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READERS' COMMENTS

Burgers, blanks and a B-17 bomb



Peter, David and dad Dom DeLuise chomping down Burgertime.

DOM DOUBTS

My favorite thing in VR is the way you have celebrities or experts in certain areas review videogames, tapes or discs. But, frankly, I can't help but wonder if all those people really write the reviews-or if they even play the games or look at the programs. Take the videogame Burgertime, for instance. Now, come on. I just can't believe Dom DeLuise really wrote the review you ran in the July issue.

Janet Goldstein Stamford, CT

· Oh, no? We forwarded your letter to Dom DeLuise, and he sent us the photo above. Those are two of his sons with him, Peter (left) and David—and no, they're not ghostwriters. (Photo by Cece Hugo.)-Ed.

TV TRESPASSES?

Your article in the July issue, "Are TV Stations Secretly Spying on Viewers?" caught my attention.

Although cable companies may or may not be engaging in "intimidation, harassment, and surveillance," every one of them is engaging in something more clearly illegal and doing it blatantly. When the cable was installed across your yard, did anyone ask your permission? Did you even know that cablecompany workers were there until the

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cable was in? They were, and continue to be, trespassing on your property.

The telephone or electric poles on which the CATV cable is strung are most likely in easements, which were either dedicated when the subdivision was laid out or separately negotiated by the utilities. Except in the newest subdivisions, these easements are reserved for public utilities. The cable companies vehemently refuse to be classified as public utilities, because they do not want to be subject to the regulation of the various public utility commissions. They have no right to be in these easements. even if they have an agreement with the utility owning the poles and a franchise from the city or county. The franchise only applies to "public right of way"-the city streets.

If the cable companies can stay there without a complaint long enough (generally 21 years east of the Mississippi and seven years west), they will automatically acquire a right to remain. However, if they ask permission, they never acquire this right. That's why they don't want to.

Check this out.

(Name withheld by request)

• We will.—Ed.

BLANK EXPRESSION

Before I get to my guestion, I would like to say that Video Review is the most informative and mind-boggling magazine on the market, and I'm grateful for being one of its many subscribers.

I recently purchased a Panasonic VHSformat VCR. Upon trying to decide which blank tapes to purchase, I've become somewhat confused, as there are so many selections. Up to now, I've been buying Scotch T-120's. Are these good tapes?

What is the difference between this type of tape and the one put out by PDMagnetics that uses only chromium dioxide as its recording medium? Is there really much of a difference? Are TDKs better than Scotch cassettes? In your opinion, which are the best and the worst tapes?

> Jackie West Darby, PA

 We've answered all those questions in our last Test Reports of blank cassettes (Aug., Sept., Oct. '82 VR). Our next tape tests are scheduled for '84.-Ed.

B-17 ROMB

I want to pass belated congratulations to Howard Polskin on his review of the videogame B-17 Bomber in the November, '82 Video Review. I recently received a free Intellivoice module from Mattel and dived into all my old magazines to find reviews to help me figure out which game to get. Everybody else said B-17 was wonderful, a major milestone, etc. The guys in the store said much the same thing. Even my boss told me it was a fabulous game.

Then there was your review, which said that a game with so many elements couldn't be called a dud, but that it bordered on boring. Aha, I said, there's one in every crowd. This guy's obviously

Well, I'm happy to report that you're absolutely right. (Actually I'm not so happy, since I just blew 35 bucks on the thing.) Yes, it had bunches of different screens and lots of elements and nice sound effects, but who wants a game with which you can go to the bathroom and not miss anything?

Anyway, as the bombardier in B-17 says," That was onnn tarrroit." I think I'll pay more attention to your reviews in the future.

> Nathan Walpow Culver City, CA

CORRECTION

RCA has never sold separate video components. The tunor referred to in the Complete Shopper's Guide to Components '83 (Aug. VR) is an audio, not a video, tuner. RCA offers a full line of monitor/receivers rather than separate components

TAPING GAMES

In VR's June '83 Questions section, you said that it would be possible to record game or computer graphics by connecting the "video output [of the game] to the antenna input of the VCR." I don't think this will work, will it? The direct video from the computer is not a signal that the VCR's antenna terminals (and the tuner connected to them) can interpret.

Paul Metzler Knoxville, TN

Similarly, from Charles Masek of Chesapeake, VA, and Robert Gustafson of Chicago, IL.

Our coffee machine must've run out early that night. Of course, connecting the direct video from a game or computer to the antenna input of a VCR won't work. Direct video signals lack the RF carrier necessary to put them onto the VHF band so the VCR's tuner can pick them up. But connecting direct video signals from a game or computer to the direct video input on a VCR will work. If the game or computer has an RF output (usually channel 3 or 4), then it has to be connected to the antenna terminals of the VCR.

LIGHT LANGUAGE

I'm interested in a videocamera that will work well indoors, but comparisons are confusing to make when minimum illumination readings are given in different terms—lux, footcandles and footlamberts. Where do lumens fit in? What do all these terms mean, and how can you convert from one to the others?

John Butera Tallahassee, FL

Lux is the metric measure for the brightness of a "pinpoint" source of light. Simply divide by 10 to get a ballpark conversion to the US unit, footcandles. (If your pocket calculator is handy, dividing the lux figure by 9.85 will give a more accurate result.) The two ratings are the most commonly used for testing videocameras, but watch out. Often, they're given as "(so many) footcandles for a useable image." Just how

Send your queries to:

Hot Seat or Questions Video Review, 350 E. 81st St., NY, NY 10028

Sorry, no personal replies.

useable that image is becomes a subjective determination, and in no case is it as good as the image you'd get with more light.

Footlamberts measure light coming from a surface such as a TV screen or a reflecting surface. This measurement is directly related to the footcandle; if you shine a 100-footcandle lamp on a wall that reflects half of the light back, you'll have 50 footlamberts. All VR test reports are conducted with surfaces that are 100% reflective, so, in our case, footlamberts are equal to footcandles.

Lumen is a measure of light energy normally used for determining the efficiency of lightbulbs. (Since the early "70s, the federal government has required this rating to be marked on all lightbulb packages.) An incandescent lamp that consumes 100 watts will produce about 750 lumens; a fluorescent lamp may produce the same number of lumens while consuming about one-fourth of the power. This measurement has little to do with videocamera specs.

Unfortunately, there are no set standards for measuring the minimum illumination for videocameras. What's more, most cameras don't exhibit the same sensitivity to all colors. So when comparing cameras tested by different labs, take all ratings as approximate values.

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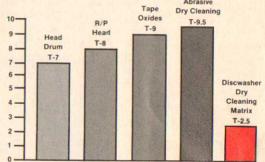
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On-Line in Line

If most Americans aren't working or sleeping, they're very likely to be either watching TV or shopping. Now efficiency-minded people in Pittsburgh can save time by combining these two activities, thanks to Abrahim Lavi.

In 21 Pittsburgh-area stores, Lavi has installed monitors by check-out counters and other places where people wait. The monitors play an hour-long videotape of one-minute advertisements, public-service announcements, fashion news and instructions on cooking, repairs, quiltmaking and plant care. During the football season, highlights of Steelers games are also included.

Showing videotapes in stores isn't really a new idea, but this is the first time the reality has been so successful. "What makes us different," explains Lavi, "is that each store gets a customized tape. We have a master tape, but then we customize it by filling in blanks. For example, we may get an ad from a business in one neighborhood, and the ad will appear only in stores in that particular area.

How successful is it? One chain of stores conducted a study which found that sales of a product doubled after a one-minute ad for it was run on the monitors. Lavi attributes this success in large part to a good sound system. (Even if people don't watch, they can still hear the commercials.)

The implications of in-store advertising are far-reaching, but what we want to know is when Lavi will develop a system which allows people to work and sleep while they shop and watch. (A.W.R.)

Unsinkable Debbie

Not to be outdone by the likes of Jane Fonda and Marie Osmond, Debbie Reynolds has announced plans to do her own exercise videotape, based on her newly created and choreographed exercise program called "Do It the Debbie Way."

No contracts have yet been



signed-"it's just in the formulative stages," according to her manager. Presumably, she's waiting for a video producer to

Someone should, because Debbie could bring to an exercise tape an aspect that's been

overlooked in others. Last spring, when she was starring in Woman of the Year on Broadway, she collapsed onstage and had to be taken to Roosevelt Hospital to be treated for exhaustion.

If she bases the tape on that experience, it could be the most realistic exercise video yet. Exercise verite, non? (A.W.R.)

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 Cocq-Cola Bottling Boy, Hawaiian Punch Man and the Mazola Corn Oil Game ("We call it 'maze'.")

When guestioned about its bold marketing scheme, a Mattel spokesperson told us, "Kool-Aid is the second most popular drink in the world." Using that logic, 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)□

Two All-Beef Videogames

Okay, we think Kool-Aid Man is a silly idea for a game. But we're ignoring something important: advertising. Having a picture of one's product on the package of a game is Good Advertising. Kids, the main consumers of Kool-Aid, see it on store shelves. Possibly some connection will be made in their minds, and sales of powdered drink mix will rise, right?

The best-dressed

Sounds like the beginning of a trend-and it just might be.

Parker Brothers plans to release two new games which, it says, "capture the McDonald's experience." (Depending on your McDonald's experience, this could turn your tastebuds on or turn your stomach, period.) The first game is designed for kids five to nine years old and stars the McDonaldland characters. The second game, for all ages, "is a fast-action game served up the McDonald's way!"

All we can say is that if Burger King wants to have it its way, it better get on the joystick! (A.W.R.)



Girl of Steel

Now that Christopher Reeve has declared that this summer's Superman III will be Superman finis, could it be the video end of the never-ending battle for truth. justice and the American way? Will die-hard superhero cassette collectors be forced to go back to taping reruns of the old Adventures of Superman TV series once the final Superman III cassette is released?

Not to worry. Supergirl is on the way. The latest feature in the Super series will arrive in theaters next summer and, no doubt, on videocassette soon after, though Warners isn't saying exactly when. It's now being shot in England (what about the American Way?) with Helen Slater, a 19-year-old fresh from New York's High School for the Performing Arts, in the title role.

Supergirl, in case you haven't been keeping up with your superheros, is Superman's first





cousin. She made her debut in the May '59 issue of DC's Action Comics, which explained to the world that, as Zor-El's daughter Kara, she lived on Krypton in Argo City, which was hurled whole into space when the planet exploded. As the city left it's solar system, it turned into Kryptonite. When its protective lead shielding was punctured in a meteor storm, her father sent baby Kara to Earth. Good of Superman found her and named her Linda Lee. When she was adopted by the Danvers family

should be a piece of cake, especially with the supporting cast that's been lined up: Faye Dunaway, Peter O'Toole, Peter Cook and Brenda Vaccaro are all on hand to help bring the Girl of Steel to the screen of silver.

Should the movie turn out not worthy of sequels, there's still hope. Remember, at one time or another, a Superdog (Krypto), a Supercat (Streaky), a Superhorse (Comet) and even a Supermonkey (Beppo, not Bonzo) have all graced the pages of DC comics. And why stop there? After all, Superfly already got his movie. (F.P.)

Birthday Suites

Birthdays are for champagne toasts, whoopee cushions, stripo-grams and unwrapping presents of cheap cologne. Now, CCR Video Corporation has produced a birthday greeting videocassette to enhance this festive atmosphere.

Called a 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 "Lots of luck in the future." monkey and smell like one, too."

boy or girl. At the beginning and her secret identity as Linda Lee the end of the program, space has been left to add your person-Danvers was complete. No stranger to video, the al written message—for instance, comic-book character has, over the years, held jobs as a TV news "Another year older, another reporter for KSF-TV in San Franyear grayer" or "You look like a cisco and as an actress in a daytime soap opera. The movies 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.) The birthday tapes can be ordered by calling 800-526-0359 (800-932-0878 in New Jersey). CCR Video pays for mail delivery, except in cases in which you've put off thinking about the birthday until the last second and need overnight delivery. (B.J.)



Undressed For Success

Och, the air was tense. Would Samantha (Under Covers) Fox come out ahead as Best Erotic Actress or would Loni (Never So Deep, above) Sanders saunter to the top? Which erotic femme fatale would win the prize for best supporting actress—and for supporting what? "The envelope, please..." couldn't do justice to the scene at hand.

The scene was the Erotic Film Awards, the adult entertainment industry's answer to the Oscars and the ViRAs. From around the land, the erotic glitterati gathered to pay homage to themselves and their art. Most even showed up in the obligatory black tie, the only night of the year there's an obligatory dress code—or even obligatory dress-for this crowd.

Now, honoring beautiful bodies we understand. Giving awards for great performances we understand. Recognizing achievements in music and set design (like having them) we understand. But one prize we found rather odd. It was for the best costume, from a choice which included Cafe Flesh and 1,001 Erotic Nights.

We knew good taste had pre-

vailed, though, when we saw the statues being awarded to the winners: Rather than crass blow-up dolls, they were comely female figurines. Though the figurines did have vertical poles rising from their hands. (M.R.)

Video to the Max

Despite the unfortunate grammar of its title, our favorite show for the upcoming TV season is Me and Max. How could we

"An irreverent look at a suburban family going crazy with home video equipment," is how the show is described by Peter Chernin, vice president for program development at Showtime, which will be airing the show. The plot, according to Chemin, revolves around the adventures of a man who voices his strong opinions to cable-TV viewers via his own satellite uplink. Sort of Archie Bunker goes Marshall McLuhan.

Another attractive aspect of the series is that each episode lasts only 15 minutes. Would that other sitcoms might follow this example. Of course the series' producer is no stranger to short stories: Arnold Margolin is best known for his work on Love, American Style.

Well, maybe this show isn't so promising after all. (D.C.)



Ode to a Cathode If I've got no place to go, I turn on my video. It can take me back in time, Help me visit Frankenstein. I can go out cruising bars, Robbing banks or stealing cars. I can join Luke and the Force (We will save the world, of course).

I can fly to Mars and back Or listen to Roberta Flack. As you can guess, I could go on, But I won't-my movie's on. So I'll bid you this adieu: May the movies be with you.

Submitted by:

John H. Mawhinney Jr. Philadelphia, PA

If you have a short, videorelated joke, story or poem, send it to: Laugh Tracks, c/o Video Review Editorial, 350 E. 81st St., New York, NY 10028.

GAMES, COMPUTERS, TELETEXT: A G



DOD CONNECTION?



By Barry Jacobs

he next few steps to be taken in the video revolution will be ones in which video fans let their fingers do the walking. With the world of telecommunications rapidly uniting with the world of home video, the telephone may soon become as indispensible a part of the average home entertainment system as a VCR. Within the next few months, several companies will begin delivering games and computer software into American homes by transmitting (or "teledelivering") them as series of electronic signals over cable-TV and telephone lines.

It's a development that's long been forecast, though its advent has come swifter than most experts have expected. John Wicklein (author of *The Electronic Nightmare*), among others, has been predicting for years that all sorts of video programs will eventually be "downloaded" over phone or cable lines from central computer banks directly into home TV sets. But Wicklein didn't think this would come about until the 1990s. While the day when anyone will be able to receive any movie, TV program or text service he or she likes over the phone still seems years off, the imminent arrival of instant teledelivery of a wide variety of games and computer programs moves this technology a huge step toward that future.

The Good ...

The advantages of teledelivery are many, but it may also entail certain disadvantages, particularly for avid game players. One of the key plusses stems from the phone services' virtually instant access capability: If anyone can access a particular game from a central computer at any time, there'll be little need to go to a store and buy the cartridge of the game. By not paying a store's retail prices and by avoiding the costs incurred in the manufacturing, the packaging and the marketing of a game cartridge, anyone will likely be able to receive the game over the phone lines for much less money than the cost of a cartridge.

Another obvious advantage is that if a player simply wants to try out a game, he or she doesn't have to purchase it, but can access it and play it several times.

... And the Bad

But how about the disadvantages? For one thing, someone may play a particular game so many times that it would be more economical to own a cartridge version of it than to repeatedly access the game from a central computer. Also, it's impossible to collect, trade or share such ephemeral programs.

Moreover, how good will the quality of the teledelivered games be, in terms of sound effects, graphics and overall playability? No one knows for sure. However, in the case of *Donkey Kong*, as one example, some of the phone and cable services claim that the teledelivered version of the game will be of the same, if not better, quality than the *Donkey Kong* cartridge. Still, some of the computer information services that download games admit that their games have nowhere near the sophistication of cartridge games.

In general, sending games over the phone lines is not as reliable a way of delivering them as by cartridge.

Glitches and other interference due to faulty phone-line transmissions are bound to occur. (Continued)

Within the field of teledelivery, there are also relative advantages and disadvantages in getting a service that transmits over either phone or cable lines. Nearly everyone has a phone, and therefore nearly everyone can subscribe to the phone services. Phone game services can also offer a much larger menu of games and programs from which to choose than can cable services. But cable lines have a broader bandwidth and have the potential to carry games of greater graphic sophistication than do phone lines. Cable lines also suffer less interference.

Perhaps the biggest problem with the upcoming teledelivered services facing shoppers eager to get "wired" is the sheer variety and incompatibility of the different setups. Some of the services can be received only with particular videogame consoles; others can be received with particular home computers; some can be downloaded into any personal computer. Some charge for each program a subscriber calls up; others for the amount of time a subscriber uses the phone line. The following rundown of the new phone and cable services examines their potential and their deficiencies.

First Services

Among the teledelivery services that are strictly gamesoriented (initially, at least), Control Video Corporation's GameLine, started up in July, has garnered the most attention. The service downloads games over the phone lines into Atari VCS or VCS-compatible game consoles with the use of a phone modem-type device called a Master Module (available in stores for about \$60). By placing the Master Module in the slot for game cartridges and connecting its plug to a modular phone outlet, the Module will automatically "dial" the number for Control Video's central computer in McLean, VA and allow subscribers to access any of the games on the menu that will appear on their TV screens. There's an initial \$15 membership fee (payable by credit card) and an additional \$1 charge each time a game is accessed. Unlike other services, however, GameLine has a memory device—the Master Module temporarily retains the program for the game so that it can be played five to seven times before the program runs out. In other words, at \$1 an access, it costs 10 to 15 cents per play, no matter how long it takes to complete a game.

What if a player becomes addicted to a particular game and wants to play it over and over again? Depending on how good a player is, he or she can run up quite a tab. Purchasing the cartridge might be less expensive. What if a family's kids run amuck and access game after game while their parents aren't home? Control Video has been wise enough to allow the placing of a credit limit on the number of games that can be accessed.

Will hours of game-playing tie up the phone for hours? No, because once a game has been downloaded into the memory chip of the Master Module, the phone line is free again.

Control Video claims that the graphics and the play of its games are identical to those of cartridge versions of the same games. But one drawback of the service is that the 50 games it's initially offering, and the additional games it plans to add each month, may not be the games most gamers want to play. So far, only Imagic and several other smaller software companies that produce games for the Atari system have agreed to allow GameLine to

download their games. Atari and Coleco have yet to announce whether they're going to participate. Activision has refused. So, however convenient the service may be, if it can't supply the favorites, it's of limited value.

Perhaps to compensate for the limitations of GameLine, Control Video plans to put the VCS system to further use with a series of Master Modules to download such information services as SportsLine, StockLine and BankLine. These services will provide text on home screens of the latest news in those fields. While they'll probably not be available this year, they are coming soon and point to a rapidly approaching era when people will be able to access any conceivable kind of information or entertainment over wires.

Maybe the reason many videogame companies are not licensing their games to GameLine is that they have plans of their own to teledeliver their games. As reported in our June issue, Atari has formed a new division called Ataritel to produce a combination phone/computer module that will be able to receive games (as well as other information) over phone lines. Whether the games will appear on conventional home TV sets or on screens built into Atari modules remains unclear, as Atari still isn't talking and has recently pushed back the date of introduction from this fall to early next year. Coleco is also reported to be planning on some means of delivering its games over phone lines by '84.

The third major videogame company, Mattel, has been teledelivering games for several years now, over a cable channel known as PlayCable. Designed for owners of Intellivision game consoles who are also cable subscribers, it has caught on only very slowly, largely because the service is available as a pay-TV channel on only 20 cable systems nationwide. In addition to the limited number of places it's available, there's a technological limit to the number of games the cable can carry and, therefore, the number of games one can choose from. Of the 20 choices that appear on the PlayCable menu many are old favorites, as well as new games that are added to the selection each month. The service costs \$10 to \$12 per month, during which period subscribers can access as many games as they want; each time one downloads a game, it's for a single play. A PlayCable spokesperson claims that the cable games are exactly the same as the cart versions, and that soon after a game is a hit on cartridge it will likely be made available on PlayCable.

To overcome the service's current limitations, Play-Cable is considering delivering to consoles other than Intellivision (Atari VCS or ColecoVision, for instance). It's also currently working on delivering other types of information as well as shopping services over the channel. In addition, Mattel is said to be considering starting a whole new service to download its games over the phone lines.

Competing head-on with PlayCable will be another pay-cable game channel, called The Games Network, starting up in December. Instead of downloading its games into the videogame consoles subscribers already own, they'll need to put down a \$20 deposit to rent a Games Network gamebox and keyboard, and then will have to pay \$14.95 a month for the service. However, what the company is offering, the Games Network people contend, is no ordinary game machine. The game box is said to have the sophistication of a 64K RAM microcomputer. (Most cartridge games use only 4K to

Continued on page 120

By Mark Schubin

ideo speaks in many languages around the world. Some are related closely enough that a TV set from one country can work in another. In other cases, a TV set may speak the right language, but with an "accent" that leaves the set picking up only the sound or only the picture. Add in VCRs, and you've got a mess.

It's bad enough that international TV standards are a muddle for everyone except some jet-setting technicians. But what's worse is that this confusion has generated misinformation and some confounding myths.

MYTH: There are three kinds of TV in the world: NTSC, PAL and SECAM.

FACT: There are, indeed, three major approaches to the way that color is encoded in a TV signal, and they are, indeed, called NTSC (National Television System Committee, the American system), PAL (Phase Alternation by Line, the West German system) and SECAM (Systeme Electronique Couleur Avec Memoire, the French system). But, unfortunately, the situation is far more complicated than that.

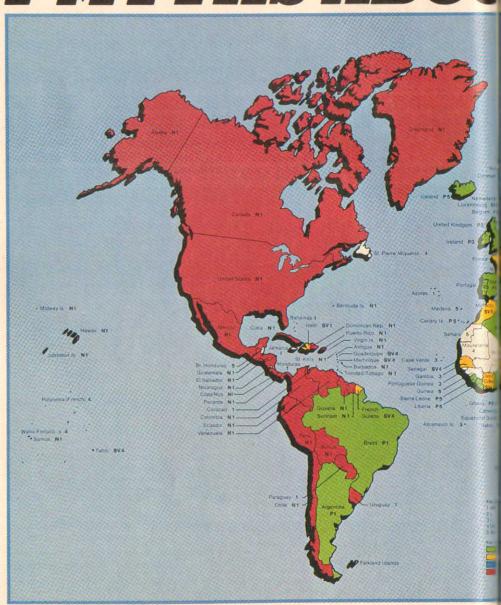
Put in the simplest terms, all color TV sets have controls for channel selection, volume, brightness and contrast. In addition to these, PAL sets have color (or saturation) controls, and NTSC sets have both color and tint (or hue) controls. PAL sets don't have tint controls, and SECAM sets have neither tint nor color controls, because they don't need them. When the Europeans were develping PAL and SECAM, they thumbed their noses at the earlier NTSC standard, saying that it stood for "Never Twice the Same Color."

Modern color TV sets work fairly well in any of their systems, but that doesn't mean that a PAL set will work in any country transmitting PAL signals. For example, Argentina, Brazil, Britain and West Germany all transmit PAL color TV signals, but a British set will not work in West Germany, and a videocassette recorded in Brazil can't be played on even the same brand of player in Argentina. Argentina transmits the unique PAL-N, Brazil transmits the unique PAL-M, Britain transmits the type of PAL known as PAL-I and West Germany transmits the type of PAL known as PAL-B (or PAL-G).

While those are the four most popular types of PAL, there are also PAL-H (almost perfectly compatible with PAL-B and PAL-G) and PAL-D (quite incompatible with the other five PALs). The situation is even worse with SECAM. There's SECAM-B, SECAM-C, SECAM-D, SECAM-E, SECAM-G (usually compatible with SECAM-B), SECAM-K (usually compatible with SECAM-D), SECAM-K1 (almost perfectly compatible with SECAM-D and SECAM-K) and SECAM-L. That may not seem worse than PAL until you try to use an old Egyptian (SECAM-B) set in Iran or Iraq (both SECAM-B countries). It just won't work, thanks to another differentiation between SECAMs, called SECAM-vertical and SECAM-horizontal.

(Not long ago, there were two NTSCs, but this author managed, as a consultant, to talk the only country transmitting NTSC-N [Barbados] into switching to NTSC-M.)

BONING BOU



MYTH: You can't use NTSC equipment in a PAL or SECAM country.

FACT: If you've got a portable black-and-white TV set, designed for use in the US, it'll work just fine, with absolutely no modification, in Brazil, a PAL country. The secret? Both NTSC-M (the US television standard) and PAL-M (the Brazilian standard), end in M. That's much more important than whether a country uses NTSC, PAL or SECAM.

Those final letters stand for the international TV transmission systems recognized by the International Consulting Committee on Radio. There are 14 recognized standards, but four of them (A, C, E and F) are dying or dead, and a few others are either completely or partially compatible (the partially compatible standards can make pictures seem a little different from the way a program's director wanted them to look, but most people won't notice). Standards B and G are completely compatible and standard H is partially compatible with them: standards D and K are completely compatible, with standard K1 partially compatible with them.

That leaves B, D, I, L, M and N as distinct standards. Let's have a look at the important differences between these. Every standard except our own M features 625 scanning lines per frame, with 25 frames-per-second. Standard M features 525 scanning lines with 30 frames per second. Let's call that difference "frame rate."

Standard B separates the picture and the sound car-

riers within a channel by 5.5 MHz (5,500,000 cycles-per-second). Standards D and L use 6.5 MHz. Standard I uses 6 MHz, and both systems M and N use 4.5 MHz. Let's call these differences "sound separation."

Finally except for standard L, all standards use techniques known as "negative picture modulation," and "FM sound modulation." Let's call this difference "L's weirdness."

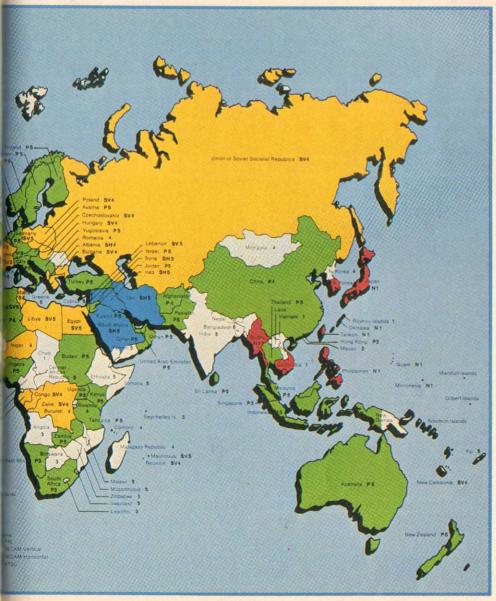
MYTH: A 525-line TV set cannot be used in a 625-line country. FACT: That set you took from the US to Brazil? Take it with you across the border to Argentina.

Brazil, you will recall, is an M country, and therefore uses the same frame rate as the US, regardless of how its color works. Argentina, however, is a system N country, and, therefore, uses 625 scanninglines-per-frame and 25 frames-persecond.

If you turn on your US-made TV set in Argentina, the picture is likely to roll badly. So do what you'd normally do when the picture rolls: Adjust the vertical hold. With the exception of some sets that have no vertical hold controls, virtually every TV set can be made to produce at least black-and-white pictures from either 525-line or 625-line transmissions, almost anywhere in the world, except in France (because of L's weirdness). If the picture seems a little distorted, fiddle with the vertical size control, too.

Sound is another matter. In Argentina, you'll hear it loud and clear. In Britain, you won't—at least not while you can see the picture. That's because of the sound separation. Standards M (US) and N (Argentina) share the same kind of separation. Standard I (Britain) doesn't. If you mess around with the fine-tuning knob on your American

THEOR HICKLY



set, you'll eventually get British sound (though it'll probably be somewhat dull and distorted, as a result of some other differences between the standards)—but by the time you get the sound, you'll have lost the picture.

There are two alternatives to using a local set. First, a number of travel sets are available with switchable sound separations. Usually these are marked US (4.5 MHz), Europe (5.5 MHz) and United Kingdom (6 MHz). These sets will work fine throughout the Western Hemisphere (except for French islands), throughout Western Europe (except France), and in many other countries. Besides in France and French territories, these travel sets also won't work in many parts of Africa, in China or in any other country using standards D, K, or K1.

If you take along two US TV sets, however, or a TV set and a radio equipped for TV sound, you'll be able to watch black-and-white pictures virtually anywhere in the world (except France), simply by tuning in the picture on one set and the sound on the other set or the radio. Nevertheless, you'll still have to tolerate somewhat dull, distorted sound.

MYTH: A "universal" TV set will work anywhere in the world.

FACT: A Belgian company called Barco has been making probably the most universal sets in the world for the longest time. It stands to reason: In Belgium one can easily receive, through an antenna, signals from Britain (PAL-I), France (SECAM-E and SECAM-L), Germany (PAL-B and PAL-G), the Netherlands (same as Germany), and Luxembourg (PAL-B, SECAM-C, and SECAM-L), as well as Belgian (PAL-B and PAL-H) ones. Yet, the most universal set we know of that Barco makes—one that can deal with NTSC, PAL or SECAM in standards B, D, G, I, K, K1, L, M or N—will still not receive certain Australian, Irish and New Zealand broadcast channels, to say nothing of many super-band cable channels in the US.

In the VHF band, the world's channels are an awful mess. There are American channels, Australian channels, Chinese channels, European channels, French channels, French overseas channels, Irish channels, Italian channels, Japanese channels, Malaysian channels, Moroccan channels, New Zealand channels, Soviet channels and United Kingdom channels—and those are just the basics! For example, South African channels are just like Irish channels, except that they start and end with higher frequencies. That's why multistandard television sets are all equipped with broad tuning systems. Fortunately, the UHF band has just three kinds of channels: American, European and Japanese.

MYTH: Your VCR cannot be used with foreign TV sets. **FACT:** Forty countries and territories throughout the world use precisely the same NTSC-M television standard used in the US, including most countries in the Western Hemisphere, plus Japan, South Korea, Taiwan and many Pacific islands. As long as you use batteries (power being another story), your VCR will work fine for recording or playing tapes in any of those countries. As long as you don't mind not recording or playing back in color, you can use your VCR in any other standard M country, including that PAL country, Brazil.

Unfortunately, the frame-rate incompatibility problem between M and the rest of the standards does prevent you from recording foreign television broadcasts in other than system M countries, directly on your VCR. There are multistandard VCRs (primarily for professional use), and they'll let you play American tapes, in full color, on a multistandard television set, but even they won't let you record a non-M broadcast for playback on a US VCR.

The solution, if you own a videocamera, is simple: Tune in the program you want to see on a foreign set, aim your camera at the set and record away. You'll end up with a tape that will play on US VCRs. When professionals do it, they call this process "optical standards conversion."

For playing back tapes out of the country, you can hook your VCR into a UHF "upconverter" (the sort sold here to allow you to use an old programmable VCR with cable television channels) and you'll probably be able to generate a UHF channel that can be tuned in on a foreign set. By fiddling with the vertical-hold and the vertical-size controls, you'll be able to make a picture (without color, or with incorrect color) and, if you hook an audio output of your VCR into a hi-fi system, you'll get sound. As an alternative, you can just hook your VCR into one of the new, portable, color monitors.

The same is true for videogame consoles, except that they don't usually feature audio outputs. You can connect a splitter to the VHF output of your game and connect one output of the splitter to the UHF upconverter and the other to a "TV sound" radio. It may seem complicated, but, to a game addict, it's worth it.

MYTH: Multistandard VCRs and TV sets are a necessity for exchanging programs.

FACT: Well, they're certainly convenient, but they cost a lot by the time you get everyone equipped.

Suppose, however, that you take along an extra NTSC-M VCR, TV set and camera with you when you visit your friend, and leave it there. Simple camera/VCR/TV set packages can be purchased from US discounters these days for far less than the cost of a single multistandard VCR. Now, when your friend wants to send you a tape, he or she just plays it on a PAL-I VCR and PAL-I TV set, aims the NTSC-M camera at it, and records it on the NTSC-M VCR. When you send a tape to your friend, he or she simply plays it on the NTSC-M VCR and looks at it on the NTSC-M TV set.

FACT: Television laws are the same wherever you go. **FACT:** Not so. In most countries, it's illegal to own a TV set without having a license for it. In Britain, the annual license fee is a hefty 46 pounds (Sterling—about \$70) for a color set; in Italy it's 78,910 lire (about \$54); in Hungary it's 720 forints (about \$18). In some countries, VCRs require licenses, too.

If you're travelling with video gear, don't risk having your VCR confiscated at customs. Find out what licenses might be required for using your VCR out of the country before you go. To prevent any problems when you return to the US, be sure to register all foreign-made equipment (and that includes every single VCR, regardless of brand) with US Customs before you leave. The registration is free, and you can do it at any international airport or customs office, but it does take time.

MYTH: International video is more confusing than the inside of a computer.

FACT: That's no myth, just fact.

type cartridges, Laser Blast reverses the roles of the you the outsider! companied by nice sound effects.

like qualities—in short, for their graphic excellence. (Crane attributes this to the artistic training he received from his mother.) With the sole exception of Laser Blast, you never shoot, maim or purposely harm your enemies in a David Crane creation. His games test quick thinking—reaction timing and the ability to recognize patterns—and are sometimes infected with Crane's sense of humor.

DRAGSTER, Activision, VCS-compatible cartridge, \$22.95. Dragster, one of Crane's first Activision efforts, is still a unique simulation of drag racing the guarter mile, for either one player or two players simultaneously, a big plus for VCS cartridges. The appealing screen shows two beautifully detailed dragsters on the left side. You gun the throttle as the lights count down to green, then nudge the joystick to drop into first gear. If you don't immediately blow your engine, your racer will begin to move toward the finish line at the right side of the screen. You can accelerate until the tachometer reaches the danger mark, then let go of the gas and drop into second, third and fourth. Like real driving, the game demands an accurate sense of timing. Graphically, the game represents the result of the "Dave Crane Method of Game Design," which states:

LASER BLAST, Activision, VCS-compatible cartridge, \$22.95 Laser Blast is Crane's only shoot-'emup, and a funny one at that. Unlike other Space Invader-

"Start with a pretty picture."

David Crane's Pitfall (above) can be a Harryina experience as you try to control the cartoon. Mark Turmell's games leave you in a Turmoil (right) as your character's attacked by the cuteniks.

player and the computer. Instead of being the protector, you are, in this game, the alien attacker in the saucer and your object is to kill the enemy laser bases that are, after all, only protecting their turf. Crane makes

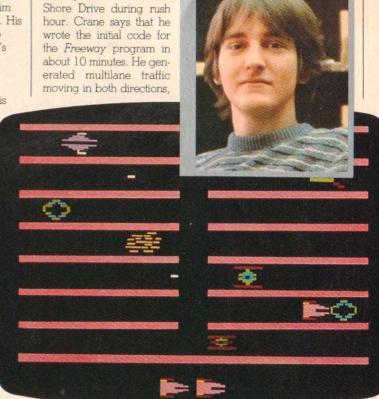
Initially, your saucer can move anywhere in the top third of the screen, ducking under enemy radar and making it tougher for them to hit you. But every wave forces your ship higher and higher and, because the laser bases don't keep still, your timing must improve wave by wave. The expected pretty graphics are ac-

FREEWAY, Activision, VCS-compatible cartridge, \$22.95. David Crane rarely begins a new project by conceiving the entire game scenario because, in his words, "only one in one thousand ideas will actually work well on the VCS." He prefers to start work on the graphics and game mechanics first, building the scenario around them. Freeway, however, was born as Crane and

some of his friends tried

getting their car across

Chicago's crowded Lake



an accurate car horn sound, even some trucks, but enthusiasm for the game was low. Then came Crane's stroke of humor that turned an okay game into a classic: He decided the player should control a chicken!

Now, why does the chicken cross the road? To gain one point every time he makes it safely across all 10 lanes—that, at least, is the object of the game. The chicken doesn't die when it gets run over, just moved back a lane, which gives the game its cartoon flavor. After getting run over a number of times, one starts to feel like Wile E. Coyote from the Roadrunner cartoons, whose timing was never guite right either.

GRAND PRIX, Activision VCS-compatible cartridge,

\$31.95. Grand Prix is a one-player game in which you drive a formula racing car through a course of other cars along a

straight track that scrolls toward your car from the right. The longer you hold down the button, the faster your car goes. The pattern of computer-controlled cars, boldly drawn in good detail, doesn't change until you have an accident, at which point their movements become random.

If your timing is consistently accurate as you shift from lane to lane, and if you're ready for Crane's little monkey wrenches designed to keep you on your toes-tunnels just wide enough for a single car and oil slicks that cost control—it just might be possible to drive the

course with your foot to the floorboards. The graphics are excellent and detailed as usual, and the sound effects well used.

PITFALL, Activision, VCS-compatible cartridge, \$31.95.

Pitfall, another unique and highly praised game, is very much like a cartoon that you control, and earned Crane the 1982 ViRA for Best Game Designer. The idea came to him in the form of this thought: "I want to design a game in which every time you run to the

edge of a scene, another scene ap-

pears and you continue." There are 255 different scenes, all beautifully drawn, through which your character can run in search of scenes containing treasures.

You have 20 minutes or three lives, whichever comes first, to find as many of the 32 treasures as possible. Crane designed Pitfall so there's not enough time to reach more than half of them if you stay above ground. Each underground scene equals three above and the real strategy is finding out which ladders lead down to shortcuts and which lead to dead ends. The rest is all timing. Your character can run, jump and hang onto vines to get past or across the various obstacles in each scene. And the game play is so open-ended that you really do feel like you're actually controlling a cartoon.

Rob Fulop

At age 25, Rob Fulop is almost an "old-timer" of VCS game design. Rob worked a summer job in Atari's coin-op division between his junior and senior years at the University of Califor-

Variety is the spice of gaming in Rob Fulops' Cosmic Ark, as you contend with wave after wave of changing attackers.

nia at Berkeley. After graduating with a Bachelor of Science degree in Electrical Engineering/Computer Science, he returned to Atari, this time to work as a software designer in the consumer products division. His boss was Dennis Koble. But the atmosphere at Atari changed after Activision was formed in 1979, so when the idea of forming another software company was being tossed around, Fulop felt ready to move on. He joined Imagic to continue designing VCS software, and once again Dennis Koble is his boss!

Fulop designs videogames in "the arcade style": wave after wave of fast action. One of Fulop's favorite mechanisms for hooking the player is to make the creatures in each wave different, both in graphics and in animation, so that when you lose you are left thinking, "I wonder what the next wave looks like?" He prowls the arcades in search of basic ideas with proven

> game play and manages to reproduce those ideas on the limited, and limiting, VCS. The most remarkable aspect of Fulop's style is that, unlike Crane, he does not use solid, bold colors. If you closely examine a creature or an object in one of his games, you'll notice his use of luminance—that is, he shades an object from top to bottom with various hues of the same color. Also, the objects in a Fulop game never move at a constant speed, but speed up and slow down at random.

NIGHT DRIVER, Atari, VCS-compatible cartridge, \$23.95. Night

Driver, as you may have guessed, is a driving game played on a dark, winding road. Fulop adapted the game from Atari's coin-op of the same name, and much of the coin-op flavor survived the translation.

The player's car appears at the bottom of the screen with the roadmarked only by shoulder posts-stretching to a horizon above. Oncoming cars loom out of nowhere just as they would on a dark, foggy night. The object is to drive as far as possible within the time limit.

Night Driver might look crude compared to Turbo or Pole Position, but it was state-of-the-art programming in its day and established Fulop as a designer of popular games.

MISSILE COMMAND, Atari, VCS-compatible cartridge,

\$31.95 This game is one of the best translations of a coin-op to the VCS ever released, retaining all the original fast action and enough of the graphics and sound effects to feel like genuine Missile Command. It is a classic piece of work, one of Atari's best sellers, but no one even told Fulop to program the home version. Fullop just took on the task after several other designers wondered aloud if the game could be done on the VCS.

The object is to protect your six cities and central missile silo from wave after wave of falling enemy bombs. Each wave increases the speed and number of enemy bombs, represented as either straight or zig-zag lines.

Some early copies of the game contain a small hidden message. If you let all your cities and your silo be destroyed without fighting back, Fulop's initials appear on the screen. Atari discovered and removed the initials, however, after a small production run, turning those games with initials into collector's items.

DEMON ATTACK, Imagic, VCS-compatible cartridge,

\$31.95. This was Fulop's first Imagic cartridge and it's been a smash hit. In this format alone, it has sold over a quarter million copies, and it has been translated to at least five other machines. The game combines elements of Space Invaders, Galaxian and Phoenix. But if you closely examine the attacking birds, you'll notice brightly detailed graphics and a very erratic movement pattern, the Fulop trademark.

Fulop created different birds for each new wave, and the variety is what makes you hit RESET again and again. And after several waves the birds do not disappear when hit by your fire, but split into two smaller targets! These act as mates: When one is shot, the other turns and dives for your cannon. Demon Attack is one of the best original arcade-style games for the VCS.

COSMIC ARK, Imagic, VCS-compatible cartridge, \$31.95. Remember the coin-op Space Fortress? Well, one of Cosmic Ark's two alternating screens requires that same type of furious joystick and fire button action to destroy meteors approaching your ship from four directions at once. If you succeed in fending off the meteor shower, you switch to the second screen, which shows your saucer above the surface of an alien planet. Your job is to retrieve a pair of creatures without being disintegrated by the enemy forcefields.

The game's graphics are a highly detailed blend of soft colors, and the animation is splendid. But again, what sustains this game is the variety of creatures Fulop has programmed.

Bill Budge

Bill Budge is in his early twenties and has created only a few videogame programs. Yet already he is something of a legend within the computer field. When his first game, Raster Blaster, came out, players and designers alike were shocked by the strength of both the graphics and game play.

Budge, like many videogame designers, has a Bachelor of Science degree in Electrical Engineering/Computer Science, which accounts for his technical ability, perhaps. But the aesthetic qualities found in his programs are unique. Budge looks for ways to place responsibility on the player, giving him or her the tools to create his or her own experiences. The result: Pinball Construction Set, a "game" that allows you to create your own games of computer pinball. Asked why he doesn't create the programs himself for sale, Budge responds "I am an artist. I like to give players the tools they need to have fun their own ways. Next I am working on a program that will allow you to create programs like Pinball Construction Set."

RASTER BLASTER, BudgeCo, Apple II-compatible 48K disc, \$29.95. Raster Blaster paved the road for serious computer pinball. It is astonishingly beautiful and plays much like the real thing. You control the flippers with a pair of paddle buttons, and you have a wide variety of shots depending on the angle and your timing. All the trappings of pinball are included, but the beauty of the program is the animation of the pinball itself, which moves on a course similar to what it would take on a real table. You feel like you're really playing pinball.

PINBALL CONSTRUCTION SET, Electronic Arts, Atari 400/800-compatible 48K disc, \$39.95. PCS is more than a computer pinball game. It is an electronic building kit that allows the user to create endlessly different games of computer pinball. The left half of the screen displays an empty pinball table and the right half displays all the ingredients you need for a complete game: Bumpers, kickers, drop targets, rollover chutes and a dozen other types of items may be placed anywhere on the table. And if you like big scores, that's easily fixed because you can also assign point values to every target. You can even "re-wire" the table so that any combination of targets you like gives bonus points or extra balls.

If you don't know where to start, there are five complete

tables on the disc ready to be played or changed. But the real beauty of owning this game is that you can save your best creations on blank discs for future play. PCS turns you into a game designer, instantly.

Alan Miller

This designer began his career in videogame design like so many others—with Atari. After graduation from the University of California at Berkeley with a Bachelor of Science degree in Electrical Engineering, Miller took several computer-related jobs before finding temporary happiness at Atari in 1977, just before the VCS was introduced. Two years and four games later, Miller left Atari with three other designers to form Activision.

Miller is an avid sports player and fan, which accounts for his interest in developing strategic, two-player video sports contests. But if one must point to the single most recognizable feature of Miller's designs, it would be his attention to detail and the technical excellence of the programs themselves, which squeeze the VCS' memory for everything it has.

BASKETBALL, Atari, Atari 400/800-compatible cartridge, \$34.95. This was one of Miller's first games and also one of the first designed for the Atari computers. Miller set out to create one of the first team-sport videogames, allowing up to four players at a time on the court. This move emphasized the strategy of teamwork. Scoring is based on percentages: Directly under the net your player can hardly miss, but the farther out you move your player, the less often he scores two points.

Basketball was a breakthrough: Miller's use of a trapezoidal outline for the court creates the illusion of depth, making other games of basketball seem flat and two dimensional. Technically, the game is flawless; graphically, it's absorbing; and strategically, it's very involved.

TENNIS, Activision, VCS-compatible cartridge, \$22.95.

Tennis was another ground-breaking game for Al Miller, and his first with Activision. Whereas previous games of tennis had been little more than dressed-up versions of Pong games, Tennis added strategy from the real court.

Miller again used a trapezoidal court layout to gain depth perspective and allow players to move anywhere in their courts. This introduced the strategy of playing a "net game," whereby you use various angle shots to run your opponent ragged. Like the real sport, this is a game of position and stamina -whatever player maintains good position longer will win the point.

ICE HOCKEY, Activision, VCS-compatible cartridge, \$31.95. Although this version of hockey gives each player

only two skaters, limiting the passing options, you can alternately control both skaters on your team. With a bit of practice you can pass between the two and create some involving strategies.

On defense you can give stick checks, which sometimes will dislodge the puck. And you can trip the opponent without fear of penalty because there is no referee. But, like Tennis, Ice Hockey is a game of position. With only two defensemen, a missed trip can be deadly, leaving the man with the puck a clear path to the goal.

STARMASTER, Activision, VCS-compatible cartridge, \$31.95. Starmaster is a VCS version of the classic Atari computer game Star Raiders. There are several other VCS versions, but none as technically excellent as Starmaster. First you look at the chart of the galaxy and decide which sector containing enemy ships to attack. After a beautiful "hyperwarp" journey to the sector, you battle the enemies from a first-person perspec-

tive. The graphic effect of the stars and ships is stunning. But Starmaster is not just a shoot-'em-up; the strategy required to do well is considerable and must be planned far in advance if you hope to save your starbases from being surrounded before you run out of fuel. The game concept may not be typical of Al Miller, but the effect of the game is: lots of detail, fine graphics and a good sense of strategy.

Mark Turmell

Five years ago Mark Turmell bought an Apple and began to teach himself programming, focusing on his area of personal interest: fast and furious arcade-type action games. He sent his designs, unsolicited, to Sirius, which liked them well enough to hire Mark as a full-time game designer. Now 21 years old and with at least six game designs under his belt, Turmell is one of the youngest and most prolific designers in the business.

Turmell's games tempt a description of him as the Alfred E. Newman of videogame designers. The software plays well, but Turmell's silly sense of humor is built into every design. More often than not, your life and death struggles will be fought against ridiculous-looking creatures who will make you laugh (from the silliness) and cry (from the tension) at the same time.

SNEAKERS, Sirius Software, Apple II-compatible 48K disc, \$29.95. Sneakers, Turmell's first game, combines furious action with highly animated graphics. The player controls a movable laser cannon as in Space Invaders, but instead of shooting at menacing beings, the player is pitted against wave after wave of cute, playful creatures. The first wave, for example, comes from the sneakers themselves: half moons with legs wearing tennis shoes! These move about erratically, trying to stamp out the player's cannon.

Each of the seven waves contains different creatures and its own movement characteristics, which means learning a different tactic for every one. There's so much action packed into Sneakers that one enjoys the intermissions as rest periods between waves long after their amusement value has worn off.

BEER RUN, Sirius Software, Apple II-compatible 48K disc, \$29.95. In this game, your character works at the Olympia Brewing Factory, a building of different floors and levels reached by climbing ladders. It is a maze game of climbing and dodging and catching things (such as beer cans) for points.

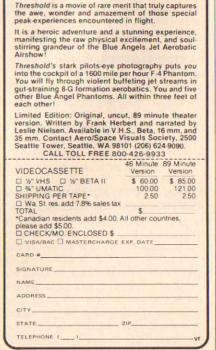
Elevators take your character from floor to floor in search of the artesians who guard the factory. Ultimately, your hero reaches the Olympia blimp. Graphics and game play are highly detailed, and of course your pursuers are more often cute than frightening, until one grabs you.

FAST EDDIE, Fox Video Games, VCS-compatible cartridge, \$20. Fast Eddie is Turmell's first VCS game design, and continues his fascination with cute graphics and tough challenges. Eight levels of play feature half a dozen different screens, each an arrangement of ladders that connect five horizontal ramps. Your character, a cute little guy named Eddie, must run and climb in search of objects that appear at random screen locations. Eddie is chased by sneaker-like creatures from previous games. After grabbing nine prizes, he can leap over the king sneaker, known as High Top, to get the key he guards.

TURMOIL. Fox Video Games, VCS-compatible cartridge, **\$20.** Turmoil is the type of game that gives your wrist and firing finger almost no rest. In fact, Turmell set out to create a game in which your enemies move faster and with more malice than those of any other game. He succeeded.

You control a ship moving up and down an alley in the center of the screen. Enemy objects appear in corridors leading into the alley, and you must shoot them for points. But they attack from all sides and you almost go berserk just trying to stay alive. Not all the enemies can be destroyed in the same way. There are special bonus treasures to tempt you down the dangerous corridors, which keep tension at the frenzy level.





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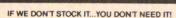
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LIVE HAMP! (1982) * * * *

With Lionel Hampton, Arnett Cobb. Directed by William Cosel. (Sony cassette, color, Beta Hi-Fi, VHS stereo, 25 min., \$19.95 Beta, \$24.95 VHS)

BILL WATROUS REFUGE WEST BAND (1981) * *

With Bill Watrous, Gordon Goodwin, Dennis Farias. Directed by Ric Trader. (Sony cassette, color, Beta Hi-Fi, VHS stereo, 24 min., \$19.95 Beta, \$24.95 VHS)

ROB McCONNELL AND THE BOSS BRASS (1981) * * *

With Rob McConnell, Sam Noto, Eugene Amaro. Directed by William Cosel. (Sony cassette, color, Beta Hi-Fi, VHS stereo, 26 min., \$19.95 Beta. \$24.95 VHS)

By John S. Wilson

The big bands of Bill Watrous, Rob McConnell and Lionel Hampton provide an impressive audio showcase for Sony's new Beta Hi-Fi stereo videocassettes. In all three cases, there is a vivid sense of big band presence, of clarity, depth, tonal subtlety and realistic balance that have been missing from virtually all other video efforts to capture the big band sound.

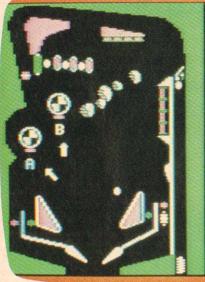
The mere fact that the bands are working in live situations-Watrous and McConnell at Howard Rumsey's Concerts by the Sea in Redondo Beach, CA, Hampton at Paul Anka's Jubilation Club in Las Vegas-and that they use their normal working set-ups may contribute to the realistic balance, although there are innumerable similar live tapes in circulation that prove this does not necessarily follow. And the pictures, particularly in the Hampton short, may help to seduce the ear, to fulfill what the ear thinks it is hearing. But these are really only marginal helps in creating the vital presence of a big band that comes out of these releases.

The most successful of the three is the latest, Live Hamp!, produced in March of '82, and obviously the beneficiary of the experience gained in making the other two the previous year. There's no trick to catching and projecting the vitality of Hampton's personality and performance. It's there from the moment he steps on stage-grinning, gesticulating, stepping around, playing with a gleamy-eyed concentration, building up a sweat, generating enthusiasm. But this time that vitality and involvement also come pouring out of his band as well. The players are loose and relaxed and interested. (There's a marvelous shot of one band member listening with open-mouthed pleasure to another's solo.)

This is an excellent example of a typical Hampton band. It swings solidly and

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CRITIC'S CHOICE:





designer doesn't write just one story; he or she writes a structure for an unlimited number of stories to be creat-

> ed by the players. The designer gives us worlds to explore, whose outcome we control.

> The videogame designers profiled here are electronic artists, and videogame design is their creative outlet. For them, game design has become a form of personal expression. You

can recognize style in their craft by examining the components of a videogame—graphics, animation, color, sound, theme and challenge—as they relate to a body of work.

David Crane

The 29-year-old David Crane earned his Bachelor of Science degree in Electrical Engineering from DeVry Institute of Technology in Phoenix, then migrated west to California in what could be called The Great Silicon Rush of the 1970s. David has always been a game player—a very good game player-who holds his cool under pressure. I've seen him run through advanced boards of Pac-Man with one hand in his pocket and no body movement except from the other wrist outward!

His first involvement with professional game design was at Atari, where he worked on both the hardware and the software

By Phil Wiswell

hen Universal released the movie, E.T., The Extra Terrestrial theatrically, hordes of people rushed out to see it-not because it was released by Universal, but because it was directed by Steven Spielberg. Clearly, his past pictures-Jaws, Close Encounters of the Third Kind and Raiders of the Lost Ark-established a recognition of, an appreciation for and an appetite for the "Spielberg touch." But when Atari released E.T., the videogame cartridge, it was much different.

Videogamers had a lot less to go on, because Atari had omitted a key piece of information from the product—the name of the game's designer, Howard Warshaw, and anyone else who might have helped to create the game. Obviously Mr. Warshaw had more creative input than Atari, the corporation, yet for all intents and purposes the E.T. videogame is "by Atari."

Nonsense!

Videogame design is a creative act. The designer is an artist working through the relatively new medium of the microcomputer; and the body of work he or she produces invariably has style, as books, records and movies have style.

Using a desk as an easel, a cathode-ray tube as a canvas and a palette of nothing more than binary digits, videogame designers have created a new and powerful language. Like the majority of consumer entertainments, most videogames are fantasies designed to interest and amuse the mind. But videogames take a giant step beyond books, records and movies: They're interactive. The language of videogames is not simply read with the eyes or listened to with the ears as output, but also involves continuous input from the player via joystick, paddle or keyboard. A videogame

Changing the face of gaming, Pinball Construction Set by Bill Budge (above, left) lets you change the laws of gravity. Al Miller's Star Master (right), like his sports games, stresses strategy over shooting.



Dig Dug-ing and Tunnel-ing with Worms



Treasures, tribes and troubled White Water in the tropics.

WHITE WATER! * * * * Designed by Doug Fults. (Imagic, Intellivision-compatible cartridge.

VIDEOGRME

By Dr. Jack Wheeler

High adventure—even the sound of itconjures up images of perilous struggles in strange new lands. Since age 14, I've dedicated my life to exploring the frontiers of the earth. Here's a videogame that captures the thrill of these adventures. It takes place in the Amazon, which I have strong feelings about, because the jungle always stays with you. The Amazon jungle is an area larger than the continental US, and the river itself is nearly 4,000 miles long. The upper tributaries have white water (as in this game), and during my explorations I've lived with tribes along the river.

White Water is actually several games. First, of course, there's the river. You have a crew of three, and must navigate your raft downriver without losing the crew. The rafting is realistic. You get the sensation of going downstream and, like real life, if you're not careful you can end up going backwards. You also get spun around by rocks and whirlpools (as well as barrelswhich I never saw in the Amazon).

Dr. Jack Wheeler is a professional adventurer whose exploits have earned him a place in the Guinness Book of World Records for the first parachute jump at the geographic North Pole.

You've also got to worry about your crew members. The various dangers can knock them out of the raft. When they go overboard, you've got to try and rescue them before they hit the obstacles. If you lose your crew, the game is over.

But the cartridge has an additional adventure—a contest with the natives. If you successfully navigate downstream and land on a shore, you visit a jungle scene filled with a golden um, some flags (the number and location of the flags change every scene) and a friendly native. Your goal in this challenge is to beat the native to the golden urn, but before you can do that, all the flags must be taken. After you pick up one or two flags (your choice), the native will pick up one or two (his choice). This continues until all the flags are gone. Then, whoever reaches the urn first earns additional points. Afterward, you continue downstream to the next shore (where another flag game occurs). Upon collecting three golden urns, more treasures turn up as the challenge continually increases.

I've lived with tribal people in many parts of the world, and have always found them to be honorable. In this game they never cheat. But if you cheat (by just grabbing the golden urn and running), the tribe's chief will suddenly appear, shooting a death spell at you. If he misses, when you return to the river you'll find the waters fast and furiousthe chief has cast a spell that lasts until you reach the next tribe.

When Roald Amundsen became the first

man to reach the South Pole, he said, "There are those that say I've had good luck. But what some call good luck I call good planning." That applies here. Plan your strategy before moving in the jungle game, and learn to read the river in the rafting phase.

Of course, there's no substitute for real life. We each have the opportunity to make of our life a thrilling adventure. This is the best adventure videogame I've seen-it's what Pitfall should have been. If you find it exciting, go after the real thing.

TUNNEL RUNNER * * * * Designed by Dick Belaska. (CBS, VCS-compatible 12K cartridge. \$30 approx.)

By Frank Lovece

Some people fantasize about being rich, others about being famous, and still others about being Pac-Man. Tunnel Runner won't do much for the first two types, but if you've ever wondered how it feels to be a certain happy dot, this game comes as close to fulfilling your dream as copyright laws

This is one of very few first-person maze games. Starpath has a similar VCS game, Escape from the Mindmaster, and firstperson computer maze games such as Sirius Software's Wayout abound. Yet, despite its predecessors, Tunnel Runner remains as fresh and engaging as a return to childhood streets on the 10-speed bike you never had as a kid. The equivalent of 10 speeds here is 12K of memory, three times the norm for a VCS cartridge. A CBS-designed chip adds 8K to the usual 4K, making this the first of a projected series of "12K, enhanced" videogames.

All that extra memory is apparent. As you explore a labyrinth of yellow hallways and paneled, multicolored floors that flash when a door is nearby, you find yourself able to do things that VCS games just aren't supposed to let you do. Variable-speed, continuous motion, for one thing: Push your control lever forward and let it go, and you advance automatically. Lean on the lever, and you accelerate. Pressing the fire button gives you an overhead view of the maze, showing you where you are.

The object is to locate keys and use them to unlock doors that transport you to more

RATINGS

- * OUTSTANDING
- GOOD AVERAGE
 - BELOW AVERAGE

advanced, point-profitable and sometimes invisible levels. You earn points for crossing untraveled sections and hopping levels. There's a time factor and, depending on the level, two or three monsters, having distinct characteristics, to keep you running.

The game mixes intelligence and intuition. You need a certain amount of deductive power to figure out the most time-effective routes (often they're the ones that let you look down a short hallway without having to take time to explore it) and a memory for which doors warp you, keylessly, to other parts of the maze and those that take you to further levels. Intuition is the key when it comes both to knowing which direction to take without consulting the overhead view of the maze and skeedaddling from monsters AQAP. Regrettably, there are no clues whatsoever to locating keys and doors, so dumb luck plays a part, too.

So do senses other than sight. Audio cues are deathly important, especially in levels with invisible monsters. There, the creatures' Jaws-like electronic heartbeats are your only hope. Coordination helps too, since it's easy to skid right by a turn.

There are some shortcomings to this excellent game, though. For one thing, you have to be sitting just right on the flashing panels to see a door. And the graphic sameness of the tunnels can get boning. They look more like hallways than tunnels, but I suppose Hallway Runner sounded too much like a long carpet. And the sound effects seem to indicate you're driving a tank, not running. No matter, really. Tunnel Runner is still a great game that should give anyone a run for the money.

WORMS? ★ ★ ★ ★ Designed by David S. Maynard. (Electronic Arts, Atari 400/800/ 1200XL-compatible disc. \$35)

By Phil Wiswell And Bernie DeKoven

Worms? is the kind of video activity that can wake you up in the middle of the night with thoughts of untried strategies. We use the word "activity" because Worms? is much more than a videogame. It's an exercise in programming artificial intelligence, an idea that could only be played with and understood on the computer.

Worms? can be played by one to four players, but the idea is so abstract that we suggest you start playing with a single worm on-screen and try to make it do predictable things before taking on an opponent. The rule booklet suggests you put off reading the rules indefinitely and simply play the game; but don't expect to catch on for a while whether you read them or not.

The object is to capture the most territory, and no hand/eye coordination is required. A pattern of dots and flashing lines are onscreen indicating where your worm begins. Physically, all you do is point the worm's head in one of the six directions it can travel from a dot, press the button to start it moving and watch how far it goes.

The worm begins the game as an idiot, and you must train it to make all its decisions. For example, if you move to the right on your first turn, then down on your second, your worm will automatically move down after moving right for the duration of the game. Every time a worm reaches a configuration of dots and lines it has not encountered, the game stops and waits for you to instruct the worm which direction to move. As the worm moves, it leaves behind its colorful trail and—you hope—boxes off some territory. One piece of territory and one point are awarded a worm that draws the sixth (last) line to a dot, thereby capturing it in the player's color.

During the initial stages of a game, worms will stop frequently for instructions. After a while, though, the worms know enough to keep going by themselves, at which point you can sit back and enjoy the splendid animation. Worms? has taken advantage of the computer's ability to graphically enhance a pattern or drawing, and you will derive a lot of pleasure simply from watching the action. The game ends as soon as all the worms have nowhere left to move.

The program allows you to select smart or randomly generated computer worms to play against, and you can even use the same worm from your last game. A worm can even be stored on disc and then loaded

DIG-DUG * * *

Designer uncredited. (Atari. Atari 5200- and 400/800-compatible cartridge. \$40.95/\$44.95)

By Michael Blanchet

Videogames have been tools of conformity, for the most part. A maze game such as Pac-Man, for example, requires the player to execute a series of turns in a specific order to avoid the monsters and register a good score. Now take the same game, but imagine allowing the player to carve his or her own path. No longer the slave to the set walls and corridors of the maze, the player is offered a virtually unlimited number of moves to explore. That game would be something unique and a cut above the common "twitch" game. Dig-Dug is such a game and it has done for maze games what Burger King did for fast-food shops—it lets you do it your way.

Dig-Dug, adapted from Atan's arcade game of the same name, addresses the maze idea in new fashion. You control Dig-Dug, who must tunnel through layer upon layer of terro firma in search of Pookas and Frygars. Dig-Dug burrows through the soil, leaving a tunnel big enough to accommodate himself and his enemies. When he taps a compartment containing either a Pooka (a beach ball-like character with legs)



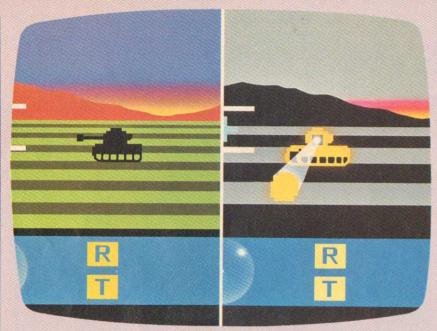
Teaching dumb Worms new tricks to create colorful patterns.

into any future game. So you can create and save worms with different intelligences.

Experimenting with this crude form of artificial intelligence in such a graphically appealing manner is fun even when you don't know what you're doing. But realize that Worms? requires a longer period of "initiation" than most videogames before you begin to feel comfortable. Just don't be surprised when you discover how much there is to learn about Worms? It's a little scary thinking about all that virgin territory to explore

or a Frygar (a bad-tempered dragon that breathes fire), Dig-Dug must run or fight. Contact with either beast will cause him to wither. With a tap of the action button, Dig-Dug can brandish a most unlikely weapon—an air pump. By continually depressing the button, you force more and more air into your foes. A swift half-dozen pumps will cause both Pookas and Frygars to burst.

In early rounds of play, *Dig-Dug* is a simple search and destroy mission. Each creature can be engaged and defeated with little threat to Dig-Dug's well-being—



Robot Tank: 24-hour cycle and recycle of relentless tanks.

that is, if you move him quickly. If you let him dally and wander about, the caged creatures will slip through the soil like earthworms to confront your character. Because of the time necessary to burst each beast, facing off against two or more can be risky.

Since Dig-Dug allows you so many options as to how, when and where to attack, it opens a new category of games. To call it a simple reflex contest would be inaccurate, while calling it a strategic simulation would be just as erroneous. It is, in fact, a happy marriage of those two genres. Since the game is visually appealing and immediately gratifying, it should please even casual gamers. Skilled players will like the fact that some solid strategy, both subtle and obvious, is needed for a good score.

An aside for Atari 5200 owners: You'll find that the system's controller, infamous for being difficult to operate, does not detract from *Dig-Dug*'s playability. Neither razorsharp turns nor diagonal moves are necessary here.

LOCO-MOTION ★ ★ ★ Designer uncredited. (Mattel, Intellivision-compatible cartridge. \$39 approx.)

Mattel's adaptation of the Centuri coin-op, Loco-Motion, suffers from a handicap that may prevent it from reaching the wide audience it deserves—it follows in the footsteps of Activision's recently released Happy Trails.

The original "move the playfield, not the man" game, Loco-Motion looks and plays like a cross between a finger-fidget puzzle and a Rubik's Cube. By manipulating small blocks that contain sections of railroad track, you must provide the computer-controlled train with access to all the outlying passengers scattered along the screen's borders. The Intellivision disc controller is not the nuisance here it often is, since each block can slide only up, down, left and

right. Absorbing and unique, with just the right amount of frustration thrown in for good measure, *Loco-Motion* is recommended for the jaded gamer who has had his fill of death-ridden shoot-'em-ups and cutesy maze games. (M.B.)

MOUNTAIN KING ★ ★ Designer uncredited. (CBS. Atari 400/800-compatible cartridge. \$30 approx.)

By Dan Gutman

Some of us prefer a quickie game—plug it in, turn it on and play. Wham, bam, thank you, *Ms. Poc-Man*. Others disdain such cheap, impersonal flings and favor deeper, more meaningful gaming relationships, such as that in *Mountain King*. This game is so deep, I read the instructions five times and I

still don't know what's going on.

According to the instructions, your character, trapped in a diamond mine, must first collect 1,000 diamonds, then try to capture a Flame Spirit in order to enter the Temple Chamber, thereby getting the Crown. Sound simple? Well, I followed the instructions very carefully and couldn't get the Crown to save my life, no matter how I moved the joystick. There are also treasure chests, bats, spiders, skulls and flashlights to fool with. There are no battles. The music (from Peer Gynt) is used very creatively, and hardcore adventure freaks may go for this game.

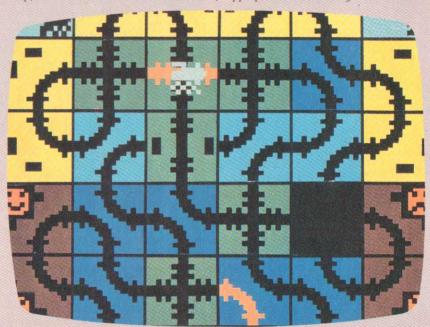
As for the rest of you, I think playing quick, meaningless, impersonal games is nothing to be ashamed of. \square

ROBOT TANK ★ ★ Designed by Alan Miller. (Activision, VCS-compatible cartridge, \$34.95)

By Suzan Prince

Basically a "twitch" game requiring no significant strategy, Robot Tank pits you, the good guy, against them, squadrons of computer-controlled tanks special, developed by the US Army which have somehow broken loose from a central depot, have gone wild and are now headed in a westerly direction across the Mojave Desert. Next stop, Los Angeles—unless you can hang in and destroy as many as possible with your four hunter tanks for as long as possible; there's no time limit. Bump off one squadron (12 enemy tanks) and earn a bonus tank. Wiping out four enemy squadrons nets you a Medal of Merit patch; destroying five earns you the Cross of Excellence patch, and annihilating six decorates you with the Star of Honor patch.

Designer Miller has created a fairly sophisticated screen for the VCS. The foreground is flat desert terrain, while the appropriate mountain ranges are viewed in



Moving the tracks, not the train, in Loco-Motion.

the background. Your instrument panel contains a radar screen for remote hits and four warning lights to indicate radar, video, tread and cannon damage. A clock tracks days and hours of the potentially endless battle.

To its credit, Robot Tank's challenge lies, first, in the 24-hour battle cycle in which bright daylight becomes dusk, then pitch darkness and finally dawn and, second, in the elaborate climate changes. During the war, your hunter tank is continually alerted to rain, which bogs down movement; fog, which impairs visibility; and snow, which throws the tank treads off balance in the icy desert. The constant transitions lend a sense of progress, motion and tension to the game. For example, in night's pitch darkness your main occupation should be avoiding enemy tanks until dawn, because judging a hit, even on the accurate radar screen, is almost impossible and more likely than not to result in an enemy's direct attack.

Compared with Miller's previous winner, Starmaster, Robot Tank seems a bit slow and uneventful. You hit 12 tanks. So what? You hit 60. So what? There's always more where they came from. And more and more and more. Without plot or strategy, Robot Tank talls short of what today's players might expect from the current militaristic maneuver simulation games. □

KOOL-AID MAN ★ Designer uncredited. (Mattel, VCS-compatible cartridge, \$30 approx.)

This is one of the new breed of "boardroom" games—begotten not by a designer, but by a corps of corporate blue suits armed with market surveys and demographic reports.

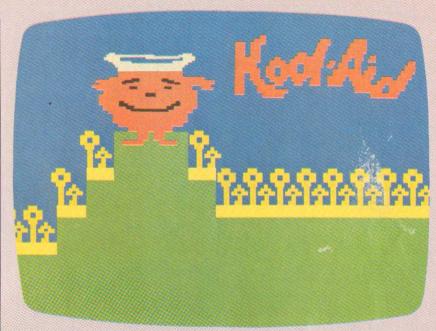
Your screen character is the Kool-Aid Man, and your goal is to have him run over the straw-toting Thirsties that are out to soak up his water supply. By absorbing the Ks, Ss or Ws floating across the screen (they stand for Kool-Aid, sugar and water, respectively), Kool-Aid Man becomes Super Kool-Aid Man and enjoys a fleeting moment of invulnerability.

Chock-full of activity, challenge and vibrant color, Kool-Aid Man is simple, nonviolent fare. This is strictly kids' stuff. But is this just a harmless game based on a food trademark—or a new form of subliminal advertising? A quick glance between the lines uncovers a strong message targeted at the young and impressionable. Kool-Aid is the only way to beat the Thirsties. Can Coke and Pepsi games be far behind?(M.B.)□

PORKY'S ★ ★ Designed by Laser Microsystems. (Fox, VCS-compatible 8K cartridge. \$34.95)

By Mark Trost

Hoping to translate boxoffice success into videogame gold, Fox has once again adapted a popular movie title to a VCS cartridge. The results will probably leave both movie fans and videogame buffs cold.



Kool-Aid Man: Can Coke and Pepsi beat the Thirsties, too?

Like most things, Porky's loses a lot in the translation. All the sophomoric hijinks which turned the modestly budgeted sexploitation comedy into one of '82's most popular movies are used as an excuse for bundling together four already overdone game scenarios.

The game, like the movie, chronicles the attempts of the hero Pee Wee to blow up the infamous Porky's Bar. The cartridge, which boasts five separate screens and benefits from superior animation, thanks to a memory-boosted ROM cart, begins with an unabashed Frogger imitation. Here, Pee Wee attempts to cross a highway without being run over by various obstacles (including boats, girls, pigs, police and cars). Then, it's on to the next scene, the swamp. In this one, Pee Wee does his Pitfall Harry impersonation as he pole-vaults over a swamp in an attempt to collect four bricks to form an escape ladder.

Once out of the swamp it's on to the movie's fabled shower scene, which may not be suitable for TV (so the adds say), but seems tame enough for the videogame screen, since it's been transformed into a Pac-Man-like maze. After hitting the showers, the time has come for the fourth and final challenge, climbing a Donkey Kong-type scaffold. If Pee Wee reaches the top, the game goes into its opening animated sequence, the destruction of Porky's Bar.

Admittedly, Porky's isn't the easiest videogame in the world. I had particular trouble with the shower and the highway levels. Despite the often rugged play, though, gamers will come away with a disjointed feeling. Rather than being designed for cohesiveness, this one is put together merely to accommodate scenarios and story lines that have little to do with videogame enjoyment. The Porky's label may help the feature's sequel, but it's a definite videogame liability.

SQUISH 'EM * *

Designed by Tony Ngo. (Sirius, Atari 400/800-compatible cartridge. \$39.95)

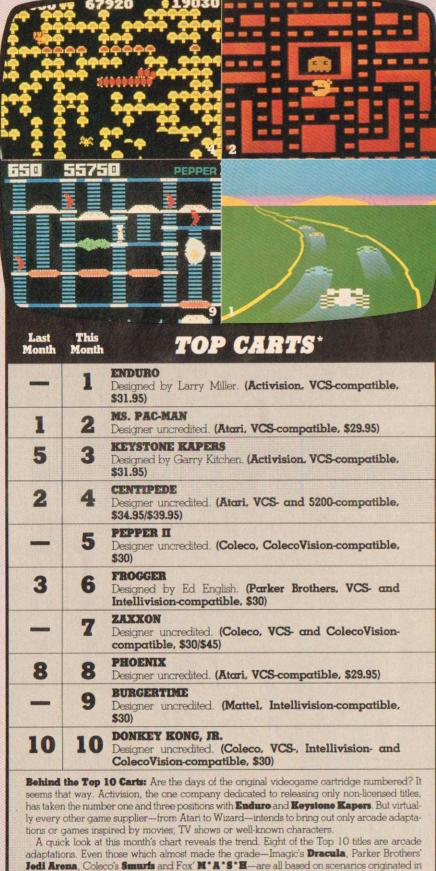
SQUISH 'EM * * * Designed by Tony Ngo. (Sirius, Commodore 64-compatible disc. \$39.95)

Squish Em for the Atari 400/800 and Squish Em for the Commodore 64 are not different games, but they do clearly show that different computers have not only different computing capabilities, but different game-playing capabilities as well.

The Atan 400/800 Squish Em is a decent enough game. As in the old arcade game Crazy Climber, you have to move a man up the girders of a building infested with weird creatures. An unseen enemy from above is heaving junk at your man as he climbs. Your fire button picks his legs up, so he can sail over the creatures' heads or land on top of them (whence the game's name). Points are scored for climbing floors, jumping on or over creatures, picking up various prizes along the way and reaching the suitcase at the top of the 48-story building. The field scrolls vertically as you climb.

This is a simple, somewhat addictive, short-term-fun game. But it leaves you feeling a little empty. You have no goal: When you reach the suitcase, there's no reinforcement, no break—just another girder to climb. Other than the score, there's no indication that you have accomplished anything. And the game doesn't change much throughout its 15 levels. You get the feeling that a game for a 16K computer should have more depth to it.

The Commodore 64 version, with 64K of muscle, is a different story. Your man really looks like a man and the building really looks like a construction site, with brick outer walls and realistic girders. Hammers, TV sets and 3D bricks rain down from above. Unlike the Atari Squish Em, the



Commodore version displays the level you have reached. And there's a clearly defined goal: When your man reaches the top, he gracefully leaps off the building, wearing a brilliant multicolored parachute.

In both formats, Squish Em is a lightweight game that will delight the Frogger crowd more than the Defender fans. You can pick up the moves quickly, and there is a certain elegance to the jumping, stomping, sliding, climbing and squishing once you've got it down. If you own both the Commodore and the Atari systems, buy the Commodore version of the game. (D.G.)

JUNGLE HUNT * * * * Designer uncredited. (Atari, Atari 5200-compatible cartridge. \$40.95)

By David Tuller

Lions and tigers and bears, oh, my! Well, not exactly, but gorillas and crocodiles and boulders, oh, yes! Jungle Hunt, a thrilling safari game, boasts a final obstacle even more chilling-cannibals are about to turn your hero's girlfriend into a scrumptious sweetie stew. To save her, he must cross the forest by swinging from rope to rope while avoiding the gorillas; swim across a river teeming with man-eating crocodiles; climb a steep hill with boulders boucing towards him; and penetrate the cannibal camp. There he must rescue his beloved, strung up above a cauldron of boiling soup.

What makes Jungle Hunt so much fun is that each segment is like a mini-game in itself, with its own rules, survival strategies and skills. For example, when your hero is jumping from one rope to another, timing is everything. Press the red fire button just as the next rope becomes visible at the left side of the screen. Too soon or too late, and he just won't make it. Unfortunately, there is one major drawback: The sexist premise of the game could offend a fair number of potential female buyers.

THE FORTRESS OF NARZOD * * Designer uncredited. (GCE, Vectrexcompatible cartridge. \$39 approx.)

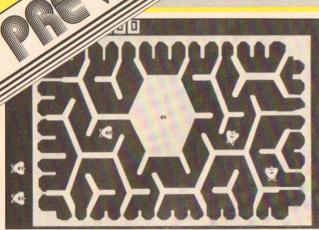
The Fortress of Narzod is a standard shoot-em-up that requires the same basic firing and dodging skills as such earliergeneration hits as Asteroids and Space Invaders. Because the action lacks originality, Fortness tries to capture the player's interest by stressing plot instead. Narzod, an evil wizard, has enslaved all mankind; you, the player, are the last remaining good wizard who can free mankind from enslavement. To win, your Hovercraft must navigate three roadways leading to the Fortress, destroying Narzod's guardians along the way. Keep an eye on your own missile shots, though. They can ricochet off the walls of the roadway right back into your Hovercraft. Though each roadwayand each of the three levels of difficultyadds obstacles, the action varies little. And the sheer number of quardians can make the game guite tedious for all but the most adept and skillful players. (D.T.)

Jedi Arena, Coleco's Smurfs and Fox' M * A * S * H — are all based on scenarios originated in another medium. Apparently, an innovative game idea will only be released if it can somehow be tied to Mr. T. (M.T.)

*Based on a nationwide survey of sales and rentals at presstime. All games are in cartridge format unless otherwise noted. Suggested retail prices are approximate

NIDEOGRIME.

Coming next in cart, cassette, disc



Don't expect sweet dreams in Beezer's drone-filled honeycomb.

ADVENTURES OF THE PINK
PANTHER The Pink Panther continues to prowl after that priceless
pastel gem, pursued by Inspector
Clouseau. (NAP, VCS, Coleco Vision)

AGENT U.S.A. Set in railroad stations across the country, this train teaser is designed to teach logical thinking. (Scholastic, Apple, Atari 400/800)

ALPHA BEAM Using a shuttlecraft, you serve up alphabet soup in the sky to the main spaceship on the planet below. (Atari, VCS)

ANIMACTION An electronic atelier for aspiring Picassos, this cart, used with GCE's Light Pen, lets you create on screen. (GCE, Vectrex)

BATTLEZONE There's terror in the turret as you look out on a desert filled only with enemy tanks, saucers and missiles. (Atari, VCS, Atari 5200)

BEAM RIDER Ride 'em, spacecraft—on beams of light. Guide your ship along grids, destroying bombs. (Activision, VCS)

Trap drones and dethrone the queen in this apiary attack. Your beehive blitz is hindered by baby bees hatched by the queen. (Imagic, Intellivision)

EXECUTE: It's survival of the quickest as your character shoots its way through mazes while rampaging robots ridicule its efforts. With built-in voice synthesis. (Atari, Atari 5200)

BUMP 'N' JUMP A cross between James Bond and Evel Knievel, Jumpin' John bumps off cars 'n' jumps off the road. (Mattel, VCS, Intellivision, Amarius)

CAVERNS AND CREATURESEnhanced memory in this king-of-the-

cave cart lets you break the time barrier. You can take the cart out, leave it for up to 10 years and still start where you left off, according to NAP. (VAP, Coleco Vision)

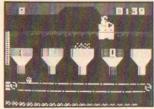
DOMINO MAN The ins and outs and vicious circles of the domino theory. A bee and a bully set off your chain reactions. (CBS, Atari 5200, Intellivision, ColecoVision, Atari 400/800/1200 XL)

DONALD DUCK'S SPEEDBOATThe daring drake takes the tiller to weave his way past oceanic obstacles. Bobbing buoys Huey, Dewie and Louie make trouble. (Atani, VCS)

DRAGON RIDERS OF PERN Forget the mouthwash—you'll need dragon breath to defend against the "dreaded threads" threatening your homeland, Pern. (Epyx, Atari 400/800, Commodore 64)

DUMBO'S FLYING CIRCUS The elephant with the big heart pops balloons by shooting peanuts and carries clowns to safety. (Atari, VCS)

FLAG NET You shouldn't need Friday's help to defeat your opponent and net big points in this computer



Keying in on Rubble City.

Capture the Flag. (Scholastic, Apple, Atari 400/800, TI-99/4A, Commodore VIC-20)

TLAP! It's a dragon's life—and nest that must be protected with fireballs against all-too-real mythical enemies. (Imagic, VCS, Intellivision, Coleco-Vision)

FLINTSTONES REYBOARD
FUN Yabadabadoo you know how to
use your computer keyboard? Fred,
Wilma and Pebbles help you learn.
(Mattel, Intellivision with Computer
Adaptor cartridge)

GUN FIGET Video High Noon. Each cowpoke gets a six-shooter and—for hiding purposes—one cactus and one stagecoach. (Epyx, Atari 400/800)

HERCULES VS. THE TITANS/ CHUCK NORRIS—SUPERKICKS

With only a club and a little smarts, Hercules must defend Olympus against fire-hurling titans. On the flip side of this double-ender cart, Chuck Norris kicks his way to a Buddhist monastery and mystical truths. (Xonox, VCS, Coleco Vision)

WORDS Spell Geroge Jetson/Write boy Elroy.... Wife Jane, daughter Judy, dog Astro also help kids learn to spell and recognize words. (Mattel, Intellivision with Computer Adaptor cartridge)

IOUST It's a bird, it's a plane—no, it's an ostrich—and your knight is riding it, dropping eggs on the opposing knight. (Atari, VCS, Atari 5200)

KICK-MAN Pop a wheelie, not a balloon, as you unicycle back and forth catching balloons on your head. (CBS, VCS)

ERULL Your character must avoid the snare of the Crystal Spider (compliments of Columbia Pictures, not Steuben Glass) and defeat the firehurling beast. (Atani, VCS)

LASER GATES Voyage to the Bottom of the Cave to retrieve treasure. Strategy is the key to outmaneuvering monsters. (*Imagic, VCS*)

MADDEN FOOTBALL Coachturned-TV-sports-commentator John Madden developed this video version of football. (CBS, Atari 5200, Intellivision, Caleco Vision, Atari 400/ 800/1200 XI.)

MASTERS OF THE UNIVERSE
Only the truly macho need apply.
Your character, He-Man, must battle
the villainous Skeletor to reach the
Castle Greyskull. (Mattel, VCS)

MELODY MASTER The screen is alive with the sound (and sight) of music. Use the Light Pen to compose colorful tunes. (GCE, Vectrex)

MISS PIGGY'S WEDDING The depressed Diplasiocloela (Kermit) and the pulchritudinous porker (Piggy) are scheduled to be married—but first Miss Piggy must find Kermit, who is hiding in the church. You can play either character. (Atan, VCS)

MOON PATROL Crater cruisin'. Your moon buggy jumps craters and shoots rocks while avoiding enemy attack. (Atari, VCS, Atari 5200)

MOTOCROSS A crash course in biking—complete with water hazards and hairpin turns. The fastest time wins. (Mattel, Intellivision)

OIL BARONS Oil gluttony is your end, searching and drilling your means. Game board of earth's topography is included. (Epyx, Apple, IBM PC)

OMEGA RACE The spinning Death Ship is your top challenge after your



Crater hopping in Moon Patrol.

fighter ship has passed Droid ships and Vapor mines. (CBS, VCS, Atari 5200, Intellivision, Atari 400/800/

PIGS IN SPACE The galactic grunters—Link, Miss Piggy and Dr. Strangepork—face out-of-this-world eggs, spaghetti and meatballs and Gonzoids. (Atari, VCS)

POPEYE Brutus force theatens Popeye's quest, while Olive Oyl drops hearts to test his love. (Parker Brothers, VCS, Atari 5200, Intellivision, ColecoVision, Atari 400/800/1200XL)

POWER-PLAY ARCADE#1 Three 3Ds per cart. This multiplay cart, with 30K ROM, includes "3-D Ghost Attack," "3-D Havoc" and "3-D Genesis." Each game has six or seven screens. (Amiga, VCS)

QUICK STEP Teeny boppers—a squirrel and a kangaroo, actually—attempt to capture as many blocks as possible on a continuously descending playfield. (Imagic, VCS)

REALSPORTS BASEBALL
Baseball banter without the voice box.
The ump calls balls, strikes, foul balls
and outs—all without a separate

speech synthesizer. (Atari, Atari 5200)

RISK Globe trotting for world conquest. Fortify frontiers and deploy forces in this computer version of the strategy board game. On-screen battles can be played in "real time." (Parker Brothers, Atari 400/800/ 1200XL)

ROAD RUNNER The shifting sand boxes of the desert create roads for the beep-beeping bird. Wile E. Coyote must pick up birdseed before the bird does. (Atari, Atari 5200)

ROBOTRON Swiss Robotron? The last family on earth must survive waves of attacking robots. (Atari, Atari 5200)

SEAWOLF II You are captain of Das video Boot and must try to destroy enemy PT boats, aircraft carriers and destroyers. (Epyx, Atari 400/800)

SIR LANCELOT/ROBIN HOOD

Lance a lot of winged creatures to reach the ice cavern and retrieve the Blue Sword. Or flip for a kiss from Maid Marion if you can get Robin Hood past the Sheriff of Nottingham's henchmen. (Xonox, VCS, Caleco-Vision)

SPACE SHUTTLE You don't have to worry about losing the protective tiles on this shuttle flight. When you complete your mission in space, return to earth. (Activision, VCS)

SPECTAR RAM and ROM enemy Rammers traveling on a geometric grid. Clear the maze while avoiding collisions. (Epyx, Atari 400/800)

SPELLING IN SPACE Space Wharves-a spelling beam. A word flashes on the screen and you must dock lettered spaceships in the correct order to spell the word. (Mattel, Aquarius)

SPORT GOOFY Goofy doggedly attempts athletic feats. In "Running Sky Dive," he climbs a scaffold to jump to a target on the ground, and in "Pogo Pop," he pops balloons with his pogo stick. (Atari, Atari 5200)

SWAT TEAM 2000 A city is under attack, and you must get your SWATers to the flashpoints to defeat aliens. (NAP, Coleco Vision)

TARG Get the ramships in Target, then shoot before they ram you. The fate of a city is at stake. (CBS, VCS)

WORM WHOMPER Jiminy Cricket cracks com and you do care. Your farmer must protect his crop of corn from swarms of invading insects. (Activision, VCS)

XEVIOUS In search of the perfect wave. Xevious forces send down 32 of them. If your Solvalon super spacecraft manages to fend them all off, it has to contend with the Andor Genesis Mother Ship. (Atari, Atari 5200)□

GAME PLANS

RELEASE OF THE JEDI: It's true-Parker Brothers has decided not only on titles-Deathstar Battle and Ewok Adventure-but also on release dates—late summer and mid fall—of its Return of the Jedi-based Meanwhile, Coleco has licensed this summer's other big movie hit, War Games. And CommaVid is defying predictions it's going under by scheduling fall releases: Stick 'Em and Kickapoo.

3DEVELOPMENT: GCE has developed 3-D Imager for use with its Vectrex system. Imager will be released in fall along with four carts, Mine Storm, Narrow Escape, Crazy Coaster and one unnamed at presstime. . . Three seems to be magic number this fall, as Amiga plans to release two more three-in-one game carts. Power-Play Arcade #2 will include games for kids: Scavenger Hunt, Gopher and Eggomania. Power-Play Arcade #3 will include SAC Alert, Depth Charge and Strafe. Carts should retail for \$32 to \$38.

WAFERS ON-LINE: Sierra On-Line's first wafer game for Coleco's Adam will be Frogger. The company expects to follow with Adam versions of Sammy Lightfoot, Apple Cider Spider, Threshold, Jawbreaker, Mr. Cool and Lunar Leeper.

MARIO MANIA: Mario Brothers will be living chez Atari, which obtained exclusive rights from Nintendo for developing, manufacturing and distributing home games based on carpenter characters. VCS versions should be out by Christmas, with computer versions following in early '84 RealSports Baseball, Star Raiders, Battlezone and Berzerk will be first VCS games to use Milton Bradley-developed voice recognition module.

LONG SHOTS AND HORROR HUMOR: Software manufacturer Electronic Arts has signed on Philadelphia 76er Dr. J (Julius Erving) and Boston Celtic Larry Bird to develop basketball game, and cartoonist Gahan Wilson to develop entertainment software package utilizing Wilson's specialty, horror humor. Meanwhile, Bill Budge, designer of Pinball Construction Kit, is working on Kit Kit: game designing for non-programmers. -Abigail Reifsnyder

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...PHONE HOME

Continued from page 34.

8K RAM.) The Games Network games, therefore, can have more complex graphics and effects than do cartridge games. Because it's delivering these games over cable, it is limited, as is PlayCable, to offering about 20 games a month. Also like PlayCable, it's planning on delivering other kinds of entertainment and information over its channel, concentrating particularly on educational programming. The Games Network is being rolled out very slowly and will be available on only 12 cable systems by

the end of the year. Introduction into other areas will wait until '84.

Yet another approach to delivering games over cable comes from NABU, a Canadian company from Ottawa. To receive its service, it'll be more than a matter of a \$20 deposit: the cost will include a hefty \$975 (Canadian) investment in a 64K NABU home computer with keyboard and cable adaptor. The system starts up this September on the Ottawa CableVision system at a fee of \$8 (Canadian) a month, and NABU is currently seeking to get onto several US cable systems by next year. NABU will be offering 15 games at a time—all

licensed from Spectravideo—including backgammon and roulette, as well as arcade-type games.

In its use of cable lines, NABU's teledelivery system is similar to PlayCable and The Games Network, but is generally more akin to the many computer information services that download games and information over the phone lines to personal computers with the use of a modem. While the computer information services aren't primarily (or even secondarily) games delivery systems, most do offer rudimentary games.

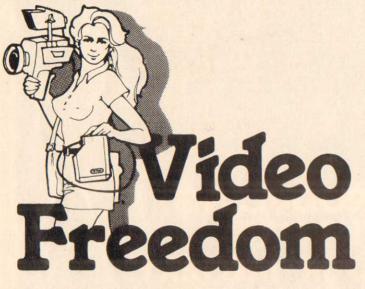
They have several things in common. First of all, people need personal computers connected to modems in order to use them. A modem connects the phone line to the computer and costs between \$100 and \$400—a fairly hefty sum. Second, most charge by the hour for the number of hours one uses their services.

CompuServe, of Ohio, has been downloading programs for over three years and now has over 150 on file and 55,000 users who call up to access them. There's an initial membership cost of over \$20 and then it costs \$5 per hour on weekends and in the evenings and \$22 per hour during business hours to use the services.

The Source, of McLean, VA, and the Delphi System, of Cambridge, MA, are similar to CompuServe in that the user accesses information with any personal computer from the central computer but does not actually receive the computer program. The Source costs \$20.75 per hour from 7:00 a.m. until 6:00 p.m. and \$7.75 all other times. Its 35,000 subscribers can choose from news and other information, as well as 70 to 80 different games, including Dungeons and Dragons and Adventure. But there are no graphics or sound effects in these games—they're mainly written text games.

A slightly different kind of system, the Telephone Software Connection, of Torrance, CA, must be used with an Apple II, Apple II Plus or Apple IIe personal computer. It actually delivers computer game and how-to programs over the phone, which the user keeps. Of the 63 programs for sale, at between \$12 and \$70, eight are games, including World Currency, Wall St. Journey and Chess Connection. Of the eight, about half have graphics and sound effects, but not to the extent that any cartridge does.

Other companies will soon be getting in on the teledelivery act. American Bell plans to soon introduce a videotex terminal, likely to be able to receive games as well as information. (See Newsbreaks, page 16.) CBS is said to have games in its videotex plans. It's all part of the new emphasis on don't-leave-home home video, having all the information and entertainment you need (or want) sent over the wire into your living room.



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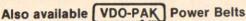
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