

hooting Close-Ups

Video

CONQUERING.
THE SPACE INVADERS

The #1 Magazine Of Home Video

The Best of B-Westerns • What's Your Video IQ?
How to Organize Your Cassette Library
Will Cable Companies Bury Community TV?

BERGER-BRAITHWAITE VIDEOTESTS

Magnavox VHS VCR • Showtime Video Stabilizers • Toshiba Beta VCR

**Portable
Magic:**
Go Anywhere,
Tape Anything



by F. Laney, Jr. & Bill Kunkel

40
A Portable Feast
by Roderick Woodcock
A roundup of portable video-cassette recorders and their features.

44
Best of B-Westerns
by Tim Onosko
The good guys wore white, the bad wore black and the cowboy hero sang at the drop of a ten-gallon hat.

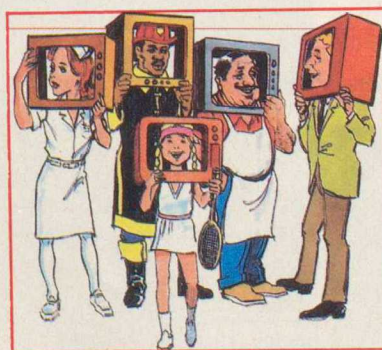
48
**Public Access:
The Electronic Soapbox**
by Cliff Roth
Cable TV's role as an ideal forum for the local community may be threatened by cable companies.

52
Cataloging Your Cassette Collection
by Steve Robbins
A comprehensive system to help organize your growing tape library.

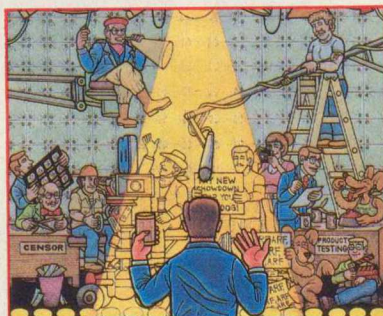
56
Time Out for A Commercial
by Norm Blumenthal
Fascinating facts and figures about the "messages" that are TV's lifeblood.

61
What's Your Video IQ?
by Tracy Ecclesine
This is a test. No talking, please. These forty questions will reveal how video-wise you are.

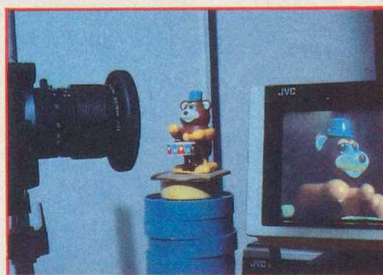
64
Cityscapes: View from the Top
by Gary Jitt
This month's Video Environment takes you 31 floors up, to a co-op with spectacular views inside and out.



Page 48



Page 56



Page 72

66
The Saga of Space Invaders
by Arnie Katz & Bill Kunkel
Orson Welles only fooled us in 1938. The real aliens landed forty years later, disguised as video games.

72
Getting Close to Your Subject
by John Bishop
How to make the most of the macro (close-up) feature on your camera's zoom lens.

Columns

Channel One.....	6
Televiews.....	16
Arcade Alley.....	18
TV Den.....	20
Audio into Video.....	24
Video Programmer.....	28
Videogram.....	30

Videotests

by Berger-Braithwaite Labs.....	80
Magnavox VR8340 VHS Video Recorder	
Toshiba V8000 Beta Video Recorder	
Sony AG-300 Betastack Cassette Changer	
Showtime Video Ventures CVA-170 Stabilizer & S-7 Synchronizer	

Departments

Feedback.....	8
New Products.....	12
Programming News & Views.....	32
Top 50 Bestselling Titles.....	38
Program Directory.....	76

ABOUT THE COVER

This month's cover depicts the "magic" of portable video recording with a fantastical view of the splendors of ancient lands. But you don't have to go to such lengths (or heights) to record anything, anywhere with a portable VCR. Carpet photography by Alan Veldenzer; carpet from ABC Carpet Co. Background photography of India by John Lewis Stage, The Image Bank.

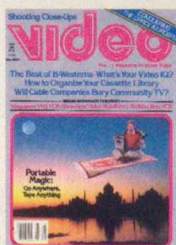


PHOTO CREDITS: Les Morsillo-53, 64-5, 72-5, 80-90; John Lewis Stage/The Image Bank-40-1 (Background); Alan Veldenzer-40 (Carpet)

ILLUSTRATION CREDITS: Brent Bailer-28, 48-9; Frank Emmi-24, 61-2; Alan Hashimoto-66; David Prestone-31, 56-7



VIDEO (ISSN 0147-8907) is published monthly by Reese Publishing Company, Inc., 235 Park Avenue South, New York, NY 10003. Second-class postage rates paid at NY, NY and additional mailing office. © 1981 by Reese Publishing Company, Inc. All rights reserved. Under Universal, International and Pan American Copyright Conventions. Reproduction of the editorial or pictorial content in any manner is prohibited. Single copy price \$1.75; \$2.00 in Canada; 1 Pound Sterling in U.K. One-year subscription (12 issues) \$15.00; Canada \$18.00 U.S.; foreign \$23.00 U.S. Address subscription orders to VIDEO, P.O. Box 1118, Dover, NJ 07801. Address all subscription correspondence and inquiries to VIDEO, P.O. Box 1116, Dover, NJ 07801. Change of address takes 60 days to process; send old address label, new address and zip code. All material listed in this magazine is subject to manufacturer's change without notice, and publisher assumes no responsibility for such changes. Printed in the U.S.A.

POSTMASTER: Send form 3579 to VIDEO, P.O. Box 1116, Dover, NJ 07801.

Arcade Alley

A Critical Look at Video Cartridge Games & Programs

by Bill Kunkel & Frank Laney, Jr.



Lure of the Labyrinth

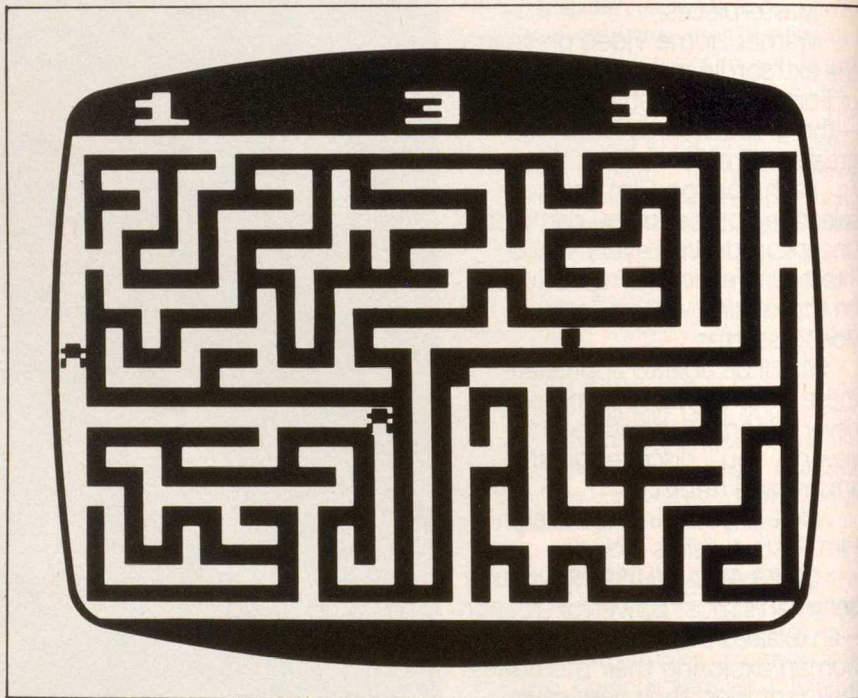
Exploring Maze Games

If you're a typical "Arcade Alley" reader, chances are that you've taken a few enjoyable cracks at solving mazes. There's something timelessly fascinating about laboriously ferreting out the single correct serpentine passage from a tangle of false starts and dead ends.

The maze was as well-known in ancient Athens as in modern-day America. The Greeks of the Golden Age took great delight in the myth of Theseus and the Minotaur, in which a mighty hero must negotiate a labyrinth to find and slay the man-beast at its center. These days, folks enjoy mazes in many forms, ranging from paper-and-pencil games and three-dimensional puzzles to the "house of mirrors" found in just about every amusement park and carnival. Even role-assumption fantasy games like "Dungeons & Dragons" are, at bottom, little more than extremely clever mazes with lots of imaginative embellishments.

Designers of cartridges for programmable video game systems have not entirely resisted the compelling lure of the labyrinth. Although mazes *per se* are much less common in the home arcade software catalogs than "Pong" variants and sports simulations, there are a few of them. Games as otherwise diverse as "Combat" and "Adventure"—both from Atari—use mazes and maze-like elements. Truth to tell, however, makers of home arcades have generally slighted maze-loving players. The main reason VIDEO hasn't bestowed an Arcade Award for Best Maze Game is that there haven't been enough contenders for the honor in either 1979 or 1980. But if the current trend continues, this might not be true in 1981.

Suddenly, software suppliers have discovered the maze, recently releasing several cartridges wholly or partially using the principle of the labyrinth. We reviewed one of the best, Atari's "Dodge 'em," in a previous installment of "Arcade Alley." This time, we'll look at a couple of brand



Atari's "Maze Craze" is the latest offering in a new spate of video maze games.

new video maze games and an older one that set the stage for the current explosion of interest in this kind of cartridge.

Atari's **Slot Racers** (CX 2606) has virtually nothing to do with either slot cars or racing of any kind, but ranks as the most important of the classic labyrinth games. It's a fast-moving head-to-head thriller that requires quick thinking, and even quicker manipulation of the joystick. This a-maze-ing cartridge is a triumph despite the patent absurdity of the situation it propounds. Players drive on-screen cars through a byzantine network of city streets, taking potshots at each other with missile launchers mounted on the automobiles' front hoods.

As with most Atari software, options abound. There are four different street-map mazes, an equal number of car speeds, and several ways to handle the missiles. One set of variants has missiles which are faster than cars and can automatically turn corners to pursue them. A

second group of contests gives the cars a chance to accelerate out of harm's way. The third batch includes missiles that won't navigate corners, making it necessary to get your foe in the direct line of fire before pressing the action button and loosing a rocket.

Steering, especially in games with fast missiles, is more than just an annoying complication. Many times a driver can avoid a rocket with a well-timed turn that would otherwise blow the car to scrap metal. It takes a little practice to push the joystick at just the right time, but the results are well worth the extra effort.

Maze Craze (CX 2635), a new release from Atari, invokes the labyrinth in its most familiar guise. The designers have deftly built onto this basic puzzle structure, adding the tactics of pursuit and avoidance and a madcap race for the playfield's only exit.

Subtitled "A Game of Cops n' Rob-

continued on page 110

Bill Kunkel is a New York-based writer and veteran video game addict. He shares his mania with Frank Laney, Jr., another New York freelancer.

Arcade Alley

continued from page 18

bers," the game has arcaders portraying video lawmen patrolling a rabbit's warren of semi-deserted streets. Depending upon the variant selected, cops strike either to catch unarmed robbers or to avoid armed ones—and then reach the safety of the exit. The computer depicts all criminals as free-roving cursors, but there's quite a difference between the two types of felons. A police officer can arrest an unarmed crook, but if the blue knight runs into the more lethal variety, he's likely to get a stunning knock on the head.

The cartridge offers four speed options ranging from plodding to greased lightning to keep pace with the increasing skill of players. Since the street mazes are randomly generated, there's no danger (or hope) of becoming even slightly familiar with the multitude of possible city maps. Sound effects do a great deal to enhance the illusion: hollow footsteps echo as the video flatfoots prowl the pavements in search of wrong-doers. A cop hitting a dead end causes a signaling bump, and there's a thudding crash when a weapon-toting baddie gets the best of a man in blue. The unit also gives a satisfying electronic titter of triumph when the first policeman successfully escapes through the exit.

The cops-and-robbers metaphor does, admittedly, wear thin at times. After all, police officers aren't supposed to run away from crooks, whether or not they're armed. But once you explore some of the fiendishly clever options, such little details become irrelevant. If you like mazes, you'll go crazy over "Maze Craze."

Take the Money and Run (AJ 9412), from Magnavox, is an entirely original and completely captivating maze game for the Odyssey² system. Most design elements are "right off the shelf," but Magnavox has created a charming explanation for the sizzling on-screen action.

Each player begins the adventure with a stake of \$500,000 in the labyrinthine kingdom of Keynesium. They need every penny of it in order to reach the game-winning goal of amassing \$1 million. Arcaders not only compete against each other, but also against the system itself—computer-controlled robots representing positive and negative Keynesian economic factors. Brightly-colored robots symbolizing income, reward, and investment can add to a player's bankroll, while the darker-hued automatons, which stand for expenses, theft, taxes, and inflation, trigger a subtraction from the hoard. The idea is to capture the brightly-colored robots as quickly as possible while keeping the darker ones at arm's length. The faster a player catches up with a positive factor, the more it's worth. On

the other hand, the longer it takes the negative robots to nail their quarry, the less effect they exert.

The playfield maze isn't overly complex, but navigating it is no cinch either. Since the robots are smaller than the on-screen players, they can move freely through even the tiniest corridors. Arcaders, meanwhile, must constantly hit the action button to make their players duck their heads to squeeze into tighter passages. Unfortunately, this cuts speed by one-third, giving the dark robots a fine opportunity to do their deadly work. Although earning a cool million is the stated goal, we recommend that first-timers start off with a lower figure. Until the game is mastered, it may take longer to earn a million bucks in "Take the Money and Run" than it does in real life.

Players of all ages should enjoy this cartridge, but we especially recommend it for younger gamers. It's one of the few video games that successfully blends a little education with a high degree of entertainment.



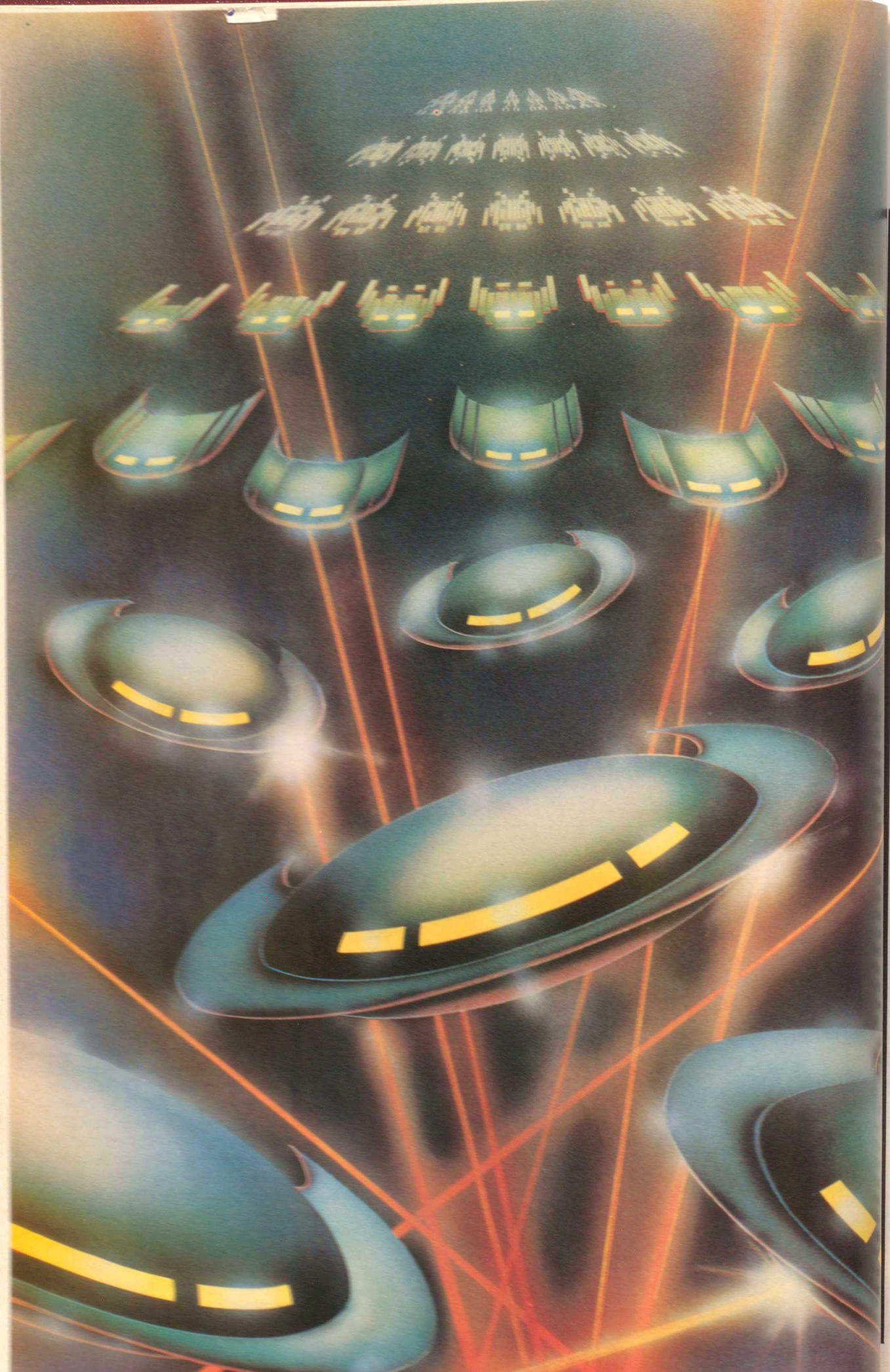
Electronic Soapbox

continued from page 50

for the audience it does attract. In the middle-class community of Endwell, New York, where 40 percent of the homes are hooked up to cable, a controversial PTA meeting about television violence was videotaped by the local access group. Before cablecasting the tape, the PTA alerted parents in its newsletter. So while the meeting was attended by only a few dozen active parents, several times that number watched the presentation at home.

When public access programs are aimed at a special audience, producers can attract a bigger audience if they publicize their program through a newsletter, special mailing, newspaper notice, or bulletin board posters. A weekly program based on a special interest can become the central focus of a related organization after a few months. The least effective form of publicity is the rolling "teletype" message on a blank cable channel, because most people who watch this are already interested in access programs.

Public access arrangements vary from community to community. In Binghamton, New York, the cable operator accepts prerecorded 3/4-inch U-Matic videocassettes and plays them Thursday nights on a vacant channel. In San Diego, California, the cable operator lends out two portable U-Matic video recorders with color cameras, microphones, and lights, has a color studio available for public use, and provides access to a U-Matic electronic editing system at a local library. There are also Betamax and VHS decks available for dubbing. Between these two extremes,



The Space Invaders Saga

How a tiny video game turned into an interplanetary craze

by Frank Laney, Jr. & Bill Kunkel

Orson Welles's *War of the Worlds* radio broadcast paralyzed the nation with fear in 1938. A generation of shocked Americans believed, at least for a few hours, that aliens had landed in northern New Jersey and were pillaging and destroying the countryside. Of course, that was just a hoax. The *real* alien attack took place in Japan in 1978.

That was the year Taito, Ltd. marketed the first "Space Invaders" coin-operated video game. The rest is history; a combination of its science fictional theme, non-stop action, and engaging audiovisual trimmings quickly made the new game a craze of epic proportions. As it turned out, all the visitors from space really wanted was an endless supply of coins.

If you've been vacationing on another planet for the last couple of years, a brief description of the "Space Invaders" game is in order.

Although the various versions of SI differ slightly, the essentials are the same, whether it's a Midway (Bally) coin-operated machine or an Atari VCS cartridge. Players fire a horizontally-mobile cannon, located at the bottom of the playfield, at yellow space creatures descending the screen in six rows of aliens apiece. The catch is that the invaders can fire back at the cannon and destroy it if one of their bombs strikes home. Three struck cannons complete a game.

The defender's resources are limited,

but there's never a shortage of onrushing invaders. As soon as the arcader successfully blasts one assault group, another takes its place. Periodically, the invaders' motherships flit across the top of the screen; players who hit them earn bonus points.

Taito placed 100,000 units in its first year. Japanese arcaders went crazy, pouring \$600 million in spare change into "Space Invaders" machines. Almost overnight, the instant hit crowded traditional Pachinko machines out of the country's restaurants and coffee shops. The Bank of Japan had to triple production of 100-yen pieces just to meet the craze's need for coinage. What's hot in Japan doesn't necessarily catch on in the United States, as the promoters of Pink Lady can attest. But "Space Invaders" made the crossing with ease, exerting the same hypnotic hold on American arcaders that it had established on their Far Eastern cousins.

Bally, through its Midway division, licensed "Space Invaders" in the U.S. in late 1978. The company kept the machine in continuous production for the next 23 months, making a total of more than 60,000 units. This kind of sustained popularity is extremely rare—a three-month production run is considered an excellent showing. Ironically, Bally's success with "Space Invaders" is rapidly shifting the balance of power in the coin-operated field away from the pinball machines with which the firm first gained fame. Video games account for half of commercial arcade business in 1979, drawing even with pinball on the wings of a 25 percent increase in revenues over the

previous year. "Space Invaders" gets the credit for a hefty chunk of this increase. Bally is now attempting to build on the beachhead it seized with "Space Invaders" by marketing a more sophisticated version, "Galaxian" (to be described later).

"Space Invaders" grew so popular that it became impossible to find a machine not in use. Players willingly waited on line for up to an hour and poured sacks of quarters into those 60,000 waiting coin slots. One "Space Invaders" fanatic reportedly fed \$80,000—that's a quarter of a million games—into this seemingly insatiable coin eater.

Yet even greater popularity still lay ahead. Atari purchased the right to offer "Space Invaders" as a home video game and put "Space Invader" cartridges for its VCS unit into stores early last year. (The company followed up with a "Space Invaders" cartridge for its Atari 400/800 home computer later in the same year.) "Space Invaders" immediately became the biggest seller in the 36-cartridge VCS line, surpassing the previous sales champion, "Breakout." At last, every "Space Invaders" fanatic could disintegrate aliens in the comfort and privacy of the family living room. And the home video version, aided by some delightful TV commercials, pushed the popularity of "Space Invaders" to a new high. Ad hoc tournaments, strategy clinics, and "Space

Invaders" T-shirts flourished in every area of the country.

Finally, spurred by the pleas of millions of ardent invader-fighters, Atari staged a competition to determine the U.S. "Space Invaders" champion. More than 10,000 gamers participated in five regionals held last fall in New York, Chicago, Los Angeles, San Francisco, and Dallas/Fort Worth. Although Frank Tetro set a tournament record of 110,125 in the New York regional tourney, he and the other challengers fell before California's Bill Heineman in a November showdown staged in New York at the world headquarters of Atari's parent company, Warner Communications.

The unprecedented success of "Space Invaders" is attributable, in part, to its having been in the right place at the right time. Even as *Star Wars* mesmerized the world, breakthroughs in microprocessor design enabled companies to offer machines that sported strikingly colorful and exciting spacey effects. Hoping to make a good thing even better—and to cut themselves in for a fat slice of the millions now being spent on SF games—many manufacturers have applied still more advanced technology. In some cases, these "second-generation" video games are even better than the original.

Midway (Bally), owner of the U.S. commercial rights to "Space Invaders," hasn't produced a single SI machine in over a year. Instead, it makes "Galaxian," the annointed successor to SI. "Galaxian" is essentially a souped-up version of the original, boasting an even greater array of colors, special effects, and audio frills. It features bird-like invaders that advance in column formation but break off in groups of three for low-altitude bombing runs.

Japan is trying hard to keep its preeminent position in the space video game race. The Far East's most successful offerings are "Space Firebird" and "Moon Cresta," both distinguished by riveting graphics and stunning audio. Fittingly, Japan's fiercest competition comes from the company that turned "Space Invaders" from a fad into an obsession, Atari. The Sunnyvale, California-based company makes "Asteroids," the biggest commercial arcade moneymaker during most of last year.

Unlike the highly symbolic SI, "Asteroids" takes a more realistic tack. Players pilot laser-equipped spacecraft through the perils of an asteroid swarm in deep space. Arcaders atomize the hurtling rocks before they can destroy the ship, getting more points for skragging the smaller chunks. The coin-operated version of "Asteroids" uses a new innovation called Quadrascan, developed for Atari by Electrohome Electronics. Using it, the

continued on page 121

Playing "Space Invaders" Like an Expert

Lightning reflexes certainly contribute to the success of the "Space Invaders" greats, but fabulous hand-eye coordination isn't all that separates them from average "Space Invaders" fanatics. The arcaders who tote up truly astronomical scores, like those compiled by the regional champions in Atari's nationwide tournament, have clever strategies as well as supple wrists.

Eliminating the first three legions of invaders is relatively easy in Atari's home version for its Videogame Computer System (VCS), because even beginners quickly learn that the three rocket-shaped bunkers provide a generous measure of protection. But by the fourth round, the arcader has nothing standing between his cannon and the onrushing hordes except a quick trigger-finger and even quicker wits. From this point onward, all the

umn, the last one with a full complement of invaders. On the way across the playfield, really proficient arcaders zap the closest alien in each column before obliterating the entire line on the far left.

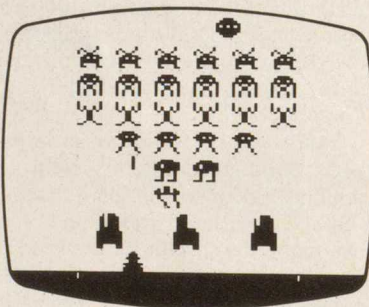
After that, it's like shooting fish in a barrel for most of the top guns. Leaving eight invaders on the screen keeps a steady stream of 200-point mother-ships sailing across the top of the screen, upping scores a bit. Leaving seven invaders functional will produce the same effect, but the attackers from space will also speed up at that point, perhaps canceling the player's small edge.

The truly great competitors have traditionally taken their dedication to unusual lengths. This is certainly true of Frank Tetro, who amassed the highest score during the Atari regional tournaments. "The invaders," he explained just after his record-shattering game at New York's Citicorp Center, "have eight different firing patterns. I've become so familiar with the game that I can almost instantly recognize which pattern they're employing." In other words, by memorizing the invaders' gambits, players like Tetro know where the next missile is coming from before it's even fired. That, video-game-lovers, is known as an *edge*.

Other versions of "Space Invaders" require some strategic adjustments. In both the familiar Midway arcade and Atari 400/800 computer versions, for example, it is impossible to memorize the aliens' firing pattern. They drop bombs depending on the actual location of the gamer's cannon.

Some "Space Invaders" games give a variable number of points for hitting a mothership, instead of the straight 200-per-saucer of the Atari VCS. This has led to the "kamikaze school" of "Space Invaders" play. These daredevils let the last eight or nine aliens in each round march almost to the bottom of the field, to get a crack at the maximum possible number of motherships. This tactic is, however, recommended only for those with strong hearts.

But even those whose nerves turn to jelly at the first *thumpthumpthump* should be able to vanquish family and friends with ease using the techniques perfected by the experts.



The original "Space Invaders" and its complement of symbols will remain video game classics.

good players adhere to the same basic strategy with a will of iron. "Hey, man, it's better to pass up a mothership than break the pattern," one teenaged commercial arcader recently told VIDEO during a lull in the action. "The pattern." It's a phrase often heard when high-scorers gather. The pattern, say gamers who know "Space Invaders" best, is the essence of this electronic obsession.

Leading players all begin the fourth and succeeding rounds by immediately blasting the two lowest aliens in the second vertical column from the left. Then they sweep the cannon to the right, wiping out the two bottom nasties in each column. When they reach the column farthest to the right, they eliminate it completely before starting to sweep in the opposite direction. The goal is the left-most col-

says Paramount has an obligation to protect and work with its theatrical exhibitors.

Less concerned with publicity, profit and serving a complementary audience, Childs places more importance on fully determining what would be successfully received by the public on home video. He says he wants to aim for quality rather than quantity and to avoid replicating what has come to be the pattern of theatrical releases, in which 20 percent of all releases end up earning 80 percent of the revenue. That's a risk the movie industry realizes it has to take for its theatrical releasing outlets. But Paramount President Bob Klingensmith forcefully argues that a picture's performance in theaters should guide the studio in its release and promotion in all ancillary media, leading eventually to broadcast television. These ancillary venues of release include home video along with pay-cable, rental hotels and motels, oil rigs, and college campuses.

Klingensmith says too-close release schedules (90 days or less) doesn't allow enough time to judge the true nature and extent of public acceptance. He distinguishes between promotional hype and personal word of mouth; it's the latter that really counts. To get a title ready for day release, a company must place a duplication order well in advance. "If you like to be caught holding 800,000 to 10,000 video-cassette copies of a box office dog?" asks Klingensmith.

Paramount's position makes short-term 'cents' for the video programmer, who has only so much money to buy the inventory you see sitting on shelves. There's no way retailers can gather meaningful data about what is popular with their customers. Contrary to music industry practices, video programmers do not have liberal return privileges. Childs says Paramount's Video wants to build a reputation with retailers, as well as with you and me, by only offering proven successes.

However, the Fox position seems to make more sense for you and me in the long run. There are movies with the kind of wide appeal Paramount prefers that can certainly be counted upon as winners for these, especially as Paramount is aggressively encouraging rentals. There are also movies that you like that don't, and vice versa—movies that don't command the large theatrical audiences that studios like Paramount need to justify a video release, but which may reach an important audience over time through video.

One of Paramount's earliest video releases—made through Fotomat before Paramount got directly into the business—was the offbeat *Harold and Maude*, with Ruth Gordon, Bud Cort and Vivian Pickles, a charming comedy about a wealthy but bored young man interested in death and a wonderful rascal of an elderly woman who ardently pursues him. *H&M* has achieved a kind of cult status

and I am told that it continues to attract respectable audiences through video and other ancillary forms of release. While *H&M* may not have made a big splash in its theatrical run, Paramount and Fotomat continue to make a buck on it through video release. Under Paramount's current winners-only policy, I wonder if we'd ever have seen *Harold and Maude* on video?



Space Invaders

continued from page 68

machines can render detailed line drawings anywhere on the screen. This allows high-resolution target images to drift onto the playfield at varying speeds from different directions. The asteroids, outlined in characteristic Quadrascan blue, fairly leap off the screen at the player.

Progress continues: Gremlin/Sega has already unveiled a series of commercial arcade units, led by "Astro Blaster," that employ computer voice chips. Atari, meanwhile, is developing "total environment" games that isolate players and give them a full-spectrum experience of repelling an extraterrestrial attack. Home arcade system suppliers aren't standing still either. Atari is rushing into distribution with home versions of "Asteroids" for both the VCS and the Atari 400/800 computers. The home "Asteroids" can't use Quadrascan, but otherwise represents the leading edge video game technology.

However, the prize for sheer inventiveness must go to ActiVision. The company's "Laser Blast," for use with the Atari VCS unit, turns the tables in the classic "Space Invaders" situation. For the first time, the arcader is cast as the commander of the invading saucer fleet. Its mission: to destroy planetary defenses.

With the introduction of this fine cartridge, the "Space Invaders" story has come full circle. Players weary of watching their cannon blown to smithereens can now change sides and go on the offensive. But luckily, there will still be millions of "Space Invaders" veterans, staunch defenders every one, to stop this threat to the safety of the universe.

Although imitations are common and "second generation" SF games are more sophisticated, "Space Invaders," a unique test of stamina, skill, and reflexes, will always remain a beloved video game classic. As long as there's one true-blue arcader, there'll be a legion of little yellow space creatures marching down a playfield, raining death from the skies as they come.

The aliens have landed. It looks like they're here to stay.

