A Critical Newsletter for the Serious Gamesman

TOP 10 SELLERS
Game Systems
1. Q*Bert (PB/COL)
2. Joust (AT/5200)
3. Pitfall II (ACTV/2600)
4. Joust (AT/2600)
5. Centipede (AT/COL)
6. River Raid (ACTV/COL)
7. Space Shuttle (ACTV/2600)
8. Popeye (PB/5200)
9. Frenzy (COL/COL)
10. Mario Bros (AT/5200)

TOP 10 SELLERS
Computer Entertainment
1. Flight Simulator II (SubLogic/AP)
2. Zork I (INF/AT)
3. Wizardry (SIR/AP)
4. Sargon II (Hayden/AP)
5. Q*Bert (PB/AT)
6. Robotron (AT/AP)
7. Blue Max (Synapse/AT)
8. Lode Runner (BRO/AT)
9. K Uston Blackjack (SCN/C64)
10. Centipede (AT/C64)

(Top 10's are compiled from a panel of retail outlets, chain stores, and distributors)

IN THIS ISSUE

News of Intellivision, Inc
Top Secret Apple Update
Software for the Home...
Views from Three Prominent
Industry Representatives

COMING NEXT MONTH

VIDEO GAMES / COMPUTER GAMES:
TRADING PLACES

When Video Game Update debuted The Computer Entertainer over a year ago, providing two newsletters in one and doubling the size, the sole purpose was to add coverage for gamers with a home personal computer (many of whom ALSO owned one or more dedicated systems). As we began to explain home computing, and news of the industry, little did we know we were so far ahead of the pack!

Over the months we have been sending out two newsletters in one, it has become apparent that in some months there is a tremendous quantity of Video Game Update news, while other months overflow with home computer information.

Rather than separate the two concepts, we are pleased to announce beginning NEXT ISSUE (APRIL, 1984), Video Game Update with Computer Entertainer will become *The Computer Entertainer with Video Game Update*. As we told you when we debuted Computer Entertainer, we would expand the newsletter carefully and not interrupt game news and reviews. The same applies to the name change. Video Game Units are smaller versions of home computers, and we all love to compute for the fun of it. We will never abandon our dedicated game system players. We will continue to report and review on ADL the companies, big and small, for all the systems — the 2600, 5200, Intellivision, and ColecoVision.

One And The Same

Atari was one of the first dedicated systems with the VCS, and ATARI has released FIVE home computers. Coleco introduced a computer after the enormous success of ColecoVision. Had ADAM been a big success story, it would have been as a computer AND separate video game system, just as ATARI. While we can rate Atari VCS, ColecoVision, Intellivision games, etc., we can more than double your overall perspective by adding Apple, IBM, Commodoze, etc. We will still give YOU the OPTION of choosing to read or NOT read the computer-only sections, or the video-game-only sections.

One year ago we sent questionaires to our subscribers in an attempt to find out which systems got most of your interest. We were stunned by the percentage of home computers out there playing games. From that research, we began The Computer Entertainer section and doubled the size of the newsletter. It was the "average" reader who told us the computer "entertains us."

The Computer Entertainer name change has been in response to several factors: your feedback on articles, many of you interested but confused about YOUR role with a home computer, and the logical conclusion that this is the perfect name for two combined newsletters, both dealing with a computing device, both playing games!

The Bottom Line

We need to progress with you. Hearing from new people every month the words "you pack more information into one page than a magazine with four colors and glossy paper can do in 3 issues" is nice. Hearing the words "you spent too much space dealing with ADAM and not enough on ColecoVision" would better guide us!

Every issue upsets someone—in fact, many people. (Even a bad review can cause cancellation from a manufacturer.) Our intent is to be the independent watchdog, accept no advertising dollars to sway our thinking, and to spend many hours with consumers to find out what YOU want to know. We know the slight change of face will make a better newsletter, and a more open newsletter in the years to come. And for those of you who paid for a subscription the first year, based totally on video games alone, you know we add pages rather than slight one system for another!

New Questionnaire

Based on how valuable our questionnaire was to us last year in shaping our coverage, we are again enclosing one with this issue. It is imperative you list your subscriber code on that questionairre (the last 4 digits above your name on the mailing label.) The reason for this is that we will check off your number when it comes in to us, and ONLY subscribers can answer! (By the way, if your subscription expires this month, and you do not renew right away, we cannot accept your questionnaire.) Please take a few minutes to fill it out and return it no later than April 15th so your voice can be heard. We will publish the results within the next couple of issues.

Happy Gaming!

CRITICALLY SPEAKING..ATARI 2600-COMPATIBLE

OUT OF CONTROL(★★/★★) is a timed maneuvering game in which the player attempts to navigate a triangular space ship on a vertical course as quickly as possible, while moving around or through Space Buoys. At the end of the course, the player's ship must pop ten Space Balloons, one at a time, and then park the space ship safely in a dock. There are fourteen different courses with anywhere from ten to eighty-two Space Buoys. Each of the courses can be taken at fast or slow speed. (The designer has included a chart of the courses showing his best time on each one.) Some Space Buoys are single, with a flashing arrow indicating the side on which they must be passed. Pairs of buoys must be passed by going between the two, while trios can be maneuvered around or passed through. Collision with any buoy penalizes the player: the last set of buoys successfully passed must be repeated.

Rotate and Thrust

Maneuvering the space ship is accomplished with a combination of clockwise and counter-clockwise rotation (pushing the joystick right or left) and thrust (pushing the firing button). When the ship is "out of control" (off the course), it turns red to warn the player to return to the course. After all buoys have been successfully passed, ten Space Balloons appear one at a time, and they must be popped by running into them with the space ship. The final sequence is a docking maneuver that must be completed without collision. At this point, the clock stops and the game is over. The end came not a bit too soon for us, since we hadn't enjoyed the first course. We tried several more courses at slow and fast speeds, but we never learned to like the game, even though our times got progressively better. The control of the space ship is reminiscent of *Asteroids*, and fans of that game may enjoy a new application of an old skill. However, the sparse, simple graphics and inherent frustration of the game are not likely to appeal to most gamers. (Solo Play; Pause) Not Recommended. (MSR $30.00)

CRITICALLY SPEAKING..INTELLIVISION-COMPATIBLE

CONGO BONGO (★★½/★★½) is based on Sega's own coin-op climbing game. Two of the original screens are present, and the three-quarter perspective in both gives a three-dimensional effect. The game begins with the player's hunter climbing up Jungle Mountain, a structure of stairs, bridges and rivers. Congo Bongo, the ape, rolls green coconuts down the mountain to thwart the hunter's progress to the Monkey Plateau. Here the monkeys become troublesome only after the first level, either stopping the hunter's progress or throwing him over the cliff when they catch him. From the Monkey Plateau, the hunter must jump across a river and avoid more coconuts during the final climb to reach Congo Bongo. On the second screen, the hunter must cross the Great River, using a combination of lily pads, islands and fish. The final barrier between the hunter and Congo Bongo is a group of charging rhinos on the far bank. If the hunter can slip past them to reach the sleeping ape and give him the hot foot, the player then returns to the first screen at the next difficulty level.

Better Climbing Games Available

We had mixed emotions about this game. The coin-op original is cute and lots of fun to play, and this adaptation does retain some of the flavor of the arcade game. The designers have attempted to duplicate the three-dimensional look, but it doesn't come across particularly well on this system. Game play is just okay, since the repetition of only two screens becomes boring after a number of plays. Fans of the coin-op game will find too much missing from this version to enjoy it for long. There are much better climbing games available for the Intellivision system.
Not Recommended. (MSR $29.95)

AN OVERSIGHT

When we ran our index of videogame manufacturers in January, we inadvertently left out NEWPORT CONTROLS, the people who have brought us the Prostick line of joysticks for such consoles as Atari, ColecoVision, TI, and others. Their address is 15425 Los Gatos Blvd., Los Gatos. CA 95030.

CRITICALLY SPEAKING..ATARI 5200-COMPATIBLE

PITFALL (★★★½/★★★½) is identical to the version for Atari computers, which was reviewed last month. For those who are not familiar with PITFALL, it's a horizontally scrolling game in which the play controls Pitfall Harry, the jungle adventurer who searches for go and treasures while leaping over tar pits, crocodile-infested swamp quicksand and rolling logs. He must avoid scorpions, fires and snake on his twenty-minute quest for treasure above and below ground While the graphics have been improved over the original versio for the Atari 2600, gameplay is identical in every detail. In this cas a great game on the Atari 2600 is only an average one on the 5200 even with the improved graphics. (Solo Play; Pause)
Not Recommended. (MSR $34.95)

ROBOTRON (★★★/★★★) has come to the 5200 in a ve sion which is virtually identical to the Atari compute program (see review in Computer Update section). Th version also features the dual controls, although th Atari controllers, with the non-centering joystick, ar a drawback. This game works well with any one of th self-centering joysticks on the market. For those wh love the frantic pace of the arcade version, you will enjoy this on for your 5200. (One player; two-player alternating; pause)
Recommended (MSR $39.95)

STATUS OF THE INDUSTRY
The Answer to "Are Games Dead?" Issue

Parker Bros. published a fact sheet at the show which has some interesting statistics. We are passing it along to you as we think there are some pretty interesting points.

A brief overview of information was given by Parker Bros. which was released by the Electronics Industry Association.
★ The sale of video game consoles this past year has added another 7 million units to the video game console base. This compares to sales of 8.2 million units sold in 1982 and 3.8 million consoles sold in 1981.
★ The trade group predicts sales of game cartridges have continued to grow in 1983, rising to 75 million units from 1982's base of 60 million units. These sales totals are up dramatically from the 28 million units sold in 1981.
★ There are only six video game cartridge manufacturers this year end compared with 30 manufacturers last year.
★ Manufacturers dumped between 15 million to 20 million game cartridges into the market place since June. Even taking these close-out specials into consideration, the sale of game cartridges equalled last year's record unit sales.
★ Two distinct pricing trends developed with the low priced close-outs accounting for 27% of total unit sales this past fall while popular titles are still commanding a $30-$40 price. The fact that 73% of total unit sales were on the premium cartridges makes 1984 a particularly interesting year.

Limited Line-Up of Quality

Via this fact sheet, Parker Bros. indicates that, based on the above statistics, they will offer a limited line-up of titles but will stress quality through improved graphics and gameplay. They indicate a continuation of 8K and 16K memory chips in their games, and an ongoing commitment to the best available licenses as well as in-house developments.

Obviously, all software manufacturers who plan to survive in this business will have to have this same basic attitude—and in order to be successful, any company producing software, including Parker Bros. will have to make good on that promise in order to have "hit" product.

EXPLANATION OF RATING SYSTEM:
★★★★ —EXCELLENT
★★★ —GOOD   First set of stars—Quality of Graphics
★★ —FAIR   Second set of stars—Quality of Play Action
★ —POOR
N/A—Not Applicable (i.e. Adventure games are not rated for graphics)

Any game for a given system is compared only to other games for the same system. In other words, all Atari 2600-compatibles are judged separately from ColecoVision-compatibles, etc. The same system is used for computer software, except where noted (i.e. many Atari and C64 software is virtually identical)

INTELLIVISION: A NEW BEGINNING

There has been a great deal written about the recent sale of the
Intellivision division of Mattel and what it means to Intellivision
owners. It is not really a surprise to anyone that Mattel has dropped
out of the electronics business given all the problems they have had
over the years. From poor management to poorly timed product
unveilings (i.e. the Aquarius), Mattel could never quite reach the
forward edge of the business. Obviously, they did quite well during
that period of time when everyone was frantically buying every game
machine they could get their hands on; however, with the ad-
vancements brought about by Coleco and the various home com-
puter companies, they were left in the dust.

It was clear from the recent C.E.S. that they were attempting to
"get back in it" but, as we indicated in our February issue, their pur-
chasing terms for dealers were very unattractive and probably led
to orders which were much lower than anticipated. Meanwhile, we
did note a great deal of activity at their booth and we've gone on
record in several issues indicating there is still a demand for good
Intellivision software.

Mattel VP Buys Division!

Terrence E. Valeski, Mattel Senior Vice President of Marketing
and Sales had done some homework of his own and decided that
indeed there is a demand for good Intellivision software. He put
together a group of investors who made Mattel an offer they couldn't
refuse so the Intellivision software product can live on. Valeski's new
company, to be named Intellivision, Inc., also to be based in the
Los Angeles area, plans to produce several of the new cartridges
introduced at the Show within the next several months. Meanwhile,
Mattel has agreed to perform warranty and non-warranty work for
Intellivision owners and will, for a one-year period, provide software
assembly services to Valeski's company.

Some Details Available

In an effort to be able to answer all the questions from concerned
Intellivision owners, we spoke with Mr. Valeski before going to press
to get the scoop from him. There has been so much written about
Intellivision's demise and other related stories, we wanted to get the
real story! (we thank Mr. Valeski for his time as we know he must
be inundated with phone calls at this point). First, you will note we
have taken Mattel-produced Intellivision cartridges out of our
Availability Update. First, Mr. Valeski indicated it would be the Fall
before the new company would be able to gear up on production
of new games and, secondly, not all games which were introduced
at the recent show will be made. Games which we have been assured
of a later release date in the year include One-Player Baseball, 3-D
Cover Force, and Party Line. Other new titles which we outlined
last month are "up in the air." Some may appear while others will
not. Mr. Valeski did indicate they are in the process of gearing up
production on recent hits such as Burgertime, Mission X, Masters
of the Universe, and Bump N Jump so, if you are having problems
finding those titles, they should be available again soon. Meanwhile,
Mattel is selling off older titles at reduced prices.

Sub-License ColecoVision Titles

Our next question involved the ColecoVision titles we saw at the
show. Although they will not be released under the Intellivision, Inc.
name, Mr. Valeski assured us that they will reach dealer's shelves
later this year under a sub-licensing agreement with another com-
pany, as yet unannounced. He did indicate they would make some
2600-compatible cartridges, but was unable to list actual titles at this
point.

ECS To Continue

Although nothing will be in the stores for awhile, the new com-
pany has plans to not only produce software for the ECS system,
but they are working on finding a company to manufacture both
the ECS hardware and the Intellivision II hardware. By the way,
Mr. Valeski indicated that he feels the strong sports licenses which
Mattel has had over the years (NFL, NHL, NASL, etc) have never
really been exploited and he would like to delve into that area more.
What we don't know at this point is whether he's speaking of pro-
motional ideas, additional games, or ? We'll just have to wait and see!

The bottom line is that Intellivision owners will have to be patient
as the new company gears up. Unless some third party software
companies come through with new titles, it could be the fall before
you can purchase anything new. Obviously, we wish the new com-
pany well because we know, from our phones ringing off the hook,
that there are a lot of dedicated Intellivision owners out there who
want to be able to buy new product!

ONE STEP BEYOND

Not satisfied to "merely" design and release SPACE SHUTTLE,
Activision has taken it one step further and developed a special
science course about space travel which reinforces traditional book
learning with hands-on use of the computer. This pilot project was
recently completed in the San Jose (California) Unified School District
in which, during the two-week long course, sixth, seventh, and eighth
grade students learned to "fly" an actual space shuttle mission on
the computer using Activision's SPACE SHUTTLE. The space shut-
tle curriculum, developed by Activision and an educational consul-
tant, was designed to integrate several academic disciplines. The
students studied the history, vocabulary, technology, and physics
of space flight, as well as the challenges of living in space and possi-
ble careers in the aerospace industry. During the course, students
ate space food, operated a robot arm similar to the one on the shuttle,
and experimented with heat-shield tiles and rocket propulsion
theories.

Highly Successful

Educators in the school district were so pleased with the results
that they plan to expand the program next year to include their sixth-
grade students. Once again, this demonstrates the highly positive
effect that "games" can have. If you are interested in bringing this
program to your school, write to Video Game Update, attn: Space
Shuttle, and we will see to it that your name is passed on to the
correct people at Activision so you can learn more about this
program.

COMPUTER CAMP DIRECTORY

With the major growth of computer camps all over the country,
it is becoming harder and harder to pick the right one, let alone find
out about all that are available! Verbatim Corp, manufacturers of
blank computer diskettes, have just announced a free reference
guide, "Camps 'N Computers—A Directory of Summer Computer
Camp Instruction in the United States," in conjunction with the
American Camping Association. With more than 100 listings, the
directory is divided up into six regions of the country, with the camp
contact, address and telephone number, tuition, length of sessions,
and recreational facilities. Also included are the number and types
of computers, the student/computer ratio, instructor qualifications,
computer programs taught and the number of daily computer hours
available to campers. For a copy of this invaluable guide, send a
check for $1.00 (postage and handling) payable to VERBATIM at:
"Camps 'n Computers," Suite 228, 4966 El Camino Real, Los Altos,
CA 94022.

FIRST COMPUTER SONG WRITING CONTEST

Entech has just announced its first annual Computer Song Writing
contest which will award cash prizes and free studio time to the three
best songs written with a Commodore 64 using EnTech's STUDIO
64. The grand prize is $1000 and recording time at a Hollywood
studio. The winner will be able to help turn his or her composition
into a hit song. The second place winner will win $500 and studio
time, and the third place winner will win studio time. The winners
will be chosen by a panel of music industry professionals and an-
nounced on December 15, 1984. Your song must be submitted on
disk before November 1, 1984 and can be no longer than 5 minutes.
You can get the official rules and entry blanks by writing to: Com-
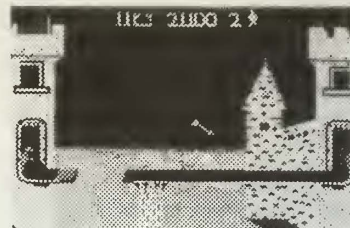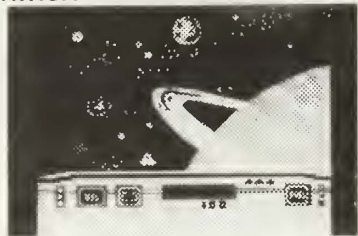puter Song Writing Contest, P.O. Box 881, Sun Valley, CA 91353.
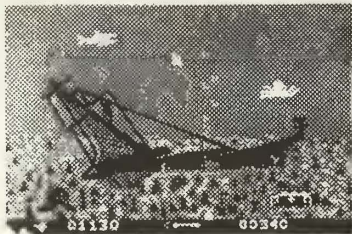
FATHOM

WING WAR

DRAGONFIRE

MOONSWEEPER

DRAGONFIRE (★ ★ ★ ★ / ★ ★ ★ ★) is a magnificent version of a game designed originally for Atari 2600 and Intellivision. It takes place in days of old when knights were bold, when the world was populated with gallant princes, fair damsels and fire-breathing dragons. It's a two-stage contest in which the player controls a young prince who has vowed to recapture the castle and its treasures from dragons. In the first scene, the prince makes a mad dash across a bridge over the moat to get into the castle. This is no easy task, since the angry dragon breathes deadly fireballs from its position inside the castle. The prince must run and jump over or duck under the fireballs, his cape flowing in the breeze. In the higher difficulty levels, there is added danger as a section of the bridge opens and closes, and/or an archer shoots arrows toward the bridge from his position behind a parapet in a castle tower. Once the prince survives the run across the bridge, he enters the second scene inside the castle storeroom, which is guarded by the dragon and its henchman, the magic troll. Here the prince must gather all the pieces of treasure before he can escape and move to the next round. The prince must avoid the dragon's fiery breath, the troll's sword, and even arrows at the highest levels.

Designed with Style and Class

DRAGONFIRE is a highly challenging action game that has been designed with style and class. The game involves running and dodging, jumping and crouching, all placed in a breathtaking setting. The castle and moat scene is gorgeous, full of details such as rippling water around the castle footings, pennant waving in the breeze, and fair damsel waving from the castle tower. Once the player is able to run the gauntlet on the bridge, another stunning scene awaits in the castle storeroom. This setting is convincingly rendered in simulated 3-D with a wealth of detail. One more touch we found delightful was the message delivered when the prince loses his last life: "Thou Art Finished." The game is great fun to play, and it's a real treat for the eyes—what more can the game player ask? (Solo Play; 2-Player Alternating)
Recommended. (MSR $34.95)

MOONSWEEPER (★ ★ ★ ★ / ★ ★ ★ ★) is a multi-screen space game by Imagic based on the version originally designed for the Atari 2600. (Since difficulty levels can be chosen and the game started directly with the controller, any Atari 2600-compatible joystick can be used.) In the first screen, the player chooses one of four different galaxies (difficulty levels) to enter. The player's ship, Moonsweeper, then appears near the bottom of the second screen as various objects hurtle through space, orbiting a planet on the right side of the screen. Meteors, comets, alien vessels and space debris can be blasted or avoided, or the Moonsweeper's forcefield can be engaged if collision is imminent. To land on one of the moons orbiting the planet, Moonsweeper must touch it as it passes. Once on the surface of the moon, the object is to rescue five stranded miners and avoid or shoot at the towers on the surface. The aliens have other ideas, though, as their Orbital Launchers release Surface Destroyers that move randomly and shoot at Moonsweeper. (The player's best move is to destroy the Launcher before it has a chance to release the Destroyer, but that's not always possible. There are times when the

player can even be faced with several Destroyers at one time, making the rescue operation really difficult.) Once the five miners have been rescued, Moonsweeper must fly through a series of accelerator rings to blast off and head for one of the remaining moons in the galaxy. The Moonsweeper's control panel at the bottom of the screen provides indicators of velocity, fuel level, degree of bank, number of reserve ships, score, number of miners rescued, number of remaining moons in the galaxy, and a radar screen showing the location of the miners to be rescued from the lunar surface.

Best Space Game Yet for ColecoVision

Once again, Imagic's designers have proved that they really know how to get the best from the ColecoVision system. Graphics are truly spectacular, and game play is outstanding—definitely the best space game we've seen yet for this system. MOONSWEEPER has everything from bright colors to effective use of three-dimensional graphics on the lunar surfaces, and the game is complex enough to raise it above the level of the usual shoot-em-ups. This one will take every bit of skill you can muster, especially if you enter the more difficult galaxies. (Solo Play   Recommended. (MSR $34.95)

FATHOM (★ ★ ★ ½ / ★ ★ ★ ½) is another game from Imagic that first appeared in a version for the Atari 2600. This contest with mythical overtones requires the player to rescue Neptina, daughter of the sea god Neptune, who has been imprisoned as figurehead on the prow of a sunken ship. Proteus, a member of Neptune's court, has the ability to transform himself from fish to bird and back again in the search for the missing three pieces of Neptune's magical trident. Only when all the pieces have been found does Proteus have the power to release Neptina from her bondage. In the underwater scenes, the fish must touch a number of seahorses equal to the difficulty level to be able to transform itself into a bird. While underwater, the fish must avoid contact with jellyfish, sharks and kelp to avoid losing energy points. Once transformed into a bird, Proteus flies when the player pushes the joystick button to make the bird's wings flap. He can fly left or right to volcanic atolls or straight up to join flocks of screaming blackbirds. In these scenes, the bird must touch clouds to make it possible to become a fish again. Energy points are lost in collisions with blackbirds, pelicans, or fireballs spewing from the volcanoes.

Finding the pieces of the trident is the most important objective, but the bird or fish first must find the compass which is hidden on different screens on the various difficulty levels. Once the compass has been found, it will direct the player to the screen where a trident piece can be found. On that screen, the bird or fish must touch clouds or seahorses until a star appears. When the star is touched, a piece of the trident materializes at the bottom of the screen. When all three pieces have been recovered, Proteus must become a fish and make his way through the beds of seaweed, watching for a roaming shark, finally descending to the shipwreck on the ocean floor. One of the most difficult parts of the game is the actual rescue of Neptina, since a pesky octopus keeps getting in the way. (There is a way to stun the shark and the octopus, but it's tricky.)

Unusual and Original Game

This game is not the same as the original for the Atari 2600. New elements have been added, such as the compass, shark and octopus, and we found this version more challenging than the original. The graphics are lovely, especially the detailed rendering of the shipwreck on the ocean floor. It's an unusual and original game with elements of both action and strategy adding to the enjoyment. Incidentally, this game can be played entirely with any Atari 2600-compatible joystick (no need for keypad). Starting difficulty levels (one to five) can be chosen with a nudge of the joystick at the beginning of the game, and the game is started or reset by hitting the firing button. (Solo Play)
Recommended. (MSR $34.95)

WING WAR (★ ★ ★ ½ / ★ ★ ★ ★) is an inventive, offbeat game which takes place in a world of prehistoric fantasy. The player controls a winged dragon which is made to fly by flapping its wings with the joystick firing button. The dragon starts the game in its den, but its ultimate survival depends on its flying into the outside world to capture crystals of fire, air and water. As the dragon flies within the underground cavern and through the sky, it meets many of its enemies: spiders, bats, bee swarms, griffins, fire demons, hydras and others. Each dragon starts life with the ability to survive ten contacts with these enemies. (The eleventh contact causes the dragon to turn black and flop onto its back.) It also starts with a supply of ten fireballs for defense. Destroying some enemies may cause them to turn into one of the desired crystals, but the crystals can also be found in the outside world near the volcanoes (fire), the lakes (water), or floating through the sky (air). Extra lives can be earned by picking up a winged dragon egg in the outside world and returning it to the dragon's den. Returning a water crystal to the den adds to the dragon's strength, and a fire crystal adds to the creature's supply of fireballs. Bringing water, fire and air crystals to the den results in the creation of a Super Crystal which increases the range of the dragon's fireballs, making it possible for the dragon to enter the secret passageway and do battle with the Rock Demon which guards the precious Diamond Crystal. This one is worth seeking because of the bonus points awarded.

Marvelous Fantasy Game

WING WAR is a marvelous fantasy game with lots of different screens and strangely beautiful scenery. The cavern is eery, and the outside world is full of odd little islands in the sky. Game play is quite challenging. It takes a while to get used to controlling the dragon's flight while mastering the techniques of nabbing and keeping crystals or eggs and doing battle with the dragon's enemies. Because of the large number of varied screens and the random locations of the sparkling crystals, the player is unlikely to become bored with WING WAR. We found the game totally fascinating and unlike anything else we've played. (Solo Play) Recommended. (MSR $34.95)

GUST BUSTER (★ ★ ½ / ★ ★) is a game with an unusual premise and an even more unusual control mechanism that bypasses the joystick entirely. The player is a balloon vendor at an amusement park, riding gusts of wind while held aloft by a fistful of balloons. One controller button inflates a balloon while the other deflates it, and four of the keypad buttons are employed to choose which balloon to inflate or deflate. Wind speed and direction at several altitudes above the park are given by windsocks at the left edge fo the screen. The player's character floats above the amusement park, attempting to avoid such hazards as fireworks, airplanes in an airshow, peanuts blown from an elephant's trunk, and fountains. Periodically, the character must descend to sell balloons to groups of people in the park for points. The character's balloon supply can be replenished by having him land on a popcorn truck. Bonus points are earned for each complete tour of the amusement park.

Credit for Originality

We have to give credit to Sunrise for originality on this one. Even though we weren't enthralled by the game, there's nothing else like it on the market. Graphics are average for the system—okay, but less than outstanding. Game play is definitely unusual. GUST BUSTER is a slow-paced game that action game fans won't like, but its amusement park theme may appeal to young children. This is one you should try before buying, if possible. (Editor's note: kudos to Sunrise Software for printing photographs of actual game screens on the package. This is the kind of honesty we'd like to see more of.) (Solo Play) (MSR $29.95)

GUIDE TO COLECO'S ADAM

Simon and Shuster, a major publishing house, has indicated their intention to publish a 128-page "Guide to Coleco's ADAM," written by Danny Goodman, due out in June.

BEAMRIDER (★ ★ ★ ½ / ★ ★ ★ ½) is a futuristic shooting game with the look of vector graphics. The field of play is a bright grid of light beams that recedes into the distance, giving a three-dimensional feel to the game. The player's ship moves horizontally along the bottom of the screen, seeming to occupy the foreground of the scene, while the enemy starships emerge as blips of light in the far distance near the top of the screen. The player's weapon is a laser lariat which can be released along any of the vertical beams of light in the grid. The first enemy ships ride the horizontal and vertical beams in unpredictable patterns, often releasing deadly red laser bolts which must be avoided. The object, of course, is to destroy the ships, but the player can't shoot too wildly. Sometimes the craft that moves down a beam isn't an enemy at all, but instead it's a yellow energy form which yields an extra ship if the player's ship collides with it. As the player advances from sector to sector, the enemies become more varied in their movements and attack patterns—and there are lots more of them! (Advancement to the next sector occurs after fifteen enemy craft are destroyed. Then an Enemy Command Craft moves slowly across the top of the screen, and the player has but three chances to blow it up with a solar torpedo. Shining, green blockers try to intercept the torpedoes.)

Very Appealing Game

There is a sort of classic simplicity about BEAMRIDER that makes for a very appealing game. The colors are bright and beautiful, the clean look of vector graphics is attractive, and the other-worldly sound effects add an appropriately futuristic touch. Game play is simple, but it had us hooked within a few rounds. We really liked the ability to set the level of starting play at the first, fifth or tenth sector. (The tenth sector should be challenging enough for the most accomplished of outer-space shoot-em-up fans!) If you look hard enough, you can see that this game's inspiration was the basic invasion games, but it is quite an elegant application of the slide-and-shoot type of play action. No mere clone, BEAMRIDER is an original twist on a classic theme. (Solo Play; 2, 3 or 4-player Alternating) Recommended. (MSR $34.95)

MORE INTERACTIVE NEWS

As more and more is written about Interactive and Laser games, we have learned that Atari and N.V. Philips of Holland (manufacturers of laser disk players) have been engaged in serious talks regarding a possible joint effort to produce a new kind of video game for home games and computers. With this news and Coleco's license of DRAGON'S LAIR, can laser for the home be far away?

Interesting Problems

As great as laser sounds for the home, it brings several questions into focus. We had some informal discussions with a couple of highly respected game and computer designers at the Show about the future of laser for the home. Imagine the problem with DRAGON'S LAIR, which uses a multiple-computer system in the arcade version, in a home translation. It would seem that Coleco's promised add-on (see Coleco article elsewhere in this issue) would have to be very complicated (and, therefore, expensive) to accommodate the program. OR, the translation could be something entirely different from the original, which would upset those who love it in the arcade. "Traditional" games are another story. Imagine Activision's SPACE SHUTTLE on laser and then imagine the cost Activision would have to incur to produce a laser disk. First, they would have to film a great deal of footage to work from; return to an editing lab to edit it (just like a motion picture); then cut a master (at a cost of over $5000 for just that); and finally make the finished product. By that time, they probably couldn't sell enough disks to make back their investment! So, one of the big questions that remains to be answered is whether there will be enough product which can be translated to this format to support the cost of a laser disk add-on (in the case of a system such as Coleco is planning), or whether the answer will be to produce occasional product for one of the systems which is already available (such as the Pioneer laser disk player).

Once again, Richard P. Simon of the Investment firm, Goldman Sachs, has written a thoughtful and incisive commentary on the state of the videogame industry. His report, THE VIDEOGAME INDUSTRY: FOURTH CYCLE WINDING DOWN, was published January 30, 1984 and we thank him for allowing us to reprint portions of this report. We know most of our readers would not have the opportunity to see the report and there are many important facts which are covered in it.

Overview

"Last year was disastrous for the videogame industry, as measured by the cumulative losses of industry participants, the number of companies leaving the business, pricing of cartridges at retail, and the stock market performance of the various companies. In 1983, we believe consumer expenditures on home videogame entertainment declined 30%, with approximately a 27% decline in expenditures on cartridges. The first half of 1984 should not show much improvement as a substantial number of liquidated cartridges hit the market in January.

Leaving the Fourth Cycle

"We believe the home videogame market and, to a lesser degree, the home computer market and coin-operated videogame market, are in the last stages of a transition period into a new and healthier cycle, characterized by the interaction of new technology, more creative applications of existing technology, and most importantly, less competition. It will be a smaller but less frantic, fractionalized, and hectic marketplace. We view 1984 as the transition year from the fourth to the fifth cycle (characterized in our February 1983 report on the videogame industry as technologically driven) and suspect that before the latter is reached, hybrid products demonstrating more creativity than technological change will enter both the coin-op and home marketplace. We also anticipate a more orderly market will emerge by mid-1984, reflected in less inventory liquidation, rational sales policies, and substantially fewer competitors, and that the industry will return to profitability this year.

In terms of participants, Atari should dominate the industry, followed by Activision and then Parker Bros. These should be the only major competitors in the software end of the videogame industry, as Coleco will be focusing more on its Adam computer and other competitors have essentially gone out of the business or lowered their profiles substantially. The health of 1984 may not be visible until the end of the year due to seasonality and the fact that the excess inventory overhang should last into the second quarter.

"It is important to note that the home computer market, which could have improved U.S. unit sales this year from the estimated 5 million in 1983, is becoming increasingly important for videogame software manufactuters. At the end of 1983, we believe there were 5-6 million functioning home computers in the field, and by the end of 1984, that number could increase to 8-9 million. Computers would account for almost 35% of total cartridge-consuming (or disk or tape) consoles in the field.

The Home Market

"In our February 1983 report, THE VIDEOGAME/HOME COMPUTER INDUSTRY - THE FOURTH CYCLE, we introduced our concept of the five cycles of the home videogame, coin-op, and computer industries. In summary, we stated that the home videogame sector, the first cycle began in 1975 and ran through 1977. It was born with the introduction of the first dedicated games "Pong" (Atari) and "Telstar" (Coleco) in 1975. These games were crude, repetitious, and as proven by the less-than-three-year cycle, a fad. The second cycle ran through 1979 and laid the groundwork for the development of the industry as it exists today. In 1977, Atari introduced the first programmable videogame (2600). During the second cycle, Odysset was the only major competitor in the systems area, and no other company offered Atari-compatible cartridges. The third cycle began in 1980 and was characterized by explosive growth in a supply-short environment and minimal competition. During the third cycle, Intellivision and Astrocade joined Odyssey and Atari. During that timeframe, cartridge volume leaped to 39 million units from 1 million.

"The fourth cycle began in 1982 and was characterized by intensified competition, overwhelming supply of cartridges, and the increased competitive thrust of the home computer, as well as slowing but still rapid growth in the demand for videogame entertainment. In the latter part of 1982 and all of 1983, hardware manufacturers were directionless and appeared to try to offer products that would cover every market niche—add ons, converters, and keyboards were announced, most of them never reaching (yet confusing) the marketplace. At the same time, many new companies entered the videogame software area and announced a very aggressive cartridge lineup. Unfortunately, manufacturers produced these cartridges without testing the validity of the demand they had expected.

"Last year was the crescendo of the fourth cycle, as the industry paid the penalty for the substantial overproduction in 1982. In our February 1983 report we estimated manufacturers shipped approximately 93 million cartridges worldwide, about 80 million in the U.S. Of the 80 million, we believed that about 16 million were left in domestic retail inventories or at the distributor level. Furthermore, there was substantial number, perhaps 20 million, cartridges left in manufacturers' inventories, which were not included in their shipment levels. In re-examining 1982 yearend inventories, we believe our assessment of the industry overhang of cartridges was substantially understated. We now suspect that were may have been as many as 20-25 million units left in the domestic retail pipeline, and perhaps almost an equal amount at the manufacturers level. This resulted in substantial returns to manufacturers, then a continued flow of liquidated product into the marketplace in 1983, which filled retailers' shelves. The inventory overhang at the end of 1982 may have equaled over 55% of total estimated 1983 retail sales of cartridges. Beginning at mid-1983, most of it was sold at drastically reduced prices and detracted from underlying demand and the relative appeal of the hit cartridge. There was no Pac-Man, Donkey Kong, or Frogger mania in 1983.

"Of the estimated 80 million cartridges purchased by consumers in 1983, we estimate that 50 million were not top-tier cartridges, and perhaps a third of the total purchased were distress sales (less than $8.00 per title). (Imagic, which shipped approximately 6 million cartridges in 1983, acknowledged that it liquidated 3 million cartridges in December.) Atari, Imagic, and Mattel were the major dumpers.

"After the June 1982 C.E.S., we presented a table of competitors in the videogame industry who indicated that they expected to be active participants in the cartridge end of the business. Of the 25 companies that showed or announced a videogame product at the show, 9 had their own consoles, 18 offered or intended to offer Atari-compatible cartridges, and 8 offered or promised to offer Intellivision-compatible cartridges. Based on the announcements, we saw a potential for 150 Atari-compatible cartridge titles and roughly 56 Intellivision titles. This inundation of product set the stage for the shakeout.

"We had assumed that these manufacturers would produce against firm orders, or at least accurately assess the industry's potential demand and not produce as they indicated they would. However, they produced an even greater number, and the resulting flood of titles occured. In 1983, we believe that at any given time, there were more than 300 titles available to the retailer.

"Based on our conversations with the various manufacturers, we believe that the liquidation phase could continue for three to six more months, and there has been considerable dumping in January. For most purposes, Imagic has gone from the scene. U.S. Games, Apollo, Telesys, and others went out of business in 1983. Atari still has excess inventories, as does Parker Bros. In our opinion, Coleco (which also has excess inventories) will be keeping an extremely low profile in the Atari-compatible cartridge market and will be devoting virtually all its efforts to marketing and producing its Adam computer.

"A key issue for the health of the industry in 1984 is the fact that there are clearly fewer competitors. The companies we believe have staying power are Atari, Activision, and Parker Bros. These companies will have a smaller, yet substantially less disruptive market in 1984, due to the winding down of cartridge liquidation and reduction of competitors. We believe Atari will continue to dominate the industry and could, under normal circumstances, capture at least 50% market share, or 25 of the 50 million nonliquidated titles. Following Atari, we believe Activision is most likely to capture the next largest market share, and after that Parker Bros. We suspect Coleco will be a minor force, as previously noted, and other manufacturers (if any) will capture a very small percent of the healthy cartridge component of this business.

The Fifth Cycle

"The current declining interest in videogame play is not necessarily an indication that the industry is dying a slow death; technology and creativity could rejuvenate the industry. We expect a fifth cycle—characterized by a new generation of technology replacing prior products. However, the fifth cycle will probably not begin to materialize until 1985, although hybrid products bridging the fifth and fourth cycles could be seen in 1984 in both the home and coin-op market. We believe the market is approaching the stability to refocus on product engineering. The technological breakthrough will have to come in hardware. Until that happens, creativity is the only avenue for software improvement. We define these hybrid products as more innovative than technological. Videogame entertainment (excluding computer-related videogame cartridges) generated almost $2 billion in retail sales last year, plus an additional estimated $4 billion in the coin-op market. A market of this size, despite its contraction, suggests substantial underlying interest by the consumer.

Electronic Delivery

"Several companies have attempted to deliver video software via electronic systems at retail locations. Several companies trying to enter this business have met with tremendous resistance from the major software suppliers—notably, Atari, Parker Bros., and Activision. Without the major companies, we feel these systems will meet with mediocre success, at best. However, they, as well as Coleco, are working on home delivery techniques for videogame software. Although these programs are in the embryonic state and not much detail is available, it is apparent that major software suppliers want to control the availability of product going directly into the home and view direct home delivery as complementary to traditional retail purchasing of cartridges. In fact, home delivery may be a very good way for the consumer to test a particular videogame on a pay-per-play basis prior to committing to a $29.00 purchase. Furthermore, it gives a new marketing tool to the software suppliers (offsets dependence on coin-op premarketed hits). At this time, it is too early to judge the technological limitations and overall feasibility of this approach, but we suspect that within the next 12 months, test markets will be springing up. It should be noted that systems in place to date (most notably The Play Cable joint venture between Mattel and General Instrument) have failed.

Laser Technology

"The current thrust (coin-op) in terms of new technology is laser disc. Unfortunately, the appeal of discs is not directly transferable to the home market as the superior graphics are not available due to totally different technologies. In our judgement, they will probably not be available until 1985, at the earliest, and at that time, the cost may still be burdensome for the mass market. The coin-op market could improve without the aid of laser disc technology, via technologies that are immediately transferable to the home. And creativity as in the home market might be the driving force behind improved demand for coin-op.

The Home Computer

"The first cycle of the home computer industry ran from 1975 to 1977 and was dominated by the hobbyist market. The continuing, second cycle is defined as the sophisticated work-at-home market. The third cycle, the consumer market, began in 1979 and expanded into the fourth in 1981; it can be characterized as the beginning of the mass market.

"Many followers of the home computer industry expect substantial and rapid growth through the balance of the 1980's. We are, however, concerned because we have not found a need for the home computer and, more importantly, unit sales of computers were driven by reduced prices, with the majority of units falling below $200. We believe this impetus is largely behind the industry, and

future sales will have to be generated by factors other than mass market prices and "RAM power." We continue to believe that the primary application for home computers is videogame play and that from a game software standpoint, there is not much difference between the two markets. The other driving force is education. When measuring the size and potential of the market for videogame software, one should not be confined to videogame consoles. The home computer console owner is also very interested in game play. In fact, in 1983, game software was the most popular category for home computers by a substantial margin.

"As a result of the more rapid growth of unit sales for home computers than videogame players, all major manufacturers are offering their hit titles to all the major home computer systems, including C64, VIC 20, Apple, IBM, Atari, and TI (and perhaps eventually Adam). Thus, videogame software will benefit from the ever-increasing presence of the home computer although many home computers will be replacing videogame consoles.

Competition

"Unlike videogames, there are many more competitors in the computer software area. (A publisher of software product directories recently indicated that there are 6000 organizations calling themselves software publishers, and fewer than 100 have more than 25 employees.) Nonetheless, we do not believe this fragmentation will result in excess inventories as the majority of independent software manufacturers do not have the financial strength to market or manufacture volumes sufficient to disrupt the marketplace. The major problem is the hardware mix. As manufacturers are "forced" to produce software in up to six formats, this drastically reduces production economies of scale and increases design costs. Software manufacturers risk producing for systems that have very short life cycles. The software industry needs better hardware with a reasonable functional life."

Reprinted from "The Videogame Industry: Fourth Cycle Winding Down," with the permission of Richard P. Simon, Goldman Sachs

Our Overview

There is no question, in our opinion, that Mr. Simon has hit some very important points regarding the game (and computer) industry today. In fact, the Parker Bros. report (elsewhere in this issue) indicates many of the same facts. We are also convinced that games are here to stay as an important part of home entertainment. We have many avid readers who simply are not interested in computers and see no use for them in their lives. Again, this parallels segments of Mr. Simon's research. You'll be undoubtedly reading more and more about the "death" of gaming—don't believe it. Forecasts have had to be scaled down after unrealistically high expectations, old product must be moved out of the pipeline, and computer software must still go through its shakeout, especially in the "entertainment/educational" area, but play on...you've got A LOT of company!

SOME VECTREX GAMES AVAILABLE

Thanks to several readers who have been combing stores all over the U.S., we are finding that, in addition to the older Vectrex games which can be found at discount, it appears that some stores such as Toys R Us have purchased everything laying around the Vectrex warehouses, including some new and previously unreleased titles!! It will obviously be a "hit or miss" opportunity for you; however, if you want some newer games, get out there QUICK and start looking. The 3-D Imager has shown up, along with three 3-D games including 3-D Roller Coaster and 3-D Mine Storm. We've also been told there are additional cartridges available for the previously released Light Pen.

NINTENDO CONSIDERING GAME CONSOLE?

We have learned that Nintendo, the Japan-based coin-op game manufacturer, is giving serious thought to the introduction of a new game console which is already available in Japan. This under-$100 unit is understood to feature very good graphics and gameplay due to 24K cartridges (a library of approximately 15 are currently available in Japan). While the introduction of yet another dedicated game console (although they are supposedly working on a keyboard attachment) seems like a very risky venture given today's marketplace, we are told they may introduce the machine at summer C.E.S. As always, as we learn more, we will pass it on to you.

MOVED??? Don't forget to let us know so you don't miss one important issue. For the fastest change, either send us your mailing label, or copy the numbers on the top of it and we'll do the rest

A Fight to The Finish

Last month we had a lot to say about available hardware as mentioned at C.E.S. The announcement from Commodore about the 264 and 364 computer was greeted by almost every insider as being one of the jokes of the Winter Conference. Had they been announced as COMPATIBLE and/or with EXPANDED MEMORY, it would have been a new ball game. The upside of this story is that seemingly Commodore has realized their error and POSTPONED the release of these computers "indefinitely." (Shouldn't they have realized *before* the show that a negative reaction was inevitable??)

Massive lay-offs at Coleco headquarters and our inside reports of internal panic because the Data Pack (among other technical problems) are causing Coleco extreme headaches. (The most circulated rumor this month has Coleco quietly discontinuing the Adam in favor of a new computer altogether.)

On the other side of marketing your product you have Apple. While it's very hard for us to justify you running out and coughing up between $2000 and $3000 for all the goodies on a Macintosh, we give Apple a great deal of credit. Macintosh was introduced WITH third-party support. Sony was contracted for the 3.5-inch memory drive. Roughly 100 software and hardware vendors are now working on programs to run with Macintosh. Anticipation is 500 software programs by end of the year. This computer is a nifty everything-Lisa-was-supposed-to-be (and then some.) Apple has built a new factory in Northern California which, when running full steam, will churn one Mac every 27 seconds. The Macintosh is hard to pur-

Apple Computer's Macintosh is shown here with mouse and detachable keyboard. Peripheral devices and accessories include a numeric keypad, an external disk drive, the Imagewriter printer, a modem, and the Macintosh carrying case.

chase right now; however, there is one huge difference — if you walk into a store with a Macintosh, you can not only receive a complete demonstration, but you can get lots of "hands-on" time yourself (critical in a computer purchase). Try and find a store which will let you work with an Adam before purchase! Why are stores so afraid to take Adam out of the box and allow "hands-on?"

Apple is also addressing the 25 or so "knowledge workers" in America whose jobs would be made a whole lot easier with a computer. Apple research has shown the majority of those who could benefit from a personal computer are unable and/or UNWILLING to spend 20 to 40 hours learning how to use one. By contrast, Macintosh takes a few hours to learn, period. Apple Chairman of the Board Steve Jobs says, "Macintosh easily fits on a desk, both in terms of its style of operation and its physical design," since the the computer is designed to take up the amount of space taken by a single sheet of typing paper. The use of the "mouse," that handy little critter that plugs into the Mac and rolls around a desk top, seems to be the "gotcha," or "hook. Or, another hook would be Apple's Credit Card.

Again, a whole 'nother breed of animal in terms of marketing. Now the race between IBM and APPLE will be a fun race to follow. Do you buy a computer by reputation of the product, or reputation of the company? IBM has the $2500 PC, the $5000 XT, the $700 "toy" (the junior) and their portable announced toward the end of last month. It's about the same price as the PC, with as many features... except it's portable.

Apple Scoop!

One of the major benefits of owning an Apple is their policy of NOT announcing something until it is ready to ship. Even though, in most cases, you can only pre-order the Macintosh due to limited supply, the company is gearing up a new plant to manufacture nothing but the Mac. As a "game" system, the Apple II series is somewhat awkward (especially if you're a gamer who must have a lot of music,) but the //e is the best Apple "gamer" to date and insiders are talking about a couple of new systems which will make gaming even better. One is the Apple //c, which is the portable we leaked a story about in December as the "Elf." More has come to light about the //c, beginning with 128K of RAM built-in, as well as built-in disk drive with a connector for a second drive. There will also be a connector for a printer and a modem. Unfortunately the //c will not be expandable beyond the 128K, nor will it have the usual Apple slots for peripherals. At a cost of "under $1000," the //c will be compatible with all //e software (which is mostly compatible with the Apple II +). The keyboard on the //c is reportedly larger than the //e.

Also, inside Apple sources inform us of the development of the //x! Supposedly, this computer will be much more powerful than the IBM PC, which is a 16-bit computer. One might assume this one will have TWO microprocessors. It's a //e look-alike selling in the same ballpark as the //e. The BEST news is that the //x would be at least twice as fast. Apple computers are pretty fast anyway, especially compared to Atari and the slowest of the more popular personal computers, the Commodore 64.

If you are ready for this one, the //x will include orer 500K RAM on the one microprocessor, and a memory bus which will support 16 Million kilobytes (!!!) of user memory and a high resolution graphics mode. Reportedly, there will be an optional 68000 card giving the //x more power than Lisa 2. And, not to be outdone by anyone else, the //e will have an upgrade system for the //x for $600 to $700. The use of more than one microprocessor will allow the user the ability to run two programs at the same time.

Again, the //c and the //x are "reportedly" in development and Apple has not commented, and most likely WON'T comment until each is available.

In the Apple vs. IBM race, it is going to be wild, as we hear more and more about what Apple is coming out with, and IBM just producing keyboards because of their name value. Granted, the PC and XT are superior for memory and the processor (in fact, the processor statement can be argued), but the pennant race is on. To avoid line extension, one would draw the conclusion that the Apple 2 series can go on and on, with a Macintosh line and a Lisa line. Since there seems to be little support from third party developers, Apple III may be the one to bite the dust. Hopefully, space permitting, we can get down to 8-bit/16-bit/24-bit, bussing, 8080/8086 and on and on in our next issue. We are certainly not slighting other systems this issue, it's simply a matter of space and what's happening. We still give our hearty "BRAVO" to the entire Atari line of personal conputers and we will keep you posted on anything new for the discontinued TI-99/4A.

The Jeffries Report

Lest it go unnoticed, "a personal view of computing" called *THE JEFFRIES REPORT* out of Santa Barbara, California is a very interesting, 8-page newsletter, sent via First Class Mail once a month for only $30 per year. *The Jeffries Report* seems to have many "inside" sources as well as a balanced viewpoint of all major computer systems. While staying away from the review angle, it deals straightforwardly with hardware and the marketing aspect of the computer industry. Editor Ron Jeffries has his own unique style of writing, and his insights are very interesting. He has an uncanny knack of tapping many sources— personal and print—to formulate his own distinctive opinions. If you can, try to grab a copy of January 1983, post-C.E.S. issue. *The Jeffries Report*, Box 6838, Santa Barbara, CA 93160. (Phone 805-967-7167.) Cash, checks, money orders, Visa and Mastercard accepted.

GATEWAY TO APSHAI (★ ★ ★½ / ★ ★ ★½) is a strategy and action cartridge game based on the highly popular *Epyx* games on diskette, *Temple of Apshai* and *Upper Reaches of Apshai*. The player takes the role of heir to Apshai's greatest warrior in a quest to find and reclaim a safe passageway through an underground labyrinth to the fabled, lost Temple of Apshai. There is an amazing amount of depth for a cartridge game: the labyrinth comprises eight levels of sixteen dungeons each, with each dungeon containing approximately sixty chambers. Most players will spend many, many hours exploring well over seven thousand different rooms!

Starting the game on level one, the player is given the choice of any of the sixteen dungeons to explore. Initially, only the entrance room of the chosen dungeon is visible. All other chambers are covered until entered. For a little under seven minutes, the object is to collect as many treasures as possible on that level, while avoiding perils and fighting all kinds of nasty creatures. (At the end of the time limit, the player is automatically transported to the next, deeper level.) The player starts the game equipped with keys, a "search spell," a "locate trap spell," a short sword and leather armor. The key is used to open closed, visible doors in the dungeon walls, and to open secret doors that are revealed by using the search spell. The locate trap spell reveals invisible traps that can detract from the player's "health" score if the player runs into the trap. (Health points are also deducted for wounds inflicted by creatures in the dungeons. When the player's health score falls to zero, a life is lost. Healing salves and potions will restore health when points are low.)

Superb Introduction to Adventure Gaming

Just as there are many chambers to explore in this game, there are numerous things to discover within the labyrinth: treasure, all kinds of creepy creatures, magic spells and potions, secret doors, traps, and various weapons. Creatures can be avoided, or they can be fought with long or short swords, bow and arrows, or other weapons, and they run the gamut from bats, vampires and spiders to snakes, ghouls and wizards. The more precious the treasure the creatures are guarding, the more challenging they are as opponents to the player. There is a wealth of discovery in this game, and it's a stimulating combination of strategic thinking and exciting action. Graphics are quite good, too. If you've never tried adventure gaming, GATEWAY TO APSHAI would be a superb introduction, preparing you for the more challenging rigors of games such as *Temple of Apshai*. (Solo Play; Joystick) (Cartridge) Recommended. (MSR $40.00)

DEFENDER (★ ★ ★½ / ★ ★ ★ ★) is essentially the same as the version for the T.I. 99/4A reviewed elsewhere in this issue. Graphics are extremely close to the arcade version, and game play is terrific. If you're a fan of the coin-op game, still one of the best scrolling shoot-outs around, you'll definitely want this one for your collection. (Solo Play; 2-Player Alternating; Pause; Joystick and Keyboard)
Recommended. (MSR $44.95)

ROBOTRON: 2084 (★ ★ ★ / ★ ★ ★) is quite similar to the version of ROBOTRON for Atari computers, reviewed elsewhere in this issue. The adaptation for the Commodore 64 is a bit confusing at first, because the instruction booklet doesn't make the control options entirely clear. The single-player game is controlled with the joystick in control port 1 (not 2, as stated in the booklet), *if* you are using only one joystick. A dual-joystick control option is available, which is not really explained in the instructions. Fortunately, there is a pre-game screen that does explain these options. Pay attention to that and ignore the instructions. Using two joysticks, one for directing your character and one for firing, is the best method if you can develop a means of holding the darned things in one place! This problem is solved in the Atari versions for their own computers and 5200 game system with a joystick holder that comes with the game. If you want to play the Commodore 64 version with two controllers, you'll just have to be inventive. The single joystick also works quite well, but it doesn't have quite the feel of the coin-op original. (Solo Play; 2-Player Alternating; Pause; 1 or 2 Joysticks) (Cartridge) (MSR $44.95)

PAC-MAN (★ ★ ★ ★ / ★ ★ ★ ★) is a superb Atarisoft adaptation of the familiar Bally-Midway coin-op game. This is the classic maze game in all its glory, complete with original theme music, bright yellow Pac-Man, four ghosts, energy pills to make the ghosts vulnerable, and fruit prizes. Graphics are a near-duplicate of the original, and the game is just as much fun as ever. Whether you're new to this game or an accomplished pro, you'll find a difficulty level to suit you. Especially if you like maze games, this one is a must for your collection. (Solo Play; 2-Player Alternating; Pause) (Cartridge) Recommended. (MSR $44.95)

CENTIPEDE (★ ★ ★ ★ / ★ ★ ★ ★) is another excellent Atarisoft translation of a familiar arcade hit. The player controls a bug blaster to battle the dreaded Centipede snaking through the mushrooms of the enchanted forest. The bug blaster can be maneuvered throughout the lower third of the screen, except that it cannot move through mushrooms. Pests other than the Centipede include the bouncing Spider, the Flea that plummets straight down, and the Scorpion that poisons mushrooms. Although the game was designed for trackball in the arcades, it works quite well with a joystick. If you do have a trackball, though, it will make the game that much better because it then plays just like the coin-op original. Graphics are beautifully bright and colorful, with well-defined characters and mushrooms. This is an exciting game with all the sights, sounds and appeal of the arcade game—a winner! (Solo Play; 2-Player Alternating; Pause) (Cartridge)
Recommended. (MSR $44.95)

BUGABOO (★ ★ ★ / ★ ★ ★) is an import from Spain by way of Great Britain. The designers are a Spanish team, Paco and Paco, and the program comes from **Quicksilva Inc.,** a British software company that has now opened offices in San Antonio, Texas. The scenario involves Bugaboo (also known as Boogaboo), the pet flea belonging to a group of space explorers on an alien planet. The game opens with a brief cartoon sequence in outer space, followed by the introduction of Bugaboo as he hops about in an alien garden until misfortune befalls him: he jumps into a deep, black chasm. Once Bugaboo hits bottom, the player's task is to help him hop his way back to the top of the cave as quickly as possible, using the plaforms carved into the sides of the various rock towers in the cavern. Unlike many other jumping games, the player has complete control over the length of Bugaboo's leaps. First, the player moves the joystick in the direction of the desired move. The length of each leap is determined by the length of time the joystick (or keyboard button) is held in position, gauged by a series of moving dots at the bottom of the screen. Next, when the dots have moved far enough, the joystick is released and Bugaboo makes the programmed jump. This control system takes a bit of experimentation to become accustomed to, but it works quite well with practice. The joystick firing button is used only when the player wants to make the screen scroll in any of four directions to explore the cave and look for dangers.

Nasty Creatures in the Cave

As one might expect on a strange planet, there are some nasty creatures to be found in the cave, including a Pterodactyl described as a flea-eating dragon and some plants that devour poor Bugaboo if he happens to land on their blossoms. The niches in the rocks harbor winking eyes, most of which turn out to be quite harmless. Unlike more typical video games, BUGABOO does not offer the player multiple "lives" or point scoring. Once Bugaboo is eaten, the game is over, and the only score registered is the amount of time used. Graphics are very colorful and nicely detailed, particularly in the variety of flora and fauna to be found in the cave. The game looks fairly simple, but it turns out to be difficult to get Bugaboo to the top of the cave. BUGABOO is a little different from the usual hopping and climbing games, but it lacks the depth and diversity required of a game that players will want to play repeatedly over a long period of time. It's enjoyable in the short run but not likely to be an enduring favorite. This is one you'll want to try before buying, if possible. (Solo Play; Joystick or Keyboard Control) (Disk; also available for VIC-20)

CRITICALLY SPEAKING..COMMODORE 64

DIG DUG (★ ★ ★ ½ / ★ ★ ★ ½) is yet another terrific entry in the Atarisoft lineup for owners of the Commodore 64 computer. It is, of course, based on the Atari coin-op game (licensed from Namco) that has been popular enough in the arcades to inspire the usual crowd of imitators. The player controls Dig Dug, the little guy in the white space suit who burrows underground tunnels and creates his own mazes. In this subterranean world, there are tunnels inhabited by Pooka, the monster, and Fygar, the fire-breathing dragon, and contact with either creature will knock Dig Dug out. Dig Dug has two unique methods for dealing with these characters. He can crush them by tunneling strategically under a boulder, causing the rock to fall and annihilate one or more enemies, or he can literally blow one up by extending his little blue hose into it and hitting the joystick button until the monster expands and explodes. Dig Dug must be quick, because Pookas and Fygars will turn into ghosts if he doesn't reach them soon enough. The spectral versions of the monsters are especially dangerous because they are not restricted to the tunnels as they move directly through the ground. They return to their former selves only when they enter a tunnel. The ghosts are also dangerous because they cannot be blown up. The only way to destroy the spirits is to bonk them with a boulder. After two rocks have fallen in any round, a bonus vegetable or fruit appears in the center of the screen for ten seconds. If Dig Dug can reach it, the player earns extra points.

All the Fun of the Original

DIG DUG is a delightfully silly game in the arcade version, and this adaptation retains all the fun of the original. The graphics are beautifully detailed with splashy colors and cute characters. The introductory music as Dig Dug enters the screen is not present in this version, but the typical music is used throughout actual playing sequences. There are other minor differences from the original, too, including a straightforward message at the bottom of the screen to keep the player informed of the level being played. This is in contrast with the pictorial representation of flowers at the top of the screen to indicate playing level, which was part of the original DIG DUG and the adaptations for Atari computers and the Atari 5200 game system. The player has the ability to start at any of ten difficulty levels, a feature that makes the game well suited to players of differing skill levels. The game itself is thoroughly addictive, offering a nice change of pace from more typical maze games. DIG DUG would definitely be a worthwhile addition to any Commodore 64 owner's game library. (Solo Play; 2-Player Alternating; Pause; Joystick) (Cartridge) Recommended. (MSR $44.95)

BASIC BUILDING BLOCKS by **MECA** is reviewed under Apple.

KEN USTON'S PROFESSIONAL BLACJACK is reviewed under Atari computers.

CRISIS MOUNTAIN (★ ★ ★ / ★ ★ ½) is an adaptation of the CREATIVE SOFTWARE game for the Atari computers. The game takes place within the caverns of a supposedly extinct volcano in the Pacific Northwest. A terrorist organization has been hiding there, and they have left behind their supplies, including a couple of armed bombs that must be defused to keep the entire West Coast from being blown up. The player controls the volunteer who runs and crawls through the cavern, collecting loot and supplies and deactivating bombs while avoiding rocks, pits of molten lava, and Bertrum, the crazed, radioactive bat. The contest is timed by the countdown of the bomb clocks, so speed is necessary. Bombs are deactivated by digging at the top of them, either with the volunteer's hands, or by the faster method of digging with a shovel. Any time left on the bomb clock when it is rendered safe is added to the player's bonus time. (A Bonus Run is awarded after both bombs on the screen are deactivated. This is followed by the next level of play.)

Play Action Is Average

Unfortunately, the volunteer's strength is gradually sapped each time he is hit by one of the bouncing, white rocks in the cavern, and they can be quite difficult to avoid. (Being hit-90-by a rock also causes him to lose the shovel, if he is carrying it.) When the volunteer's strength points dwindle from three to zero, the volunteer sprouts angelic wings and floats upward off the screen—a cute touch. The game offers two basic screens, different cavern scenes, each

filled with narrow passages, ramps and lava pits. The location of the bombs, supplies and loot changes each time the game is played. Graphics are colorful in the two scenes, but play action is only average. The game can be played for time, ignoring the loot and going straight to deactivation of the bombs, or it can be played to accumulate lots of points for finding supplies and loot. Either way, CRISIS MOUNTAIN is a game the player is likely to play several times and then put away in favor of a climbing game with more variety. (Solo Play; Pause; Joystick) (Cartridge)
Not Recommended. (MSR $34.95)

CRITICALLY SPEAKING..TI 99/4A

DEFENDER (★ ★ ★ ½ / ★ ★ ★ ★) is from **Atarisoft,** and it's an excellent adaptation of the classic arcade scrolling shoot-out from Williams Electronics. Graphics are very close to the original coin-op game, and game play is satisfyingly challenging. The player controls a spaceship patrolling a planet under alien attack. The mission is to protect the humanoids on the planet's surface, because they will turn into nasty mutants if kidnapped by the alien Landers. (Bonus points are earned for rescuing humanoids from the Landers and returning them to the surface of the planet.) Besides the Landers, the enemy spacecraft include Bombers that lay mines, Baiters, and Pods that release Swarmers. (The location of all these enemies both on and off the screen can be monitored on the radar scanner.) In addition to saving humanoids, the player's ship must destroy as many enemy spacecraft as possible, either with the ship's laser fire or the judicious use of smart bombs. When the action gets a little too hectic, the player can move the ship into hyperspace. All the excitement of the original is present in this excellent translation—a must for T.I. 99/4A owners. (Solo Play; 2-Player Alternating; Pause; Joystick plus Keyboard) (Cartridge)

Recommended. (MSR $44.95)

DIG DUG (★ ★ ★ ★ / ★ ★ ★ ½) is essentially the same game as the version for the Commodore 64, reviewed elsewhere in this issue. Graphics are superb, with very detailed characters and beautiful colors. The game plays very much like the coin-op original, particularly if you've made the switch to a better joystick than the one that comes with the computer. This one is a must for owners of the T.I. 99/4A. (Solo Play; 2-Player Alternating; Pause) (Cartridge)
Recommended. (MSR $44.95)

Computer EdGame Challenge Seeks Entries

Verbatim, a well-known manufacturer of blank data diskettes, is sponsoring a contest for programmers of educational games with the cooperation Scholastic, Inc. Though the contest is open to anyone, they especially encourage the participation of school groups. Entries must be submitted by April 30, 1984 on 5-1/4" diskettes or cassettes and may be programmed on any of the popular home computers, such as Apple, Atari, Commodore, IBM, Texas Instruments, TRS-80 and others. Elementary and Secondary School Divisions are each subdivided into six categories: mathematics, language arts, sciences, health and nutrition, geography and social studies, and miscellaneous. Note: one of the most important rules of the Computer EdGame Challenge is that all games must be *non-violent*. Everyone who enters will receive a merit certificate, and every school group that submits an entry will also receive a Verbatim Data-Life Twin-Pack (two blank diskettes). The top winner in each of the twelve categories will receive an Atari 800XL computer with Atari 1050 Disk Drive and an Amdek Color 1+ Monitor. Registration forms and programming guidelines can be obtained by writing to Computer EdGame Challenge, c/o Scholastic, Inc., 730 Broadway, New York, NY 10003. If you'd like to see what it takes to create a winning program, last year's top three games (Dr. Oz's Cavern, Inchworm and Spell-Off) are available on disk for Apple II/III (48K). Cost for all three games is only $3.50 from Computer EdGame Challenge, 4966 El Camino Real, Los Altos, CA 94022. (If any of our readers turns out to be a winner in the EdGame Challenge, be sure to let us know!)

ATARISOFT CHANGES

Atarisoft has told us that Stargate will not be made available for any systems other than Apple and IBM. Robotron has been cancelled for the TI-99/4A.

synapse

DIMENSION X (★ ★ ★½ / ★ ★ ★) is the long awaited "war between the worlds" which had been delayed several months due to programming problems. Your challenge consists of two parts—the desert and the passages. With the help of instrumentation, you can navigate through the Jaraloban desert. The control panel has indicators for fuel, range, and shield status, a scanner for enemies, the desert map and a communications window. You must carefully monitor your fuel level and shield strength on the indicator display. It will tell you if there is enough fuel to make it to the next refueling station, and how you are faring against the enemy. The man-made planet is made up of 25 sectors. With the help of your Desert map, you can garner all the known information about the world. Depending on the color of the desert's squares, you will explore empty sectors, sectors with enemy ships, never before explored sectors, neutral zones, and your target sector. The letter "C" on your Desert map represents your capitol which you must defend at all costs. The communications window will display important messages from "Rigillians Approaching," "Sector Secured," The Capital is surrounded," "Edge of Sector Ahead," etc. As you leave a sector, there are eight passages exiting in various directions. Travelling through the passages to the next sectors are tricky, to say the least. They are guarded by electrified Delta gates through which the Rigillian enemies cannot pass, but the Warriors can. The passages are of varying lengths with many twists and turns (your ship is equipped with a tunnel guidance system). Your Altitude indicator will tell you whether you are flying above or below the deadly gates. Use your joystick to dive and climb, avoiding the gates. When the Rigillian fleets are moving towards your capital, stay close and use the neutral zones as shortcuts to the capital. You will encounter battle after battle as you try and protect your city.

Varied Play

As you head into the various sectors, your mission entails different tasks, from destroying the enemy, to watching your indicator panel for quick moves that will be necessary to reach and save your capital. The passageways require skill and quick reactions as the gates come on your ship very quickly. It's very easy to make it through the sectors, just to lose your life in the passageway. The graphics are quite colorful with the 3-dimensional scrolling of the planet's surface which is becoming more and more popular in various games being released. It does give you a definite feeling of movement. You have a great deal of manueverability within the sectors as you can become aggressive or retreat back into a passageway, based on your situation. You must keep your eye on several factors—from the sectors themselves, to messages on your communications window, your desert map, and the Quadra scanner. This is a good one for those who like to go head on with enemy ships, while using strategy. By the way, Synapse has made adjustments to this program so that it will definitely work with the Atari XL computers! (coming shortly for C64) (Solo Play, Joystick, 32K Disk)
Recommended (MSR $34.95)

screenplay

KEN USTON'S PROFESSIONAL BLACKJACK is a combination of blackjack strategy tutorial and video blackjack game. (Ken Uston is a blackjack player known for the card counting system which allowed him to win a lot of money at many casinos and subsequently be barred from playing at any of them.) If you want to go straight to the tables, you'll find that you have a choice of Atlantic City, Las Vegas (Strip or Downtown; single, double or multiple decks), Reno/Lake Tahoe, or "player's choice." Then you choose your casino—how about a few rounds at Caesar's Palace on the Strip in Las Vegas? Once you set up the table with as many human and/or computer players as desired (up to 7), each player has a choice of playing according to one of several systems: basic strategy, simple or advanced plus/minus, Uston advanced point count, or "undeclared" strategy if you don't want to adhere to any particular system. Each player can select a bankroll of up to $9999 and opt for betting units of up to $99. The rules of the chosen casino are displayed, and then it's on to the game itself. Depending on the casino chosen, all the expected options such as doubling down, splitting, insurance bets, etc. are included. During the game, any play that goes against the strategy you've chosen will be greeted with a series of three beep tones. (If you'd prefer to avoid being reminded of strategy errors, you can select an undeclared system.) This portion of the program offers as realistic a version of casino blackjack as we've seen, short of an actual junket to Las Vegas!

Strategy for Serious Players

Serious blackjack players will want to take advantage of the counting and strategy drills provided in the program. These drills are based on material from the accompanying manual entitled *The Ultimate Game...The Winningest System,* which provides detailed explanations and charts for several blackjack strategies. The first, Basic Strategy, is the only one that does not employ card counting. In ascending order of complexity, the others covered are the Simple and Advanced Plus/Minus Systems and the Uston Advanced Point Count System. We can't emphasize strongly enough that these counting systems are for *serious* players only, since they require a great deal of dedication and concentration to use properly. There is no question that they do give the player an edge, though. A very nice bonus is available with the program, too—a coupon entitling the program buyer to receive a free copy of the book, *Ken Uston's Professional Blackjack.* If you're serious about learning a winning blackjack system, this program is a must. But even if you just want to be able to play the game by yourself or with a few friends, the program is a very good one. (Solo Play; up to 7-Player Simultaneous; Keyboard) (48K disk with Atari version on one side, Commodore 64 on the other; also available for Apple and IBM packaged together)
Recommended. (MSR $69.95)

ROBOTRON: 2084 (★ ★ ★ / ★ ★ ★ ★) has made its debut on the Atari system with a new twist: dual controls. Most know the premise—the frantic struggle between your man vs. advanced robots who attack you in waves, with different models of enemy androids in each wave. You score points by destroying robots with a laser gun and by touching humans, transporting them to safety. The dual controls are a special feature where you set both joysticks in a plastic holder (included) and use the left joystick for maneuvering while firing at th robots with the right.

Dual Controls a Big Plus

The dual control feature makes the Atari version a strong one, as we were able to rack up much better scores with the maneuverability this feature gave us. The gameplay is frantic and it takes a good deal of practice to reach higher levels of play. The graphics are colorful, albeit a bit blocky. Because gameplay is the critical factor in Robotron, the somewhat blocky graphics cannot be considered a strong negative. (solo play; two-player alternating; joystick)
Recommended (MSR $49.95)

BOULDER DASH (★ ★ ★ ★ / ★ ★ ★ ★) may be reminiscent at first glance to digging games such as Dig Dug; however, the gameplay and graphics make this one of the best of the genre! Rockford is introduced to us as the "star" of the game as he digs through the earth collecting Jewels. He digs his way through the caves, collecting Jewels and avoiding the falling boulders. Collect all the jewels (or a predetermined number for the difficulty level) and a magic door appears taking you to the next, and more difficult, cave. If you get crushed by a boulder (jewels can fall on you too), you must start collecting jewels in that cave all over again. Watch out—the boulders fall whereever gravity dictates! They will fall straight down if unsupported, or they will topple off underlying objects if there is nothing to block their way. Through trial and error, you will learn the physics of the boulders! There are many different types of caves—from simple ones where you pick up jewels and exit before time is up, to rooms where you must move boulders to get the jewels, to Butterfly rooms where you must drop boulders on the butterflies to create jewels, etc. There are 16 different types of caves in all, many of which are very tough. If you successfully complete four consecutive levels (no easy task), you are rewarded with a "puzzle"—an interactive intermission that's a game within a game. The puzzles are a true challenge! We just couldn't resist trying the "Greed" cave where the number of jewels (and boulders) was amazing. If you want to see boulders and jewels topple beautifully to the bottom, this is a cave you must try!

Simply Beautiful

As simple as the premise is, First Star has done a first-rate job on Boulder Dash. The graphics are dazzling with multi-colored caves, sparkling jewels, and great detail on Rockford himself (he'll tap his foot impatiently if you stop to think about your next move!) The gameplay is hypnotic—we tried tearing ourselves away again and again and would continue for "just one more cave". With all the various types of caves available, boredom won't set in! If you like digging games, you'll *love* this one! (coming soon for C64) (Solo play; joystick; pause; 32K disk)
Recommended (MSR $29.95)

CRITICALLY SPEAKING. APPLE-COMPATIBLE

THE HEIST (★ ★ ★ ★ / ★ ★ ★ ★), from MICROFUN, is the newest creation of designer Mike Livesay, who programmed Micro Fun's Miner 2049er, and it's a winner! In this first version (later planned for IBM, Atari, ColecoVision, and C64) there are 144 different booby-trapped rooms on three levels. The game's hero, Graham Crackers, must remove every piece of artwork from the museum to find a hidden micro dot which contains information vital to the safety of the world. In his quest, he runs into death traps, dead ends, doors which require special keys, and much more. You can fall, as long as there is a floor beneath you. There are lifts, escalators, elevators, alarms to be avoided, scaffolding, and roving robot guards. Collect all the art on each of the three levels on all three floors to be "lifted" to the next one.

Lots of Animation

There's a great deal of activity and action with this one—from the moving escalators to calling for an elevator, pushing your floor number on your keyboard and arriving at the correct destination. The colors are very vivid with excellent detail. Gameplay is very good—you have to remember where you've been so you can work your way around and through rooms, returning on other floors to avoid brick walls and other obstacles. There's no question that this one will keep you busy for hours as you hunt for all the rooms, artwork, and the eventual uncovering of the micro dot. (Solo Play; Pause; Joystick or Keyboard)
Recommended (MSR $40.00)

KEN USTON'S PROFESSIONAL BLACKJACK is reviewed under Atari computers.

DIG DUG (★ ★ ★ ½ / ★ ★ ★ ½) is essentially the same as the version for the Commodore 64 reviewed elsewhere in this issue, with the exception that this is a single-player game only. Graphics in this version are bright and colorful with well-defined, cute characters. Keyboard control is difficult, unless you're very accustomed to playing action games that way. Response, even with the joystick, is a bit slower than other versions of DIG DUG, but the game still plays well. The flower garden indicators of screen number are present in this version. (Solo Play; Pause; Keyboard or Joystick) (Disk)
Recommended. (MSR $34.95)

BASIC BUILDING BLOCKS is a tutorial program designed to teach BASIC (Beginner's All-purpose Instructional Code) language to any computer owner from the age of twelve years and up. As with any such program, the user is given an introduction to all the important BASIC commands, including disk access, sound and graphics. After concepts are introduced and explained, the user must answer a few questions applying the knowledge just learned. The ability to learn BASIC programming from the computer itself in a self-paced program is valuable, but already available from several other programs now on the market. What makes this program very different and especially attractive to the budding programmer is the "BASIC Design Tool" feature.

BASIC Design Tool

The BASIC Design Tool (BDT for short) is described as "a window into your computer," a very appropriate phrase. This unique feature slows down any BASIC program so that the user can actually see it working, line by line. In the lesson portion of the program, the user is introduced to the BDT and given the opportunity to see how a BASIC program assigns variables, executes an endless loop using a GOTO statement, and several other simple functions. The user is able to step through the program, one line at a time, at variable speeds. A window shows which line of the program has just been executed, plus the line about to be executed. Not only can the user follow the programs provided in the tutorial, but he or she can use the BDT on the second disk to write and debug original programs. This is an invaluable tool for the beginning or even the more advanced BASIC programmer. BASIC BUILDING BLOCKS capitalizes on the strengths of the personal computer as individual tutor and goes beyond the teaching function to provide a very helpful programming tool. Best of all, it's so easy to use that the manual isn't even necessary in the early stages of the program! (Two 48K Disks in versions for DOS 3.3 and ProDOS; also available on two 64K Disks for IBM PC)
Recommended. (MSR $79.95)

Mastering the SAT is a comprehensive, multi-diskette program designed to help the college-bound high school student to prepare for the Scholastic Aptitude Test (SAT). Many colleges and universities require their prospective students to take the SAT because it serves as a predictor of performance in college. Many high school seniors go through a great deal of anxiety before they face this test simply because it is so important to their future. This program and its accompanying manual should go a long way toward lessening that anxiety.

Helpful Manual

The SAT comprises two main sections that measure verbal and math abilities. MASTERING THE SAT provides complete verbal and math pretests and posttests, plus two samples of the Test of Standard Written English (TSWE). In addition, the accompanying manual is actually a test preparation workbook. It not only explains the uses of the computer program, but also provides two complete Scholastic Aptitude Simulated Tests in the more standard written format the student will encounter on the day of the actual SAT. Another extremely helpful section in the manual covers test-taking strategies. Hints on time usage, advisability of guessing, and even the recording of answers all help the student face the SAT with a more confident attitude.

Pretest

The suggested procedure for using the program involves first taking the pretest, a simulated, full-length SAT. After completion of the pretest, the computer will provide the student with a score and analysis of results, all of which can be printed out, if desired. For maximum benefit, the student will want to go through a computer review of the test answers at this point. The student has the option of reviewing all test answers, only the correct answers, or only those answers that he/she missed or skipped.

Skill-Builder Exercises

The next step is to work with the computer skill-builder exercises, especially those that cover areas that were shown to be weak in the pretest. Math skill-builders cover arithmetic, algebra, geometry and quantitative comparisons. Verbal skill-builders include sentence completion, reading comprehension, opposites and analogies. A random vocabulary builder is also provided, giving the student practice in recognizing Latin and Greek roots in English words. The final step in using this program for maximum benefit is to take the posttest, another computer simulated, full-length SAT. As with the pretest, the computer will provide a score and analysis of the test results. It is also possible to review the test answers in detail.

Easy to Use

MASTERING THE SAT offers a tremendous amount of help to the college-bound student, yet it's so easy to use that the student will not be intimidated by the computer. The program is ideal as an individually paced approach to test preparation, although it can store results for up to three students at one time. This writer remembers her nervousness and sweating palms in the weeks leading up to the SAT. If only MASTERING THE SAT had been available then! (Four 48K Disks; also available for IBM PC)
Recommended. (MSR $150.00)

Charles Goren: Learning BRIDGE Made Easy is made-to-order for the beginning card player who wants to learn the game of Bridge, or for the average player who wants to improve his/her game. This program comes with an extensive player's manual that is very much a part of the learning process. Prepared by renowned Bridge expert, Charles Goren, the manual covers the fundamentals of Standard American Contract Bridge bidding and play. The chapters of instructional material are set up in the same order as the tutorial quizzes of the computer program. There are ten chapters in the manual and ten computer quizzes covering various aspects of bidding, including hand evaluation, notrump opening bids,

opening one of a suit, opening strong hands, preemptive opening bids, responding to one of a suit, responding to a one notrump opening bid, rebids by opener, rebids by responder, and direct competitive bids. In addition, the program provides the ability to play one hundred practice hands on the computer, with seventy-five declarer-play hands and twenty-five defensive-play hands. (The one hundred hands are detailed in the back of the player's manual, as well.)

Personal Advice from Charles Goren

The beauty of the computer participation in the quizzes is the personal tutoring the player receives every step of the way. Errors are explained, hints are provided in the playing section, and correct answers are provided. And the advice is the best available, because it comes directly from Charles Goren! This is an ideal application of the power of a home computer in a personal learning situation. The Bridge player has the opportunity to learn at his or her own pace, reviewing topics as needed. This program is a must for anyone wanting to learn Bridge or improve their game. (48K Disk; also available for IBM PC)
Recommended. (MSR $79.95)

Software Directions '84

Much of the software destined for the home, whether designed for personal computers or the dedicated game systems, has been exclusively entertainment-oriented until recently. As game players become more familiar with their dedicated game systems, many feel the need to reach out, grow, and move into a personal computer. These people start out by feeding their new computer game programs—prettier and more complex games than they could play on their dedicated systems, but strictly entertainment, nevertheless. Most of these owners of new computers soon begin to move in new directions for the first time. They don't give up their games, but they begin to try out an occasional piece of educational software, or a home management product such as a word processing or financial program.

The software shown by the multitude of manufacturers at the recent Winter Consumer Electronics Show (CES) reflected the more varied interests of today's consumer. Besides the usual numbers of games, there was much more educational and management-oriented product on display. We talked with representatives of three different software companies to learn more about how they see the future of software for the home in 1984. We spoke with John Victor, president of Program Design, Inc., which has been a respected producer of educational software since 1978. We also spent some time with Tim Mott of Electronic Arts, the innovative company responsible for some of 1983's best computer games. Electronic Arts is making its first entry in the arena of home management software in 1984. And because entertainment is still an important part of software for the home, we talked with Philip Orbanes, Vice President of Research and Development at Parker Brothers.

An Abundance of Educational Software

Of the three categories, educational software was most notable for the increased quantity in evidence at this CES as compared to previous shows. John Victor of PDI is a man with a strong background in psychology and education, and he didn't mince words in expressing his disapproval of what he calls "fluff" educational programming. According to him, many companies are producing "video comic books...education only in a secondary way. The entertainment aspect is primary." He sees the future of educational material as it should be in software that is "curriculum-related, but aimed for the home." He cited products from CBS Software as good examples of this approach.

We struck an obviously sore point when we asked whether the serious kind of software he preferred might be perceived as too dull, or might be difficult to inspire a child or adult to tackle. He replied that "the assumption is that education is dirty, and you have to trick people into learning. On the other hand, when we're talking about people who are adults or approaching adulthood, I don't think they're going to be gulled into learning accidentally by playing a game." As for the issue of motivation, he added, "if a person sees that they are learning something worthwhile, and they can do it, then that's motivation. The people that have to be pushed to learn anything, that's because they're afraid of failure. People will put up with a lot if they think they're going to succeed." Mr. Victor went on to say that intrinsic rewards in educational programming are of primary importance. The learning itself must be the reward, rather than any external factor.

Shakeout in Educational Software?

When asked if he thought there is a "bandwagon effect" operative with the current proliferation of educational software on the market, Victor said, "a lot of companies are trying to bail themselves out. Their Pac-Man or Donkey Kong clones aren't selling, so now what they're going to do is...Spinnaker clones or Learning Company clones. And then they're going to discover that's not going to sell, either. And then they're going to wonder what else they can copy." Like many others, Victor sees a shakeout in educational software as being inevitable at some point this year or soon thereafter. He feels it is important for companies that are producing educational software to look seriously at what the consumer wants, rather than produce a program and then try to make the consumer want it. And he returned again and again to the idea that "you can't make educational software by taking a video game and twisting it a little bit, and out comes education."

Home Management

Even if home management software is less controversial than either education or entertainment, it is an area of growing importance to software producers. Tim Mott of Electronic Arts was involved with the Xerox Star project about ten years ago, and he has recently completed work with a team of designers on *Cut and Paste,* a word processing program for the home. Mott and his team realized that many so-called home management products were, in fact, derivatives of office products. "There was an assumption being made that the person in the home was similar to the person in the office. It's not surprising that that's not correct." Instead, the Electronic Arts team thought about the kinds of people who would be using the program. Because the home user would turn to the word processor infrequently, compared to the office user who employs it daily, the system had to be easy to use, easy to remember, but not so full of prompts that it becomes cumbersome to the person who has mastered its use. They also stress the similarity in a family of related products sharing the same general look and operating process. Thus, *The Financial Cookbook,* a program to help the consumer make important financial decisions, operates in a similar fashion to *Cut and Paste.* The easy-to-learn, easy-to-use home management program is something we'll be seeing a lot more of from a number of different software producers in 1984. These companies feel that the consumer who owns a computer is ready to put it to work, helping to fill the consumer's needs for word processing, information storage and retrieval, and financial decision-making, among other tasks.

(To be continued in the April, 1984 issue of *The Computer Entertainer.*)

WHAT WILL THEY THINK OF NEXT?

Discwasher has just released ENTRY REST, designed to take the fatigue out of working with your Apple II computer. Made of solid oak, it includes a built-in multifunction calculator with memory and a static grounding bar that protects the computer from static charges. Promised to be easily mountable (with hardware provided), it retails for $34.95.

DRAGONHAWK FOR C64

Next month we will review DRAGONHAWK, a new release from Creative Software where your mission is to kill a flying serpent who has put a mountain range full of creatures under its evil spell. Dragonhawk destroys his enemies by pouncing on them from above and six hordes of enemies at different levels must be killed.

DONKEY KONG (★ ★ ★½ / ★ ★ ★ ★) is an amazingly good translation by **Atarisoft** of the Nintendo arcade classic. All four screens of the original are present as Mario, the carpenter, battles to save his girlfriend from the clutches of the angry ape, Donkey Kong. The game opens with Donkey Kong stomping around at the top of the screen, forcing horizontal girders into a series of sloping ramps. The ape asks the player, "How high can you go?" and the first screen is then displayed. The player makes Mario run and jump, climbing girders and ladders while leaping over the barrels rolled by the chest-pounding ape. When Mario reaches his girlfriend at the top, bonus points are awarded for completing the screen in less than the allotted time. On the next screen, Mario must remove all rivets from the structure of girders while avoiding the firefoxes. Bonus points are earned for picking up scattered objects, such as his girlfriend's purse and parasol. On the elevator screen, madly bouncing springs and firefoxes are the obstacles, and Mario must jump onto a series of fast-moving elevators to reach the top. The final challenge is the cement factory screen, which has a series of conveyor belts carrying buckets of sand. On each screen, Mario can grab a hammer to smash barrels, firefoxes, springs or sand buckets for extra points. Mario's success is always short-lived, though, because the ape keeps taking his girl away from him and moving her to a more challenging screen!

Game Play Is Superb

This is a much better version of DONKEY KONG than we expected on this somewhat limited system. Though the graphics are undeniably a bit blocky, they're definitely superior to the usual run of games for the VIC-20. The colors are bright, and all the characters are recognizable. The ape even thumps his chest! Game play is superb, with all the essential elements of the original game present. Joystick control is especially smooth and effortless. DONKEY KONG is one of the very best arcade translations available for this system. (Solo Play; 2-Player Alternating; Pause) (Cartridge) Recommended. (MSR $44.95)

DIG DUG (★ ★ ★½ / ★ ★ ★½) is essentially the same game as the version for the Commodore 64, reviewed elsewhere in this issue. Understandably, the graphics are less distinct on the VIC-20, but the designers have still done a very good job within the limits of the system. The game plays very well, retaining the feel of the arcade original in a contest that's pleasantly addictive. (Solo Play; 2-Player Alternating; Pause) (Cartridge) Recommended. (MSR $44.95)

TWO IN ONE

Howard W. Sams & Co has just released a "two in one" arcade package for Apple II owners. SPUD pits two player's wits as each tries to weaken and penetrate the opposition's protective shields with an exploding spud, eventually destroying an opponent's fort and winning the game. In MUG SHOT, a game for one to four players, each player has a fort and a field of five "mugs" inside a trap; these mugs must be released, and they destroyed before they can destroy the player's fort in eleven levels of play. Retail for this package will be $29.95.

Set Sail

Meanwhile, Apple owners can sharpen their sailing skills in a simulation of four different sailing races in REGATTA, a game for one or two players. Action is staged at the player's choice of any of four lakes, each with a couse marked by three buoys. A clock, visible on the screen, tracks elapsed race time; record-breaking times are recorded for future reference. The manual explains basic nautical terms such as running, reaching, tacking and yarning. Retail is set at $29.95.

ROKLAN SOFTWARE FILES CHAPTER XI

Roklan Software, whose recent hits include Gorf, Wizard of Wor, and Deluxe Invaders (all for Atari computers) have been forced into reorganization. While they still have new games under development for possible introduction at the summer C.E.S., they tie their problems to the recent Atari hardware shortages which severely affected software sales for that system. Several companies have reported softened sales; although, as the XL series becomes more widely available, it is felt that Atari software sales will once again pick up.

DEMON ATTACK (★ ★ ★ ★ / ★ ★ ★ ★) for the IBM PCjr is the most dazzling version yet of this classic video game, combining the best features of all previous versions. The battle is fought in two stages: from the surface of the Moon and then deep in space at the home of the Great Demon. On the surface of the Moon, the player controls a horizontally mobile laser cannon, shooting at four successive waves of colorful, swooping demons. Using either tracer shot mode (shots can be steered by the joystick) or non-tracer mode, each wave must be defeated without the player's laser cannon being hit in order to move on to the next wave. Many of the demons will split into smaller demons when hit, and some of the smaller demons dive at the player's laser cannon in the higher waves. After four waves are eliminated, the player's ship takes off into space to face the Great Demon, which sits behind a protective energy shield. From behind the shield, small demons dive toward the player's ship. Each one that is hit as it passes through the barrier will decrease the strength of the shield until the player's shots can finally penetrate it. The Great Demon can be destroyed only by shooting it directly in its cyclopean eye when it is wide open. Then the battle resumes on the surface of the Moon at the next higher difficulty level. Once the game is over, it can be restarted from the beginning or at the point where the player lost his/her last ship.

Benchmark for Graphic Excellence

As one of the first pieces of recreational software for the new IBM PCjr, this version of DEMON ATTACK establishes a benchmark for the graphic detail possible on the system. Imagic designers have earned a well-deserved reputation for achieving the utmost from each system when it comes to graphic excellence. The graphics in this version of the classic game are nothing short of awesome, from the pock-marked surface of the Moon to the evil splendor of the Great Demon. As for game play, DEMON ATTACK remains one of the best variations on the invasion theme, especially with the challenge of its two-stage contest. (Solo Play; 2-Player Alternating; Joystick) (Cartridge) Recommended.

ANGELSOFT LAUNCHED

Angelsoft, Inc., a development concern, has just been launched to design entertainment/educational programs for home computer systems. Initial programs feature the TinkTonks, four stars of a series of computer stories with games geared toward a four to eight year old audience. Angelsoft plans to integrate children's books with computer software. The Angelsoft programmers have written their own graphics language which allows them to create programs with the look of a moving picture book. The first programs will be sold and marketed through Mindscape for the Atari, Commodore, Apple, and IBM computers.

BANK STREET WRITER FOR PCjr

Broderbund's newly released BANK STREET WRITER for the IBM PC is fully compatible with the PCjr. Features include 80-column display, normal and decimal tab,s user-definable function keys, enhanced screen prompts and cursor movements, expanded block moves, as well as copy, replace and format functions. Retail is $79.95.

QUESTIONNAIRE

Please fill out as completely as possible and return to us by April 15, 1984. Let us know what you're thinking! (Please, if you need additional room, or don't wish to mark up your newsletter, just drop us your answers on letter paper)

System(s) owned:

Game:
Atari 2600 _____
Atari 5200 _____
Colecovision _____
Intellivision _____
Vectrex _____
Other _____
(Specify) _____

Computer:
Adam _____
Apple _____
Atari (which) _____
Comm 64 _____
IBM PC _____
IBM PCjr _____
TI 994/A _____
VIC-20 _____
Other _____

System(s) being considered for purchase
_____
_____

What will influence your purchase of a new system?
_____
_____

What game and/or computer magazines do you subscribe to?
_____
_____
_____

Your favorite is? _____
Why _____
_____

Your least favorite is? _____
Why _____
_____

Number of Games Purchased per month
(please tell us which system(s) you purchase the majority of new games for)
_____
_____

What influences your purchases of those games?
_____
_____

Number of Educational software purchases per month _____
(please tell us which system(s) you purchase the majority for)
_____
_____

What influences the purchase of this software?
_____
_____

What type of software is your favorite (strategy, maze, skill, educational, etc.)
_____
_____

PLEASE COMPLETE THIS SECTION IF YOU CURRENTLY OWN A COMPUTER

Do you own any productivity software (word processing, spreadsheet, etc)? _____
If so, which? _____
What software purchases are you planning? _____
_____
_____

What peripherals do you own currently?
Modem _____
Printer _____
Disk Drive (1 or 2) _____
Monitor (type) _____
Other (describe) _____

What peripherals are you planning to purchase?
_____
_____

Area(s) you'd like us to explore for you
_____
_____
_____
_____

Additional notes: _____
_____
_____
_____

PERSONAL DATA
Male_____
Female_____
Your Age Group:
8-14_____
15-18_____
19-29_____
30-up_____
Hours you spend each week:

Playing games _____
Using system for educational purposes _____
Using system for home productivity _____
Using computer for business _____
Reading game/computer magazines _____
Watching TV _____

Name_____
Subscriber # (last 4 digits)_____
City_____
Zip Code_____

Thanks for your time!!

THE VIDEO GAME UPDATE
12115 Magnolia #126
North Hollywood, CA 91607

ATARI 2600
FEBRUARY
Oscar's Trash Race (AT)
Out of Control (AH)
x-Pitfall II (ACTV)
x-Private Eye (ACTV)
Shuttle Orbitor (AH)
MARCH
Beamrider (ACTV)
Berenstein Bear (COL)
Front Line (COL)
H.E.R.O. (ACTV)
River Patrol (TGV)
FIRST QUARTER
Taz (AT)
SECOND QUARTER
Changes (TGV)
Choplifter (AT)
Espial (TGV)
Millipede (AT)
Rock N Rope (COL)
Scraper Caper (TGV)
Sky Lancer (TGV)
Star Wars (PB)
Super Crush (TGV)
Tarzan (COL)

INTELLIVISION
FIRST QUARTER
Glacier Patrol (SUNR)
Snowplow (SUNR)

COLECOVISION
FEBRUARY
x-Campaign 84 (SUNR)
x-Gust Buster (SUNR)
x-Quest for Quintana Roo (SUNR)
x-River Raid (ACTV)
Rolloverture (SUNR)
Squish 'Em Sam (INT)
Super Cobra (PB)
MARCH
Aquatron (INT)
Beamrider (ACTV)
Blockade Runner (INT)
Buck Rogers (COL)
Destructor (COL) ★ ★ ★ ★
Dukes of Hazzard (COL) ★ ★ ★ ★
Galaxian (AT)
Gateway to Apshai (EPYX)
Heist (MF)
Joust (AT)
Joy Sensor (SUN)
Jumpman Jr (EPYX)
Jungle Hunt (AT)
Moon Patrol (AT)
Mountain King (SUNR)
Pole Position (AT)
Sewer Sam (INT)
Super Action Football (COL) ★ ★
Wargames (COL)
FIRST QUARTER
Dino Eggs (MF)
Dragonfire (IMGC)
Fathom (IMGC)
Lunar Leeper (SOL)
Moonsweeper (IMGC)
Oil's Well (SOL)
Threshold (SOL)
Wing War (IMGC)
SECOND QUARTER
Brainstrainers (COL)/ed
Bump N Jump (MAT)
Burgertime (MAT)
Congo Bongo (COL)
Fix-Up the Mix-Up Puzzle (COL)/ed
Fortune Builder (COL)/ed
Keystone Kapers (ACTV)
Rock N Rope (COL)
Smurf Paint & Play (COL)/ed
Star Trek (COL)
Star Wars (PB)
Tarzan (COL)
Telly Turtle (COL)/ed

★ ★ for use with Super
Action Controllers
★ ★ ★ for use with
Roller Controller
★ ★ ★ ★ for use with
Expansion Module 2
/ed - educational

ATARI 5200
MARCH
Flip and Flop (FS)
Jawbreaker (SOL)
Robotron (AT)
Super Cobra (PB)
Xevious (AT)
FIRST QUARTER
Scraper Caper (BIG5)
Tutankham (PB)
SECOND QUARTER
Choplifter (AT)
Dreadnaught Factor (ACTV)
Legacy (AT)
Millipede (AT)
Star Wars (PB)
Warp Wars (ACTV)

ATARI COMPUTERS
FEBRUARY
Bilestoad (DM)
x-Boulder Dash (FS)
Campaign 84 (SUN)
Creepy Corridors (SOL)
x-Dimension X (DM)
Donkey Kong Jr (AT)
x-Football (AT)
Genesis (DS)
Gust Buster (SON)
Mario Bros (AT)
Martial Arts Master (DS)
Moon Patrol (AT)
Quest for Quintana Roo (SUN)
Robotron (AT)
Rolloverture (SUN)
Scraper Caper (BIG5)
Snokie (SOL)
Tutankham (PB)
Xevious (AT)
MARCH
Adventure Creator (SPN)
Aegean Voyage (SPN)
Flight Simulator II (SUB)
Grandma's House (SPN)
Pitfall (ACTV)
Sorcerer (INF)
Spare Change (BRO)
APRIL
Dreadnaught Factor (ACTV)
Puzzlemania (EPYX)
Zenji (ACTV)
SECOND QUARTER
Big Bird Special Delivery (CBS)
Coco Notes (CBS)
Ducks Ahoy (CBS)
Ernie's Magic Shapes (CBS)
Half-time Battling Bands (CBS)
Keystone Kapers (ACTV)
Laser Gates (IMGC)
Legacy (AT)
Millipede (AT)
Movie Musical Madness (CBS)
Peanut Butter Panic (CBS)
Quick Step (IMGC)
Sea Horse Hide N Seek (CBS)
Star Wars (PB)
Timebound (CBS)
Warp Wars (ACTV)
Webster: the Word Game (CBS)
Wing War (IMGC)

VIC-20
FIRST QUARTER
x-Dig Dug (AT)
x-Donkey Kong (AT)
Galaxian (AT)
Joust (AT)
Jungle Hunt (AT)
Moon Patrol (AT)
Ms Pac-Man (AT)
Pole Position (AT)

COMMODORE 64
FEBRUARY
Battle of Normandy (STRSIM)
Bilestoad (DM)
Boulder Dash(FS)
x-Centipede (AT)
Dallas Quest (DS)
Death in Caribbean (MIF)
x-Donkey Kong (AT)
Drelbs (SYN)
Flight Simulator II (SUB)
Floyd of the Jungle (MICP)
Gust Buster (SUN)
Juno First (DS)
Liberator (THORN)
Lost Tomb (DS)
Lunar Outpost (EPYX)

Minnesota Fats Pool (HES)
Monster Smash (DM)
Nightraiders (DM)
Oil Barons (EPYX)
PacMan (AT)
Paintbrush (HES)
Popeye (PB)
x-Robotron (AT)
Rolloverture (SUN)
Roundabout (DM)
Scraper Caper (MF)
Sentinel (SYN)
Slamball (SYN)
Stargate (AT)
Submarine Commander (THORN)
World's Greatest Baseball Game (EPYX)
x-Zaxxon (SYN)
Zeppelin (SYN)
MARCH
Campaign 84 (SUNR)
Ducks Ahoy (CBS)
Ernie's Magic Shapes (CBS)
Grandma's House (SPN)
Math Mileage (CBS)
Quest for Quintana (SUNR)
Sea Horse Hide N Seek (CBS)
Sorcerer (INF)
FIRST QUARTER
Battlezone (AT)
Galaxian (AT)
Joust (AT)
Jungle Hunt (AT)
Moon Patrol (AT)
Ms Pac-Man (AT)
Pole Position (AT)
SECOND QUARTER
Argos Expedition (CBS)
Balloony Bin (ACTV)
Big Bird Special Delivery (CBS)
Coast-to-Coast America (CBS)
Coco Notes (CBS)
Dinosaur Dig (CBS)
Half-time Battling Bands (CBS)
Light Waves (CBS)
Mission Impossible (EPYX)
Movie Musical Madness (CBS)
Star Wars (PB)
Summer Games (EPYX)
Weather Tamers (CBS)

TI 99/4A
FEBRUARY
Buck Rogers (TI)
Congo Bongo (TI)
x-Defender (AT)
x-Dig Dug (AT)
Popeye (PB)
FIRST QUARTER
Fathom (IMGC)
Moonsweeper (IMGC)
Wing War (IMGC)

APPLE II/IIE
FEBRUARY
Ankh (DM)
x-Dig Dug (AT)
Dreadnoughts (AH)
Drelbs (SYN)
Genesis (DS)
Liberator (THORN)
Mr. Robot (DM)
Nibbler (DS)
Oil's Well (SOL)
Pooyan (DS)
Quest for Tires (SOL)
Scraper Caper (MF)
Space Ark (DM)
Submarine Commander (THORN)
Under Southern Skies (AH)
MARCH
Coast-to-Coast America (CBS)
Dinosaur Dig (CBS)
People Development (CBS)
Personal Development (CBS)
Sorcerer (INF)
APRIL
Webster: the Word Game (CBS)
FIRST QUARTER
Battlezone (AT)
Galaxian (AT)
Joust (AT)
Jungle Hunt (AT)
Moon Patrol (AT)
Ms Pac-Man (AT)
Pole Position (AT)
Stargate (AT)

IBM PCjr
FIRST QUARTER
Baseball (IMGC)
Football (IMGC)
Microsurgeon (IMGC)
SECOND QUARTER
Big Bird Special Delivery (CBS)
Coast-to-Coast America (CBS)
Dinosaur Dig (CBS)
Ernie's Magic Shapes (CBS)
In The Chips (CS)
Match Wits (CBS)
Murder by the Dozen (CBS)
Pipes (CS)
Save New York (CS)
Timebound (CBS)

ADAM
FEBRUARY
Donkey Kong (COL)
Donkey Kong Jr (COL)
Zaxxon (COL)
SECOND QUARTER
Sub Roc (COL)

COMPANY NAME CODES:
ACTV - Activision
AH - Avalon Hill
AM - Amiga
ART - Artwork
AT - Atari/Atarisoft
BRO - Broderbund
CBS - CBS Software
COL - Coleco
COMM- Commodore
CS - Creative Software
DM - DataMost
DS - DataSoft
EA - Electronic Arts
EPYX - Epyx
FIR - First Star
FUN - Funware
IMGC - Imagic
INF - Infocom
INT - Interplay
MIC - Microfun
MMG - MMG Micro Software
PB - Parker Bros.
PDI - Program Design Inc
ROK - Roklan
SIR - Sirius
SOL - Sierra On-Line
SPN - Spinnaker
STRSIM - Strategic Simulation
SUB - SubLogic
SUN - Sunrise
SYN - Synapse
TGV - Tigervision
TRO - Tronix
XON - Xonox

*(x - indicates shipped
retailers by our press c
(may not be in natio
distribution, however.)
(Editor's Note: We feel
some cases, dates given
by the manufacturers
simply not realistic. H
ever, we feel it is our resp
sibility to give you the p
jected release dates as t
are given to us, without
alteration.)*