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Volume 8, Number 7/April 1, 1982

PLAY METER

The Twice Monthly Publication for the Coin Operated Entertainment Industry

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FEATURES

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What to Tell a Loan Officer

Not All is Well in Video Publicity

A subject of frequent query to our editors is 'What do I tell my banker?' when the operator is going for capital infusement for his route. Here, Charles C. Ross provides a set of guidelines for favorably impressing your banker. Models for presentations are included in this 'must-read' for new operators.

26

News hawks have been ballooning the criticisms of a handful against coin-op games, from housewives to politicians. Roger Sharpe, beginning on page 26, comments on this negative-publicity trend and offers a call for unity to stem this tide. On a related note, in this issue's 'Chief Gripe in Operating Today,' Charles C. Ross (page 37) builds his own case for the needed

industry-image betterment. (See also the Letters, pages 5 and 6.)

66

The Mesquite Case in the U. S. Supreme Court Our analysis deals with the implications of the Aladdin's Castle vs. Mesquite, Texas, case as ruled on by the High Court shortly before this issue of *Play Meter* went to press. The issue of juveniles' play in arcades seems to be back in the ballpark of local operators and associations.

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DECO

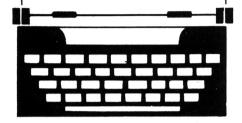
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Letters to the editor . . .



'Unbiased' on copyright'

I would like to compliment you on your unbiased reporting regarding your copyright stories. I appreciate getting both sides of the copyright problem.

I would also like to compliment you on the equipment poll list. Your ratings seem to be very accurate according to what we see and hear out in the territory.

> Les Lystad American Games Seattle

Ed. Note: Another view of the copy game syndrome is told in the following letter...

'Too much attention...'

I must admit that I have been a little concerned recently with the nature of your articles seeming to follow one trend. That is, in my opinion, you were devoting too much attention to the subject of copy games. While this is an important subject, I think there is a story behind all the copy games. Mainly I don't think operators are buying these games to make a quick buck but to try to keep up with location demand with a limited supply of capital resources.

Yes, it's true, many operators across the country are quickly going broke! I could spend an hour just outlining the reasons, but I'm sure you alredy have an understanding of what they are. There is a light at the end of the tunnel (for *Play Meter* anyway). Your recent articles by David Pierson covering the Tournament Fiasco were impressive and informative. This type of reporting

on the industry trends, from an operator's point of view, could enlighten us all.

Sam Westgate Williams Enterprises, Inc. Enfield, Illinois

Joystick tilt

First of all let us say that your magazine is tops!

We have a suggestion: joysticks they seem to take the most abuse. We have observed strong handed players, who can't seem to control their excessive hard play on the joystick. Our suggestion would be for the manufacturers to incorporate a type of tilt where, when a certain pressure is applied to the joystick, it would close a separate switch (the game could go to game-over mode and display TILT in large red letters). Hard rubber could be used to resist a plunger up to a certain point.

Pulsar appears to make the man slow down if excessive pressure is applied to the joystick.

> W. Morrow Prairie Automation Ltd. Grand Prairie, Alberta, Canada



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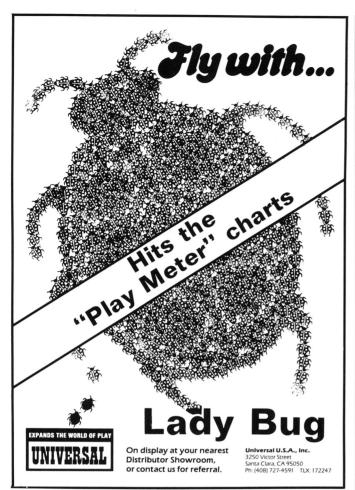
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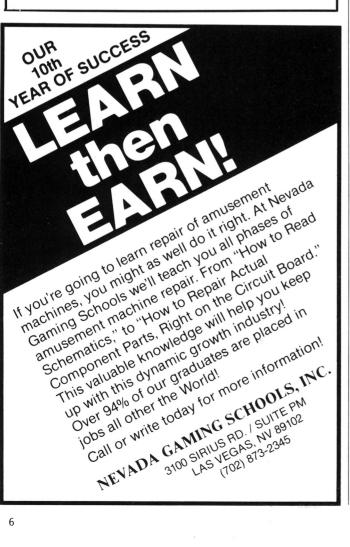
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Open letter to a parent

Amusement Device Manufacturers Association Des Plaines, Illinois January 11, 1982

Mr. Peter Neill Managing Editor Northbrook Star Northbrook, Illinois 60062

Dear Mr. Neill:

Ordinarily we, as will most industries, will refrain from responding to undocumented complaints and accusations, but, we feel, the letter from Jan Stein with regard to "Video Games in Northbrook" [Illinois] requires an appropriate

The so-called "greedy entrepreneurs" of video game rooms include some rather prestigious names including Warner Communications, Columbia Pictures, Gulf & Western Industries, Bally Manufacturing Corporation, Pizza Time Theatre, etc.

There are thousands of game rooms throughout the United States operating successfully without any need for police protection. We have no idea of what her term "corruption" refers to, or where, or when.

Since the present-day game rooms are well designed and constructed, and the games are played by local residents, what does she mean by "unconducive atmosphere?"

The accusation that children will no longer be safe in Northbrook is ludicrous in itself. The game rooms do not permit any smoking and most prohibit any food or beverages at all. Liquor is never a problem as it is never permitted. As for drugs, any teenager will tell Mrs. Shein that the schools are the major and easy source for the sale and procurement of drugs. Would she propose closing the schools?...

For the same price, just about, as a six-pack of beer a young person can play the video games for up to two hours, and if they are very skillful, even more. Isn't this a pretty reasonable price to pay for so much fun?...

It's a great industry, in both consumer and coin-operated divisions, and millions on millions of people, including more and more women and adults are falling in love with the fun of video games. I wonder if Mrs. Shein has ever played Pac-Man?

> Joseph Robbins President, ADMA

[Ed. Note: Excerpts from the Illinois parent's letter to the Northbrook Star's editor follow.]

"Keep video games out of Northbrook

As a concerned parent of Northbrook, I plead with the Northbrook Village Board not to allow the licensing of electronic video game rooms...

We as adults must set the ways for the growing individuals. Let's challege, stimulate and create the positive atmosphere for our teenagers and young adults with activities that will benefit their minds and or bodies, and yet fulfill their needs.

Why would an entrepreneur of video game rooms be concerned about our children, teenagers, and young adults...greed is their only concern. Will they pay the price for extra police protection and corruption?...

You will be drawing idle teenagers and young adults to an unconducive atmosphere.

The type of clintele that will be attracted to the areas will be a distraction to the Northbrook area children, teenagers, and

Children will no longer be safe in Northbrook, drugs will be more available, and liquor will increasingly be present.

Nearby stores will find more theft occurring, and to avoid the parking problems and nuisance, local shoppers will shop in other communities...

Please don't let greed be the reason for voting "yes" to video game licensing. Raise our taxes if need be to cover lost licensing revenue, but don't corrupt our community and the people of Northbrook.

Jan Shein



Nintendo joins Legal Battle against Video Game Infringements

Nintendo will pursue all infringements of its audio-video games (listed below) under copyright, trademark and unfair competition laws in Federal and State Courts, and before the United States Customs Service and International Trade Commission.

DONKEY KONG • RADAR SCOPE • SKY SKIPPER ...and others.

INFRINGERS:

In addition to civil remedies available to Nintendo, criminal charges will be sought against willful infringers and their prosecution will be actively assisted.

DISTRIBUTORS AND OPERATORS:

Be alert to non-genuine audio-video games. Infringing games and their components may be confiscated and destroyed when traced into the hands of even innocent buyers.

Nintendo

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Bally hails Supreme Court ruling

Bally Manufacturing has received the Supreme Court decision to remand the City of Mesquite vs. Aladdin's Castle case back to the 5th Circuit Court of Appeals with approval.

"It was exactly what we asked for in our brief," commented Bally Counsellor Glen Seidenfeld.

The Court of Appeals had decided in favor of Bally that the City of Mesquite was proceeding unconstiutionally when it tried to ban 17 year olds from playing the arcade pieces in Aladdin's Castle. In remanding the case back to the state level, the Supreme Court requested that court to clarify whether its ruling is sufficiently supported by Texas law. If it is, rather than the federal law upon which that court called for the basis of its judgment, then the case would be in its proper jurisdiction in that state rather than in the Supreme Court. (See analysis, page 66.)

As to the other issue of question, whether or not the ordinance of the city could instruct the Chief of Police to investigate arcade license appli-

cants for possible criminal connections, the Supreme Court reversed the Court of Appeals denial of that right to the city. But Seidenfeld contends that point was moot anyway—the state court having found no criminal connections relevant to Bally—and therefore the reversal of the earlier decision favoring Bally was unimportant.

As to the Aladdin's Castle that sits in the mall in Mesquite, it has remained open throughout the controversy and continues business as

Midway halts infringers in L.A.

Midway has been granted an injuction against some 25 companies, restraining them from using, buying, or selling copies of *Pac-Man*, *Rally X*, and *Galaxians*. Two other defendants were instructed to continue under a temporary restraining order for thirty days until further information can be gathered to validate their objections to the injunction.

The injunction offered by Midway in U.S. Federal District Court, Central District of Los Angeles, was approved by Judge Terry Hatter February 16 after less than two hours of argument.

The injunction is characterized by the entension of Midway's copyright wars to include attacks on locations. Most notable in the decision was the inclusion of the national chain of 7-11 stores. The managers of those 4700 outlets now must concern themselves with being held in contempt of court if they are discovered with games that might violate the Midway copyright.

Defendants Stan Rousso and Michael Stone were excused from the injunction when their attorney Michael McEntee argued that the game *Buccaneer* did not infringe on Midway.

McEntee questions the validity of the *Pac-Man* copyright, claiming that the game existed in Japan four years prior to the date Midway claims for its creation.

Rousso and Stone were granted

thirty-day extensions for the purpose of allotting time for continued gathering of evidence. Currently, those parties have investigators working in Japan to gather such evidence.

Kayes restructure under new company

With the completion of the sale of Irving Kaye Company to U.S. Billiards barely out of the way, the Kaye brothers have incorporated the remains of their former company into a new endeavor, Designs for Leisure, Ltd.

The new Kaye effort will center around home pool table lines, one line of distributor products, another featuring a decorator/designer pool table. They also will continue manufacturing casino gaming furniture, said Howard Kaye.

In effect, the old Kaye company and the new Kaye effort differ only in that the new effort is void of the coinoperated line of pool tables. "We sold the building and the coin-op business," offered Howard Kaye.

Kaye left the door open for a return to the coin-op end of the company's endeavors, indicating that the future would see their return to that aspect of the industry.

Principals of the former company will stay with the Kayes. Gary Kealey will be sales manager of the new firm, and Don DeServi will remain as woodworking foreman. However, Bill Currier, former Irving Kaye sales manager will move with the coin-op division to U.S. Billiards.

Designs for Leisure, Ltd. is located at 41 Kensico Drive, Mount Kisco, New York.

California video championships a resounding success

In the wake of the video world championship fiasco of the previous month, Marianne and David Davidson might have thought it easier to cancel their California "Video Games State Championship" playoffs and wait till the heat had died down. But Marianne and David are not the kind of folks who seek the easy way out of anything and their energy and courage is evident in the scope of their business.

Following their precept that operators "must become more public relations conscious to survive the fast-buck artists' threat to the industry," the Davidsons embarked on the biggest tournament endeavor ever attempted by an independent

operator.

The Recreation Station state championship involved more than two million games played in a marvelously successful tournament—not a complaint was registered through two and a half months of competition at 200 locations which culminated in the championship finals December 19 at the Ramada Inn in Culver City. There, amidst prize fight-like tension, Jeff Davis handled a Defender for 214,750 points within a five minute time limit for the uncontested California video championship. An audience of several hundred cheered the fifteen-year-old, and many more who had been in and out of the competition area that day read later of the youngster's victory.

The tournament's early rounds were played at each participating Recreation Station location. For eight weeks players battled to gain one of the two weekly playoff positions. Then, on Saturday of the ninth week, those eighteen playoff contestants gathered at the location to vie for a local championship and a bid to

the regional playoffs.

"Although all the final statistics are not in," offered Dave Davidson, "this tournament has already alleviated some myths about having video games in the stores. It is generally believed that the games will keep clients in the stores longer, but this showed that the games can actually bring people in. Some stores showed a 100% increase in game receipts."

Store owners and followers of the tournament also learned that there is no age limitation in respect to the people who enjoy playing the videos. The tournament was open to all ages in hopes of showing that the games provide family fun.

The majority of Recreation Station locations are Stop N Go convenience markets in California and Arizona and all the stores benefitted in sales and advertising from the pro-

motion.

On December 12, 200 in-store winners of "state finalist" belt buckles came to six division playoffs. Each of those players was allowed two five-minute time limit games, the best of which was recorded as their semi-final effort. When the play-off winners were determined, those regional champs headed to the finals competition in Culver City to compete for \$10,000 in prizes.

"All the prizes had been bought and paid for before the contest was even started," commented Davidson as a comparison to the previous month's Chicago fiasco [Play Meter, January 1 and February 1 articles]. Those prizes included a Williams Defender as first prize, a Honda ATC 110 off-road cycle as second prize, an ATC 70 as third, a G.E. 19" color TV for a fourth place finish, a Panasonic AM/FM cassette stereo system for fifth, and a sixth place prize of a Hitachi stereo AM/FM cassette.

The video to be used in the finals was not announced until all finals contestants had been decided. Then Williams' *Defender*, *Play Meter* "Video of the Year," was announced as the game upon which the finalists would compete.

"We chose the *Defender* because of its diversity and sophistication. Winning on the game takes agility. It is not merely a matter of memorizing a set of patterns," noted Davidson.

The championship finals were hilighted by the presence of two Southern California celebrities. Charlie Tuna, Los Angeles' KHIT disc jockey helped emcee the proceedings and twelve year-old Mathew Labarteadx of Little House

on the Prairie challenged media and contestants to beat him on a Missile Command. "The Tuna" left the crowd laughing and Mathew quit the Missile Command undefeated.

When the excitement died down and the crowds filtered out of the competition area, six proud young men had registered impressive five-minute point totals on the *Defender*. After Davis' first place finish came Damon Packard in second with 198,900 points, Brian Franklin took third with a score of 192,225, Fred Smith was fourth with 181,150 points, Brian Selfridge was fifth at 176,675, and David Redmond sixth with 172,875.

The fact that the competition went off without a hitch would have been success enough for Recreation Station's 1981 state video championships, but the tournament did much more than simply avoid the kind of embarrassments that scarred the industry reputation last November in Chicago.

"We wanted to improve the image of videos in the state," says Dave Davidson. "We wanted to show that the games are good family fun."

The Davidson's efforts could not have been more timely, nor more courageous. They risked some \$60,000 up front on the contest. (With over two million plays attributed to the contest, their risk was greatly rewarded.)

The rewards will be forthcoming throughout the year. The public relations benefits from the successful tournament will do much to improve the image of videos in a state which is undertaking efforts to revamp ordinances governing the number of machines allowed in any one location have been forthcoming. There are still the connotations of the evils of the old industry hanging on here, even though they aren't spoken.

But the Davidsons believe their state championship tournament has helped wipe away some of the prejudice against the coin games and that their approach to improving the industry image is especially significant in light of the fact that it was accomplished by a single independent operator.

City officials turned operators defeat city ordinances

Nowhere has the battle to keep arcades from opening within a city been more adamantly fought than in Union City, New Jersey. Twice city officials had developed ordinances to regulate the machines and both times the ordinances have been ill-fated.

The result is that two new arcades offering a total of fifty machines will soon be open in Union City, and their owners are—interestingly enough—city officials.

Juvenile Bureau Detective Jamie Macias and Firefighter Eugene LaMastro will open TA Spanish Arcade at 4512 Bergenline Avenue and Macias will also be part owner of the other Union City arcade, Arcade America, to open at 811 Summit Avenue.

The first ordinance intended to prohibit arcades in Union City was set up in July. It was shot down in October when Hudson County Superior Court Judge Richard Connors overturned the declaration limiting establishments to three machines. The judge ordered the

city to issue licenses to the two arcades mentioned above and a third which opened several weeks ago.

Original partners in the application for the Summit Avenue site included Police Sergeants Harry Calandrillo and Paul Hanak, School Trustee Mario DeLuca, and Attorney John Esposito. Those four, along with City Prosecutor Thomas DeClemente, have filed an application in nearby West New York.

In attempting to deny the applications in face of Judge Conners' ruling, Public Safety Commissioner Arthur Wichert cited an existing moratorium on pending arcade applications. The moratorium was to be in effect while the city waits for a new ordinance regulating the machines.

When Wichert was threatened with contempt of court charges by Connors, he promptly issued the licenses February 11.

Then, on February 18, the city commissioners came up with another ordinance. The ordinance

defines what the city interprets as an arcade and offers a fee schedule. Establishments with up to three machines will pay an annual fee of \$200 per game. Those with more than three games will pay \$400 a year per machine.

The ordinance itself is an admission of defeat on the part of the city's commissioners who, according to Commissioner Robert Botti, are "all against having arcades in the city."

city.

"Whether we like them or not," said Botti, "we have to operate within the law. We had a pinball ordinance and we tried to use it to block the opening of arcades...The ordinance (was) declared invalid by a superior court judge...We are appealing that decision, but the chances of winning the appeal are slim.

"The alternate is to adopt an ordinance that stands a chance of being successfully defended in court. There is no way we can have any control over arcades without some form of ordinance."

#1 in Pac-Man Sales in 1981

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Pac-Man mutation multiple

Pac-Man may have finished its run at Midway, but the profits off the phenomenally successful game are just beginning.

Pac-Man production reached 96,000 before its closing after becoming the video game industry's

biggest seller.

In a New York Times story, Midway's Stan Jarocki indicated that some thirty companies in the last eight months have signed sublicensing agreements with Midway relevant to the Pac-Man creatures. The companies produce greeting cards, bumperstickers, watches, and mugs, among other things.

Three of the sublicensees of Pac-Man are companies making home games, including one from Coleco Industries which has put quite an advertising campaign around its \$55 unit.

Called a "tabletop game," Coleco's Pac-Man is eight inches deep by six inches wide by eight inches high. Analysts say that Coleco's strategy of copying precisely the arcade game's look and sound should make it the most successful Pac-Man sublicensee.

In addition to Coleco's effort, Atari, the home game industry leader, is producing a home version of Pac-Man in cartridge form (selling for about \$37). Atari's license is notable in that it comes directly from Namco, where Midway got its license for the coin-op model. "Every other licensed product must be dealt with through us," the Times quoted

The third major entry into the Pac-Man home market is the Milton Bradley Company which will produce a board version of the game.

Jarocki indicated that Midway and Namco shared profits on the arcade pieces at about 50-50 split and that the same shares will be apportioned for the sublicensing revenues.

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Atari provides boost for record Warner earnings

Atari's parent company, Warner Communications, Inc. has reported a fifty percent increase in 1981 earnings per share. In addition, WCI revenues and net income for 1981 set records by substantial margins. Fourth quarter 1981 was the best quarter in WCI history.

According to WCI Chairman Steven J. Ross, "The dramatic surge in Atari's business caused an outstanding performance for the WCI Consumer Electronics Division, in which revenues more than doubled to \$1.2 billion, while operating income more than quadrupled to \$287 million.

Atari's pretax operating income for the fourth quarter was \$136.5 million, accounting for 90% of WCI's total operating income during the period.

"All segments of Atari's business registered strong growth for the year," Ross said. "Substantial increases in production capacity, combined with extremely strong orders for Atari's consumer game products and home computers, as well as record results in coin-operated video games, resulted in 1981's record-breaking year."

Board of Directors The WCI recently raised the cash dividend 47 percent to an indicated annual rate of \$1.00 per common share.

Leon rides on North American Amusement

Tom Leon, who has devoted ten years to the kiddie ride industry, has opened his own company, Thomas Leon's Kiddie Rides America. Now after nine months of operation Leon is changing his company name to: North American Amusement Co. The new name accompanies an expansion of products and services.

Leon is strong on the kiddie ride business feeling that people entering the kiddie market today stand a great chance to capture a good portion of the market, if they are careful in what they purchase, and are careful to check out their prospective suppliers.

He offers some advice to anyone deciding which machines to buy.

"A lot of kiddie rides today are more complicated and sophisticated; they do more, offer more and look different.

The customer must take into consideration whether the shipment is for inside or outside use, whether it will be attended or not attended, and

which age group will be riding.

There are one, two, and three axis rocking rides. There are controlled and non-controlled rides. There are circular motion rides and stationary rides. There are lifting rides and angular lifting rides.

Leon warns there are more rides on the market today than ever before. Many of them are old in design and some of them are "here today, gone tommorrow" which could leave the buyer with a replacement parts problem.

"The kiddie market is a very large and important one, not to mention an influential one," he said. "Little kids certainly influence where their parents take them." He refers to what has happened with the pizza restaurants, family restaurants, arcades, supermarkets, kiddie land arcades, water slides, malls, and go cart tracks.

Bally's 1981 revenues net record earnings

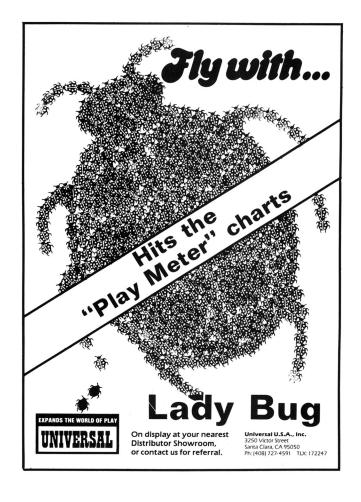
Robert E. Mullane, chairman of Bally Manufacturing Corporation, announced that Bally's revenues, net income and earnings per share for the year ended December 31, 1981 set new records for the fifth consecutive year.

For 1981, revenues were \$884.9 million as compared to \$693.2 million last year. Net income of \$81.7 million was 55% above the \$52.8 million earned in 1980. Earnings per share

were \$3.03 compared to \$1.97 per share a year ago.

For the fourth quarter of 1981, revenues were \$217.4 million as compared to \$185.4 million in the comparable period of 1980. Net income of \$18.3 million was thirty percent higher than the \$14.0 million earned in the fourth quarter of 1980. Earnings per share were 68¢ compared to 52¢ per share reported for the 1980 period.





PLAY METER, April 1, 1982

Midway breaks ground for new headquarters



Present at Midway's ground breaking ceremonies were: Jack Hartman, Vice President/Finance; Stanley W. Jarocki, Vice President/Marketing, Jack B. Williams, Mayor of Franklin Park; David Marofske, President, Midway Mfg. Co.; Paul Vesper, Vice President/Manufacturing

Midway officially broke ground on a new multistory office building in Franklin Park, Illinois, on February 18.

The new 40,000 sq. ft. facility will house an expanded engineering and research and development branch and will consolidate office functions in Midway's three existing buildings.

Officers of the Village of Franklin Park including Major Jack B. Williams joined with David Marofske, president of Midway, and his staff, in the double shovel ceremony.

"Our significant growth as leader in our industry is represented in this new building," said Marofske. "We are providing the best possible working environment for the innovative and hard-working staffs that have made that growth possible."

Estimated completion date is December 1982.

In other activity, Midway announced separate licensing agreements were reached with Fratelli Zaccaria of Bologna, Italy and Playmatic of Barcelona, Spain to market their games in the United States. Neither product was identified, but the company promised the information would be "released shortly."

Game center group improves community image

In the interest of building a better image for pinball parlors—and saving money—three Stockton and two Modesto firms have formed an association that could be the first of its kind in the game center industry.

The new group is called California Game Centers.

The Stockton centers are Supercade, 510 N. Wilson Way; Starcade, Hammer Lane at Interstate 5; and Cosmicade, in the 5700 block of Pacific Avenue. The Modesto members are Cals R Cade and The Game Station.

The five centers remain independently owned and operated, but they are pooling their advertising and promotional costs, as well as swapping games to hold the interest of their clientele.

The association also has a game club with membership dues of one

dollar per month, which entitles each member to one game token daily for at least 28 days.

In an effort to encourage good study habits, the centers reward school-age club members with three free game tokens for each "A" and two for each "B" they receive on their report cards, provided there are no grades lower than "C."

To discourage truancy, the owners don't allow school age youngsters in the centers during school hours.

Centers are supervised at all times and rules against smoking, loitering, and use of foul language are strictly enforced.

"The rules are intended to assure that the centers provide a safe, clean place of entertainment for the entire family to enjoy," says Ted Morse, a partner with Dave Morgan in Supercade.

The rules apparently are working. In the evenings, some 75 percent of the centers' customers are adults—men and women—even entire families. The games also are popular with adult workers during their lunch hours.

The opportunity the association affords for game-swapping among centers keeps them "looking fresh," explains Morse.

It also saves them a lot of money. California Game Centers members include, in addition to Morse and Morgan, Charles Raigoza, Don Nelson, Ken Moore, and Al Malvar, partners in Starcade; Ken Bickford and Albert Reynosa of Cosmicade; Cal Henning of Cals R Cade; and Jerry Rosenthal of The Game Station.

AMOA surveys members on "gray area" games

The Board of Directors of the Amusement and Music Operators Association has appointed an ad hoc committee to study so-called "gray area" games. Such pieces as *Draw Poker* and *Twenty-One* will be looked at in light of whether or not they should be classified as gaming machines.

Leo Droste of the AMOA indicated that the "gray area" games became a problem after the elimination of the tax stamp in 1980. Prior to that all gaming machines were clearly identified by the tax stamp as gambling devices.

An earlier definition of gaming devices was withdrawn by the AMOA when several members of that organization objected to certain phrases within that definition that tended to include the "gray" games.

The 1981 AMOA Exhibition brought the difficulty with that definition to a climax, and rather than identify "gray" games as gambling machines, the AMOA withdrew its separate classification for those games to wait for further input from its membership on how the matter should be handled.

The board will consider the committee's report on membership response to the issue at its mid-year meeting.

Konami caters to kids

The pitter-patter of little feet is music to the ears of the executives at Konami Industry. The Tokyo firm has signed an agreement with Parker Brothers and two other toy manufacturers which signal its entry into the electro-toy market.

Under the agreement Konami is producing hand-held electro-toy home versions of *Scramble*, *Frogger*, and *Turtles*. The company manufactures the small PC boards for these games and its partners complete the assembly and distribute the toys through their existing channels.

The hand-held version of Scramble is being marketed by Tokyo's Tomy Company in both Japan and the United States. The hand-held Frogger will be sold in the United States this summer by Parker Brothers, a division of General Mills. (In Japan, Frogger will be marketed by Gakken of Tokyo.)

Konami's *Turtles* will reach the public through Entex Industries of San Francisco.

THE CALENDAR

March 26-28

Amusement Operators Expo '82, Hyatt Regency, Chicago

March 31-April 2

Coin-Op '82, Irish Amusement Trades exhibition, Racecourse Centre, Leopardstown

April 2-4

NAMA Western Convention-Exhibit of Vending and Foodservice Management, Brooks Hall, San Francisco

April 2, 3

AMOA/Notre Dame Seminar, Center for Continuing Education, Notre Dame, Indiana

April 14-23

Milan Fair, Internat'l Business and Meeting Center, Milan, Italy

April 16-18

FAVA/music, games, and vending show, Curtis Hixon Convention Center, Tampa, Florida April 30, May 1

Wisconsin Music Merchants Association exposition and annual membership meeting, Milwaukee

May 7-8

Ohio Music & Amusement Operators, annual convention and show, Columbus

May 12-13

New Jersey Amusement Operators Association, Playboy Hotel & Casino, Atlantic City

June 3-5

Amusement and Music Operators of Texas, Americana Hotel, Ft. Worth

June 20-25

Bowling Proprietors Association of America, 50th annual convention and trade show, Town and Country Hotel, San Diego, California





Paul Moriarity, vice president of Taito America Corporation, Elk Grove Village, Illinois, is pictured with Danielle Newman, Chicago's 1982 Easter Seal poster child.

Taito America is sponsoring a Qix tournament at the company's retail store, Games America, in Palatine, Illinois, and donating all proceeds to the Easter Seal Society.

Centuri games head for home video computers

Centuri has joined the ranks of video game manufacturers who are offering their games for the home market.

The Hialeah, Florida firm announced February 18 that they had entered a licensing agreement with Atari who will market all of Centuri's games for stay-at-home video fanatics.

The first three Centuri games to be offered for home video computer use will be *Phoenix*, *Vanguard*, and *Challenger*.

Raymond E. Kassar told a Miami News reporter that Centuri's move was reflective of a universal desire of major coin-op makers to take advantage of home markets.

"Many coin-operated video game manufacturers are seeking us out for representation in this powerful and important consumer market," Kasser is quoted as saying.

Centuri, formerly Allied Leisure, has staged a dramatic turnaround in the video game market since President Ed Miller headed a group of New York financiers in a management takeover in 1980.

In fiscal 1981, Centuri revenues were \$61.4 million and the company posted a profit of \$7.5 million, compared with revenues the year before of \$5.9 million and a loss of \$4.5 million.

City's ban on coin games defeated by public support

by Joyce Romano

A proposal to ban all coin operated games in the City of Fairfield, Connecticut, was disposed of after a public hearing was held on February 9.

The Town Plan and Zoning Commission's proposed ordinance was struck down when 300 provoked townspeople attended the meeting at a local school and protested against the amendment, showing their favor of continuing electronic games in town.

The proposed ordinance would have prohibited the use of all electronic coin-op amusement games in town, except in residences or schools.

The proposed amendment to the zoning regulations regarding amusement devices read as follows:

"It shall be unlawful in any District for any business, store or other commercial or industrial establishment to have on its premises for use by customers or invitees any amusement device.

"For purpose of this section, amusement device shall mean any mechanical, electrical, or electronic device used or designed to be operated for entertainment or as a game of skill by the insertion of a piece of money, coin or token or other article, into said device or paying money to have it activated. This definition does not include: a jukebox, rides, bowling alleys, as any such device (maintained within a residence, or school, for the use of the occupants thereof and their guests)."

The proposal was developed by a subcommittee of the Town Plan and Zoning Commission, after State Police told school officials and PTA groups about problems with pupils frequenting the game rooms at rest stops in Fairfield, on the Connecticut Turnpike. Authorities continued to warn parents of the dangers of these rest stops, citing that they were scenes of prostitution, drug-trafficking, and other crimes.

The possible prohibition of the games led many parents to voice their opinions in favor of the games. One parent stated she felt the video games were "mind-sharpeners," and quite educational, and that it was the responsibility of the parents to control their children's whereabouts as

to playing locations.

As one man acclaimed, he himself was a "video-game nut" and he said that probably most people who participated in these games received some enjoyment or personal satisfaction from the playing of such games. Therefore, it isn't up to a few people to decide on someone's own affairs of how and where he spends his time; whether it's in front of a Pac-Man or having lunch in the same place, while still being subjected by these so-called "bad influences of crime," the citizens indicated. This question of prostitution, drugproblems, and other related crimes in places of such reputation should then be regarded by police officials as most people agreed.

Based on all the support for the continuance of the amusement games, led not only by the local people, but by the Chamber of Commerce also voicing support, free enterprise was the argument accepted for their confirmation.

They felt the proposal in question was "highly restrictive," as a spokesman stated, and that 80% of the members were against the amendment

Shared support for the games and disapproval for the controversial amendment assured the arousal of the local operators to attend the meeting. With all the protest against the ordinance, they were able to sit back and quietly observe the support they were receiving from the townspeople.

Actually, there were no supporters of the amendment as written, but of variations in the wording of the amendment, because no one wanted games entirely banned.

Summing up the evening, most people felt that if a person doesn't want to play the games, he doesn't have to, but in the meantime, people shouldn't be told what they can and can't do. "It's invading the rights of the people who enjoy the games as well as the operators who monopolize them" said one resident.

"If such an amendment were to pass, not only would children suffer, adults would also be affected, as well as the game business itself. If one city were to prohibit electronic games, it would be inevitable that other cities throughout the country, who have had minor problems, would become aroused," the Fairfield citizen said.



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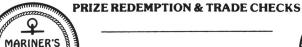
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Venture Line grabs West German gem

Venture Line Inc. has announced the completion of a licensing agreement with Video Games GMBH of West Germany for their new game Looping. The license grants to Venture Line exclusive manufacturing and marketing rights for North America, South America, and the Carribean.

In making the announcement, Joe York, president of Venture Line, said "We're just elated with the acquisition of *Looping*. This game has all the potential of being a gigantic hit of the proportion of a *Defender*. Never before has a game offered the player as much latitude in movement and control."

York further acknowledged that many other major American manufacturers commonly agreed that the West German game was something

very special.

Rick Wood, director of marketing for Venture Line, affirmed that Looping will be offered in the exclusive Venture Line "Change-A-Game" system. "Change-A-Game" enables the operator to convert a Venture Line cabinet into a new game both mechanically and graphically for approximately \$1000.

"Theoretically," stated Wood, "any operator that owns a Venture Line Spiders may change-over the game into a Looping if he so desires. By releasing a game with the potential popularity of Looping in the "Change-A-Game" format, we should effectively lay to rest any skepticism concerning our commitment to developing a quality conversion system for the industry."

Venture Line will sample ship Looping to their distributors in early March, and preview the game to the public at the Amusement Operators Expo in Chicago.

The game was licensed, with the negotiations held through Video Games GMbH agent, Freddie Bailey.

CORRECTION

In the February 15 issue, page 34, Play Meter mistakently identified the positions of Edwin and Joanne Anderson of Namco-America, Inc. The correct job title for Edwin Anderson is Administration Operations Manager; Joanne Anderson's proper title is Marketing Manager.

Microcomputer tax simulation available:

Results of operating alternatives print out with Syntax program

Vernon K. Jacobs, a C.P.A. who practices as a tax consultant in Prairie Village, Kansas (a suburb of Kansas City), has developed a microcomputer tax simulation and planning program that will compute the income and social security taxes of six different taxpayers for each of six taxable years.

The program will compute the various tax amounts for married tax-payers filing jointly or separately, for single taxpayers, for taxpayers who file as head of household, for corporations and for accumulation trusts. For each taxpayer, the program will compute the tax results for 1979 through 1984, based on the tax rates and special rules applicable to each year.

This program, which is designed for the new inexpensive desktop microcomputers, is called SHORTAX because it uses only 23 items of data to compute up to 18 values for 36 different combinations of taxpayers and taxable years. According to Jacobs, his program will make as many as 60 complex tax computations in an hour, with a single page printout of each case. Jacobs says it takes him from 30 minutes to three hours to do just one of those calculations with a regular calculator.

The program will compute the federal income tax using the tax rate schedules, the 50% maximum tax method (for tax years prior to 1982), or the income averaging method. For corporations, the program will also compute the alternative tax on long-term capital gains. If applicable, it will also compute the add-on minimum tax and the alternative minimum tax.

For 1981, Jacobs' program will compute the special 1.25% tax credit and the special 20% maximum tax rate for long term capital gains realized after June 9, 1981. For 1982 and later years, it will automatically compute the "marriage tax" deduction based on a percentage of the earnings of a married couple.

The program is available for license from Syntax Corporation, which

Jacobs formed to market microcomputer programs for financial and tax specialists. The SHORTAX program costs \$500 for the first year of use and \$150 for each annual update that is released in future years. Information about the program can be obtained from Syntax Corporation, Box 8137-P, Prairie Village, Kansas 66208, or by calling 913/362-9667.

The program can be used to estimate the tax consequences of alternative business and investment transactions. Examples include:

- 1. Using SHORTAX to quickly check the impact of transactions that create excess losses and tax credits that must be carried back to prior tax years, or to estimate the value of amending a return.
- 2. Comparing the advantages of joint or separate returns, or computing the salary combination that would create the greatest marriage tax deduction with the least FICA tax or self-employment tax.
- 3. Computing the tax benefit of incorporating, or electing to file as a Sub-Chapter S corporation or increasing an owner's salary.
- 4. Computing the value of setting up trusts for college expenses.

The use of some of the options, including (3) above, often require the assistance of a certified public accountant.

SHORTAX is designed to run on microcomputers using the CP/M disk operating system developed by Digital Research, Inc. Some of the microcomputers that can use this operating system include Altos, Apple (with Z-80 soft card), Cromemco, Durango, IBM (the personal computer), Intertec, Hewlett Packard (Model 125), Northstar, Radio Shack, Vector Graphics, Zenith, and Xerox. The SHORTAX program requires a minimum of 48,000 characters (bytes) of computer memory, although a few systems may require 56,000. The program will run with one or more disk drives, either 8" or 51/4". The program is written in Microsolf Basic. Version 5.0

Newport arcade stages challenge for charity

A video game-a-thon was held at the Space Age Arcade in Newport, Rhode Island, January 28—30, to raise money for the Muscular Dystrophy Association.

The event featured seventeenyear-old Tony Torio's attempt to break the world record 7-million points scored on the video *Star Castle*. Torio amassed 6,647,070 points in 37 hours of play, raising over \$2,500 for the charity.

O'Brien Music, a company involved in the coin-operated business for over forty years and owners of the arcade, pledged \$50 for every million points score, while Cinematronics, Inc. of El Cajon, California, the manufacturer of the game, donated \$1,000. Numerous local businesses and individuals made pledges or supported the event through donations of refreshments.

The video game-a-thon was the brain child of Walter Groux, assis-

tant manager of the Space Age Arcade. The concept was conceived after Groux received a request from Torio's friends to allow him to try to set a new world record on *Star Castle*. Groux felt if a charity could get involved, the attempt would be worthwhile. The Muscular Dystrophy Association had experience in staging this type of event.

Torio began his assault of the

world record on January 28. He had played his first game of Star Castle only six months earlier. Like other games he tried, Torio quickly mastered *Star Castle*, playing for several hours on one quarter. He felt he had an excellent chance of breaking the world record. However, after playing 37 hours without any breaks for sleep, Torio's attempt ended 353,000 points short.

Alderman stops license fees

In Des Peres, Missouri—a suburb of St. Louis—an alderman has taken a stand against video taxation.

The Des Peres Board of Aldermen voted 3-2 against submitting a measure to citywide voting that would force operators to pay \$100 a year to

place video games within the city.

Alderman John G. Steuterman called the fee highly discriminatory and offered: "Just because a man has a good business—in this case a video machine—doesn't mean you should come in and tax him."





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SO YOU WANT TO IMPRESS YOUR BANKER?

What to tell and show a loan officer

by Charles C. Ross

You are probably one of the following:

A. Not in the amusement machine business but looking to get into the business and are seeking funds to get started.

B. In the amusement machine business and seeking funds to expand your present operation so as to take advantage of the good opportunities in your area.

Regardless of which type of person you are, you need a good proposal to present to your banker. Now, if you are going to impress your banker you must first know what your banker wants to know.

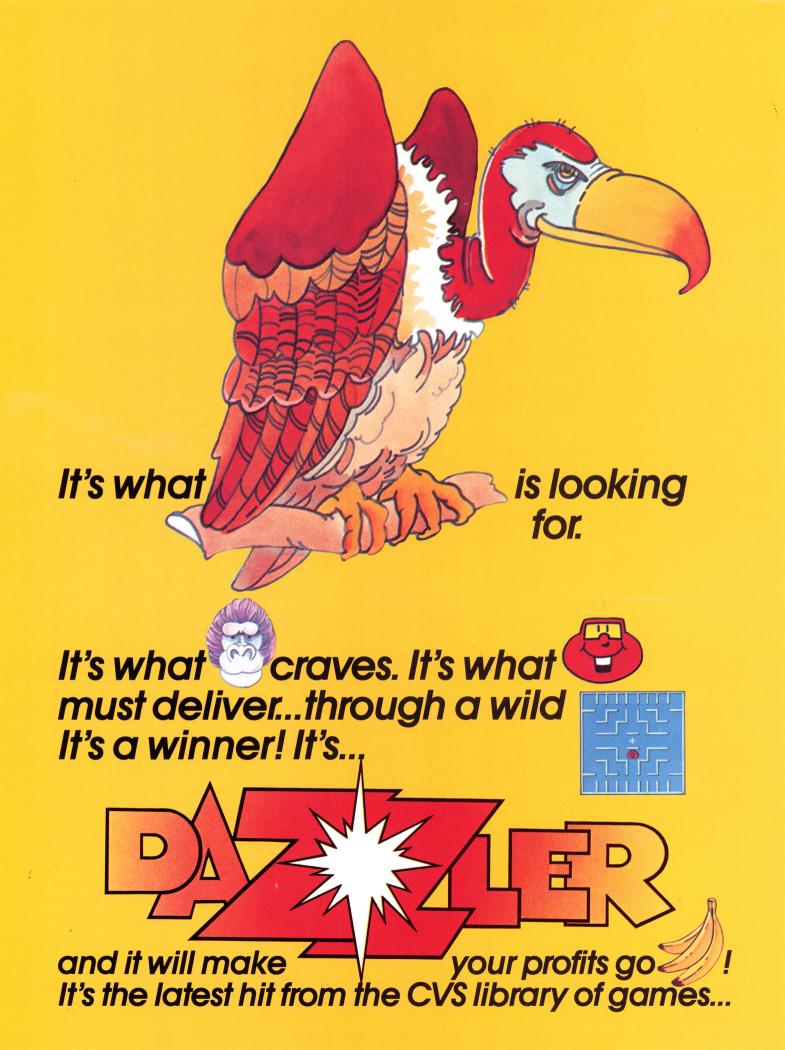
Information about the amusement industry

As we are all aware the amusement machine industry has not always had the name and image it is currently projecting. The words "arcade" or "game room" still

conjure up dark, dirty pool halls in the minds of many bankers. To help counter this bad image you need to show the banker:

- 1. Articles out of national newspapers, and magazines such as *The Wall Street Journal, Newsweek, Forbes*, or *TV Guide*, as well as local publications (refer to table of articles). These will help sell the idea that arcades and game rooms have come out of the dark ages and into the forefront of entertainment.
- 2. Do not use the word "arcade" or "game room" when talking to a banker or anyone who you think may envision a den of sin. The words "family amusement center" or "family entertainment center" are much more palatable. How can any decent American banker argue with the word "family"?
 - 3. Show the banker copies of Play Meter magazine

INFORMATION TO IMPRESS YOUR BANKER				
	NEW ARCADE	BUY OUT EXISTING ARCADE	EXPAND A ROUTE	BUY A ROUTE
INDUSTRY INFORMATION	National Newspapers Magazines	Same as new Arcade	Not as needed as in Arcades	Not as needed as in Arcades
PICTURES	Proposed Site, Parking, etc.	A must. Caption pictures with changes you plan to make.	Not needed	Not needed
FINANCIAL INFORMATION	Pro-forma Income Stat. and a Pro-forma Cash Flow, Pro-forma Inc. Stat. from new Arcade	Present Inc. Stat., Cash Flow, and a Pro-forma Cash Flow, Pro-forma Inc. Stat. from purchase	Present Inc. Stat. Cash Flow, and a Pro-forma Cash Flow, Pro-forma Inc. Stat. from expansion	Present Inc. Stat. Cash Flow, and a Pro-forma Cash Flow, Pro-forma Inc. Stat. from purchase
PHILOSOPHY OF DOING BUSINESS	A Must	A Must	Not Applicable	Not Applicable
CREDIT REFERENCES	Personal Banker	Distributor and/or Banker	Distributor and/or Banker	Distributor and/or Banker



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games will grab player attention. You'll be proud to showcase your CVS games.

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RELIABLE

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'Give all current information about your company, its locations, a history of growth, and your philosophy of business...'

to allow him to see the quality of the publication serving the industry. Quotes from articles in *Play Meter* can also help educate him on the growth taking place in the amusement industry today. (The 1981 annual operator survey analysis as published in the "State of the Industry" issue is available in reprints.)

Information about your business

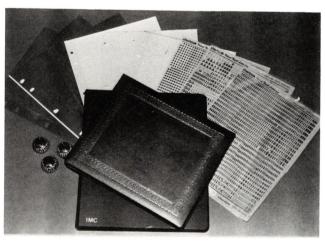
If you are already in the coin-op machine business you should give your banker the following information:

- 1. All the current information about your company, complete with income statements, balance sheets, and cash flow statements.
- 2. A list of your present locations and pictures of any company-owned family amusement centers.
- 3. Give a brief history of your company and tell how the company has grown in the past. It is a good idea to show growth rates in numbers of machines as well as revenues, net income cash flows, assets, and net worth.
- 4. Give a brief philosophy of doing business. In the philosophy you should include any business practices that you think will make a favorable impression on the banker, such as: "We at Magic Machines Inc. are serving the family market and do not allow loitering or alcoholic beverages on the premises. We are here to provide a good, wholesome entertainment complex for the entire family. We even have a family night..."

A philosophy of doing business is a must but should be kept to one typed page in length. It shows the banker that thought has gone into your operation and that you do not leave things to happenstance, but that you have a plan.

If you are not in the coin-op amusement business, you should provide the banker with the following information about your proposed business:

1. A philosophy of doing business is more important for you than it is for the person already in the amusement



Some of the materials needed for a good presentation include different typing elements so that you can have important information in large letters. Large type can be used for headings. Sleeves for each page of your report should have blank white sheets inserted behind your typed page to give the page a thick feel. Run-on letters can also be very helpful in personalizing your presentation and giving it a professional look. Note the white rub-on letters used to personalize the notebook. Photographs should be 8×10 and placed in a professional-style photograph album.

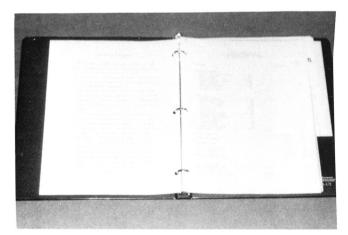
'Establish a philosophy that you plan to follow, and be sure to include the things the banker wants to see.'

business. Establish a philosophy that you plan to follow and be sure to include those things that the banker wants to see, particularly the family orientation. While on the subject of a business philosophy—every arcade should have a business philosophy even if you do not plan to show it to the banker.

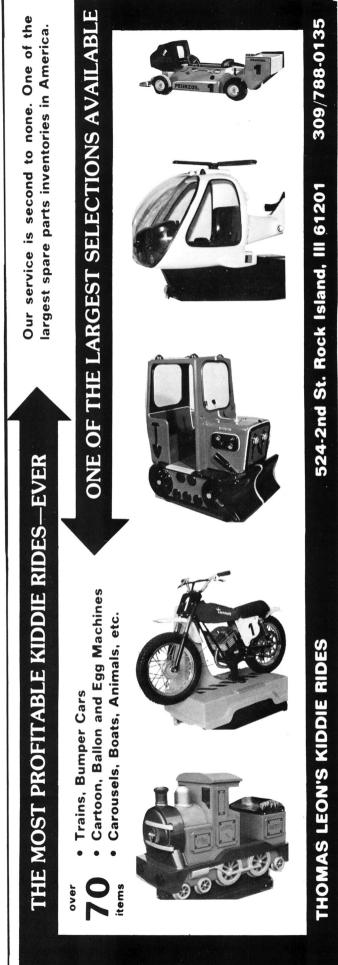
If you have an area that is controversial such as smoking, which you plan to allow, it is best to avoid the issue entirely. Be positive in your philosophy and explain what you are going to do for the community and how the community will be a better place as a result of your plans. Always try to overcome any negative image.

Should you be planning a bar which sells liquor and has amusement machines, do not hide this from the banker. Explain that you are going to serve a segment of the market that has previously not been serviced, and build support for the concept. Explain why it is a viable idea.

- 2. If you plan to open a family amusement center (arcade to you and me), take pictures of the proposed site and be armed with traffic flows, competition in the area, other entertainment in the area, and the reasons you have chosen that particular location. Photos of well-run, attractive amusement centers will also help the banker visualize what you are planning. Also include any other information that will help the banker realize that you have selected a location that is going to be profitable.
- 3. If you plan to buy an existing operation, be sure to explain why the previous owner is selling. Now, for a touchy area: If the previous owner was losing money, be sure you do your homework and explain to the banker what the previous owner was doing wrong and how you will be able to make the operation make money. Remember, the banker's main concern is to make sure that the loan is repaid. So be sure you convince him that the management was the problem and not the location or business itself.



Your presentation should have a professional appearance and have a natural flow. For example, one proposal I reviewed had a history of the company, philosophy of doing business, consolidated income statement, consolidated balance sheet, a statement of change in financial position, statement of sources and uses of funds, a proforma cash budget, a growth rate chart, return on investment calculations, current outstanding loans, credit references, personal data on the officers. All this information was supporting information to the loan request to help sell the banker on the idea.



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Information about you

If you have been in business for some time and have an established rapport with a banker, it may not be necessary to give him much personal background. It is, however, a good idea to tell the banker of any professional achievements or affiliations which you can show him, so he knows you are on top of your industry.

Information from your attendance at trade shows such as the Amusement Operator's Expo and other national and state shows demonstrates to the banker that you are not asleep at the switch but that you have your finger on the pulse of the industry.

If you have never been in the amusement business before, you will need to explain to the banker why you feel that you can make it in this business.

If you have been in a totally unrelated field prior to this venture, try to find some common ground from your previous work experience. For example, you might explain how you have been working with the public for the last five years or that you have some background in electronics repair. Don't forget to tell the banker about your educational background particularly if your background includes courses in business or electronics.

In essence tell the banker anything about you that will help him see that you are qualified to undertake this enterprise successfully.

A list of personal credit references should be included. If you have a company, be sure to list company credit references.

Financial information about your plan

You need to have a very well thought-out plan for the banker to read so he can see what you intend to do. Remember, the banker makes his money lending money, so he is eager to loan the money in spite of what you may think. His concern is that the money loaned is repaid, and for that reason he is going to want to know the particulars of your proposed plan. He is going to want to know such things as:

1. How much money are you planning to borrow? Be sure to tell the banker exactly how much money you plan to borrow. To be vague and not know the exact amount you need is to show that you are unprepared to talk about the loan at this time. Another point here: The amount you need to borrow and the amount the banker is willing to lend may be different amounts. Be prepared to support your amount and to defend it.

2. How is the money going to be repaid—monthly, quarterly or in one lump sum? Monthly installments are what the banker will probably be looking for in your proposal.

3. How long do you plan to borrow the money? First, do not attempt to borrow the money for a time period longer than your lease on the location. To try to borrow money for five years with a one-year lease is a sure way to walk away with your cash bowl empty.

Also remember, the banker is viewing you as a risky business—so the quicker the repayment the better. Try to keep repayment to two years or less.

4. From what source is the money going to be repaid? The repayment must, of course, be from the operation you plan to open. Another important point: if the business you are planning to open will not generate sufficient cash to repay the loan and you are relying on rich Uncle Harry to make half the loan payment, you are going to leave the bank disappointed. The business must be able to generate the cash needed to repay the loan.

Since your operation is going to have to generate the loan repayments, it is necessary that you have some accurate projections of revenues and costs. In other words, you are going to build a Pro-forma Income Statement. (Don't let the word Pro-forma throw you; it simply means *projected*; be sure to use the word pro-forma in your proposal.)

Building a Pro-forma Income Statement is always tricky. You will find that you will have no problem determining what your expenses will be, but projecting revenues is the tricky part. Remember, if you know what it will cost to operate, you at least know how much revenues must be generated to break even.

- 5. Now for one of the classical bank questions. "How much money do you plan to have in the project?" As a rule of thumb the banker would like you to have at least twenty percent of the total funds in the project. If he views your business or you as a high risk, he may require much more.
- 6. Another classical bank question. "What are you going to use for collateral for the loan?" The banker, if he is familiar with the coin-op business, will probably not be too excited about accepting amusement machines for collateral because of the relatively short life amusement games enjoy. If he is unfamiliar with the business he may accept them without hesitation. You should, however, be prepared to offer him the machines and something else of value—for example, a piece of real estate. Do not offer the added collateral unless he asks for it, so as not to encumber your other assets, but be prepared.

Presentation of your plan

Presentation of your plan is just as important as the information that your plan contains. Bankers are hit daily by individuals who are not prepared to give them something tangible to read and study about their proposed business venture.

The benefits to a well-laid-out plan are obvious. The banker has something to study if he is a bit confused or if he cannot remember all the information you gave him in your meeting. He also has something to take before a loan committee so that his fellow loan officers have a chance to see your full presentation without you having to be there.

Remember that the loan committee may be the deciding group to determine if you get a loan or not, so your presentation should be impressive, concise, and accurate.

Charles C. Ross is a partner in the firm of Innovative Management Consultants, specializing in consulting to the amusement industry.

MAGAZINE AND NEWSPAPER SOURCES OF INDUSTRY INFORMATION

0.	m ib collin m	
Wall Stree	t Journal	August 13, 1980
Detroit Fr	ee Press	November 14, 1980
Journal of	Commerce	August 15, 1980
TV Guide		December 6, 1980
Forbes		March 2 and
		April 13, 1981
San Franc	isco Examiner	April 12, 1981
The Kanso	as City Times	April 11, 1981
Play Meter	, "State of the Inc	dustry Issue"
(Available	as a reprint)	November 15, 1981

Also check other newspapers for feature articles on the coin industry. A handy reference to past issues, Guide to Periodical Literature, is available at your local library for additional media references.

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The spotlight's on video and all is not well

commentary by Roger C. Sharpe

The groundswell continues to build but all isn't well with the coinmachine industry, which is coming under increased scrutiny in the past few months. Most of the news revolves around video and the sudden discovery of it by the masses with feature stories in *Time* and *Newsweek* heralding the revolution that far surpasses anything that has ever occurred in the history of the industry.

Even a number of publishers have gotten on the bandwagon, as a slew of video game books have hit the stores offering tips, advice on how to play, and other information for the uninformed.

If that weren't enough, Walt Disney Productions is readying a video-inspired movie, "Tron," and Bally has gotten into the act with plans to produce video games to tie into the movie. "Tron" is scheduled to hit the theatres in the summer, so get ready.

Elsewhere, a news brief reported an event in Atlantic City, where Tommy Smith played Defender for 16½hours, logged 16,604,200 points and did it all on his original quarter. Who says the games don't play too long? But not all the news is so positive, as most of us are aware. As of this writing, the Mesquite, Texas case is still without a verdict that could well set a legal precedent no matter what the outcome. However, there's even more that's facing video and the industry.

When any subject hits the Today Show, Phil Donahue, and the CBS Evening News, it's bound to get attention and have an impact. Unfortunately the slant wasn't the greatest in the world when, on January 7, Ronnie Lamm, a Long Island mother and president of the PTA in Brookhaven, New York hit the airwaves with a story mistitled "Pinball Wizardry." Her crusade is to get rid of game rooms, asking for a halt, in her area at least, of permits for opening new locations, citing that video games are dangerous for child-

ren and that there are serious sociological concerns as well.

It would be easy to dismiss Mrs. Lamm as a lone crank, but the fact is that she's voicing concerns held by an increasing number of adults around the country. In fact, Phil Donahue saw fit to have Mrs. Lamm on his show along with Chicago's 11th Ward Alderman, Patrick Huels, on January 21 and the discussion continued in the same critical vein. All in all it appears that restrictions may well be put into effect if these and other people have their way.

The problem is that presently

there's no apparent united front for the industry. Everything is splintered with everyone looking out for their own best interests and in this day and age there's more that's needed.

Take Michael Collins of Yonkers, who responded in the New York Daily News with an editorial that read:

"As the owner-operator of a small, licensed video-game arcade in Westchester County, I was angered and dismayed upon reading the editorial 'Blast those invaders' in the Daily News. This generalization by supposedly responsible reporters



These children are 'in danger' by playing coin-op video games, say an increasing number of critics. (Photo: Doug Walberg)

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A lone operator's voice pleading for understanding doesn't get the support needed for industry betterment.

depicting the video-game industry as a sleazy, organization-controlled, den of iniquity is grossly unfair to the many legitimate businessmen, as myself, operating in the same vein as movie theaters, athletic events, etc.

"Why not conduct a vendetta against coin-swallowing cigarette and candy-vending machines, or better yet, Lotto, legalized New York State gambling which certainly do much more physical and financial damage than computer machines that are entertaining and challenging?

"There are illegitimacies in every type of business, but why condemn and continuously harass people striving to conduct legitimate businesses, paying salaries, taxes and working hard as hell to earn a living?"

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Drowned out

A lone voice pleading for understanding, but really drowned out by the masses. It's too bad, but so it goes and one wonders how many other areas are facing the same problem and not getting the support they need to have some impact for the betterment of the industry. It's a frightening prospect if things are allowed to go on as they have.

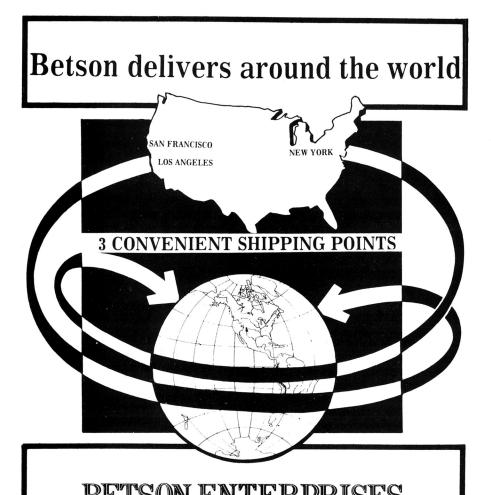
Following up on the mood of change that is suddenly gripping the country, a story I reported on (February 15, *Play Meter*, p. 40), concerning judgments against some New York City arcades, which were illegally opened and under attack, has come to some resolution for the present. Although the rulings will be appealed by lawyers for the locations, the inference is clear that the battle won't be easy. The *Daily News* offered the following account, which I have edited down to highlight the main points:

"Two Manhattan courts have taken a strong action against a pair of East Side video-game arcades in decisions that city officials believe may lead to the shutdown of the parlors and the end of the mini-boom in illegal game shops...'It's wonderful,' Consumer Affairs Commissioner Bruce Ratner said of the court decisions. 'If we keep putting together more victories like this, these places will have to stop operating in defiance of the law.'

"Ratner said this effectively means the business has to close. But Resciniti (attorney S. Edmund Resciniti, representing Games, Games, Games—one of the locations effected by the ruling) argued that the shop could continue to operate under the judge's ruling. Resciniti said he did not expect a trial to begin for a least a year, since there were many outstanding summonses against his client to be decided first...

"Consumer Affairs officials, however, predicted that Camhy (Sheldon D. Camhy, attorney for Just For Fun, another arcade in the ruling) faced a tough road since unanimous lower court decisions are rarely reviewed by the Court of Appeals.

"The involvement of Camhy, a partner with the prestigious law firm of Shea & Gould, had raised suspicions among city officials and neigh-



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Hopefully, it won't take another world war to divert unwanted attention...but a united front is needed.

borhood residents that the videogame industry might be financing the arcade's legal battle. Camhy has denied such allegations. But even more eyebrows were raised earlier last week when the attorney again raised the same constitutional issues in defense of yet another unlicensed arcade, The Dream Machine at East 90th Street and First Avenue."

And if this weren't enough, the waves of discontent continued in another related story that ran in January, 1982. Also in the *Daily News*, the report went:

"Accusing the city's Consumer Affairs Department of violating the spirit of the video game and pinball law, Councilwoman Carol Greitzer (D-Manhattan) introduced legislation this week aimed at limiting the number of video arcades throughout the city.

"Greitzer, chairman of the City Council's Consumer Affairs Committee, is upset by the proliferation of video and pinball games and accuses the Consumer Affairs Department of not following the intent of the original legislation drafted in 1976.

"The department amended the regulations of the law to allow a wider variety of stores to offer the games

than originally planned.

"Greitzer's bill, introduced Tuesday, would give the Council power to restrict the number of stores on each block that could have the games and the number of games each store could have...

"Video parlors are now a part of the Manhattan landscape and Greitzer says that some mothers are complaining because their children are 'mindlessly pouring one quarter after another into the slots.'

"Greitzer also said that she has no objections to the games themselves but to the unsavory elements associated with them.

Well, there's the old argument again about the image of the business which continues to come up. It's unfortunate that the more things change, the more they stay the same. And the end isn't in sight, with probably the worst yet to come. It all reminds me of my research into the industry for the "PINBALL!" book and the isolated stories that sprung up in the mid-to-late Thirties concerning pingames. Not much was done then either as many just took

the money and ran. The ageless wonder, Bill Gersh, implored the industry to create a National Public Relations Board, but his pleas fell on deaf ears. Only a World War was able to take away the attention.

Hopefully it doesn't have to come to that *this* time around. But there has to be some united front that represents not one manufacturer

against another or some special interest group. After all, anything, even an entire industry, is only as good as the sum of its parts.

Ed. Note: Trends toward a united defensive front are emerging and will be tracked in upcoming Play Meter articles for their usefulness to operators generally.

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Zoning issue kills NE Philly arcades

by Mitch Plotnick

When Play Meter went to press with the February 15 issue, the state of arcades in Northeast Philadelphia, a staunchly conservative community, was one of confusion. During the fall, Northeast residents succeeded in blocking two proposals for arcade zoning variances on their main shopping drag, Frankford Avenue.

Now, based upon two decisions handed down by the Philadelphia Zoning Board of Adjustment on January 25, the people of the Northeast appear to have arcades on the ropes once again. The knockout punch may not be far behind.

One of the decisions disapproved a zoning variance for a 60-machine arcade at 3217C and 3217D Willits Road, positioned next to Skiltime, an arcade already operating at 3217B Willits Road.

The second decision is intended to close Skiltime, which opened last November amidst aggressive community debate. The zoning board ruled that Skiltime's owners were unable to prove that their permit was valid.

Although Skiltime's building was first used as an arcade by previous tenants as late as 1979, the new owners were required to obtain a variance for a regulated use arcade. (An August 1980 bill gave amusement arcades regulated use status.) When Skiltime's owners opened their facility last November, they neglected to obtain a variance, thereby invalidating their permit.

Zoning board decisions are not self-executing. Rather, they serve only to verify the legality of buildings according to zoning codes. Actions based upon zoning decisions, such as closing an arcade that is operating with an illegal permit, are the functions of courts, beginning at the Common Pleas level in Pennsylvania.

So, immediately following the disapproval by the zoning board of Skiltime's operations, local state

Rep. John J. Swaim and the city of Philadelphia filed a suit in Common Pleas Court, seeking to expedite the zoning board's recommendation to close Skiltime's doors.

The Common Pleas Court hearing was held January 27. The plaintiffs, represented by a staff member from the city's Law Department, filed their list of grievances, which included labeling Skiltime as a public nuisance. Skiltime's attorney then filed his responses to the allegations.



These variance notices at Longshore Pin-Bowl in Philadelphia were posted too high for zoning board regulations, a common mistake that causes delays in zoning hearings.

—Photo by Mitch Plotnick

The judge, deciding Skiltime's owners were entitled to a written reply to their responses, granted a continuance to give himself time to reply to the arcade operators.

The official hearing was to come to fruition in Common Pleas Court on February 23, at which time the judge would decide whether or not to uphold and enforce the zoning board's recommendation to shut Skiltime.

The plaintiffs have a strong case. Skiltime is not backed by a legal permit, and it is a regulated facility located within 500 feet of residential zoning. Several community members will be present to testify at the hearing—against Skiltime. The arcade owners' defense will likely be that the city, by granting them a license (not the same as a permit) to open in November, misled them into believing that the former arcade owners' permit was still valid.

If the Common Pleas Court judge finds the defendants guilty, he can levy penalties of up to \$300 per week and/or 90 days imprisonment, retroactive to the zoning board's January 25 decision.

Lessons from the case

It is unlikely that Skiltime will survive; it is dangling at the end of a frayed legal rope. However, what is of greater importance to amusement machine vendors and future arcade owners are concrete lessons that can be learned from examples like Skiltime vs. Northeast Philadelphia. These lessons are further highlighted by yet another Northeast Philadelphia arcade case that surfaced in early February.

Longshore Pin-Bowl is a Northeast bowling alley that has been in existence since 1958, smack in the middle of a row home neighborhood. It is within 500 feet of a church, a school and a recreation center.

When its present owners, William Clark and Patrick Hamil, took over in May 1980, they added eight amusement machines to their bowling lanes and assumed they did not need a zoning variance to do so.

Recently, a neighbor complained about teenagers hanging out at the bowling alley, and the Department of Licenses and Inspections sent an inspector to survey the facility.

"The guy from L and I told us that there's a city ordinance that says if you have three or more machines. you have to get a variance," Clark said. "We have eight machines. Some people are under the impression that we're closing the bowling alley and opening an arcade. That's not the case. We're in the bowling business, not the arcade business. We're in the process of building the business back up after the previous owner ran it down. These machines," Clark added, "are helping us pay our bills."

Clark said he was astonished when he found he had to obtain a variance for adding just eight machines to his bowling alley. "When we brought in the machines we were under the impression that we were properly zoned. Our vendor didn't even know the city ordinance existed," he said.

So Clark and Hamil filed for a zoning hearing and obtained fluorescent orange variance notices, which must be posted for public notice on the property for 12 days prior to the hearing. But once again, Clark and Hamil failed to familiarize themselves with the rules of the arcade game.

They posted their variance notices seven feet from the bottom of the ground to the bottom of the signs. The pertinent writing on the signs is seven and a half feet from the ground, and very difficult to read.

Zoning board regulations require that variance notices be posted at eye level.

Typically, when signs are improperly posted prior to a zoning hearing, the zoning board chairman grants the party a continuance so they can properly display the notices to the public. This means a delay, usually three weeks.

But, the point of cases such as Longshore Pin-Bowl and Skiltime is that aspiring arcade owners should not have to waste time with zoning hearing delays, or in Common Pleas Court, or battling enraged community vigilantes. This is not to imply that every arcade proposal has buried within it a 100 percent chance of being successful. But many proposals that fail do so unnecessarily.

The name of the game is zoning. And all zoning ordinances that become law do so via introduction and passage of a bill by township or city council members, people who are elected to help plan our communities. Any zoning ordinance passed into law is public record, and you are permitted access to these documents. Often, if you write to your local council member, they will send you copies of all ordinances that apply to your variance request.

Prior to renting a building, prior to purchasing video or pinball machines, and certainly prior to opening your arcades doors for business, you should familiarize yourself with the local ordinances that will govern your business.

You should know what the current zoning is and what legal steps are available to change the zoning. You should know all local regulations pertaining to the posting of zoning variance notices. You should know specific requirements for minute details, such as how high your variance notices must be posted.

This advice applies to distributors as well as to arcade owners. A distributor does an arcade operator a tremendous disservice by selling him or her machines, cognizant that the arcade operator is unaware that he or she must first obtain a permit. It only creates confusion and trouble when a neighbor subsequently registers a complaint with the city.

This type of pre-purchase, pretrial preparation can only help to reverse the trend of zoning decisions in favor of arcade owners. The alternative is a situation like Northeast Philadelphia, where the residents hold a resounding edge.



'Pee Wee Pinballs' spur family arcade play



The young set play pins when the size of the table is brought down to their level.



As well as the height, the speed of play is customized with rebound rubbers to extend a game.

When a parent brings a youngster under about six years old to most game rooms, there isn't much to interest the child, except perhaps a few kiddie rides, which often require supervision.

Wunderland Game Room in the Cleveland suburb of Mayfield Heights has come up with a solution—"Pee Wee Pinballs."

Using standard pinball games, owners Harvey Sussel and Brian Presser hit upon the idea of equipping the machines with scaled down legs to allow small children to play. The playfield has also been customized, with rebound rubbers stretched across the outlanes to block them and extend the game. And unlike the other pinball machines in Wunderland, which are set on three-ball play, the Pee Wee pinballs offer five balls per game.

"Kids come in here with their father and they want to do just what daddy does," Sussel says. "We want to let kids enjoy this room along with their parents."

Sussel admits that while these Pee Wee pinballs have not themselves brought in much money, he feels that his purpose in adapting the games—"to provide family entertainment and cater to all people"—has been successful.

"We're not looking for strong collections as much as we're trying to get children in here," he explains, "and these Pee Wee pinballs encourage parents to come in with their kids."

Sussel says the main reason he came up with the idea of the Pee Wee pinballs was height; if you can't raise the children, lower the games.

"We had little kids standing on plastic milk crates to reach the pinball machines for a while," he says, "but it was still hard for them to play. And when these kids were done with the games, older people would walk by and trip on the crates that were lying around."

A follow-up:

Video game theft epidemic

Wunderland now has three Pee Wee pinball games-Superman, Middle Earth, and Spiderman. "We tried to pick pinball machines with playfields that are simple for children to understand," Sussel says. "Something like *Black Hole* would be too complicated for kids."

Sussel says he thinks smaller children prefer pinball to video games, since the basic objective of a pinball machine is easier for a child to grasp than the sometimes complicated play strategy of a video game.

He says he plans to put in more of these pinball games in the future. In fact, he's already ordered four more sets of legs for the games. He says the first three sets were made by a local machine shop for \$6 per set, and were purchased since he didn't want to spend time waiting for a distributor to special-order them.

Wunderland, less than a year old, doesn't presently have any kiddie rides, although Sussel says four or five are on the way early this year. By combining these rides with the Pee Wee pinballs and cocktail videos, he hopes to set aside an area of the room "for children only"—away from the main entrance to the game room.

"We originally put these (Pee Wee pinball) games by the entrance, but the kids playing them were getting battered by people going in and out,' he says, and the machines are now at the far end of the game room.

Sussel says the Pee Wee games were needed because of the large number of children playing—or trying to play-games alongside their

"One of our employees counted the people in the room over several evenings, looking at the number of older and the number of younger people," Sussel says. "We found there were quite a few kids looking for something to do. We thought we'd let the kids have some time on the games.'

As if to encourage small children to play pinball alongside their older counterparts, Wunderland has placed the Pee Wee pinballs among the standard-size games. In fact, the machine next to the Superman Pee Wee pinball is none other than "the world's largest pinball game"-

Having just read "A New Epidemic" concerning video theft cases, in Play Meter, February 1 issue, a California operator called and said he appreciated the article by Mike Shaw...but it came a few days too late to alert him. A rip-off crew had walked into one of the operator's locations, convinced the manager that they were with the operator's company—and made clear away with a couple of videos from the site.

This ripped-off operator offers one solution that he intends to pursue against the video theft wave: Require a written guarantee from the location, indemnifying him from loss of his machine.

What if the location owner balks at making such assurance?

"I don't need that one location as badly as I need to be secure from having my machines stolen," replied the operator.

It's a point to ponder, especially

considering the reported high cost of games' insurance coverage for the operator himself, plus the stake the operator has invested in the game which tends to be vulnerable on loca-

As pointed out in Shaw's article, the location tends not to "give a damn" since it has no vested interest in the equipment, if some characters in work clothes walk into the establishment and announce they are removing the video game, "for repairs." Further, any receipt the "workmen" give the location is worthless.

Just as he would indemnify his own bar dispensers from theft, so can the location owner insure against the game operator's machines—if he is reminded that half the lost game revenue would be his, or that he will not be serviced with any game without insured protection to the operator.

-R.E.T.





MUSIC PROGRAMMING

by pat matthews

New products from Waxland

Music! Music! Music! It's what the world needs more of. I guess it does soothe the savage beast. I was beginning to turn into one, but the tide has finally turned!

Good product from the real pros of the biz is beginning to trickle from the tap.

***Denotes previous review by Play Meter.

Make A Move On Me—Olivia Newton-John—MCA/52000

Once the "girl next door," Olivia moves more into sensualism with this follow-up to her biggest record ever, "Physical." This time out it's more in the vein Sheena Easton has developed since her emergence from Olivia's homeland, Australia. Nice imports from down under, eh? 10 out of 10 cinch.

Call Me—Skyy—Salsoul/S7 2152

Already one of the hottest dance numbers in discos, this relatively new group of fresh faces is set to zoom up the Pop charts. An underlying funkiness in the bass work, coupled with a terrific vocal arrangement propel this record and will set everyone to dancin'. There's even a sound effect hook over the instrumental run which will, no doubt, impress some people. Personally, I feel it adds nothing to the song. 10 out of 10 on highest chart.

On The Way To The Sky—Neil Diamond—Columbia/18-02712

This is a first for Neil Diamond. That's right, another first for the heart-throb of millions of ladies. It's his first songwriting collaboration with Carole Bayer Sager (I wonder who she's living with now—I don't think it's Neil). And what a combination it is! Once again Neil sounds like Neil. Loaded with strings, acoustic guitar, and that velvety voice of Diamond, this one has all the ammunition needed for success. At least a 9 out of 10.

Find Another Fool—Quarterflash —Geffen/50006

Following hot on the heels of their initial smash success, "Harden My Heart," this newcomer from the Northwest hardens their sound just a bit. This one even has a great electric violin solo, that'll make this the

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D DODDIE OUE EL C. L. T.
☐ BOBBIE SUE—The Oak Ridge Boys—MCA
☐ TONIGHT I'M YOURS—Rod Stewart—Warner Brothers***
☐ CENTERFOLD—The J. Geils Band—FMI America***
☐ LOVE IS ALRIGHT TONIGHT—Rick Springfield—RCA***
□ MIKKOK, MIKKOR—Diana Ross—RCA
☐ SWEET DREAMS—Air Supply—Arista★★★
□ PHYSICAL—Olivia Newton-John—MCA***
☐ KEY LARGO—Bertie Higgins—Kat Family
☐ I CAN'T GO FOR THAT (NO CAN DO)—Daryl Hall & John Oates—
KCA***
☐ TAKE IT EASY ON ME—Little River Band—Capitol★★★
☐ PAC-MAN FEVER—Buckner & Garcia—Columbia
□ WHEN ALL IS SAID AND DONE—Abba—Atlantic★★★
☐ SHAKE IT UP—The Cars—Elektra***
☐ LOVE IN THE FIRST DEGREE—Alabama—RCA***
☐ THAT GIRL—Stevie Wonder—Tamla★★★
☐ SPIRITS IN THE MATERIAL WORLD—The Police—A & M***
☐ YOU COULD HAVE BEEN WITH ME—Sheena Easton—
EMI America***
☐ SOMEWHERE DOWN THE ROAD—Barry Manilow—Arista★★★
WAITING ON A FRIEND—The Rolling Stones—Rolling Stones Records
☐ OPEN ARMS—Journey—Columbia★★★
☐ THE SWEETEST THING—Juice Newton—Capitol
☐ LEADER OF THE BAND—Dan Fogelberg—Full/Moon/Epic★★
☐ THROUGH THE YEARS—Kenny Rogers—Liberty***
☐ HOOKED ON CLASSICS—The Royal Philharmonic Orchestra—RCA
HARDEN MY HEART—Quarterflash—Goffen+++

first rocker outside of a Country crossover to feature the instrument on a hit record! At least I don't recall any. And beside, she (Rindy Ross) still sounds like Pat Benatar to me. She plays a mean sax, too. This one's rockin' straight to the top. 10 out of 10.

We Got The Beat—The Go-Go's—I.R.S./9903

This L.A. girl group took a long time to gain national acceptance, but now that they have, look out! Fortunately for them, their records are a thousand times better than their live performances. If this one is a big hit like "Our Lips Are Sealed," their first hit, they will be the first group with the "punk/New Wave/Pop" sound to make it commercially. I predict they will! 10 out of 10. The drum "beat" will nail you to the wall!

I Love Rock N' Roll—Joan Jett & the Blackhearts—Boardwalk/7-11-135

What can you say about a group whose female leader wears a gold

pacifier on a chain around her neck? If pacifier is a derivative of the word peace, it certainly would not serve as the explanation in this case.

Relying on a beat reminiscent of Queen's "We Will Rock You," Jett and company bring heavy metal back to the commerical frontier with this great singalong tune. A few beers may help! 8 out of 10 or better.

Theme From Magnum P.I.—Mike Post—Elektra/E-47400-A

Not since The Bubblegum Coalition has this former California politician and musical innovator enjoyed the success he's had recently. Hot on the heels of "Hill Street Blues," Post stays fresh in mind with theme music from another action and adventure television series. This one relies heavily on synthesizer, piano, and percussion to carry it through. Now if only Mike Post was as popular with the ladies as Tom Selleck. 9 out of 10 anyway.

Never Give Up On A Good Thing—George Benson—Warner Brothers/50005

This funky toe-tappin' danceable number is included on the George Benson Collection, a "greatest hits" compilation which was released late last year. It may have been "filler" material at the time, but the time is perfect for the stone solid smash. The production, instrumentation, arrangement, vocals, etc. are positively perfect. I predict this will be Benson's biggest hit in quite some time. Winner from start to finish on this "Good Thing"! 10 out of 10 easy.

Breakdown—Climax Blues Band—Warner Brothers/50018

It seems to be Warner's month! This British quartet shed its Cult label last year with the surprise hit ballad, "I Love You" and is back with a somewhat dreamy to rockin' mix. It's from an album with some of the tackiest cover art seen in these parts for some time. Musically, the varied combinations of styles in this one song could possibly strike a chord with a lot of people. 8 out of 10 or better.

The records are rated as follows: 10 out of 10 = Top 10 peak; 9 out of 10 = Top 20 peak; 8 out of 10 = Top 30 peak; 7 out of 10 = Top 40 peak; 5 or 6 out of 10 = Somewhere in Top 100; 4 or less = Forget it, loser, break in half.



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How to use this machine:

By choosing one button, select the desired biorhythm.

START I:

Will calculate the biorhythm for the next two weeks.

(A two week biorhythm from the day you request will be printed out with a calendar anb comments.)

START 2:

Will calculate your love, driving, studying and gamble luck.

(12 items, such as love, driving, and monetary luck will be printed with an estimation graph and comments.)

START 3:

Will calculate your congeniality with that special person.

(From the birthdays of you and your special person, comments and congeniality percentages wii be printed out for physical, sensitivity, intellectual and total congeniality.)

Procedures:

- I. When you want your biorhythm.
- 2) Input your date of birth with the keys.
- 3) Input the day that you want to know about,
- 4) Push the start key. (For two weeks START 1; for a day, START 2.
- 5) Cut the sheet of paper dispensed.
- 2. When you want to know your
- 1) Insert a coin.
- 2) Input your date of birth with the keys.
- 3) Input your special person's birthday with
- 4) Push the START 3 button.

- 1) Insert a coin.
- using the keys.
- congeniality.

- the keys.

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- ★If fail to shoot UFOs, they invade into the earth.
- ★UFOs shoot laser beams and kidnap human, but if you soot UFOs, bonus points bonus points be gained and rescue people.
- ★If 3 missile guns are destroyed, game will be finished.

TV-VIDIO game parts list



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Today's 'Chief Gripes' of Operating

The series devoted to operators' experiences...

Play Meter is open to operators written contributions to this series, with the hope that exposition of industry problems today, from the operating standpoint, will advance their correction. Subject matter should state a perceived problem and then give a practical solution that could be undertaken to solve the problem, as the operator sees it.

Please take an overview of problem areas, not one particular game's failings, for instance. Problems may be technical/mechanical in nature, however, or it could be The Government, the players, the landlord...or any common problem area that most annoyingly presents itself to operators. No subject is taboo, but content should be within the bounds of good taste and not consisting of personal attacks on character or reputation.

Decision of the editors is final, since we wish to avoid repetition and to explore as many different areas of the operating business as possible. All submissions will be fully considered. To be considered, writers should submit "Chief Gripes" at no more than 6 double-spaced typewritten pages in length. Address:

Play Meter, P.O. Box 24170, New Orleans, LA 70184.

My biggest gripe is that here we are the amusement machine industry comprised of national and international companies, approximately 9,000 operators, grossing revenues of 8-plus billion dollars, with three associations (Amusement Device Manufacturers Association, Amusement and Vending Machine Distributors Association, and the Amusement and Music Operators of America) and here we sit.

"Sit," you say, "meaning what?" I mean here we are an aggressive risk-taking industry and we sit around watching local communities label us as villains, undersirables, even "pushers" addicting unsuspecting children on these evil hell-sent corruptive devices only surpassed in indecency and ill-breeding by porno-

graphy! And we sit, and we watch as some local community far away from our back yard crushes the life out of some operator whom we don't even know! After we casually read reports about it in the local paper and in *Play Meter*, we shake our head and go back to our business.

Well manufacturers, distributors, operators, and trade publications, it is time we united and lauched an offensive on a national, state and local level!

The war to better our image should be regarded as the most important "war" we in the coin-op amusement business should be waging. To not wage war is to put our livelihoods on the line and in the hands of other people. You say "Oh you are an alarmist. They wouldn't..." You are correct they probably would not put us all out of business but do you know that you may be the next? The point is that we are all in this together and it is about time we united and employed different tactics than that of laying low and hoping that nothing happens. To do less than launch a full-scale offensive is to encourage those blood-seeking vigilantes to continue rolling.

The national offensive

At the national level we need a publicity campaign headed by an "Amusement Machine Development Council" whose job should be to better the image of amusement machines by doing institutional advertising to help better the name of the industry. Why don't we employ a team of university psychology and marketing professors to study the business and tell us the good attributes of video games? For example one study has already shown that video games can improve reflexes, eye-hand coordination and act as a tension release. So why not hire some well accepted American personality like Charlton Heston or Roger Stauback to carry a message about the good that the industry is

For example, why do people ignore that we are not going to injure any youngster but in fact we will help develop certain skills? Did any one

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ever consider how many injuries high school football causes, yet there is no legislation to outlaw football? We must educate the public on amusement machines.

I am of the opinion that most of the community fathers disgusted with arcades have not been in one for more than a momentary visit.

Parents are used to children going to movie theaters and the parents accept the movie as a viable form of entertainment, mainly because they themselves went to movies when they were younger. However, they did not have arcades or video machines and they do not understand the video game as a form of entertainment. This needs to be expressed and the parents educated.

Another thing people complain about is not getting anything for the quarter invested in an amusement machine. Well, when was the last time you went to the movie and left with something tangible? A quarter in an amusement machine is a quarter invested in entertainment just as much as the money spent on a movie, bowling, minature golf, or a water slide. Why have these forms of entertainment gone unscathed? Again I feel it is because they are

understood better than an amusement machine by the older generation in the city halls.

Then we have the debate over drugs. Opponents say "Arcades are drug trafficking places." Could it not also be said that schools are "drug trafficking places." Why don't we close all schools too?

Another point which could be explained is how local amusement

An item needing to be nationally addressed is exactly why there is resistance to amusement machines—then overcome the resistance

centers provide a place for youngsters to go and stayy off the street and out of trouble.

I think a close study of objections to amusement machines will show that the objections usually stem from a misunderstanding and ignorance about the amusement machine business today. Moral to that story is simple; we must educate the public.

The objections which do not stem

from a misunderstanding about the business today stem from the amusement machine business in the past. After all, it has not been that long since pinballs were unlawful in many states. It has certainly been in most city fathers' lifetimes. Could it be they are still in the "old days"?

One of the first items needing to be addressed on a national level is to ascertain exactly why there is resistance to amusement machines, then determine the best approach to overcome the resistance.

A state offensive

Each state should have an organization to determine which towns have a problem and launch a fullscale war in those communities. If a state does not have any problem communities, then that state should try to determine why they have no problem (or prepare for potential problems) or determine what they are doing right so that the information can be sent along to the national organization for distribution to other states that are experiencing problems. Remember that just because you do not have a problem today does not mean you won't have one in the future.

Each state should also do its part

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to better the image of the amusement machine in their state. Statewide campaigns at regional or state fairs to show the state of the art in amusement machines could help educate the public about our business. After all, we are part of the electronic revolution that is changing all of our lives.

Finally the state organization should rally to the needs of any community that is facing unfavorable ordinances or discrimination against amusement machines.

The local offensive

At the local level the operators in the area should band together and have a luncheon once a month or so. This is the time that problems could be discussed and even the launching of a local educational campaign designed to educate the local community fathers about the benefits of amusement machines.

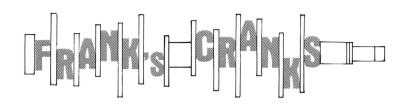
The local focus should be as the national and state focus: what can we do to better the image of amusement machines and amusement operators? Arcade or amusement center operators can even invite church groups in on Saturday mornings before regular business hours for one or two horus of free fun. What better place to have an amusement center mentioned than in the church bulletin?

Operators can also donate machines to local orphanages and invite local TV and radio stations to the ceremonies. (An Illinois operator recently proved to have a wedge against harsh local legislation because he operated the games in a city-owned teen recreation center. He simply threatened to remove the games from that location if the city "taxed him out of business" with a steep per-machine tax. He stood firm and the city backed down.)

At the local level the list of promotional ideas for bettering the image of the lowly amusement machine are endless. (For hints, watch our "P.R. Problems" column.)

Well, as someone once said, "The best defense is a good offense." I feel that fits the amusement machine business today. We are in the spotlight, and we can either perform or hide and receive the boos. I think its time we performed so that we at least have a chance for applause.

Charles C. Ross is a partner in the firm of Innovative Management Consultants which specializes in consulting to the amusement industry.



The Crank gives his opinion on "What's wrong with the coin operated amusement business?"

A few months ago I was asked by Play Meter's Ray Tilley to skip one of the "Frank's Cranks" columns and perhaps write what I felt was wrong with the business of coin machine operating today. After weeks of wondering what could be the "root" of all the bad publicity—a reason why location owners habitually complain about amusement companies, why the general public bands together to protest arcades in their community —it dawned on me that this is all a result of "misinformation" and worse yet, "no information." The public, as well as many of the people "in the business," doesn't know very much "about the business." This plus man's natural instinct of "greed" (often acted upon based on his misunderstanding of the business) is where I feel one of the larger problems lies.

Now that the introduction is out of the way, let's use examples to see what really happens on the street. First let's deal with *contracts* and *commission arrangements*.

The most common commission split I've seen in the last thirteen years is the 50/50 split of game receipts. Some of the variations on this arrangement are: (1) advance commissions to the location (better known as interest free loans); (2) cash gifts to the location in return for a one-sided signed contract for a period of years (the location owner accepts the cash and signs a contract which naturally favors the operator and sets the location owner up to be "screwed"; (the operator may act consciously or subconsciously);

(3) combinations of the above which include all the receipts for, say, one month going to the location owner (a cute way of giving a cash gift but which preys on the greed of the location owner), a higher commission split (which is not a good business decision for the operator) with less service being provided by the operator, inferior equipment being supplied (which might include "copy games"—games manufactured in violation of the patent and copyright laws), and any other manner of operation to reduce the operator's overhead.

Why does this happen? Let's examine what happens when both location owner and operator enter into an agreement that both feel is unfair to themselves. Most people assume that amusement games take in thousands of dollars each week (the uninformed media supports this erroneously) without stopping to think how absurd this idea is. I've heard this from the uneducated as well as the highly educated.

Those who have operated games know that at 25¢ per play and an average of four minutes per game (not unreasonable), a "great" game (and there are very few of these around) will take in fifteen quarters or \$3.75 per hour if the game is played non-stop. This will generate \$315 per week for a location that's open twelve hours a day, seven days a week. Some locations are open more, many are open less; some games could earn more, most will earn less. It's a rare event if a game is played continuously for 84 hours in

one week. I've read in our trade magazines that the national average is about \$100 gross per machine per week. My route falls into this category as do many of the other operators' I've talked to across the country. If the public knew this to be the truth, the location owner might hesitate to take in an operator offering him "the world" and an operator who is new to the business might hesitate to offer "the world" to get a new location.

If location owners and potential operators fully understand that a manufacturer's warranty doesn't mean that a distributor must fix boards and monitors within 24 hours (it could take weeks), a whole new perspective of the amusement business might be perceived. This would make location owners stop and think seriously about owning their own machines. The public should also be informed as to the cost of a new game (\$2500-\$3000), because I've heard intelligent people say that games cost over \$10,000 each. This is one reason why unreputable suppliers can sell "off brand" games and "copies" for \$4000 each to an unsuspecting public.

Operator does "nothing"

Assuming a location owner feels the machines gross a lot of money, it's natural then that he will "begrudge" the operator his fair share of the receipts. The location owner feels (misunderstandingly) that the operator is doing "nothing" for the share the operator is taking out of the machines each week. The

Location owners may play one operator against another and end up with a higher commission or "extras" they feel that they deserve.

location owner will play one operator against another and because the operators often don't fully understand financially what they are doing, the location owner will end up with a contract that may give him a higher percentage of the split, a cash advance, a gift, or anything he feels he deserves as "extra."

The operator, on the other hand, is "annoyed" that he had to "give away" so much and, from that point on, consciously or subconsciously plots a way to get back what he feels he "gave away." This can be accomplished in many ways, some which even the operator feels are beneficial to him, but in the long run are just the opposite. The operator might be forced to purchase more used machines, purchase copy machines which are often cheaper (but have very little, if any, resale value and generate less income than the "real" game), and provide less service or unqualified service (it is sometimes cheaper to send a serviceman with an "out-of-order, parts are on order" sign than it is to send a qualified mechanic who makes two to three times as much per hour).

Many times I've heard location owners "swear" how it is "always" to

the operator's advantage to fix a broken game as fast as possible because if the game is broken the operator is "losing money." This statement is not accurate and could only be spoken by someone unfamiliar with running an amusement business. True, it's not good for an operator to have a broken machine, but if it costs more for the operator to fix the machine than, let's say, one half of what the machine takes in, it's a bad business decision to fix that machine as soon as possible.

As an example, a service call on an Asteroids comes in at 5 p.m. At this time, most of the day mechanics are ready to knock off. This Asteroids grosses \$140 per week or \$20 per day. If the operator can send a serviceman to the location by 5 p.m. the next day, without sending him out of his way, the cost of the service call might be only \$5. If the machine is out-of-order for 24 hours, the operator might lose \$10 (50% of \$20 income), but chances are that if more games are in the location, part of this \$20 would be made up by the other machines. However, if the operator chooses to send a mechanic out by, say, 7 p.m. the same day, and had to pay overtime, plus mileage and gas, it is possible

that this same call would cost him \$25. Subtracting from this about \$8 (the Asteroids would be out only a few hours), it cost the operator \$17 out of his pocket for the service call. In a case like this, it "pays" the operator not to fix the game until the next day unless the contract stated that he must do this.

If these acts don't help (in the operator's mind) the operator to recover what he "gave away" to get the location, then he naturally won't purchase new equipment on schedule for the location because he went into this deal with a bad attitude toward the location. In the worst cases the operator might even decide it's OK to "steal" money from the location. This chain of events naturally adds to the negative image of our industry. If one operator steals, then the public assumes that all operators steal.

It's also an unfortunate fact that the public thinks that most operators have underworld connections. Some operators use this misconception and try not to go out of their way to even deny this, because they feel that this "mystique" can sometimes be used to intimidate a location owner into staying with them or renewing a contract. So even those



"in the business" hurt the image of the business through their own actions or inactions.

Operators must be educated as to what happens when they purchase copy games and pirated circuit board chips. If the operator is well established and plans to remain in this business for years to come, then it may be foolish to try to save a few dollars in the short run and then be the first and among the loudest to scream: "Where have all the established, reputable manufacturers gone?" Someone has to spend the millions of dollars necessary to design a new game, and it sure as hell isn't going to be the company that makes the copy games.

Some solutions: Dispel the myths

First of all, the public and the operators must be well educated about the amusement business. So many decisions today are based on "seat of the pants economics." In today's market of rapidly depreciating equipment (a new machine could really lose up to 70% of its value in a few months and now we have to depreciate games over a five year period). The veteran operators (and the newcomers) will not be able to "give away" loans, gifts, high com-

missions, and other "favors" if they want to remain solvent. Lists of reputable operators, distributors, and manufacturers must be compiled and distributed by state, local, and national amusement associations. The leadership of these associations must be reputable (just like our politicians). Checkbook salesmanship may not work as well in the amusement business as it does in, for example, major league sports. The company with the flashy checkbook is often forced to "cut back" on game purchases and the quality of their service. It's always the same adages: "You get what you pay for," and "Nobody gives anything away for free."

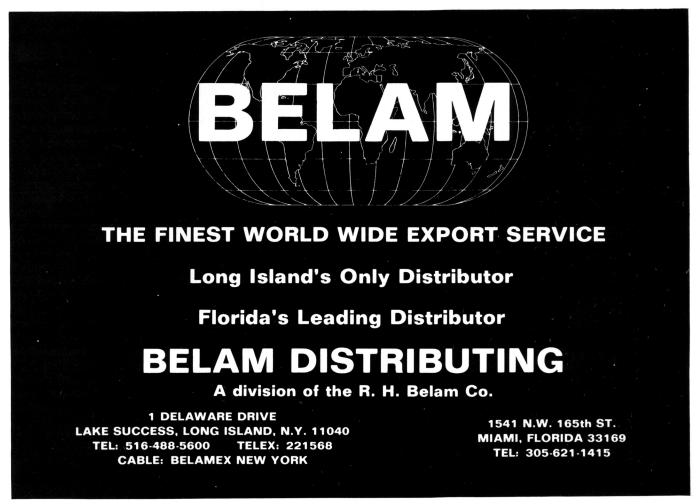
Those whose job it is to inform the public are often not informed themselves. The myths about the amusement business must be laid to rest. Those who make the laws regulating the amusement business need help to draft laws that will be effective in controlling and regulating the amusement business. For example, when arcades spring up all over it only hurts the image and profitability for all those concerned if the arcades are not managed professionally. Arcades must not let students in during school hours and not permit

those under eighteen in after a reasonable hour at night on school days.

Operators and location owners must write contracts that are fair to both parties. The operator should guarantee his service (say within 24 hours) or pay the location owner what was lost in revenues. Machines should be purchased and rotated according to a predetermined formula that the operator could live with. If the operator acts as a professional, perhaps the location owner would respect him as a businessman instead of seeing him as someone trying to get the best of him. Perhaps the location owner would want to deal fairly and not be greedy.

I've had great success in doing business professionally. (There are still, of course, those location owners who can't be convinced to be fair and still insist on doing business the "old way.") I believe strongly that most people given a chance to do business honestly will be proud to do just that.

Ed. Note: Seninsky will deal with the topic of this "Cranks" column, in depth in an Amusement Operators Expo '82 seminar, "Negotiating Commissions with Locations," on March 27.



I.C. LOGIC DESIGN COURSE Lesson Seven:

R/S Flip-Flops

signed specifically for the coin-operated amusement industry. This course is copyrighted and owned by Kurz Kasch jointly by Kurz Kasch and Play Meter magazine. This material Editor's Note: The material below is a serialization of the Kurz Kasch correspondence course for electronics, de of Dayton, Ohio and its reprinting is being is authorized for muhimming authorized for publication exclusively Lesson Seven, R/S Flip-Flops. The seventh lesson is about the basic memory element known as the R/S Flip-Flop. A thorough knowledge of this type flip-flop is required so more advanced memory elements can be understood.

MEMORY ELEMENTS:

The bistable multivibrator, or more simply, flip-flop, is the basic electronic memory element. Unlike the logic gates discussed in previous lessons, the flip-flop is capable of accepting binary information and storing it for future recall. All flip-flops have two outputs called Q and \overline{Q} , and all flip-flops are capable of remembering the last instruction they receive.

State of FF	Q	ā
I	I	0
0	0	I

Table 7-1. A truth table relating the state of a flip-flop to its output.

When a flip-flop is instructed to go to the **one** state, its Q output will be at a **Hi** logic level, and the \overline{Q} output will be a complementary **Lo** logic level. The condition of the outputs will not change until the flip-flop is instructed to go to the **zero** state. At this time the Q output will be at a **Lo** logic level, and \overline{Q} will be at the complementary **Hi** level. This information is summarized in table 7-1.

There are several types of flip-flops in common use. Each is designed to handle specific requirements, and familiarity with each of these types is of utmost necessity in almost any design work.

THE R/S FLIP-FLOP:

The Reset/Set (R/S) is the least complex of all flip-flops. The circuit (fig. 7-1) consists of two cross-coupled NAND gates. It has two inputs, SET and RESET, and two outputs, Q and $\overline{Q}.$

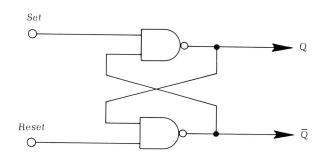


Fig. 7-1. The basic reset/set flip-flop. This flip-flop is constructed with two cross-coupled NAND gates.

In order to understand the operation of this circuit, remember that the output of a NAND gate will be at logic 1 if any input is zero, and the output will be at a logic zero only if all the inputs are at logic 1. Now let us assume that both the set and reset inputs are at logic 1 and that the flip-flop is the one state. In this state the Q output is at logic 1 and the \overline{Q} output is zero (fig. 7-2a). Furthermore, the output of gate 1 is constantly disabling (turning off) gate 2, and the output of gate 2 is constantly enabling (turning on) gate 1.

The flip-flop is said to be **latched** in stable state 1 and will not change states until the inputs are changed.

Although we have assumed that the flip-flop is in the one state with both inputs at logic 1, there is no reason why it could not be in the zero state. The student should verify that the same input conditions could also support a stable zero state.

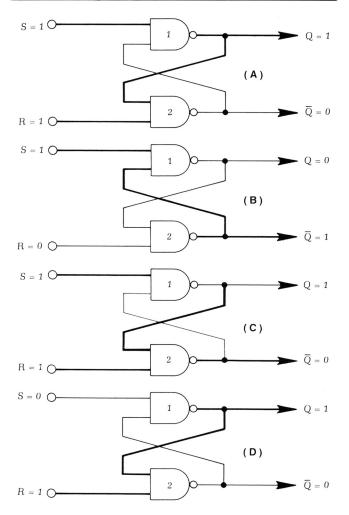


Fig. 7-2. The possible output states of an R/S flip-flop with a sequence of inputs. For proper understanding, the figures should be followed in sequence from top to bottom. (See text.)

Inputs	at t _n	Outpu	t at t _{n+1}
R	S	Q	ā
0	0	?	?
0	I	О	I
I	0	I	0
I	I	Q at t _n	\overline{Q} at t _n

Table 7-2. The truth table for a NAND gate R/S flip-flop. The output is not predictable when both inputs are zero.

If the input to gate 2 is changed to logic zero, the circuit will latch in the zero state (fig. 7-2b). Even if the input to gate 2 returns to logic 1, the flip-flop **remembers** the momentary logic zero and remains latched in the zero state (fig. 7-2c).

If the input to gate 1 is now momentarily changed to logic zero, the circuit will latch in the one state (fig. 7-2d) and remain in this state even after the input to gate 1 returns to logic 1 (fig. 7-2a).

After several hours of operation if we were to examine the circuit and find it in the **zero** state, we would know that the last logic zero applied to the flip-flop was on the RESET input. If it were in the **one** state, we would know that the last logic zero was on the SET input.

Naturally, there is one exception to the rule. If **both** inputs are momentarily at logic zero, then **both** outputs will be at logic 1 until the inputs return to logic 1. When this occurs, the resulting state of the flip-flop cannot be predicted. For this reason, both gates of a R/S flip-flop should never be enabled simultaneously.

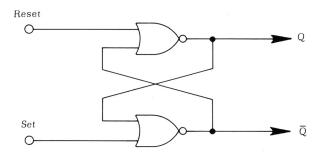


Fig. 7-3. An R/S flip-flop constructed with two NOR gates.

Inputs	at t _n	Output at t _{n+1}								
R	s	Q	ā							
0	- O	Q at t _n	Q at t _n							
0	I	I	О							
I	О	0	I							
I	I	?	?							

Table 7-3. The truth table for a NOR gate R/S flip-flop. The output is not predictable when both inputs are 1.

The truth table for the operation of a R/S flip-flop is given in table 7-2. The momentary input at time t_n is given on the left, and the resulting output at time t_n+1 is on the right. The first row shows the indeterminate state resulting from a logic zero applied to both inputs. The last row indicates that the output condition will not change when both inputs are at logic 1.

A R/S flip-flop may also be constructed by cross-coupling two NOR gates as shown in fig. 7-3. In this application, the inputs to the NOR gates would be maintained at logic zero and subjected to momentary transition to logic 1.

Unlike the NAND gate the NOR output is zero if any input is 1. Of course, the truth table for NOR gate flip-flops will be reversed (table 7-3).

CLOCKED R/S FLIP-FLOPS:

It is often desirable to permit a R/S flip-flop to change states only during certain time intervals. This is most easily done by placing an additional gate in the SET and RESET inputs (fig. 7-4). Any input to gate one must pass through gate three, and any input to gate two must pass through gate four. Both gates three and four are enabled by a logic 1 on the clock input. If the clock input is at logic zero, the output of gates

three and four will be one regardless of the SET or RESET inputs.

The clocked R/S flip-flop permits synchronization of memory input with any positive going signal. Furthermore, any changes at the inputs will not alter the state of the basic memory unit so long as the clock is held at zero logic. Of course, if both inputs are at logic 1 upon the arrival of the clock pulse, the resulting memory state will be indeterminate.

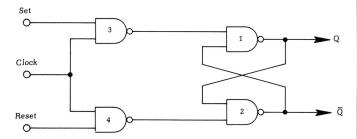


Fig. 7-4. A R/S flip-flop with a clocked input. The output will change states only when the clock input is 1.

R/S MASTER-SLAVE FLIP-FLOP:

The master-slave concept of flip-flop design was introduced to solve a major problem that is associated with the clocked memory unit. The inputs to a simple clocked memory will not change the output until the clock pulse is applied. However, during the clock pulse, the outputs are free to change many times in accordance with any change at their inputs. In many applications this is not desirable.

The operation of a R/S master-slave flip-flop is characterized by a maximum of **one** output transition during a clock pulse. Fig. 7-5 shows how this is accomplished.

The entire circuit is actually composed of two clocked flip-flops. Gates one through four comprise a slave memory while gates five through eight are the master memory. Gate nine

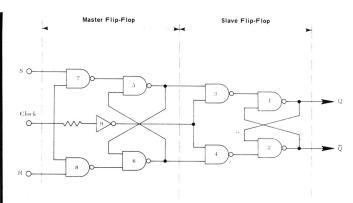


Fig. 7-5. A R/S master-slave flip-flop. The state of the master flip-flop is transferred to the slave flip-flop when the clock goes to zero.

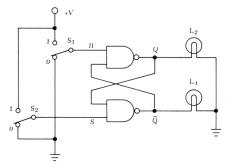
permits information to be entered into the master section while the clock pulse is at logic 1; then, be transferred to the slave section as the clock goes to logic zero.

Notice that the clock pulse is directly applied to gates seven and eight, but that its complement is applied to three and four. Thus, when the master is gated ON, the slave will be gated OFF and vice versa. When the clock is **Lo**, the resistor keeps the input to nine slightly higher than seven or eight. In effect, when the clock goes **Hi**, gate nine will respond just in advance of seven and eight. Thus, by the time the master is enabled through seven and eight, the slave will have been disabled through three and four. In this condition, and for as long as the clock stays **Hi**, the master may change states many times without affecting the slave.

This process is reversed as the clock goes Lo. Now, seven and eight will be disabled just prior to the time three and four are enabled, and the last information to the master is dumped into the slave. Since the slave cannot accept information from the master until seven and eight have been disabled, the outputs Q and \overline{Q} can have only one transition per clock pulse.

Breadboards

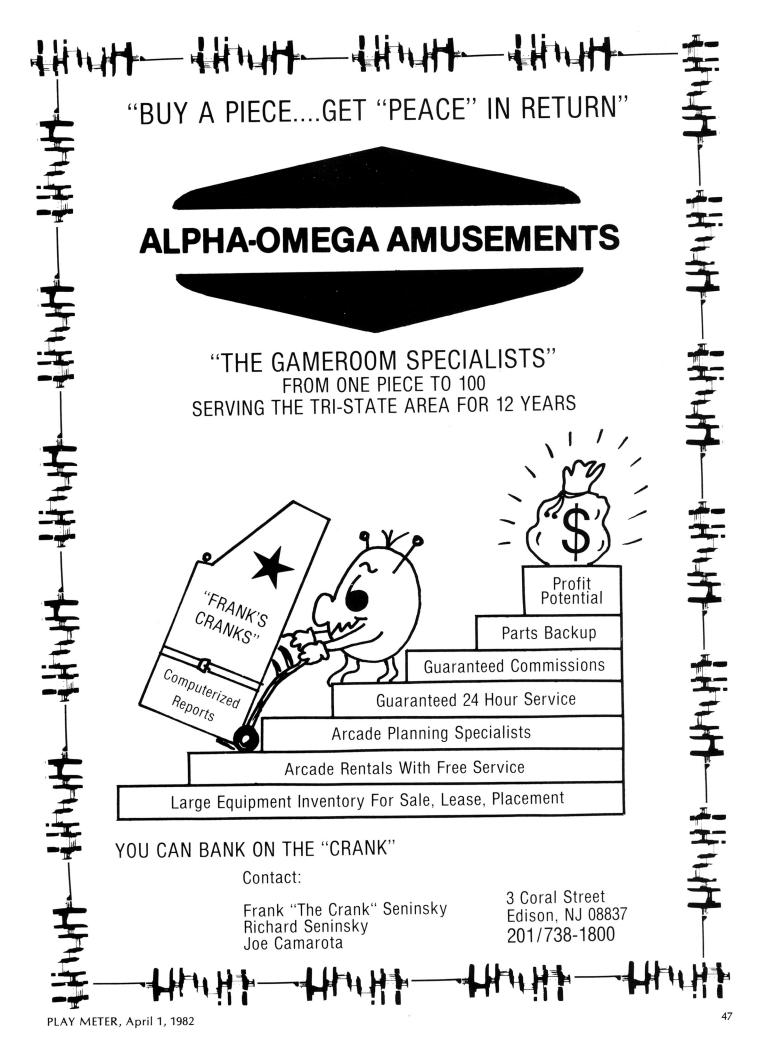
7a R/S FLIP-FLOP



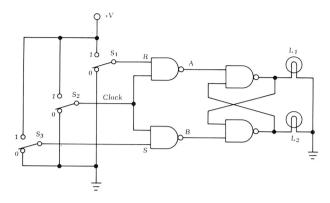
- 1. Wire up the circuit on the breadboard using two NAND gates. Before applying power, set S_2 to the logic zero position and S_1 to the logic 1 position.
- 2. Apply power, observing correct polarity.
- 3. When operated in this manner, lamp L_2 should light and lamp L_1 should not light.

That is, \overline{Q} is at logic 1 and Q is at logic zero. Refer to fig. 7-2 of the fextbook

- Switch S₂ to the logic 1 position. Since the last logic zero is remembered by the flip-flop, L₂ will remain on and L₁ off.
- Momentarily switch S₁ to the logic zero position and then return it to logic 1. When
 operated in this manner, a pulse is formed and applied to the R input. The lamps
 should change state, showing that the last logic zero was at the R input.
- By applying another logic zero pulse at the R input, the output conditions should not change.
- Momentarily switch S₂ to the logic zero position and then return it to logic 1. This
 time, since the last logic zero pulse was at the S input, the lamps should change to
 the corresponding state.
- 8. Switch S_1 and S_2 to the logic zero position
- In this state, both outputs are at logic zero. If both inputs return to logic 1 simultaneously, the resulting output condition is indeterminate. This type of operation is not suitable for Hip-Hop applications.



7b GATED R/S FLIP-FLOP



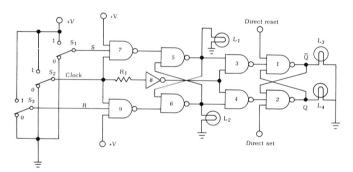
1. Wire up the circuit on the breadboard using four NAND gates. Before applying power, set S_1 and S_2 to the logic 1 position and S_3 to the logic zero.

- 2. Apply power, observing correct polarity.
- When operated in this manner, the gated flip-flop will operate exactly like an ordinary R/S flip-flop. The logic 1 input on C permits the complement of the R input to appear at A and the complement of the S input to appear at B.
- 4. Use the logic probe to show that $A = \overline{R}$ and $B = \overline{S}$.
- 5. Switch S2 to the logic zero position and repeat Step 4.
- When the C input is at logic zero, A = 1 and B = 1. When operated in this manner, the R and S input are isolated from the flip-flop. Notice that the lamps do not change.
- 7. Switch S_1 to logic zero and S_3 to logic 1. The lamps should **not** change. Test A and B with the logic probe.
- 8. Momentarily switch S₂ to logic 1 and then return it to logic zero. The application of a logic 1 pulse at C permits R

 to appear at A and S

 to appear at B. Then A = 1 and B = 0, and the flip-flop changes state. At the end of the pulse, A returns to logic 1 and B stays at logic 1, but the flip-flop retains the last information that it received.

7c R/S MASTER-SLAVE



- Wire up the circuit on the breadboard using four three-input NAND gates, four two-input NAND gates and one inverter. Don't forget the resistor, R₁. Before applying power, set switches, S₁ and S₃, to logic zero and S₂ to logic 1. Also, connect DIRECT SET and DIRECT RESET to +V.
- 2. Apply power, observing correct polarity.
- 3. Switch S_2 to logic zero. All three switches should be at logic zero now.

- 4. Apply a clock pulse by switching S₂ momentarily to logic 1 and then returning it to logic zero. When S₂ is moved to the logic 1 position, gates 3 and 4 close, isolating the slave from the master flip-flop. Then gates 7 and 8 open allowing the master to be connected to the R and S inputs. At the end of the pulse when S₂ is returned to logic zero, gates 7 and 8 close, isolating the master from its inputs. Then gates 3 and 4 reopen to connect the master to the slave. When the clock pulse has been completed, notice the condition of the outputs has not changed. As long as R and S are at logic zero, the clock pulse will not change the outputs. This corresponds to the first row of the truth table.
- Switch S_1 to logic 1 and enter the input statement on row 2 of the truth table.
- Apply a clock pulse by switching S₂ momentarily to logic 1 and then returning it to logic zero. Enter the condition of the outputs, Q and Q̄, in row 2 of the truth table. L₁ and L₂ show the condition of the master flip-flop, and this information need not be entered in the truth table.
- Switch S₁ to logic zero and S₃ to logic 1. Enter the input statement in row three of the truth table.
- Apply a clock pulse by switching S₂ momentarily to logic 1 and then returning it to logic zero. Enter the condition of the outputs, Q and Q

 in row three of the truth table.
- 9. Switch S_1 to logic 1. This corresponds to row four of the truth table.
- 10. Apply a clock pulse as above. The outputs, Q and Q̄, cannot be predicted in this case. The student may find that the flip-flop he has constructed will always produce a particular output for R = 1 and S = 1. This can occur if one gate is slightly faster than another.
- 11. Switch S₂ to logic 1. Then alternately disconnect the DIRECT SET and DIRECT RESET inputs from +V and connect to ground or zero. These inputs will only function properly when the clock is at logic 1 thus isolating the master from the slave. The student should observe the output results as these inputs are alternately grounded.

'Fast hands': Good press...

"Gerry Cooney was excited. Had he just knocked out a sparring partner? No...Did he get an advance on his \$10 million payday for his March 15 title fight with the WBC heavyweight champion (Larry Holmes)? No...

"I just made a score of 203,00 playing Pac-Man,' the 25-year-old Irishman was saying from his room at the Concord Hotel in Kiamasha Lake, New York," wrote sports editor Peter Finney, of New Orleans' Times-Picayune/The States-Item recently. And the sports column called attention to a clean, hard-hitting, hero-

image contender in a favorable relation to a coin-op amusement. Finney wrote:

"For the last four weeks, Cooney has been spending some of his idle hours mastering the popular video game, mixing *Pac-Man* with five miles of road work, 90 minutes in the gym, three squares a day...

"Apparently, Cooney enjoys the hand-eye coordination necessary to score well as you watch a screen full of images and play with a series of knobs," wrote Finney, then continuing to describe and speculate about the Holmes-Cooney match.

Headlined: "Cooney has Pac-Man in his corner." •

Consumer Electronics Show

Home game competition on view

As promised last time in "Critic's Corner"/February 15, I wanted to give all of you a brief overview of some of the sights at the Consumer Electronics Show, held in Las Vegas the first week of January. Lest you think this is a small potatoes event, rest assured that it's the second largest convention held in this gambling town, attracting approximately 70,000 visitors to the almost 1,000 exhibits. It is indeed the big time and as such sometimes offers a telling look at some of the trends that will undoubtedly unfold in the coming months.

What was more surprising to me this time around, after having covered this particular industry for the past six years, is the increased emphasis on games for home computers as well as hand-held and counter-top efforts that belie the intensity of competition between this business' major companies. The importance should not be missed that they're going hot and heavy after coin-machine games for inspiration and outright licensing in order to appeal to what has become a rapidly growing market.

If anything, the surge in interest and product at this show should be a warning to coin-machines that they could well be competing against themselves before too long. Just take a look at the line-up from Entex Industries, which is offering handheld versions of *Crazy Climber*, *Defender*, *Spiders*, *Turtles*, *Super Cobra*, and *Black Knight* pinball. Its display even went so far as to have the coin-machine versions in the booth to further get their point across.

At Coleco there was a full arcade set-up as this company was trumpeting portable versions of *Pac-Man*, *Galaxian*, *Omega Race*, *Donkey Kong*, *Berzerk*, and *Frogger*. In addition, this company was also announcing cartridges for Mattel's Intellivision home computer system and Atari's video computer system that included *Donkey Kong*, *Round-Up*, *Vanguard*, *Phoenix*, *Mousetrap*, and *Venture*.

It's obvious that the action is heating up to get in on the video game bonanza. And the question for the future might well become a moot point of just how much the public can take if they're bombarded at the local game room and then assaulted in the living room by a home system. At sometime there's going to have to be a trade-off unless the coin-machine efforts stay ahead of the pack in

terms of play action and sophistication. But even this may be changing.

One need only look at the growing number of software manufacturers who are doing some pretty amazing things for home computers that are far more advanced than many of the "popular" systems now available on the market from Mattel, Atari, Astrovision, and a few others. High-end users are gaining the benefits of these unique creations and it shouldn't be too long before they too are discovered for knock-down versions. In fact, Magnavox for its Odyssey system has integrated board play for a new strategy series that promises much for the near future in terms of application and expansion from the limitations of their current hardware.

The problem is that by and large the home systems just don't offer the same action found on the coin-op models, although this too is changing as some of Mattel's newest announcements show, with the use of voice integrated into the play of the game. As it stands now, both sectors are competing for almost the same market in a race to get to the next plateau. Admittedly, however, the bucks may be bigger in terms of development and research for these companies than for the coin-op counterparts.

The one fact is that video is creating and nurturing incredible growth in two areas that shows no sign of abating. The only obstacle might well turn out to be the legal environment prevalent in much of the country that could cast coin-op video in a less than flattering light.

But the times they are indeed a-changin' and with it has come a further evolution for the coinmachine industry, which I still believe must not be content with the status quo and antiquated business practices. The striving for excellence and not just parity must become a growing goal by at least the aggressive companies if they are to stay ahead of the pack.

It seems interesting to me to have the opportunity to watch both the home market and coin-machine sweepstakes as they enter this new era. It's exciting because the sky is the limit for all types of games and so does the public appetite seem to be in spending quarters or larger sums to get the entertainment they want.

Ed. Note: Roger Sharpe has reported on the consumer games market for GQ magazine.



A second look at two 'possibles'

By Mike Bucki

The manufacturers may be outdoing themselves, saturating the market with too many good or even great games, giving the players too many choices too soon. If you buy everything, some will collect more dust than coins and if you merely buy too many too soon you risk shortening the earning life of one of your high volume games as the players shift to one of the newer ones. But competition dictates buying at least a few of the apparent "sure-fire" hits, games like *Qix*, *Tempest*, and *Fogger*.

Everyone will have them sooner or later so you jump on the bandwagon early, before it becomes one, and perhaps give yourself a bit of a lead. But there's a problem. The distributor says, "Sorry, but (so & so manufacturer) tells us there's a hugh backorder of that game. We won't be able to deliver it to you for several weeks." Supply and demand, so it goes.

So what do you do about that one location of yours that's crying for something new? The players are apparently bored, revenues are way down, and you're going to lose those customers if you don't do something soon.

Standing there in the distributor's showroom, you look around. What does he have in stock? Is there something that maybe you glanced at before that deserves a second look?

At that point in time, let your eyes wander over to Solar Quest and Challenger.

Solar Quest by Cinematronics appears to be one of the few games this year that's based, not on *Pac-Man*, but on another big winner from

the past, Asteroids. That in itself is a big plus and this game offers more than mere imitation. But it may need a little on-site marketing help to become a big hit.



Cinematronics' Solar Quest



Centuri's Challenger

PLAYFIELD: Like Asteroids, Solar Quest gives the player control of a spaceship with left and right steering buttons, a thrust button, fire button and an escape-hatch hyperspace button. SQ also adds firepower to the player's ship with a nuke button that must be pressed twice, once for launch and a second time for detonation. Enemy targets enter the battle from all sides of the screen. The player can thrust his ship offscreen and return it through the opposite side. The enemy targets and the player's ship are depicted with white line stick figures on a dark background.

Unlike Asteroids there's a deadly sun in the middle of the screen, all the enemy targets are ships of various shapes and sizes, there are no space rocks to contend with, and destroyed enemy ships leave behind survivors floating in space.

ANALYSIS: Defender sired Stargate and Galaxian has given birth to Galaga, so the question must be asked: Is Solar Quest too much of a second cousin to Asteroids? If so, and if Galaga and Stargate haven't proven successful by the time you read this, despite and maybe because of their genetic heritage, there may be a way of rescuing Solar Quest from the same fate. "Vive la difference!" say the French, with aplomb. "Emphasize the difference!" I say.

"Emphasize the difference!" I say.

Look at the "survivors" and the instructions regarding them. "Capture survivors for bonus points" reads one of the printed instructions on the panel alongside the screen. The display mode carries the instructions a couple of steps further. It shows that they look like smaller

white versions of the center-screen starburst. It tells the player that they're worth 250 if shot and 1,000 if captured. And a printed line in the display mode says: "Capture 25 survivors for extra ship."

The problem with the last instruction is that 25, in this particular set of computer graphics, more closely resembles the word "as" than it does the number "25." Substitute "as" for "25" in that instruction and you'll see the problem. Couple that with the fact that players, in my observations, rarely read the instructions.

And that's where you, as an operator with conscientious employees, can make the difference. Solar Quest will probably attract a large number of Asteroids aficionados. The game play is very similar and the controls, as in Asteroids, respond precisely to the player's commands. The graphics, similar yet different from the big "A," will aid that initial attraction. But holding the players, keeping them, and developing their interest might depend upon how soon they learn about the survivors and what can be accomplished.

They'll try shooting all the survivors, not worrying about capture, and discover that a fairly high score can be the result...but there's no

bonus ship to be awarded. They'll try capturing all the survivors and probably rack up a lesser score, at least on the first such attempt. Then they'll try combining those two tactics, capturing survivors when convenient, but not going too far out of the way. Bonus ships and big scores will be the result and you'll have a crowd enthusiastically hooked on a game your competitors may have overlooked.

But remember you can make the difference if you tactfully make sure the players know about the survivors in *Solar Quest*. You don't have to tell them which tactic to employ; in fact they'll want to unravel that mystery themselves. Just let them know the survivors exist.

Solar Quest can stand on its own merit, without the aid I've suggested, but I believe with a little marketing boost from you it could prove better than:

Rating

ITA -3 (Immediate Turn Away)

CB +7 (Come Back)

MO -5 (Max Out)

Solar Quest becomes progressively difficult through "a possible 500 levels," according to Cinematronics. So you won't run into the

"hours of play for one credit" that both helped and plagued Asteroids. But I'd suggest that you ignore the all-too-easy level 1 setting. Start at 3, move to 5 when necessary and on up to 8 when you've hooked the players.

Where Solar Quest is nearly absent of color and doesn't need it, Challenger by Centuri is almost overloaded with bright hues, bells, bongs, buzzes, and whirrs. It won't become 1982's top video earner, it won't even make the top ten. But it might squeeze into the top twenty and that could make it a worthwhile investment.

PLAYFIELD: (Imagine a circus barker for a moment.) "Whatcha got here my friends is what appears to be yer basic spaceship-at-the-bottomof-the-screen, enemies-flying-downtoward-you video gaaaaammmee. Yes, sir that's what it appears to beeee. However-step closer little lady so you can see the action as my young assistant demonstrates; yes, that's better-however when we push this magical button you can plainly see that...What'sa matter boy didn't ya hear the cue? Go ahead, push the button! There folks, see how the "Warp" button flips your spaceship to the top of the screen?



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Like Magic, I say, like magic. Ah yes, the wonders of modern technology. But that's not all, oh no!"

The controls which set Challenger apart from the numerous bottom-ofscreen outer-space games are the Warp button and the Super Bomb button which have been added to the Left and Right dodging buttons and the Fire button you'd expect. Your spaceship is equipped with three guns that fire simultaneously and without hesitation: one shot travels along a vertical line while the other two blast objects approaching at opposite 45-degree angles. The Super Bomb—one per ship—destroys all objects on the screen. ANALYSIS: The controls respond quickly, a factor that carries much weight with me, but the graphics and the sound effects seem a bit too childish for an outer-space battle. The energy rings, hexagonal shapes that break into smaller and smaller pieces when hit, look more like tou boulders than a threat you'd expect from outer space. The "Space Bogeys" closely resemble caterpillars in movement and shape. You can hitch your spaceship to a "bonus bug" that randomly walks across the bottom of the screen and collect bonus points for each second you safely remain connected, but the "bonus bug" looks like a walking TV camera. Voyagers I & II sent back amazing and enlightening photographs of Saturn with the computer enhanced cameras on board but none of those cameras walked anywhere to my knowledge.

At higher levels, spaceships that look like spaceships do appear and the challenge becomes more so in *Challenger*. The game's bright colors and its wealth of sounds are well intergrated. But I believe the appeal for adults is lacking. Kids, 13 and under is my guess, might go wild over this Centuri attraction.

With that specific young audience in mind, *Challenger* gets pretty good marks from me:

Rating

ITA -3 *CB* +5

MO -5

That's good? Oh well, maybe the winter cold has chilled my bones too deeply. Till next time, bundle up and stay happy.

Ed. Note: For more discussion of the merits of talking up the game with its players, see columnist Bucki's "PR PROBLEMS/PR SOLUTIONS" analysis, this issue.



Child's play

Game-A-Tron's new video game Got-Ya presents a maze in which the player is presented the childhood game of "Rock/Paper/Scissors."

The one- or two-player full-color video requires the player to fill in the entangled maze (which instructs him with an "Olyve Oyl" character on the screen). He is hindered when the hand appears and presents its challenge: "Paper cover rock, rock crushes scissors, scissors cuts paper."

Got-Ya will be on view at the Amusement Operators Expo in Chicago this month.





All aboard!

A colorful new addition to the Kiddie Rides America stable of machines is Noah's Ark.

The ride provides a secure seat for even the youngest child and a steering wheel is fitted together with an observation window so that the child can see a small owl outside the Ark. When a push-button in front of the child is depressed, a hooting sound from the owl is activated and its eyes are illuminated.

During the ride time, an electronic tune "We are all going to the zoo tommorrow," is played.

A telescopic handle in the base of the machine allows it to be easily wheeled around the site, when required.

Dimensions of Noah's Ark: 63" long, 26" wide, and 50" high; weight 300 pounds.

Aquatic nemesis

Artic Electronics' new video *Devil Fish* features an undersea fantasy environment, into which the fierce Devil Fish breaks the aquatic calm—and challenges the player.

The Devil Fish breaks out of captivity and challenges the Sea Dog, which the player controls by use of a four-way joystick. His Fire Button drops fishes that bait the Devil Fish.

If he is able, the player captures the devil in the narrow passages of the maze on the screen, returns the invader to its prison, scores points, and completes the phase of game.

The player must continually capture bait fish to elude the Devil Fish.

Devil Fish made its debut at the ATE in Britain and is now available to North American operators.



53



Legless pingame hits the table

Micropin, now being marketed by Elcon Industries, is a miniature pingame that incorporates state-of-theart electronics.

The stainless steel machine holds full memory and will accommodate one to four players, automatically calculating point spread between players, according to the manufacturer.

High scores are LED-displayed and kept in memory. If no one tops the high score after 200 games, *Micropin* will automatically display the previous high score to date.

Other features of countertop-size *Micropin*:

—Automatic volume control reacts to ambient noise levels and adjusts itself accordingly:

—a two-level tilt mechanism can force loss of the ball in play or a "major tilt," resulting in end of game;

—rubber shock mounts allow the players to steer the ball without tilting (*Micropin* is designed to be fastened to the counter top with double-stick tape or screws);

—a battery back-up system retains scoring even if the game is unplugged;

—the game may be operated as a separate cashbox unit or by direct payment to an attendant; price per credit is adjustable, 1—99 cents;

—an overhead lamp illuminates the playfield and is spring loaded with a built-in spare bulb;

—steel cable may be used to padlock the unit to the location.

Micropin's bumpers, flippers, and ball are chrome plated to resist accumulation of residue on the playfield as with plastic and rubber parts.





Sky shootout

Two rocket ships fuse into a powerful, agile space station and venture together into deep space to do battle with kaleidescopic enemies in *Space Duel*, a new coin-operated video game by Atari, Inc.

Space Duel features Atari's QuadraScan color video display system thrusting the player into a realistic three-dimensional universe filled with waves of geometrically shaped enemies—lethal flying saucers, explosive mines which relentlessly pursue their attacker, refusing to be destroyed, spinning paddles, whirling cubes and pentagons, octahedrons—even a rash of "nuclear" hexagons.

A panel of control buttons allows the players to maneuver the space-ships through astral battles. The ships rotate left and right, wrap around the screen, and thrust away from danger at the touch of a button. Another button creates a protective shield that diminishes with use, but deflects saucer missiles and lethal collisions. For attacking, a fire button launches four shells that must strike a foe or travel their full distance before the next volley is launched.

The object of *Space Duel* is to destroy this rogue's gallery for points before they destroy the ship's three lives. It can be played by a single player and his solo spaceship, but offers unique challenges to two players fused together.

In the first two-player version, the ships, connected by an astral umbilical cord, perform a space ballet as they dodge and destroy their mutual enemies. If either ship is fired upon it is damaged but not destroyed. The crippled ship has limited firing ability and slow maneuverability. A second hit to either ship destroys that ship and sets to burning the 'fuse' link between the two. The second ship is destroyed soon after.

The game ends when all lives of the ship(s) are spent. If a score is eligible for the high score table a fireworks display lights up the screen and the player can enter his initials on the screen. The top five scores in each category, along with corresponding players' initials, are displayed when the game is not being played. A special non-volatile memory retains the top score, even if power goes out.

Aids to the Trade

Vends anything, paid in advance

If you're in charge of copy machines, parking gates, video games, vending machines, heavy equipment, or anything else that dispenses services, a new system is available that is designed to collect your fees in advance.

Usage Control System, developed and marketed by Dallas-based CopiShare, Inc., is an add-on device that fits almost any kind of machine. Company officials say the device



makes the vending or renting of anything easier, faster, and free of complications.

The system is simple for everyone, says CopiShare. A UCS unit is attached to the copy machine, video game, parking gate, or other electronic device. A magnetic stripe credit card that fits into the device can be programmed to measure minutes, seconds, dollars, cents, number of copies, number of plays, or other amounts. For the code you decide on, CopiShare technicians do the custom engineering to make the system work the way you want it to, said its product announcement.

Operators' customers purchase the magnetic stripe credit cards that are programmed for a specified number of minutes, dollars, copies, or other value. The user inserts his card and, as he uses a machine, the card's value is debited. The UCS Unit gives a quick, simple reading to let the user know how much value is left on his card. When no value remains on the card, the machine simply won't accept it any more.

The UCS Unit reduces the need for coin devices, allows the vendor to give discounts to frequent users, and

facilitates collecting fees in advance for plays in the future, said the manufacturer.

According to company spokesmen, the unit has a wide variety of uses. A user can get a card that enables him to play a certain number of video games, get a certain number of sandwiches out of a vending machine, receive a certain number of copies from a copy machine, or park a certain number of times in a parking lot with a mechanized gate.

Company technicians point out that the unit is housed in a strong metal case resistant to vandalism; the machine cannot be jammed by a card, and the minimum number of moving parts reduces the need for frequent repairs.

The unit is now available from company dealers. For more information, contact CopiShare, Inc., 8300 Douglas Avenue, Suite 800, Dallas, TX 75225, Telephone 214/692-1208.

Stops thieves by killing engine

Within eight seconds after anyone manages to start your car, *Gard-A-Car* Stops the engine dead. The thief can't restore it and must flee or be caught. It's no game, but a simple 2-wire installation that insures quick installation and immediate protection. *Gard-A-Car* is operated by flipping a hidden switch "on" when you leave the car and "off" when you return.



The control box is easily hidden and measures 2"×2"×2". Gard-A-Car does not interfere with normal car operation, and is designed for any ignition system except diesel, said its distributor.

Gard-A-Car retails at \$21.95, and is available from Mountain West at 4215 N. 16th Street, P.O. Box 10780, Phoenix, Arizona 85064. National toll free number: 800-528-6169. In Arizona, Alaska, or Hawaii, call 602/263-8831.

Master code keys 'keyless' lock

Mountain West Alarm of Phoenix has announced a new, weatherproof pushbutton door lock that eliminates need for keys—and locksmiths. The easy-to-install kit is practically pick-proof and allows easy change of the combination. It is designed to serve many businesses, data processing departments, banks, jewelry stores, and homeowners.



The weatherproof solid state keyboard resists vandals and has no moving parts to wear out or jam. Its system can also be programmed on keyboard with a secondary combination to allow temporary access to neighbors or friends, much like loaning a key, without revealing the master code. Tamper alarm feature activates electronic tone and locks out keyboard for 25 seconds after 16 random numbers are pressed.

This keyless doorlock system retails for \$109 and is distributed by Mountain West Alarm, distributor of burglar and fire alarm supplies. For a free catalog of products write Mountain West Alarm, Box 10780, Phoenix, Arizona 86064 or call 800-528-6169.

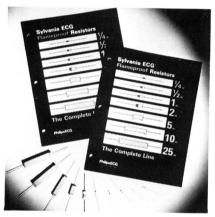
Flameproof resistor catalog appears

Publication of a detailed, 16 page catalog on Sylvania brand ECG flameproof resistors has been announced by the Distributor & Special Markets Division of Philips ECG, Inc.

Entitled "The Complete Line" because it is the most comprehensive flameproof resistor line available in the industry, the catalog lists the characteristics of over 1,000 individual ECG types, ranging in power handling capability from 1/4 watt to 25 watts with resistance values from 0.1 ohm to 100 megohms.

The catalog also identifies some of the replacement market potential for ECG flameproof resistors.

Sylvania brand ECG flameproof resistors can be used to replace carbon composition, carbon film, metal film, cermet film, wirewound and fuse resistors.



The catalog plus information on Sylvania brand ECG flameproof resistors and ECG semiconductors for industrial and commercial replacement applications may be obtained from authorized Philips ECG distributors; or write on company stationery to Philips ECG, Inc., 1025 Westminster Drive, Williamsport, Pennsylvania 17703-3277.

Money processor unit is 'intelligent'

The *IMP*, the Intelligent Money Processor, has been introduced by the Abbott Coin Counter Company of Stamford, Connecticut.

Serving the needs of many industries—banking, retail, vending, supermarkets and others where money is counted—the *IMP* offers a completely new and accurate cash-control and counting system.

A micro-processor based unit, the *IMP* interfaces with Abbott's docu-

ment counters and coin counter/sorters. The *IMP* provides many unique program features, i.e., fit and unfit bill categories for all bill denominations, operator selected program flow, adding machine mode, and a correction routine that allows the operator to fix errors quickly and easily. It is easy-to-operate, portable, and lightweight, said the manufacturer.

The *IMP* synthesizes Abbott's experience in designing efficient cash control systems. It answers the often stated need by all money processors for greater productivity and improved efficiency, with minimum capital outlay.



Abbott, manufacturer of money handling equipment since 1911, is a full service supplier of all related products, backed by a nationwide service network.

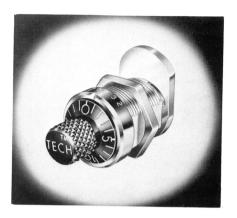
One combination opens many cam-locks

Tech Manufacturing's new Combination Security Cam Lock can be used in any standard 3/4" diameter opening. It easily replaces standard 3/4" diameter keyed locks, eliminating the need for special keys and allowing the desired cabinetry or equipment to be protected with a security combination lock.

The new lock is directly interchangeable with most original equipment locks and is completely assembled, ready for immediate installation without the need for any modifications or redesigning of existing equipment. It is especially suited for cabinets, coin boxes, vending machines, storage files, and lockers. Its unique push-pull knob easily serves as a handle for cabinets and drawers.

Any number of locks are available with the same combination, or available with over 3,000 different combinations. Each lock has an exposed serial number for cross referencing the combination number to registered owners.

The new security combination lock increases the resistance to drilling, center punching, lock picking, and other forms of vandalism while being as easy to use as any standard combination padlock. It is resistant to binding and freezing from dust, dirt, and moisture.



For further information, contact Jerry Mattson, president, Tech Manufacturing at P.O. Box 88; Rockford, Minnesota.

Panel-mounted LED switches brighten

The Component Products Division of Industrial Electronic Engineers, Inc. (IEE), a manufacturer of displays in diverse technologies, has announced its snap-in panel mounted "DH" Series line of Lighted Pushbutton Switches.

These miniature lighted switches require less than 1" of space behind a .125" panel when using the PCB type. The switches also come in wirewrap and #110 solder caps, or incandescent illuminated caps in round or square styles. The square version sports a .560" cap (round .795") and has evenness of illumination across the face in the full face version. The LED lighted units are extremely bright, making it very difficult to tell them from one illuminated by an incandescent lamp. said the manufacturer. They feature snap-action self cleaning contacts. standard 300 gm operating force with a smooth positive level.

They are available in SPDT or DPDT, alternate, or momentary action with barriers to prevent misoperation, and with silver, gold over silver, or platinum, gold and silver alloy contacts.

For further information, contact a local IEE representative or IEE, 7740 Lemona Avenue, Van Nuys, California 91405, telephone (213) 787-0311, ext. 374.



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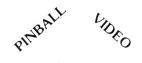
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Industry suffers supreme setback

by Mike Shaw

The anti-arcade rumblings of the city of Mesquite are vague enough even to confuse the nation's supreme decipherers. In a landmark non-decision, the U.S. Supreme Court ruled on February 23 that "it's not my job" to decide whether or not this Dallas suburb has the right to keep young Mesquiteites up to seventeen years old from playing video games in the town mall.

For the town of Mesquite, the failure of the Supreme Court to render a decision is a resounding success, for the matter must be reconsidered now by the appeals court in Texas whose earlier decision against Mesquite and in favor of Aladdin's Castle/Bally Manufacturing was thoroughly torn asunder by the high court.

For the industry, the remand back to the Court of Appeals is a sad defeat and opens the way for every narrow thinking town councilman in the country to save the children of his city from associating with these games that are designed, manufactured,

sold, and operated by criminals.

Yes, criminals. You see, Mesquite's main objection to Aladdin's Castle is that it is owned and operated by Bally Manufacturing, which But such is not the case. As so often occurs in courts of law, the decision rendered was based on legal technicalities rather than the substance of the issue.

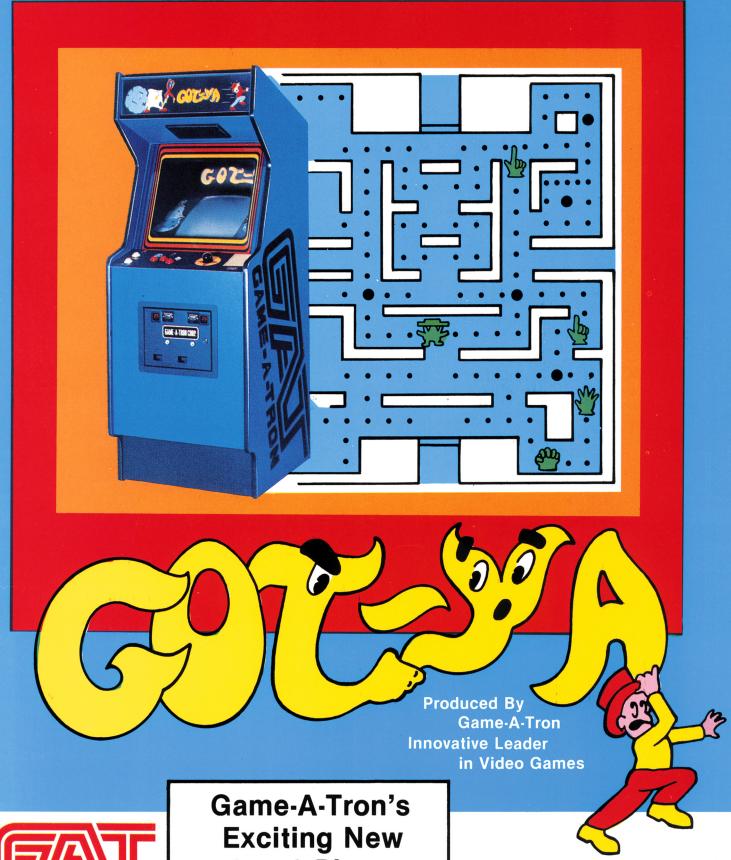
The Court of Appeals was ambiguous in its dealing with the constitutional question of the youngsters' right of association, the supremes ruled, seven to two. Whether the lower court used Texas law or federal law to decide that the right of association was violated was left in doubt. Therefore, the Supreme Court feels that the Court of Appeals must clarify the basis of their decision before the higher court has jurisdiction to rule, because the Supreme Court will not tinker with decisions made that are based on state constitutional law except where that law is contrary to the federal constitution.

However, more regrettably, in dealing with the Appeals Court ruling that the ordinance's term "connection with criminal elements" was unconstitutionally vague, the Supreme Court soundly reversed the appellate decision, contending that "the Federal

Constitution does not preclude a city from giving vague or ambiguous directions to officials who are authorized to make investigations and recommendations."

"The Federal Constitution does not preclude a city from giving vague or ambiguous directions to officials who are authorized to make investigations and recommendations"

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