

Video Review

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MAGAZINE



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PREVIEW '84!

SECRETS OF THE VIDEO TREND-SETTERS

The Best and Worst Video Products of '83

*First Lab Tests:
VCR/Monitor,
LCD TV*



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'83: The year in Freeze-Frames



School/Work

What's wrong with college students these days? Particularly at Stanford, many of them seem to be losing touch with traditional academic values—they're spurning Frisbee, cutting down the exposure to rock 'n' roll, walking past *Three Stooges* retrospectives. Instead, they're shutting themselves up with their computers and *earning money*.

These kids mean business. Whether designing videogames or firming up software deals, so many computer brats are running their own campus-based computer companies that Stanford decided to form a Center for Entrepreneurship—sort of a

"junior capitalists" club for advice and contacts. Harvard and Dartmouth are joining the IC league and along with Carnegie-Mellon are reportedly also developing such centers. Should these schools start giving extra credit for such student businesses, a new award would be in order: *summa cum cash*. (F.L.)□

Getting Carded

We're sure in the video age when the censorship efforts of community traditionalists deal with library videotapes.

It seems that a resident of Fairfax, Virginia has complained to the county's board of supervisors that Fairfax's 19 libraries have been lending videocassettes of R-rated movies to cardholders under the age of 17. Of the libraries' 1,000 video titles, a full 10% are R-rated, including the likes of *Blue Lagoon*, *Taxi Driver* and *Animal House*. Kids of any age with a library card can now borrow mature video programs—ones with just a little violence and bare flesh—and watch them on the family VCR without their parents around to make them fast-forward through the good parts.

"Our job is to provide materials without restrictions," says library director Edwin S. Clay. "There are no age restrictions on borrowing books or films, so there are none on videocassettes."

At presstime, the library board was considering whether to shut down *Animal House* or keep the party rolling. (B.J.)□

Generic Engineering

Roll over, generic toilet paper—Teknika has stolen your no-frills thunder. The company's just introduced the first generic TV set, a 12-inch (diagonally measured) black-and-white model that has channel and volume controls, but little else. According to a company spokesperson, the generic set "looks

as ugly as it possibly can."

To make matters even worse—or better, depending on how you look at it—the \$89.95 set comes in a white cardboard box with two black stripes and no brand-name identification. If not for its size, you might mistake it for bathtub cleanser, paper towels or pickles.

Why pursue such Bizarro-world excellence? "The unit has such an unusual value that it's been bought by many commercial and industrial companies as a gift or premium item," says Mel Hunger, Teknika's marketing vice president. But that's not all. "It serves many of our retailers as an ideal promotional item," he says.

American marketing meets Soviet aesthetics. (M.R.)□

ponder with another national cable service.

One night, according to the spokesperson, the man monitoring the cablecasts woke up about 3 o'clock in the morning to *Pussycat Ranch* after falling asleep to (are you ready?) Sister Theresa on The Christian Network. (D.C.)□

Exer-Game Bicycle

If you've been tantalized over the last six months by those two-minute spots on the evening news about the Aerobics Joystick, good news. It's now for sale.

If you've missed all the publicity about this new device, you'll be glad to know that it combites



X-Rated Glitches

While sitting back watching the Auburn-U. Miss basketball game on ESPN not long ago, viewers in Connecticut got a little more than they paid for. Suddenly the game would go out and be replaced by a few minutes of X-rated fare, including "a leather-clad woman presiding over an orgy," according to one surprised viewer.

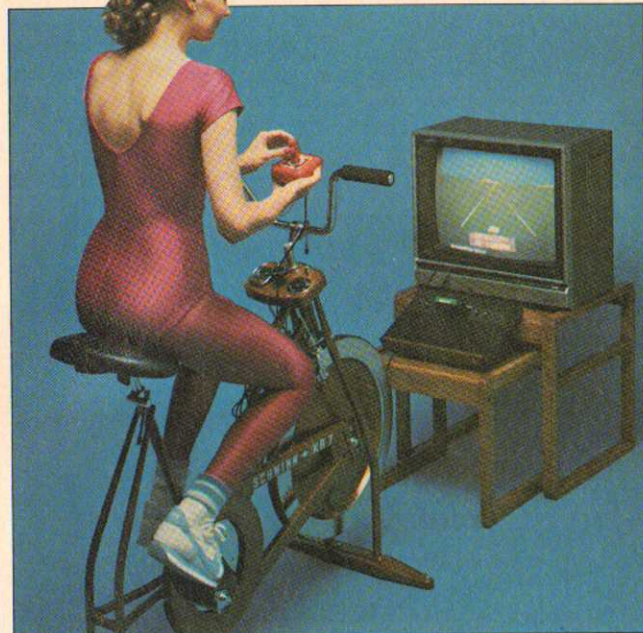
Not surprisingly, lots of viewers called their cable operators of ESPN. But they weren't complaining. In fact, by-and-large the calls were from people who wanted to find out how to subscribe.

Has anything like this happened before? We called a spokesperson for Eros, who said there used to be a few problems when it was sharing a satellite trans-

two of America's favorite fads, so people involved with them have time for both.

This absolutely for-real device interfaces between a standard exercise bike and an Atari VCS or 400/800/1200XL computer. Suncom, the company behind the ingenious gadget, claims it can be installed in 10 minutes or less. Said to work best with Activision's *Enduro*, the Aerobics Joystick allows all the muscles in your body to participate in the game play: The faster you pedal, the faster the car on the screen moves. (When you have to pedal yourself, *Enduro*





seems aptly named.)

The Aerobics Joystick also works with shoot-'em-up games (in which everything goes faster as you pedal more furiously) and Suncom is hoping that games specifically designed for it will be developed by other companies.

But the best thing about the Aerobics Joystick is that it promotes the efficient use of time. You can kill two birds with one stone (so to speak) as you train for *Phoenix* and the *Tour de France* at the same time. And, if you play *Burgertime*, you can work off last night's hamburger even as you make another. (Fredric Paul) □

Birthday Suites

Birthdays are for champagne toasts, whoopee cushions, stripograms and presents of cheap cologne. Last year, CCR Video Corporation produced a birthday greeting videocassette to enhance this festive atmosphere.

Called Vizigram, each cassette's seven-minute program includes a birthday horoscope, a rundown of the celebrities born on the same day, a recounting of the date's famous and humorous historical events, as well as scenes of singers, comedians and jugglers all regaling the birthday boy or girl. At the beginning and the end of the program, space has been left to add your personal written message—for instance, "Lots of luck in the future," "Another year older, another

year grayer" or "You look like a monkey and smell like one, too."

Vizigrams cost a whopping \$39.95 each, payable by credit card. But company officials point out that a standard singing telegram costs \$15 more. (Besides—you don't want anyone to skimp when it comes to your birthday.) They can be ordered by calling 800-526-0559. (B.J.) □

Dishes and Dudley Do-Right

You could call it the Video Ice Charades.

Some time ago, Canada's Federal Business Development Bank granted a small business loan to Crowder Communications, an up-and-coming electronics company in Burnaby, British Columbia. The company put the loan to such good advantage that during Canada's Small Business Week recently, the FBDB gave it a management award. Only then did the bureaucrats in Ottawa discover that as fast as Crowder Communications was turning government cash into satellite TV receiving systems, the Royal Canadian Mounted Police was riding off into the sunset to seize them from homes as far north as the Eskimos' Arctic Circle.

Part of the problem has been Canadian law and the policy of the Department of Communications toward private ownership of satellite antennas, which has been, to put it mildly, ambivalent. The Mounties had strong suspicions that miners, loggers

and Eskimos were using their Crowder antennas to sneak a peek at ESPN and MTV (Canadian reception of US signals is illegal), so they actually seized several offending dishes—just when the FBDB happened to come along with its award. (R.A.) □

Dumbest Game Of the Year

The battle for The Most Far-Fetched Videogame has been a close one this year. With such contenders as *Revenge of the Beefsteak Tomatoes* and *Pooyan* (in which you throw meat bombs at pigs), our judges had a tough time choosing. But in the end, the winner just had to be Mattel's new one—*Kool-Aid Man* (right).

According to Mattel, "the object of the game is to get all the Kool-Aid ingredients over to the sink." If you can handle that excitement, you've also got to battle the dangerous "Thirsties." Hold me back.

They have turned arcade games, movie titles and even cartoon characters into videogames. But this is the first game, as far as we know, that's based on a beverage. Will this start a new trend? We can hardly wait for *Coca-Cola Bottling Boy*, *Hawaiian Punch Man* and the *Mazola Corn Oil Game* ("We call it 'maze'!")

When questioned about its bold marketing scheme, a Mattel spokesperson told us, "Kool-Aid is the second most popular drink in the world."

Using that logic, I think someone should come out with a game based on tap water. Or better yet: *The Air Game*—"If you like breathing it, you'll love playing it!" (Dan Gutman) □

Reverse Vidiot

Stephen Baccus is living proof that videogames don't rot the mind. The heady 14-year-old, who graduated from the University of Miami last spring, said he used to spend about 45 minutes each day playing *Pac-Man* and *Frogger* in the college gameroom.

Baccus, who has an IQ of 190, also likes devising his own games on his Apple home computer. "I never really got around to marketing them" says the teen regretfully.

Game playing isn't Baccus'



only tie to the world of video. Since the age of 6, the talented lad has taken acting lessons and has already appeared in a number of movies. In Jerry Lewis' *Hardly Working*, his largest role, he played the "little brat" son of the leading lady.

To relax, he watches about three hours of TV sitcoms each day. Video may not make him smarter—but it doesn't seem to be hurting him. (M.R.) □



Philly Court Skins Computer Copycats

By Carl S. Kaplan

NEW YORK—Shoppers of computer equipment and programs have had, in recent years, to keep on the look-out for "copycat" products—low-cost imitations of standard brands.

US Court of Appeals for the Third Circuit, copyright law may be extended to protect computer programs, even if they exist unseen as part of a computer's internal circuitry. This ruling came in the controversial case of Apple vs. Franklin. The latter's com-

puter products are perfectly compatible with software programs designed for use on Apple II-series computers. In May '82, Apple filed a lawsuit against Franklin for infringement of patents and copyrights, charging

in the suit that Franklin unfairly copied Apple's computer programs in the form of floppy discs and built-in ROM (read-only memory) circuits. In August '82 a lower court denied Apple's motion for preliminary injunction against Franklin, but the Appeals Court reversed the denial, saying that copyright protection "is not confined to literature in the nature of Hemingway's *For Whom the Bell*

CARRIERS BAGGED BY MCI MAIL?

By Gary Arlen

WASHINGTON—In the last few years, Americans have discovered cheaper long-distance phone rates with MCI. Soon they may discover cheaper videotex and delivery services through the company's phone connection as well.

MCI Communications just unveiled MCI Mail, which offers its subscribers ticket purchasing and reservations, electronic banking, home shopping, electronic mail and information retrieval. It is a form of videotex, initially to be available through any microcomputer.

Perhaps the most interesting aspect of MCI Mail is the way it could affect the overnight delivery business. By sending messages over the phone line, users would save substantially on the cost of overnight delivery. Federal Express and other carriers are preparing to offer similar electronic delivery systems. □



Computer catfight: left, original Apple II; right, the guilty Franklin Ace 1000.

Now, a recent court ruling may pave the way for the gradual elimination of computer clones and greater assurance for shoppers.

According to a decision handed down in Philadelphia by the

puter products are perfectly compatible with software programs designed for use on Apple II-series computers. In May '82, Apple filed a lawsuit against Franklin for infringement of patents and copyrights, charging

Tolls." In other words, computer software is copyright-able.

The Appeals panel has now remanded the case back to the district court, which will soon decide whether or not Apple gets the injunction. □

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Bitsy Bargain

Britain's maverick consumer electronics innovator, Sir Clive Sinclair—who brought out the first inexpensive pocket calculator, the first two-inch, portable black-and-white TV set and the first under-\$100 personal computer—is out to do it again. This time he's come up with the world's cheapest flat-tube pocketable TV.

The result of four years' development, the new Sinclair pocket set has a two-inch (diagonally measured) screen and uses a cathode-ray tube much like the one in Sony's similarly sized

Watchman. But all resemblance stops there. Sinclair is selling its set in Britain for just \$120, and says it expects to offer it here next year at less than \$100—about half the price of the Watchman. The new TV weighs in at just 9.5 ounces, is 5.5 inches high, 3.5 inches wide and only 1.12 inches thick. It uses a special lithium battery made by Polaroid that runs the set for 15 hours, or about four times as long as the battery life claimed by Sony.

Timex, which also has rights to all Sinclair technology, is considering offering the pocket set here, at some future point, as a miniature computer monitor for its three currently available Timex computers. (R.G.)

No-Show Time For Game Plans

Now that videogame fever has broken, many of the top game makers are making changes that could affect the availability of new games and consoles for game fans in the future. Among several recent developments:

- Atari's much ballyhooed telecommunications division, Ataritel, which has been developing a data-display terminal to receive downloaded games and other software for an '84 introduction, may be put on hold. After less than one year on the job, Ataritel president Peter



Imagic's Shootin' Gallery.

Wensberg has been shifted to another spot in Atari. Inside sources say that the shakeup was prompted by new Atari boss James Morgan, who is reportedly cool to the Ataritel project.

- With the popularity of videogames dwindling, Imagic will soon cease selling its own videogames and stick to designing games for other companies.

- Some insiders expect that Mattel Electronics will gradually shift its emphasis from selling consoles to designing and selling software for Intellivision and other videogame/computer formats. Mattel has already sharply curtailed shipments of its Aquarius home computer. (C.K.)

POKER FACES VIDEOTEX TEST

NEW YORK—You can play poker with the gang while each of you cozies up to your own terminal at home, thanks to a new videotex database which can deal up to five players into a game.

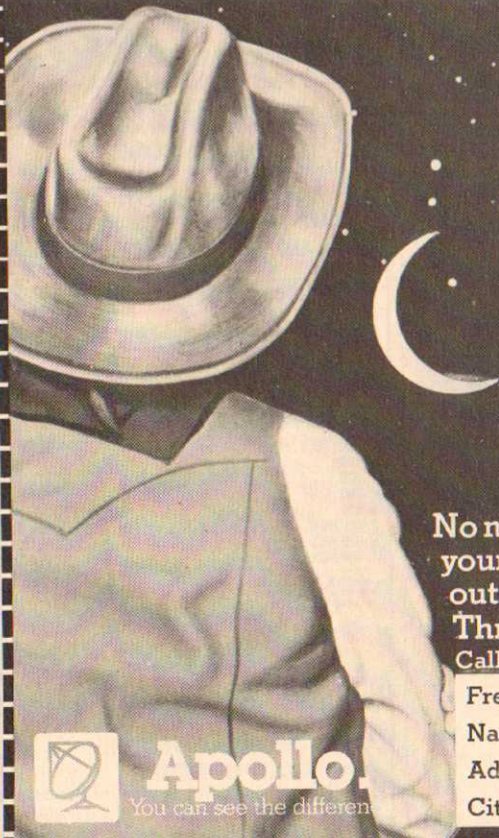
Saloon Poker is the latest game developed by Infomart, a Toronto pioneer in the videotex software business. When several

people call into the videotex computer at the same time (for instance, friends who arrange an on-line poker game or total strangers), the game gets underway. The software is sophisticated enough to allow the dealer to choose draw or stud poker, call wild cards, and raise or call bets on each card dealt. If enough players are not on-line at

the time, the computer will sit in to play the other hands. Cards are dealt in a random manner and the computer doesn't necessarily win. (In several games we played, the computer "folded.")

Infomart is developing other on-line games in which videotex users can compete against each other from their homes. Bridge is already available. (G.A.)

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Cable Diet Goes Lo-Cal

Television fans who've enjoyed dining on cable-TV fare may find that what was once a feast is now barely a meal. If their cable system carried—and they subscribed to—everything, they would have witnessed the disappearance of CBS Cable and The Entertainment Channel, the vanishing of TeleFrance and the recent merging into one channel of Daytime and The Cable Health Network.

This last development is set to go into effect right after the New Year. The new channel, called Lifetime, will have less emphasis on health and will relegate a lot of the analytical CHN shows to the bleary-eyed hours after midnight. It will likely lean to Daytime's old programming.

That's probably all to the good, as is the news that some of The Entertainment Channel's high-brow BBC programming will appear soon on ARTS. But the bad outweighs the good these days. Plans for regional sports network called The Sports Network appears to be off. Only one news

service will last into 1984, when Satellite News Channel will be absorbed into Ted Turner's Cable News Network operation. And, in pay TV, The Movie Channel lost some of its identity, although not its name, when it merged with Showtime.

For all its growth, cable hasn't grown fast enough. The ad-supported services have never pulled the audience necessary to attract sponsors. Cable now appears to have a lot in common with Lily Tomlin—it's an incredible shrinking medium. (S.G.)□

COM-TEXT

Few low-cost teletext receivers have been developed, and fewer still have found their way into Americans' homes. So some TV stations are working on the means for people to tap into their teletext databases now, with the use of their home computers.

Leading such efforts is KSL-TV of Salt Lake City, Utah, which allows home-computer users in the Salt Lake area to phone directly into the KSL teletext computer to look up data stored for the KSL broadcast teletext service. (G.A.)□

L7 TV

A flat, square TV world is not necessarily a dull TV world. The FST (Flat Square Tube) line of TV sets introduced here last summer by Toshiba offered viewers less picture loss than occurs with the curved screen of most conventional sets. Now, US TV-set makers are taking up the square TV design. RCA has recently started showing a compromise TV tube that it will use, and make available to other manufacturers, which it is called the COTY FS.

The COTY is an internal tube design developed by RCA for standard tubes earlier this year,

and has since been adopted by such other TV-tube makers as GE and Zenith. The FS is for Full Square, which means the tube will have square corners, as does the FST, but will come with a standard curved face instead of the flatter surface found on the Toshiba model. Like the FST, the FS will have a slightly greater than standard viewing area, and so it will be offered in even-numbered screen sizes, including 14-, 16-, 20- and 26-inch models. Only the 26-inch model is expected to be for sale next year, with the other sizes arriving in '85 and '86.

An even flatter RCA tube, the Coty SP, is also under development. (R.G.)□

Floppy Success

At present, the state of computer software is a kind of nightmare where you can only play certain programs on certain computers. Each computer brand has its own inventory of software programs, and the result is that the confused shopper has to cope with a limited range of software choices.

But all that could change. VR has learned that Digital Research, the CA-based computer company, is working on a type of floppy disk-based program that can play on any type of computer. The company expects to exhibit its "universal software" at the upcoming winter Consumer Electronics Show. (C.K.)□

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THE VIDEOTIME CORPORATION

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What's in the video picture for '84? Much more sophisticated equipment, much less sophisticated programming and a few surprises, according to our insiders. Here's a complete look at what they're forecasting in every home-video area for the coming year.

EQUIPMENT **By Robert Gerson**

Simplicity and systems seem sure to become the video buzzwords of '84: Simplicity, as manufacturers aim to take some of the mystique out of video gear through simpler designs, and systems, as product makers increasingly see TV sets as central terminals to be interfaced with a variety of video devices.

Video and audio input/output jacks and plugs will be standard equipment next year on just about all higher-priced color TV models. Many sets will feature front-mounted jacks to make hook-up easier for such products as videogame consoles and computers, which often are moved from set to set. Multiple antenna inputs, switchable by remote control, appeared for the first time this year. Next year they'll provide a low-cost alternative to monitor/receivers and component systems for people who want to permanently connect one or two extra video devices but don't want to get involved in high tech.

Aside from the simplicity and system trends, the most noticeable change in next year's video gear may be the '84 TV sets' picture tube shapes. Toshiba started a trend this year by introducing sets with flat-faced, square-cornered tubes. In '84 more companies will have similar tubes, while such producers as GE, Magnavox, RCA, Sylvania and Zenith will be squaring off the corners on curve-faced tubes.

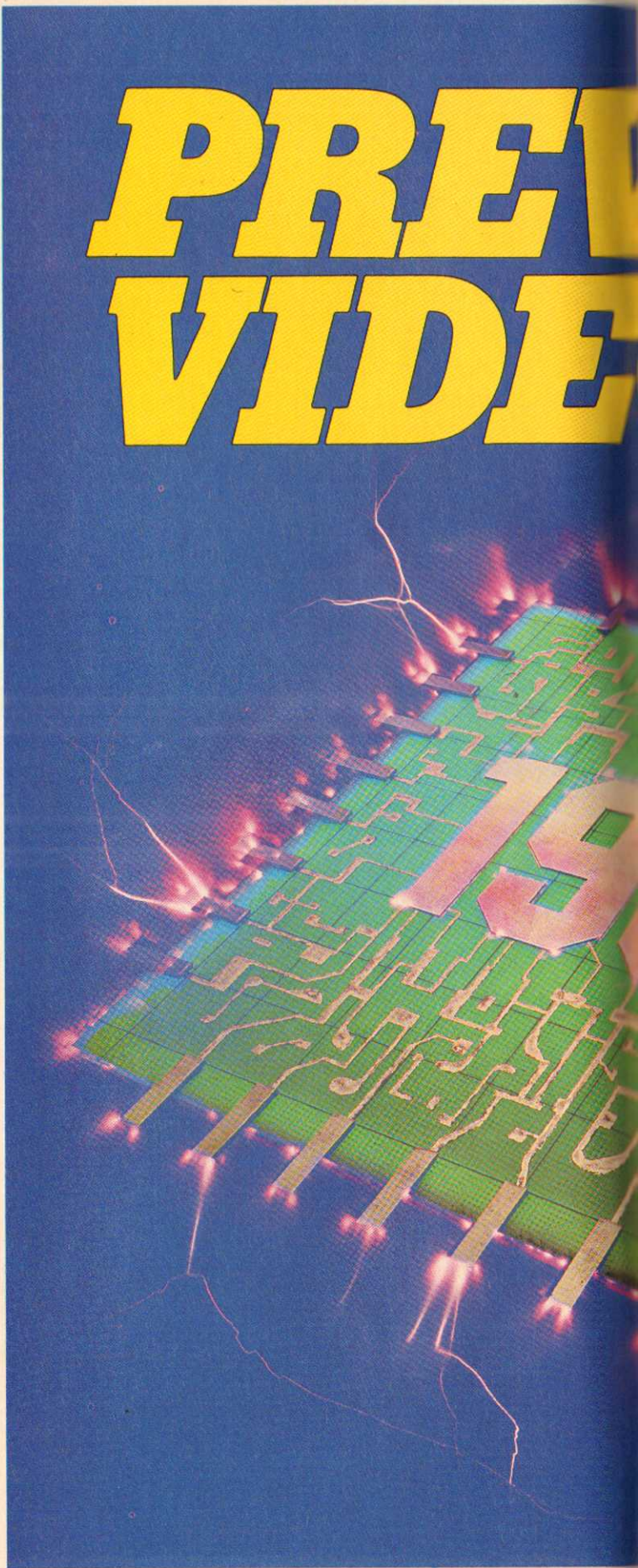
Also coming are two long-awaited major innovations, TV sets equipped to receive stereo-sound broadcasts and the first sets with complete digital signal processing. If all goes on schedule and no inter-industry legal battles over standards erupt, stereo-TV broadcasting should start by spring '84. It will take a year or two for prices on stereo sets to come down to a level attractive to most people. But inexpensive stereo-TV tuning adaptors for hi-fi audio systems and combo audio/video receivers should be out quickly.

As for the digital TV sets, they'll be scarce and very expensive when they arrive. As of this writing only Matsushita, through its American arms Panasonic and Quasar, is formally committed to bringing them out in '84, though GE, Sony and Zenith are widely considered good bets to go along.

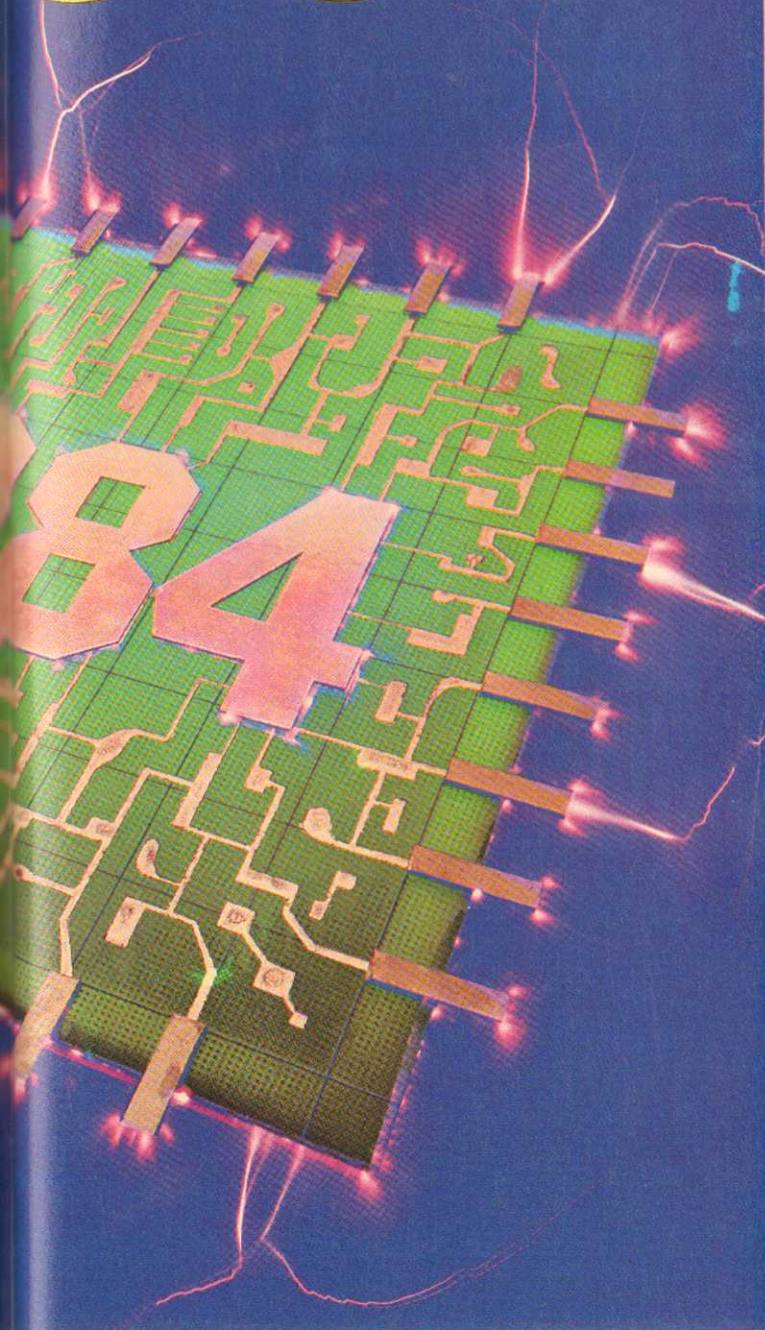
In addition to better pictures and sound, the big feature highlighted on the Matsushita sets is picture-in-picture, which displays the feed from a VCR or other source in a square in the corner of the screen while you're watching something else. The idea was introduced here by Sharp in '79, but didn't catch on. That, of course, was before the video age hit its stride, so perhaps Sharp was just ahead of its time.

As for projection TV, there's nothing on the horizon to cause any major changes. For the most part, pricing will continue to be high, and the cabinets will remain massive. More emphasis will be on not-so-massive 40-inch rear-screen systems that take up little more floor space than a large 25-inch direct-view color console. Browsers

PREVIEW VIDE



VIEW: O '84



may even get their first look at the talked-about 35-inch projection set.

After a full year of stability, another round of price reductions is expected in the VCR field. The first basic under-\$300 models should arrive. At the higher end, full-frequency stereo audio will be promoted by both Beta and VHS marketers. Prices on remote-control machines are due to come down a bit, and manufacturers will be stressing the advantages of their graphic displays that will make VCRs easier to program and operate.

The war for the hearts and minds of portable VCR lovers will really rage in '84, with new one-piece Beta and VHS-C VideoMovie camera-recorder combinations coming. The result should be a significant reduction in prices for standard portable VCRs and cameras. Also coming down in price to the reach of the average video fan will be solid-state color cameras.

But home-video directors shouldn't get their hopes up about being able to buy one of the much heralded ultra-compact 8mm camera-VCR combinations this year. The major manufacturers are having second thoughts about introducing a brand new standard at this time. So unless some company decides to be a trendsetter, 8mm video is still another year away. □

TAPES AND DISCS

By Seth Goldstein

While video fans pace the waiting-room floor, the major prerecorded-tape companies will continue to struggle over the delivery of budget titles in '84. Much of their strategy may be determined by congressional action on two of the hottest copyright issues to surface in years—those of home taping and of the right of retailers to rent cassettes as they see fit.

Even without the clear-cut answers expected late in the year, there will be enough affordable titles to start a small boom in children's programming and music, as well as movies. It's a good bet that some rock superstar—Billy Joel? Michael Jackson?—will issue a major compilation of video clips in '84.

For the videodisc, it's time to do or die. RCA will be putting its greatest effort to date behind the interactive player, offering a group of relatively limited interactive programs like the *Mysterydiscs* as an inducement to try CED. But CED—and LV too, for that matter—have an uphill fight against steadily declining prices of VCRs and cassettes. The moral for consumers: lower prices, more choices. It's a "buyer's market," now more than ever. □

TELEVISION

By Jefferson Graham

Tired of trekking out to the local video shop and renting videotapes, only to have to bring them back a day or two later? ABC and Sony say they have a solution to the dilemma in the form of the coming year's most dramatic television development—Telefirst.

Beginning in January, this complicated new over-the-air pay-TV service/recording device will premiere in Chicago for VCR owners only. After local ABC station WLS concludes its programming day, recent movies will be transmitted to home VCRs from 2:00 to 6:00 a.m. But

the only way to watch will be to play back recorded tapes of the movies the next day with the aid of a new Sony descrambler. (ABC won't launch Telefirst nationally until at least '85.)

If paying \$19.95 a month for three hours of nightly pay TV/video with a possible additional \$20 monthly VCR rental sounds costly, how about DBS? Newspaper magnate Rupert Murdoch, cable-TV manufacturer General Instrument, and CBS all seem to believe that millions will shell out \$500 to \$1,000 for rooftop satellite dishes that can only receive five pay-TV channels, plus an additional \$25 to \$30 per month for programming. United Satellite Communications began its DBS service in November in Indiana, and plans to make it available to 16 northern states in '84.

What else will be happening in '84? More and more cable services will be more traditional (i.e., more like broadcast TV) in outlook as a means of survival. Showtime will have more original pay-TV series, essentially resembling broadcast TV, but without commercials, and with less censorship. HBO will have a lot more original movies. The Movie Channel, now that its ownership has been merged with Showtime, will diversify its mix to include more oldies, foreign and classic movies, and some original fare as well. Cinemax will show fewer old and foreign movies, with more material similar to that of Showtime—young, hip series such as the *SCTV Network* and *Album Flash*. □

COMPUTERS AND GAMES

By Carl S. Kaplan

Predicting the major trend in computers and games for '84 is easy: Everything will get cheaper. Videogame consoles will drop in price, videogame software will drop in price. Computers, peripherals, programs: down, down, down, all courtesy of price wars among manufacturers and production economies resulting from increased sales.

Aside from the inevitable price cuts, there are some interesting developments in computers and videogames that will appear in '84. Starting with videogames, we'll begin to see an acceleration in the movement toward electronic delivery of software. GameLine, an inexpensive videotex system that offers consumers videogames sent via telephone wire, recently launched its operation in some parts of the US. On GameLine's heels are AT&T and Coleco, who recently announced a joint game/videotex service to debut in late '84. No doubt these are only the first of many.

Meanwhile, '84 will see the first home computers from a few Japanese companies. These game-oriented models will all employ a common operating system—MSX—and will therefore be compatible. I don't expect any new game consoles from the likes of Mattel, Coleco and Atari.

In software, we'll have some George Lucas games for the Atari 5200 in '84, and a lot of games from the third-party publishers like Activision and Imagic. Most of such companies are scrambling to position themselves for the transition to computers, so the majority of their new and exciting games will be designed for low-end computers such as the Commodore 64, Coleco's ColecoVision/Adam and the new Atari series.

In computers, the big story for '84 will be the introduction of IBM's Peanut, and the rush of software companies

to support its format. The Peanut could singlehandedly stabilize the crazy computer field and create a de facto software standard—good news for consumers.

Some other forecasts:

- Commodore's VIC-20, at only 5K of memory, will either disappear or be price-cut to the bone. The Commodore 64 will come down to around \$100. Texas Instruments will further cut the price on its 99/4A and introduce a 64K computer product. Coleco will roll out a slew of peripherals for its new Adam all-in-one computer package.

- Videodisc players, both CED and LV, will start being used in conjunction with computers next year, particularly for entertainment uses. Hollywood studios are already starting to produce a new generation of interactive computer/videodisc games, complete with footage from movies, for the enjoyment of consumers.

- In late '84 we'll all finally see what Atari's Ataritel division has been working on all these months. I expect the Ataritel product will be some kind of data display telephone, suitable for videotex uses. It may also control lights in the home, turn on the air conditioner, call the cops when burglars come, etc.

- In computer software, I expect lots of additions in the educational and home management categories. Major software/book publishers, such as Warner Software, CBS, McGraw-Hill, will come to dominate this area.

- The cassette system of memory storage for low cost computers may go the way of all flesh in late '84 or '85. Cassette programs, though cheaper than floppy discs, are rather unreliable and time-consuming to load. The microtape drive, as contained in Coleco's Adam and TI's lap computer, should gain wide acceptance.

- Then there are advanced computer graphics, wireless keyboards and computer networking. □

VIDEOTEX AND TELETEX

By Gary Arlen

Like previous waves in the electronic revolution, videotex and teletext are deadlocked in a waiting game: The services can't develop until there are devices out there to pick up signals, and no one will buy a receiver until there's something to see.

All eyes are on south Florida now to gauge public response to the Viewtron service which recently started. Other videotex services slated to start in the Los Angeles and Chicago areas in the spring will learn from the successes and mistakes of Viewtron.

Teletext depends on the availability of terminals. Zenith will offer its receiver in selected locations (such as Cincinnati) where a local TV station agrees to transmit teletext. Unfortunately, the \$300 Zenith device is incompatible with the teletext format which NBC and CBS are transmitting. Terminals from Panasonic and other manufacturers will appear this year that will pick up the NBC-CBS teletext signals, albeit at much higher prices. Also receivers for cable-TV teletext signals are due to arrive late in '84.

Perhaps the best indicator of the speed and direction of videotex/teletext development is how closely these promising new technologies tie into home computers. Trends suggest that many communicating computers will include videotex reception chips, paving the way for an explosion in videotex. □



A barrage of bests: (left) Zenith's color TV set with built-in teletext adapter; (below) Sony's Betamovie videocamera-recorder combination; (right) Coleco's all-in-one Adam home computer.



TOPS IN VIDEO

This year was the beginning of the end of video—as video alone. The transformation of video components from mere movie machines to integrated parts of larger home communication, entertainment and information systems was clearly underway. Videophiles, since '81, have been connecting their stereo VCRs to their audio amplifiers to produce rudimentary home entertainment systems. But among '83's top products were several with new adaptor jacks to interact with computers, as well as with teletext, down-loaded videogames and other new functions of "teledelivered" material. Those may seem to be only slight technological improvements, but they indicate an evolving conception of video's capabilities that has one foot planted in the future.

There were other innovations in video in '83, less philosophically heady, but more immediately eye-opening. Components got smaller and were consolidated, in some cases, with other components. TV-tube technology made great strides. But, aside from these few spectacular stars, it was the subtle improvements that highlighted the year and heralded video's future. By product category, '83 looked like this:

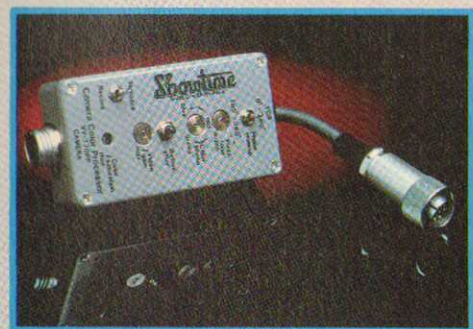
Videocassette Recorders

After years of complaining about mediocre audio in VCRs, videophiles got what they were listening for—and

more. In '83, Sony introduced the first Beta Hi-Fi VCRs (models SL-5200, SL-2700) whose stereo sound is of such high quality that it is superior to that of *all* audio tape systems. Employing the AFM (audio frequency modulation) recording technology, Beta Hi-Fi has been rated to have an audio frequency response approaching 80 dB. Toshiba (model VS36) and NEC (model VC-739E) followed suit with their own Beta Hi-Fi tabletop recorders, and Sanyo, this past fall, released the first one-piece portable, Beta Hi-Fi VCR (model VCR 7300), allowing home moviemakers to record their children's piano recitals with the sort of outstanding stereo clarity deserving of a master. As a result of this innovative leap in sound, the Beta format, which seemed to be in trouble a year ago, has been given a strong shot in the arm.

VHS manufacturers, in the meantime, showed prototypes of AFM recorders, using a recording technology similar (though not identical) to Beta Hi-Fi, and boasting the same impressive audio specifications. The introduction of these stereo machines, however, has been put off until next June.

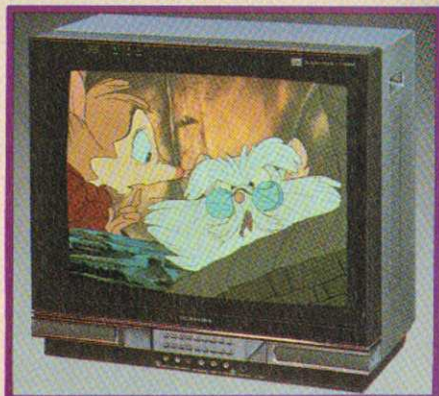
Among the niftier VHS recorders that did hit the stores in '83 was RCA's unusual portable (model VJP 900). It looks like a tabletop VCR, with the recorder directly alongside the tuner/timer section within a flat-bed base. But unlike any tabletop, the recorder can be lifted out of the base and carried as a portable. Placing the recorder



Bitty bests: Showtime Video Ventures' micro color-processing amplifier for connection between a videocamera and a portable VCR; (right) Seiko's wristwatch television set.



More bests: (below) RCA's modular portable/tabletop videocassette recorder; (right) Toshiba's color monitor with flat, square tube.



VIDEO OF '83

back in the base automatically connects it to the tuner/timer with no extra wires necessary. Our technical editors lauded this innovative design, but wished that the video frequency response of the recorder were better.

The year's biggest VCR improvement, in many people's minds, was the cutback to low, low prices. Sanyo led the way with its two-head tabletop recorder (model VCR 3900), which had a retail price of \$399.95, but, incredibly, was being sold in some stores for as little as \$249.

Videodisc Players

An otherwise quiet year in videodisc players, '83 saw RCA's introduction of its first "interactive, random-access" CED player (model SJT 400). Not that we were terribly impressed with it—the player often produces very jittery "still" pictures. But what caught our eye was the "control jack" on the back of the player that will, according to RCA engineers, accept a computer interface, so that a computer can program the player's random access. It will also allow CED discs to be used as information storage devices. RCA isn't yet promoting the player for its potential uses with a home computer, but the introduction of the jack itself marks an important interim step.

Meanwhile quite a few companies introduced computer interfaces for laser disc players, but

BEST

in '83 they were all for commercial and industrial applications. Still, many found their way to hardcore gamers' homes.

Video Monitors/TV Sets

At the top of our list for substantive breakthroughs in '83's TV sets and monitors are Zenith's series of Smart Sets and its Custom Series TV sets. The 13-inch, 19-inch and 25-inch sets all have "access ports" in the back to make them compatible with teletext decoders, cable-TV decoders and the coming adaptors for stereo TV. They're the first sets to be teletext-ready, though '84 promises that sets with this feature will become part of nearly every company's line. (Zenith by the way, began selling its first teletext decoder in late '83 available *only* in the Cincinnati, Ohio area at presstime.)

Sony introduced three 13-inch sets with "home interface terminals" (additional RF inputs) in *front* of the sets. The idea is to be able to easily plug a videogame system into and out of a TV set without having to fiddle around with wires in the back. Of course, since it's an RF input, the jack can be used for a VCR or a disc player as well.

It would be interesting to play a videogame on one of the sets in Toshiba's FST (flat square tube) series. The tube used in it is, as the name implies, perfectly flat and square so that no picture information is lost, as is the case with conventional sets. According to one of our technical analysts, Toshiba's new flat tube "will set the stage for all the tubes to come." In '83, Sears began offering a line of sets employing the same flat tube.

This year's monitors included a rash of new models capable of the best, highest-resolution picture attainable from a variety of signal sources, including a VCR and a home computer. Of the many excellent models available, our technical experts raved most loudly about Mitsubishi's monitor/receiver (model AM-1301), which has a 13-inch screen with a 2,000-character display and an RGB connector for better computer and game graphics. Another excellent monitor, Sanyo's model AVM-195, has a 19-inch screen and 370 horizontal lines of resolution (over 300 lines is considered very good), but it also needs a separate TV tuner.

In '83, Kloss came up with a video monitor (Novabeam Model Two) that's also a portable projection system. It's called a portable because, at 80 pounds, it's extremely light for a projection system and because its top folds down so that the whole thing doubles as a coffee table when the monitor's not in use. The monitor itself

boasts a horizontal resolution of 390 lines.

Portability was truly portable with the spate of pocketable, personal TV sets that arrived during the year, among them the first liquid-crystal display (LCD) sets. The Casiovision, made by Casio (reviewed in this issue), weighs only 12.35 ounces and has a 2 $\frac{3}{4}$ -inch (diagonally measured) screen, while the Video Sports set from EXP Research weighs 1 $\frac{1}{4}$ pounds and has a 1 $\frac{1}{2}$ -inch (diagonally measured) screen, a TV receiver and headphones. It makes up in novelty what it lacks in picture quality.

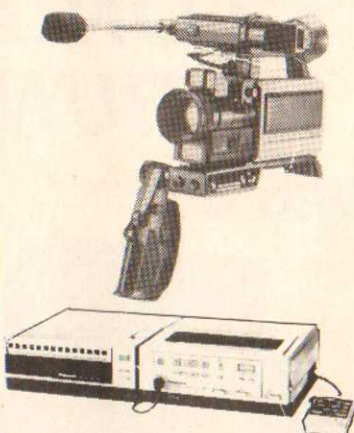
Two more Sony Watchman TV sets (which employ cathode-ray tube technology) entered the scene. One (model FD-30A) has a stereo AM/FM tuner as well as its VHF/UHF tuner.

While most of the year's camera improvements were a

Video Price Busters

Panasonic

CINEMAVISION



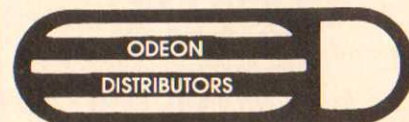
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matter of fine tuning (more Saticon tubes, more features such as auto-focus and auto-iris), one remarkable innovation arrived in the form of Sony's Betamovie. Both a camera and recorder (for standard Beta cassettes) in a single device, it does away with the need for a separate portable recorder and dangling wires. After recording, the cassette can be played back on a regular Beta VCR. In order to accomplish this feat, Sony had to redesign its Beta recording technique, and a by-product of the new engineering was color reproduction better than that of any consumer videocamera.

Home Computers

In this year of the computer, Coleco's Adam impressed us the most. For only \$600, the 80K RAM home computer

comes with a 75-key keyboard, a built-in word processor and a daisy-wheel printer. If you already own a ColecoVision videogame system, you can turn that console into the full-fledged Adam with an expansion module for only \$400. Not only was the price incredibly low for a complete computer setup, but it also includes a game console, because ColecoVision game cartridges can be played on the Adam.

Video Accessories

More of the old with just a touch of the new was the theme of '83's video accessories. More super black boxes became available—those which consolidate a myriad of functions into a single box. More important were the new accessories designed to improve home movies by improving the signal between a videocamera and a recorder. Adding to their videocamera enhancer (model VV-277) of last year, Showtime Video Ventures introduced in '83 a videocamera color processor (model V-770) which allows the videotaper to correct the colors of the images the camera is picking up.

One interesting accessory in '83 was the solar battery charger (model ASX500) from Solar Tech in San Francisco. It allows you to use the sun's rays to recharge your VCR or camera batteries.

Game Equipment

Gadgets dominated the game equipment of '83. While no new videogame systems came out, a bevy of oddball accessories did. There's no picking best here—only citing the most imaginative or outrageous.

There were rapid-fire adaptors, such as Discwasher's Fire Control Adaptor and Questar's Auto-Fire Module, to allow as many as 20 shots per second. There were trackball controllers from Atari and TG Products, while KY Enterprises offered a mouth-operated controller for paraplegic game fans. There was a joystick called the Joy Sensor, from Suncom, with no stick at all but touch-sensitive panels to direct on-screen action, and something called the Joyboard, from Amiga, that players can stand on in order to control the game with their feet. There was even an exercycle controller, from Suncom: the faster a player pedals, the more shots are fired on the screen.

There were also some technologically impressive accessories. Milton Bradley introduced a voice-recognition module to be used with a TI 99/4A computer, so a user can move ships around the screen. Vectrex introduced a light-sensitive pen for "drawing" light images. □

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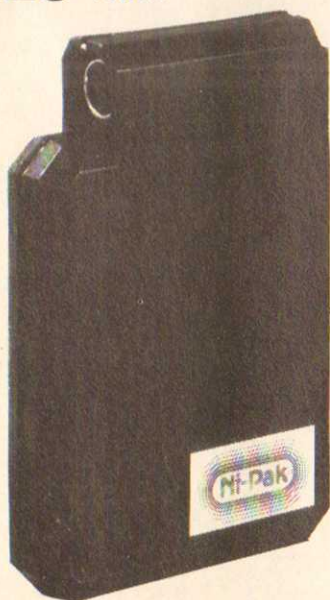
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FLOPS IN V

By Deirdre Condon

We call them flops, but these products are actually big hits with us. They've lightened our hearts with their silliness; they've stirred our admiration for designers whose sheer ingenuity led them to create products of little or no practical value. In short, they've made us laugh, and how often can you say that about video equipment?

All these products work (or were designed to work but never actually made it to store shelves—the vagaries of fortune and all that). We aren't in the least criticizing the quality of these products: They all do what their makers say they will do, to our knowledge. It's what they were created to do that falls somewhere between odd and bizarre.

It's important to point out that people chuckled over the invention of the telephone—and the TV set. In fact, a great demand for these products may spring up at any moment, and the companies making them will have the last laugh. We'll take our chances, though.

Real Stinker

First our futuristic favorite: the Aroma Disc Player. Since our first report on this remarkable step toward Smell-O-Vision (Aug. '83 *VR*), there's even been a further development.

You may recall that the Aroma Disc player is an electronic scratch-'n'-sniff device. You can buy discs scented with such fragrances as Ocean Breeze, Man's World ("the sophistication of a wood-paneled study") and so forth. The video angle is that the company that produces the Aroma Disc Player, Environmental Fragrances, Inc., foresees a day when the discs can be encoded and, more importantly, a prerecorded videotape or disc can be likewise encoded with a sub-audible carrier that will cue the Aroma Disc. That way, the right smells can accompany a particular movie (just think about *Willy Wonka*

and the *Chocolate Factory*) for a more complete movie-watching/hearing/smelling experience.

The new development is that an Italian designer has come out with a whole line of players—a black ceramic one, for instance, shaped like a cat. See? This is definitely a product with a future. Designer casing notwithstanding, though, our favorite Aroma Disc flavor is still the same: neutral.

Kitsch in Appliances

There should be an "If You've Got It, Flaunt It" award for the feature-packed TV set Sears introduced last year. Oh, yes, it was a little light on the features most TV sets have been incorporating—no wireless remote, no comb filter. But how many TV sets have built-in audiocassette recorders and are microwave ovens?

The price is a little steep: \$1,500. But hook up a VCR to the audio and video input/output jacks and you have almost everything cultural a person needs: food, music, movies. And think of the convenience. Not only is the number of unsightly wires cut down, but all your household radiation can be in one place.

The oven, by the way, is not cable-ready.

See What?

Our next choice product probably belongs in the same category, though for a different reason. It, too, is a TV set, and its qualities as a winner are crystal-clear. Maybe lucite would be the correct word.

Made in Germany by a company called Loewe-Opta, this set might remind you of the anniversary clocks that country is famous for—you know, the ones in glass that you can watch work. Same principle, different result. This is a TV set encased in clear plastic. You can watch it work!

Some of the drama and high-tech excitement dissipates after a little reflection, however. Electronic TV sets have no moving parts. None. In other words, watching the



VIDEO OF '83

average electronic TV set at work is less thrilling than watching the average TV show.

What Price Atari?

While all the flop products of '83 reflect, to some extent, the past year's trends gone awry, the fate of one trend couldn't be more clear than by its almost total absence here. That, of course, is videogames. Just as the consoles and cartridges are fading fast as America's favorite fad, the number of goofy game add-ons has declined.

For one of the most sublimely impractical products of the year we have to thank the format and pricing wars among the game companies.

The format wars nudged a little company to come out with an adaptor so that anyone with a VIC-20 game console could play games made for the Atari 2600. It being a little company, the price for the product, called the Cardaptor-1, had to be a little higher than a huge conglomerate would charge to produce the same thing. In fact, the company found itself in the odd position of have to sell the adaptor for \$89.95.

Perhaps that doesn't strike you as odd, considering the amount of fun the VIC-20 could then offer. If it doesn't strike you as odd, you probably don't know that you can now buy an Atari 2600 game console for about \$70.

Atari put its foot down, and the Cardaptor-1 is no longer available.

Switch Switch

All it took was for *Time* to pick a computer as Thing of the Year, and people who might ordinarily be pattering around the basement building better mousetraps start learning BASIC. We know we can expect a lot from this category in the future; considering how much people think computers can do, and how little most people actually know about them, the industry of peripheral peripherals has nowhere to "goto" but up. As it is a budding in-

dustry, we offer only two that particularly struck our fancy last year.

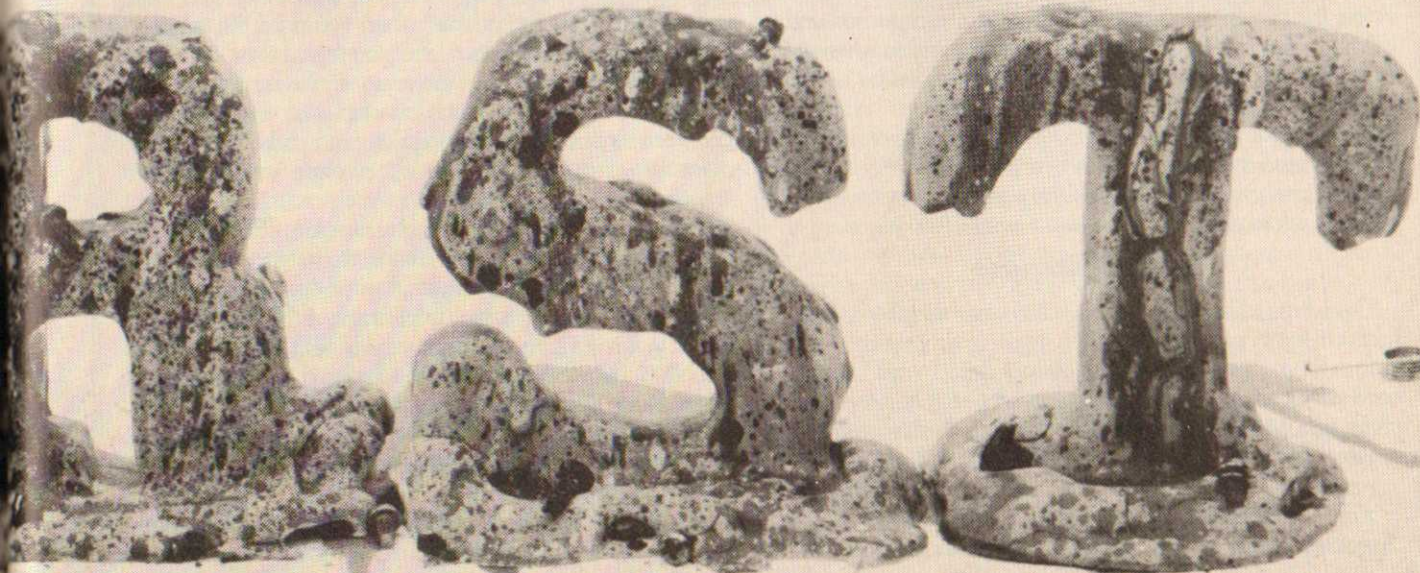
The first deserves special mention, even though it never made it into stores. Called the Command Console, it was an add-on for Mattel's Aquarius computer. Since the Aquarius has proven less than successful and has been unplugged faster than you can say HAL, its add-ons never had a chance.

What made the Command Console unique was that it was, to put it simply, a programmable timer. Using the Command Console as an interface between your Aquarius and your household electricity, you could program your lights (and appliances) to go on and off at certain times. All you would have had to do for this experiment in futuristic living was pay about \$80 for the console and, of course, the cost of the Aquarius itself. True, your computer would be household-dedicated. And you can buy an electrical timer—for less money than the Command Console alone costs—that will do the same thing.

Real Woofier

Finally, there's the Dog-Bites-Computer (or vice versa) category. We have a feeling that, in years to come, we'll be able to fill these pages with animal-friendly computer stories alone.

A pioneer in the field is the RainMatic. Like the previously mentioned Command Console, this product is a programmable timer. The difference is that if you look this interface in the eye, you're likely to get squirted. Indeed, RainMatic, as its name might (or might not) imply, interfaces a faucet and a garden hose. Programmable for up to eight waterings a day over a one-week period, RainMatic can do more than fill your dog's dish while you're away from home. It can water your lawn. Replenish evaporated water in a goldfish bowl. With special small straws, it could water all the houseplants. (That hasn't been invented yet. It's our own idea, but RainMatic Corp. can have it.) □





TRUTH IN PAO

THE FACTS ABOUT MISTAKEN, MISLEADING

Special Report by Abigail Reifsnnyder

Can someone judge a video product by its cover? In many cases, there's so little information on the package of a piece of equipment or a video program that it would be close to impossible to be led—let alone misled—about the contents. Problems can arise, though, when a company puts a little more on its product's box than it should have. Sometimes this seems to be an oversight; sometimes it seems to be intentional. Most frequently, it's a case in which the information is correct in a technical or a narrow sense. But, because of the expectations of the shopper, it can be at best confusing or, at worst, construed as deliberately misleading.

* * *

"Original, uncut theatrical version." These are charmed words in the world of prerecorded video. Creative Images' recent release of the X-rated Marilyn Chambers movie *Up 'n' Coming* bears these words, but the video portion of the last (and most unusual) scene is nowhere to be seen. The audio track, however, does run over the credits.

Frank Bell, national sales director for Creative Images, claims that "the original theatrical version did not have that scene. That scene was added to the second theatrical version." Al Goldstein, VR's X-rated-movie specialist, insists otherwise.

According to Bell, "When we say 'original theatrical version' we are differentiating from the edited version of *Insatiable* we put out which was cut. Maybe we should have said 'unedited version,' but that's really a question of semantics."

Some cases are less straightforward. Take, for example, the case of Howard Hawks' movie *The Thing*, originally released theatrically in '51 by RKO. That version ran 87 minutes long. Three of the four versions currently available on video run for only 80 minutes, and the fourth runs for 86 minutes. Yet all claim on the package to be the '51 version. This

leaves the consumer playing a game of *To Tell the Truth*.

The three 80-minute versions are available from King of Video, Nostalgia Merchant and RCA; the 86-minute version is from VidAmerica.

As Nostalgia Merchant's president Earl Blair explains the discrepancy, "There is a key scene in which the hero, Kenneth Toby, is tied up by Margaret Sheridan, and they reminisce about their old love affair. When RKO re-issued the movie in 1956 for theatrical release, this scene was considered too slow and was cut, along with minor bits of dialogue. The old version exists today only in a 16mm print and an incomplete 35mm nitrate fine grain at the Library of Congress. There are flaws in the 16mm print, so we made a brand new print from RKO's 35mm fine grain to give the best quality video."

As for VidAmerica's version, manager of business affairs and spokesperson Gary Needle knows that his company has the most complete version, but doesn't know why. "We'll





PACKAGING? OR MURKY VIDEO PACKAGES

always try to get the original uncut version," he says, "because one of the reasons anyone would buy a movie that's available on TV is that he or she wants the uncut version."

Meanwhile, King of Video and RCA spokespersons say they're surprised to hear of the missing material. "If it's cut," says an RCA spokesperson, "there's a reason, and it's not that we cut it. We don't do that."

The videotape *Joni Mitchell: Shadows and Light* from Warner presents a different kind of problem. Among the songs listed on the package is "Edith and the Kingpin." It is, however, nowhere to be found on the tape (as reported by *VR* editor David Hajdu almost two years ago). "It's a mistake," Warner spokesperson Mike Finnegan is quick to admit. "On a lot of packages in the stores," he explains, "we have put an overlay that doesn't list that song. Packages without the overlay must be from the first run before we caught the mistake."

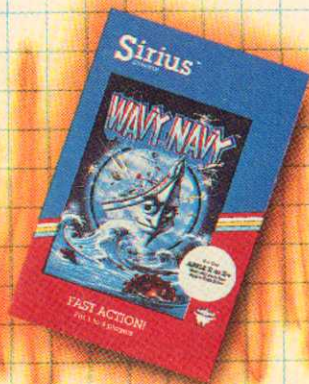
Still, *VR* staff members visited several of the biggest videotape and

disc stores in the New York area and found only versions without the overlay.

Then there's the case (uncovered by *VR* reviewer Leonard Maltin) of *The Best of Betty Boop*, a tape whose package text appears to be the result of incomplete research. It says Betty Boop made her debut in 1929. (In fact, it was 1930.) It also says that Helen Kane was the voice of the character. (Helen Kane was never the voice of Betty Boop but rather the inspiration for the animated character.)

Phil Kromnick, General Manager of NTA Home Entertainment (which released the tape), says he was unaware of these errors. "Our artist, who put together the information for the package, and I will go over the research," he says, adding that "we plan to release Volume II, and will be sure to have the correct information on that package." As for Volume I, NTA spokesperson Nick Draychlich says, "I imagine what we'll do is fix it at the next printing."

While cases such as these with mistakes or blatantly misleading in-



formation on video products do occur, it's with far less frequency than those in which information on packages falls into a gray region somewhere between accurate and dishonest.

Tricks with Time

Just because the running times of the theatrical version and the video version of a movie don't jibe, this doesn't mean that cuts have been made. Through a process called time-compression, movies can be sped up to fit onto one videotape or disc. As with most issues which fall into a gray area, feeling on this subject runs high among both video insiders and videophiles.

The issues involved in time-compression are numerous and complex, and, depending on who's doing the talking, the process is said to be used as frequently as "routinely" to "not at all anymore." (Watch future issues of *VR* for much more on time-compression.)

Disagreements aside, the fact of the matter is that a number of movies on tape and disc have been time-compressed. The most infamous example is *That's Entertainment*, released on disc by MGM/UA. Other examples of movies on video that have been time-compressed are *Superman* (Warner and RCA), *Jaws* and *The Spy Who Loved Me* (RCA), *Star Wars* (CBS-Fox) and *Blazing Saddles* (Warner). There are undoubtedly many other examples, since tape and disc companies generally admit that with movies up to 10 minutes too long to fit on a tape or disc, many at least try to use time-compression.

It's important to realize that the reasons many companies use time-compression are economic—they're not part of some sinister plot to fool video fans. Just as "original uncut" are magic words, "cutting" is a word these days in prerecorded video. But a two-tape or two-disc set is substantially more expensive both to produce and to buy.

Equally important, however, is the fact that absolutely no company marks on its package the fact that a movie has been time-compressed, which leaves shoppers unable to make informed buying decisions.

"At what point can the average person tell the difference?" is the most frequently asked question in discussions not only of time-

compression but also of the cables used to connect the various components of audio and video systems. On the package of its Interlink II cables, Monster Cable claims the cables "improve sound system performance. Designed specifically for transmitting low level audio signals, Interlink sets a new standard for performance...."

According to Larry Greenhill, who tested the Monster Cable cables for *Stereo Review*, "It's a widely held feeling that wire is wire as long as the ends are clean and the plug fits snugly. The Monster Cable cable we tested did transmit certain signals better than other cables, but we were using very complicated equipment and using signals you wouldn't just listen to. It would be like using a very complicated test bar pattern for video with which you can see very small differences. But people don't sit and watch complicated test bar patterns; they watch movies, where those differences wouldn't necessarily show up."

Hal Rodgers, an electronics veteran associated with *High Fidelity* and *Technology Illustrated*, puts it more strongly: "It's just a way of selling a large diameter wire at a very expensive price. You can get the same wire from a welder for a lot less. There's really no advantage over the thinner wire. There are no differences in the audible range."

On the other side of the wire fence is Noel Lee, president of Monster Cable. "I think the people who say there's no difference haven't sat down and really listened," he says. "Anybody who has a system, was using conventional wire, and switches to Monster Cable will hear the difference. It doesn't take an audiophile to hear it. I think it's a problem of prejudice against cables," he adds.

The 64K Question

One of the most important criteria by which a computer is judged is the amount of RAM (random-access memory) it has. Unfortunately, different companies count their RAM in different ways, so the number printed on the package may not mean what it seems. Take, for example, the Atari 1200XL computer, advertised as a step up from the 800 computer with 48K. On its box, it says "powerful 64K." But, according to computer writer and editor Jules Gilder, "If you've got an 800 and yearn for that

extra 16K, the 1200XL will keep you yearning. Only 48K is normally accessible, so if you're working with BASIC, you still only have 48K of RAM available. The remaining 16K is accessible only with certain software programs."

In response, Atari spokesperson Bruce Entin says, "That 64K is for the user. We could have said the machine has 73K or whatever, but that's not what's available to the user. You have a lot more memory for your files, even if it's not there for the BASIC."

This is a touchy issue among home computer manufacturers. To further explain why Atari says its computer has 64K, Entin adds, "We decided not to do the kind of thing Coleco is now doing—advertising its computer as having 80K when 37K or so is used for the operating system and so is not available to the user."

Coleco spokesperson Barbara Wruck contends, however, that the 80K in the Adam is "all user-accessible. 16K is the graphics capabilities, but it's all controllable by the user."

For video fans, this means that as long as computer companies play their number games, consumers will be playing guessing games.

The better educated shoppers are about these kinds of issues, the more likely it is companies will respond to their demands. This is evidenced most clearly by the recent trend toward more honest packaging for videogames. When videogames first took off, manufacturers would put exciting pictures and elaborate story lines on the game boxes which frequently bore no resemblance to the actual games.

Because of such complaints, game companies in general and Datamost in particular now include a photograph or a realistic rendering of a game screen on the package. "We're striving to make our packages more realistic," explains Datamost's Dean Marion.

Similarly, Sirius Software's president Jerry Jewell says, "We had previously put out packages without screens, but we had a lot of complaints. Since we started putting the game screens on, we've had none."

The lesson is what veteran consumer crusader Ralph Nader has been saying for years: Informed consumers are much more powerful than they may realize. □

Painting by pixels, plus plenty



Fun with Art: computer coloring that's easier than 1, 2, 3, 4.

Activity

FUN WITH ART ★ ★ ★

Designed by ISM Ltd. (Epyx, cartridge for Atari 400/800/1200XL. \$34.99 approx.)

By Randi Hacker

Computer graphics are all the rage, showing up in everything from movies to TV commercials. Rendering them is, of course, a terribly complex process involving lots of ones and zeros and the plotting of many points such as the dull 4,5, 6,7 and the more exciting 8,10. Fortunately, you can bypass all this with computer graphics programs, such as *Fun With Art*. You can draw, fill, print letters of the alphabet and do all sorts of other artistic things without having to recognize a single number.

There are 24 modes in *Fun With Art* including draw, outline, box, circle, edit and fill. You choose a mode by using your joystick to position a cursor over the function you want. The functions are all represented by small pictures on the menu screen: A line represents drawing; a circle,

circle; and a disc, storing on disk. Nothing tricky here. So, you position your cursor over the picture of the mode you want by moving your joystick. Once the cursor is in place, you press the fire button and you've engaged that function.

Let's say, for example, you want to use the draw mode. You place the cursor over that symbol, press the fire button and then press the "start" button on your computer. This will result in a blank screen which does not mean you've done something wrong. Think of the blank screen as a tabula rasa, a canvas or a piece of paper upon which you can create what you want.

To draw, you push the joystick in the direction you wish the line to go while holding down the fire button. This results in your leaving a trail behind you like a skywriter. If you wish to place the cursor in another part of the screen without leaving a telltale trail, simply remove your finger from the fire button.

Several of the functions are particularly cunning. For example, there's the zoom mode which allows you to single out any portion of your drawing, zoom in on it (allowing you to magnify many times) and refine it by adding color and filling in between pixels.

There's a reverse or mirror mode which allows you to make a mirror image of a shape you've already created. (This is particularly handy when drawing handlebar mustaches—you only need to do one half.) You can also copy any part of a drawing or

you can isolate a specific part of a drawing and relocate it elsewhere on the screen.

In addition, there's a text mode that lets you generate letters in two different sizes. You can use the zoom mode on these and really embellish the type style, making it baroque and ornate. Although it gets to be a drag flipping back and forth between the menu and screen and running through the various color choices, it's still creatively rewarding. The results may not be *Tron*, but then Rome wasn't painted in a day, either. □

DANCING FEATS ★ ★

Designed by Christopher Chance. Softsync, disc for Atari 400/800/1200XL. \$24.95)

By Sheldon Leemon

If you found the kazoo a musical instrument too tough to master, then you might enjoy the solution provided by *Dancing Feats*: Play the computer. The program provides a drum beat and bass line, and you provide the melody by moving your joystick in one of eight directions. Only notes that are harmonious with the chord changes of the background music can be selected, so any note you play sounds pretty good.

Trouble is, it all sounds pretty much the same. The program does let you choose the type of bass line, the type of beat, the tempo, the type of chord progression and a style of ending, giving several choices for each. But it's fairly difficult to play a recognizable melody with a joystick. The note selection is not that accurate, and it's hard to hold the note for just the right amount of time. The result is that all of your "compositions" tend to wander.

In its favor, *Dancing Feats* is extremely easy to use and will let you record your sessions for posterity. For the young user or musical novice, it provides a painless introduction to the joys of musical creation. □

Personal

PRACTICALC PLUS ★ ★ ★ ★

Designed by Sandy Ruby. (Computer Software Associates, disc for VIC-20 with 16K RAM. \$54.95)

By Phil Wiswell

This electronic spreadsheet, modeled on the popular *VisiCalc*, is one of the most powerful programs written for the VIC-20. In fact, *PractiCalc Plus* includes 85% of the *VisiCalc* functions, which is no mean feat on

RATINGS

- ★★★★ OUTSTANDING
- ★★★ GOOD
- ★★ AVERAGE
- ★ BELOW AVERAGE

the VIC-20. But don't just buy its program because it's very good; buy it because you need a spreadsheet.

Much credit is owed to Kathleen F. Nolan for the helpful 65-page manual that can walk even a neophyte through every function of the program. Step by step, the manual has the user enter and manipulate sales information about the XYZ Corporation. Thus, after an hour or so, a spreadsheet utilizing every *PractiCalc* feature has been completed.

PractiCalc Plus has 600 cells, or row/column locations, which seems more than adequate for home use. And if your VIC-20 has 24K RAM, you can have 2,000 cells.

The program contains 22 mathematical functions, the ability to alphabetize and the very important global search and replace function. This last causes the computer to find a particular entry. The user has the option of replacing it there or through the spreadsheet. The computer will then automatically re-compute all the figures affected by the change. Graphics may be used to display the information in bar chart form. And, of course, you can save a spreadsheet on the *PractiCalc* disc.

All in all, this is a versatile, powerful and easy-to-use package. □

TEXT WIZARD ★★ ★

Designed by William V. Robinson.
(Datasoft, 32K disc for Atari
400/800/1200XL. \$49.95)

SPELL WIZARD ★★ ★

Designed by Phillip Dennis and David Selenkow. (Datasoft, 32K disc for Atari 400/800/1200XL. \$49.95)

There are so many word processing programs out that choosing among them can be difficult. Datasoft has recently made its program more attractive by packaging it together with a spelling checker and lowering the price to \$79.95 for the two together.

Even so, word-processing programs tend to appeal to different people for different reasons and are thus difficult to recommend. I like these two programs for their power and flexibility, but they are not the easiest to use because, especially with *Text Wizard*, you have to remember which combination of keystrokes causes which one of the many functions to occur.

Text Wizard has two stages. In the first, you create and edit a document; in the second, you define the exact print format. (The Atari 825, the Epson MX-80 or the Centronics 737 printer may be used.) This program has all the functions I require of a word processor, many of which are missing in programs of lesser quality. The most important inclusions are automatic word wrap, a disc directory, excellent editing controls, a page flip and the abilities to search for and replace a word or phrase and to merge many small text files into a larger one. Print format commands are extensive and offer true proportional print, allowing lines to be con-

densed or elongated for a finished look.

Spell Wizard is a computerized dictionary with 33,000 entries, and you can write your own dictionary to keep track of the words you use most often. This rapid proofreader scans 600 words per minute, making a list of each word, then checks the dictionary just once for each word, saving valuable time. What's more, you can correct your mistakes without plugging in *Text Wizard*.

Misspelled words or those not found in the dictionary are flagged, and the program rapidly scans from one to the next. All flagged words can be added to your dictionary. Unfortunately, it will flag all non-alphabetic entries (numbers, anything with an apostrophe, dollar signs, etc.), which is a waste of time. Personally, I don't need a computer to check my spelling. If I did, however, I would think *Spell Wizard* a fine companion to *Text Wizard*. (P.W.) □

Games

BEAM RIDER ★★ ★

Designed by Dave Rolfe. (Activision, cartridge for Intellivision. \$34.95)

By Ken Uston

When I get a new Activision game, I get a conditioned response. First, strong curiosity takes over and I wonder, "Okay, what did those guys come up with this time?" Then a feeling of anticipation sets in—an intuition that the chances are good the game's going to be a grabber. My anticipation was rewarded: *Beam Rider* is a grabber.

The most impressive feature of *Beam Rider* is its simulated 3D graphics. The beams themselves add a dimension of depth to the screen—they really seem to be coming at the player from outer space.

Then, both the aliens and the lasers travel along these beams with 3D authenticity.

Beam Rider is a space shoot-out—but not your ordinary space shoot-out. The screen persona is a triangular spaceship, the nose of which is surrounded by a circular electric ring. The ship travels across the screen, attaching itself to one of five space beams. (I suspect this feature was ingeniously incorporated to circumvent the difficulty of navigating screen objects with the infamous Intellivision disc.)

We are attacked by aliens, of course. The basic alien is a well-designed and formidable-looking flying saucer, which resembles the planet Saturn, complete with rings. At each of the succeeding difficulty levels (called "sectors"), more and more objects are encountered, with different characteristics, sizes, shapes and colors. Some must be destroyed by laser fire, others must be avoided. There's also a friendly yellow carrier which awards us extra ships each time we allow it to land on our ship. (If we blast it inadvertently, it becomes vindictive and destroys our ship on contact.)

After we've killed all 15 enemy flying saucers within each sector, we are given a chance to blast a huge enemy Gargon ship, which travels the screen in the distance. To destroy Gargons, we fire not lasers (with the top firing button), but torpedoes (with—you guessed it—the lower firing button). The torpedoes give such an authentic 3D feeling that they're a joy to launch just to watch them progress into space. The Gargon explosion is noisy, colorful and fun just to observe.

It takes a while to get hooked on *Beam Rider*, but the addiction will eventually set in among space shooters. *Beam Rider* has found a niche. It's one of the most playable Intellivision games I've seen, and its colorful graphics and explosions should make it a popular cartridge among Intellivision console owners. □ (Cont.)



Beam Rider: a shoot-'em-up with 3D graphics.



Save New York: lots of action in the game than never sleeps.

SAVE NEW YORK ★ ★ ★

Designed by Joe Jetson. (Creative, cartridge for Commodore 64. \$34.95)

By Dan Gutman

Frankly, I think that if alien creatures descended on New York and started eating buildings and dropping baby mutants into the subways, few people would notice. But out-of-towners might grab a joystick to save the Big Apple in this clever shoot-'em-up.

Save New York may be the first multi-screen game with just one screen. After your rocket battles the bird-like aliens above the skyline (just five buildings, actually), your screen persona must hop out of the rocket and duel the baby mutants underground. Your fuel is constantly being depleted, especially when you are firing, and a plane flies over periodically to drop off packets of fuel for your rocket to catch.

The game has more depth than the average twitch game. There's a different configuration of colorful buildings each time you play, and the lights in the windows surrealistically twinkle like a city full of workaholics flipping the switches on and off. Unlike a lot of shooting games, your bullets can fly *all* the way across the screen, and the aliens have the ability to fly *behind* the buildings, giving a feeling of depth. The buildings crumble nicely when the aliens munch on them. Your rocket moves a bit slowly, but the control over it is good.

The game is a bit confining. In order to fit both the skyline and the subways on screen, Creative had to make the images somewhat small. I would have preferred two separate screens that filled the frame. Also, it would have been nice if the screen could scroll horizontally past these five nondescript buildings. Imagine scanning Manhattan from the Statue of Liberty to the George Washington Bridge, as *real* structures—the Empire State Building, say—crumbled to

the ground. I'm no programmer, but I do know that the Commodore 64 can handle very sophisticated games.

My other quibble with the game concerns the scoring: 20 points per alien isn't adequate compensation for defending the greatest city in the world. You can hold the fort for 10 or 15 minutes in this game and come away with just 600 points. I wouldn't even defend Newark, NJ, for 600 points, and my mother lives there. Videogame players expect their scores in the *thousands*, not the hundreds.

Save New York is actually quite a good little shoot-'em-up with a dash of humor in it. But a lot of cartridges will sell because of the clever title on the box, though the game inside could just as easily have been called *Save Des Moines* or *Save Houston*. □

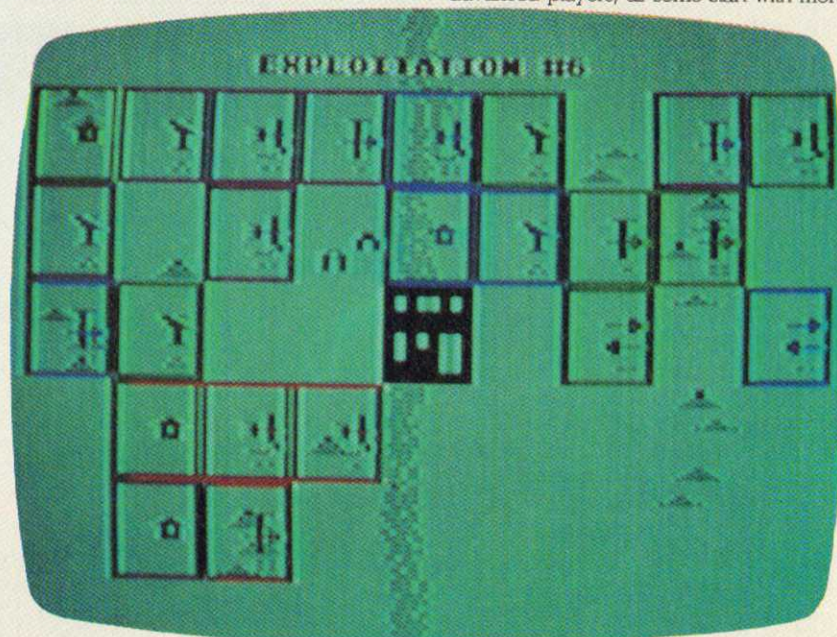
M.U.L.E. ★ ★ ★ ★

Designed by Bill Bunten, Dan Bunten, Jim Rushing and Alan Watson. (Electronic Arts, disc for Atari 400/800/1200XL. \$40.95)

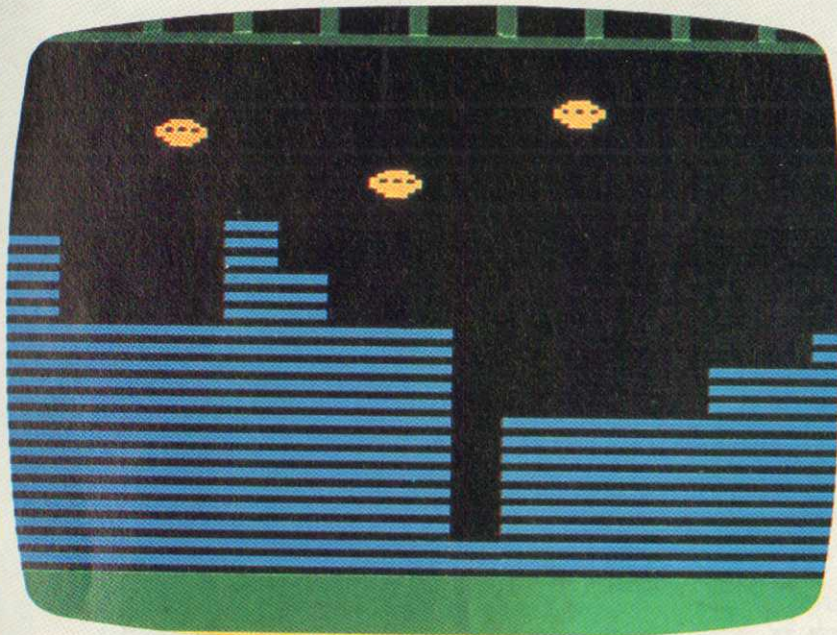
To the avid player of board games (and judging by the purchases of such games, there are quite a few), *M.U.L.E.* comes as a revelation. It not only moves the board game into the electronic age, but also moves the computer game away from its current role as a scaled-down version of video arcade fare. Unlike such disposable entertainments, which come into fashion suddenly and then disappear, *M.U.L.E.* seems destined to become a classic.

Just as the animal mule is a cross between a horse and donkey, the game *M.U.L.E.* is a three-way cross of computer simulations such as *Hamurabi* or *Lemonade*, board games such as *Monopoly* and fast-action arcade games. In *M.U.L.E.*, the four players (at least one human and up to three computer players) develop the resources of a colony planet. Each player, in turn, claims a parcel of land and decides whether to mine minerals or to produce food or energy. After every player has had a turn, a tally is made of the commodities each player has produced, and how much was used up in production or lost to disaster. Then all players simultaneously bid in a free-for-all auction to sell their goods to other players or to the store. At the end of each round, a summary recaps the worldly goods of each player. The most affluent settler—the one with the most goods and land—at the end of a certain number of rounds wins the game.

This short summary of game play does not do the game justice, however. Its real beauty lies in the way in which it takes advantage of the strengths of the computer. Each player chooses his playing piece from one of eight character types. These player types allow handicapping of older or more advanced players, as some start with more



Planetary supply and demand for M.U.L.E.-ish capitalists.



Super Cobra: squeezing all the fun out of the arcade version.

money and get less playing time each turn. During the game, players that are doing poorly get preferential treatment in the auction, in the parceling out of land and even in the order in which they take their turns. Random events, such as planetquakes or pest attacks, which affect the holdings of a single player or the entire colony can occur at any time.

Even the Beginner game contains such elements of economic theory as the law of supply and demand, economies of scale, the production learning curve and the law of diminishing returns. For even more challenge, additional elements are added to the Standard and Tournament games. In short, the game play in *M.U.L.E.* can be as simple or complex as you care to make it. And while you don't need a degree in economics to excel in it, you may be surprised how much economic theory you can learn by playing it. But *M.U.L.E.* is such a delight to play that if you learn anything, you'll never notice. (S.L.) □

SUPER COBRA ★ ★ ★

Designer uncredited. (Parker Brothers, cartridge for Atari VCS. \$30 approx.)

By Craig Kubey

Stem's *Super Cobra* was a strong arcade sequel to a strong arcade game known as *Scramble*. So the question is simply whether the little black plastic VCS cartridge does a respectable job of replicating its six-foot-high coin-op parent. Yes. Yes, yes, yes.

Super Cobra is as good as any VCS game I've played, and I've played more than I want to remember.

In this game, you control a helicopter and it's not just any helicopter. This sucker is *lethal*. It's got both missiles and bombs. Although it doesn't possess every last accoutrement of *Blue Thunder*, neither is it

the wimpy eggbeater piloted by those guys who give the rush-hour traffic report.

Being a VCS game, *Super Cobra* does suffer from mediocre graphics. The 'copter is fuzzy, the missiles look like typewriter hyphens, and the bombs appear no more destructive than oatmeal cookies.

But *Super Cobra* has all the basic elements of an attractive game. It's not too hard, not too easy. Control of the helicopter, even with the standard '77 Atari joystick, is surprisingly precise. In addition, you can pause and return to the game, and even continue if you've lost all your ships.

You pilot the helicopter through enemy terrain. The terrain is a lot like a city skyline, with sudden climbs and descents. But the challenge only begins with collision avoidance. The enemy turf is manned. You encounter rockets, artillery, fireballs and mines. The longer you keep your 'copter flying, the more aggressive the enemy becomes in the use of its weapons. And you must destroy fuel tanks or run out of gas.

The fire button operates both the missiles and the bombs. The weapons alternate: If you just fired a missile, the next push of the button will drop an oatmeal cookie—excuse me, a bomb.

The biggest drawback is that if your chopper gets wasted anywhere during one of the 11 levels of play—even near the end of a level—you have to go all the way back to the beginning of the level. This gets boring and makes it more time-consuming than necessary to proceed to the next level. If it weren't for that (and for the fact that *VR* refuses to pay any reviewer who gives fractional stars), I would have given this game three and a half stars.

The way to get totally psyched to play this game is to go to a movie theater, watch *Blue Thunder* three or four times, then rush back to your living room and fire up *Super Cobra*. If a second helicopter appears on

the screen and you can see a tiny Malcolm McDowell in it, grab the phone, and dial Roy Scheider. □

SUPER ACTION BASEBALL ★ ★ ★

Designer uncredited. (Coleco, cartridge for ColecoVision sold with Super Action controllers. \$70 approx.)

By Frank Lovece

Baseball videogames are as enduring as baseball itself. And what makes a baseball videogame great isn't just realistic graphics and accurately adapted game play, but a harder to define—and certainly subjective—"feel."

Super Action Baseball sports the trademark Coleco graphics. It lacks however, the usually impeccable Coleco game play, and I can see how the limitation could become annoying in the long run. Still, what elevates this game to the big league is that the unknown, unsung designers have captured the spirit of the great summer ritual.

Take, for instance, the little cartoon face that pops on and off silently to scream "strike" or "out" in a word balloon. It's shorthand that says "baseball" in our brains—as do the simulated organ music and the whistling, off-screen spectators. There's a sandlot beneath the Astroturf, after all, and it's good to be reminded.

The two-screen game play itself—strictly two-player except for the batting and fielding practice modes—is naturalistic, especially in the close-up batter-pitcher screen. The action switches from that close-up (with inserts of the three bases) to an overhead view of the diamond. Pitching and swinging options are multitudinous, but the game presents the same pitcher and batter every time. There are no distinctions, say, between lefties and righties, nor between a .300 batter and a .200 batter.

This does help make the game easy to grasp, though, and *Super Action Baseball* managed to satisfy both friend A, the rabid Yankees fan, and friend B, who thinks the Yankees were the team that won at Gettysburg. In fact, friend B and I were able to sit down with the game and Coleco's accompanying new controllers without having to resort to the instruction book. A good thing, too, since the instructions are so murky that Coleco had to include a separate sheet clarifying some of them.

Incidentally, the new controllers, which are compatible with all ColecoVision cartridges, offer both numeric and color-coded buttons and both joystick and speed-roller manipulation. They are so logically designed it's a pity there's no best technical achievement award to give them.

A few more gripes about the game, however. The screen figures tend to blink when runners and fielders cross each other. The arms of the outfielders alternate between flailing, Jerry Lewis arms as they field, and Incredible Hulk arms as they make impossibly deep leftfield to home plate

throws. And the batter's selections of swings all look the same.

Ah, well. The spirit of baseball thrives as much on pine tar and dead sea gulls as it does on triple-plays. The limitations of *Super Action Baseball* are disappointing, but the spirit? It soars. □

SPIKE'S PEAK/GHOST MANOR ★★★

Designed by Beck-Tech. (Xonox, cartridge for VCS. \$30 approx.)

By Tom Hirschfeld

Two games in one review? Only natural, when they're on the same cartridge. It's like Dr. Dolittle's pushmi-pullyu: You choose your game by the end you stick into your VCS. More impressive, the games are both pretty good and together cost the same as an ordinary cartridge.

On one end is *Spike's Peak*, in which you control a piton-equipped climber trying to reach the top of a mountain. First, he must climb the zigzag meadow path, watching out for swooping eagles and loping bears. He can avoid them by diving into a canyon or scurrying into a cave (if it's bearless, that is—eyes peering out mean danger). Patterns emerge soon, however. It's a little like the first screen of *Donkey Kong*.

The second and hardest screen pits your mountaineer against jagged ledges, complete with rock slides, stinging cacti and bouncing boulders. The best strategy here is to keep your character on the left side of the screen. The boulders—the only real danger—bounce in predictable patterns, so if you watch their movements, you can avoid them easily enough.

If he survives, your hero must brave the icecap, home of abominable snowmen and cascading avalanches. His piton serves a dual purpose here. He can throw it at the snowmen to kill them, but if he gets caught in an avalanche without it, he slides to the bottom of the screen.

Finally, he tries to plant a flag at the summit before his body temperature, already low, falls all the way.

The game's graphics are good, especially on the icecap. The sound effects are adequate, and the upper skill levels present a challenge for even the ablest video athlete.

Ghost Manor is a little less menacing, but the graphics are still imaginative enough to make it fun. The manor and its gravestones rise to sinister music to surround an innocent young couple. You choose the boy or the girl as your character (a charming touch), and then—cruel world—your companion disappears. To rescue him/her, your character must storm the castle.

First, your character plays a game of tombstone tag with a ghost (or a skeleton in the upper levels), collecting spears for the attack. The quickest way to get enough spears is to start in the left of the middle row of tombstones, then follow the ghost across the top two rows.

With enough spears, your character can storm the castle. This entails shooting down

the black knight, scorpions, skulls and bats (*Carnival* revisited). You should try not to use up your spears before you deal with the mummy who chases your character with his ax. He chops in a pattern, but moves too quickly for comfort at the hardest skill level.

Once inside the castle, your character roams the mazes of upper floors, searching for points and crosses by opening creaking coffins. The crosses are used in the final screen to defend your character from—you guessed it—Dracula. Dracula always starts in the top left, so if you immediately move your character to the left, then up, the crosses will have their power over him. Then it is a simple matter to drive him into the dungeon, freeing your companion.

Neither game on this schizophrenic cartridge is truly outstanding, but each provides solid fun—especially when you consider the price. □

KEN USTON BLACKJACK/POKER★★

Designer uncredited. (Coleco, cartridge for ColecoVision. \$30 approx.)

By Michael Blanchet

Like most people I want to believe what I read. So when I popped *Blackjack/Poker* into my ColecoVision console, I braced myself not only for some high stakes gambling, but also for Wayne Newton, a chorus line and a cigarette girl. Heck, it says "All the excitement of a real casino" right on the package.

Although *Blackjack/Poker* is one of the most sophisticated gambling games ever designed, it lacks that thrill that can only be found in a real casino.

Using the keypad overlay, you can tell the blackjack dealer your bet and whether you want to stand or take another hit. Stumped players will find one feature of value. It's the "Help" button. When pressed, it provides the player with advice on when

to take a card, when to stand, when to split and when to double the wager.

As an aid in teaching the novice the ropes of casino blackjack and poker, this game shows much promise. But as pure entertainment, *Blackjack/Poker* can't hold a candle to a good, old-fashioned deck of cards and a pocket full of change. □

PLANETFALL★★★

Designer uncredited. (Infocom, disc for Commodore 64. \$49.95)

I'm hesitant to call *Planetfall* a game. Most games are little more than simple tests of one's ability to react. *Planetfall*, like all of Infocom's games, is better described as an experience—one, I might add, that's currently unmatched by any other form of computer entertainment.

In this humorous, sci-fi text adventure, you assume the identity of the lowliest ensign aboard the stellar patrol ship *Feinstein*. Your goal is to save a doomed planet somewhere off in the uncharted reaches of the universe. What transpires, though, is far too lengthy and involved to recap here with any justice.

Like all Infocom games, *Planetfall* accepts multi-word commands as opposed to standard graphic adventures which can handle, in most cases, no more than one verb and one noun. Also, *Planetfall* responds with a bit more personality when you type in invalid verbiage. This feature certainly heightens the realism of the game and is a most welcome change from "You can't do that here"—the standard way for an adventure program to tell you that you're beating down the wrong trail.

Although Infocom makes an attempt to integrate as much humor as possible into each and every one of their games, *Planetfall* stands as their first full-fledged piece of comedy (due, in part, to the robot sidekick, Floyd). This is fun and funny stuff. (M.B.) □ (Cont.)



Planetfall: saving a doomed planet with Floyd the robot.

FATHOM ★ ★**Designer uncredited. (Imagic, cartridge for Atari VCS. \$29.95)**

Fathom combines *Donkey Kong* with the great old Lloyd Bridges TV show, *Sea Hunt*. I've heard of weird marriages but this is ridiculous. And the child is what you might expect from crossing two different species: It's an ugly mutation: boring and annoying.

What you're supposed to do here is save a mermaid. Not just once, but seven times. Then you get a "special surprise." Who knows? Maybe it's a piece of seaweed that once actually got stuck in Lloyd Bridges' Aqua-lung. You save the mermaid by earning pieces of Neptune's trident. Neptune, you see, is the mermaid's father. Her name is *Neptina*. (Who says there's no drug problem in Silicon Valley?)

You earn trident segments by becoming a dolphin and touching seahorses, then a starfish, and by becoming a seagull and touching clouds, then a star in the sky. When you have all three pieces of the trident, you get to become a dolphin again and swim down to the bottom of your TV set and release the mermaid. (I can't believe this. I went to law school and now I'm writing about becoming a dolphin in a stupid home videogame? What depravity! What embarrassment!)

Just as in *Donkey Kong*, as soon as you help the lady out, she splits. Real grateful. Not bad looking, though, if you don't mind women about as tall as a thimble (true, she wouldn't eat much on dates, but how could either of you achieve true sexual bliss?).

All of the game's confusing and rather aimless wandering is made downright irritating by the requirement that to operate the seagull's wings you must push down the red fire button once for each flap. This gets tiring even faster than it gets boring. I can't *fathom* how anybody would want to play for more than a short time at a sitting.

Still, it gets two stars rather than one because it is quite distinctive. You gotta admit you don't save a mermaid every day. (C.K.) □

MAJOR LEAGUE HOCKEY ★ ★ ★
Designer uncredited. (Thorn EMI, cartridge for Atari 400/800/1200XL. \$39.95)

By Phil Gerson

Major League Hockey is a good version of the game. It features two six-man teams, both well produced graphically, on a scrolling rink. The sound effects—from the official's whistle to the smack of the puck—are good. The play is very much like regular hockey, with face-offs, passing and saves a regular part of the game.

What makes this one better than many hockey videogames is its unique capacity to have up to four players involved at once. With four joysticks, you can play two people on a team or all four against the computer. In addition, you can have the computer play with you as well as against you.

Unfortunately, there are a number of bad points to this game. First, the goalie does very little compared with most other hockey videogames. Instead of being able to make saves with his whole body, the goalie can only stop the puck with the very tip of his stick.

Gaining control of the right player presents another problem. In most hockey games, you automatically control the player with the puck or the player closest to it. Here, in order to control a player, you must press the button on the joystick, and the number of the joystick (1 to 4) will materialize for a moment over the player that the joystick is now controlling. If this is not the one you want, you must press the button again—and again—until you get the right one. Sometimes, by the time you get to the right man, he no longer is. This is a real

problem when dealing with the goalie. Often, you gain control of the goalie just as the puck is sailing by him into the net.

Overall, however, this is a reasonably good version of hockey. While it could have been better, it is still fun to play and can give many hours of excitement to up to four players. □

CRIBBAGE AND DOMINOES ★ ★ ★
Designer uncredited. (Thorn EMI cassette for Atari 400/800/1200XL. \$29.95)

By Walter Salm

If you've been looking for a cribbage partner (a rough search, no doubt), look no further. This game pits you against the computer, and the computer can't cheat; it has the same luck as you do.

Assuming you already know how to play cribbage (an old English card game), this version is excellent. The cribbage boards are displayed at the top of the screen, and there are never any arguments as to whether you're on your first or second time around the track.

The computer counts its own hand and, if you wish, yours as well. It also counts the crib with an accurate impartiality that can be maddening. It never makes mistakes in the point count. You can also expect the computer to make all the right moves for pegging (scoring) points.

On the other side of the game cassette is *Dominoes*. Now I've never been much of a domino buff, but, as with *Cribbage*, it's interesting playing against a machine—especially since, unlike chess and similar games, a degree of luck is involved.

The computer can run, in fact, into some bad luck in the draw of tiles (as can you). If you lose the game, the computer announces in huge letters, "I have massacred you." If you win, it announces in equally bold letters, "You have massacred me."

These are not fast-paced shoot-em-ups, but traditional games of luck and playing skill. These video versions can provide many hours of laid-back game play. □

Educational

TEDDY'S BALLOON ★ ★ ★
Designer uncredited. (Program Design, disc and cassette for Atari 400/800/1200XL. \$34.95)

By Elizabeth Crow

This cheerful little program offers two easygoing games for preschoolers in a happy marriage of high technology and old-fashioned kids' entertainment. Although you need a computer, a disc drive and a data recorder to get *Teddy's Balloon* off the ground, it features a Howdy Doody look-alike in a series of adventures that could have been dreamed up in the '50s.

Absurd as this convergence is, however, *Teddy's Balloon* is a pleasant diversion for

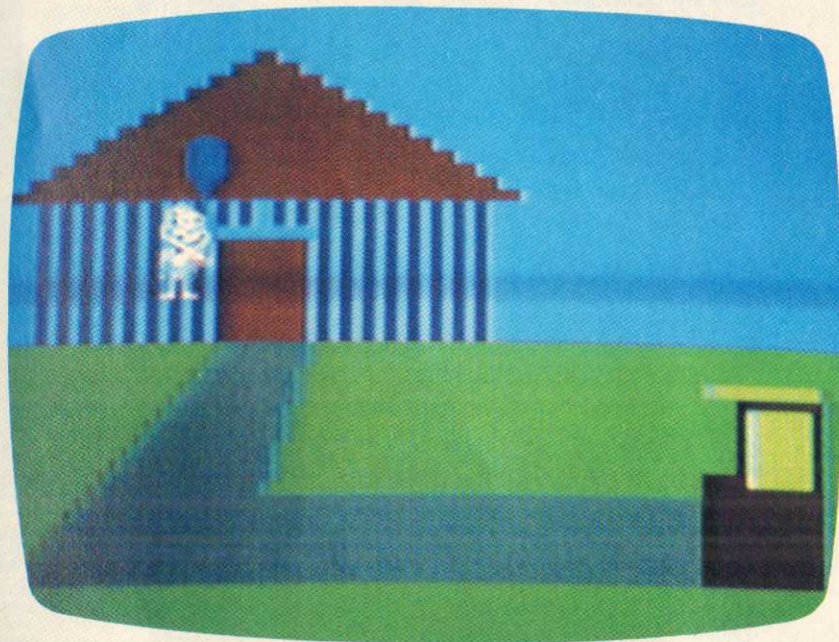


Starring Neptina the mermaid, Fathom is all wet.

three- to five-year-olds and is secretly educational, which should stand it in good stead with parents who want their children to learn while they play.

Here's how it works: After flashing a bright "Hello," the screen instructs the player—or, really, the player's parent, since this is a game for nonreaders—to select either the story or the game program. The game is a simple dodge 'em affair in which the player racks up points by maneuvering a smiling balloon up or down the screen past the birds, clouds and airplanes that want to pop it. The story is more interesting.

Little Teddy, the chipper female narrator informs us, has spent the day at the circus. Now, a few minutes before 5:00, the circus is folding up for the night and Teddy is on his way to meet his parents at the gate.



Teddy's Balloon: a kids' game for the '80s; a story for the '50s.

Before he can get there, though, he's lured off on video adventures by a talking balloon. "You and I can fly," promises the balloon—and indeed they do. As the player manipulates the balloon with his joystick, Teddy, in a spaceship, sets off on a journey through flocks of angry birds, bad weather and—an air-controller's nightmare—a blizzard of planes.

In each situation, the child has to weave the balloon to the safety of a "magic" word ("bird," "plane" or "cloud") in order to keep up with Teddy. There are no penalties for wrong moves or mistakes. The game simply lights up the right answer, and the child eventually closes in on it. When the child has finally found the magic word he gets a warm "Very good!" or "You did it!" as his reward.

Teddy's Balloon is a bright, good-natured adventure, geared to a young child's limited attention span. (It's only 15 minutes long if your child whips right through it.) As cozy and unthreatening as *Candy Land*, games like *Teddy's Balloon* may well be the '80s' answer to the classic board game. □

TURTLE TRACKS ★★★

Designer uncredited. (Scholastic, disc for Atari 400/800/1200XL. \$39.95)

Turtle Tracks is a marvel. Designed for children aged nine and up, it is a complete computer programming kit for kids. In 10 gradually intensifying lessons, it rewards the diligent by teaching them how to make the computer draw, paint and sing. And for a computer-shy adult (such as myself), *Turtle Tracks* turned out to be the easiest way to begin the formidable task of learning to use my computer for more than videogames.

As its name implies, *Turtle Tracks* uses a turtle as a cursor. As the turtle moves across the screen, it leaves behind a track of small or large balls (depending on which program you're using). Within minutes of turning it on, I was cranking out instructions

corners of the screen (a variant of one of the "Challenge" exercises that appear at the end of each lesson). The following night ended still later as I attempted to program the turtle to leave his trail of balls in a slanted line from one corner of the screen to another. I had to program a series of repeated right and left turns, a kind of turtle minuet, before I could get the intended results. I succeeded at last but, more importantly, realized that computing is more than fun or simply an interesting, even exciting, exercise. I suddenly saw that the precision and analysis that even the simplest instructions demand are, in a word, beautiful—that in mathematical order lies a stately, lovely world I had never even glimpsed when, years ago, I sat grimly graphing X and Y coordinates in Mr. Hershey's Algebra II class. With *Turtle Tracks*, I had had a minor epiphany: I had "got it."

Turtle Tracks is a terrific program. It is clear, attractive and marvelously thorough, reminding the woolly-headed when to press "Return," when to turn on the disc drive, when to load the disc. By repeating the basics so often, it makes using the computer almost second nature, and, thus, the computer truly becomes one's own. (E.C.) □

BEGINNER'S BASIC TUTOR ★ ★

Designer uncredited. (Texas Instruments, disc for TI-99/4A. \$29.95)

By Abigail Reifsnnyder

This fails to meet the most important requirement of educational computer software: It has no particular advantage over a good old-fashioned workbook.

As its title suggests, *Beginner's BASIC Tutor* is designed to teach the novice the basics of the programming language BASIC. There are eight lessons, six of which follow exactly the same format. The computer presents up to three screens of information, then asks a multiple choice question relevant to that material. If you answer correctly, you go on; if not, you are shown the correct answer and the information is presented again, followed by the same question. Whoopee.

Lessons four and five, the two deviations, are positively titillating in comparison. There are no questions in lesson four; information about CALL functions is presented and their uses demonstrated. Lesson five has you create designs on a cursor grid to help you understand graphics functions.

The major shortcoming of this program is that it lacks any interactivity. You can't try out anything as you learn it without breaking out of the program. Furthermore, the lessons don't build on one another in any significant way. (The same holds true, by the way, for the material within each program.)

In its favor, *Beginner's BASIC Tutor* is straightforward and very easy to use. And if you have the patience to sit through all eight lessons, you're bound to get the basics down. But, frankly, I'd rather use a book so the computer would be free for experimentation. □

Coming next in cart, cassette, disc

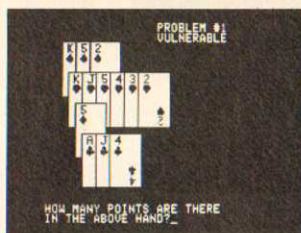
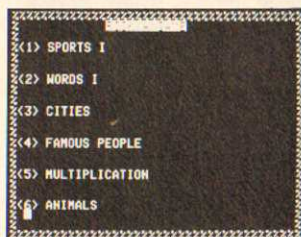
YOU WILL BE GIVEN A RANDOM EQUATION IN THE FORM $AX + B = C$. YOU WILL ALSO BE GIVEN A MENU OF RULES TO BE USED IN THE SOLUTION OF THE EQUATION. THE RULES ARE AS FOLLOWS:

FOR THE EQUATION ABOVE

- 1) ADD SAME TERM TO BOTH SIDES
- 2) SUBTRACT SAME TERM FROM BOTH SIDES
- 3) MULTIPLY BOTH SIDES BY SAME TERM
- 4) DIVIDE BOTH SIDES BY SAME TERM
- 5) SIMPLIFY BOTH SIDES

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PERSONAL

ATARI LOGO Using an on-screen turtle and everyday English word commands, the user can create graphics, animation and game action. It's all to teach Logo, the programming language that's designed to be easy for children and first-time computerists to learn. (Atari, Atari 400/800/1200XL)

ATARIWRITER This new word-processing cartridge offers full editing commands, a preview mode, automatic page numbering, global search, form-letter style and proportional spacing. (Atari, Atari 400/800/1200XL)

EASY SCRIPT This disc-based word-processing program has multiple command functions, including file linking, automatic mail merge and generation of personalized standard letters. Comes with complete documentation for school, home or business uses. (Commodore, Commodore 64)

FAMILY FINANCES This work program designs a family budget plan that can be updated. The program will analyze the results of the projected budget against the actual expenditures of the budgeted period. (Atari, Atari 800/1200XL)

GENERAL LEDGER This disc program is designed for home business. It replaces the paper ledger's function of recording financial information and, according to Commodore, allows the user to manipulate the information with great speed. (Commodore, Commodore 64)

MAGIC DESK This electronic office lets the user move from one activity to another by simply moving an on-screen hand to point to the appropriate symbol. There's a typewriter for typing, file drawers, a calculator, and many other functions—including a wastebasket. (Commodore, Commodore 64)

TOTL BUSINESS SYSTEM Everything under the sun. This integrated accounting system contains most features a small business needs. It puts out reports for customer listings, inventory and sales, customer statements, invoice orders, check register and more, integrated so that information updated in one file is updated across the board. (TOTL, Commodore 64/NIC-20)

EDUCATION

CHARLES GOREN: LEARNING BRIDGE MADE EASY Developed by leading bridge experts, this tutorial is aimed at the new player. It comes with a 144-page book. (CBS, IBM PC, Apple II/II+/IIe)

ERNIE'S MAGIC SHAPES Ernie and the rest of the Sesame Street gang help youngsters (ages three through six) to identify shapes, and shapes embedded within shapes. (Tandy, Radio Shack Color Computer)

FAX An educational video quiz with four categories of multiple choice questions and three skill levels. Speed counts: The faster the questions are answered, the more questions (and points) the player can get before time runs out. (Epyx, Apple II/II+/IIe, Commodore 64)

HANDS ON A computer-literacy package for first- and second-graders with many activities that mimic the fundamentals of computing. One, for example, is called Blackboard, which teaches the basics of word-processing and electronic mail. (Tandy, Radio Shack Color Computer)

MASTERING COLLEGE BOARD ACHIEVEMENT TESTS: ENGLISH COMPOSITION Electronic cramming. This tutorial for the English achievement test features more than 1,000 questions on such topics as rewriting sentences, phrasing and grammatical errors. (CBS, IBM PC, Apple II/II+/IIe)

MASTERING THE S.A.T. Developed in conjunction with the National Association of Secondary School Principals, this program was designed to inspire confidence by training students to answer the types of questions offered on the college boards. (CBS, IBM PC/Apple II/II+/IIe)

PLAY WITH LANGUAGE This first of a series of software packages developed by Children's Computer Workshop is structured to help first- and second-graders to develop language skills. The package contains three activities, including "Picture Place," a sight-word vocabulary skill developer. (Tandy, Radio Shack Color Computer)

SPEED READING This program encourages the user to increase the number of words read per minute as well as encouraging comprehension of the text. The computer tracks the pace and adjusts the program accordingly. (Atari, Atari 400/800/1200XL)

SUCCESS WITH MATH: LINEAR EQUATIONS This teacher-created tutorial was designed for both remedial work and skill development in the mathematics of linear equations. For students in grades seven through 10. (CBS, Atari 400/800/1200XL, Apple II/II+/IIe, Commodore 64)

ACTIVITY

FUN WITH MUSIC Designed for children (ages five through 10), this program is simple to operate. Kids can play with songs and melodies on the disc or compose and save their own tunes. (Epyx, Apple II/II+/IIe, Atari 400/800, Commodore 64)

MUSIC CONSTRUCTION SET A program with all the parts that make up a musical composition. It allows the user to learn the logic of composition by creating original music, playing it back and saving it on disc. The player can experiment with changing keys or beats, moving notes and piecing together measures. (Electronic Arts, Apple II/II+/IIe, Atari 800/1200XL, Commodore 64)

PAINT A graphics utility designed for the average computer owner. With no programming, users can draw in many patterns, make perfect circles and squares, mix up to 128 colors of paint and store 24 pictures that the computer can later run. (Atari, Atari 400/800/1200XL)

GAMES

BLADE OF BLACKPOOLE A high-resolution text adventure, this game contains dozens of scenes, each posing a different puzzle to solve. Type in any short sentence for each



Rocky and Mr. TKO.

move or action to find the magical sword and return with it to the tavern. (Sirius, Commodore 64, Atari 800/1200XL, Apple II/II+/IIe)

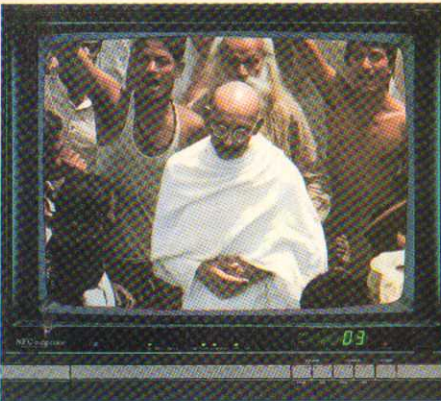
COMPUTER TITLE BOUT Based on the Avalon Hill board game on boxing. It's a strategic contest for two players and uses graphics. (Avalon Hill, Atari 400/800/1200XL)

H I G H V I D E O F I D E L I T Y



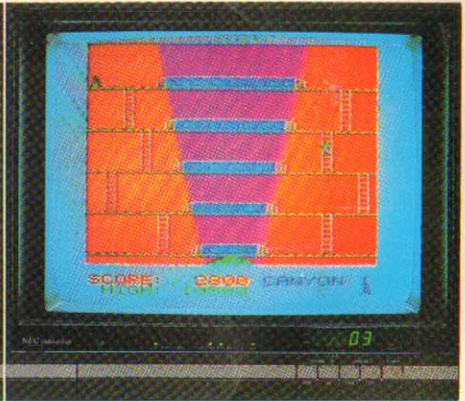
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