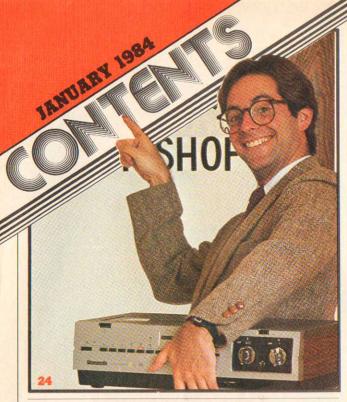


BI-ANK TAPE TESTS CBS LABS RATE VHS VIDEOCASSETTES

Special Review: IBM PCjr Computer Software Repair Rip-Offs, Video Cults, Much More





SPECIAL REPORT

Can Outsiders Invade Your Home Computer? By Barry
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Whitewashed 'Warriors' tape?



FOR SOL YURICK

Novelist

I bought the cassette of The Warriors, mainly because it's one of my favorite books. I notice several scenes are different than they

are in the book. Don't you think this reworking of your novel is horrible?

> Ian Bracchitta Irvington, NY

Not at all. In fact, I would have been surprised if the movie studio stuck to the book. Some writers would say that Hollywood raped them, but I know what the movie industry is like and decided to have nothing to do with it. I didn't write the screenplay and didn't want to write

There is a brilliant condensation of the book's opening scene, in which the gangs are all assembled in the park. That's an improvement on the book.

Another change isn't. There are blacks and Puerto Ricans in the book, but the hero is white in the movie. I guess the director or studio decided that moviegoers don't want a black hero. This, in my opinion, shows a lack of understanding of New York.

OFF TRACK

I've been recording with an RCA VET 650 and have been pleased with it. However, I recently played some tapes I recorded about two years ago and discovered they now have white lines running horizontally across the picture, especially at the top of the screen. Yet all the tapes I've done in the last eighteen months are perfect. What's wrong?

William Fox Scottsdale, PA

Your VCR's video heads are out of alignment; videotape isn't passing over the video heads at the correct angle. Newer tapes play perfectly because they were recorded at the off angle. Your older tapes, however, were recorded when the tape alignment was as it should be. Your VCR should be brought in for servicing. Don't worry that tapes you've recorded recently will have

white lines running across the screen once the tape alignment is properly adjusted—they won't. Both sets of tapes will play just fine.

TVRO TROUBLE

I recently bought a TVRO (home satellite-receiving system) Quasar Varactor tuner and a Sony 1946R TV set. When I view satellite stations on TV, the picture is clear. But I have a problem when the VCR is turned on: the picture is washed out and grainy. Is my tuner out of whack?

> Dennis Pechek Springfield, IL

Most satellite tuners such as your Quasar model come already tuned. But it sounds as though your first step is to do some extra fine-tuning yourself.

If that doesn't work, check whether the satellite tuner is hooked up properly. The

output from the TVRO satellite receiver is the same as that from the antennas. Since the satellite tuner receives this signal, it should be plugged into the VCR's antenna

Also, make sure that the TV/video output selector is switched to TV. If it's not, the picture will be grainy.

If the picture is still poor, call the Quasar distributor in your area, who will recommend a local service center.

NO. NO NANETTE

Could you tell me why the back cover of the That's Entertainment videodisc contains a picture of Nanette Fabray and lists her under "cast?" She's nowhere to be found on the disc version.

> Stephen Rys Earlysville, VA

Good catch. According to an MGM/UA spokesperson, That's Entertainment was one of the first discs the home-video division released, and, at the time, color slides for the



That's Entertainment: covering too much.

cover were sent from the theatrical division. No one double-checked the slides against the disc, assuming they were appropriate. The spokesperson told us that the cover will be fixed next time around.

A LA MODEM

I've heard that by hooking up a modem between my home computer and my telephone, I can call up other computer users. How does the modem enable me to do this?

Tina Tasley San Francisco, CA

Modems enable home computer owners to communicate with other people with home computers as well as with electronic bulletin boards and videotex services.

A modem (modulator/demodulator) translates digital information generated by a computer into analog form, which telephone lines can digest and convey to the computer you're calling.

The same device is also used at the receiving end, so that the computer can, in turn, take the analog signal that's been sent via a telephone and transform it back into digital signals for the receiving computer.



'76ers Dr. J: Only highlights.

SAY HEY, NBA

I'm a basketball fan in search of a VHS videotape of the 1982-83 NBA championship series. Could you tell me what company, if any, has these tapes and if they're available now?

Jimmy Hewitt Pomona, CA

If you want whole games, you'll have to see if you can find someone who taped the games from TV and is willing to make copies for you.

If you'll settle for a cassette of highlights from the games, wait till March, when CBS/Fox is scheduled to come out with

Send your queries to:

Hot Seat or Questions Video Review,

350 E. 81st St., NY, NY 10028

Sorry, no personal replies.

NO JOY STICK

I recently bought a Colecovision. After one month the joystick wouldn't move to the left, except with certain games. My friend has the same problem. Is this a coincidence or are these joysticks defective?

> Calvin Reves Hollywood, CA

According to Coleco, it's a coincidence. But according to our game experts, this is a common problem with Coleco as well as other brands of joysticks, since internal com-

short-lived. Underneath the joystick is a spring that

ponents are made of plastic and often

connects it to the controller. It could by that yours is bent, hence the difficulty moving the stick in certain directions. Or it may be that the left leaf-spring (a small ring that conducts electricity) inside the controller is chipped, misaligned or wearing

Coleco does not repair broken joysticks, but will replace them free of charge if returned within three months of purchase. After three months, you'll have to buy a new one at \$19.95. If this is the case, try calling the company's service center at (800) 842-1225.

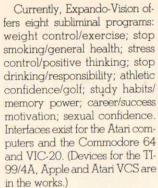


Subliminal Software

Lose weight while you watch TV? Sounds like a headline from the National Enquirer, but actually it's one of several promises made by a company called Stimutech about its new product Expando-Vision.

Termed a "home computer behavior modification system." Expando-Vision consists of two parts: an interfacing device that joins a home computer and a TV set to allow for fast switching between the computer and regular TV signals; a program on cartridge drives the system. The program includes self-improvement messages that are flashed on the screen for 1/30th of a second every minute as you watch TV or programs from a VCR or disc player. At 1/30th of a second, the messages are so fast the average person can't see them consciously, but slow enough to reach the subconscious. In other words, the programs work on the same principle as the famous soda ads that were inserted in feature movies in the '50s and '60s to send the audience scurrying to the concession stand during the doublefeature break. Those were eventually banned.

The same theory applies: The subconscious accepts this quick



Orwell may not have had the particulars right, but he sure captured the feel of 1984. (A.R.)

Manhattan Transfer

Maria Manhattan, a "terminal" artist (as she describes herself), had a dream: to see Nancy Reagan ride the subway.

And it came true (sort of). Manhattan hooked up with New York University's Alternate Media Center, which was designing an electronic art gallery using a text and graphics editing terminal made by Canadian manufacturer Norpak. The Media Center asked her to create an electronic "page" that could "move": in other words, computer-generated animation.

Here was her chance. Riding the subway one day, she saw

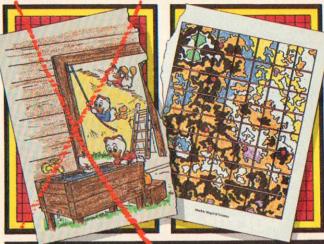


information and, in time, a person begins to act on it. Thus, people who want to guit smoking need only use Expando-Vision, and every time they watch TV, their minds receive messages that they no longer smoke; ergo, they're likely not to smoke. The messages, written in white letters on a blue background, say such things as "I do not smoke" and "I see myself as a non-smoker."

lights blinking past her on the tracks, and realized how she could give her animation the illusion of a subway car in a tunnel. After that it was easy to get the First Lady on NYC's Lexington Avenue line.

Manhattan's page moved in more ways than one. It evolved into 14 pages of Nancy's underground crusade and became the first electronic political cartoon.

NEW TECHNOLOG!



Soon it was shuttled off to the Los Angeles Times videotex trial, where it turned out to be the most controversial and popular electronic page. (J.G.)

Coloring By Digits

Through the ages, there have been all sorts of movements in the world of art. There was fauvism, orphism, Impressionism, cubism and dada-ism, to name just a few. Naturally, with each new era, a new art form has to be intro-

Behold the era of DATA-ism. No, this doesn't mean that you draw a computer with both interface ports on the same side of its metaphorical head. We take this to mean something quite different and the first entry into this movement is the New Technology Coloring Book.

Gone are the days when coloring books sported simple line drawings of puppies, kitties, clownies, mommies and daddies. This coloring book gives you (among other things) pictures of neurons, four distinct views of the brain after a PET scan, a digitized picture of someone's temperature, digitized portraits of famous people and a double helix.

About the only thing all these whimsical drawings have in common is the fact that the spaces you get to color in are impossibly tiny. If you thought staying in the lines when coloring in a beach ball was difficult, this book is not going to make you feel any more like an acccomplished artist. Each tiny space is further cluttered with a number which corresponds to a color listed in the front of the book. Presumably, if you color it in following the directions, you should get a pretty true-to-life image of, say, the Arecibo Interstellar Message, Of course, if you use colors other than the ones recommended, who, we'd like to know, will call you on a point of inaccuracy?

Aside from being Crayola-, Flair- and colored pencil-compatible, the New Technology Coloring Book also gives us the answer to a question that has been plaquing scientists since, oh, 1864; namely, what would Lincoln look like if he were a videogame character? (Randi Hacker)□



"Initial Reaction" By Chick Dameron

VCR. VHS LVR, DBS AFM DIN RF, IRE

UHF, IPS VHF, MDS AFT TV...RIP

NCAA ON TV: FAIR PLAY?

By Lucy Huffman

WASHINGTON—College football fans may be in for a "field" day. The Supreme Court recently agreed to review whether the National Collegiate Athletic Association can decide which college games are aired on TV. If the court rules against the NCAA, the TV rights for college games, and maybe even some pro events, could be up for grabs, giving cable, pay, and other networks the chance to carry more games and with teams of their choosing.

Under the current system, the NCAA negotiates all the TV contracts for its member schools using a method intended to give everyone fair coverage. Since all NCAA members are supposed to get TV time—and revenue—TV sports fans often have to sit through games between lesser teams rather than between the nation's strongest squads.

Football powerhouses Oklahoma and Georgia, who brought the suit, argue that the NCAA's method is anticompetitive because it prevents them from cutting their own deals. The Supreme Court is expected to rule sometime this year.



Sad in the saddle: the 99/4A computer and all the accessories you could have had.

Endangered ICs: TI Going Dodo

By Carl S. Kaplan

NEW YORK—Owners of Texas Instruments 99/4A computers take note: buy up extra software and TI's speech synthesizer now. Both are likely to become scarce as a result of TI's recent decision to abandon the home computer business and discontinue production of the 99/4A. It may soon cease producing software for the comput-

er, leaving the task to other companies. Only one other company—Atari—now makes software compatible with the TI computer, and it remains an open question how many other software publishers will choose in the near and long-term future to make programs for a machine that's no longer sold.

As for computer peripherals, many manufacturers make monitors, cassette recorders and printers that work with the 99/4A. But no one besides TI makes a 99/4A compatible speech synthesizer, and the company says it may cease manufacturing that, too.

TI computer owners will continue to be able to have their machines' warranties honored. But if they want to make full use of their computers, with the right software and accessories, they better act now.

FCC Acts And Axes

As the '84 election approaches, the Reagan era Federal Communications Commission has just handed down a series of decisions that will affect the kinds of viewing choices TV fans have in the years to come.

• After more than 10 years, the FCC lifted the last of its rules on subscription television by making it easier on broadcasters to shift to a pay TV format if they choose. Under the new guidelines, broadcasters will no longer have to adhere to strict technical standards for STV, nor file detailed in formation at the FCC on their plans. The idea is to encourage new STV stations to start up.

 In efforts to boost two new video technologies, the FCC has decided to award licenses for low-power TV and for an entertainment microwave service called multipoint distribution service by lottery. •Broadcast companies will no longer have restrictions on the number of stations they can own if the FCC adopts a recent proposal. Now, broadcasters are limited to owning seven AM radio stations, seven FM's and seven TV outlets. (L.H.)□

Time Waits

Time Teletext, an ambitious full-channel teletext service due to get underway this year, has been put on a back-burner. For more than a year, Time tested its satellite-cable teletext system in San Diego and Orlando and developed a contract with Matsushita to build a sophisticated teletext terminal.

Technical and delivery problems plagued the project—and raised questions about the viability of a teletext service such as the one Time envisioned, which was loaded with videogames, home into and teletext mainstays such as news, business and sports reports. (G.A.)□

TAPE YEA, CABLE NAY: 'RAIDERS,''FLASHDANCE,'

The immensely popular Raiders of the Lost Ark—the sixth biggest grossing movie in history—may not appear on HBO or other pay TV services for a long time.

With the likelihood of selling 500,000 videocassettes of Raiders-and more than a few discs -Paramount figures it doesn't have to sell the movie to pay TV six to nine months after the home video release, as is the usual arrangement. The studio is telling pay-TV services to up the ante or there'll be no sale. And the same holds for Paramount's other summer hits of '83-Flashdance, Trading Places and Stavina Alive. MCA may take the same tack using E.T. the way Paramount is using Raiders.

HBO and other services need the movies. Their first made-forpay features haven't set pulses pounding the way some theatrical movies can. Whether they de-



Raiders' Ford: cable-shy.

cide to pay the higher prices could drastically affect people's cable TV watching. Raider fans should check cable listings for future developments. (S.G.)

Special Report by Barry Jacobs

magine a different sort of "war games." The I.R.S. wiretaps your phone line to snoop on transmissions between your home computer and your bank's computer in order to keep tabs on your financial transactions. Or your ex-spouse's lawyer manages to raid the financial records stored on your home computer to find out your monetary worth in order to hit you for more alimony. Or a nosey neighbor electronically raids your home computer to browse through your electronic mail.

With all the headlines about the vulnerability of largescale institutional computer systems, scant attention has been paid to the dangers of such home-computer security problems. So far, there have been relatively few instances in which these problems have occurred. But with home computers gaining greater storage capacity (and switching from floppy to hard discs), allowing the filing of more and more important information, the possibilities for home computer crime are increasing greatly.

Says Sanford Sherizen, an independent computer security consultant and professor of criminology at Northeastern University in Boston, "Home-computer users are going to have to begin considering what stored information they can no longer afford to lose."

There are three ways such losses can occur: file raiding, eavesdropping and, the most obvious means, disc swiping. Each requires different security measures to protect home-computer records.

FILE RAIDING

his situation most clearly resembles the scenario in the movie WarGames: An intruder calls up your on-line home computer via the phone lines, then gets through any passwords you may have set up in order to gain access to your files. In some cases, an intruder may even be able to change some of the information in the files or even delete it.

Most home computers are usually safe from this kind of intrusion, simply because if a computer is not hooked up to the phone lines via a modem, there's no way an intruder can break in. If a computer is on-line, but it's turned off when nobody's home, access over the phone lines has been cut off and no one can get to the files.

Nonetheless, computer users employing their equipment for electronic mail drop-off, or those who've connected all their electrical appliances to their computers and are turning the appliances on and off by calling up the machine over the phone, could be vulnerable. In these and other instances in which their computer systems are connected to "auto-answer" modems and have "communications software" packages (so instructions to the computer can be given over the phone), intruders calling the machines could find their way into the files.

All an intruder would need to do, in most cases, is to come up with the correct password giving access to the computer's records, according to Richard Kay of the Computer Security Institute, a trade organization of computer security specialists.

"Most passwords can be fairly easily broken," says Kay, "especially with the simple sort of communications packages used with home computers." Unlike large institutional computers, which will hang up on intruders if they give wrong passwords (as was demonstrated in WarGames), home computers will not hang up, thereby





giving intruders plenty of time to crack the code. Since people calling up are communicating through their own computers, they have powerful means to attempt a large number of possible passwords in a very short period of time. Once they hit upon the correct word and get past the communications package, intruders can summon up anyone's menu directory to their home computers and take their pick of which files they'd like to peruse.

According to Kay, there are only two viable possibilities for securing a home computer against this kind of attack: encryption/multiple-passwording devices and phone

security devices.

Encryption devices code all the computer programs, so that even if someone were to break into the files, all he or she could read would be gibberish. Kay says they are a "bother to use" because you need to decode your programs each time you want to use them and then recode them later, but the encryption is "essentially impossible" to break.

Passwording devices are less sophisticated encryption tools which put passwords on all the different files that are stored in order to make a break-in much more difficult.

Computer-product manufacturers are only now beginning to make hardware and software versions of these devices that can be used with home computers. However, the cost of such products is still very high.

The Enigma Point-To-Point, from Engima Corp., is a circuit card that can scramble all your programs. It costs about \$1,200. Significantly, it's compatible only with the IBM PC, like most of these products. Fischer Innis has a device called the Watchdog, only compatible with IBM microcomputers, that allows you to place passwords on 16 areas of the computer files. It costs \$295. MPPI's PC Lock II (\$349) is for IBM-compatible home computers and allows you to place passwords on 37 files.

Phone security devices require the caller to punch in a correct code (on a pushbutton phone), or the computer will automatically disconnect the call (similar to a large institutional-computer set-up). The MicroSentry, from International Mobile Machines for \$695, gives callers three attempts at coming up with the correct three-digit code before hanging up. It is a black-box type gadget that is connected between the phone and the modem, and it is only compatible with the IBM PC. (The company has other models compatible with business and industrial

computers.)

A device called the Secure Access Unit, also only compatible with the IBM machine, takes phone security one step further. Available from Leemahn for \$1,195, it requires the caller to punch in one of a number of correct six-digit codes. If a correct number is entered, the product automatically hangs up, then immediately calls the caller back at his or her home phone number. The device has enough memory to be programmed to call back 100 different telephone numbers, depending on which correct six-digit code was entered by the caller. When the computer calls back, the person answering will have access to the computer's files and programs.

EAVESDROPPING

he second major threat to home-computer security is eavesdropping—the act of taping a phone transmission between a home computer and another computer. According to Marc Rottenberg, director of the Public Interest Computer Association in

Washington, DC., the most serious reported instance of this so far was when "Don Sellars, a Canadian journalist in Washington, sent an article on defense negotiations to his home office. He soon discovered that US security officials were looking for the sources of his story." Sellars believes that, since officials in Washington knew about the story two days before its publication, they must have intercepted it during transmission over the phone lines.

Of more concern to the average computer user is how secure financial information will be when transmitted over the phone lines—for instance, when transmitting tax figures to an accountant or making bank transactions over the upcoming home banking systems. Home banking, in particular, makes security experts nervous. "Banks are doing relatively little against possible intrusion," says one.

Says another, "All it's going to take is for one person to misappropriate a large amount of money from a home banking system and you're going to see a furor over security."

Taps for Sale

What all this boils down to is: How safe is information transmitted over telephone lines? We all use phones and generally talk openly (even though many people are aware that wiretapping by the phone company and government officials, as well as by unauthorized persons, does go on). But computer transmissions contain so much more information-much of it quite possibly sensitive—that it makes the wiretapping threat that much more dangerous.

According to Sherizen, equipment that can be used for wiretapping is sold in many electronics shops, and instructions as to how to wiretap are widely circulated both in pamphlet form and on many computer-club bulletin boards.

It's difficult to safeguard your transmissions against wiretapping. You can ask the phone company to monitor the line to see if it's being tapped, then call the police afterward, but this is a lengthy process. The best solution may be to simply use an encryption device. By encrypting all the information that will be transmitted, all that is overheard or even intercepted will be as good as useless to the infiltrator.

DISC SWIPING

he third major threat to home computer security is H that of someone breaking into a home and stealing home-computer discs. This may sound no more serious than having your color TV ripped off. But a TV is easily replaced; financial records may not be. The convenience of storing all your most vital information on a single disc could turn into a nightmare if that disc suddenly

disappears (or is lost in a fire), and all the laws against theft and property damage won't be much consolation to any

According to Sherizen, many small businesses that have adopted computer record-keeping in recent years have made duplicate discs of their most important records and put them in bank vaults. Yet that doesn't stop the intruder from gaining vital information from discs still in the office or home. Here, too, encryption may be the answer.

Computer Invasion and the Law

As concern has grown over these new types of security problems, state and federal laws are being introduced to specifically address computer security. According to

Jay Bloombecker, director of the National Center for Computer Crime, 21 states have already passed computercrime laws that call for penalties for both theft and malicious mischief. Other states, says Bloombecker, have been prosecuting computer criminals under the ordinary statutes regarding theft and fraud.

There is also a federal proposal in the House, the Federal Computer Systems Protection Act, introduced by Democratic Congressman Bill Nelson of Florida. This bill seeks penalties of \$50,000 and/or five years in prison for anyone caught tampering with federal agency computers, computers of private companies (such as savings banks) whose funds are federally insured and all computers used for interstate commerce. This last provision covers home-computer hobbyists' use of such computer information services as

CompuServe and The Source, which download information over phone lines to home computers all over the country. If someone were to tap, or in some way interfere, with those transmissions, he or she would be culpable under the Nelson bill, which is due to come to the House floor for a vote in early '84. An identical bill is also being readied in the Senate.

The growing number of laws and of encryption products is just one early sign of concern over the frightening possibilities of widespread home-computer crime. Today's happy-go-lucky computer novice may be tomorrow's cautious, hard-bitten computerphile, wary of crafty hackers.

"We'll soon have to figure out what kind of information can safely be put on our computer systems," says Sherizen. "We'll have to see what kind of computer discs, for safety, should be locked up." That's no Hollywood happy ending.

A VICTIM'S VIEW

How does it feel to have your private computer transmissions intercepted and read by outsiders? Don Sellars knows. "It feels the way you would feel if your home were burglarized," he says. Sellars, a journalist for Canada's Southam newspaper chain, was based in Washington D.C. when it happened to him. Here is how he tells the story:

"I had been covering some secret negotiations between Canada and the US over weapons testing for some time. In late September of 1982, I uncovered a few new details and bashed out a story on my Telcom Ambassador II. I filed the story over the phone lines to our headquarters in Ottawa late on a Friday afternoon. But the editors decided to hold the story until the Monday papers.

"Saturday night I got a call from a friend in Washington who said that there was a 'witch hunt' under way for my sources and that US security officials had actually shown him a transcript of my article and accused him of being a source. (He wasn't.) This happened a day before Southam sent the article over the wires to its affiliated papers.

"I now know that the capability is there for the National Security Administration to intercept any phone call going in or out of the US. I don't know how they did it, exactly, just that in my case it was done. We gave the NSA a chance to comment on this charge, but it chose not to. I was also called in by the FBI and asked to name my sources. Of course I didn't.

"In retrospect, I guess I was just naive to think I could use the phone lines safely. I'm not a paranoid person, but I've learned to be very careful about using the phone. Even the Canadian Embassy worries about the sanctity of its encoded information sent over phone lines. I guess whoever owns the biggest computer rules the world." (J.B.M.)

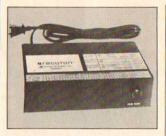
Home Computer PCir \$1,269

The long-awaited "Peanut" finally surfaces under the name "PCir." The package includes a cordless, infrared, "Chicklet-style" keyboard, two program cartridge slots, 128K of user memory and a disc drive capable of storing 360K of information (or, 368,640 characters). It can be connected to a color TV set or color monitor.

The PCir uses a 16-bit 8088 microprocessor and is compatible with many PC (Sr.) disc programs if used with IBM's Disc Operation System 2.1.

The "entry model," with 64K of memory and no disc drive, is priced at \$669.

IBM, PO Box 2989, Delray Beach, FL 33444 (305) 241-6048.



RECOTON **Cable TV Converter** Model V617 \$89.95

Here's a product restorative power: It videophiles use a TV set's remote control for selection of pay-TV channels. While a decoder is necessary to unscramble pay-TV signals, this converter is intended eliminate the need for a cable-

Unless otherwise noted, all product specifications are manufacturers' datanot results of Video Review tests. All listed prices are manufacturers' suggested retail. Availability varies.

company box to bring in basic cable channels.

Approved by the FCC, the model V617 allows for multievent programming with any combination of pay-TV, basiccable and network channels. Recoton, 46-23 Crane Street, Long Island City, NY 11101 (212) 392-6442.

CANON Videocamera Model VC-20A \$1,375

Let there be very little light, because this camera is supposed to be good at shooting movies in low-light conditions. Its manufacturer rates the camera's light sensitivity at 15 lux (about 14 footcandles).

The camera features a threecolor (red, white, green) character generator and a oneinch electronic viewfinder.

The 5.8-pound camera has a



Coming next in

video equipment

single 3-inch Saticon tube, an fl.6, 8:1 power-zoom lens, an auto iris and automatic focus. Canon, One Canon Plaza, Lake Success, NY 11042 (516) 588-6700.



TENSEN **Audio/Video Tuner** Model AVS-2100 \$590

This "audio/video tuner" is more of a total interfacing device for a whole home entertainment system, including a computer.

A "computer" button on the front panel of the AVS-2100 indicates its second RF input; the "decoder" button refers to a

loop that hooks up to a cable descrambler box.

The component's cable-ready video tuner is capable of tuning 134 channels with three audio outputs. It also has a Dynamic noise-reduction system, and it's capable of simulating stereo sound from monaural sources. Jensen, 4136 North United Parkway, Schiller Park, IL. 60176 (800) 323-0707.



SHOWTIME VIDEO VENTURES Videocamera Test Kit

\$9.95 apiece

Is your system true blue—and true purple and true orange? If not, this test kit from Showtime Video Ventures may help.

It contains five test charts, four intended to measure color accuracy, and one (a black-and-white drawing of an Indian chief) intended to test image sharpness. These tests are designed according to EIA broadcast standards. Showtime Video Ventures, Tillamook, Oregon 97141 (503) 842-8841.

NEC

Color Monitor

Model CM-1951A \$550 Model CM-2551A \$700

This monitor is better to see hue with, according to NEC. The product features a new comb filter and a "trap" switch designed to prevent interference from video circuitry when text and games are displayed. Its manufacturer rates its horizontal resolution at 350 lines.

It has a 19 inch (measured diagonally) smoked-glass screen, and the 90 degree angle of the

picture tube is supposed to provide full-screen pictures.

The CM 1951A is stereo capable. (It has a built-in amplifier and speakers.) There are also two video input terminals and two monitor output terminals.

Its companion monitor, the model CM-2251A, has a 25 inch screen (measured daigonally), and is equipped with all the same features.

NEC

1401 Estes Avenue, Elk Grove Village, IL 60007 (312) 228-5900.





AMIGA

Videogame Controller Power-Stick \$20

There's a new angle to this Colecovision controller: Its keypad is tilted up at 30 degrees for viewing of the controller overlays that come with some games.

The controller comes with a six-foot cord and a standard ninepin plug.

The Power-Stick family of controllers also includes models (not shown) designed for use with Intellivision and TI 99/4A videogame consoles.

Amiga, 3350 Scott Boulevard, Building #7, Santa Clara, CA (408) 748-0222.

AUDIO DYNAMICS

Video Sound Processor Model VSS-2 \$399.95 Model VSS-1 \$249.95

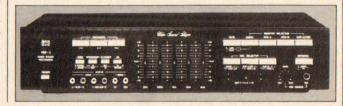
You can mold the audio of your video with this unusual proc amp from Audio Dynamics.

The device features a fade control for both video and audio, and monitoring and dubbing controls for three video sources (the model VSS-1 only accommodates two video sources).

Also, the VSS-2 can simulate stereo sound and help eliminate audio noise with its reduction circuitry. It's equipped with microphone and mixing inputs so that narrative can be added to videocassette recordings.

Audio Dynamics, Route 303, Blauvelt, NY 10913

(914) 358-6060.



QUAZON Videotex Terminal Model Quik-Link 300 \$250

If you hook up with Quik-Link, you can immediately access on-line videotex services.

Subscriptions to The Source, Comp-U-Serve, Comp-U-Store and Dow Jones News/Retrieval come with the purchase of this model, though it is compatible with any text-only service that uses the ASCII (American Standard Code Information Interchange) system.

It has a built-in modern and a

4K memory that can store the names and the numbers of up to four services and the user's ID and password. Press a "host" button, and Quik-Link will automatically dial and connect you to the selected service.

The three-pound terminal can

be connected to any color or black-and-white TV set or monitor. But since it doesn't process color, text only appears in white.

Quazon, 3330 Keller Springs Road, Carrollton, TX 75006 (214) 385-9200.



EMERSON RADIO

Videocassette Recorder Model VCR 900 \$499.95

Here's another new make of VHS recorder from which to choose: Emerson.

The company's first VCR is a basic, two-head, front-loading model that features a one-touch recording button, three-event/14-day programmability and a 10-function remote control. The machine weighs in at 11½ pounds.

Emerson Radio, One Emerson Lane, Secaucus, NJ 07094 (201) 865-4343.

ON THE DRAWING BOARDS

INTERFACE IT: There's talk that **Akal** is working on its first laser videodisc player, which the company says may be introduced by mid '84. Meanwhile, **Ploneer's** new Laserdisc player is coming out first half of year. New player will have card into which users plug interface device that lets videodisc and computer communicate.

WHAT A CHARACTER: Showtime Video Ventures plugging away on new, five-color character generator to work with VCRs, videocameras and laser and CED players (the last application is for professional use). It's scheduled for May release. Price: less than \$500.

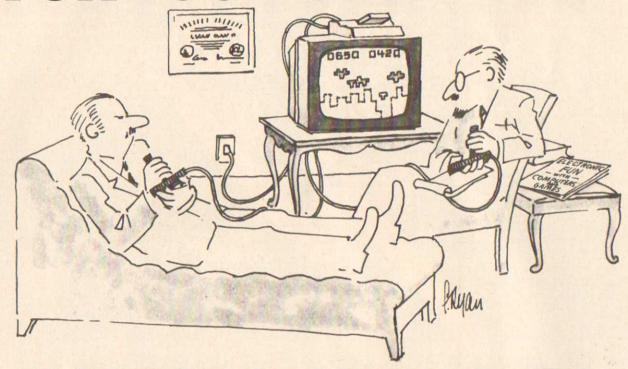
SCREEN SCENE: Mini color TV with three-inch LCD screen by Sanyo is in making and due late '84.

HOWDY: Panasonic developing new personal computer, The Senior Partner, slated for March '84 introduction. Built into this \$2,495 PC are thermal printer and nine-inch monitor. Model will be 100% with IBM PC software, according to Panasonic.

BROWNIE' POINTS: Is whole new format of Brownie-style videocamera-recorder in works at **Kodak**? That's buzz at presstime, though Kodak staying mum. Various reports say snapshot giant working on new kind of 8mm or 3/4-inch tape system as well as on half-inch format. Company also reportedly working on 51/4-inch floppy discs (for home computers alone or also for electronic still cameras similar to Sony's announced Mavica?) More as we get it.

—Jacquelyn Gavron

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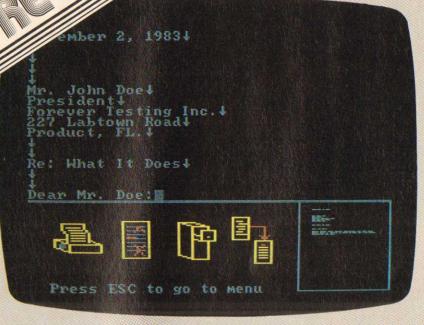
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SOFTWARE

Special: IBM's first PCjr software



Pictures make HameWord easy homework for the novice.

Personal

HOMEWORD * * * Designed by Sierra On-Line. (IBM, disc for PCjr. \$75)

By Abigail Reifsnyder

Separating the software from the hardware can be rather troublesome when a word processor is involved. This is particularly true of IBM's HomeWord for its PCir, since one of the best features of the program derives from the keyboard's design. Unfortunately, one of the worst features is the keyboard itself—a Chicklet-style keyboard, which most typists find difficult, at best, to work with. IBM appears to have decided to trade off speed for flexibility.

This flexibility is, however, a big plus. Home Word accommodates both the novice (using on-screen pictorial cues) and the experienced user (using the control and function keys, whose functions are indicated on an overlay included with the program).

In the first mode, the screen is divided into three portions. The top two-thirds of the screen is devoted to the text. The bottom third is divided between the pictorial menu and a display of the entire page as it will

RATINGS

- OUTSTANDING GOOD AVERAGE BELOW AVERAGE

appear if printed. This is particularly helpful since with HomeWord, as with most word processors, what you see on the screen is not what you get on the printed page.

The pictorial menu has four main categories: print, edit, file and format. Each of these has, of course, its own sub-menu. For example, if you choose "format," the program will ask you if you want to change the vertical margins, the horizontal margins, the line spacing and so on. All you have to do is move the cursor to the function you want and hit "enter." All this makes reading the instruction manual virtually unnecessary.

If you find these visual cues unnecessary, you can clear them from the screen, to devote it entirely to text. To perform the same functions as above, you'd simply hit "control" this or that, or "function" 1 or 2. This mode is, not surprisingly, faster

There's no question in my mind that this is one spiffy home word processor. The only reason it gets three instead of four stars is because the words get processed with a less-than-spiffy keyboard.

COMPUTER MECHANIC* * * Designed by Rudolph Daniel. (Softsync, cassette or disc for Commodore 64. \$21.95 on cassette; \$26.95 on disc)

By Suzan Prince

This effective little program is perfect for both kinds of car owners: those who are absolute sticklers for proper auto maintenance and those who couldn't care less what's under the hood, so long as it runs.

The software is divided into three sections. The first, record-keeping section allows you to precisely document and continuously update your car's routine maintenance schedule. This is accomplished by assigning a short identification tag to each car you own (e.g., "83 Ford"), then filling in a series of blanks with the most recent date and mileage at which certain jobs were performed, including oil change, tune-up, brake job and tire rotation.

Once you've set up your records, each individual car file may be integrated with the second, data base manager section, which advises you of the next mileage point at which your car should be re-examined.

The third, diagnostic section is a valuable tutorial and almost worth the disc by itself. By initiating an interactive guestion and answer session, the computer helps you determine possible trouble spots, then graphically illustrates where to locate them and explains how to check them. For example, the first two choices in the section are, "1. Car won't start; 2. Car runs rough." If you choose number one, the system will ask you what happens when you turn the key in your ignition. If you get absolutely no response from the starter, you'll be advised to examine your battery. If you want to know exactly how to do that, the program will step to an illustration and explanation. In this way, option after pictorial option can lead you to an elusive malfunction. All this, plus safety tips, too.

Even if you don't own a taxi fleet or a stable of company staff cars, this supple program is a fine addition to your personal management library.

PHONEBOOK *

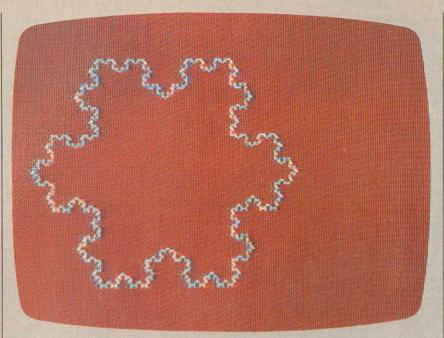
Designer uncredited. (Dynacomp, 16K cassette for Timex/Sinclair 1000. \$12.95)

By Bob Gerson

Dynacomp's Phonebook has got to be ranked among those great ideas whose time has not, and never will, come.

Phonebook does just what its name implies; it converts the computer into a home telephone directory that will hold up to 100 listings either by name or business. Once you have keyed in all the data, Phonebook offers you several retrieval options. You can call up individual names, all the names listed under an individual letter or the names of all the doctors or auto mechanics you have entered.

Phonebook has a straightforward menu that makes it a snap to enter and recall the listings and make changes, additions and deletions. The original tape is used only



Commodore 64 Logo: a friendly, "learning" language.

once to load the program. You are supposed to keep your working directory on a separate tape, and it's a good idea to have a back-up copy.

That's the good news. The bad news is that it takes nearly three minutes to load the master program, and it would take nearly forever to punch in 100 listings on the computer's mini-membrane keypad. Don't go away yet—it gets worse. It takes more than five minutes to load after listings have been entered, and that's assuming it loads the first time you try. It's hard to believe the authors really think five minutes is a reasonable access time for a listing.

Fortunately for mankind, there now exists an alternative to this electronic marvel. It's a solid-state, multiple-entry, random-access device that, once programmed, lets you call up individual listings in less than 20 seconds, and costs less than 50 cents. It's called a pocket phone directory.

ROBERT CARRIER'S MENU PLANNER *

Designer uncredited. (Commodore, cassette for VIC-20 with 8K expansion cartridge. \$25 approx.)

By Abigail Reifsnyder

This program appears to be designed for the etiquette-conscious but forgetful and unimaginative hostfess). As the program's title suggests, its purpose is to help you create menus (with appetizer, entree, vegetable, dessert and wine) and keep track of your guests (who ate what last time he or she was over). There are 30 dishes and 20 wines from which to choose. Contrary to what most people would probably expect, there are no recipes; rather, the accompanying booklet includes code letters and numbers for each dish to indicate in which of Carrier's cookbooks the recipe can be found.

The program is easy to use, though not so easy that you won't need the instruction booklet. You can substitute your own favorite dishes for those supplied by the program—especially convenient if you don't own all five of Carrier's cookbooks.

One thing that surprised me was that the program allowed me to invite the same person over twice, using the same menu.

The program does do what it's supposed to do but, frankly, I can't imagine why a person would want a menu planner that doesn't even include recipes. It should do more or it's just not worth the bother of inputting the information and learning how to use it.

SPRINTYPER * * *

Designer uncredited. (Computer Software Associates, cassette for VIC-20. \$14.95)

By George Kopp

The first thing every budding computer programmer comes to realize is that, no matter how smart you are, no matter what sort of intuitive grasp you have of the fine points of computer programming, you've got to be able to type. Without typing skills, a one-hour programming task could easily take half a day. Fortunately, typing is one skill computers teach very well, and there are many typing programs out today. Many take the form of games: Type the right letter and get points. Sprintyper for the VIC-20 is pretty straight stuff, and will appeal to an adult audience where a typing game will not

Sprintyper essentially generates sentences. Thousands of them. 365,625 to be exact. All you do is type the sentence that appears on the screen. These are not ordinary sentences, though, but sentences scientifically designed to get you used to the keyboard. For example, "Are 2 loud pals

weird?" You get timed for each sentence, and you also get buzzed each time you make an error.

There is a display of the keyboard on the screen in front of you all the time. If you never had a typing course, however, you won't get much help from the program. Although the "home keys" could have been colored differently, for example, they aren't. Sprintyper is not so much a typing teacher as a typing drill sergeant. But if you feel all you need is constant practice to get you up to 90 words a minute, Sprintyper will give it to you—365,625 ways. □

Language

COMMODORE 64 LOGO ★ ★ ★ ★
Implemented on the Commodore 64
by Leigh Klotz, Jr. (Commodore, disc
for Commodore 64. \$59.95)

By Sheldon Leemon

Logo is a learning language designed to make it easy for people to communicate with computers. All of us, and children especially, learn naturally and spontaneously from our environment. A computer can simulate many different kinds of environments. Therefore, if there is easy access to the computer's power, we can use it to explore and even to create new worlds. Logo's success in providing this kind of access has made it a widely acclaimed educational tool, which is rapidly being adapted for most home computer systems.

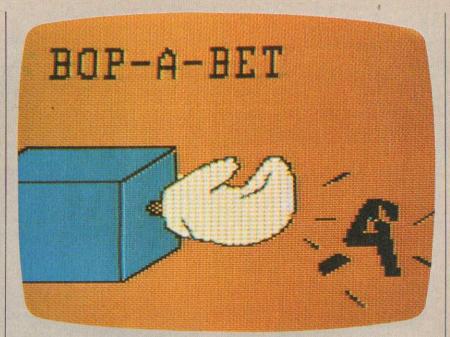
The most obvious way in which Logo provides a child with access to the computer is through the system known as "turtle graphics." Turtle graphics creates an environment where the child controls an imaginary turtle with a paintbrush tied to its tail. If the child types FORWARD 10, the turtle moves 10 steps forward, drawing a line behind it. If the child types RIGHT 30, the turtle turns 30° to the right. The user can combine these commands into programs that can be used just like the command words that form the basic core of the language. For example, you can create a BOX program which drives the turtle forward a few steps, turns it 90° to the right and repeats this procedure four times in a row. Afterward, any time you type BOX, the turtle will draw a box.

Logo is not, however, confined simply to graphics. It has a complete set of commands, including powerful word-manipulation commands, that allow you to perform just about any computer task. The rest of the language is designed to be as easy to use as turtle graphics. It is a structured language, which encourages breaking each programming problem into small, easily-tested modules. It is interactive, which means that you can try out each module that you write immediately to see if it works as you thought it would. And Logo is friendly. It starts up with the message "Welcome to Logo," and unlike other

languages, it never prints error messages such as "Syntax error at line 130" or "Fatal I/O error." Instead, it uses messages such as "I don't know how to Hello" or "You don't tell me what to do with 3500."

Commodore's version of Logo for the 64 was developed by Terrapin, Inc., which has ties to the group at MIT that originally developed the language. Because this is the same group that developed Logo for the Apple II, the Commodore 64 version incorporates virtually all of the features found on that system, so that existing educational materials will apply directly to the 64 version as well. Moreover, this version has many features which take advantage of the additional graphics and sound capabilities not found on the Apple. Like the Texas Instruments version of Logo, it has movable graphics figures called sprites. You can set the shape of these sprites, move them around the screen and even animate them. You can draw in any of 16 colors and print text characters on the graphics screen. Graphics screens can be saved to disc and loaded later. Commodore 64 Logo also has music commands. It lets you use the function keys to switch easily from text to graphics.

Just as important as the fine job done in implementing the language is the equally fine job of documentation that comes with the package. The 400-page manual is divided into a clear, step-by-step tutorial and a comprehensive reference quide. Along with the program disc, there is a utilities disc with programming examples and procedures that can be used in your own programs. Best of all, this quality software is among the lowest-priced of any version of Logo. Since the Commodore 64 computer itself is among the lowest-priced home computers, the combination of the two provides a very complete Logo system at a fraction of what such a system would have cost even a short while ago.



Alphabet boxing for teeny boppers in Bop-A-Bet.

Educational

PARENT GUIDE HI-RES LEARNING GAME SERIES

Sierra On-Line, discs for Apple II/II+/IIe. \$29.95 each)

The initial four discs in this series are all of high enough quality that I will use them with my own infants in a few years. Each features nicely drawn high resolution graphics with text where appropriate. And the few rules in the booklet are really for the parent because the child's choices are always prompted by the programs. In fact, all a parent needs to do is get the disc drive running (something a child shouldn't do anyway), and a child can play and learn on his or her own.

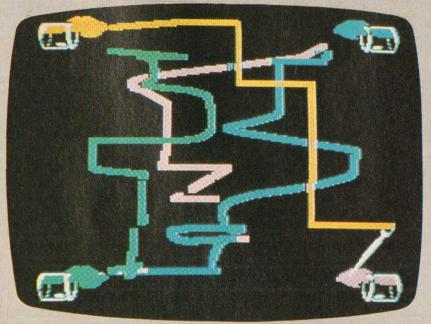
DRAGON'S KEEP * * * Designed by Al and Margaret Lowe and Michael and Rae Lynn MacChesney.

Drogon's Keep introduces a child to the world of adventure gaming, while teaching map reading and reading comprehension skills. A child at the second grade reading level should have no problem with the vocabulary of the text. And no typing ability is required; only the space bar and return key are used to move from one place to another.

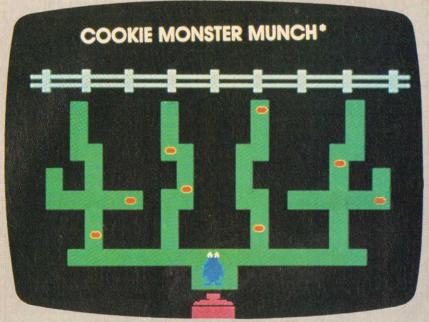
A dragon holds 16 different animals captive in the 26 indoor and outdoor scenes around a house. A large map identifying each location comes with the game, and lines have been drawn between rooms or scenes that are connected. A compass decal is placed on or near the screen and corresponds to the directions shown on the map. When an animal is found, its location can be marked on the map with a decal depicting that animal. And there is no violence to deal with: If a dragon is in the room, the child's character must leave and return when the dragon has moved.

TROLL'S TALE ★ ★ ★ Designed by Al Lowe and Michael MacChesney.

This game takes the concept of *Dragon's Keep* a few steps farther with 33 map locations. Over half of the locations are not labeled, and there are very few lines to indicate connecting rooms in the troll's manor. The child must label the locations and draw the connecting lines as they are discovered. Again, there are 16 treasures to find, and the accompanying decals mark their locations on the large map. Vocabulary is designed for any child at the third grade reading level, and no keyboard skill is required. (Cont.)



Screen Painting of a child as the young artist.



Cookie Monster Munch: a preschooler's picnic.

LEARNING WITH LEAPER * * * * Designed by Nancy Anderson.

The four games on this disk are designed for children who cannot read, and all screen instructions or choices are symbolically represented. The child merely moves the joystick-controlled character to the desired object or symbol and then presses the button to cause an action.

In Dog Count, the child must count the number of dogs displayed and find the corresponding group of bones to feed them. The dogs will accept only the group of bones that gives one bone to each dog. and any wrong selection brings on some humorous animation by the hounds.

Balloon Pop teaches children to recognize the many kinds of shapes that make up letters and numerals. A shape is displayed and the child moves the cursor to the corresponding shape among the choices at the bottom of the screen. Each of the six levels of play can only be accessed after a decent performance on the previous level, so the child really can't get in over his or her head.

Leap Frog is a series of mazes through which the child must maneuver a frog with minimal collisions into maze walls, and is designed to strengthen hand-eye coordination. This seems to have the least value of the four.

Lastly, Screen Painting lets the child experiment with artistic creativity through color and shapes that he or she draws on the screen. The child chooses a color from the paint jar, and the brush automatically leaves a trail of paint unless the button is depressed.

BOP-A-BET * * *

Designed by Al and Margaret Lowe and Michael and Rae Lynn Mac-Chesney.

Most children can really enjoy this game without feeling the pressure of learning the alphabet as much as the pressure of completing a maze. Four letters are randomly displayed in the maze at one time, and the child moves the bopper to them with the joystick or keyboard. A press of the button or space bar releases a boxing glove from the bopper to punch out the letter. A sound effect alerts the child whether this was the next letter in the alphabet or out of alphabetical order. If correct, the letter disappears and another pops up elsewhere. When the round is over (you set a time limit for the alphabet from 1 to 99 minutes), a victorious player is awarded a bonus round and may move on to a more challenging maze.(P.W.)

COOKIE MONSTER MUNCH * * * Designer uncredited. (Atari, cartridge for Atari VCS. \$30.45)

By Elizabeth Crow

At last! A videogame that preschoolers can really play. Cookie Monster Munch is a simple maze game in which the Cookie Monster, Sesame Street's furry blue omnivore, tracks down cookies, picks them up, then pops them into a cookie jar before

It's a fairly standard game format, with the obvious added appeal of the Muppets. But it was a delight for my preschooler because it does not require the use of the standard Atari joystick, which most little children find impossible to hold straight or to manipulate with any finesse. Instead, the game uses the Atan kid's controller, a large-format, lightweight plastic control panel with pushbuttons numbered zero through nine arranged on it. Over this you simply slip the Cookie Monster Munch overlay, which consists of a picture of the monster racing along a cookie-strewn ground, four arrows (pointing up, down, right and left) and a half-eaten cookie in the middle. When the

child presses the directional arrow buttons, the monster obligingly trots in the intended direction. When Cookie Monster gets a cookie, he straddles it, the child pushes the cookie button, and, as a sprightly tune plays, the monster hoists it, busboy style, over his head. Then the player must have Cookie Monster retrace his steps back to the cookie jar. The cookie flips in, and the jar lid clatters back into place with satisfying vigor.

After a few minutes of experimentation, four-year-old Rachel was quite adept. Occasionally, she'd stop, look down at the control panel, mutter "He needs to go down," find the appropriate arrow and press it. Every time another cookie made it into the jar she was thrilled, and when-in each game's grand finale-a giant image appeared of Cookie Monster munching his spoils, she happily chanted "One, two, three," as the numbers appeared on the screen.

For Rachel, the lower levels were not only satisfying, but educational. As she began to use the control panel with an ease and confidence she had never felt with a conventional joystick, she began to grasp an important, abstract concept: Making Cookie move depended upon her finding and pressing the symbol of the direction in which he was to go. This kind of one-stepremoved action is something adults take for granted every time they consult a map, or drive a car or, more significantly, read a sentence. But for a child, it's a new experience, and essentially opens the door for all higher learning. Not bad for a little game about a greedy blue Muppet.

Periodical

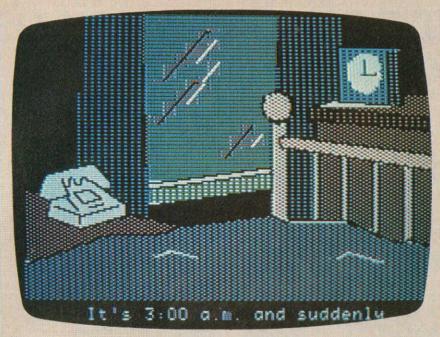
MICROZINE, PREMIER ISSUE * * * *

MICROZINE, Number 2*** Designed by Information Technology Design. (Scholastic, disc for Apple II/IIe. \$39.95)

Children's magazines can be deadly. I remember sitting in the waiting room of my dentist, flipping through such publications, wishing that just once I'd find something interesting to do. "Do" is the operative word here—and doing is precisely what Microzine, a computer magazine for children 10 years old and up, is about.

The format of the first two issues of Microzine is pretty much the same, though the content is not. Each issue contains a "Twistaplot Adventure" (an interactive story), three activities and a section called "Computer Stuff" (with instructions on initializing discs).

"Haunted House," the story on the premier issue, wakes you (the child) up at 3:00 a.m. to rescue your friend who may or may not be trapped in a haunted house. You trek off to find your friend or go back to sleep or try to call him or her. Throughout



Microzine's "Haunted House": storydoing replaces storytelling.

the adventure you are faced with similar choices which affect the outcome of the adventure. While the variations are not limitless, they are sufficient to interest a 10-year-old for at least several run-throughs.

The first issue also includes an interview with Robert Mcnaughton (the older brother of Eliot in E.T.), "Poster," a simple graphics language for drawing—guess what—posters, and "Secret Files," what every 10-year-old wants, a private place to store such information as the names, addresses and phone numbers of friends. "Poster" and "Secret Files" are particularly fun to play around with and could be used daily with continued interest by a child.

"Northwoods Adventure," on Microzine 2, takes you on hikes through woods and cance trips down rivers. Like "Haunted House," "Northwoods Adventure" combines a first-person text adventure with some onscreen maneuvering (using the keyboard or a joystick) of your character. Both stories would benefit from more and better sound effects (a limitation of the Apple), but neither suffers from their lack.

"Melody Maker," a tune composition program (by far the most difficult to play with), "Ride the Wind," a hot-air balloon race simulation, and "Word Ladder," a vocabulary game, make up the rest of the disc.

The "Computer Stuff" section on both discs is helpful and easy to understand.

Perhaps the best feature of both issues of Microzine is the diversity of the activities. They vary not only in form and content, but also in degree of difficulty, giving each disc lasting value.

The activities on both discs are fun (important to kids) and educational (important to parents). A computer magazine is a great idea, and, as Scholastic has shown with these two programs, it can be a great reality as well.(A.R.)

Games

FROSTBITE * *

Designed by Steve Cartwright. (Activision, cartridge for Atari VCS. \$31.95)

By Michael Blanchet

This is one game in which a subtitle would be most appropriate. Something along the lines of "Frogger on the Ice Floe" or maybe "Q*Bert does Antarctica." Admittedly, the polar setting of the game is novel, but it cannot hide the mish-mash of Frogger and Q*Bert influences that comprise it.

As Frostbite Bailey, the player must construct an igloo and enter it before the on-

screen temperature drops to zero. One block is added to the structure each time Frostbite safely lands on one of the passing white ice floes. When all four floes revert from white to blue, they will, as a group, turn white again. Needless to say, it's more hopping until a door appears on the igloo. At this point, Frostbite must return to the strip at the top of the screen and crawl inside.

Aside from the rapidly falling mercury, Frostbite must also contend with an unlikely array of creatures, some of which are indigenous to the setting. Others, such as the Alaskan King crabs and "the dreaded Killer Clams of the North," were clearly concoted. As Frostbite leaps from floe to floe, he must avoid not only the crabs and clams but the "low-flying Snow Geese" and grizzlies as well. Contact with any of these can result in the loss of one game life.

I cannot speak for the rest of you on this point, but I have to admit I've seen more than my share of these cute, prancing, jumping and leaping games—a rather large category into which this game seems to fit nicely. If it is only short-lived diversion you seek, Frostbite will fill the bill. Like all Activision games, it is easy to learn but difficult to master. On the issue of it's being fun to play, I have ambivalent feelings. Sure it's fun for a while but, like any twitch game, it accelerates to a pace that borders on the impossible.

Activision has always been renowned for the originality of its designs. But let us not forget that the Atari VCS is pushing the age of eight. It stands to reason, then, that there's not a heck of a lot left to do on that system that hasn't already been done. A year ago, Frostbite might have had an identity in the videogame marketplace. Now I'd have to say if is nothing more than just another faceless title clamoring for the buyer's attention along with so many other mediocre cartridges.



Frostbite: Frogger and Q. Bert rendezvous in the Antarctic.

TIME PILOT * *

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

By Craig Kubey

Time Pilot provides great hope for the troubled videogame industry. If games this bad can make the arcade top 10 and then be manufactured for the home by companies as big as Coleco, think of what real games could do!

This game starts with an intriguing concept—a delta-wing fighter plane that warps through time, battling the state-of-the-art military aircraft of different eras. First, it takes on the biplanes and dirigibles of 1910. If it survives those, it's on to 1940 and propeller-driven monoplanes and bombers; next to 1970 and killer helicopters; then finally to 1985 and jet fighters and bombers. Sounds exciting, doesn't it? Don't worry, it's not

The promising airborne idea plummets to earth owing to the classic flaw of home videogames: poor control. Usually it's a plus when a home videogame replicates an element of its coin-op predecessor, but here it's a minus: ColecoVision brings right into your living room the slow, imprecise joystick control that you knew and hated in the arcade. You simply can't get your ship to turn fast enough, and you can't get it aimed at the precise angle you need to fire accurately at your enemies. In addition, there's no way to vary your plane's slow speed.

The flaws don't stop with poor control, either. They continue with inaccuracy. In particular, the biplanes in the 1910 level—this is seven years after the Wright Brothers flew their plane 120 feet at seven miles an hour and still got on *Donahue* and *Nightline*—often speed right on by your modern jet fighter.

And you get points for "saving" parachutist buddies by (get this!) running



Time-warping to battle state-of-the-art aircraft in Time Pilot.

into them. Of course, poor graphic quality diminishes the horror of your colliding with a human: Each chutist looks like a white turtle or, at best, the Michelin tire man. Similarly, you can often fly right into an enemy aircraft without damage to either side.

Sound effects are also unrealistic. Anybody equipped with a tongue and a couple of lips can sound more like a helicopter than this cartridge can.

Time Pilot does have some advantages. When you hit an enemy blimp or bomber with machine gun fire, it bursts into flame, and the more times you hit it, the larger the flames become, until finally the enemy craft is destroyed. Also, the enemy's arsenal contains heat-seeking missiles that really work, following your plane even as you

maneuver to avoid them. And the cartridge provides eight game options; four levels of skill for both one-player and two-player games.

It would be reasonable to buy this game if you're looking for a cartridge to be played mostly by kids 12 and under. All told, however, *Time Pilot* is too simple and too imprecise for even the halfway skilled video player. What we have here is your average game for the Atari VCS. Unfortunately, it's made for Coleco Vision. □

ADVANCED DUNGEONS & DRAGONS—TREASURE OF TARMIN * * * *

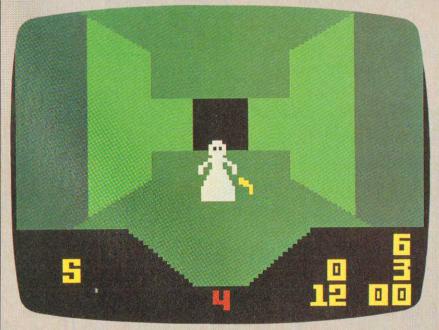
Designer uncredited. (Mattel, cartridge for Intellivision. \$39 approx.)

By Bob Borgen

Perhaps the most refreshing aspect of Treasure of Tarmin is that it comes with an instruction booklet less elaborate than the game it describes.

The game is a first-person trek through a series of mazes and passageways in a multi-level castle. The perspective changes as you move forward, left or right. Your goal is to defeat the dreaded Minotaur (who protects the treasure), but along the way (through doors and hallways), you may encounter over 50 different monsters (which attack you) and many different objects (which help you).

You carry a pack (displayed in the lower left-hand corner) which holds up to six items (including war and spiritual weapons, shields, armor, containers and books) and must constantly decide what to drop when you encounter more valuable objects. As you gain experience your war and spiritual strength grows (as in the original non-electronic D&D). Also, like the original, strategy is important, since you can play for hours at a time, exploring the dark reaches of the castle. (Cont.)



Treasure of Tarmin: an advanced game of monsters and mazes.



Taking 3D effects to the Blue Max as a WWI flying ace.

The graphics are not particularly flashy, but the wealth of detail in story options makes up for the lack of color in the passage halls. For gamers who like story and adventure, this is the best such cartridge for Intellivision to date. Treasure of Tarmin uses all of Intellivision's "brain power" to create a great role-playing adventure, which can go on, and on, and on. □

BLUE MAX * * * * Designed by Bob Polin. (Synapse, disc for Atari 400/800/1200XL., Commodore 64, \$34,95)

Sometimes the way to make progress is to go backward. The exciting space duel scenes in the movie Star Wars were actually based on the dogfight footage of old movies. Similarly, Blue Max takes the scrolling 3D effects of the futuristic game Zaxxon and transfers them back to the days when biplanes ruled the skies.

Blue Max is a typical war game, in that you play the World War I flying ace who tries to shoot down enemy aircraft, bomb targets and strate anything that moves. Meanwhile, enemy aircraft and artillery fire try to knock your plane out of the skies. But the game's super graphics are anything but conventional. It uses diagonal scrolling and a shadow that changes size to help foster the 3D illusion, just as Zaxxon does. But Blue Max takes it one step further by making the trajectory of the bombs your plane drops depend on such things as the height from which they're dropped and a wind factor. The graphics and joystick control (you push the joystick one way to climb, one way to descend) combine to impart an extremely realistic feel to the game.

There are plenty of elements to this game, which should make it fun to play for a long while. In fact, just getting used to handling the airplane takes a bit of practice. I would definitely advise bombing from an altitude of about 35 or 40 feet until you get the hang

of the longer lead time required when your plane is flying higher. Fortunately, you can acquire that knack through lots of practice and, with a game this good, you're bound to get plenty of that.(S.L.)

ESCAPE FROM THE MIND-MASTER * * * *

Designer uncredited. (Starpath, cartridge for ColecoVision. \$34.95)

By Frank Lovece

Like Starpath's original VCS- and Supercharger-compatible version, this Coleco-Vision-compatible *Mindmoster* could make a dandy home IQ test, what with all the pegs and holes to match up. First-person maze games do tend to create that clinical feeling.

Mindmaster is a bit less challenging in

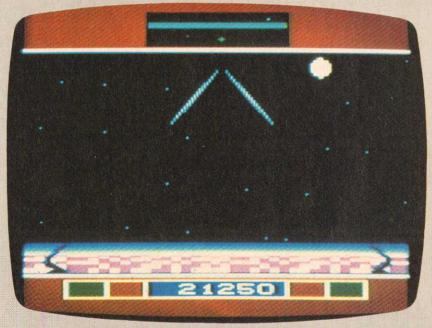
some ways than CBS' VCS-compatible Tunnel Runner (the cerebral elements of the off-screen Mindmaster's "tests" tend to overshadow the thrill of the hunt) but this is certainly a lighter and wittier game. The alien chasing you looks like an extraterrestrial cocker spaniel; the music is a sort of walk-proud-through-the-storm niff via synthesized calliope; and you get the feeling the mysterious Mindmaster is probably Don Rickles.

FINAL ORBIT/BUMPER BASH * Designer uncredited. (Sirius, cartridge for VIC-20. \$39.95)

The strategy that put these games on one cart would fill half an LP with Frank Sinatra and the other half with Frank Zappa. The hoped-for result: Some of the Sinatra crowd might get interested in Zappa and vice versa. But in a VIC-20 cartridge, where program memory already limits game play, graphics and sound to a 5K total, the two-for-one offer only hurts each game. Either could have been very nice, but each cuts corners to make room for the other.

Final Orbit is a shoot-em-up featuring twin cannons that fire lasers to converge anywhere along an invisible vertical line in the center of the screen. The trick is to align the enemy ships horizontally before letting go a blast, but this is all you have to do because the computer adjusts the height of your shots. If the player controlled this also, the game would be a more strategic affair. Shooting, after all, is the player's only action, and despite a variety of differently drawn enemy ships, it gets somewhat tedious. The enemy ships do fire back, though, so there is some dodging action.

Bumper Bash is a simple video pinball table that could have been more challenging with just a few more targets and a few more angles available off the flippers. The player just seems to hit the same targets again and again. Still, the ball is nicely



Two for one, but none for two: cutting too many corners in Final Orbit.



animated, and there is some strategy in the selection of initial plunger force.

All in all, the package will not appeal to the older, more discriminating buyer, but a child might consider the twin-pack a bargain.(P.W.)

PARTY MIX * * *

VIDEO ACCESSORIES

VIDEO

Designed by Dennis Coswell. (Starpath. cassette for Supercharger and Atari VCS. \$17.95)

By Dan Gutman

Kids today can't play Pin the Tail on Donkey Kong at parties. Although videogames would seem perfect for groups of children, almost all of them are for just one or two players. Party Mix may be the first VCS game to actively involve two or four players at once.

And I mean actively. In most other multiplayer games, one player takes his or her turn, gets killed, and another player gets a

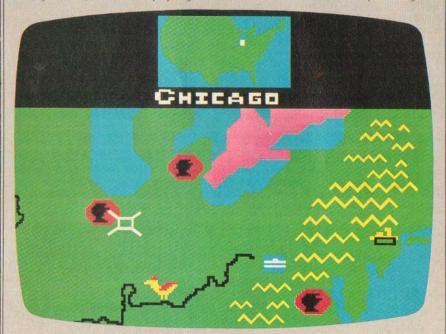
WAR ROOM***

Designer uncredited. (NAP, cartridge for ColecoVision. \$21.50)

The rules in the world of videogames are often blurry. The difference between a game being fun or in bad taste often depends on the shape or the name of what you destroy. Blasting aliens is fun, but shooting people is frowned upon. In War Room, the explicit naming of the enemy may spoil what is otherwise a good challenge.

War Room is like Missile Command, but viewed from above, rather than from the side. You control a satellite which stays in the center of the screen and scrolls in any direction around an accurately drawn map of the United States. You must protect 42 actual US cities from waves of attacking Soviet nuclear missiles, which can be destroyed by placing your satellite over them and firing.

But there is an additional aspect that gives



Cold War Room: US-Soviet video nuclear warfare.

shot. In *Party Mix*, all four players have a paddle controller in their hands, and they all control something on the screen at the same time. The screen is cut in half, with one team on each side. There are no points and nobody gets killed.

There are five games on this tape—not bad for \$17.95. None of the games is a blockbuster. In fact, none of them would stand up as a release by itself. But when you put them together in a room full of semi-hyperactive kids, they make a fun, happy, yelling, mindless, competitive good time. The games are cute, simple and different—not just five variations on the same theme. Two are racing games; one is a tug of war, one is a throwing game; and one is an update of CommaVid's Cakewalk.

With bright colors and familiar children's songs accompanying the games, Party Mix will be enjoyed by children from seven to 12 years old. □

the game strategy and tactics: Each city produces materials needed to keep your satellite armed. Besides fighting off enemy missiles, you must transfer supplies to and from cities so that enough "laser fuel" will be continually produced to keep you going. The best hint for survival is to pick up as much as you can from each city you're near and distribute it to other cities to keep production flowing. When key cities are destroyed, you'll run out of fuel and lose.

Videogamers are accustomed to eventually losing most games, but that aspect is especially disturbing here, where you must defend the US from Soviet attack. Equally troubling for some may be the specific depiction of the Russians as the enemy, a depressing return to Cold War ideology. Until E.T. and friends arrive and prove otherwise, I'd prefer to keep my blasting limited to Bug-Eyed Monsters, not real-life cultures. □

GLIB + +

Designer uncredited. (Selchow & Righter, cartridge for Atari VCS. \$25 approx.)

Myth: If you make a game electronic, it's more fun. Case in point: Glib, the first videogame from the makers of Scrubble. Glib consists of five variations (for one or two players) on a Scrubble theme. In the easiest version, you are given seven letters with which to form a word. The variations include a time limit, replacing only the letters you used to form a word and catching the letters as they parade across the top of the screen. Such Scrabble-like complications as double letter and double word occur randomly.

Everything works as you'd expect, and the different versions are fun (at least, if you like word games and I do). But I could find no advantage over playing the same games with a bunch of little pieces of wood with letters printed on them.

As a one-player game, Glib is pretty boring, since you aren't even playing against the computer. On top of it all, you can cheat—use all seven letters in any order and the computer credits you with a word, even gives you a bonus for using all seven letters. Of course, you shouldn't cheat, but I'd want an electronic word game to check on me—otherwise, where's the advantage over the pieces of wood? (A.R.)

OINK *

Designed by Mike Lorenzen. (Activision, VCS-compatible cartridge, \$31.95)

By Howard Polskin

This is a simple game for simple minds that's simply bad. Perhaps youngsters will enjoy the antics of a poor little pig who must keep replacing bricks at his feet to keep the big bad wolf from zapping him. Yes, it's innovative—the first game adapted from a nursery rhyme, the Three Little Pigs. But for anyone who has ever experienced the wonderful glories of videogamesmanship, Oink is scarcely worth playing.

The only thing Oink has going for it are the clear and distinct graphics of the pig and the wolf. Beyond this, everything else about the game is bottom-of-the-barmyard.

The pig and the wolf are separated on screen by a three-tiered wall of bricks. (In the one-player version, you control the pig; when two people play, one controls the pig and the other controls the wolf.) The wolf trots along at the bottom of the screen hungrily eyeing his quarry. He hammers away-one brick at a time-at the tiers of bricks until there's a clear opening between him and the pig. The action's similar to that of Breakout. When the space develops, a white ray shoots out from the wolf and zaps the pig, freezing him in his hoof-steps, making him convulse like a convicted murderer frying in the Big Chair. Talk about fried ham. Of course, I wonder why a wolf has a white ray. This wolf appears to have extraterrestrial powers for some reason.

Unfortunately, the pig is not blessed with any E.T.-esque abilities. He has the most conventional of defenses: On the top of the screen rests a layer of bricks, which the pig must grab and quickly toss into the spaces that the wolf has created before he gets zapped. That's the game: one of pure defense. The pig can't even take a brick and bop the wolf on the snout. The wolf eventually wins. There's no way to build the house so that the wolf can't get in.

As a purported example of state-of-the-art videogames, Oink is aptly named. □

ZAXXON ★ ★ Designer uncredited. (Datasoft,

A bestseller since its release, Zaxxon confirms a uniquely American trait—the confusion of popularity with quality. If it weren't for the Zaxxon label, this game would have little going for it.

cassette for Atari 400/800. \$39.95)

Visually, Datasoft's Zaxxon only partially maintains the 3D perspective that is the trademark of the coin-op original. Since the walls are low and the fortnesses almost void of detail, it is difficult to gauge your plane's altitude and speed. The fact that your ship is bigger than the downsized walls only increases the feeling that this isn't a 3D game at all, but a two-dimensional game twisted at a funny angle, instead.

The trick to coin-op Zaxxon is to be pilot first, fighter second. Such is the case here, but the division of duties is unbalanced. Since your jet is larger and the playfield smaller, any sense of 3D flight you may have acquired playing coin-op Zaxxon is distorted and of limited value. Unlike the coin-op version, there are no missile silos or brick lines to give you points of reference. All too often a force field or wall seems to defy its physical boundaries to jump out and grab the ship.

Another thing you'll notice about this game is that you can't play it right away. In

the cassette format, it takes a good seven to eight minutes to load the program. What follows is hardly worth the wait.(M.B.)

MURDER BY THE DOZEN ★ ★ ★ Designer uncredited. (CBS, disc for Apple II+/IIe. \$34.95)

By Robert Alonzo

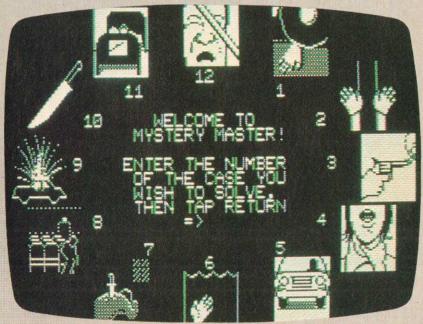
The adolescent detective Encyclopedia Brown and the well-mannered supersleuth Sherlock Holmes have fascinated readers for decades. *Murder by the Dozen* lets you discover what it would be like to be one of them.

The game is as well-organized as any topnotch mystery. Unlike a book, however, it
allows the player to interact with the witnesses and suspects. One to four players
can take turns interrogating suspects,
examining the evidence and conducting a
city-wide investigation. Besides the disc, the
package also includes three booklets: one
with case profiles, one with clues and one
with the solutions. Yes, if all else fails, you
can cheat. But don't worry about the game
becoming useless after you've cheated,
because the disc comes with 12 complete
mysteries.

The game's graphics and sound effects are not as extensive as some players might like, but *Murder by the Dozen* is not meant to delight the eyes and ears. It is a game designed to pique the players' minds.

There are only two problems with the game. First, you can't save a game in progress for future continuation. Second, when you question suspects or search locations, you are given clue numbers which you must then look up in the clue book. This can become tedious, especially if you're used to the computer doing this kind of thing for you.

Murder by the Dozen is an intense intellectual exercise that requires thought, memory and cleverness.□



Going Sherlock Holmes in Murder by the Dozen.

SOFTUNE

Math-oglyphics: multiplying in Pyramid Puzzler.

EDUCATIONAL

8000 X 5000 =

GARY M

DR. SEUSS FUN WITH NUM-BERS This Early Learning program is designed to teach children, ages three to five, to identify numbers the one-fish, two-fish way. (Coleco, Adam)

DR. SEUSS STORYMAKER The cat in the hat goes micro. This program allows children to create their own stories using Dr. Seuss characters. (Coleco, Adam)

INTRODUCTION TO COUNTING A revised version of Counting Bee, this educational program teaches basic counting and shape recognition to four- to eight-year-olds. Screen displays introduce the concepts of height and weight. (Edu-Ware, Apple II/II+/IIe, Atari 400/800/1200XI.)

INTRODUCTION TO POETRY Ode to a computer. This program is

Ode to a computer. This program is designed to teach various concepts of poetry, including meter, through practice and by indicating which syllables should be stressed. (Edu-Ware, Apple II/II+/IIe)

PSAT/SAT ANALOGIES This program focusses on word definitions and relations. Each of the six sections contains 34 analogy types as well as definitions. The format is designed to prepare the student for the way the material is presented in the actual tests. (Edu-Ware, Apple II/II+/IIe)

PYRAMID PUZZLER This educational program for children is

designed to teach multiplication concepts. Children practice using an on-screen pyramid. (Roklan, Apple II/II +/IIe)

05:32

SMURF ADVENTURES IN READING Designed to build the reading skills and vocabulary of five- to seven-year-olds, the program tells stories starring the Smurfs. (Coleco, Adam)

SMURF FUN WITH NUMBERS

Teaching addition, subtraction, multiplication and division is the

stars in balloon races, mazes and other games all designed to teach basic number concepts to children ages four to six. (Edu-Ware, Apple II/II+/IIe)

UTILITY

64 DOCTOR This diagnostic program, designed to locate and solve hardware problems, includes tests for the disc drive, keyboard, video, audio, printer, RS-232 port, joysticks and memory. (CSA, Commodore 64)

PERSONAL

cut and paste Developed specifically to meet home word processing needs, this program is the first piece of non-entertainment software from Electronic Arts (makers of Pinball Construction Set and M.U.I.E.). (Electronic Arts, Apple II/II + /IIe)

FINANCIAL COOKBOOK To buy or not to buy. This program is designed to help the user make such decisions as whether to buy or lease a car. The computer uses formulas to determine cost-effectiveness. (Electronic Arts, Apple II/II+/IIe)

THE MONEY MASTER This home-budgeting program is intended to make the user the master and the spreadsheet the slave. The program includes a checkbook series

Products, allows for automatic access of Western Union services. It dials WU and gives the message. (Sydney Data Products, IBM PC)

Coming next in

cart, cassette disc

PRACTIFILE This data file management system is designed to help the user keep track of files. (CSA, Commodore 64, VIC-20)

TOTAL HEALTH This nutritional program is designed to suit the needs of the fitness fanatic, the dieter and the nutrition-conscious. It keeps track of daily nutrition and calories burned with a balanced plan of exercise and diet. (CSA, Commodore 64, VIC-20)



Conquering medieval Europe.

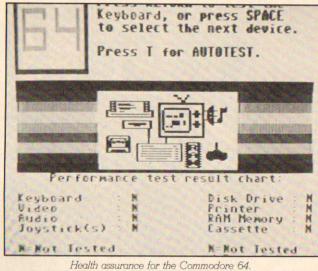
GAMES

CONQUEROR As in William the. The setting is medieval Europe, and the player must defend the kingship against other power-hungry lords, while attacking neighboring realms in an effort to increase holdings. (CSA, Commodore VIC-20)

ENCHANTER II Spellbinding sequel to *Enchanter*. The player is now a full-fledged member of the Circle and must locate the missing Delbars, whose experiments have left the Circle in grave danger. (*Infocom, Apple II/II+/IIe, Atari* 400/800/1200XL, Commodore 64, IBM PC, TRS-80)

FINAL FRONTIER In this multilevel space shoot-'em-up, the player commands a spaceship through six levels of play. At each level, the player confronts entirely different situations. (Sydney Data Products, Apple II/II+/IIe, ColecoVision, Commodore 64, IBM PC)

graphics of this first-person flight simulation give the player the impression of really flying a plane, according to the manufacturer. The player must contend with enemy



goal, helping Smurfs do their thing the way. For children five to seven. (Coleco, Adam)

WEBSTER'S NUMBERS Webster, the friendly green dragon, and a credit-card series. (Orbyte, Commodore 64)

POSTMAN This disc program, developed as a joint venture of Western Union and Sydney Data tanks, using a grid to determine their positions. (Electronic Arts, Apple II/II+/IIe)

GRYUSS The player's ship tries to penetrate the circle of enemy ships. (Parker Brothers, Atari VCS, 5200,



A ball's-eye view in Slamball.

400/800/1200XL, Coleco Vision, Commodore 64)

HOT MONEY A game of international finance termed, by its manufacturer, "almost educational." The player competes against the Gnome of Zurich, while contending with fluctuating exchange rates. (Sydney Data Products, IBM PC)

MANAGER'S BASEBALL Sandlot strategy. This computer baseball game features the batter-pitcher confrontation. The player acts as manager, deciding on the order of the batters. (Sydney Data Products, IBM PC)

THE OFFICIAL SUBROC This Super Game Pack version of Subroc is, according to the manufacturer, "More challenging than the 3D arcade version." The Subroc craft fights subs underwater and flying saucers in the stratosphere. (Coleco, Adam)

RETURN TO THE PIRATE'S ISLE A combination graphics and text adventure. The player deciphers clues found in such places as pyramids to solve the mystery. (Texas Instruments, TI-99/4A)

where no man has gone before is the key to this adventure game. The player lands somewhere along the coast of the Americas and must explore inland. (Electronic Arts, Apple II/II+/IIe)

SLAMBALL Pinball from the perspective of the ball. The player controls not the bumpers, but the ball itself as it bounces around the table. (Synapse, Commodore 64)

SMURF: RESCUE AT GAR-GAMEL'S CASTLE This Super Game Pack version pits Smurf against more dangerous obstacles and steeper cliffs. (Coleco, Adam)

STAR WARS Home translation of Atari's arcade translation of the movie. The player shoots down fighters to reach the Death Star, then must get across the Death Star in order to eventually destroy it. (Parker Brothers, Atari VCS, 5200,

400/800/1200, Coleco Vision, Commodore 64)

TREASURE ISLAND As the island sinks, the player's character must get to the other side, collecting treasures and avoiding monsters. The character may hide in caves to avoid the monsters. (Texas Instruments, TT-99/4A)□

SOFTWORKS

chip off the old block: NAP's much-touted "Probe 2000" series, to have included the videogames Power Lords and Pursuit of the Pink Panther, has been cancelled because of chip-design problems. War Room, first and only in series to be released, will still come out, though.

NEXT TEXT GAMES: Infocom, makers of the popular text adventures Zork, Suspended and Enchanter, will soon be releasing the second title in its Infide! series as well as the follow-ups on Planetfall and Deadline. CBS Electronics also plans to release a slew of new titles with special emphasis on musical activities for the family.



Probe 2000-only one.

SUMMER SOFTWARE Long-time videogame and accessory manufacturer Amiga is currently working on software for its new computer to be released around June '84. Home finance, business and word processing packages to be among first software releases. Third-party software companies will be doing translations of Amiga-arcade-type games. Joyboard games **Mogul** and **Surfs Up** most likely to be first.

—Abigail Reifsynder

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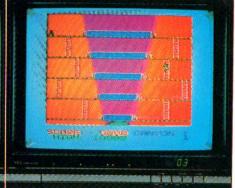
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