

The Twice Monthly Publication
for the Coin Operated Entertainment Industry

PLAY METER

Volume 8, Number 1

January 1, 1982

THE CHICAGO TOURNAMENT FIASCO

AMOA MAPS 1982 ACTION COURSE

REPORT FROM THE JAPAN SHOW

WHY COIN—OP SHOULD GEAR
TO WOMEN'S INTERESTS

PLAY METER CRITIQUES
'THE GAMES OF THE NEW YEAR'



A M O A
1 9 8 1

AUTHORITATIVE INDUSTRY SOURCES ACCLAIM:

PAC-MAN^{T.M.}

**TOP VIDEO GAME
OF THE YEAR!**



CASH BOX

October 31, 1981

The year's top three "highest earning pieces", according to our survey are:

1. Pac-Man
2. Defender
3. Asteroids

Operators were asked to name the top three amusement game manufacturers, based on quality and earning power of the products they produce, and following are the results:

1. Midway
2. Atari
3. Williams

Operators were asked their choice as the "top game of the year"—and the winner is

Pac-Man!



RePlay

November 1981

We asked the operators to list the most profitable upright video games they've had out since the beginning of 1981; and we asked them to write them down in order. Their cumulative answers were:

1. PAC-MAN (Midway)
2. DEFENDER (Williams)
3. ASTEROIDS (Atari)



MIDWAY MFG. CO.
Franklin Park, IL 60131

PLAY METER

The Twice Monthly Publication for the Coin Operated Entertainment Industry

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The AMOA Gears for Action

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Game Tournament Fiasco in Chicago

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Is Pinball Dead?

Charles Ross answers this question in the affirmative, even after viewing the gamut of pinball choices now offered. Rebutting Ross' view is pin critic Roger Sharpe, who sees the report of pinball's demise as greatly exaggerated. Decide for yourself after reading this lively exchange.

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'We will not do business with gray area games'

Do you think it's possible that this industry could be going through the best of times and the worst of times all at the same time? Well, it's not only possible; but, in fact, it's taking place right now, and I'll explain how.

The best of times? Who would dispute that claim? Ask just about anybody involved in this industry how business is, and the answer will be "better than ever." And so it is. Revenues are at an all-time high, and industry growth is progressing at a record pace. It almost seems as though it's all too good to be true. And, to be quite honest, in some respects it is. Even now there are some who are whispering to themselves, "How long can it last? When is the bubble going to burst?" That little question brings us back to reality and face to face with the paradox of today—it's also the worst of times.

Beneath all the glitter, glamour and excitement of these prosperous times lies a deadly threat that could very well send this industry plummeting into a tailspin which will take years to recover from.

The vast amount of media attention this industry has received over the past couple of years has turned out to be a double-edged sword. We all know the good things that have resulted from the media exposure—increased awareness and acceptance of our unique form of entertainment, resulting in a larger player population base. Yet how many of us have realized that all this media attention has had a rather severe negative effect on the industry as well?

Gray area games, those amusement games in disguise, pose a real threat to the pure amusement games from which this industry derives the majority of its income. Gray area games are pseudo amusement devices that award the player with a high number of game credits that can easily be cashed in. They are not games of skill but rather games of chance which exploit amusement machine laws and ordinances. As such, they should not be operated in any state where gambling is illegal.

While *Play Meter* can only encourage operators to take steps to prevent bad legislation, we can do something about the gray area games, even if it costs us an appreciable amount of money.

Therefore, starting with this issue of January 1, 1982, *Play Meter* will not be accepting any advertisements for these pseudo gambling machines. Ads for outright gambling machines will continue to be accepted, however, since those make no bones about being gambling devices. Legislators and public bodies can easily tell the difference between a slot machine and a video game. But gray area games

muddy up the waters. While some gray area proponents claim the games are not in and of themselves gambling devices, the simple fact remains that is their true nature. It's no use playing naive or quibbling with semantics when we all have such large investments in the amusement machine business.

Accordingly, the Amusement Operators Expo '82, which *Play Meter* magazine co-sponsors with Conference Management Corp. of Stamford, Connecticut, will not be accepting gambling or pseudo gambling equipment for exhibition purposes.

It is our firm belief that, as a publication and as a trade show serving the coin operated amusement industry, we cannot advance the distribution of gray area equipment—machines and devices which foster witch hunts that have been shown to snare pure amusement games with legislative restrictions and to curb the livelihood of amusement operators.

Amusement, as far as we are concerned, is the name of the game. Some will argue that two human beings can wager money on anything, from soft drink caps to moon landings. We are not naive and do recognize the prevalence of gambling in the human nature. But it is where there is a confusion between what is gambling and what is pure amusement—whether in the minds of legislators or in the machines themselves—that *Play Meter* as an enterprise and the coin industry as a whole must make a stand. Our stand is this: Nevada or Atlantic City type payout machines are legal in those and other areas, as in Britain. There is no confusion about slot machines' nature; the authorities can check for a payout cup and be sure they are looking at a gambling machine. It is in the fringe area of video gaming-type equipment that doubt arises in the public eye. And as long as a mask, gray or otherwise, hangs over the face of the coin-op amusement industry, it is a blot and a stigma that conflicts with the amusement nature of machines which most of us are dealing with.

By dissociating ourselves with the gray mask, we hope to further the line of demarcation that will end conflict between amusement and pseudo gambling. We call on the industry to do likewise.



Ralph C. Lally II
Editor and Publisher

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Step Two

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Step Three

Hand the second receipt to the location owner. Your collector takes all the cash.

Please send me more information on your ITS cash accountability system.

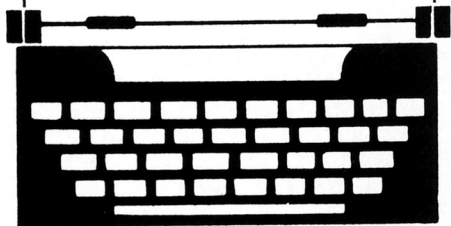
Name _____

Company _____

City _____ State _____ Zip _____

- I operate under 250 machines
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 over 1,000 machines

Letters to the editor . . .



Are there reasons?

I write to you as a concerned employee of the coin-operated business. I pose a question that I ask you address to the manufacturers of today's coin-operated video games and to the leadership of the AMOA. I also ask that a poll be taken of the industry to see if there is a number of those who share my feelings.

My question is this: "Why doesn't this industry have a national advertising campaign, directed at the family, as the bowling industry does?" These ads should expound on the pure enjoyment of playing video games!

Are there good reasons why we don't have television advertising? If so, possibly we could hear them in *Play Meter*.

It seems that our industry is already in television advertising thanks to Atari. How long before Chuck E. Cheese Pizza Time Theatres are doing it also? So, why not the manufacturers, with a little push from AMOA?

Tony Procopio
Bally Northeast Distributing
Syracuse, New York

In a trivial vein

I enjoyed the coin-op trivia quiz in the annual Buyer's Guide [*Play Meter*, October 15]. However, I take slight issue with one of the questions: #2 asks which is the only pingame depicted on another pingame's backglass. *Wizard* is technically right, but in addition to *Capt. Fantastic*, *Wizard* appears on *Silverball Mania*.

In that vein, I have submitted another quiz, which I hope your readers enjoy. It's a theme quiz, and covers coin-op games that have appeared on TV or movies.

William Brohaugh
Cincinnati, Ohio

[Ed. note: You caught us napping, Bill! Readers will find Brohaugh's "Media Quiz" inside an upcoming issue.]

Results marginal

I read with interest all letters and articles about a better split for the

operator. The idea is great but the results have been marginal on our route.

On all video accounts where new machines are requested I include a guarantee.

I have been disappointed to find someone came along behind me and offered a 50/50 split. I guess it will be slow, like going to 50¢ on pool. (We were one of the first).

Everyone should wake up to the cost in this business and realize you are a fool to give it all away.

Tony Polansky
Eveready Vending Inc.
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Army and Air Force PX operators signed on board the association: shown here with AMOA President Pink (center).

Copyright battle is ongoing

AMOA officers map action for industry crusades

By Ray E. Tilley

The AMOA put on its war paint to ready for a new round of legislative fighting over the jukebox copyright royalty issue while celebrating its past year of activity and electing officers for 1982, in its October 30 general membership meeting during the Expo in Chicago.

Outgoing President Norm Pink told the membership: "If there's any change I would like to remember from my administration, it is cooperation between manufacturers, distributors, and operators.... Our industry is changing, it is growing, and we must grow with it; 1982 promises to be a fruitful year for all of us."

To usher in the association's new year, the members ratified the election of Mrs. Leoma Ballard, Belle, West Virginia operator, as

AMOA president. An AMOA member since 1954, she was elected to the board of directors in 1968. She told her fellow AMOA members: "I have a solid feeling of accomplishment. I look forward to serving as your president. I believe people in this industry are beautiful and unique people."

In her inaugural talk, Ballard stressed a belief in the free enterprise system and called for "unity to reach our goals." When the AMOA recently was not able to receive relief from jukebox royalty fee requirements, she said, "failure just meant we found a way it didn't work," and she called for a new goal to be reached.

Pink pointed to such a goal in the jukebox fee fight, with a \$25 per-box fee approaching in 1982. "This industry can no longer sit back and have our equipment taxed away," he

declared. He noted the former MOA's defeat of royalty bills prior to 1967 and that in 1969 the association agreed to the concept of a per-box fee only if no upward sliding adjustment were to be made.

With both those burdens, a pre-jukebox fee and a sliding scale, now in effect by Copyright Royalty Tribunal edict, the AMOA has petitioned Congress to amend the Copyright Royalty Act of 1976 and to repeal Section 116 of that law, thereby exempting coin-op phonographs from infringement of copyright—which would undercut the requirement for per-jukebox fees if the AMOA initiative succeeds. (See related story on the AMOA's amendment proposal to Congress.)

Pink called on membership to wage "a campaign we have never seen before." He pointed out that, in legislative battle against the

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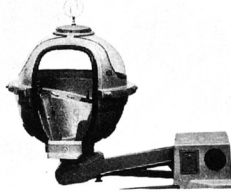
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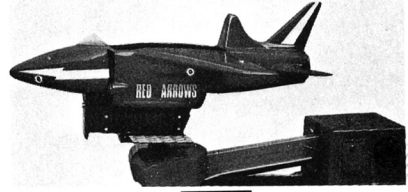
NEW

HYDRAULIC HELICOPTER (IT ROTATES)
"MOST PROFITABLE RIDE EVER"



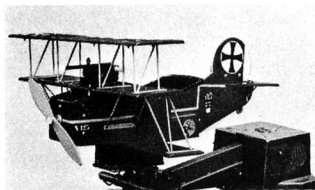
NEW

HYDRAULIC GALACTICAR (IT ROTATES)
FLASHING LIGHTS, AND SOUNDS
"A TERRIFIC RIDE"



NEW

HYDRAULIC RED ARROW (IT ROTATES)
FLASHING LIGHTS, DIFFERENT MOTIONS,
VARIOUS SOUNDS

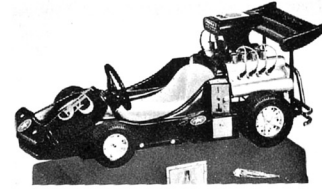


NEW

HYDRAULIC RED BARON
(IT ROTATES) WORLD WAR I TRIPLANE
"REAL LIFE ACTION"



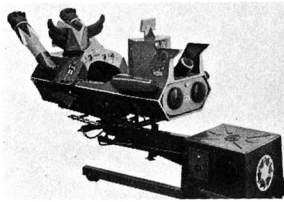
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LOTUS RACE CAR
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MOTORCYCLE
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- Large inventory of rides
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- Over 9 years experience in children's amusements

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copyright royalty agencies, "we have an influence they do not have," with the support of revenue-earning locations and municipalities where jukeboxes are operated.

"Go to your customers," Pink urged, "and tell them, 'We have a problem and we have to work on this together....Combine our dollars and our influence, to fight and help us in this legislative program.'"

Show Records

The AMOA Expo, staged for the final year in the old Conrad Hilton Hotel on Michigan Avenue, broke all previous attendance and exhibiting records. Attendance was logged at 10,917 persons, a sharp rise from the 7,400 on hand last fall.

The number of exhibit booths was up slightly, with 370 stands crowded into the four show rooms. Exhibitor personnel numbered 1,240 of the total figure, and the estimated 800 foreign attendees was a slight decrease from the 1,072 recorded last year.

With the success of its exhibitor sign-ups, the AMOA treasury stood with a surplus of \$115,900 on October 30 after expenses of the Expo and other costs—totaling \$521,509—were accounted, said Treasurer Wesley Lawson, Winter Haven, Florida operator.

Officers confirmed for 1981-82 also are First Vice President Clayton L. Norberg of Mankata, Minnesota; Secretary Lawson; Treasurer Dock Ringo of Mineral Wells, Texas; and

incoming vice presidents Walter Bohrer Jr., Milwaukee, James B. Reeves, Whiteville, North Carolina, and Vincent Storino, Toms River, New Jersey.

AMOA Executive Director Leo A. Droste pointed to new operators in the industry as the main components of the increased attendance numbers, and President Pink outlined the AMOA officers' active year in traveling to state association meetings, including the newly

**AMOA attendance: 10,917
(vs. 7,400 in 1980)**

**Exhibit booths: 370
(400 projected in 1982)**

formed Iowa, Indiana, Wyoming, and Arizona associations.

Pink also explained that the headquarters office of AMOA will begin making use of its new data processing equipment to storehouse information of possibly vital interest to state associations and individual operators—files on licenses and tax structures around the nation, legislative matters, as well as AMOA membership records.

Of problems facing the coin

industry, Pink pointed to distorted revenue figures and public concepts of games, as portrayed by the nation's media, and the "get rich quick" schemes for coin-ops also appearing in the press.

From the legal arena, AMOA general counsel Nicholas Allen spoke to the membership on "a very busy year for the AMOA's representation in Washington." He detailed (1) the AMOA's appeal from the CRT's jukebox royalty rate decision (which had oral arguments heard in federal court in Chicago the week following the exposition); (2) the AMOA's motion as an intervenor in the U.S. Court of Appeals in Washington from the raising of the mechanical royalty rate on records; and (3) hearing within the CRT on its method of annual rate adjustment of royalty fees, which a court has held not to be in the CRT preview to adjust along cost-of-living lines.

Also, the counsel reminded the members, legal defense was raised against the location list requirement for operators, but the CRT rescinded its own regulation in this matter (*Play Meter*, August 1, page 22). Further, the AMOA participated as a "friend of the court" in the Aladdin's Castle challenge of the Mesquite, Texas ordinance banning juveniles from playing games in arcades—"and we expect to win, by the way," said Allen.

CRT proceedings are underway, he noted, to divide performing rights societies ASCAP and BMI's shares



Allen: 'Legal progress'

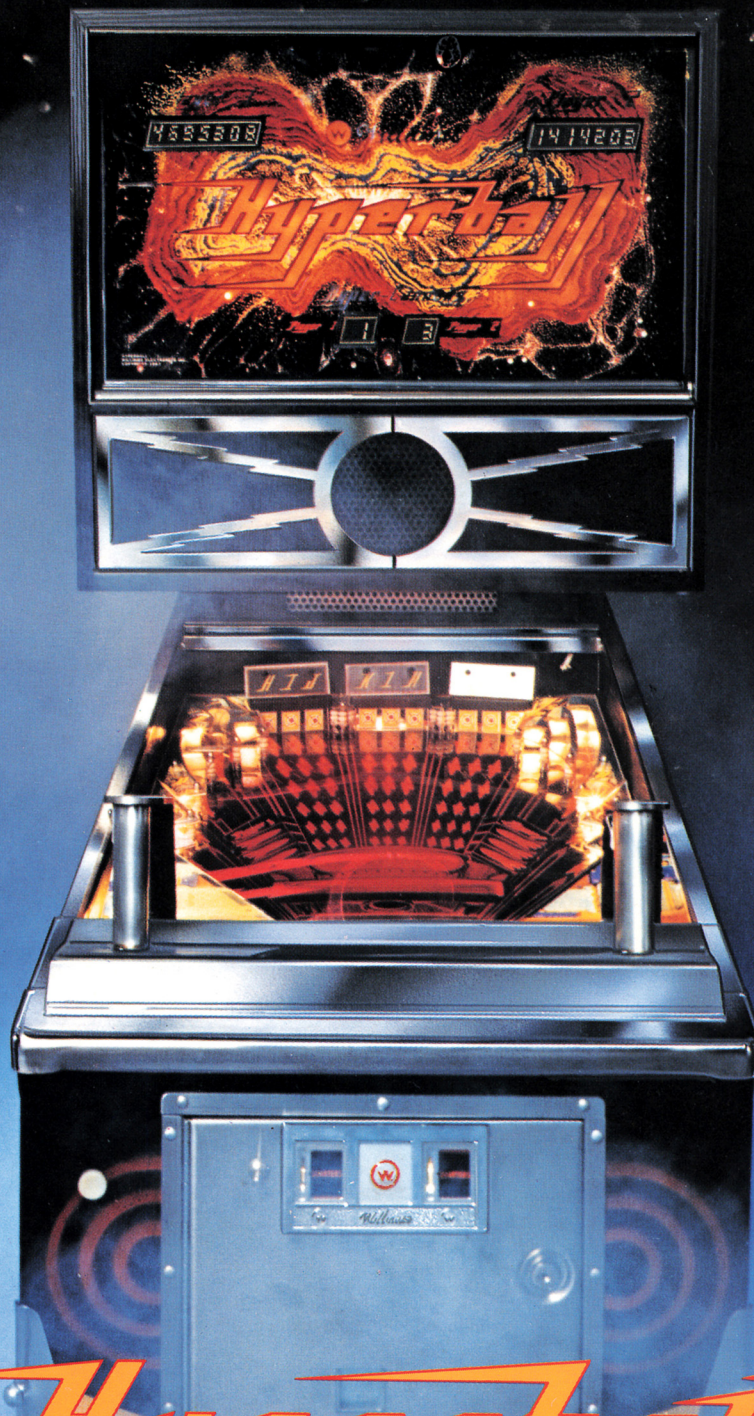


Ballard: 'New challenge'



Pink: 'Good cooperation'

*We're gonna change
the way you play!*



Hyperball™
the next evolution in games
Williams 
ELECTRONICS, INC.

Play Meter

Equipment Poll

The following are rankings of the top videos and top pinballs making above average weekly gross collections nationwide. The dollar amounts appearing are the average weekly grosses as reported to Play Meter magazine through its regular national operator survey, including both arcade and street locations. Games with less than adequate responses (less than fifty percent) but with above average collections are so noted. Games not appearing on the poll either (1) did not generate over a ten percent response rate to provide an adequate representative sampling or (2) did not register weekly gross collections above the national average. **Special note should be made that these earnings figures are gross revenues. When computing operator revenues, these amounts should be reduced by fifty percent to reflect the most widespread industry practice, that of granting fifty percent commissions to the location owners.**

TOP VIDEOS

Fourteen of 38 videos (37%) with a response rate over ten percent have above average earnings.

	Jan. 1	Dec. 15	Dec. 1
National average for videos	\$171	\$169	\$186
★ 1. DONKEY KONG/Nintendo	\$288	\$283	\$306
★ 2. QIX/Taito	\$287	\$306	\$317
3. TEMPEST/Atari	\$266	\$260	—
★ 4. FROGGER/Gremlin	\$264	\$262	—
5. OMEGA RACE/Midway	\$240	\$229	\$264
6. CENTIPEDE/Atari	\$221	\$232	\$252
7. PAC-MAN/Midway	\$220	\$215	\$238
8. DEFENDER/Williams	\$218	\$233	\$254
★ 9. VANGUARD/Centuri	\$191	\$230	\$278
★ 10. WIZARD OF WOR/Midway	\$175	—	\$192

TOP PINBALLS

Seven of 21 pinballs (33%) with a response rate over ten percent have above average earnings.

	Jan. 1	Dec. 15	Dec. 1
National average for pinballs	\$ 99	\$101	\$104
1. BLACK HOLE/Gottlieb	\$204	\$203	\$209
2. EIGHT-BALL DELUXE/Bally	\$129	\$135	\$134
★ 3. VOLCANO/Gottlieb	\$126	\$114	\$108
4. MARS/Gottlieb	\$110	\$113	\$111
★ 5. FATHOM/Bally	\$108	—	—

★ Conditionally Rated— Weekly average based on less than 50% response rate

Provisionally Rated Pinballs and Videos

(Above average earning games, with a response rate between 10—25%)

VIDEOS

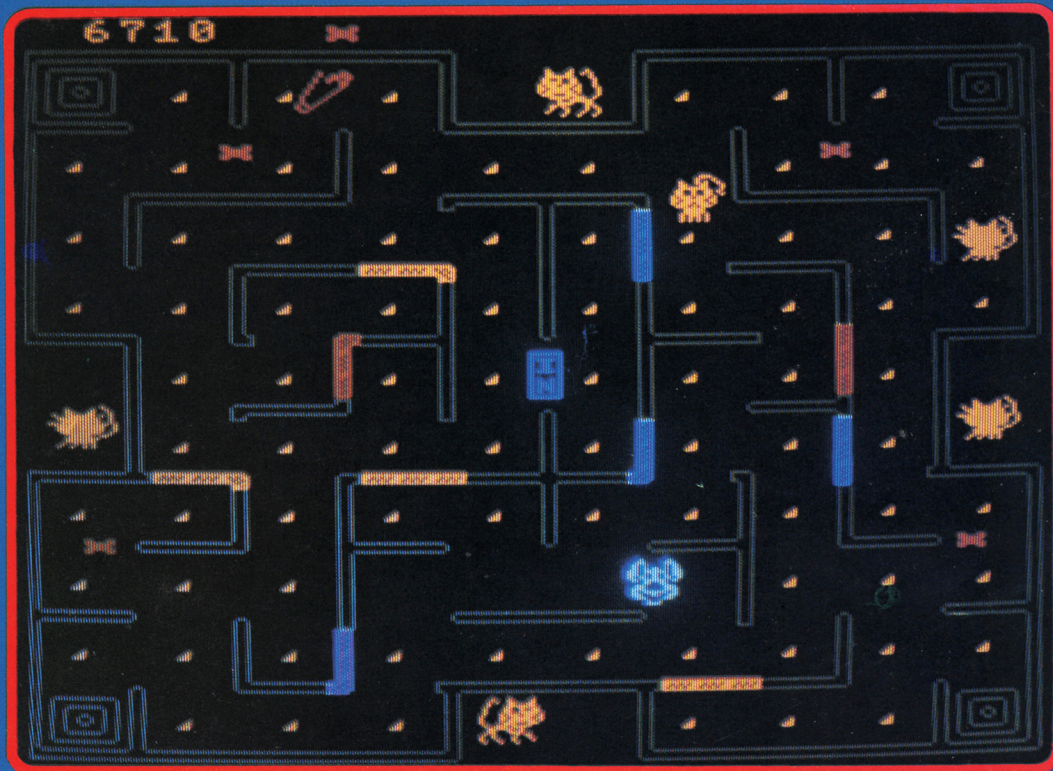
Provisional Ratings	Jan. 1	Dec. 15	Dec. 1
MAKE TRAX/Williams	\$250	—	—
GALAGA/Midway	\$238	—	—
SOLAR QUEST/Cinematronics	\$203	—	—
TURTLES/Stern	\$194	—	—

PINBALLS

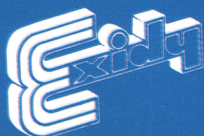
Provisional Ratings	Jan. 1	Dec. 15	Dec. 1
CENTAUR/Bally	\$138	\$133	\$119
ELEKTRA/Bally	\$133	—	—

Operator/readers who would like to join the ever-growing numbers of readers participating currently in the survey, write: Play Meter, Equipment Poll, P.O. Box 24170, New Orleans 70184.

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This is one Mousetrap™ players will never escape!

The temptation of delectable yellow cheese is too much for **one** mouse to resist... the **player's** mouse. Despite many cats on the prowl, the mouse bolts through a playfield of halls, chomping cheese for points, and finding other red prizes for bonus value.

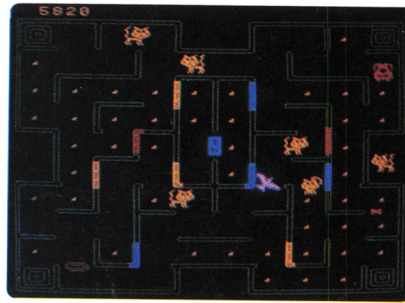
The mouse searches out dog bones which are accumulated at the top of the screen. Each bone allows the mouse to become a ferocious dog when the "dog button" on the control panel is pressed. Now the player is the aggressor, and cats are open game for additional points of escalating value. After several seconds, the red dog begins blinking blue. This warns that his power is wearing off and he'll soon become a mere mouse again.



When all the cheese morsels on one level are gobbled up, bonus points are awarded and the player is given another game field with more challenge.

Outwitting the Hawk of Doom

Randomly, a purple hawk appears, flying above the walls in search of a delicious mouse or dog. The player's only defense is to enter the secret passage marked "in" at the center of the screen. This quickly transports the mouse or dog through an unseen tunnel to one of the four corners. This tactic makes the hawk "dumb", or aimless in his flight. The mouse or dog can then escape the hawk.

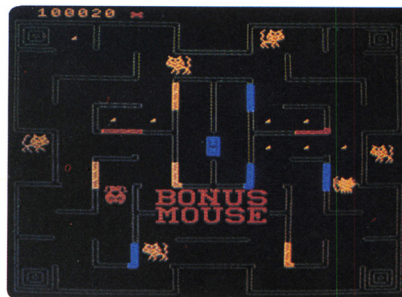


There's more than one way to skin a cat...

Mousetrap™ features what no other game has featured before—player controlled doors. At the touch of a button, the player may open or close three colors of doors. By closing a door, the mouse can block a cat's advance. Or, when the mouse turns into a dog, the skilled player can use the doors to trap cats, earning additional points for each one overtaken.

BONUS MOUSE!

A "bonus mouse" or extra turn is offered when the player reaches an operator-selectable score.



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Mousetrap™ is designed with four separately locking doors for the Electronics, the coinbox, the monitor, and the coin mechanisms.

- Slide-out Electronics™: All electronics are contained in a slide-out drawer, accessible through a locking front access metal door.

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- Separately locking monitor service door.
- Large heavy duty casters with built-in hand holds and back rails for ease of transportation.
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Original three-channeled soundtrack, sound synthesis, and special sound effects.

Completely new, industry-proven joystick with accurate control and reliability.

International graphics, multi-lingual. Player Vanity Table.

OPERATOR OPTIONS

Coinage

Coins per play
International coin types

Language

English, Spanish, French, German

Turns

Number of turns per player

Bonus Mouse (extra turn)

Bonus earned for selectable amount of points per level.

DIMENSIONS

	inches	cm.
Height:	72.00	182,88
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of the royalty fees pool, with that decision expected by December 1. At that juncture, dispute between the two societies could be expected over 1982's royalties at the \$25 per-box rate, said Allen.

Allen reported a cautionary note, that the CRT has been requested by the motion picture industry association to rule on whether CRT-set rates as applied to movie distribution royalties can be made retroactive or be projected to a later date.

Two bills pending in Congress would affect the CRT and the music operator, noted Allen. One, the Danielson Bill to tack on further jukebox royalties for the performers of music, has been "put off for an indefinite period in committee."

In a separate legislative action to determine the CRT's subpoena power, AMOA attorneys have entered the association's objection to this power.

The AMOA business luncheon concluded with recognition of past officers and outgoing members of its Board of Directors.

New Horizons

And so, with a crowded schedule and a crowded convention floor (rivaling at times the orgiastic scenes of the U.S. national political conventions), the AMOA Expo 1981 eventually moved into history. Executive Droste termed the turnout in attendance "unreal" but looked forward to the Chicago Hyatt Regency Hotel site of the 1982 AMOA show, where accommodations are expected to hold 400 exhibitor booths. ("It would be more," said Droste, "but there is another, smaller convention in the Hyatt at the same time," which will be November 18-20, 1982.)

In 1983, the AMOA show moves to New Orleans and the Rivergate Center, which would provide even more spacious show area.

In the making for 1982, meanwhile, is a new wrinkle for the AMOA Expo. In recognition of the growing amusement games sector, and in addition to the AMOA Jukebox Awards, the AMOA will have its own amusement games awards program, Droste told the trade press.

The AMOA officers could not predict, however, whether or not a repeat performance would be seen next year of one of the aspects of AMOA Expo '81 which all could agree upon: the weather, which in Chicago was mild and balmy during the entire pre-Halloween week.

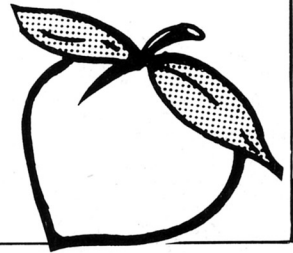
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How not to run a tournament

The \$400,000 'Spectacular' bust

Report and commentary by Mike Bucki

Less than a week after the scheduled October 29 opening of the first-ever World Championship of Video, the tournament sponsor Atari Inc. was scrambling to save its corporate image because of it.

Atari put up \$50,000 in cash and prizes to attract the video players, spent thousands more on a four-week advertising blitz in Chicago (the tournament site), sent more than 1500 tour promotion packages to operators around the country, and according to Frank Ballouz, vice president/marketing of Atari, "placed a substantial sum including the \$50,000 in prize money" in the hands of Lee Peppard, president of Tournament Games Inc. of Seattle.

"We spent more than \$100,000 promoting and packaging the tournament," said Ballouz. Now, while covering the bouncing checks and apparently worthless "Tournament Bucks" awarded to the winners by Peppard, Atari has committed to spending thousands more. But even with that laudable move, the company may not recoup all of its lost public image.

Peppard apparently tried to stretch Atari's money, coupled with the players' entry fees, officiating fees, and the quarters spent while competing, to cover the entire \$400,000 weekend. And in many parts of the country, that's how it was promoted—as the Atari and TGI \$400,000 weekend. So while Atari promised to make good the loss incurred by winners in its *Centipede* tournament, the foosball, *Mark Darts*, eight-ball, and Air Hockey competitors say it isn't enough. They want to know who will make good their bounced checks and/or "worthless funny tournament money."

Not all the checks issued by Peppard bounced: Some of the players who went to Merchandise

National Bank in Chicago early Monday morning, a few hours after the tournament concluded, were able to cash their checks. On the other hand, Peppard issued a \$3500 rubber check to Michael Bowers, a Denver, Colorado foosball competitor who didn't win this year but was owed the sum from 1980. The account number, 31-08172, was found to match that of other worthless checks issued to winners of this year's tournament, including Sonya Sunset of Denver, who was out \$175 plus \$325 in Tournament Soccer Bucks, and Johnny Lott of Los Angeles, who unsuccessfully tried to cash his \$800 check on Tuesday, November 3 in Chicago and now wonders whether he'll ever see that \$9,000 automobile he supposedly won. Peppard, it appears, tried to pay off at least one of last year's winners with this year's money without placing enough cash in the account to cover this year's winners.

An officer of the bank told this reporter that a "substantial amount of money" (he declined to divulge the sum) had been in the account, but as of Friday, November 6 there were 100 to 150 checks that could not be cashed because of insufficient funds.

The players put much of their blame for this year's fiasco on Atari. Many knew about the shaky history of Tournament Games Inc.; they knew, for example, that Johnny Lott and Michael Bowers had been issued bad checks after last year's Memorial Day weekend tournament; they knew that, bit by bit over an 18-month period, Bowers and Lott (with frequent costly phone calls) finally got most of the winnings owed them. The foosball players knew that history, yet they came again this year. Why?

Bowers gives several reasons: "I was defending world champion. They had paid me most of the money

and I was giving them the benefit of the doubt. And Atari gave them credibility; it was a smokescreen for Peppard, and it worked."

Sonya Sunset, Bowers' girlfriend, said she traveled to Chicago to compete "because Atari was going to be sponsoring it and I thought it would be different." She adds, "I didn't think it (a bad check) was going to happen to me."

Bob Maloney of Denver was a little luckier, or perhaps smarter. He cashed his \$1,000 check earlier that Monday morning and explained: "I've had past experience with his (Peppard's) bounced checks."

"Then why did you go to Chicago to play in the tournament?" he was asked.

"Well, I figured they had their act together; they were connected with Atari, and they had all these games," replied Maloney. He is very skeptical about the value of the \$2,000 in Tournament Bucks he was also issued. Tom Loffredo also wonders. Finishing thirteenth in the open singles of Atari's *Centipede* competition, he was able to quickly cash his \$100 check, but what about those 100 Tournament Bucks? Are they worth anything? Will Atari make good?

Even before the bouncing checks began to emerge, Atari's Ballouz knew the tournament was a public-relations bust. "A disappointment in Chicago," was how he described it Saturday, October 30, when the tournament was still in progress. Only 138 *Centipede* fanatics had come to play when, said Ballouz, "we expected 2,000 from Chicago alone."

In the midst of the tournament, hints of trouble to come had already begun to surface.

"Everything they do here is to cheat the damn player," complained Rocky Wilson, a 26-year-old Air Hockey, foosball, and *Centipede*

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contestant from Seattle. "It's just another one of Lee Peppard's smokescreens," said Johnny Lott, 1980 world foosball champion.

Lott said TGI was going broke until Atari decided to attach its *Centipede* competition to the TGI events.

"I was aware they (TGI) had had problems," said Atari's Ballouz.

We asked, "Were you aware that players like Johnny Lott say they haven't yet received their prize money from last year, in Lott's case \$1000?"

"Lott said that?" asked Ballouz, incredulously.

"Yes."

"No. I was not aware of that," said Ballouz

There was a \$1 'officiating fee' —but there were no officials. The young women in TGI outfits dispensed copies of somewhat ambiguous rules.... They didn't officiate.

Surprises with fees and rules

The trouble began Friday night of the Chicago tournament—the public relations problems, that is. At the door, players were told to pay a one-dollar fee to get inside. A sign near the entrance indicated that the proceeds would go to a local charity; the doorkeepers tried to inform those who couldn't see the sign, because of crowding, of that same fact.

But put yourself in the player's position for a moment. You've won the local tournament and with it the right to compete in the World Championship. You've travelled hundreds of miles, spent two or three hundred dollars for airfare, paid the 60-dollar entry fee, and here's someone telling you to pay one more dollar to enter the tournament hall.

It's true that some of the players' entry fees and airfare had been paid by their sponsor. But many also paid their own way, and that included hotel rooms, cab fare, and meals.

Then came the one-dollar officiating fee. But there were no officials. There were several young women in TGI outfits who dispensed entry blanks and copies of the somewhat ambiguous rules. They were supposed to act as officials but

they hadn't been briefed properly and didn't officiate. They gave out much misinformation and added to the confusion that eventually reigned, telling players to move to the blue section, go to the brown section; no, now you should be in the blue section... but they never acted as officials and they did nothing about the alleged cheating that occurred.

Moments before the 6:30 p.m. Friday start of the tournament, the players were reminded, with a public address announcement, that to qualify for the double elimination they would simply go to any one of the 280 *Centipedes* on the floor, establish a high score, and post the three-letter code each had been given.

The TGI-outfitted young women had been handing out similar instructions in print: "Proceed to play any *Centipede*, trying to post the highest score on that game. Only the top scores will advance to the double elimination round. You may attempt to establish a high score as often as you can and on as many games as you want within the allotted time."

At 6:30 p.m., with no announcement as to amount of "allotted time," the players rushed to the *Centipedes* and began shoving quarters in the slots.

As a player, you've probably paid for most of your play time in the local tournament. But at the World Championship, mightn't you expect a little more class than to have to pay quarters to play? Another alternative, one that's been used successfully in many local tournaments, is to make the players pay for play but give the proceeds to charity. And in all such successes, the players are informed of that fact long before the tournament play begins.

In this instance, the quarters went to Tournament Games, Inc.

At 8:40 that Friday evening, the players were told that they all qualified for the double elimination round the next day, that it didn't matter whether they'd posted a high score on any of the *Centipedes* in the three-minute time limit set on each machine.

Guess how the players reacted? "Scam!" "Cheating us!" "Just to get our quarters!"

TGI President Lee Peppard tried to explain to a group of irate players and their parents that some players had apparently been posting not their own three-letter code but that of a girlfriend or someone else.

"Then where are the officials we paid for?" the players wanted to

know. Peppard apologized and said that Tournament Games had taken on too much, with the inclusion of the Atari tournament. He said he'd meet with the players in the morning and straighten the whole thing out, "so if you'll excuse me, right now I have to go to a cocktail party."

The players and parents could hardly believe what they'd heard. They'd spent \$10 or \$20 in playing the tournament, and here was its head man, saying he was going off to a party.

The next day, Saturday, Peppard explained to me that his tournament director, Ed Tuhkanen, had changed the game plan "at the last minute, and it was a mistake."

"Double elimination" was the original game plan, according to Peppard. With thousands expected, several flights of 256 players each were to be whittled down to one flight in double elimination.

With the low turnout, Tuhkanen, according to Peppard, decided to try the "post the high score to qualify" approach.

But that won't wash. If it was a last minute decision by Tuhkanen, how is it that those rules were in print, several thousand copies distributed, several hours before the 6:30 p.m. planned start? How is it that those

TGI President Lee Peppard explained that his tournament director had changed the plans 'at the last minute, and it was a mistake.' But those rules were in print several hours before the starting time.

rules also stated: "An announcement will be made regarding the starting time of the double elimination process?"

Peppard also appears to tell reporters varying stories. Example: Sunday morning, around 11 a.m., I called his hotel room to get the names of the winners. Peppard told me that the contest wasn't finished yet, and then in the same breath asked me if I'd returned Saturday to see how smooth the tournament was running.

I had returned. I'd witnessed players waiting for 2½ to 4 hours between matches, I'd heard announcements about computer breakdowns delaying all the events, several players expressed their doubts

about ever getting prize money if they won, and none of the players knew where they stood in the contest. Listings of matches were posted on the large television monitors, but standings weren't, at least not during the several hours I spent there late Saturday afternoon.

T-shirt compensation

Bruce Downs, 18, from Atlanta, lost his first double elimination match, won his next two matches in the losers bracket, and lost his fourth match. He didn't quite make it, he was told, and was given a Tournament Games soccer T-shirt and hat as compensation for the quarters he'd spent Friday night.

By my calculations, whittling down 138 players in double elimination, Bruce finished somewhere between 44th and 70th. Players finishing in the 49/64 bracket were to receive \$25. Perhaps, because of a low cumulative score in his four matches, Bruce did indeed finish 70th. The point is that he really doesn't know. The players weren't told how the final standings would be decided.

"We made a mistake; we didn't fully think it out," said Atari's Frank Ballouz, when asked to assess the conduct of the *Centipede* tournament. Ballouz says not spelling out the rules, particularly the three-minute time limit, months previously, was a factor in low turnout.

Ballouz stated that Atari is committed to the concept of a world championship video tournament and that yes, they'll try it again next year.

One final word, a commentary: When you use the line "cash and prize" while promoting a tournament, make sure that the players know and fully understand what that means. Spell it out, exactly how much cash and how many prizes. And don't expect video players to go home happy when you've given them soccer and foosball T-shirts. •

Note: Next issue Play Meter will investigate the "Tournament Game Spectacular" fiasco further.

Ed. Note: Mike Bucki, former news director of WABE radio in Atlanta and former assignment editor of WSB-TV/Atlanta, will begin a series on public relations problems and solutions, in subsequent issues of Play Meter. Sample topic: How do you answer the brash TV reporter who asks you, on camera, to compare heroin addiction to the attraction of video games? The columns will be aimed at aiding the operator to recognize PR problems and solve them.

Investigations, debts pursue TGI's Chicago tournament

The "Tournament Games Spectacular" has aroused the interest of U.S. Postal Service authorities, the *Chicago Tribune* reported on November 6.

A postal inspector was quoted as saying the U.S. attorney's office had asked the postal service to determine whether postal fraud was involved in promoting the Expocenter tournament.

The postal inspector, Dan Witowsky, reportedly was attempting to determine how many checks were written on the tournament account opened by Lee Peppard, president of Tournament Games Inc., and how many had bounced.

It was also reported in the newspaper's same story by Robert Benjamin that Peppard has been

sued for \$10,000 in unpaid bills by the Hyatt Regency O'Hare Hotel after a Tournament Soccer event he promoted for that site in May of 1980.

The newspaper also reported that the Expocenter had received advance payment of \$40,000 from Peppard to arrange for the four-day October event, but that he also owed \$10,000 to a contractor who should have been paid.

The *Chicago Tribune* on November 5 quoted three Chicago area tournament finishers who had not been paid their winnings, as well as quoting top finisher Johnny Lott as saying he took his \$850 winnings check to the Merchandise National Bank, "and they just about laughed at me."

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MAGAZINE

'The AMOA Experience'

—from a first-time attendee's observations

By Michael Mendelsohn

My first visit to Chicago turned out to be quite a delight. The weather, normally icy cold this time of year, was a sunny 70 degrees. The people of Chicago were warm, friendly and quite helpful. I was pleasantly surprised at the beauty this city possesses. Lakeside jogging in the early mornings was a definite delight.

My first AMOA show, on the other hand, had its ups and downs. The AMOA experience can be categorized into two parts, daytime and nighttime. Daytime was spent making your way through crowded masses of people to view the many exhibits. Nighttimes were spent

fortifying old industry relationships and building new ones.

The size of the AMOA show took me somewhat by surprise. Three large halls were totally saturated by hundreds of exhibitors. Some of the larger manufacturers, like Atari, took up two complete aisles.

The majority of exhibits seemed to divide into two areas: game manufacturers and service-related exhibitors.

I was somewhat disappointed by the game exhibits. Most of the worthwhile videos had already been shown at our Los Angeles

distributor. Two exceptions were *Turbo* by Sega and *Star Gate* by Williams. Both games bear close watching. There were dozens of other video games being shown, most of which were simply inadequate duplications of other popular video games.

In the pinball field were three very unique entries: *Viper* by Stern, *Elektra* by Bally, and *Black Hole* by Gottlieb. (*Black Hole* had been available to distributors for some time before the show.) Upper and lower playfields are now becoming commonplace. A pinball is still a pinball, however. And I find it difficult to become excited over one, no matter how unique it may be.

Service back-up

As for the service-related exhibitors, I found much to interest me. All of the ones I spoke with were helpful and informative. In outline, here is much of what I discovered.

- Two highly qualified service schools were represented, Nevada Gaming School and Randy Fromm's Arcade School (based in San Diego). Each of these seemed to serve a different purpose in the industry; the Fromm school was most practical for operators to send their employees for further training. This school is short (six days), relatively inexpensive, and gets right to the point in giving the mechanic the necessary tools for optimum field performance.

The Nevada school appeals more to the electronically minded individual who is looking for an in-depth education in video, pinball, and gaming devices. Its placement service promises to assist in the student's landing a job upon completion of the school.

- The latest in test equipment for the repair of logic boards and television monitors was on display. I



Play Meter covered the Conrad Hilton event. Above is Renee Pierson, circulation manager, passing out copies of the special show issue to convention attendees.

took information for my head service manager to analyze for usefulness in our operation. (Any attempt by myself to explain test equipment would be very incomplete.)

There were parts suppliers handling everything from I.C. chips to padlocks to television monitors. And the games manufacturers supplied the latest in service and parts manuals.

- All of the major change dispensers were on display, with each manufacturer eager to discuss the details of each model being shown.

An innovative machine on the market was the Standard \$1-\$5 floor model. This changer is more expensive than most but has these benefits: a very simple mechanism with few working parts to potentially jam or malfunction; very durable construction; and it holds \$2,500 in tokens or change.

This changer is somewhat dull in appearance. An arcade model designed to fit into a more colorful atmosphere would be highly desirable.

International Totalizer once again had its system for collections on display (it having been previously shown at the Amusement Operators

Expo in March 1981). The totalizer is the quickest, most efficient theft preventive collection system to date.

However, its two failings continue to be: (1) its high cost, approximately \$100 per machine, and (2) the inability to totally differentiate free plays obtained through pennies, slugs, quarter stringing, etc.

Novelties

Another positive value of the show was the display of a wide variety of novelty amusement equipment which you do not normally see at distributors' showrooms. Kiddie rides of all types were being shown.

A new ride I found interesting was a Grand Prix type racing car with a television monitor installed in front of the driver. The child not only gets the feel of an actual race car, but gets to control the car through the race track shown on his video monitor.

Some other novelty rides included coin-op strength testers, punching bags, and balloon, candy, and prize vendors.

Social life

Evenings were taken up by cocktail parties put on by the manufacturers. Live bands, full bars,

and impressive buffets were commonplace. The parties, many of them by invitation only, offered an opportunity to meet and talk with people you ordinarily do not see during the remainder of the year.

The annual AMOA show is as much a social event for its members as anything else. In all, it was a worthwhile experience.

I would, however, suggest using a different hotel for several reasons. A number of attendees appeared to be freeloaders looking to play all the latest games. This had to be the greatest "arcade" of all time! A classier hotel setting would discourage many of them.

[Ed. note: *The AMOA is booked for the downtown Chicago Hyatt Regency for the 1982 fall show and convention.*]

Most important, the Conrad Hilton seems to have become outdate for the immensity of services the AMOA show now requires. The more modern hotels in town might be an improvement. If nothing else, a fresh and cheerful atmosphere for next year's show would certainly be welcome.

Mendelsohn is president of Games Unlimited in Los Angeles.

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SPECIAL:

A look at the 'top games' at the AMOA show

by Mike Bucki

Smart handicappers frequently go with entries from the well established stables where the breeders and trainers have proved they know how to win. But the wise bettor also spends time, *throughout the season*, closely watching the morning workouts. The morning-line favorite could go lame, and there might be a rising star out there among the long-shots.

Charged by *Play Meter* managing editor, Ray Tilley, with the task of picking the top five or ten videos from the AMOA Show in Chicago, I feel somewhat left adrift. With dozens of selections in the field, hundreds of other "bettors" crowding the stalls, and only 20 hours to view and review, I'm now faced with the task of choosing the winners for the entire season on the basis of only a few morning workouts. Unfair and impossible, I say, but I enjoyed every minute of the task.

My regular reviews are based on 2

to 8 hours research on each game but time was limited at the AMOA exposition. My observation time varied from 2 to 30 minutes, with most games receiving about ten minutes of my attention. Nevertheless, 1982 looks like it will be a very exciting season with several solid Favorites and Co-Favorites, a few interesting Possible Long Shots, and too many Also Rans; only a few of the last category need be mentioned here.

TOP TEN FOR 1982 (Favorites and Co-favorites)

Atari's *Tempest* will be the first out of the gate but it will be running neck and neck with Taito's *Qix* as they head into the first turn. *Frogger* (Gremlin) may leap into the lead from time to time, with *Eliminator* and *Make Trax* grabbing rail positions just behind the leaders. None of the top ten should ever be discounted, which means that Gremlin/Sega, Midway, and

Williams will thoroughly enjoy 1982, as you can see from the following:

1. **Tempest**—Atari
2. **Qix**—Taito
3. **Frogger**—Sega/Gremlin
4. **Eliminator**—Sega/Gremlin
5. **Make Trax**—Williams
6. **Omega Race**—Midway
7. **Turbo**—Sega/Gremlin
8. **Venture**—Exidy
9. **Galaga**—Midway
10. **Stargate**—Williams

1. *Tempest*, by Atari, delivers what everyone else promises: "Skillful players continue to be challenged while less experienced players try to master higher and higher levels." Pressing the start button, the player discovers that he has eight seconds to choose one of five starting points: Level 1,3,5,7, or 9.

Most will choose Level One and find themselves looking down the throat of an inverted cone. Red X-shaped Flippers are rising toward the

(continued on page 27)



TEMPEST—Atari



QIX—Taito



FROGGER—Sega/Gremlin

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Experts’ Choice: Top Videos

[Clip and save for purposes of ribbing the staff in '82]

New video game product is by now hitting the streets and the arcades after exposition to operators and distributors at the 1981 AMOA Show. Some stars are beginning to rise (see Equipment Poll, page 12) and other starters will emerge later, toward the home stretch of the video season.

Play Meter, which last year made its picks at the gate in Chicago (January, 1981 issue) and took a certain amount of ribbing about its collective editorial choices, has in this new games season gone on the line and put on record its editors’ individual scratch sheets (see box). Here are the games judged winners, in order of 1 to 5, by *Play Meter*’s Publisher Ralph C. Lally II, Editorial Director David Pierson, independent video games reviewers Mike Bucki and Roger C. Sharpe.

For those who question this trade journal’s judgement in tagging the long-distance runners after a glimpse of each game at the show...just compare the 1980 editorial notes after the 1980 show: *Battlezone*, we said, “seemed to offer the most potential for the present video market.” The Atari game, *Play Meter* commented, “appears to be one which will appeal almost immediately to expert video game players” and it was also “a potential favorite for scholarly types.” Well, apparently the scholarly types and other *Battlezone* aficionados were in the small minority, since the game fizzled in popularity. We goofed.

But on the up side, we editorially noted that Cinematronics’ *Star Castle* attracted sizeable crowds at the 1980 AMOA Show and took some experts’ votes as being the best video at the show.

We went on to remark about Williams’ *Defender* (later to be shown as best earner in operators’ responses to *Play Meter*’s annual

poll): “not a bad showing for the company’s initial effort in the highly competitive video market.” Not bad, indeed.

And *Play Meter* was a bit short-sighted (as we have been reminded repeatedly) in viewing *Pac-Man*. We termed the Namco-engineered Midway game as “another maze-type game...a cute game which appears to grow on players...sound effects (are) good for awhile then become annoying.” Like the annoyance of our having to eat crow after crow as the game soared into the upper heights of popularity.

And so forth. But let the past sleep.

Our in-house choices, when meshed with scores from the two game reviewers, produce the *Play Meter 1981-82 Video Game Winners Consensus*:

1. *Tempest/Atari*
2. *Qix/Taito*
3. *Donkey Kong/Nintendo*
4. *Galaga/Midway*
5. *Frogger/Gremlin*

Also garnering scores for top-five placement by one or more of our panel of experts were: *Eliminator/Gremlin*, *Make Trax/Williams*, *Stargate/Williams*, *Tactician/Gremlin*, *Thief/Pacific Novelty*, and *Vanguard* by Centuri.

In addition to the editors’ and the reviewers’ choices, see also Dick Welu’s choice of “Game of the Show” in his AMOA Diary, coming in the next issue of *Play Meter*.

For the reviewers’ assessments in this issue, see Bucki’s Viewpoint on Video special column on page 22, and Sharpe’s commentary, “Nostalgia and Videos,” page 67.

Good luck to everyone, and we trust no one will be jinxed by our picks.

—the editors

The ‘Play Meter’ Picks

LALLY: *Tempest, Qix, Donkey Kong, Frogger, Vanguard*

PIERSON: *Qix, Donkey Kong, Tempest, Galaga, Stargate*

BUCKI: *Tempest, Qix, Frogger, Eliminator, Make Trax*

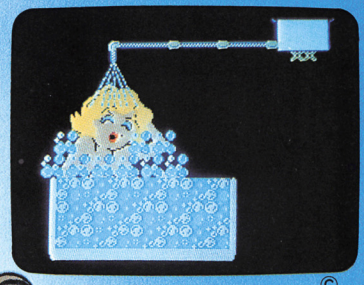
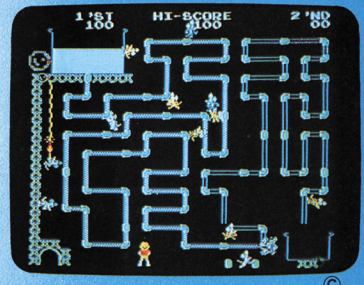
SHARPE: *Galaga, Tempest, Thief, Tactician, Donkey Kong*

CONSENSUS: *Tempest, Qix, Donkey Kong, Galaga, Frogger*

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Depth	545mm	560mm	690mm	560mm
Height	625 - 765 (Can be adjusted in five stages)	685 - 825 (Can be adjusted in five stages)	1625mm	1375mm
Power Source	100V - 240V / 100W	100V - 240V / 110W	100V - 240V / 110W	100V - 240V / 100W

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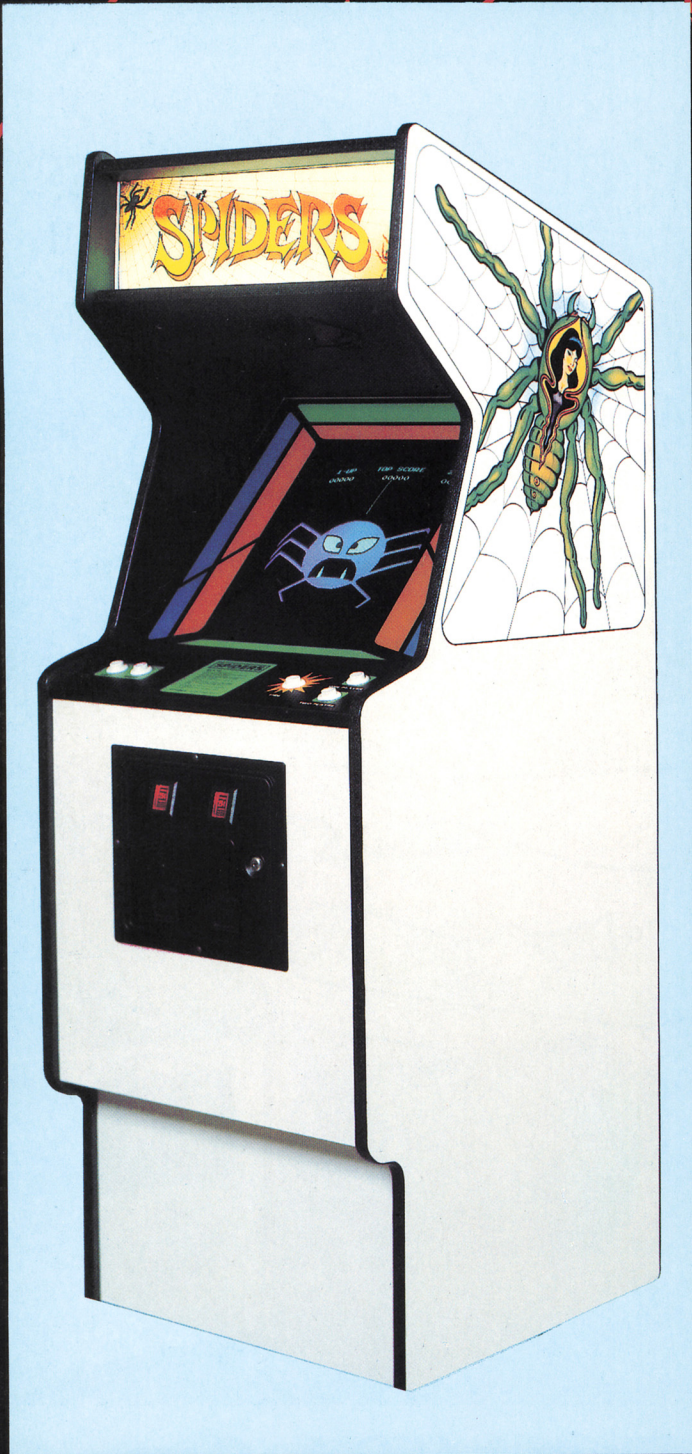
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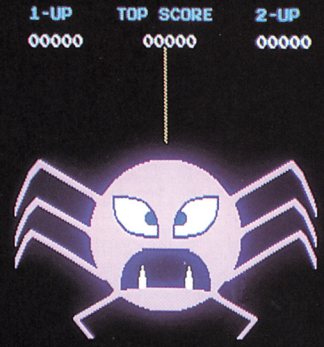
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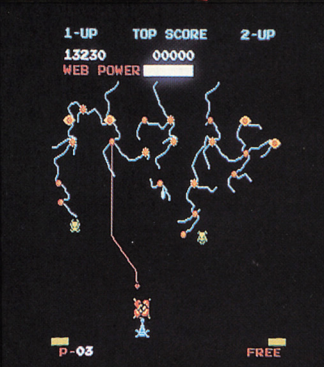
SPIDERS



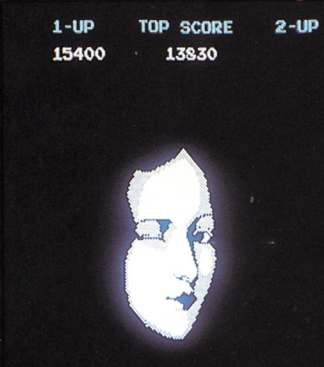
Commencing the battle, a huge purple spider will appear challenging the player to test his skills against the attack waves of the menacing spiders.



The horrible pods appear on the screen exploding and releasing deadly spiders to descend upon the player. Watch out! The treacherous spiders will hurl super webs and sonic waves at the player in an attempt to destroy him.



If the player destroys the first three attack waves, the beautiful Spider Princess will briefly appear to encourage the player to continue the battle.



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Reviewer Bucki checks out two-player action on *Eliminator* with Brad King from Sega/Gremlin at AMOA show.

player to the top rim; they appear small in the distance but rapidly grow in size as they flip up the planes of the vortex. The player must act quickly, skirting his blaster around the upper rim with a twist of the control knob, while holding down the fire button for continuous fire.

If too many flippers or flipper tankers reach the top, he can obliterate the entire group with one touch of the Super Zapper button. A second touch, in each vortex, destroys only one enemy. Then suddenly, all the enemies are gone and with a spectacular *whirr-whoosh*, the player finds himself flying through space and landing, in just a second or two, on the rim of another, oddly shaped vortex—with more and more enemies to confront, their frequency and speed increasing as he fights his way to higher and higher levels. And from level 9 upward through 99 he learns that he must earn his way past two, three, or four levels, if he wants to add a quarter and begin the next attempt at a Skill-Step point higher level 9.

Most will add that quarter again and again and again. *Tempest* captivates an audience with its crisp clean lines that create a truly three-dimensional experience. The whirr-whoosh victory flight down the throat of each vortex is a designer's stroke of genius. It wastes very little time while zapping the player with a rush of anticipation for the next battle. The battle sounds, including the throbbing humm of the pulsars (beginning at level 17 if you ever get

there!), compliment the visual effects perfectly.

But there's a possible bowed tendon, a severecrippler waiting in the paddock for this finely tuned stallion. At the Atari *Centipede* World Championships, during one of the many lulls in the action, I observed several youngsters discovering what may be a major flaw in *Tempest's* program. After level 3, green spikes begin to grow up several planes in each vortex. Red Flippers that reach the top can be destroyed by sitting your blaster on a long green spike and holding down the fire button. As the Flippers "flip" one by one along the rim and into your blaster they disappear. That's okay, that's part of the game's instructions which are printed on the control panel. But I found several youngsters successfully sitting the blaster on an empty plane and being able to defeat one or two of the higher level vortexes with little or no "battle."

Are there faults in the program or were these faulty machines? We are checking with Atari and we'll let you know.

Rating:

ITA -0 (Immediate Turn Away factor)

CB +10 (Come Back rating)

MO -1 (Max-Out rating; could be -4 or -6 if major flaw is a flaw)

2. *Qix*, by Taito, may not attract the large crowds that will gather around *Tempest*—not at first. Comparatively, the action moves at

a snail's pace. The two colors on the screen, beige and light blue, are rather bland. You won't find provocative sounds here, only a hum when a line is being drawn, the crackle of the fuse, and the sparkle of the Sparx. It looks too simple, too easy. And therein lies its beauty. Scenarios like the following thought-flow, will occur over and over:

"Whew! Love that *Defender* but it sure wears me out. Think I'll try something different, like—hey, what's that? *Qix*. Hmmmm. Looks easy enough...Wait till that thing (the double helix) spins away and then draw lines and capture large hunks of territory. Yeh, think I'll give it a try. Hey, this is easy, I got three huge chunks already, for 54% of the screen...whoops, what's that? Oh, a little Sparx got me. Instructions, let's see. Aha, I got it, just draw around them little suckers. Okay, let's...whoops, darn, forgot about the *Qix* while trying to draw around that Sparx. One more time. Son of a gun, got me again. Well, you can't expect to beat a new game first time around, let's try it again."

And that's the beginning of an addictive frustration. Unlike many other games on the market today where a joystick is the primary control, *Qix's* responds precisely. The player can't blame the controls for his failure, only himself. And when he does that, you've got him hooked.

Adults and the very young will probably comprise most of the throngs of *Qix* addicts in the early

going. Challenged teenagers (a good promotion wouldn't hurt) will quickly follow. Qix quickly acquaints the curious with a quiet—yet frustrating—quest.

Rating:
 ITA -2
 CB +9
 MO -3

3. Frogger (see upcoming review in the next "Viewpoint on Video"): A great game that should gather an ever-increasing number of fans.

Rating:
 ITA -2
 CB +8
 MO -5

4. Eliminator, by Sega/Gremlin, seems constructed from parts of Star Castle, Space Fury, and Omega Race, yet somehow emerges with its own unique character. Energy bolts do not destroy an enemy space ship but merely push it away—but if any ship bounces into the Eliminator Base, that ship is destroyed. Rapid fire reduces the range and strength of energy bolts.

A shot laid precisely down the throat of the spherical Eliminator Base destroys it and ends the round. Unlike the drone space ships

confronting the player's ship in the early going, the Eliminator Ship, when it emerges, can destroy the player's ship with energy bolts or with a collision.

Sights and sounds have been blended harmoniously in Eliminator, the dramatic explosion of the Eliminator Base captivates the eye and ear, but the best feature of this game is its simultaneous play. Two players can compete on the upright model, while two, three, or four can battle it out on the cocktail version.

The cocktail model, in the right locations, say a tavern, should increase operator profits enormously. While a single player will probably receive 1½ to 2½ minutes playing time for each quarter, four players competing against each other will probably finish each battle in 3½ to 6 minutes.

Eliminator should reap high profits while offering players a new challenge that truly pits one against another.

Rating:
 ITA -1
 CB +3
 MO -2

5. Make Trax, by Williams, was one of many Pac-Man-type games at

the AMOA exposition but this was the only one that combined all the right elements and came out looking different. The joystick responds as the player expects. The maze has six exits and two overpasses—elements which confuse at first but become part of the strategy of the player as he or she increases his or her skill. The rollers, which give the brush a temporary burst of speed as it paints the maze paths, also become part of the advancing player's strategy.

But then come the frustrations. Just when the player thinks he has successfully avoided the fish time after time, and is about to completely paint the maze, then come the playful kitten, the nose-twitching mouse, the dirty bird, the dancing cat, the invisible man, and the runaway tire. Each takes its turn in a different maze level, making "trax" across the freshly painted paths, requiring the player to paint those paths again and/or capture the offender for bonus points.

I may be sticking my critical neck out (pun intended) while placing a cutesy game in the top five, but Make Trax possesses that fun and frustration factor that'll keep them coming back.

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Rating:
ITA -1
CB +10
MO -3

6. *Omega Race*. A great game by Midway. See my review in the November 15 issue of *Play Meter* for details.

Rating:
ITA 0
CB +9
MO -4

7. *Turbo*, by Gremlin/Sega. I didn't get to play this game at the AMOA Show. A crowd packed

themselves around it, constantly. But I watched for several minutes and felt like I was in the driver's seat. Imagine how the driver feels as those unending three-dimensional highway scenes zoom up and away. Snow scenes, night scenes, cityscapes, and landscapes challenge the driver in this fast paced journey.

With *Frogger*, *Eliminator*, and now *Turbo*, Sega/Gremlin appears to have something for everybody.

Rating:
ITA -3 (some players aren't fond of driving games)
CB +9
MO ?

8. *Venture*, by Exidy, displays a refreshingly unique concept but might fail, slightly, with some players because of the joystick. It's not terrible as joysticks go, it's only slightly unresponsive. Many are far worse. Most players will probably master the joystick's idiosyncracies for the joy of playing the game, the adventure of traveling down into the dungeon, stealing treasures from each of four rooms on each level, shooting ghosts with a magic bow and arrow, avoiding the goblins—it can be great fun!

The *Venture Legend*, a poem which instructs the players how to win, sets a mood that *Dungeons and Dragons* afficianados will find delightful.

Rating:
ITA -3 (slight joystick problems)
CB +7
MO -3

9. & 10. *Galaga* by Midway and *Stargate* by Williams. Both are colorful, action packed adventures in outer space with sound effects that enliven the play of the game. Both are also obvious follow-ups to 1980 hits, *Galaga* following *Galaxian* while *Stargate* comes on the heels of *Defender*.

Williams and Midway are banking on the success of the previous games but there's a nagging question looming on the horizon. When *Defender* and *Galaxian* fans begin looking for greener pastures, will they choose a very similiar game that presents a few new twists and challenges, or will they want something totally different? In time, the players will answer that question.

Ratings:
Galaga:
ITA -2
CB +7
MO -4 (a few sections that are too easy)

Stargate:
ITA -3 (like *Defender*, it'll be too tough for some)

CB +8 (but once tried, it'll bring 'em back)

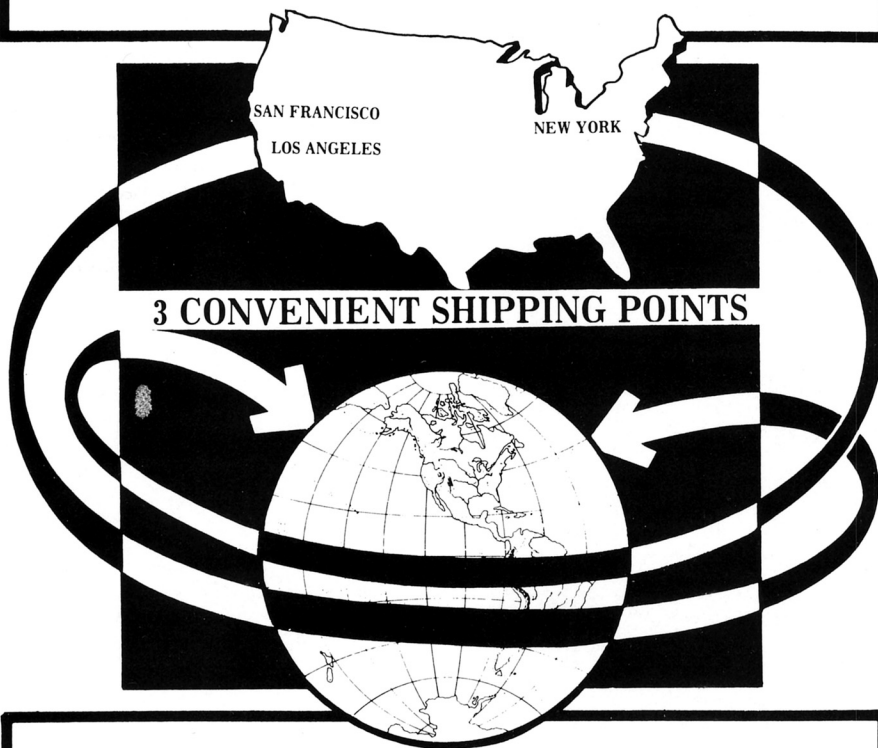
MO -2 (a few will master it, but not consistently)

Possible Long Shots

Minor flaws prevent the following from becoming solid hits. All are basically good games with interesting concepts, colorful graphics, and appropriate sounds. Space doesn't permit me to discuss the attributes, individually, so please understand why I'm only targeting the flaws of the following; hopefully the

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manufacturers will take steps to correct them.

Red Alert by GDI. The fire button is too slow; perhaps the entire game is. A speed-up kit could work wonders for this game. Repeat players soon become bored with the opening 15 seconds wasted on display. That little speech is effective, the first or second time. Later it wastes time, the player's and the operator's. Put it in display mode where it belongs.

Donkey Kong by Nintendo. A display opening wastes 16 seconds before play actually begins. However, the primary problem I have with *Donkey Kong* is its joystick. It doesn't seem to want to respond to my commands. The fault may lie with me, the player, but if too many players feel the same way, whether or not that perception is accurate, then too many won't come back.

Solar Quest by Cinematronics. A good, almost great game except it may prove too easy in the long run. With difficulty settings from 1 to 8, all of the *Solar Quests* at the AMOA Show, except one, were set on "1". The exception was set on "5". The

speed increased dramatically but not geometrically, not quite enough, and it left me wondering if setting "8" will be hard enough for the above-average player.

Challenger by Centuri. A slightly different "base at bottom screen" game that's too cutesy, visually, for an outer space adventure. You can "warp" to the top of the screen, "superbomb" all the attacking enemies, wield your triple gun, and link-up with a walking television camera on the screen for bonus points, but it's too much of a kiddie game for outer space. Maybe Centuri could just change the name to "Hokey-Dokey"?

KAOS by Game Plan, Inc. I couldn't quite get the hang of operating the joystick and the jump button but it may have been me and not the game. An innovative game design with bright colors and humorous sounds. A possible come from behind winner here.

The Also Rans

With Rock-Ola's *Jump Bug* and *Fantasyland*, I discovered joysticks that responded like dead fish. Both games are cute but the controls are

terrible and sometimes the game program thwarts what little control you have!

Among the maze games, *Pac-Man* "imitations" that displayed little imagination, were Universal's *Lady Bug*; *Piranha* licensed to U.S. Billiards; and *Turtles* by Konami, licensed to Stern. *Turtles'* joystick also flops with the worst of them.

In *Streaking* by Shoci (marketed by Elcon Industries), a nude woman runs around a maze, avoiding the cops, picking up dots and bits of clothing. It's a cute idea, but someone should tell the Shoci designers that the streaking fad faded from the American scene several years ago. Someone should also show them how to construct a responsive joystick. Sorry if I sound like a broken record, while discussing these poor joystick controls, but I believe in telling it like it is.

Among the games that looked intriguing and that I hope to evaluate more fully in the near future are *Mouse Trap* by Exidy, *Spiders* by Venture Line, *Victory* by Exidy, and Konami *Type 102 & 104*, licensed to Stern, and held in house, respectively.

But for now, these weary fingers must rest. Till next time, happy new year! ●



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Amusement Machine Show in Tokyo:

Japan exudes confidence

By Play Meter's International Desk

The Japanese who have been entrepreneurs of the video game industry over the past few years are a long way from being written off. But the busy, bullying tactics employed to establish themselves so dominantly in what was—and still is to the operator—very much part of the risk business are no longer so evident.

Instead, as visitors to the 19th Amusement Machine Show in Tokyo saw in October, the Japanese industry is all about risk. The game is the same; it's just the name of the game that's taken a more mature, realistic adjustment rather than a change.

The Japanese industry is showing obvious signs of altering its tactics. It was its venture that brought about the joint statement in March of 1981 by JAMMA and ADMA, the Japanese and the American manufacturers' associations respectively, and encouraged further a second such bonding declaration to be signed prior to the Tokyo Show at an international conference of video game producers. The Japanese industry remains a busy one but the bullying appears to have ceased—there is a genuine belief that to succeed one has to be recognized as being successful. And having succeeded, the Japanese industry is rapidly establishing itself, albeit with the help of a venture it can hardly claim to be its own entirely.

It is commonplace these days that, however busy our international trade shows are, there appears to be just as much activity and business conducted in hotel suites housing "our next hot game which we don't want anyone but you to see just yet." Needless to say, in Tokyo the "hot games" were either in hotel rooms or just a couple of hours away by the Bullet to Osaka.

If there was anything to describe as "hot" inside the spacious inter-



Some games displayed variations from space themes in the Tokyo showing.

national exhibition center in Harumi it could, in fairness, only mean the Nintendo comical character game *Donkey Kong*.

Nintendo introduced *Donkey Kong*, a colorful game with some brilliantly graphic features, in mid-summer and has enjoyed considerable success with it on its home market. How the game will stand up to the world market, however, with Nintendo determined to stand alone as sole manufacturer, is of course another matter. There were variations on the game available in Tokyo and, inevitably, as Nintendo reaps the benefits from keeping *Donkey Kong* close to its chest, there will be copiers lining up to plagiarize the innovation.

In the comical vein, Universal produced a novel variation on the successful maze game theme with *Lady Bug* and Nichibutsu added even more deviations to the same theme with a novel piece, a lady in a bath protected against nibbling mice by one Frisky Tom. This game,

though, has not been scoring too well on the Japanese market and Nichibutsu has been working overtime to improvise with effect for the world market.

One man in the Japanese amusement industry who permanently seems to have something to smile about is Namco's Masaya Nakamura. As head of JAMMA he is well satisfied that so much is being done in the fight against video games piracy, and that 32 major companies worldwide chose to agree at the recent Tokyo conference he called, brought a grateful smile to his face.

That smile was kept beaming throughout the three-day exhibition that followed, as the confidence Namco has in its organization, research and development, and expertise was more than rewarded with the success of *Galaga*.

Namco's new game, in fact, is simply an advancement of its outstanding *Galaxian*—but with some subtle innovations on an entirely new board. Midway Manufacturing, of course, was first in line for U.S. and worldwide rights for a game that looks likely to keep the space theme very much part and parcel of the video games industry for some time yet.

Baiting for bidding

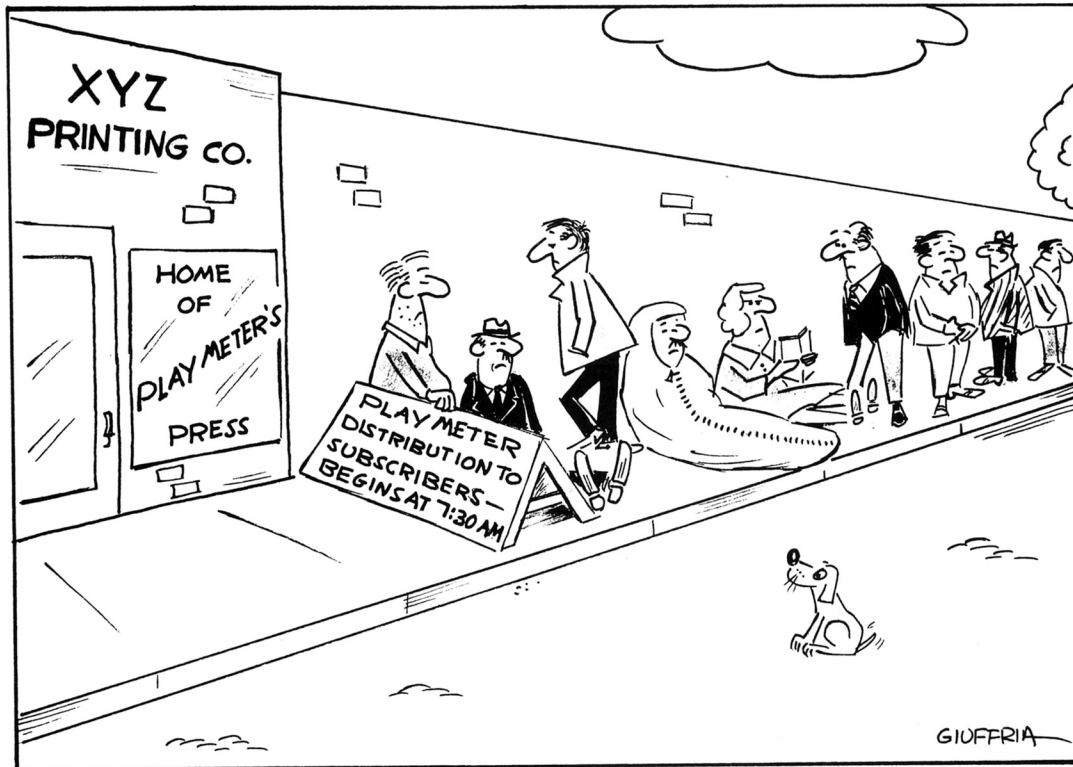
Talking of space themes, it was interesting to note the only "scramble" on the vast Konami stand was from company representatives wishing to raise a bid for any one of a number of games exhibited. Konami, without doubt one of the most innovative of Japan's current venturers in the video games market, hadn't even named its range of new games—they just numbered them, baiting the international market to barter lot by lot.

It seemed to work, although *Play Meter* was informed that Konami has as much new product tucked up its sleeve in readiness for a similar big

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Hayao Nakayama, executive vice president of Sega Enterprises, Ltd. (standing) served as chairman of the Japan Amusement Manufacturers Association (JAMMA) show. Here, Nakayama addresses a large group of industry leaders from over the world, outside the Exposition Hall on opening day.



Around the Nichibutsu stand, talk was about its Frisky Tom, a game with a comical theme—which hasn't yet replaced outer space in Japan.



Turbo, Sega's new driving game with high speed and 'three-dimensional' features was a hit at the JAMMA exposition.

showing at the European exhibitions next January as it showed in Tokyo.

One of the most encouraging signs in the video games field seen in Tokyo was the re-emergence of Taito among the frontrunners. Without one of its "hot games" for some time now, the *Space Invaders* innovator has ventured forth with tenacity and perseverance, and its faith could well be rewarded through *Fitter*—a maze game initially, but with the challenge of Rubik's cube as a second phase!

The Japanese coin-operated amusement industry, of course, is not dependent on video games, although gambling is as controlled in the coin machine trade there as it is in the United States. Kiddie rides and fun vending equipment, arcade games, and the permitted token-in/token-out piece are important parts of a thriving industry in Japan.

Quasi-gambling equipment

Pachinko—their own and never matched parochial game—has found problems, though. Pachinko is nowhere near as popular as in its 1976 heyday but a revival with the introduction of fruit symbols, called a "Fever" feature—adding impetus to a game housed in about 100,000 Pachinko parlors throughout Japan—was about to revitalize the game. The Tokyo Show, in fact, endorsed this with a conscientious involvement from the industry in general for its own game for its own market.

Government legislation, however, was soon to put an end to the operator's hopes of a revival in a flagging market as the Pachinko games with a Fever feature were labelled "gambling machines."

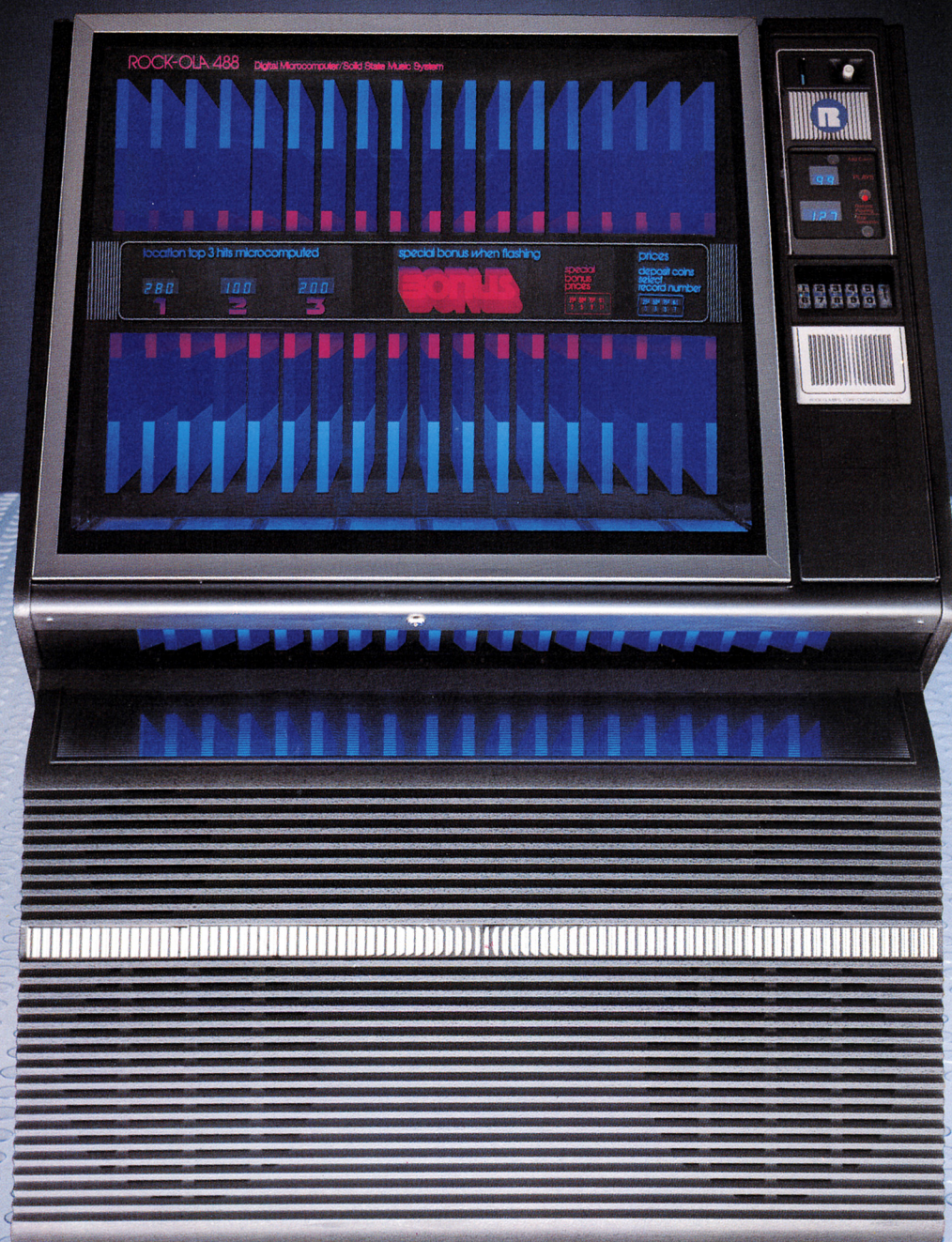
Ironically, when one enters a Pachinko parlor he can only purchase a basket of "ballbearings" and feed the machines with them. All you win, if you're lucky, is a basketful of "slugs"...and at the end of the day, it seems, everyone must be a loser.

The Japanese, however, are not ones to lie down—and irrespective of their own strict and stringent government legislation and the conscientious threat of the American and European amusement machine manufacturers, their message is simple and clear. They are steadily getting their house in order, getting the industry in Japan together and taking thoughtful strides in step with each other to make sure the potential they have to offer does not run away at too fast a gallop again.

It's a united venture and a venture the world trade should welcome. ●

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Do coin-ops shut out potential distaff fans?

By Marion Cutler and Jane Peterson



'Women—more than zaps, lights, or electronics—are the signal that the game has become respectable.'

There are two ways of looking at recreation: something you can do to spend time or something you can do to get pleasure. Either way, the result means profit for the provider. But any business today that looks at recreation from the standpoint of *who* the customer is rather *why* the customer is buying, is as doomed to extinction as the buggy whip.

Shutting out women nearly spelled the end for taverns and pool halls until they wised up, cleaned up, invited women in, and became respectable. Today the bars and pool halls throughout America are not only integral parts of restaurants and clubs, but the wet bar and pool table are status symbols in upper middleclass homes. The message to the rest of the amusement industry is loud and clear: clean up your act, and you, too, can profit. Turn on the lights, scrape the paint off the front windows, quit spitting on the floor, and what was yesterday's "den of iniquity" can become today's "in-spot."

Far from exploiting the potential market, the amusement games industry seems to be narrowing it by presenting a "loners" and "losers" image to the potential customer. With half-naked female figures and gigantic "zooms" and "zaps" forming the backgrounds, pinball and electronic games and their surroundings fairly shriek "Men Only!" What's more, most of these games are located in places marginal to women's access. What appears to be an anti-social attitude toward women (as was so clearly the case with pool halls and taverns) gradually generalizes, in the public's mind, to the anti-social element, period, and takes on a criminal image.

The idea shouldn't be that playing an amusement machine makes the customer some kind of mechanical genius who can bounce the machine

around to demonstrate muscle, but that it is a social amusement around which the No. 1 American sport can be organized: Finding someone. Las Vegas had this psychology tapped the day the doors opened.

Face it: Women are the signal that the game is respectable, and women are the customers that can make the game more appealing to a wider male market than any number of space-zaps, flashing lights, or electronic sounds.

The world changes faster than our ideas about it do. A 50% divorce rate and the economic facts of life have propelled the majority of women into new lifestyles. With the new lifestyle has come increasing socialization between men and women. But most bars and arcades still turn women off, and women won't socialize with men if it means picking up a lousy image. This is why the women who do frequent bars and clubs tend to do so in protective groups, a tactic that they know is counter-productive to the Finding Someone game.

The business that provides women access to recreation without the surcharge of a bad image will be the business that capitalizes on women's new economic power and lifestyle. She needn't continue to be thought of as an appendage to the male customer. Her motivation to find amusement and company is no less than that of her counterpart.

Who is the new woman? She's educated, she's solvent, she's self-determined. Her charge card is no longer pink. She's today's pioneer and explorer because most of what men have taken for granted for a long time is all news to her. She joins organizations, works out in the gym, heads a household, and worries about taxes. You'll find her on the golf course, tennis court, in line at the driver's license bureau, and aloft



'A majority of women are into new lifestyles and increasing socialization between men and women.'



'Once the industry opens its doors to this waiting female market, its image is bound to improve.'



'Games that test more than mechanical skill can open doors for potential customers of any age group, because their appeal will go beyond the adolescent male.'

in an instructor's airplane. If she is a single employed woman or a married unemployed woman (categories that most women fill sooner or later), she has as much or more leisure time at her disposal than other men or women.

So far, the only leisure activity that provides her with a chance to Find Someone and improve her image at the same time is the college classroom. Women now comprise more than 50% of college students. And people with college educations devote from two to three times as much leisure to recreation as do high school graduates or high school drop-outs.

Opening the market wider

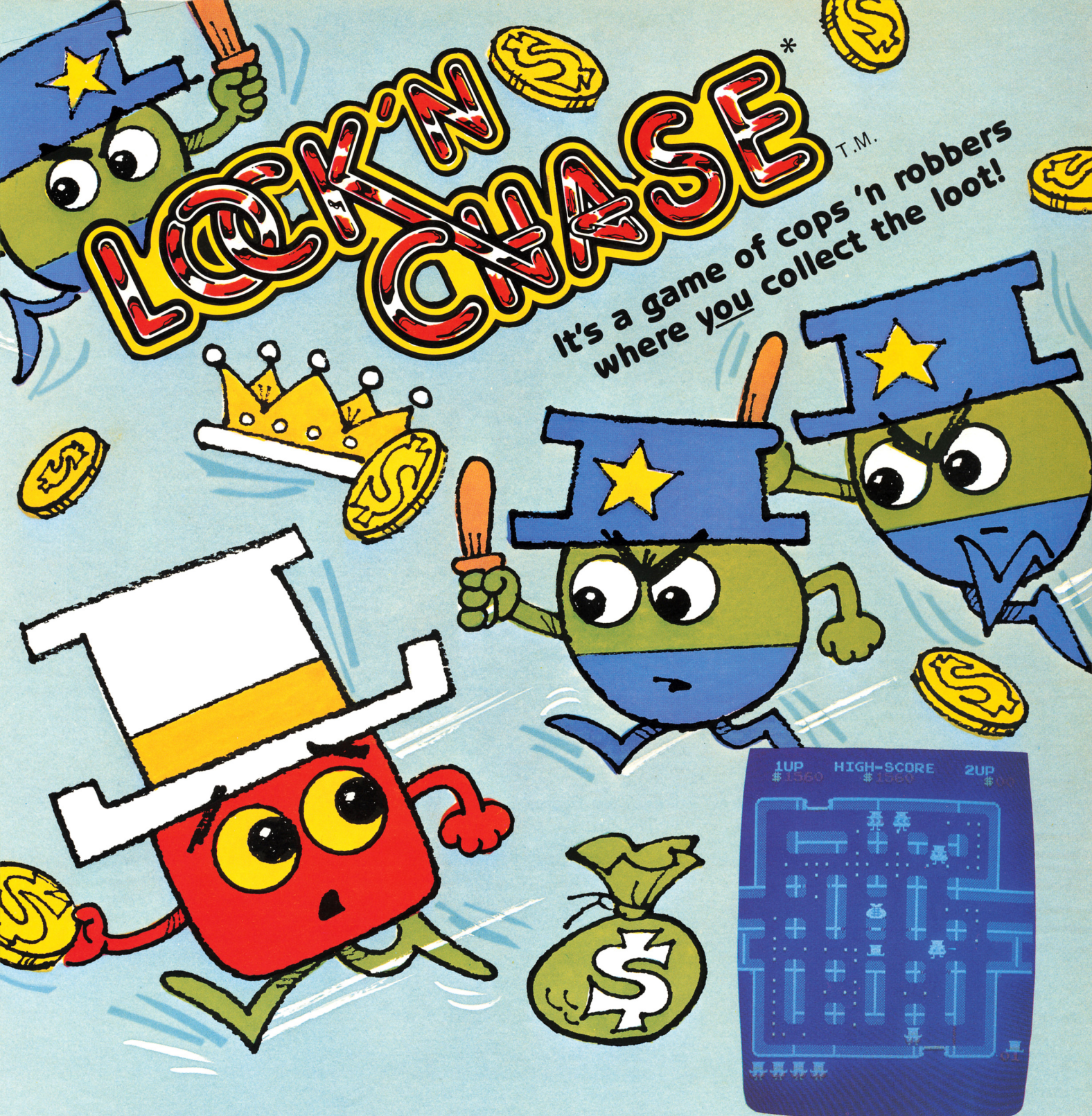
Why should the image that women seek remain opposed to the image that the amusement industry now projects? It shouldn't. Once it opens its doors to this waiting female market, the industry is bound to improve its image, and the image of its customers will improve accordingly.

By making games serve a social purpose, the games can come to symbolize the highly respectable desire to meet others. Games for two or more players carry an implicit social message. Games that test more than mechanical skill open doors not only for women but for potential customers of any age group because their appeal will go beyond the adolescent male.

Social games that are today confined to the home of potential customers can come out into public and be free of the restriction that one can only play with those people we already know and can invite into our homes. People who like to play games could then do so in public, and people who like to be out in public could then have access to the games that will make meeting others easy. The backgammon board and Monopoly set could be laid away, once and for all, with an R.I.P.

Can opening the market to the woman customer really start all this? We think so. Because if you look around you, it seems undeniable that the real game we all play is Find Someone, and any game that plugs into that game has got to succeed. ●

[Ed. Note: The authors are professional freelance writers specializing in the research of sociological topics such as aging, and are based in Dallas. Peterson teaches writing at Richland Community College, and Cutler holds workshops in business writing.]



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WAR GAMES: Fun videos go to the Army

By LEE SHEARER

The new generation of computerized video games has revolutionized the coin operated entertainment industry during the last two years, which is news to nobody, but the new video games have made waves in another area now: military training.

Small towns here and there occasionally ban coin-operated machines, arguing that they contribute to the moral delinquency of youth—but the U.S. Army may soon be encouraging its soldiers to play some video games, a new kind of war game played in the interest of national defense.

More specifically, the Army thinks the programmable games may be adaptable to use as part of its training program for tank gunners. And if that program pans out well, there could be further possible uses. There are anti-aircraft gunners, artillery bombardiers, and any number of other Army jobs that require the eye-hand coordination that is also essential for playing video games well.

The idea is a brainstorm of Gen. Donn Starry, who heads up the Army's Training and Doctrine Command at Fort Monroe, Virginia.

Starry had simply noticed a lot of people playing video games during his travels, explained Maj. David Robinson, extension training director at Ft. Monroe. Starry also noted two other things: those people were playing the games, and paying money, voluntarily; and they were developing eye-hand coordination that might be transferrable to other tasks, such as firing tank guns and cannons.

The attractiveness of a training alternative that would allow the Army to inexpensively simulate firing combat weapons was obvious to Starry. If video games could be adaptable as a training device, that gives the Army the possibility of increasing the amount of training in firing guns, and cuts the cost of firing those "guns" considerably.

It's better of course to use real tanks and real ammunition, and no

simulated program can completely replace the need for training on the actual equipment a soldier would use in war. But, as Robinson pointed out, "You're talking about a lot of money to run a tank." In a test training session, for example, 50 to 100 rounds might be fired, and those rounds may cost from \$40 to \$100. There are even some sophisticated shells that cost in the thousands of dollars. The Army, for obvious reasons, uses those shells sparingly in training.

Economizing isn't everything

"I'm not sure savings is the right way to look at it," Robinson noted, however. "It is not a technology that will eliminate the need for actual firing." The potential savings is only one of a number of features that make the video game look attractive, the major explained. "Yes, this technology does appear feasible as a part-task trainer," he said. "It replicates most of your responses but isn't as visually sophisticated. We're looking at something that's low-cost, and the play aspect is still there."

Another attractive feature of video games, Robinson said, is their programmability. Such factors as distance can be simulated by altering the apparent size of a target on the video screen, and the computer can also be programmed to know how much lead a gunner must give—that is, how much farther ahead of a moving target a shell has to be aimed in order to get to a particular place at the same time the target does.

Although Atari's *Battlezone* was mentioned in news accounts about the test training program, Robinson told *Play Meter* that the Army has not yet selected the particular game it will adapt for the test.

It would seem logical that the Army's training system would resemble something like *Battlezone*, however, with that game's provision for a player to look through a periscope viewer, manipulating controls to drive a video tank and fire at enemy vehicles.

The Army's version would have controls like those the soldier will use in a real tank, and the objects he fires at, and gets fire from, will be outlines of the enemy vehicles a soldier might actually encounter in a battle, should his skills be used in a real war.

Under test

Robinson said the idea will be thoroughly tested next spring with soldiers at Fort Knox, Tennessee. If the Army's scientific evaluation shows that the games can contribute to developing hand-eye coordination that is transferrable to a gunnery task, then the games may become a part of the Army training regimen.

"A lot of it will depend on how this study progresses," Robinson said. "We can scientifically measure what skills are transferrable."

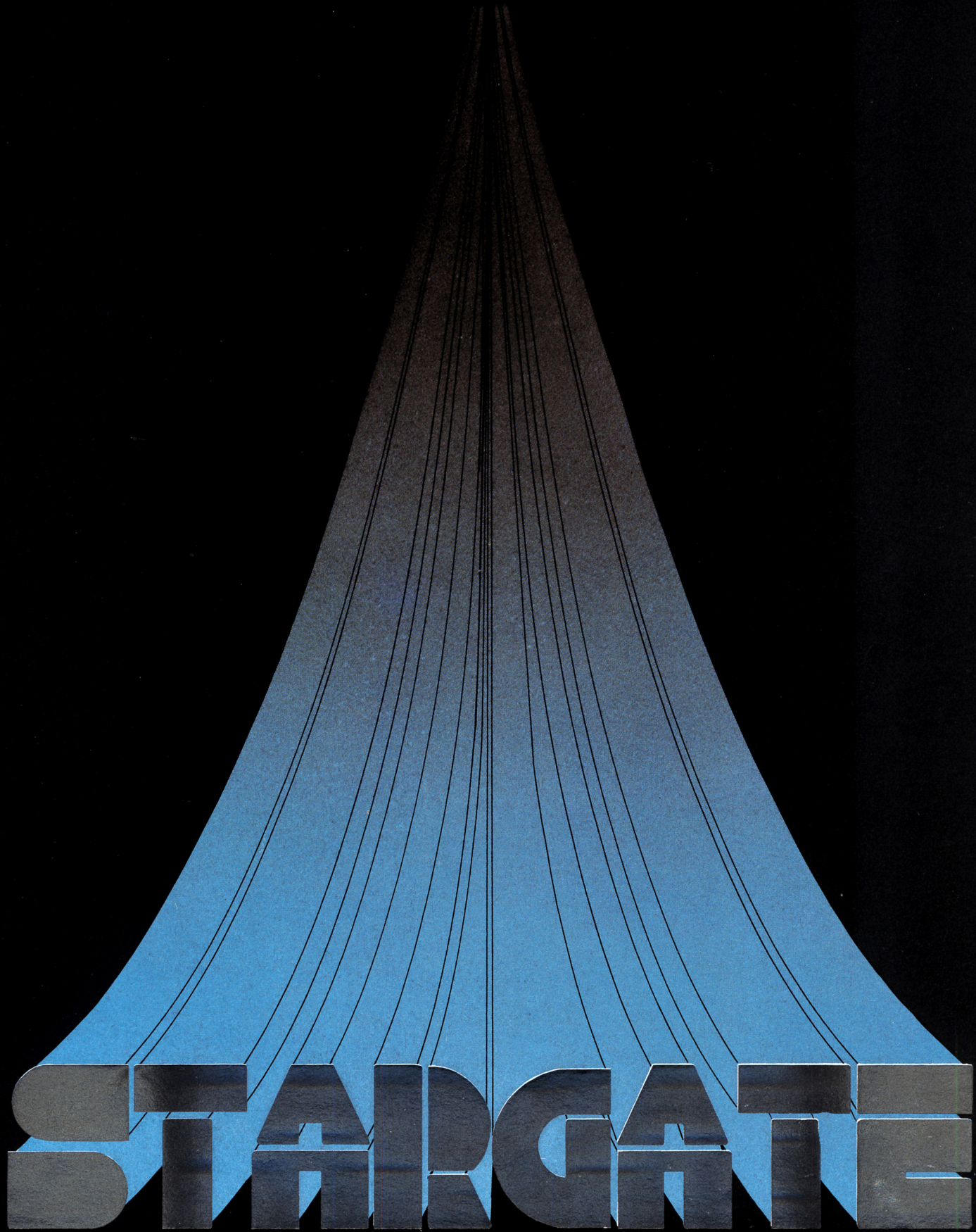
If the test does prove successful, Robinson added, procurement of machines for the training program probably would not begin until early 1983. While pointing out that an evaluation had not yet been made, Robinson was optimistic about the video games' value to the Army. "I'm looking at something that makes training more exciting," he said, noting that efficiency and cost avoidance are added bonuses.

"I think there's no substitute for really firing the thing, but when the gunner gets that opportunity, he is a much more efficient user of that opportunity," the major said.

Because the videos are "fun," Robinson added, "Who's to say a soldier won't be playing that game after hours? If you make training fun and exciting, then the soldiers respond, and I don't think there's anything wrong with that."

Robinson also pointed out what any former student knows. "The classes you learned most from are the ones you had fun in," the trainer said. ●

Contributor Shearer is a free-lance writer based in Seattle, with a background in psychology and anthropology.



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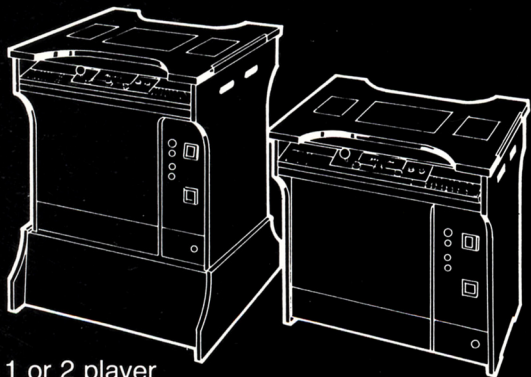
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Smaller producers to organize for leverage in games licensing

A new trade organization aimed at protecting the interests of smaller manufacturers of coin-op games is in the process of forming. Its adherents believe that in the combined buying power of a dozen or more of the smaller U.S. factories, they will have leverage to license and jointly produce hit video games that so far have been mainly in the province of the largest manufacturers to market in this country.

Tentatively named A.I.M.—the Association of Independent Manufacturers—the group is planning organizational meetings and discussing with attorneys its incorporation, according to Bill Olliges one of its organizers and who has engineering background and experience with the industry firms of Taito, Universal Research Labs, and Centuri, Inc.

Licensing of games is key to the alliance of some 24 small manufacturers, whose production capacity cannot turn out the numbers of

games necessary to make licensing from a games originator, such as the Japanese, economically feasible.

Andre Dubel of Elcon Industries, another manufacturer interested in A.I.M., explains that factories such as his “had no real crack at” games offered in the Japan trade shows, where originators demand guarantees of shipping no less than lots of 500 game programs. Producers in his position are cramped by a “hit syndrome” market, he said in which his customers “demand the *Pac-Mans* and the *Defenders*.”

Said Dubel, “There is a definite need for the little guys to get together for buying clout.”

As Dubel and Olliges see it, the manufacturers association ADMA, with its representation of the major U.S. producers, does not serve the common interest of the smaller manufacturers. “The larger companies have no problem licensing foreign or domestic games with a guarantee of a minimum

amount to be built,” said Olliges. “The smaller companies don’t have the advantage of their scale.”

If the members of an A.I.M. organization join together and commonly license an original game product, then the component factories would be sublicensees of the game’s originator and would together be able to meet the scale of production needed for the “hot” product under license, in his assessment.

Also, toward meeting the requirements of FCC and Underwriters Laboratories standards for video games, he said, the members could approach “common packaging and shared engineering expense.”

Olliges is presently developing its own hardware and software for games, with production scheduled for next spring at its Miami base.

“Many of the large companies were once small companies,” Olliges pointed out. ●

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Awaiting 'the law of the land'

Local bans on juveniles continue to crimp arcades

By Ray E. Tilley

The U.S. Supreme Court in November heard oral arguments on the issue of whether a Texas locality's prohibition of youths under 18 from playing coin-operated amusement games shall stand, and attorneys expected a decision may be issued by the high court in one to three months, or possibly in six months' time.

Bally's Aladdin's Castle arcade chair had filed action more than a year ago against the city of Mesquite, Texas, challenging the constitutionality of the age barrier and had been upheld in lower federal courts. The coin-op interests argue that the designing and playing of electronic amusement games are free expression protected by the First Amendment. Mesquite appealed to the Supreme Court.

While this landmark issue for the coin industry is pending settlement, some smaller operations than Bally's/Aladdin's have decided they cannot wait on a definitive decision and have filed suits with local courts. And in other localities, restrictive ordinances continue to be drafted with the intent of barring the enthusiastic playing public who are under 18 from playing in arcades.

In the Detroit area, B&J Vending Company filed in McComb County court for a restraining order against local enforcement by police of a 17 years minimum age for playing coin-op games. Brian Scopel, of B&J, reports that in his operation's many convenience store and supermarket locations for games, police have barred the youths under 17 from playing.

This prohibition has cut into receipts of the games operation, and B&J's attorneys will, on a county-by-county basis, seek to restrain the enforcement until the Supreme Court's eventual decision becomes "the law of the land."

Scopel said that B&J's fight against age prohibitions was met with a lack of support from "our state

association, the southeast Michigan association, or the AMOA. They say, 'Good luck,' and that's basically all they do," said Scopel.

He noted the complex of local regulations other than the age limit for players—requiring a background file and fingerprinting operators in each city in which they are placing games, and binding the operator with red tape by which he is required to show the percentage of revenue from electronic games compared to a store location's total revenue.

But, for the moment, the constitutional issue of banning juveniles from arcade game play is the peg on which legal hopes of Scopel and other operators hang when fighting regulations basically as individuals. "It's great that Aladdin's has gone all the way to the Supreme Court, and we wish them luck," Scopel commented. He added that he would encourage operators and associations to band together and fight restrictive laws.

The daisy chain of crimping local legislation is reported to *Play Meter* almost daily. In Middletown, Connecticut, for example, in October a judge rejected the request from owners of an arcade for a temporary injunction against an ordinance that requires players under 16 to be accompanied by an adult. Superior Court Judge James Higgins said there was "insufficient evidence for an injunction." Lawyers for Woodrow Welch and Victor Porrello, Jr., owners of The Great Escape amusement arcade, argued for overturning the ordinance as a violation of the constitutional right of free assembly, the UPI reported.

In Providence, Rhode Island, city councilmen agreed November 9 to introduce an ordinance barring those under 18 from playing electronic games in the city. That ordinance would also prevent opening new amusement centers within 1,000 feet of schools and would force new applicants to obtain permits from the city's Bureau of

Licenses, the city council, and its zoning board.

City officials had been slapped with complaints from school officials and residents over proposals to place amusement centers near two high schools, the *Providence Journal* reported. City regulations were found not to be "strict enough to block the new centers, even if nearby residents and the police object."

License Board Chairman Ernest F. O'Connor was quoted to say: "These machines are lucrative. And I've read they can become addictive, not only to children but to grownups. So I would like something introduced, something so we can regulate them." He asked council for an ordinance limiting the number of new centers. He added that he had imposed a moratorium on licenses for new machines and amusement centers.

Police told the officials they were opposed to "all amusement centers because they attract juveniles who have to take money from their families, some on welfare, or steal it." The city had four licensed arcades, with a fifth seeking zoning changes in order to open. Officials cited the amusement centers, although noting that "hundreds of electronic games" were in operation in local bars, grocery stores, and pizza parlors, but saying that crowds of juveniles are attracted to the centers.

However, three councilmen agreed to propose the ordinance that would ban juveniles from the use of all game machines in Providence.

The issue being argued in the Supreme Court contends, on Aladdin's part, that such regulation as the ban on juveniles' play is constitutionally possible only if it is shown in the state's interest to curb adverse effects of such activity as juveniles' congregating.

(For a methodology on dealing with local governing bodies, read Michael Mendelsohn's commentary in *Play Meter*, November 15, pages 24-25.)

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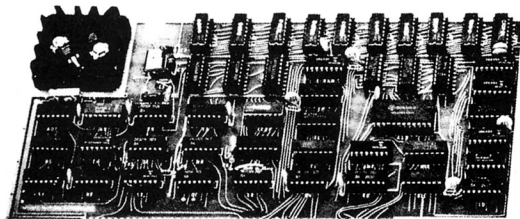
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Venture Line expands with Change-A-Game product

Venture Line, Inc. of Phoenix, Arizona, has announced marketing plans for its exclusive "Change-A-Game" system, which was developed to enable the operator to receive a new game, both mechanically and graphically for under \$1000, according to the manufacturer.

The Change-A-Game cabinet is engineered for easy and quick changing of the logic board, control panel, and plastic game header, according to Venture Line. For visual attraction, the manufacturer has developed pressure-sensitive, removeable decals to graphically dress the cabinetry.

Joe York, president of Venture Line, said: "In our eight years of business, we have learned to understand the client's needs—simply put: return on investment. Common sense dictates that a new monitor and cabinet isn't necessary every time the operator chooses to upgrade a game.

"Change-A-Game, used as an alternate purchasing form to complement established buying habits, will give the operator the much-needed price relief he is looking for in today's industry," concluded York.



Ed Wanisko

Venture Line's current game release, *Spiders*, is offered in its Change-A-Game system. York noted that *Spiders* "was previewed with overwhelming success at the AMOA Show in Chicago."

Inquiries concerning the new

system can be made to a local Venture Line distributor.

Sales director

Edward Wanisko has been named director of sales for Venture Line. His direct responsibility will embrace the further expansion of the Venture Line distributor network.

Venture Line President Joe York commented, "Growing up in this industry has given Ed personal relationships with many operators and distributors across the country."

Wanisko, with his brother, owns one of the larger vending companies in the southeast Florida area.

Meanwhile, Venture Line has announced a major expansion of its manufacturing facilities in Phoenix. The new building will house Venture Line's corporate staff and will serve as an additional production facility for its computerized video games.

York said, "Our new facility couldn't be coming to completion at a better time. This third additional building will effectively expand our production capabilities to satisfy our ever-growing distributor network."●

Rodstein moves up to chair Banner

Albert M. Rodstein has been elected chairman of the board and chief executive officer of Banner Specialty Company, it was announced during AMOA Show week.

In making the announcement, Rodstein said that Banner Senior Vice President Alan Bruck has been named president and chief administrative officer, while Jerry Boyle will be promoted from vice president to vice president/general manager of the Philadelphia branch office, as of November 1.

Rodstein, who has been associated with almost every aspect of the vending machine industry for 47 years, has served as president of Banner since 1958. During the period from 1961 to 1971, he also

served as senior vice president of Macke Company, while simultaneously heading Banner Specialty.

In 1971, he left Macke to devote full time to Banner. He is married, father of three and grandfather of three, and a resident of Elkins Park, Pennsylvania.

Bruck, who has been with Banner for the past eight years, joined the company as vice president/general manager of the Philadelphia branch and was shortly thereafter promoted to the post of senior vice president.

Bruck was previously vice president of the Keystone Region for Macke Company. Married and the father of three, he is a resident of Rydal, Pennsylvania.

Boyle, who has served as company vice president for the last five years, started with Banner as a parts manager in 1964. He also previously served as a sales executive and an administrative coordinator for customer service.

Prior to joining Banner, he was employed by a Philadelphia area vending machine manufacturer. He is married, the father of nine, and resides in the Roxborough section.

Banner Specialty Company, with executive offices in Jenkintown and business offices in Philadelphia, Pittsburgh, and Baltimore, has been a distributor of coin-operated vending and amusement equipment for the past 65 years. ●

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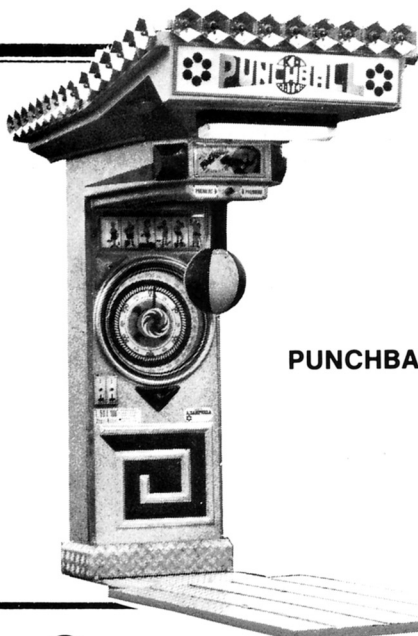
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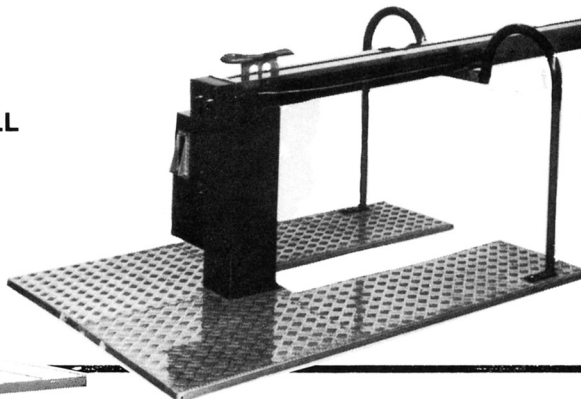
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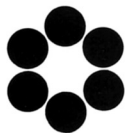


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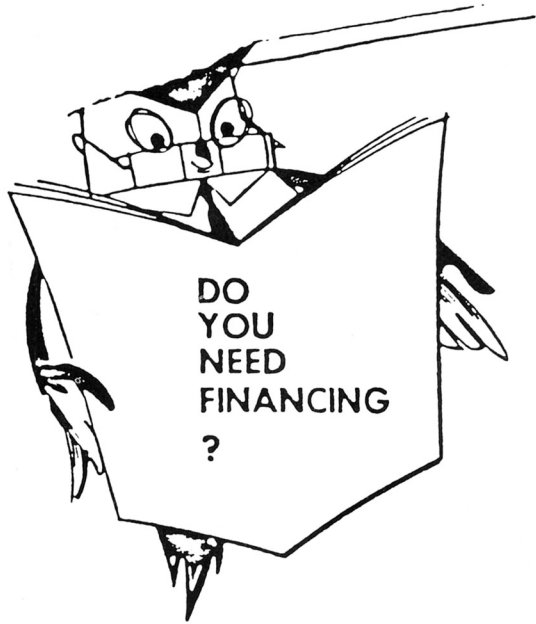
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'Addiction' can be good...

Video games have become so popular that adolescents show signs of addiction—and that has both its good and bad points, say two University of Louisville professors.

A recently completed study by Drs. Michael Skinner and Ricard Fee showed that some people attain a certain status among avid players. "Often, good players could be seen hustling the less adept for free games, Cokes, and money in exchange for tips and teaching techniques. It's almost like being a celebrity or an athlete," noted Dr. Fee, U. of L. Laboratory clinician.

Positive aspects about playing video games were identified by the university's psychophysicologists as: (1) involvement and participation, (2) control and discipline, (3) learning new skills, (4) status, (5) releasing tension and frustration, and (6) potential for another positive use—being fun to play.

The negative factors were identified as: (1) teaching aggression without mercy; (2) expense; (3) being a substitution for other activities; (4) physical problems such as stiff necks, poor circulation, headaches, and finger cramps; and (5) stress.

Skinner said in a University of Louisville publication, that the potential for positive use of the games is literally staggering: "if learning to play these games can be fun and involving, why can't all learning be?"

Fee noted that the "addiction" is both physical and psychological: 'players experience adrenaline rushes, elation, and finally—despair, as well as a whole range of aggression and violent reactions.' Fee also said players can become involved in the electronic games that they lose awareness of their surroundings, time, and the money spent on play.

One reaction noticed in almost every participant in the study was the satisfaction gained in getting a second chance to beat the machine. Said Dr. Skinner: "Sometimes it's revenge while at the other times it's just knowing there's a chance to top the leading score registered in some of the games. This is where the status of being the best comes into play," said the professor.

—from the University of Louisville (ky.)

Japan operators' show

The Land of The Rising Sun is readying to stage its second amusement machine show—the NAO Amusement Expo '82, scheduled for March 1 and 2 at the Pacific Hotel in Tokyo.

The expo will be sponsored by the Nihon Amusement Machine Operators' Association and will coincide with the association's annual meeting.

Formed in January of 1981, NOA claims membership of some 500 operators. Its chairman, Hiroshi Uchida, told the trade press in Tokyo that the new show will deal solely with amusement machines for the Japanese market and that about 60 exhibitors are being catered for.

NAO branches in monthly meetings throughout Japan have so far discussed their domestic trade problems including excessive competition, circuit board and copyright infringement, and the problem of eliminating gambling machines that are now rampant in some parts of the Japanese industry.

NAO also pursues operator-members' interests by liaisons with the major manufacturers and government administrative offices.

Chicago's hat's off to the maker of Pac-Man

The City of Chicago saluted Bally Manufacturing Corp. with its honor of a special day recognizing the games maker's 50 years of participation in the Windy City's economy, with a special proclamation by Chicago Mayor Jane M. Byrne on October 19, 1981.

As a memento, Bally's President and Chairman Robert E. Mullane presented Mayor Byrne with a *Pac-Man* table model video game in honor of the occasion (see photo).

The Mayor's Proclamation stated in part:

"Whereas, originally known as the Lion Manufacturing Corporation, the company was founded in 1931 in Chicago when the Great Depression was overwhelming the nation; and whereas the leadership and spirit of the founders and succeeding executives has lifted Bally's status from a small local concern to one of the 'Top 500' corporations....

"And whereas, today Bally employs more than 10,000 persons, with the majority working in the Chicago area, making it one of the largest employers in Illinois;...

"And whereas, the company has received numerous citations and awards from federal, state, and local governments for its contributions to the war effort during World War II and the Korean Conflict and for its determined efforts to be a good corporate citizen...in Chicago:

"Therefore, I, Jane M. Byrne, mayor of the City of Chicago, do hereby proclaim Bally Manufacturing Corporation Day in Chicago..."



Bally's Mullane and Mayor Byrne, with proclamation and Pac-Man.

Analyzing *Pac-Man*

Meanwhile, the Chicago news media were noting how a "silly" game called *Pac-Man* had performed for Bally and had contributed (through its Midway Manufacturing video division) "as much as 25 percent of (Bally corporate) earnings this year....And *Pac-Man* is a major reason analysts are saying Bally's profits should leap 50 percent or more this year, to about \$82 million, or \$3 a share," the Chicago *Tribune* observed in its Business pages on October 28.

For Bally, video game sales more than doubled in each of the last two years, reaching \$133.9 million in 1980, or 20 percent of Bally's total sales of \$690.1 million that year, the *Tribune* reported.

Since August 1981, Bally had expanded beyond its amusement games and slot machines interests to acquire or agree to acquire a pizza parlor chain (Barnaby's, to be converted into Bally's Tomfoolery arcade/restaurants), an amusement park chain (Six Flags and its 40 freestanding Funway Freeway arcades), and a lottery ticket game supplier, Scientific Games of Atlanta.

Against this expansion of video outlets and development, the *Tribune* ironically contrasted Chairman Mullane's reputed initial reaction to *Pac-Man*: "It's silly. Don't build it."

But build it, Bally and Midway did, and the game became 1981's best seller, with sales expected to total 90,000 units by year's end.

Mullane told the *Tribune* writer of his company's expectations for a "super" video game in 1982, called *Tron* and which could be tied into a Walt Disney Productions science fiction movie next summer. The movie reportedly concerns a computer games programmer who becomes trapped inside a computer where he becomes a player in some video games. Bally expects to market a game identical to one played in the film and to tie-in with Disney promotions for the movie.

Beyond Chicago are Bally's interests in its Empire Distributing subsidiary branches and its venture into the bettors' world with Bally's Park Place casino/hotel subsidiary in Atlantic City. ●

Atari congrats video tourney winners

Players from around the country competed in Atari's first coin-operated video game contest on a national scale, October 29—November 1 at Chicago's Expo-center, all vying for a portion of the \$50,000 in cash and prizes being offered.

Contestants competed on Atari's recent coin-op video game *Centipede*, in which they battled relentless segmented centipedes and

attacking spiders and fleas, all worth valuable points when destroyed. To measure skill rather than endurance, said an Atari spokesman, contestants were given only three minutes in which to achieve a high score.

When the final match was completed, Eric Ginner of Mountain View, California emerged the victor of the Open Singles category, racking up 52,341 points and entitling him to a trophy and \$12,000

in cash and merchandise prizes. Julie Winecoff, a Charlotte, North Carolina resident, scored 36,613 point and finished second with Faith Sloan of Chicago taking third place by achieving a score of 34,372 points.

"We congratulate these winners," said Frank Ballouz, Atari's vice president/marketing, Coin-Operated Games Division. "We like to see this high level of enthusiastic and competitive play." ●



MUSIC PROGRAMMING

by pat matthews

Starr rings in the new

What happens when you are so famous people become afraid of you? Or afraid of taking a chance and failing might be a better way to put it. Such is the case of Ringo Starr. Now, how many of you out there never heard of him? Not many, I assure

you. Ringo had this album and he wanted to release it. But his previous label, Portrait, was on the verge of folding up its operations and didn't want to chance it.

The story was that Ringo couldn't get European distribution. (I don't

buy that.) So, what to do? An album with no label!! He shopped around and eventually came to terms with Boardwalk Records, an up and coming label headed by one Neil Bogart, who obviously knew a winner when he heard it.

Pat's Play Meter 'Hit List'

- FANCY FREE—Oak Ridge Boys—MCA***
- PRIVATE EYES—Daryl Hall & John Oates—RCA***
- MY GIRL (GONE, GONE, GONE)—Chilliwack—Millenium/RCA
- START ME UP—Rolling Stones—Rolling Stones/Atco
- THE OLD SONGS—Barry Manilow—Arista
- CONTROVERSY—Prince—Warner Brothers
- NO REPLY AT ALL—Genesis—Atlantic***
- WISH YOU WERE HERE—Barbara Mandrell—MCA
- EVERY LITTLE THING SHE DOES IS MAGIC—Police—A&M***
- SHARE YOUR LOVE WITH ME—Kenny Rogers—EMI/Liberty***
- YOUNG TURKS—Rod Stewart—Warner Brothers
- SAUSALITO SUMMERNIGHT—Diesel—Regency/Atco***
- OH-NO—Commodores—Motown***
- DON'T STOP BELIEVING—Journey—Columbia***
- WAITING FOR A GIRL LIKE YOU—Foreigner—Atlantic
- HARD TO SAY—Dan Fogelberg—Full Moon/Epic***
- PHYSICAL—Olivia Newton-John—MCA***
- TAKE MY HEART—Kook & The Gang—DeLite
- WHY DO FOOLS FALL IN LOVE—Diana Ross—RCA
- TROUBLE—Lindsey Buckingham—Asylum***
- ARTHUR'S THEME (THE BEST THAT YOU CAN DO)—Christopher Cross—Warner Brothers***
- JUST ONCE—Quincy Jones/James Ingram—A&M***
- LOVE IN THE FIRST DEGREE—Alabama—RCA***
- THE NIGHT OWLS—Little River Band—Capitol***
- LET'S GROOVE—Earth, Wind, & Fire—ARC/Columbia
- HARDEN MY HEART—Quarterflash—Warner Brothers
- HERE I AM (JUST WHEN I THOUGHT I WAS OVER YOU)—Air Supply
- LEATHER & LACE—Stevie Nicks & Don Henley—Modern/Atco***
- TURN YOUR LOVE AROUND—George Benson—Warner Brothers***
- TRYIN' TO LIVE MY LIFE WITHOUT YOU—Bob Seger—Capitol***

Wrack My Brain—Ringo Starr—Boardwalk Records/NB7-11-130

Written and produced by one George Harrison, this up-tempo song with a 1980s Beatleish sound is surprising a lot of people already...it has a clean sound and is not as "corny" as the title might suggest...very recognizable vocals by Mr. Starr with very commercial sounding instrumental accompaniment. There's even a synthesized voice (maybe George's?) at the end. Nice song, well done (and that's how I like my steaks and records); *9 out of 10* for certain.

Touch and Go—Stanley Clarke & George Duke—Epic/14-02568

The first release by this somewhat unlikely combination was a surprise success. It was a funky soul number entitled "Sweet Baby." And this one takes that initial hit one step further. This one is along the same lines with emphasis on the great bass work of Stanley Clarke as before, but with an added touch of strings and a prettier sound. These guys sound really great together. A nice love song which is destined for *10 out of 10* on the highest chart. George Duke's keyboard work is sheer delight!

Your Love—Gary U.S. Bonds—EMI-America/P-A-8099

He came back. But, can he stay

PAC-MAN

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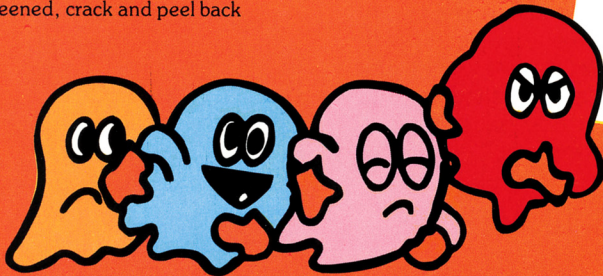
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in the forefront? I think so. For a couple of reasons, too. For one, he's got Bruce Springsteen on his side. Written and co-produced by "The Boss," this brings back that dreamy sound Bruce used to have in his earlier lps. Heavy on the sax and sung from the heart, this one could keep the revitalized career of Bonds on the front burner: *8 out of 10* possibilities.

Yesterday's Songs—Neil Diamond—Columbia/18-02604

After a string of chart successes for rival label, Capitol (extracted from "The Jazz Singer"), he's back on his "real" label. Now this might be considered a pressure situation and Neil may have felt he had to produce. So, he put his best foot forward, so to speak, and has come up with a catchy song to preview his forthcoming Columbia lp release, "On The Way To The Sky." I don't particularly care for the female backing vocals, but they're not enough to hold this sure-winner from zooming to the top of the Pop and Easy Listening charts. *10 out of 10* on both. He's certainly got the ladies right where he wants them.

Sweet Lover Man—The Pointer Sisters—Planet/P-47945

This one's from the same lp that brought us the super successful "Slow Hand" and that means another Richard Perry produced tune. However, I don't hear this one like I did the just mentioned hit. This one sounds more like a song that would be used as fill material in their night club act. Then again, maybe the public is ripe for this jazz flavored sound full of difficult-to-sing vocals. It is different! *8 out of 10* outside chance.

Blaze Of Glory—Kenny Rogers—Liberty/P-A-1441

I thought it was "Woolverton Mountain" when I first heard it and unless it's construed as a patriotic statement, this one may go up in a "puff of smoke" on the Pop Charts. However, it will nevertheless score big on the Country Charts: *10 out of 10* and another big seller for the "Silver Fox."

You're My Latest, My Greatest Inspiration—Teddy Pendergrass—Philadelpha Int'l/ZS5-02619

The ladies are swooning in the aisles, as usual, throughout TP's latest cross country tour and it was reported that they dropped like flies for this one. Just one listen and you'll feel the urge to faint, too. *10 out of 10* on the R&B Charts. ●

on the move

World Wide team adds

Promotions were recently announced for two members of the sales team at World Wide Distributors to serve the vending trade.

Bill Atwood, with 25 years experience in vending sales in downstate Illinois, will be sales manager in charge of World Wide's full-line Vending Department. For the past 8 years, Atwood has been covering the firm's territory in downstate Illinois plus several river towns in Iowa. As sales manager, his responsibilities have been increased to include all administrative duties of the Vending Department.

Wally Lacina is now promoted to sales engineer/vending. He has been performing duties as service manager for the past 15 years at World Wide. "Wally's knowledge and background will help customers not only in their purchasing, but also to solve any service problems that may occur," said Fred Skor, World Wide's president. Lucina currently serves on the advisory committee of vending repair courses at Harper College.

Commenting on the two personnel changes, Skor stated, "With these two promotions within the ranks, we will have a seasoned and competent staff to service our full-line vending customers."

Simon goes to Tornado

Steve Simon, four times a national champion of table soccer, has been appointed marketing and sales director of Tornado Table Soccer, Forth Worth, Texas.

Ed McCloud, Tornado's president, noted that Simon has been in the roles also of an operator and factory representative. "His 10-year involvement in table soccer alone makes him a valuable asset to our company," McCloud added.

The firm cited an increasing demand for table soccer equipment, a market which Simon will aim to serve. He commented, "A quality, long-lasting table-soccer table has always been needed, one that can sit

on location for years with a minimal amount of service. It is a pleasure and challenge to work for a company that makes such a product."

Tornado Table Soccer is located at 5202 Airport Freeway, Fort Worth 76117; phone 817/831-2231.



Simon



Lopez

Taito promotes Lopez

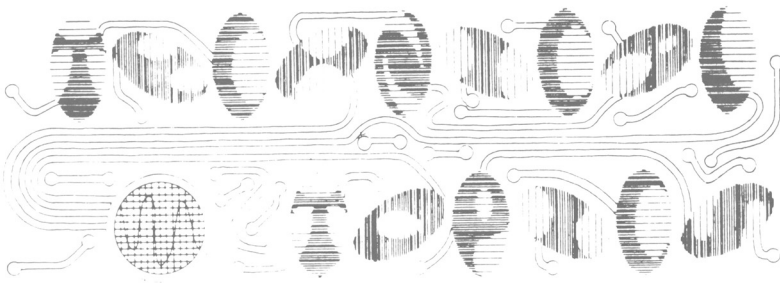
Rene Lopez was promoted to director of customer service at Taito America Corp. Formerly Taito's service manager, he has been with the company for one year.

In his new position, Lopez is responsible for field service worldwide on all Taito America games, Taito's extensive school program, plus the customer hotline and parts.

Lopez began his career in the industry with Bally Manufacturing Corp., where he worked for ten years, leaving as quality analysis manager to join Game Plan Inc. as field service manager, a position he held for one year until joining Taito.

"Rene is obviously a very important part of the team here at Taito America, and this can best be exemplified by the satisfaction our customers have expressed in him," said Jack Mittel, president and chief executive officer.

"Quality service is the key to a successful company in this business," Lopez said. "I want any problems handled as fast and as efficiently as possible, but more importantly I want to make sure our school program helps minimize the problems that can occur. Our toll free hot line is a vital link to our customers allowing us to give them fast aid. If we can help save downtime we're doing our jobs," Lopez said.



I.C. LOGIC DESIGN COURSE

Lesson Five: DeMorgan's Theorem

Editor's Note: The material below is a serialization of the Kurz Kasch correspondence course for electronics, designed specifically for the coin-operated amusement industry. This course is copyrighted and owned by Kurz Kasch of Dayton, Ohio and its reprinting is being sponsored jointly by Kurz Kasch and Play Meter Magazine. This material is authorized exclusively for publication in Play Meter Magazine.

Lesson Five, DeMorgan's Theorem. The fifth lesson is concerned with another mathematical method of circuit manipulation. The use of this theorem permits the designer to convert circuit function notation into a more convenient form.

DeMORGAN'S THEOREM OF NEGATION :

The application of DeMorgan's theorem (Theorem 8a and b) deserves our special attention. In its first form (8a), we have a method for inverting an AND (Product) expression, and the second form (8b) is a method for inverting an OR (Sum) expression. In effect, the theorem involves inverting each term, changing the operation between the terms, and finally inverting the entire expression. For example, applying DeMorgan's theorem to the expression $\overline{A + B + C}$, we have:

$$\overline{A + B + C} = \overline{A} \cdot \overline{B} \cdot \overline{C}$$

Note that $A = \overline{\overline{A}}$ and $B = \overline{\overline{B}}$ when negating.

When you actually apply DeMorgan's Theorem, you may have to double NOT an expression to make available or NOT to apply the theorem.

EXAMPLE :

Simplify the circuit shown in fig. 5-1. Except for the inverter at the output, this circuit is identical to a previous example (lesson four). Basically, we have an inverted "sum-of-products." The use of DeMorgan's Theorem will transform this into a "product-of-sums" which can then be reduced as follows.

RULE: Negation in general is performed after the statement under the bar has been reduced to its simplest form.

STEP 1 : Write the Boolean statement for the circuit.

$$\overline{ABC + \overline{A}B + A\overline{C}} = X$$

By comparing Step 1 of the problem with the same step of the previous example, the student will notice that the entire statement is negated by the inverter at the output. An equality can be established based upon Theorem 8b:

$$\overline{ABC + \overline{A}B + A\overline{C}} = (\overline{A} + \overline{B} + \overline{C}) \cdot (A + \overline{B}) \cdot (\overline{A} + \overline{B} + C)$$

DeMorgan's theorem has been applied to the original statement, and the rules for conversion were simply to change each logic operation and complement each term.

The reason for negating the expression was to convert it to a form conducive towards reduction.

STEP 2 : Combining the first two terms by use of Theorem 3,

$$(\overline{A} + \overline{B} + \overline{C}) \cdot (A + \overline{B}) \cdot (\overline{A} + \overline{B} + C) = X$$

$$(A \cdot \overline{A} + A\overline{B} + A\overline{C} + \overline{A}\overline{B} + \overline{B}\overline{B} + \overline{B}\overline{C}) \cdot (\overline{A} + \overline{B} + C) = X$$

Inspection of the left hand term reveals some identities. (It is best to reduce the expression as soon as possible. By doing so, you will prevent the expression from becoming unwieldy.)

The term $A \cdot \overline{A}$ becomes 0 and can be dropped. Also, the term $\overline{B} \cdot \overline{B}$ becomes \overline{B} . The expression then reduces to:

$$(A\overline{B} + A\overline{C} + \overline{A}\overline{B} + \overline{B} + \overline{B}\overline{C}) \cdot (\overline{A} + \overline{B} + C) = X$$

$$\overline{B}(1 + \overline{C})$$

$$\overline{B} \cdot 1$$

$$\overline{B}$$

The term $(\overline{B} + \overline{B}\overline{C})$ can be reduced by use of Theorem 3 and Identities 1 and 5.

The expression then reduces to:

$$(A\overline{B} + A\overline{C} + \overline{A}\overline{B} + \overline{B}) \cdot (\overline{A} + \overline{B} + C) = X$$

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Rearranging terms:

$$(\bar{B} + A\bar{B} + \bar{A}\bar{B} + A\bar{C}) \cdot (\bar{A} + \bar{B} + C) = X$$

$$\bar{B} (1 + A + \bar{A})$$

$$\bar{B} \cdot 1$$

$$\bar{B}$$

The term $\bar{B} + A\bar{B} + \bar{A}\bar{B}$ can be reduced by use of Theorem 3 and Identities 1 and 5.

The expression then becomes :

$$(\bar{B} + A\bar{C}) \cdot (\bar{A} + \bar{B} + C) = X$$

STEP 3: Combine the remaining two terms by use of Theorem 3.

$$(\bar{A}\bar{B} + \bar{B}\bar{B} + \bar{B}C + A\bar{A}\bar{C} + A\bar{B}\bar{C} + A\bar{C}\bar{C}) = X$$

Inspection reveals further reduction can be accomplished. The terms $A\bar{C}\bar{C}$ and $A\bar{A}\bar{C}$ can be eliminated by use of Identities 8 and 6. Also, the term $\bar{B}\bar{B}$ becomes \bar{B} by use of Identity 7. The expression then becomes:

$$(\bar{A}\bar{B} + \bar{B} + \bar{B}C + A\bar{B}\bar{C}) = X$$

The common term \bar{B} can be "factored" by use of Theorem 3. The expression then becomes :

$$\bar{B} (\bar{A} + 1 + \bar{C} + A\bar{C}) = X$$

Rearranging the terms and grouping by use of Theorem 3,

$$\bar{B} [(\bar{A} + A\bar{C}) + (1 + C)] = X$$

The terms $(1 + C)$ and $(\bar{A} + A\bar{C})$ can be reduced by Identity 1 and Theorem 6, respectively, and the expression then becomes :

$$\bar{B} [(\bar{A} + \bar{C}) + (1)] = X$$

Finally, by use of Identity 1 again:

$$\bar{B} \cdot 1 = \bar{B} = X$$

Comparing the final term from the previous example with the above shows the effect of the inverter on the output.

EXAMPLE :

Simplify the circuit shown in fig. 5-2.

$$(A + B) (\bar{A} \cdot \bar{B}) = X$$

$$(A + B) \overline{(\bar{A} \cdot \bar{B})} = X \quad \text{Identity 9}$$

$$(A + B) \overline{(A + B)} = X \quad \text{Theorem 8a}$$

$$0 = X \quad \text{Identity 8}$$

Since the output is always logic zero, we can eliminate all three gates.

EXAMPLE :

Simplify the circuit in fig. 5-3 by use of DeMorgan's theorem.

$$\overline{\bar{A}\bar{B} + (C + \bar{D})} = X$$

$$(\overline{\bar{A}\bar{B}}) \cdot \overline{(C + \bar{D})} = X \quad \text{Theorem 8b}$$

$$(\overline{\bar{A}\bar{B}}) \cdot (\bar{C} \cdot D) = X \quad \text{Theorem 8b}$$

$$(A \cdot B) (\bar{C} \cdot D) = X \quad \text{Identity 9}$$

$$AB\bar{C}D = X \quad \text{Theorem 2}$$

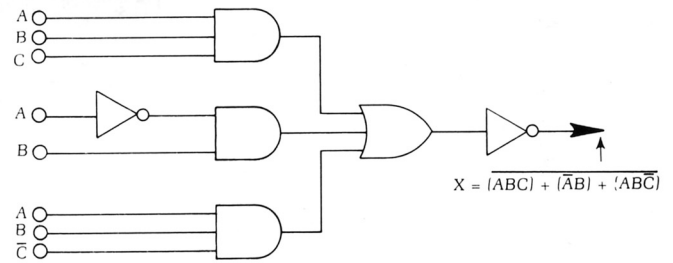


Fig. 5-1. A complex circuit which can be simplified by Demorgan's Theorem.

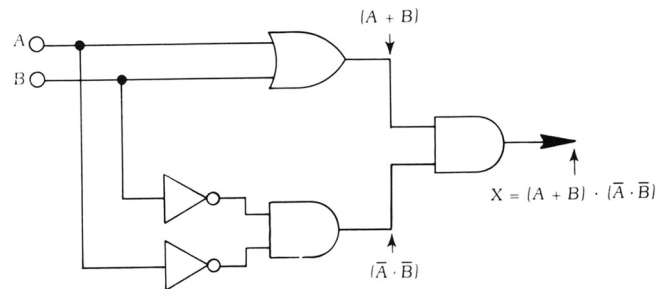


Fig. 5-2. Another circuit which can be reduced with DeMorgan's Theorem. The entire circuit is shown to be redundant.

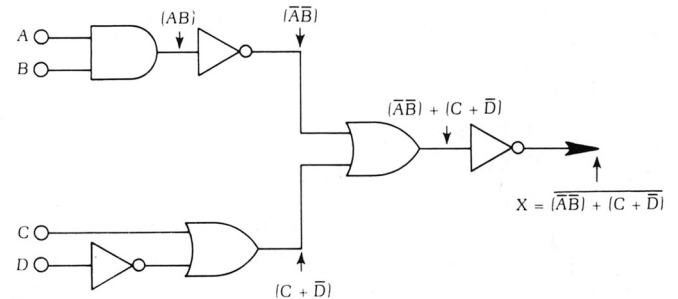


Fig. 5-3. The reduced configuration of this complex circuit is shown in fig. 5-4. Redundant components may exist in this circuit.

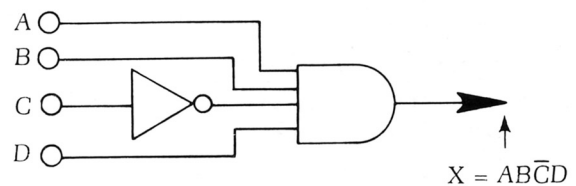


Fig. 5-4. The result of reducing the circuit in fig. 5-3. There were four redundant components in the original circuits.

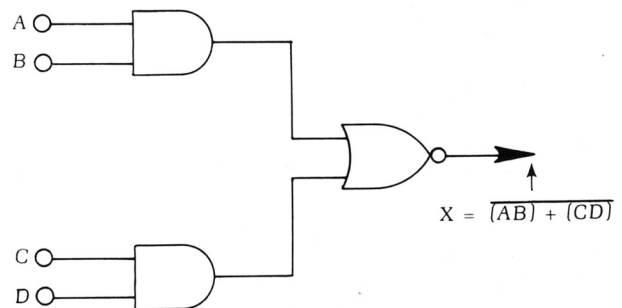


Fig. 5-5. An AND-OR-Invert gate introduces in lesson three. The output can also be expressed in "product-of-sums" form.

Notice that only one operation is changed at a time. The resulting expression may be implemented with considerably fewer components (fig. 5-4).

DeMorgan's theorem is especially useful when the final gate in a logic circuit is an inverter. The AND-OR-Invert gate in Lesson Three is an excellent example (fig. 5-5). The output of this gate can be given as:

$$\overline{(A \cdot B) + (C \cdot D)}$$

Although this "sum-of-products" form is usually desirable, the negation complicates it. Applying DeMorgan's theorem, we have:

$$X = \overline{(A \cdot B) + (C \cdot D)} = (\bar{A} + \bar{B}) \cdot (\bar{C} + \bar{D})$$

The resulting expression is called a "product-of-sums" form and is comparatively simple to work with.

(Program test will follow in *Play Meter*.)

Rosen outlines 'positives' of video mode

Sega/Gremlin unveils '82 line, responds to 'interchangeable' fears

By Ray E. Tilley

While the news media are groping for a definition of the video games phenomenon—whether it is a fad or a new, legitimate form of entertainment, that is—the industry can positively "point with pride to social benefits and accomplishments" of the coin-operated sector.

That was a message from Sega/Gremlin Chairman David Rosen, speaking to distributors of Gremlin products during the AMOA convention week in Chicago. He stressed the industry's arguing point that video games are "active entertainment," rather than "passive" as in television watching. The games, he continued, afford mental stimulation, not simply "absorption" in a form of diversion, as in music enjoyment.

The games are valuable, Rosen maintained, "as emotional release, a form of escapism...of fantasies—good fantasies." Further, he pointed out, videos foster concentration. "Video games are teaching machines," both in eye-hand coordination and for concentration of mental effort, said Rosen.

He outlined three types of players who pay for computerized game entertainment: (1) "the macho type"—most usually attracted to the space-theme game, in Rosen's thesis; (2) the skill player, who transfers skills he has developed on computer games to new games as they appear and attract him; and (3) the "cartoon game" player, the one who has not necessarily developed high skills but who seeks light diversion, "like a slapstick movie."

Along with increasing technology in games, in this analysis, Rosen

cited a need for new games to appear more often, to keep the playing public playing. Into this market need and in today's economy, Sega/Gremlin's Convert-A-Game system fits, said Rosen.

Frank Fogleman, Gremlin vice president, spoke to distributors on concerns some had expressed about the introduction of convertible games. First, he said, the manufacturer had no intention of destroying the marketing channels that exist for Gremlin/Sega's products. The interchangeable games will be sold only through those established distribution channels, he said.

Further, said Fogleman, the Convert-A-Game system will not be a one-sale proposition for distributors. The handlers will continually sell new games introduced in the convertible mode. Also, Sega/Gremlin will continue to develop new games other than those for the Convert-A-Game system.

On the matter of location purchasing of games—an expressed concern of operators—Fogleman responded that, since Gremlin/Sega will sell convertible games only to distributors, it is in the distributors' hands to maintain the operator's place in the pipeline for new games. A sale to a location, then, is the responsibility for the exclusive Gremlin/Sega distributor.

And responding to another operator concern—that the changeable system's design will become outmoded—Fogleman said that the G-80 board systems allow updating to new developments in technology but can retain the same essential system for new games developed by Sega/Gremlin.

Chairman Rosen said the key to

success in computer videos is high technology directed toward the players and that coin-ops, "more than any other industry have to put the computer age within functional usage of people everywhere." The video phenomenon, then, is actually an acceptance of computer technology in today's society, and not a passing fad, in his analysis.

"It is costly as well as rewarding to be a pioneer," Rosen added.

For the distributors, the Sega/Gremlin officers and staff unveiled three new games during the AMOA event and noted there will be a spring 1982 introduction of products beyond these.

From Gremlin Industries' own engineering group on the West Coast came its new game *Eliminator*, for which it has applied for a U.S. patent. The game introduces the element of a deflector system, as explained by its chief developer, Lane Hauck (who noted that the game consumed "three man-years" to create, with three game programmers on its team).

The player on *Eliminator*, by using the energy bolts from his spaceship, repels his opponents rather than zapping them directly. Destruction of ships comes about when they hit the hovering, key-shaped parent ship on the screen. The big zapper on the game is *The Eliminator*, a craft hatched by the mother ship, which emerges to seek to destroy any nearby ship with its own bolts. Other than repelling *The Eliminator* and opponent ships into the mother ship, players are able to demolish the parent vessel by well-placed bolts directly into its launching area. This, said Hauck, is an appealing "come from behind" factor built into *Eliminator*.

By Frank Seninsky

When the hands get sore from lifting the cash bin ...

Having just returned from a long three days at the AMOA show in Chicago, I'm glad to be able to finally sit down. My head is still spinning from all of the games that were on display. In upcoming reviews I'll be writing on games like Gottlieb's *Black Hole* and *Haunted House*, *Donkey Kong* by Nintendo, *Qix* by Taito, *Frogger* by Gremlin, and Williams' "deluxe *Defender*" named *Stargate*. (No one has ever made a successful "deluxe" anything—let's not forget *Deluxe Space Invaders*, *Sea Wolf II*, *Deluxe Asteroids*...but that's not entirely true: Bally came out with *Eight Ball Deluxe*, which is very successful, but it was not made until two years after *Eight Ball*.)

To go through all the games would be very time-consuming and very boring. I was more impressed with the manufacturers' efforts to mechanically and electrically improve their games.

After all the cranking I've done in the past year, I'm happy to report that someone out there is listening. Starting with the coin doors (my pet crank), Mr. Claude Trieman, president of Coin Acceptors, Inc., has just signed a license agreement with Coin Controls Ltd. of England. If I have my information correct, Coin Controls Inc. was the first to come up with the coin door now made by Coin Acceptors, first introduced by Atari. This type door now is used or soon will be used by Atari, Williams, Gremlin, Taito, Centuri, and Cinematronics. It's not my business to comment on who

developed the door first...but I'm glad the industry will be getting a uniform door.

Now that the Coin Acceptor door has been somewhat improved I'm told that a new Coin Control door will be used on future video games. The new door system has a smaller coin door with a separate cash box

compartment located under the coin door. This new door assembly is called the over/under coin door.

The model displayed at the AMOA show by Coin Controls was what I've been hoping for all along.

The coin door itself could be strengthened (I felt the metal is too thin; they do kick doors in America.)



Among technical innovations shown at the AMOA: NSM/Lowen Automaten's phonographs, programmed for a wide flexibility of customer play. Special feature is group play selection—six tunes of a particular musical variety, play sequentially at the press of two buttons and insertion of one dollar.

There was no slam switch on the door but I hope that all manufacturers will utilize this important feature. The slam switch is the only protection a video game has against rough players. The coin return buttons don't stick, the coin chute slides are steep enough (an increase

apart and cleaning out the assembly.

Atari has done a fine job with *Tempest* (—except for using the old, cheap pot cover knob from *Breakout* days. This plastic cup is easily cracked by putting a key—or a quarter—under the lip and pulling up).

have two prongs that fit into two grooves in the top of the control panel. This will make it more difficult to unscrew the caps from the outside, and this will reduce service calls.

The new blade switch that was first made by Wico Corp. and used

To make it easier to take apart and clean the TrakBall assembly on Centipede, we removed and discarded 3 or 4 of the 6 screws holding the assembly together.

of 2-3 degrees) and long enough so coins won't jam up, and the metal cash box is large and securely mounted similar to the way that the Taito cash box is mounted. The cash box compartment is completely separate from the back of the game and would be difficult to break into from the back. Only the collector needs to have a key to the cash box door.

At the Atari booth I spent some time with Otto —Whatshisname—. He showed me the efforts he has made to design stronger, more durable parts for future Atari games. For example, Atari has made replacement parts for the *Battlezone* handles that were always breaking.

Otto said that when the handle was first tested it was tested in the forward and reverse positions only. They didn't think of testing them from side to side, for twisting and for pulling and pushing (tension, compression, torsion). I feel controls should be tested by Lou Farigino, Larry Holmes, and Linda Carter at 0 degrees Fahrenheit, and at 150 degrees Fahrenheit in a tank filled with Coca Cola and Budweiser. This is what it's like in the real world, out in the street.

The Atari Trak Ball has been vastly improved. I feel that the ball on *Centipede* is too too small and the ball on *Missile Command* is too big. I hope that Atari will use a medium-size ball in the future. The *Centipede* Trak Ball assembly is held together by six screws. To make life easier for

I was glad to see that there is no marquee on *Tempest*. The graphics at the top of the game are embossed on the metal frame. This will save operators a lot of money. I punched this metal marquee as hard as I could (I'm no Larry Holmes). I hurt my hand but did no damage to the game. Also, this marquee can't be stolen without taking the whole game.

Plastic cash bins

To drift off for a moment (it's late and I'm very cranky), I'm very upset with the plastic cash bins used by Atari and Midway. These bins have ridges and curves that make it difficult to dump coins into a bag. The coins get stuck on the ridges and fall out the corners all over the floor if you don't constantly tap the sides of the bin in all directions while dropping out the coins. Midway's bin looks like some kind of a convoluted square with two holes on each side. They expect you to lift up to 20 or 25 pounds with four fingers.

Whatever happened to the old metal cash boxes used on *Space Invaders* with the lip so you could show kids how strong you were by lifting it up with just your left hand? (Yes, I'm left-handed, how did you guess?) This used to impress the kids.

Now when I spill quarters all over the floor this does not impress them. It's also hard to pick the quarters off the floor because both thumbs and both index fingers are sore from lifting out the bin with the holes in the

by Atari on some *Deluxe Asteroids* and *Centipedes* has worked out well in most cases. We've put the switch on all our *Asteroids* and have had no problems for a few months. The contacts are lines instead of points and are perpendicular to each other and therefore are self-cleaning.

In the past few weeks I have found that the lines have developed grooves on *Centipede* and have had to be replaced. Wico, Penn Ray, and a few other parts suppliers have improved this switch and now have a beveled or curved-line contact arch (again perpendicular to each other) that should last much longer. This type of switch can be used as a quick solution to problems on Williams pinballs *Black Knight*, *Jungle Lord*, and *Pharaoh*.

For those switches that are critical on these games (saucer switches, ball return, ball count), this type of blade switch or a good micro switch should be used. Tod Erickson has tested the cross-hair blade switch on *Black Knight* for the last few months and he has eliminated most of his service calls for stuck balls.

Good games at breakfast

The highlight of my trip to Chicago was being invited to attend a breakfast hosted by D. Gottlieb & Co. and its Howie Rubin, vice president and general manager, Video Division. About twenty operators from around the country attended. The engineers and marketing people at Gottlieb wanted

The highlight of the AMOA trip for me was a Gottlieb breakfast meeting in which the games maker learned what operators want included in a good video game.

us, three of the screws or even four can be taken out and thrown away. The assembly is bolted to the panel by three bolts and as long as the assembly is together that is enough to secure it.

By eliminating three or four screws, it will save time when taking

sides. Let's get back to smooth metal cash bins that don't have sharp edges. How many band-aids can you carry.

Atari has also improved the plastic button cap cover that is used on its button switches. The new caps are made of a more durable plastic and

to know what we thought should be included in a good video game. Some interesting facts surfaced.

- Cabinets: (1) leg levelers should be included. Midway's system was the best. The manufacturer uses metal plates mounted securely to the cabinet and places the levelers in a

bag outside the cabinet. This gives the operator the option of using them if required. (The stapled-in T-nuts are a disaster.)

(2) The base of the cabinet should be dropped down lower than the sides, as Atari does, so the bottom edges of the cabinet don't chip off when sliding on the floor.

(3) The control panel should be slanted so people can't put drinks on the panel while playing or at any time for that matter.

(4) The back doors should be made of a decent grade of wood that won't warp (as Williams' doors do). My brother Richard once stated that if you place *Defender* with the back facing the players, a good name for the game would be "Warp Warp". (Since that time, I've heard that a real game has used this name, and no reference is made here to that game).

(5) The on/off switch should not be put in the back but should be placed on top as Midway does.

(6) There is no reason to put an interlock on the front door unless the manufacturer insists, because of insurance liabilities.

(7) Most operators liked the idea of having the bottom, front of the cabinet recessed (toe recesses). (8) There should be no graphics in front of the cabinet below the coin door. (9) Darker colors (white and yellow are poor choices) should be used, to hide marks and dirt better.

(10) Marquees should be made of an unbreakable material and inserted as part of the cabinet so they can't be removed from the outside, or they should be eliminated as Atari has done on *Tempest*.

(11) Most operators wanted to see games come with a fan that would blow air out of the cabinet to reduce heat build-up. The vents should be high up on the cabinet since heat rises. One operator suggested that there should be no need for a fan if the manufacturers would just design systems that won't heat up. This

sounds like a more practical idea.

(12) The monitor screen covers should be made of unbreakable polarized glass to reduce or eliminate glare.

(13) Wheels are not necessary on the back of a game. This makes it easier for players to move games out of position and slam them back into the wall; it also makes it easier for games to "walk away."

All of the operators felt that it was the manufacturers' responsibility to make modifications and speed-up kits so they wouldn't have to look elsewhere for this service. It was also unanimous that all video games should get progressively harder, which would limit playing time to a maximum of about 20 minutes for the best players.

In the next "Cranks" column, scheduled for the next issue of *Play Meter*, I'll finish talking about what constitutes a good video game, as seen by the operators at Chicago, and have some service tips for you.

All of the operators (I met) felt that it was manufacturers' duty to make modification and speed-up kits available for their own games.



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POINT

“Pinball Is Dead”

By Charles C. Ross

Author's Note: This article may spur your thought, provoke you, anger you, or excite you. If it does do any of these I would encourage you to write to us at Play Meter and express yourself.

In recent months there has been much discussion about pinball and its place in the amusement industry, which seems to be dominated by an unceasing onslaught of new video games with increasing levels of sophistication. Where does pinball stand?

In my opinion there is one fact we all need to face; Pinball is dead! That is correct, pinball is dead! Let us bury it and move ahead. In an industry where life cycles are very short why has there been this refusal to believe the simple obvious truth that *pinball is dead?*

Simply because pinball enjoyed a long life some people think it is immortal. Here are some common arguments for pinball:

1. *“When the video bubble bursts, pinball will be in vogue again and all will be well as before the video boom.”*

I feel that pinball is dead and when the video boom ends what takes its place will be much more interesting and sophisticated than a steel ball rolling on a piece of painted plywood.

To use an analogy: The auto industry is in long-term trouble, so when the auto bubble bursts we will all return to riding horses. Right? Wrong. Technology will have a mode of transportation much superior to the present day automobile. Horses and buggies will not come back and neither will pinball. What comes after video will be phenomenal.

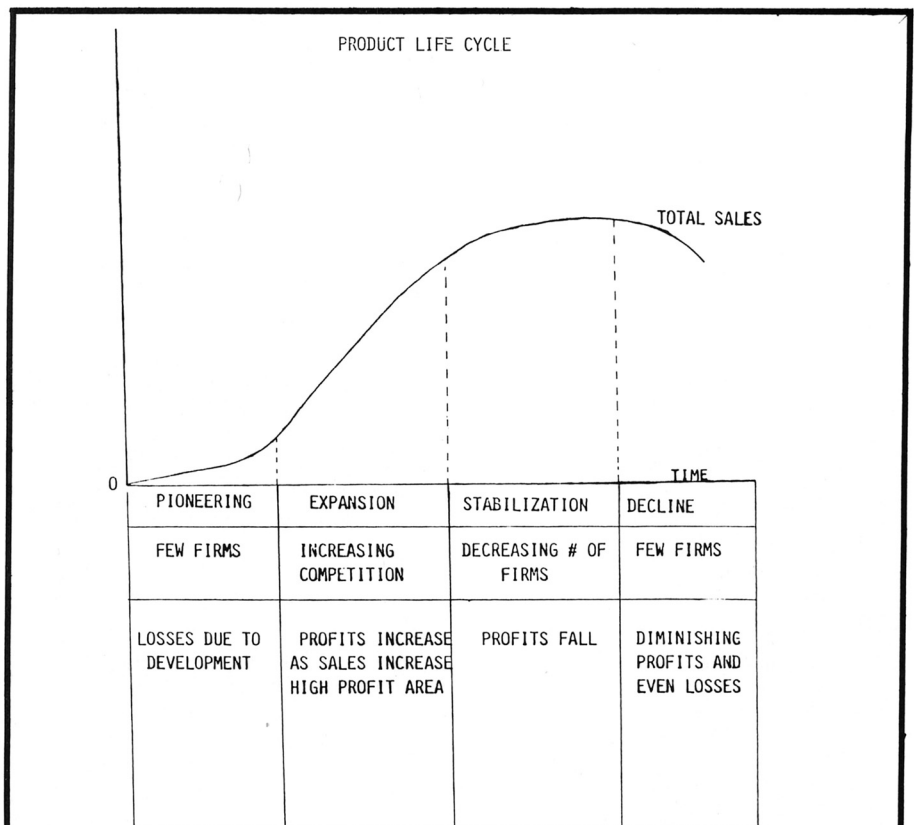
2. *“Pinballs are needed to round-out the arcade or route.”*

Players cast their votes for machines by shoving quarters in the slots on the front of machines. If pinball or foosball or air hockey received more votes (quarters) there

would be no problems. But they are not receiving the votes.

We must remember that the whole point of this crazy business is to make money. To think otherwise

is to delude yourself. Check the number of used pinball machines offered for sale in the classified section of this magazine, or ask your distributor to give you a decent



The above typical product life cycle curve adds further support of the fact that pinball is dead. Plotting dollars on the vertical axis and time on the horizontal axis, the curve depicts the life cycle of pinball. In the pioneering stage of pinball there were few firms and there were losses or small profits due to the development of the new product.

Then as the product became accepted there was a heavy expansion era where there were many companies, domestic and foreign, getting into the pinball business. Profits increased, sales boomed and manufacturers, distributors, and operators made money during this era.

The stabilization era was seen as more and more pinball makers got out of the business and into the video business to help offset falling profits as sales fell. The consumer was demanding a new product, video games.

Today pinball is entering the decline era where a few firms are coming out with few models, profits are drying up as sales decline and many soon turn to losses. Pinball manufacturers will have to seek more lucrative investment opportunities for their companies' money.

—Charles Ross

trade-in on a pinball machine.

When it comes to maximizing net profit and return on investment on a limited capital budget, that translates into buying video games. Good management of your capital expenditures dictates that you should spend money on your next best alternative investment.

The next best alternative investment is the one with the highest return on the investment. There are so many next best alternative investments in video games that you will never get to the pinballs. According to *Play Meter* Equipment Polls, the best pinballs can not match the earnings of the number ten video game (see August 15 and September 1, 1981 issues).

To further compound the problem, pinballs are depreciating much faster than videos. I am sure you can find situations where videos have depreciated faster than some pinballs but those are the exceptions. Some videos are dogs, but the whole point is that *all* pinballs are dogs. Your next best alternative investment is to buy another good video game.

3. *"There are always those people who want to play pinball."*

The statement is true but it does not mean you must accommodate the minority. There are always people who want to play foosball and Air Hockey too, but do you accommodate them just to be a nice guy?

Remember your objective is to make money, so invest in the hottest game first—then the next best game and so on until you run out of need for games or money. Chances are you will never get to the pinball machines as being your next best alternative employment of money.

4. *"If I am wrong and pinball does come back, I don't want to be caught with no pinballs and all videos."*

If pinball does come back, it will not be overnight. The direction of the trend will be clear. It is clear today; stay away from pinball. That is today's trend and the next trend to the money-making wave of the future will be the same maturing transition that occurred with the introduction of *Space Invaders*.

Don't worry the boat won't leave without you, nor will the boat you are on now sink without adequate warnings.

While it may appear that I am down on pinball, I would like to thank pinball for all it has done for the industry; but the time has come to bury it with a respectable funeral and quit trying to revive the dead.

COUNTERPOINT

Is Pinball Dead, or Is Video Just Afraid of the Competition?

By Roger C. Sharpe

I don't know, I just have the feeling that those who have begun to bemoan the plight of pinball versus video and have started to express the idea that pinball might in fact be dead and should be buried, are really only saying this because they're actually afraid of pinball. This is the only thing I can think of as a reason for the fervent pleas they're making.

Why else? Could they be that concerned about the manufacturers and their profits? Because if the individuals making the claim are operators, no one is forcing them to buy pins. Yet maybe they don't like the fact that the guy down the block still buys some of the new models and has players who actually look forward to playing a few flipper games.

On the facing page, there's the piece "Pinball Is Dead" by Mr. Charles Ross, who may only be stating the views he has for the effect of saying them rather than truly believing them. I don't think anyone in the business could honestly believe pinball is dead and no longer profitable, but I welcome the opportunity to respond to the points Mr. Ross presents and let you be the ultimate judge, although it is really the player out there who is deciding what should continue and what should be abandoned.

Product life cycle short?

In his opening comments, Ross states that the product life cycle of the industry is very short. I guess one could believe that 50 years is short in terms of pinball, but most wouldn't think half a century is something to write off so blithely. I mean, let's face it, the coin-machine industry by its very nature is different from all the marketing text book studies one

reads about in school. There are no rivals to its uniqueness or even the problems it has had to bear throughout its existence.

And, if Mr. Ross were willing to put the business into its proper perspective, vis-a-vis the entertainment/leisure industry, could he in fact be so glib about movies, sports, and any of the other forms of escapism people flock to for a release from the pressures of the work day and outside world? I don't think so. In fact, the continuation of pinball is reason enough to understand and accept that it can still be viable in today's marketplace.

His first point about pinball being the salvation when the video boom explodes into myth and history is less than accurate for those smart businessmen who keep this industry going. I don't think that anyone can seriously state that pinball will take over from video, nor even suggest that foosball's great acceptance a few short years ago was the death knell for the rest of the coin-op forms.

We're dealing with two distinctive breeds of animal and the attraction they provide. The audiences, although similar only because there is a commonality of locations and the insertion of coins, really do stop resembling there. The appeal is uniquely separate for anyone who has an affection for either medium, or even those who play both. And to suggest as an example that pinball is like the horse and video is like the automobile is totally absurd and doesn't really equate in terms of purpose or function.

After all, if we are to suggest that video is a car, then let us say that it equates with the new popular models and pinball is the old luxury

models and then agree that there will always be drivers for the luxury models of Cadillac, Rolls, Mercedes, Jaguar, and the rest no matter what their gas efficiency or the ease of parking them on a crowded urban street. But this belabors the point and misguides the problem of this man's obvious worry.

"Pinball is needed to round out a route or location."

An interesting suggestion and maybe even true in some areas, but isn't this an old argument that most have dropped? What we're all talking about, and even Ross agrees, is to make money—and I would state that I haven't heard of anyone losing money on pinball or any other game.

Let's make the case that what we're really talking about is the speed of return on investment which is the real issue and the fact that most operators, rightfully so, can't wait to get their money back as soon as they can. But then this again points out the unique nature of the coin-op business, because if the rest of the world felt the same way, we wouldn't have a New York Stock exchange where issues are bought because they pay good dividends, endure over time, and are stable institutions to put money into.

Sure there will always be the speculators trying for the quick buck, but there will also be the IBMs, GMs, AT&Ts, and the rest that just lay there year after year still attracting those who want to "play" the market.

The pinball problem is just that the majority of people now playing the games are, by and large, new to the

entertainment form and attracted by the TV screen and all the hoopla attached to it in the past few years. But this isn't to suggest that strong pinball games can't also attract their own players who are just as devoted and willing to put quarters into the slot to try their hands at flipper games. The intangible is being able to have a location that appeals to those customers who may want one or the other or a mixture of the two.

And the validity of pinball is still just as important, although admittedly less so than five or ten years ago.

"There will always be players"

How can anyone in his right mind say, categorically, that all pinballs are dogs? Was *Eight Ball Deluxe* really that bad? How about *Black Knight* or even the more recent *Mars* and *Black Hole*? And there are others to add to the list, but I must say—"give me a break." To suggest that there are always people who would play pinball, but to ignore this segment of the market, is to really be naive and causes me to think that Ross really isn't serious and is just putting us all on. He has to be, because his comments and observations are just so ludicrous as to not be taken seriously. It's like the little boy crying wolf, and we all know the story and will continue to do what we want anyway.

Is pinball that much of a threat? That's what I go back to since I feel the distinctions of trying to compare it to foosball or Air Hockey are really stretching the point. What has to be accepted is that, no matter the form pinball will take in the future and

even some of its variations for the imminent AMOA show, there will always be some people who are captivated by the idea of trying to control a ball on a field by just pressing some buttons on the side of a cabinet and even adding a hit or two in body English to emphasize the point.

It's like saying that slot machines will go away just because there are some video gaming devices that let you play cards or any type of gambling, or that those who play roulette or craps won't play slots, or vice-versa. The form is pure and has endured and will continue to do so just because the attraction is unique and can't be duplicated. And that's really the issue no matter what the new technology may bring in the way of innovative and far different equipment than we can now imagine.

But pinball is a staple, just as video will be when the next wave comes to roost at the top of the heap. There are even still those who like to see a good rifle game hit the arcade trail and any number of other "old hat" modes that once had their day in the sun. But in terms of pinball, the sun also rises and continues to do so as long as there are players around to support it and companies willing to have a battery of designers and engineers ready to find the next magic formula to transform a simple board of wood into the unique and special world it is.

All I can suggest for Mr. Ross and others like him is to not worry, the future will bear the burden of proof.

As for me—it's time for a little *Sharpshooter*.

Finnish slots are 'healthy'

Slot machines in Finland collect funds for a healthy purpose—that of health care and other social program. Governed by the Finnish Slot Machine Association, slot machine activities collect *markkaa* (Finland's unit of currency) to be used in the pursuits of national health care, child protection, care of the elderly, and education of the youth, reported the 1981 edition of the publication *Finnish Trade Review*.

Total slot machine proceeds in Finland in 1980 reportedly were about 350 million *markkaa* (FIM), or the equivalent of \$91 million in U.S. currency. Of that amount, some 150

million FIM were distributed purely for public assistance (US \$39.3 million).

The Slot Machine Association is also engaged in manufacture and servicing of various amusement and chance games at its new plant near Helsinki. The main product is the classic slot machine (called *pajazzo*) by which most of the profits are collected. Some 3,500 slot machines are manufactured there annually.

The Finnish slot machine is the result of years of development and refinement. Several unsuccessful attempts have been made to copy it. The *pajazzo* has also been exported to Norway, the United States, and

elsewhere.

Plans are now for the association's ultra-modern factory to concentrate more heavily on exports. In 1980, the total value of game exports was 4.8 Million FIM (\$1.25 million, based on 1979 rate of exchange between currencies).

Finnish Trade Review states that development of the product has evolved electronic slot machines of "high-level achievement technically and also in exterior design. For the latter, the Finnish firm Ergonomia Design is responsible."

More information: The Slot Machine Association, Mariankatu 9, SF-00171 Helsinki 17, Finland.

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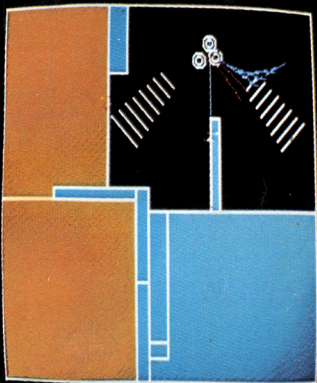
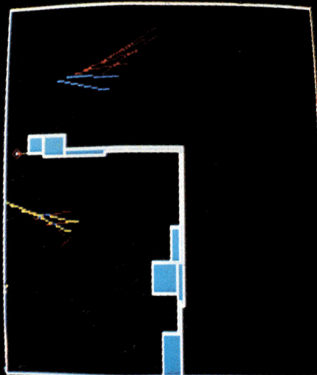
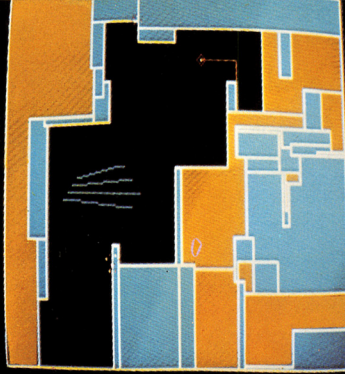
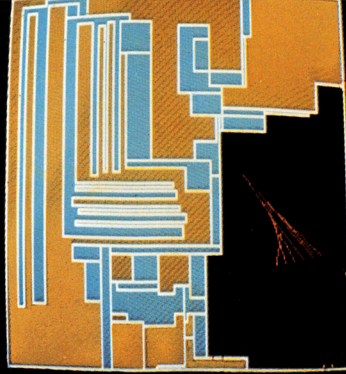
QIX

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from



*pronounced "kicks"



Trillions upon trillions of configurations!

SPARK ▶

SPIRAL DEATH TRAP

▲ MARKER

▶ THE FUSE

▶ THE QIX

TO DRAW STIX ▲
PRESS
▼ FAST OR SLOW ▼

How your players can get their Qix™ ... before Qix™ gets them!

Qix is a video game unlike any you've ever seen in design and challenge! And Qix *stays* unique play after play, player after player, because there are as many strategies as there are possible configurations . . . and there are **trillions upon trillions of configurations** that can be plotted on the screen! With this kind of fresh, new appeal, you'll want to make sure that your players get their Qix!

The object of the game is to box in Qix, the spinning helix, by filling in 75% of the screen with boxes of color. The percentage that's filled in over 75 is multiplied by 1000 for Bonus points. The player draws boxes with his Marker, (3-7 per game, operator adjustable), using his slow draw and fast draw on the control panel.

QIX™

The player must stay out of the destructive path of the whirling Qix so that it doesn't hit the line of a box before the box is completed! As the game progresses, the 1 Qix divides itself into 2! Separating them with lines or boxes earns

2X Bonus value! Separating them a second time scores 3X Bonus value, etc.!

SPARX™

The player must avoid the 2 Sparx that travel along the Strix or they'll destroy his Marker! The Sparx stop their mad chase only when the Marker is caught or the screen is filled by at least 75%! Just when the player feels he has them out-smarted, the Sparx begin to multiply and become even more dangerous and aggressive Super Sparx!

FUSE

If the player stops or doesn't complete a box, the Fuse will light, shoot up the Strix and destroy his Marker!

SPIRAL DEATH TRAP

The Fuse will deliver a burning fate to the player who makes a wrong turn and boxes himself into a Spiral Death Trap!

How you'll get QIX™ ... in our brand new cabinet!

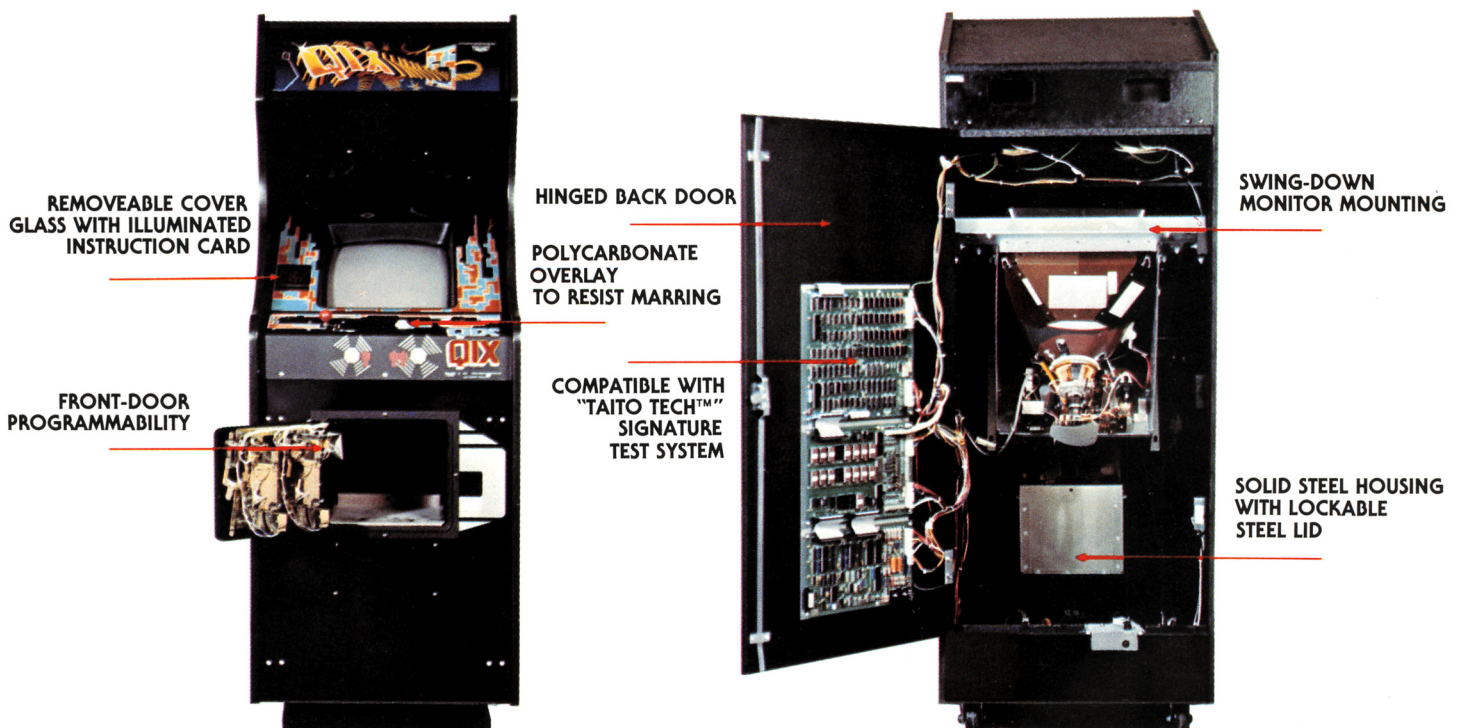
It's a special service-priority cabinet and it's just what the operator ordered!

Specifically designed for easy access and service as well as for maximum security, it houses a revolutionary new electronic system. This system allows for more on-monitor audit and test screens, flexibility and realism of configurations and innovative special effects like the ominous bellowing sounds in Qix that are twice as menacing in Taito stereo.

The cabinet has front-door programmability and audit functions with swing-down monitor mounting and logic boards on a hinged back door to simplify service. These logic

boards are fully compatible with the "Taito Tech™" Signature Test System for board troubleshooting. Removeable cover glass features an illuminated instruction card and the easily accessible control panel has a replaceable polycarbonate overlay which resists marring. The lift-out molded cash box is surrounded by solid steel housing with lockable steel lid and has the capacity for the highest earnings . . . the kind that Qix is sure to bring in!

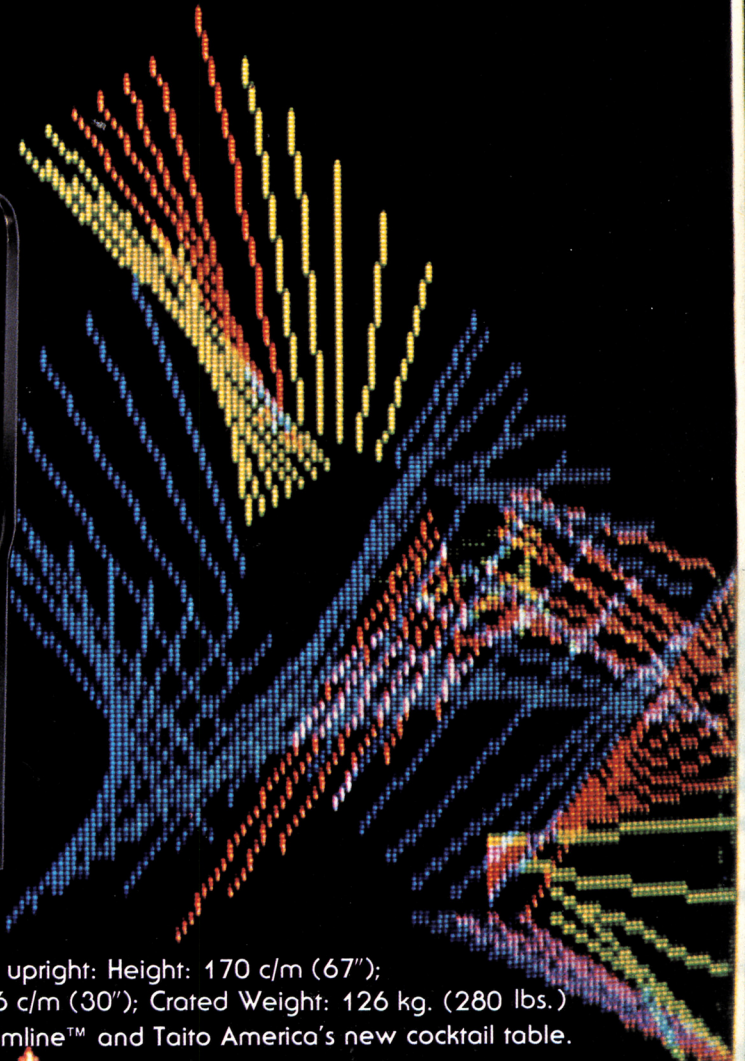
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By Roger Sharpe

CATACOMB on review

Themes and variations

Nostalgia and videos

Maybe the reason for some of this verbal wanderings about coin-ops is due to the recently held AMOA and my feelings about that particular event. Back in 1975 I attended my first coin-op show in Orlando, Florida. I was doing a feature story for *Gentlemen's Quarterly* and wanted to get some pictures of Allied Leisure's *Dyn O' Mite* solid-state pinball machine. But this initial baptism didn't prepare me for my visit to the then-MOA convention, where I was overwhelmed by the spectacle of a world I was rapidly beginning to know.

Now, seven Chicago conventions later, my enthusiasm and excitement haven't diminished. I still gear up for the extravaganza and the chance to see friends I might not see for a year, as well as see what the industry will be offering the "real" world in the months that follow. Admittedly, a few years ago, when the foreign manufacturers literally flooded the convention with pinball machines and all the domestics were showing two, three, and four models, there was magic for me that has not been matched.

But I too have changed over time and look at the total effort, although my mood has been calmer and more restrained. I think I even may have surprised a few people with my "video involvement" at the show this time around and there were those who thought I had finally abandoned ship. However, to those I would offer that I've always had an interest in video and annually look at those models which might interest me later when I have to put my own money in to play.

And, since this issue of *Play Meter* is an overview of sorts of the AMOA Show, I'll take the opportunity to

give some reactions in general before I head into the pins and the developments there.

A few of the video highlights for me, which will undoubtedly reveal more about my video side than anything else, included *Galaga* since I am a fan of *Galaxian* and this has even more effects for my eye; *Tempest*, which wasn't really new for me, having seen and played it for a bit before I ever arrived in Chicago; *Thief*, even though I don't know Los Angeles streets and have never been good at any maze or car game; *Tactician* because I liked "doodling" a little blocking formation in the beginning and still can't figure out the "jumping" bombs; *Donkey Kong* which I have seen for ages and finally tried only to be hit with the fact that I'm no good at climbing games either; *Victory* because I liked traveling off into space away from the action, wandering around trying to master all my fingers and all the controls without feeling totally inept—I didn't succeed.

There were probably other efforts which at this point escape me, only because my mind just flashed on some of the other attractions such as trying to figure out the purpose of the racing car game in the North Hall, an electronic soccer game only because I won, and the strongest image of all—the Nevada Gaming School booth and a girl with legs that just didn't quit. Ah well, there's always next year, although each succeeding show, the girls at this booth seem to get taller, unless I'm finally getting older and shrinking.

But you're probably wondering about reactions to the pinball machines that were on display and whether those predicting doom and

(continued on page 69)

This is supposed to be the first issue of the new year, 1982 for those of you who may have missed it, but between you and me it's difficult for me to think about resolutions—given the fact that I haven't yet had my Turkey Day dinner and am still reveling in yesterday's overtime win by the Bears over Kansas City, let alone the two game winning streak of the Chicago Bulls and the continued scoring binges of the Black Hawks. Of course, by the time both of us read this in print, those above memories will have faded, replaced by thoughts of winter and, undoubtedly, deadlines for what will probably be spring issues of *Play Meter*.

Hopefully all of you survived last time's retrospective of the Corner and enjoyed the recounting of just how far we've all come over the last 200 machines. It staggers me, truthfully, to think that I've been at this for so long and marvel at the changes within the industry not only in terms of people who have come and gone or shifted from one company to another, but also the dramatic happenings with equipment—not just from the superficial acceptance of video's surge and pinball's up and down existence, but rather just how far the whole industry has come from those first days when I began my ongoing love affair with the business.

It is a special part of me now, an integral factor of my life, and probably what my future will hold and I can't get over everything, especially what I honestly consider to be my good fortune at having the opportunity to delve behind the machines that I was so fond of for so long, and meet the individuals who make it happen day after day.

It is an exciting and unique business that those involved should be proud of—because I'll tell you something—no one out in the real world really knows just how much fun you're all having, even if your



Stern's CATA COMB

equipment is down or there are problems to deal with—don't trade it in, because the coin-op business is the best game in town.

With these few observations aside, the pinball machines at the show were varied in their design and utilization of electronics as well as giving an indication of the individual companies' commitment to the product and their dedication to pursuing games that might keep pinball on the road back. Because, even though there are some who would like to see this mode of entertainment put gently to its rest, the fact remains that there are players out there ready, willing, and able to test their flipper skills. Even given the fact that the number of games has diminished, the quality,

by and large, has improved dramatically with those machines being produced currently.

The line up includes Williams' single-level, multi-ball *Barracora* and the double-level, multi-ball *Solar Fire*. From Stern there's this issue's entry, *Catacomb* with its flipper in the backglass and the "big game" size, multi-ball *Viper*. Gottlieb, besides showing its very successful *Black Hole*, entered a new frontier with *Caveman* and the three-level *Haunted House*, while Game Plan surprised a few by returning to the wars with a celebrity-inspired *Mike Bossy*, *The Scoring Machine*. Lastly, Bally brought to life its version of a three-level, multi-ball game with *Elektra* and the multi-multi-ball *Centaur*.

All in all a healthy offering of games and variations on what pinball can be and will become.

Stern's CATA COMB

Although its energies have been obviously turned to jukeboxes and video, the company has still managed to keep pinball going with efforts that are different and filled with surprises. *Catacomb* is no exception with the inclusion of a "whip action flipper" in the backglass.

PLAYFIELD: The action begins with two lanes at the top left (6 & 1) and a single lane on the right that ties into a spinner for increased lit values. Just below at the center is the first of four drop-target-banks. This three-bank (B) is balanced by another on the right side (C). There are two thumper bumpers in the middle of the field and another three-bank at the left of this (A) with a kick-out hole as well for locking up the ball.

Move down the right side and there's another kick-out hole for locking up a ball as well as a last drop-target-bank (D). The left side, meanwhile, offers a spinner that curls back around to the center of the board and a side stand-up target (2) before one gets down to the conventional wire lane and flipper set up.

ANALYSIS: The old center card grid is back as the main theme of *Catacomb* with the players trying to fill out the sixteen lit numbers in order to complete the card, build up a reserve bonus of 136,000 points and then begin anew. The sixteen randomly ordered numbers are tied into the four drop-target-banks, the top two left lanes, and that left side target. Each of the numbers are color-coordinated into either red, blue, green, or orange with the completion of a drop-target-bank

lighting the appropriate colored number for that bank.

Multi-ball play is really a throw-in, with the kick-out holes locking balls until four of the same color are made, thereby releasing the balls into play. There are some good, long shots to the sides, with some reverses also broadening the potential of the board, but the primary shot, satisfaction-wise is that left side spinner which can be built to 1600 points per revolution on what is predominantly a flipper-based game.

The last part of play on *Catacomb* is that backglass which picks up the A,B,C,D lanes, tied into the drop-target-banks, and provides a last chance to get numbers by pressing the right flipper button to propel a ping-pong type ball up, over and down the lanes, with the left side flipper button controlling which color the lane will mean so that a player has a chance to not duplicate a number already achieved.

Once the same number is hit, the play is over, with a timer also thrown in for those wanting to be precise in trying to beat the game. The action is quick and a matter of timing to line up the right numbers and colors for the right target banks and the right lanes.

GRAPHICS: Even with the backglass flipper, which is an attraction unto itself, *Catacomb* is an interesting package of sights and sounds. There's a good use of color, once again drawing away from space and the integration of sound and speech to balance off the total presentation.

PLAY: The scoring on *Catacomb* can be rather low in the six-digit frame of things and just about right in terms of seven-digit scoring with most machines I've seen having high games of only the 2 and 3 million variety. For add-a-ball areas, you may want to try three limits beginning with about 360,000 points and followed by 700,000 and 1,500,000 points. On free play you should be all right increasing these by about 200,000 to 300,000 points depending once again on the caliber of play in your location as well as your percentaging.

PROS & CONS: *Catacomb* is a decent game with some challenges that may keep the players coming back, if they're regulars and are frustrated at trying to beat it. The problem is that the machine could have been so much more rewarding to play with no design changes, but rather the further integration of programming and memory. Admittedly, costs and constraints in what might have been possible, are

factors to be dealt with, but if the game had three more cards on the board (ala *Big Game*) there would have been a big difference.

As it stands now, a player gets a lit number only when an entire bank of drop targets are made, when the ball is on the field. This is almost a penalty for those less skilled in directing their shots and also a turn-off for those who may complete a bank only to have it be lost when the number lit has already been made. My suggestion would have been to keep the present card as a master card, so to speak, and offer three other cards or even four, which would have tied in each drop-target with a letter or number or some other emblem so that a player could have been rewarded just by hitting some and not all of the targets. The end intent would have still been to complete entire banks to light the master card, but there would have been something for the average player, with maybe some bonus also built into this type of approach which would have fully loaded the game and kept all areas alive for increased scoring potential.

Otherwise, the machine doesn't supply enough of a rest in terms of a shot back to the top or even a return to the plunger, making it more of a gun-and-run effort that thrusts most of the action on the flippers given the layout of the features. It's too bad because the potential was there, although once again one must be aware of whatever the problems were and the obstacles in getting the game out on budget.

RATING: ##

And that's it for this time around. Pinball is alive and well, no matter what anybody thinks. Players will come back and pop their money in when the games are worth it and incrementally earnings are up over the past years although video still manages to lead the way for now. Upcoming are some of the efforts already mentioned.

Until then, my best to those I had a chance to see at Chicago recently and my regrets that time was so short that I couldn't touch base with everyone I would have liked to. I even left one day short of the show only because of a feeling of homesickness and the desire to be with Zachary Nathaniel who is now already five weeks old. Well, at least Ellen cooperated by delivering early so I wouldn't miss the show entirely. We'll just have to *time it* better next time. Anyway, as usual, be well and prosper and have a Happy New Year! ●

(continued from page 67)

gloom for flipper games are in fact right in their assessment of the future. Well, I'll tell you; I was encouraged by what I saw and how the people flocked around to see what was coming up. However, more important than specific machines at the show, was the general mood that seemed to pervade the atmosphere.

'Lack of excitement'

I didn't sense the excitement that is usually so much a part of the show, with people racing around saying, "Did you see so and so's booth?" or "such and such a machine?" Instead, everyone kind of went around the booths and exhibit halls pretty much knowing what any of the "surprises" might be and getting a general feel for what was being offered.

Part of this reaction might be that many people I talked to expected far more innovative equipment than what was offered. After all, how many maze games can an operator look at and consider buying, if he already has what he thinks is enough of this type of game? Or the knock-off retreads of previous efforts, re-packaged and "improved" to have you think they're something different from the original.

However, don't get me wrong. There were some innovative games on the floor, but, by and large, the year seems to point in a direction of status quo for the time being, before someone ventures into the next level and plateau that will lead the others who are less willing to take chances. It's the nature of the coin-machine industry and has been throughout its history, although I'm sure that there were some who expected video to somehow be different and transcend the norm.

But things don't work that way and so the show was kind of flat in terms of an overall sweeping enthusiasm.

There were the singular achievements such as Gottlieb's triple-level playfield. *Haunted House*, the pinball machine that integrated all aspects of playfield design and should prove to be a good, strong, novel approach to tap. In addition, the same company broadened its scope with *Caveman*, a pin-vid hybrid that gave basic flipper play with a built-in screen in the hopes of attracting all types of players with the opportunity to try both formats within a single game. It should prove to be a good novelty machine for a beginning and open up new areas for pinball and video to be meshed

together, further expanding the horizons of those things that are possible and those which can be accomplished.

In terms of pinball, the MOA/AMOA has never been a real disappointment, although the efforts of Zaccaria, InterFlip, Universal, Recel, Playmatic, Sonic, and others are truly missed. There always seemed to be something going on such as the changeover of Chicago Coin into Stern, the unveiling of *Big Game* with its "new" size and seven-digit scoring. The year Gottlieb went "blue" and brought the world *Cleopatra*. The dazzle of Williams with Steve R's *Flash* and *Black Knight*, a talking *Disco Fever* and more gaudy booths with beautiful girls. Even Atari and Game Plan made their own waves at different points in time. And, lastly, Bally which everyone vied with for elaborate set-ups and equipment to match, such as *Xenon* complete with its own display cabinet and girl, *Flash Gordon* with Ming's head and strobe beckoning passersby, a talking *Kiss* with seven-digit scoring and much, much more.

This time around, besides Stern's dramatic video jukebox and the horizons it opens up for this medium of entertainment over the long haul, maybe the only other revolutionary development was Williams' *Hyperball*. Some may pass it off as just another "shooting game", but to those I urge them to look again.

It was a marvel, incorporating what had been a staple of the industry for so long, with some new technology and packaging for a dynamic product that's sure to usher in imitators and further development in this area. Although the cabinet may appear pinball-inspired and even the backglass may harken thoughts of this genre, the play and strategy are anything but similar to video or pinball.

For many years the old-timers I always seem to gravitate to, have talked about coming up with a gun or rifle game to fill a very real void in the marketplace, but none have yet to successfully incorporate their dream into a viable and real creation. However, with this entry, Williams has crossed the barrier with a machine that, for me, takes video to the next step with more interactive play and involvement in a game that you'll be hearing a lot about in the coming months. Suffice it to say, for now, that it is a milestone in much the same vein as Gottlieb's *Caveman* can be over time. More later.

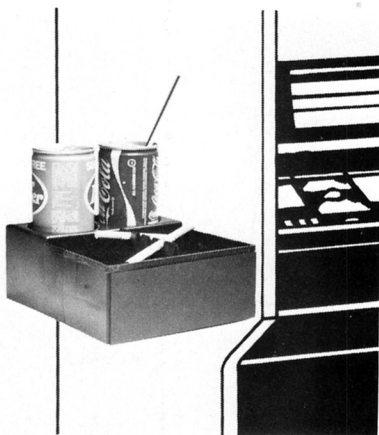


Pinball has a bite

Stern Electronics has introduced *Viper*, its latest one-to-four-player solid state pinball game with a serpentine theme of colorful back-glass and playfield art.

Viper's new play feature, Roto Shooter, is a rotating ball; chamber that allows players to control the ball's shooting position when aiming for target points. The turning mechanism, located in the center of the playfield, is activated when the ball is swallowed into the chamber. *Viper Shoot*, located next to the side flipper button, ejects the ball out of the Roto Shooter.

In addition to lively audio effects, play action features include: *Viper Reverse*, controlling Roto Shooter spin direction; bonus multiplier up to 4X, activated by hitting drop targets in sequence; captive ball lane, released when 1-2-3 sequence is completed; and multi-ball capacity, with up to three balls able to be launched simultaneously onto the playfield.



Cleaner games

A utensil to aid keeping coin-op games clean without frequently cleaning them up is offered in specially designed ashtray/beverage holder units being marketed by Spectrum Engineering of Connecticut.

The tray-holders serve to eliminate damage to games and floors from spills and cigarette burns by game players. Playing time is increased by increasing player comfort and minimizing distractions, the manufacturer points out.

The units, designed to fit all coin-operated games, are easily installed, are interchangeable and leave no marks on games, according to Spectrum Engineering. A variety of sizes and colors are available, as are custom-made units. For further information, contact: Spectrum Engineering, 453 Glenbrook Road, Stamford, Connecticut 06906.

The new shell game

Stern Electronics has announced production of *Turtles*, its new fun-themed video game, licensed from Konami Industry of Japan.

In a departure from space themes, the solid state, one- or two-player game features animated beetles chasing turtles through a colorful video maze. Game action is accompanied by lively music and sound effects.

Object of the game is for the player to maneuver his turtles across the screen, rescuing baby turtles from mystery squares (for 100 points), and carrying them to safety (150 points) while fleeing the attacking beetles. To win, the player must successfully rescue all turtlelets in eight levels of play and reach the "top of the house." In a special bonus feature, a player who earns 5,000 points is awarded an extra turtle.

Other features include: attacking beetles disabled by the Bug Bomb button (100 points for each beetle bombed); additional Bug Bombs awarded when turtle passes Flashing Star; increasing play difficulty with completion of each maze; and directional control of turtles with joystick.



Computer duel

Eliminator, a new Sega/Gremlin computer video game, features a new concept in game design and play features with Sega/Gremlin's Colorbeam X-Y color vector monitor system, said the manufacturer.

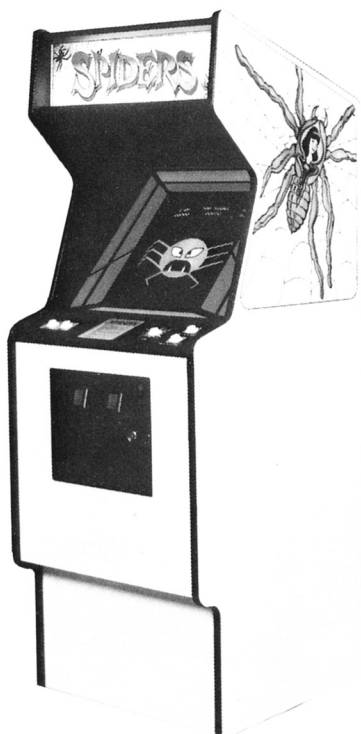
The game features three playing modes: single-player, two players competing against the game computer, or the dual-single mode, permitting the winning player in a two-player game to continue to play against the computer.

The objectives of the game are to force an opposing player's spaceship, computer-controlled attack ships, and the *Eliminator* into the *Eliminator* base, where they are destroyed—and then eliminate the *Eliminator* itself. Numerous secondary objectives and strategies are built into the game to whet player interest. Players who take the greatest risk score the most points.

Game action revolves around the *Eliminator* base—a large, spherical object which floats at random about the video screen. The base is not vulnerable to attack except through a narrow tunnel which leads to its core. During game play the *Eliminator*, a lethal enemy craft, emerges from its base to attack players' spaceships. Players each get five ships, which can be quickly caught up and eliminated in the game play.

A player ship can destroy the *Eliminator* before it leaves its base by firing an energy bolt directly down the tunnel. Higher scores can be earned by destroying the *Eliminator* base in the same manner after the *Eliminator* ship has emerged from its tunnel. Either way, the base is destroyed in an explosion of sound and color; the round is ended and another, more difficult round begins.

Operator options include a variable number of player ships, the amount of points required for an additional player ship, and the level of difficulty. However, Sega/Gremlin advises the operator not to change the factory setting for *Eliminator*. Its new features and game play have been fine tuned for maximizing operator earnings, following study of actual play action on locations, the manufacturer has said.



Video game spins web

Treacherous spiders explode from deadly pods and descend upon the player in Venture Line's new *Spiders* video game.

The object is to shoot and destroy the menacing spiders before 16 of the crawlers can land and form a Spider-belt below the player on the screen. The game begins with a huge purple Spider appearing and challenging the player to test his skills against the waves of the devastating, crawling insects.

In announcing the new release, Richard Wood, director of marketing for Venture Line, said: "*Spiders* is an easy game to learn, but very difficult to really master. It requires fast reflexes and provides increasing challenge as the game progresses. After many weeks of intensive testing we are proud to offer this game to the industry."

In *Spiders*, pods appear on the screen, exploding and releasing spiders to descend upon the player, who must watch out for their hurling spider webs and sonic waves to destroy him.

If the player successfully destroys the first three attack waves, a full graphic facial picture of the beautiful Spider Princess will briefly appear, to encourage the player to continue battle.

The game includes numerous operator options for location versatility. *Spiders* is manufactured under license from Sigma Enterprises of Japan and is offered by Venture Line in its exclusive changeable game system. For details, contact a local Venture Line distributor.



Kaos reigns

A new vertical maze video game, *Kaos* made its debut at the AMOA show in Chicago in October. It marked Game Plan's first design in the video field, with both hardware and software created by Game Plan personnel.

On *Kaos*, with a 19-inch full color upright monitor, a little man chases dollars, and if he doesn't catch them, they drop to the bottom of the screen and turn into dragons which then try to catch the man. The man must be kept in motion by the player or he drops out of action at the bottom of the screen.

The man in *Kaos* has a chance to turn into a king and slay the dragons. The object of the game is to build points by gathering dollars or slaying dragons, and not losing the little man. Men move faster than dollars, dragons faster than men.

Kaos features a sequence of eight different video screens as the game progresses, and the speed increases, adding to the difficulty of the game and the demand on skill. It is programmed to have bonus men awarded for reaching 10,000; 30,000; and 30,000 points. In addition, the machine can deliver the money units, called ERGS, on the same point basis in the one- or two-player game. Multi-colored bars with small gaps form the vertical maze. Key to difficulty is an invisible bar that makes travel to the top of the screen difficult—and exciting.



Challenging a 'bogey'

Centuri, Inc. has announced plans for immediate marketing of *Challenger*, its latest in video space games. Developed and manufactured by Centuri at its Hialeah, Florida facilities, "*Challenger* is a space monster, blast-'em-type video game that is fast paced and high-scoring and incorporates 16 phases of increasingly difficult play," said Centuri President Ed Miller.

Challenger tests the player's ability at the start by confronting him with up to ten large energy rings that move randomly about the screen. As the player blasts an energy ring, 100 points are displayed on the screen, and the ring is replaced by two smaller ones. Each smaller ring, in turn, carries a score of 200 points and also divides into two still smaller rings, for which the player can earn 400 point each.

In single-player games, play ends when all spaceships are destroyed. In two-player games, play alternates after each ship is destroyed, with players continuing from the point at which their last ship was knocked out. During each phase of the game, Space Bogeys appear on the screen at random and for varying lengths of time. The player can skillfully avoid the bogeys until they disappear from the screen, or can win 500 points by blasting a bogey.

Challenger introduces three new features: warp control, triple guns, and a super bomb. When warp control is activated, the space ship becomes smaller and moves to the top of the screen where the image is reversed—allowing the ship to fire back toward the center of the screen. The triple gun allows the player to "shotgun" out of difficult situations.

The ultimate weapon, the super bomb can be activated only once for each ship and destroys everything on the screen, giving the player additional points. But the bomb is lost if the ship is destroyed before its firing.



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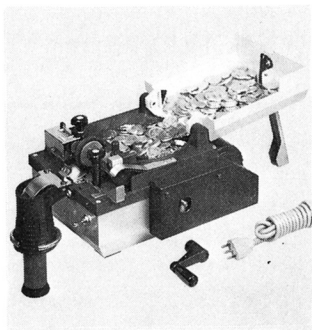
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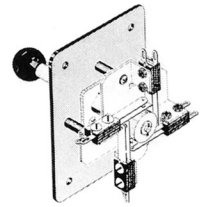
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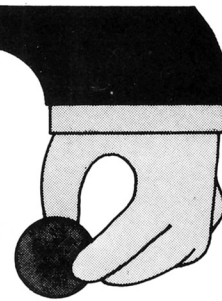
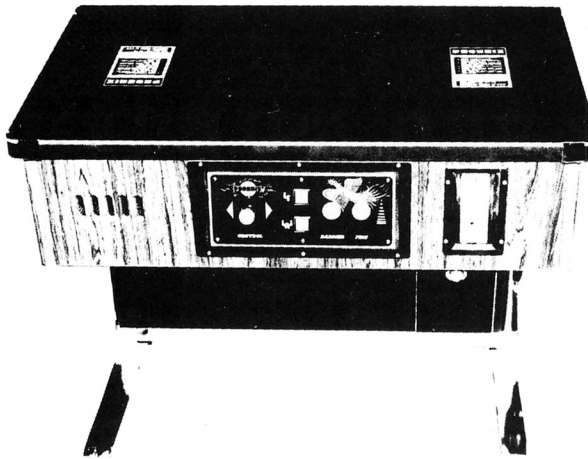
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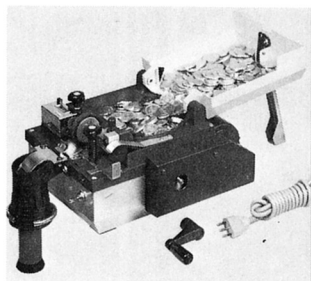
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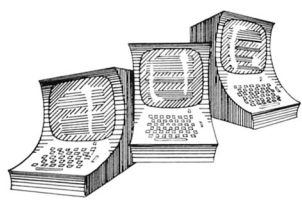
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News briefs... News briefs... News briefs..

.....Funds of which the Tournament Games, Inc. "Spectacular" was short after the AMOA show week event in Chicago amounted to \$170,000, according to TGI President Lee Peppard. Peppard said that amount included a \$90,000 cash shortage plus at least \$80,000 in "Tournament Bucks" coupons which at present cannot be redeemed by winning players for promised prizes. Attempts were being made in the industry to raise funds to cover the shortage to players, including Play Meter's acting as a clearinghouse for donations to a Tournament Fund. Meanwhile, a class action suit by the players, against sponsors of the "Spectacular," Atari, Inc. and TGI, is being considered by those individual players pending results of the industry-wide effort to raise the funds shortfall. A full report will follow in Play Meter..

.....The three industry associations ADMA, AMOA, and AVMDA are studying a cooperative effort of grassroots help for coin operators in areas of adverse legislation on games. The "public relations"

program, said ADMA's Director Paul Heusch, would be "as thorough as we can make it," to show local officials the positive effects of arcade games and well-run arcades. An announcement was expected by December 1, to signal whether AMOA's board of directors agree to the cooperative industry-governmental relations program package.....

.....From AMOA, "no comment" was the official word from its Executive Director Leo A. Droste as to why gray area games were not required to carry a notice of their potential gambling nature, while they were on exhibit at the AMOA Show. Droste told Play Meter that a last-minute decision to rescind this earlier policy decision had been made by AMOA but he refused comment when asked if AMOA's backing down on this matter was a result of a threat of a lawsuit by one of the gray area games manufacturers.....

.....In an upcoming issue of Play Meter, coverage will review the seminar sessions

[continued on next page]

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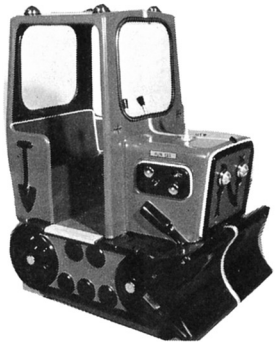
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presented at the AMOA Show.....

.....Southwest Vending Sales Co. counted 3,000 persons in attendance for its first-ever distributor preview, held November 7 in Dallas, timed to follow the AMOA show and featuring all major manufacturers and their equipment on hand. Operators' interest in the new games was high, and Southwest Vending featured service seminars with factory representatives conducting sessions. Details will follow in Play Meter.....

.....Atari announced on November 11 that it had entered into an agreement with Namco, Ltd. of Japan for the exclusive manufacture and sale of Namco's newest video game in the United States and Canada, plus other territories. The Namco game would be announced later. A Namco spokesman said the relationship between the two manufacturers will be to exchange "both technical and marketing ideas" in other joint projects.....

.....Betson Enterprises has set a product showing for December 2 at Leonards of Great Neck, Northern Blvd., Great Neck, New York, featuring the new Rock-Ola 488 jukebox as well as a new game product premiere.....

.....Stern Electronics, Inc. has appointed Gil Williams, a veteran coin-op games industry executive, to the post of corporate consultant. He will supervise the establishment of a full-line Stern production facility in Limerick, Ireland, which will begin assembly processes in January. Williams currently operates Galaxy Arcades in California and has served as Atari's vice president of manufacturing.....

.....Patrick L. O'Malley has been named a member of the Board of Directors of Bally Corp. O'Malley is chairman emeritus of Canteen Corp. and is a member of the board of the Chicago Area Regional Transit Authority. As well as holding other public posts, he is an officer in a number of financial institutions including Michigan Avenue National Bank, Chicago...

.....The Governor of Puerto Rico reportedly has signed an executive order delaying the removal of 380 slot machines from the island's seven casinos on December 31. Gov. Carlos Romero apparently wants to give the legislature time to reconsider its order that all slot machines be removed by August of 1982. From all slots in Puerto Rico, 60 percent of the income goes to the government treasury, according to the gaming trade press.....

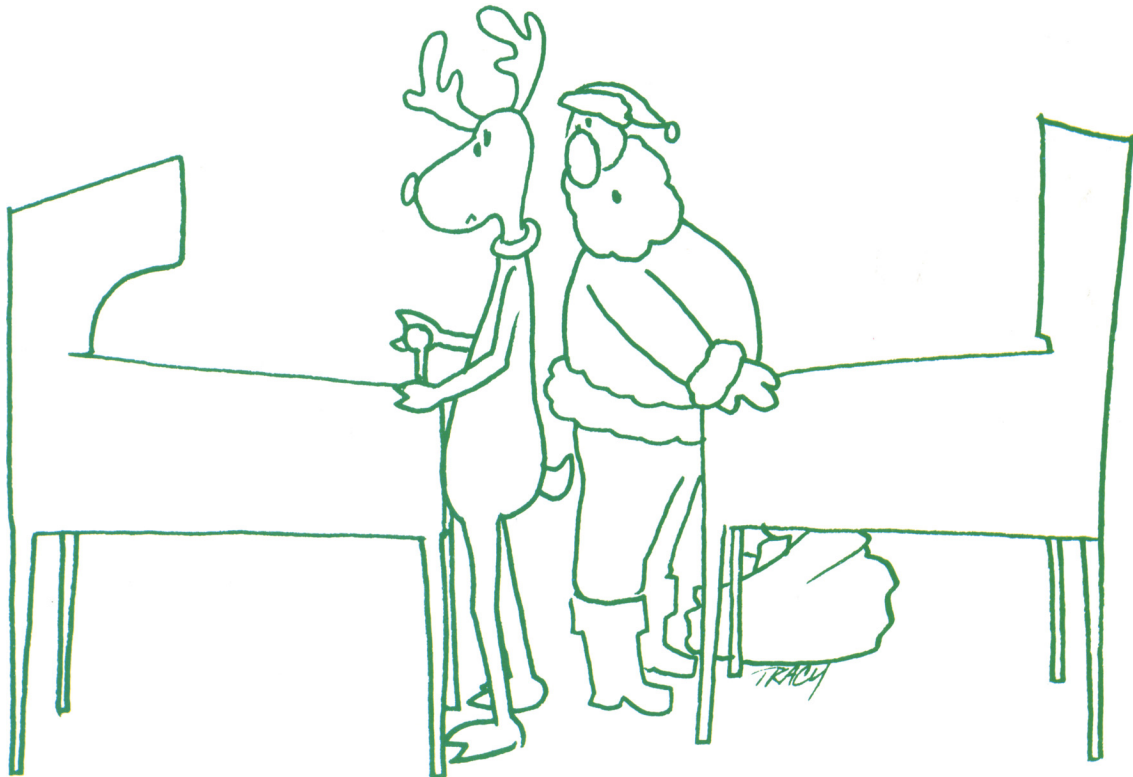
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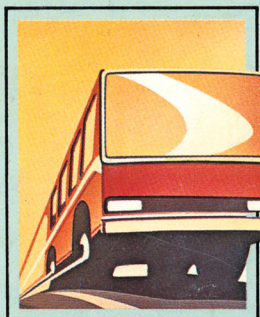


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