centered and hyperwarp until your speed reaches about thirty metrons, then abort. Keep doing this until "Range" is about fifty centrons or until you can see the Star Base in the distance. This way you can possibly save a surrounded Star Base from the horrid destroyers.

> William Claproth LA Puente, CA

Enduro

To the Editor:

In Enduro it is not necessary to travel at top speed through the entire race. By varying your speed, depending on road conditions, and gunning it only about forty percent of the time you will fare better in avoiding crashes.

To prevent disastrous recoil from crashes, brake speed prior to impact, either by hitting the roadside, or pulling back on the joystick and releasing the accelerator button. (A high speed collision sends you back about seven cars, crashing at slow speed may only cause you to loose one position.)

During the day sequences the right side of the road is not only safer for travel, but is the best opportunity for top speed driving. On curves the right side is still safer. At night you will be able to cut in and out of traffic better as often minute contact with lights will have no effect on you. At this time the center of the road is the safest.

In fog slow down a lot, because during fog cars tend to cluster together and a crash will cause you to lose several places.

Watch for one frequent trap: a line of cars will force you over to the left side of the road. At the end of this corridor will be another car.

> Ed Laufer Fairfield, CT

TAKING IT TO THE STREET

Roving reporters Randy Palmer and Bob Sodaro visited a number of arcades and elicited the following strategy tips:

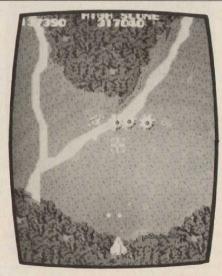
Xevious

Fly low when aiming at the ground targets. Stay higher for the air targets. Once an air target is shot, you can pull back to catch the ground targets. Keep away from the sides when Zakatos appear (black spheres). The sides can trap you.

-Mark Tankersley

Robotron 2084

Eliminate as many Spheroids as possible at the outset of a wave. The



enforcer Robots are your most formidable enemies. Shooting away the Spheroids first will ensure that none emerges to plague you as you work against the other robots. Spheroids usually begin lined up on one side of the screen. As they separate to move to the corners, plug the ones that pass by over and underhead.

-Dave Clinton

O-Bert

Beginning on the third screen, the green Freeze Ball will come out. Keep Q-Bert near the top of the screen so you can capture it as it first drips. Coily will only follow Q- Bert—not pounce on him—if you maintain a lead of only *one* pyramid block. (if you create a larger gap, the snake will use it to get in front of Q-Bert.)

-Derrick Haynes

Star Wars

In order to avoid the phasers that are emitted by the Towers, steer completely away from the Towers as soon as you blast away the white top. The phasers will fall harmlessly away from you.

-Douglas Tanaka

Star Wars

To destroy the enemy ships quickly, fire at the *nose* of the ship; it will run into your line of fire and be destroyed. When lines of phaser bombs come toward you, destroy the ship *first*, then dispense with the phasers.

-Ames Jordan

Amidar

Getting the four corners will allow you to run down the Amidars for points. Capture three corners and wait to close off the last one until a number of the Amidars are concentrated in one section. Once you've completed the fourth corner, go immediately for the section of the board with the highest concentration of Amidars.

-Anonymous

Mr. Do

Try to kill as many monsters with one apple as you can, but don't wait too long to drop the apple, as they might slip away and you could get yourself trapped. You don't have to eat all the cherries on every screen, so don't get greedy. Spend most of your time killing off the monsters.

F. Rivera

Juno First

Stay close to the bottom of the screen, and wait for a cluster of the enemy ships to break through onto the playfield. Then zoom forward and blast away. Drop back if you have to, and don't be afraid to use the warp button to get out of trouble.

J. Jones

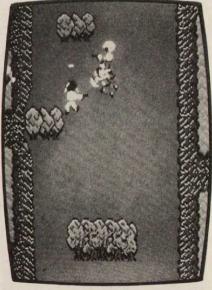
Gyruss

Try to stay to the bottom of the screen; even though you can rotate

all the way around you usually get more kills if you stay along the bottom of the screen. The other ships tend to cluster on their first pass, so that is the best time to blow them away.

Phil Thomas





In Front Line, says Tom Davies, if an enemy is standing on a land mine, shoot the mine.

RAMblings

Continued from page 59. depicts an animated sea battle. The actual game, however, uses the basic ten-by-ten arrays and stationary ships with nearly invisible damage indicators on them. With the sound option on, the aural prompts quickly become very obnoxious. The important sound cues are provided even with the sound option off.

So how is the game? Basically it is a well-executed rendition of the old paper and pencil game. It underutilizes the capabilities of the computer. With practice you might become better at this game, but there is too much chance involved to win consistently. Since the enemy ships are on a different grid from yours, it is that much more of a guessing game. The computer doesn't have to avoid its own ships when it fires at yours.

The game does have some value. It requires deductive reasoning. It also demands basic graphing skills to locate coordinates. If drawing the ships is cumbersome on paper, it is no less so on the computer.

After playing several rounds of *Hide And Sink* (and losing all except one), I've concluded that better use would be made of the computer if it generated grids on the printer which several friends could use to play a nice, quiet game of Battleship. It is a computer game that was probably much more enjoyable to write than it is to play.

-Dale Rupert

One computer game to avoid is Tachyon from Mirror Images Software, Inc. It is supposed to be an action Star Trek type of game. Unfortunately most of the action is merely the spinning of the disk drive between scenes. The program has some good ideas and some very good graphics. But playing it is a tedious chore. According to the manufacturer, this game is being revised to improve its speed. If the nearly continuous disk accesses could be eliminated (and there is no apparent reason that they couldn't be), this could be a worthwhile game. In the meantime, avoid it. Try Spyder from the same company if you are looking for action.

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ROLE-PLAYING

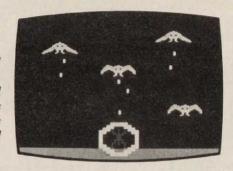
Continued from page 32

Mutually dependent adventures! One Cadet fights off the Krylon hordes (Phoenix) while a second cadet frees stolen Federation ships (Flash Gordon). The first Cadet's score will determine the time allotted the second Cadet.

older cartridges to be reused with a new life to them. Yet perhaps the greatest advantage to this type of gaming is that it allows the player the ability to use his/her own imagination while gaming.

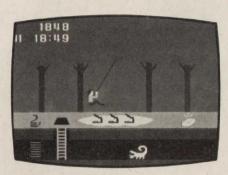
All types of adventures can be had with a format similar to this: rescues, treasure hunts, interstellar wars. New game cartridges can constantly be added to the list provided. Another aspect of roleplay videogaming is that each and every time the Patrol launches on a new mission the quadrant of space in which they travel will, quite naturally be different; whoever is the GO for the game will design the map differently.

Advanced role-play videogamers can always devise more involved gameplay by adding various factors to the mission. A score can be arbitrarily set that has to be beaten, or the GO could play each game first, and thus set the high score. Once this high score is determined the SCs would have to either match or beat it. Points would be subtracted or bonus points would be added to those who fell short or exceeded the mark by greater than ten percent. These points could be



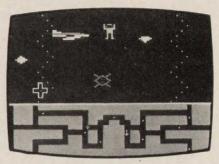
awarded or penalized in the form of fuel, shielding, HP or firepower.

Other variables besides these could be added to the equation.



When marooned, two methods can be used to resupply and effect repairs: the down-and-dirty method (Pitfall, above) or the elegant method, in which you win the needed money (Casino or the like).

SHIPS		THE S	PACE
Class		Shields	Fire-
			power
Scout	20	5	4
Ion Fighter	16	15	15
Starjammer	20+	8	10
Dreadnaut	10	18	18
Cruiser	15	16	14
Skimmers	14	10	8



Cadets could be allowed to have warp power that would use up more (or less) power in traveling great distances.

Money could be added as a part of the adventure. This money could be acquired in any number of fashions. First as paychecks for being in the Space Patrol. Second as rewards for capturing dangerous villains (winning Gunfight and bringing Black Bart back to the Galactic jail). The third way that money could be acquired is by finding it during your various encounters and engagements (the magic urn in Haunted House). This money could be used to purchase additional goods at the various outposts throughout the quadrant.

As you can plainly see, the variations on roleplay videogaming are limited only by the player's imagination (and the number of cartridges). So now that we have laid the foundation, gamers, get to your consoles and commence playing. After you hold a few of these adventures into the galactic unknown you will be able to come up with your own variations. When you do, write to us, and tell us how your adventures turn out.

SUGGESTED GAMES TO BE USED IN VIDEOGAME ROLE-PLAYING

Space Battles

Galaxian(A) Asteroids (A) Space War (A) Star Raiders (A) Yars Revenge (A) Space Attack (M) Star Master (Ac) Cosmic Ark (I) Star Voyager (I) Stellar Trac (S)

Atmosphere Attacks

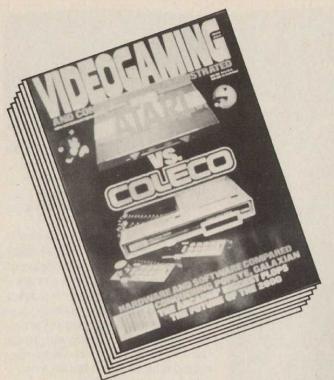
Phoenix (A) Defender (A) Missile Command (A) Space Invaders (A) Astro Blast (M) Megamania (Ac) Chopper Command (Ac) Laserblast (Ac) Empire Strikes Back (P) Planet Patrol (Ap)

Surface Warfare and Rescues

Berzerk (A) Adventure (A) Haunted House (A) Air-Sea-Battle (A) Combat (A) Outlaw (A) Dark Cavern (M) Space Cavern (Ap) Pitfall (Ac) Robot Tank (Ac)

Guide to the games;

M=M Network Ac=Activision A = AtariI=Imagic S = SearsAp=Apollo P=Parker Bros.



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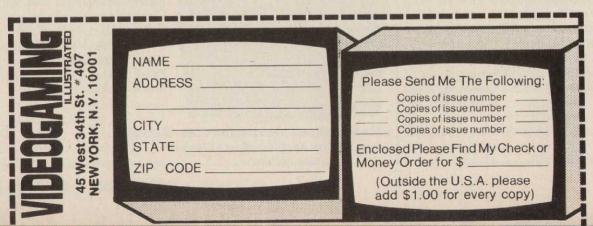
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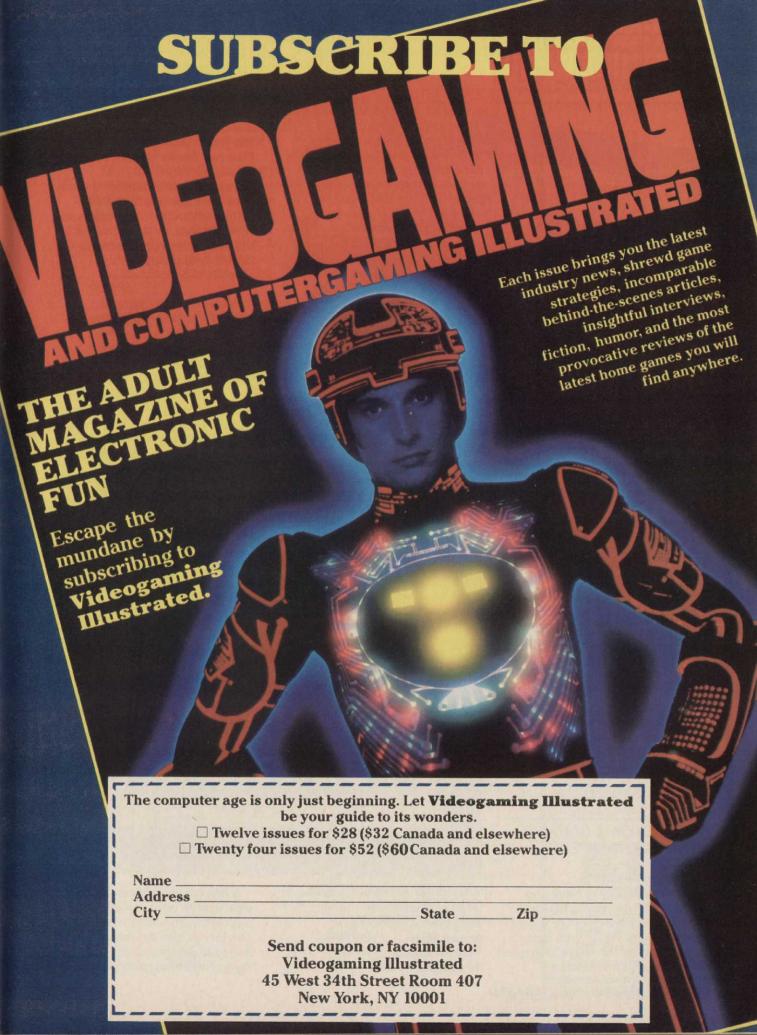
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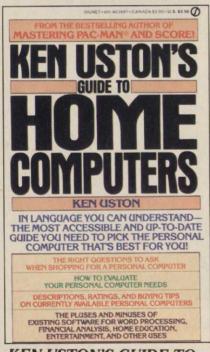


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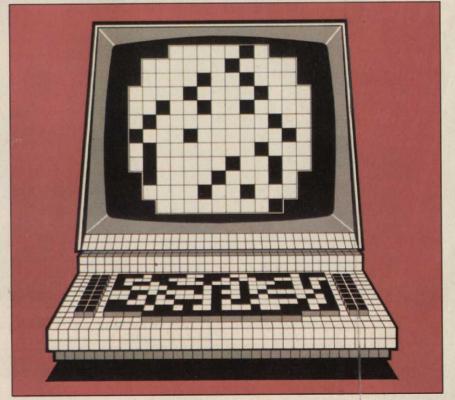
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KEN USTON'S GUIDE TO HOME COMPUTERS Signet Books

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If you've money to burn, and want to find out what a top card player recommends in the way of computers, this is for you. Uston's predictions for the future are typical of his vacuous presentation.



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Ernest Mau Hayden Books 304 pages/\$14.95 A fine book for advanced users who want to create crosswords, word-finds, and other letter games. The tone is friendly, though sloppy line-editing has made for some convoluted technical passages.

than exciting, I'm surprised to see so little of the ColecoVision's memory utilized. Just looking at the game, I'd have declared it fair for Intellivision. But judged by the stan dards of the more sophisticated Coleco unit, it's the weakest game on the market.

First, the Missile Command style defense is old hat by now. It doesn't matter that you're looking down rather than out at the attack: you must place the cursor over the enemy rocket and vaporize it. At that, you can be pretty sloppy in your placement and still get the Ruskies.

Second, when you consider the potential of ColecoVision, the bold, undetailed graphics are a big letdown. This should have been a crisp view from space, with shifting clouds figured into the graphics and gameplay, and some sort of launch capacity of your own.

Nothing. Zilch. Just sight-andshoot with a collect-the-objects phase.

What there is moves fast, but never creates a sense of verisimilitude. You'll get bored with this one very quickly. Countermeasure for the 5200 remains the best game of this type.

Good idea, Odyssey, especially in light of the popularity of WarGames' Thermonuclear combat theme. As for details like entertain-

ment value-better luck next time. Graphics: D-Gameplay: D+

J.C.: I'm appalled by War Room, utterly and deeply. I'll tolerate many themes in the name of creating a good game; I've accepted sexual genres, and allow that the more tasteless hack-and-slash games have a right to their audience. It isn't that I'm a fuddyduddy; I really hate to be so moralistic. But if the industry doesn't develop a sense of values, some damn outsider is going to force it on us, like Congress did to comic books in the fifties.

Why the preamble? Because nuking the United States is in the worst possible taste. Indeed, bad taste is too mild a reproach: 'sick' doesn't even say it all.

I can (unfortunately) imagine a young videogamer getting a charge out of this real-life simulation. Makes a kid feel like a NORAD commander. But I can't believe Odyssey was insensitive and mercenary enough to subject Las Vegas, Denver, etc., to Hiroshima-like disasters in the name of a videogame. The subject is simply too terrifying, too emotional, too topical to be made into sport. Odyssey could easily have set this game on another world, in a distant future with exotic, fanciful weapons, in a fictitious country rich in some kind of natural resourceanywhere but our nation!

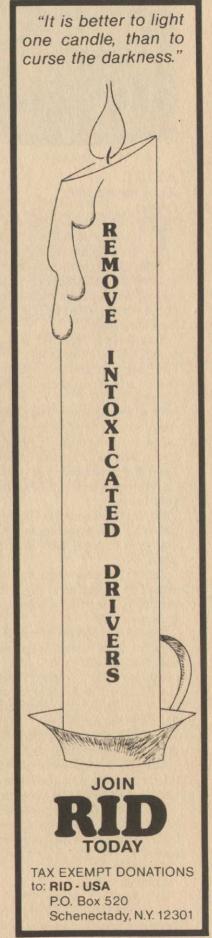
I'd love to hear their rationale for this, and invite them to respond.

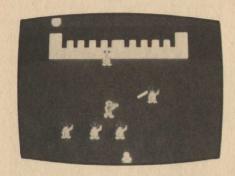
Taking a deep breath and trying to be objective, War Room does a good job of keeping the player on his/her toes. There are enough nuclear bombs in the air to keep the cursor moving, the Communist spies are very tough to evade, and the need to keep track of your country's supplies-especially laser fuel for the satellite-makes for variety and suspense.

Surprisingly, the graphics are every bit as weak as E.C. mentioned, though I was more impressed than she with the scrolling map of the U.S. Would that it were something else!

With an F- for ethics, I offer the following:

Graphics: C-Gameplay: C+





KRULL Atari for the 2600 Object

You are an heroic warrior whose wedding is interrupted when humanoid Slayers pour in from the top of the screen. You kill one after another with your sword, eventually falling before one of the countless laser-bolts that spring from their spears.

Your bride is abducted, and you pursue her on a fleetfooted Firemare. En route you collect the Glaive, a five-bladed disc needed to

fight the Beast.

To reach the Beast, you climb the sticky strands of a spider web, trying to avoid the deadly Crystal Spider who moves unencumbered. Surviving this screen, you pass to the Fortress where the Beast has

your bride.

Hit the Beast with the Glaive and you win. If the giant monster hits you, your Princess becomes Mrs.

Beast.

E.C.M.: Not only is this an excellent condensation of the action in the flop movie, *Krull* is a fine game

in its own right.

Though the Slayers screen is Fast Food, et al, the spears keep things very lively; the Crystal Spider challenge is like nothing I've seen in videogames. The Beast level is actually Breakout in disguise, but thanks to the surprisingly wellrounded narrative, it has more drama than that Atari oldie.

The graphics are spare but colorful; the animation on the Firemares and Crystal Spider are excellent.

Don't avoid this one because you hated the movie: *Krull* is actually better than any of the SwordQuest games!

Graphics: C+ Gameplay: B-

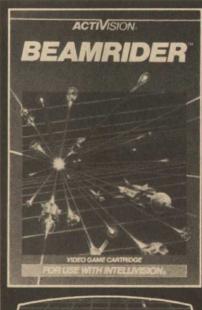
J.C.: Krull left me cold. The SwordQuest series may not have been a commercial success, but the truly abstract environments and unusual gameplay devised for them at least made the games aesthetic triumphs.

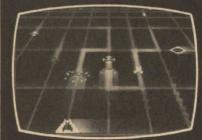
The problem with *Krull* is that it's badly conceived, nothing more than the story of the movie with gameplay tacked-on. That may make for a solid story, but the novelization tells that same story and better.

You have no options in this game, a "must" for quest programs of any kind. E.C.'s favorite, the 2600 Adventure, lets you go where you want when you want; Krull directs the player inexorably from start to finish.

Parker Brothers was wiser to focus on key scenes or themes when adapting the *Star Wars* movies. A Slayers-only game with our hero trying to get himself and his Princess to a Firemare outside a multi-room castle would have been much more enjoyable. The Crystal Spider gameplay is wasted here.

Graphics: C Gameplay: D





BEAMRIDER Activision for Intellivision Object

Restrictor Shield has been slapped around the earth, and it's crawling with alien craft. In order for the Shield to be raised, the ships must be destroyed.

As the grid-like Shield scrolls from the horizon, your ship must slideand-shoot to destroy the onrushing vessels of the invaders. Both the alien ships and your weapons can only travel along the vertical gridlines.

The action buttons on the side of the controller determine which arms are to be used. Each wave has a mix of alien spacecraft, each of which is vulnerable to different

weapons.

J.C.: Well, Activision has finally produced a real stinker. An Activision disaster is nothing anyone was hoping to see and, indeed, we were beginning to think the company was too clever to do any wrong. But Beamrider is wrong. Very wrong.

Because weapon and target are both locked on a beam, it is often inevitable that they crash. And though the aliens can switch beams, there are only five routes; it's tough for them to take you by surprise.

In later levels, when the heavens are thick with aliens, the action is fast, but not as fast as experienced videogamers will like.

Intellivision owners who own Star Strike or Tron: Solar Sailer needn't waste their money on this one.

Graphics: C Gameplay: D+

E.C.M.: Beamrider is Tempest in a teapot.

Once again, canny Activision has gotten the jump on Atari with a modified version of an upcoming license. Unfortunately for them, they did a lousy job.

Tempest is a classic not only because of its lightning pace and vivid graphics, but due to the circular path of the player's defense.

In creating a *Tempest*-like game, Activision captured neither the speed nor crackling graphics of the arcade game. Further, since they couldn't overtly use the circular slide-and-shoot, they settled for the standard across-the-bottom variety. Boring!

On top of that, the vector-type graphics obviously intended to summon up visions of *Tempest* don't work here. They simply make the game look like an unfinished

Moonsweeper.

Let's hope *Beamrider* is just a fluke from the greatest game company in the business!

Graphics: D Gameplay: D

MICRO TAKES

(Editor's Note: This new column allows our reviewers to comment on games previously covered for other systems, or cartridges which would otherwise have been squeezed from *Preview*. Only gameplay will be graded in these reviews.)

Donkey Kong Jr. (Coleco for the 2600)

Object: Climb vines, leap to girders, and evade creeping Snapjaws to save Donkey Kong from his cage. Three different screens.

J.C.: The graphics are as boring as we've come to expect from Coleco 2600 games, but gameplay is surprisingly satisfying. B –

E.C.M.: I found the "Key Push" level (screen two) a *real* disappointment. Otherwise, this is a worthwhile addition to the 2600 library. B

Zaxxon (Coleco for Intellivision)

Object: Soar over an enemy starcity, blasting rockets and fuel dumps while avoiding walls and laser barriers.

E.C.M.: This isn't a bad space game, but it isn't *Zaxxon*. The three-quarters view has been replaced by an over-the-shoulder perspective. Weak graphics on the enemy ships, but the scenery is well-done. B—

J.C.: The player's ship banks and climbs realistically, and the hardware of the evil robot Zaxxon comes fast and furious. I would've called it *Zaxxon Jr.*, though, for as E.C. said, this isn't the arcade game. B

Frogger (Parker Brothers for Intellivision)

Object: Get the Frog across a traffic-heavy road, then from Turtle-to-Log over a raging river.

J.C.: This is the best of all the Parker Brothers *Froggers*. The graphics are not up to Intellivision standards, but control is excellent, especially if you've put joysticks on the keypad. B

E.C.M.: Very colorful, with good Frog animation. However, the graphics are not sufficiently crisp, making precision jumping in the river segment more of a hit-or-miss proposition than *Frogger* fans will tolerate. C

Q*Bert (Parker Brothers for Intellivision

Object: Jump the Q*Bert figure up and down a pyramid, changing the colors of its component blocks while avoiding various nemeses who are in hop pursuit.

E.C.M.: A major disappointment, worse than the 2600 edition. The pyramid has inexplicably been changed to an obelisk and, if you're an arcade *Q*Bert* fanatic, control with the keypad disc is frustrating to the extreme. D

J.C.: The elongated pyramid didn't bother me, and if you're not used to the Intellivision disc by now, you've long-since packed away the system. Excellent color, so-so animation, surprisingly weak sound effects. B—

Q*Bert (Parker Bros. for ColecoVision

Object: See above.

J.C.: Just about perfect. Having to hold the controllers at an angle, as per the instructions, is a bit awkward; otherwise visuals, sound, and gameplay are arcade-quality. A –

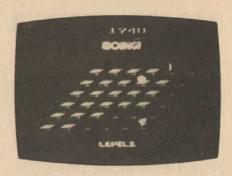
E.C.M.: Videogamers will love this one, though casual players will find it too easy to accidentally jump Q*Bert off the pyramid. A fine, certainly unique cartridge for the system. B+

Berzerk (Atari for the 5200)

Object: Move a Humanoid from room-to-room, vaporizing as many Robots as possible.

E.C.M.: Exactly like the arcade game, with all its plusses (sinister voices, dogged Robots, dangerously electrified walls) and minuses (too-simple room "mazes", drab graphics, redundancy from room-to-room. B –

J.C.: Berzerk is dated. Shallow play, with the inherent flaw that Robots selfdestruct by colliding with each other make for a cartridge which doesn't tax the 5200 or the player. D



Boing!

Boing! First Star for the 2600

Object: You are a Bubble bouncing around a playfield of thirty-six cubes. You must turn each cube "on" while avoiding Pins which will pop you as well as Bubble Eaters.

E.C.M.: To say that this is unthinkably worse than Parker Brothers' *Q*Bert* is only half the story. This is an unoriginal, derivative game which you can look to find on the remainder tables in short order. F

J.C.: While I found gameplay somewhat livelier than *Q*Bert*, and control of the bubble easier, *Boing* suffers from a dearth of characterization, bone-bare graphics, and drab colors. A sound commercial concept, poorly executed. D

Mr. Do! Coleco for the 2600

Object: See ColecoVision review, page 13.

J.C.: This is Coleco's first good 2600 cartridge. You'll find that the orchard has been pruned somewhat, with fewer Cherries, Apples, and Badguys. Considering the limitations of the system, this is nonetheless quite satisfying. B

E.C.M.: Mr. Do! is a merely adequate representation of the arcade original. Newcomers to the game will be amused; fans will find it equivalent to a few drops of water when you're dying of thirst. C-



MOONSWEEPER

Continued from page 34 the destroyer or its deadly missiles is unlikely. The destroyers tend to move in S-curves and diagonals. Try positioning a tower on a diagonal between your ship and the destroyer. The destroyer may be moving too fast to fire at, but often just being at a diagonal from it with a tower in between will cause it to zoom at you, oblivious of the tower; it will crash into the tower. If you are going slowly and there is a tower directly in front of the destroyer, step on the gas. The destroyer just might accelerate to keep up with you . . . right into the tower!

If a surface destroyer isn't threatening your life, it is better to go slowly. Use the radar on the top of the screen to determine where the next miner will pop up. The radar does not indicate miners that are on the screen, so when the radar moves, look for a miner where the radar was, not in its new spot.

If you are going at a faster speed, do not accelerate towards what might be a miner in the distance until you can see his arms waving and that he is not near a tower. Often towers in the distance look just like miners; by the time you discover the mistake, it may be too late to slow down and avoid crashing.

Even if the radar indicated that

the next miner would be in that area, towers can be there as well. Do not blindly follow the radar.

If a miner is standing near a tower, slow down immediately. If he is standing right in front of the tower, avoid him altogether, or pick him up and shoot at the same time so you do not crash into the tower. If you mis-time the shot, you may shoot the miner, which would be a "miner mistake". Don't worry if you miss a miner or two. There are an unlimited number on each moon.

While we're on the subject of callous disregard for digital life:

In easier moons it is worthwhile to pass up some miners to shoot satellites, which are worth big points. These satellites zip by Space Invaders-mothership-style, and are easy to hit. On harder moons it is not a good idea to pass up the stranded miners for the tempting satellite, because the miners appear less frequently, and the surface destroyers become more aggressive if you overstay your welcome on the moon.

SIX IS ENOUGH

Once your ship picks up six miners, it is full. Often, the game is so fast you won't be able to summon the concentration to count as high as six. No problem. Just look at the counter that shows how many miners have been saved; when it starts flashing, look out for the accelerator rings. Ignore all other

miners.

To gather enough speed to blast off of the moon, accelerate to full thrust and fly your ship through the middle of two or three rings in a row. Try to destroy the surface destroyers first by firing at them. If that is not possible, just accelerate towards a ring. The destroyer is oblivious of the rings and will more often run into it than you.

The flight rings often come so fast that it is impossible to react fast enough to get your ship there in time; in that case you will have to wait for more flight rings. The flight rings will come just as quickly the second time, but sometimes the pattern of rings will repeat. If you can remember the general pattern of the first set, you may be ready for the second set. Keep firing, however, just in case a tower pops up unexpectedly. Fly through the rings, and you are back on the sun screen.

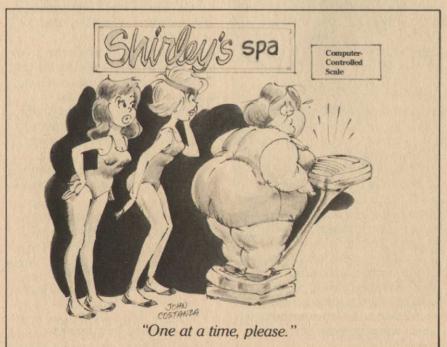
NINE FREE SHIPS AT TEN THOUSAND POINTS?!

The Imagic rules state that "You are awarded an extra Moonsweeper, to a maximum of nine, when your score increases 10,000 points." That is not entirely true. The fact is, everytime (up to nine) that your score increases past a multiple of 10,000 points, you get a free ship. Sound the same? It isn't.

Unlike many games, Moonsweeper allows you to lose points (by activating the force field) as well as earn points. So if you fly off a moon with over 10,000 points, you will have an extra ship, as expected. But wait! If you activate your forcefield until your socre is just under 10,000, say at 9990, and you fire at the torches, flares, and bullets so that your score passes 10,000 again, you earn another free ship! Do this up to nine times for more ships and big points. Cheating? Perhaps, but remember, it's all for a good cause.

With Moonsweeper, Imagic has once again taken the Atari 2600 and wrung from it every drop of potency, like a sponge. Even with hints and strategies, perhaps because of them, Moonsweeper will still be fresh months from now.

Take as many shots as you like; you'll get no hangover from Moonsweeper.



ARCADIA

Continued from page 40 sound. It sends a code message to the sound board, which replies by making the sound. The way it actually does that is that there's a program on the sound board that the sound microprocessor is executing. This program is a series of instructions that outputs numbers to a 'Digital to Analog Converter'otherwise known as a 'D to A Converter.'

Simple as pie, right? Well, alright, about as simple as collecting twenty sinibombs in a worker zone. But hold on, all will become clear (or at least a little less murky) as explanation goes on. "Sound effects are created with a digital computer," Metz elaborates. "When we say 'an analog signal' we mean a signal that varies in voltage as opposed to a number, which is what digital computers use. We have to take a voltage reading and convert that into a number for our digital processor."

"Basically all microprocessors work on a binary (number) system," Dussault relates. "The numbers are usually zero and one. Unfortunately sound is not such a clean cut situation. Sound is analog. It varies in terms of voltage, amplitude, frequency, and pitch. Those are the types of things that have to be taken into consideration when do-

ing sound.

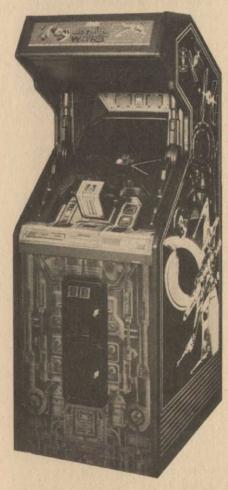
'You can make sounds by simply using ones and zeroes, but the result is usually plain and monotonous. If you use more numbers, you get noise. All the sounds that players perceive as lightning, thunder, and explosions in Sinistar are actually just 'white noise'-random numbers being thrown out of a digital computer."

"Really, any sound you hear is a component of a changing frequency, a changing pitch, random noise, or things like reverberation off walls that you aren't even aware of," Metz takes up. "We have to program things like that in; secondary sounds that repeat the first one that you heard." To hear Metz tell it, none of this was particularly new to the Williams' folk. But he will admit one premiere feature of one particular model of Sinistar.

"The unique thing about Sinistar

was the stereo programming in the sitdown version. There were two sound systems. In fact, there were two sound programs. One for the front two speakers and one for the rear two speakers. It sounded like noise was coming from all sides. This really created the effect of actually being somewhere rather than having the sound simply thrown into your face by one speaker. It creates an environmental experience."

Part of this unique experience stems from the monster Sinistar's



ominous words. Words that Metz and company had to work up in a slightly different fashion. "We actually went to a studio and recorded twenty or thirty minutes worth of speech," he remembers. "And out of that came three or four weeks of editing what we wanted out of that. The programming was relatively simple compared to the process of deciding what phrases and what words we wanted to use. In both words and sounds, we probably threw away twice as many as we used. But when it came time to pro-

gram the boards, all we did was use the equipment we already had and the skill we already possessed."

Paul Dussault helped build those skills and that equipment. "Now the speech is also made on the same sound board, but that sound board works off a CVSD-a Continuously Variable Slow Delta-modulator." Although sounding like a weapon used in a Bugs Bunny cartoon by Martin the Martian, the CVSD is an extremely important device, although actually little more than a plug between digital and analog computers. Remember, analog computers use voltage for language, digital uses numbers.

"The CVSD is a D to A Converter," Dussault says, "but it is also an A to D converter. What we actually do is take the tape we made in the studio and play it into the CVSD. That, mind you, is an analog signal coming off the tape that we hear as words. The CVSD takes that and converts it into digital information."

Although not exactly the same, this process can be understood if one thinks of the CVSD as a translator who converts foreign languages into english so we can understand it. The CVSD is telling the digital computer what the analog computer said in a language it can understand-namely numbers. And when it comes time to translate the information back, as it soon will, the CVSD takes the numbers and reconverts them back into voltage, which the analog understands.

Why bother converting the analog information to digital? For one reason and one reason only: analog computers don't have memories. Once the sound is worked up on an analog computer there's no way to hold onto it and store it in the machine. Only digital computers can remember. So a team-up must be created to give videogames their punch.

"When it comes time for the game to actually make the speech, we reverse the process," Dussault concurs. "The digital information is refed through the CVSD, which recreates the original analog signal. The analog converter is tied to an amplifier and the amplifier is attached to the speakers. And that's the Sinstar's speech."

"We actually decided what the Sinistar was going to say first," Metz recalls, "Only after the sound program was completed (worked out) and generated (programmed into the digital computer) did we have the programmer and video artists sit down and animate the mouth of the monster so that it matched the speech. In that respect, we did it the way cartoon animators do-soundtrack first, animation afterwards."

So Sinistar now stands in the arcade, a proud achievement in both

sight and sound. A proud achievement that may very well be drowned out by the cacaphony of other arcade machines. Only in the sitdown, or cockpit model, or when the machine stands alone in nonarcade surroundings, can the player truly savor the effect. But as Dussault sees it, the times are achanging and sound will soon take its rightful place in the gameplaying experience.

"In the past, mere noises were adequate," he muses. "Just some

sounds thrown in to punctuate the play. But as we get to be more and more an entertainment medium, we have to really choreograph the sound effects. We have to keep developing more and more sophisticated hardware that will be able to do more in a shorter period of time.

"One only has to watch Return Of The Jedi to appreciate how sound enhances the visual effects. I think you'll soon find that same attention to detail in video games."

ETIQUETTE

Continued from page 45 player is constantly making wrong decisions.

If the player is too good to lose a ship rapidly, help him or her out by saying something like, "Watch out for that Mutant!", stretching your arm in front of the screen and tapping on the glass. This maneuver usually ensures a quick loss of game life for the player. When the ship blows up, announce the fact to those around you with a simple remark like, "How frightful! You lost it!"

Such antics help point up other player's faults, making you look good by comparison. If you are good at the game, go ahead and play it once you've made the person in front of you lose a quarter. Look at your watch frequently, as if you don't care too much about the action on the screen and have something more important to do in a little while. If you don't wear a watch, glance in the direction of the arcade entrance every so often, as if you're expecting a friend to walk in at any moment.

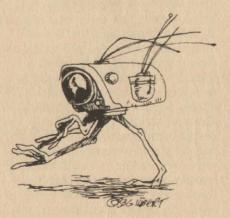
If you aren't very good at the game, don't worry. Once the player has lost his/her last ship, smile slightly and shake your head as you walk away. Onlookers will believe you've already mastered the game and are tired of it. Prestige and esteem are not your's for the asking; they must be earned.

Sometimes it can be difficult to play a machine because the person already playing it won't stop putting quarters in. This situation can be easily remedied, however. Simply place a few quarters (four is best) next to the ones the current player has outlayed. When the current

game is finished, reach for one of the quarters and put it in the coin slot. When the player starts to complain, insist that it's your quarter. He'll maintain that he had a quarter on the machine. At this point accuse him of trying to steal a quarter. Be belligerent. Claim that you put five coins on the machine (instead of the actual four). If he refuses to leave the game (and is bigger than you are) remove all the quarters from the machine, walk back to the manager's booth and lie about the situation. Wait calmly for the manager to eject the player from the arcade, then play the game.

Other tactics can work just as well. Play the game next to his, and make noises of excitation and dismay, no matter what's happening on the videoscreen. Even when you lose, yell a lot. Emitting sounds like "Aaroooh!" and "Gaarghf!" have been found to be particularly effective in upsetting neighbor-players.

Occasionally a player can be bumped from a machine by dropping seemingly helpful hints which are in actuality false. For example, with Asteroids, lean in close and whisper to the player, "You know, if you press Hyperspace and spin the knob at the same time, you never



blow up." Or, "If you shoot away all the men at the bottom of the Defender screen except one, the difficulty level automatically decreases." Find children in the nine-to-eleven year age range and tell them if they eat all the Pac-Man Energizers first, the Ghosts stay blue until the end of the wave.

You can create your own deceptive tips. They're easy and fun, and the possibilities are endless.

A common situation that confronts the arcade player is this: you are playing a game you really enjoy, and suddenly become surrounded by a gaggle of would-be's who also want to play the game. Don't be intimidated into giving the machine up! Wait until one of them places a quarter on the machine, then turn and tell them you are the repairman and you're doing tests because the game hasn't been operating properly. This works best if you have a couple of screwdrivers and a big ring of keys attached to your belt. No one wants to throw away quarters; the offending parties will leave directly.

This has been but a sampling of the problems arcade-goers face today, and the proper solutions to those hazards. Today, many arcades have plush carpeting. Tomorrow, it is rumored, many of them will introduce alluring displays featuring cute bears with clarinets. The pressure to conduct oneself correctly will become even more intense.

Those of you who encounter problems not covered in this article are encouraged to send in arcade etiquette questions of your own. Those questions accompanied by a five dollar bill (arcade expenses, you understand) will be seriously considered; the rest will be ignored.

I/O-PINIONS

Continued from page 24

hold the attention of even a young child. Good idea, giving a chance for children to feel like grownups, but way-off-the-mark execution.

Mission X

E.C.M.: Mission X is as awful as B-17 was excellent. It is difficult to comprehend how one company could create both games, or that they're targeted for the same hardware. The graphics are embarrassing, the only remotely interesting effect being the plane's growing larger or smaller as it climbs or descends. Other than that, graphic interest is nil. Gameplay is both simple and simpleminded. You'll master most of the strategies in fifteen minutes, and lose interest in the cartridge fourteen minutes before that.

If you must have a shooting and bombing game of this type, *Sub Hunt* is superior in every way.

J.C.: Intellivision really missed the boat here—no pun intended. This game should have been played flat with a suggestion of three dimensionality. That is, they've got the bomber rising and falling: the entire contest should have been between aircraft, seen from above. Virtually every other air battle is viewed from the side.

Instead, they've rehashed the *River Raid* scenario—less effectively, I might add—and have us involved in the same tired bombing of ground targets. Not only is this skill easily mastered, it's downright insipid next to *B-17 Bomber*.

Burgertime

J.C.: If enough people find out about this game, there may be some hope for Intellivision. If not . . .

Burgertime is an unequalled delight. Similar to Coleco's Space Panic, it calls for much more strategy: you can drop a hamburger ingredient on one of your antagonists and score extra points; you can wait until they're on the ingredient and drop it with them on it, scoring highly; or you can do both, really racking up the points.

If you wait too long for everything to be in place, however, you may find that one of the canny devils has circled around the entire screen and left you trapped.

I hope this cartridge gives its maker many calories of success.

E.C.M.: Burgertime is, to be sure, a wonderful game, though unless you've attached a joystick to your keypad, you'll have a heck of a time maneuvering Pepper along the sharp, quick angles he needs to succeed.

Think about it, Intellivision: your stubborn adherence to the disc has proved a whopper of an albatross!

While fans of *Burgertime* may find the disc frustrating compared to the arcade controls, this is a faithful and generally satisfying home edition. The arrangement of the ladders from screen-to-screen are nicely varied, and there are four different speed levels from which to choose.

I'm especially impressed with the graphics. While they may not be up to the arcade version, the visual characterization of Pepper—especially the way he raises the hem of his garment while climbing—and the personalities of the food are superbly sketched.

A very good job for a very inadequate system.



Sid the Spellbinder

J.C.: Odyssey has taken a quantum leap forward in the use of videogames as educational tools. I do not hesitate to call this one of the most important videogames ever created.

Diehard videogamers are likely to be critical of the simplicity of the game: even at his highest velocity, Sid is an easy target for seasoned players. But the game wasn't created for them. It encourages youngsters to spell, and to spell correctly if they want to continue playing. Accordingly, gameplay has been designed with seven to ten year olds in mind.

The Voice is better-used here than in any of Odyssey's other videogames. A gentle voice tells the child, "Okay—now spell such-and-such," while a raucous, metallic voice announces Sid's coming or the incorrect spelling of a word.

A word book accompanies the cartridge, a slim but surprisingly handsome volume which uses and defines all of the words in the videogame's thirty-seven word vocabulary.

Sid the Spellbinder is a brilliant melding of keyboard, Voice, videogame action, and the print medium. It should be required software in all elementary schools.

E.C.M.: Just one small disagreement. Given the low level of literacy across every age group, I'd make Sid the Spellbinder compulsory in high schools as well.

I hope Odyssey gives this game the advertising support it deserves.

I can't say enough about this game. It's dull as videogames go from an adult perspective, but it's one of those beacons which lights the way for everybody else.

I watched some kids playing this game, and they were a little impatient with the spelling aspect. Good: It means they're learning.



Acrobats

E.C.M.: When I first saw this game, I thought it was going to be just like *Circus Atari*—and parts of it *are*: the whole theme of popping

balloons, for one. However, the two games *feel* different. The Odyssey see-saw has less bounce, the figures are more realistic, and the balloons move differently, just to cite the obvious.

I'm not going to say this is a great game; it has some serious flaws. More than once I watched my acrobat bounce from one to another of the balloons, often for more than thirty seconds at a stretch, while I twiddled my thumbs.

But that doesn't happen in all variations, particularly in the stationary balloon version. Because the area around a given balloon isn't always filling with new targets, your placement has to be more precise. I also had fun with the shield options: stationary (permanently located in the center) and random (the shield pops up here and there, now and then). If you hit the "wall," your acrobat comes down fast. Working around it is a challenge.

Great entertainment for kids; diverting amusement for adults.

J.C.: For the record, I found this cartridge much less lively than Circus Atari. Or, comparing Odyssey to Odyssey, P.T. Barnum's Acrobats hasn't the speed and fascination of Odyssey's Breakdown/Blockout, which are the best of the batter-thewall games on the market-Super-Breakout notwithstanding. But on its own terms, this cartridge offers enough one-and two-player variations to give you plenty of enjoyment. I found the stationary balloon and shield games to be very good, the moving balloon games very boring. I would add only that the Voice capaciaty is better used in this game than in most others: it's quite natural for the acrobat to say things like "You blew it!" upon hitting the floor hard. (Actually, that's not exactly the phrase he or she would use . . . but why quibble?)

Killer Bees

E.C.M.: Once again, Odyssey's graphics are about as sparse as you can get. The bees are mere dots, and the Beebots antennaed blobs.

But, as is increasingly the case with Odyssey 2 cartridges, gameplay is excellent.

The hive is a very tight field in which to stalk your quarry, and as



the waves advance and more and more Beebots crowd the screen you'll find collison with enemy bees more likely.

Fun, fast, highly original, and sporting *excellent* buzzing and voice effects, this is one game which doesn't *need* the upcoming Odyssey 3 to be a smash.

J.C.: I couldn't agree more with E.C. This game starts tough and doesn't relent as play goes on. But what's particularly exciting about Killer Bees is that as your swarm decreases, you must employ different strategies to try to pull each wave out of the fire—for example, watching the pattern in which a Beebot is moving and trying to sting it not through wild pursuit but by "heading it off at the pass," so to speak.

And, of course, just when you think a given level can't get any worse, more enemy bees flood the screen.



Smithereens.

J.C.: I had fun with Smithereens. though I wouldn't call it a heavyweight game. The technical challenge of hitting the castle, catapult, or enemy knight-all of which earn you points-is quickly mastered on all three levels. However, the fact that only the winner gets to keep his or her points is a nice touch, and the sound effects with the Voice module are striking. The concussive sounds of walls being struck, and the squish of the lake-cum-marsh between the opponents are particularly well-done. The sound effects, without the Voice, are flat.

This is a great game for five-toeight year olds, and adults will have a lot of laughs playing with young kids—but there isn't much here for the serious videogamer. Odyssey would have been wise to throw in a few curves like flaming projectiles or clusters of stones.

E.C.M.: Maybe I've been spoiled by Atari's lightning-fast *Warlords*, but *Smithereens* is one of the slowest "action" games I've ever played. You don't even have to watch the screen: just count off the seconds, release the joystick, and wait to hear the crash.

I agree that the sound effects are great, almost worth the price of admission—yet I found the Voice "narrator" very annoying. I don't like being called "a turkey" and other names in the midst of even a plodding game; whoever at Odyssey thought this was "cute" should be paid in Bobby Sherman records.

Of all the things the Voice could have done—speaking a Lady's good wishes, the king's asides, a squire's concerns—anachronistically emulating some smart-mouthed arcade game was the worst possible choice.

In short, except for the resounding audio, I found this a bore. I ended up flipping boulders at my own castle just to get the bloody thing overwith.

The graphics are equally pallid, the knights and castles more suggestive of Mr. Bill at the beach.

If you only own a Odyssey unit, you'd be wiser to spend your money on *Pick Axe Pete, K.C.*'s *Krazy Chase*, or *U.F.O. Smithereens* just doesn't do the trick. □

READER POLL

Our readership is growing with every issue. Accordingly we want to 1) thank you, and 2) find out as precisely as possible who you are.

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AUGUST 1983 READER POLL SERVICE CARD





HOW VERY NOVEL!

o you remember your initial dismay when, as a child, someone handed you for the first time a book that had no pictures in it? This is a hurdle most children vault quite easily; they are eager to flex their imaginative muscles, to flesh out the sights, sounds and smells of landscapes, characters, vehicles, rooms, tools and ornamentation.

Though state of the art computer graphics are not yet life-like, they are detailed and colorful enough to allow players' imaginations to take a snooze during gameplay. But not the interactive prose adventures from Infocom of Cambridge, Massachusetts: these totally textual games require the player to apply imagination, reasoning, wit,

standing in a small clearing in a well marked forest path that to the east and west. anyon View ou are at the top of the Great Canyon on its west wall. From here there is marvelous view of the canyon and parts of the Prigid River upstream. Pross the canyon, the walls of the White Cliffs join the mighty ramparts of the Flathead Mountains to the east. Following the Canyon upstream to the porth, Aragain Falls may be seen, complete with rainbow. The mighty Frigid liver flows out from a great dark cavern. To the west and south can be seen immense forest, stretching for miles around. A path leads northwest. It is possible to climb down into the canyon from here. inb down cliff cky Ledge a are on a ledge about halfway up the wall of the river canyon. You can e from here that the main flow from Aragain Falls twists along a passage ich it is impossible to enter. Below you is the canyon bottom. Above you more cliff, which appears climbable.

A world of hurt awaits you in Infocom's Zork I.

and memory. At the same time, these participatory novels (as some have called them) are not hard work, in the same way a good book is not. Judging from the enthusiastic reviews they have been garnering, they are a helluva good time.

Infocom's Interlogic series of games offer the player a vocabulary of six hundred words with which to interact with the games. Commands are given in complete English sentences rather than two-word, stilted commands. The games require 32K primary memory and disk drive, and there are



versions available for all the major home computers and some of the not-so-major ones. The average time it takes to complete the games is thirty to forty hours each.

Most of the creative team behind these games worked in MIT's Laboratory for Computer Sciences in the 1970s. The company's president is Joel M. Berez. Together with senior project manager Edward H. Black, Berez attracted the talents of science fiction and mystery novelists and inspired them to write in this new art form.

Early Interlogic games include: Zork I by Dave Lebling (find the twenty treasures), Zork II by Lebling (more treasure questing under the malevolent eye of the Wizard of Frobozz), Zork III by Marc Blank and Dave Lebling (further adventures in the Land of Shadows; watch out for Grues and the Dungeon Master), Deadline by Marc Blank and Dave Lebling (murder mystery), and Starcross by Dave Lebling (a deep space rendezvous with a starship full of aliens, hostile and friendly).

More recent releases include:



eye on



Create your own games with the READS 2600.

Suspended by Michael Berlyn. The player has been in cryogenic freeze and awakens into a nightmare world in crisis. The player must manipulate six robots to help him/her solve a score of complex problems. Each robot has some kind of hobble. quirk or personal problem; one is blind, another deaf, one is stupid, another speaks only in riddles, etc. etc. vikes!

The Witness by Stuart Galley. A mystery in which the player is witness, detective, suspect and potential victim. Game includes a period newspaper, suicide note and other physical clues.

Planetfall by Steven
Meretzky. A comic adventure in which the player is marooned on a hostile planet armed only with a multi-purpose scrub brush and an eccentric robot companion, Floyd. The player must stop the planet from falling into the sun while finding food, sleeping, getting sick and even dreaming.

YOU CONTROL THE VIDEO

M aybe you're one of the apparently mounting number of videogamers grown bored with what the Atari 2600 has (or doesn't have) to offer. Maybe you feel you could make a fortune designing games if your freehand sketches would just feed into your **Atari 800's** disk drive. Or maybe you bought a 2600 and an 800 and don't know what the hell you're going to do with both of them.

A possible solution to all three problems has been provided by VSS Inc. With their READS 2600, supplied software, and a 6502 assembler, you can use your 800 to create your own games for the 2600 (adaptor for VIC-20 games available).

Says Ed Salvo of VSS:
"The READS 2600 is a
development tool for
home use. It's intended for
someone who knows how
to program and design a
VCS game, especially someone who'd want to sell
that game to a manufacturer." Physically, it is a
"black box" which connects to your 800 through
the joystick ports and to
your VCS through a cartridge adaptor.

In addition to developing games in 4K, you can utilize the unit's bank selection mechanism to create 8K games. With an optional EPROM programmer, you can assemble prototype cartridges.

The complete READS



Commodore's Executive 64 portable computer.

2600 package includes 8K ROM emulator, Atari 800 connector cable, Atari VCS cartridge adaptor. cartridge adaptor connector cable, instructions, and software packages for transferring your computer's machine language program for execution on the VCS and for discovering the graphic and audio capabilities of the VCS. Price is \$795.00, with accessories ranging from \$5.50 to \$295. Write VSS Inc., Hardware Development Division, TX 75220.

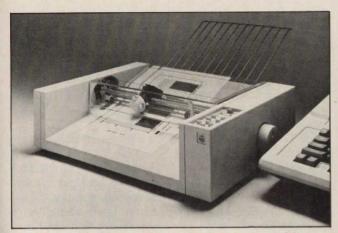
SURGE SUPPRESSANT

While programming your new multimillion dollar game, you'll want to protect if from unexpected surges on the line that could erase the program and/or damage the computer itself. To this end, Discwasher has introduced a computer power line monitor/protection device.

The two-stage, surge/spike charge suppressor has both EMI and RFI filtering. It's available



A calculated move: Radio Shack's Pocket Computer.



The Apple Color Plotter for instant graphics.

as a wall unit which plugs into a socket, or with a power switch and 5-foot cord.

LET'S GET SMALL

In another ten years we're liable to see pinky ring disk drives and wristwatch printers, but in the meantime we'll have to settle for Commodore's 5" x 141/2" x 141/2" briefcase computer. The Executive 64 has 64K RAM, a full upper/lower case detachable keyboard, built-in six-inch color monitor, and a built-in single floppy disk drive with 170K capacity (second drive optional).

The unit is fully compatible with VIC-20 and C-64 peripherals. External ports allow full-sized monitor and graphic printer hookups. With a Z-80 cartridge, it can accommodate PET software. The Executive 64 can also use game cartridges designed for the 64 family, and has full music and sound capabilities.

The price is \$995. Now, if they could miniaturize that. . .

While comparison in any other category with the Executive 64 is meaningless, Radio Shack's new TRS-80 Pocket Computer Model PC-3 is a lot smaller. It weighs four ounces and fits in a shirt pocket.

The PC-3 provides sixteen arithmetic and eight string functions, and features twenty four-character liquid crystal display along with accuracy up to ten digits and 1.4K memory. Other features include two-digit exponents, multiple statements, and arrays.

Price of the unit is \$99.95. For \$119.95 you can add a matching printer/cassette interface that allows use of a cassette recorder to load and store programs and prints twenty four characters per line. The interface also makes the PC-3 compatible with Radio Shack's library of software for the pocket computer Model PC-1.

Most significantly, though, Radio Shack's pocket computer has made possible a new way to lose computer information . . .in the washing machine.

BEARING FRUIT

Returning to normalsized hardware, Apple has introduced two new



Apple's Monitor II—The Sequel.

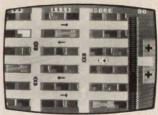
peripherals. The Apple Color Plotter, Model 410, produces graphs and charts on paper or overhead transparencies. Designed for the Apple II and III personal computers, it is compatible with Apple Business Graphics and many other software programs of the II and III. Among the plotter's many features is its ability to interchange its four color pens automatically during operation. Price is \$995.

The Monitor II, a monochrome video display for the Apple II, features superior resolution for 80-column text and graphics display, an anti-reflective high-contrast screen, and a tilt mechanism for adjusting the screen's angle. The monitor is designed to reduce eye fatigue. Price is \$229.

GAME UPDATE

Giving the same old boring Tootsie Rolls and Mary Janes this Halloween? Why not download the neighborhood gremlins with computer games? Sure, it's a little more expensive, but at least no one will chalk up your sidewalk. And remember how much you enjoyed adding up your obnoxious neighbors' den-





Over-drive

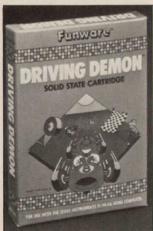
eye on

tal bills last year as you handed their kids your gooey candy? Well, imagine giving software to a kid who won't be able to use it until his or her parents spring for a computer, disk drive, printer, voice synthesizer. . .

Creative Software's Funware subsidiary has released five new games for the **TI-99/4A**.

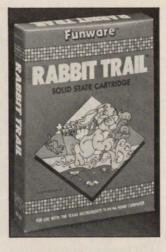
Ambulance puts you in the shoes of the man who risks his life racing through streets against traffic, to reach the place where an injured person lies. Your goal is to fill the hospital with rapidly expiring emergency cases without losing too many patients or too many ambulances.

At the wheel of *Driving Demon*, you must drive as far and as fast as you can within a time limit. By watching your tachometer, speedometer, and long-range scanner, you can avoid the cars





Demon at the wheel.





Rabbit Run.

ahead of you.

When you've had it with high-speed driving, you can slow down and hop along the *Rabbit Trail* in quest of carrots. Here, dangers include weasels, traps, and a hawk.

A poetically fitting stocking stuffer is St. Nick, which pits Kris Kringle against hostile elves who scatter his toys. Santa's helper must manipulate him through a maze, dodge flying witches (is it Christmas or Halloween?), and pick up the toys in a given order.

Nothing to sneeze at is *Schnoz-ola*, in which a well-nostriled Mayan prince must collect the sacred flowers growing on a four-tiered pyramid. The player maneuvers to the top of the pyramid and back down again while dodging fireballs sent by gods who get their noses out of joint.

All five cartridges

feature a pause function, and retail for \$44.95.

As forecast last issue. Texas Instruments and Milton Bradley have released six arcade games and four educational games for use with the TI-99/4A and the Milton **Bradley MBX Expansion** System with voice recognition. The three which require use of the MBX (Championship Baseball, Terry Turtle's Adventure, and I'm Hiding) retail for \$59.95 each, the other seven for \$49.95.

While far too expensive to kick dirt on, the computer umpire in *Championship Baseball* will call balls and strikes like its real-life prototype. You control your players' movements through voice recognition, to the strains of what Tl calls "realistic ballpark music."

In Sewermania, you must defuse a time bomb in a rat-and alligator-infested sewer. You get a shovel to bash the rats and a generator to flood the sewer.

Meteor Belt teams you with a computer co-pilot to duel with enemy ships.

Adventure-starved computergamers will dodge boulders and eagles to scale six increasingly difficult mountains and capture *Bigfoot*. With a grappling hook, players pick up supplies and gold on their way to the mountaintop.

In Space Bandit, players snatch up space crystals in a 3D maze as droid guards pursue. The game features such 3D visuals as wraparound shooting and a shield that must be raised to save players from being hurled into space.



Romox's Starion.

In Super Fly you must position your flies to destroy alien spiders before the next batch of spider's eggs hatches before your eyes. Included is a "bug spray" feature.

Educational offerings include Terry Turtle Adventure, in which the child learns elementary programming and education concepts as (s)he guides Terry home through a changing landscape. The turtle obeys the child's commands, and talks back. Which may help certain kids to come out of their shells.

Honey Hunt poses the problem of helping a bee find flowers while avoiding flies and spiders.

Also inspired by the insect kingdom, I'm Hiding requires the child to locate clue-calling bugs hiding in a crayon box.

Three musical games make up *Sound Track Trolley*, in which kids play, match, or follow tunes. They can pick out funny musicians and combine their tunes to form a band. And the way things are in the recording industry, probably make the Top 40.

Romox has adapted three programs for the TI-99/4A.

Ant Eater requires one or two players to outwit an anteater while traveling from an undergound burrow to the surface in search of food. But it's no picnic—if



TI Baseball.

vou survive, vou face two anteaters in the next round. and three in the round after that.

In Hen Pecked, you're a rooster who must keep the chickens in the barnyard from straying too far.

In Princess and Frog you'll hop past jousting knights, from alligator to snake on your way across the moat, to the castle where you'll collect the enchanted kiss from a princess to restore yourself to humanhood.

All three 8K cartridges sell for \$39.95.

From Romox, Inc. for the Atari computers:

Sea Chase pits you against sea mines and a depth-charge-dropping destroyer on your way to capturing ten missing treasures. Price is \$39.95.

At the wheel of Taxi, you must dodge potholes, barriers, motorcycle cops and other obstacles in order to get back to the garage before the dispatcher finds out you're late. Just like real-life hacking, except that you must try not to hit pedestrians. The 16K cartridge retails for \$44.95.

To the tune of gurgling water, the sewer cleaner in Waterworks must flush out obstructions in the city's maze of pipes and tunnels while luring rats into dead ends. Price of the 8K cartridge is \$39.95.

Topper is a tortoise who navigates his way through 3D obstacles in various

geometrical shapes while dodging a dynamitethrowing hare. Price is \$44.95.

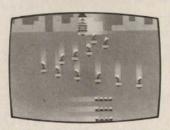
Starion requires you to zip through multiple screens, bypassing obstacles and attackers, to pick up the twenty prisoners trapped in an outer space cave-one by one. The 16K cartridge costs \$44.95.

The videogamer who prefers creating to destroying can draw on Sketch. Using a joystick controller, you can combine dots, lines, circles, arcs, and squares, in up to 256 colors and shades, to generate electronic masterpieces. Price of the 16K cartridge is \$44.95. Even being a starving artist isn't cheap anymore.

Activision has charged into the computer software arena by releasing River Raid and Kaboom! for the Atari home computers. Both games, which have had several features added, retail for \$34.95

From Broderbund Software comes Operation







Activision trots out its best, comic and combative.

Whirlwind, a World War II contest consisting of several phases of battle action. Gametime elapses in anything but whirlwind fashion, typically lasting from one to three hours. Your win can be designated questionable, marginal, tactical, strategic, or breakthrough. List price is \$39.95.

Radio Shack takes TRS-80 users to an unusual kind of videogame futurea plausible one-with Reactoid. On the site of the world's first nuclear fusion reactor, you must prevent disaster by guiding energy particles to the energy posts in the center of the core. If the particles go astray they will hit other particleemission tubes and begin melting the reactor's core. Seven hits, and the screen disintegrates in a meltdown.

Gomoku/Renju incorporates ancient Oriental strategy in a one-or twoplayer battle of wits. Gomoku is won by the first player to create a horizontal, vertical, or diagonal line



Tanks for the Atari.

of five pieces of his/her own color. Reniu is a similar but more complex game.

The games are \$19.95 each and require color computers with at least 16K memory.

It may have only five arms, but Turning Point Software's dreaded Pentapus (for Apple) is more dangerous than the average ink-squirter. He waits in deepest space for players who survive the waves of Drangels, Eagulls, and other devilish mutants that assault them. If you defeat the fivearmed fury, you can return home; but you'll have your hands full. Featuring action freeze/restart, high-score editing, and four separate skill levels. Pentapus retails for \$29.95.

Broderbund has adapted David's Midnight Magic for the C-64. The video pinball game features dual flipper controls, bumper action, rollovers, multiple ball play, and the sounds and lights of an arcade pinball unit. Price of the disk is \$34.95.

First Star Software is releasing two games for the 64. Flip and Flop is a 3D multilevel romp with scrolling playfield; players hop on the surface or swing from a ceiling.

Bristles is touted as the first four player unisex game. Players must paint rooms on forty eight levels while avoiding Smart Buckets, Dumb Buckets and Half-Pints.



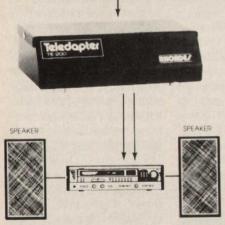
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WORTHY COMMENTS

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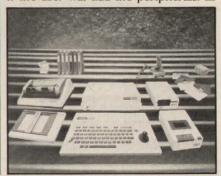
Continued on page 57

The Basic does allow the user access to the 256 x 192, 16 color graphics with great ease, and having the Basic in ROM keeps memory free for the user, although the graphics of the computer takes over 18K away.

Overall, this computer is a good one, but it is not for everybody. If the buyer is interested in developing a computer system with several peripherals for about \$1500 total, (s)he's going to wind up with a pretty powerful machine that's CP/M compatible. This could be a good business computer if it had a typewriter keyboard. The \$600 SV-328 (their top of the line) comes with such a keyboard and 80K of memory, as well as a built in powerful word processor and "Superterminal" program. That computer would be more appropriate for the business user. Although Spectravideo is putting out varied software, there might be some third party support as well. Most of the major computer companies are waiting to see how the computer sells first.

The SV-328, incidentally, will probably conform to the MSX standar-dization code that was recently announced by Spectravideo on behalf of fourteen Japanese companies. The hardware standardization in the bus will allow software to run on all computers with the MSX logo, those computers yet to be announced.

In any event, the SV-318 is a computer that can be expanded. The major peripherals are available now, and some unique peripherals are promised (ColecoVision adaptor, graphics tablet, keypad). This is no computer for someone who only wants to spend \$300, but it can be as powerful as a high end computer if the user will add the peripherals.



he new industry buzzword for technologies innovative "sexy." Laserdisc, for example, is sexy, as this issue's article on the subject indicates.

What, we ask, could be sexier than the impending marriage between home computers and videodisc players—a marriage that would geometrically increase the precision and speed of access?

Following are some speculative applications-giddy and sober-that the VCI staff feels are in store for laserdisc and its users.

Audio/Visual Collages. Rock videos

are all the rage today. Tomorrow, afficianados of rock, classical or jazz will be able to create their own videos in the comfort of their own homes.

An interface must be created between a home computer and a unit that will encode information onto a blank disc. This unit is called the Engraver. The Engraver accepts and stores, bit by bit, the information that the user intends to employ in the disc. When all the information is assembled.

it will engrave the assemblage in data track format onto the disc.

First, the user will record the song to be visualized. The Engraver will accept and digitalize the audio track. At the same time, the home computer will display the music on an oscillating graph so that the user will be able to precisely coordinate the visual images with the proper musical phrase.

Now, various units will be interface with the computer, which will translate and transmit the data to the Engraver. Each unit will apply particular kinds of visual information. The computer will be able to screen out certain information and accept only what is desired. New information can then be layered onto the previous data.

The units include the Still Camera (prototype: The Micron Eve. covered in VCI 7/83, which transmits still visual images from photos, paintings, fabrics etc. into a computer); The Looney Tuner (prototype: The Movie Maker, covered in VCI 8/83, which is a complete animation program); Hot Lips (prototype: The Voice from the Alien Group, covered in VCI 6/83, which allows the user to plant disembodied lips anywhere on the screen to synchronize with sound). With these units and a video cassette recorder (for relaying in-

Physical Fitness/Arcade Play. In VCI's February issue, we reported the LaserTour, an exercycle with a rearprojected videodisc screen before it which displayed various landscapes scrolling in coordination with the cycler's pace.

Take this a step or two further: a wraparound screen that surrounds either an exercycle or a rowing machine or a running treadmill. The player will have a fire button at his/her command. While cycling or running or rowing through outer space or surreal landscapes, the player will enjoy rapid-fire shoot-em-up games and get a good workout in the bargain.

> Stereo sound. wind machines, sensurround and smellovision will the enhance experience.

Education. In English class, for example, the time will come to test students on Catcher in the Rye. A laserdisc presentation will be mounted that puts the students in the role of Holden Caulfield. Students would have to react as Holden would in various situations: not from the book itself, but all-new situations. This would serve as a

Art © Alvino-Manzione

gauge of understanding of the character.

Adult education games might include Cocktail Party Challenges. Elegant (or otherwise) parties will be presented onscreen and the player will interact. Thousands of conversational permutations are possible. Perhaps interfaced with a computer's voice recognition device, the player will see how his/her wit stacks up against various crowds: investment bankers, the Parisian elite, Hollywood types, Greenwich Village burn-outs etc. If the computer senses desperation or hesitation in the player, the onscreen figures will interrupt or rudely look elsewhere for more stimulating company.



formation from movies, sports, ballets, newsreels, home movie/tapes etc.), visual information will be applied at any speed the user chooses, animated with new backgrounds, blended Betty-Boop-style into stream of consciousness segues with colors pulsing to the beat.

Imagine yourself (taped with a VCR camera) dueling with Errol Flynn to the Brandenburgh Concerti. Imagine the collective works of John Wayne used to animate the latest Police album. Animate lips onto Darth Vader as he sings My Way. Steer Popeve and Olive Ovl through a pas de deux while the helicopters attack in Apocalypse Now.

Sexy, right?

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