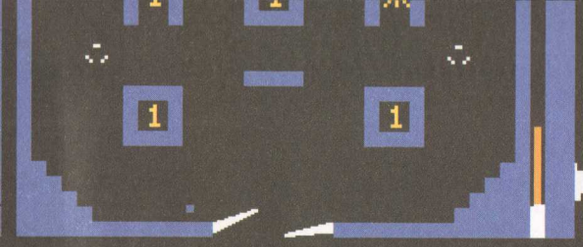
deluxe edition

ART OF ATARI®

Tim Lapetino

Foreword by Ernest Cline, Afterword by Robert V. Conte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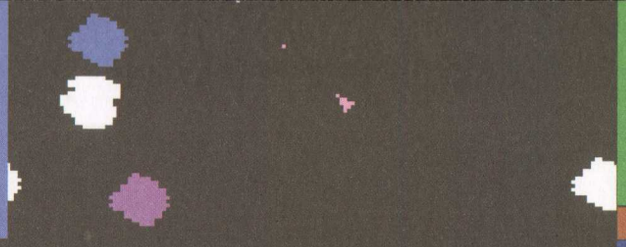

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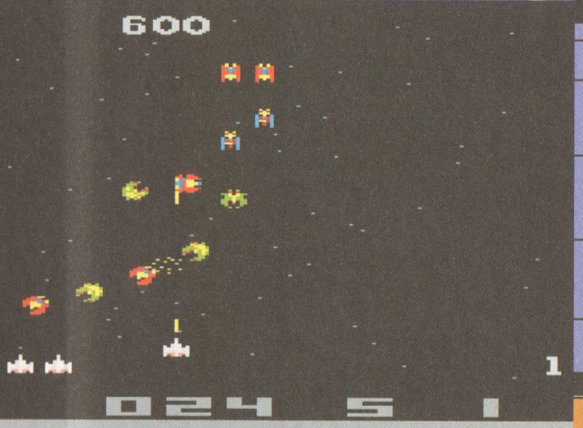
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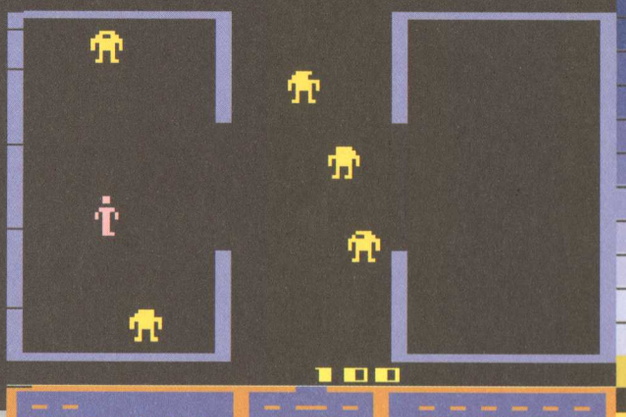
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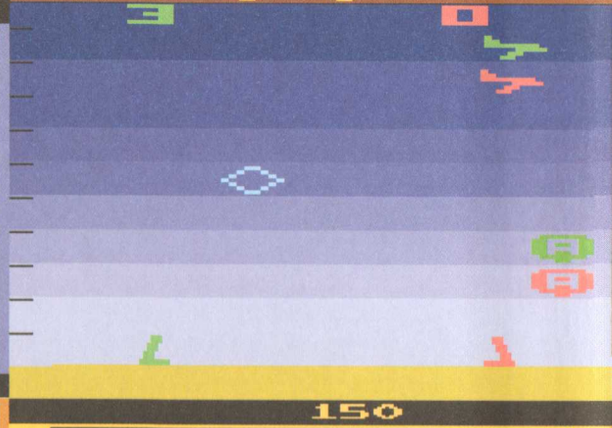

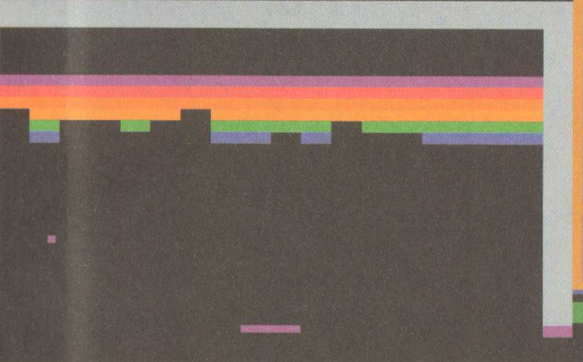

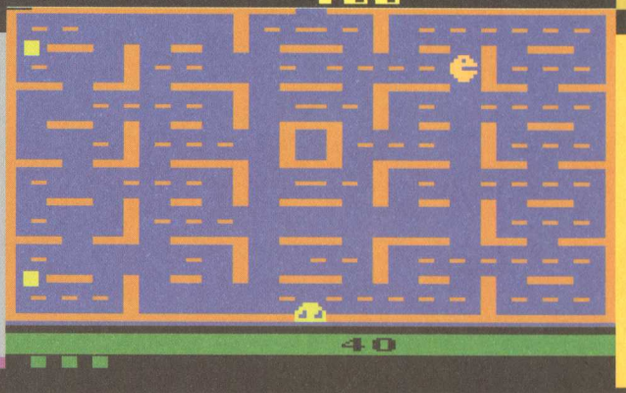
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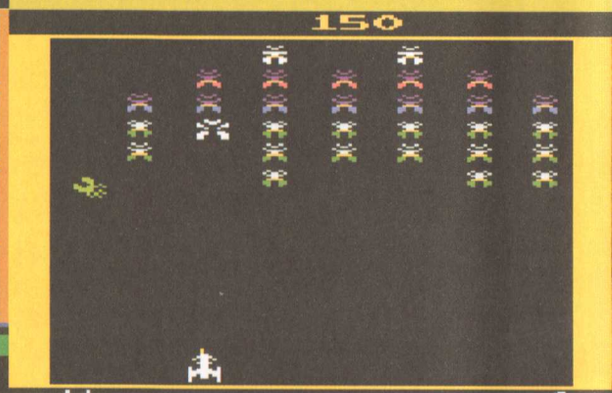
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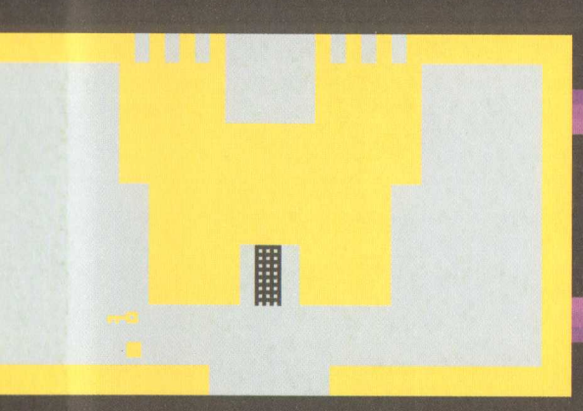

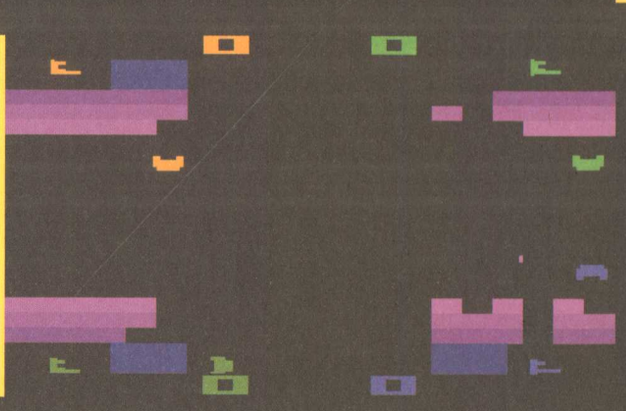

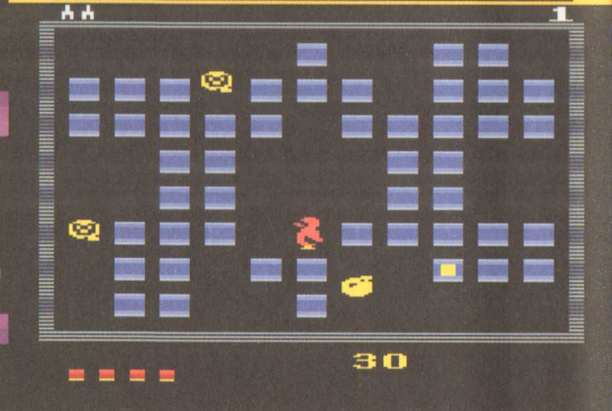
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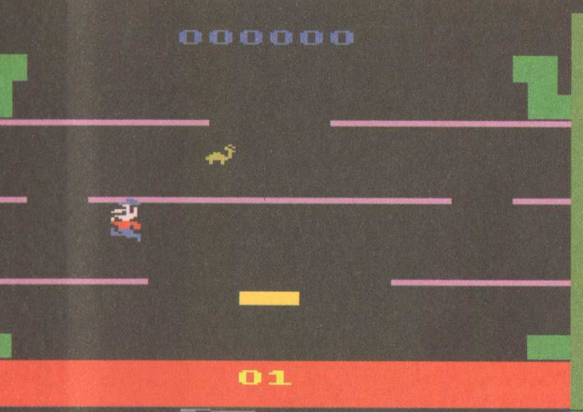
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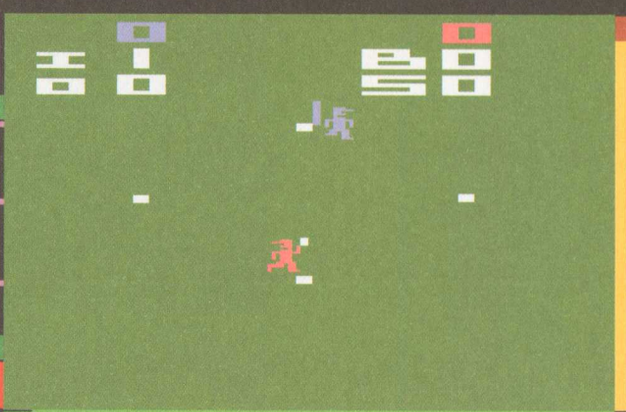

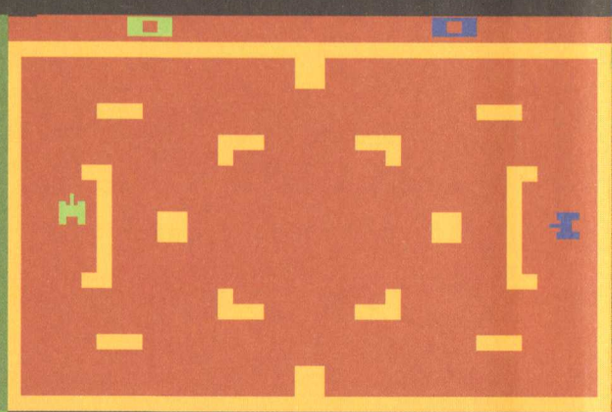

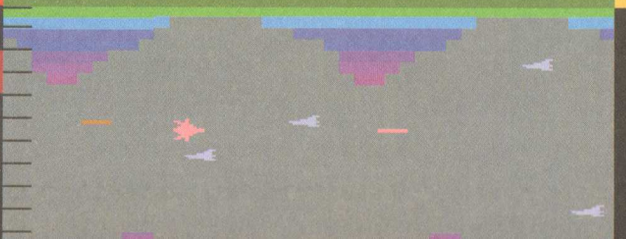

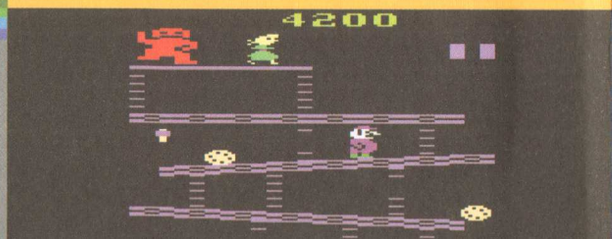
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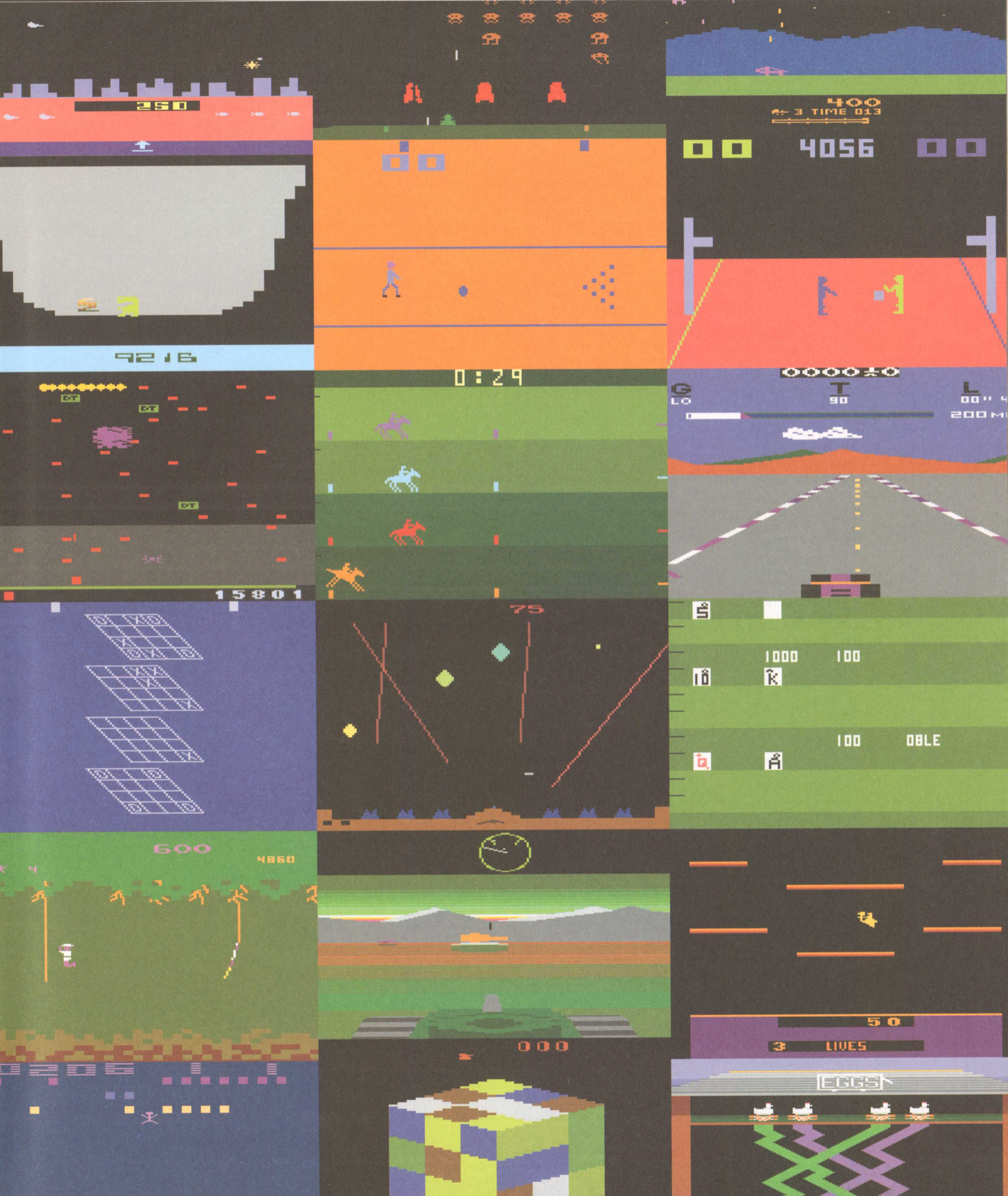
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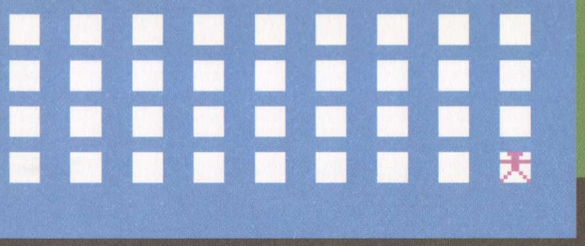

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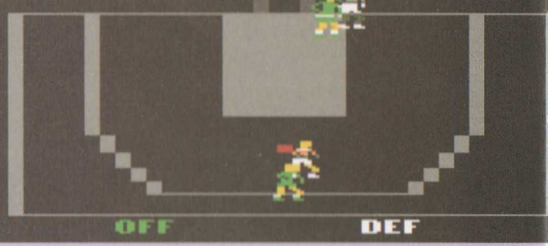
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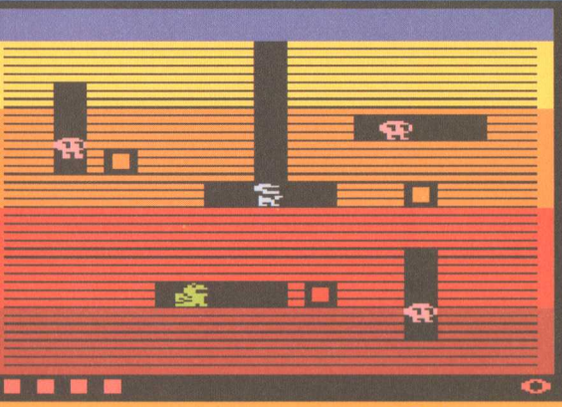

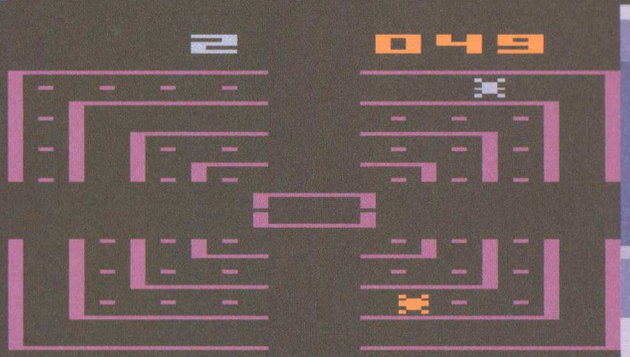
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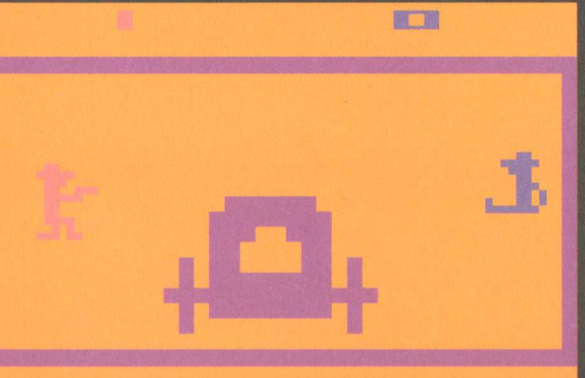

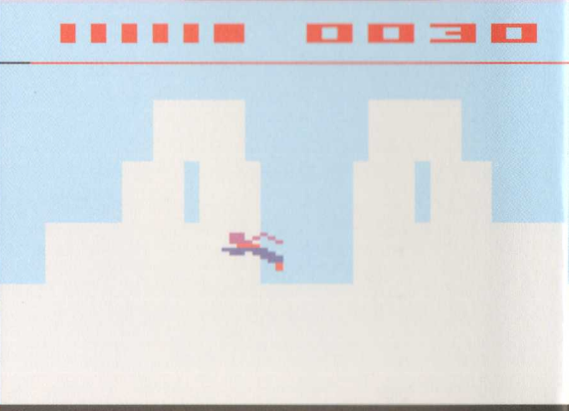

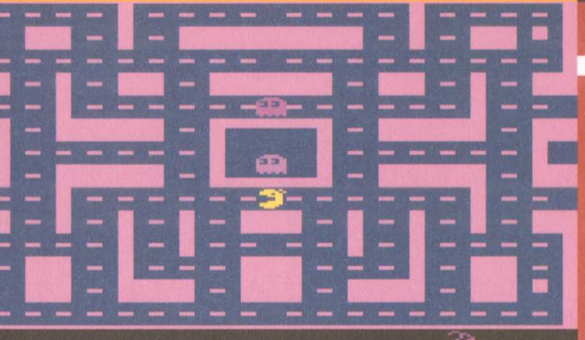

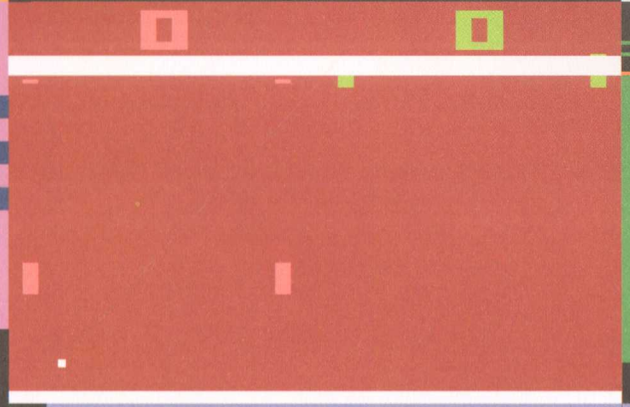

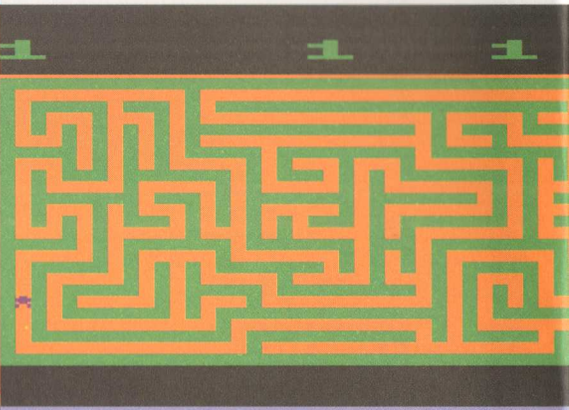

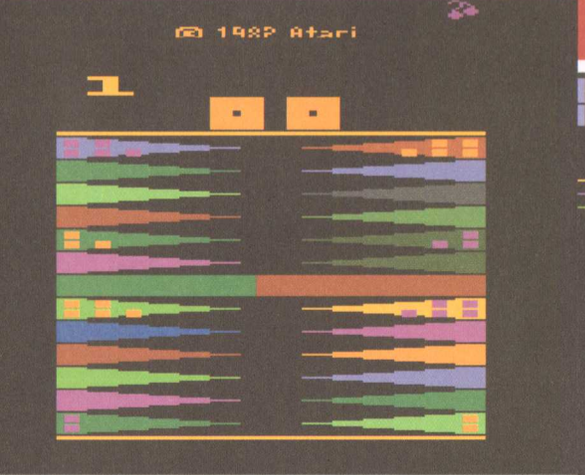
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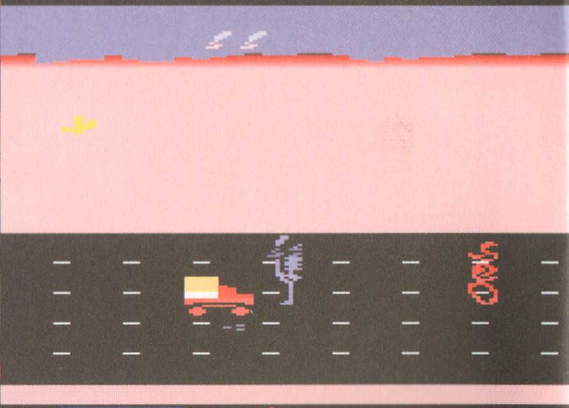

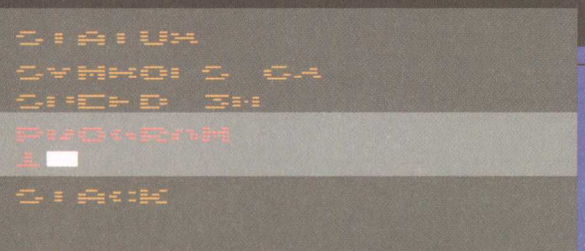

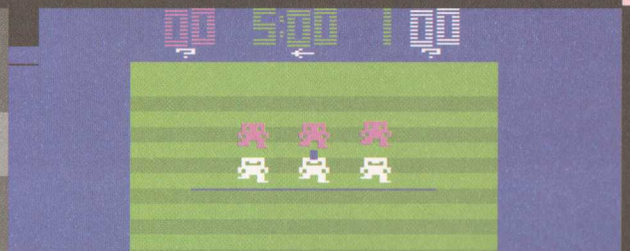
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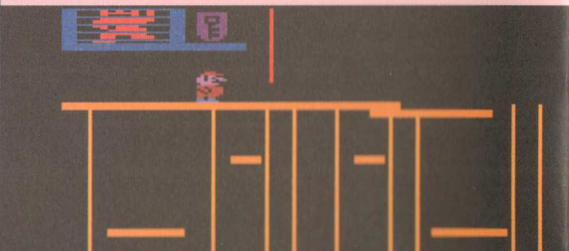

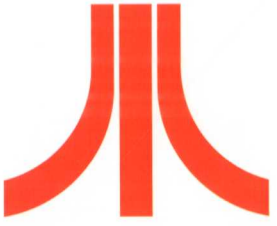

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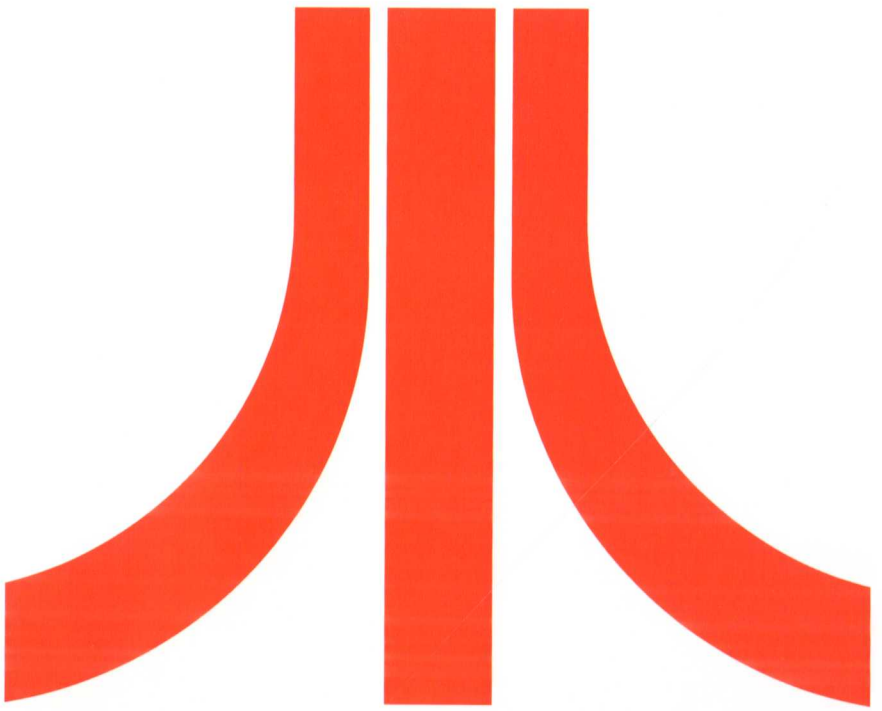

ART OF ATARI®

TIM LAPETINO

Foreword by **ERNEST CLINE**

Afterword by **ROBERT V. CONTE**

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◂ Detail of cover art for *Pac-Man* (2600)
Artist: Hiro Kimura

FOREWORD

ERNEST CLINE

THE ATARI 2600 was the first video game console my family ever owned, and receiving that "Heavy Sixer" console for Christmas in 1978 would end up drastically altering the course of my life and career. Prior to this, the time I'd spent playing video games would have probably only amounted to just a few hours, doled out in all-too-brief twenty-five cent increments at my local arcade, or in the lobby of my small hometown movie theater. I invariably ran out of quarters before I'd had my fill, and each time I'd be forced to exit the game room flat broke and longing for more. But once we got our Atari, my younger brother and I could play any of our half-dozen or so video game cartridges for hours on end. In the summer, when we were out of school, we would escape into the Atari's alternate reality all day long, until our parents finally began to fear for our vision and our sanity and forced us to go outside and try to amuse ourselves under the harsh rays of the sun.

My memories of all the blissful hours I spent playing Atari games will always be tied to the artwork on their packaging. My first impression of each game came from the artwork on the front of its box, usually a dynamic illustration that depicted the experience you were promised to have while playing it. And since that same artwork also appeared on the label of the cartridge itself, you would catch another glimpse of it each time you slid the game into your console to play. It was like studying the cover artwork on your favorite rock album, cassette tape, or CD before you played it on your stereo—or admiring the movie poster art printed on the front of a videotape's sleeve each time you slid a favorite VHS tape into your VCR. The feelings evoked by the imagery plastered on the media's packaging was a preamble to the experience of listening, watching, or playing what was contained inside.

The box artwork was an essential part of the ritual of escape you experienced each time you played an Atari game. In a player's mind, the artwork on the label would be forever linked to the digital artifact inside. One informed the other. Even though the crude graphics of the games themselves were never quite as colorful or realistic as the illustrations depicted, that artwork had an almost magical way of elevating your gameplay experience, by helping your imagination bridge the gap between the crude pixelated shapes dancing across your TV screen and the fantastic images they could conjure in your mind's eye.

Atari games played a vital role in the inspiration for my bestselling novel, *Ready Player One*, a story about an eccentric billionaire video game designer who holds an Easter egg hunt inside his most popular game, in order to find a worthy successor to his fortune. This plot was partially inspired by Atari's ill-fated *SwordQuest* contest, which utilized clues hidden inside the comic book artwork included with each game cartridge—allowing readers to solve a series of fiendish puzzles in order to win fabulous prizes. I was also inspired by the very first video game Easter egg ever discovered, the secret room in Atari's *Adventure*, where the game's creator, Warren Robinett, hid his name. He did this because, at the time, Atari didn't give credit to its game designers, so their names didn't appear anywhere on their game's packaging, leaving their identities a mystery. The artist who created Atari's box and label artwork suffered the same indignity, and that's one of the reasons I'm so pleased about the release of this book. Here, in these pages, you'll finally learn the names of the artists who created the images that were such an indelible part of so many of our childhoods.

For me, revisiting the beautiful artwork presented in this book is almost as good as taking a trip in Doc Brown's time machine back to that halcyon era at the dawn of the digital age. But be warned, viewing these images may leave you with an overwhelming desire to revisit the ancient pixelated battlefields they each depict as well. Which begs the question ... Have you played Atari today? ■

Ernest Cline is a New York Times *bestselling author and screenwriter, known for his passion for Atari and his amazing, video-game inspired novels,* Ready Player One *and* Armada.

THE BOX ARTWORK WAS AN ESSENTIAL PART OF THE RITUAL OF ESCAPE YOU EXPERIENCED EACH TIME YOU PLAYED AN ATARI GAME.

IN A PLAYER'S MIND, THE ARTWORK ON THE LABEL WOULD BE FOREVER LINKED TO THE DIGITAL ARTIFACT INSIDE."

▼ Catalog montage art
Artist: John Mattos

INTRODUCTION

TIM LAPETINO

I WAS FIVE YEARS old when my dad brought home an Atari VCS from our neighborhood video store in Chicago. The Atari 2600 had already become a gigantic, category-defining success, spawning a new industry of home video games. In the six years since its release, Atari had blanketed the U.S. with its marketing power in print ads, TV commercials, and the pages of my favorite comic books. I wanted one. From the moment we first plugged it in, I was hooked. The rainbow of colored boxes, the soft click of that single orange joystick button, the deluge of bleeps and bonks coming from our little bedroom TV. It was almost too much.

Like many other '80s kids, I loved *Missile Command*, *Pac-Man*, *Berzerk*, *Joust*, *Enduro*, and countless others. My brothers and I logged endless hours in front of our 2600, racking up high scores in *Space Invaders*, *Kaboom!*, and a slew of other first-generation Atari games.

But it wasn't just the games that enthralled me. For me, and I suspect, many other kids, a significant part of the experience went beyond our on-screen adventures. The games were just a prelude to creating our own elaborate, imaginary worlds, and one of the windows into the video game world was Atari box artwork. I would stare for hours at the beautiful illustrations on games like *Missile Command*, *Warlords*, *Star Raiders* and *Super Breakout*, letting that art transport me to deep space, burning battlefields, and other exotic locales spawned from our Zenith TV. The game, the artwork, and my imagination all rolled into one, adding additional dimensions to the game cartridges popped into my console.

Those visuals seared my brain like a lightning bolt, and even through a creative career in design and branding, they never left my consciousness. Twenty years after playing a 2600 for the first time, I still wondered—who were the men and women behind the art and design of Atari? I've always been interested in creative process as a way to understand people, to unpack how others create, whether it be logo design or a director's film commentary.

So, I undertook a quest to unearth the identities of those unsung heroes of Atari—illustrators, designers, art directors, industrial designers and others—to tell their stories and share insights into the work they did. I slowly acquired artwork in the form of slides, transparencies, and original pieces. My research gained momentum and girth, like a snowball rolling downhill. Countless hours digging in the dark corners of the Internet yielded some opportune leads—to hundreds of interviews, emails, and phone calls, connecting with people, events, and work that happened four decades ago. I logged thousands of miles by car, plane, and train to interview, research, and acquire art that ended up in this book. I'm glad to say that this volume will help shine a light on the work of people like George Opperman, Cliff Spohn, Susan Jaekel, Regan Cheng, Fred Thompson, Hiro Kimura, and many, many more.

These talented creatives weren't just selling video games, though. They were leading us by the hand into uncharted territory. By today's standards, the games were simple, crude, and visually underwhelming. But that's not how they felt at their introduction—the phosphor bright worlds that Atari created were groundbreaking. It might be hard for today's kids—who've cut their teeth on multi-threaded processors and advanced graphical engines—to comprehend this nascent world and its impact. It was even hard for us to understand at the time, never having seen anything like it. You could play games—on your TV screen?!

It was all so new that artists—creative people—were needed not only help sell the titles, but to provide a narrative thread connecting us to these simple games. Art and design played a pivotal role in pulling wide-eyed kids like myself into the world of video games, then connecting those dots (almost literally) with the dots on screen. When I sat down with my joystick, I wasn't just a rectangle bouncing a ball against a wall of blocks, I was a marooned astronaut facing off against an otherworldly anomaly in deep space. These artists created something real with their paintbrushes and inks, ushering us into worlds filled with style, power, and beauty—creating a lasting emotional connection from gamers to the thrill of playing something like *Adventure*, *Pac-Man*, *Galaxian*, or *Yars' Revenge*.

These pieces of art are also fantastic works in their own right, and since they stand in for our bubblegum childhood days, there is an added emotional resonance that ties them forever to nostalgic moments and those pixelated adventures.

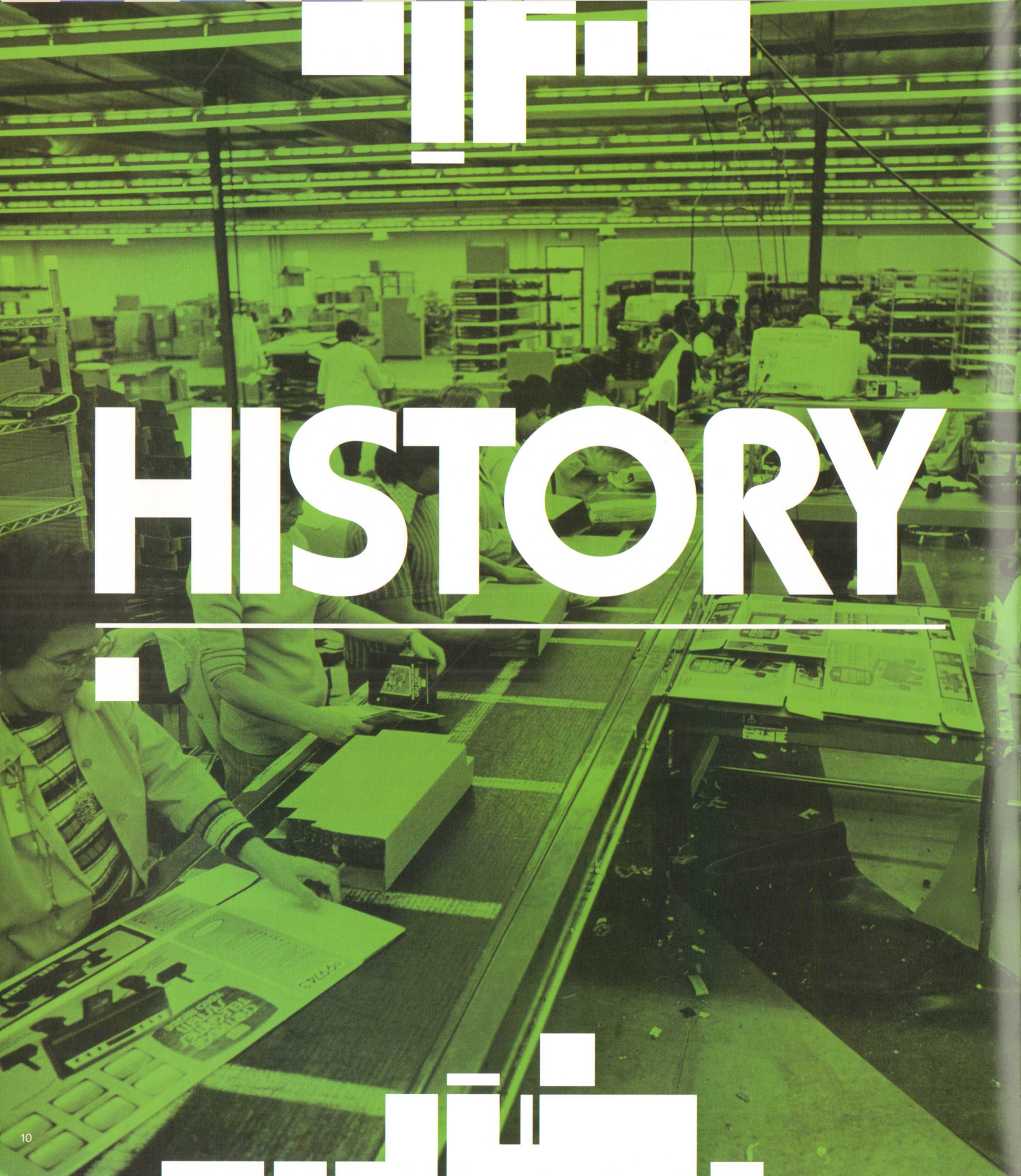
These creatives helped craft our relationships to the first home video games and Atari specifically. The Atari 2600 was one of the best-selling video game systems of all time, with an estimated 30 million units sold over the life of the

console. Because of its incredible reach and quality, Atari left its indelible mark on an embryonic industry, as well as in our collective pop culture consciousness. The original brand still stands for amazing fun, classic video games, and that category of "easy to play, difficult to master" gaming experiences. Atari and its associated memories are powerful stuff, and those of my generation who grew up with these games can now revisit those worlds, not just by playing the old games, but by entering into the work that tied us to them. With a lack of preservation process and decades of change for Atari, few of the original pieces of art still exist. My goal is to resurrect the best of Atari's art and design, allowing present and future generations to appreciate, understand and enjoy it.

This book is dedicated to those earliest video game pioneers who saw further afield than most of us and created worlds to stir the imagination. ■

Tim Lapetino
Chicago, IL
March 25, 2016

"TWENTY YEARS AFTER PLAYING A 2600 FOR THE FIRST TIME, I STILL WONDERED—WHO WERE THE MEN AND WOMEN BEHIND THE ART AND DESIGN OF ATARI?"



HISTORY

▸ Even though Nutting Associates didn't consider *Computer Space* a smash-hit, it didn't stop the company from releasing a two-player follow up game without Bushnell and his team.

THE BIRTH OF ATARI

ENGINEERING A DREAM

IN 1968 TWO engineers met at the Silicon Valley manufacturing company, Ampex. Sharing a cramped office intended for one, Nolan Bushnell, a newly-minted graduate of the University of Utah, and Ted Dabney, a straight-laced veteran engineer, began a friendship. They bonded over the Japanese strategy game, Go, playing during lunch breaks on a wooden board hand-made by Dabney. Ampex was one of the giants of Silicon Valley, a company known for its work in creating audio recording equipment, as well as the first videotape recorder. Its cutting-edge Videofile division was home to Dabney, Bushnell, and a host of other talented engineers—many of whom would use their experience in video technology to shape the early medium of video games. Bushnell was fresh talent at Ampex, but it seemed like he always had an eye out for something else. That something else came when he viewed one of the very first computer games, known as *Spacewar!*.

Originally created by MIT students for the PDP-1 minicomputer, *Spacewar!* could only be played on large computers with specialized graphical displays—generally the province of researchers and academics on college campuses. *Spacewar!* gameplay consisted of players piloting small rocket ships, trying to shoot each other out of the sky, while navigating black holes and other variations. The game was simple but addictive, and Bushnell saw promise in the idea of creating a coin-operated version for the masses, if he could simplify the technology and produce it. During school holidays and breaks, he had worked at the Lagoon Amusement Park in Salt Lake City, Utah, which provided a first-hand education on the industry and environment of coin-operated games—pinball machines, strength testers, and other electromagnetic skill games. With hope in evolving technologies and just a rudimentary understanding of the engineering needed for such a product, Bushnell recruited Dabney to join him in this side project.

In 1970, the two formed a partnership they called Syzygy, a term that represents "the straight-line configuration of three celestial bodies."[1] The pair joined with fellow Ampex worker and computer programmer Larry Bryan, who would help build a proposed minicomputer version of the game they had in mind. Each was to contribute $350 to the company at the outset, but after the initial direction proved to be cost-prohibitive, the project shifted gears and Bryan's expertise proved unnecessary, leaving only Bushnell and Dabney.

That fall, Bushnell came to Dabney with a question, seeking to solve their basic challenge. Could they generate a dot on a standard TV and use something like the horizontal and vertical hold to move it around the screen? Dabney set about creating prototype circuitry, turning his daughter's bedroom into a workshop.

Before long, Dabney was able to cobble together a working prototype, and Bushnell had found a willing partner to license their game and provide the funds to finish its development. Nutting Associates, makers of the popular *Computer Quiz* game and other electro-mechanical games, was one of the few coin-op companies west of the Mississippi. Nutting would build and license the game from the pair, calling it *Computer Space* to fit within their existing "Computer" branded lineup. With that, the first commercial video arcade game went into production. When it was released in 1971, the game sold moderately well, with 1,500 units earning nearly $3 million in sales[2], which was average for a coin-operated game of the day.

It wasn't quite the breakout hit owner Bill Nutting or

THE NEWEST 2 PLAYER
VIDEO SKILL GAME

PONG

from ATARI CORPORATION
SYZYGY ENGINEERED

The Team That Pioneered Video Technology

FEATURES

- STRIKING Attract Mode
- Ball Serves Automatically
- Realistic Sounds of Ball Bouncing, Striking Paddle
- Simple to Operate Controls
- ALL SOLID STATE TV and Components for Long, Rugged Life
- ONE YEAR COMPUTER WARRANTY
- Proven HIGH PROFITS in Location After Location
- Low Key Cabinet, Suitable for Sophisticated Locations
- 25¢ per play

THIS GAME IS AVAILABLE FROM YOUR LOCAL DISTRIBUTOR

Manufactured by
ATARI, INC.
2962 SCOTT BLVD.
SANTA CLARA, CA.
95050

Maximum Dimensions:
WIDTH - 26"
HEIGHT - 50"
DEPTH - 24
SHIPPING WEIGHT:
150 Lb.

◂ Atari co-founders Ted Dabney and Nolan Bushnell, CFO Fred Marincic, and engineer Allan Alcorn

▾ An original *PONG* cabinet

Bushnell hoped for, but Nutting's penny-pinching ways might have handicapped the game's success, while also convincing Dabney and Bushnell that they'd have to move on if they wanted future games to be more successful. But the response did build confidence in the duo, affirming the belief they could create another game and make a go of it. Profits from *Computer Space* gave the pair enough money to leave Nutting Associates, set up an office, and begin work on their own. The Office of the California Secretary of State noted that their chosen name was already in use, so the two had to pick another official designation for their company. Their third choice was the name Atari, a term from the Japanese game of Go, making it official.

A lucrative development contract with the Chicago coin-op company Bally would give them the money to hire their first engineer, Allan Alcorn. Alcorn, who had worked with the pair at Ampex, was fresh out of school and working full-time there when he was wooed away by Bushnell, excited to work on something different. He said, "I did it because I was young, unmarried, and reckless—what the hell. I figured it'd cave in a year or two anyway and I'd go back to Ampex."[3]

Contracted to provide them with both a pinball game and a video game, Alcorn developed what would eventually be called *PONG*. The now-famous game began life as a warm-up project for Alcorn, based on a demonstration Bushnell saw of the first-ever video game console, the Magnavox Odyssey. Created by Ralph Baer, the "brown box" console played an assortment of games directly on a home television set, including a version of tennis that served as inspiration for the project. It was understood (at least by Bushnell) that this initial game was never meant for production. As soon as Alcorn had something workable, they would move on to a more commercial concept, presumably a racing game of some sort. But something funny happened along the way—the game was actually very playable. Alcorn's creative segmenting of the game's on-screen paddle to simplify the controls made the game engaging enough for a typical workaday crowd, in a way that the physics-heavy *Computer Space* wasn't.

The team set up their prototype unit at a local dive called Andy Capp's, and soon bar owner Bill Gattis called Alcorn at Atari when the machine stopped working, basically because of overplaying—the malfunction was its popularity! Famously, Alcorn once discovered that the *PONG* machine seized up because its coin mechanism was overflowing with quarters.[4] The team went on to build twelve additional full-size units—ten to put in locations for further testing, one for Bally, and another to keep in their office. The earnings at each of the locations were so outstanding that it was actually a problem for Bally, because they simply did not believe the quoted figures. Those at Bally were deeply skeptical of the numbers, which were far too high based on their experience—and this was after Dabney had already fudged the numbers lower!

Eventually, Atari decided to manufacture the units themselves, and in November 1972, they released *PONG* to the world. The game went on to be a bestseller for Atari and led to an explosion of arcade video games when imitators quickly jumped on board. Atari would have to innovate to continue its success, but their first hit product had proven that there might be a bright future for coin-operated video games. Things began moving quickly after that, as the small group experienced rapid growth due to the demand for *PONG* and its related follow-ups like *PONG Doubles* and *Quadrapong*. By the end of 1974, Atari had sold $3.2 million worth of *PONG* and

▲ Nolan Bushnell during an interview with *Play Meter* magazine, 1975

its sequels.[5] As Atari launched other unique games like *Space Race* and *Gotcha* in 1973, the company grew rapidly to meet the production demands and orders, and engaged additional help as they created new games. The swelling team developed new cabinets and an evolving look for the presentation of the games. Part of that also meant that the company needed a more professional image, leaving Syzygy behind. Through new hire George Faraco, Atari engaged a small Palo Alto agency to design a visual identity to replace their transitional Syzygy-Atari logo. George Opperman entered the picture.

As Atari drank from the well of success again and again, Bushnell's priorities began to shift from engineering to self-promotion, with tensions mounting and frustration building between the two company founders. The conflicts came to a head in 1973, with Bushnell ostensibly forcing Dabney out, buying his partner's shares in the company. Atari would hardly pause with this change, but it fundamentally altered the character of the growing company, and Bushnell would barely look back.

Design and engineering of arcade games continued unabated, with Atari leading the way ahead of a growing pack of imitators and competitors. The company struggled to find professionals who could keep up with the work needed to produce and manufacture its slew of games and still fit into the loose, freewheeling company culture.

But another Atari employee definitely stood out, even in that unconventional environment. Hired in 1974 as a technician to assist the engineers, he was strong-willed and abrasive, striding around barefoot, with co-workers complaining about the smell (he rarely showered) and his generally unflattering opinions of their work. His name was Steve Jobs.

While Alcorn (rightly) didn't think much of Jobs' engineering skills, Bushnell apparently saw enough promise to keep him on despite his lack of aptitude and obnoxious behavior. Atari's co-founder explained, "I always felt to run a good company you had to have room for everybody. You could always figure out a way to make room for smart people. So, we decided to have a night shift in engineering—he was the only one in it."[6]

Jobs would continue working at Atari for a short while longer, and at one point volunteered to take on a project that Bushnell and engineer Steve Bristow had envisioned—a game that would become the classic *Breakout*. One of Atari's last non-microprocessor-driven games, the charge to Jobs was to keep costs down by reducing the number of chips needed. Jobs would get a $100 bonus for each chip removed from the current design, and an additional windfall if he could bring the overall count down below a certain number.

"Jobs never did a lick of engineering in his life. He had me snowed," Alcorn said later. "It took years before I figured out that he was getting Woz to 'come in the back door' and do all the work while he got the credit." Truly, Jobs was collaborating secretly with his moonlighting partner Steve Wozniak on the chip design for Breakout, allowing Wozniak to play his favorite arcade games for free at night. Wozniak would quietly work on the project during his day job at HP, and then joined Jobs at night during the project's end. The duo turned out a greatly-reduced chip count and elegant design, after working four days straight. Both of them contracted mononucleosis, the sleeping sickness, but Jobs never revealed the full extent of the bonus he received to Wozniak, reportedly approaching $5,000. Jobs gave his partner $350, and used the rest to finance a trip to India he was about to take. Wozniak wouldn't know about the full amount until he read about it in a book many years later.

But a question remains—why would the team give the project to an employee with basically no engineering experience? Because Bushnell and Bristow saw through the deception, and knew that Jobs would have Wozniak's collaboration. Atari management later offered a job to the impressive young engineer, but Wozniak was happy with his work at Hewlett Packard, and declined. Later, he would find another reason to bid farewell to HP. On April 1, 1976, shortly after Jobs left Atari, he and Wozniak (along with another

> **"I ALWAYS FELT TO RUN A GOOD COMPANY YOU HAD TO HAVE ROOM FOR EVERYBODY. YOU COULD ALWAYS FIGURE OUT A WAY TO MAKE ROOM FOR SMART PEOPLE. SO, WE DECIDED TO HAVE A NIGHT SHIFT IN ENGINEERING—HE WAS THE ONLY ONE IN IT."**
>
> —NOLAN BUSHNELL on Steve Jobs

▸ **Apple co-founders Steve Jobs and Steve Wozniak founded Apple not long after Jobs left Atari**

ex-Atari employee, Ron Wayne) founded Apple Computer. Wozniak's experience on *Breakout* would also influence his design of the Apple II computer years later.

Finances had been a constant concern for Atari beginning in 1974, after a series of missteps involving its latest string of arcade games, poor management decisions, and increased competition in the space. All of these left Atari in an unenviable position and continued to hamper future growth plans the following year. In order to remedy the financial struggles and fund continued work on the development of the VCS/Atari 2600, Bushnell sold Atari to Warner Communications for $28M. The highly-publicized deal made sense for Bushnell, who pocketed $15M from the sale, but quickly it seemed like the laid-back, creative work environment of Atari would be a poor fit for the corporate juggernaut Warner.

The seeds of discontent were probably sewn in the personalities of those involved. Bushnell seemed to thrive as the head of an innovative, creatively-focused company, building new and cutting-edge products. But Warner wanted to develop the company, to manage and optimize it, and gain a steady return on its large investment. By its very nature, the corporate structure of Warner and its management led to fewer "bet the company" decisions—the kind which Atari was repeatedly built on. This approach rankled Bushnell, and he continually clashed with management. The two opposing views wouldn't co-exist for long within the same company.

In 1977, Warner-backed Atari launched the Video Computer System (VCS, later re-christened the Atari 2600). The console, released with nine games, was years in the making, and one of the main components of the company that drew Warner's initial interest. The promise of the 2600 was the idea of bringing video games out of the arcade and into the home. In its first year, the VCS was a smash-hit in holiday sales, selling out its initial production run. But a variety of marketplace issues led retailers to shy away from it the following year, amid significant company losses.

The ideologies of the R&D-focused Bushnell and Warner's conservative management team kept conflicting, and it all came to a head in disagreements about the future of the VCS. Bushnell alienated himself when he claimed, in front of the company's board, that the market was oversaturated and Atari should pull the plug on the VCS, moving on. Warner vehemently disagreed, believing that the VCS should be promoted heavily, year-round—and would soon be proven correct. Increasingly sidelined within the company he founded, Bushnell would disappear for long stretches, and was eventually forced out in 1978. In early 1979 he took his Chuck E. Cheese restaurant concept and left to focus on growing it. Less than 10 years after the birth of Atari, Bushnell was gone, with Ray Kassar installed as new CEO. Kassar would continue to frustrate Atari's free-wheeling engineers, amidst growing resentment about the transition from a creativity-focused atmosphere to Warner's

ATARI'S VIDEO COMPUTER SYSTEM IS SUPERIOR TO ANY OTHER SYSTEM BECAUSE IT GIVES YOUR CUSTOMERS MORE GAMES TO PLAY AND BETTER GAMES TO PLAY.

The fact is, we could have had a programmable unit a year ago. But we wanted our 1977 microprocessor based programmable system to have enough power so it would still be worth its stuff in 1983. Who needs a programmable unit this year that doesn't have enough power for next year's games. And we wanted a system that could handle the kind of sophisticated and intricate video games Atari is famous for, because the more fun we make our games, the more games you're going to sell.

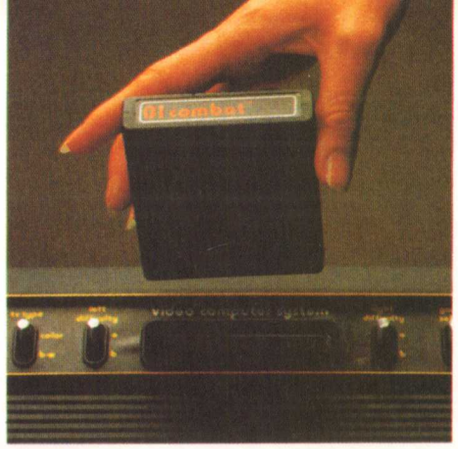
Since games are the name of the game, we pre-test our video games in consumer research studies, and we use our coin-operated game expertise to make sure we have the most challenging home television video games in the market place. That's what separates us from everybody else. Most companies don't realize that if a game isn't challenging, it isn't fun, and if it isn't fun, it isn't going to sell.

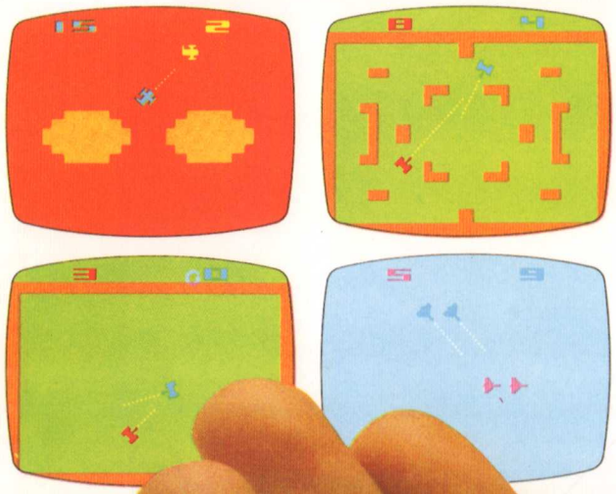
Right now, six Game Program™ cartridges, with different controllers for different games, are available with Atari's Video Computer System.™ We have Combat,™ Indy 500,™ Space Mission,™ Video Olympics,™ Street Racer™ and Air•Sea Battle.™ After Christmas, we plan to introduce one or two new Game Programs every month.

Every one of our Game Programs has fourteen to fifty game variations. No one else in the industry can say that. No one else in the industry has even half as many game variations per cartridge.

In the beginning, we created six Game Programs. But, there's a lot more to come.

▶ Retailer-focused advertising promoting the launch of the Atari VCS in summer of 1977

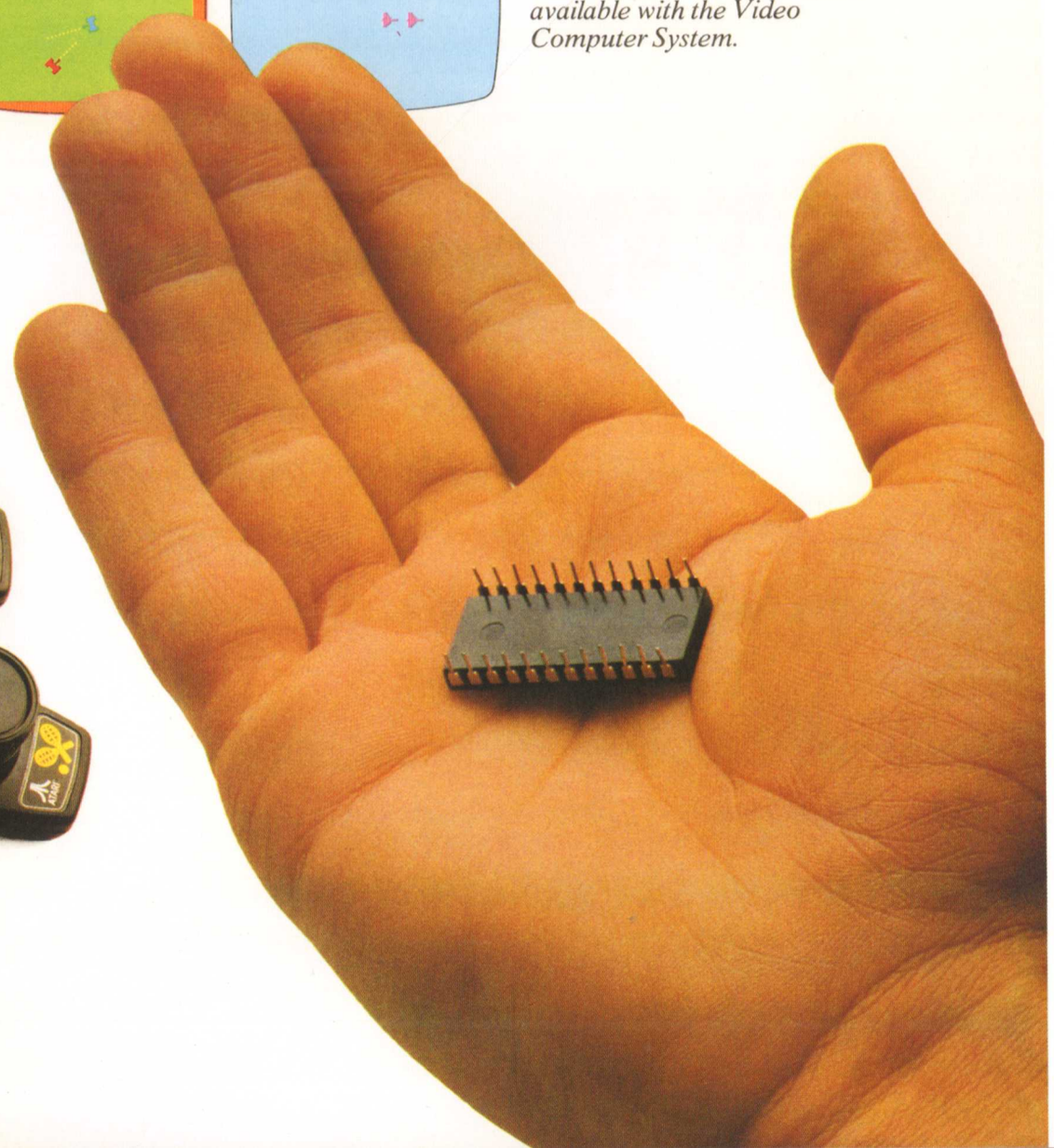




Left corner—A flip of the Handicap Difficulty Switch and suddenly an ace bomber is a rookie again.

Center— The Combat Game Program is packaged with every Video Computer System. There are 27 action-packed game variations including Bi-plane,™ Tank Pong,™ and Jet Fighter.™ It's a fight to the finish battle in living color.

Lower left—Rugged remote control paddle controllers are available with the Video Computer System.



THE CORPORATE STRUCTURE OF WARNER LED TO FEWER "BET THE COMPANY" DECISIONS—THE KIND WHICH ATARI WAS REPEATEDLY BUILT ON.

corporate culture. However, Kassar did understand how to utilize marketing, optimize manufacturing, and develop the company Atari had evolved into. The leaner Atari would now enter what is widely-considered its golden age, with a string of successes in both hardware and software.

While the VCS continued to develop as a moderate success, internal issues became paramount, as programmers became frustrated with Kassar's management and disputes over credit and game royalties. David Crane, Alan Miller, Larry Kaplan, and Bob Whitehead, four of Atari's talented VCS programmers, dubbed the "Gang of Four," were rebuffed after bringing their concerns to Atari management. Taking a daring leap, the quartet left to form their own software company, Activision, and began creating competing games for the Atari VCS. They became the first "third party" publisher in video game history, though they wouldn't do it without a bumpy ride. Atari's response came in the form of a lawsuit directed at Activision, accusing them of copyright and patent infringement. "Atari bought full-page magazine ads to try to paint us as criminals, when all we were doing was pursuing our chosen craft," David Crane recalled.[7] The lawsuit dragged on for nearly two years, and was eventually thrown out by a judge. A licensing agreement was put in place between Atari and Activision, and the legal decision allowed anyone to create games for Atari's console, a crucial detail that would eventually play a part in the company's downfall. Activision's first games, including *Boxing*, *Bridge*, *Checkers*, *Dragster* and *Fishing Derby*, were released in 1980.

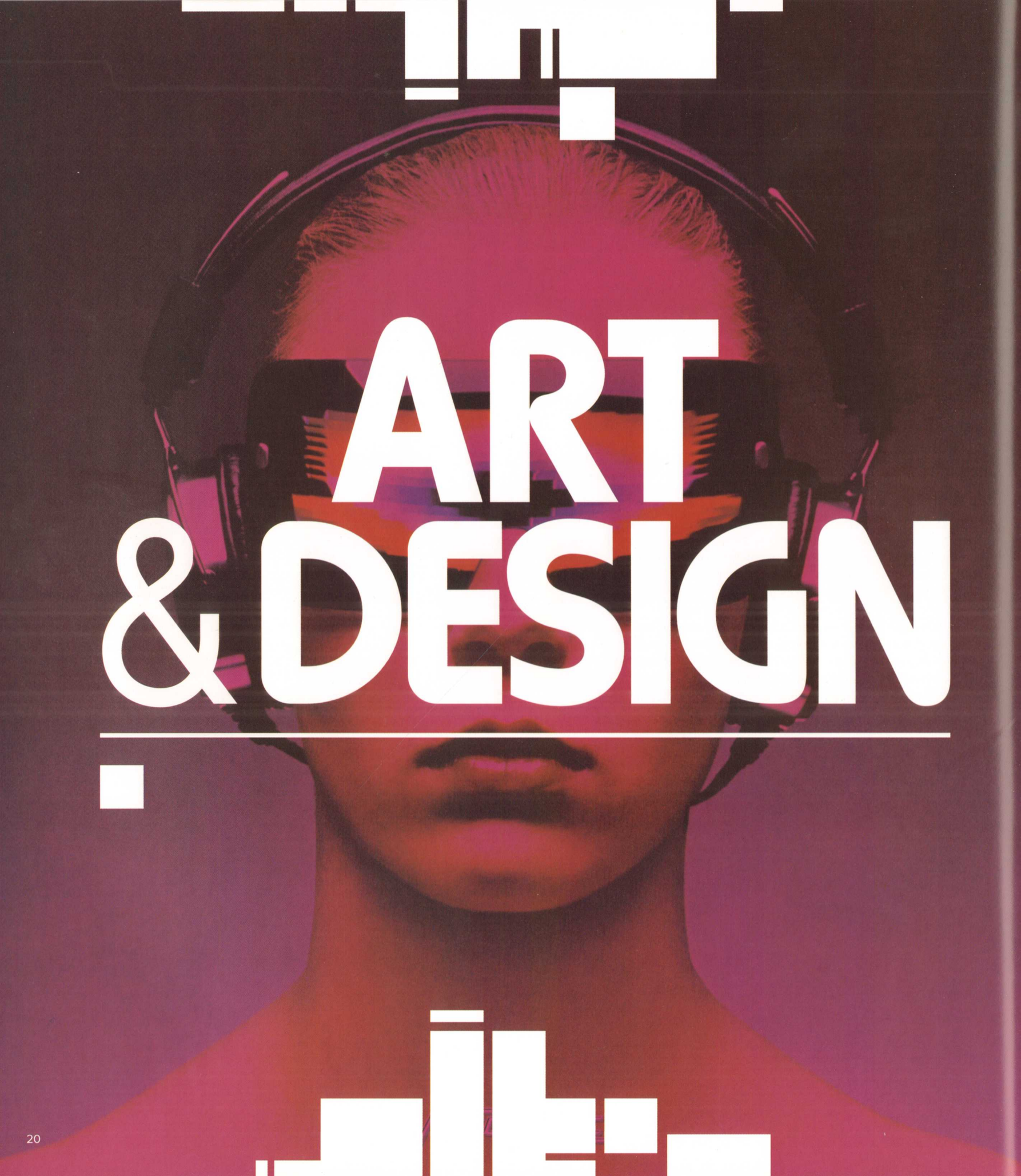
That same year, Warner's patience and commitment to the 2600 finally paid off with the release of the console's "killer app," a home version of *Space Invaders*, the wildly-popular arcade title. The system took off, quadrupling in sales. On its way to iconic status, this success seemed to validate Kassar's long view of the company. Warner had taken the time and energy to invest in developing the consumer brand, supporting it with strong marketing and quality games. From an engineering standpoint, the 2600 was already outdated technology, but the consumer market had finally caught up with its original vision. That year Atari would represent one-third of Warner's total annual income and become the fastest-growing company in American history.

But along with that sort of stratospheric success came high expectations, and neither Atari (nor the video game industry itself) would be able to sustain the same level of growth. Shortages of both consoles and games plagued retailers in 1980 and 1981, and as video games exploded, stores were forced to ration product to keep enough inventory for the huge Christmas buying season. After ramping up production, Atari encouraged retailers to order for the entire year at once, and those orders (not actual retail sales) generated a false impression of huge sales, when actually it was just the opposite.

In 1982, financial analysts began warning of a market bubble. Within Atari, actual sales slowed and both distributors and retailers were still flush with product. The third party video game market also exploded, flooding the market with dozens and dozens of choices for unsuspecting consumers—some good, and many poor. When financials were announced in December, Atari's sales numbers had fallen far below expectations, angering Wall Street analysts. Warner stock dropped precipitously, and kicked off a video game industry bloodbath. Compounding this were a number of high-profile missteps, including the poor critical reception of highly-anticipated home titles like *E.T: The Extra-Terrestrial* and *Pac-Man*, just as the financial issues were coming to light. The industry's largest player was the engine that powered the North American video game market, and Atari's huge stumble sent shock waves through it, which killed companies, canceled products, and caused rounds of layoffs both inside and outside of the company.

After another year of struggles, historic losses, and a failed takeover attempt by Rupert Murdoch, Warner decided to cut bait and sell Atari in 1984. Not finding one single buyer, Warner head Steve Ross decided to divide the company, with the Consumer Division sold to former Commodore computer founder Jack Tramiel, as part of his new company, Atari Corporation. The rest of the original Atari, including the Coin-Op division, was promptly rebranded as Atari Games Inc., and would remain in control of Warner through the year. After selling controlling interest of Atari Games to longtime arcade partner Namco, the original heart of Atari Inc. would last for two more decades (and several name changes) before closing down in 2003. Tramiel's Atari Corporation would go on to release the 7800 ProSystem, additional consoles, computers and many other games, but neither company would ever equal the success of the original Atari Inc. Those brightest chapters were squarely in the rear-view mirror, now just a part of the company's history. ■

▸ Atari assembly line workers package the Sears branded Atari VCS, dubbed the Cartridge Tele-games System Video Arcade


ART
& DESIGN

▶ Early dealer-focused launch ad for the second wave of Atari's VCS games

THE IMAGINATION GAP

THE ROLE OF ART AND DESIGN IN EARLY GAMES

DESIGN WAS AT the root of Atari's success, even from its earliest days. What began as a scrappy Silicon Valley startup with Nolan Bushnell and Ted Dabney at the helm grew to pioneer the new industry of video games. Atari organically developed a way of thinking about electronic games that the company called "Innovative Leisure" in its early marketing, as it capitalized on the growing ubiquity and availability of microprocessors to birth something unique.

While Bushnell didn't have the technical chops his collaborators did, he did have a panoramic vision for electronics as entertainment, and for connecting people. This wasn't purely about technology and innovation; this vision was about designing fun experiences. Engineer Al Alcorn elaborated: "Nolan didn't want to define us as the best coin-op game designer and manufacturer; instead he focused broadly on the entertainment business. We were creating new, disruptive products in the leisure industry. Nolan figured people would spend more money on what they wanted, not what they needed."[8]

This ethos came through from the earliest days of Atari, and Bushnell explained that their approach was necessarily rooted in creative thinking and design as a competitive advantage: "We started out as the smallest and weakest with no factory," he said. "We were outgunned everywhere, except for creativity and design."

With Atari making the transition from a Wild West of bars and taverns to wood-paneled living rooms across America, it needed an evolutionary approach. When Atari created a dedicated Consumer Division, it required doubling down on the company's strengths in design. Along with continued technological breakthroughs, Atari would utilize art and design to take the company to the next level, both financially and creatively. After bringing its popular *PONG* game home with a series of standalone versions, the company also began work on a programmable game system, eventually called the VCS (Video Computer System).

When Bushnell sold Atari to Warner Communications in 1976, the company added Warner's financial might and marketing experience to an already-savvy art department. George Opperman had already built a strong Graphics department focused on Coin-Op, and had set the standard for the way arcade games were marketed, packaged, and designed. Some of those creative team members would make the switch to the newly-christened Consumer Division, while others were brought fresh into the offbeat work environment recognized today as distinctively Silicon Valley. In a world that is much more design-centric than it was 40 years ago, it seems only appropriate to unpack and understand the work and culture that gave birth to one of the superstar brands of the 20th century.

▲ Atari's Coin-Op Design Team (from left to right): Jim Arita, Roger Hector, Steve Hendricks, George Opperman, Gjalt Van Der Wyk, Bob Flemate, Evelyn Lim and James Kelly

> What we do becomes a reflection of how people see Atari in the outside world. No matter if it's a carton illustration or box design, our job is to grab the consumer's attention."
>
> **JOHN HAYASHI**

▲ Consumer artist Jim Arita

▲ Art director Bob Flemate

DESIGN IN ITS DNA

AT A TIME when on-screen game graphics were much less sophisticated, Atari needed artwork and graphic design capable of stirring the imagination. "The games were simple so you had to create as much of the context with reality as you could," explained art director Steve Hendricks. "We had to implant the visual image in the gamer's mind. We would work with programmers who came up with the game concepts." Exciting advertising, contemporary package design and lush illustration would differentiate Atari and capture attention on store shelves, but this whole constellation of creative parts became more than just a way to move merchandise—it became a crucial aspect of the overall game experience. Box artwork often served as a player's first exposure to a new title, coloring her interpretation of the gameplay within. Art and design brought this first generation of home video games to life, allowing players to see more than just the simple pixels on screen. Hand-painted artwork allowed gamers to bridge an imagination gap—instead of crude, blocky graphics, they could visualize gunfighters, space nebula, and roaring Indy cars—creating a rich imaginary world populated by fantastic characters and drama, a familiar doorway to enter this new world of TV bytes and pixels.

Intentionally or not, Atari's creative efforts wove a narrative thread with all of these disparate elements, which became more than the sum of their parts. And the home environment required a different approach than Atari's work in arcades. Art director James Kelly explained: "The artwork was totally different. Coin-Op was all about bold colors, silkscreened art, and attention-getting graphics. And the Consumer art was looser, using offset printing in full color, allowing you to paint it the way you wanted to. It was a broader, more artsy way of working."

Industrial designer and later head of R&D Roger Hector was one of a handful of employees who spent time in the Coin-Op, Consumer, and Research Groups, with a broader perspective on all. He echoed the importance of design and creativity in these new games: "In some ways, art and design were part of the complete package and were of a very high caliber. We were in a continuous state of evolution, and as the process of building game images became more elaborate, design became more important."

In many ways, Atari's success would echo years later in the design-centric approach of Apple Computer. Apple co-founder (and former Atari employee) Steve Jobs' commitment to beautiful design and evocative marketing (often at a high cost) would differentiate his company in its early days with the Apple II, and much later, with the game-changing iMac and iPod. As with Apple, Atari's commercial success and cultural influence owe as much to its emphasis on art and design as its technological innovations.

Bushnell put it in simple business terms: "Design is the best return on investment that you can have," he said. "It's virtually the same cost to build something pretty as something shitty. So why not make the world a better-looking place? Whether it's a box, a game—whether it's an object–pretty is better than ugly."

While Atari was carving out a new business model within an infant industry, it wouldn't journey into the world of design blindly. Strategic hires like George Opperman, James Kelly, and up-and-coming talents like Hiro Kimura, Warren Chang, and Gus Allen helped fill and diversify their creative ranks. While young, many of Atari's new creatives came from the worlds of advertising and design, allowing them to apply more conventional experiences in crafting brands to this upstart industry. They drew on the lessons taught by book jacket design, "big idea" advertising, consumer product design, and many others.

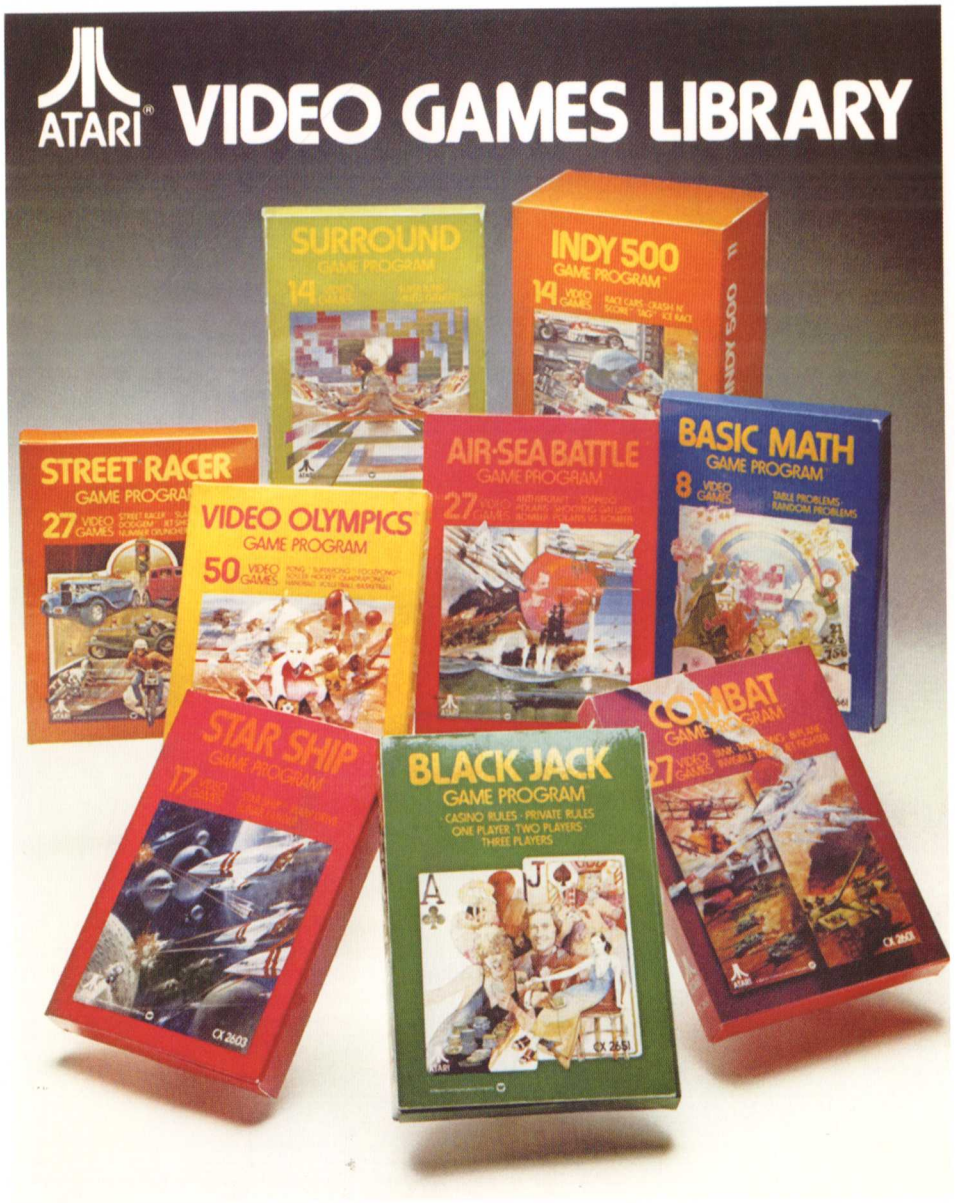
Early on, Bushnell realized that the mechanical coin-operated tradition provided a clue on how to differentiate the design and style of Atari. "The coin-operated business was built on garish, gaudy colors," he said. "I found that if we put a little refinement in the design of our cabinets, and made them more sophisticated, then all of a sudden the market got a lot bigger for us, because we were the only ones doing that. It was a differentiator for us, as well as a market expansion tool."

Bob Flemate, who would later become art director, succinctly explained the craft to *Video Games* magazine: "What we sell is what happens in our minds and comes out through our hands."[9]

Atari's creative teams began sketching out the playbook, gradually creating a new design language that carried through the entire life cycle of advertising, marketing, and sales. Inspiration came from a variety of media and product types, including record albums, paperback book covers, movie posters and home stereo equipment. Because video games exploded at the heart of pop culture, it only made sense that these artists would draw from adjacent areas. This resulting blend hardened over time into Atari's aesthetic, which not only solidified the company's brand, but ultimately earned it a place in America's pop-culture design vernacular.

The brand matured just in time for Atari's rapid growth. With the Atari VCS finally hitting its stride with the release of its killer app in 1980, a home version of the popular *Space Invaders*, suddenly the demand for new games meant a spike in design and illustration needs, and the art department's small staff grew quickly. The group subdivided, with Evelyn

BOX ARTWORK OFTEN SERVED AS A PLAYER'S FIRST EXPOSURE TO A NEW TITLE.



▲ Ad featuring Atari's nine initial launch titles for the VCS

ATARI WAS UNIQUE. AT THAT TIME, VERY FEW COMPANIES HAD INTERNAL ARTISTS, BUT WE HAD SO MUCH WORK TO DO THAT WE HAD A STAFF INSIDE, AND WE STILL HAD TO HIRE SOME OF IT OUT."

—EVELYN SETO

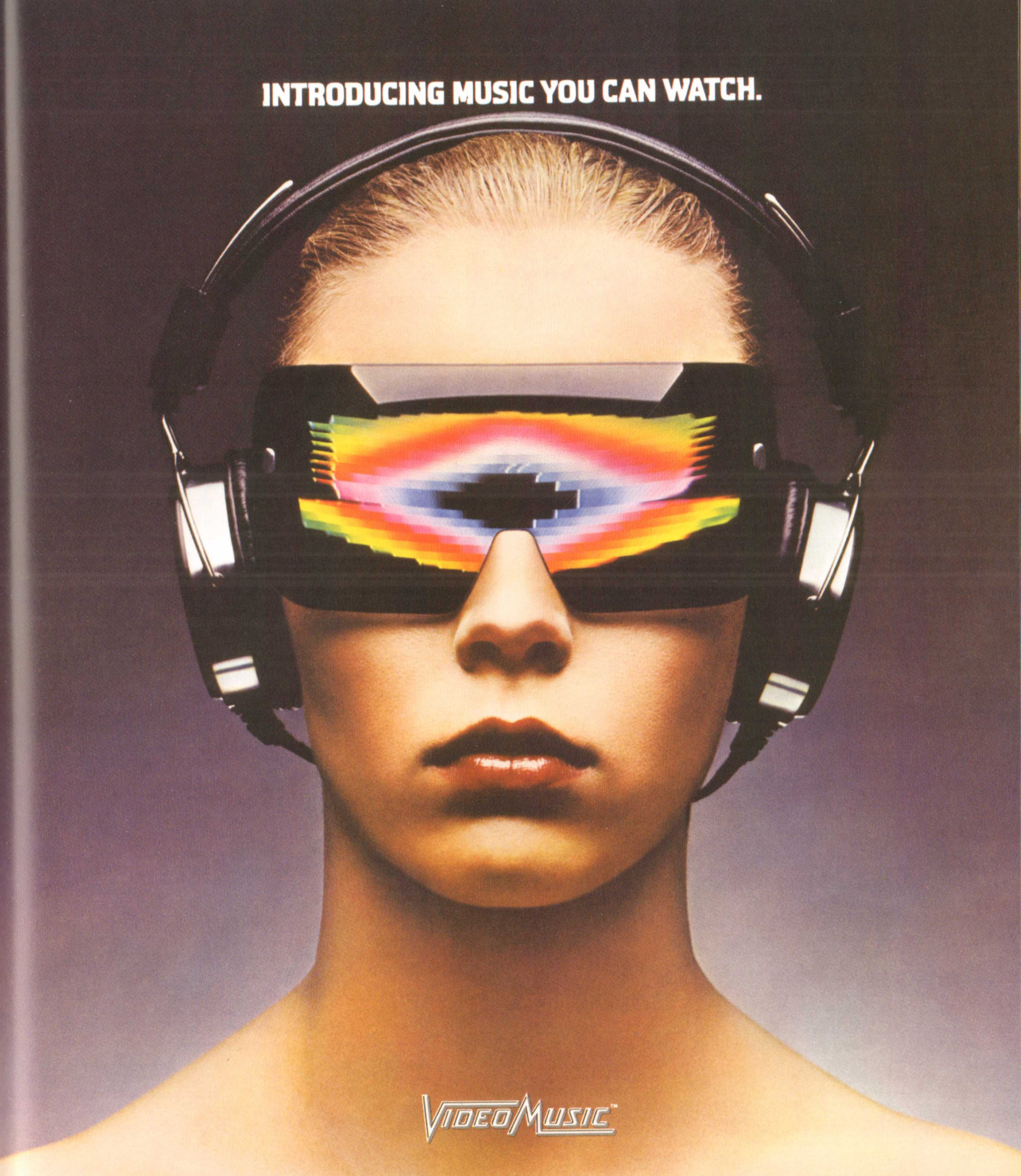
▲ Artist and art director James Kelly hard at work at his drawing table

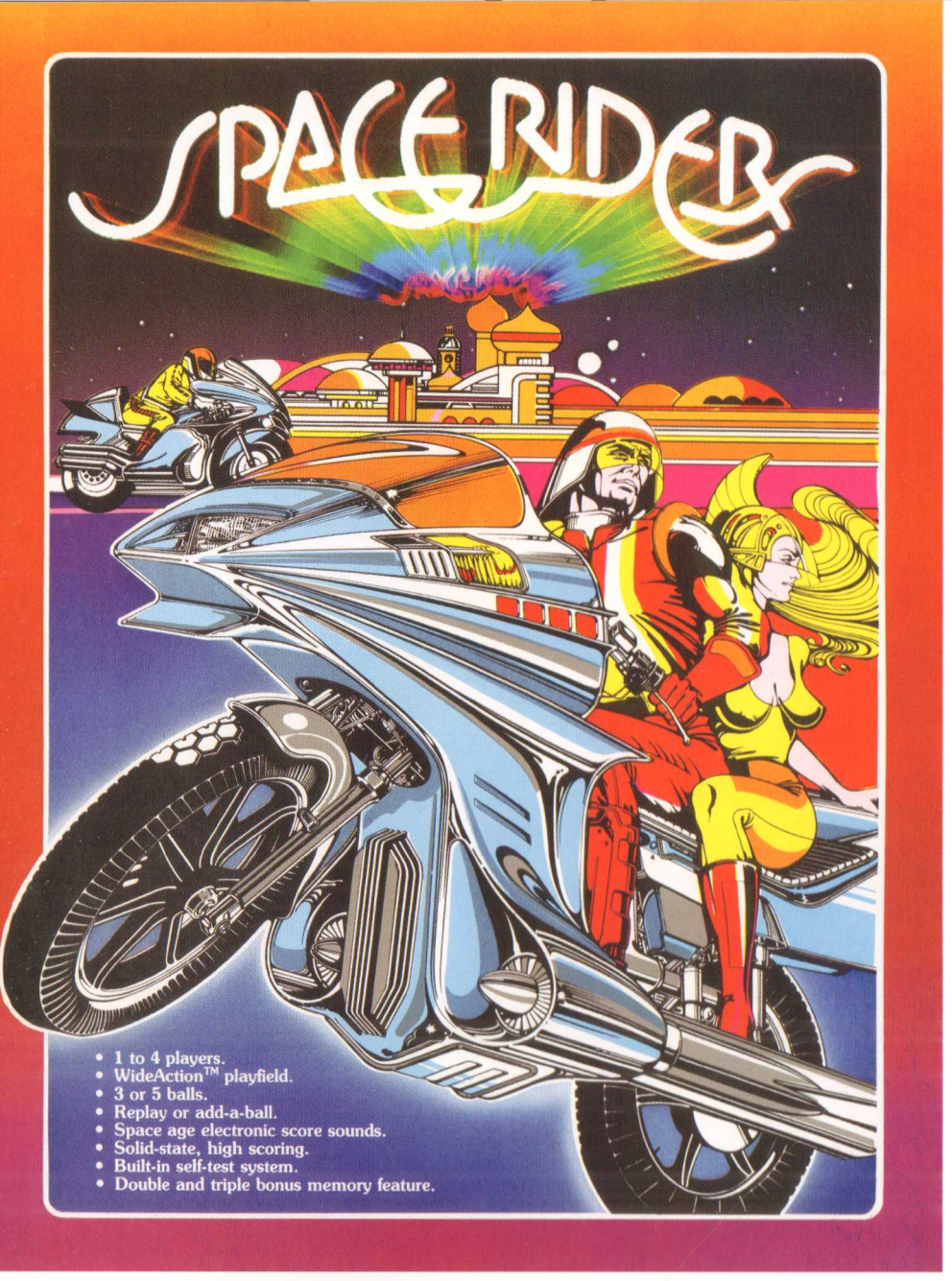
▶ Eye-catching launch flyer for Atari's innovative music visualization console, the Video Music.
Designers: Rich Silverstein, Gino Icardi
Photographer: Rudy Legname (Bozell & Jacobs/Pacific)

Seto managing graphic design while James Kelly managed illustration. John Hayashi headed graphics for the Consumer Division. In describing the team's role, Hayashi explained in a 1981 Atari newsletter, "We're mainly a wing of marketing. What we do becomes a reflection of how people see Atari in the outside world. No matter if it's a carton illustration or box design, our job is to grab the consumer's attention."

"Atari was unique," Seto explained. "At that time, very few companies had internal artists, but we had so much work to do that we had a staff inside and we still had to hire some of it out." Having a large art department meant that the creative process could be collaborative, but that it could also be immediate. Nolan Bushnell relished the chance to be inspired by the creative work around him. He loved to peek at works-in-progress, energized by the team's output. "I loved to go into the art department and see what they were working on," he said. "And in almost every case, I would get my mind blown—for the beauty and simplicity." Designer Roger Hector experienced this first-hand: "Early on, Nolan would come around after hours and steal drawings from my desk and take them elsewhere. He would show them to other people, and sometimes just look at them. Nolan and I became friends—he started by taking stuff off my desk."

While the general corporate culture of Silicon Valley tended to minimize the influence of creatives and their "soft skills," that trend began to change at Atari, as the company sought to integrate its design and engineering strengths. "Graphic artists were often left out of credits in the early days," said Hector. "We had a deep bench of talent including Jim Kelly, Evelyn Seto, Jim Arita, and others. Even George Opperman was a solid artist and a great art director. These guys worked every bit as hard and passionately as the engineers, and were commonly left out of the credits. But the times have changed [in video games], and at least now everyone gets acknowledged. Sometimes it's a cast of hundreds!" Atari leadership, and the organization as a whole, held art and design in high regard, which was nearly unheard of in the tech-centric Silicon Valley environment. This gave the fledgling company a distinct advantage that its competitors were never able to replicate.


INTRODUCING MUSIC YOU CAN WATCH.
VIDEOMUSIC™



◂ Flyers for *Space Riders* and *Airborne Avengers* (Pinball)
Artist: George Opperman

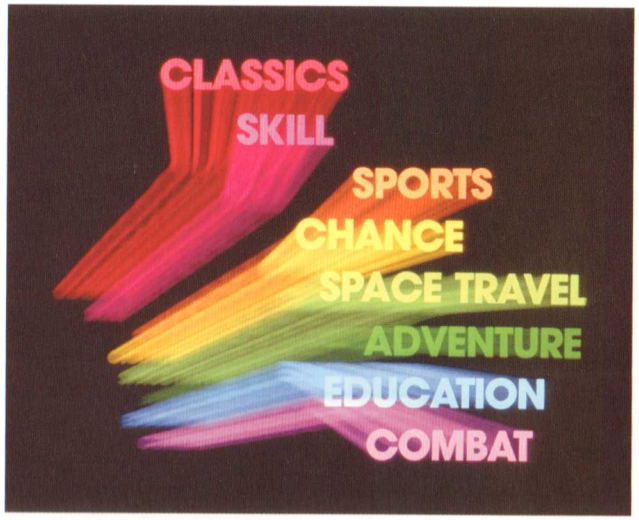
BAY-AREA DESIGN CULTURE

THE ATARI STYLE of design and illustration didn't spring up like a lone flower in the desert, but instead grew out of several visual styles and movements that had percolated and grown natively in California—the Bay Area in particular. The psychedelic art movement in San Francisco was borne out of the counterculture of the '60s, most closely associated with mind-altering drugs like LSD and the underground music scene. Rock concert posters became the earliest canvases of this visual style, with artists like Rick Griffin, Victor Moscoso and John Van Hamersveld showcasing work that featured boldly-saturated colors vibrating in glaring contrast, as well as elaborate, ornate, distorted typography, and elements of collage. Drawing inspiration from Art Nouveau, Victorian art, Dada, and Pop Art, this indie style was soon appropriated by the music industry for vinyl record album cover design, and by the end of the '60s, had made its way into mainstream consumer marketing. The visual styles echoed an outsider perspective, free of constraints, concerns of legibility, and embraced a sea change in values and social mores that typified that generation.

The expressive lettering and bold palettes of this late 1960s work undoubtedly influenced designers like George Opperman, whose bespoke typography and color choices reflected a similar sensibility—highly-crafted linework coupled with raucous color. Opperman's typography veered into the ornate and curvilinear, and his designs consistently utilized the thicks and thins of multi-leveled line illustration, as well as highly-saturated, warm colors.

In parallel, the West Coast was home to the rise of supergraphics, a designation given to large-scale, abstract designs that spanned large buildings, structures, and retail interiors. Designers of this movement (and architects) used these physical environments as a medium for communicating with enormous patterns and bold colors on interiors and exteriors. Designers like Barbara Stauffacher Solomon and Deborah Sussman (best known for her work on LA's 1984 Olympics) used scale to provide stunning visual stimulus, bending their designs around architectural details, walls, and other places. These simple shapes, deployed at billboard sizes, would draw the eye around corners and at odd angles in order to capture visual attention. These characteristics are present in much of Atari's early cabinet side art, which functioned in the same way, but on a slightly smaller scale.

▶ The typefaces Harry and Bauhaus were both used on Atari 2600 cartridges and packaging, sometimes interchangeably



▲ Glowing typography used on Atari 2600 packaging and promotional pieces

▶ Harry Fat 60pt AaBbCcDdEeFfGgHhIiJjKkLlM

▶ Bauhaus Bold 36pt AaBbCcDdEeFfGgHhIiJjKkLlMmN

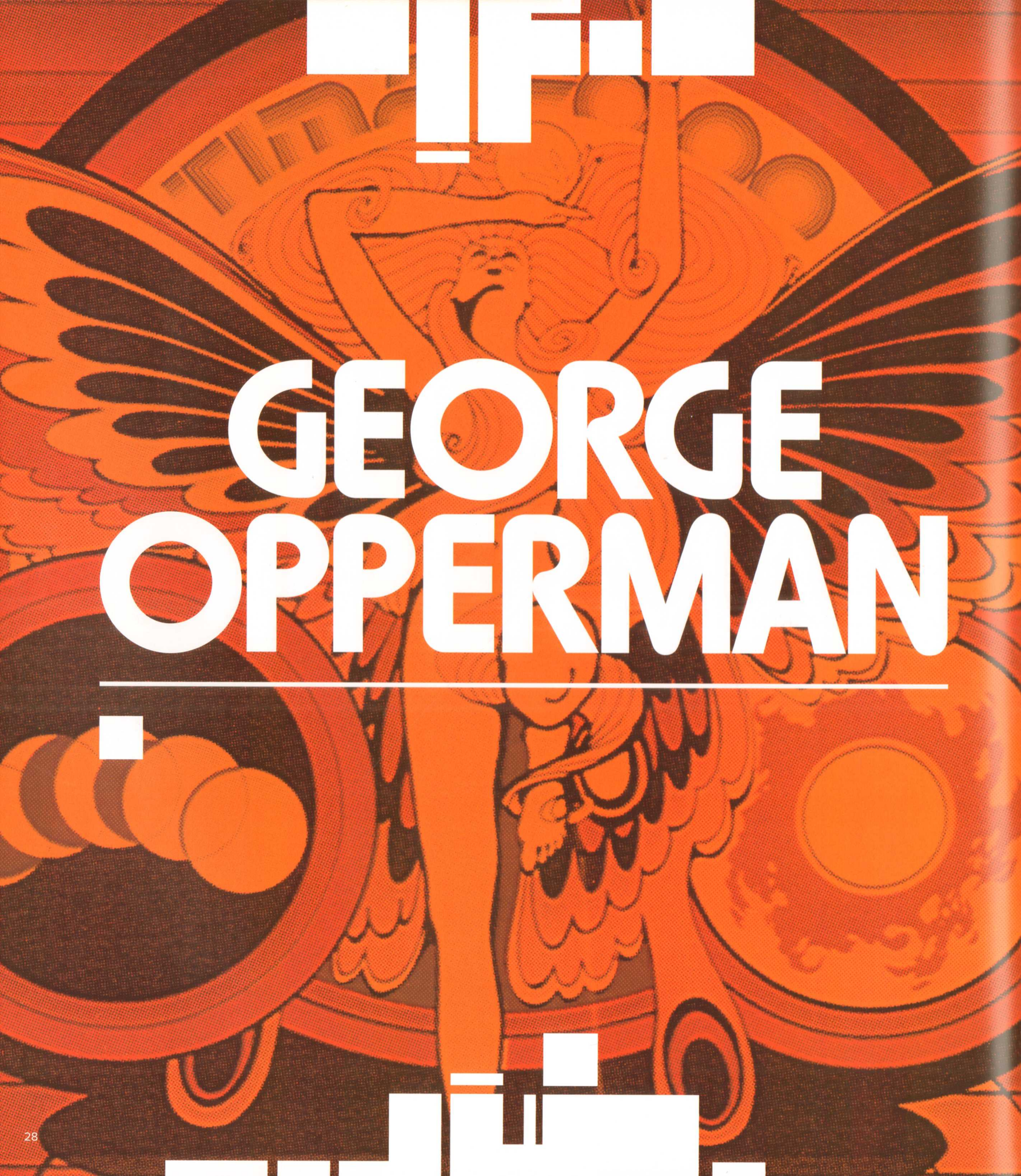
TYPOGRAPHY

AN ESSENTIAL PART of developing a brand identity is the deployment of a cohesive system of lettering, or typography. As Atari moved further into the consumer products space, the company's visual identity became crucial in defining products as Atari's, and also to communicate a holistic look and feel.

The company's typography began with the logo designed by George Opperman in 1972. The wordmark of the logo was based on a version of a typeface named Harry. Created in 1966 by designer Marty Goldstein (with help from C.B. Smith), the typeface has a variety of friendly, curved edges and rounded forms, which contrast with its compressed and upright posture. Goldstein, born in Chicago in 1939, is best known for co-creating the *Creative Black Book*, an annual directory of artists and suppliers to the advertising industry. Goldstein was still a young designer, just six years removed from his time at Brooklyn's Pratt Institute, when Visual Graphics Corporation (VGC) published the typeface, named after Goldstein's father, Harry.

The typeface also found its way onto the packaging of Atari's 2600 games—on cartridge labels, boxes, and instruction manuals. When displayed side-by-side, as in a retail location, the rainbow of colors and consistent design treatment form a unified whole of game titles. Atari's brand typography stands out and provides a binding consistency.

Another of Atari's workhorses was called Bauhaus. An iconic typeface, it was developed by Herbert Bayer of the legendary Bauhaus School in Dessau, Germany, in 1925. It features a rounded, sans-serif design whose forms were derived from the straight edge and compass. The typeface is mostly associated with Roaring '20s and Art Deco-era design, but it found new life in the 1970s. Ed Benguiat and Vic Caruso redrew Bauhaus for the International Typeface Corporation (ITC) in 1975, in part because its simple, clean lines and not-quite-closed counterforms make it noticeable when set in larger sizes. ■


GEORGE
OPPERMAN

▶ George Opperman reviewing backglass artwork with colleagues Evelyn Seto and Bob Flemate

ATARI'S VISUAL SOUL

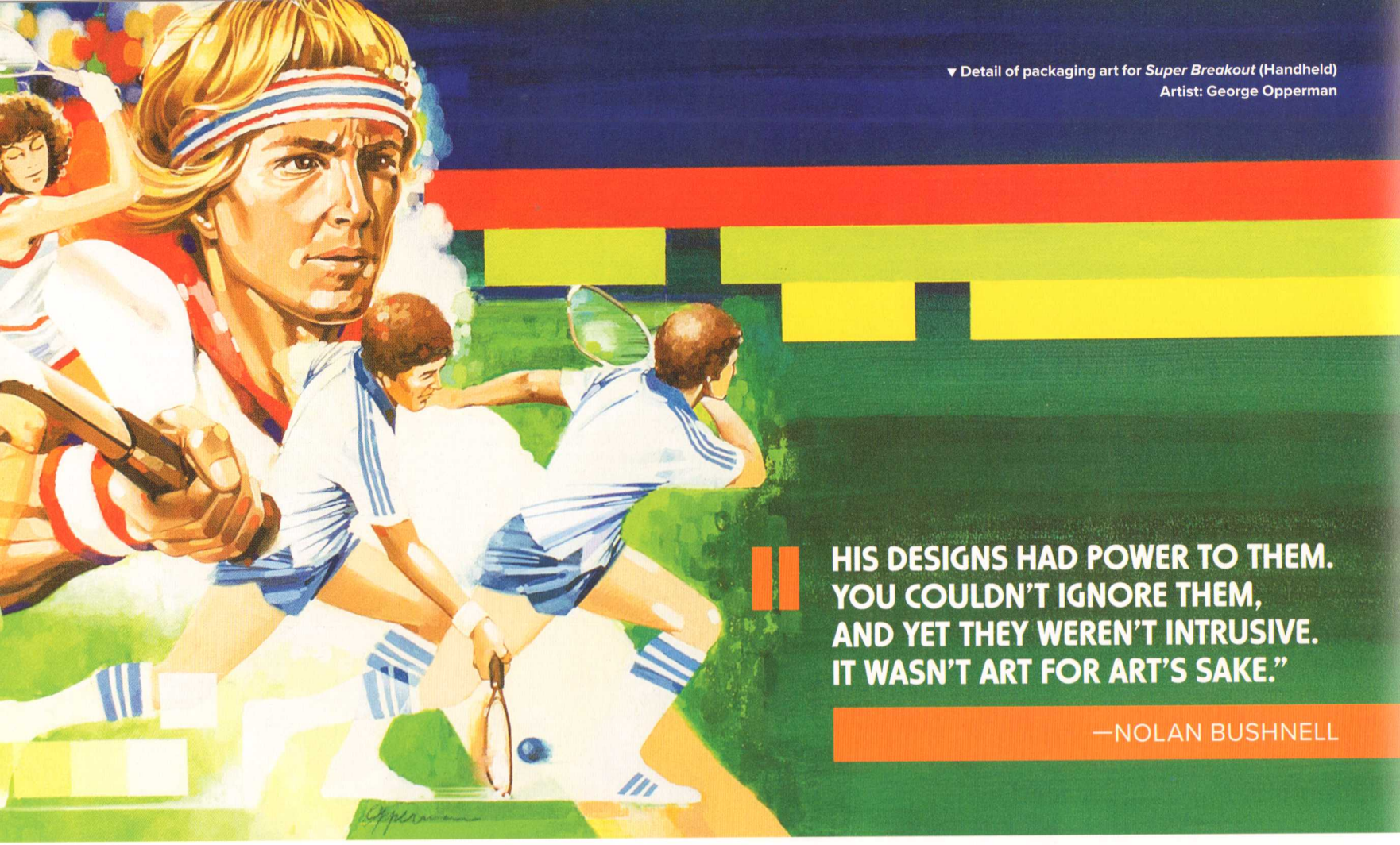
CHAMPIONING POWERFUL DESIGN

GEORGE HENRY OPPERMAN was born on January 5, 1935 in Canada. A versatile artist, he studied fine art at the Ontario College of Art and Design in Toronto, as well as graphic design and marketing at Drake University in Des Moines, Iowa.

In 1966, Noland Vogt, Dale Gruyé and George Opperman founded the design agency GVO (Gruyé-Vogt-Opperman, Inc.) in Palo Alto, California. Dale Gruyé was an industrial design engineer with Hewlett-Packard, and Noland Vogt an industrial designer hailing from recording equipment powerhouse Ampex. The two were friends at Art Center in Los Angeles, and were intent on going into business for themselves. Opperman joined them, and the three sought to build a hybrid firm that would combine graphic design and advertising with industrial design services. While this multidimensional business model would become more commonplace decades later, at the time the complex offering proved to be a financial challenge for the young firm. They struggled to turn a profit, and in 1971, Opperman allowed himself to be bought out and formed his own more focused firm.[10] Gruyé and Vogt rejiggered their GVO acronym into the Gruyé Vogt Organization. GVO narrowed its focus to industrial design, and would eventually become one of the first ID firms to blend engineers, researchers, cultural anthropologists, human factors specialists, and makers into an integrated design process.

Opperman then formed Opperman-Harrington, Inc. with Ursula Harrington, an associate from his time at GVO. The pair partnered at the small agency, where he met Evelyn Seto, who was later hired on as a production assistant. "The agency was very small," Seto said, "One writer, an art director, media buyer, a production manager, a front office person, and myself—a production assistant."

In that era, Silicon Valley was awash with non-consumer, technical companies developing components and parts for bigger clients. This wasn't the kind of sexy, famous work that larger San Francisco or New York ad agencies had much interest in. But smaller local firms picked up many of these



▼ Detail of packaging art for *Super Breakout* (Handheld)
Artist: George Opperman

"HIS DESIGNS HAD POWER TO THEM. YOU COULDN'T IGNORE THEM, AND YET THEY WEREN'T INTRUSIVE. IT WASN'T ART FOR ART'S SAKE."

—NOLAN BUSHNELL

jobs, designing for clients and trade publications. According to Seto, Opperman-Harrington was one of these of firms. She explained, "Companies like Fairchild Semiconductors, FMC, Ampex, Lockheed, Westinghouse, IBM, HP, Intel, and AMD were around. Regis McKenna [whose firm was instrumental in Apple Computer's early marketing and design] became a local agency powerhouse when he made companies like Intel interesting. I would not be surprised if video games didn't wake up the ad world and they came a-calling."

Seto, who would later rejoin Opperman at Atari, was directly involved with his initial Atari work during their time together at O-H. Atari design director George Faraco was instrumental in hiring Opperman and O-H, initially to work on logo concepts for the evolving Atari. Faraco, a designer himself, connected with O-H through his mutual friend, Dale Gruyé, both members in the local Industrial Designers Society of America (IDSA) chapter. Seto filled in some of the details: "George met and worked with Nolan around the time they decided to drop Syzygy from their original name to just Atari."

The now-famous Atari logo was created in 1972 under the purview of Opperman and his small team at O-H, with George Faraco providing creative direction and oversight on the Atari client side. After more than 150 logo concepts created over six months, Faraco recalled:[11] "I said, 'Yeah, it's this one.' And why I picked that one? It's because I have a pretty sophisticated artistic design sense! And that was the one that I knew was the winner."[12] Seto also had a hand in that original logo as well. "I inked the original," Seto said. "I inked it and handled the production." Atari engineer and employee number three, Al Alcorn, said that Atari had paid Opperman $3,000 for the logo.[13]

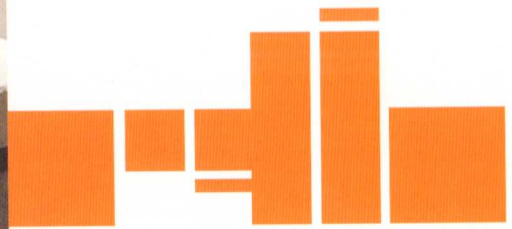
The creative partnership apparently worked well, as Opperman continued his relationship with Atari independently until 1976, when he folded Opperman-Harrington, and joined Atari full-time. Opperman would prove instrumental in establishing Atari's visual brand and executing many of its classic arcade titles.

Faraco was gone by 1976, and Opperman then led the art department. His effect on the company was dramatic, owing to his leadership, nose-to-the-grindstone work ethic, and design skills. Seto elaborated, "George was an incredibly talented man. He could both design and illustrate, which is, in my mind, a rare combo. On a deep level, I think George was a nice man who lived and breathed design and graphics. He was a hard-working, intense man. I will say he was a perfectionist." He joined Atari as one of its more seasoned employees: he was 41, eight years older than Bushnell.

Bushnell deeply appreciated Opperman, and had seemingly found an experienced design and marketing hand

◂ Opperman with art director Bob Flemate, *Video Games* Magazine, June 1983

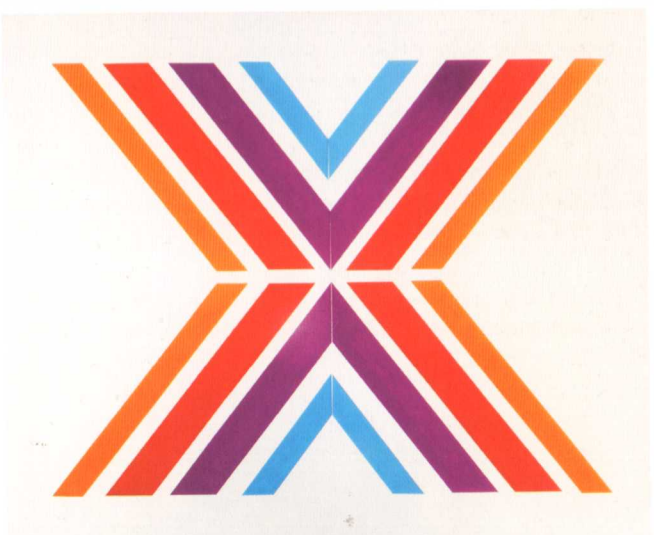
> At Atari, we like to think everything Industrial Design and Graphics do contributes to making every Atari game an adventure for the player."
>
> **GEORGE OPPERMAN**
> 1981 ATARI PROMOTIONAL VIDEO



▾ Logo created for Atari's 10th Anniversary celebration
Artist: George Opperman

to help communicate a singular visual message for the young company. Bushnell elaborated on Opperman's design style: "He just had this simplicity—I like to think of him as the Matisse of Graphic Design. I loved working with him. It was one of these delightful things."

"One of the things that George did really, really well," Bushnell said, "is that his designs had power to them. You couldn't ignore them, and yet they weren't intrusive. It wasn't art for art's sake. It was a powerful communication of what was in store for you in the game. It made you want to play it. It was really communication through images. I always liked that about George, because you get a lot of designers who want to do pretty for pretty's sake, and you'll say what is your aim with this look? And they'll say 'Well, people will love this look,' and you'll say, 'No, what are you trying to communicate with this look? What are you trying to say?' I think an awful lot of designers get carried away with look and feel and forget that the primary job is communication."



▲ Opperman at his drawing table in a lighter moment

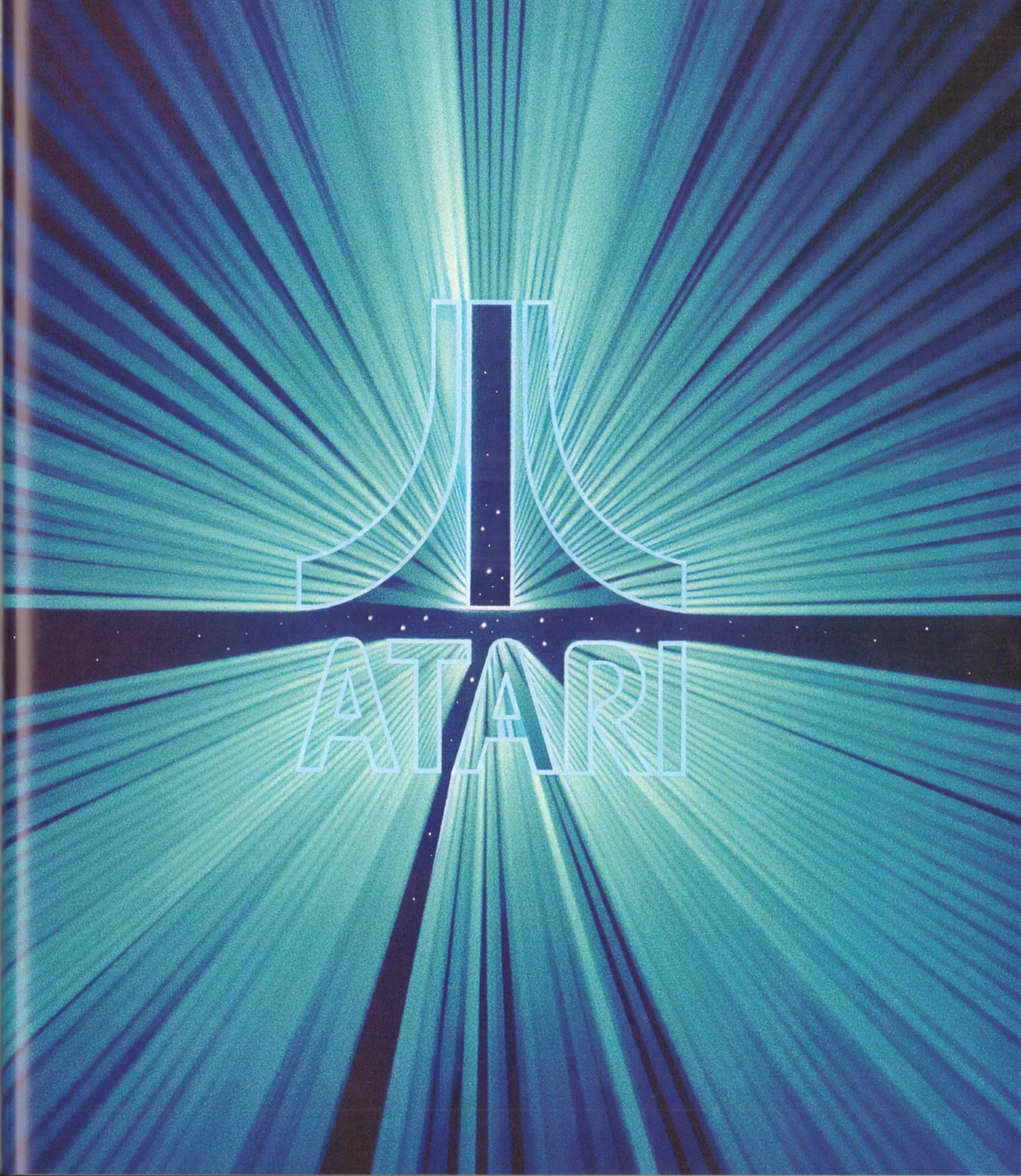
Precious little has been written about George Opperman, and his quiet personality didn't lend itself to grandstanding or bragging. In one of the few instances of discussing his approach, Opperman summed up his design philosophy this way in a 1981 internal Atari newsletter: "We are visual salesmen ... we collectively try to interpret both the quality and play value of every Atari game. Above all, graphics must attract the players and help them feel that every Atari game is an adventure."

Art director Steve Hendricks had more praise for Opperman. "He was an artistic dynamo," Hendricks said. "George was a workaholic, but was a super nice guy. When I think of him, I remember the smell of nicotine—he was a chain smoker. It was almost like he was a factory, churning out tons of wonderful creative in that smoke-filled office of his."

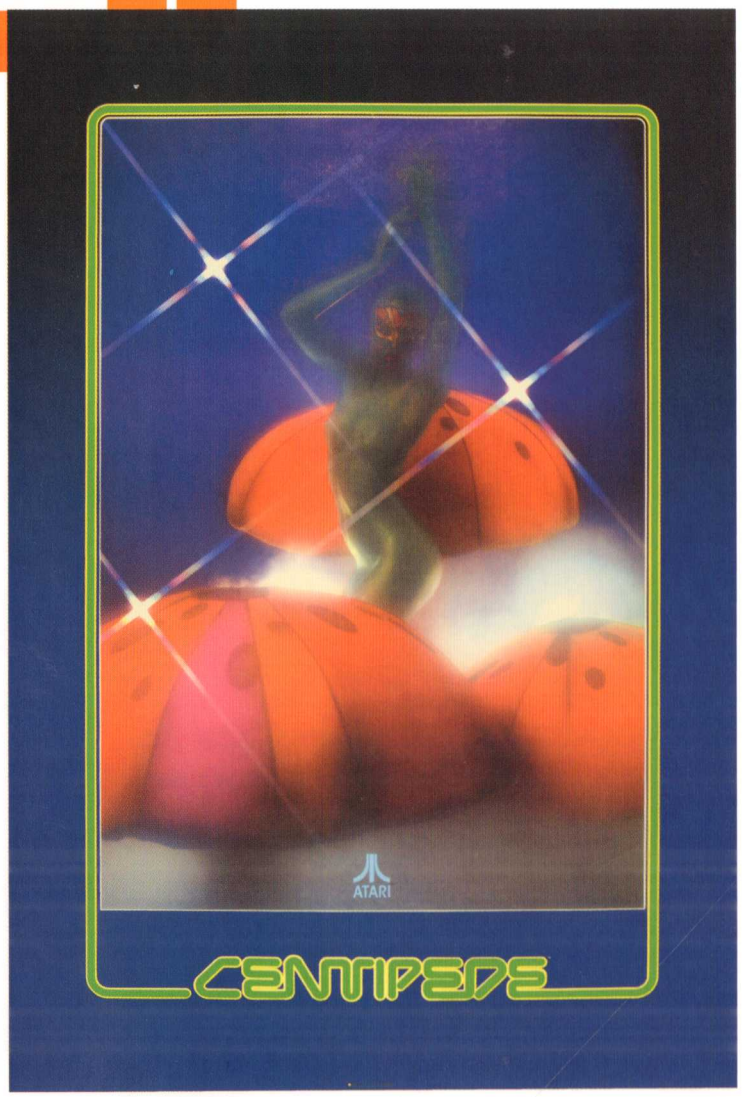
Roger Hector, who spent a year in Opperman's Graphics Group before moving onto industrial design and R&D work at Atari, appreciated what the art director brought to the table creatively. "George was the linchpin of the whole thing," he said. "He provided creative freedom and assistance when needed, and the art director quality of very high standards. I credit George with setting the standard and the tone for the group. It made it a pleasure. He was very well-liked, well-respected, and a very good leader of the group. He always had creative suggestions and ideas to make things better, but would allow the diverse talent of the team to express themselves. He didn't ride over you. He loved to get in there and do it himself, and was fully capable of doing it himself. That was back in a time when everything was hand-made in an old-school, traditional way. I respected him greatly. He knew everything he needed to know to run this group and could do it himself. That combination worked well for everyone."

The head of Atari's Industrial Design department, Peter Takaichi, remembered Opperman this way: "I was in constant

▶ This glowing, seemingly moving version of the Atari logo was created by Opperman for the cover of an Atari recruiting brochure


ATARI

▸ Flyer art for *Time 2000* (Pinball)



▲ Opperman described this *Centipede*-themed poster aimed at arcade distributors to *Video Games* magazine: "It was unusual, to say the least, to be working with a girl in green greasepaint. And those models don't work cheap either. It's good, but it's definitely not what we would put out for the general public."

"FEW PEOPLE HAVE GIVEN AS MUCH OF THEIR LIFE TO A COMPANY AS GEORGE GAVE TO ATARI."

—DAN VAN ELDEREN

awe of his creativity and imagination," Takaichi recalled. "His work in graphic design and advertising/marketing really distinguished Atari from the competition. George worked incredibly hard. He put in long hours and routinely came in on the weekends. He demanded the best results from himself and from his staff. He was perfectionist, and work that was not done to his standards was redone, no matter the cost in time or money. George had the final say on everything that his group produced."

Fellow art director James Kelly remembered that Opperman also had a handle on the business side of keeping creatives challenged and appreciated. "Compared to a lot of other illustration jobs, we were paid well. It was always that way. That was George Opperman. That was his way. And he was a perfectionist, and that would drive you crazy, but it became the way we all worked."

However, Opperman's creative output and development of the Atari team wouldn't last. On November 27th, 1985, he passed away after a diagnosis of advanced lung cancer. On that day, Atari Games President Dan Van Elderen sent the following internal company email with the announcement of Opperman's passing: "Few people have given as much of their life to a company as George gave to Atari, and even fewer will leave behind the marks of permanence and beauty and art that George was able to leave."

Opperman's design style was as varied and unique as his skillsets. Not only was he an accomplished illustrator and painter, but also a strong designer, capable of bold and nuanced design work in logo and identity design. His typography tended to be bold, striking and expressive, sometimes bordering on the abstract. Emblematic of the times, his identity designs were balanced, visually layered, and often played fast and loose with letterforms, many of them bespoke. Nearly 40 years later, his work echoes the times, with an emphasis on emotive lettering, complex linework, and saturated color palettes. Within the confines of video games, one can see similarities in the approach to color and type in the work of Tom Kamifuji, another California designer best known for his series of colorful, screenprinted art. Kamifuji was also the package designer for Fairchild Semiconductor's Channel F video game system, the first removable cartridge-based console. (In an interesting case of interconnectedness, Kamifuji's work was also an inspiration for the rainbow stripes of Apple's iconic logo, designed by Carlos Pérez and Rob Janoff at advertising firm Regis McKenna.)[14]

But these designers were not the only ones to tap into the developing zeitgeist of '70s California design—with its bold, colorful, overlapping outlined style showing up in everything from Heinz Edelmann's work on the Beatles' *Yellow Submarine* film, to ABC's *Wonder Woman* television title sequence by Phil Norman.[15] ■

TIME 2000
A New Pinball
TIME 2000

▸ Opperman reviews arcade silkscreen films with production supervisor Gjalt Van Der Wyk

THE LOGO

BEHIND THE FUJI

ONE OF THE most enduring pieces of graphic design to come from Atari is the company's logo itself. Long after Nolan Bushnell and his successors have moved on to other ventures, and the company itself has changed hands multiple times, the Atari logo, affectionately nicknamed "the Fuji," still persists as a lasting part of popular culture. More than 40 years after its creation, the logo still epitomizes retro video games, '70s/'80s pop culture, and the halcyon days of Atari's market dominance. Even today, teenagers wear t-shirts emblazoned with the logo, though most of them have probably never played an original Atari console. While other logo designs of the era—Carolyn Davidson's Nike "swoosh" or the Apple logo created at Regis McKenna—have spawned mythologies and lengthy design criticism, the origins of the Atari logo are still wrapped up in some mystery, adding to the mystique of its designer, George Opperman, and the iconic mark itself.

The facts we do know are here: George Opperman designed the logo for his clients at Atari, while working at his own agency, Opperman-Harrington Inc. Atari creative director

▾ These final Atari logo concepts by George Opperman were mounted on presentation board and submitted to Nolan Bushnell and others for selection

George Faraco and co-founder Bushnell were involved in the creative direction and final selection as well. But Opperman's creative process and actual intent are much less clear. In a 1983 interview with *Video Games*, Opperman explained the origins of the logo this way: "Symbols are just visual nicknames that combine first letters and interpretive design elements. I kept trying to stylize the 'A,' then I looked at *PONG*, their big game at the time. *PONG* had a center line and a force (the ball) that kept hitting its center from either side. I thought that (force) would bend the center outward. And that's what I designed."

This explanation was intended to solidify Opperman's intent behind the logo, but not all parties agree with the "official story." In other interviews,[16] Faraco insisted the logo had no such concept behind it, and suggested that Opperman imputed this explanation after the fact. "That's all utter bullshit," Faraco said. "It's just a design. There was none of that linguistic, storytelling crap. That's somebody's invention. He gave me a bunch of doodles, so I said 'Use this one,' and that was it."

For his part, Bushnell believes that Opperman purposefully offered multiple, conflicting origin stories for the logo—like the idea that it represented a Japanese character, or its similarity

> **"I LOVED IT FROM THE DAY I SAW IT. THERE WAS NEVER ANY HESITATION."**
>
> **NOLAN BUSHNELLL**

to the famous Mt. Fuji. Regardless of intent, the final version of Opperman's logo made its public debut in promotional materials and the cabinet for the arcade game *Space Race*, in 1973.

Bushnell recounted his own creative brief for the Atari logo: "I said, 'It has to be very simple. You have to be able to recognize it from one hundred feet away if it's on an 8x10 piece of paper, and it has to be easily reproduced on hats, t-shirts, or what have you. It can't have a lot of tiny lines—it has to be bold.' I loved it from the day I saw it. It was like 'That's it!' There was never any hesitation."[17]

The logo would go through changes and minor alterations in the years after Atari's sale, division, and subsequent changing of hands. But Opperman's version of the Atari logo once again graces products and merchandise today, and that mark is an indelible representation of the best of Atari. Al Alcorn detailed how efforts to refine Atari's visual image were underway, even just four years after the logo debuted: "When Warner Communications bought us in 1977, they said 'Well, we're going to putsch up your image,' so the first thing they did was do a survey to see what the impact of the Atari name and logo was, before they changed it, to get a reference. Turned out it had better brand recognition—this was in 1977—than Mickey Mouse. It was like 'What?!' So we had paid $3,000 for the original logo from [George] and they spent $100,000 to find out—don't fuck with it! So really, it became an icon, a worldwide icon, so that's cool."[18] ■

ATARI LOGO EVOLUTION

1: Syzygy Engineering logo
2: Atari *PONG* cabinet logo
3: S/A Hybrid logo
4: New logo with S/A Atari typography on it
5. Final logo

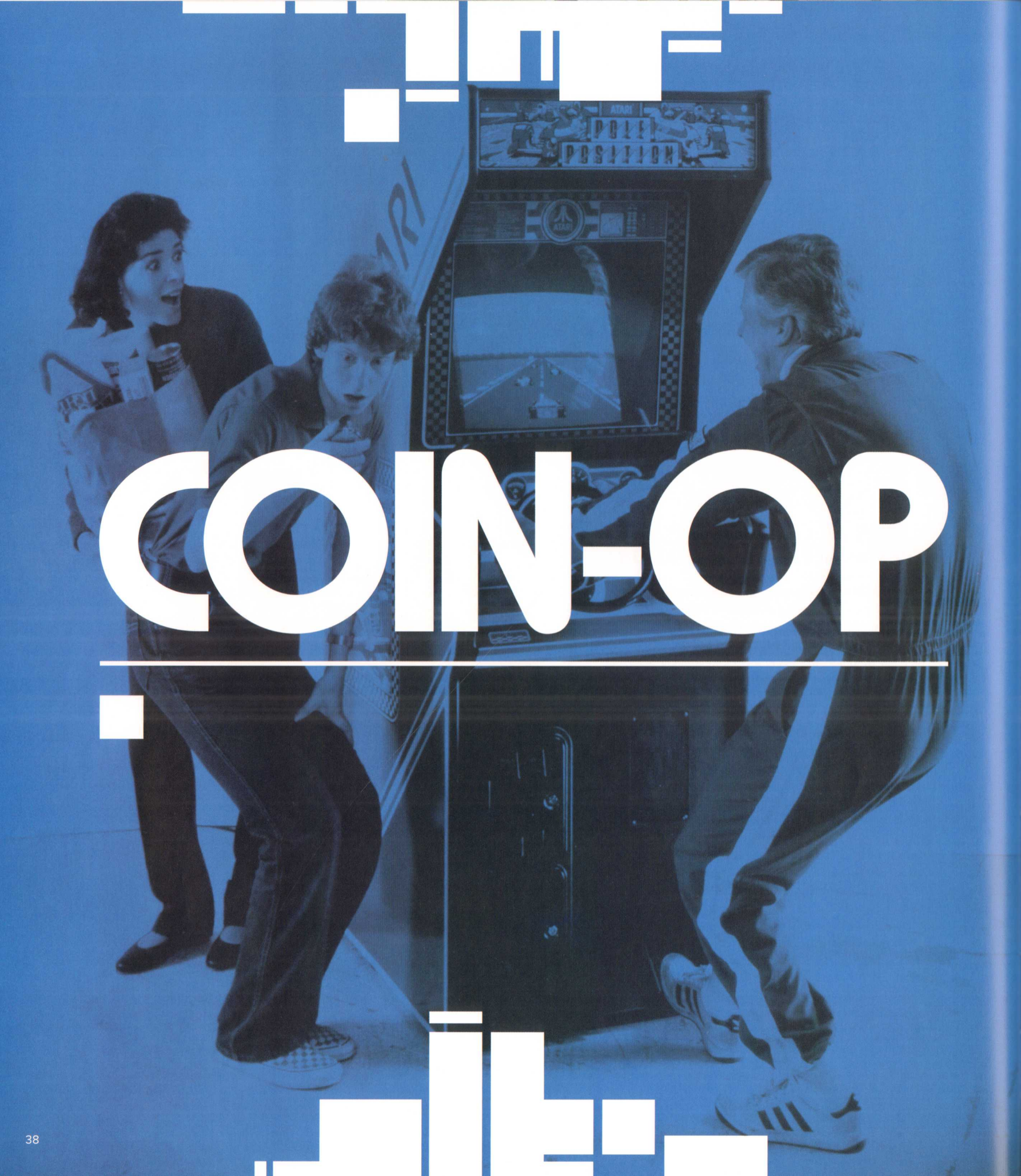
1

2

3

4

5



COIN-OP

FROM COIN TO CONSUMER

DESIGN EVOLUTION BEYOND THE ARCADE

ATARI MADE ITS mark creating inventive, immersive arcade games, and the company never truly strayed far from those roots, for good reason. As Atari grew to include a slate of products aimed at the burgeoning consumer market, its design strategies would also evolve.

George Opperman and his team, paired with a strong cadre of young industrial designers, together defined a look and feel for Atari's arcade games, which would later mature into the signature visual language of Atari consumer products—consoles, cartridges and the like. But the creation, marketing, and presentation of arcade games stood out in the industry—not just for game quality, but also for a commitment to high-end design and illustration.

In some ways, Atari's internal design group was part of a tradition that existed within the pre-video game coin-op world. "Part of what established a business style were the pre-existing pinball machine companies," Roger Hector explained, "and it's a very big process to create a set of pinball artwork. The backglass and all the pieces, the playfield and all of that—you can't really shop that out if you're Gottlieb or Bally. You build an in-house group. And Nolan and the gang—the executives at the time—they found that out. So, I think that was inspiration for them to take someone that they knew and respected—like George [Opperman]—and say, go do this. And George had a wide-ranging background that he brought to it, and managed to hire some really good people."

Arcade cabinets had multiple audiences: The "cabs" and their graphics had to be attractive enough to entice owner/operators to consider them, allowing these buyers to visualize each within their location as prospective income-generators. The final artwork and cabinet designs needed to speak to the other target audience—game players—often in visually busy or chaotic environments. Either way, it was crucial for both audiences to connect with the games in order to achieve the end result—players willing to walk up to a cabinet and insert a quarter.

Hector again laid out the landscape: "The arcades were the focus—games were bought by distributors and the distributors were a bunch of old dudes who had been around since the days of pinball. Their business started with pinball machines and jukeboxes, and they demanded a certain style of graphics—bright and colorful. And all of the games really had silkscreened graphics on the side panels that were generally bold colors to work in the street locations and the arcades."

▲ Atari Coin-Op sales team, 1979, left to right: Frank Ballouz, Howie Rubin, Sue Elliot, Don Osborne, and Tom Petit

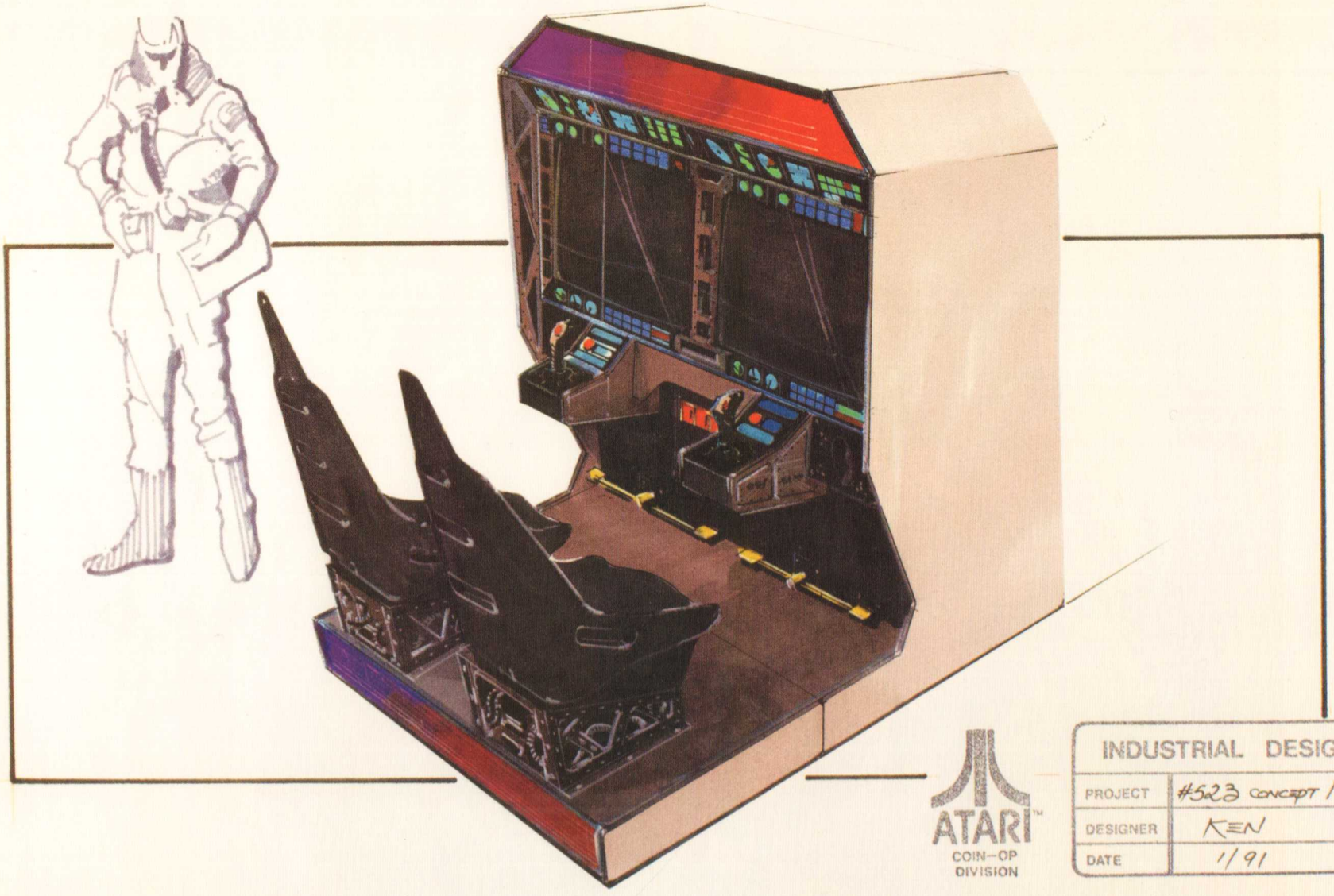
▲ Ad that ran in *Replay* magazine, focused on arcade owners

▲ The environmental cockpit style cabinet for *Pole Position II*

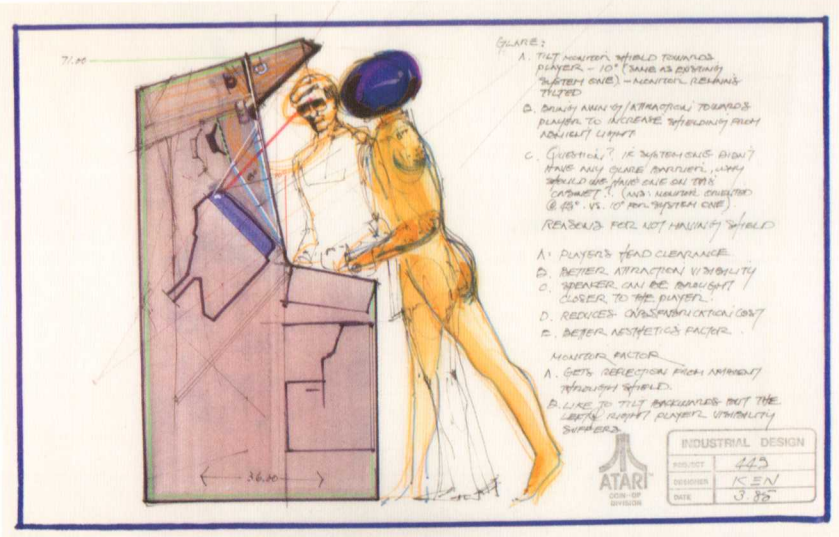
CABINET ART

PART OF THE complete package that also included gameplay, attract screens, and physical design, cabinet art was one of the main on-site promotional tools used by designers to draw players in. Creative, large-scale artwork was not only important to set the tone for the game itself. It also helped distinguish a game from other competitors. While cabinet art played an crucial role in the attractiveness of a game, industrial designer Barney Huang admitted that eventually, the evolution of arcades meant changes for this work at Atari. "With coin-op, the arcade owners tried to pack more games into a small space to make more money," he said. "So these beautiful side graphics got lost as they packed them together. Eventually we standardized the cabinets more and more, so from a design point-of-view, there weren't a lot of challenges left."

▲ A photo used in the flyer for the arcade game *Gotcha*. The game's infamous controls were round, pink and dome-shaped—designed to suggest a woman's breasts. Soon after, arcade cabinets were retrofitted with more standard controllers.
Industrial Design: George Faraco



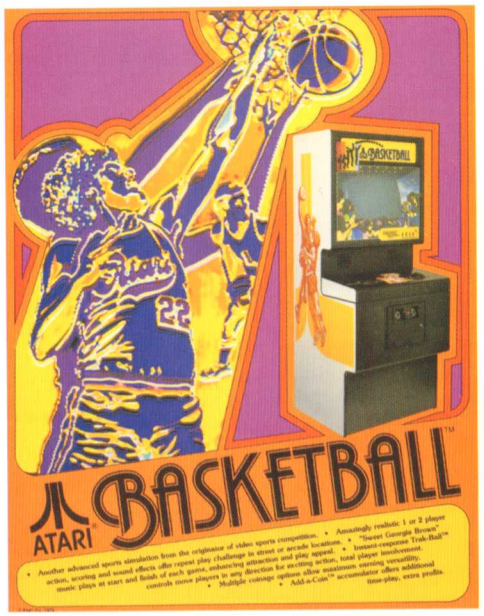
◄▲ Arcade cabinet design concepts were used to work through design challenges as well as promote new visual concepts
Designer: Ken Hata

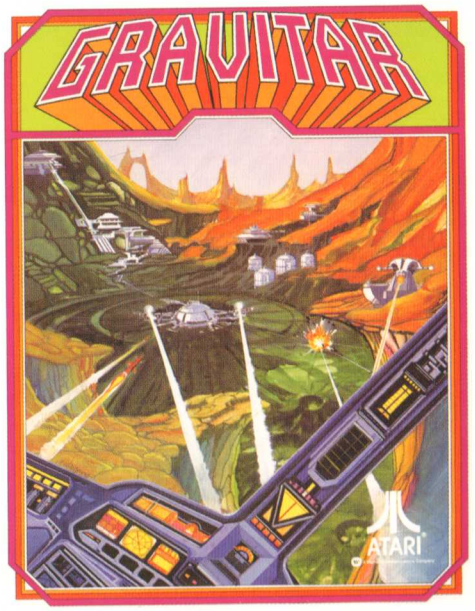


Industrial designer Barney Huang laid out the team's general thinking on creating unique physical, arcade experiences: "When we did arcade cabinets, we asked, 'How do you make two dimensions interesting? What if we create 3-D vacuformed dimensional parts?' We had to keep coming up with something new. But in the end it was all about the quality of the software."

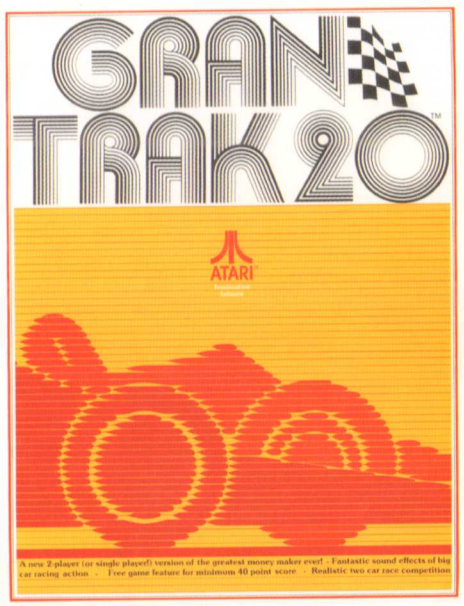
FLYERS

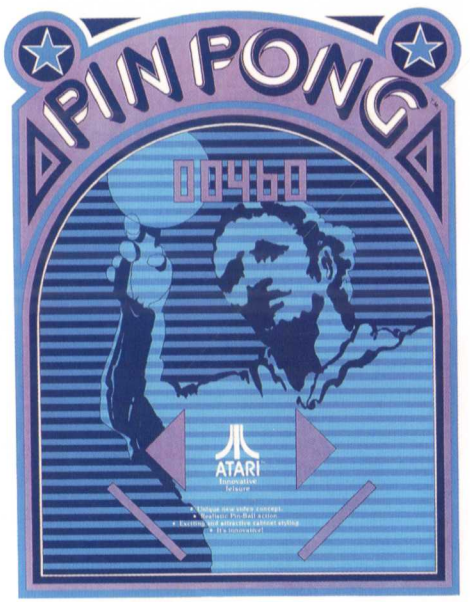
ARCADE FLYERS WERE the standard tool of the trade to promote sales of arcade games. Atari's flyers were powerful representations—not only of the games, but also the overall game experience. While nothing could replace gameplay demonstrations or gorgeous side art, flyers played an important role in the sales process.


BASKETBALL
ATARI

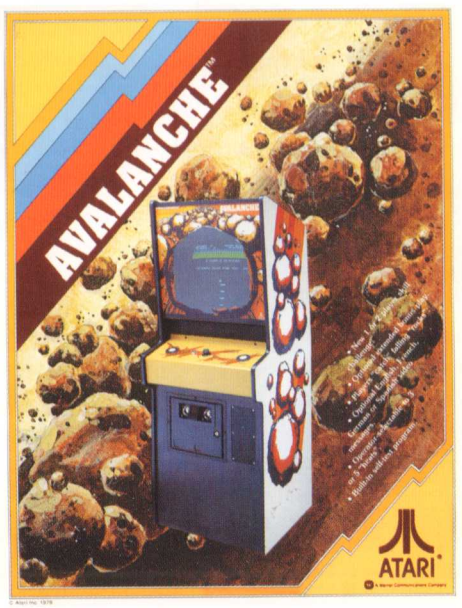

GRAVITAR
ATARI

DOMINOS
ATARI


GRAN TRAK 20
ATARI


PIN PONG
0046D
ATARI

ATARI
SOCCER
ATARI


AVALANCHE
ATARI

SUPER
BREAKOUT
ATARI

ULTRA TANK
KEE GAMES

▲ Color rough coin-op flyer for *Star Wars* (Arcade)

▼▲ Color art for *Food Fight* marquee art and t-shirt graphics

▼▶ Cocktail cabinet side graphics for *Soccer* (Arcade)
Artist: Evelyn Seto

▶ Initial cabinet art concept for *Paperboy* (Arcade)

▲ Marquee artwork for *Solar War* (Pinball)
Artist: Bob Flemate

EVOLUTION TO CONSUMER

ART DIRECTOR AND illustrator Steve Hendricks spent time in both Coin-Op and Consumer Divisions, and noticed a healthy influence of one group on the other. "Coin-Op really impacted the Consumer Group," he said, "in terms of gameplay, and of course, the graphics—it really inspired what happened in the consumer area."

Roger Hector, part of the Coin-Op team and later head of R&D, explained the shift taking place inside Atari. "In the early days," he said, "the Coin-Op group was the premier group, because you had dedicated hardware—a lot bigger proportional investment in creating a coin-op game than you did a consumer game. But eventually that flip-flopped, you know? When you can spend a fortune producing a cartridge, that was a much bigger investment than they could afford in coin-op. But in the beginning, it went the other way. The coin-op guys were the stars."

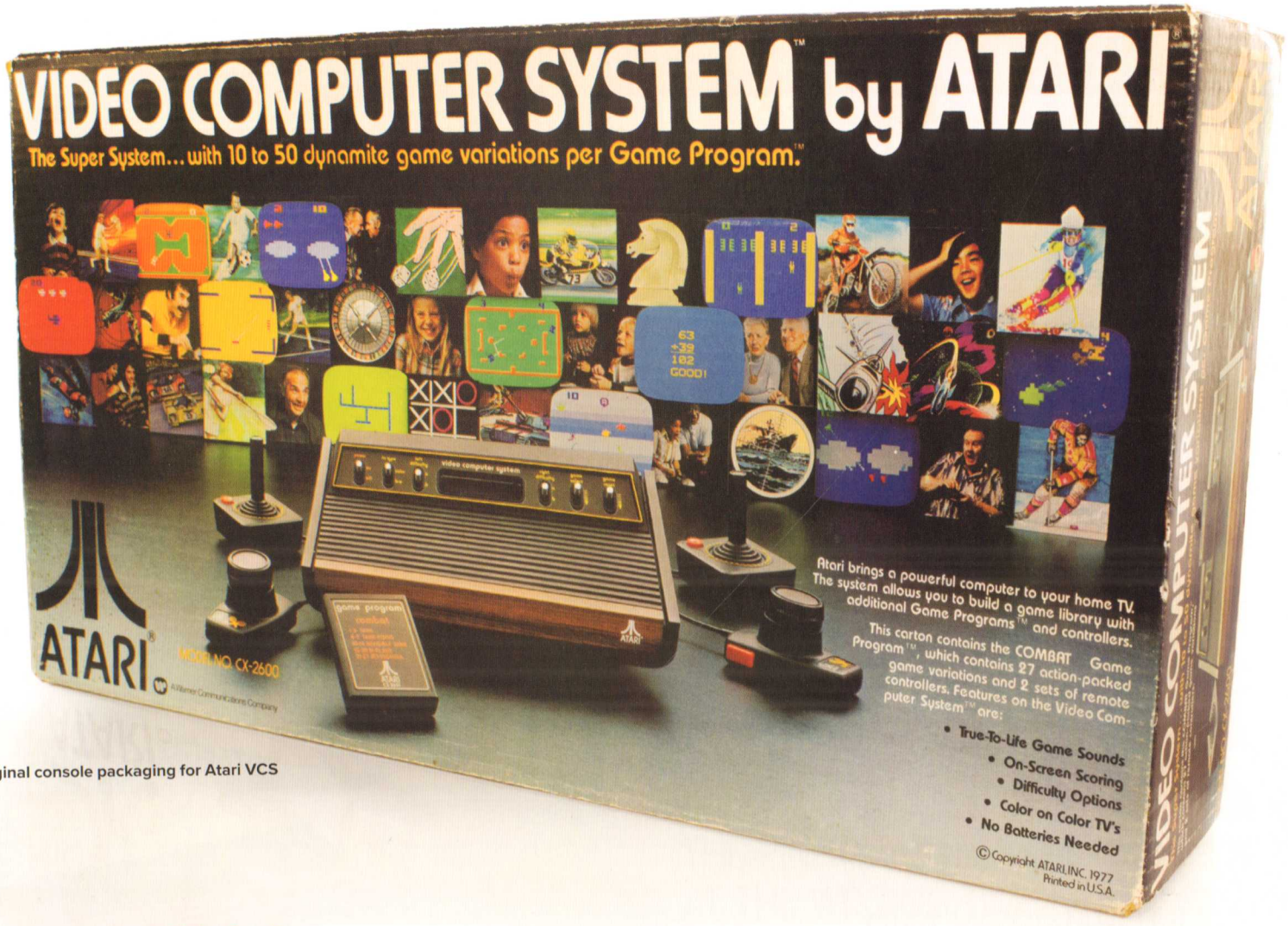
The audiences for coin-op and consumer-oriented games were different, as were the environments in which the end products lived. Atari's dedicated consoles, home consoles and game packaging lived in retail environments and store shelves, competing with the other products in that challenging space. The style of artwork necessitated an evolution as production requirements and audience needs shifted as well.

"The artwork was totally different," noted Consumer art director and illustrator James Kelly. "Coin-Op was all about bold colors, silkscreened art, and attention-getting graphics. And the consumer art was looser, using offset printing in full color—allowing you to paint it the way you wanted to. It was a broader, more artsy way of working." Industrial Designer Barney Huang agreed. "You went from only using so many colors, the restrictions with the arcade games, but now you could do full-blown illustrations. You had complete freedom."

Hendricks, for one, embraced the change in working style that went hand-in-hand with his move to work on consumer design. "We didn't have to pick a very specific style," he said. "It was pretty cool too, because we weren't limited by the technology any longer—coin-op was silkscreen, and you could only do certain things. And really, the direction we took with the art was to make it an inspiration for that game title. Obviously, what you saw on the screen wasn't even close to what the graphics on the covers looked like. But it didn't matter!"

"We were making it up as we went," Hector said. "One of the things that helped a lot was that Atari was making a lot of money! There was a gigantic fire hose of money being sprayed into the building constantly, so more traditional businesses would be a little more cautious about budgeting things and that sort of thing. Hell no! Not at Atari! And if you ever wanted encouragement to just go do it, it was the senior staff. Nolan, for one, would say—'Go do that!' And he didn't even ask what it would cost. That was really a kind of carefree, 'We're the kings of the world and we don't even know what we're doing!' sort of attitude." ■

HOME
CONSOLES
video computer system
power
tv type
left difficulty
right difficulty
game select
game reset
color
b-w
ATARI
game program
combat



▶ Original console packaging for Atari VCS

BRINGING THE ACTION HOME

THE PROMISE OF A VIDEO GAME LIVING ROOM

HOME CONSOLES WERE born from the promise of bringing arcade-like video game action to the living room. Atari's creatives took the experiences gleaned from their arcade successes (and failures), translating them into a home system. The result was a series of products, each with its characteristic design style, personality and features. These early video game consoles were but the first wave of consumer electronics that have taken up permanent residence in our daily lives.

▲ Interior manual art for Atari VCS (2600)
Artist: James Kelly

1977

ATARI 2600

VIDEO COMPUTER SYSTEM (VCS)

A CULTURAL ICON AND ATARI'S BEST-SELLING CONSOLE

ATARI'S FIRST PROGRAMMABLE cartridge system, the Atari VCS (Video Computer System) was the company's daring plan to move video gaming from the province of dimly-lit arcades and into the living room. With a streamlined hardware profile and a huge library of games, the console sported its signature faux woodgrain and single button joysticks, icons of the era. Backed by the financial resources and creativity of parent company Warner Communications, the console launched with nine games. It steadily built a following until exploding at retail with the 1980 release of its "killer app," the home version of the popular arcade game, *Space Invaders*. The simplified architecture of the VCS (later rechristened the Atari 2600) allowed talented programmers the flexibility to innovate on the software side, extending the development of games for the system and prolonging its life. The 2600 went through various iterations and was the most popular system of its day, selling an estimated 30 million units until it was finally put to rest in 1992.

ATARI 2600 "VADER"

ATARI 2600 JR.

ATARI 2800/VIDEO ARCADE II

1982

ATARI 5200
SUPERSYSTEM

THE HIGH-DESIGN ARCADE MACHINE FOR THE HOME

THE 5200 SUPERSYSTEM was released as a high-end console, designed to emulate the full arcade experience and compete favorably against Mattel's Intellivision, though its chief rival would be the surprising ColecoVision. Code-named PAM (Personal Arcade Machine), the console had a long gestation period, developing in fits and starts, until Atari eventually decided to repackage its home computer technology into this new offering. The industrial design took a quantum leap as Atari spared little expense in crafting a premium-styled system that bore strong resemblance to expensive home stereo equipment of the era. However, bad timing, delayed compatibility with the 2600's game library, and poor reception of the system's unwieldy controllers eventually doomed the 5200.

1986

ATARI 7800
PROSYSTEM

THE RIGHT CONSOLE AT THE WRONG TIME

ATARI'S 7800 PROSYSTEM was a joint effort with partner General Computer Corporation (GCC), and initially seemed poised for success. The new console boasted an impressive set of specs, from higher-resolution graphics to more onscreen objects, with beautifully-redesigned controllers and the ability to play all 2600 games. Announced in 1984, the 7800 would have competed favorably in the post-crash video game market. However, in the wake of huge financial losses by Warner Communications, portions of Atari's Consumer Division were sold to computer mogul Jack Tramiel in 1984. The 7800 was shelved until financials were sorted out, and in the interim, Nintendo released its Nintendo Entertainment System in the US, which eventually dominated the market. The 7800 missed its opportune moment, and by the time it was released in 1986, Nintendo had already licensed many of the hot arcade titles. Game licensing opportunities were few for the 7800, which relied more heavily on third-party developers than its predecessors. The console launched with games developed nearly three years earlier, an eternity in the industry, which didn't help matters. The 7800 would go on to be a financial success for Atari Corp., but did little to return the brand to its previous dominance.

1987

ATARI XE
VIDEO GAME SYSTEM

A HYBRID PC AND GAME SYSTEM BUILT FOR COMPATIBILITY

THE ATARI XE Video Game System (Atari XEGS) was basically a repackaged Atari 65XE computer, fully compatible with Atari's existing line of 8-bit computer software and peripherals. Atari Corp. believed that the console could serve as the best of both worlds—personal computer and video game machine. However, the XE ended up being relegated mostly to computer stores, which kept it out of the hands of many gamers, and the computer functionality didn't appeal to the dedicated PC crowd. The deluxe version was released with a light gun, computer keyboard, and a version of Atari's classic, one-button CX-40 joystick, but didn't make much of a marketplace dent.

1989

Lynx I Revision

Lynx II

ATARI LYNX
THE FIRST HANDHELD WITH 16 BITS OF COLOR LCD POWER

THE ATARI LYNX was a groundbreaking handheld game console released with the world's first color LCD screen, a backlit display, switchable left and right-handed controls, and networking ability with other Lynx consoles. The Lynx was originally conceived by software company, Epyx, which ran into financial difficulties during development. The company needed a partner in order to launch the product, and found a willing one in Atari Corp., after being spurned by Nintendo. Under the agreement, Atari would handle production and marketing of the Lynx. But relations between Atari and Epyx were strained, and the Lynx release was delayed nearly two years. When it finally came to market, the Lynx had to compete directly with Nintendo's new handheld console, the Game Boy. Even though Nintendo's offering had inferior graphics, specs, and a monochromatic display, the Game Boy trounced the Lynx and other competitors with an enormous library of great games, a lower price point, and extended battery life. The Lynx was a moderate success, but ultimately couldn't sustain sales with its premium price point and relatively small stable of games.

1993

ATARI

JAGUAR

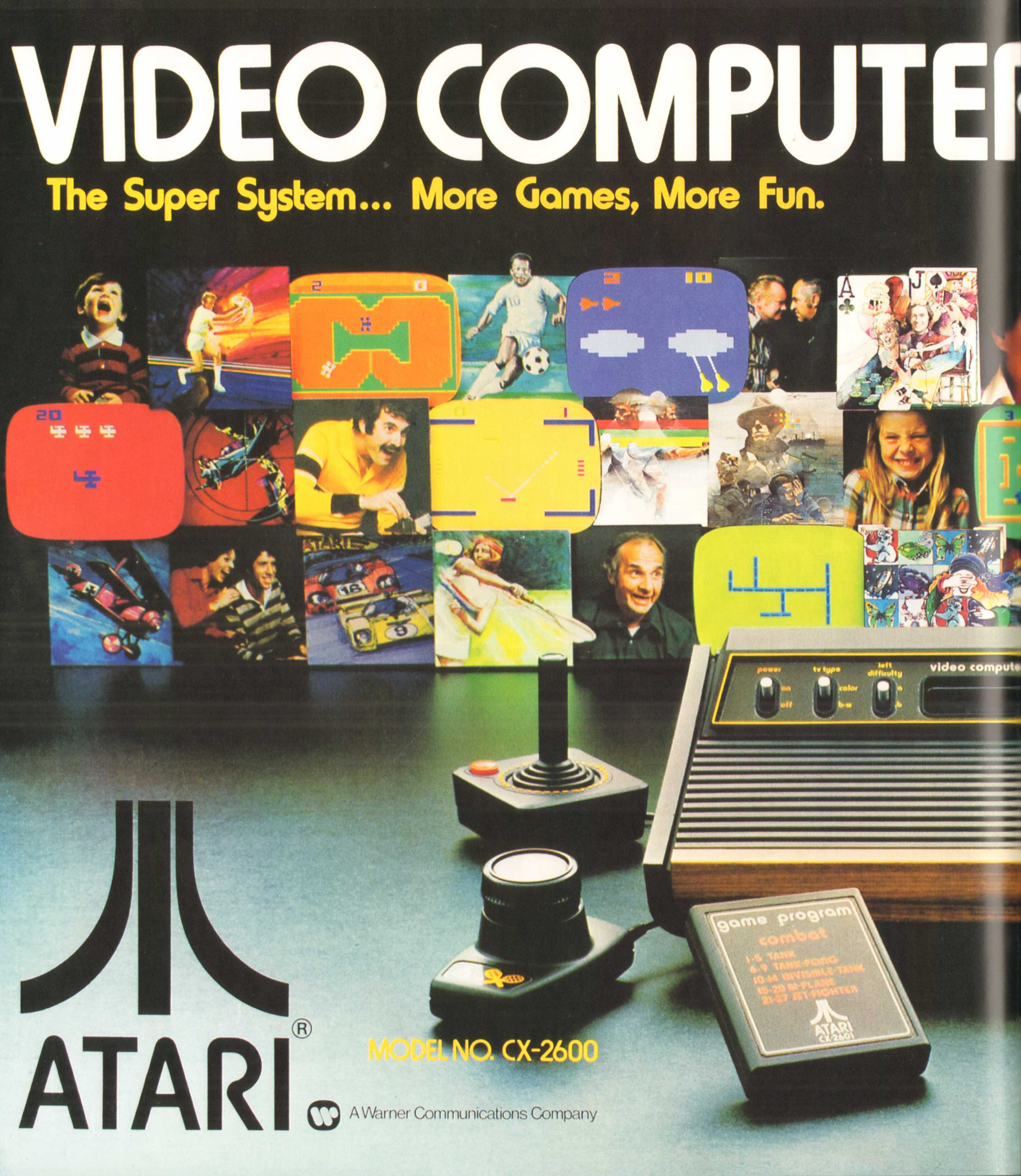
THE WORLD'S FIRST 64-BIT CONSOLE WAS ATARI'S LAST

THE ATARI JAGUAR was Atari's sixth and final console. Marketed as the first 64-bit video game system, it was designed to compete with the Sega Genesis and Nintendo's Super Nintendo Entertainment System. Because of its multi-chip design, game development for the console proved difficult for programmers, both internally and at third-party developers. The controller design was also criticized, along with its lackluster game library. Even the release of a CD drive add-on and promise of peripherals like the unreleased VR headset, voice modem and others couldn't save the struggling console. It was officially discontinued in 1996, but after Hasbro Interactive purchased the IP of Atari Corp. in 1998, the Jaguar's patents were released into the public domain, making it an open platform. The Jaguar now enjoys a cult following, with a slew of homebrew games released for the console.

▶ **Silver Atari packaging suite that replaced Atari's earlier colored game boxes and dark console packaging. These designs were also intended to differentiate Atari's separate console lines.**

VIDEO COMPUTER

The Super System... More Games, More Fun.



ATARI®

MODEL NO. CX-2600

A Warner Communications Company

R SYSTEM™ by ATARI®

Atari brings a powerful computer to your home TV. The system allows you to build a game library with additional Game Programs™ and controllers.

This carton contains the COMBAT Game Program™, which contains 27 action-packed game variations and 2 sets of remote controllers. Features on the Video Computer System™ are:

- **True-To-Life Game Sounds**
- **On-Screen Scoring**
- **Difficulty Options**
- **Color on Color TV's**
- **No Batteries Needed**

▲ Detail of Atari VCS console packaging, highlighting the six-switch "heavy sixer" model

© Copyright ATARI, INC. 1977
Printed in U.S.A.

▲ Internal Atari photo of *Stunt Cycle* (top) and *Video Pinball* dedicated consoles

▶ Launch advertising for *Video Pinball* and *Stunt Cycle*

DEDICATED CONSOLES

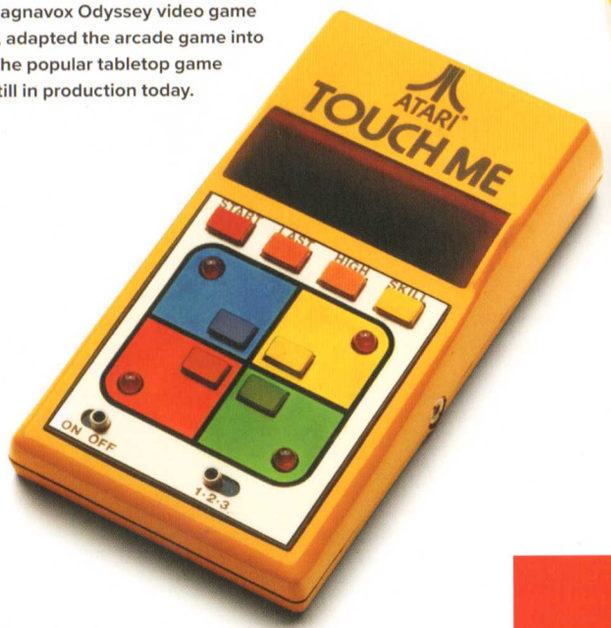
BEFORE ATARI RELEASED its first home console, it also designed and developed a line of dedicated consoles, game systems that kicked off the consumer video game market. The first of these was a home version of its popular arcade game, *PONG*, released under partnership with Sears. Atari's own branded *PONG* unit followed, as well as a string of *PONG* sequels, and a few other consoles and handheld units.

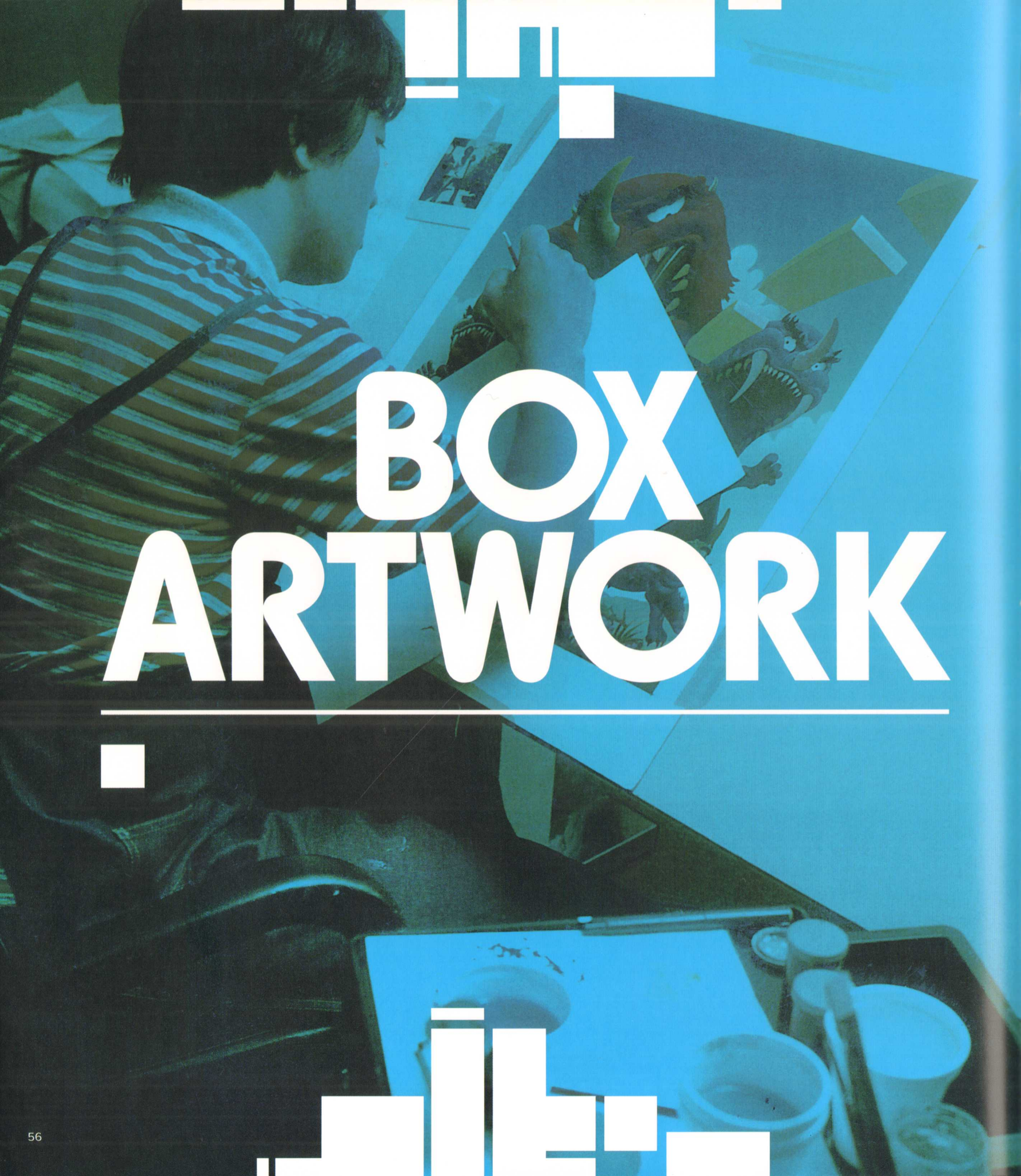
SEARS TELE-GAMES PONG ▪ PONG ▪ PONG DOUBLES
SUPER PONG ▪ SUPER PONG TEN ▪ SUPER PONG PRO-AM
SUPER PONG PRO-AM TEN ▪ ULTRA PONG
ULTRA PONG DOUBLES ▪ VIDEO PINBALL ▪ STUNT CYCLE
VIDEO MUSIC ▪ HANDHELD TOUCH ME

▼ Promotional photography of Atari's *Super PONG* dedicated console

▲ Packaging for the Atari-branded home version of *PONG*

▼ Atari's *Touch Me* handheld game, released in 1978. This game was based on the Atari 1974 arcade game of the same name, but was much less successful than another re-imagining of the arcade game. Ralph Baer, inventor of the Magnavox Odyssey video game console, adapted the arcade game into *Simon*, the popular tabletop game that is still in production today.





BOX ARTWORK

FROM PIXELS TO PAINTBRUSH

CROSSING THE IMAGINATION BRIDGE

ATARI'S CONSOLE GAME PACKAGING stood out on the shelves. Rows of boldly-colored boxes were crowned with expressive, hand-rendered illustration. Each piece of cover art served as a clue to the contents within, a kind of portal into the electronic, television game world.

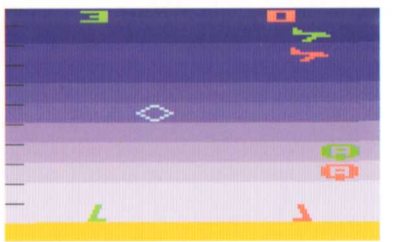
While box artwork played an important role in the sales process (package designers call it "shelf appeal"), it also served a different, less-obvious function. In the early days of home video game consoles, Atari's evocative artwork set the stage for the gaming experience. It helped gamers dream up an environment in which their pixelated adventures would play out. The art was a crucial connection point for the moment when a cartridge slid into the console, the power toggle was flipped on, and the TV hummed to life.

None of Atari's artists or designers were experts in video games, as the industry was still in its infancy. But they each tapped into a well of human experience that, coupled with some amazing games, left an indelible mark on a generation of players. Their stories are declarations of craft and concept that helped illuminate a neglected corner of creativity in the early video game world.

▲ Game packaging for *Air-Sea Battle* (2600)
Artist: Cliff Spohn

I painted it to look dimensional, rather than actually cutting up the art, like we did with the first game art in *Combat*."

CLIFF SPOHN



AIR-SEA BATTLE

One of the original nine VCS launch titles, *Air-Sea Battle* features a variety of one and two-player military bombardments, featuring aircraft, submarines, destroyers, and blimps. The game served as a sort of shooting gallery, with more than two dozen game variations. It was also renamed *Target Fun*, serving as the pack-in game for the Sears Tele-Games version of the console.

▼ Game packaging for *Basic Math / Fun With Numbers* (2600)
Artist: Susan Jaekel

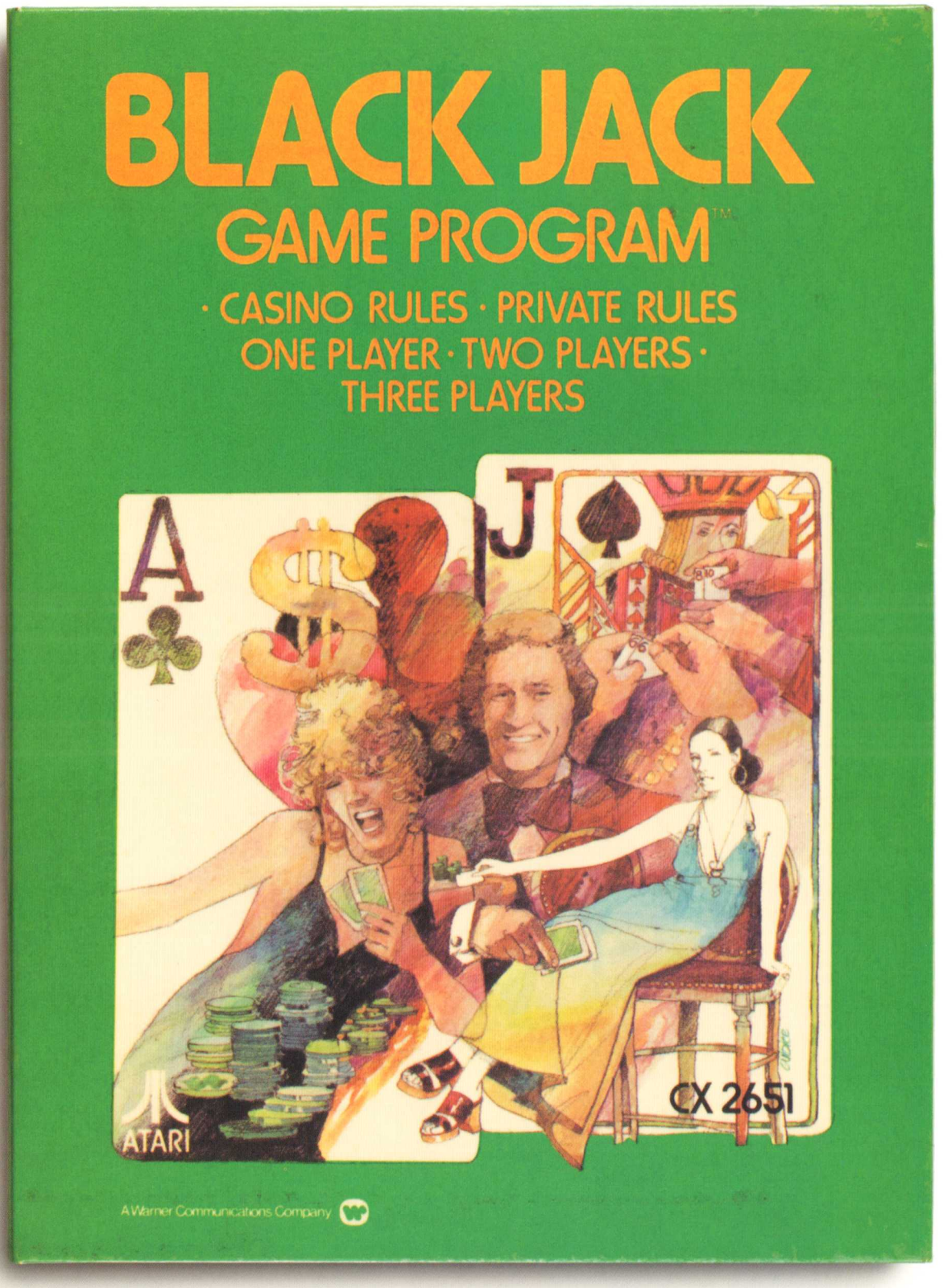
5
+8
13

BASIC MATH/ FUN WITH NUMBERS

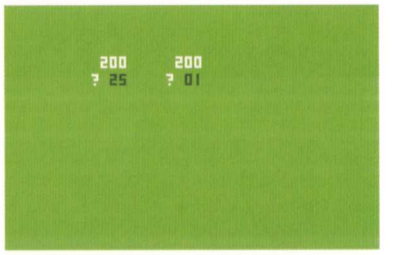
Basic Math (or its alternate title, *Fun With Numbers)* was an attempt to bring some educational fare into Atari's lineup of game cartridges. It is simple in delivering math problems, and announcing a little musical cue for right or wrong answers. Box artist Susan Jaekel's artwork injects more fun and whimsy into the title than it probably deserves. Jaekel recalled, "This was my first piece for Atari and the most fanciful and loosest in style—the '70s vibe."

The Atari art directors pretty much gave us creative freedom to come up with the image ideas. On *Black Jack* I based the layout around the playing cards, illustrating part of the playing card along with happy people that would be seen in a casino."

RICK GUIDICE



◂ **Game packaging for *Black Jack* (2600)**
Artist: Rick Guidice

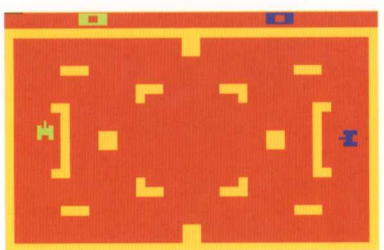


BLACK JACK

This game was Atari's representation of the classic card game, blackjack. Though simple and minimal in both its graphics and sound effects, the game delivers a relatively authentic (if slightly stripped down) gameplay experience. And it replicates one of the truths of blackjack precisely—the house usually wins! This game was later discontinued after Atari released its *Casino* cartridge, which contained multiple card games, including blackjack.

They wanted to cut it up [the different sections] and I didn't like that. The jet trail is cut, and it always really bothered me that the rocket's trail goes from one level to the top level."

CLIFF SPOHN



COMBAT

This classic game of two-player warfare is still one of the most enjoyable 2600 titles. Based on two of Atari's mid-'70s arcade titles (*Tanks* and *Jet Fighter*), *Combat* sports 27 variations on head-to-head action, with each battle simulation—tanks, biplanes or jets—lasting two minutes and sixteen seconds, and the highest scorer winning the round. *Combat* was the original VCS pack-in title, and one of the most common cartridges found in collecting circles.

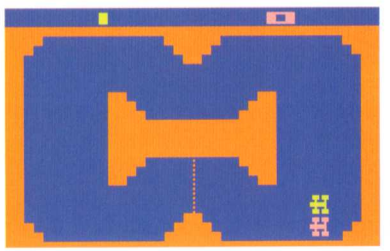
▲ **Game packaging for *Combat* (2600)**
Artist: Cliff Spohn

▲ Cover art for *Indy 500* (2600)
Artist: Cliff Spohn

▶ Detail of *Indy 500* cover art
Artist: Cliff Spohn

INDY 500

A home version of Atari's groundbreaking multi-player arcade games, this racing game recalls the famous Indianapolis Motor Speedway. Unique among Atari driving games, it came bundled with the exclusive Driving Controllers, a set of single, spinner-style controllers used only for this game. The Driving Controllers look identical to Atari's Paddle Controllers, but allow 360 degree movement. *Indy 500* affords single-screen racing on a variety of tracks and surfaces (like ice), and has a ton of replay value.

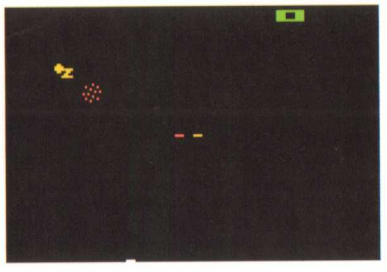


32
33
3

This was loosely based on *Star Wars*, and I really liked John Berkey's sci-fi art. I've always been a sci-fi junkie, so that's one of my fantasies. I used big stripes and I think I put them all on the fighters so they'd have the same markings. I've always liked designing things like this."

CLIFF SPOHN

▶ Game packaging for *Star Ship* (2600)
Artist: Cliff Spohn

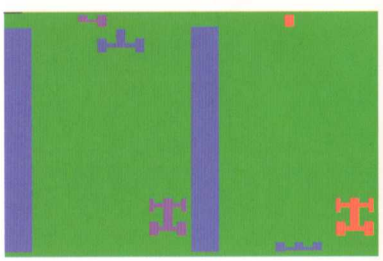


STAR SHIP

One of Atari's earliest space shooters, this game centers around a first-person cockpit perspective, based on the 1977 arcade game, *Starship 1*. As the player, you target a variety of asteroids, star fighters, flying saucers, and space robots for the highest score.

Doing *Street Racer* was an opportunity to do some hot rods with a '50s type street drag, and also introducing other types of racers, such as sports cars and motorcycles. I had fun giving a blurred appearance of speed to some of the images."

RICK GUIDICE

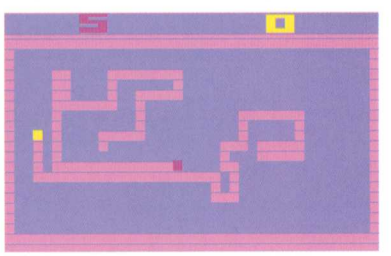


STREET RACER

Using the Paddle Controllers, the player controls an automobile, trying to dodge cars to score points against an opponent. The game's split screen action allows dueling drivers to keep an eye on each other while avoiding oncoming traffic. *Street Racer* drew from Atari's earlier environmental arcade game, *Hi-Way*.

▲ Game packaging for *Street Racer* (2600)
Artist: Rick Guidice

▲ Cover art for *Surround* (2600)
Artist: Cliff Spohn

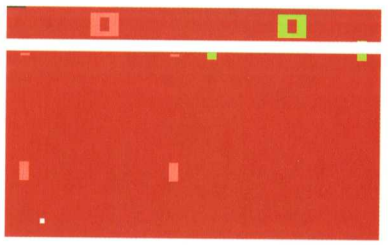


SURROUND

This early game pits player versus player, and as each opponent's square travels across the screen, it leaves a trail of unbreakable tracks in its wake. The tracks serve as walls used to block, surround, or cut off the opponent and gain points. Much like the classic light cycle battles in the sci-fi movie *Tron*, *Surround* has variations that keep it fresh, and echoes the gameplay of the very first "snakes" arcade game, *Blockade*, by Gremlin.

VIDEO OLYMPICS

Video Olympics would be more accurately described as *PONG Olympics*, since this game features 50 variations on Atari's original, classic ping-pong style game. Different styles of play, 4-player modes, and additional ball english make this game an interesting evolution from Atari's early history.



It was difficult to try and design these with all the arms and legs and still keep it together. Everything ties in with something else, and I tried to create 'carry-through' lines and wire everything together. It's easier and more fun to use montage. I wanted to show blurring balls and motion lines."

CLIFF SPOHN

◂ **Game packaging for *Video Olympics* (2600)**
Artist: Cliff Spohn

CLIFF SPOHN'S WORK STANDS OUT NOT JUST FOR ITS QUALITY EXECUTION, BUT ALSO FOR ITS STRONG DESIGN SENSE.

POWERFUL COMPOSITIONS AND EFFECTIVE USE OF MONTAGE ALLOWED HIS WORK TO TRANSCEND FLATLAND INTO THREE DIMENSIONS.

▸ This wizard piece marries a variety of early Atari 2600 artwork and visual themes from previous games into one arresting montage. The image was used in POP [point-of-purchase] displays in store, as well as on Atari's game catalogs, and a dry erase scoreboard sold from *AtariAge* magazine.
Artist: Cliff Spohn

CLIFF SPOHN

BORN AND RAISED in Oregon, Cliff Spohn was constantly drawing from an early age, sketching through his teenage years—hot rods, airplanes, girls, and *Mad Magazine* characters. He received his BA in illustration and graphic design from San Jose State College in 1973.

In 1976, Spohn chanced upon the artwork that would alter the trajectory of his career. "I saw the art of David Grove in a gallery window in San Francisco," he explained. "I saw how loose it was and how you could see the pencil lines. I knew this was the direction I wanted to go. It floored me! I never met him or talked to him. I didn't know my ass from fifty cents on how to do this stuff, but I went home and tried to figure out how to get that kind of wash and type of texture."

"From that point on, I never stopped working. This was a very popular style at the time and I had to teach myself how to do it. It lent itself to editorial and advertising work as well."

In 1977, Spohn began working as a freelancer for Atari through the Palo Alto-based agency, Steven Jacobs Design, and then eventually on his own. "The work was more of what I wanted to do, and Steve art directed me a little bit," Spohn said. After the initial creation of artwork for *Air-Sea Battle* and *Combat*, Spohn went on to create the art for many of the other initial 2600 launch titles, and nearly 20 other games, defining the illustration style for Atari's home consoles.

Fellow illustrator Steve Hendricks explained about Spohn, "He was an icon around here. He came up with the look. Our task was to emulate what Cliff was doing, and Cliff was amenable to giving us trade secrets, but the way he did it was the way Atari packaging needed to look."

Spohn's work stands out not just for its quality craft and execution, but also for its strong design sense. Powerful compositions and effective use of montage allowed his work to transcend flatland into three dimensions. "To me, designing is standing on one foot," he mused. "I always want to keep the viewer off-balance, moving, with asymmetrical imagery, on the edge." He described the technique on his Atari work as "anti-painting," where "It's really the opposite of painting, because you lay in a

AIR-SEA BATTLE ▪ BACKGAMMON ▪ BASKETBALL ▪ BOWLING ▪ BRAIN GAMES ▪ BREAKOUT ▪ CHAMPIONSHIP SOCCER
CODEBREAKER ▪ COMBAT ▪ FOOTBALL ▪ HOME RUN ▪ HUMAN CANNONBALL ▪ INDY 500 ▪ MINIATURE GOLF ▪ STAR SHIP
SUPER BREAKOUT ▪ SURROUND ▪ VIDEO CHESS ▪ VIDEO OLYMPICS ▪ WIZARD

"TO ME, DESIGNING IS STANDING ON ONE FOOT. I ALWAYS WANT TO KEEP THE VIEWER OFF-BALANCE, MOVING, WITH ASYMMETRICAL IMAGERY, ON THE EDGE."

—CLIFF SPOHN

▶ Spohn's illustration for an early Apple Computer manual. His artwork was personally commissioned by Apple co-founder Steve Jobs.

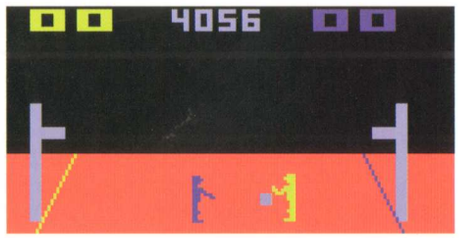
wash, then use a bristled brush to pull off some of the color, then spray fix it so you don't pull off all the paint. But in the end, it's all about the composition, and that's the way I've always approached everything."

Spohn was heavily influenced by illustrator David Grove, but his work also referenced paperback book covers and album art. He worked as a freelance commercial illustrator, even creating art for another tech startup, the brainchild of former Atari employee Steve Jobs. That company, of course, was Apple Computer. Spohn illustrated two of the company's early manuals, and Jobs loved the artist's work—he even had Spohn's original art hanging in his office! For his part, Jobs tried to lure Spohn away from his freelance work for Atari to a full-time position at Apple, including stock options. But Spohn turned down the offer, doubtful about the future of the fledgling computer company.

Atari art director and illustrator James Kelly praised Spohn: "He was a fabulous illustrator and had a nice, relaxed, editorial way of coming up with images. I saw his work on *TV Guide* and *Time* magazine covers—really notable places, where you'd see the country's top illustrators."

Spohn eventually moved on from Atari as the company brought more and more of its illustration work in-house. With no shortage of clients, Spohn continued on for decades as a freelance illustrator for a variety of companies, including Delta, Coca-Cola, Starbucks, NFL, and many others. His current personal work delves more deeply into abstract expressionism. ■

BASKETBALL



Released not long after Atari's Trak-Ball arcade version, the home version of *Basketball* is a joystick-driven, one-on-one affair, providing intense head-to-head court action. Atari would go on to create more elaborate sports titles, but *Basketball* was one of the first. The game also makes an amusing cameo in the film *Airplane*, as two air traffic controllers are found playing it rather than manning their equipment.

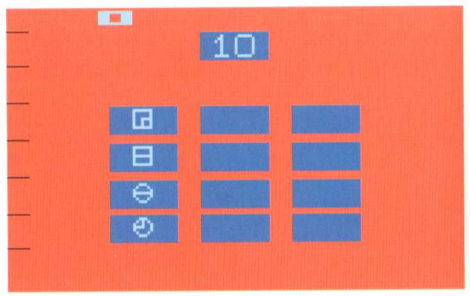
In this I was using the washes—'anti-painting.' You lay in a wash, then use a bristled brush to pull off some of the color, then spray fix it so you don't pull off all the paint. But in the end, it's all about the composition."

CLIFF SPOHN

▶ **Cover art for *Basketball* (2600)**
Artist: Cliff Spohn

BRAIN GAMES

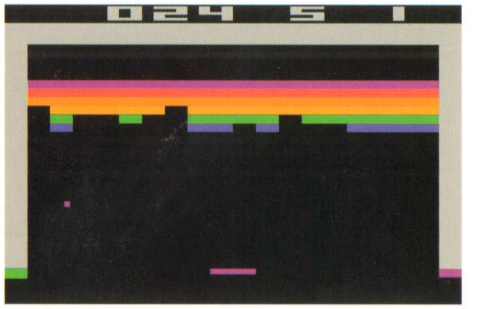
Another educational offering for the 2600, *Brain Games* utilized Atari's custom Keyboard Controllers to allow players a variety of matching and memory games. The Keyboard Controllers featured a numeric keypad with 10 digits and the * and # symbols, much like a conventional telephone. Interestingly, one of the variations within *Brain Games* is Touch Me, an updated version of Atari's *Simon*-like memory game which was released as both an arcade and handheld version before appearing in this game.



▼ **Cover art for *Brain Games* (2600)**
Artist: Cliff Spohn

BREAKOUT

A home version of the arcade hit for the VCS, the 2600 game pits the player against a rainbow-colored row of bricks, utilizing a bouncing ball to break through to the other side for a greater high score. With its addicting gameplay and iconic visuals, *Breakout* is one Atari's classic cartridges for the VCS.

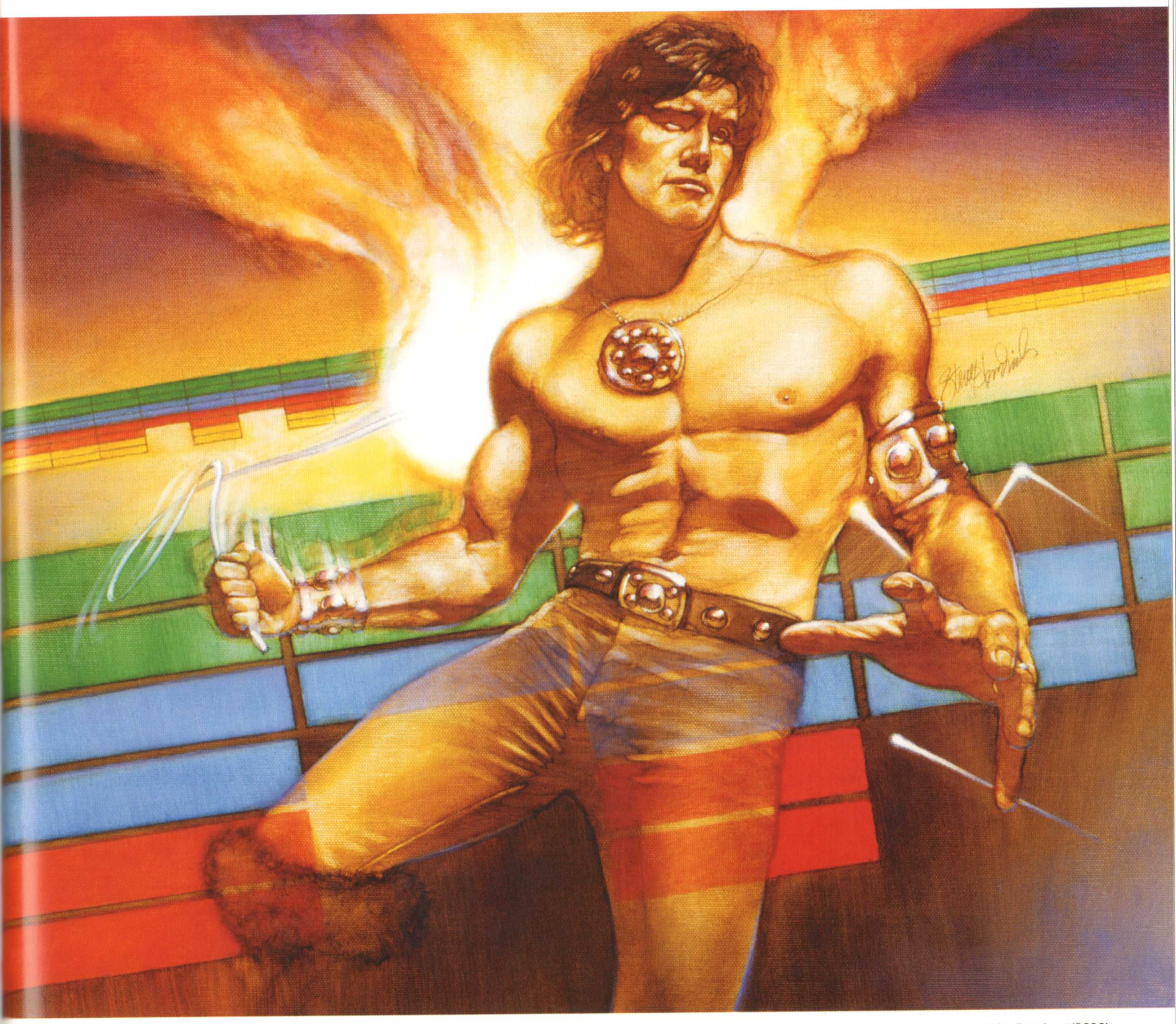


"For this I wanted to have some kind of motion to it, almost like handball or racquetball. I thought of different things—sledge hammers, guys breaking through walls. I just wanted to create a mood, so I drew these tennis players to show the movement back and forth."

CLIFF SPOHN

◂ Game packaging for *Breakout* (2600)
Artist: Cliff Spohn

▲ *Breakaway* cover art for the Sears version of *Breakout*
Artist: Rick Guidice



▲ Unused concept for *Breakout* (2600)
Artist: Steve Hendricks

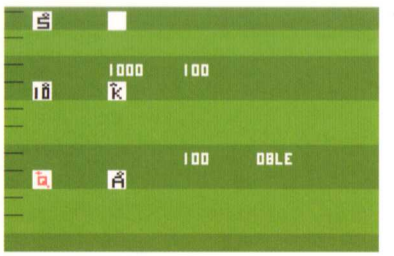
"The concept was to take a Conan-like character (I used myself as the model) and give the old *Breakout* theme a different twist as the hero breaks through the 'wall' with a ball of fire at the end of a chain."

STEVE HENDRICKS

▲ Game packaging for *Casino* (2600)
Artist: Rick Guidice

I thought of Monte Carlo, outdoors, images of the car, and fun, attractive people having a good time. It always helps to sell it to the audience in that way."

RICK GUIDICE

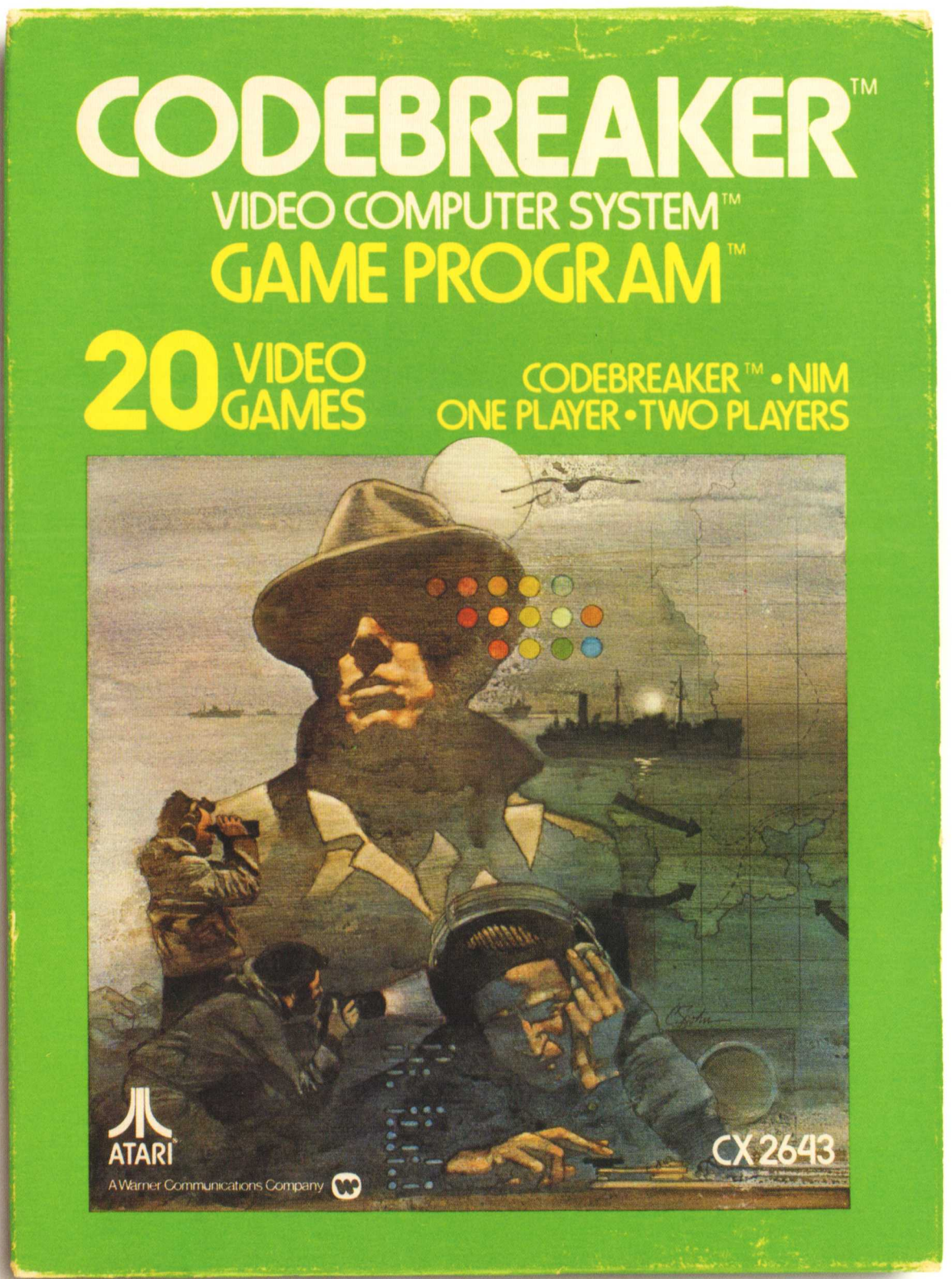


CASINO

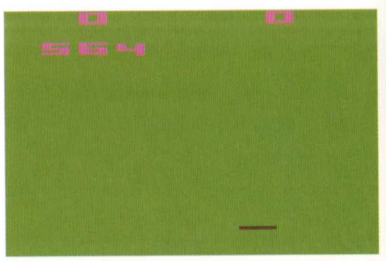
A more elaborate version of Atari's earlier card-based games, *Casino* featured blackjack, poker and solitaire game variations. It includes versions for up to four players, using the paired Paddle Controllers. Best of all, there are no cards to shuffle or chips to count!

I really wanted to have a whole mysterious, military secretive thing—that cloak and dagger style, 1940s, mystery, codes and stuff. I was still using carry-through lines to move your eyes around the image, inside that foggy, mysterious kind of scene."

CLIFF SPOHN

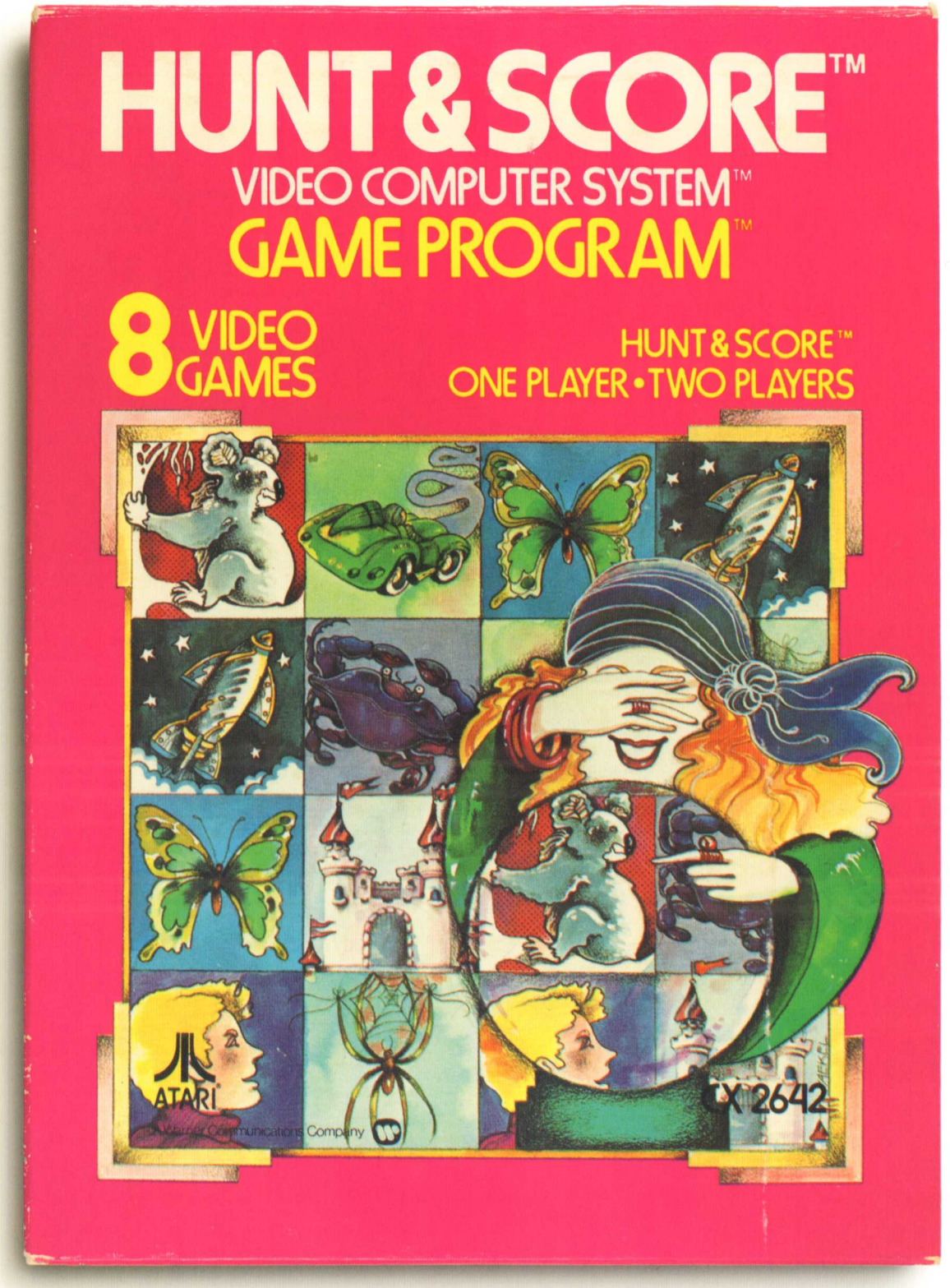


▸ Game packaging for *Codebreaker* (2600)
Artist: Cliff Spohn

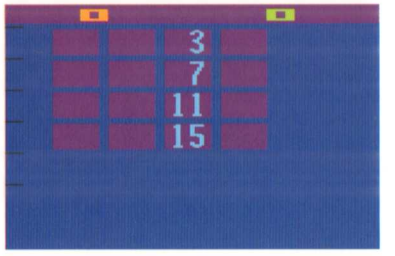


CODEBREAKER

While the box artwork conjures a world of intrigue and espionage, the gameplay for *Codebreaker* is actually much closer to the classic board game, *Mastermind*, developed by Mordecai Meirowitz, an Israeli postmaster and telecommunications engineer. In the Atari game, players take turns trying to deduce a sequence of hidden numbers, entering them on numerical keys of Atari's Keyboard Controllers.



◂ Game packaging for *Hunt & Score* (2600)
Artist: Susan Jaekel



HUNT & SCORE

Hunt & Score is a memory matching puzzle game, as players try and match two "cards" that share the same shapes when overturned. Many of the actual game images are represented in illustrator Susan Jaekel's art for the game packaging. Both Jaekel and artist Rick Guidice created artwork for the game—Guidice's art was used for the Sears branded version. The two artists were more than collaborators—they would later marry after their time at Atari.

"This piece was done with Dr. Martin's dyes and black Prismacolor pencil."

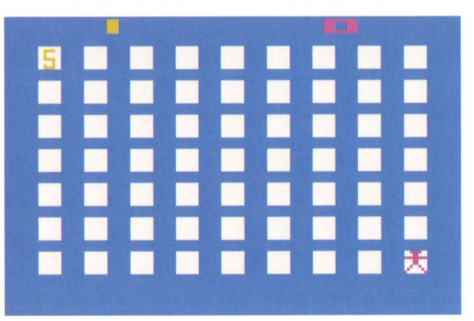
SUSAN JAEKEL

▲ Artwork for the Sears game *Memory Match (2600)*, a renamed version of *Hunt & Score*
Artist: Rick Guidice

"With *Memory Match*, I relied upon some of the images that were used in the game itself and expanded on others."

RICK GUIDICE

▲ Cover art for *Flag Capture* (2600)
Artist: John Enright

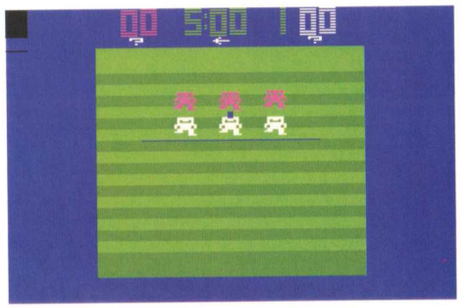


FLAG CAPTURE

This gem is a two-person guessing game, as both players navigate their "explorers" in an attempt to locate the hidden flag within rows of squares. Clues are given to help players along, with added variations that include timed games and moving flags.

FOOTBALL

Due to the limits of the original Atari 2600 hardware, this version of *Football* is greatly simplified. Field goals are excised and plays are limited, but the game manages a three-on-three style of play that is still fun. And the clever use of an on-field "invisible line" marking the first down distance predates its use on television by twenty years!



I put the Atari logo on the bottom guy, and this guy tried to sue for likeness rights, but it wasn't him."

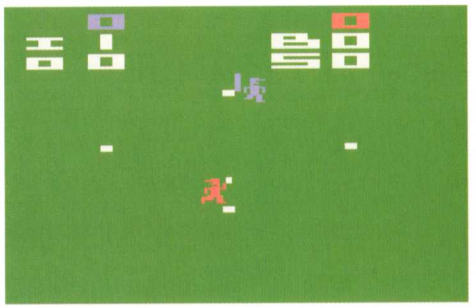
CLIFF SPOHN

▼ Cover art for *Football* (2600)
Artist: Cliff Spohn

C. Spahn

HOME RUN

Home Run was Atari's first attempt at a baseball game for the 2600, and it shows in the incredibly simple gameplay and graphics. Unable to include features like fly balls or independent fielders in this version, Atari would later vastly improve on *Home Run* with its *RealSports Baseball* game, showcasing how much programmers had learned to squeeze out of the 2600 console.



◂ Cover art for *Home Run* (2600)
Artist: Cliff Spohn

▲ Unused cover art for *Home Run* (2600)
Artist: Cliff Spohn

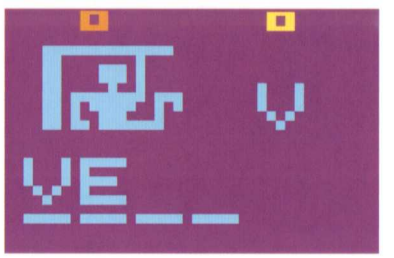
I did an initial design and was going to send it in, but I didn't like it, so I re-did it. It sucked. This composition is much better, and I never sent in the original one. I was always doing things like that—if I didn't like it, I'd re-paint it or re-do it."

CLIFF SPOHN

▲ Game packaging for *Hangman* (2600)
Artist: Susan Jaekel

I had a lot of fun with this one, and loved that balloon typeface that I used for the words."

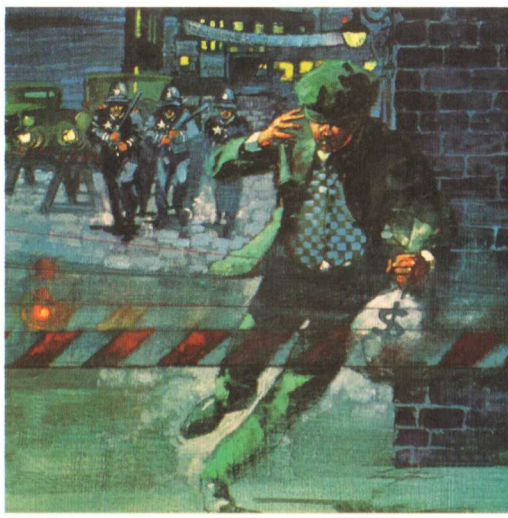
SUSAN JAEKEL



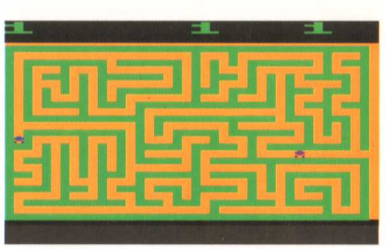
HANGMAN

The Atari rendition of this classic pencil and paper game has added electronic variations, including skill levels that range from first grade through high school level words. Though words can't be longer than six letters, the game is still challenging, especially when timed.

▲ Game packaging for *Maze Craze* (2600)
Artist: James Kelly

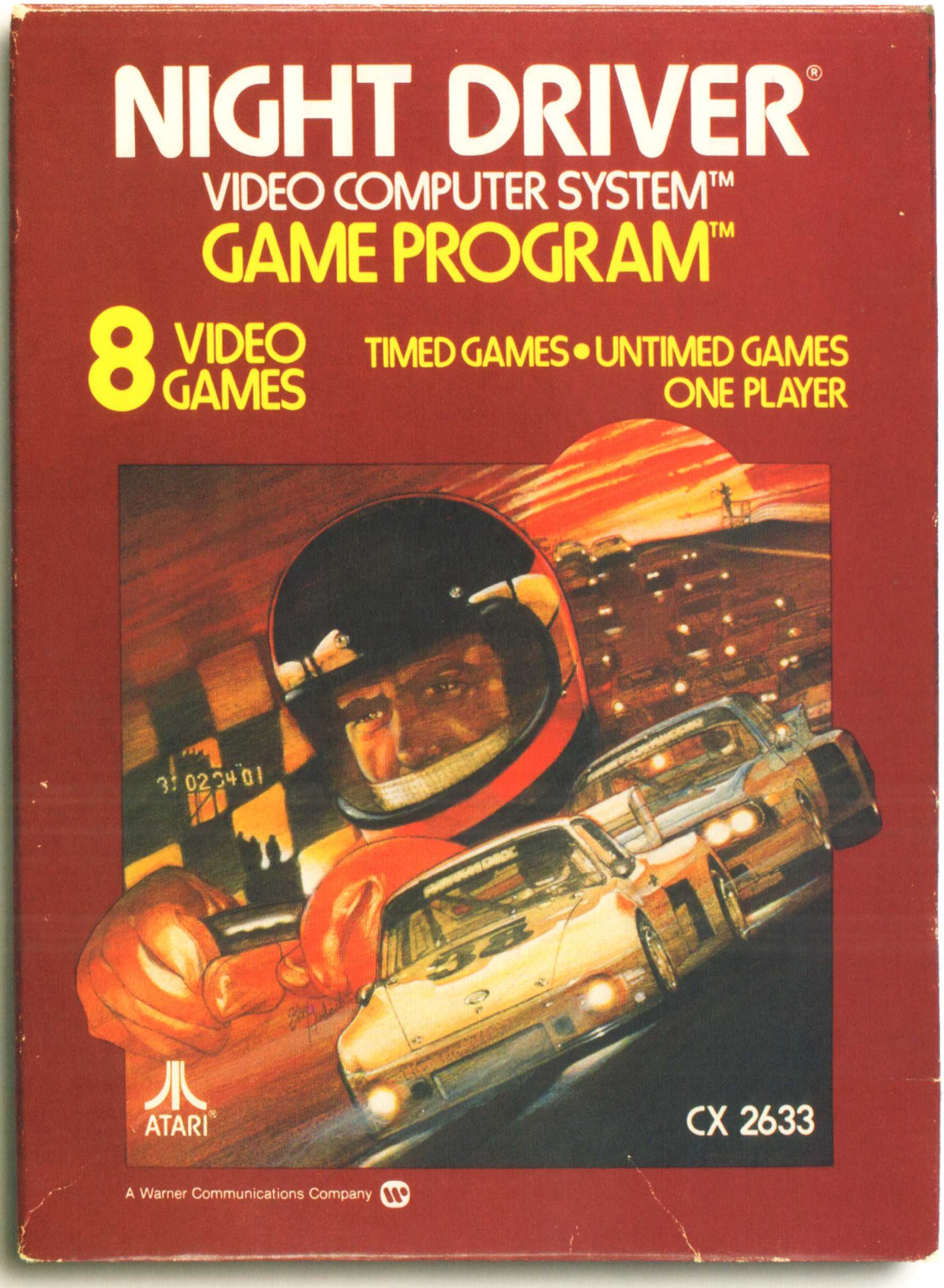


▲ Alternate artwork for *Maze Craze* (2600)
Artist: Francis Livingston



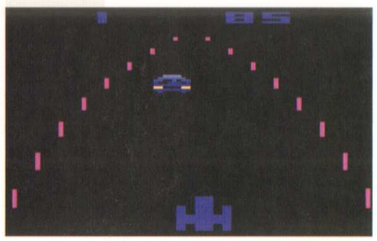
MAZE CRAZE

Maze Craze allows players to control one of two police officers—either red or blue—and to navigate them through a maze of city blocks. Along the way, players have to contend with armed robbers, blockades, and other challenges, in a race to exit the maze first, with a staggering 256 game variations.



▲ Game packaging for *Night Driver* (2600)
Artist: Steve Hendricks

▲ Unused cover art for *Night Driver* (2600)
Artist: Rick Guidice



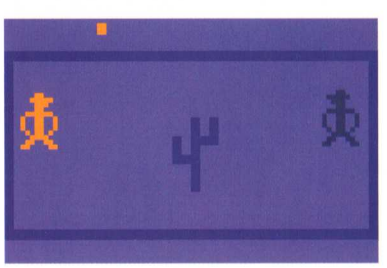
NIGHT DRIVER

Night Driver was the first driving video game to use a "behind the wheel" perspective to convey the illusion of depth and speed. Based on Atari's black and white arcade version, this game utilized the Paddle Controllers to let players speed through the darkness, avoiding oncoming cars and navigating sharp turns.

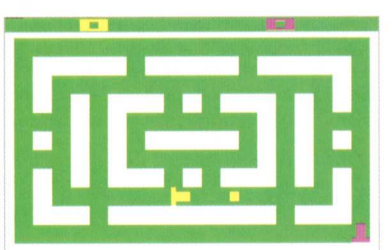
▲ Cover art for *Outlaw* (2600)
Artist: John Enright

OUTLAW

Dueling gunfighters have been a staple of film and TV for years, and Atari brought its own entry into the mix with *Outlaw*, based on its earlier arcade game. One or two-player gunslinging action roars with obstacles like cacti, wagons, and barricades also complicating the standoffs at high noon.



▲ Game packaging for *Slot Racers* (2600)
Artist: John Enright



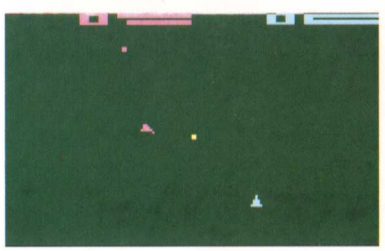
SLOT RACERS

Playing like a cross between a shooting game and a maze runner, *Slot Racers* pits opponents against each other in simplified vehicles, whizzing through a labyrinth while dodging and firing.

This was done at the same time I was doing the NASA work, and I took the opportunity to squeeze in as many planets and moons as I could, along with the fun of designing some spacecraft that were battling. This scene would be seen from inside a bubble dome control pod."

RICK GUIDICE

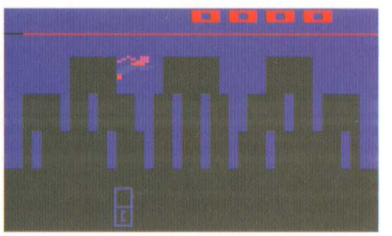
▸ Game packaging for *Space War* (2600)
Artist: Rick Guidice



SPACE WAR

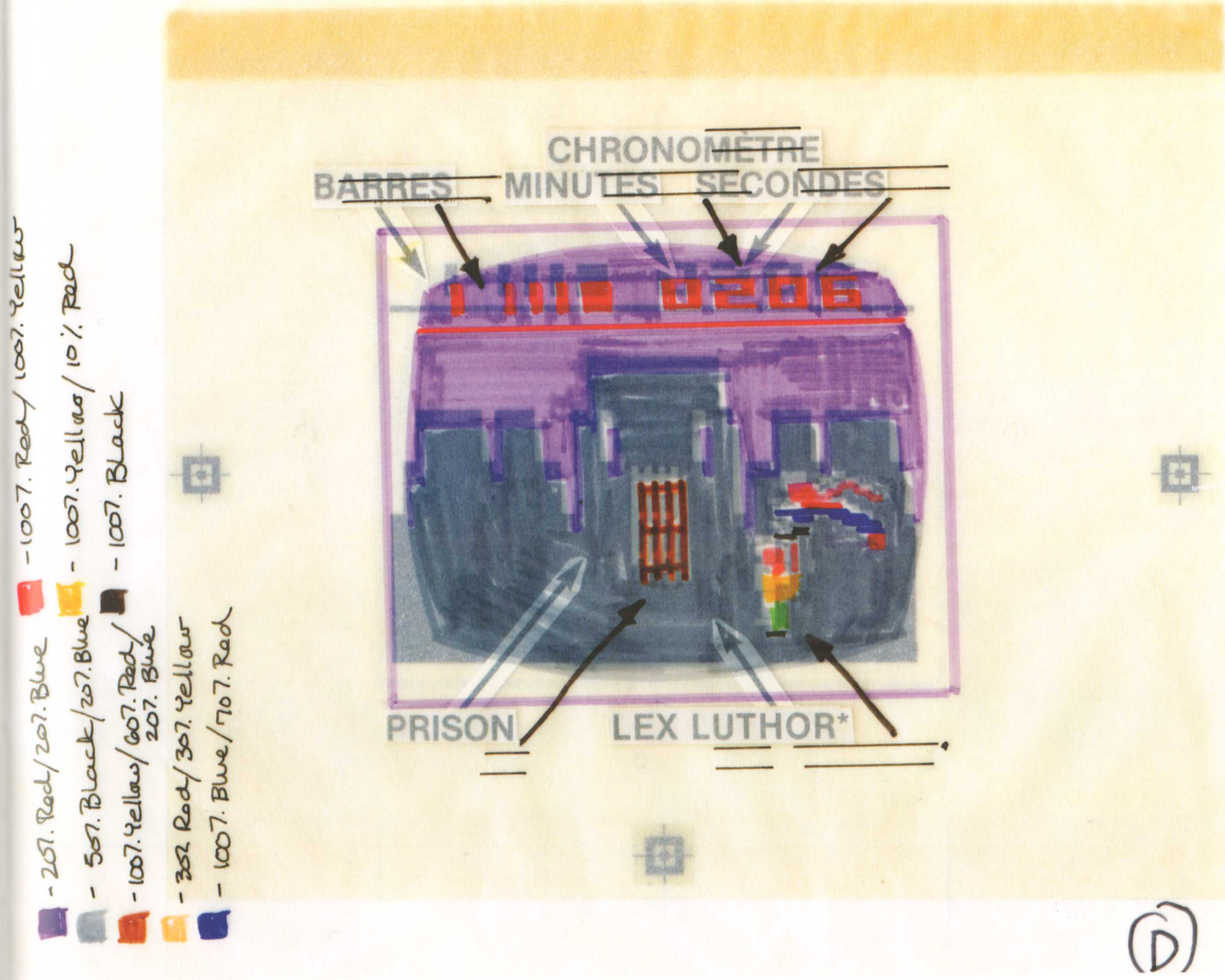
While one of the earliest entries for the 2600, this particular game has an even older pedigree. Atari's version of *Space War* is a direct conversion of what some consider the first video game, *Spacewar!*, created by Steve Russell, to be played on PDP-1 mainframe computers. *Spacewar!* was also Nolan Bushnell's inspiration for *Computer Space*, the first commercial arcade video game.

◂ Game packaging for *Superman* (2600)
Artist: Judy Richter



SUPERMAN

Everyone knows the origin of Superman: The sole survivor of a doomed planet is rocketed to the safety of planet Earth, raised by adoptive parents, and uses his extraordinary powers to fight for truth, justice and the American way. Superman was also the property of DC Comics, another entity owned by Atari parent company Warner Communications. A year after the release of Warner's 1978 *Superman* feature film, this game version became the first film-licensed video game in history.



▲ Color production mockups of a game screen illustration for the *Superman* manual interior

DC gave you a playbook on exactly how to sculpt Superman. You would do some rough sketches. Cover art was the most crucial because that was going to be on the shelf. They [licensors] weren't as hands-on in the actual game. They didn't have input or opinions on the game."

JUDY RICHTER

SUPERMAN

▲ Wonder Woman was another DC Comics character who never had the chance to share the Atari spotlight with Superman. This color study was created as part of a prototype pinball machine's backglass artwork.
Artist: Evelyn Seto

▼ Artwork used in a magazine ad for Atari's *Superman* pinball game
Artist: George Opperman

▲ Unused cover art for *Superman III* (400/800)
Artist: Terry Hoff

SUPERMAN III

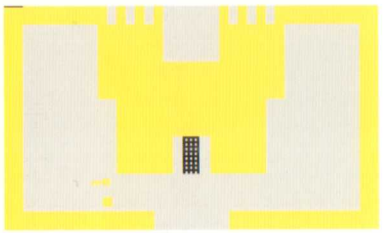
With the upcoming release of Warner's *Superman III* movie, Atari was also readying a game version for its 8-bit computers. Unfortunately, the film was a critical bomb, and the game was shelved after tepid response in consumer playtesting. But artist Terry Hoff still had the opportunity to create finished box artwork. "*Superman III* was something that they wanted to stay ahead of," he said, "so they had me working on the comp which you see on the box prototype. Then they approved it with some minor changes, as you can see. It's funny I didn't realize on the final version that the traffic was going the wrong way. Well, he was flying over a freeway in London, I guess!"

◂◂ Previous page: Detail of game packaging for *Adventure* (2600)
Artist: Susan Jaekel

This one seems to get the most fan mail. I loved doing that dragon! My dad gave me an airbrush, and I used that for the background hills and sky, along with pencil and ink lines too. What a lot of work!"

SUSAN JAEKEL

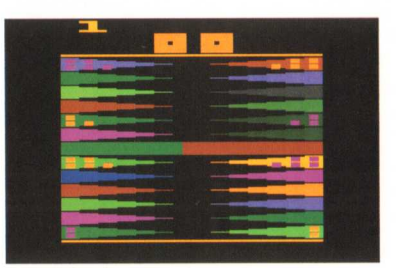
◂ Game packaging for *Adventure* (2600)
Artist: Susan Jaekel



ADVENTURE

This classic title broke ground as the first graphical adventure video game, serving as a template for many games to come. In *Adventure*, the player navigates a variety of mazes and catacombs—dodging bats, dragons and other perils in a quest for the Golden Chalice. Programmer Warren Robinett loosely based *Adventure* on the text-based *Colossal Cave Adventure* game, which he played at the Stanford AI Lab. *Adventure* is also famous for having one of the earliest video game "easter eggs," as Robinett hid his electronic signature credit in an obscure corner of the game, accessible only after collecting specific elements and bringing them together in a particular room.

▲ Cover art for *Backgammon* (2600)
Artist: Cliff Spohn

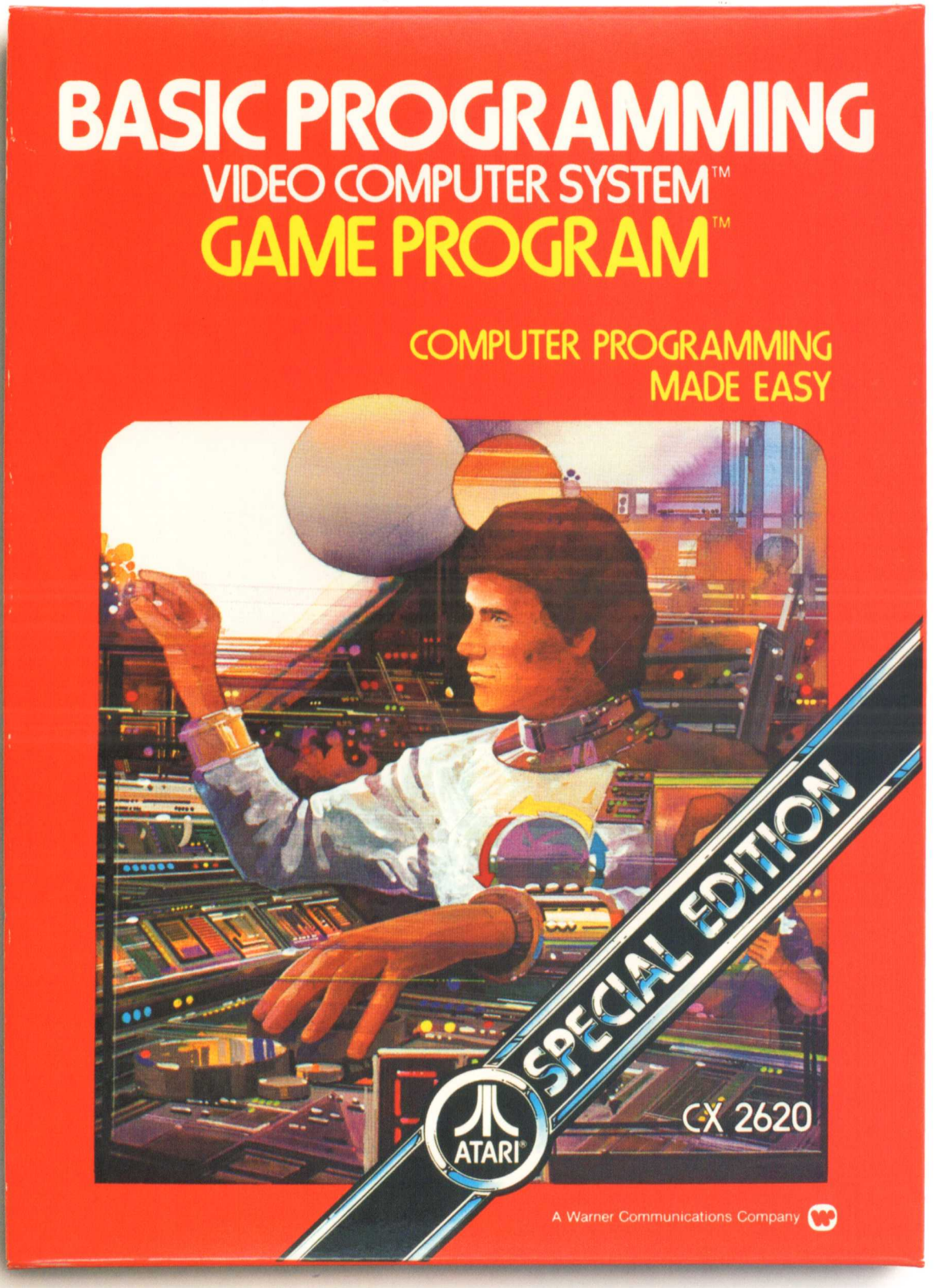


BACKGAMMON

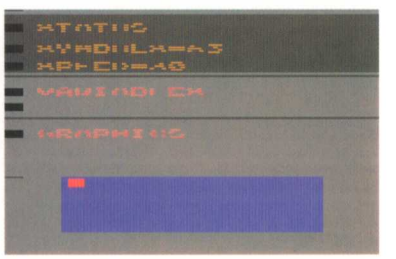
Based on one of the world's oldest known board games, Atari's *Backgammon* contains many of the elements of the ancient strategy game. Using the Paddle Controllers, players move pieces and roll dice either against another player or the game's AI opponent.

I was doing NASA work at the same time, and that was on robotics and the future control of drones ... and this ended up being similar."

RICK GUIDICE



◂ Game packaging for *Basic Programming* (2600)
Artist: Rick Guidice

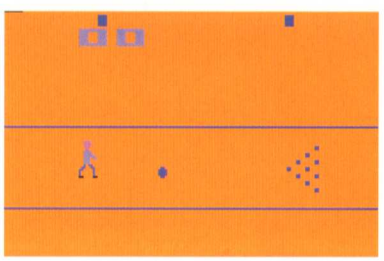


BASIC PROGRAMMING

This game served as more of an introduction to computer programming than anything else. Given the capabilities of the 2600 and a limit of 63 characters for any program created, it is difficult to program anything substantial in the game. *Basic Programming* was very much an introductory educational tool, and utilized the numeric Keyboard Controllers.

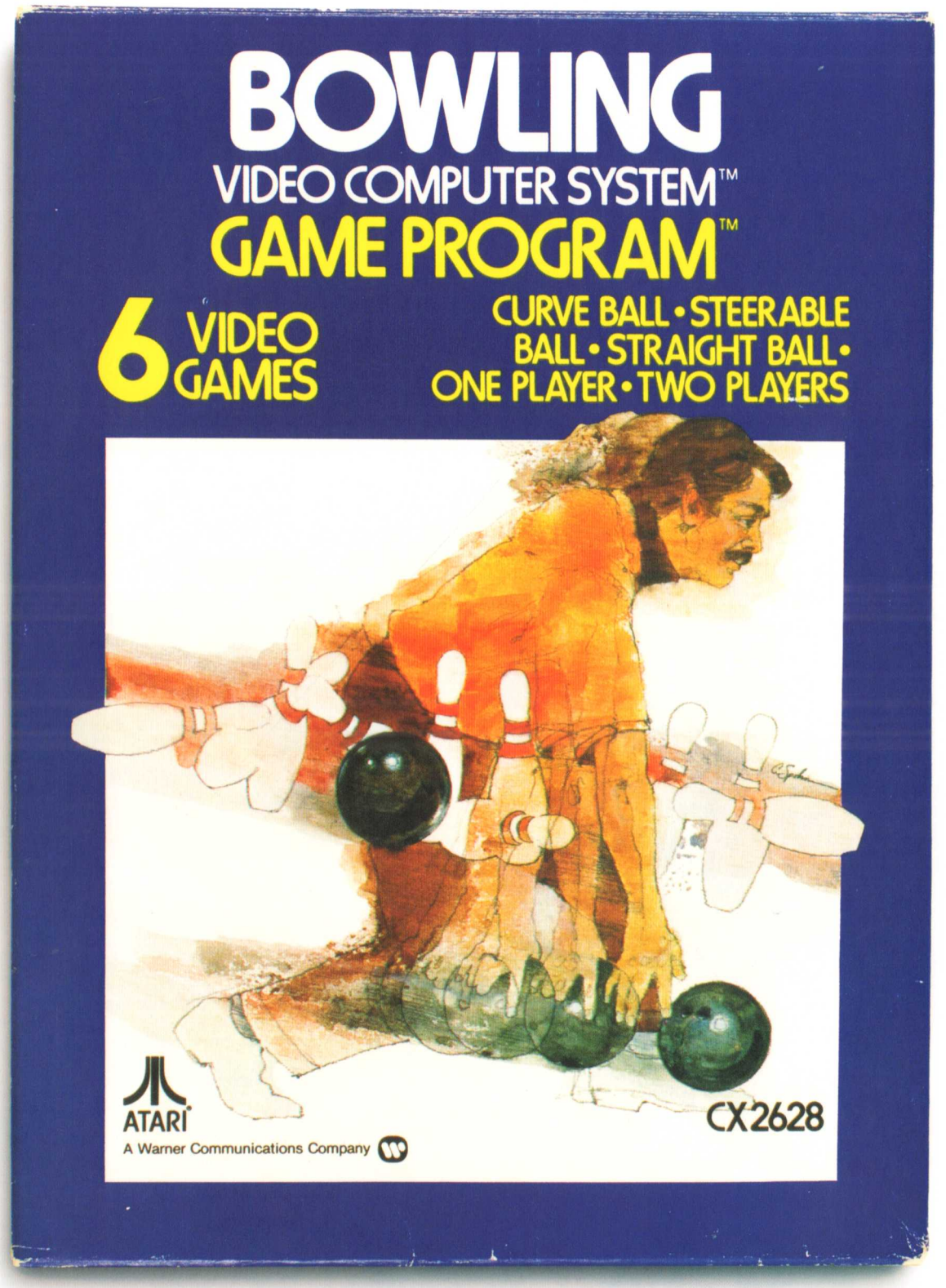
I wanted to push the design element—the staccato of the pins, the movement of the ball. I didn't overwork the pins, and wanted to keep it simple. And of course, the old mustaches."

CLIFF SPOHN



BOWLING

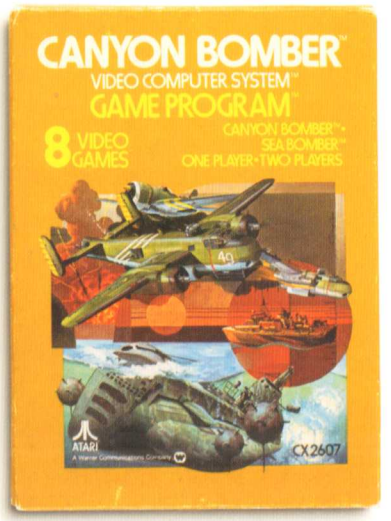
Atari's *Bowling* sports a simplified presentation, but retains much of the charm of classic ten pin play. With several unique game variations, including a steerable ball option, the game still allows serious competition, whether it's tossing a gutter ball or hitting the pocket on the Brooklyn Side.

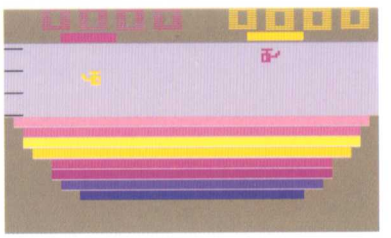


▲ Game packaging for *Bowling* (2600)
Artist: Cliff Spohn

◂ Cover art for Sears *Canyon Bomber* (2600)
Artist: Rick Guidice

▾ Cover art for *Canyon Bomber* (2600)
Artist: Greg Vance





CANYON BOMBER

Air-to-surface missiles are the weapon of choice in this game, as you drop explosive payloads into deep canyons or at enemy watercraft to be the first to 1000 points. Military strategy notwithstanding, this game shares visual cues with other early 2600 games like *Combat* and *Air-Sea Battle*.

"One of my favorites. I liked using the silhouette of a B-17 bomber with other B-17s and B-29s within the silhouette. I had the opportunity to use one of the historic bombing methods of hand dropping a bomb out of an open cockpit biplane. Off in the distance you can see a canyon in the horizon with flames, as if recently bombed. It pays homage to the name of the game."

RICK GUIDICE

I was going to have a guy rolled up into a ball—very graphic, moving, but it didn't work, so I went with the whole old time circus style. I don't remember how I derived it—maybe it was Evel Knievel or Captain America inspired, but the stripes gave it more movement, and I just wanted to follow the game's premise."

CLIFF SPOHN

▸ Game packaging for *Human Cannonball* (2600)
Artist: Cliff Spohn

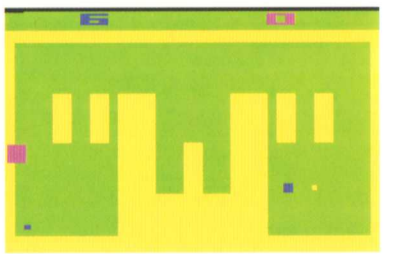
HUMAN CANNONBALL

Only the most madcap daredevil would agree to be shot from a cannon, but that's the premise of this 2600 game, as you adjust speed, angle, and power in order to safely launch your stuntman into a huge water tower. Otherwise, your thrill-seeker ends up flattened with a congratulatory "OUCH" animation to boot. This game is based on Atari's unreleased arcade game, *Cannonball*, by Owen Rubin.

I went out to a local putt-putt course and shot pictures of everything around me, to get images for my files. I like creating that depth and realism, and bringing it up spatially and dimensionally."

CLIFF SPOHN

◂ Game packaging for *Miniature Golf* (2600)
Artist: Cliff Spohn

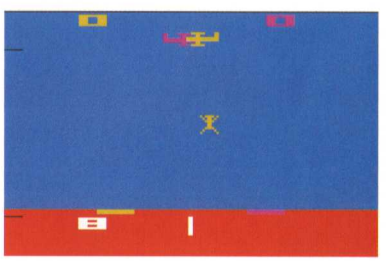


MINIATURE GOLF

Straight from the land of putt-putt, this game attempts to re-create the bizarre angles and banking shots needed to sink your ball for a hole-in-one—or at least, not a bogey.

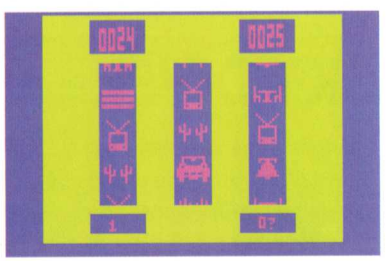
▲ Cover art for *Sky Diver* (2600)
Artist: Greg Vance

SKY DIVER



Much safer than actually pulling a ripcord at 30,000 feet, *Sky Diver* allows players to drop from a plane, open the chute, and attempt to guide their freefalling sky diver onto the landing pad at the bottom of the screen. With moving platforms, wind changes, and head-to-head competition variations, the game keeps things light.

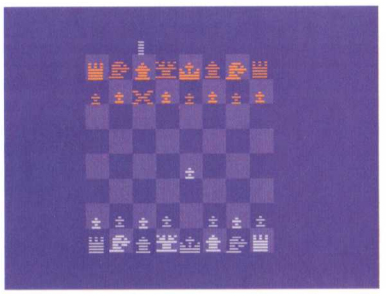
▼ Cover art for *Slot Machine* (2600)
Artist: John Enright



SLOT MACHINE

While it might be a far cry from the clinking coins and exciting action of Las Vegas, this game lets players bet up to five coins before spinning the reels in the hopes of a jackpot. Either Lady Luck lends a hand, or you walk away with empty pockets.

VIDEO CHESS



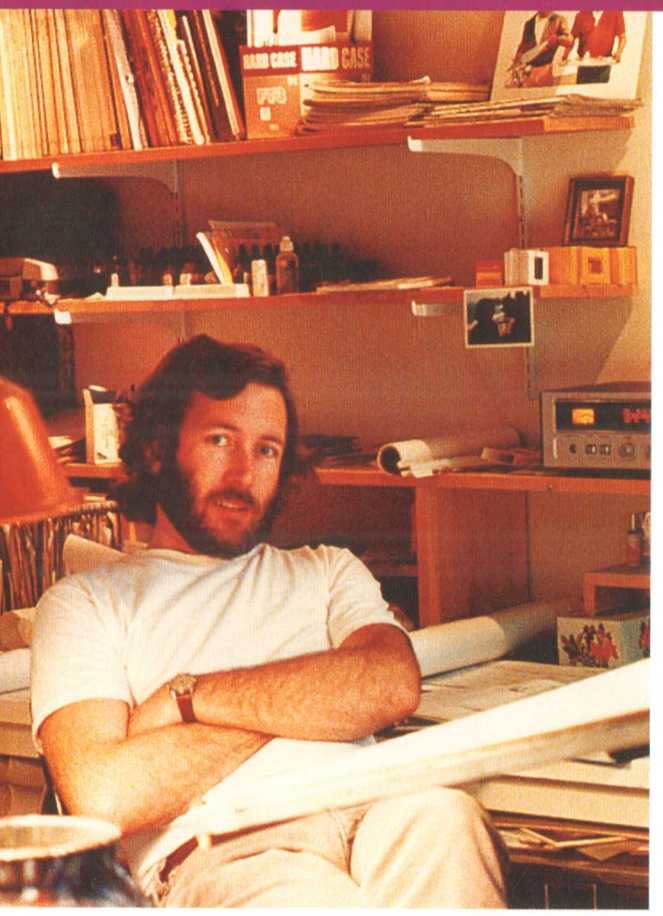
For a classic cerebral game, Atari's *Video Chess* has quite the checkered past. The company had no intention of creating a chess game for the 2600 until a Florida man apparently sued Atari for false advertising. The original VCS box sported a chess piece illustration on the cover, leading some consumers to the conclusion that they could play chess on the console. After nearly two years, Atari's programmers were able to create a chess-playing algorithm with the help of national chess champion Julio Kaplan. With the technical hurdles overcome, *Video Chess* was released. The game also led Atari to invent the bank-switched ROM technology that allowed game cartridges to later increase in memory size.

▼ Cover art for *Video Chess* (2600)
Artist: Cliff Spohn

"The question for me was, how am I going to get it to feel like you're *you* and playing against the computer? With all these lights and electronics, he could be you, or he could be the computer."

CLIFF SPOHN

RICK GUIDICE



RICK GUIDICE WAS born and raised in San Jose, California, and began his love affair with illustration and architecture in his teens. "I started at 16, doing renderings in an architecture firm," he said. "This led to working in an advertising agency that did illustrations for residential tracts and architectural renderings. Then I got into architectural design beyond rendering."

On a scholarship, Guidice attended the Academy of Art College in San Francisco, and at 25 began freelancing, picking up both advertising and editorial work, while keeping one foot firmly planted in architectural illustration and design. But it was the development of Silicon Valley and its communication needs that drew Guidice into some of his most well-known work, for both Atari and NASA. "The high-tech wave came and Atari came along, and I did a series of illustrations for them," he explained. "I was working for Atari and NASA at the same time."

But Guidice's first blush with Atari still had an architectural component. "They called me to do an architectural design for the building entrance to make it look good," Guidice said. "I was an architectural designer at the time. It was one big, open warehouse with manufacturing, delivery, and shipping together—it was quite interesting." That project led to more freelance illustration with Atari, but this time in game packaging instead. "I would come up with preliminary sketches, and they would approve those and make comments. I was one of the first ones, before they hired art directors, about the same time as Cliff [Spohn]."

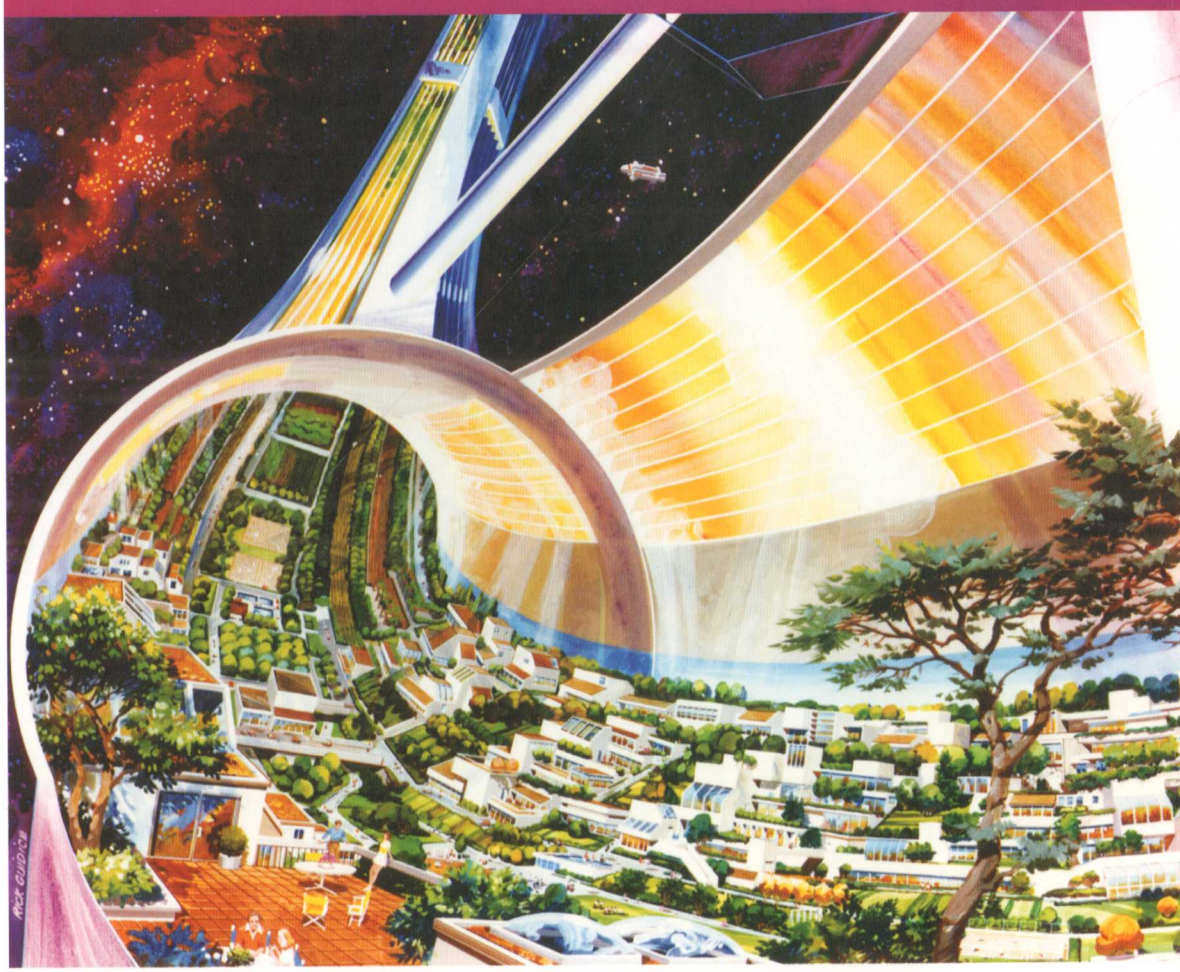
Similar to his visualizations for NASA, Guidice typically wasn't able to work from a subject he could see. "I never did see the [game] programs, since they didn't even have the games ready when we were commissioned," he recalled. "The art director would give us a verbal description of the game. When you're working as a full-time illustrator, you attack each problem in a systematic way. These were fun because you had the ability to come up with your own solution. The approach was to create and organize imagery related to the theme of the game, making the images fun for myself and creating excitement to promote the product."

At the same time Guidice was painting hot rods, biplanes, and blackjack dealers for Atari, his work caught the attention of NASA, and he was commissioned to create full-

BASIC PROGRAMMING ▪ BLACKJACK ▪ BREAKAWAY ▪ CANYON BOMBER ▪ CASINO ▪ MEMORY MATCH
NIGHT DRIVER ▪ SPACE WAR ▪ STREET RACER

"WHEN YOU'RE WORKING AS A FULL-TIME ILLUSTRATOR, YOU ATTACK EACH PROBLEM IN A SYSTEMATIC WAY. THESE WERE FUN BECAUSE YOU HAD THE ABILITY TO COME UP WITH YOUR OWN SOLUTION."

—RICK GUIDICE

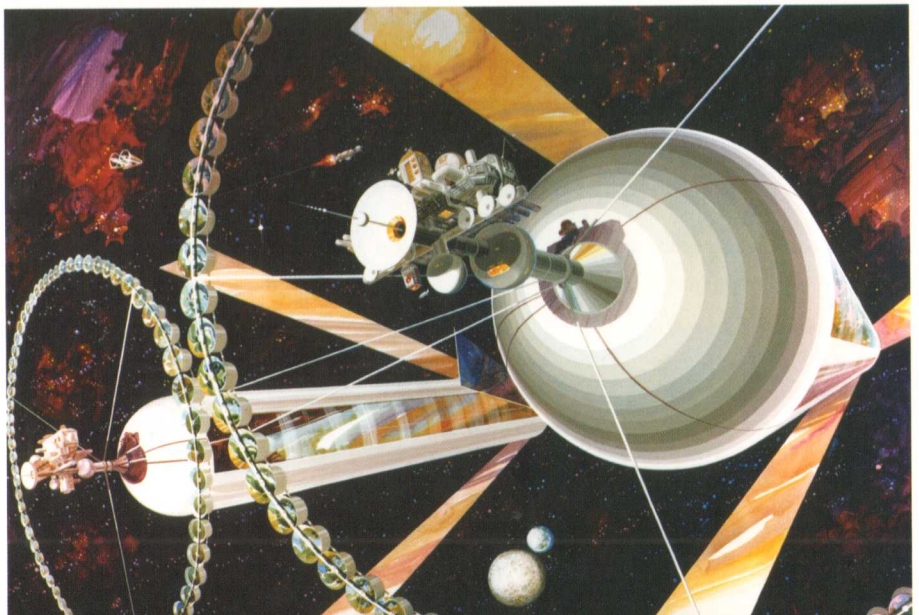


▸ Guidice's renderings of a pair of O'Neill cylinders (bottom) and a cutaway view of the proposed Stanford Toroidal colonies that could house tens of thousands of permanent residents. Artist: Rick Guidice

color paintings depicting space missions and settlements for the NASA Ames Research Center in Mountain View, California. This kicked off a 15-year working relationship where Guidice provided a hand-drawn, human face for NASA's exploration efforts. He explained: "The purpose of these pieces was to educate the public and to seek government funding and promotion for the programs. Whereas in the Atari covers, I had freedom to just have fun with whatever I chose to illustrate. NASA work, even though it was done in the same medium of acrylic, was to demonstrate a scientific image. The technical aspects and accuracy of the imagery were paramount to the scientists and engineers this work was done for." To help insure the faithfulness of Guidice's renderings, he attended meetings with NASA's mission directors and scientists to get a first-hand understanding of concepts discussed in the sessions. Each painting took him about three weeks to complete.

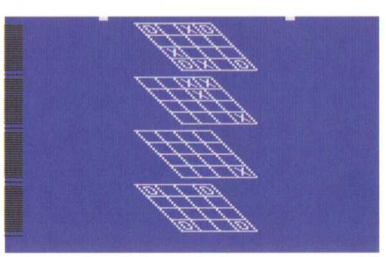
Much of that NASA work has been preserved, and now continues its life as part of traveling shows and exhibits. Some of them are also on display at the NASA Ames Research Center and The Smithsonian. Clearly, a vintage view of tomorrow is still compelling to audiences of today. "I get calls from enthusiasts and futurists," Guidice said, "who are interested in how we saw things—a past look into the future."

Now, Guidice has his head out of the ionosphere, with feet planted on terra firma—quite literally. Since the mid-'80s Guidice has focused on architectural design projects, both residential and commercial, designing homes for many notable residents of Silicon Valley. ■



▲ Cover art for
3D Tic-Tac-Toe (2600)
Artist: Susan Jaekel

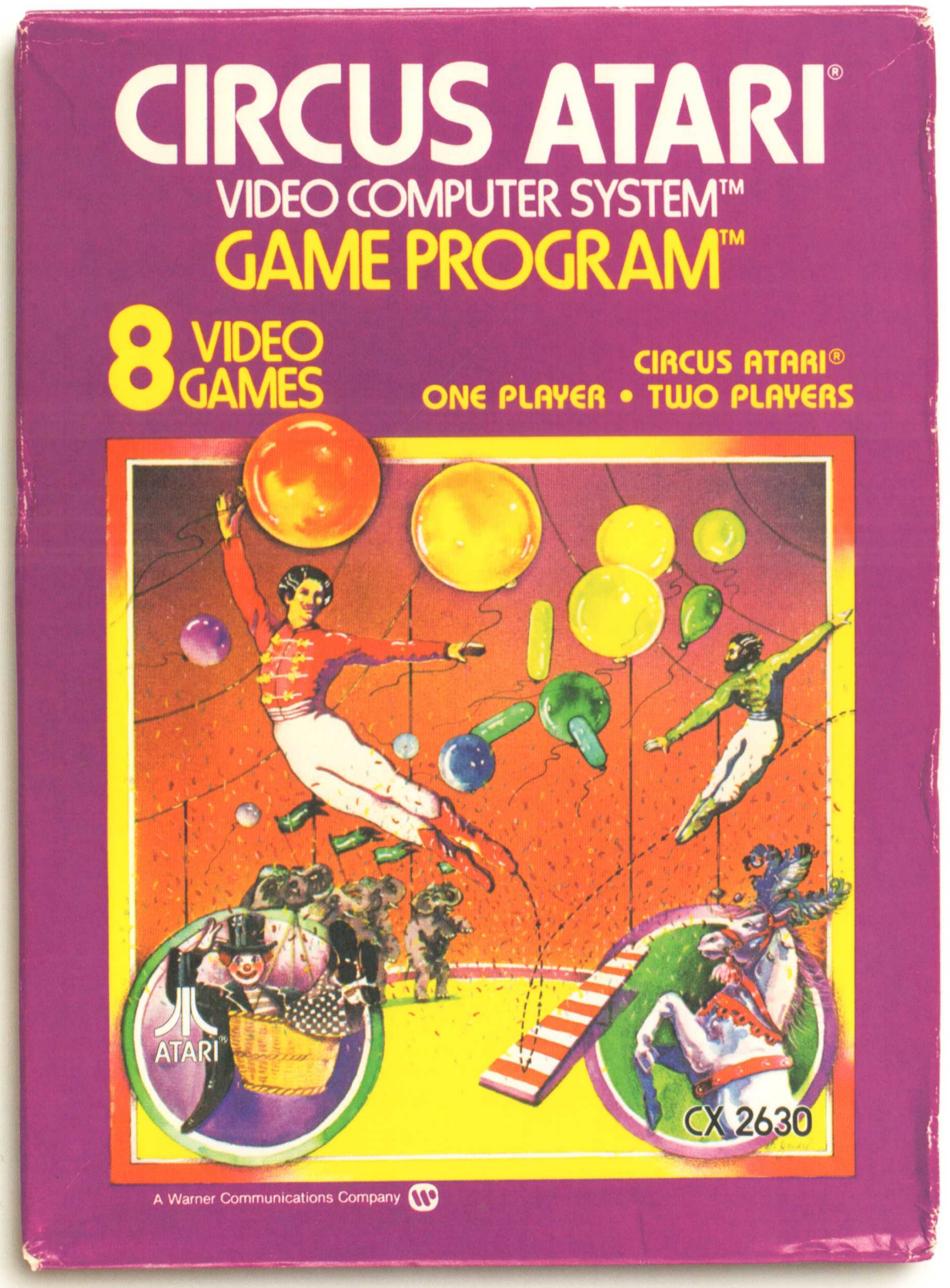
3D TIC-TAC-TOE



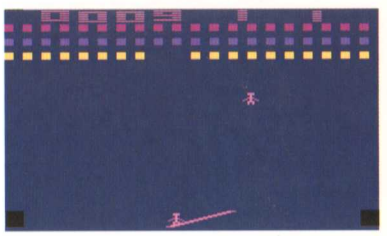
In an attempt to update the classic game of Xs and Os, Atari brought this first graphical version of *Tic-Tac-Toe* into three dimensions with four stacked game levels. Though the 2600 can't achieve true dimensionality, the game cheats it with angled perspective, which actually makes it more difficult. In the end, no matter how it's dressed up, it's still *Tic-Tac-Toe*.

I was off to the library for scrap [reference material] on the animals and clowns. I loved those brilliant colors, though they are light fugitive. I was using a frisket and air brush in the background. I was obviously using *Yellow Submarine* influences at the time."

SUSAN JAEKEL



▸ Game packaging for *Circus Atari* (2600)
Artist: Susan Jaekel



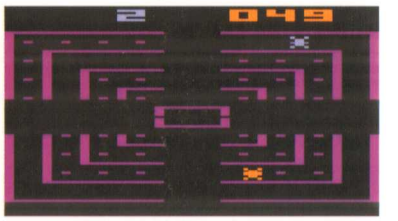
CIRCUS ATARI

A fast-paced, whimsical game, *Circus Atari* gives the player control over a pair of seesawing acrobats whose goal is to pop rows and rows of colored balloons floating by. Considering Atari's bad experience with knockoffs of its own arcade games, it's surprising that this Paddle Controller game is clearly an unlicensed translation of Exidy's 1977 arcade game, *Circus*.

I used myself and a gal from our department as the models. I'm sure I found models for the cars."

JAMES KELLY

◂ Game packaging for *Dodge 'Em* (2600)
Artist: James Kelly

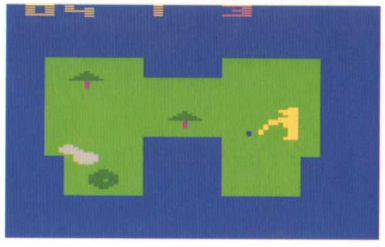


DODGE 'EM

This maze-racing game begs players to drive their speeding vehicles through multiple, intersecting lanes, avoiding both the "crash cars," as well as the other player, while scoring as many points as possible in a short amount of time. Roaring engines and helmets are kindly suggested.

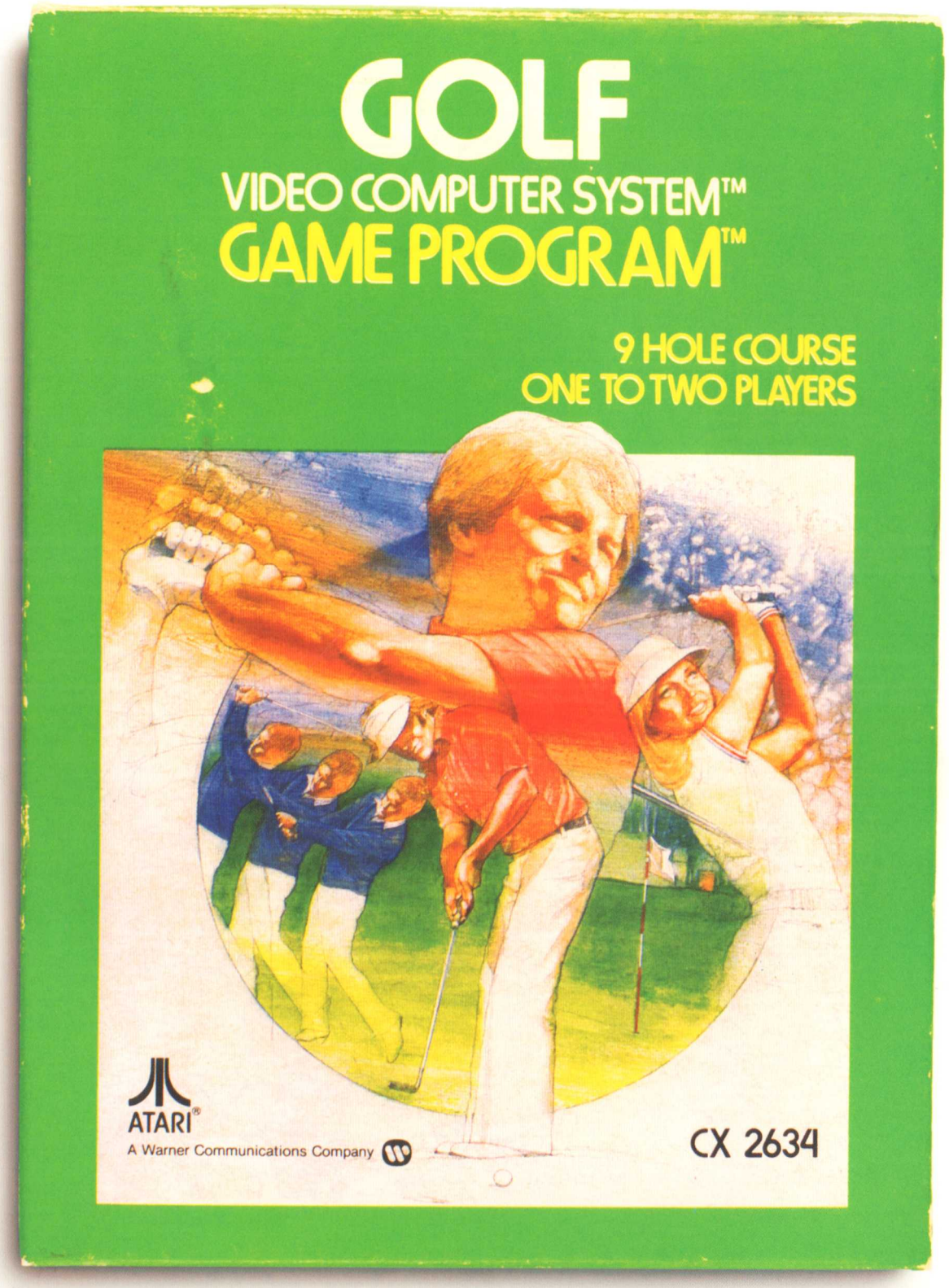
This was my first painting for Atari in 'the style.' Like most of my work at the time, this was done in acrylics and gouache."

STEVE HENDRICKS



GOLF

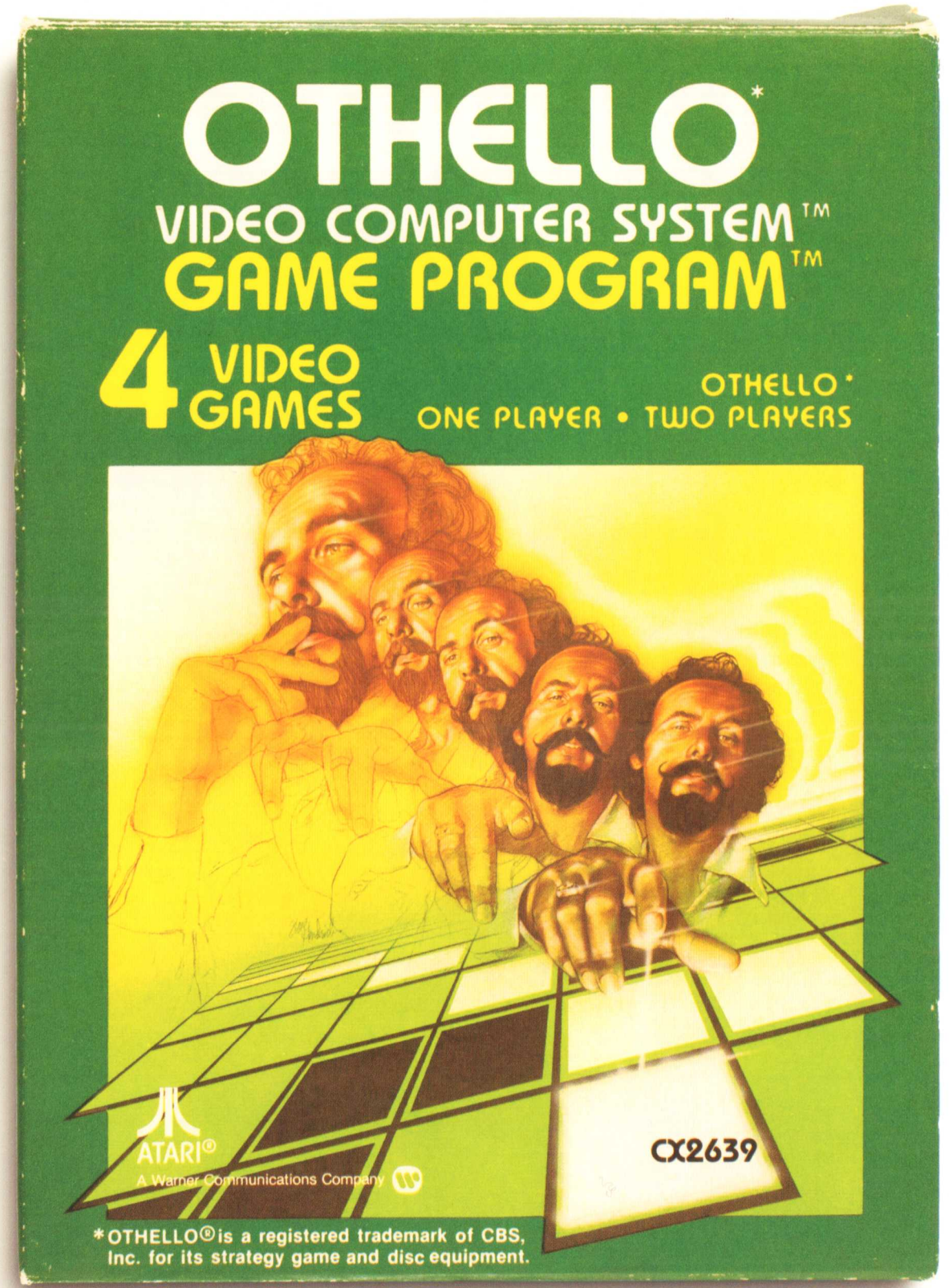
Beneath its simplified graphics and meager sound effects, *Golf* is a fun, nine-hole fairway experience. As the template for future golf video games—aim, swing, and connect—*Golf* doesn't try to do too much, but it still includes trees, water hazards, sand traps, the rough, and a zoomed-in display for putting. Not a bad day of hitting the links!



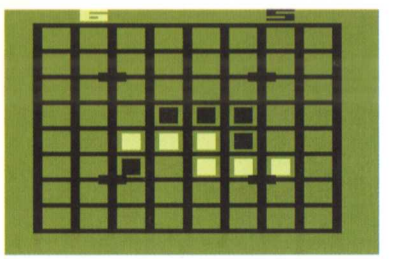
▲ Game packaging for *Golf* (2600)
Artist: Steve Hendricks

The main character in this piece was based on one of our amazing illustrators on staff at the time, Jim Kelly. I incorporated a little airbrush into this one, along with Prismacolor pencils and acrylics."

STEVE HENDRICKS



◂ Game packaging for *Othello* (2600)
Artist: Steve Hendricks

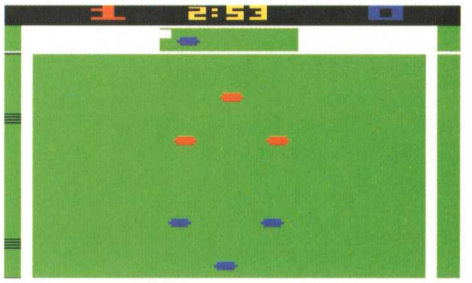


OTHELLO

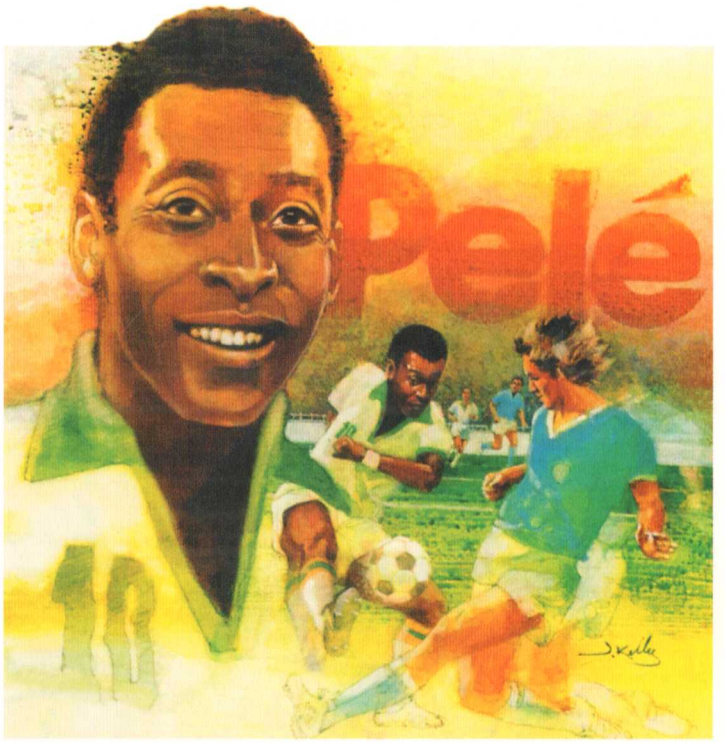
The original version of the board game *Othello*, called *Reversi*, was invented in the 1880s. Played on a green grid of 64 squares with opposing black and white pieces, the game pits player versus player in a quest to control and capture as much of the board as possible to win. The Atari version is a perfect distillation of the game, providing enough challenge and quick competition to make it an unlikely winner in the Atari 2600 catalog.

PELÉ'S SOCCER

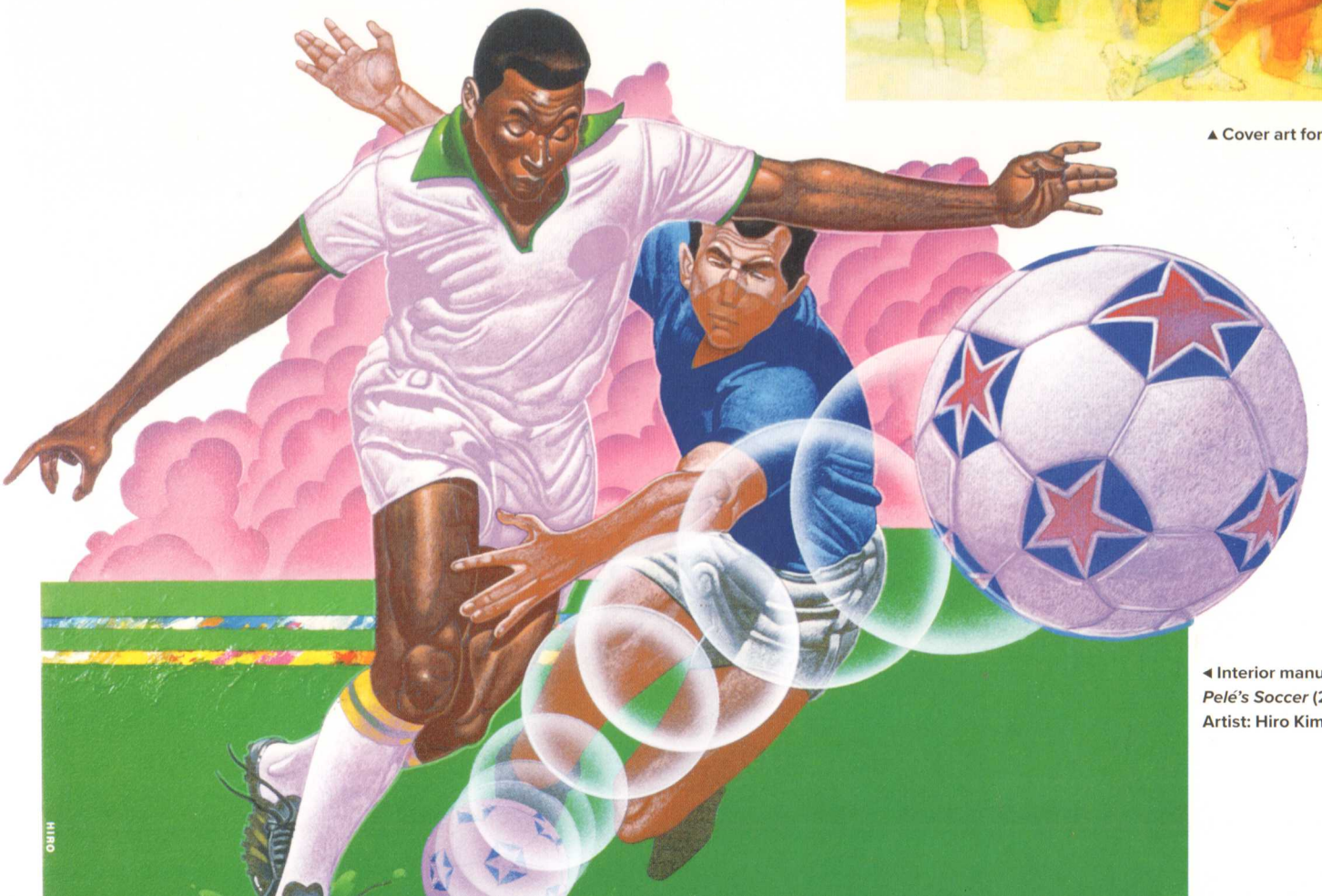
One of Atari's earlier sports games, *Pelé's Soccer* was "personally endorsed" by Brazilian footballer Pelé, widely regarded as the greatest soccer player of all time, and also named one of the "Top 20 Most Important People of the 20th Century" by *Time* magazine. The game itself is a top-down view of a green expanse of soccer field, vertically scrolling with three players on each side, and heavy passing action. A nice fireworks display is also shown after each goal. The game was first released as *Championship Soccer*.



▲ Pelé at an event marketing his signature game for the Atari 2600



▲ Cover art for *Pelé's Soccer* (2600)
Artist: James Kelly

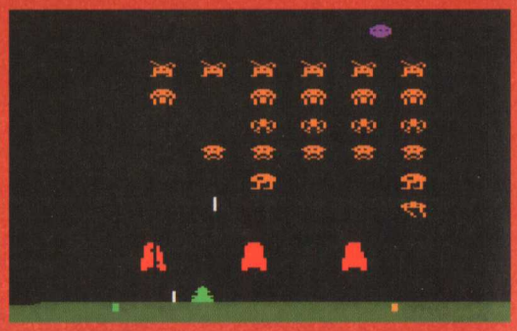


◀ Interior manual art for *Pelé's Soccer* (2600)
Artist: Hiro Kimura

▲ Cover art for *Space Invaders* (5200)
Artist: Bud Thon

SPACE INVADERS

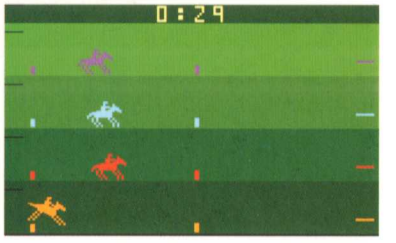
One of the most popular arcade games ever, *Space Invaders* was also instrumental in the success of the 2600. While the console had already been on the market for nearly two years, it wasn't until the release of the home version of *Space Invaders* that the 2600 truly took off. Sales mushroomed as video game players wanted to shoot waves of approaching aliens in the comfort of their own homes. Some small changes were made to accommodate the limits of the 2600's graphics, but the spirit of the game was kept in-tact. The 2600 version also added a slew of game variations, to keep it fresh for Invader veterans.



▲ Cover art for *Space Invaders* (2600)
Artist: Norman

▲ Unused cover art for *Steeplechase* (2600)
Artist: Steve Hendricks

◀ Sketch concept for *Steeplechase* (2600)
Artist: Steve Hendricks

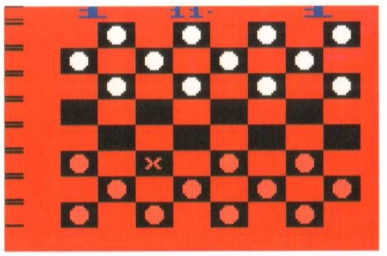


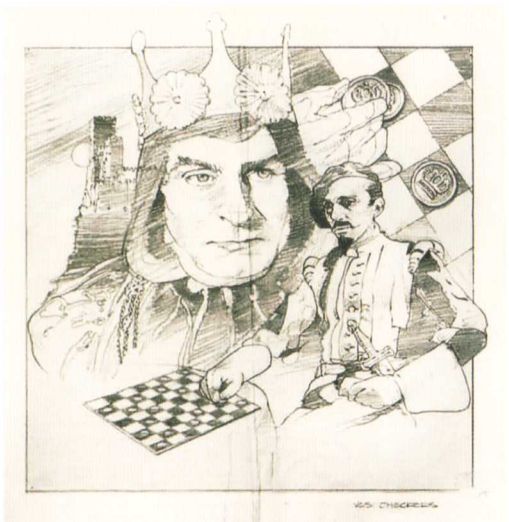
STEEPLECHASE

This Sears-exclusive horse racing game allows up to four players (with Paddle Controllers) to gallop to victory by jumping hurdles and making it to the right side before the other jockeys. Atari downplayed the potential gambling aspect of horse races in this arcade game conversion, unlike the Mattel Intellivision *Horse Racing* game. Perhaps the equestrian action was more than enough for Sears.

VIDEO CHECKERS

Like other early video game makers, Atari translated a handful of classic board games into their on-screen counterparts, to provide some well-worn and familiar game experiences for those still adjusting to video game life. And thus, checkers became *Video Checkers*. This version has an AI opponent and even utilizes official green and buff tournament colors in the advanced levels. King me, indeed!





▲ Sketch concepts for *Video Checkers* (2600)
Artist: Steve Hendricks

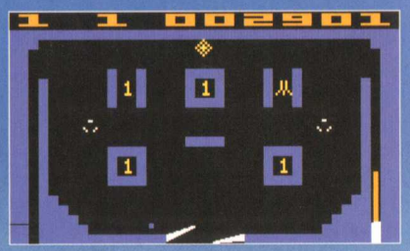
▲ Cover art *Video Checkers* (2600)
Artist: Steve Hendricks

"I used a brother and sister as my models for this one, and tried to get a little of that sibling rivalry into this piece."

STEVE HENDRICKS

▲ Cover art for *Video Pinball* (2600)

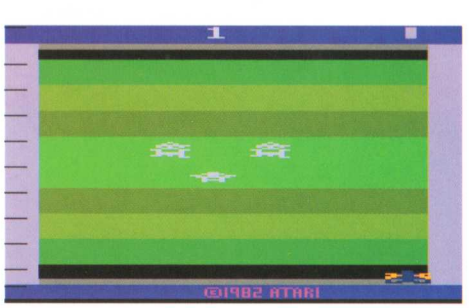
VIDEO PINBALL



The 2600 version of *Video Pinball* shares some gameplay similarities with the earlier dedicated *Video Pinball* console Atari released in 1977, but improves upon the overall game experience. Even though the playfield is simple compared to actual electromechanical pinball games, this version allows some authentic "nudging" of the ball to gain additional bonus points, as long as the player doesn't tilt and lock up play. While true pinball wizards might scoff at the game, it remains a standout early game for the 2600.

▲ Cover art for *Demons to Diamonds* (2600)

DEMONS TO DIAMONDS



Originally titled *Hot Rox*, this game's title was changed to the more descriptive *Demons to Diamonds*, a shooting gallery style two-player simultaneous affair. In the game, players participate in what the manual describes as a "Cosmic Carnival," shooting a variety of demons, transforming them into diamonds for a higher score.

SUSAN JAEKEL

SUSAN JAEKEL WAS born in Evanston, IL, to a pair of artist parents. "My dad was always bringing home manila paper for me to draw on," she said. "He taught me the alphabet at age four while drawing the objects that corresponded to letters. My mother had been an illustrator at David C. Cook in Elgin—that's where they met! My mom freelanced while my sister and I were little, till my dad got a job as an art director. However, they weren't thrilled that I had decided to make art my career. They felt teaching was a safer, more lucrative way to go, but I knew what I wanted. And I have been so lucky to be able to draw every day for a career."

Jaekel studied art at San Jose State University, and then was connected to Atari through her friend and fellow illustrator, Rick Guidice. Guidice was also working for Atari, NASA, and others. That friendship blossomed into much more, and the two formed a different sort of creative collaboration when they married in 1984.

"Artwork has always been a great selling tool," Jaekel said. "The '70s and '80s were a great time for illustration—art was everywhere, and it's different than now. But there will always be creative people making beautiful things. I worked in my own studio, freelancing, and worked in Los Gatos with a group of freelancers. I also worked in Sunnyvale. Los Gatos was a hotbed of artists—painters, sculptors, glass blowers. It was kind of secluded. In the '60s the freeway broke through, but it was isolated somewhat."

On working for Atari: "They gave us the assignments, but I never played any of the games beforehand. I came up with the initial concepts in pencil drawing and I'd bring it in for approval, then I'd paint the illustration. I used Dr. Martin's dyes on illustration board."

"At the time I was also working for *Sunset* magazine, book publishers, and graphic designers. The Bay area was good because of the rise of technology. The children's market was my favorite. I guess I was in touch with my inner child. That was my way."

"I do a lot of research beforehand, looking at other illustrators for inspiration. My creative approach was to thumb through the New York Illustrator's Annuals, my collection of children's books, or scrap file to get an idea—often sparked by an image that would get me thinking. Then I'd do several thumbnails and draw up a full-size pencil version that would be shown to the art director."

3D TIC-TAC-TOE ▪ A GAME OF CONCENTRATION ▪ ADVENTURE ▪ BASIC MATH ▪ CIRCUS ATARI
FUN WITH NUMBERS ▪ HANGMAN ▪ HUNT & SCORE

"THE CLIMATE FOR WOMEN ILLUSTRATORS WAS GREAT. I THINK ILLUSTRATION IS A FIELD WHERE GENDER DOES NOT MATTER—IT'S JUST ABOUT THE TALENT AND THE ABILITY TO GET THE WORK DONE FOR THE DEADLINE!"

—SUSAN JAEKEL

▸ Detail image of Jaekel's art for *A Game of Concentration* (2600)

While some might try to pigeonhole Jaekel's style, she is slower to put a name to it. "I like the 'imaginative' label," she said, "but I think 'stylized' or 'fantasy' would be more accurate than 'cartoony.' I shared my studio with a cartoonist for years. Maybe that did rub off! I did get more realistic as time went on, as did a lot of illustrators. The '70s were a great time for bright, loose styles, and then the trend went towards more realism."

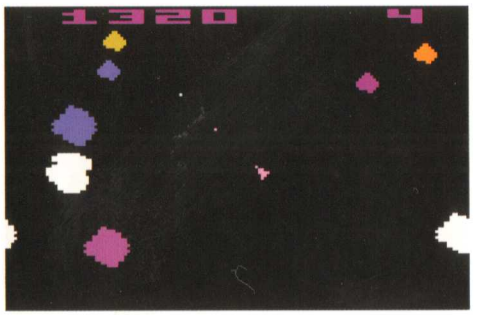
"The climate for women illustrators was great. I think illustration is a field where gender does not matter—it's just about the talent and the ability to get the work done for the deadline! I was just thinking of the women illustrators that I knew. One did beautiful botanicals and flowers for *Sunset* books and magazines. Another did very polished airbrush illustrations for video game packaging. Another did a lot of advertising work—and I eventually found my career niche with textbook illustration, along with some advertising, cookbooks, and magazine illustrations."

At Atari, Jaekel reported to art director Steve Hendricks. "Steve gave me freedom to do what I wanted," she mentioned, "and that kind of faith brings out the most creative stuff in you. He was an enthusiast for whatever we wanted to do." Hendricks described the appeal of Jaekel's style: "She is a very creative person. Her work was more imaginative, less photographic, and more cartoony. It lent itself nicely to the games she worked on."

While she was aware of Atari's soaring popularity, the cutting-edge video game technology didn't exactly connect with Jaekel. "I knew Atari was really big, but the games were like a foreign entity to me, and I resisted technology for a long time until I was forced to use it. It's the opposite of the way I think." Still, she looks back on her time working with Atari fondly. "It's fun to recall those great days. They were like a feather in my cap." ■

ASTEROIDS

Asteroids was Atari's first big arcade hit, so it only seemed natural that a home console version would follow. While it was impossible for the 2600 to reproduce the vector graphics of the arcade game, this conversion stays true to the gameplay of the original. The same rock-blasting action of the original played out well on all subsequent Atari consoles, and was ripe for interpretation by each of the artists who depicted the game in illustrations. The 5200 version of the game was created but never released because of challenges in adapting to the system's analog joystick. A special button-based controller was also in the works to improve gameplay but was never finalized.



▲ Cover art for *Asteroids* (5200)
Artist: Terry Hoff

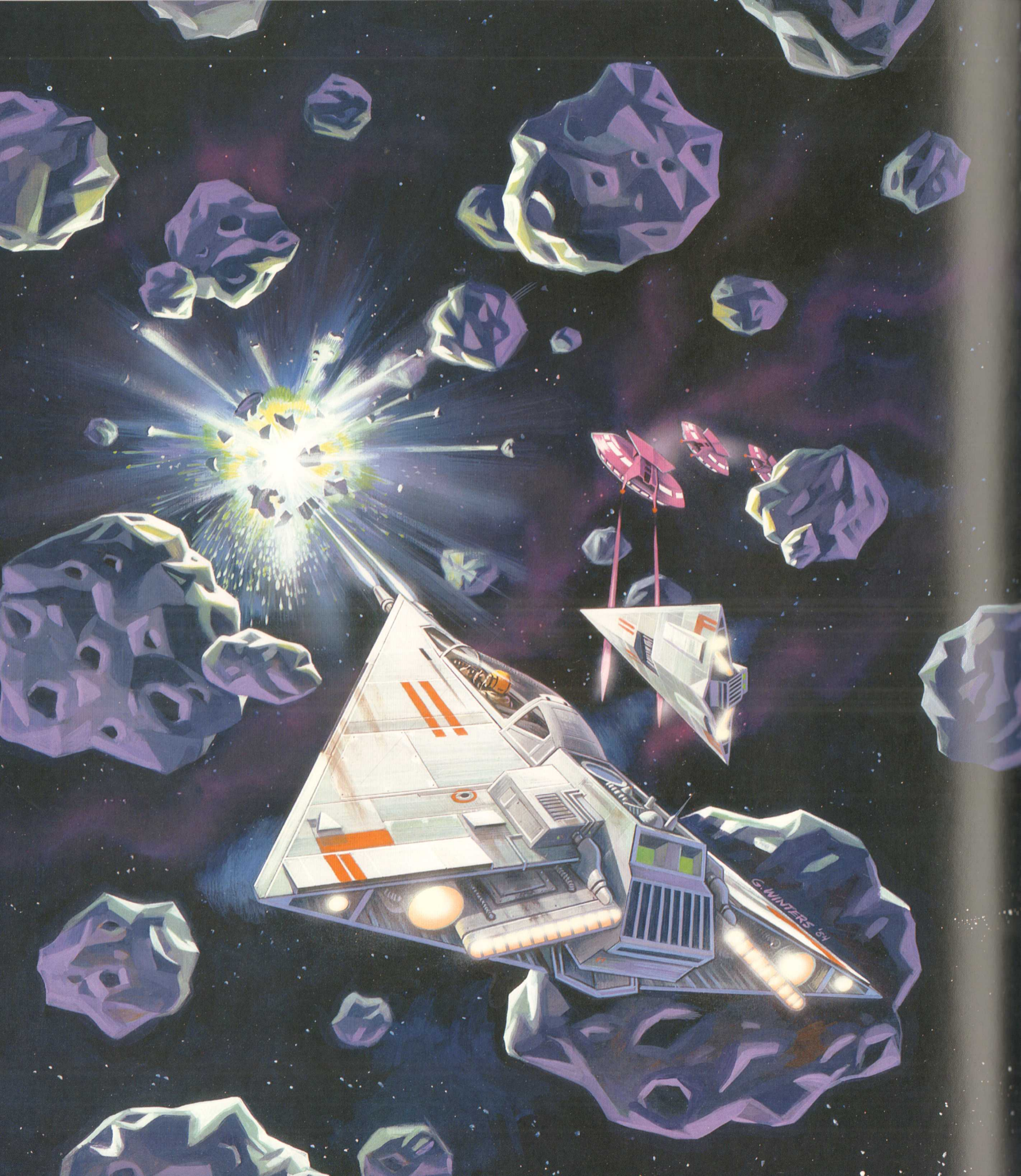
▲ Color study for *Asteroids* cover art (5200)
Artist: Terry Hoff

▲ Unused cover art for *Asteroids* (5200)
Artist: Bud Thon

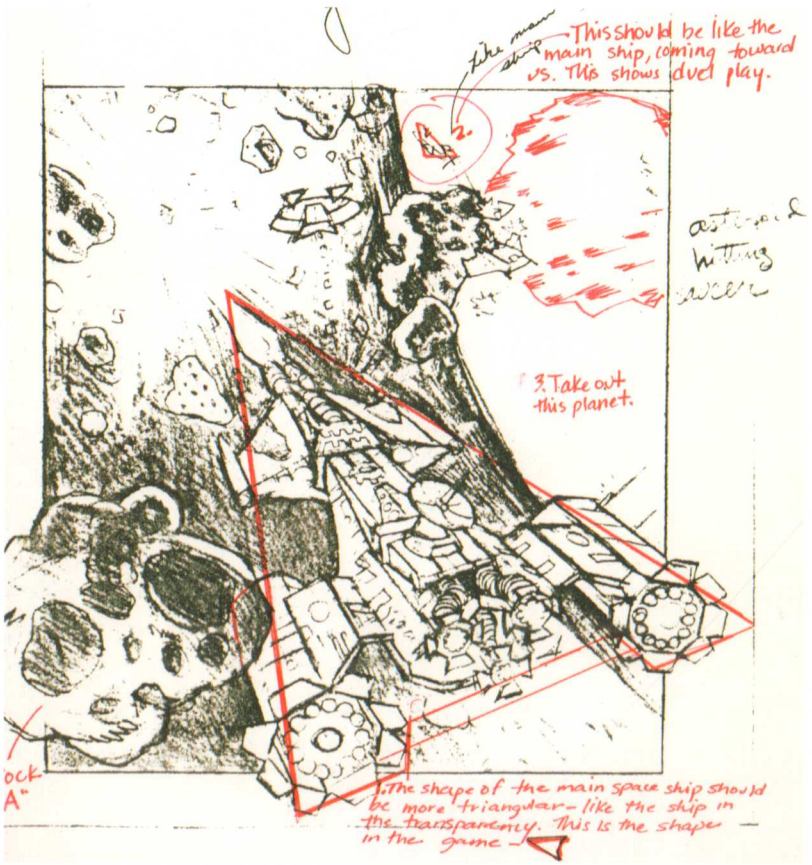
"My idea was to view it from the first person perspective, and you could almost see a reflection of yourself in the cockpit canopy. The model was my friend, and I had the action going on around his head, almost like virtual space."

TERRY HOFF

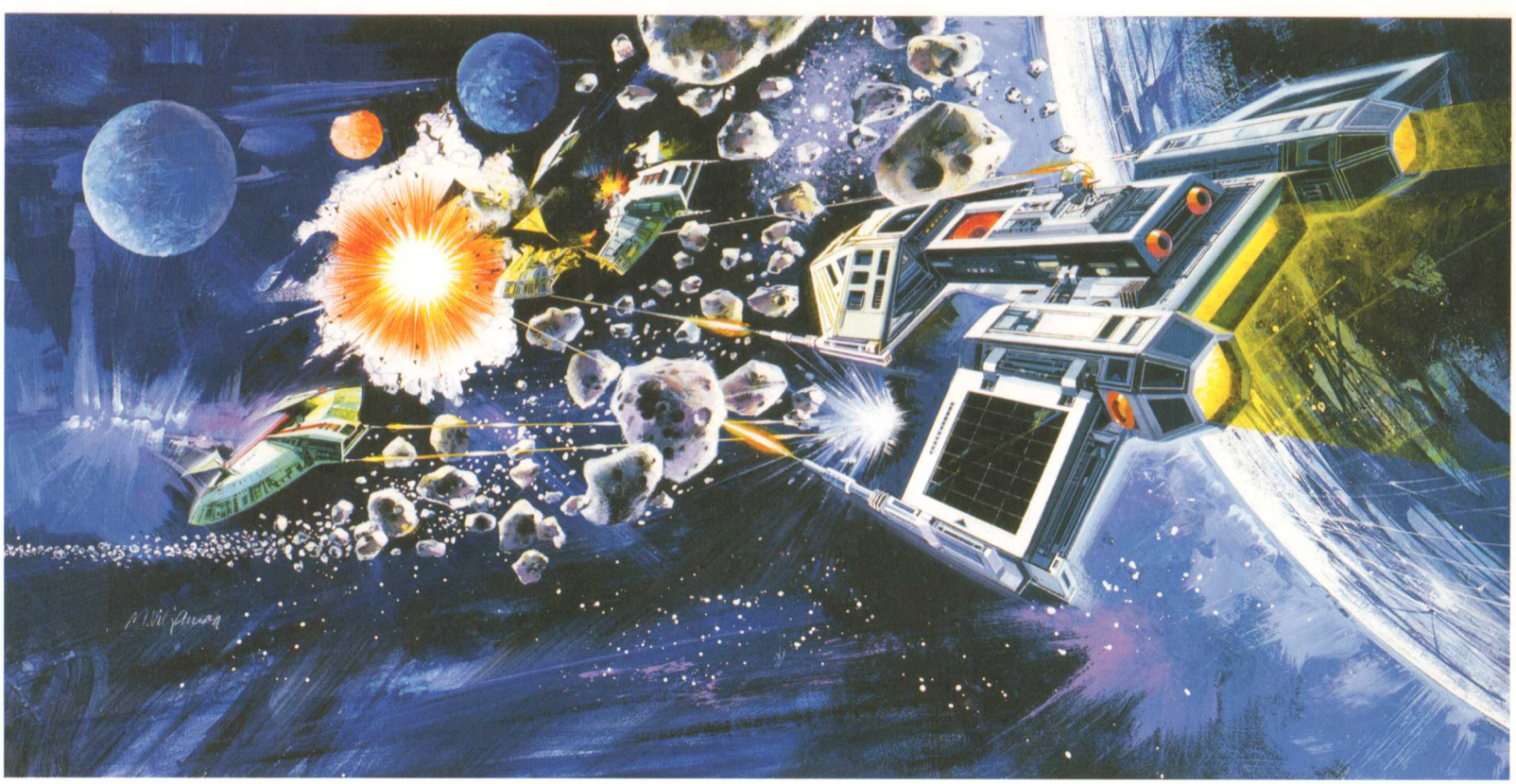
▶ Cover art for *Asteroids* (2600)
Artist: Chris Kenyon


G. WINTERS '84

◂ Cover art for *Asteroids* (7800)
Artist: Greg Winters



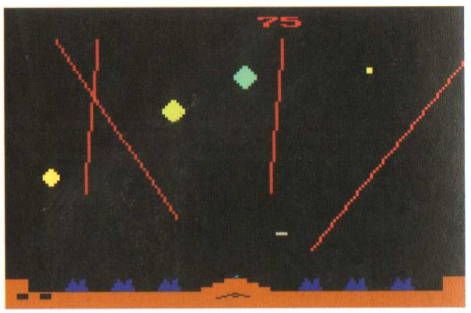
◂ ▾ Sketch concept with art direction notes and Polaroid color study for *Asteroids* (7800)
Artist: Greg Winters

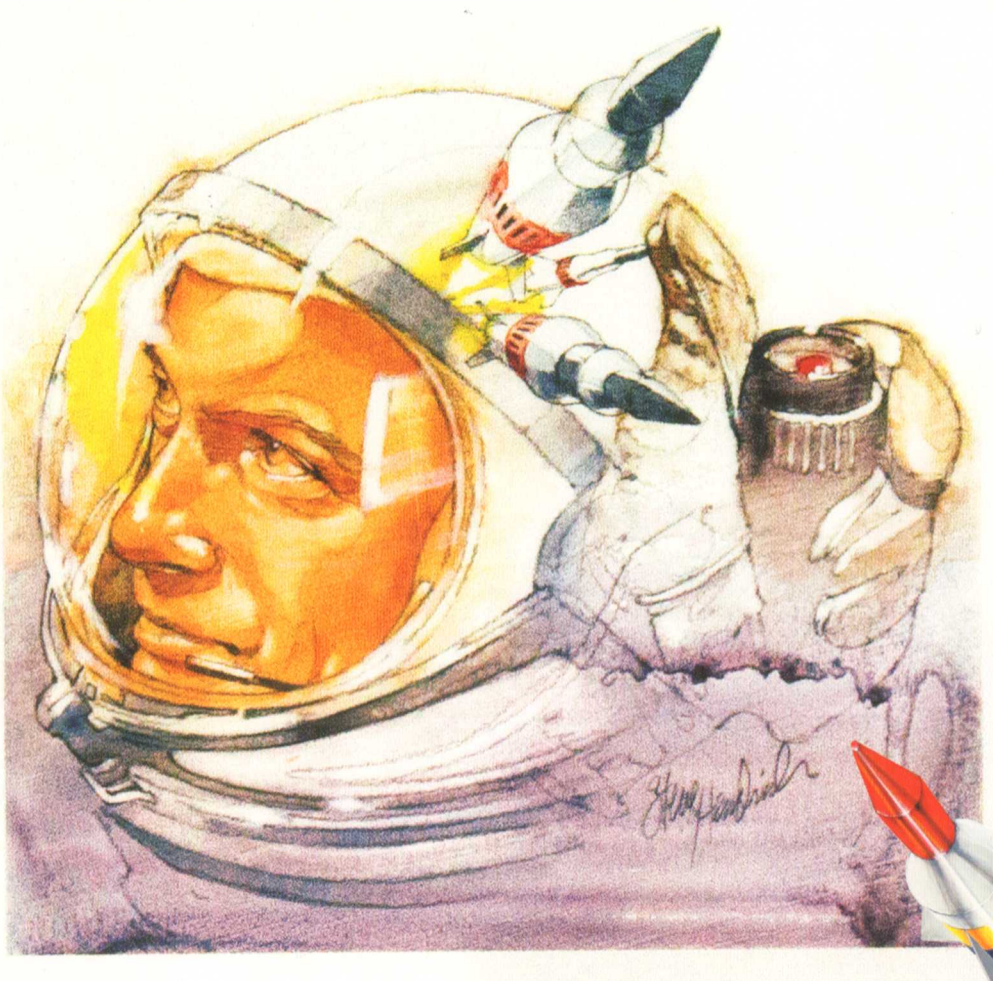


▲ Promo art for *Asteroids Deluxe* (Arcade)
Artist: Marty Viljamaa

MISSILE COMMAND

Missile Command is one of Atari's classic games, originally born out of very real Cold War fear and the looming threat of nuclear armageddon. The arcade version was originally conceived as much darker, titled *Armageddon*, with the player defending against a missile attack of California. The game name was changed and specific details omitted, but the overall cautionary messages remained. Arcade programmer Dave Theurer reportedly had nightmares of nuclear war after finishing his work on *Missile Command*, and the arcade version ends with a final bomb explosion and the words "THE END" appearing ominously. Despite these dark origins, the game's missile defense theme and addictive gameplay have proven it to be a classic of the genre.





▲ Interior manual art for *Missile Command* (2600)
Artist: Steve Hendricks

◂◂ Previous page: Detail of cover art for *Missile Command* (Arcade, 2600)
Artist: George Opperman

▲ Flyer art for *Missile Command* (Arcade)

▲ Cover art for *Missile Command* (Arcade, 2600)
Artist: George Opperman

MISSILE COMMAND

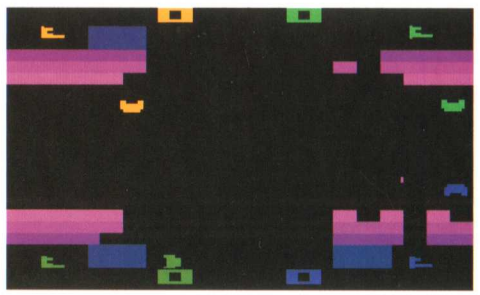
▲ Interior manual art for Missile Command (5200)
Artist: Chris Kenyon

▶ Cover art for *Missile Command* (5200)
Artist: Chris Kenyon

▼ Interior manual art for *Warlords* (2600)
Artist: Steve Hendricks

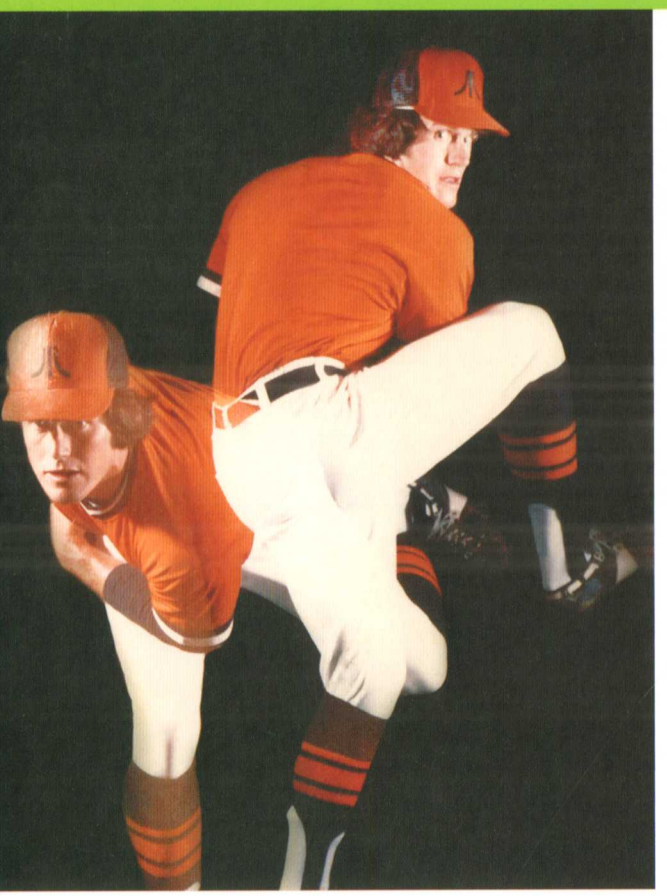
◀ Cover art for *Warlords* (2600)
Artist: Steve Hendricks

WARLORDS



Developed by one of Atari's female programmers, Carla Meninsky, this innovative, four-player game places opponents in each corner of the screen, defending their castles (and kings) against the fireball attacks of others. Atari's copywriters created a Game of Thrones-esque backstory for the game, chronicling a blood feud between brothers born to royalty. The arcade version was actually based on Meninsky's VCS game, but delays allowed the arcade version to be released first.

STEVE HENDRICKS



GROWING UP, STEVE Hendricks wanted to be just like his dad, Joe, who was an illustrator. In his third grade class, the younger Hendricks told the other kids, "'I want to be a drawer!' Kids laughed," he said, "but I thought drawer was the perfect profession. Even though I didn't use the right word, they knew what I meant." His studies at California State University of Northridge in Industrial and Product Design ended early when he left school to take his first job at an industrial design studio in Canoga Park, CA. Moving to the Bay area in 1977, he found himself showing his portfolio around town.

After interviewing at a Los Gatos advertising agency, Hendricks got a call from someone at Atari—one of his other interviewers had recommended him for a staff position there. He explained: "They said, 'We're looking for illustrators, and you sound like a good fit.' I went in to interview with several folks, including George Opperman, and before I knew it, I was signed up to work at Atari. It was one of the most fun places I ever got to work."

Hendricks began his tenure at Atari in the Coin-Op Division, working on game cabinet graphics—control panels, cabinet art, and the surrounding bevels. "We worked with our industrial design team right there who designed the cabinets and controllers. Their designs would be captured by the mechanical engineers to build the stuff, and we would use line art from them to do the concepts, with tracing paper, sketches and Prismacolor pencils. I used a lot of the industrial design techniques from college in designing the art."

"Production artists like Jim Arita would blow up our art on acetate and trace over our concepts, doing the line work. Sometimes we would do it ourselves. It was all silkscreened—sometimes 14 colors on one! It was all solids and you had to think about the bleeds and registration. It was a fun process."

"The games were simple so you had to create as much of the context with reality as you could," he explained. "We had to implant the visual image in the gamer's mind. We would work with programmers who came up with the game concepts—they were super creative."

BREAKOUT ▪ DEFENDER ▪ GOLF ▪ HAUNTED HOUSE ▪ MISSILE COMMAND ▪ NIGHT DRIVER ▪ OTHELLO
POLE POSITION ▪ REALSPORTS SOCCER ▪ STEEPLECHASE ▪ VIDEO CHECKERS ▪ WARLORDS

"WE TRIED TO TAKE THE IMAGINATION OF THE GAME DESIGNERS AND KEEP IT CONCEPTUAL—LOOSE, REPRESENTATIONAL, CAPTURING A LOT OF THE ASPECTS OF THE GAME IN ONE ILLUSTRATION."

—STEVE HENDRICKS

▸ Sketch concept for *Haunted House* (2600)
Artist: Steve Hendricks

◂ Sports montage photo of Steve Hendricks for 4-Player *Football* ad (Arcade) in *Replay* Magazine, August 1979

Hendricks later was "stolen" by John Hayashi for the Consumer Division, and along with James Kelly, Hendricks later supervised the illustration team.

"On the 2600 packaging they told us to 'do something that could spark the imagination of young buyers,' and we tried to give them some flesh and blood and energy. We tried to take the imagination of the game designers and keep it conceptual—loose, representational, capturing a lot of the aspects of the game in one illustration. I used to use markers on a frosted acetate sheet of Delrin® and the rubber cement thinner Bestine. The technique was to drip Bestine on design markers to get it to run so it looked like watercolors. I used an oil-based pencil so I could draw on the Delrin."

"The art did help kids visualize what the game was about," he continued. "They also hired creative writers to invent stories for the manual, all in line with the creator's vision—just enough to get you hooked on the game's story. The way we approached our packaging was like a paperback book—it made it richer, imaginative, and playful."

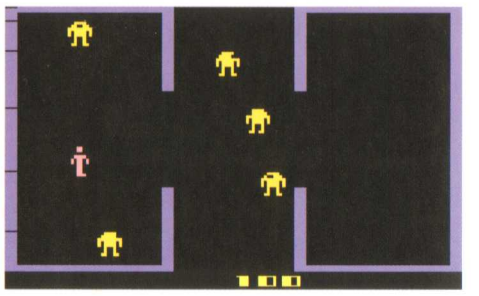
Hendricks left Atari in 1982 to pursue independent illustration work, with representatives in New York and Los Angeles. He later worked at the interactive toy company Worlds of Wonder (creators of Teddy Ruxpin and Laser Tag) founded by former Atari employees. Hendricks also lent his creative talents to Sun Microsystems and Sega, another well-known video game company. He currently works as a Creative Director at a Santa Clara design agency, FineLine Graphics & Design. ■

▲ Interior manual art for *Berzerk* (2600)
Artist: Hiro Kimura

▶ Cover art for *Berzerk* (2600)
Artist: Hiro Kimura

BERZERK

Based on the hit arcade game by Stern Electronics, the 2600 capably reproduces most of the coin-op experience in this version. Like in the original, the player roams endless mazes, blasting killer robots while trying to avoid the frightening-yet-cheery villain, Evil Otto. A challenging game as the difficulty ramps up, the 2600 unfortunately wasn't able to reproduce the digitally-synthesized speech of the arcade: "Chicken! Fight like a robot!"

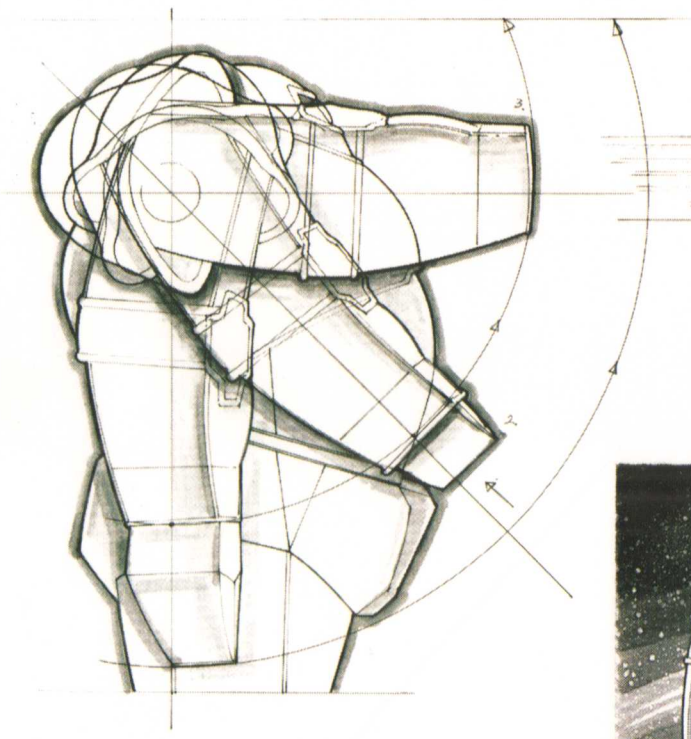


BERZERK

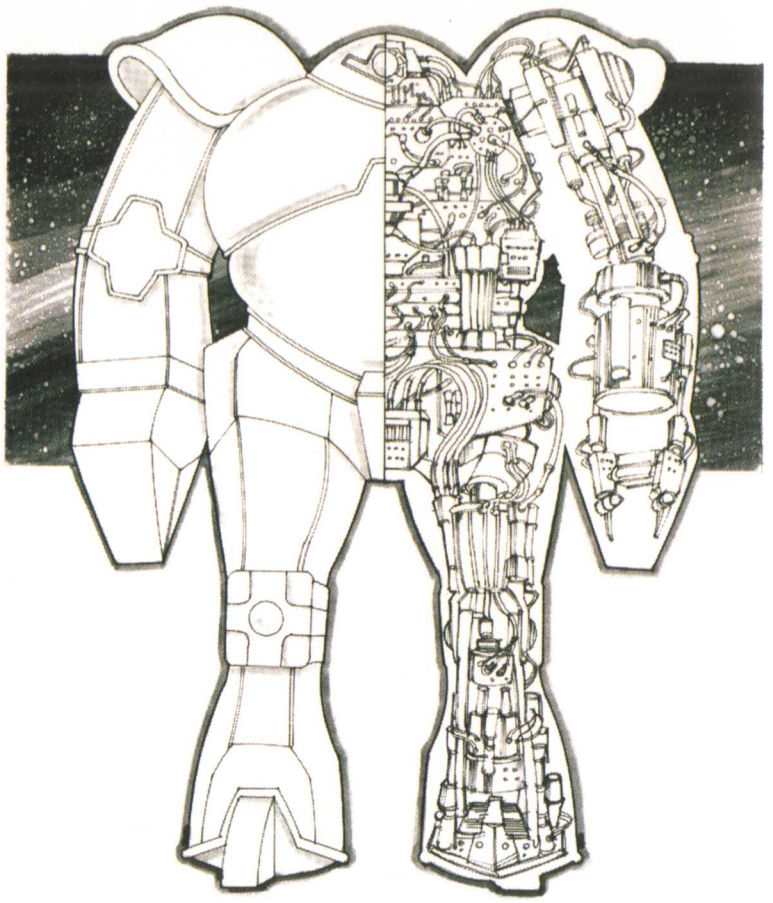
▸ Cover art for *Berzerk* (5200)
Artist: Hiro Kimura

I also did a few black and white diagrams of the robot. It was my feeble homage to my childhood hero, Mr. Osamu Tezuka's diagrams of his world-famous creation, Astro Boy."

HIRO KIMURA

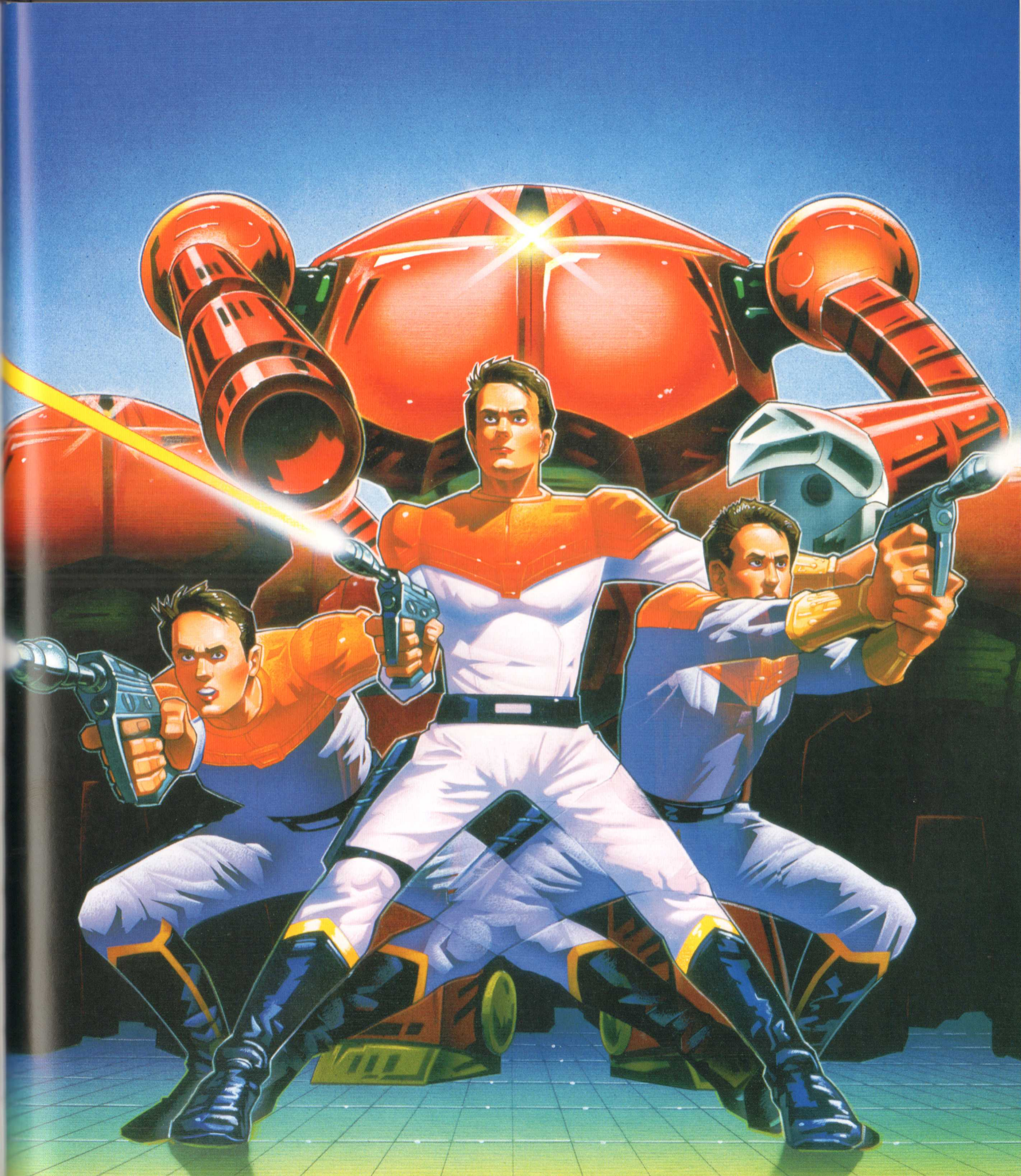


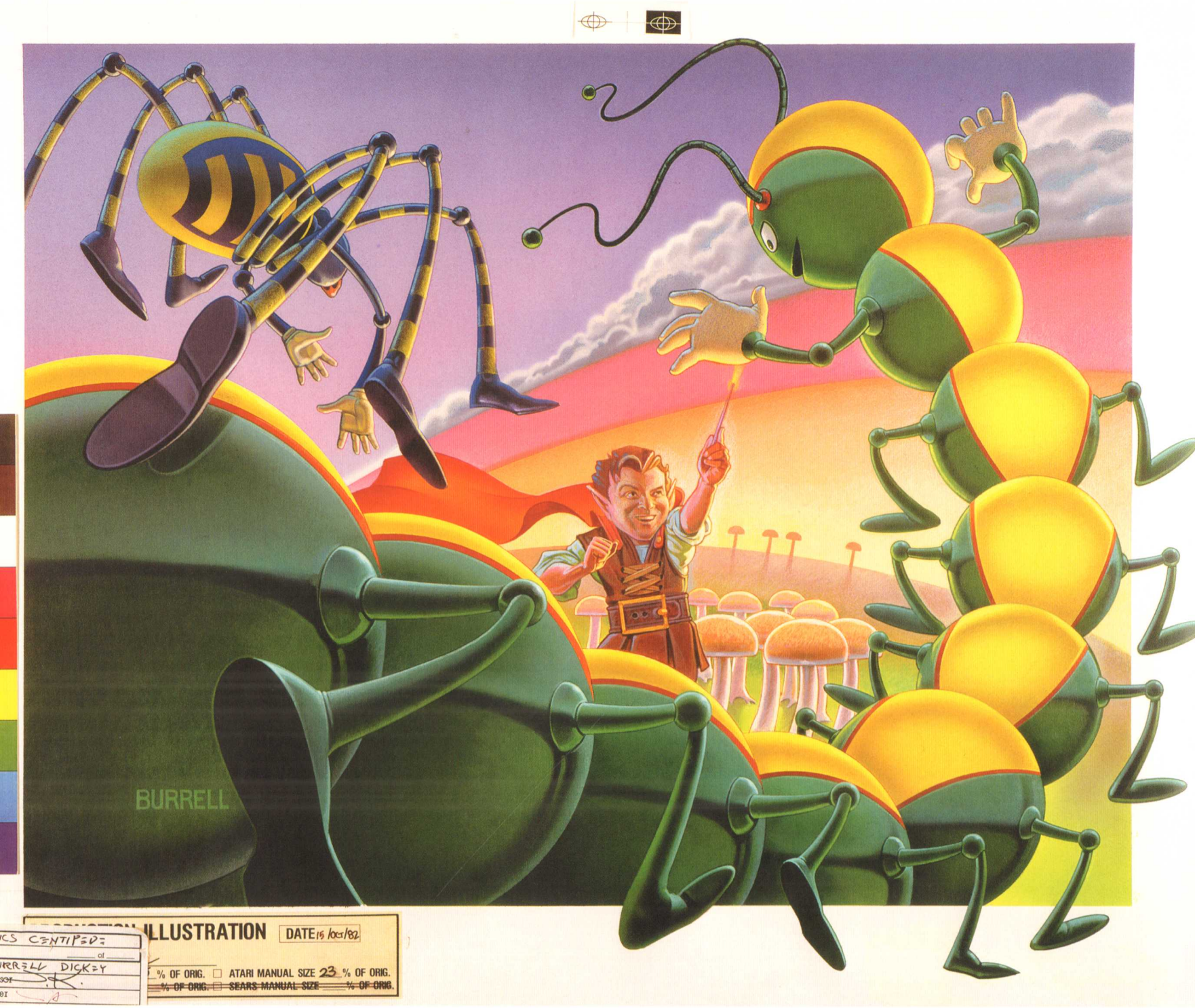
▲ ▸ Interior manual art for *Berzerk* (2600)
Artist: Hiro Kimura



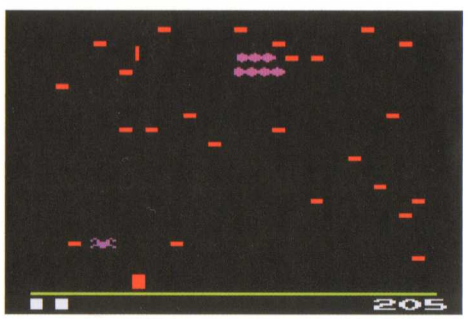
BERZERK

▲ Black and white logo artwork for *Berzerk* (5200)





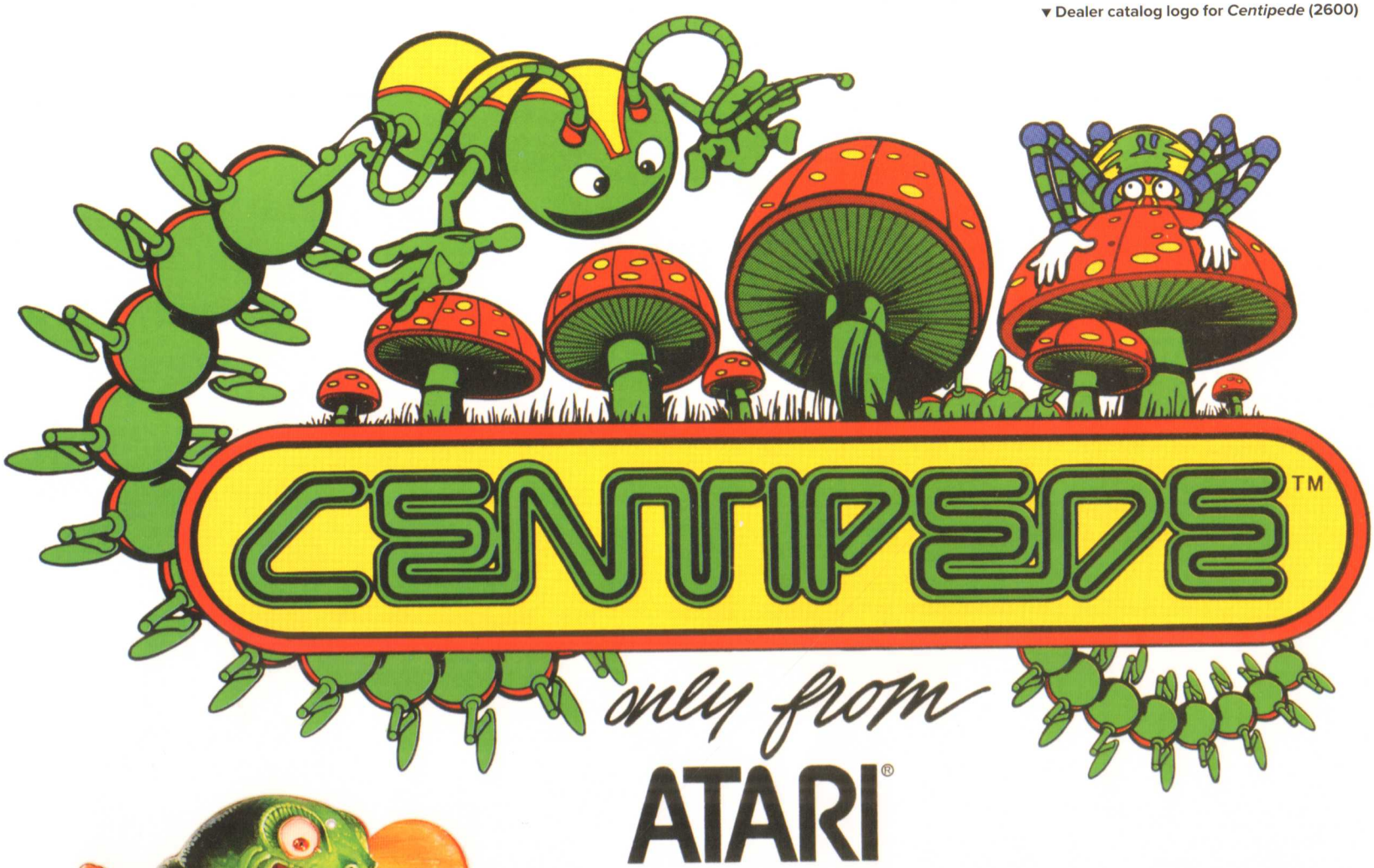
▲ Cover art for *Centipede* (2600)
Artist: Burrell Dickey



CENTIPEDE

The original version of *Centipede* was noteworthy for being the first arcade game designed by a woman, and Atari took full advantage of that PR surrounding the popular game. Programmer Dona Bailey actually co-created the game with colleague Ed Logg, and the 2600 version faithfully recreates the frenetic gameplay of the original, if not its slick graphics. Atari produced even more accurate versions of the game on its other early consoles, ensuring that no multi-legged arthropods are safe.

▼ Dealer catalog logo for *Centipede* (2600)



◂ Dealer mobile for *Centipede*
Artist: J. Hargreaves

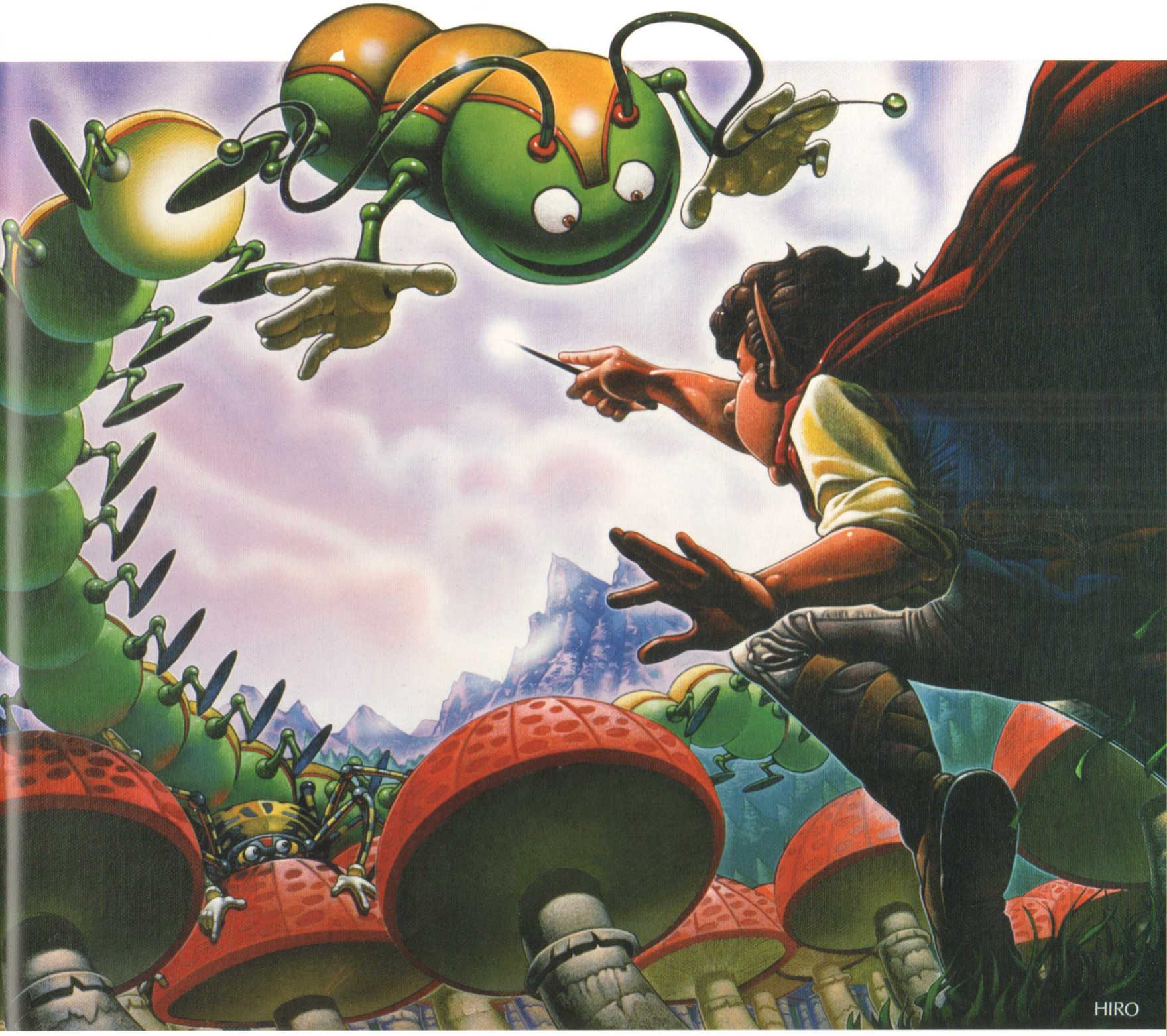
▸ Interior manual art for *Centipede* (5200)
Artist: Hiro Kimura

CENTIPEDE

▲ Cover art for Centipede (400/800)
Artist: Rebecca Archey

I viewed the game as a Hobbit-like setting with a gnome as the hero, shooting sparks from his magic wand at the centipede and spider. I proposed the idea and it was approved. The only change requested by management after the painting was finished was to eliminate the sparks shooting from the wand, as they deemed it too violent. If you ever wondered what's happening in the artwork, why the centipede is splitting, now you know the reason why."

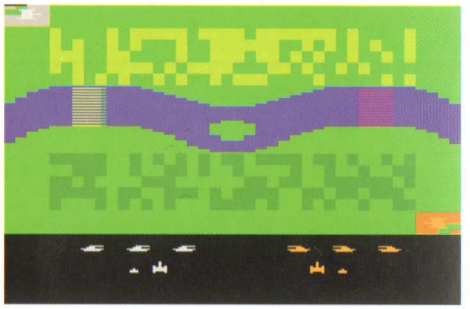
HIRO KIMURA



▲ Cover art for *Centipede* (5200)
Artist: Hiro Kimura

COMBAT TWO

The proposed sequel to Atari's first (and one of its most popular) 2600 games, *Combat Two* would have upped the ante from the original tank battle game. With added landscape elements such as water, forests, rivers and bridges, as well as a built-in level editor, the game seems to have grown in scope from the original. While officially announced, *Combat Two* was later canceled and mostly forgotten, until an unfinished prototype surfaced in 1999, provided by former *AtariAge* magazine editor Steve Morgenstern. The game was later released as part of the Atari Flashback 2 console.



▲ Cover art for unreleased *Combat Two* (2600)
Artist: Michel Allaire

▶ Interior manual art for unreleased *Combat Two* (2600)
Artist: Warren Chang

▲ Cover art for *Countermeasure* (5200)
Artist: Terry Hoff

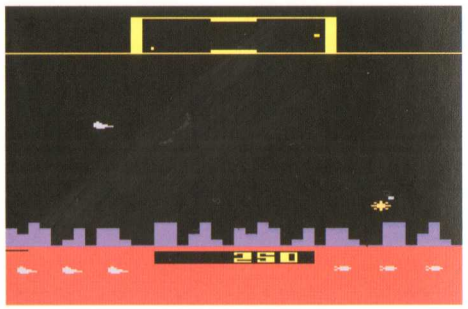
▶ Detail of cover art for *Countermeasure*
Artist: Terry Hoff

COUNTERMEASURE

This title was exclusive to the 5200 ProSystem, next in the grand tradition of war-themed games like the popular *Combat* for the 2600. The player controls a high-powered tank, determined to prevent enemies from launching a nuclear warhead and destroying the world, in classic Cold War style.

DEFENDER

The arcade version of *Defender* by Williams Electronics was heralded as an instant classic when released, because of its unique premise, fast-moving gameplay and difficulty. While its translation to the 2600 required some compromises in both graphics and gameplay, it retained the spirit of the original. The 5200 and computer versions were more faithful, and Atari remedied the shortcomings of the 2600 version with the later sequel, *Defender II*, also released as *Stargate*.

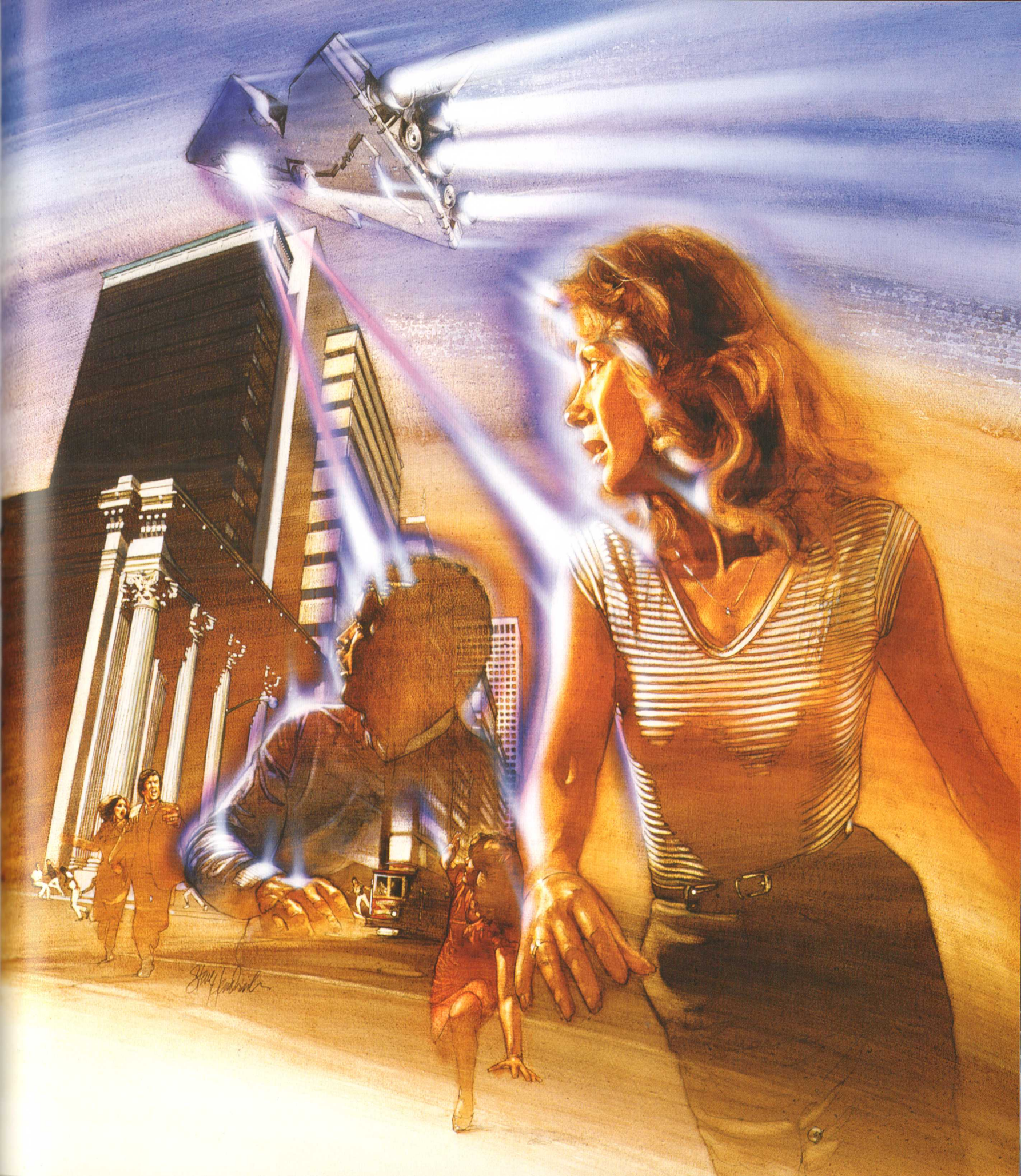


▸ **Sketch concept for *Defender* (2600)**
Artist: Steve Hendricks

"I had two of the gals who worked in the records archive department (where they kept the mechanicals and files) model. That ship was a cannibalized version of things borrowed from *Star Wars* and the *USS Enterprise*. I cut them up, lit them, and photographed them."

STEVE HENDRICKS

▸ **Cover art for *Defender* (2600)**
Artist: Steve Hendricks

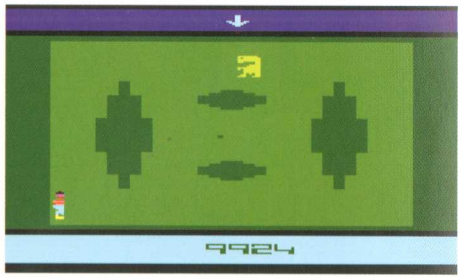


DEFENDER

▲ Unused cover art for *Defender* (2600)
Artist: Chris Kenyon

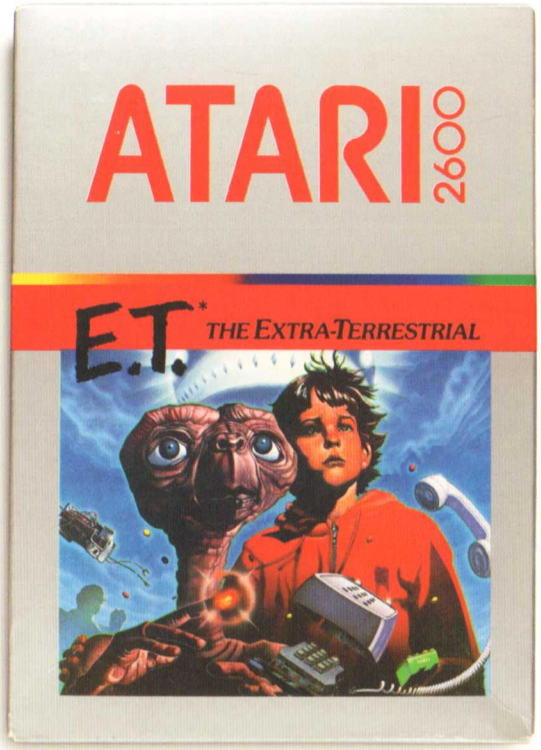
▶ Cover art for *Defender* (5200)
Artist: Robert Hunt

E.T. THE EXTRA-TERRESTRIAL



The legend that has grown up around Atari's licensed *E.T.* title nearly eclipses the actual game itself, which is a shame. Underneath landfill burials and labels of "worst video game ever" is an imaginative adventure title that pushed the boundaries of the 2600. Programmed by Howard Scott Warshaw in a ridiculously-short six weeks, the game sends E.T. searching for three parts of his communications device needed to "phone home." While attempting to rendezvous with his spaceship, E.T. can gather candy pieces (Reese's Pieces), get help from Elliott, and avoid both a menacing FBI agent and a meddlesome scientist. The game does have collision detection issues getting in and out of pits, and the instruction manual is required reading, but in all, *E.T.* is an enjoyable game and welcome part of the 2600 library.

▲ Cover art for *E.T. The Extra-Terrestrial* (2600)
Artist: Hiro Kimura



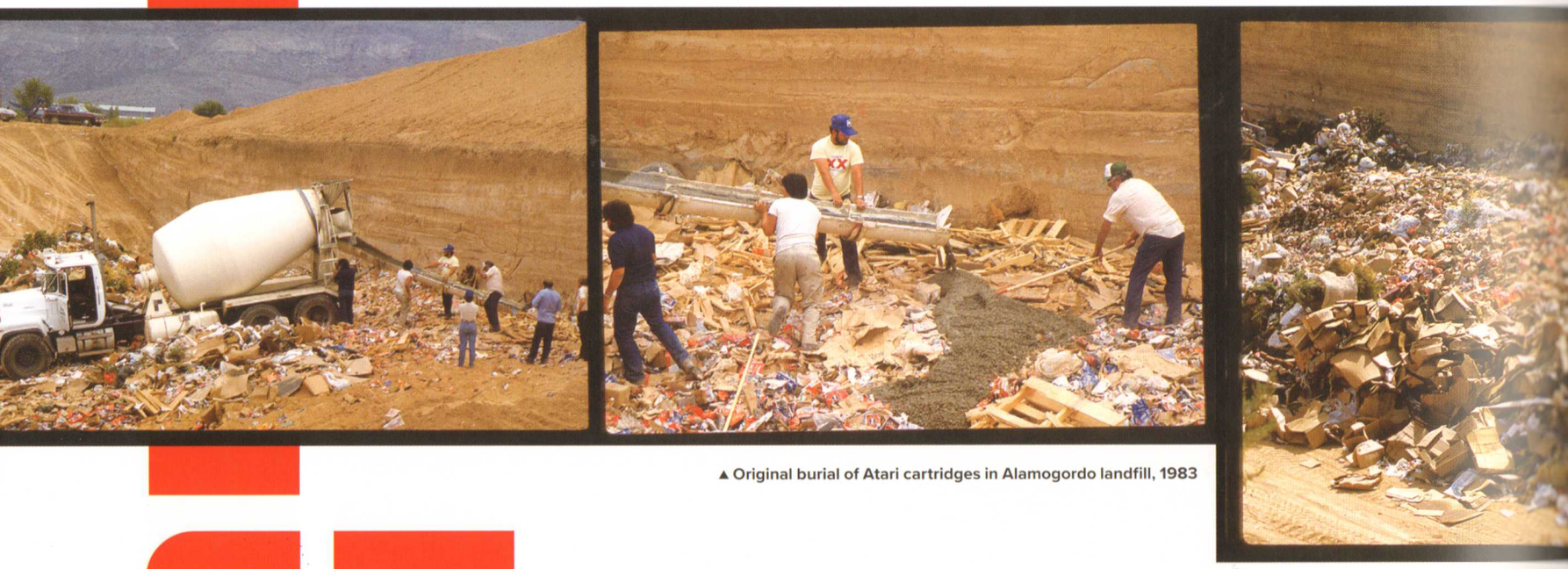
▲ Detail of unused cover art for *E.T. The Extra-Terrestrial* (2600)
This view highlights Kimura's original artwork before feedback given to the artist to depict Elliott as more "worried."
Artist: Hiro Kimura

The very first time I saw *E.T.* was through Atari. The company rented a movie theater for a private showing of the movie to all Atari employees. Several days later, I was asked to work on the video game package illustration of the film. I recall a much shorter deadline than usual, a little less than two weeks, as the game was intended Christmas that year, just a few months away.

The most difficult part of the project was that there were hardly any reference photos of the movie, particularly of E.T. itself and Elliott, since the film was just released. All the movie studio provided were a few 35mm slides. Out of desperation, my wife and I went to a nearby theater showing the movie and I took photos of the screen while my wife looked out for anyone suspecting our activity.

With a little more reference material, I went through the usual steps starting with initial sketches, but this time on steroids. I finished it on time, and on that day I brought it into Atari, as luck had it, Mr. Spielberg visited Atari to see the game's progress. I was introduced to him, showed him the artwork and he requested two minor changes. They were to 1) make Elliott look worried rather than defiant and 2) emphasize the glow around E.T.'s fingertip. I had to make the changes overnight and the final result is what's on the package."

HIRO KIMURA



▲ Original burial of Atari cartridges in Alamogordo landfill, 1983

E.T. UNEARTHING A MYSTERY

IT'S ONE OF the most enduring myths of video game history, one of those stories that spread virally even before the advent of the Internet. But there is a nugget of truth wrapped up amidst the tall tales, exaggerations, and downright misinformation. The legend sounds something like this:

MYTH: In the fall of 1983, Atari buried millions of *E.T.* game cartridges in a southwestern desert landfill. Embarrassed by poor sales and critical reception of its licensed 2600 game, *E.T. The Extra-Terrestrial*, based on the hit Steven Spielberg film, Atari decided to hide its failure, the supposed "Worst Video Game Ever," entombing it in Alamogordo, New Mexico. That game was reportedly so terrible that it sent shockwaves through the industry, causing the video game market crash of 1983, which led to the rapid downfall of Atari.

Very few of those conclusions are true, but nonetheless, many of the mythical elements have endured, spawning legends and vast tapestries of Internet comment threads over the years.

In 2013, a documentary film crew announced its intention to locate the *E.T.* burial site within Alamogordo's multi-acre landfill, unearth the contents of Atari's garbage dump, and film the results. After wrangling with local health officials, drumming up publicity, and spawning a small following of archaeologists, the crew, headed by director Zak Penn (best known for writing Hollywood films like *X-Men: The Last Stand*, and *The Incredible Hulk*) headed out to the desert to film what actually lay beneath nearly 40 feet of concrete and trash. The 2014 film itself proved to be an occasion to ruminate on the lessons of *E.T.*, and exonerate Howard Scott Warshaw, the game's programmer.

In reality, the truth was very simple. There were no hidden agendas or corporate cover-ups—at least as it related to the cartridge burial. Here are some of the facts uncovered (literally):

QUESTION 1: Buried?

Yes, Atari buried unsold, damaged and unwanted merchandise underneath a layer of cement in the hot sun of Alamogordo. But it was much more than just *E.T.* occupying those dubious desert graves. Games, consoles, and returned merchandise of all sorts were disposed of beginning on September 22nd, 1983. For tax purposes, corporations often dispose of unsold or returned product regularly, and Atari, though struggling at the time, wasn't particularly unique in this scenario. Of course, most corporations aren't Atari. The company's high-profile status, coupled with a nationally-trending news story of local teens scavenging the landfill for free Atari games, garnered some media attention.

QUESTION 2: Was E.T. a financial success?

Probably not in the way Atari hoped. Warner CEO Steve Ross negotiated an unprecedented licensing deal that paid Spielberg $22M for the rights to make *E.T.* an Atari 2600 game, part of an effort to woo the director to Atari's parent company.

Alamogordo Daily N

Alamogordo, New Mexico, Sunday, September 25, 1983

Tons of Atari games buried

Dump here utilized

By M.E. McQUIDDY
Daily News Staff Writer

The new pit at the Alamogordo city landfill has become the apparent final resting place for a warehouse of Atari games from Texas.

According to a landfill officials, eight 18-wheeler truckloads have been crushed and buried in the pit since operations began Thursday, and more are expected on Monday and Tues-

security guard was supposed to come with the project, he apparently was not on duty Friday night, as numerous reports were received by DPS Saturday of lots of Atari games showing up in the possession of youngsters, or individuals trying to sell Atari games to local stores.

"They said they tried to get rid of some of the games one time before, and a truckload was reported stolen," Moore said. "They figured it was hijacked to

told him the reason they were dumping the games is that they are changing from series 2600 to 5200 games, due to excessive amount of black-marketeering.

Apparently, another reason for Alamogordo being a top choice was that someone in El Paso wanted to melt down the metals from the components in the game sets and Atari did not want to cooperate, Moore said he was told.

▼ Documentary director Zak Penn displays an *E.T.* cartridge found during excavation of the dump site

◂▲ Archaeologists remove and inspect items found during excavation of the Alamogordo landfill site

YES, ATARI BURIED UNSOLD, DAMAGED AND UNWANTED MERCHANDISE UNDERNEATH A LAYER OF CEMENT IN THE HOT SUN OF ALAMOGORDO.

The fee was exorbitant—nearly ten times the going rate for game licensing, but not necessarily a deal-breaker for a video game based on a film by one of the era's most acclaimed directors. It still sold an estimated 1.5 million cartridges,[19] making it one of the system's better-performing games, even though nearly four million games were manufactured. Though it was probably a bad decision that hurt Atari both reputation-wise and financially, it was by no means a company-killer.

QUESTION 3: Was E.T. really the "Worst Game Ever?" Absolutely not. Programmer Howard Scott Warshaw did an admirable job creating this game, but in the end, he was most likely set up to fail. Warshaw was one of Atari's star programmers, creating the original Atari game *Yars' Revenge*, and was no stranger to movie games, having designed the movie-licensed version for another Spielberg property, *Raiders of the Lost Ark*. However, time was against him in this particular scenario. In a classic move of putting the cart before the horse, Spielberg's demand of a Christmas launch gave Warshaw only five weeks to complete the game. If the deadline passed, the licensing fee would have been wasted, the sales window slamming shut. He had five weeks to design, develop, and test the *E.T.* game, whereas a typical game creation cycle would be five or six months. With those constraints built in from the outset, Warshaw managed to put together an engaging and groundbreaking adventure game.

Was *E.T.* a perfect game? By no means. The game has notorious collision detection issues with the player's E.T. character falling into and getting out of pits. Frustration seems almost baked into the gameplay experience, with supporting game characters suddenly appearing to thwart E.T.'s efforts (the game player's) in annoying fashion. The specific game mechanics are somewhat complex, and require reading the manual closely, which was unusual for Atari's game stable, and might have been a problem given the age of E.T.'s target market. But Warshaw's *E.T.* was part of an immersive and complex world not yet seen on the 2600 platform. It allowed for multiple ways to solve the game challenges and "send E.T. home," and it sported an ending that echoed the film's tear-jerking finale. But Atari had already released games of even more dubious quality, delivered on much longer timelines. *E.T.* could have surely benefited from further testing and refinement, but Warshaw's only crime might be that of pride—believing he could create an innovative, fully-formed game within that ridiculous timeline.

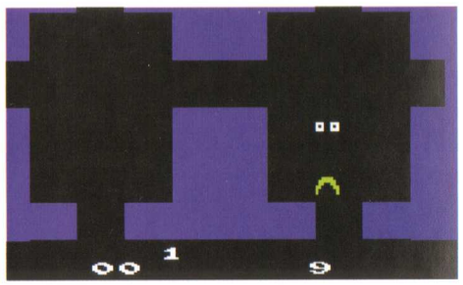
▶ *AtariAge* magazine ad announcing the availability of *E.T. The Extra-Terrestrial*

QUESTION 4:: Did E.T. bring down the video game industry?

No. Atari and others did that themselves. The licensing deal that brought *E.T.* to Atari didn't help the company's financial performance, but the wheels were already in motion for Atari's stumbles. Atari's decline was already happening before *E.T.* was developed. In early 1983, analysts has already suggested that the consumer video game market was a bubble ready to pop, with the industry suddenly finding itself awash in new products and games, all competing for the same dollars and shelf space.[20] That, coupled with some of Atari's questionable sales return and financial reporting practices, set the company up for a serious fall, from which it never really recovered. *E.T.* just had the bad fortune of being released at precisely that moment. ■

▲ Cover art for *Haunted House* (2600)
Artist: Steve Hendricks

HAUNTED HOUSE



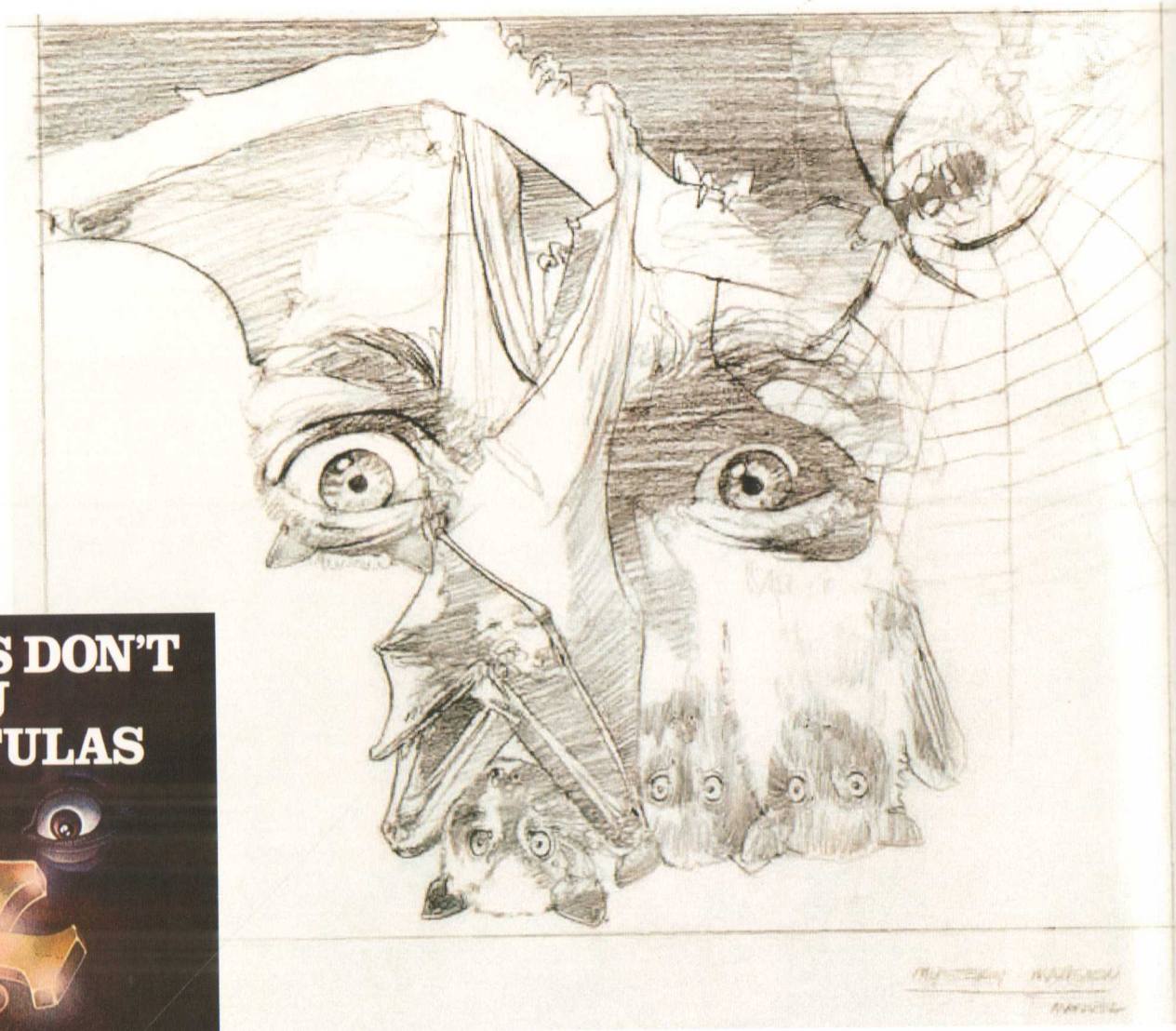
A moody, atmospheric game for the 2600, *Haunted House* (also originally to be called *Mystery Mansion* and *Graves Manor*) drops your character into the abandoned Graves Mansion, searching for all three pieces of a mysterious urn and a way to escape unscathed. With only a flickering match to guide the way at some points, a series of bats, tarantulas and the spirit of Graves himself try and take each one of your nine lives. The game is a clever and popular maze adventure game, and has earned its reputation as one of the best original games for the 2600.

The cover used was meant to be on the inside. The actual cover was way cooler and more scary, but the gal in charge of marketing came into my office after Mike approved it, and said she'd pull it, because you 'can't have eyes in that place.'"

STEVE HENDRICKS

▲ Original cover art and eventual interior manual art for *Haunted House* (2600)
Artist: Steve Hendricks

HAUNTED HOUSE

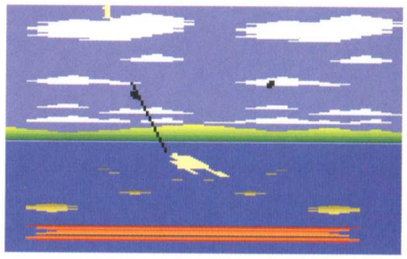


▲ Sketch concept for *Haunted House* (2600)
Artist: Steve Hendricks

▼ Ad for *Haunted House* (2600) which ran inside of comics from Warner Communications sister company, DC Comics

FROG POND

Developed by Atari in 1982, *Frog Pond* was ostensibly aimed at young children. In its simple gameplay, the player controls a frog, attempting to eat a variety of insects while missing very few. The game was completed and artwork was created, but for unknown reasons the game was never released. Coincidentally, *Frog Pond* bears more than a passing resemblance to the superior 2600 game *Frogs and Flies*, released by Mattel under its M-Network name.

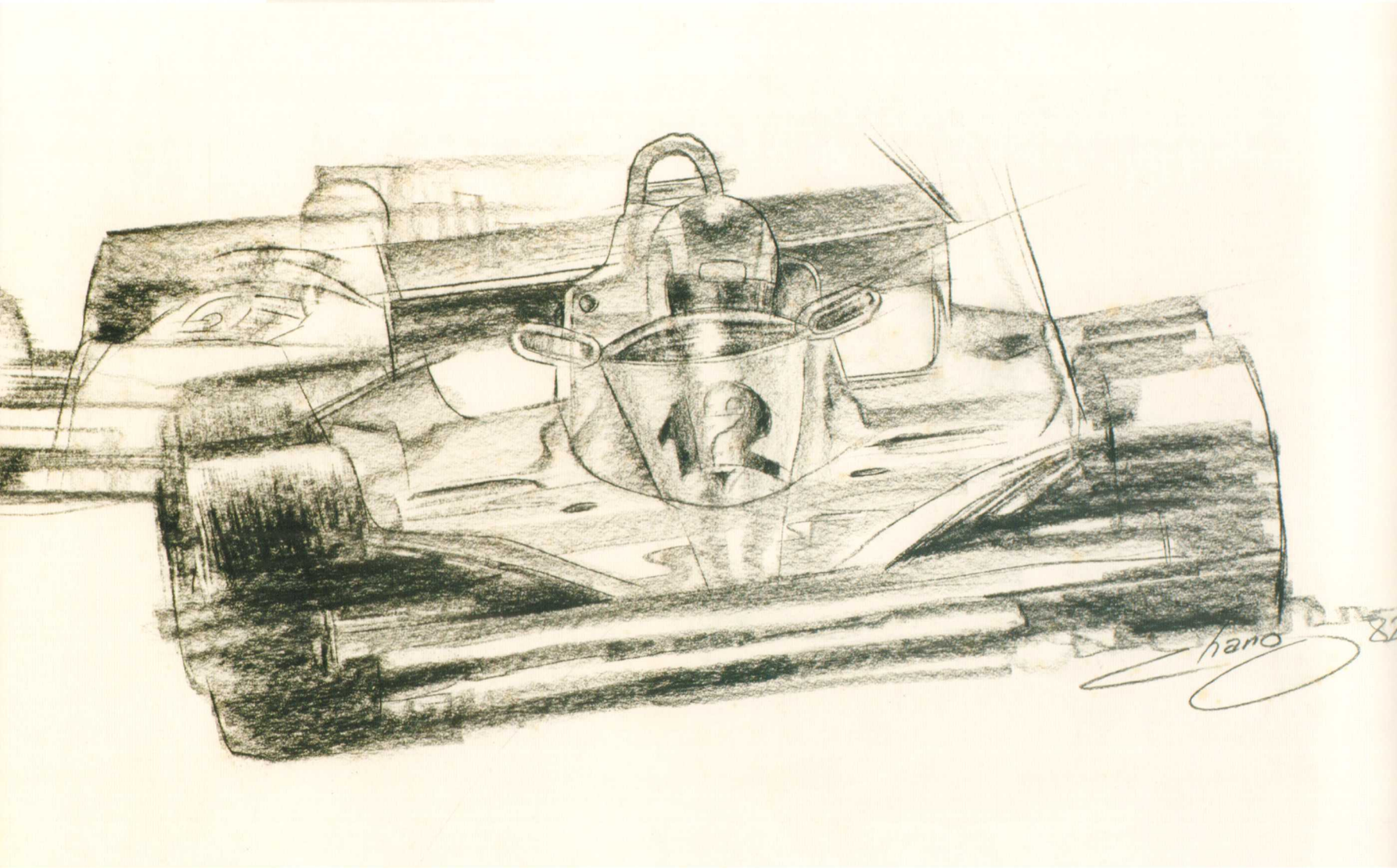


▲ Cover art for unreleased *Frog Pond* (2600)
Artist: Hiro Kimura

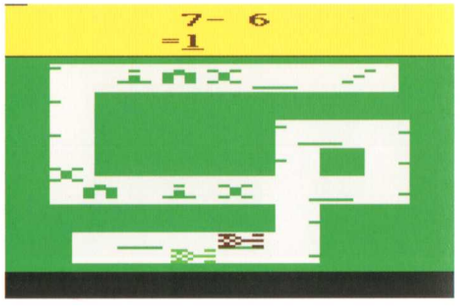
My first assignment in-house was *Math Gran Prix* and they had me working on it for months. I used a friend's children as models."

WARREN CHANG

▶ Cover art for *Math Gran Prix* (2600)
Artist: Warren Chang

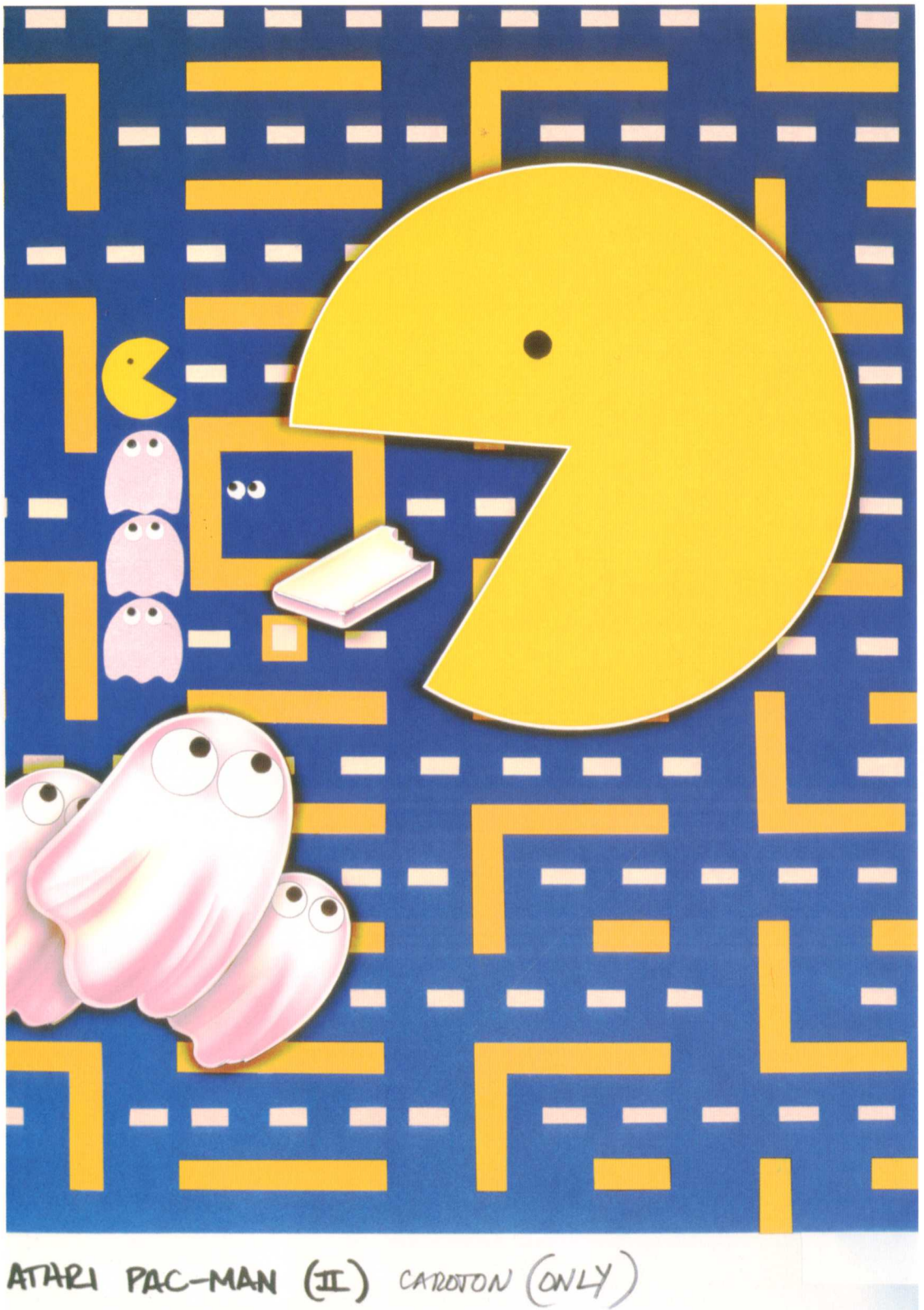


▲ Interior manual art for *Math Gran Prix* (2600)
Artist: Warren Chang



MATH GRAN PRIX

This math-powered racing game manages to transcend the dreaded "edutainment" label, mixing in strategy along with solving addition, subtraction, multiplication and division problems. While probably not the first pick for kids in the '80s, gamers could do a lot worse on the 2600.

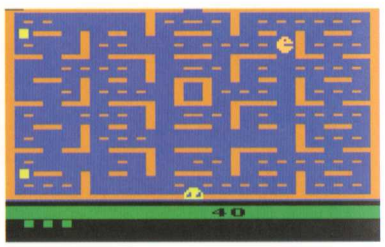


▲ **Atari marketing executives believed the 2600 release of *Pac-Man* needed a more one-dimensional, literal interpretation of the character on the packaging, and this version was executed after two earlier attempts by Kimura, seen on the following pages**
Artist: Hiro Kimura

That was actually a really cool piece of art. Upper management felt like, 'You're trying to elaborate too much, and let's get back to basics,'—basically a yellow ball with a mouth."

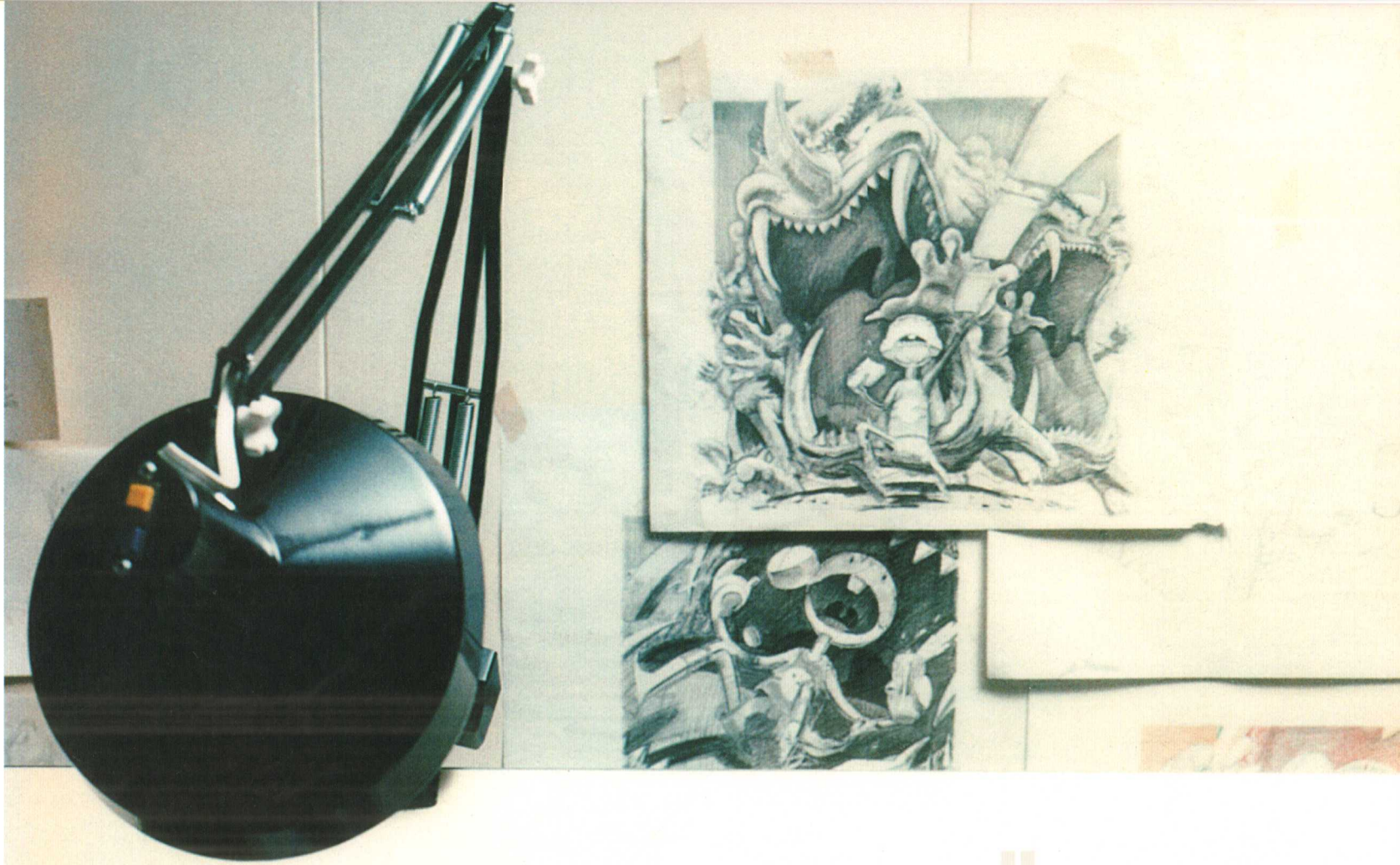
JAMES KELLY

▸ **While still the runner-up to the art treatment at left, this version of Hiro Kimura's 2600 *Pac-Man* art was still used on cartridge labels because of time and expense considerations. This art was also seen on overseas releases and later U.S. reprintings.**
Artist: Hiro Kimura



PAC-MAN

Even in the 21st century, *Pac-Man* needs no introduction. The yellow dot muncher is a cultural icon, and was at the height of popularity in 1981. The arcade game broke records of all kinds and kicked off a "Pac-Man fever" that transcended the world of video games. A home console edition was an obvious option, and Atari paid handsomely for the exclusive rights to bring *Pac-Man* to the 2600. However, despite all the hype surrounding its 1982 release, and transcendent sales numbers, *Pac-Man* fans were deeply disappointed in the translation. The 2600 version didn't play much like the arcade, had a strange color scheme, and the ghosts flickered like mad. Wary gamers were burned by the experience, which would impact the entire video game market moving forward.



> It was 80% finished when management asked me to change the direction. They became concerned that the 'ghosts' in it were too ferocious."
>
> **HIRO KIMURA**

◂ **Kimura surrounded by concept sketches for the 2600 version of *Pac-Man***

◂◂ **This unfinished, unreleased cover art was Kimura's first adaptation of *Pac-Man* (2600). It is imaginative and wildly different than any visual interpretations of the character up to that point. It was eventually rejected in favor of a much safer, more conventional treatment of the title character.**
Artist: Hiro Kimura

Atari's Home Computer Division was producing their version of the game. Since they were less restrictive concerning the package image, I took the liberty and designed Pac-Man as a boy-like character with a pair of sneakers and put him in a castle-like maze. They were pleased with the illustration and asked me to do the manual centerfold as well, which became the 'Pac-Man Strategy Meeting.'"

HIRO KIMURA

▲ Manual interior art for *Pac-Man* (400/800)
Artist: Hiro Kimura

▲ Cover art for *Pac-Man* (400/800)
Artist: Hiro Kimura

◄ Unused cover art for *Pac-Man* (5200)

▲ Final cover art for *Pac-Man* (5200)

PAC-MAN

LICENSING A LEGEND

▲ Detail of National Pac-Man Day promotional jacket back

▲ Namco President Nasaya Nakamura and Atari's Joe Robbins signing the licensing agreement for the Consumer versions of *Pac-Man* in 1980

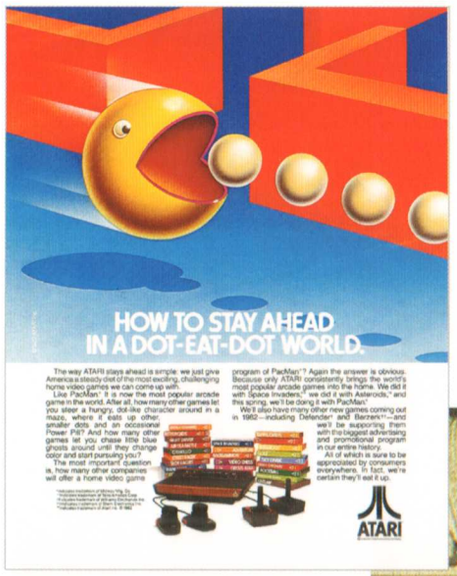
ATARI HAD ALREADY struck gold by licensing *Space Invaders*, the first killer app of the 2600 platform, and would unwittingly set events in motion to capture arcade lightning in a bottle again—in the form of a little yellow dot muncher.

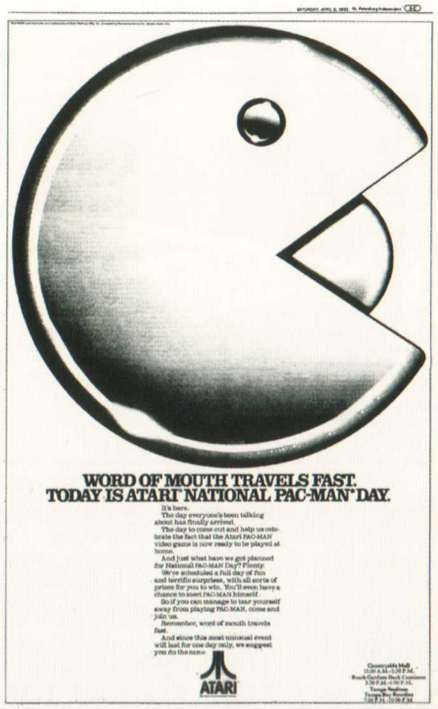
Former Atari Coin-Op President Joe Robbins had traveled to Japan to discuss legal matters with arcade company Namco. As part of the deal struck, Robbins came away with a new licensing agreement and the home rights to Namco's arcade game, *Pac-Man*. At the time, the ample, unsanctioned deal nearly cost Robbins his job, but when *Pac-Man* became a bona fide hit and cultural phenomenon after its 1980 release, the bold move to secure home console rights seemed prescient.

Programmer Tod Frye began work on the game in mid-1981, even though he was limited by the technical constraints of the 2600 and less physical memory than used in the Pac-Man arcade version. Frye's *Pac-Man* departed somewhat from the arcade game in both look and gameplay, especially since Atari required that he build a two-player version that didn't exist in the arcades. After its completion, the game was considered a technical achievement by fellow programmers, but that wasn't the end of the story.

In 1982, Pac-Man fever was still quite high, and Atari helped fan the flames with a $1.5 million dollar marketing campaign for the 2600 Pac-Man release, capped off with a multi-city launch dubbed "National Pac-Man Day" on April 3 of that year. Anticipation continued to grow, and a slew of pre-orders seemed to validate Atari's decision to manufacture more than 12 million cartridges—nearly two million more than the number of consoles already sold. The decision paid off for Atari—*Pac-Man* went on to become the company's best-selling 2600 game ever, moving an estimated 7.7 million cartridges. Frye himself would earn more than $1M in royalties from that game alone.

However, game sales masked cracks in Atari's foundation. While the earnings reports were rosy, *Pac-Man* was not received as warmly in other arenas. Many video game magazine reviews were critical of the game's altered mazes, flickering ghosts, and overall lack of fidelity to the arcade version. Even though the technical specs of the 2600 made creating a mirror image of the arcade counterpart nearly impossible, fans were generally unaware of that fact—they just knew that this wasn't the game they loved. Critical reception was tepid, and Pac-Man slightly tarnished Atari's image in the minds of buyers. ■

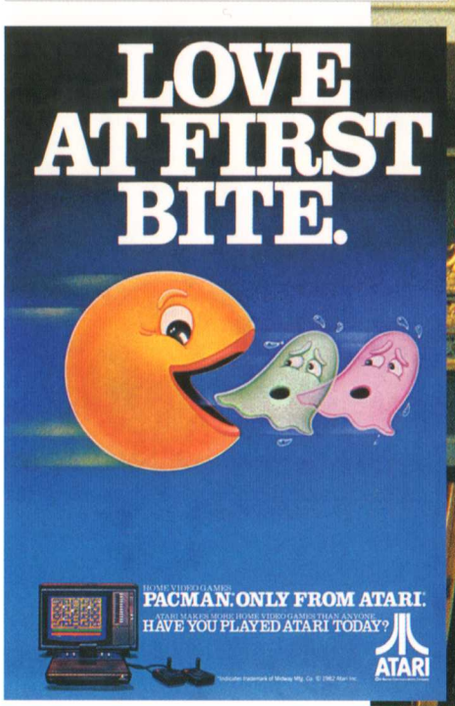




THE DECISION TO LICENSE PAC-MAN FROM NAMCO PAID OFF FOR ATARI— IT WENT ON TO BECOME THE COMPANY'S BEST-SELLING 2600 GAME EVER.

◂ One of many newspaper ads run across the U.S. by Atari in support of "National Pac-Man Day"

▾ Pac-Man publicity photo for autographs and public appearances

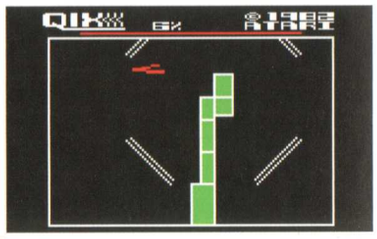


▲ Atari *Pac-Man* Advertising

▼ Cover art for *Qix* (5200)
Artists: Hiro Kimura and Gjalt Van Der Wyk

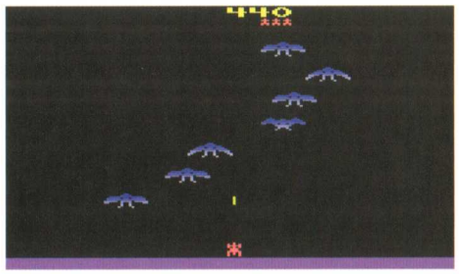
QIX

Atari cut no corners when translating Taito's *Qix* arcade game for the 5200. This conversion is a wonderful translation of the block drawing strategy game where players must partition off portions of the screen, avoiding the villain *Qix* and other adversaries for the highest scores. A unique and slow-burn strategy game, *Qix* earns its reputation as a cult favorite.



PHOENIX

Centuri's *Phoenix* arcade game is a bird-themed space shooter in the vein of *Galaxian* or *Galaga*, and the 2600 version is quite faithful, managing to include all five levels of the original game. After securing the home license for the game, Atari took issue with third party publisher Imagic's game, *Demon Attack*, and sued for copyright infringement because of the similarities between the attacking birds. The companies settled out of court, and each game has a proper place in the 2600 library.



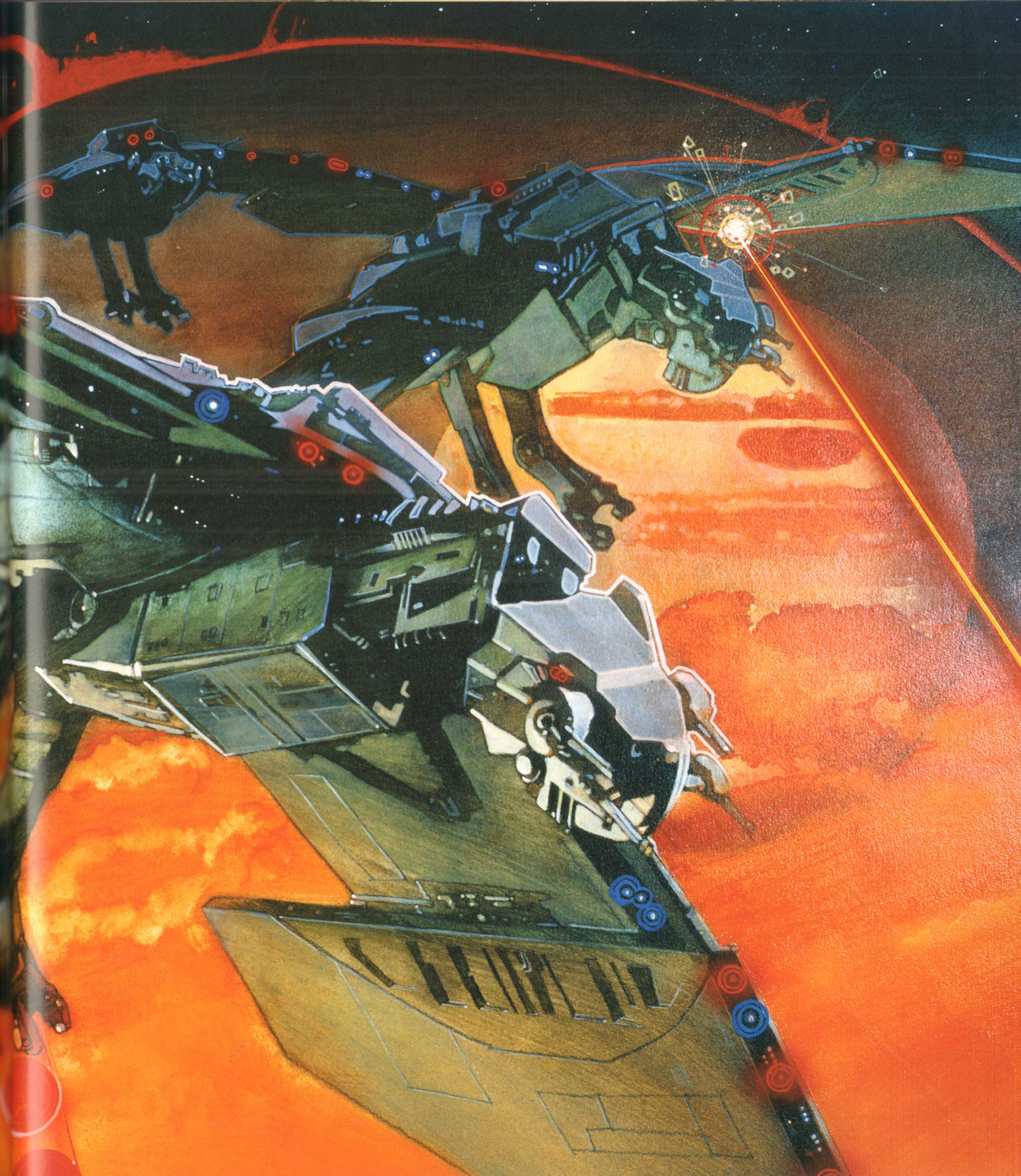
▲ Cover art for *Phoenix* (2600)
Artist: Randy Barrett

PHOENIX

I used extra parts. You could buy models from *Star Wars*, so you didn't have to build from scratch. I was trying to do more airbrush, and I built the wings and I used some walkers from *Star Wars*. I had fun building the models and the painting went quickly."

TERRY HOFF

▸ Unused artwork for *Phoenix*
Artist: Terry Hoff



◂ Cover art for *Raiders of the Lost Ark* (2600)
Artist: James Kelly

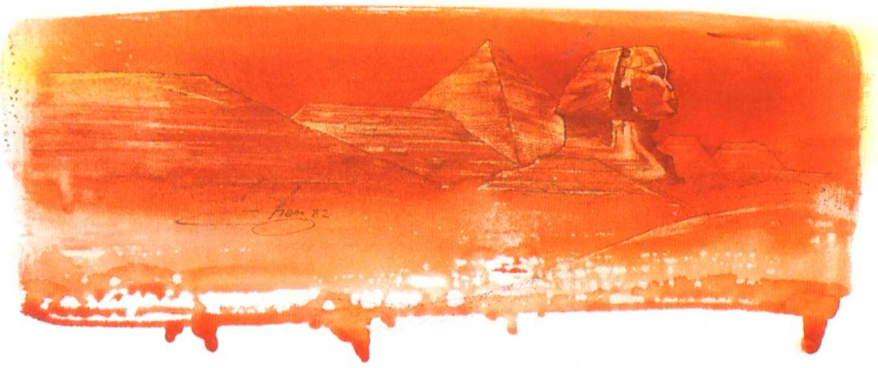
That was probably my favorite one. I used a friend, fellow illustrator Robert Hunt, and put him in the costume with the hat, and did the original piece with his likeness. George Lucas and his people took exception to this—'We really want it to look like our Indiana Jones!'—and so I made it look more like Indiana Jones, and they were happy. I cut a mask and did the Harrison Ford portrait, and pasted it over the one of Robert. It worked out."

JIM KELLY

RAIDERS OF THE LOST ARK

Howard Scott Warshaw's second game for the 2600 is one of the most complex and challenging games for the system. Based on the popular Spielberg film about archaeologist/adventurer Indiana Jones, it loosely follows the movie's plot, with Indy attempting to find and uncover the lost Ark of the Covenant. The game is difficult, to say the least, with timing, planning, and a lot of trial-and-error needed to make it to the game's ending. It also utilizes both joysticks—one for player movement, and the other for inventory of the items Indy acquires over the course of the game. Even though the game is wickedly hard, it was one of Atari's best-selling games for the console.

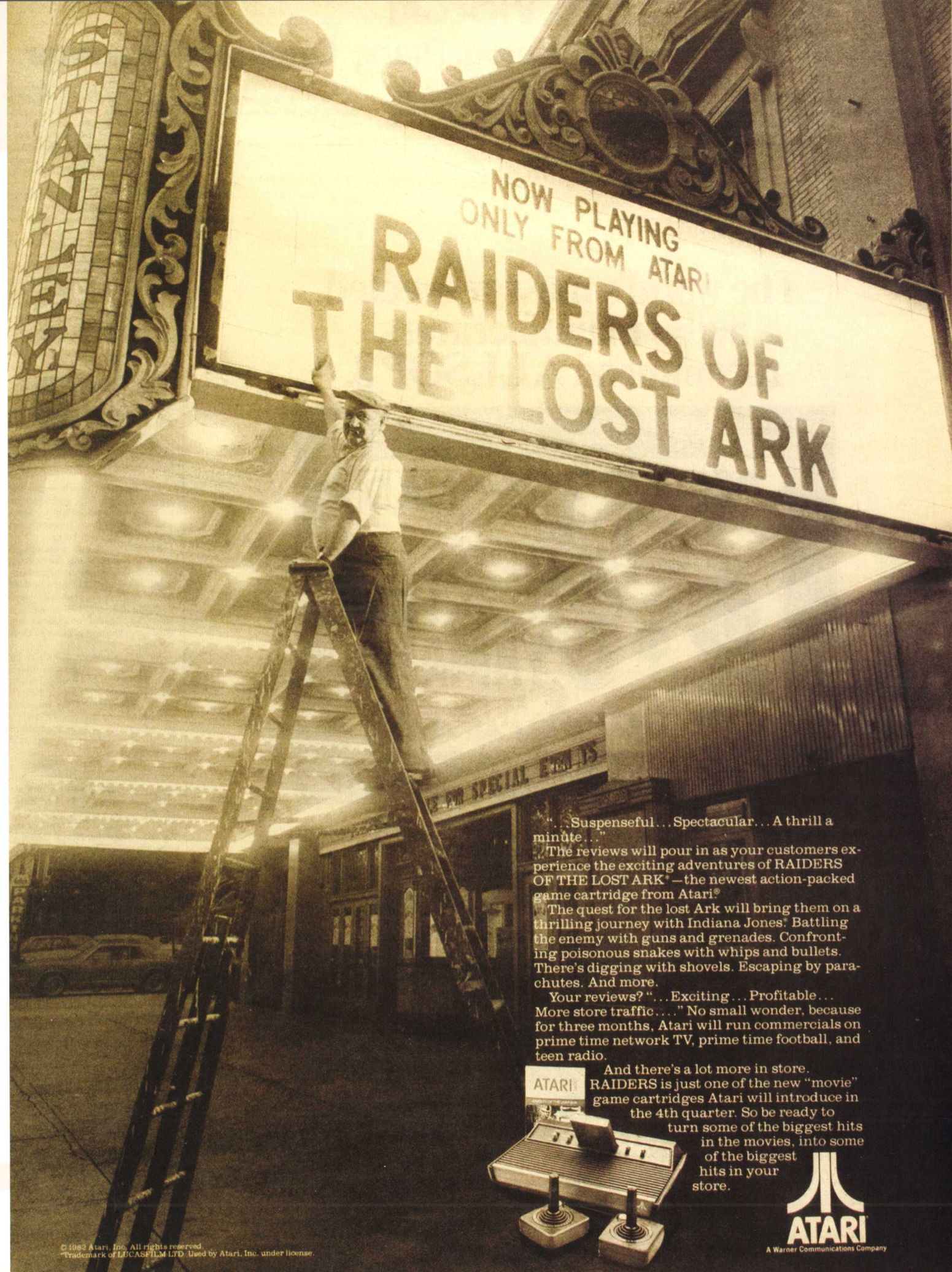
RAIDERS OF THE LOST ARK



◂▲ Manual interior art for *Raiders of the Lost Ark* (2600)
Artist: Warren Chang

▲ POP display for *Raiders of the Lost Ark*

▸ Announcement ad for *Raiders of the Lost Ark*



"...Suspenseful...Spectacular...A thrill a minute..."

The reviews will pour in as your customers experience the exciting adventures of RAIDERS OF THE LOST ARK*—the newest action-packed game cartridge from Atari®.

The quest for the lost Ark will bring them on a thrilling journey with Indiana Jones.* Battling the enemy with guns and grenades. Confronting poisonous snakes with whips and bullets. There's digging with shovels. Escaping by parachutes. And more.

Your reviews? "...Exciting...Profitable...More store traffic...." No small wonder, because for three months, Atari will run commercials on prime time network TV, prime time football, and teen radio.

And there's a lot more in store. RAIDERS is just one of the new "movie" game cartridges Atari will introduce in the 4th quarter. So be ready to turn some of the biggest hits in the movies, into some of the biggest hits in your store.

ATARI®
A Warner Communications Company

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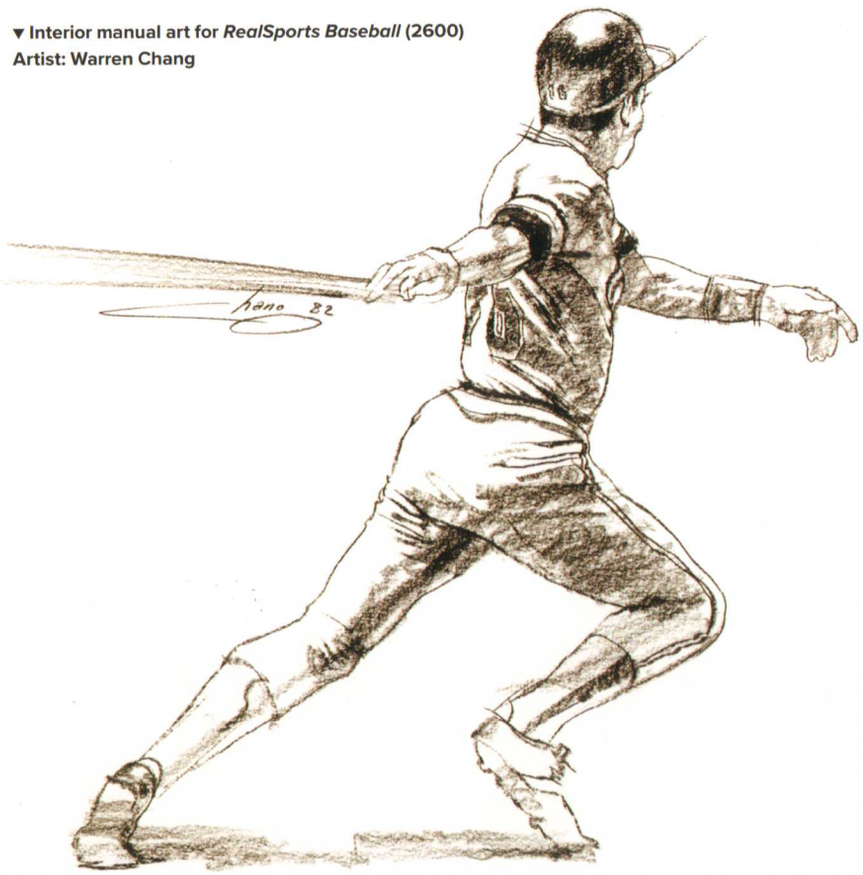
*Trademark of LUCASFILM LTD. Used by Atari, Inc. under license.

▼ Interior manual art for *RealSports Baseball* (2600)
Artist: Warren Chang



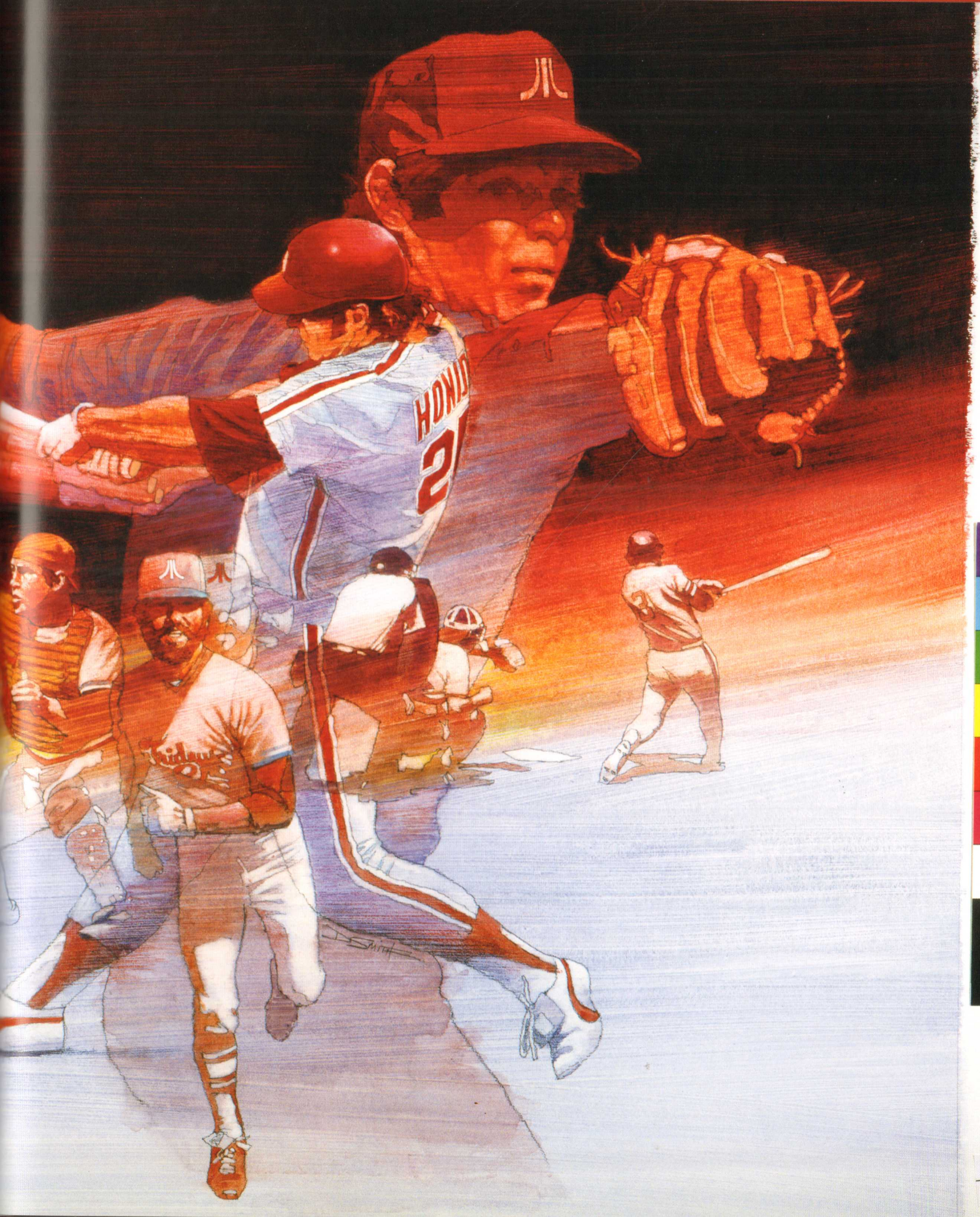
PRODUCTION ILLUSTRATION DATE 8/4/82
TITLE 2600 VCS ATARI BASEBALL (INSIDE MANUAL ILLUS)
☐ ATARI CARTON SIZE ____% OF ORIG. ☒ ATARI MANUAL SIZE 14.5% OF ORIG.
☐ SEARS CARTON SIZE ____% OF ORIG. ☐ SEARS MANUAL SIZE ____% OF ORIG.

▶ Cover art for *RealSports Baseball* (5200)
Artist: D. Smith

PRELIMINARY (FOR PROMOTIONAL USE ONLY) DATE 7/16/82
TITLE BASEBALL RED CROP TO 4½" X 3½"
☐ VCS 2600 SERIES ☒ PAM 5200 SERIES

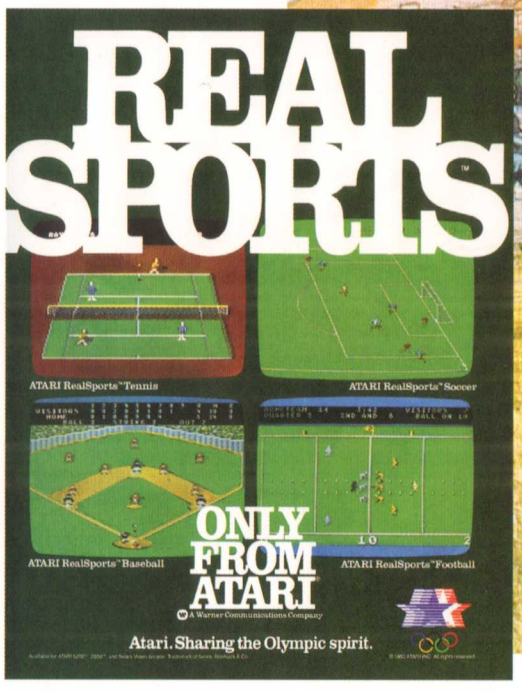
REALSPORTS BASEBALL

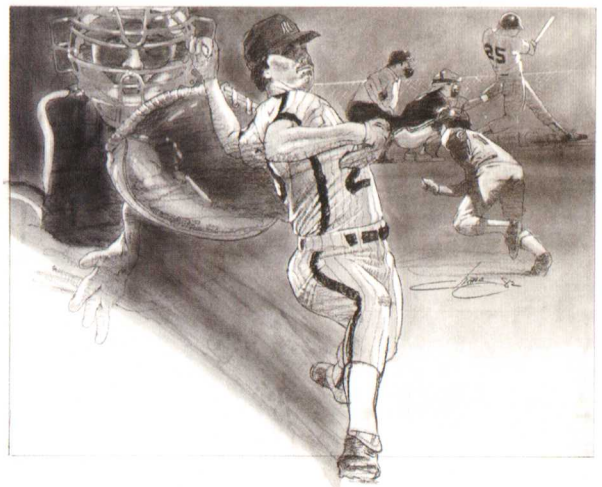
In the console battle between Atari's 2600 and Mattel's Intellivision, the competitor's advertising kept harping on the poor graphics and gameplay of Atari's sports lineup. Atari's attempt to answer its critics was the *RealSports* series of games, and *RealSports Baseball* was the first part of the makeover. While *RealSports Baseball* vastly improves on the 2600's previous *Home Run*, with updated graphics, a fully-drawn baseball diamond and pitch selection, it strikes out when compared to Mattel's baseball release for the 2600—the M-Network *Super Challenge Baseball*.

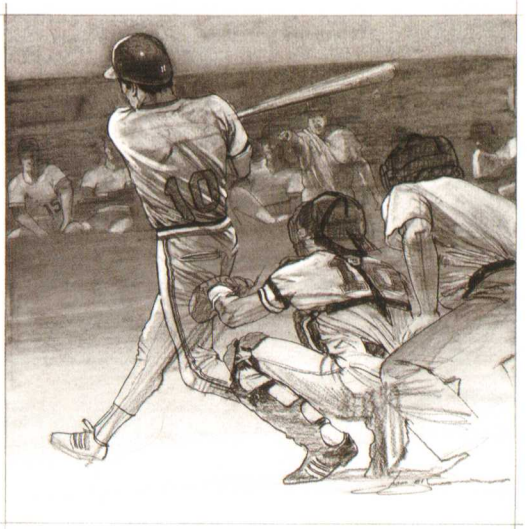


REALSPORTS BASEBALL

▼ *RealSports* Olympic tie-in advertisement



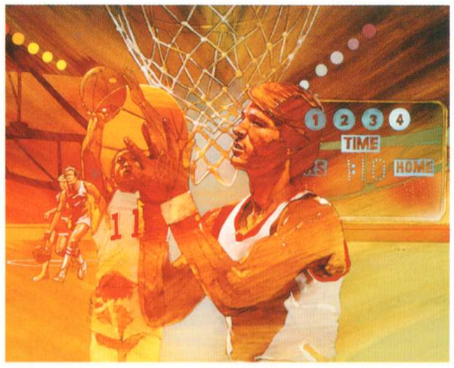




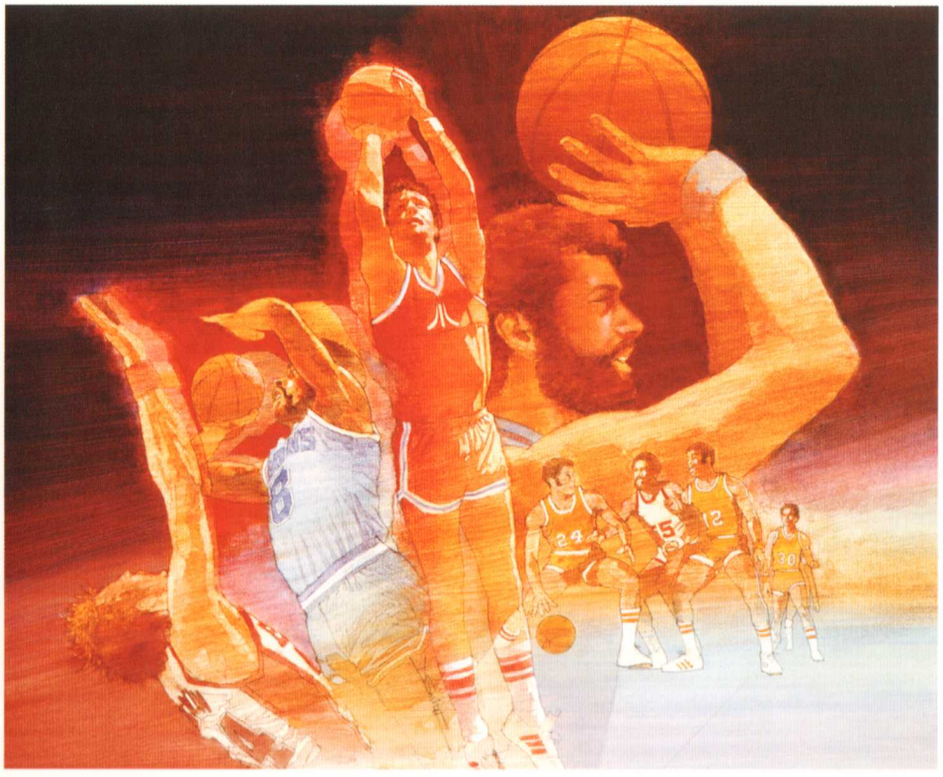
▲ Cover art for *RealSports Baseball* (2600)
Artist: Michel Allaire

◀ Interior manual art for *RealSports Baseball* (2600, 5200)
Artist: Warren Chang

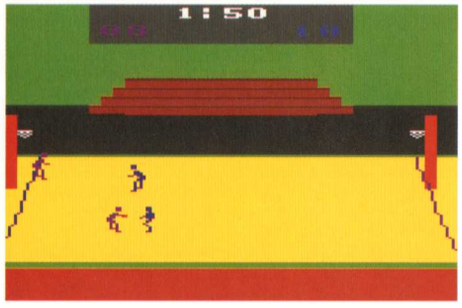
▲ Logo for Atari's *RealSports* lineup of games



▶▶ Two different versions of cover art for unreleased *RealSports Basketball* (5200)
Artist: Terry Hoff

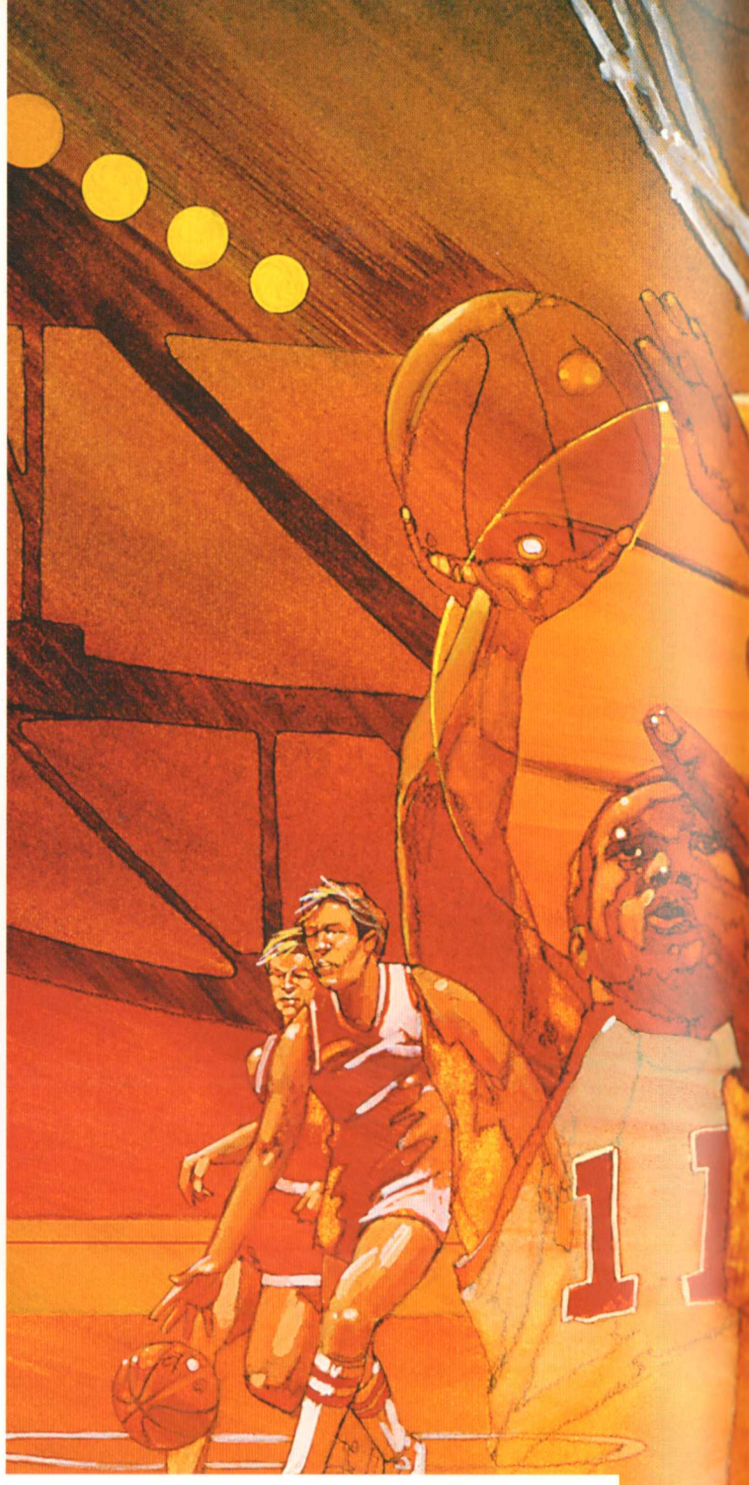


▲ Cover art for unreleased *RealSports Basketball* (2600)
Artist: D. Smith



REALSPORTS BASKETBALL

The only unreleased title in Atari's *RealSports* lineup, this version of basketball was never completed. An unfinished prototype cartridge was discovered, which slightly improves on the older *Basketball* graphically, but not in terms of gameplay. Fans of the 2600 would have to wait until the 1989 release of *Double Dunk* to get the two-on-two basketball action they craved.



> They got squeamish about putting a black guy on the cover. So I had to stencil in an overlay with a white guy. That was the only challenging thing I did at Atari, and it didn't make any sense."
>
> **TERRY HOFF**

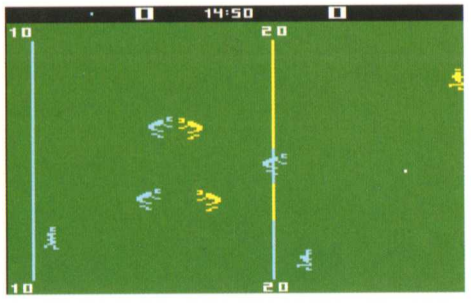
1
2
3
4
TIME
HOME

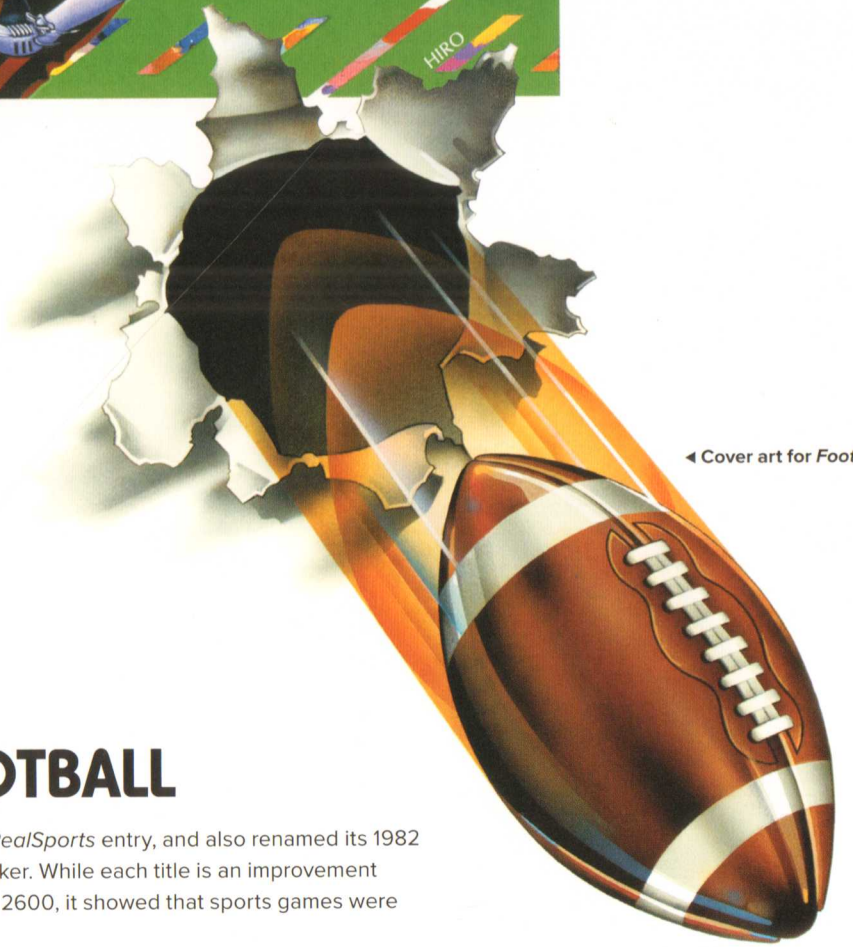
▸ Cover art for *RealSports Football* (2600)
Artist: Michel Allaire

I tried to capture exciting elements of the sport in one image."

HIRO KIMURA

▲ Cover art for *RealSports Football* (5200)
Artist: Hiro Kimura

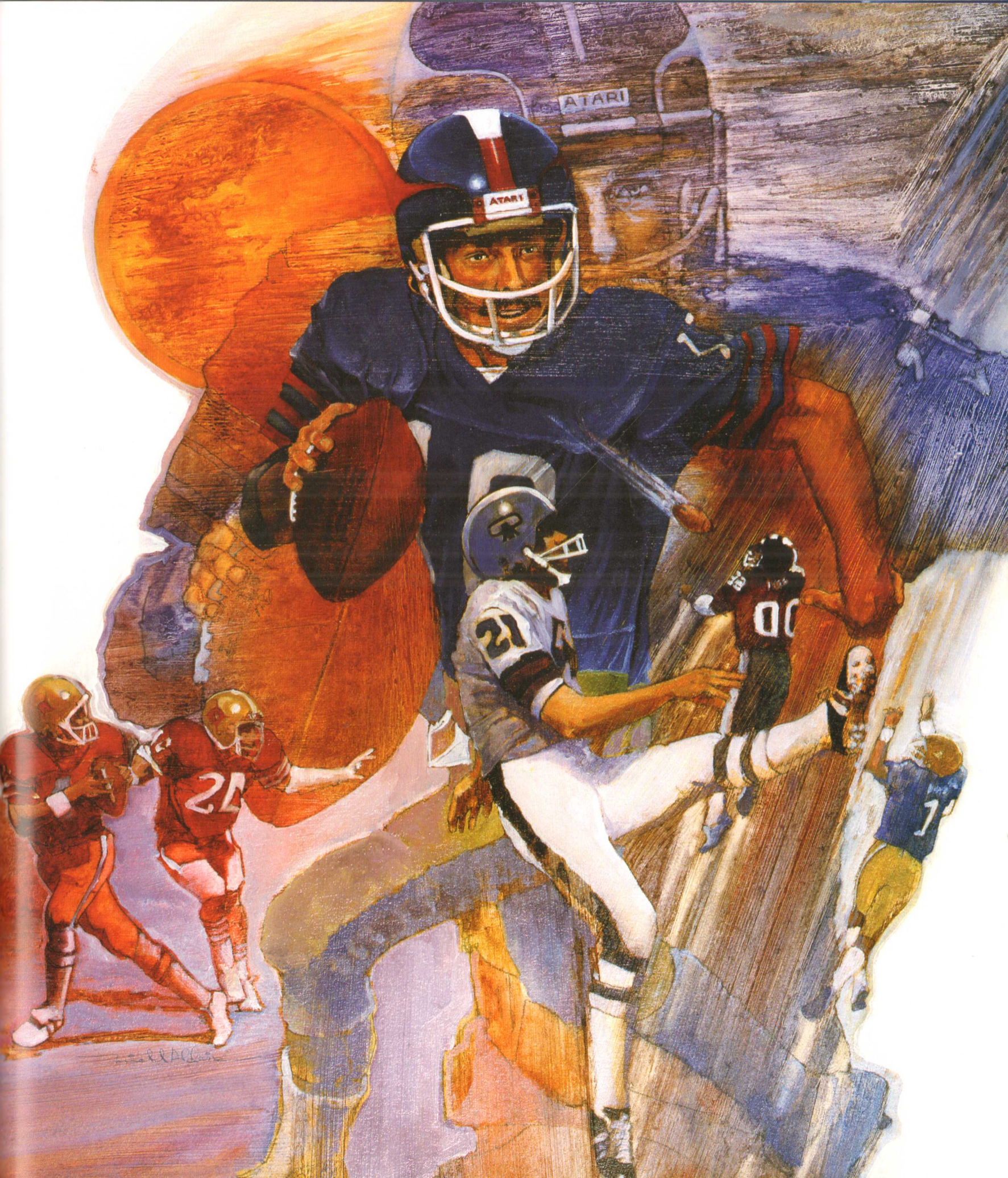




◂ Cover art for *Football* (400/800)

REALSPORTS FOOTBALL

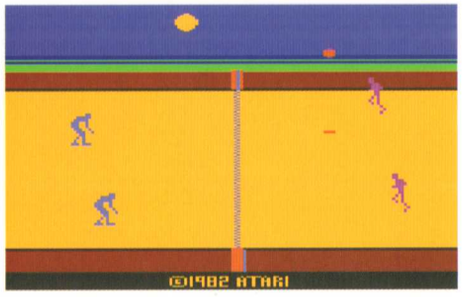
Atari upgraded its 2600 *Football* offering with a *RealSports* entry, and also renamed its 1982 *Football* for the 5200 to add the *RealSports* moniker. While each title is an improvement over the pigskin games offered previously on the 2600, it showed that sports games were generally not Atari's strength.


ATARI
ATARI

▶ Cover art for *RealSports Volleyball* (2600)
Artist: Terry Hoff

RealSports Volleyball was going to be called *Olympic Volleyball*—the original color studies and comps had the Olympic rings in the composition. I struggled with incorporating flag motifs and the colors red, white and blue into the composition, and trying to create a first-person feel to the action happening in the painting."

TERRY HOFF



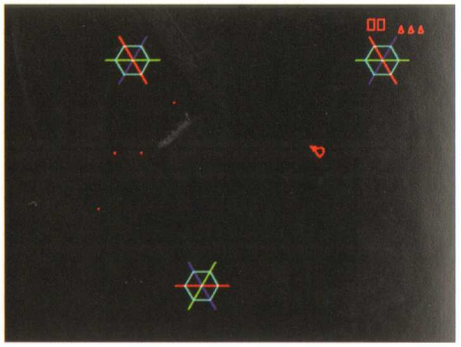
REALSPORTS VOLLEYBALL

An unusual choice for its sports lineup, Atari chose two-on-two beach volleyball for the focus of this game. With nice graphics and cool touches like the sound of crashing waves in the background, *RealSports Volleyball* nails the atmosphere, and the gameplay is fun, if a bit repetitive. The game was originally conceived with an Olympic tie-in but that was inexplicably dropped, and was still years ahead of Atari's sponsorship of the 1984 Summer Games in Los Angeles. Programmer Bob Polaro also included a clever ending to the game: the sun sets during the course of play, and after it dips below the horizon, a shark fin will appear in the water and cross the screen. Better to stay on the beach!

USA

SPACE DUEL

An evolution of the original *Asteroids* arcade game, *Space Duel* was the first and only multi-player vector arcade game made by Atari. Atari art director George Opperman said that the art for this game was one of his favorites created by the art department. The arcade game was also featured prominently on the album cover of The Who's 1982 record, *It's Hard*.



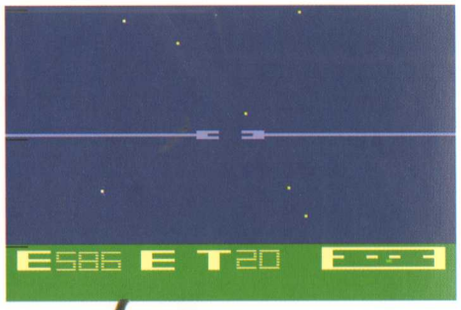
▲ Promo art for *Space Duel* (Arcade)
Artist: Marty Viljamaa

▶ Promotional photo for *Space Duel* (Arcade)

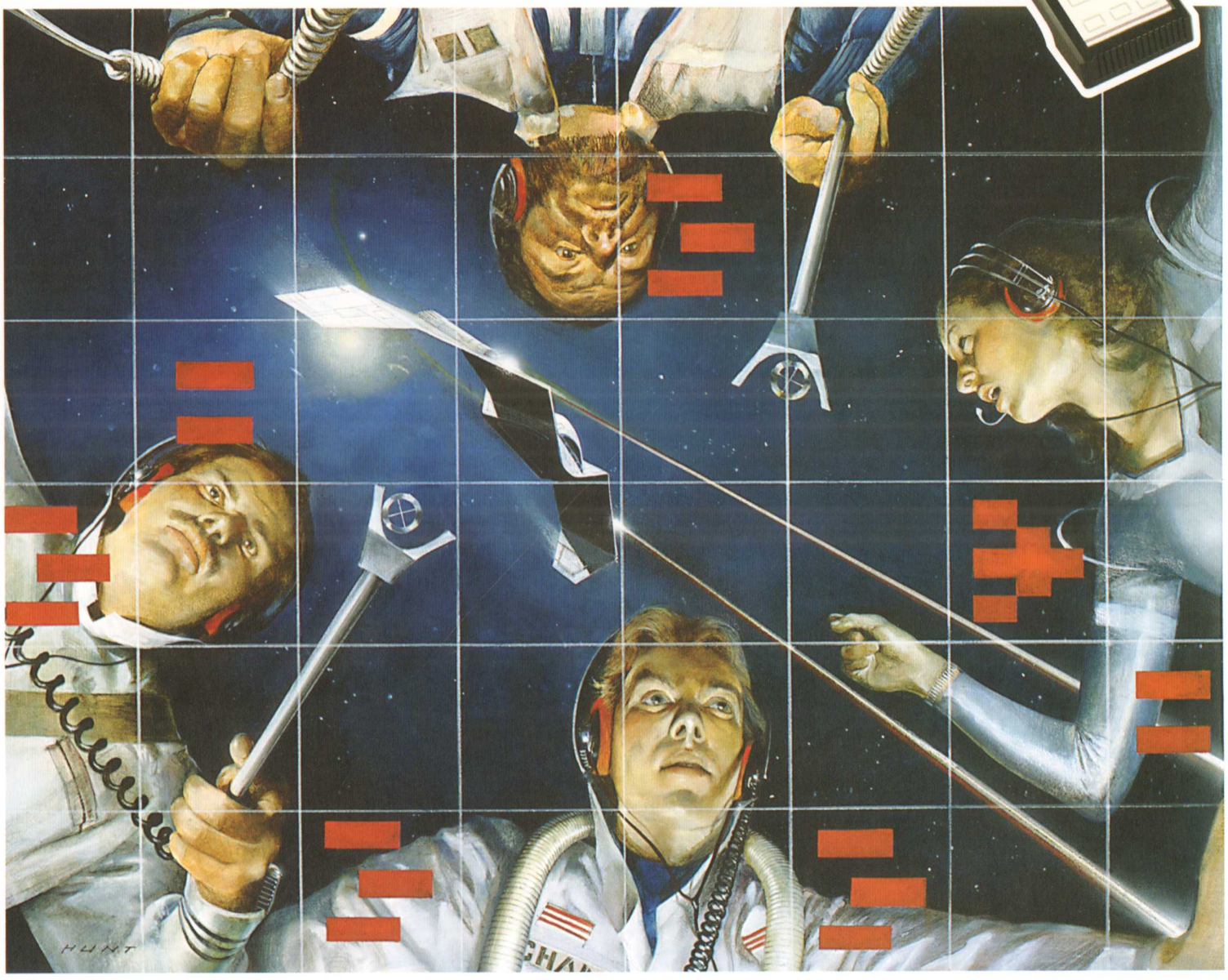
ATARI
SPACE DUEL

STAR RAIDERS

This space combat simulator was first released for Atari's 400/800 computers and critically-acclaimed, serving as one of the "killer app" games for the 8-bit computer line. Spawning a host of imitators and knock-offs, the first-person cockpit view and complex gameplay won over critics and gamers alike. Atari then translated the game for both the 5200 and 2600 consoles, and each was received well. Instead of attempting to replicate the game's complex controls on the single-button joystick of the 2600, Atari sold *Star Raiders* with the pack-in Video Touch Pad controller, a redesigned version of its numeric Keyboard Controllers, including a *Star Raiders*-specific overlay.



▸ The Video Touch Pad, an exclusive pack-in controller sold together with the 2600 version of *Star Raiders*



▲ Cover art for *Star Raiders* (5200)
Artist: Robert Hunt

▸ Cover art for *Star Raiders* (2600)
Artist: Terry Hoff

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PROCEED

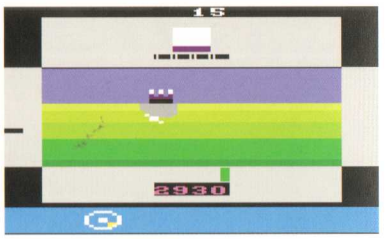
STAR RAIDERS

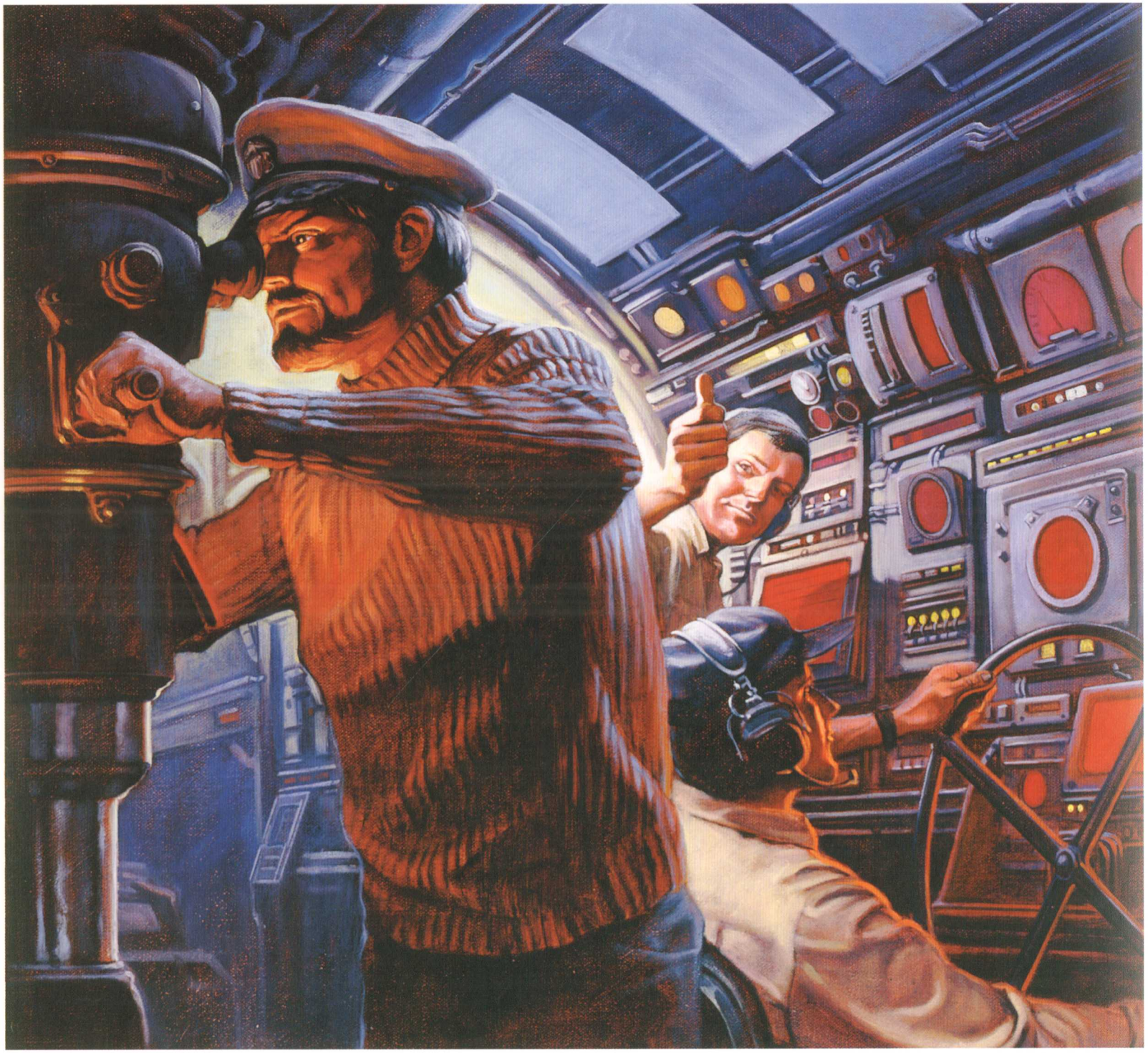
▸ Cover art for *Star Raiders* (400/800)
Artist: McCormack

MCCORMACK

SUBMARINE COMMANDER

This Sears-exclusive title was one of the rarest 2600 games released under the brand's Tele-Games label. Based on Midway's periscope arcade game, *Sea Wolf II*, you pilot a sub with a first-person periscope perspective, launching torpedoes, avoiding depth charges, and keeping your craft's mechanicals in the green.



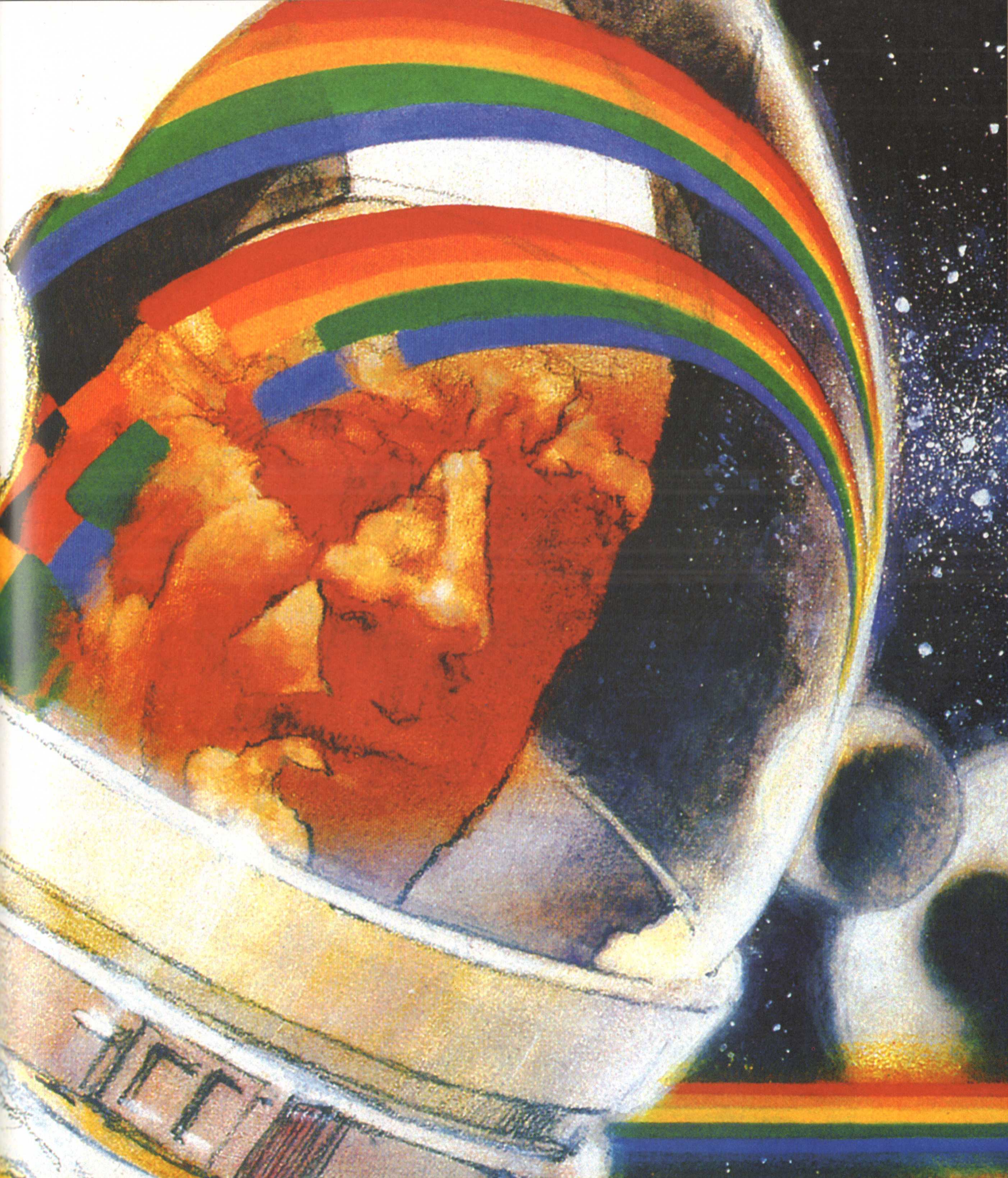


▲ Unused cover art for *Submarine Commander* (2600)
Artist: Robert Hunt

TEMPEST

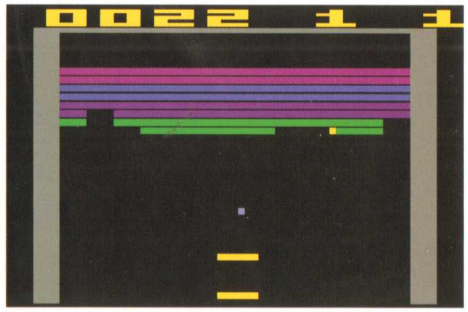
The beautiful, fast-paced game of the same name stormed the arcades with its amazing gameplay and color vector graphics, but the title had a more difficult time making the transition to Atari's home consoles. Versions for both the 2600 and 5200 were started but neither was completed. A prototype box for the 2600 version had surfaced, which proved that artwork was created before the project was shelved.

▼ **Cover art for unreleased *Tempest* (2600)**



SUPER BREAKOUT

The sequel to Atari's popular 2600 *Breakout* really just upgrades the classic *PONG*-style game, with a host of new variations, graphics, and sounds that change randomly every time the player resets the game. It's more of the same, but still manages to delight and keep the concept fresh. The 2600 version was a Sears exclusive for a time, before Atari decided to release it as well. The 5200 version of *Super Breakout* was also the pack-in game with that console on launch.

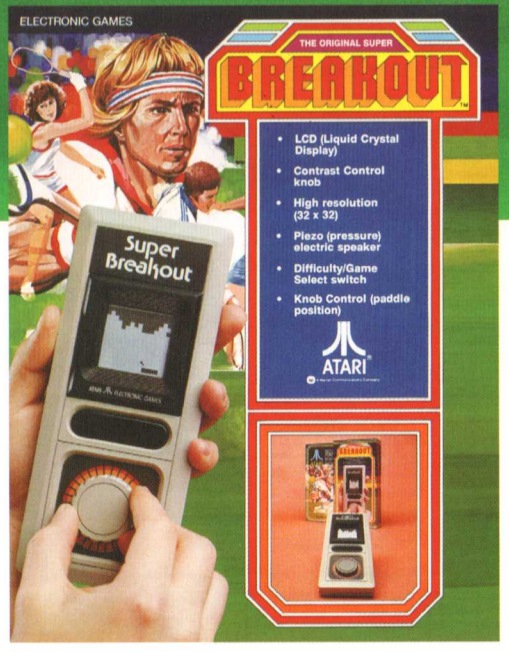


▼ **Cover art for *Super Breakout* (2600)**
Artist: Cliff Spohn

◂◂ **Previous page: Detail of cover art for *Super Breakout* (2600)**
Artist: Cliff Spohn

▶ Cover art for *Super Breakout* (5200)

▼ Unreleased cover art and packaging for *Super Breakout* (Handheld)
Artist: George Opperman

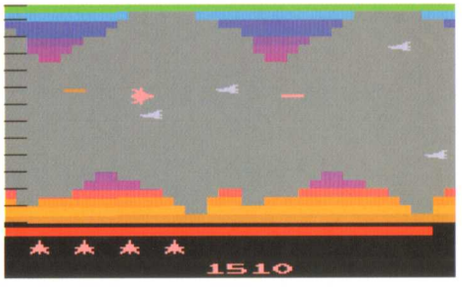


I came up with this scenario of being surrounded by this force field, so the color bar would feel like it was physically there. By putting it on the astronaut's helmet, it would help bring you back around to the artwork. It was a big burst of color across the top, and the arching on the glass would draw you down to the bottom of the art. It kept your eye moving around, rotating, keeping the viewer looking at it, through the whole piece."

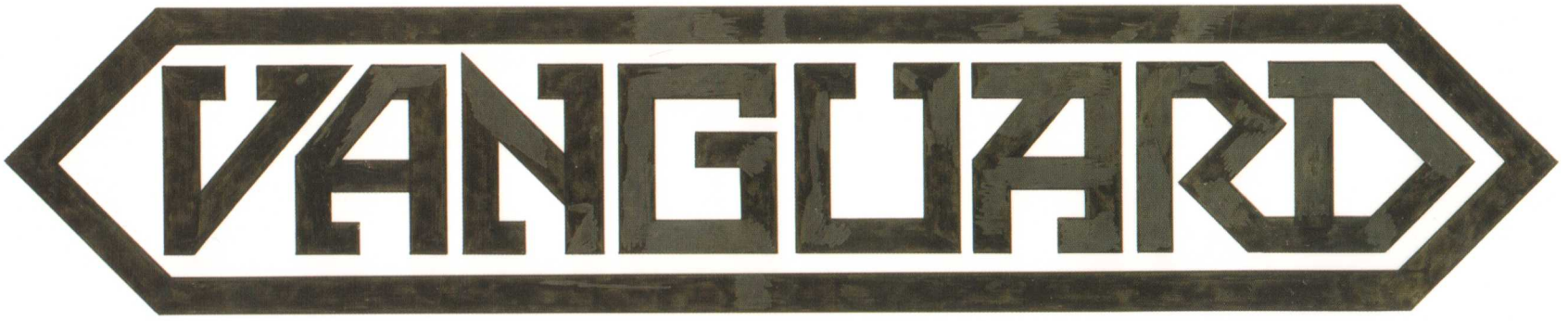
CLIFF SPOHN

▲ Cover art for *Vanguard* (2600)
Artist: Ralph McQuarrie

VANGUARD



Centauri's side-scrolling arcade game received solid ports from both the 2600 and 5200 systems, translating its gameplay and unique four-directional firing scheme well. This game cemented the 5200's reputation as a home for many great arcade translations. If the art of the 2600 version of *Vanguard* looks somewhat familiar, it's because artist Ralph McQuarrie's art has graced and influenced many groundbreaking films. His work included the original concept art for *Star Wars*, *Battlestar Galactica*, *Close Encounters of the Third Kind*, *E.T.*, and many others.

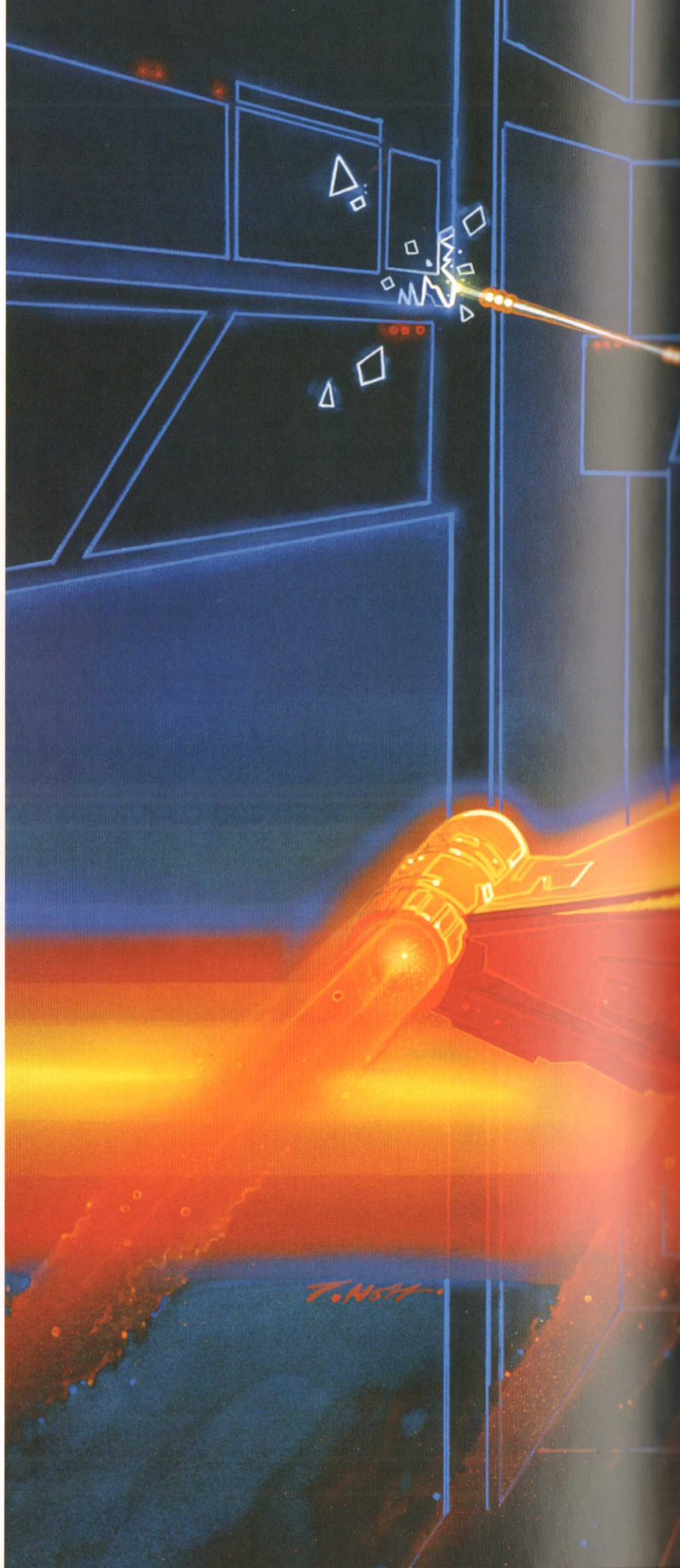


▲ Hand-drawn logotype for *Vanguard* home packaging

▲ Unused interior manual illustration for *Vanguard* (5200)
Artist: Terry Hoff

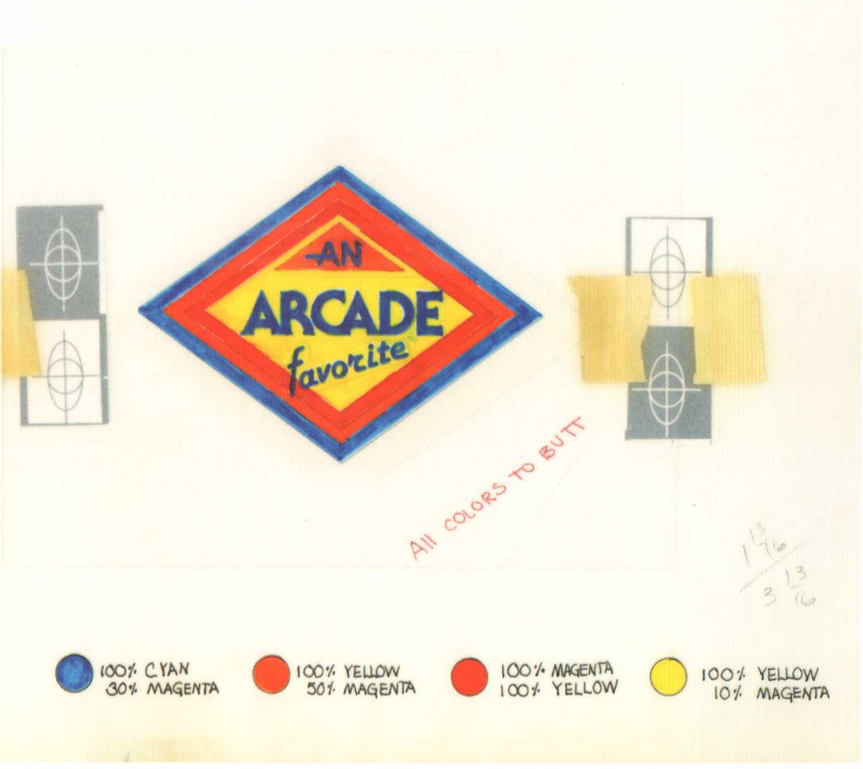
VANGUARD

▶ Cover art for *Vanguard* (5200)
Artist: Terry Hoff

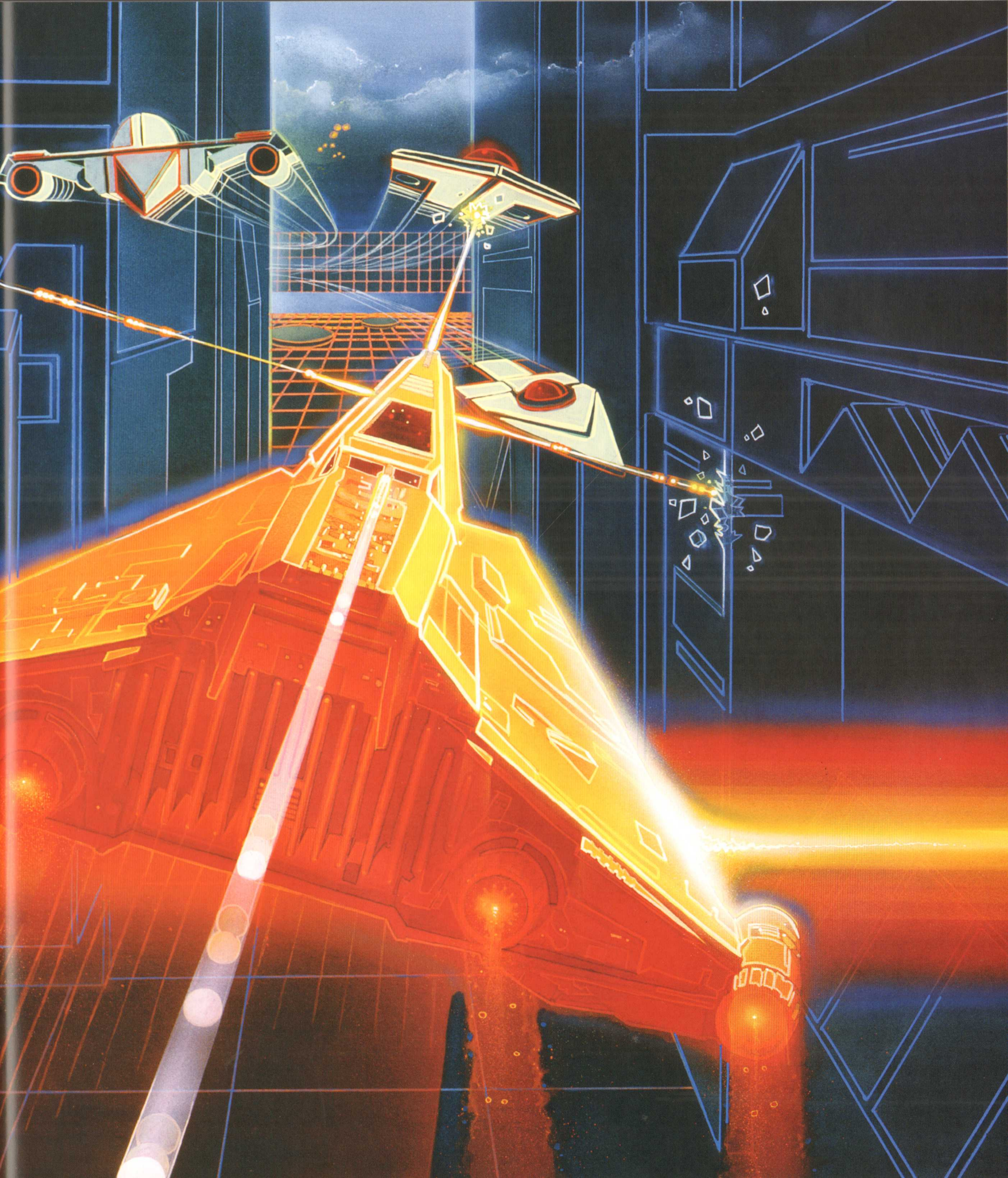


It was kind of a *Tron*-like canyon. I built so many damn models that I would cannibalize them."

TERRY HOFF

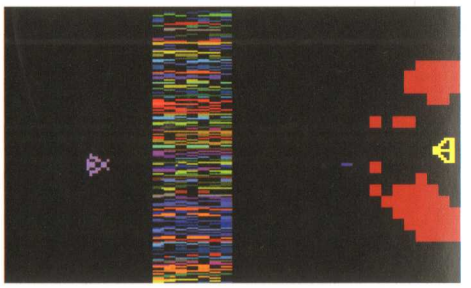


▲ Color reference and production line art for the "Arcade Favorite" violator graphic used on the *Vanguard* game packaging



YARS' REVENGE

One of the most enduring and successful original games for the Atari 2600, *Yars' Revenge* was the first game by Howard Scott Warshaw. Originally conceived as a conversion of the popular arcade game *Star Castle*, Warshaw believed he couldn't do that title justice, and decided to create his own game using basic elements drawn from *Star Castle*. The name of the game is even a reference to then-CEO Ray Kassar—Ray spelled backwards to read Yar. Warshaw developed a detailed backstory for the game that ended up as part of an exclusive pack-in *Yars' Revenge* comic book.



▲ Interior manual art for *Yars' Revenge* (2600)
Artist: Hiro Kimura

▲ Cover art for *Yars' Revenge* (2600)
Artist: Hiro Kimura

Yars' Revenge turned out to be my very first package illustration assignment after having done a couple of manual illustrations. I got the basic concept of the Yar, not as a gigantic fly, but as a chrome-plated insect shooting spitballs. It was my first attempt rendering chrome surface and I recall struggling mightily with it. Perhaps the biggest reason for it was that I used airbrush almost exclusively for the very first time, a tool I still wasn't skilled at then."

HIRO KIMURA

ARTIST PROFILE

TERRY HOFF

TERRY HOFF WAS born in Prescott, Arizona, and attended San Joaquin Delta College in Stockton, California, and the Academy of Art University in San Francisco. "I was just out of art school," he said, "taking my book around and trying to get freelance work. Atari had a finder's fee of $400 for new hires, and someone had seen my art. I did one freelance job and then went full-time there in-house in 1980."

Hoff explained the typical Atari process: "I'm not a gamer, and I wasn't a gamer then. A tech writer would explain the gameplay, and I developed a storyline, almost treating it like a fantasy or sci-fi story. Usually you were just on one game at a time. It was rewarding in that sense, to stay focused on one project. The fun of it was researching, being a private investigator. Illustrators today, they have all that info and inspiration at their fingertips, but I think that if something is harder to obtain, it's more valuable and memorable. Without research, you're losing touch with the source, and you don't spend time contemplating."

"It was rewarding because of the response from the programmers when they saw your visual solution—they were excited. To create these worlds that opened up—the game was just the beginning, and the art opened it up to people somehow, capturing the storyline. Making an exciting thing was hard. It was just fun work."

For Hoff, the challenges went hand-in-hand with the joy of working at one of Silicon Valley's most creative companies. "It was a great place to work. There were cute girls working there, and we got to paint all day. It was low-key. We just had to meet our deadlines, and I would just paint and do research, and build models for these. Working for Atari was a dream come true as an artist and young illustrator. I did my first cover for *Asteroids* 5200 on a freelance basis, and was soon hired full-time. I had my own office/studio, any supplies I needed, and a great group of creative people surrounding me. Coming into work was somewhat flexible because all they really cared about was meeting your deadlines."

ASTEROIDS ▪ COUNTERMEASURE ▪ MOON PATROL ▪ PHOENIX ▪ POLE POSITION ▪ REALSPORTS BASKETBALL
REALSPORTS TENNIS ▪ REALSPORTS VOLLEYBALL ▪ STAR RAIDERS ▪ SUPERMAN III ▪ SWORDQUEST WATERWORLD

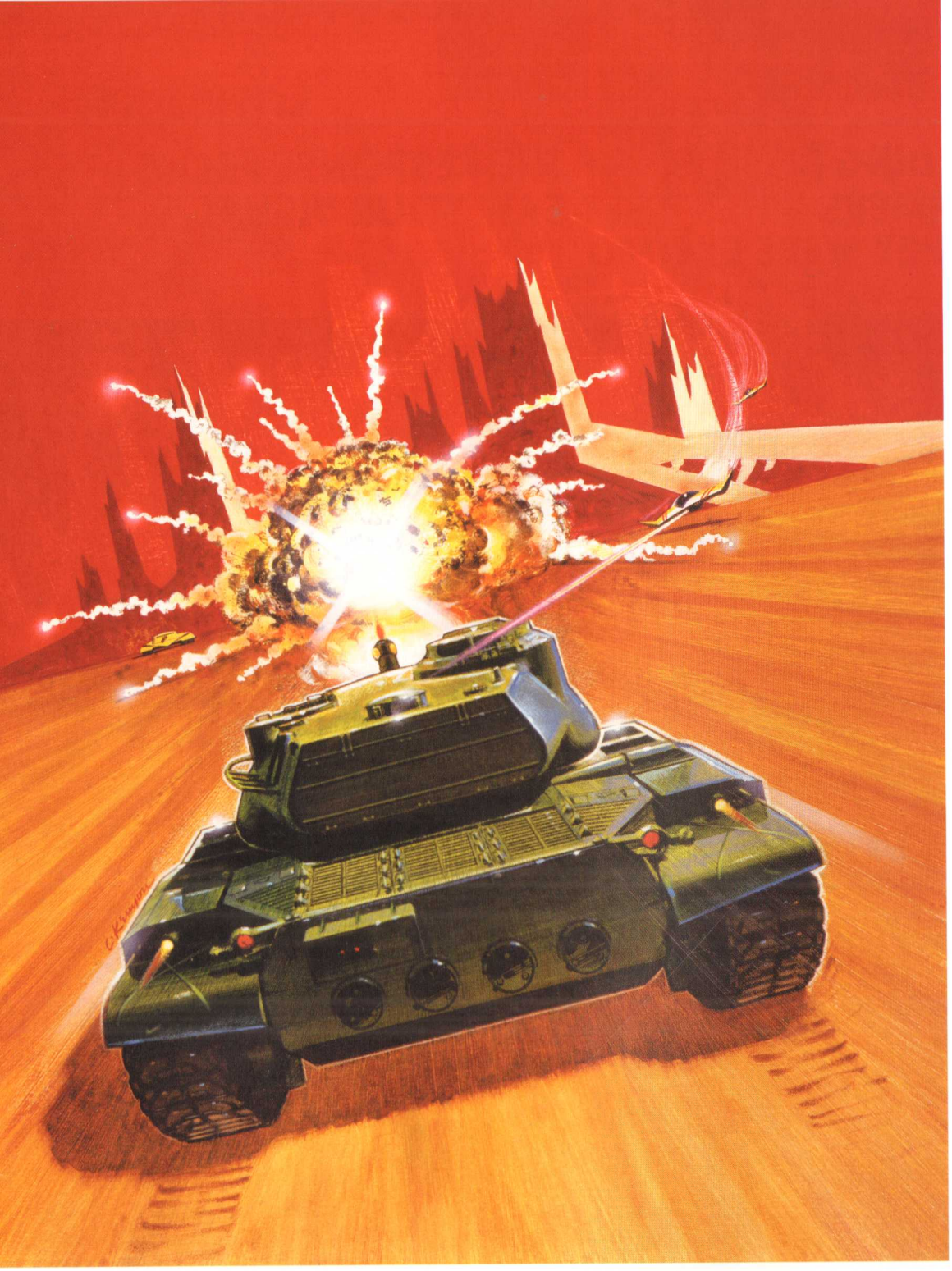
IT WAS REWARDING BECAUSE OF THE RESPONSE FROM THE PROGRAMMERS WHEN THEY SAW YOUR VISUAL SOLUTION—THEY WERE EXCITED.

—TERRY HOFF

▶ Detail of promo art for *SwordQuest Waterworld* (2600)
Artist: Terry Hoff

After a little more than a year as a staff artist, more than a dozen game covers and 10 interior illustrations, Hoff moved on from Atari. He continued creating video game cover art for companies like Brøderbund, Nintendo and LucasArts, and then transitioned to movie posters, other types of illustration, and eventually into fine art. But even as it unfolded, Hoff realized the influence that Atari—and his team—had made in the larger culture. "Atari resonated with so many people," he said, "and it had such an incredible impact in such a short amount of time."

"I later got out of doing game art because I didn't want to get pigeonholed," he said. "As the animation got better, the artwork got worse. It wasn't that rewarding, because it was still the same amount of work." Hoff currently paints in an approach he calls "thoughtful play," and does commissions, while also teaching at the Academy of Art University in San Francisco, his alma mater. ■

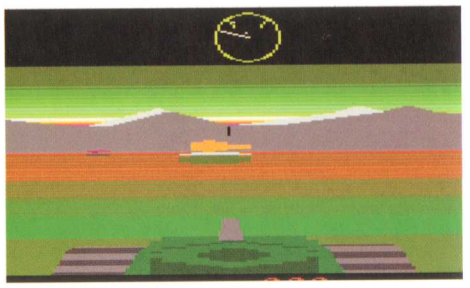


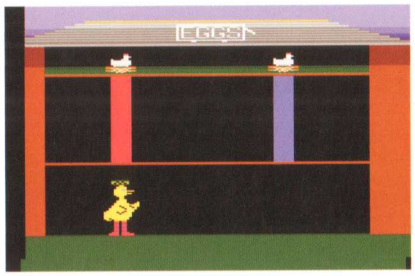
▲ Cover art for *Battlezone* (2600)
Artist: Chris Kenyon

▲ Dealer mobile for *Battlezone*

BATTLEZONE

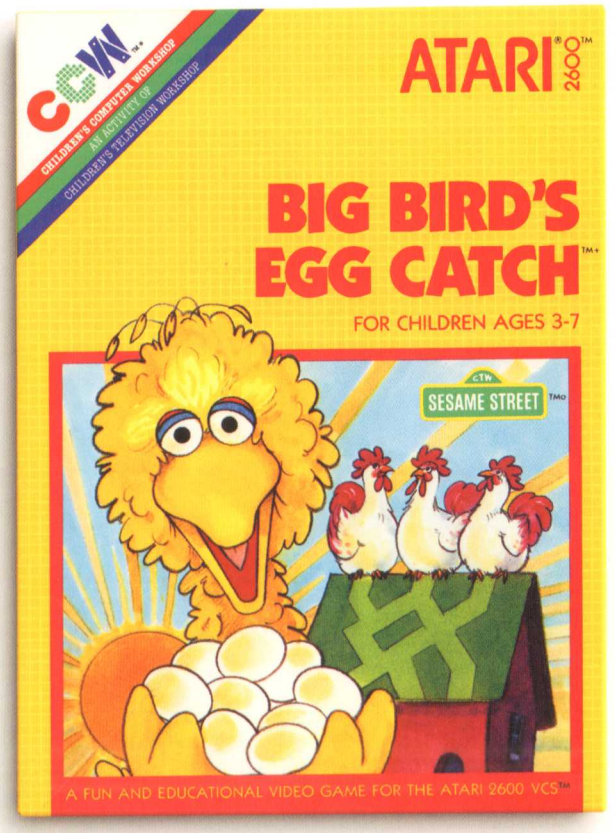
Atari's original tank game was an arcade hit, and warranted a translation for home consoles. Because of technical limitations, the 2600 game dropped the vector graphics, periscope perspective, and obstacles of the original *Battlezone*, but it still adds up to an enjoyable game. A 5200 version was developed to prototype stage, but never finished. Intriguingly, the arcade version so impressed video game playing soldiers with its realism and engagement that the American military commissioned its own version from Atari (known as the Bradley Trainer) for use in training gunners.





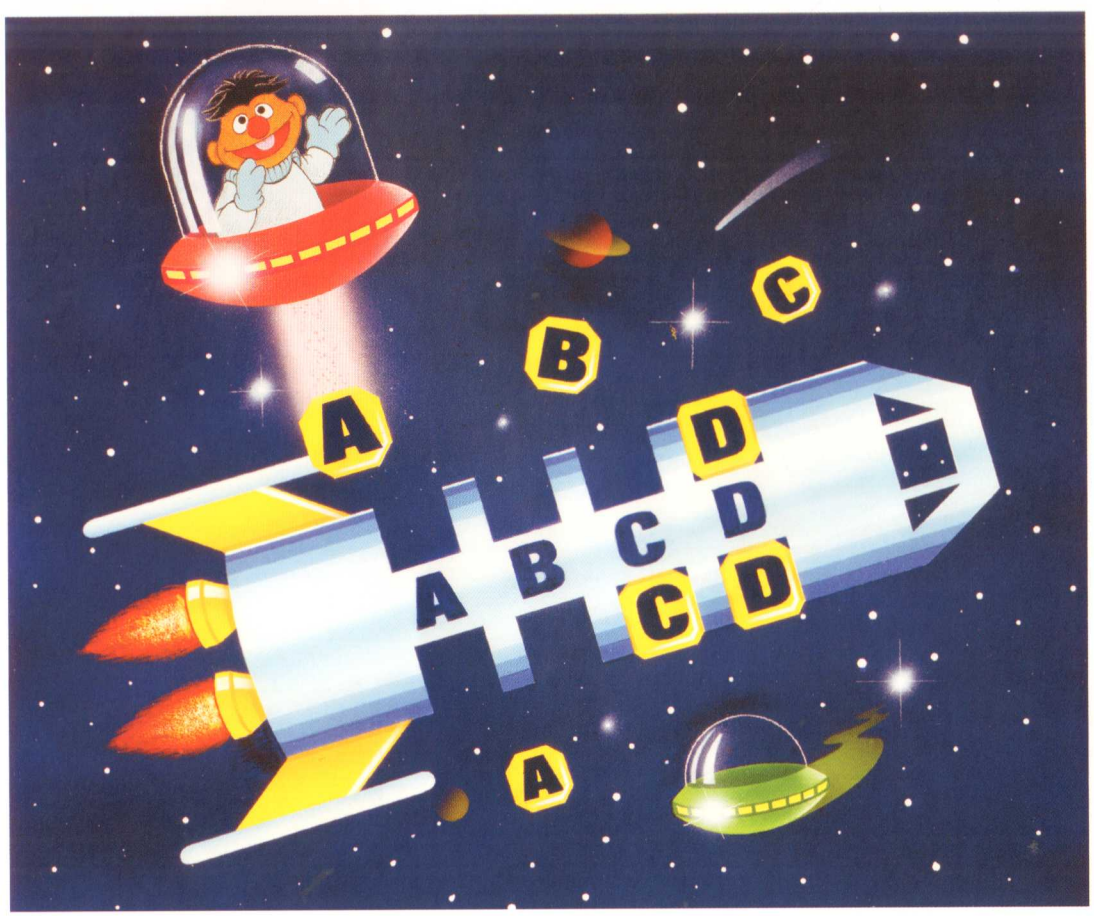
BIG BIRD'S EGG CATCH

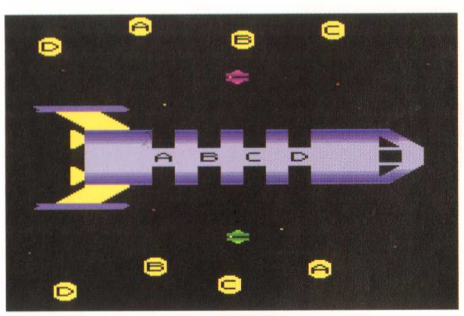
One part of Atari's line of licensed children's games, *Big Bird's Egg Catch* is an extremely simple game of anticipation, as Big Bird tries to catch falling eggs from one of two chutes. Utilizing the Kids' Controller (a redesigned version of the Keyboard Controller), the game features one of several exclusive, game-focused overlays.



▸ Game packaging for *Big Bird's Egg Catch* (2600)
Designer: Linda King
Artist: Gus Allen

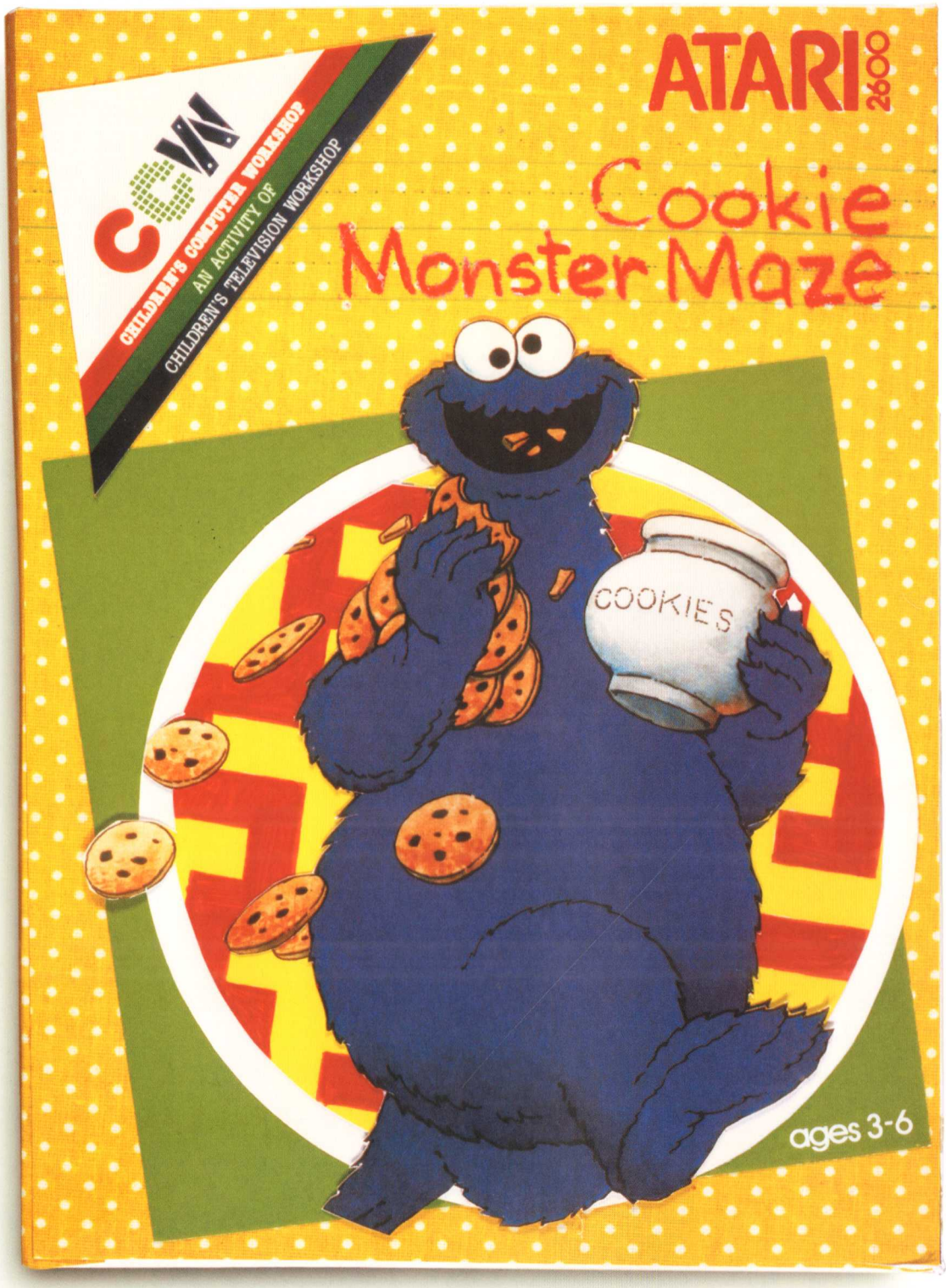
▾ Cover art for *Alpha Beam With Ernie* (2600)
Artist: Gus Allen



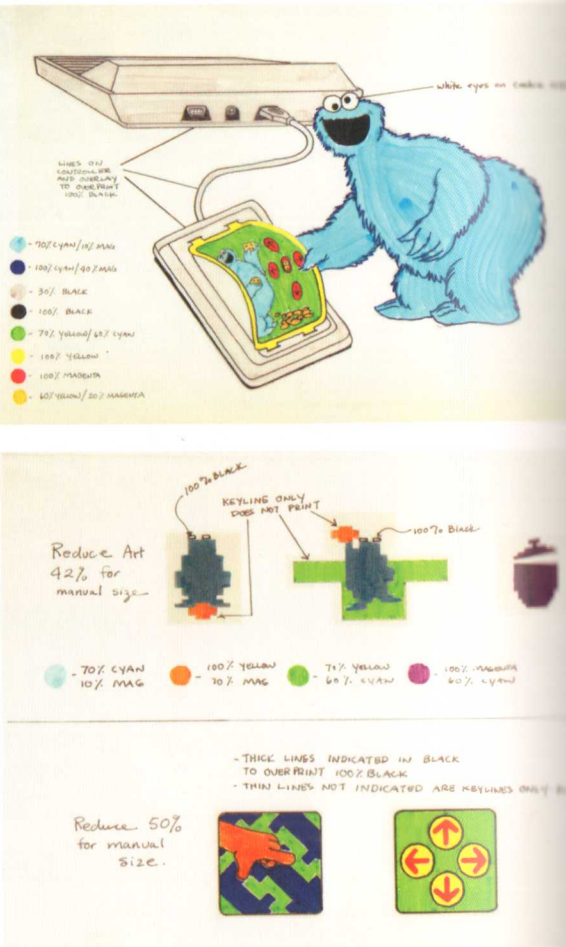


ALPHA BEAM WITH ERNIE

In another licensed children's title, Ernie (of *Sesame Street* fame) ends up in this alphabet-based game, where kids must guide letters into the appropriate places on Ernie's space ship. A simple game aimed at young children, it is exactly as advertised.



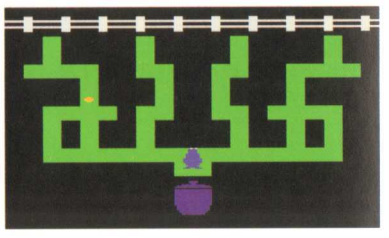
◂ Game packaging design concept for *Cookie Monster Munch* (2600)
Artist: Gus Allen
Designer: Linda King



▲ Artwork and color guides used in manual illustrations for *Cookie Monster Munch*
Artist: Gus Allen

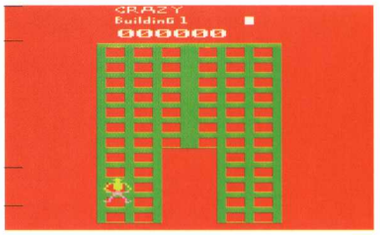
COOKIE MONSTER MUNCH

Another entry in Atari's collaboration with the Children's Computer Workshop, the player guides Cookie Monster around a maze to catch and ultimately eat—you guessed it—cookies. This tasty video game lesson was originally called *Cookie Monster's Garden* and later *Cookie Monster's Maze*, before the title included the most-appropriate cookie-eating verb.



▲ Cover art for *Crazy Climber* (2600)
Artist: Hiro Kimura

CRAZY CLIMBER



Atari licensed this unusual arcade title from Taito and Nihon Bussan Co in Japan, and made it their first Atari 2600 fan club exclusive game. Not available at retail, the game is one of the rarer first-party 2600 titles. The player controls a skyscraper-scaling hero who must dodge steel girders, condors, signs, and closing windows before reaching the topmost floors. Programmers Joe Gaucher and Alex Leavens ditched the complicated, two-joystick controls of the arcade in favor of the 2600's single joystick play, making the game a challenging one.

HIRO KIMURA

HIRO KIMURA WAS born in a Buddhist temple in Kyoto, Japan. He studied art in Hawaii and California, graduating from Art Center College of Design in Los Angeles. "I could hardly walk," he said, "when I began messing with my grandfather's treasured calligraphic brushes and sumi ink, much to his annoyance. Nonetheless, he encouraged me to draw by supplying me with an abundance of papers and crayons."

Right out of school, he was recruited by Atari art directors James Kelly and Steve Hendricks. While Kimura accepted an offer as staff illustrator, he was concerned about his ability to create the imagery needed to sell video games. "What really helped me," he recalled, "was my childhood love of superhero comic books. Thinking I'd outgrown the phase, I sort of put it aside as a past passion. Unleashing it helped me get into the video game mindset."

Unlike some other Atari illustrators who didn't have a fondness for playing the actual games they depicted, Kimura did so as part of his immersion into the worlds he would render. "I played all the video games I illustrated, trying to capture the uniqueness and excitement of each game," he said. "It helped me tremendously in developing illustration ideas."

Kimura explained a basic process he used for each game assignment, as a steady stream of new works-in-progress were developed at Atari. "As I recall," Kimura said, "we were given approximately three weeks per game title. My approach was to first talk with the programmer to see what the game is about, and which features he'd like to see emphasized in the image. Then I played the game if it was available."

"The first week was spent on concept sketches. My challenge was how to capture and communicate to possible purchasers the essence of the game within the given package space. For each, I had to develop characters unless it was already done by licensees. Sketches were usually done in pencil. Once it was narrowed down to a few at the sketch meeting, I then worked on colored pencil sketches. Upon final sketch approval, I researched the necessary references and drew a full-sized line drawing during the second week. After it was approved, I then took it to the

BERZERK ▪ CENTIPEDE ▪ CRAZY CLIMBER ▪ E.T. THE EXTRA-TERRESTRIAL ▪ FROG POND ▪ GALAXIAN ▪ JOUST ▪ KRULL
MARIO BROS. ▪ MILLIPEDE ▪ PAC-MAN ▪ PELE'S SOCCER ▪ PENGO ▪ REALSPORTS FOOTBALL ▪ YARS' REVENGE

"I PLAYED ALL THE VIDEO GAMES I ILLUSTRATED, TRYING TO CAPTURE THE UNIQUENESS AND EXCITEMENT OF EACH GAME."

—HIRO KIMURA

▶ Kimura working on his initial concept for the Atari 2600 version of *Pac-Man*

final version and completed the illustration by the end of the third week. My favorite medium was acrylic, but I sometimes used an airbrush like in *Joust* and *Pengo*, with watercolor and Dr. Martin's Dye."

Fellow illustrator Terry Hoff provided added praise for Kimura's creative approach: "Hiro worked hard to capture that [game storyline], and had an incredible work ethic. He hardly ever worked from photo references—he understood form and broke things down into simple forms. He was very meticulous, using tiny brushstrokes and layers to build it up. He combined that with airbrush and it was impressive. That was fairly unique at the time. He was a good designer too."

Kimura also detailed his relationship with color as well, explaining his process more generally. "The way I use color is lopsided—it's not how others see. I can look at objects as color shapes. The two things I felt I was weak in when I was a student were color and design. They turned out to be my strengths."

All told, Kimura spent nearly three years at Atari, and resigned just before the Consumer division was sold to Jack Tramiel in 1984. At that point, he was the only remaining in-house illustrator at Atari. Just months later, Kimura and his wife moved to New York City where he began the next stage of his career in freelance illustration, represented by graphic design icon Seymour Chwast at The Pushpin Group. Kimura's work as an illustrator has afforded him a wide variety of clients and projects, including stamps for the U.S. Postal Service, and commissions for Universal Studios, Reebok, Miller Brewing, *The New Yorker*, IBM, and many others. ■

CRYSTAL CASTLES

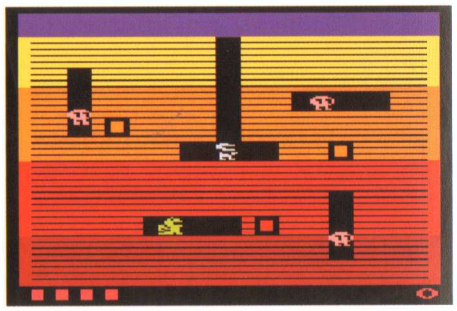
The arcade version of *Crystal Castles* is well-known for its slick graphics and 3-D, isometric mazes. In both the home and arcade versions, the player controls hero Bentley Bear in his quest to gather gems inside the castles of Berthilda the Witch, while fighting her and a cast of evil minions. Invincibility-inducing magic hats and swarms of bees make the game a fun and challenging affair, one of the best entries in the 2600 library.

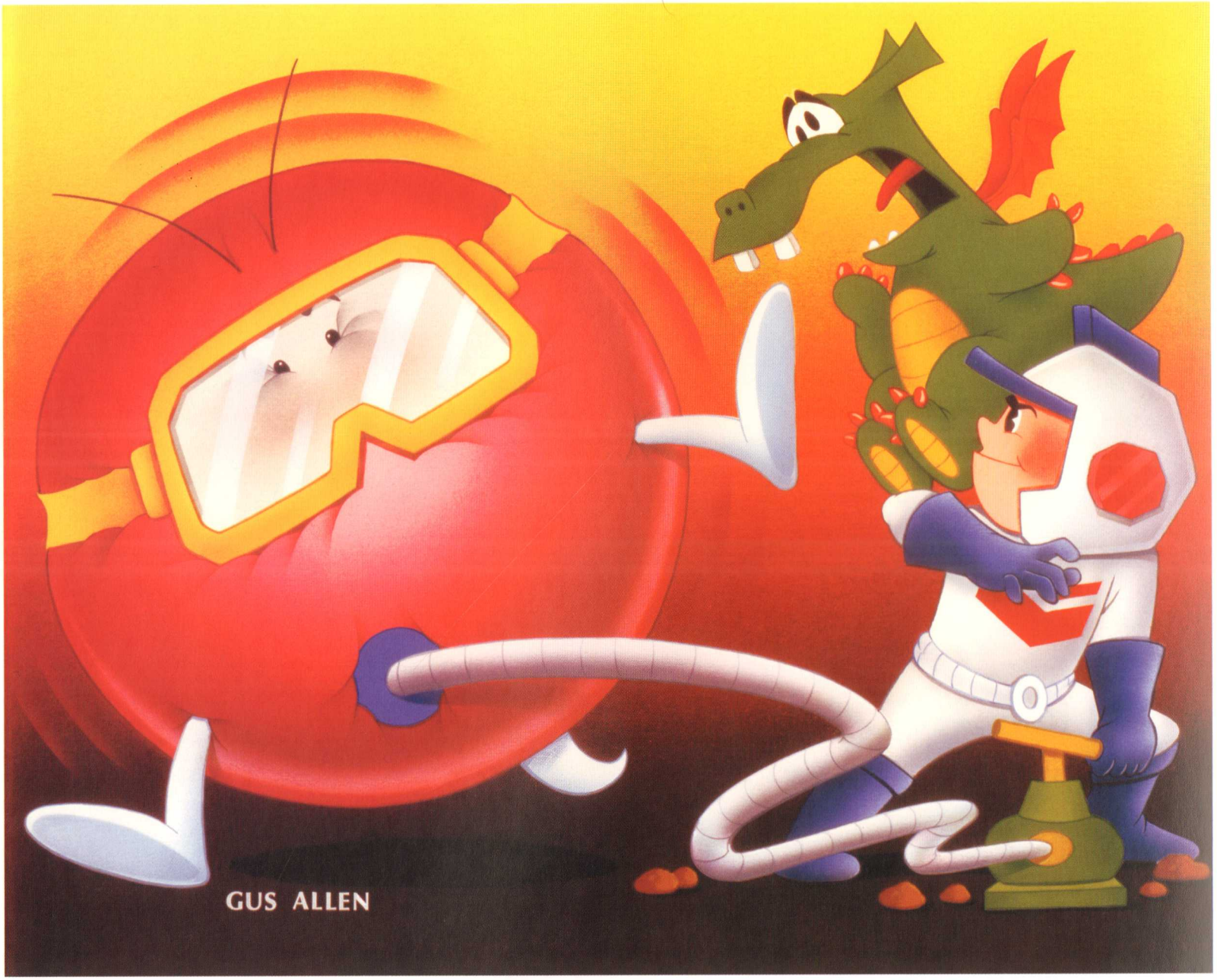
▲ Cover art for *Crystal Castles* (2600)
Artist: Judy Richter

▲ Advertising art for *Crystal Castles* (Arcade)

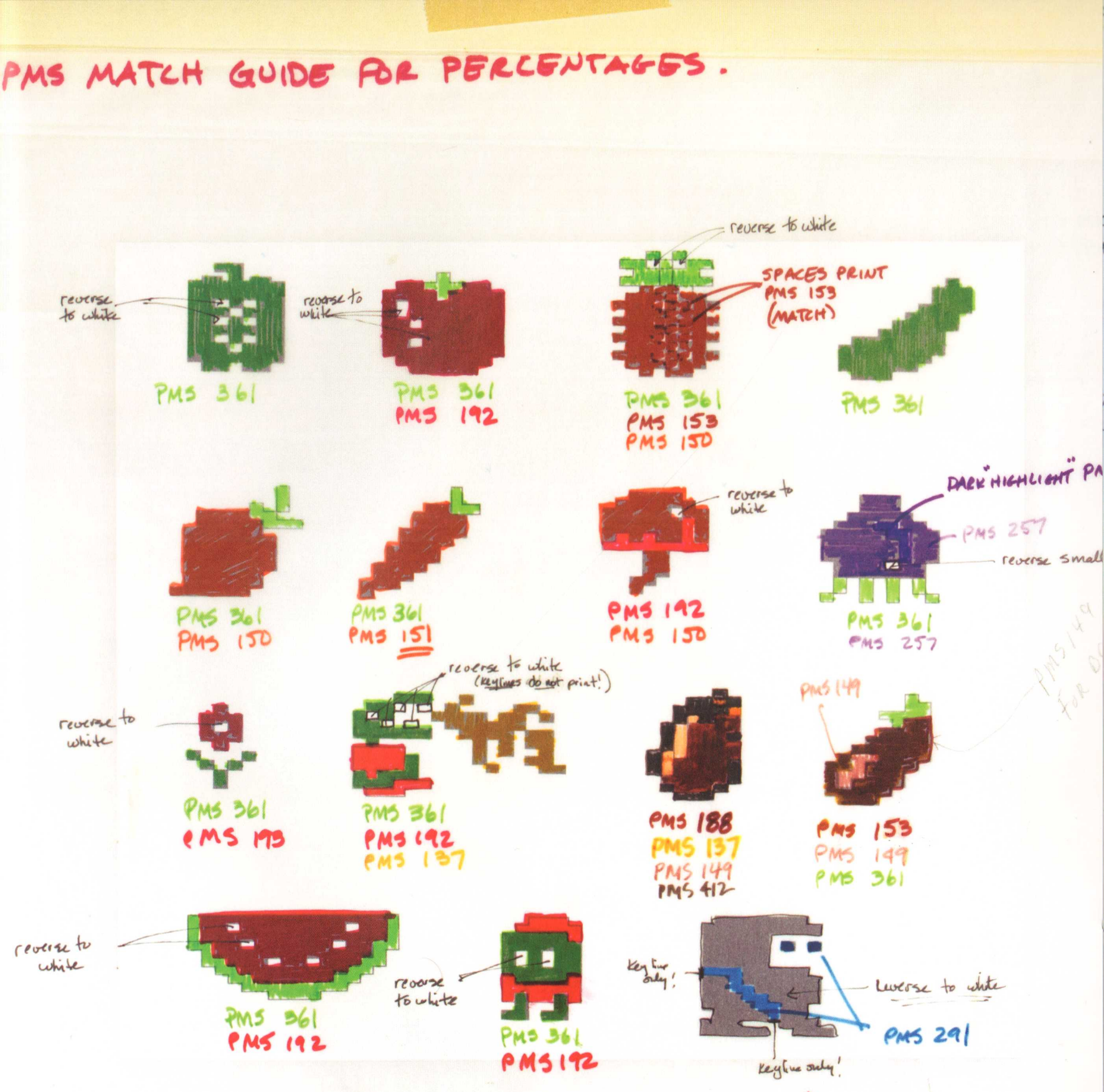
DIG DUG

In this conversion of the Namco arcade game, the player controls Dig Dug, the intrepid gardening miner. But the soil has become infested with Pookas and fire-breathing Rygars, both of which can be dispatched using a handy air pump within an elaborate series of underground mazes. A whimsical and fun concept, the game sports some of the most creative character design of any Atari game.





▲ Cover art for *Dig Dug* (2600)
Artist: Gus Allen



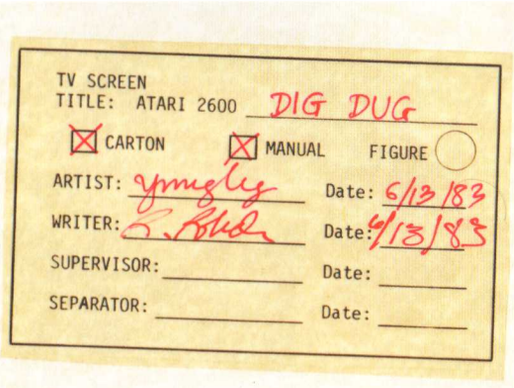
▲ Color guide for sprite illustrations in the *Dig Dug* manual (7800). While this document lists nearly a dozen Pantone color-matching values, the final manual was only printed in two colors as a cost-cutting measure

DIG DUG

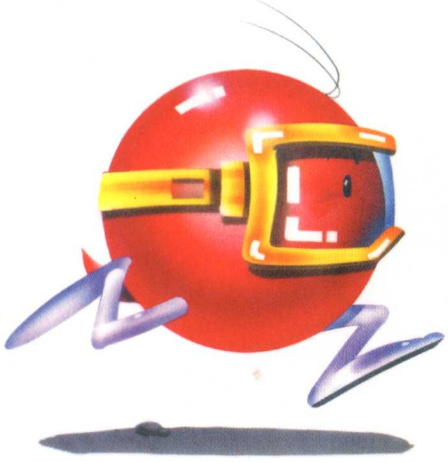
▼ Promotional artwork of *Dig Dug* principal characters
Artist: Mitchell Anthony

▼ Production artwork with comments for use on the Atari 2600 packaging

▲ Color logo art for *Dig Dug* (2600)

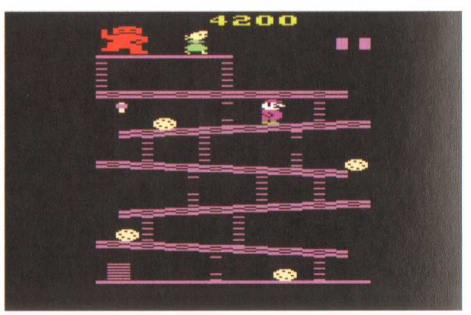


▲◀ Color guide, marker comp and approval forms for *Dig Dug* (400/800)



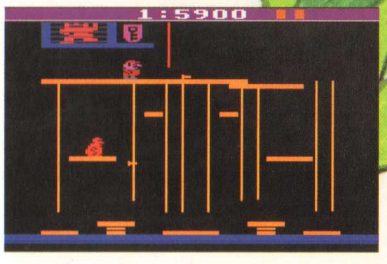
◀ Interior manual illustration for *Dig Dug* (5200)

▲ Cover art for *Donkey Kong* (400/800)
Artist: Lou Brooks



DONKEY KONG

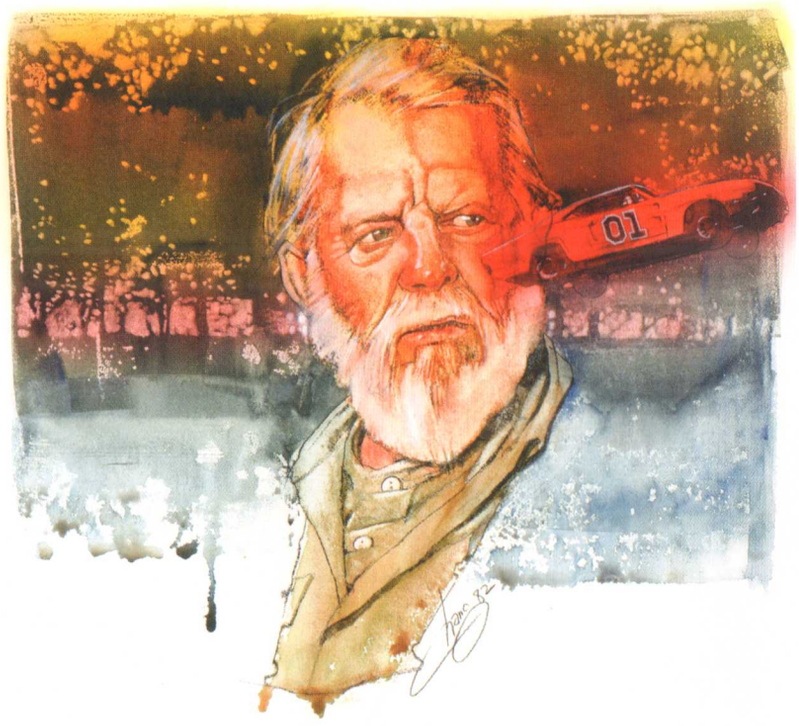
Before sharing adventures with his brother Luigi, Mario was a little-known plumber, but this game put him on the map. Nintendo's *Donkey Kong* was a smash-hit in the arcades, and console conversions were inevitable. While the 2600 version makes compromises to fit into 4K of memory available at the time, the Atari computer version replicates the challenging gameplay and all four screens of the arcade classic.



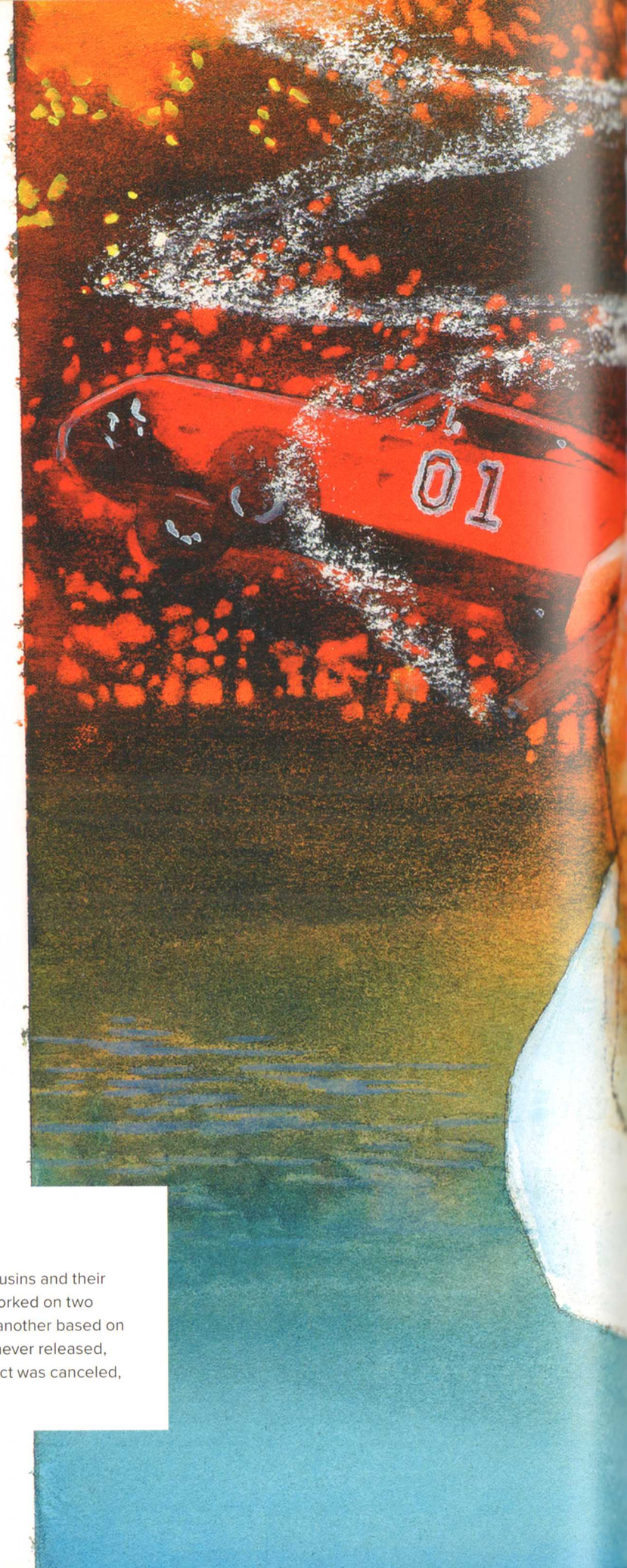
DONKEY KONG JR.

The sequel to Nintendo's *Donkey Kong* turns the classic clash on its head, with little DK Junior seeking to rescue his trapped father from the clutches of—Mario! Yes, the intrepid plumber is cast in the role of the villain in this game, and Atari's 8-bit computer version is a solid translation of the popular arcade game.

▲ **Color study for *Donkey Kong Jr.* cover art (400/800)**
Artist: Lou Brooks



▲▼▶ Unreleased manual and concept art for *Dukes of Hazzard* (2600)
Artist: Warren Chang

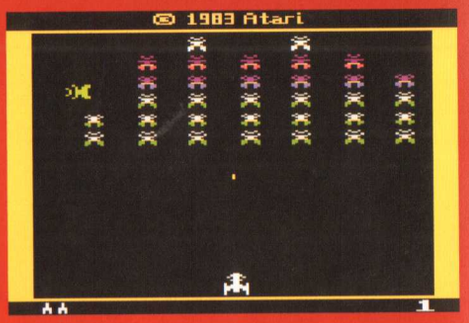


DUKES OF HAZZARD

Atari never released a game based on this popular '80s TV show starring two country cousins and their orange Dodge Charger, the General Lee—but it wasn't for lack of trying. The company worked on two different versions of *Dukes of Hazzard* for the Atari 2600—one an original creation, and another based on its earlier home console game, *Stunt Cycle*. The 1983 prototype was nearly finished but never released, though preliminary art for the game was created by artist Warren Chang. When the project was canceled, Chang explained that work was halted on any additional illustrations.

GALAXIAN

One of the earliest space shooter games, *Galaxian* is lesser-known than its popular sequel, *Galaga*. Rows of dive-bombing Galaxians attack the player's ship in this arcade translation, with wave after wave following. Programmer Mark Ackerman's innovative technique for displaying eight characters across the screen earned him a software patent.

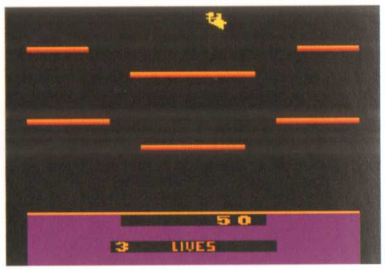


▼ Cover art for *Galaxian* (2600)
Artist: Hiro Kimura

▲ Cover art for *Galaxian* (5200)
Artist: James Kelly

▶ Logo artwork for *Joust* packaging (2600/5200)

▶ Cover art for *Joust* (2600, 5200)
Artist: Hiro Kimura



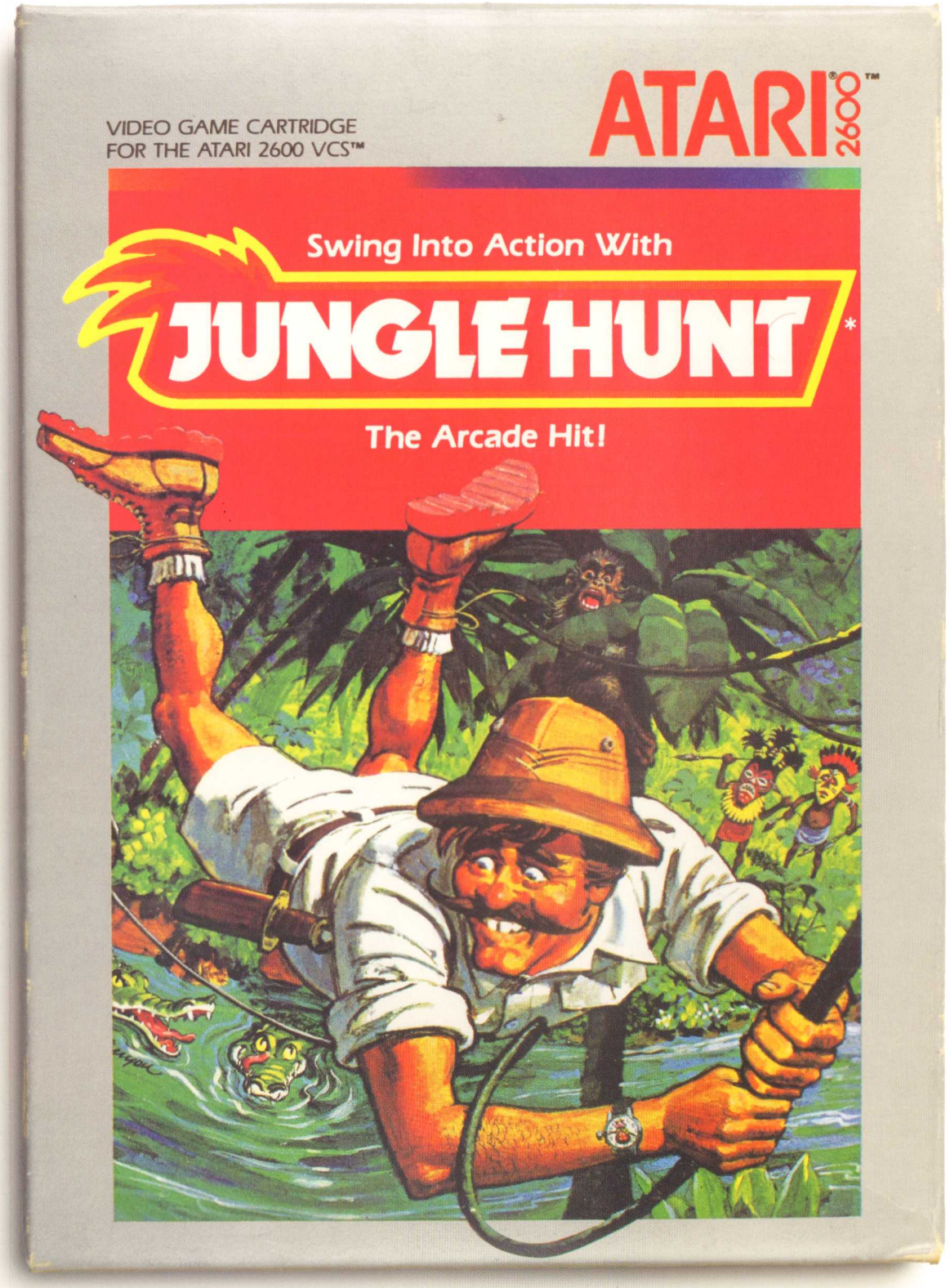
JOUST

Potentially winning an award for the most bizarre game concept, this game unfolds the tale of jousting knights astride flying ostriches! *Joust's* great two-player action allows players to cooperate in collecting eggs, avoiding lava and destroying other rival knights—or going head-to-head in battle. The 2600 and 5200 versions replicate the best parts of the classic arcade game.

▲ Advertising art for *Joust* (2600, 5200)
Artist: Hiro Kimura

Project Title JOUST 5200
Project No. _____ of _____

JOUST-5200
JUNE 6, 1983



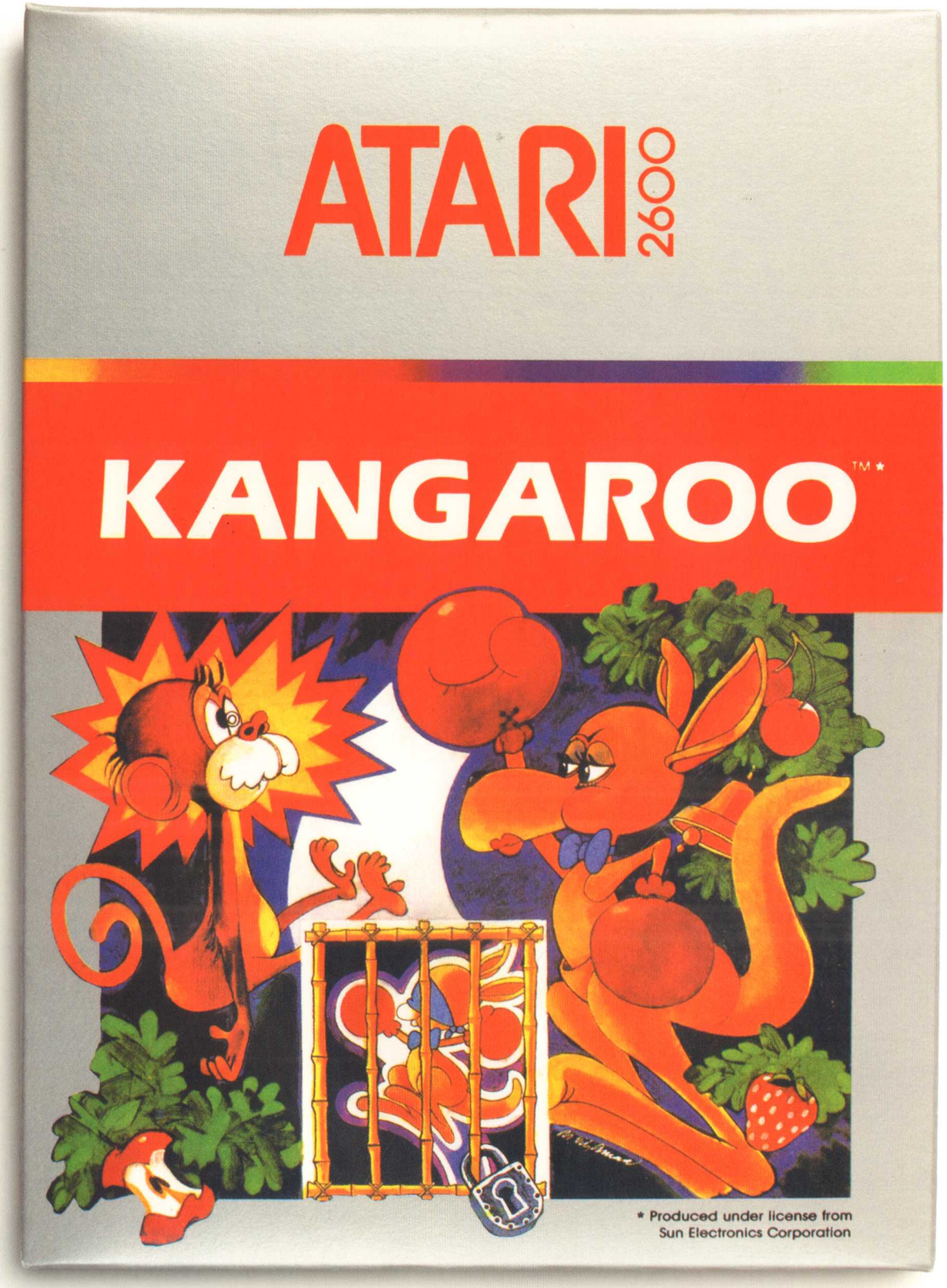
▲ Game packaging for *Jungle Hunt* (2600)
Artist: Chris Kenyon

▲ Packaging art for *Jungle Hunt* (5200)
Artist: Chris Kenyon

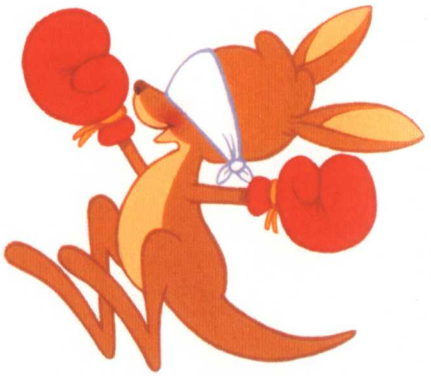
JUNGLE HUNT

In *Jungle Hunt*, the player is Sir Dudley Dashly, an English big-game hunter traversing the terrors of the jungle to rescue his wife, Lady Penelope, from a tribe of cannibals. In the 2600 version, Sir Dudley swings across vines, swims with hungry crocodiles, leaps over rolling boulders, avoids angry tribesmen, and apparently bears only a passing resemblance to Activision's Pitfall Harry. The jungle is clearly big enough for all.

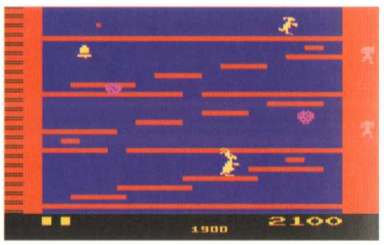
▲ Production art for *Jungle Hunt* (5200)
Artist: Chris Kenyon



◂ Game packaging for *Kangaroo* (2600)
Artist: Marty Viljamaa

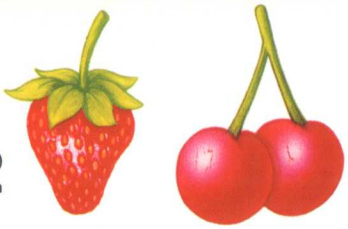


▲ Interior Manual art
for *Kangaroo* (2600)
Artist: Marty Viljamaa



KANGAROO

Mother Kangaroo has lost her baby! Mean monkeys have stolen her joey, and Momma will punch, jump, and block flying apple cores to rescue the little one. This translation of the arcade game by Japanese Sun Electronics makes for a great round of boxing-gloved adventuring, Kanga-style! The winsome duo of mother and son were also popular enough to warrant their own segment on the CBS Saturday morning cartoon series, *Saturday Supercade*.



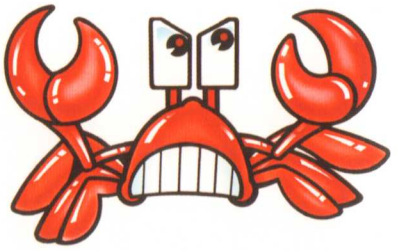
▸ Interior Manual art for *Kangaroo* (2600)
Artist: Marty Viljamaa

KRULL

One of a handful of early movie-adaptations, *Krull* draws from the sci-fi fantasy epic by Columbia Pictures. Following the plot line of the film, the player guides would-be king Prince Colwyn to rescue his new bride, Princess Lyssa. Armed with a throwing weapon called a Glaive, you must enter the Black Fortress, dodge fireballs, fight the Crystal Spider, and finally defeat the beast to save your love. A rather elaborate game with strong gameplay and mechanics, *Krull* is one adaptation that transcends its source material.

▼ **Cover art for *Krull* (2600)**
Artist: Hiro Kimura

◂ Cover art for *Mario Bros.* (5200)
Artist: Hiro Kimura



▲ Interior manual art for *Mario Bros.* (2600)
Artist: Hiro Kimura

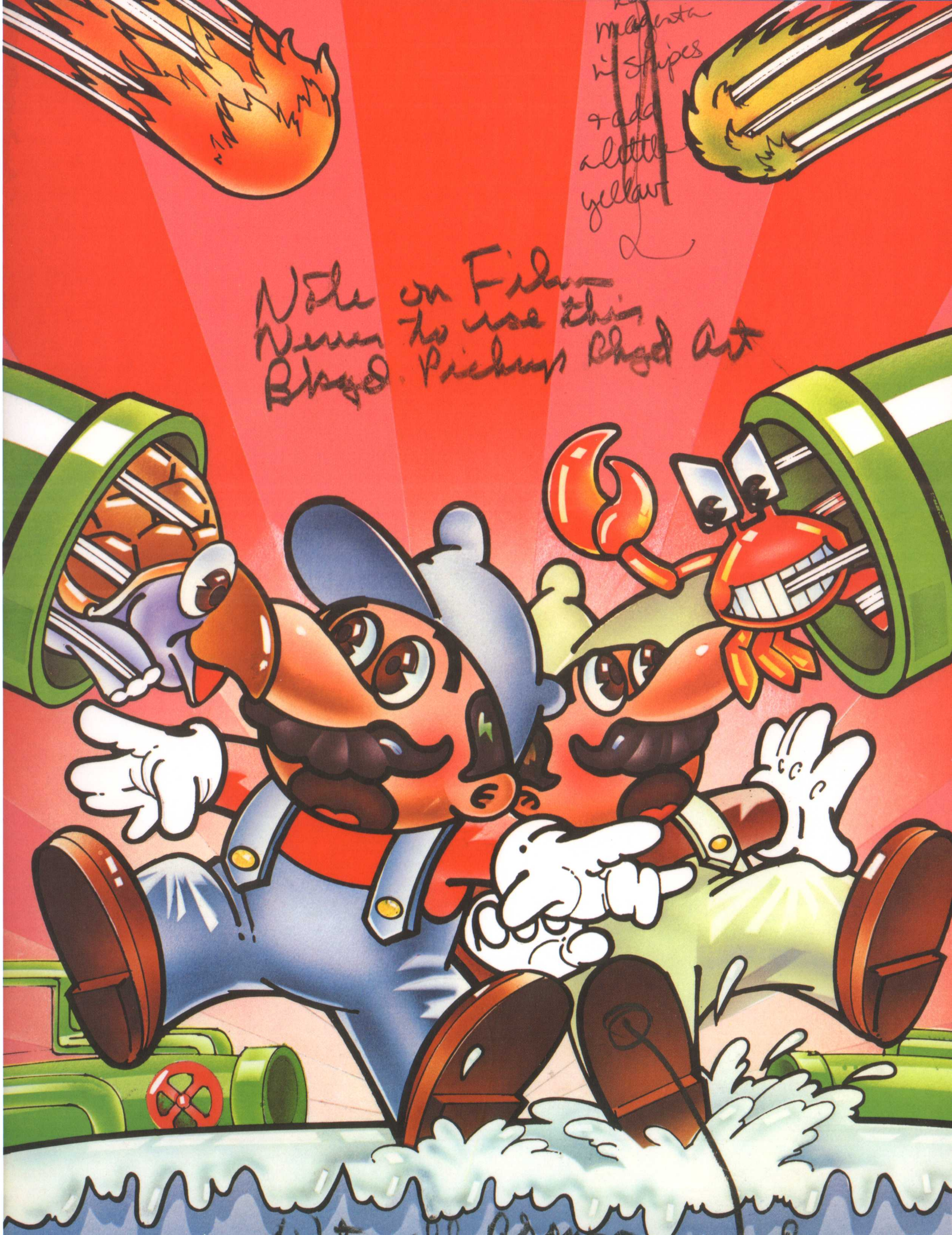
▸ Production art of manual interior for *Mario Bros.* (2600)
Artist: Hiro Kimura

MARIO BROS.

After Mario's turns in *Donkey Kong* and *Donkey Kong Jr.*, he was ready to share some of the spotlight with a relative—namely, his trusty brother, Luigi. Before they were Super, the plumbing duo fought an onslaught of turtles, crabs and bugs that infested their water pipes in this arcade translation for both the 2600 and 5200. With echoes of what would make them famous on the NES, the pair hurl fireballs and bump platforms in great, simultaneous two-player action.

"There were quite a few requirements depicting the heroes that I had to adhere to. After all, Mario was already very popular from his role in *Donkey Kong* and there was very little I could do except to make the character a little more three-dimensional. To maintain the original flavor, I used thick outlines to depict the characters."

HIRO KIMURA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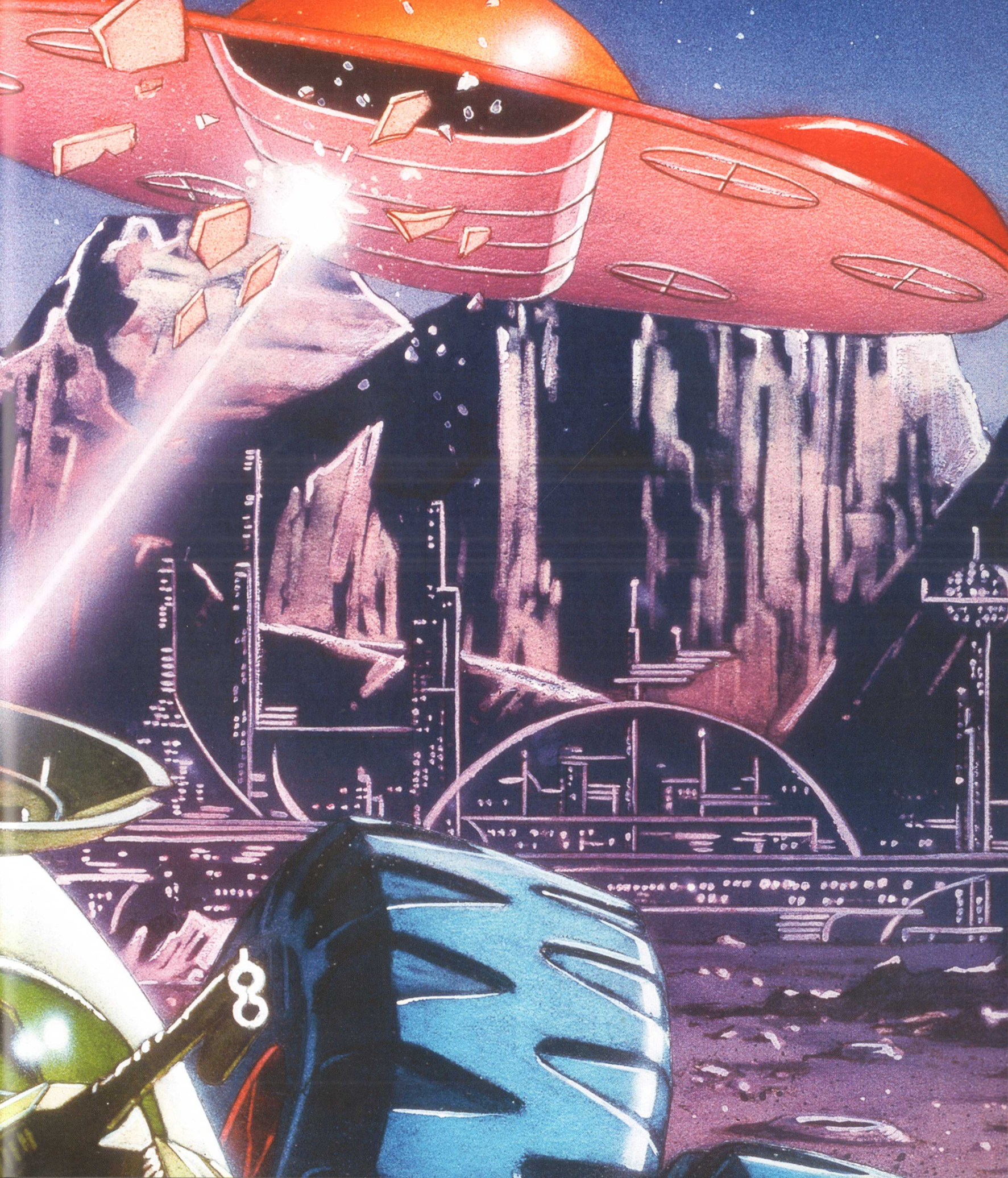
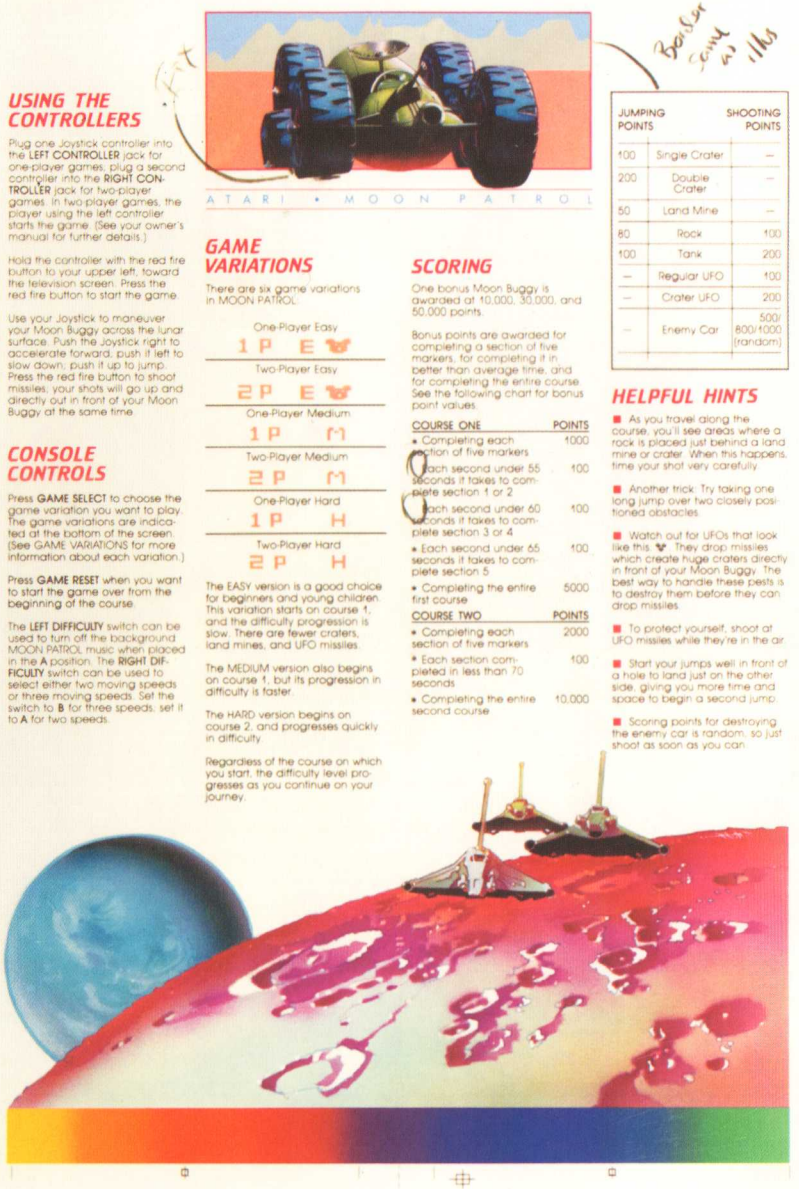


MOON PATROL

Atari's translated the Williams arcade lunar buggy game for both the 2600 and 5200, with great results. Leaping chasms, destroying boulders, and shooting enemies, the player's intrepid rover rides faithfully for both consoles. The 2600 version was outsourced to trusted Atari collaborators at General Computer Corporation (GCC), while the 5200 version was created in-house.

▼▶ Interior manual art and production art for *Moon Patrol* (2600)
Artist: Terry Hoff



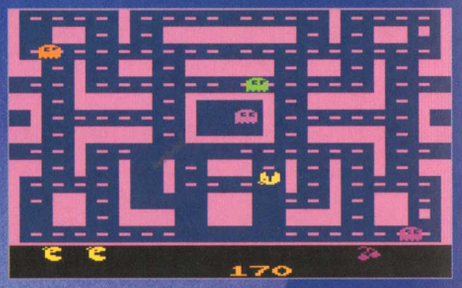
▲ *Moon Patrol* logo art (2600)

◀◀ Previous page: Detail of cover art for Moon Patrol (5200)
Artist: Warren Chang

▶ Cover art for *Moon Patrol* (5200)
Artist: Warren Chang

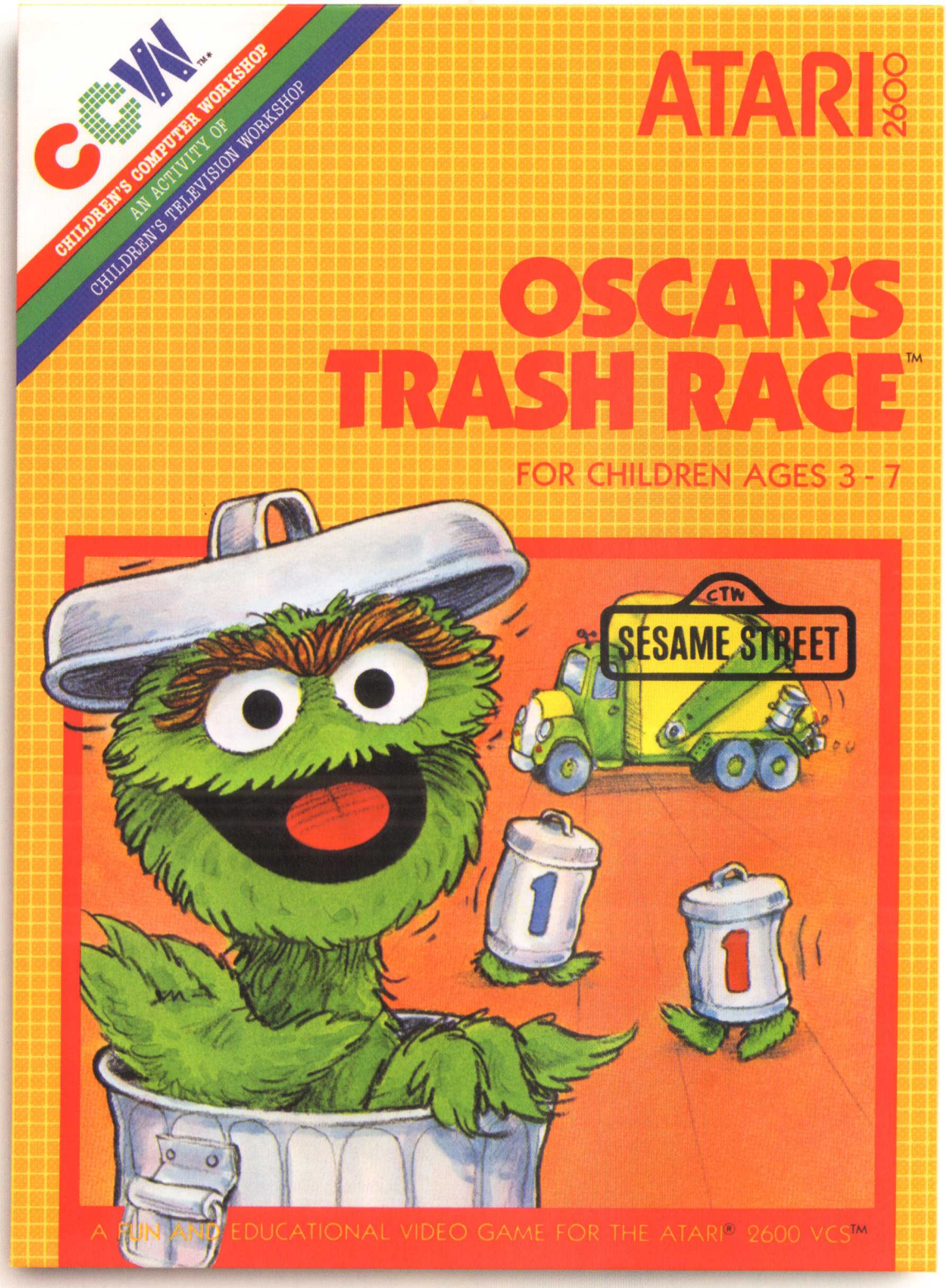
MS. PAC-MAN

Ms. Pac-Man, that beautiful sex symbol of '80s video games, began her life as an unlicensed knockoff of *Pac-Man* called *Crazy Otto*. *Pac-Man* licensees at Midway loved the game, bought the rights, and brought her into the family. This 2600 version is the game audiences should have gotten with Atari's 2600 *Pac-Man* in 1982. *Ms. Pac-Man* is quite a feat on the 2600, and won Video Game of the Year in 1983.

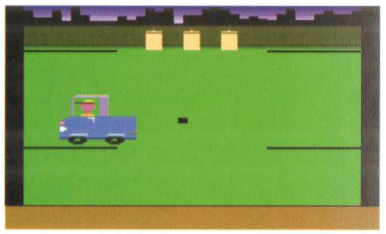


▼ Cover art for ***Ms. Pac-Man*** **(5200)**
Artist: Gus Allen

▲ Catalog montage art
Artist: Mitchell Anthony

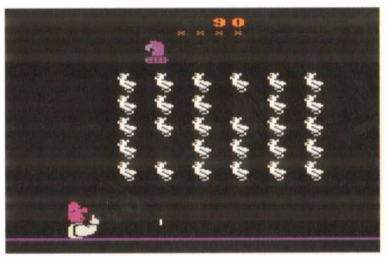


▲ **Game packaging for *Oscar's Trash Race* (2600)**
Designer: Linda King
Artist: Gus Allen



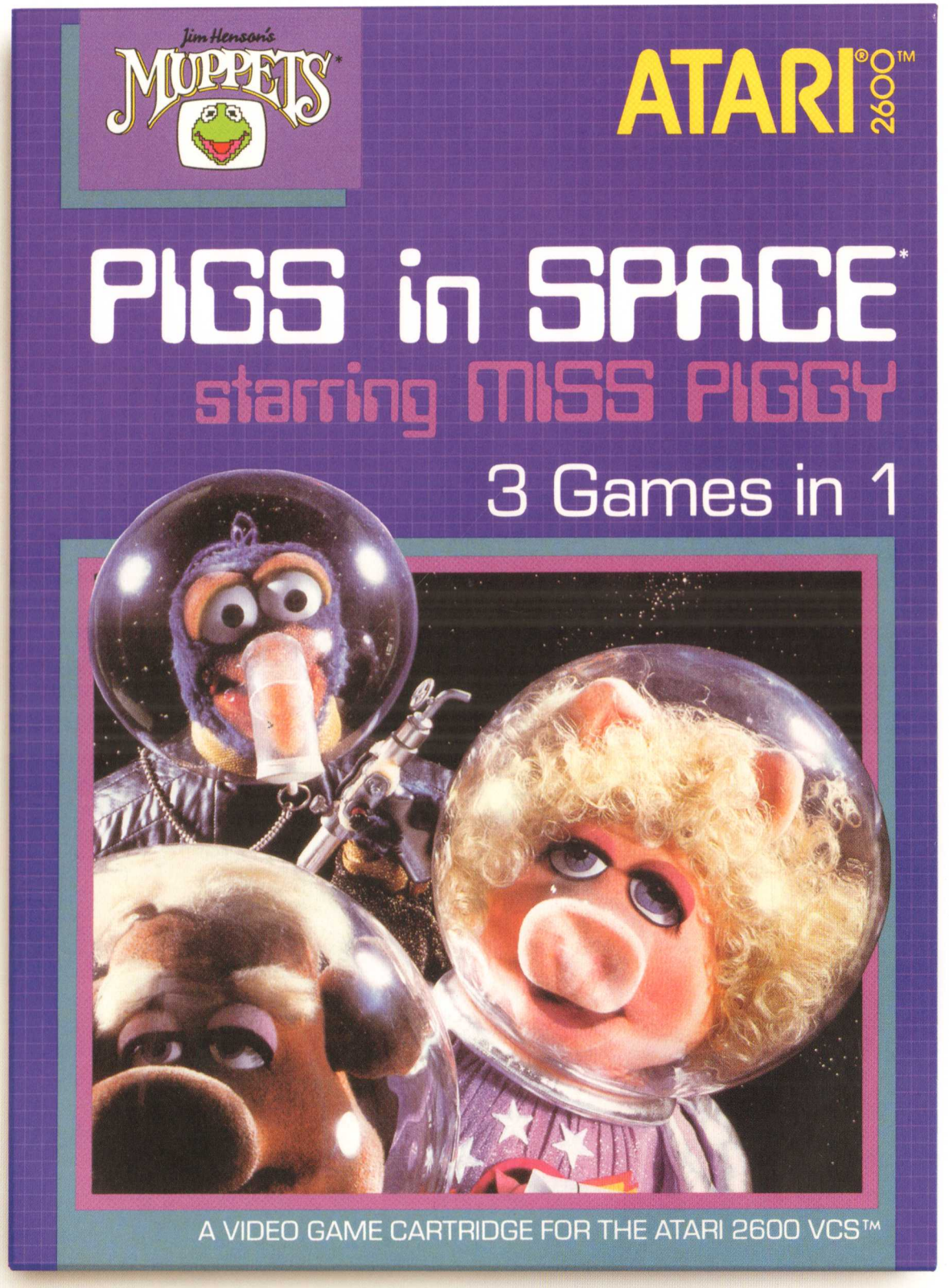
OSCAR'S TRASH RACE

Sesame Street's surly, garbage can-wearing Muppet received his own game as part of Atari's children-focused line of titles. In it, the young player matches the number of objects with Oscar's trash can, and follows directional arrows to practice learning the concepts of left, right, up and down. The game is slightly more challenging than other entries Atari aimed at children, so it really isn't garbage.



PIGS IN SPACE

Based on an act of the same name from the television series, *The Muppet Show*, this licensed kids' game was the last of Atari's children-focused line. *Pigs in Space* is unique in that it contains three different mini-games.

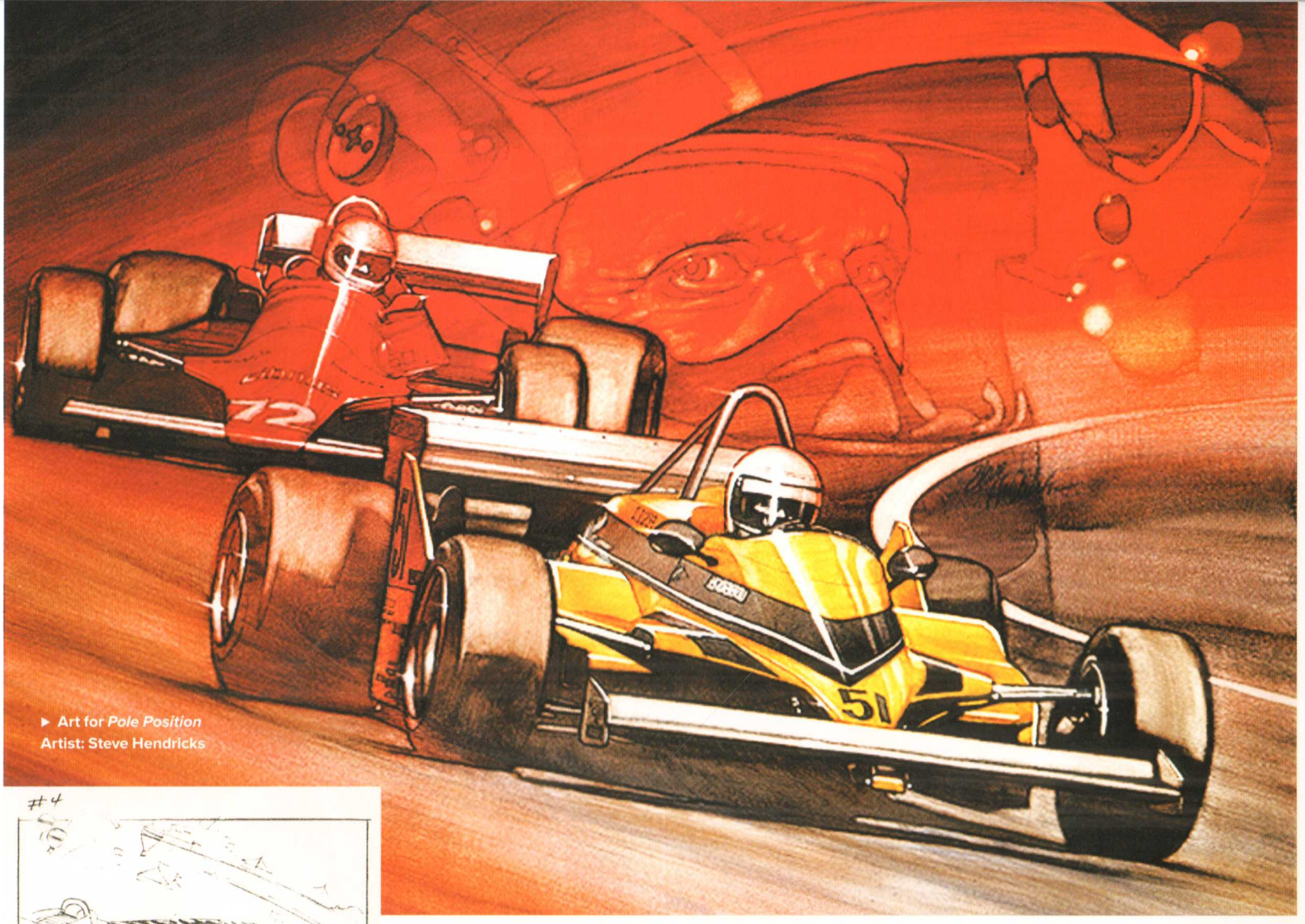


▲ Game packaging for *Pigs In Space* (2600)
Designer: Linda King

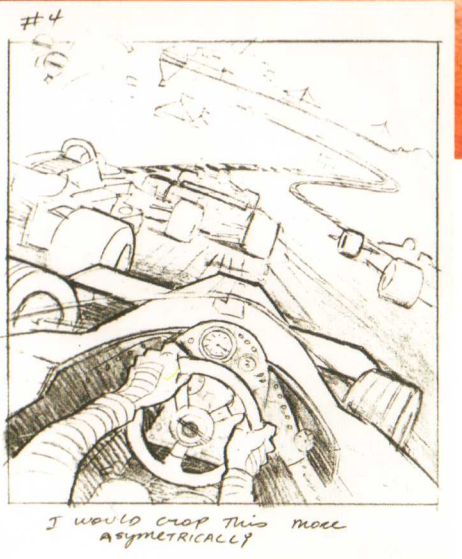
POLE POSITION

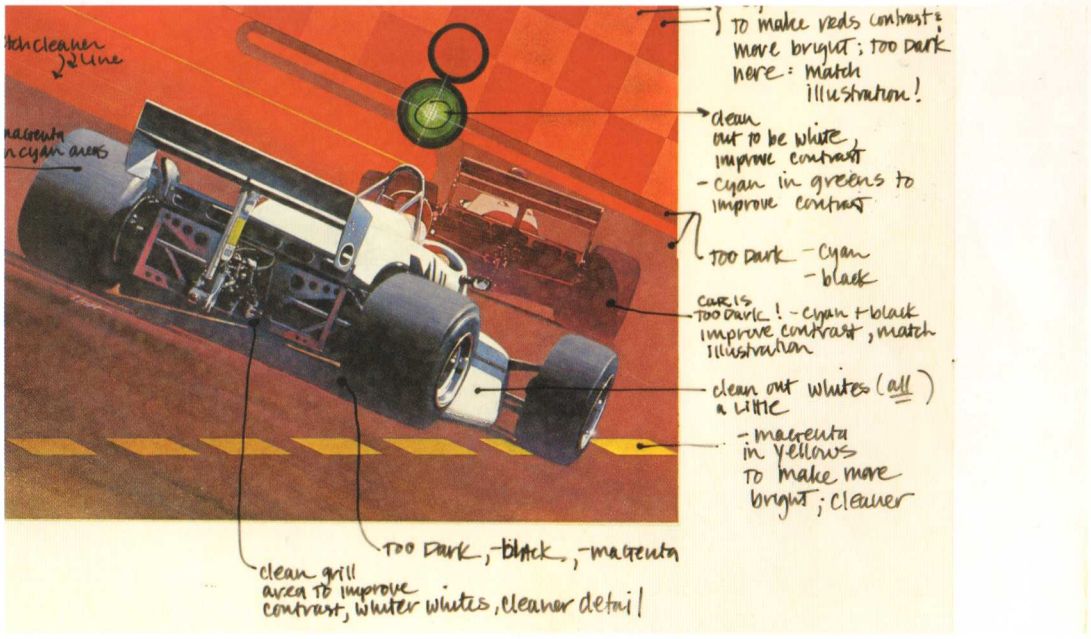
A model for nearly every modern racing game, *Pole Position* was a hit in its arcade incarnation, and sported strong translations of the race track scorcher for both the 2600 and 5200. Atari kept the wheels spinning with the oddly-sequeled *Pole Position II*, the pack-in game for the 7800.

▲ Promotional art for *Pole Position*
Artist: Greg Winters

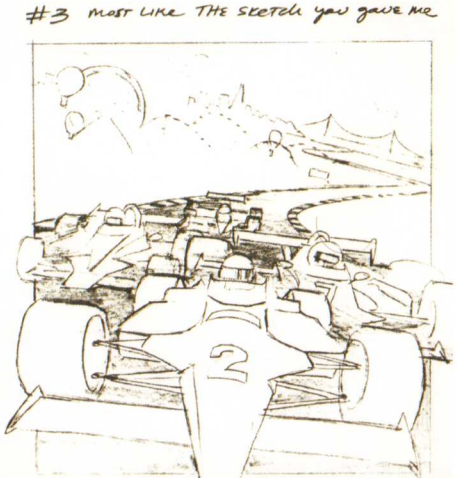


▶ Art for *Pole Position*
Artist: Steve Hendricks





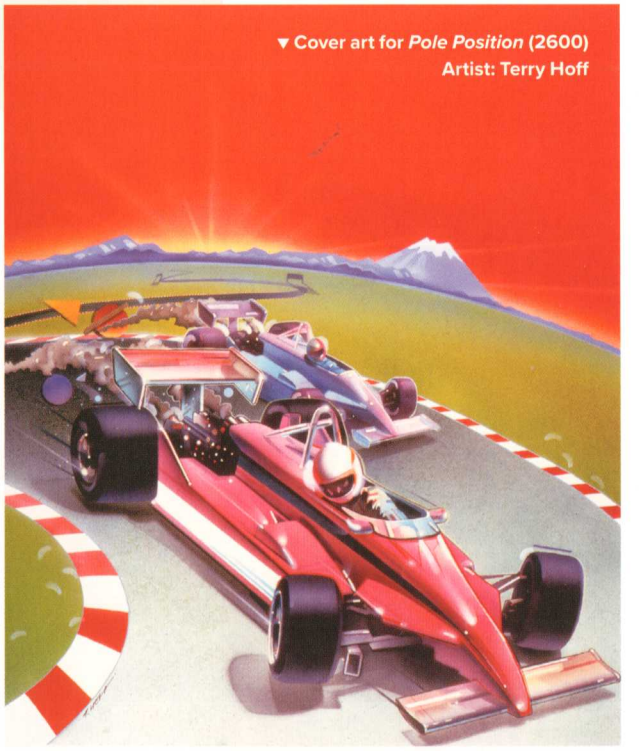
▲ Production art for *Pole Position* (5200)
Artist: Terry Hoff



◀ Sketch concepts for *Pole Position* (2600)
Artist: Greg Winters

POLE POSITION

▲ Cover art for *Pole Position* (5200)
Artist: Terry Hoff



▼ Cover art for *Pole Position* (2600)
Artist: Terry Hoff

▲ Art for *Pole Position* (2600)
Artist: John Mattos

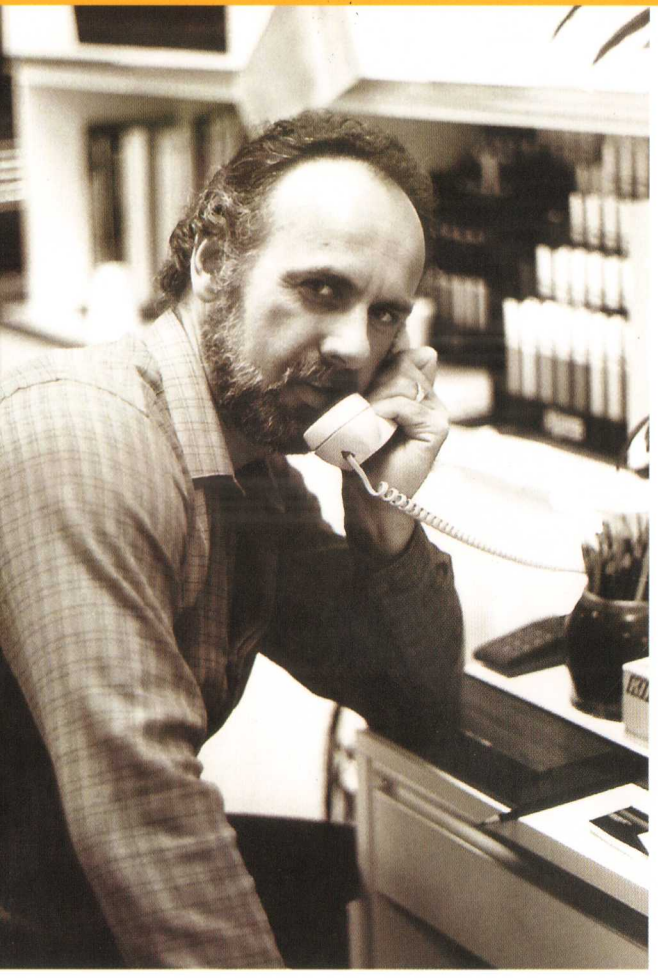
Pole Position was one of my favorites, because I got to paint an Indy car! I always treated the games as first-person fantasies, and wanted to communicate that on the covers. My painting made the car the hero this time, from the back of the car with a big tilt and diagonal design that I wanted to emphasize, allowing me to use a kind of pop art graphic shape to indicate the race track in the background."

TERRY HOFF

▶ Promo art for *Pole Position II* Kit (Arcade)
Artist: Marc Ericksen

ARTIST PROFILE

JAMES KELLY



JAMES KELLY WAS born in Wisconsin in 1945, the son of an artist mother and an architect father. At 10, he was tutored by an accomplished portrait artist, Abraham Nussbaum. "When I was ten years old," he said, "I sold my first painting for $100, and I was off and running." In his early 20s he briefly studied at the Art Center College of Design in Los Angeles and the Academy of Art in San Francisco.

"I had a passion and a talent for it at an early age. I've been an illustrator, a graphic designer and a portrait artist all of my life." He was working as an independent illustrator when he began moving in circles that contained Nolan Bushnell, Steve Jobs, and Steve Wozniak, which led to work for each of them.

In 1977, Kelly came to work full-time as art director at Atari, initially in the Coin-Op Division. Later, with growth in the home consoles, he moved to the Consumer Division, in charge of the illustration department. There he supervised young artists and was responsible for hiring new talent from local universities like Art Center in Los Angeles. "Atari happened sort of overnight," he explained, "and all of a sudden they realized they needed to hire to bring all this [illustration work] in-house, instead of farming it out. It started out as a handful of us—Evelyn [Seto], Bob Flemate—and we began."

"We created a lot of great artwork," he said. "I was involved in just about every piece of packaging art we did. I did layout, and on rare occasions I did the finished art too. We had to make it up as we went along, because there was no one to copy!"

While Kelly enjoyed six years at Atari, even amidst the company's explosive growth in the late '70s and early '80s, he wasn't prepared for its success. "I thought this was just a flash in the pan, and I'll jump in while it's cooking, and keep my nose to the wind. When it starts sinking, I'll leave—but it didn't happen." Atari had riotous success, at one point becoming the fastest growing American company in history. "Atari was the only corporate job I ever had," Kelly said. "Atari actually became quite renowned in the commercial art world as one of the places that bought and printed great commercial artwork."

After leaving Atari, Kelly returned to both schools he attended to teach classes for a time, and then moved into fine art. "I had transgressed into the fine art world, and out of the commercial art world—and that's what I still do. I do a lot of portraits, painting people. I did a lot of celebrities—Joe Montana, Will Clark. I enjoyed that—they were jobs I got because I could paint people accurately."

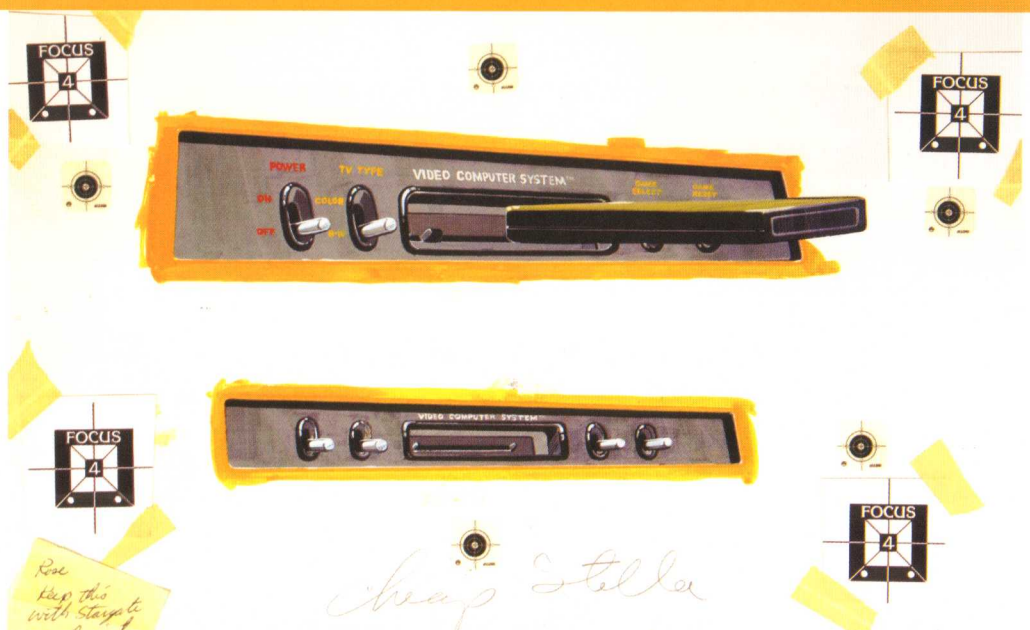
DODGE 'EM ▪ GALAXIAN ▪ MAZE CRAZE ▪ PELÉ'S SOCCER ▪ RAIDERS OF THE LOST ARK

▲▼ Interior manual art for Atari VCS (2600)
Artist: James Kelly

"WE CREATED A LOT OF GREAT ARTWORK. WE HAD TO MAKE IT UP AS WE WENT ALONG, BECAUSE THERE WAS NO ONE TO COPY!"

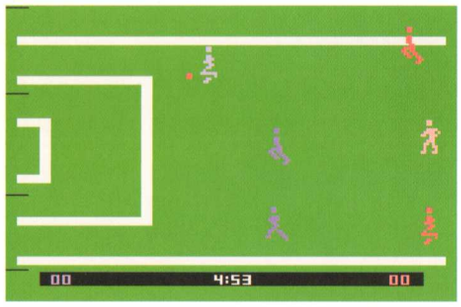
—JAMES KELLY

With those changes, Kelly also saw the decline of illustration work in the industry itself, because of the increased popularity and the rise of off-the-shelf desktop publishing tools. "When the computer came up and got sophisticated enough that you could buy graphics programs, nobody was going to pay $5,000 to commission a piece," he explained. "I know a few people that are in the art world. One thing that helps and allows you to make a living, is if you're good at it. I feel blessed, because I've been able to keep doing it. If I wasn't getting paid for it, I would do it for free." ■



▶ Cover art for *RealSports Soccer* (5200)
Artist: Steve Hendricks

▲ Unused cover art for *RealSports Soccer* (5200)
Artist: Chris Kenyon

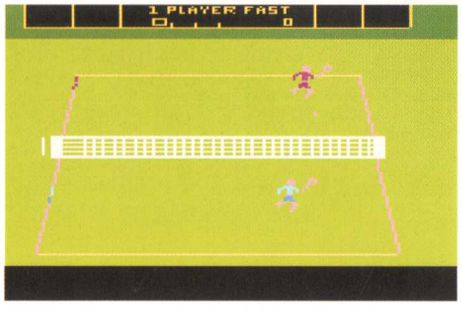


REALSPORTS SOCCER

With plenty of room to improve upon *Pelé's Soccer*, Atari released its *RealSports Soccer* for the 2600, which elevated the gameplay and AI above their previous "football" entries. The 5200 version displayed a wide, expansive soccer field, coupled with a clever use of the 5200's keypad controller for switching between players. The 5200 edition was originally named *Soccer*, before being re-christened with the *RealSports* name.

▼ Production art for *RealSports Tennis* (5200)
Artist: Warren Chang

▶ Cover art for *RealSports Tennis* (2600)
Artist: Terry Hoff

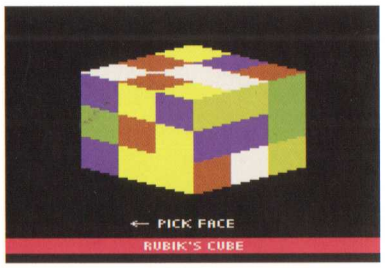


REALSPORTS TENNIS

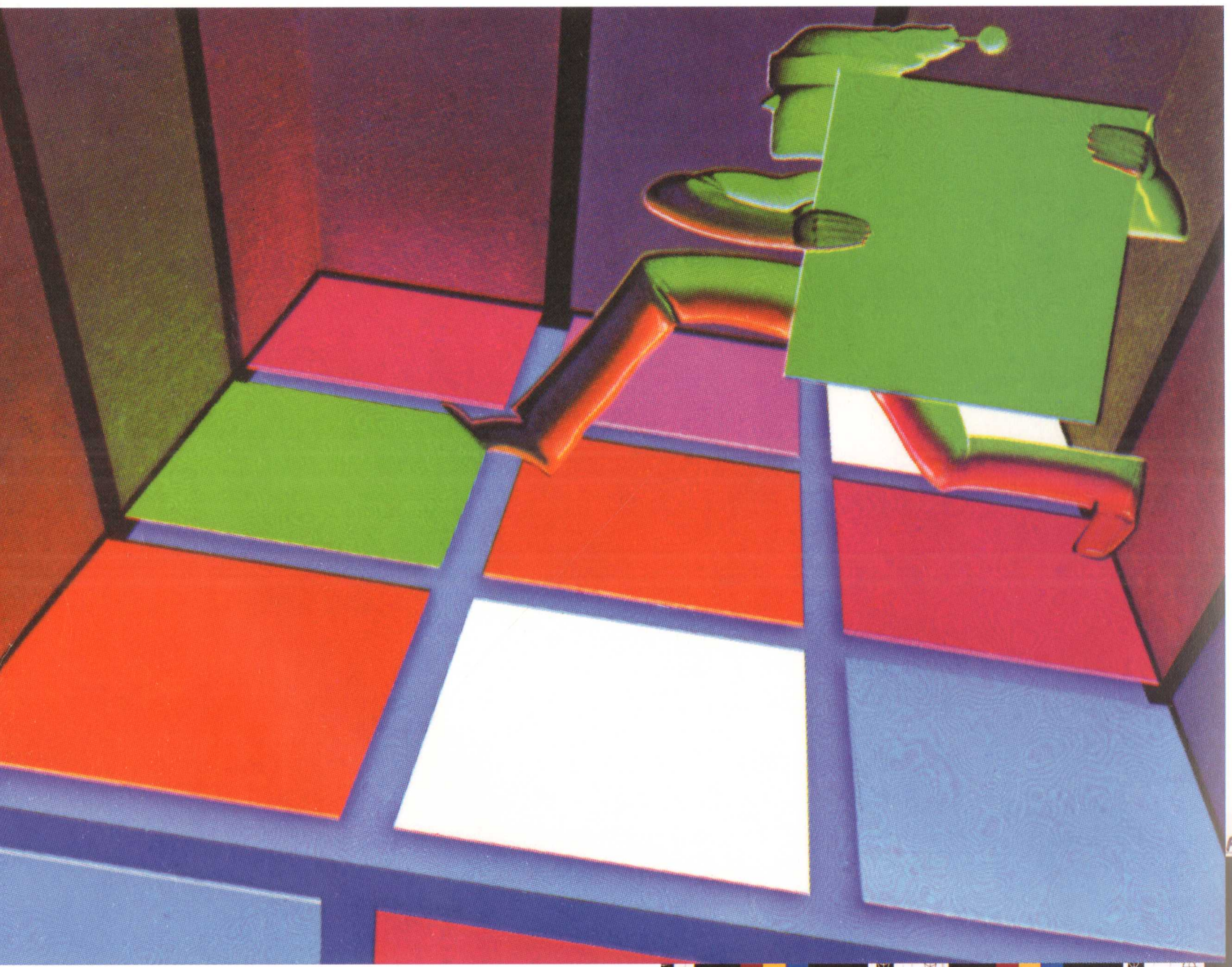
This entry in Atari's *RealSports* line of titles was a two-player version of Tennis with a faux 3-D perspective and graphics that improved on an earlier *Tennis* game release by third-party rival publisher Activison.

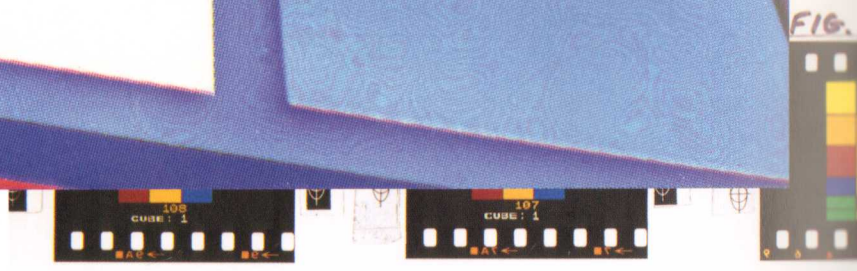
RUBIK'S CUBE

This title was Atari's attempt to capitalize on the puzzle game craze of the '80s by tweaking and rebranding its *Atari Video Cube* into a licensed *Rubik's Cube* game. The final *Rubik's* version is marginally different than the previous Atari release, but both versions shared the same artwork. The unused artwork at right has a much more cerebral take on the game concept.



▼ Cover art for *Rubik's Cube* (2600)

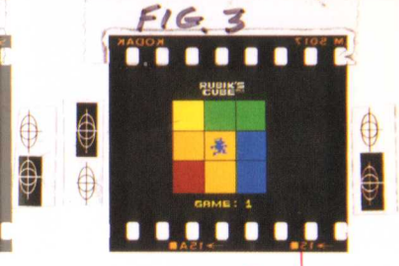




▶ Production artwork for *Rubik's Cube* manual screenshots

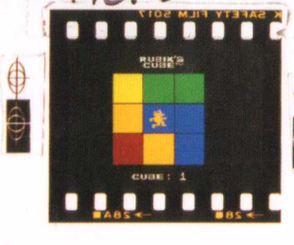
▶▶ Unused cover art for *Rubik's Cube* (2600)
Artist: Burrell Dickey

FIG. 3



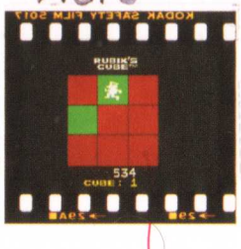
REMINDER
100% BLACK
40% CYAN

FIG. 5



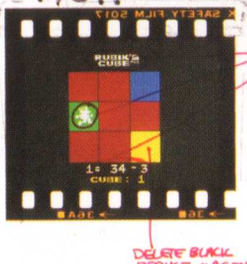
*VERIFY SIZES

FIG. 6



DELETE BLACK IN RED SQUARES

FIG. 7



DELETE BLACK
REDUCE MAGENTA
ALL YELLOW SQUARES
& YELLOW FIGURES

KO - WHITES
PURE WHITES
IN ALL WHITES

100% BLACK
40% CYAN
ON ALL
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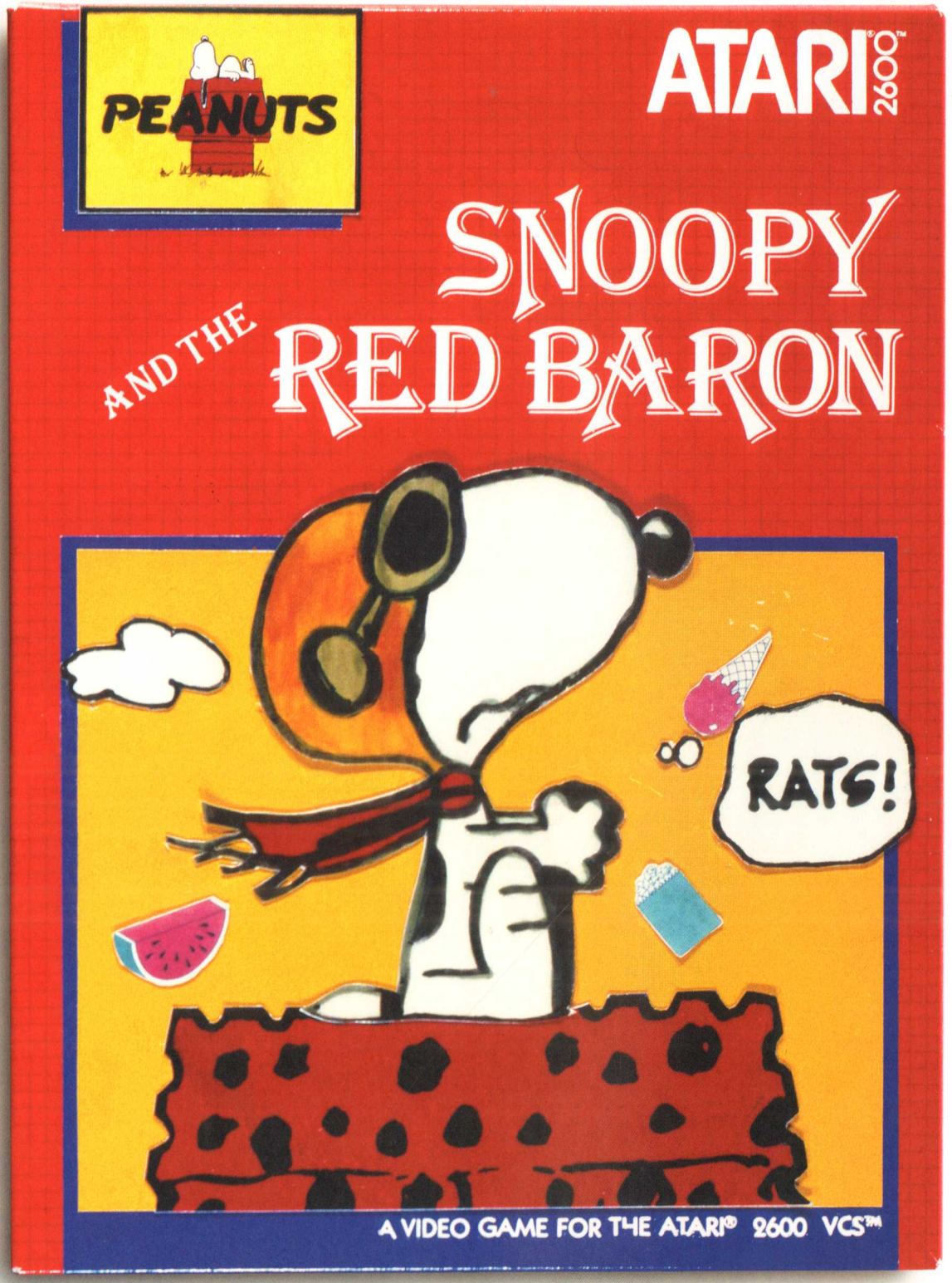
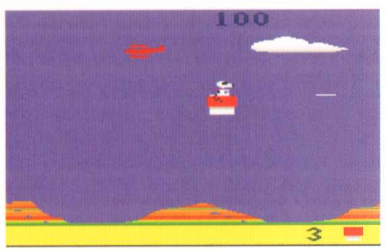


▲ Game packaging design mockup for *Snoopy and the Red Baron* (2600)
Designer: Linda King



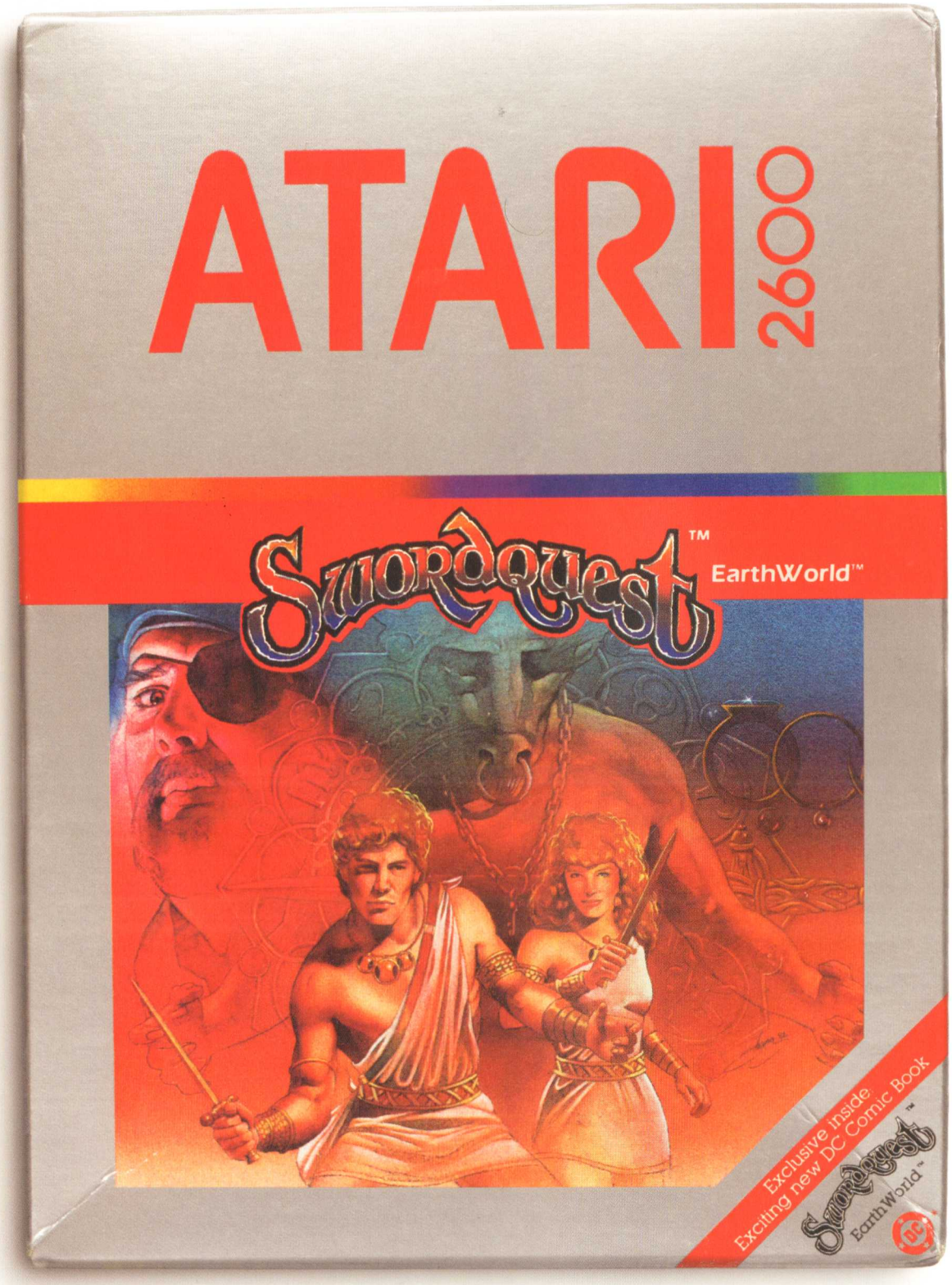
SNOOPY AND THE RED BARON

The imaginative beagle of *Peanuts* fame got his own game, which is an ode to Snoopy's WWII flying fantasy. The player must pilot Snoopy's airborne dog house, in an attempt to ground the Red Baron and pick up bonus items. While not as challenging as other 2600 games, it stands above all the other kid-oriented Atari titles. Another *Peanuts* licensed game, *Good Luck, Charlie Brown*, was developed but not finished.

SORCERER'S APPRENTICE

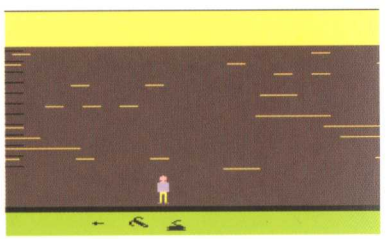
The only one of four Disney-licensed games to actually be released by Atari, *Sorcerer's Apprentice* is based on one segment of the animated film, *Fantasia*. As the apprentice, the player helps Mickey Mouse to catch or shoot falling stars and to bail water out of the basement carried by walking broomsticks. The concept sounds strange, but makes much more sense in the context of the classic film.

▲ Game packaging design mockup for *Sorcerer's Apprentice* (2600)
Designer: Linda King



▲ Game packaging for *SwordQuest Earthworld* (2600)
Artist: Warren Chang

▶ Original artwork for the cover of *AtariAge* magazine, promoting the kickoff of the *SwordQuest* competition. The art was created by George Pérez, the artist on best-selling DC Comics titles like *The Teen Titans* and *Crisis on Infinite Earths*. He also penciled each of the *SwordQuest* comic books.
Artist: George Pérez



SWORDQUEST EARTHWORLD

Earthworld was the first in a series of innovative adventure games designed be played in conjunction with a pack-in comic book, which contained an original story—and promised a chance to participate in a larger, national *SwordQuest* competition. Players would gather clues from the gameplay, which would yield help in finding hidden words within the comic. Those words could be submitted to qualify for an opportunity to play in the national competition, with a fabulous prize at the center of each one—a jeweled talisman with a small sword at its center, valued at $25,000. The winners of each game-oriented competition would then be brought together for a final gameplay round, with the "Sword of Ultimate Sorcery" as its prize. *Earthworld's* "Talisman of Penultimate Truth" was eventually won by 20 year-old Stephen Bell of Detroit. Intriguingly, the concept for *Earthworld* (and the elaborate competition) began life as a proposed sequel to the game *Adventure*.

SwordQuest!

You Can Win Fabulous Prizes by Solving the Mysteries of Four New Cartridges

In October, Atari presents the *EarthWorld* Game Program cartridge, launching the most exciting real-life treasure hunt of our time—the SwordQuest Cycle.

There will be *four* new SwordQuest games in all, each part of the total SwordQuest adventure story. This continuing fantasy tale of treacherous tyrants and daring deeds is told in the special DC comic books packed with the cartridges, and played out in the games themselves.

But the SwordQuest challenge is more than on-screen action—by finding clues hidden in each cartridge and comic book combination, players can win prizes worth thousands of dollars!

The Quest begins with *EarthWorld*, which holds the key to winning a spectacular 18kt solid gold Talisman, studded with twelve diamonds and twelve other precious stones—a prize produced at a cost of $25,000.

THE TALISMAN

THE CROWN

Next comes *FireWorld*, in early 1983. The winner of the *FireWorld* contest walks off with a Chalice, a gorgeous goblet of platinum and gold, glistening with rubies, sapphires, diamonds, and pearls—another $25,000 prize.

Later in 1983 there is *WaterWorld*, with a prize truly fit for a king—a $25,000 golden Crown, encrusted with diamonds, rubies, sapphires, green tourmalines, and aquamarines.

Finally comes *AirWorld*. Uncovering its secrets will win the fourth $25,000 prize for some lucky player—it's a modern-day version of the mythical Philosopher's Stone, encased in an 18kt gold box studded with emeralds, rubies, diamonds, and citrines.

THE PHILOSOPHER'S STONE

And when the SwordQuest cycle is complete, it will be time for the fifth and final challege of SwordQuest—the answer which will earn the grand prize winner an incredible jewel-encrusted Sword, with 18kt gold handle and gleaming silver blade, blazing with diamonds, emeralds, rubies, and sapphires—a $50,000 sword!

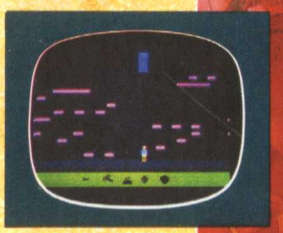
What kind of secrets are hidden in the games? No one is saying—but Jewel Savadelis, Atari's Director of Marketing Software, says, "When someone finds the clues, they'll know it!

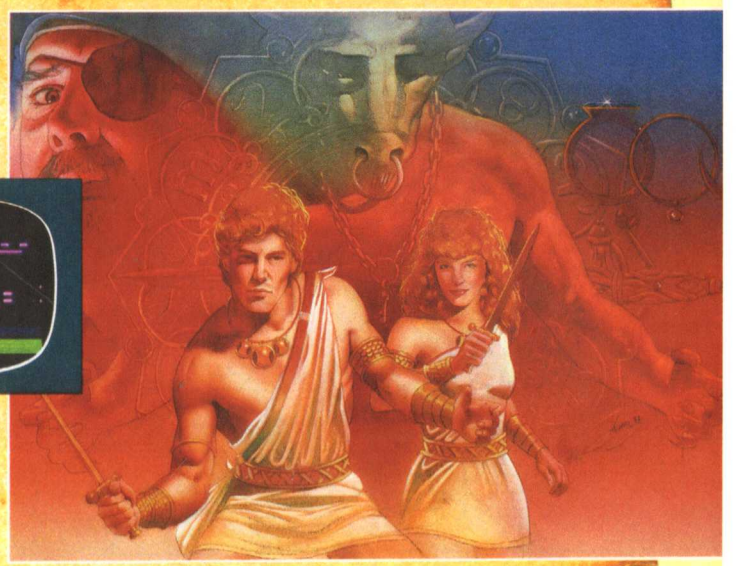
"All the contest details will be enclosed in the cartridge boxes," she explains, "but I can tell you that we're going to recognize *everyone* who finds at least a single valid clue. Find more, you'll receive a greater level of recognition. But you'll have to find all five valid clues to be eligible to win the major prize for each cartridge—and that fifth valid clue is a *real* challenge!"

THE CHALICE

▲ ▶ Two-page article from the Sept/Oct 1982 issue of *AtariAge* magazine, promoting the *SwordQuest* competition

EarthWorld ....
The Adventure Begins!





Experience *EarthWorld*—the start of a new dimension in video gaming. It's *the first true action/adventure* game—a cartridge which carries players into a captivating saga of fantasy and heroic drama.

The *EarthWorld* experience includes a full-color DC comic book packed with the game. We meet Torr and Tarra, the twin brother and sister, and learn of their death-defying quest for the Talisman, Chalice, Philosopher's Stone, Crown, and ultimately, the magical Sword of Ultimate Sorcery.

Now begin *your* quest. You venture into the Twelve Rooms of the *EarthWorld* cartridge, seeking the objects which help unravel the game's mysterious puzzle.

You must do more than run from room to room, though. There are treacherous barriers to cross—deadly arrows, tricky floating logs, and perilous portals which stand between you and the hidden chambers where *EarthWorld's* secrets await.

It takes winning strategy *and* quick reflexes to master the *EarthWorld* experience!

Regular price: $37.95 Club Member's price: $33.95

ORDER *EARTHWORLD* TODAY

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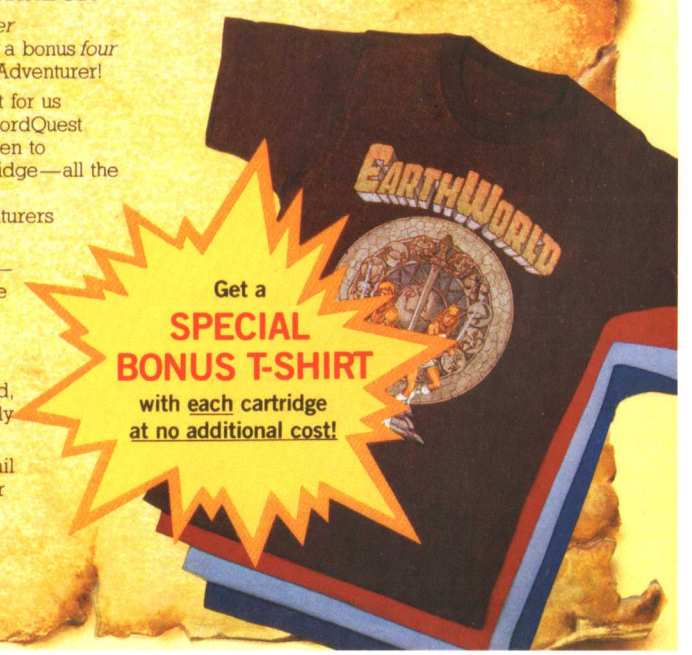
Happy questing—and good luck!



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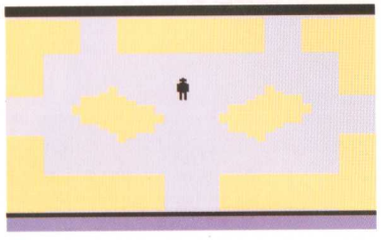
▶ Cover art for *SwordQuest Fireworld* (2600)
Artist: Warren Chang

▲ *AtariAge* Magazine ad promoting the second stage of the *SwordQuest* competition with *Fireworld*

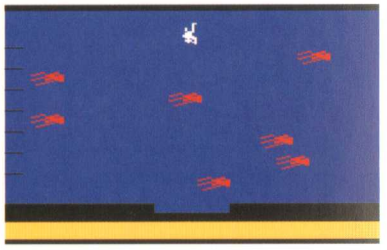


SWORDQUEST FIREWORLD

The second entry in the series, *Fireworld*, was already in stores as the *Earthworld* tournament ended. The game's layout was based on the Tree of Life from the Jewish Kabbalah. The competition prize was the "Chalice of Light," a golden, jewel-encrusted chalice worth $25,000. Michael Rideout of South Carolina took home the top competition prize, and reportedly later melted the chalice down to pay for his college tuition.

Chang 82

▶ Cover art for *SwordQuest Waterworld* (2600)
Artist: Warren Chang



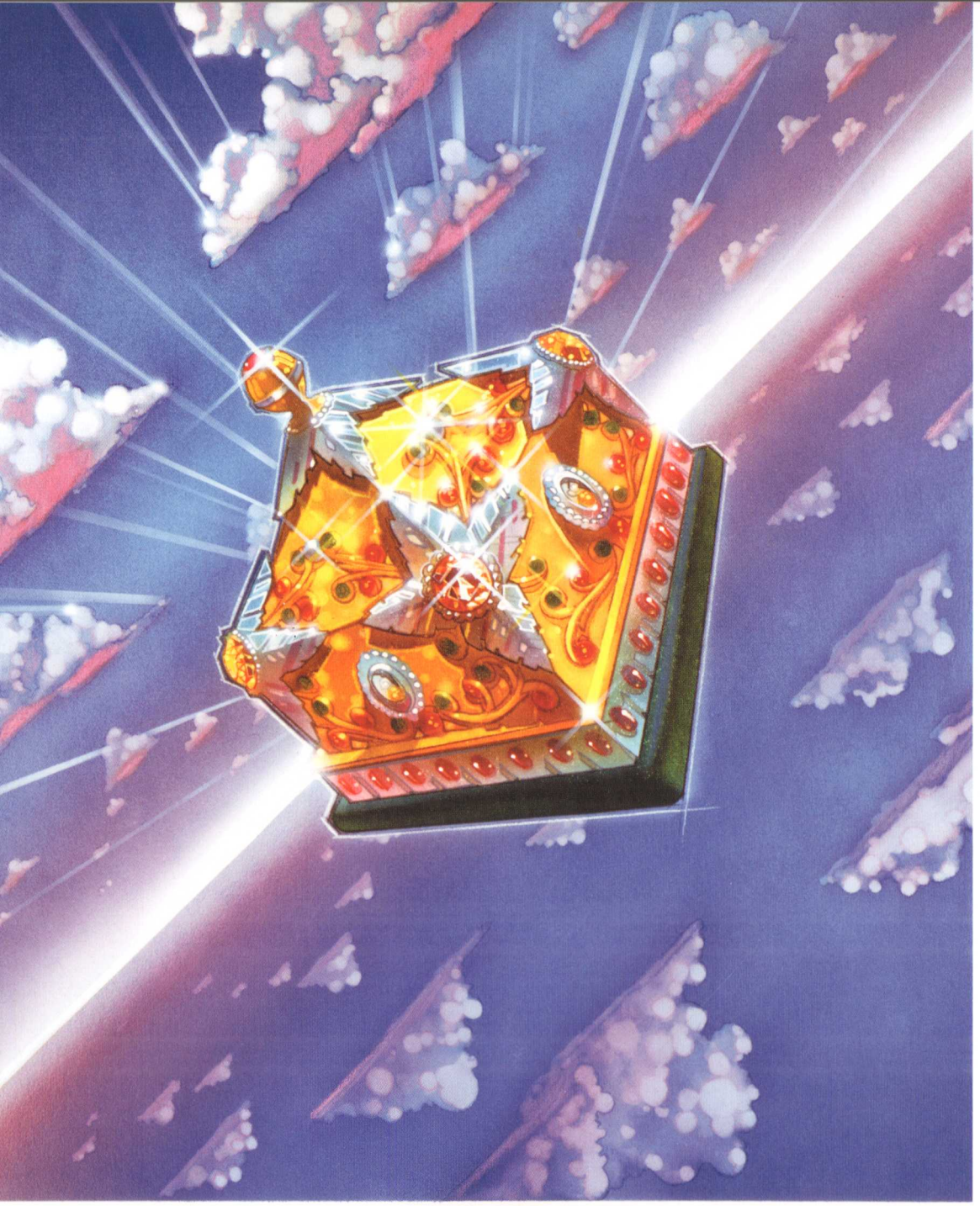
SWORDQUEST WATERWORLD

Originally released exclusively through the Atari Fan Club (and then later to the general public after the competition concluded), *Waterworld* continued the *SwordQuest* contest and its themes, with game rooms based on the Yoga theory of the Chakra. The gameplay/comic book interchange was more simplified than in the previous two games, but it was all for naught. Faced with plummeting sales and the video game market crash, Atari canceled the competition in mid-1984, and previous participants were bought out of their opportunity to compete in the final round with prizes of $15,000 and an Atari 7800 each. The contest legally needed to be completed, so the "Crown of Life" was allegedly awarded to the winner of a semi-public competition of several entrants.

▲ Promotional art for *SwordQuest Waterworld*
Artist: Terry Hoff

▲▲ *SwordQuest Waterworld* concept art (2600)
Artist: Warren Chang

Chano 83



▲ **Promotional art of Philosopher's Stone competition prize for *SwordQuest Airworld* (2600)**
Artist: Terry Hoff

I didn't do a final version of *SwordQuest Airworld*. I did some preliminary artwork and someone at Atari might have embellished it. My friend modeled for that one."

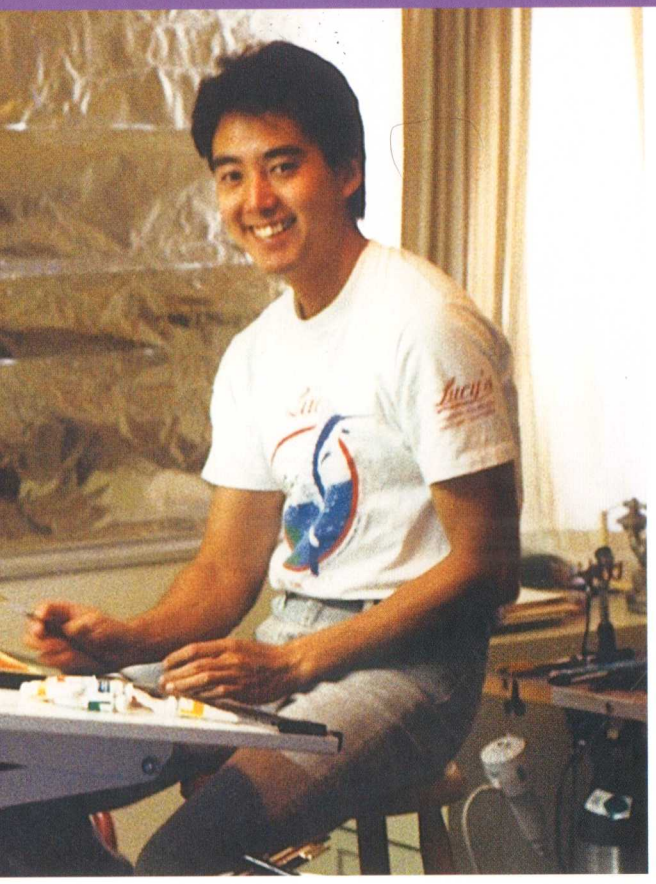
WARREN CHANG

▶ **Unreleased cover art for *SwordQuest Airworld* (2600)**
Artist: Warren Chang

SWORDQUEST AIRWORLD

Programmer Tod Frye began work on the final game of the *SwordQuest* series, to be based on the ancient Chinese text, the I Ching, but the project didn't get very far before work was halted. Since the competition was canceled, no corresponding DC comic book was initiated either. This left the game's "Philosopher's Stone" prize unawarded, as well as the final $50,000 prize, the "Sword of Ultimate Sorcery." Both were reportedly returned to makers (and Warner subsidiary) at the Franklin Mint, and later destroyed. Game cover art was started by Warren Chang, and later embellished by another artist, but much like the competition, it was never completed.

WARREN CHANG



WARREN CHANG GREW UP interested in art at a very young age. His childhood inspirations sound like a laundry list of great artists culled from all corners of culture—from comic books to fine art, the likes of Norman Rockwell, N.C. Wyeth, and fantasy artist Frank Frazetta.

Chang graduated from the Art Center College of Design in Pasadena in 1981 with a BFA in illustration. He landed a position as staff illustrator at Atari as his first job out of school. "Atari came down to interview and recruit illustrators," he explained. "I campaigned to get the job so I could be close to my family. They went through a regimented process, and freelanced out three or four students—it was a real freelance job. I did work for a baseball game—several sketches. I had heard when they saw my preliminary drawings, they wanted me."

While art was always his passion, Chang noted that the road had its stumbling blocks. In a magazine interview, he explained: "My father tried to dissuade me from pursuing art as a career when I entered college," Chang said. "I have to admit he was right. It has been a long, hard road. I really believe anyone wanting to be an artist must have an unwavering desire to do this."

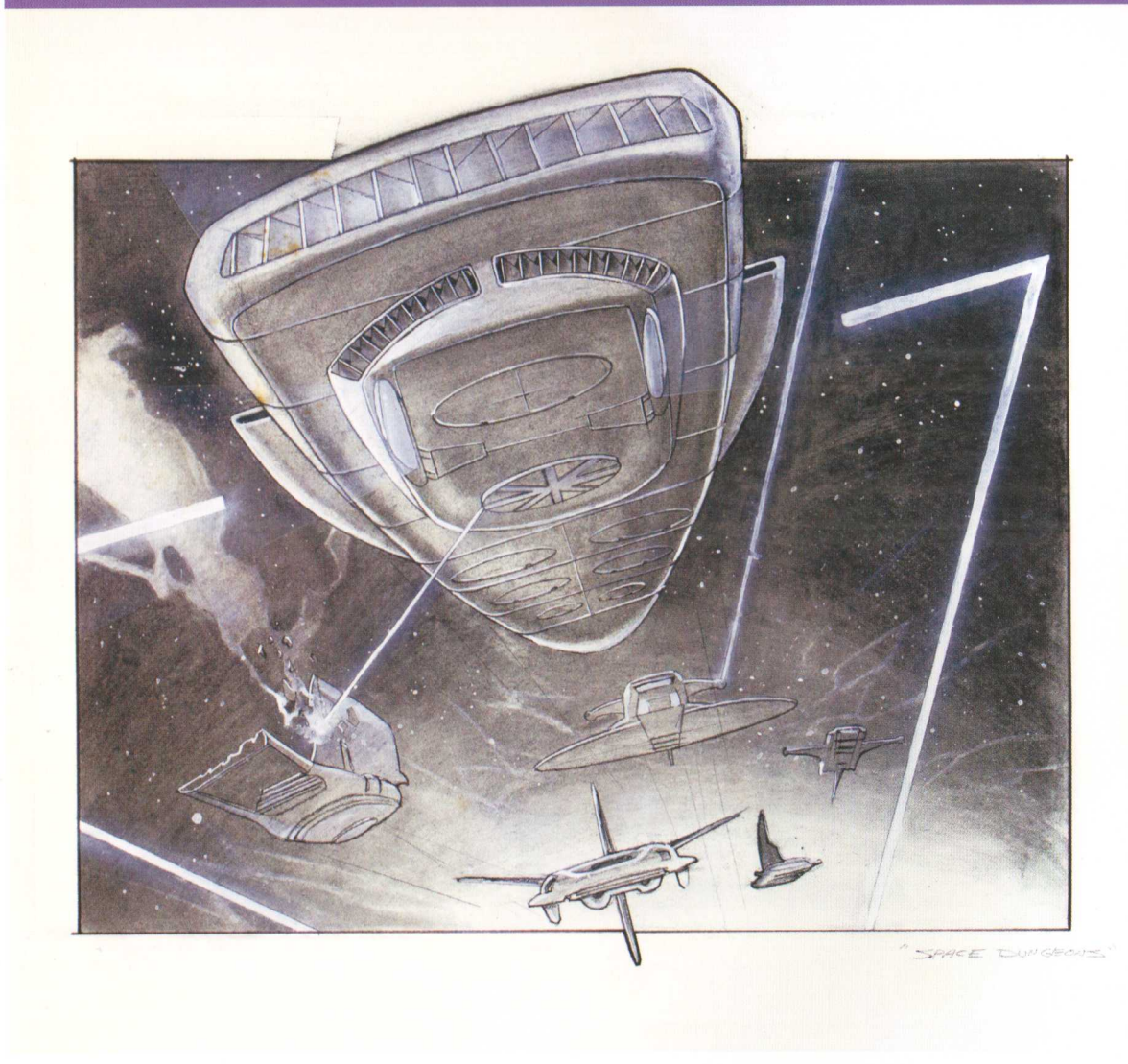
"My first assignment in-house was Math Gran Prix and they had me working on it for months. It was the first assignment I got after being hired. Because I was a newcomer, for a month, they didn't know what to do with me. I was there from the beginning of 1982 til the end of '83, and it was extremely corporate by that point. It wasn't a fun place to work for me—I didn't fit in a corporate environment. There were company baseball games, picnics, and bonuses at Christmas. There was a lot of money going around, but I was oblivious or not caring about all of that around me. I just wanted to be a great artist."

While Chang bristled within the structure of Atari's corporate parent, Warner Communications, he was nonetheless impressed with the company's reputation as a destination for great illustration. "When I was there," he explained, "Atari was one of the most prolific hirers of illustrators. All the local illustrators wanted to come and show their portfolios and wanted to work there. James Gurney, the creator of Dinotopia, and many of the best illustrators out of San Francisco wanted to work there. That was kind of exciting—to be a staff illustrator and see the best guys come in and get work. A little intimidating too."

CHOPLIFTER ▪ DUKES OF HAZZARD ▪ MATH GRAN PRIX ▪ MOON PATROL ▪ RAIDERS OF THE LOST ARK
REALSPORTS TENNIS ▪ SWORDQUEST AIRWORLD ▪ SWORDQUEST EARTHWORLD ▪ SWORDQUEST FIREWORLD
SWORDQUEST WATERWORLD ▪ TRACK & FIELD

"THERE WAS A LOT OF MONEY GOING AROUND, BUT I WAS OBLIVIOUS. I JUST WANTED TO BE A GREAT ARTIST."

—WARREN CHANG



▸ Sketch concept for *Space Dungeon* (5200)
Artist: Warren Chang

While Atari's house style evolved, Chang liked it less and less. "The marketing experts wanted us to go away from the line art and wash style that Cliff Spohn created," he recalled. "They wanted the highest contrast and brightest colors to stand out on the shelf from 50 feet away, which I thought was commercial and crass. I liked the direction Cliff Spohn and Steve Hendricks were heading, but these guys wanted us to go in a different direction, because it was felt that other style was too old-fashioned."

After leaving Atari, Chang continued as an illustrator, both in California and New York, winning a bevy of awards and accolades. He also freelanced for both Atari and its later competitor, Sega, through a variety of advertising agencies. Chang dove into other illustration staples of the era as well, including movie poster related work, video boxes, and paperback book covers. "I wanted to do paperback book art and did it from 1990 to 2000. I did 150 covers, and thought the market seemed more artistic and creative. They were sensitive to more subtle and realistic covers in both color and value."

But eventually, Chang realized that his path would take him beyond the commercial artist's path. "In 1995 I wanted to get out of the business, and while everything went digital, I went the other way and went to traditional painting and fine art. I pulled a lot of illustration experience into fine art. I've been embracing it a lot lately. I tried to run away from my illustration roots before, but now as a mature fine artist, I embrace it more."

Chang also taught at both the Pratt Institute in New York and the California Art Institute from 1997-2001. He currently teaches at the Academy of Art University and conducts painting workshops nationally. His work is now very personal, focusing on biographical interiors and also local field workers in Monterey County—inspired by the writings of John Steinbeck, and Chang's own experiences of growing up in the area.

"At the start of my transition from illustration in fine art around the year 2000, I initially painted looser, more impressionistic in style. At some point, I embraced realism and my work became more classical and academic. I don't feel the need for my work to look contemporary for my work to be relevant today. I feel it's my ideas and subjects—the thinking behind my painting—that really separates me from other artists." ■

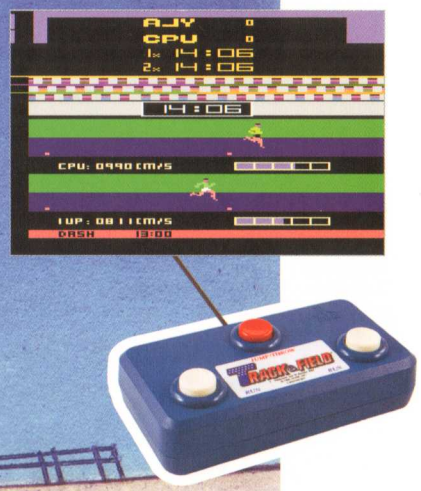
TAZ

This licensed game is based on the Warner Bros. Looney Tunes character, the irascible Tasmanian Devil, but clearly transcends its cartoon origins. *Taz* is a high-intensity, fast-twitch game that ramps up the difficulty quickly as the player's whirlwind-styled character gobbles up all the food items in sight. *Taz* also has the distinction of being the first Atari game to run with a programmer's credit line. Atari finally lifted its policy of programmer anonymity, a strategy it employed to keep other companies from headhunting and hiring away top talent. But *Taz* programmer Steve Woita threatened to quit unless he received a printed credit, and successfully opened the door for all future Atari game designers.

▼ **Cover art for *Taz* (2600)**

TRACK & FIELD

Licensed from Konami, Atari planned to tie this *Track & Field* conversion into its sponsorship of the upcoming 1984 Olympics. The game was originally going to be titled *Los Angeles 1984 Games*, but this idea was scrapped, and Atari settled for the original name and a designation of "The Official Home Video Game of the 1984 Olympic Games" instead. The game was bundled with a robust blue *Track & Field* controller, designed specifically with arcade style buttons that utilized left and right movements. Despite all the sponsorships and special control schemes, the game is a masterpiece of six different Olympic events, pushing the capabilities of the 2600.

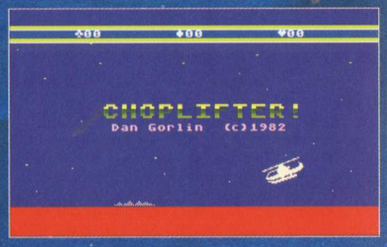


▲ The exclusive pack-in *Track & Field* controller (2600)

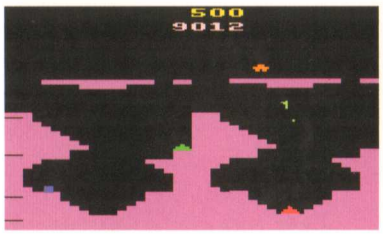
▲ Cover art for *Track & Field* (2600)
Artist: Warren Chang

CHOPLIFTER

In *Choplifter*, the player pilots an advanced helicopter, seeking to rescue hostage UN diplomats from The Enemy. Programmer Dan Gorlin created both the Brøderbund version for Atari's 8-bit computers and the Atari Inc. 5200 version. A translation for the 2600 was planned but never executed.

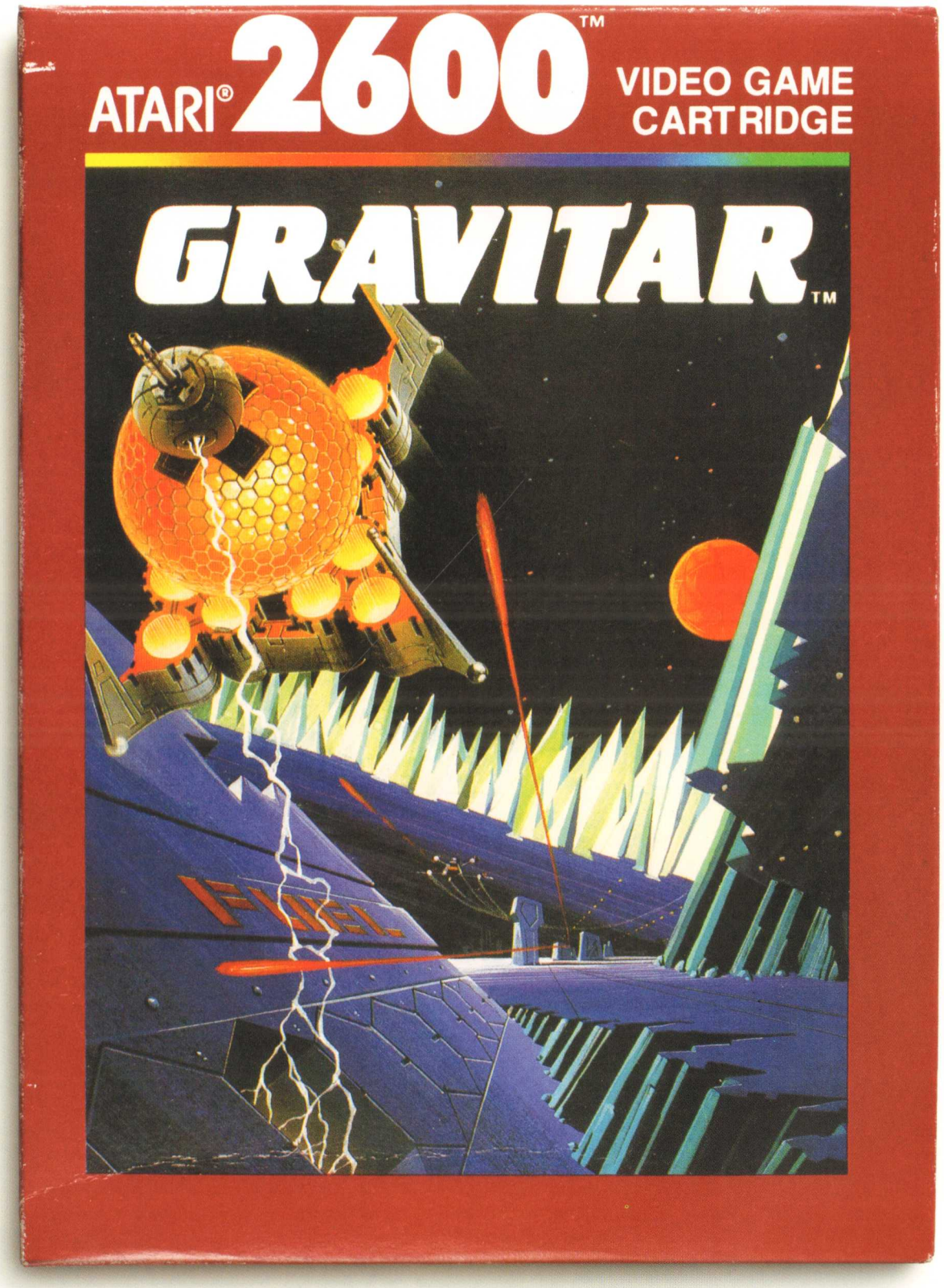


▼ Cover art for *Choplifter* (5200)
Artist: Warren Chang



GRAVITAR

One of the more difficult games for the 2600, *Gravitar* replicates much of the challenging gameplay of the arcade original, but gives players some help with a variety of difficulty levels. In the game, you pilot a craft traveling to different solar systems, hunting down enemy bases while navigating the changing gravity of each screen. The game is a mix of strategy and steady-handed skill, and not for the faint of heart. *Gravitar* was originally released as an Atari Fan Club exclusive, then later to the general public in the red box style packaging.



▲ Game packaging for *Gravitar* (2600)

▲ Cover art for *Gremlins* (2600, 5200)
Artist: Greg Winters

GREMLINS

Based on the hit film by director Joe Dante and producer Steven Spielberg, *Gremlins* tells the now-classic story of cute, adorable little Mogwai who transform into green, scaly nasties when they eat after midnight. In an usual turn, the gameplay concepts of the 2600 and 5200 versions are completely different.

Inter Office Memo

ATARI®

Atari Products Company

To: Nancy Theobald

From: Nancy Mohler

Subject: GARGOYLES BOX ILLUSTRATION OBJECTIVES

Date: 2/3/84

Here are a few initial guidelines for development of the Gargoyles (Gremlins) box illustration.

Primary characters: We've got Gizmo, Stripe, and Billy. Indications from the producer are that Stripe will be very memorable from the movie, and he is the threat in the videogames. Gizmo's less active and offers basic huggable appeal. You control Billy in the games, but he may be best remembered from the movie as the guy who carried around Gizmo in his backpack. So... I would recommend making Gizmo the central character with Stripe hanging out menacingly in the background.

Other objects: A puddle of water and pods as the Gremlins multiply are the only other things that the 2600 and 5200 game designs currently have in common. The sword, Peltzer's haywire inventions (auto ice maker in the 'fridge and popcorn popper), a flashlight, and a baseball bat fit with the story.

Theme: The threat of Stripe and the nasty Gremlins are what make the games exciting. As the button says, Gremlins are "Cute. Clever. Mischievous. Intelligent. Dangerous."

Gizmo should be so appealing that any mother or little kid would pick up the package with his picture. And Stripe should attract the attention of any boy who's ever had a mischievous thought.

Let me know if this memo is useful, and if there's other information that would help get the box art available quickly. Hopefully with Greg Winters available things can move along smoothly. I understand that this is the schedule we are looking at:

Monday, 2/6 we will have all the signatures approving his starting on the project.

Friday, 2/10 he will get a few alternative pencil sketches to us.

Monday, 2/13 our input back to him.

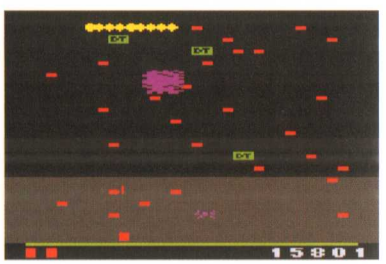
Friday, 2/17 color comps to us.

▲ An internal Atari memo describing basic characters and potential gameplay for use by artist Greg Winters in developing his initial artwork concepts

▲ Cover art for *Millipede* (2600)
Artist: Hiro Kimura

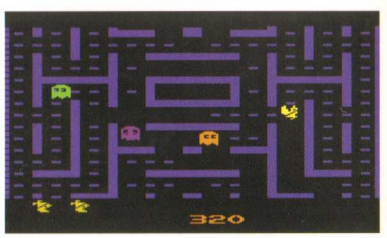
I took a similar approach to *Millipede* as I did with the *Centipede* art. Just to make the distinction between the two, I made the hero more of a young man and replaced the wand with a bow and arrow."

HIRO KIMURA



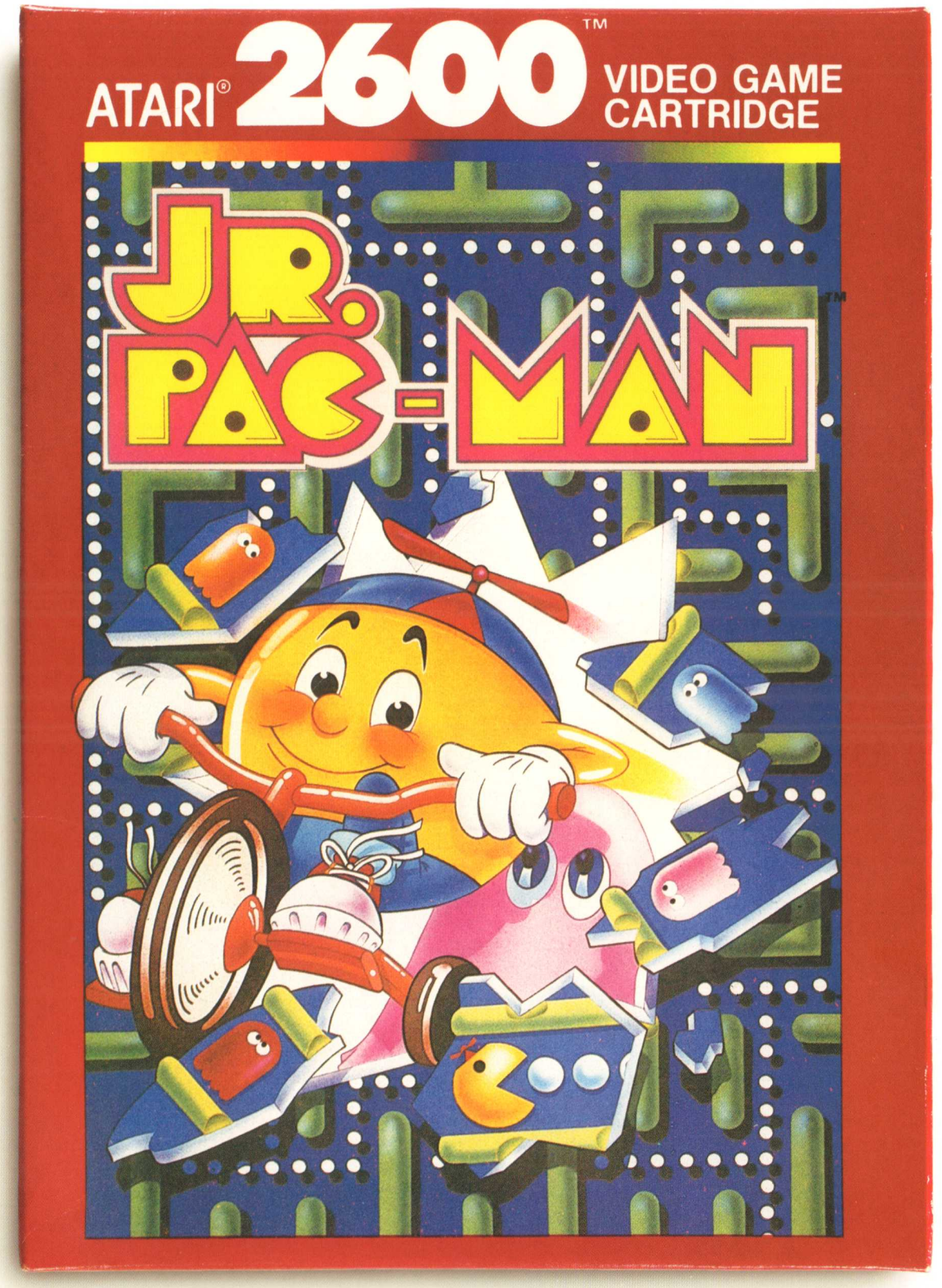
MILLIPEDE

Millipede plays like a souped-up version of its predecessor, *Centipede*. With new enemies like beetles, earwigs and dragonflies, and gameplay additions like DDT insecticide bombs, the game required new strategies from any players who had already mastered *Centipede*. Early in its development, the game was slated to be called *Centipede Deluxe*.



JR. PAC-MAN

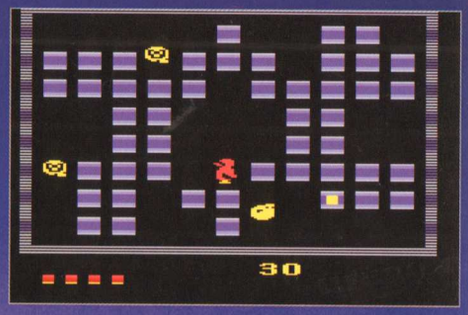
Jr. Pac-Man is a marvel of programming, taking the classic *Pac-Man* gameplay and turning it up to 11! Not content with a single-screen maze, the game introduces a side-scrolling maze that moves as Jr. travels through it. Moving, toy-shaped candy objects also abound, and can destroy the "power pills" if they touch one. The game is challenging, fast, and entertaining—one of the best *Pac-Man* games for any Atari console.



▲ Game packaging for *Jr. Pac-Man* (2600)

PENGO

Just like the Sega-released arcade game, in Atari's home console version, the player controls Pengo the penguin, squashing Sno-Bees between large blocks of ice and lining up jeweled blocks for more points. Unique and inventive, the game really shines on both of Atari's consoles.



▼ Cover art for *Pengo* (2600, 5200)
Artist: Hiro Kimura

I put myself in this Antarctic landscape as a photographer and tried to capture the most exciting and fun scene of the game. I designed the characters based on the original video graphics. By the time I worked on this and *Joust*, I had become somewhat proficient at airbrush and did both illustrations using that tool."

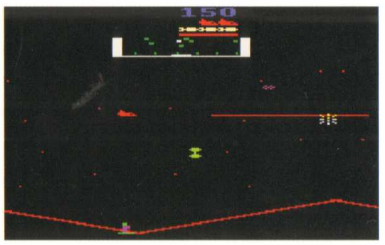
HIRO KIMURA

▸ Interior manual art for *Pengo* (2600, 5200)
Artist: Hiro Kimura

▾ Promotional brochure art for *Pengo* (2600, 5200)
Artist: Hiro Kimura

STARGATE

Also released as *Defender II*, this game is an excellent version of the arcade *Defender*, and a huge improvement on the 2600's original *Defender* translation. The graphics are more arcade-accurate, the gameplay fast and furious, and the controls more finely-tuned. The quantum leap in quality between the two versions really illustrates how much programmers had learned in squeezing everything possible out of the 2600 hardware.



▲ Interior manual art for *Stargate* (2600)

▲ Cover art for *Midnight Magic* (2600)
Artist: Marc Ericksen

MIDNIGHT MAGIC

David's Midnight Magic began life as a pinball simulator game for the Apple II computer. When it was translated to the Atari 2600, the title simply became *Midnight Magic*. Artist Marc Ericksen created art for both the original Brøderbund version and this one, though Atari art directors asked him to remove the reflection of the player's face from the main pinball.

MARC ERICKSEN

EVER SINCE HE could remember, Marc Ericksen had been drawing. But his upbringing wasn't particularly conducive to cultivating a fledgling artist. Growing up in a military family, Ericksen had lines drawn for him, where discipline and structure were the order of the day. He was a disinterested, average student, and didn't see art as a road to an eventual career.

"I was always drawing as a child, but I never had any training," Ericksen said. The Vietnam War was in full gear when Ericksen graduated high school in 1965. "We all understood that we'd get drafted if we didn't go to school," he explained, "but I didn't really care because I was from a military family. That was okay with me. I decided after one semester of junior college that I didn't want to go back. My thinking was 'I'll get this military thing out of the way,' and I went into the army, and would up being in the service for six years." Ericksen spent those years as a paratrooper and officer, rising to the rank of Captain, and earning a host of medals and honors.

"My entire upbringing was regimented, so it wasn't about expressing myself artistically," he said. "It didn't allow for any self-expression. I regard myself as an empty vessel for this, for illustration. Drawing was the only thing I could do, but I'm not an artist. There's no 'art' in me—I'm an illustrator."

Graduating with a BFA in Illustration from Art Center College of Design in Los Angeles, Ericksen explained the practical concerns that helped him develop a broad repertoire: "I did anything—storyboards, cutaways, and different kinds of illustration. Most illustrators cultivate one look, but I wound up doing so many things to make a buck and feed my kids while I was at Art Center, so I could do a lot of different things. I became a functional illustrator."

After separate stints at illustration houses in Chicago and San Francisco, Ericksen struck out on his own freelancing full-time. A fortuitous call in 1982 came from upstart computer software company, Brøderbund, best known for their *Prince of Persia* and *Carmen Sandiego* computer games. That initial meeting led to a series of video game box art commissions for the fledgling company, including titles like *David's Midnight Magic*, *Seafox*, *Stellar Shuttle*, and *Track Attack!* Those, in turn, yielded a slew of video game related artwork for a variety of clients, including Atari.

While working on these early-era video games, Ericksen's approach always remained the same: "As an illustrator, I was always extremely conscious of the idea that we were hired to take the imagery on the screen and make it into something it was not," he said. "It was always in the back of my head—'What would the kids think?' It wasn't like I was fooling

GALAGA ▪ MIDNIGHT MAGIC ▪ POLE POSITION

"I'M NOT AN ARTIST. THERE'S NO 'ART' IN ME—I'M AN ILLUSTRATOR."

—MARC ERICKSEN

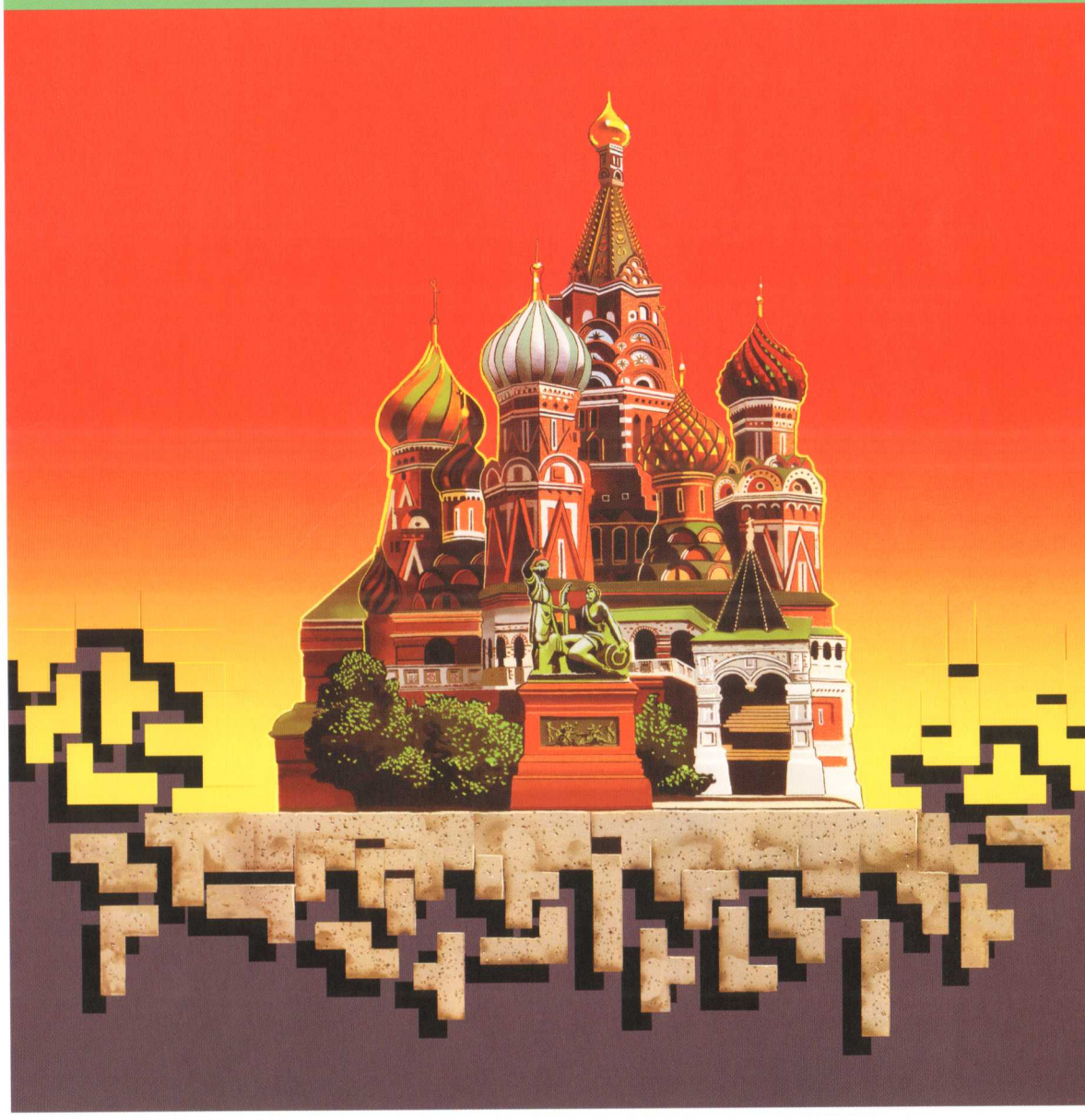
anybody, because the kids knew the games. There was never any being upset at this being on the cover versus that on the screen."

Video game work was only part of his client roster, but over time it grew into a large body of work—nearly 400 pieces of game-related art associated with almost 200 individual games. Ericksen particularly enjoyed it, but didn't realize the impact video games would have on culture, or the effect his work would have on game players. "It was really, really fun being involved," he said. "When I first got involved, I had no idea where it was going. We were doing art, getting paid, and having a good time."

Working with clients like Atari, Ericksen put himself in the hands of the game creators. "I've never been a gamer—I've never played games. Typically the client didn't have anything in mind. They would say, 'Here's the game. What do you think?' They would be talking and I would be drawing—asking all kinds of questions, like what did they see in the characterizations of the game? Sitting with them and drawing was key—they would know where they stood, and where I stood."

"At Atari, I would sit and see a lot of people playing video games," he explained. "They had a lot of creature comforts for creatives at Atari—playing games or ping pong, fridges full of food—life was good. That is more normal now, but it wasn't back then. They didn't pressure them with deadlines. A lot of times they were playing games, but they always remembered their deadlines."

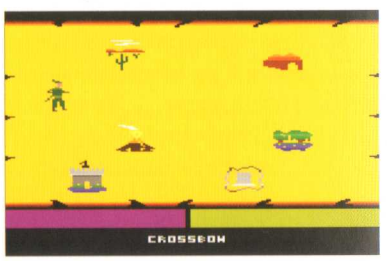
It wasn't until much later in his career that Ericksen realized he had a significant impact on an audience through his video game art. "I continued through my career with my head down—but then I started looking back at my career, and what has been said online."



▲ **Cover art for the unlicensed version of *Tetris* (NES) released by Atari Games-owned Tengen**
Artist: Marc Ericksen

Some of the art he created was attached to popular games, and the body of work he had amassed added up to quite the gamer's resume. It surprised him to learn that some gaming fans "loved this art as much as they loved the game," and he engaged the classic video game community, launching a website that delved into the process and insights from his video game work: "I enjoyed it when I was doing it, and enjoy talking about it after the fact." ■

▲ Cover art for *Crossbow* (2600)



CROSSBOW

Based on the Exidy arcade game, *Crossbow* serves up an early first-person shooter, wherein the player protects a band of wandering adventurers as they cross a series of different medieval terrains, by shooting obstacles, enemies, and other distractions. The arcade original used a crossbow-shaped light gun, and the Atari 7800 and XE versions of the game supported the Atari XG-1 Light Gun (bundled with the XE console) within the game. While backwards compatibility allowed the XG-1 gun to work in a limited number of Atari 2600 games, this wasn't one of them.

FOOD FIGHT

Rumored to have been inspired by the famous food fight scene in the raucous 1978 fraternity movie, *Animal House*, this Atari arcade game translation does a nice job of bringing the pie-slinging action to the 7800. In it, the player controls Charley Chuck, just trying to get his ice cream cone before it melts. But a bevy of food-throwing chefs are there to stop them, until it wonderfully devolves into a mess of flying food. What was an enjoyable arcade game is a near-masterpiece on the 7800 console.

▼ Cover art for *Food Fight* (7800)
Artist: Lou Brooks

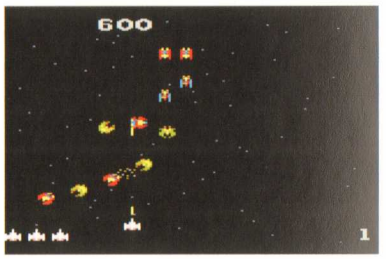
▸ Detail of cover art for *Galaga* (7800)
Artist: Marc Ericksen

◂ Logo art for *Galaga*

▾ Cover art for *Galaga* (7800)
Artist: Marc Ericksen

I was in the service in Vietnam, and I remembered how gun mounts looked, and there was an element—a faring that would cover a lot of the workings of the gun. But they didn't have angled cuts, and I thought about an injection needle—that has a horizontal angle cut—I decided that angle looked cool. I had these pipes coming into the gun, and I wanted it to feel like an insect, not just like a spaceship. I thought it'd be cool to have the aliens inside the cockpits with eyes like the ship."

MARC ERICKSEN



GALAGA

Even though *Galaga* is a sequel to the Namco space shooter, *Galaxian*, this 7800 game improved upon nearly all aspects of the original. With more complicated enemies, firing patterns, challenging levels and the ability to have your ship captured, *Galaga* has proven itself to be a classic on all platforms.

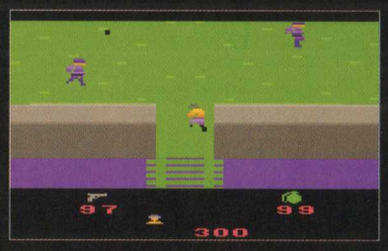
◂ Cover art for *Dark Chambers* (2600, 7800, XE)

DARK CHAMBERS

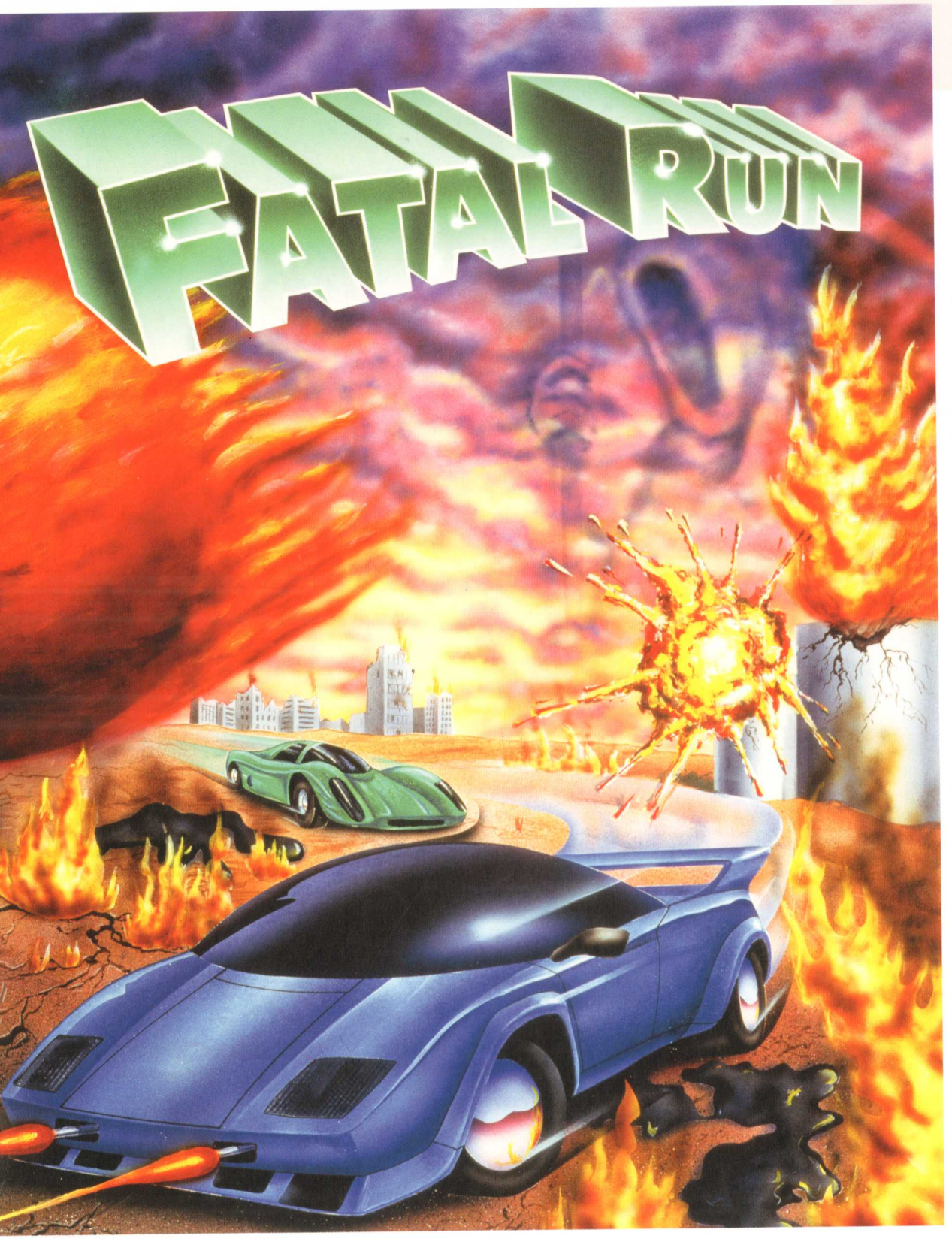
While this game looks like a clone of the classic arcade dungeon crawler *Gauntlet*, its origin is not that simple. *Gauntlet* itself was actually a clone of an Atari computer game called *Dandy* (later *Dandy Dungeon*) by programmer John Palevich, created initially as his MIT bachelor's thesis. After the success of *Gauntlet*, Atari went back to the source and licensed Palevich's game, remade it for the 2600 and 7800, and renamed it *Dark Chambers*. While the move to consoles reduces the number of players from four to two, the game is still one of the more sophisticated, multi-level titles by Atari.

IKARI WARRIORS

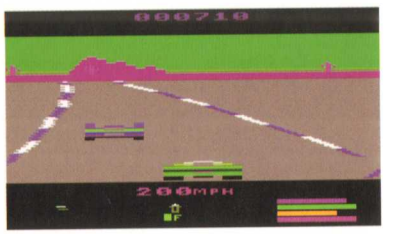
Based on the SNK arcade shooter, this game was another in a line of "commando" style games popular at the time. Two-player cooperative warfare finds the main characters using machine guns, grenades, and the occasional tank to obliterate the enemy forces. Released at the very end of the '80s, the 7800 version is a fast and accurate translation, and compares very favorably to the version created for the more popular NES.



▼ Cover art for *Ikari Warriors* (2600, 7800)

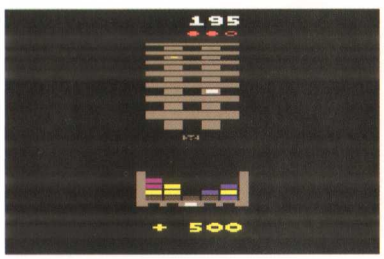


◂ Cover art with logo for *Fatal Run* (2600, 7800)



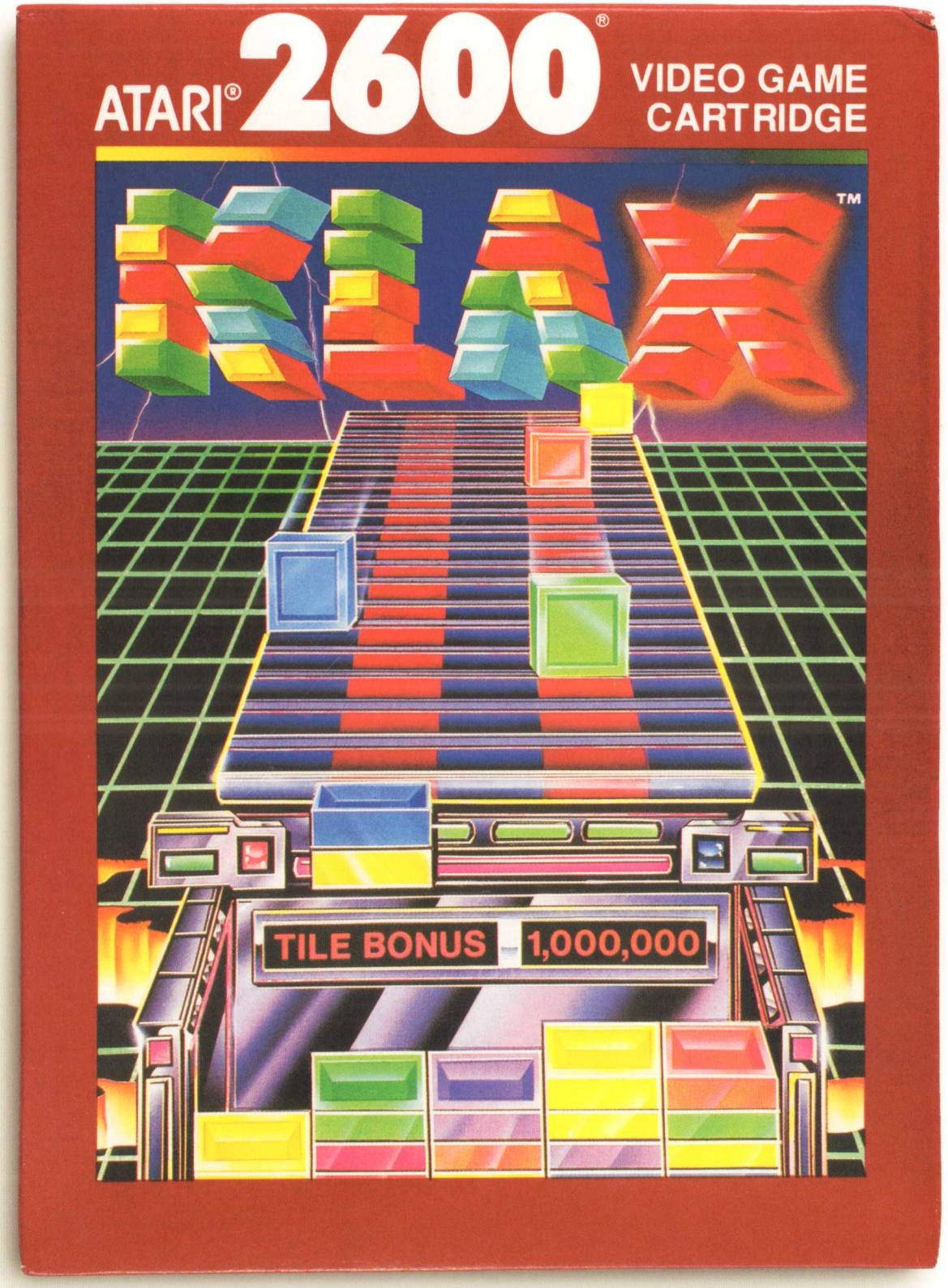
FATAL RUN

In this road battle game, an apocalyptic disaster has rendered much of the planet uninhabitable due to radiation. The player must drive a vehicle equipped with machine guns, shields, and power surge weapons, to deliver anti-radiation vaccines to 32 cities before launching a life-saving satellite. Not only was it fast, but *Fatal Run* has the distinction of being the largest official game released for the 2600, utilizing 32K of ROM storage, which is more than an order of magnitude greater than some of the 2K 2600 launch titles.



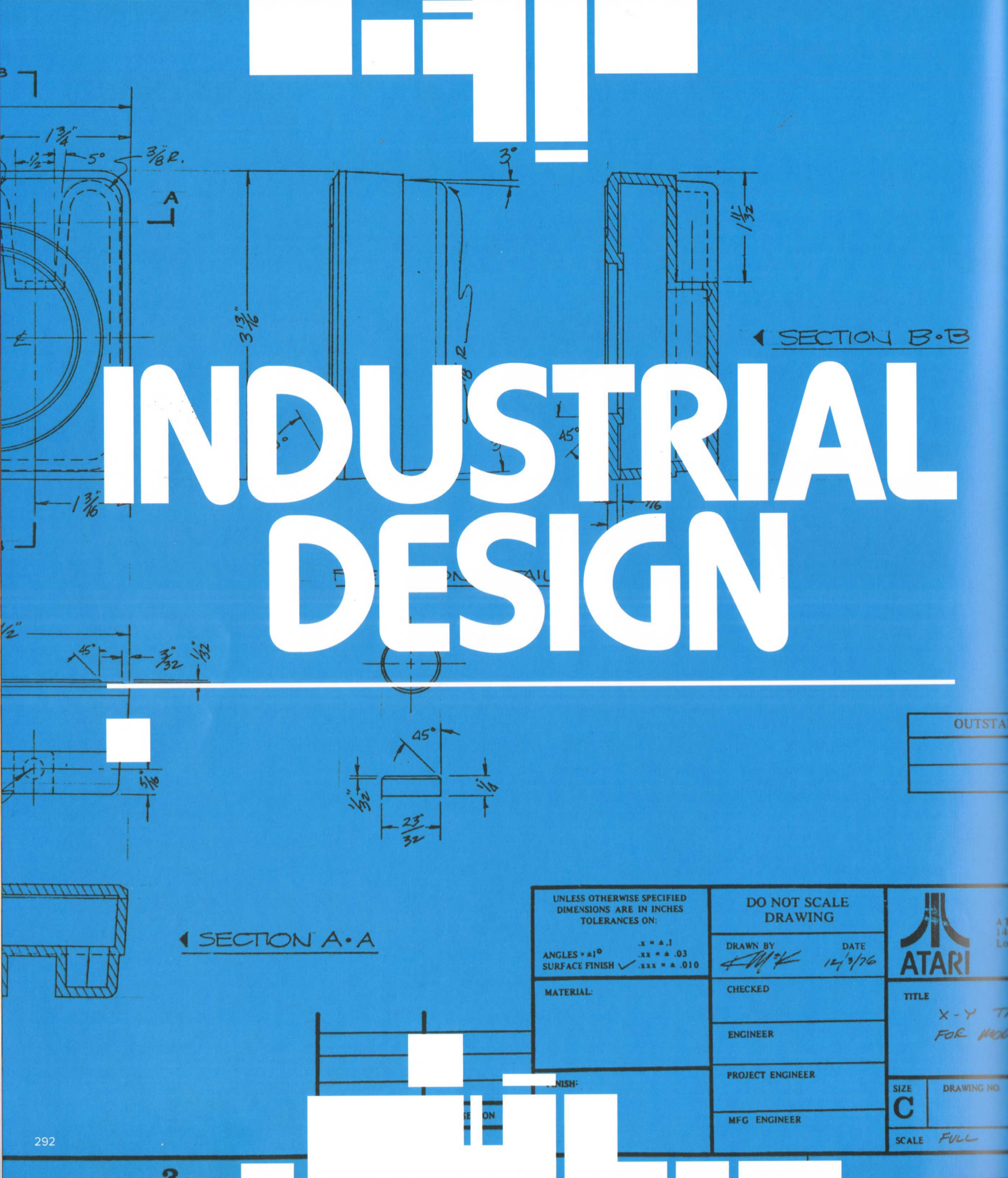
KLAX

Along with *Fatal Run*, this was the last game Atari Corp. officially released for the Atari 2600. *Klax* is a puzzle game of the same ilk as *Columns* and *Dr. Mario*, in which colored blocks drop from a conveyor belt, and the player needs to grab, sort, and arrange them, lining up pieces of the same color to score points. The 2600 game is an amazing translation of the arcade version, and really drives home the capabilities of the system, 12 years after its release.

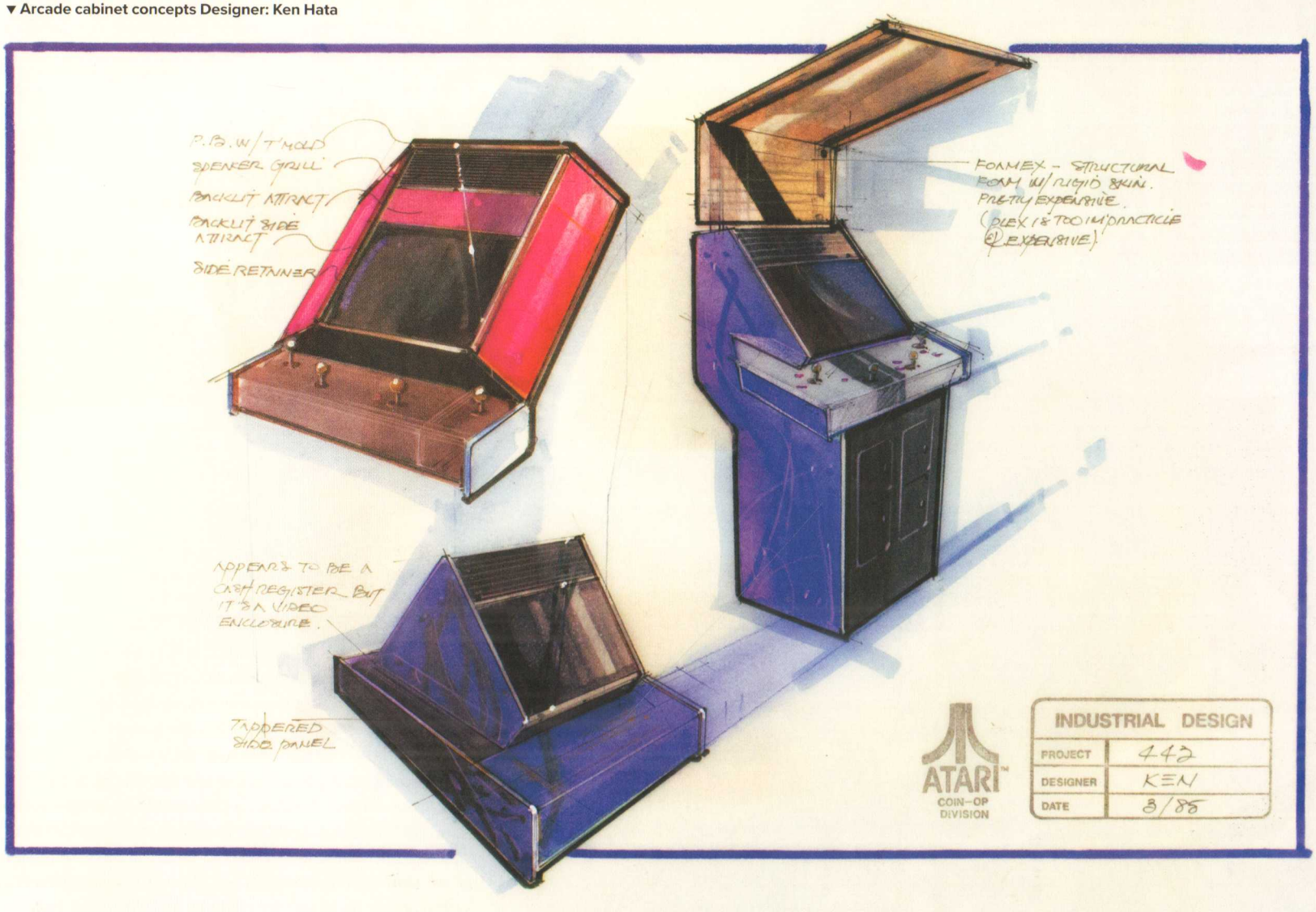


▲ Game packaging for *Klax* (2600)

INDUSTRIAL DESIGN



▼ Arcade cabinet concepts Designer: Ken Hata



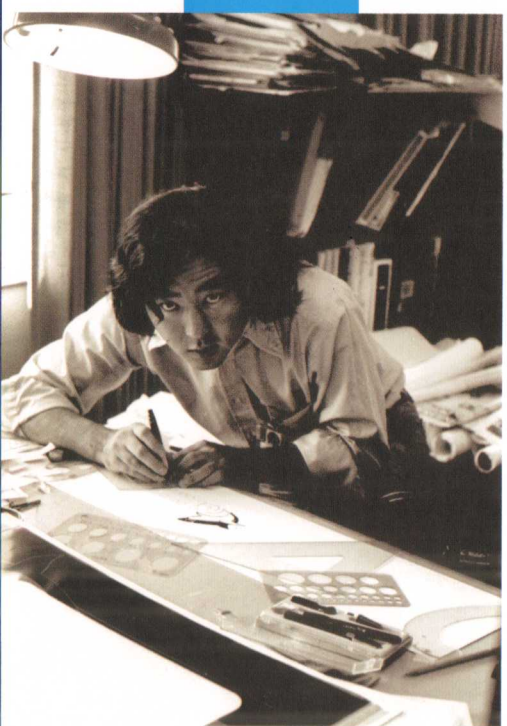
CREATING THE PHYSICAL EXPERIENCE

ATARI SHAPES THE FUTURE OF VIDEO GAMES

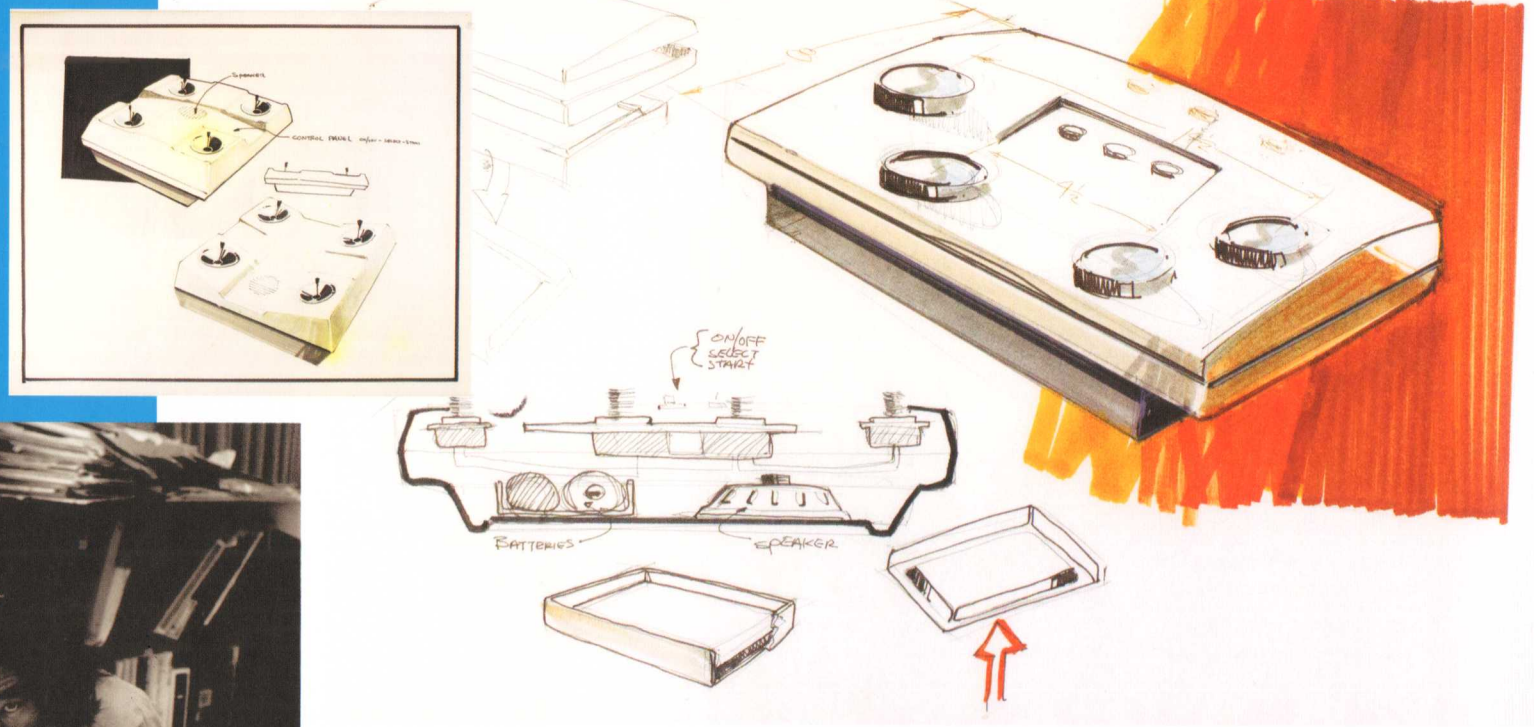
WHILE MUCH INK has been spilled about the tech breakthroughs by Atari that paved the way for both arcade games and home consoles, much less has been told about the humble containers of those electronic marvels—and the men and women who created them. But as design—specifically product design—has entered the mainstream (thanks to the success of Steve Jobs at Apple), general awareness of the art has grown. The craft of industrial design is celebrated today, but in the heyday of Atari, industrial designers were still unsung heroes, breaking new ground, setting benchmarks, and contributing to the popularity of video games and personal computers.

Atari's industrial Design Group had its roots in the company's very beginning, when Chas Grossman arrived in 1973 to be the company's first internal design group head. Grossman was another Ampex alum, delivered from the Silicon Valley stalwart, just like Atari engineer Al Alcorn and co-founders Nolan Bushnell and Ted Dabney. At the outset, Grossman managed the likes of George Faraco and newcomers Pete Takaichi and Regan Cheng.[22]

Industrial designer Barney Huang graduated from San Jose State's strong ID program, and initially intended to design cars. But the American auto industry crash of the 1970s sent him out on the hunt for other types of ID work. He ended up with a job at Atari in Los Gatos, CA. "Nolan [Bushnell] was just starting out with arcade games," Huang said, "and we all were figuring it out, asking ourselves, 'How do we keep this going?' My job



▲ Industrial design director Peter Takaichi



◄▲ ID concepts for Atari's four-player home *PONG* console. Designer: Peter Takaichi

was to design the cabinetry. The original *Computer Space* was beautiful, with custom fiberglass. But it wasn't practical to manufacture, and our challenge was how to standardize it, how to customize the art to make it great, with bold, loud graphics."

Industrial designer Regan Cheng, hired by George Faraco, also came directly from design school, and helped shape the still-nascent design of Atari's arcade machines. "Coin-Op was a good start for Pete Takaichi and me," he said. "Cabinets were pretty much two-dimensional. We started with high-end design, studying industrial design. I was fortunate enough to work in the field with a background of Bauhaus ideology. This was the father of industrial design—simple forms coming from the Bauhaus, then becoming more contemporary."

Eventual manager of industrial design John Hayashi was hired in 1976 as a project engineer to develop consumer games. With a background in industrial design from places like General Motors, Kaiser Aluminum, Rockwell, and National Semiconductor, Hayashi was well-equipped to support the young group. He did the industrial design work on the world's first electronic calculator.

Atari's needs as both an electronics maker and production facility meant that it had deeper product design requirements than many other Silicon Valley companies. With the brisk pace of tech advancement and the evolving tastes and trends in gaming, the company needed more than could be supplied by outside ID consultancies, and this was part of an eventual corporate trend. Huang explained it this way: "Atari had a huge department of graphic and industrial designers, and that was the beginning of industrial design in corporations. My parents didn't even understand what it was that I was doing. We started a Consumer Division, and at that point, the idea of a cartridge wasn't there yet. We started in Consumer, with injection-molded standalone consoles, but it wasn't sustainable, and we learned what we needed fast."

Cheng saw new opportunities for him and fellow industrial designers in the growth kicked off by the enterprising Bushnell. "It was a lucky thing for me—Nolan wanted to start a new division every year," Cheng said. "He was smart about that. Barney went over to work with Roy Nishi at Consumer. I wanted to go. It was our chance to get into injection molding and more creative stuff."

Huang also believed the move from Coin-Op to Consumer would afford them fewer constraints and added flexibility. "I preferred Consumer because you had more freedom to design," he said. "With Coin-Op, the arcade owners tried to pack in more games into a small space to make money. So these beautiful side graphics got lost as they packed them together. Eventually we standardized the cabinets more, so from a design point-of-view, there weren't a lot of challenges left."

DESIGNING A NEW INDUSTRY

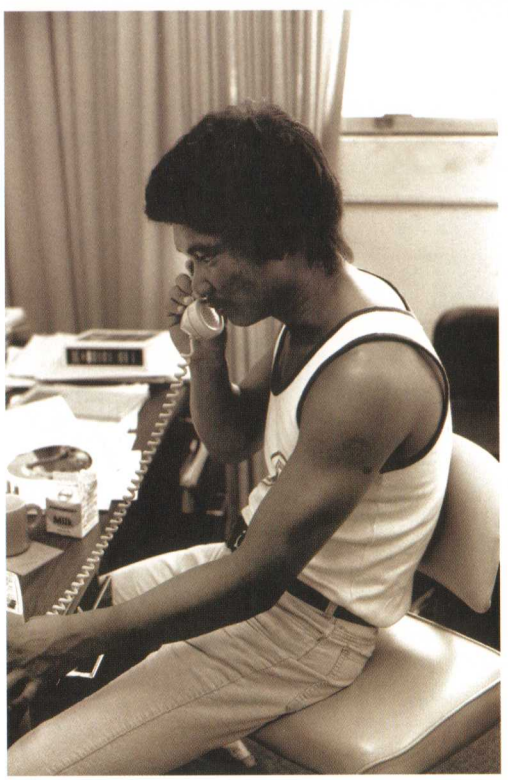
CREATIVITY WAS THE order of the day, because the Atari ID team, in parallel with creatives across the company, was building a new industry—one in which there were no established patterns. "There was no reference point," Huang explained. "We were blazing new trails. We just made these things up. It was blue sky." So, the designers drew on outside influences and the design work coming out of other industries, adapting and morphing their insights to fit the needs of a new generation of consumer products.

Huang mused, "We looked at stereo equipment for inspiration—the most exquisite and contemporary stuff, like Braun, Bang and Olufsen—the European stuff. Consumer products in the U.S. weren't very good. The U.S. was big in the auto world, but as far as the rest of the stuff, somebody had to design it. The question was, 'How do you make something cheaply, but look expensive?' That was always the challenge. Bang and Olufsen was an inspiration. Their products were contemporary, simplistic, and beautiful. Like Ferrari—their cars were very organic in the '50s, '60s and '70s. Cars like the GTO, the Shelby Cobra—it's an icon and absolutely gorgeous."

Designer Roger Hector also brought his talents to the Industrial Design team, before sowing design thinking within the R&D department. "I enjoyed sketching and designing concepts," he said. "It was a big part of what I was hired to do. Atari gave me an opportunity to be creative from a design standpoint." But it wasn't creativity for its own sake. Hector and other industrial designers were very specific in their goals for all Atari products. "Designing a product," Hector said, "isn't just designing a product, but creating an aura—designing the feelings and emotions that support the product. It's trying to convey the image, to give it a theatrical quality." It was the search for this intangible quality, the je ne sais quoi, that kept Atari's ID team stimulated and challenged as they helped develop the company's stable of products, from consoles to controllers.

Kevin McKinsey, who would have strong influence on Atari's personal computer line, joined Atari in 1976. "I was living in England and looking to move back to the States," he said. "Fred Thompson [designer of the 2600], who I knew from the Chicago Art Institute, where we went for ID—he went to this San Jose startup, Atari. After a month, he said, 'I've got the perfect job for you. They make these things called electronic games—you can play it on a TV!'" McKinsey accepted the job and a four-fold increase in pay, reporting to work at Atari's Moffat Park Boulevard offices with a team of designers who had much less practical work experience. "They had just started the Consumer Division," McKinsey said. "Nolan wanted to try and take these electronic games and put them in these cases in the home." That began a string of products which would put Atari and home consoles right in the middle of living rooms across the world. ■

◂ **Industrial designer Kevin McKinsey taking measurements on the Atari 800 computer he designed**



▲ **Industrial designer Regan Cheng (left), Industrial design manager Roy Nishi**

2600

VIDEO COMPUTER SYSTEM (VCS)

Designer: Fred Thompson / Engineer: Doug Hardy

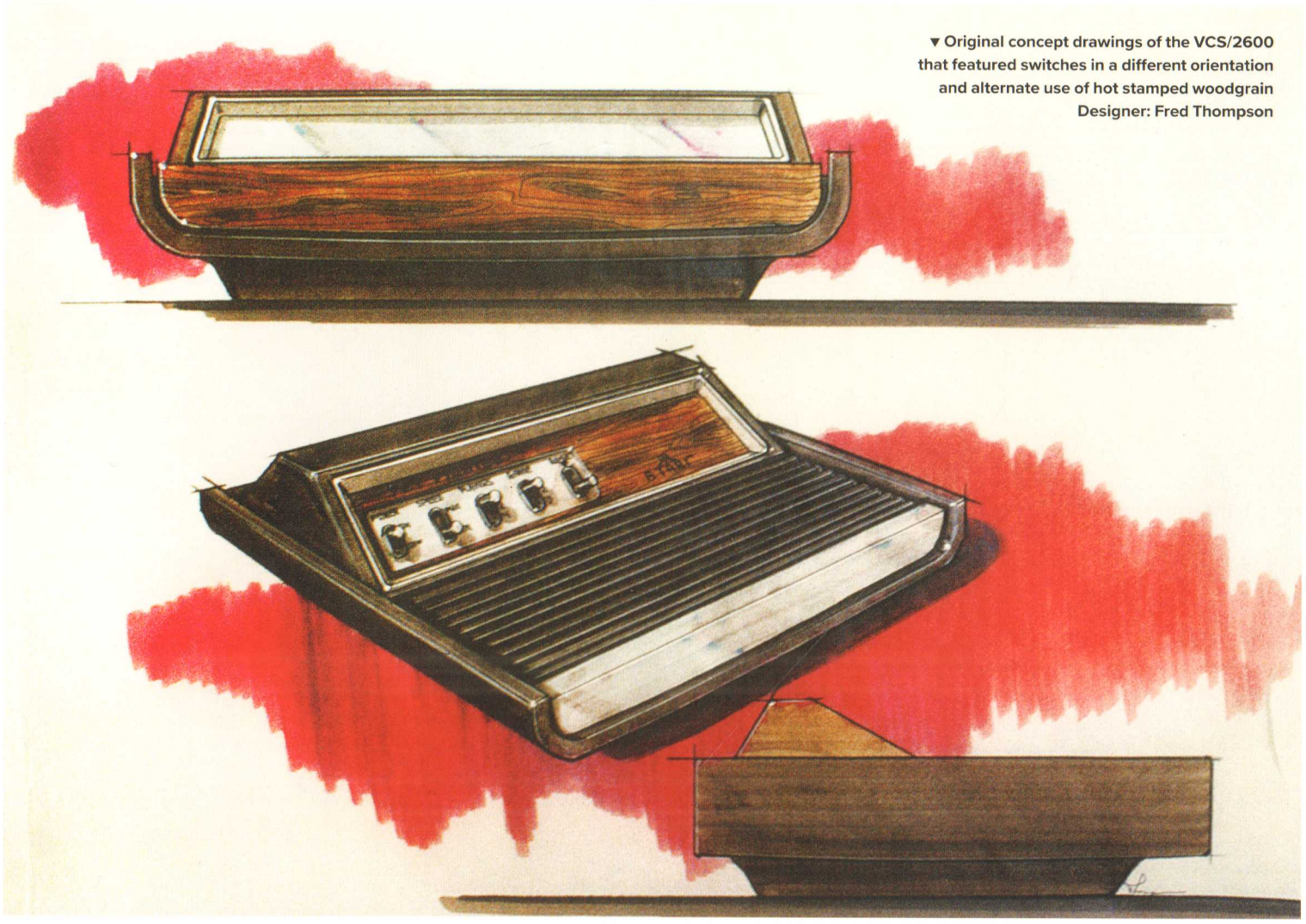
UNDOUBTEDLY ATARI'S SIGNATURE video game console, the Atari 2600 was an evolutionary step from the company's dedicated TV game systems like home *PONG* and its iterations. With these, Bushnell and his team sought a way to bring games closer to players—right into their living rooms. This was a significant shift from the Coin-Op market, to one aimed directly at consumers. A new product, code named Stella, would be built upon many of the design lessons learned from those who cut their teeth crafting arcade experiences. The Video Computer System (VCS for short and later renamed the 2600) was designed to require less hardware on the console side, allowing the game software to do the heavy lifting—which inadvertently led to greater innovation in creating engaging games. The move was a practical one, partially based on cost, but ended up baking in a technological flexibility that let the 2600 live on long after its contemporaries became irrelevant.

The initial design of the 2600 console was done by industrial design manager Fred Thompson and chief engineer Doug Hardy. Hardy was a strategic choice, as Atari hired him away from Fairchild Electronics in the wake of its creation of the Channel F, the very first removable cartridge-based video game system. Hardy explained his introduction to the VCS: "They had just come up with the idea," he said. "I think they may have had Fred Thompson's industrial design already. I was the first engineering hire for Atari and they treated me like a king, saying 'You can have anything you want.' I reported directly to the VP of Engineering." Hardy's welcome at Atari was not overblown, as he had specific experience from Fairchild in the challenges of engineering and design, as the inventor of the cartridge mechanism for the Channel F's games.

Thompson began his tenure at Atari in early 1975, initially modifying existing designs for Atari's home *PONG*. He expounded on this: "Nolan [Bushnell] told me, 'I am hiring you to save me from my own bad taste.' They needed a little guidance on the design side, but they had solved the technology. And it was only when they wanted to get into the consumer market and had sold to Sears that they needed some finesse in the designs. They had a home *PONG* unit that was black and yellow, and honest to God, it looked like a bumblebee!" Thompson helped improve the home *PONG*, and then worked on other projects like Atari's quirky Video Music console.

Hardy credits his move to Atari to former boss, (Murray)

▼ Original concept drawings of the VCS/2600 that featured switches in a different orientation and alternate use of hot stamped woodgrain
Designer: Fred Thompson



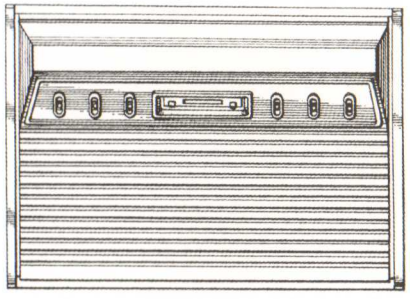


FIG. 4

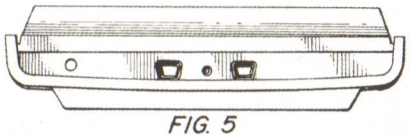


FIG. 5

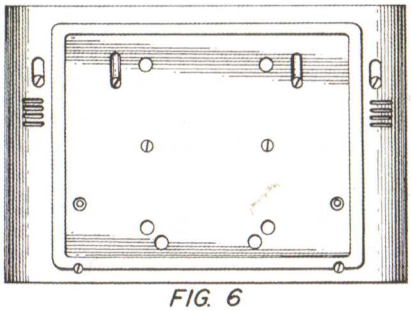


FIG. 6

◂ Original drawings of the VCS submitted with the U.S. patent application

▲ Details like hot stamped woodgrain and textured surface were carried through the first several iterations of the VCS/Atari 2600

John Ellis. "John Ellis had been at Fairchild, and Nolan Bushnell knew that he was something special. So he hired him at Atari, to design the 2600. When John became VP of engineering he needed advice, and he and I were close friends by that point. I helped him get up to speed at Atari—and he turned out to be a fantastic boss. John's philosophy at Atari was to give his engineers everything they needed to do the job right."

Thompson's original design for the 2600 was a case made from injection molded, foamed polyethylene. The console case was thick and sturdy, coupled with heavier RF (radio frequency) shielding than would be used in later iterations. All of those led to the first console being quite heavy, even though the interior hardware took up very little space. Thompson explained that the heft was to keep the console more stationary, when compared to earlier, lighter versions, which were "so light that you'd push in the cartridge and you could push it across the floor." Fans refer to this first version of the console as a "heavy sixer," because of its weight and six primary switches. The next iteration of the console, internally known as the 2600A, would later be known as a "light sixer."

Thompson explained that his inspiration came both from adjacent industries like stereo equipment, as well as his own observations about the needs of these emerging game players. "I was thinking about it in terms of consumer audio," he said, "and I also recognized that there was a lot more interaction with it—playing with the controls, putting in the carts. I wanted the shape to cradle, to fit in your lap, as the controllers had to be close since they were corded."

Even from the earliest days of this project, Atari had its sights on installing itself in living rooms in a way that other electronic toys were not. The company planned to position the console as a fixture in the home, rather than something to be used and stored out of sight. Marketing consultant Gene Landrum's initial product planning documentation for the 2600 called for it to be "designed for living room or den aesthetics analogous to stereo designs for permanent setting."[23] Simulated woodgrain and other home electronics references would make their way from the design requirements, into final iconic status for the console. Thompson elaborated on those design choices: "At the time I wanted to integrate a little bit of warmth, and that's why that little hot stamped woodgrain is there. The switches were nice little German switches that I had again ported over from my audio days. They weren't cheap, but some of these functions—you make it look like a feature, but it's really just a simple toggle! We wanted to add more to it, and give them pizazz and features!"

Design elements that today are intimately associated with the 2600—like its faux woodgrain and pebbled texture—were natural outgrowths of the product's needs and the design processes of the time. Thompson explained: "What I wanted was modest

▼ Another model iteration of the 2600, with smaller-sized cartridges and a storage bay set in the middle of the console to hold them. Also notice the earlier trigger-style joystick designs which were never used—though design elements of that approach would eventually make their way into Atari's Space Age joysticks in 1983.

▼ A design model of the VCS, with joysticks and prototype cartridge designs.
Console designer: Fred Thompson
Joystick designer: Kevin McKinsey

texturing so you wouldn't see scratching, and [the console] would take some abuse. I did it more for aesthetics—it was about finding something that wasn't too dramatic. The polyethylene had a higher sheen, so it was important to knock that sheen off and find something that was grippy. It had to be a heavier texture and counteract the slippery nature of the plastic."

Hardy designed all mechanical parts for the 2600, and shared credit on the official Atari patents with fellow engineer Craig Asher and Thompson. Designing this first console was a continual learning experience for the Atari teams, with insights occurring regularly without the benefit of an established playbook. Industrial designer Huang explained, "There were a lot of new discoveries and it was evolving. On the original console, there was so much demand that there wasn't time for QA [Quality Assurance]. That's how I met my wife, in production. It was all made here in the U.S."

This seat-of-the-pants approach wasn't new for a startup like Atari, but this pioneering would cause the occasional setback. Quality issues emerged in the early versions of the 2600, and often the molded halves of the cases wouldn't fit together well—or at all. The halves were manufactured to the correct tolerances, so the design and engineering teams searched elsewhere to diagnose the problem. They finally found the culprit in their cross-country transit. Hardy recounted the story: "The 2600s were being molded in Colorado, and shipped across Nevada, and the heat would warp the bases." The warping was slight enough not to be identified until it caused assembly problems. But once the teams figured it out, they devised a workaround to continue production until an updated design could be delivered. "Once they molded them," Hardy said, "they let them sit in 36 degree water for two minutes and it would eliminate the warping."

> Designing a product isn't just designing a product, but creating an aura—designing the feelings and emotions that support the product."
>
> **ROGER HECTOR**

Based on his work with the Fairchild Channel F system, Hardy also designed the iconic Atari cartridge with Craig Asher, who altered the original screw-based design to one that would snap together, clamshell style. Hardy's work was not unappreciated once the 2600 proved to be a success, as he found out. "Nolan was nice enough to pay me royalties—one half penny for every cart sold—nearly $195,000, which was enough for me to retire and buy a horse ranch." ■

▼ The original CX10 model joysticks are distinguished from later models by the small "Atari" badge on the stick, and the lack of the word "TOP" at the front of the orange compass rose graphic, which was added later

▲ Dedicated *Tank* console with joysticks later used in the Atari 2600
Designer: Kevin McKinsey

ONE BUTTON DREAMS

NO DISCUSSION OF the Atari 2600 would be complete without a mention of the iconic input device, the one-button joystick. Officially designated with product numbers CX10 and CX40, the joystick was originally created for another purpose altogether. While development on the 2600 continued, Atari was busy promoting its line of dedicated consoles to succeed home *PONG*—like *Super PONG*, *Super PONG 10*, *PONG Doubles*, and others. At the 1977 Summer CES, Atari announced a new standalone game unit. Called *Tank II*, the console was created with a military look by industrial designer Kevin McKinsey. It played a hard-wired version of the head-to-head army battle arcade game, *Tank*. Ostensibly planned as one of Atari's more elaborate standalone units, *Tank II* was to be released first through Sears, then later with Atari branding. However, the console's production was canceled late in 1977.[24] But a crucial part of McKinsey's design would see another life. The modular joysticks specifically made to fit into the squared housing of *Tank II* would finally be released as the iconic Atari 2600 joysticks.

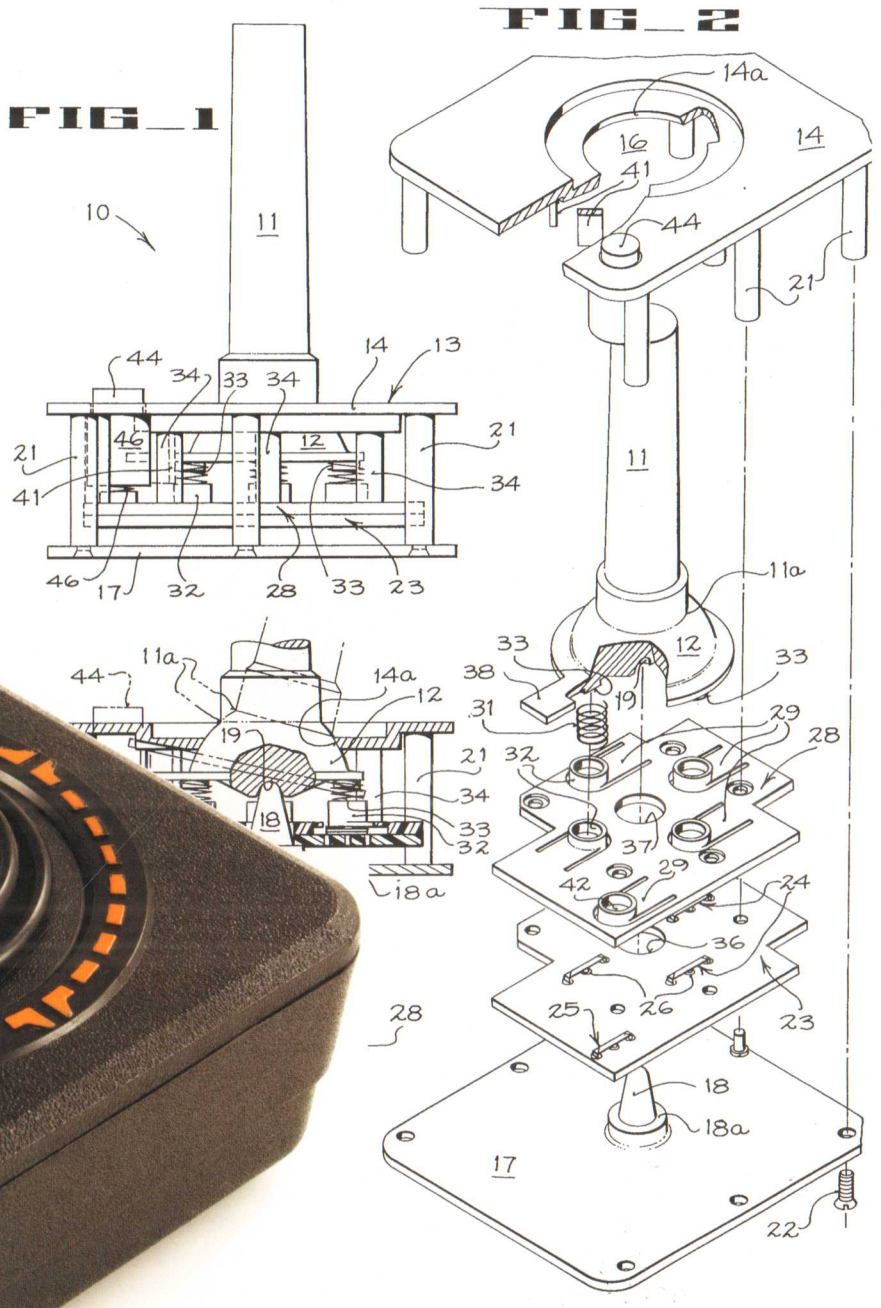
When asked about the joysticks, McKinsey said, "I was always embarrassed—it wasn't the easiest controller to hold in your hand, with angular edges and kind of square. But it was designed to nest in that *Tank* game. It ended up as a standalone thing, but didn't go with anything else [on the 2600] visually, really. Initially they were going to be hard wired, but I thought if I put them on umbilicals, two people could play simultaneously. I tried to make the boot look no-nonsense and military. The only reason I put a boot on it was because it looked like something that might be on a tank—to keep out dust, dirt, and such. That compass rose was originally hot-stamped in yellow, but by the time it got into production, to cut costs there were some changes done."

While McKinsey appreciates the now-iconic status of his joystick design, he has mixed feelings. "If I were going to design an XY controller, it wouldn't look like what I designed. It wasn't very ergonomic. If I knew it was going to sell that many, I would have designed it easier to hold. But it stayed the same, right down to how it actuated on the inside."

Even though it's generally absent on modern consumer electronics, signature textures played a big part in the design of Atari products, and the 2600 controllers and console were no exception. McKinsey explained, "Pebble texture was fairly typical. It wasn't unusual to put some kind of texture on them. It's an acid-based process where you photo etch the texture inside the mold. You could do different textures, and it's still done today—with car panels, interiors, gear shift levers. I would select a fine texture that I thought would work. The advantage is that texture hides a lot of flaws in the mold, like weld lines. If the mold is textured, you don't see that—it gets blurred. The beefier the texture, the more it hides stuff."

Though the 2600 is nearly forty years old, it still persists in the popular imagination, and has made a distinct impression on generations of video game fans. Thompson admitted, "I've been totally surprised and blown away about how long this has lived. You know, usually with products, you get them out there and they go through their life, and you move on. This thing has a life of its own! There's this cult following. For these things to live so long is so unusual. That's so gratifying. I think we were all pretty gratified about getting our products out—going to the trade shows, and seeing the excitement around your products—that's really good for you. It gives you the courage to do something else." ■

▼ The later CX40 model joystick



▲ Illustration filed with US Patent # 4,124,787 for the engineering behind the joystick assembly

5200
SUPERSYSTEM

Designer: Regan Cheng

IN 1982, ATARI released the 5200 SuperSystem, created as a complement to the technologically-aging 2600. This console had a long gestation period, and was intended to focus on arcade-accurate game conversions. Its code name, PAM (Personal Arcade Machine) even reflected this. Industrial designer Regan Cheng headed the project, and unpacked his vision for the console's look and feel: "I wanted to do a 'high end unit,' so those were the only parameters," he said. "I wanted it to have a technical, precision look—that kind of flavor, like stereo equipment. Between designers, we would have critiques, to get the guys together and give feedback. We showed some stuff to marketing—sometimes they would sneak in at night and look at our stuff, and leave feedback on Post-It notes. It got more formal later on."

"I was the main designer, and would take comments and do more ideation. 60% into it, I liked the shape. Kevin McKinsey—on his Atari 800 computer, had a real wedge shape. Basic shapes—that was Modernism." But Cheng would also seek inspiration outside of Atari. "I kept looking at high-end stereos, like the Sony Profeel," he said. "I liked their stuff, but it wasn't jazzy enough. This still had to be about gaming. These were metaphors. I was a big fan of Bang and Olufsen, the Danish design company. I liked the way they kept the sharp edges. We had to have color, and I liked metallic, and that's where the metal badge came from. The dark color played against the bright metal."

"The back was smoked plastic—glossy, smoked, and metal—all together. That meant elegant to us. Some thought it looked too sinister. That color was nine parts black and one part raw umber. I always wanted to make it look like it was moving. We had a light—an LED mounted so you could see it through a hole, because the front piece was transparent, with highly-tinted, smoked plexi. The LED was backlit in the back of it. I played around with the control connectors in the front—I had a scoop so it would come to a point like a formula race car. They were scooped so the connectors fit in there. But they were dust collectors, and we thought they might be tough to clean and connect. I got to design the connector and the cartridges. I put

▼ The 5200 sported a flip-top bay that neatly stored the console's controllers, a feature borrowed from the ill-fated 2700 prototype wireless console

▲ Detail of the 5200's single piece, brushed aluminum nameplate

storage on the back [of the cartridge] for the overlay. We had the label on the front, and on the back was this pocket for the game overlay."

"On the top surface it's all one plane and I broke it up visually to angle it so that it didn't look like one plane. The angle at the front was to differentiate it from the back piece. 80% of the front is one piece. I was playing around with acrylic. The front piece was shiny and glossy. The original console front and back were smoked and not textured [like in later variations]. They wanted it to look expensive and elegant. We didn't have a cost to fit into, so we had nice things like the aluminum nameplate that was expensive." Despite its high-end design and a handful of quality games, the console underperformed, not repeating the success of the 2600. While beautiful and well-crafted, the 5200 ended up mostly remembered for its unfulfilled promise. ■

WHAT'S IN A JOYSTICK?

THE FAILURE OF THE INFAMOUS CX52

WHILE THERE ARE a litany of reasons why the 5200 wasn't the success Atari hoped for, a healthy dose of blame can be laid squarely on the controllers. Designed by Craig Asher, who also had a hand in designing the 2600, the innovative shape and functionality suggested great design, but in the end, the actual joystick never lived up to its promise. The controllers boasted Start, Pause and Reset buttons, so users didn't have to reach over to the console to make a change. And the joystick upgraded the 2600's eight-position version with a 360 degree, spin-sensitive stick. But the joystick was uncomfortable to hold because of its unique shape, and the construction of the stick itself impeded gameplay.

While he didn't design the controllers, Cheng had some insights into their creation. "Controllers at that time were either square or sharp," he said. "We did product testing, and almost every one of those guys and girls held it differently—sideways, upside down—maybe they liked the bulk. It was funny to see that because designers always think they know how things we design are used." There were other issues too. The stick didn't self-center during use, which proved to be a major detriment to accurate play, and the fire buttons were made of soft plastic that made them less-than-responsive. A number of revisions were planned to improve the joysticks based on user feedback, but most weren't implemented before the console itself was discontinued.

7800
PROSYSTEM

Designer: Tom Palecki

THE 7800 PROSYSTEM was created as a super-powered successor to both the 5200 and 2600, but poor timing, ownership changes and the video game market crash delayed the project—limiting its reach and success in a post-Nintendo era.

Work on the 7800 began several years before its designer, Tom Palecki, was brought into product design late in the game, working with engineer Sharon Ashton on details of the console. Along with collaborators at GCC, Atari intended to fix mistakes made with the 5200, with built-in 2600 compatibility, expansion ability, and an advanced graphics chip. Compared to the larger 5200 console, the 7800 had a much smaller footprint. In marketing the new unit, management continued its numerical naming convention, arriving at a higher number by adding 2600 and 5200 to get the sum (and name) of the 7800.

The 7800 look was not a wholly original design, borrowing heavily from a previous Atari console, the Video Arcade II. That console was a redesigned 2600 sold exclusively in Sears, and also released in Japan as the Atari 2800. "The left and right ends on the 2800 are just flat," Palecki said. "Whereas on the 7800 I added polished edge chamfers around the ends for differentiation from the 2800. I was adding little details like that to create the appearance of an upgrade for the newer product. The new keyboard attachment was treated the same." Palecki designed a keyboard add-on that would have utilized the 7800's expansion slot, but it was never released.

"At the same time," he said, "I was also working on a matching intermediate module which plugged into the cartridge orifice. I believe it contained upgraded electronics to support some newer cartridges and the keyboard." The 7800 design was Palecki's last project with Atari before the video game crash. The console sported some advanced features, streamlined new controllers in the Pro-Line joysticks, and built-in backwards compatibility with the 2600, but it arrived to market far too late to make a difference for Atari.

ATARI 400

PERSONAL COMPUTER SYSTEM (PCS)

Designer: Jeff Nelson

ATARI'S SLOGAN FOR its personal computer line was "Computers for people," and this was surely reflected in the industrial design of both its 400 and 800 models. Doug Hardy explained his thinking as part of the team that designed the friendly, wedge-shaped 400 computer, whose look was both welcoming and unusual. "The 400 was actually a laptop," he explained. "It was the first laptop. It was designed to sit up on your lap, but being that they didn't have flat screens, you had to hook it up to a TV set." Codenamed Candy, the 400 was meant to eventually replace the 2600, with its ability to execute computer tasks and facilitate basic typing, while still playing a full complement of cutting-edge video games. Bright, clean and attractive, the machine was designed to exude approachability—a welcome invitation to a generation of tentative computer users, who could still be confident they were purchasing a powerful machine. "I personally think the 400 was twenty years ahead of its time," Hardy said.

While the machine wasn't a workhorse computer by any means—its spill-proof membrane keyboard was safe, but prevented users from truly typing for extended periods—some of its visual cues and approaches would carry over into Atari's other design projects.

▼ Atari 400 promotional image
Designer: Jeff Nelson
Engineer: Doug Hardy

▶ Atari 400 details like its spill-proof membrane keyboard made it ideal for computer novices and young children

ATARI 800

PERSONAL COMPUTER SYSTEM (PCS)

Designer: Kevin McKinsey

ATARI'S 800 COMPUTER, dubbed Colleen, didn't have auspicious beginnings. The design began with a firing, Kevin McKinsey said. "My boss had a falling out with the VP of engineering, and they let him go. John Hayashi became the new industrial design boss, and I was let down. I thought it would be me! He said, 'I'll do anything so you don't leave. I want you to design Colleen, this new home computer.' All the prototypes were named after girlfriends of Nolan Bushnell at one point. John said he didn't want to lose our best designer to become a manager, so he gave me a 25% increase and a big bonus. That's how Colleen started out."

He continued: "My philosophy on this thing—and you have to have a philosophy going into a design project—this was a personal computer. The first one. The Apple II wasn't out yet. I said, 'People don't know what a computer is, or what it should look like, and they are frightened of them. I need to capture the look and feel of a familiar object they know—a typewriter."

While the 800 bore a basic resemblance to a typewriter, owing to its layout and wedge shape, its sophisticated design went far beyond that, integrating visually-appealing angles and an approachable form factor. McKinsey is proudest of this product from his time at Atari. "I love the warped plane on this," he said. "A warped plane is a surface that moves as it progresses through space. It might start horizontal, then that line might change from zero to forty five degrees. It changes angles. This was a combination of a cutout and a warped plane—something I loved and am very proud of."

Fellow designer Regan Cheng also espoused his admiration for the 800. "Look at the front left or right edge—the front corner is almost vertical! The side wall is angled, and

▼ Promotional image for the 800 and its family of accessories and joysticks
Designer: Kevin McKinsey

it blends towards the back. That's a Lamborghini Countach thing. If you look at it, that's what the back looks like. I don't know if that's where he got it, but that's very cool."

In the end, McKinsey is most proud of the computer's purity and design simplicity. "It wasn't trying to be something else like a motorcycle or an airplane. It was trying to be a computer."

McKinsey contrasted this approach with Big Blue, the stalwart computer maker, IBM. "With IBM," he said, "everything was sheet metal enclosures and boxes, and everything was rack-mounted. These were rectangular boxes with some wooden ends to make them pretty. I laughed. What were they thinking?! This isn't a mainstream computer! IBM couldn't see that it shouldn't be a sheet metal box. It was up to companies like Apple and Atari to redefine what a personal consumer computer would be like. And I think we did it!"

McKinsey also designed the game cartridges for the system, as well as the user-friendly, cleanly-labeled memory modules for the 800. Utilizing a removable top, the 800 made it simple for users to add and replace RAM, long before it was en vogue for computer makers to do so. And it's clear that the whole system fits together visually from end to end, from the typography, to the warm, restrained color palette of tans, browns and golds. McKinsey felt the design should carry across not only hardware, but packaging as well. "2D design has always been as important to me as 3D design," he said. "All the boxes for the 800 cartridges—I defined the layouts of these—using the font Optima. It is a very elegant font, and I loved it then and still love it. I did the layouts on those boxes."

It seems that the 800 wasn't just admired within Atari's halls. "In 1979," McKinsey mentioned, "we went to the CES show in Chicago at McCormick Place. We enrolled the 800 in the design competitions, and it was selected as one of the best designs for 1979 in computers."

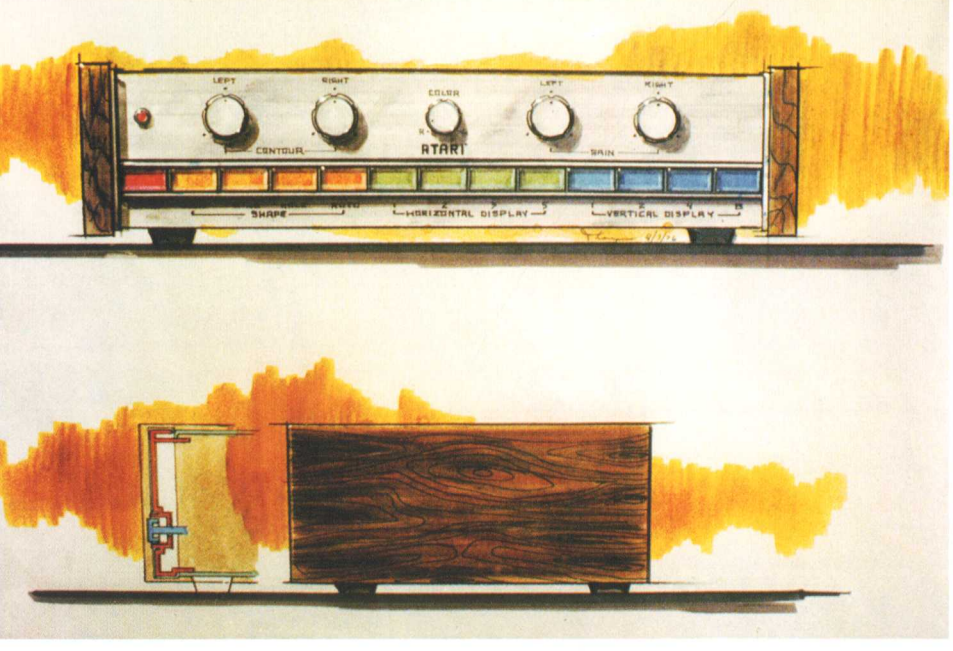
But it's clear that design was more than a beauty pageant for McKinsey and his Atari colleagues. The business side of the work drove them to a combination of beauty and simplicity, expressing itself in great design work. "There are good and bad designers," he said. "There's a class of people called bad designers and they give the profession a bad name. They design something that looks nice but takes ten pieces of plastic to make. That's bad design. It costs too much to make. A good design is a simple design, and at the same time it embodies all of the visual aspects you want."

▲ Detail of the Atari 800 warm brown-colored keyboard

VIDEO MUSIC

Designer: Fred Thompson

▼ Sketch concepts and prototype of the Video Music. Note the brightly-colored buttons, which were changed to a warmer set of hues for the final version. Designer: Fred Thompson



EVEN THOUGH IT predated all of the consoles mentioned, Atari's unusual Video Music deserves some attention. A hybrid project, the Video Music walked the line between video console and home stereo. Users could purchase the unit and connect it to both their stereo and television, and the unit would generate visual waveforms and beautiful patterns on the TV, based on the audio input of whatever music was channeled into it. A series of dials on the front allowed users to tweak and change the visual style in a variety of ways. The on-screen designs the hardware generated were psychedelic-meets-pixels, an early version of visualization software that would gain popularity as digital music became more widespread.

Industrial designer Fred Thompson recalled the product's roots in his previous time working for the consumer audio division of electronics manufacturer Heathkit. "I combed over all the stuff we collectively did in high-end audio," he said, "and it was real solid walnut end panels, nice aluminum extrusions, and these nice German knobs and buttons. I had a lot of fun putting this together." While Video Music was a novel concept, it never caught on in a big way, but today still remains a sought-after item for audiophiles and collectors.

VIDEO MUSIC.™

A FASCINATING NEW CONCEPT IN AUDIO-VISUAL HOME ENTERTAINMENT.

Video Music™ attaches to any stereo receiver and TV set. Electronically synchronized to the intensity of music, Video Music allows the viewer to create a dazzling audio-visual display on home TV. The image combinations are infinite, providing hours of individual and group entertainment at home. Thoroughly pretested for consumer acceptance, Video Music opens a new, virtually untouched market.

For the first time ever, Atari has introduced music you can actually watch, a fascinating new concept in home entertainment.

Features:
- *Infinite image combinations*
- *Manual or automatic image selection*
- *2 channel gain controls*
- *2 channel contour controls*
- *Color control (for color TV sets)*
- *Horizontal and vertical display controls*
- *Image shape controls*
- *Easy attachment to stereo and TV*
- *Proven circuitry*
  One year warranty

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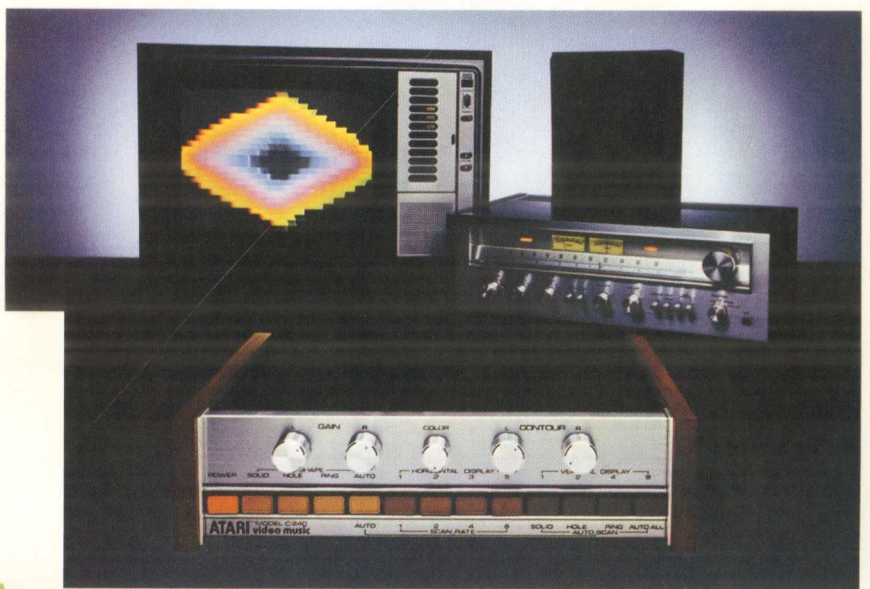
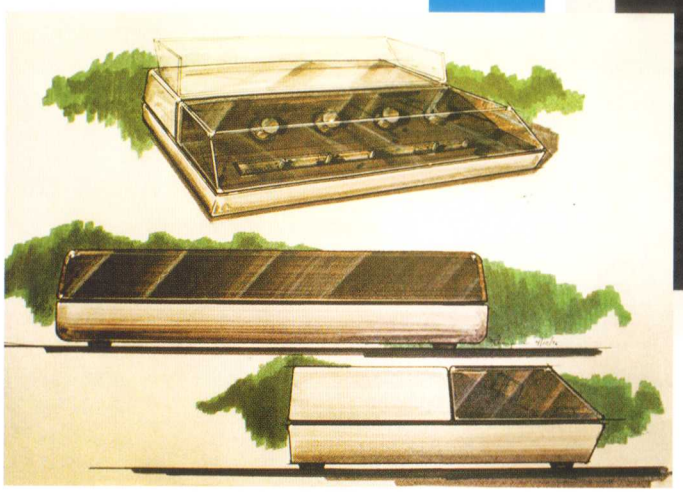
ATARI™ Innovative leisure

▶ Sales flyer for the Video Music





▲▶ Earlier prototype and sketch versions of a Video Music unit with a smoked Plexiglas flip-top lid, and hot stamped woodgrain—both were staples of the design language for mid-'70s cutting-edge stereo equipment
Designer: Fred Thompson

◄◄ Graphic designer Evelyn Seto
◄ Production manager Judy Richter
▲ Director of Consumer Graphics John Hayashi
► Graphic design manager Nancy Theobald

PROCESS

MAKING THINGS THE ANALOG WAY

WHILE ATARI GAME programmers were breaking new ground with digital microprocessor technologies that powered the company's games, the creative tools used in marketing and design were still firmly rooted in the analog age. Desktop publishing wasn't in its infancy yet, and hand production still ruled the day. Atari designers and production artists relied on a network of vendors and outside partners to complete the myriad tasks that one designer can do today without leaving her desk.

Initial concepting for package designs or advertising would be done in pencil sketch or marker form, with rough pencils or color studies used for initial rounds of approval. Designers would then create initial layouts and specify or "spec" typography for dedicated type houses like New York City-based Photo-Lettering or Frank's Type in Mountain View, CA, to produce. These physical type specimens, set to the specifications of Atari's designers, would then be integrated into paste-up layouts or mechanicals, ready to be shot for production on photo stat cameras. These cameras would output films that could be delivered for use by print vendors.

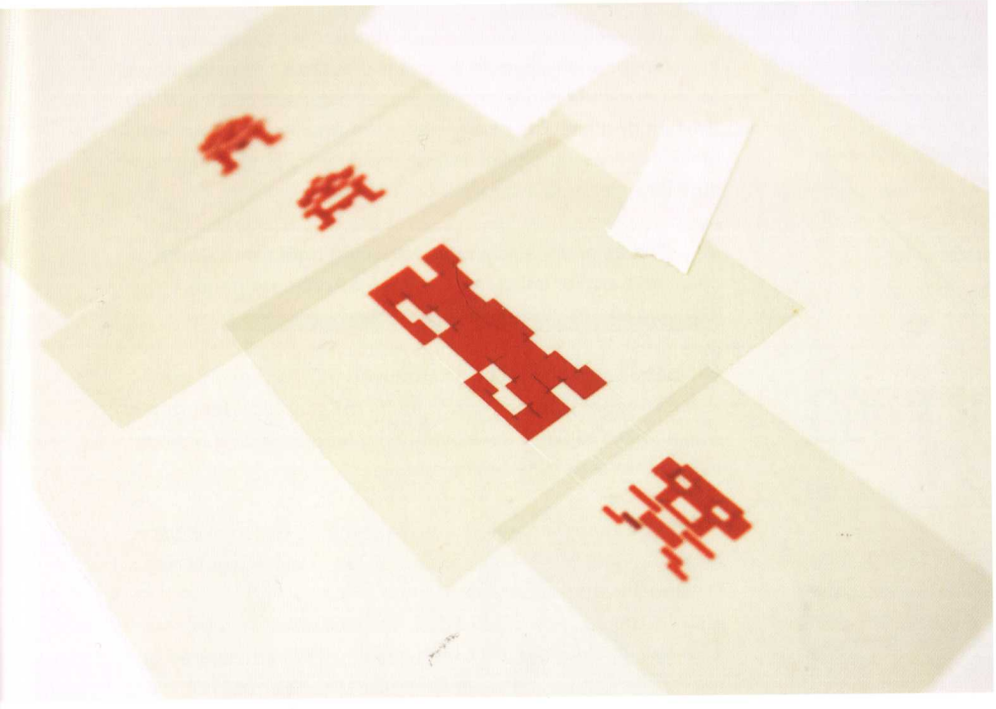
Production manager Judy Richter spent 10 years at Atari while working through three company leadership transitions. In that decade she saw, first-hand, the evolution of technology that drove her work at Atari. "I was 23 when I started there," she said. "It was a great place to grow up there. It has to be one of the first companies to have so many creatives involved. I learned a lot about package design there—applying the art of all the illustrators. It was a fun, busy time, and an interesting time in the field.

"When I started we had our own typesetting, our own darkroom, and had to process our own film and send it to printers for the boxes. As Atari grew, I'd fly to LA to record label printers to handle our volume of copies. Those printers traditionally did food products and packaging, and they were the only ones who could handle our volume. But I had to supervise their quality. The DPI [dots per inch] was low and the presses were old."

To complete the circle, the original, hand-rendered artwork and illustrations for game packaging had to be photographed by a professional, and the resulting 4x5 transparencies would be used and scaled as needed for final placement and printing on boxes.

John Hayashi, director of Consumer Graphics in Marketing, explained how the process would work. "In 1976 there was no Adobe Illustrator, no InDesign or Quark," he said. "Vector

▲ Production pasteup art from the Atari 2800 edition of *Demons to Diamonds*, a version of the game and console marketed exclusively in Japan

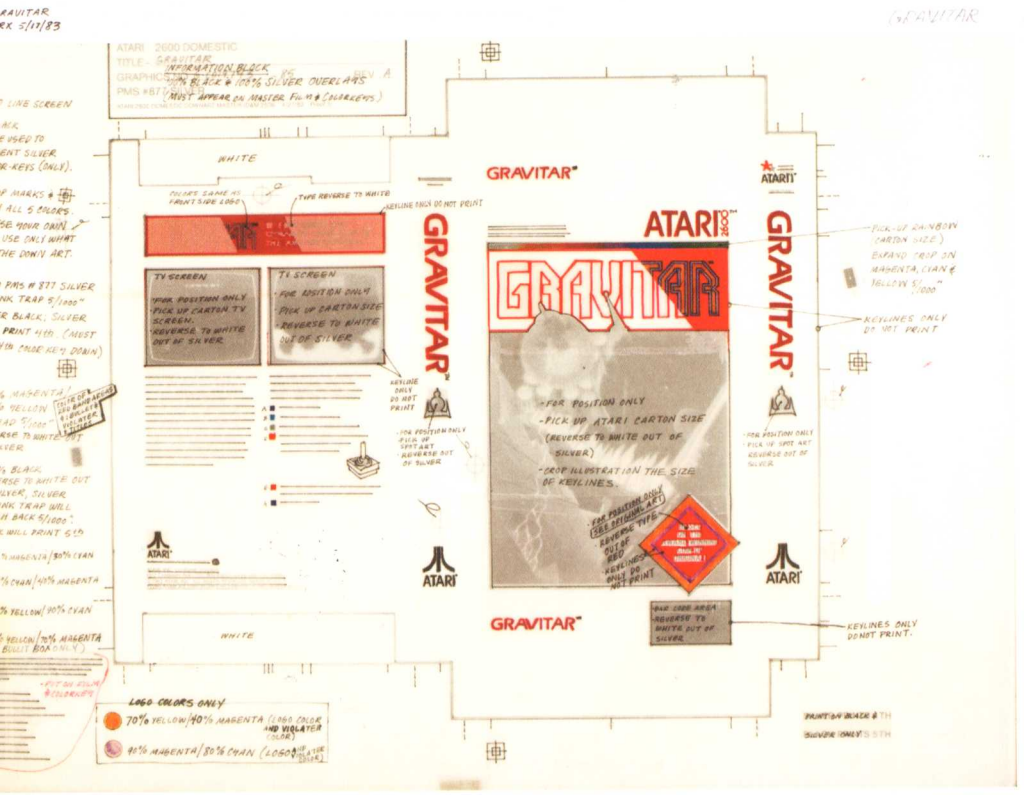


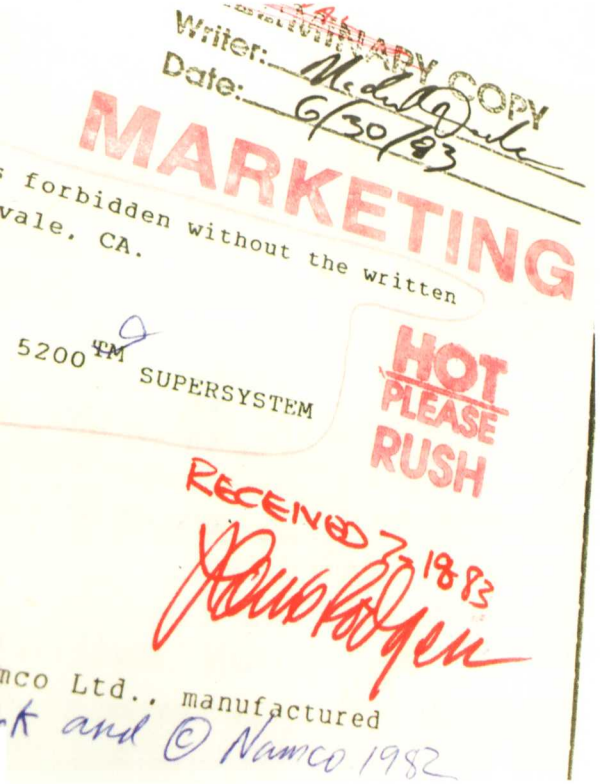
◀ Illustrations of game sprites from the *Demons to Diamonds* game manual had to be cut by hand with an X-Acto knife

ATARI WAS THE FIRST TIME A COMPANY TOOK A GAME AND GLAMORIZED IT, AND RAISED THE LEVEL OF ADVERTISING TO MASS MARKET PRODUCTION."

—JUDY RICHTER

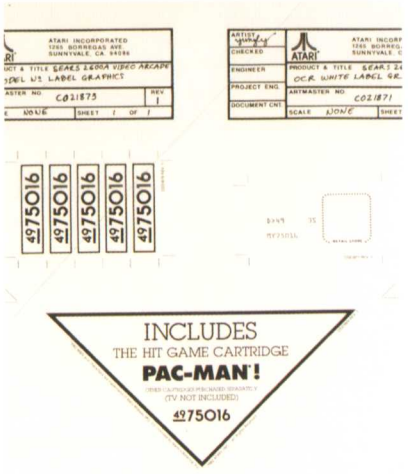
▼ Production pasteup for *Gravitar* (2600)

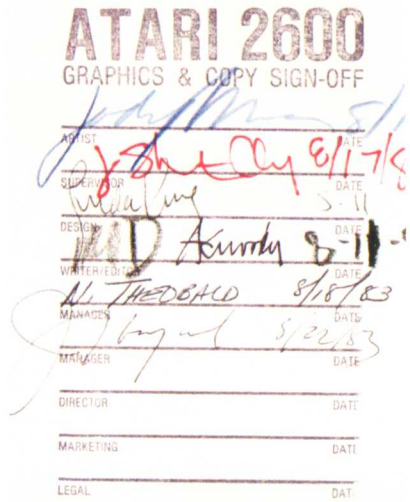




▲ Preliminary copy approval and "rush" stamp for a 5200 game

▼ Production artwork for Sears-branded 2600 violator labels





▶ Approval stamp and signatures for signoff on design and copy for a 2600 game

THE ANALOG PROCESS

John Hayashi, director of Consumer Graphics in Marketing, and Evelyn Seto, graphic designer, described the process of creating "mechanicals" for a particular game box, and the steps needed to go from concept to final printed package:

1 **Final** sign-off approval of the package comp and copy from Marketing.

2 **Develop** a flat template of the unfolded package. In tandem we would be developing the structural integrity of the package with an outside packaging vendor for the feasibility and protection of the product during transportation.

3 **From** typewritten copy we would specify the font style, point size, banner titles, leading, and width of the copy to an outside vendor (called a typographer) who would then supply black and white copy "galleys" in the format we specified. (This industry is virtually non-existent today.)

4 **We** would send out all photos or/and illustrations to a vendor for color separations. These items were approved separately for color fidelity compared to the original art.

5 **Then** we would paste the typography copy in the various locations on the template board with the pictures or illustrations blocked out in red Zip-A-Tone. On a tissue overlay, we would specify color and location photos or illustrations approved in Step 4.

6 **The** reviewed and approved mechanicals, illustrations and transparencies would be to send out to a pre-press house to be separated into cyan, magenta, yellow and black (CMYK) films for printing. The camera operator and film strippers would block out areas and book together elements as specified in the mechanicals—into a single sheet of film per color.

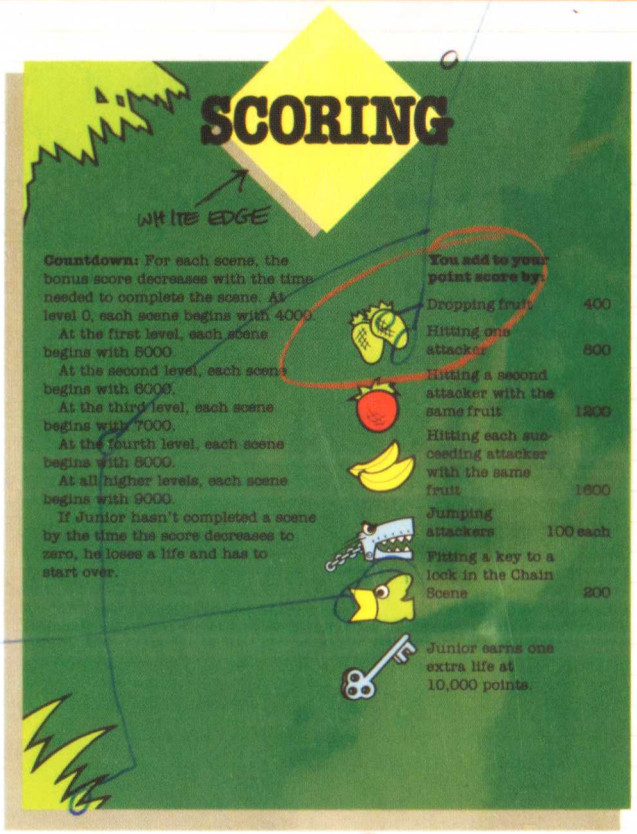
7 **The** color separation vendor would return with CMYK color keys and/or a film match print for Art Department approval and Marketing Department's final sign-off.

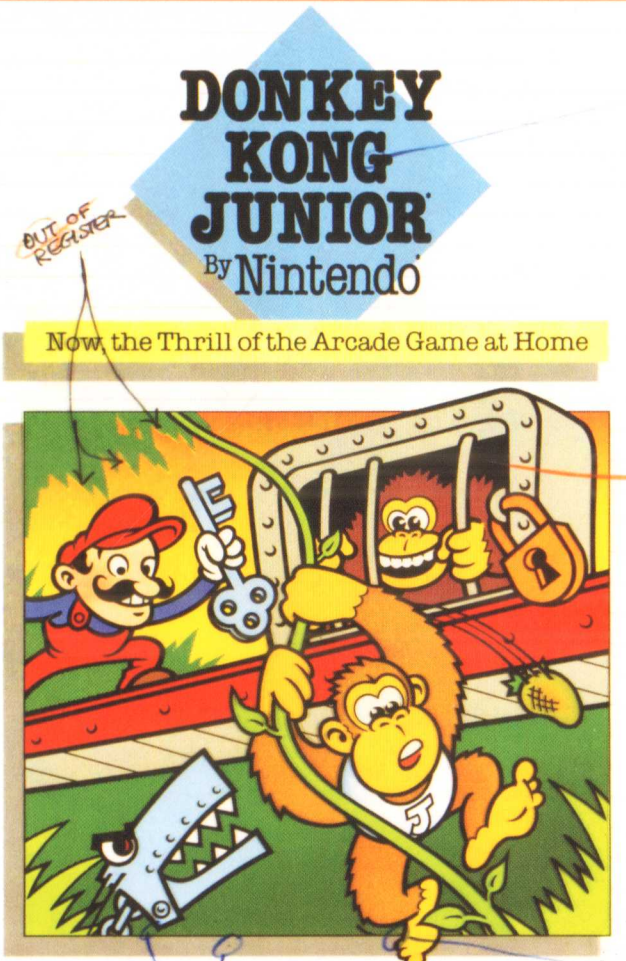
8 **After** an item had been approved for production, the Purchasing Department would notify the graphics department which print suppliers were awarded the printing, and provide us specs to order film for the supplier.

9 **We** would be notified which packaging house had been awarded the printing and production job, and we would get film specifications from them.

10 **We** would order the CMYK film and have it delivered to the Purchasing department. Often the product would be multi-sourced to meet the volume required to meet our quotas.

FILE COPY





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CO14189-40 Rev. A

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PRODUCT MANAGER WEST SHELL
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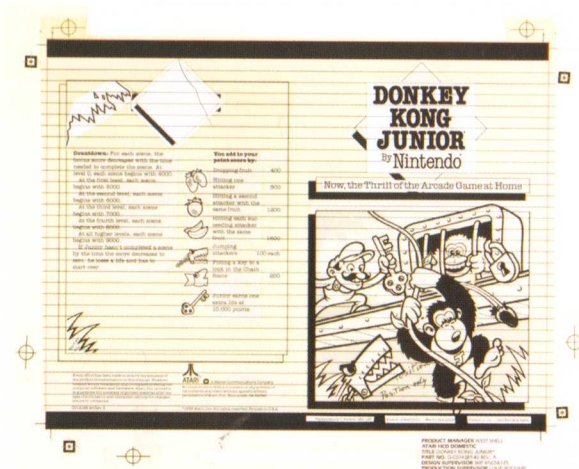
TITLE DONKEY KONG JUNIOR*
PART NO. G-CO14189-40 REV. A
DESIGN SUPERVISOR SKIP KNOWLES
PRODUCTION SUPERVISOR LOUIS RODGERS
DESIGNER ALLISON WOODS
ARTIST DEENA DAVIS
WRITER STEVE YOUNG



◄▲ Black and white and color manual production art for *Donkey Kong Junior* (2600)
Artist: Lou Brooks
Designer: Allison Woods

▲ 4" x 5" artwork transparencies used for reproduction on packaging and advertising

typography was still someone's dream at Xerox Laboratories in Silicon Valley. There was no bitmap typography because no one had invented the personal computer yet. Looking back, the reproduction procedure was very primitive in comparison to what is digitally-available today."

"There was tremendous pressure on us to get the packaging and instructional material out on time because of the lead time required," Hayashi said. "The game program chips and packaging were bought in huge volume and the demand to have all the products arrive at the factory at the same time was paramount to management. My job was to shorten the lead time required from concept to finished product."

The physical aspects of package design also presented a challenge to Atari, because of the enormous scale of the company's production. Costs and deadlines required that Atari investigate early-era automation as speed and quantity requirements grew. Richter continued: "At first we purchased an in-line packaging system—the machine would assemble and glue. Before that, we were using perfume manufacturers back east—they were the only ones doing packaging at that volume. Printing cartridge boxes came directly out of album art production houses. We were then sending it over to Asia to be done, and that was probably done for the first time in the U.S. It was different there—they would do things manually and piecemeal. That was the first time we started to see counterfeits and pirated games."

"I was called Miss Standardization," Richter said. "We were under such deadlines, and I wanted the powers that be to keep everything together. We came up with conceptual packaging designs—where the racing category would be red, and others would be another color. If we were producing too many of the same color, we switched so there wouldn't be too many of the same." This distinction didn't last long, however, as Atari's stable of games grew quickly and categorization of the original Atari 2600 titles took a backseat to a packaging redesign.

Regardless, Richter looks back fondly at the combination of craft and artistry that comprised her time at Atari, and cherished the opportunity to break new ground. "Atari was the first time a company took a game and glamorized it, and raised the level of advertising to mass market production—that gave the games a connection to art." ■

Atari
Att

Atari, Inc.---C05575H (Dig Dug box)
ppp---p47,600---Frank's Type, Inc.---03-31-83 10-23-44---(jg---CPU 0
Galley 1---2nd ac's

You Don't Just Play DIG DUG **You Feel It!**

Now, the Thrill of the Arcade Game at Home

All the excitement of the arcade game comes home with this new version of DIG DUG. You guide the hungry gardener as he tunnels beneath the earth searching for delicious fruits and vegetables. But beware of the firebreathing Fygars and mischievous Pookas, whose touch means the end for Dig Dug. To eliminate them, you must either lead them under a falling rock or pump them up with your air gun until they explode. It's a game of skill and adventure for one or two players.

Games People Feel

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Sunnyvale, CA 94086

3/31/83

Jill—
Did you order this type?
Nora

FRANK'S TYPE
935-F Sierra Vista,
Mountain View, CA 94043
961-0123

▲ Type specimens ordered from a Bay Area typography house, Frank's Type, for use in the *Dig Dug* instruction manual

EVELYN SETO

EVELYN LIM (NOW SETO) was the oldest child of immigrant parents, growing up LA's inner city. Drawn to art early in life, she received her BA in Graphic Design from San Jose State University. "I told my parents," she recalled with a laugh, "'I'm going to go into the kind of art that makes money—commercial art!'" Her first job right out of school was as production assistant for eventual Atari art director, George Opperman, at his advertising agency, Opperman-Harrington, Inc. It was here that the iconic Atari identity was created in 1972, and right off the bat, Seto had a literal hand in designing Atari's history: "I inked the original [Atari logo]," she said. "I inked it and handled the production with George."

In 1973, after nearly two years at O-H, Seto began looking for opportunities beyond what O-H could offer. As a small firm, O-H couldn't give her much room for growth, but she found a place to develop within another Silicon Valley fixture, at Hewlett-Packard. "At that time," Seto explained, "they were just starting their first consumer product, calculators." There she designed packaging, manuals, and generally supported HP's foray into the consumer market. But in 1976, the company announced that Seto's division would be moving to Oregon. Word apparently traveled that she might soon be in the market for a new position, when she received a call from a familiar voice.

In June of that year, "I got a call from George telling me he was going inside Atari [as art director]," she said. "He needed an assistant, and wanted to me to come work for him. I didn't think I would ever work for George again, but he must have valued my judgment and work ethic. He needed someone to do the practical stuff, some of the things that he didn't want to work on. I took the job, thinking it was temporary while I looked for something else."

"George and I had facing desks in a small corridor," she continued, "with our drawing boards opposite our desks. That was pretty much all the room we had. As George's assistant, I helped build up the art department, did production, and would pre-screen artists for him to interview as we started to build the team. There may have been three or four of us on the Graphics team before we moved from Los Gatos to our new digs on Borregas. Eventually there were eight of us, including Bob Flemate, Jim Kelly, and Steve Hendricks—who were the primary illustrators for the Coin-Op games."

Seto had known Opperman for a long time, but it wasn't exactly an intimate working relationship. "On a deep level," Seto said, "I think George was a nice man who lived and breathed design and graphics. He was a hard-working, intense man. He didn't chit-chat much, so I didn't get to know him on a personal level all that well. I didn't get much feedback (or mentoring) from him, so I never knew how he felt about me. We didn't have that kind of relationship. It may have been the times, too. I was the only woman in the department. In those years, many electronics companies definitely had more men than women in most departments."

While Seto was valued for her work ethic and production skills, she believed her lack of illustration background made her less useful within Coin-Op. It took a move to the Consumer Division, with its focus on packaging and identity design, for her to develop creatively. "For me to grow as a designer, I had to move on to Consumer. I came over as a graphic designer when Consumer was expanding rapidly. Steve

"I SEE MYSELF AS AN ARTISTIC PERSON, AND I'M A LITTLE MORE PRACTICAL. THAT'S WHAT GRAPHIC DESIGN IS—IT'S A MORE PRACTICAL ART. IT'S SOLVING SOMEONE'S COMMUNICATION PROBLEMS, AND THE PRACTICALITY OF THAT ALWAYS APPEALED TO ME."

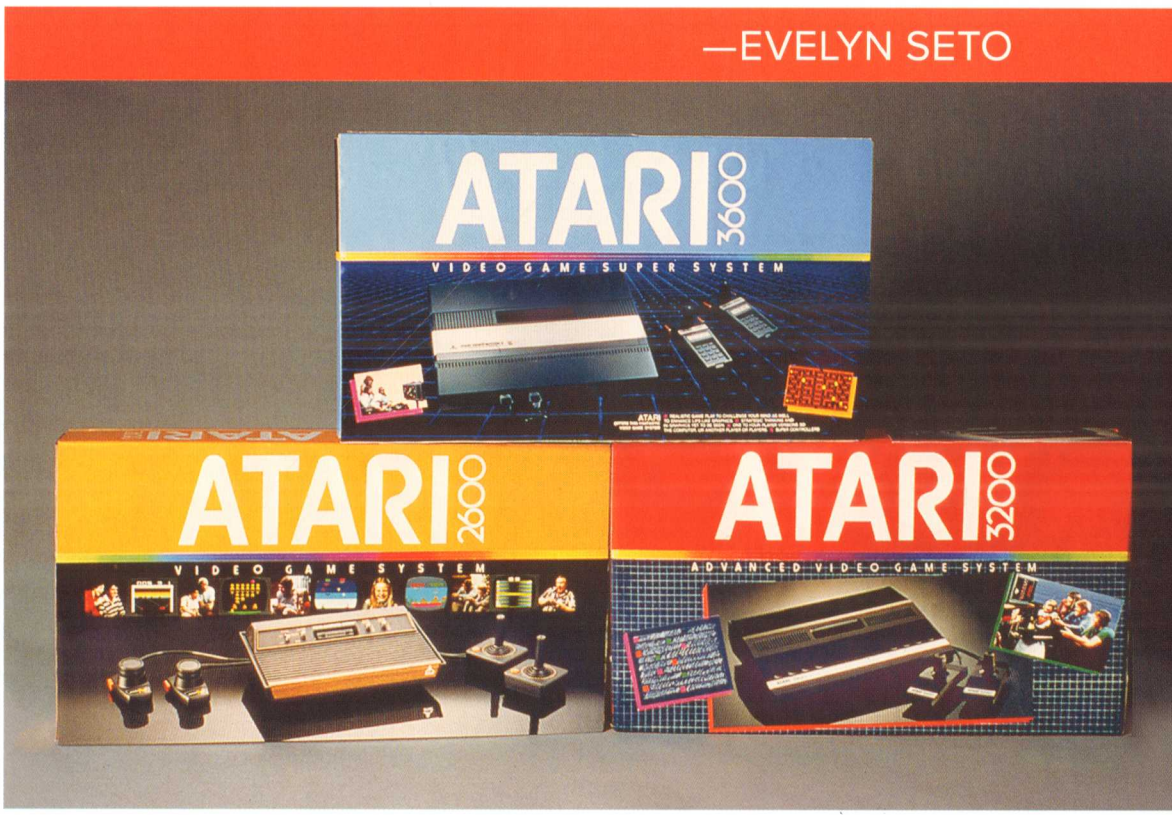
—EVELYN SETO

[Hendricks] brought Jim [Kelly] over and they managed the illustrations to be used on the packages." James Kelly also noted Seto's linchpin role in the expanding department. "Evelyn was one of our top graphic designers—creative, artistic—she saw the whole thing blossom." The department grew to nearly 70 people, one of the largest in the Valley.

Under manager John Hayashi, Seto touched every iteration and evolution of Atari's packaging, and worked hard to organize, stylize, and differentiate the brand from a growing cadre of rivals. "When the 2600 came out, the competitors were Magnavox with the Odyssey and Mattel's Intellivision," she said. "The original 2600 box was black with [television] screen designs, because at the time, black was seen as high-tech." Seto and the design team created a variety of designs and managed retail studies that evaluated Atari against its competitors, with different designs and how they might play out, gauging their "shelf appeal."

The design team eventually evolved the Atari look, settling on the familiar silver packaging that helped introduce and differentiate the 5200 and later 7800 system alongside the classic 2600. As those systems launched, and Atari grew to develop new and innovative products, Seto designed logotypes for specific games, and art directed photo shoots for products as needed.

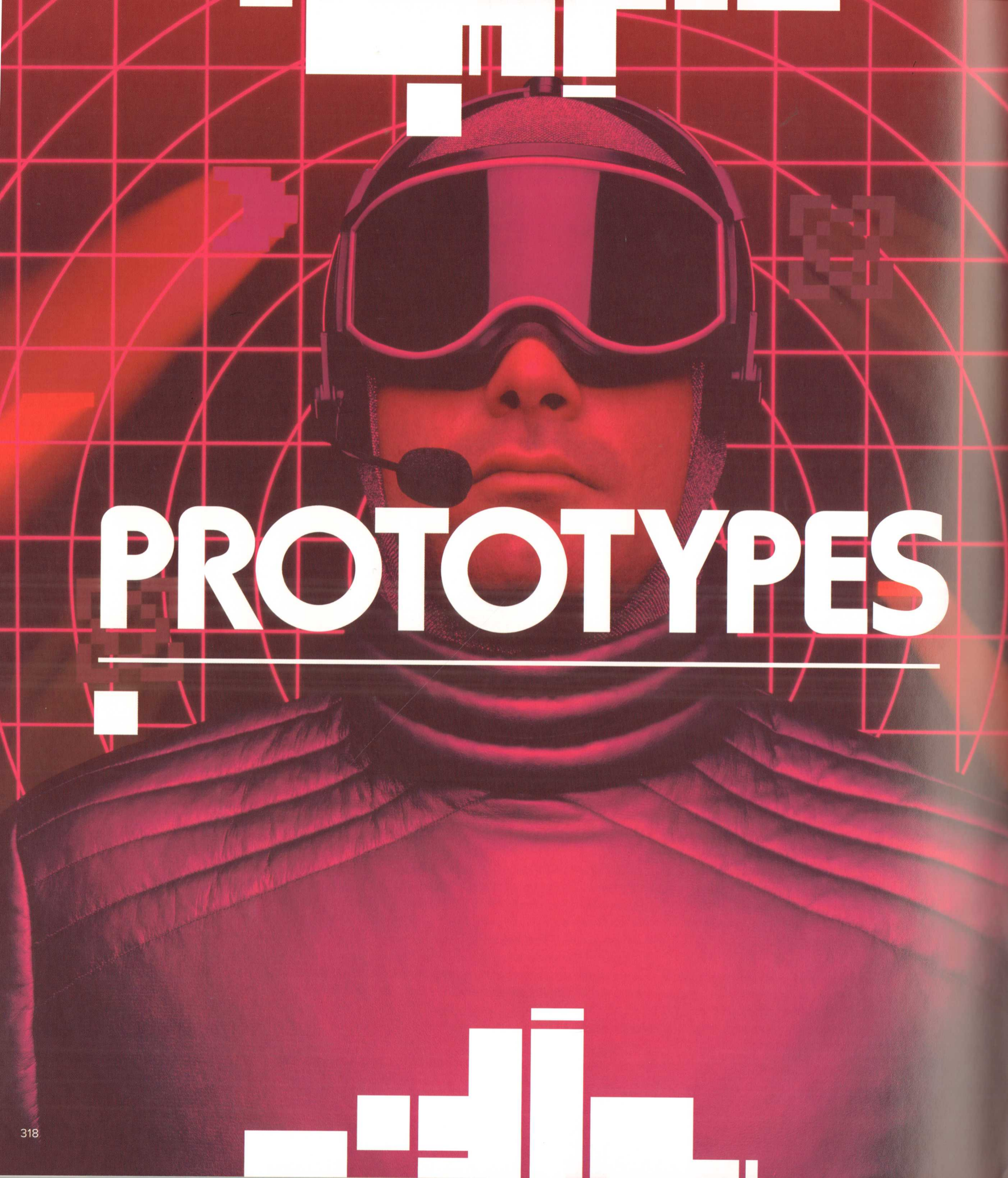
"I believe there are two kinds of people—artistic and creative," she said. "I see myself as an artistic person, and I'm a little more practical. That's what graphic design is—it's a more practical art. Everything you put down is considered and functional. It's solving someone's communication problems, and the practicality of that always appealed to me." As a design supervisor, Seto served as a kind of hub, working closely with illustrators, designers, writers, and marketing people to help orchestrate the best possible end products for Atari.



▲ **Package design concepts for Atari's console line. These design explorations were created by Seto before settling on the familiar silver packaging line. The boxes shown here still utilize the working titles of Atari 3200 and 3600.**

After seven years at the company, it was Seto's turn to leave Atari. A few of her former colleagues were working with exiled Atari co-founder Nolan Bushnell, as part of his high-tech incubator, Catalyst Technologies. The think tank yielded companies like Axalon, a line of entertainment-focused robotic toys, Etak, the world's first digital auto navigation, and I'ro, an electronic instrument for color selection in the fashion industry. Seto saw the chance to do more packaging work, step away from video games, and focus on fashion-related products, along with some of Bushnell's other ventures. "Working at Catalyst opened some new doors," she said. "Working for a 'think tank' of potential companies seeded by Nolan was fascinating. We touched the fashion world with technology. It didn't go as far as we would have liked, but I worked on solving some graphic and printing issues."

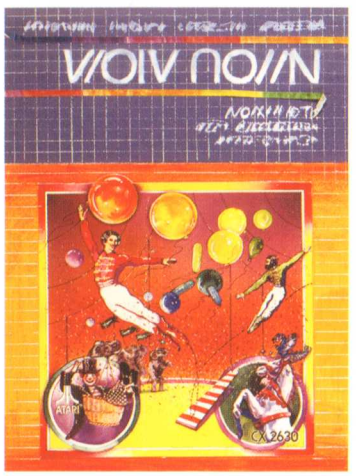
Following that, Seto continued to lend her experience to a host of well-known companies, art directing and designing work at Tonka Toys, HP, Apple, and most recently, serving as Creative Director for the San Jose Convention and Visitors Bureau. ■

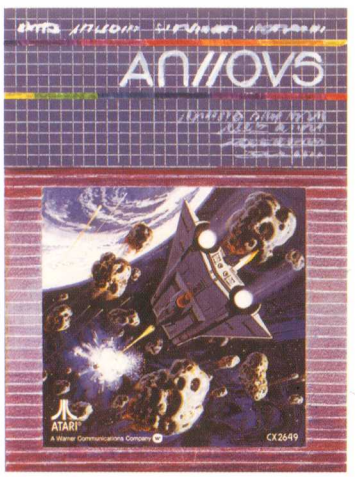

PROTOTYPES

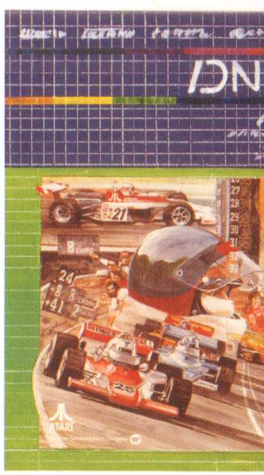
WHAT IF?

AN INSIDER'S LOOK AT RARE AND UNRELEASED PROJECTS

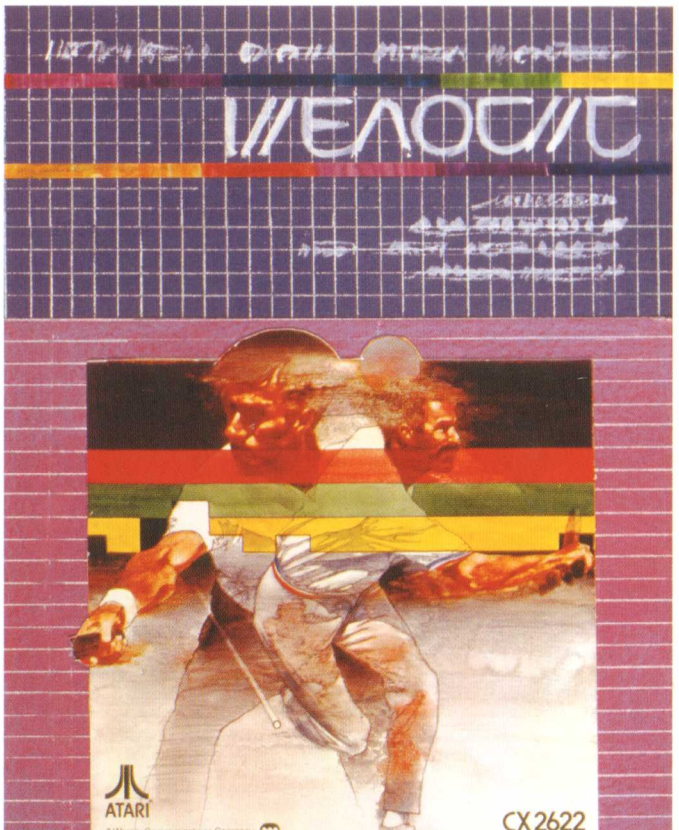
IN A FAST-MOVING environment like that of Atari's, ideas flow freely from all sources. Concepting, research, and development become avenues to test ideas, challenge previously-held notions, and work through creative ideas with other talented people. Thus, many ideas, both good and bad, end up on the cutting room floor. But the products and elements that never see the light of day can still be illuminating. The following are some of the rare and unseen projects of Atari, with details on how they might have fit into the constellation of Atari's products.





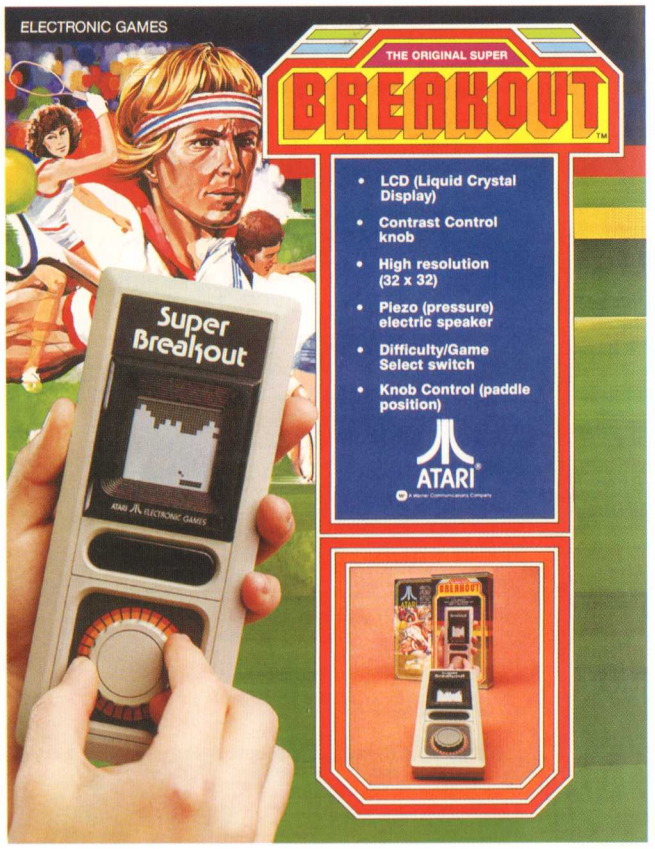


▼▶ **During the early phases of Atari's Consumer packaging redesign process, many alternatives were created. The designs in this set of rough initial concepts still retain the bold colors of the 2600's original boxes, while incorporating new, updated elements. Designer: Evelyn Seto**



ALTERNATE PACKAGING

AS ATARI GREW, it was clear that the console and game packaging would need to evolve. Faced with a host of competitors and more choices on shelves, Atari endeavored to update its brand look, primarily in consumer packaging. The company wanted to communicate the premium experience of its games, setting it apart from Activision, Imagic, Coleco, and other rivals. But the design was certainly not a foregone conclusion, and Atari's team worked through many iterations that centered around how new titles would integrate into the existing line, and how the release of new consoles (the 5200 and 7800) and computers (the 400 and 800 models) would impact the overall brand look.



▼▶ Ad slicks for the canceled *Space Invaders* and *Super Breakout* handheld games
Industrial design: Kevin McKinsey
Artists: Bob Flemate (*Space Invaders*), George Opperman (*Breakout*)

HANDHELDS

BREAKOUT & SPACE INVADERS

THESE HANDHELD VERSIONS of *Space Invaders* and *Super Breakout* were planned to be a part of the same family as Atari's 1978 *Touch Me* handheld version. To be released in 1980, the pair would have been some of the earliest handheld LCD games, with black and white displays sporting 32 x 32 pixel resolution, powered either by two 9-volt batteries or a wall adapter. According to designer Kevin McKinsey, the case designs were taken all the way through the tooling process, and working prototypes were even created before the two were canceled.

▲ Photo of Atari's *Tank II* console for marketing and internal use

▼ Launch advertising announcing the upcoming release of *Tank II*, which was canceled shortly thereafter

TANK II

DEDICATED CONSOLE

***TANK II* WAS** to be the numerical sequel to Atari's *Tank* arcade game. In the same vein as the released *PONG*, *Stunt Cycle* and *Video Pinball* dedicated consoles, *Tank* was announced but later canceled—but not before contributing significantly to Atari in another way. Designer Kevin McKinsey's nested joystick designs would make their way relatively unchanged into the release of Atari's iconic VCS (later dubbed the Atari 2600). The iconic, single-button joysticks were designed specifically to fit with the military-styled look and feel of *Tank II*, and retained those elements even after becoming part of the 2600.

▲ **Atari 2700 console**
Industrial Designer: Roy Nishi

ATARI 2700

THE ATARI 2700 (known as the Atari Remote Control Video Computer System) was intended to be a refreshed version of the aging 2600, to be released in 1981. The industrial design was the work of Roy Nishi. Not only did the console have sleek styling and an unusual dark brown case, but it also sported wireless controllers with telescoping antennae that doubled as both joysticks and paddles.

Fellow industrial designer Barney Huang recalled, "We were all involved in that one. The question we asked was, what do you do with the controllers when you're done? It was sloppy the way it was with all the wires, so we thought to have it all be integrated so it looked cleaner. This thing was expensive to make, with all the buttons and switches."

Regan Cheng expounded on the design: "You can see where this was a total wedge. It was designed by Roy Nishi. He was a good friend and nice guy. He lived in Italy after design school and learned a lot there and passed it on to us. He designed this and it came before the 5200. It's a carryover from the old computer consoles. There are LEDs deep down—underneath the plastic. The novelty was an upscale version of the 2600, but then marketing wanted to do the 5200. The 5200 was the cooler one—[the opacity of transparent material] was supposed to be a secrecy thing, to make the console more sexy."

As Cheng explained, the wireless controllers could be stored in the smoked plastic bay at the back of the console, a feature the Atari 5200 would later incorporate. Atari hyped up the modern design—including its recessed LED lights, touch controls, and features—in its Summer 1981 *AtariAge* newsletter: "Looks like the control panel of an intergalactic cruiser, but it's really the most exciting development in video games since the introduction of the Atari Video Computer System game a few years back. Finally! Nobody will trip over your controller wire just when you're about to set a new record at *Space Invaders*. Never again will the family dog gallop through the room, ripping the controller from your hands just when you're about to beat your big brother at *Basketball*. Never again will you have to interrupt your game because you have to answer the phone—because wherever you go, the controller goes too!"

Artist Matt Osborne's father, Don Osborne, was Atari VP and national sales manager in Coin-Op, and an integral

▼ Package design for the Atari 2700, restored from an original proof of the prototype box, provided by artist Matt Osborne. Osborne was recruited to be part of a photo shoot for the product and can be seen in various shots on the box itself.

part of Atari's public-facing executive team. With that family connection, as a kid, the younger Osborne had the opportunity to visit Atari headquarters many times, and also chanced upon his own Atari fame—appearing as a model on the box of the Atari 2700.

Osborne explained about growing up in the "Atari family," that "We were always looked at like celebrities, even by celebrities. But I never looked at it that way—I never felt extra special, but people seemed to do that. We had *Missile Command*, *Centipede* and *Asteroids* in our house—but I still used to sneak out of elementary school to play the games at the local deli."

When the work for Atari's wireless console developed, Osborne said, "The photographer was down at my dad's office, and he saw a picture of me on his desk. He said, 'That's the all-American kid—blond, bowl cut, crazy look in his eye—does he do any modeling?' I got paid $150 for four hours worth of work, in a rented studio in Aptos on the coast. The guy who was my dad in the shoot was a well-known model in magazines. I had seen him in ads for the GAP. The kid who was supposed to be my brother was the voice of Linus in the *Peanuts* cartoon! It was my first view of a set made to look like a living room." But Osborne's face would never grace store shelves.

Despite advertising announcing the system, and finalized box art nearly ready, the 2700 was never released. It's believed that there were range and interference issues with the wireless controllers, and the project was shelved permanently. Ironically, Atari would later release much bulkier wireless controllers for the 2600 without many of the features contained in the 2700 versions.

ATARI® ANNOUNCES THE VCS™ WITH SOMETHING MISSING. WIRES.

Our newest Video Computer System™ offers the most advanced design styling combined with the latest technological innovation: remote control.

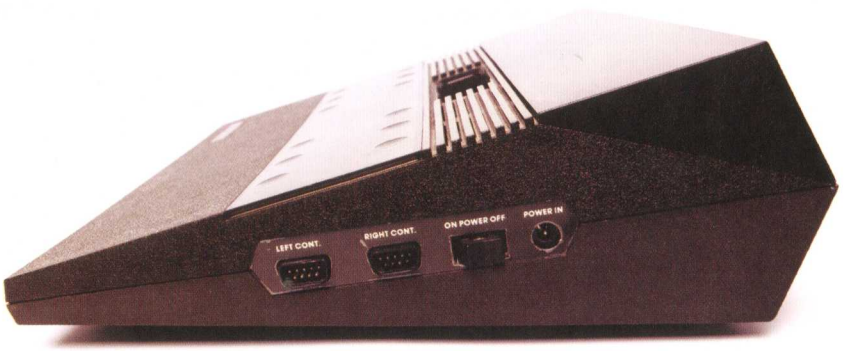
Two quick action remote controllers make home video entertainment all the more enjoyable by doing away with the clumsy wires and cords that interfere with the action.

Now you can select, play and reset games on your new computer game without ever having to get up. Fingertip touch controls with LED signals are built into the hand-held combination joystick/paddle remote controllers. And they can send signals strong enough to operate the set from 50 feet away. But best of all, you can play Atari's complete Game Program™ library with them.

The new Atari Remote Control Video Computer System™. Sometimes we have to leave something out so you won't miss a thing.

Circle No. 9 on product card

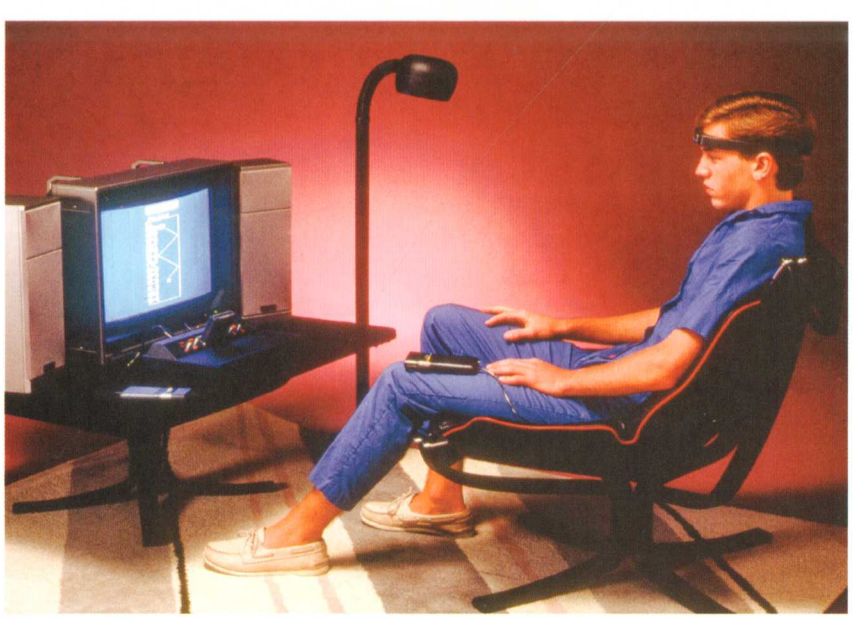
▲ Advertisement for the Atari 2700 console, which was ultimately canceled



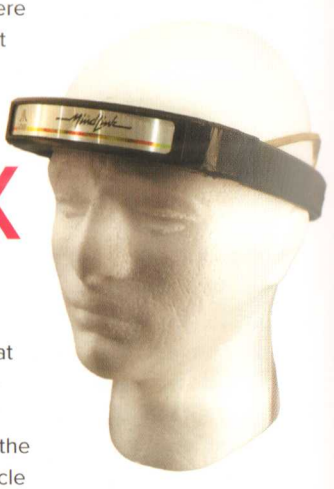
ATARI 3200

CODE NAMED "SYLVIA," this system was to be a successor to the 2600, and would have had a series of intriguing features and new technology built in (like voice synthesis!), but was ultimately canceled. Faced with a nearly-obsolete 2600, Atari simply worked to repackage the technology of its computer line, a console which would eventually become the 5200 SuperSystem.

"It had kind of a Bang and Olufsen feel to it," said industrial designer Barney Huang. "Clean, flat, no protrusions, so the whole piece of plastic moved. This was all before touch pads. We all followed B&O and their style. Like with the 7800—there was this piece of metal that was machined and stamped. There was a huge cost to that—someone had to make it, and peel it off, and put it on there."



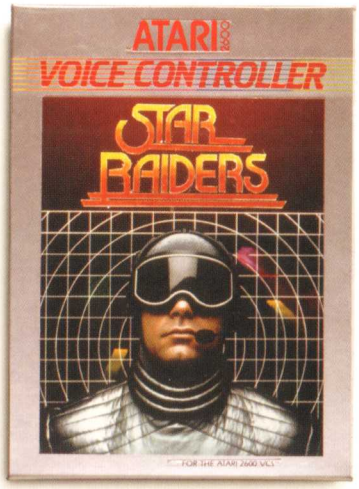
▲ As shown in this promotional photo, the Mindlink headset would have allowed users to control the game action by using their forehead muscles



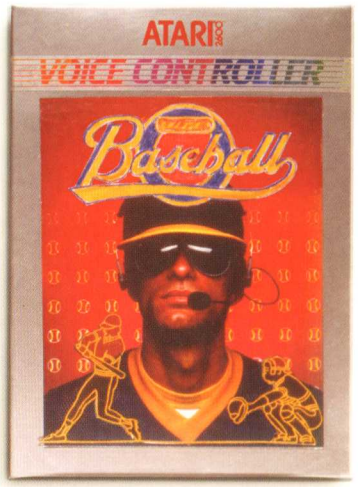
MINDLINK

ANOTHER ESOTERIC ATARI controller, the Mindlink was a device connected to a headband that wrapped around the forehead of the user. Reportedly designed to "think" the movement of objects on screen, the controller electrically measured muscle activity in the forehead, transmitting a signal to the game console via infrared remote control. In testing, users found that the device would leave them with a headache after just a few minutes of use, because of the rapid brow twitching and contortions needed to control on-screen characters.

The controller was more spectacle than substance, but admittedly, the technology needed to be tweaked further when its development was canceled by then-owner of Atari Corp., Jack Tramiel. The device never made it out of prototype form, but materials were created for its announcement, including photo shoots, and a logo designed by Tom Palecki.



◂ ▾ Design mockups for prototype Voice Controller *Star Raiders* and *Baseball* (2600)
Designer: Evelyn Seto

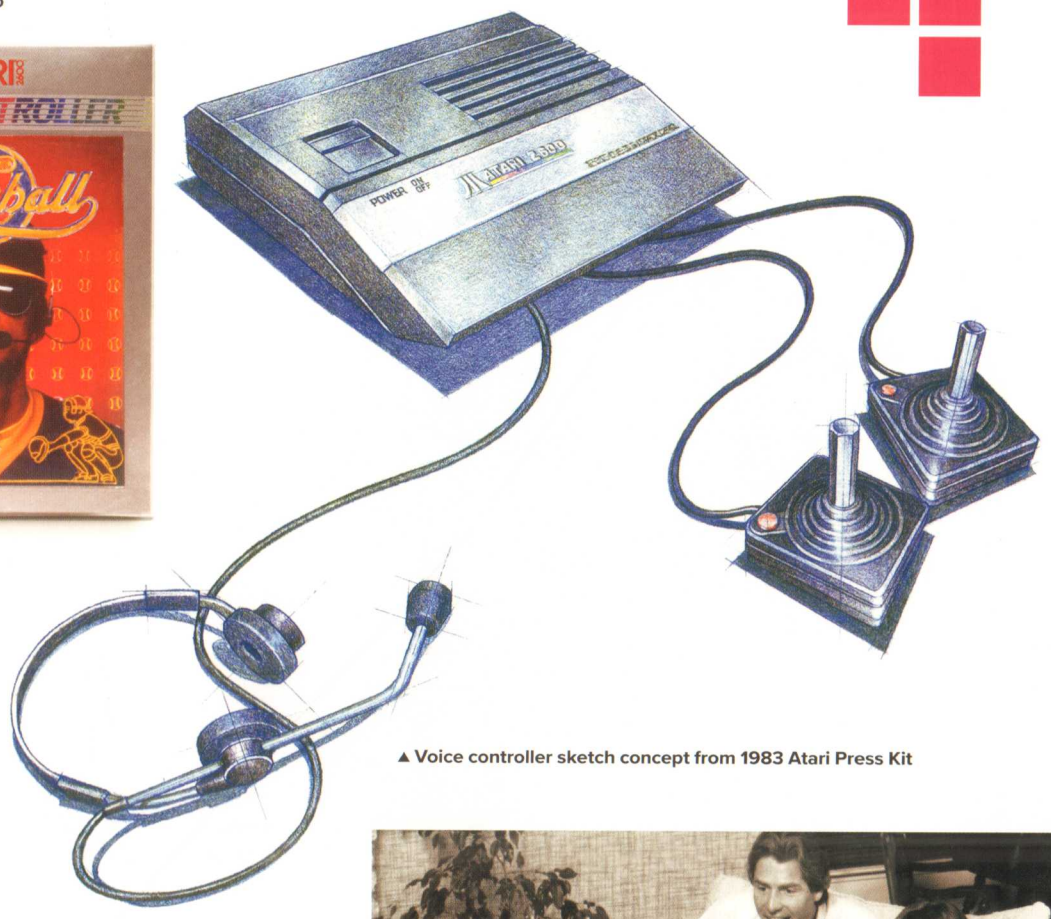


VOICE CONTROLLER

WORKING IN CONCERT with toy manufacturer Milton Bradley, Atari announced the Voice Controller as a piece of hardware allowing users to speak commands to control their game action. The set included a headset microphone and independent hardware console that would plug into the 2600 controller ports. Specially-designed joysticks would plug into the Voice Controller console.

Milton Bradley had its own track record with video game hardware for the 2600, releasing two of its own standalone Atari 2600-compatible controllers, the Cosmic Commander and Flight Commander, both bundled with exclusive 2600 games. (A third, the Armored Commander, was never released.) Atari's agreement with Milton Bradley also reportedly called for the toy company to develop 18 new cartridges (most of which would include compatibility with the Voice Commander), but the project was finally canceled by Atari. MB sued Atari for breach of contract, and then later released the device themselves as the MBX Expansion System for the Texas Instruments Home Computers. Released in September of 1983, the MBX was discontinued shortly thereafter because of the video game market crash. However, it wasn't a total loss for Atari—the case design created would later be re-used for the lower-cost version of the Atari 2600, the 2600 Jr. Also, the specialized joysticks created for the console would be sold on their own, rebranded as the Atari Space Age Joystick.

The project had progressed enough that concept box artwork had been created by designer Evelyn Seto, and specific game tie-ins were planned. Each of the design concepts emphasized the headset microphone and utilized photography, which was unusual for Atari game packaging.



▲ Voice controller sketch concept from 1983 Atari Press Kit

▸ A happy family image of the Voice Commander mockup in use, which was part of Atari's June 1983 Consumer Electronics Division press kit

◂ While the Voice Controller was never released by Atari, the specially-designed controllers were later released as Atari's Space Age Joysticks

▶ Announcement advertising for Cosmos game unit

▲ Prototype Cosmos game unit

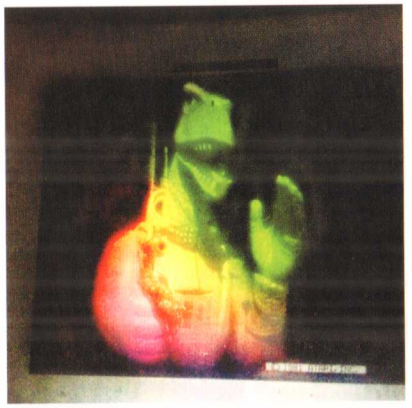
COSMOS

COSMOS WAS A prototype electronic game that Atari spent considerable time and resources on, a product of the robust R&D department started by Al Alcorn. Alcorn was the senior VP of R&D, had a personal interest in holography, was inspired, and had the knowledge of the technology behind it. He had an interest in acquiring a patent package of Holosonics—a bankrupt company that owned all the patents in the field of holography. Alcorn said: "This thing was owned by a bank, and we could buy it. This would give us a proprietary position and a chance to figure out how to make some games with it." Alcorn recruited Atari engineers Roger Hector and Harry Jenkins to design product concepts while Alcorn contracted with external holography scientists Steve McGrew and Ken Haines to set up a lab and produce holograms.

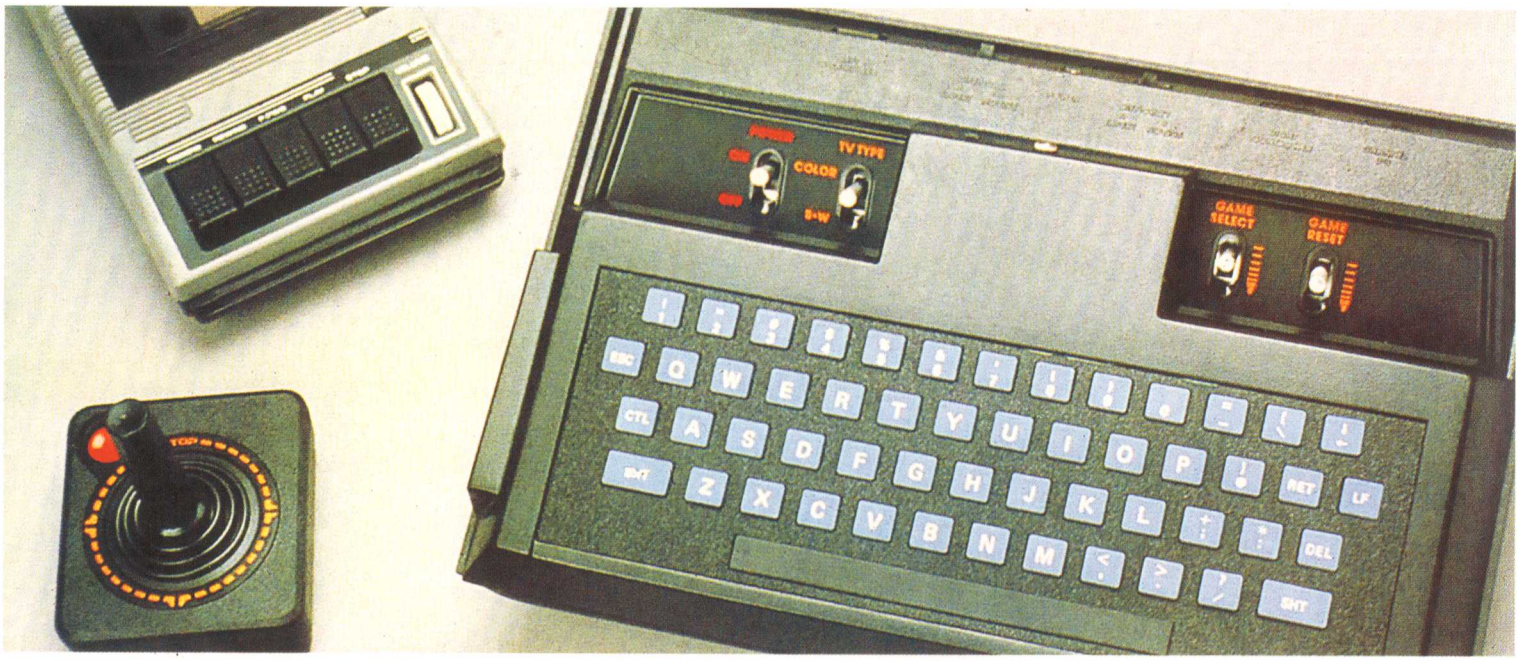
"This started as a pure R&D project based on potentially proprietary technology" Hector said, "but we did some invention ourselves." Hector continued: "My contribution was combining multi-image animated holograms into a console that could interact with them. I also created all the hard models from which the hologram images were made, and this was integral to designing the games themselves." Ultimately, full production engineering and tooling was completed and final industrial design was done alongside Roy Nishi. As many as ten production games and their packaging were completed. "Cosmos really sprang from a breakthrough in hologram mass-producability, along with a console and cartridges that were remarkably inexpensive to produce. We could retail the game carts for less than $10! This would have been a crushing competitor to the handheld electronic toy category of the time," Hector explained. Unfortunately Cosmos would never see the light of day.

"We made a pilot production run and showed it at the New York Toy Fair," Hector recalled. "We took a year's worth of production orders, but then [Atari CEO] Ray Kassar said no. He didn't want to invest in new technology. He wanted to increase production capacity for the sure thing in the 2600. That was the decision that literally pushed everyone out of the company." Hector and Alcorn left Atari not long after, but the hologram technology created would live on outside of the company. "Those two guys left the company and used their knowledge and made the first production holograms," Hector said. "Haines went and worked for a company that produced them for banks. This could have been worth a tremendous amount to Atari but there was no vision at the company." The technology would later be found on everything from credit cards, to toys, and ironically, to quality seals found on Atari game boxes.

▼ Both the spaceship and alien holograms were to be used with the console's *Space Invaders* game. The original holograms were printed on large rolls.

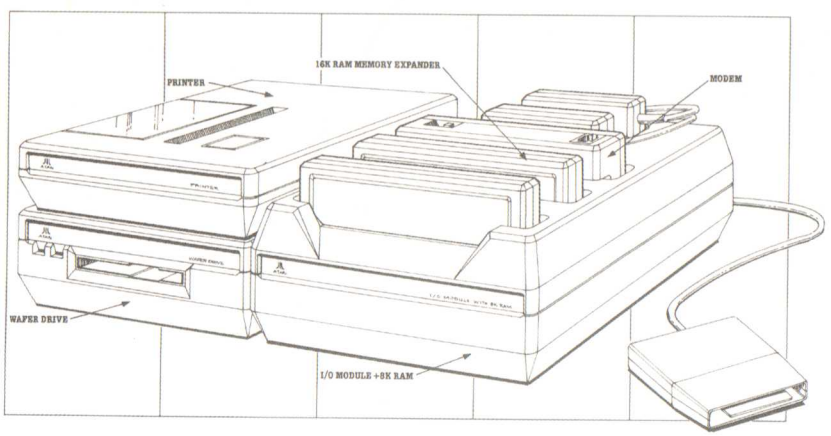


▲ Press advertisement for Cosmos game unit and its cutting-edge holographic technology



▲ Physical mockup of the Graduate keyboard featured in *AtariAge* Magazine, March/April 1984

▲▼ 1983 press kit promotional art for the Graduate keyboard and accessories



GRADUATE KEYBOARD

THE PROMISE OF Atari's Graduate keyboard was the desire to extend the capabilities of the 2600 into that of other computers on the market at the time. Atari tapped three former Commodore engineers at a company called PVI (Peripheral Visions Incorporated) to design a keyboard and memory add-on that would prolong the life of the 2600, boosting both its memory and programming capabilities. A working prototype was created, but the project was canceled before release—though not before Atari advertised it in its 1983 materials, and user magazine, *AtariAge*.[25]

Designer Regan Cheng created some mockups of the unit, but the Graduate didn't develop in the design department. Cheng joked that Atari was consistently (and almost comically) trying to add on to their best-selling product, the 2600, with a wide variety of additions, plug-ins and peripherals. "It was like it was a cheap girl," he said, "You could slide anything into the Atari 2600!"

◂ Initial rough artwork and production art to be used in packaging for the Kee Games VGS, a rebranded VCS

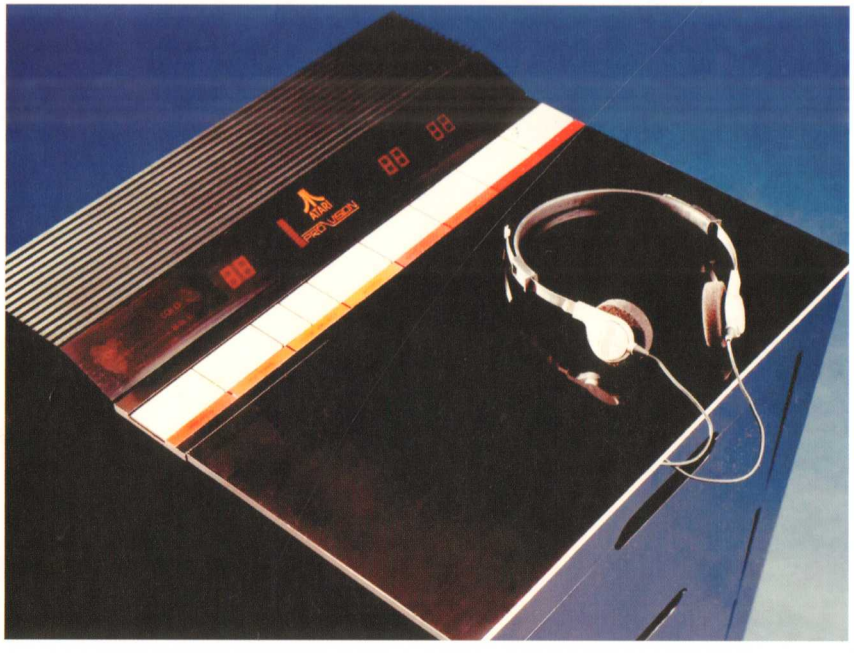
KEE GAMES PROGRAMMABLE GAME SYSTEM

KEE GAMES BEGAN as a way for the early Atari company to get around arcane exclusivity agreements of pinball and arcade distributors, and sell its games to more companies. Atari co-founder Bushnell hired his neighbor and friend Joe Keenan to run the "shadow company," which would appear as a competitor of Atari's, when in fact it was a wholly-owned subsidiary. Kee Games would produce "clones" of existing Atari arcade games, thus enabling them to sell to two distributors at once. The subterfuge was discovered in December, 1974, and amidst company turmoil, select Kee management were slotted back into Atari upon the "merger," and Keenan became president of Atari.

In the same way that Kee cloned arcade games from Atari, the company planned to release a Kee-branded version of the six-switch VCS. That never came to pass, but prototype console versions and these rough packaging concepts for the Kee Games Video Game System provide some insight into how the system might have been marketed and packaged.

▲ Original Kee Games logo (top) and an unused logo design to be used in conjunction with the Kee Games Video Game System

▾ A handful of prototypes exist of the Kee Games branded VCS



▲ Test shots of the Pro Vision prototype console

PRO VISION

ATARI'S PROTOTYPES WERE set to invade living rooms in a variety of forms. One of these was a project called the Pro Vision. The unit was basically an all-in-one console with every Atari 2600 game on a single board, with built-in controllers and power supply. R&D designer Roger Hector unpacked it: "This project started in Consumer Marketing," he said. "The sales side had commissioned a board that would live in the store—a kiosk with one monitor and selectable games for the retail stores. It seemed like such a good idea. I was leading R&D at that time. I thought, 'Let's turn this into a high-end, Bang and Olufsen style piece—make it touch-selectable, using hardware already made for this POP [point-of-purchase] thing. It was built as a finished product in our R&D group, but you had to find someone who was going to sponsor it and there wasn't anyone that felt that strongly about it at Atari.

The Pro Vision would have been contained in a high-end, rolling end-table cart, with an unusual feature of all of its games built directly into the system. Hector continued: "It was a high-style design with all the game ROMs on one board, all controllers in bins, and the games were selectable via capacitive touch switches on top. It had its own power supply and headphones were built in and stored under the hinged top. We set it up in the R&D office to look like a living room to show to the execs. It was a dream concept, but it never went past this stage."[26]

▶ The Pro Vision in its initial home in a mockup living room created at the Atari R&D office

▼ Promotional photo for the unreleased Jaguar VR virtual reality headset

ATARI JAGUAR VR

THE JAGUAR VR was unveiled at the 1995 Winter CES, ostensibly a response to the release of Nintendo's Virtual Boy console announced in 1994. The headset was developed with a company called Virtuality, who had a track record in developing virtual reality arcade systems. With the overall failure of the Jaguar sales, Atari Corp. canceled the project, as the reported retail price of the unit would have been $200–300—clearly not an answer to save the struggling console. Though the company's stock of the prototype headsets was supposedly destroyed after its 1996 merger with hard drive manufacturer JTS, two of them have surfaced and are occasionally displayed at video game conventions. Only a single game was created for the device, a 3D version of *Missile Command*.

INTEGRATED CONSOLE CONCEPT

BARNEY HUANG: "After the release of the 2600, we thought during this time—'How do we expand on this? What if we design it differently, so it's integrated? The idea was that nobody would buy a computer. You could take this dedicated console anywhere!"

▼ Dedicated game console concepts to follow the 2600 launch
Designer: Barney Huang

ADVERTISING & PROMOTION

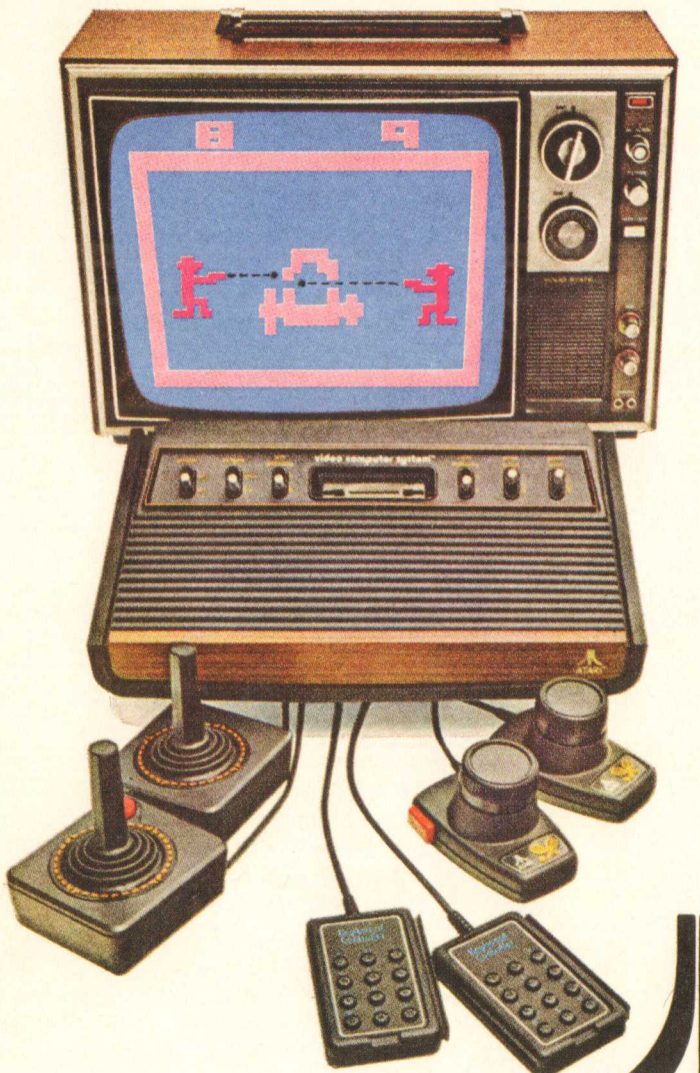
◂ Detail of a rare staff *Atari Force* T-Shirt
Artist: José García López

▾ Detail of promotional jackets for Atari dealer brochure

Don't watch TV tonight. Play it!

We're the games you play on your own TV set.

We're the Atari Video Computer System™. (Remember "Pong™"? Well, that was just the beginning.)



Atari is now a sophisticated, computerized programmable unit that hooks up to your television in a matter of seconds.

Atari features a greater selection (20 different Game Program™ cartridges, over 1300 game variations and options —and with many more to come!).

We're sport games. We're mind games. We educate. We entertain.

We can be played by one player (against the computer), two players, 3 or 4.

We're the system that's especially designed to change colors to protect and safeguard your TV tube from any damage.

We offer crisper colors (when played, of course, on a color TV).

We pride ourselves in truer-to-life sound effects, which play through your own TV's sound system.

We're Atari.

And if someone in your family hasn't asked for us yet, get ready.

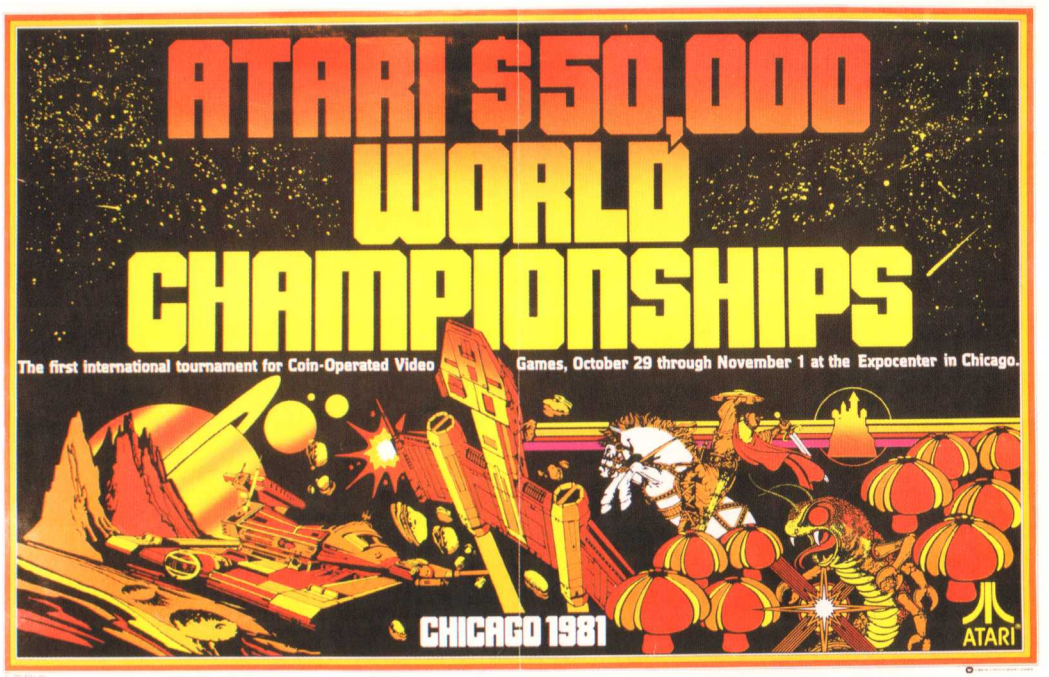
They're going to.

MORE GAMES. MORE FUN.

ATARI®

© Atari 1978
A Warner Communications Company

▲ Atari VCS launch ad, 1978



▲ Poster promoting Atari's Coin-Operated Video Game World Championship Competition, 1981

TO BE CONTINUED.

At ATARI,® we've not only developed the video games the world wants most, we've developed more and more of them.

And we plan to keep right on doing that.

After all, when you invest your time and money in a home video game, isn't it nice to know that the people who make the game are doing the same?

ATARI MAKES MORE HOME VIDEO GAMES THAN ANYONE.

HAVE YOU PLAYED ATARI® TODAY?

ATARI

© 1982 Atari Inc.

▼ Atari thermal mug
Artist: Steve Hendricks

▲ Atari Trak-Ball announcement shirt worn by female booth reps, promoting the new controller at the Consumer Electronics Show, 1982
Designer: Dan Kramer

No other video game stacks up to Atari.®

You can't top Atari for fun.

In fact, the Atari Video Computer System™ is so much fun you'll want to play it all the time. And you can because Atari has more game cartridges to play than anybody else.

Right now you can choose from forty different Atari Game Program™ cartridges.

There are fast action games like Dodge 'Em™ and Circus Atari.® Thinking games like Video Chess™ and Backgammon. You can play real life sports with Football and Basketball. And you can learn words and math from Hangman and Fun With Numbers.™

Our most exciting game yet comes straight from the arcades, Space Invaders.* Only Atari has it.

And more are coming. You'll never outgrow the Atari Video Computer System.

Instead, it grows on you.

ATARI®

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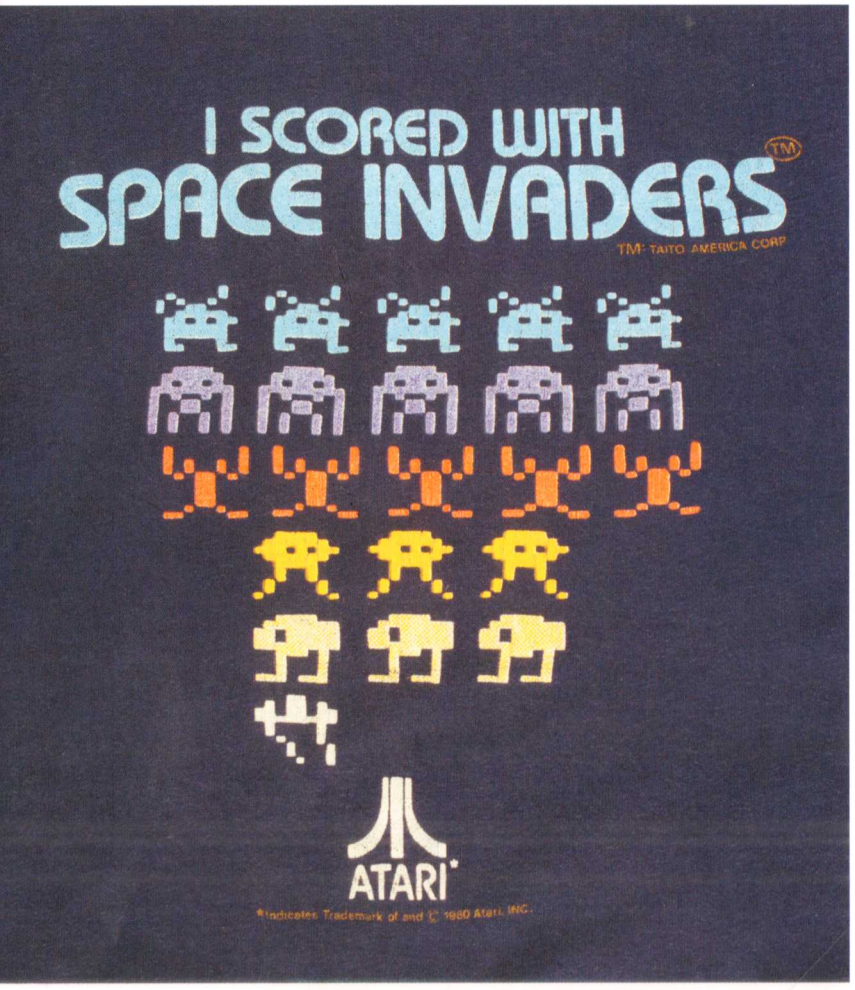
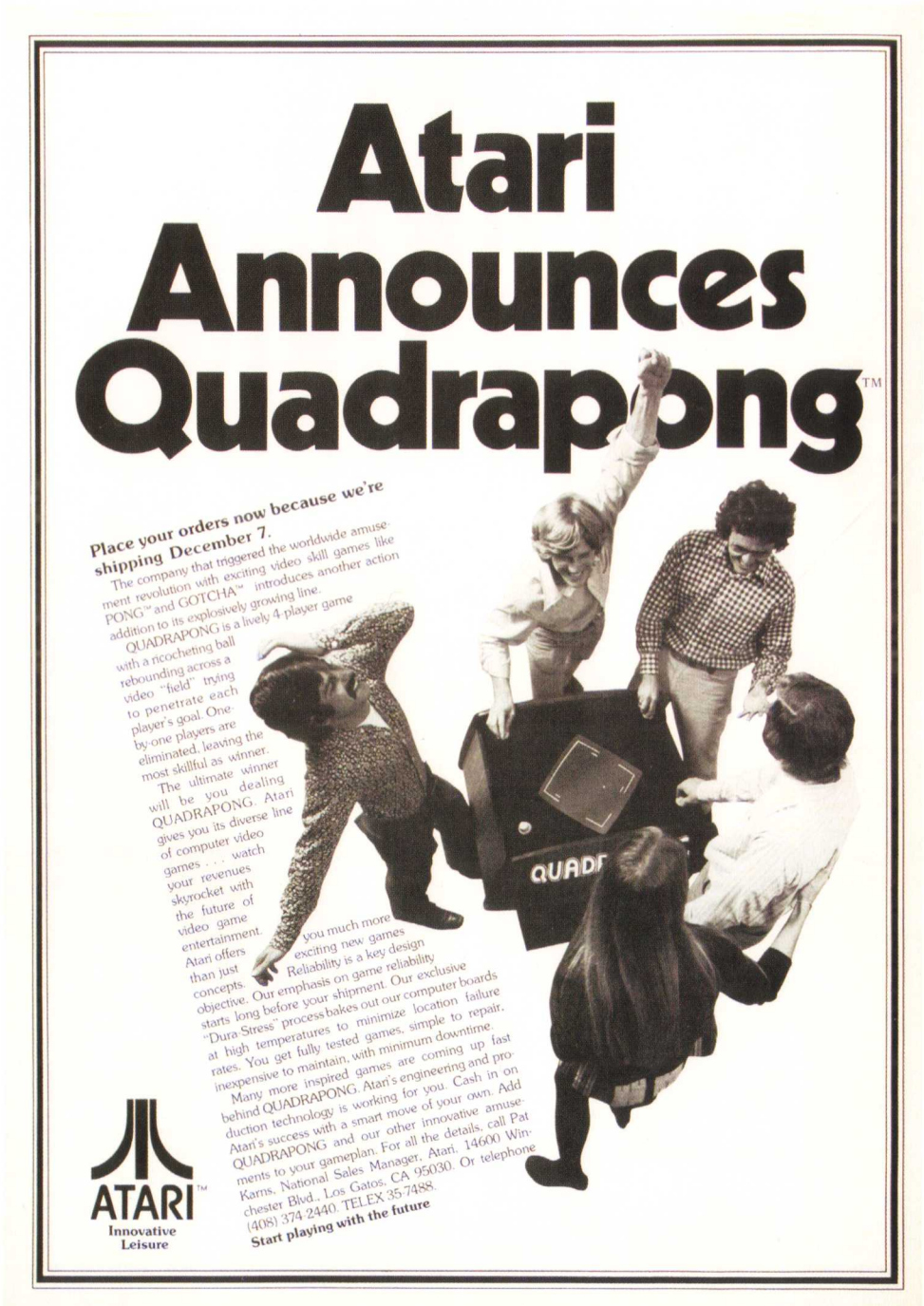
Atari, Inc., 1265 Borregas Ave., Sunnyvale, CA 94086 • (800) 538-8547 excluding Hawaii and Alaska. In California (800) 672-1404.

▼ Promo T-shirt for *Space Invaders* (2600)

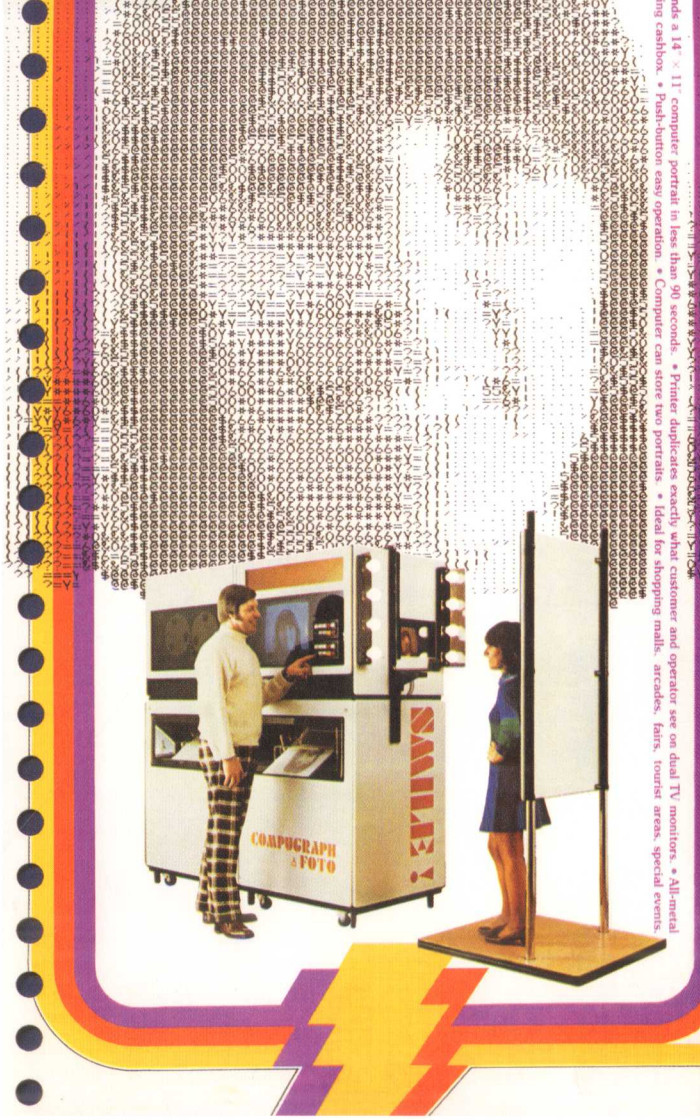


◂ Detail of Atari sales brochure

▸ Detail of Atari 5200 "New Era" sales brochure, 1982



▲ Detail for Atari's Quadapong arcade announcement flyer, 1974



▲ Flyer detail for Compugraph Foto, Atari's portable photo booth that would photograph and print 14x11" ASCII art portraits, 1976

Individual pie-shaped, coin-operated video skill games integrated into an attractive, elegant "Kiosk"

▲ Detail of Atari Theatre kiosks sales brochure, 1976

▶ Detail of VCS brochure, 1982
Designers: Kit Hinrichs, Barbara Vick
Artists: John Mattos, Rebecca Archey, Michael Schwab, Tim Lewis
(Jonson Pedersen Hinrichs & Shakery)

▲ Advertising suite announcing launch of Atari 400 and 800 computers, 1979

VIDEO COMPUTER SYSTEM ATARI GAME PROGRAM CARTRIDGES

LEARNING CENTER

BRAIN GAMES
Be a mental superstar. Focus on a series of symbols, ciphers and musical notes. Now, repeat them in order. You're working against time, and diabolical distractions. 19 games

A GAME OF CONCENTRATION
Thirty numbers flash on your screen. Hidden behind each is a familiar object or a wild card. Match any two and score. 8 games

BASIC PROGRAMMING
Learn the basics of computer language and programming. Soon you'll have the VCS game printing your messages, playing your games, even singing your song!

HANGMAN
Better brush up on your vocabulary, or the computer will make a "monkey" out of you. 9 games

ADVENTURE THEATER

CODEBREAKER
Crack the secret code in the fewest turns. The computer lets you know when you're getting warmer. 20 games

HAUNTED HOUSE
As you wander through the hallways of a dark and eerie mansion in search of the pieces of the golden urn, you'll encounter furry tarantulas, vampire bats, and a ghost—all of them trying to scare you to death! 9 games

SUPERMAN™
Help the "Man of Steel"™ save *Metropolis*™ from the evil doings of *Lex Luther*.™

™indicates a Trademark and ©DC Comics, Inc. 1982

ADVENTURE
Adventure begins with a quest to find the enchanted chalice. You'll encounter magic and evil dragons along the way. 3 skill levels

SPACE STATION

SPACE INVADERS™
An unusual assortment of aliens are descending in an almost endless stream. Destroy them with your laser cannon before they can destroy the Earth. 112 games

™Trademark of Taito America Corp.

MISSILE COMMAND™
As commander of a powerful anti-ballistic missile base, you must defend your planet from enemy attack. 34 games

ASTEROIDS™
Your Cosmic Spacecraft has drifted into a deadly asteroid belt. The longer you survive, the more space hazards you'll encounter. 66 games

COMBAT ZONE

COMBAT
Combat brings in the big guns for lots of fun. 27 games

CANYON BOMBER™
Canyon Bomber puts you in control of tons of bombs. Be careful. An itchy finger may cost you the war. 8 games

WARLORDS™
Warlords™ features fiercely feuding factions fighting with fireballs. Whew! 23 games for up to four players.

SKILL GALLERY

OUTLAW™
Outlaw includes a showdown, and target practice (to get you ready first). Shoot it out through 16 games and game variations.

AIR-SEA BATTLE™
With a little practice you might be promoted to four star general. 27 games

VIDEO PINBALL™
Video Pinball provides the ultimate challenge for all you pinball wizards. 4 games

SKY DIVER™
The longer you wait to open your chute, the more points you score. If you wait too long ... SPLAT! 5 games

PAC-MAN™
Guess who's coming to dinner? It's the hungry PAC-MAN who gobbles up dots and energy tablets and ghosts—for points. This popular video arcade game is sure to be a hit in your home. 8 games, including versions for young children.

™indicates a trademark of NAMCO-America, Inc.

SUPER BREAKOUT™
Blast your way through a mysterious force field in this super game. It's the *Breakout*™ of the future, programmed with eight exciting sound effects. 9 games

HUMAN CANNONBALL™
Your calculations have to be just right to shoot your man out of the cannon and into the water tower. 8 games

CIRCUS ATARI™
Fun for balloon poppers of all ages. 8 games

MAZE CRAZE™
You're a cop on the beat. And the things you'll run into are ... amazing. 16 games

BREAKOUT™
Smash your way through a wall of bricks in one of our most addictive games ever! Once you've mastered one variation, there are 47 other blockbusters for up to four players.

RACE TRACK

INDY 500™
This game comes with Steering Controllers to keep you on the right track. 14 games

DODGE 'EM™
It's you against the computer crash car. Various levels of difficulty keep the game a constant challenge. 3 games

SLOT RACERS™
Chase your favorite adversary and fire missiles at him, while you race along at breakneck speeds. 9 games

NIGHT DRIVER™
Careful, you never know what might jump out on the road at night. 8 games

STREET RACER™
Street Racer features six games: *Street Racer*™, *Slalom*, *Dodgem*™, *Jet Shooter*™, *Number Cruncher*™ and *Scoop Ball*™ for a total of 27 great game variations.

SPORTS ARENA

BASKETBALL
Out-dribble the computer. 2 games

GOLF
Tee off on your TV screen. 2 games

BOWLING
If you love to bowl, this game program is right up your alley. 6 games

PELÉ'S SOCCER™
This one will knock your socks off! *Pelé's Soccer* challenges you every inch of the way. Passing. Dribbling. Kicking. You choose the level of difficulty you want to play. And with 64 separate games to choose from, even Pelé himself finds plenty of challenge here.

HOME RUN
Balls, strikes, the whole bit for baseball lovers. 8 games

FOOTBALL
Don't watch football on TV ... play it! Hut one ... Hut two ... Hut three ... Hike! 3 games

VIDEO OLYMPICS
This is where you'll find *Pong*.® the original video game. And there are 49 other olympic games and game variations in 8 main events. You'll definitely want to play this more than every four years! 50 games

THE CLASSICS CORNER

VIDEO CHESS™
Video Chess offers 8 skill levels with a clever computer for an opponent. Get ready to be challenged like you've never been before!

BACKGAMMON
An exciting video version of one of the world's oldest games. 8 skill levels.

VIDEO CHECKERS
Video Checkers features 19 games to check out. Some pit you against the computer, other games are for two human players.

3-D TIC-TAC-TOE
Remember playing tic-tac-toe on car trips? Well, this version is to the original tic-tac-toe what a space shuttle is to a station wagon! You're going to love playing this old favorite in three dimensions. 9 games

CASINO
And when it comes to games of chance ... ATARI'S Casino is a sure thing. It includes *Black Jack*, *Stud Poker* and *Poker Solitaire* Fun for parties and practice.

OTHELLO®
Othello an intriguing strategy disc game, gets a big boost from the electronic age. Now the computer can keep score, and flip the game discs for you. 4 games

®indicates a registered trademark of CBS Inc. for its strategy disc game and equipment.

THE VISUAL EXCITEMENT OF STAR RAIDERS*— EVERY MONTH

ATARI FORCE

GERRY CONWAY
JOSÉ LUÍS GARCÍA LÓPEZ

LOOK FOR IT IN SEPTEMBER.

THE NEW DC. THERE'S NO STOPPING US NOW.

*INDICATES TRADEMARK OF ATARI INC COPYRIGHT © 1983 ATARI INC INDICATES TRADEMARK OF DC COMICS INC

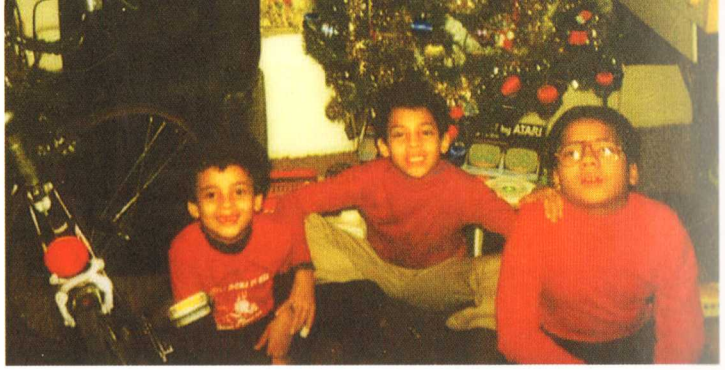
▲ Jaguar console promotional photo

▲ Atari *Football* promotional hat

▲ Detail of *Missile Command* T-shirt

◀ Promo poster for *Atari Force* monthly comic
Art by José García López

AFTERWORD
ROBERT V. CONTE



▲ Conte and his brothers with a VCS under the tree, Christmas 1980

MY INTRODUCTION TO video games began during the Summer of 1976, when I was six. Our family had spent the entire day at Nunley's Carousel and Amusement Park in Freeport, Long Island, which had recently added a "coin-operated machine area" that Dad was especially excited about. "[New York] outlawed pinball when I was a youngster," he said. "You boys have no idea what fun you're in for!"

While Pop amused himself reliving his youth, I walked around the arcade, staring at what seemed to be an endless supply of games—*Sea Devil*, *Indy 500*, and *F-1*, to name a few. I found my brothers playing a game called *Tank*, which sat next to another machine called *PONG*, and next to that was another with the moniker *Space Race*. Those "video games" at Nunley's and similar destinations—all manufactured by a company named Atari—became part of our regular Friday outings.

Struggling with prejudice as a bi-racial kid in my neighborhood, my chosen outlet of escape was imagination anywhere I could find it—comic books, monster movies, and after that fateful day at Nunley's, video games. In 1980 the local Sears electronics department spotlighted an amazing item for the holiday season: the Tele-Games Video Arcade—a home entertainment system with interchangeable cartridges. Every visit to the department store was an opportunity to play *Target Fun* on their demonstration model. When the time came to make our Christmas lists, we made sure to reference the page from the Sears Wish Book, including the system's description and catalog number!

Santa Claus was good to us that year. Under our Christmas tree was the Atari Video Computer System (VCS)! Although it had a different name and different colors, it was unmistakably the same awesome console we'd played inside Sears. Seconds after the annual Christmas morning photo was snapped, the outer box to the VCS was ripped open. Our other presents sat under the tree virtually untouched while my brothers and I played *Combat* (a glitch in the original console produced a hidden variant game when players manipulated the six control switches), *Air-Sea Battle* (wait, wasn't that *Target Fun* at Sears?), *Bowling*, *Superman*, and *Space Invaders* —all day long! "How are you doing that?" my stunned great-grandmother asked. "Are things going to come out of that TV?" We laughed.

The "Atari Christmas" remains one of my favorite Christmases ever, and it started my unquenchable thirst for VCS/2600 cartridges. Through his work as a sales manager in Manhattan, Dad would barter with customers who owned appliance and electronics stores, trading discontinued carpet cleaners for anything Atari. Combined with the games bought by Mom, Granny and with my allowance, it wasn't long before I had every Atari-branded cartridge on the market.

Dad's next job at Eldee Electronics helped me increase my Atari 2600 library substantially. He would call from his office asking whether I had titles I had never heard of—*Skiing*, *Demon Attack*, and *Space Chase*. I thought he was joking until he brought home games from new companies including Activision, Imagic and Data Age. Word of my immense game collection eventually led to kids in my neighborhood and at school inviting me into their homes to share my library, breaking down social barriers that had seemed daunting; I went from being the least popular kid to being elected onto student council!

Twenty years later, I purchased the *Atari Anthology* CD for my computer and played its games incessantly, but the artwork featured on the boxes was missing. This was a significant loss considering the connection between these powerful images and the playing ritual.

Through my work in the entertainment field I have seen with my own eyes the destruction of original assets in favor of digital conversions to save corporations time and money on long-term storage. I assumed the original Atari artwork had fallen prey to similar circumstances.

Thanks to *Art of Atari*, not any more.

After all these years, Atari enthusiasts can finally attribute artists to the exquisite imagery they created: Cliff Spohn to *Super Breakout* and *Brain Games*; Susan Jaekel to *Adventure* and *Circus Atari*, Steve Hendricks to *Defender* and *Steeplechase*; Hiro Kimura to *Yars' Revenge* and *Pac-Man*. Ironically, the artist behind my favorite, *Space Invaders*, remains a mystery. There might be a connection between *Space Invaders* and painter Gary Norman, the man responsible for the rock group Boston's iconic spaceship on the cover of the album *Don't Look Back*, but months of research couldn't verify that claim. The work is an intense illustration that tells quite a different story than its arcade cabinet art.

The VCS/2600 image depicts UFOs shooting ray beams down upon the planet. Look closely through the ship's transparent top and you will see an actual city inside it. My then-10-year-old self came to realize that the aliens were not there to destroy us; they were capturing cities to study us. Take a look at the box art inside this book and judge for yourself.

Throughout its almost 45-year history, Atari created hundreds of arcade and home video games, each an art form unto itself. The company enhanced that experience with original artwork encouraging consumers to embrace a new era of entertainment—the electronic age. As a child that grew into an adult during that wonderful "Golden Age," I was blessed to experience how Atari and video games changed the world forever.

Finally, this amazing imagery has received the recognition it deserves. So have the people behind it. ■

Robert V. Conte
Queens, NY
April 11, 2016

Robert V. Conte is a pop-culture consultant who, with a vast memorabilia collection, utilizes his expertise on a myriad of officially-licensed products for Disney, Warner Brothers, and Toho Co., Ltd. He lives in New York and has three children.

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PHOTO BY STEVE AND ANNE TRUPPE

TIM LAPETINO HAS been a fan of Atari art since childhood. An award-winning creative director and graphic designer, his design and branding work has been published in more than a dozen books and magazines. He co-authored the design inspiration book *Damn Good: Top Designers Discuss Their All-Time Favorite Projects*, and has written for *HOW*, *Geek Monthly*, *RETRO*, and other publications. He is the founder and Executive Director of the Museum of Video Game Art (MOVA), and is dedicated to chronicling the intersection of design and pop culture. He resides in Chicago with his wife and two kids.

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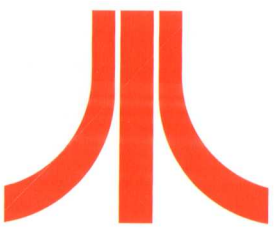

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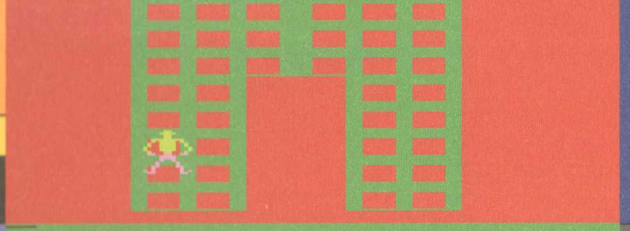

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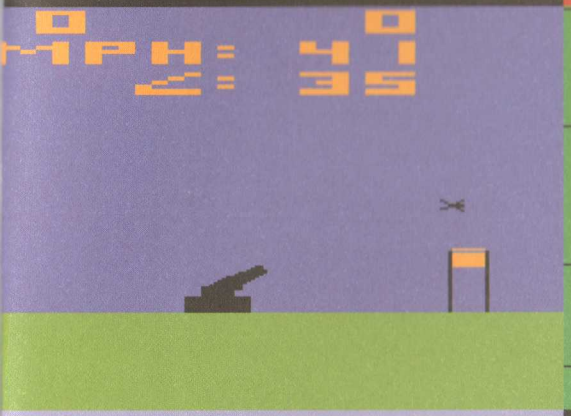
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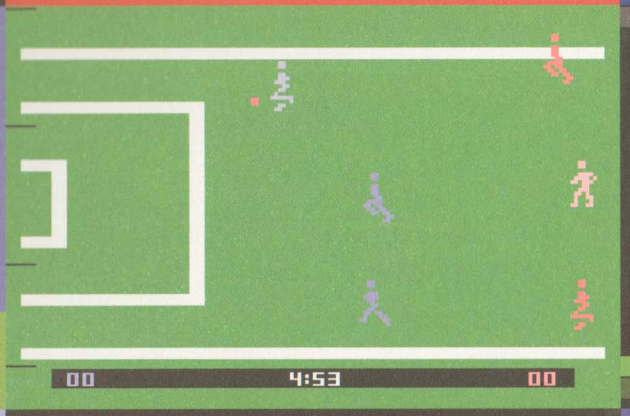
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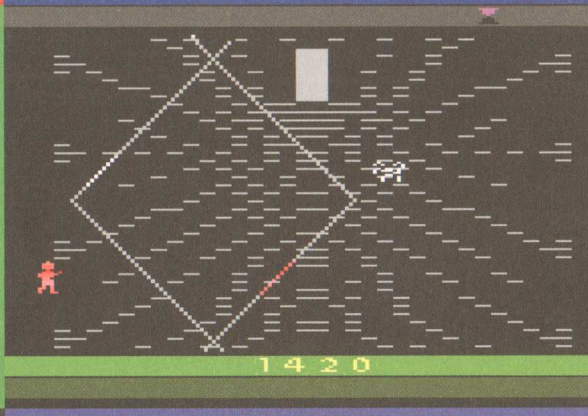
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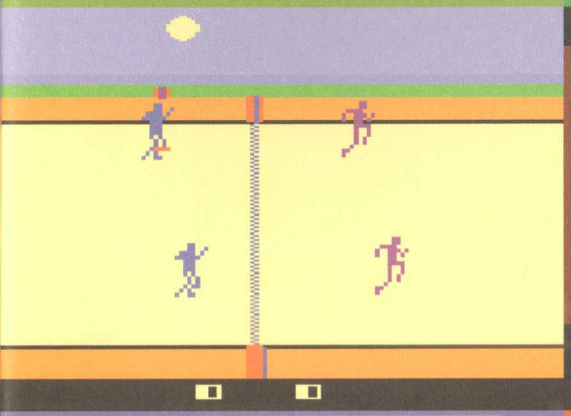

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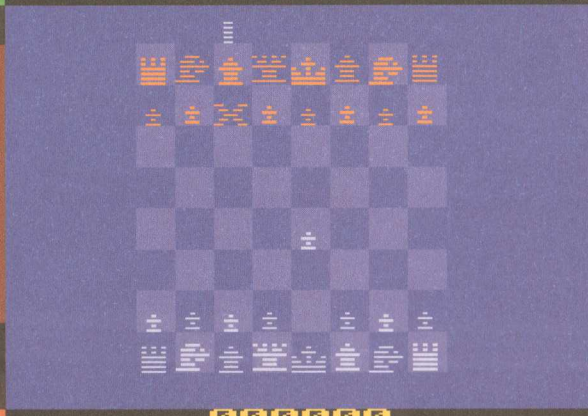

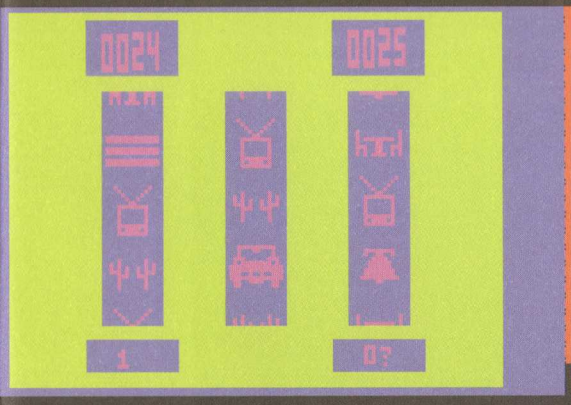
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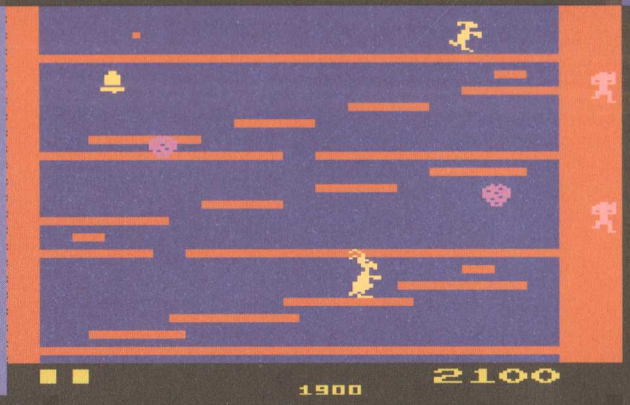
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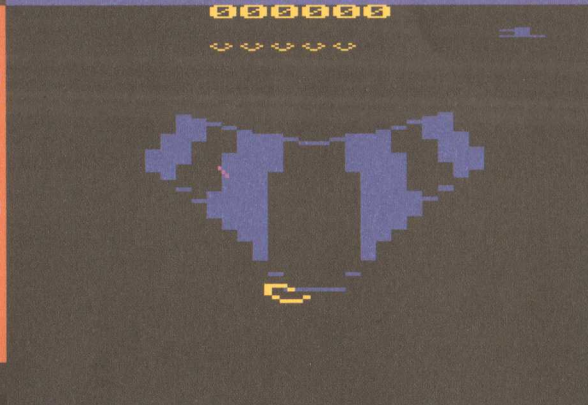
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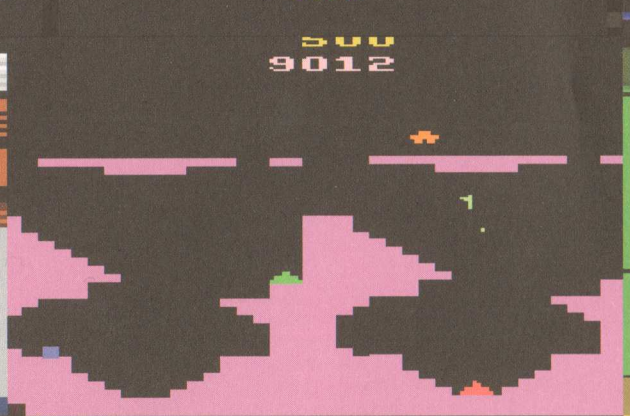
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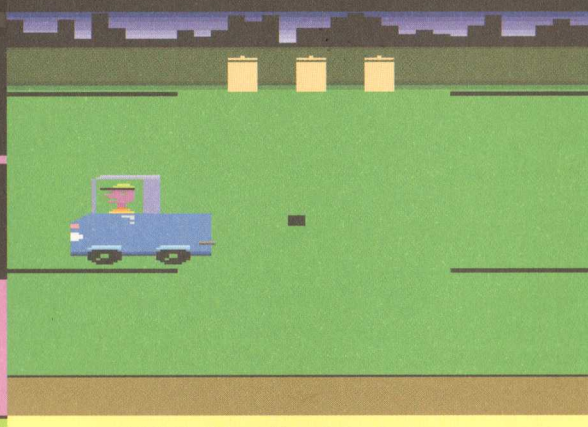

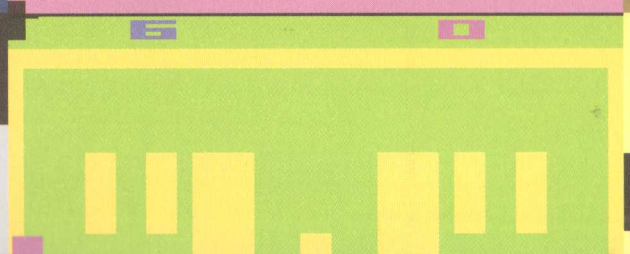

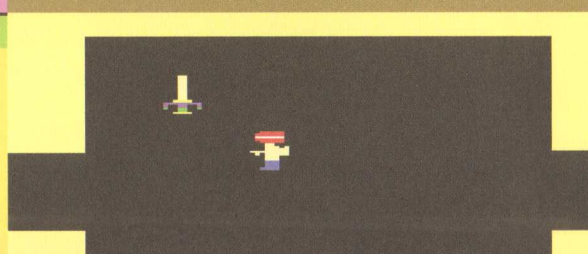

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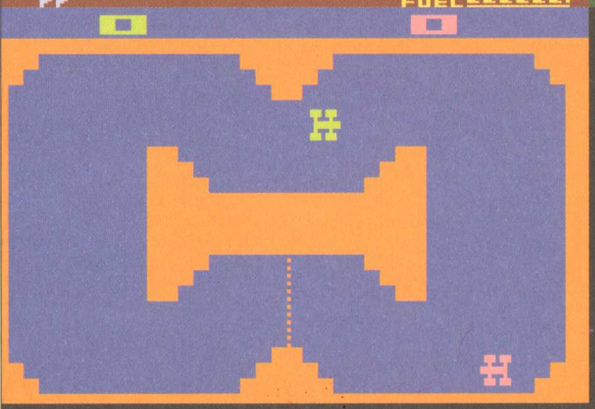

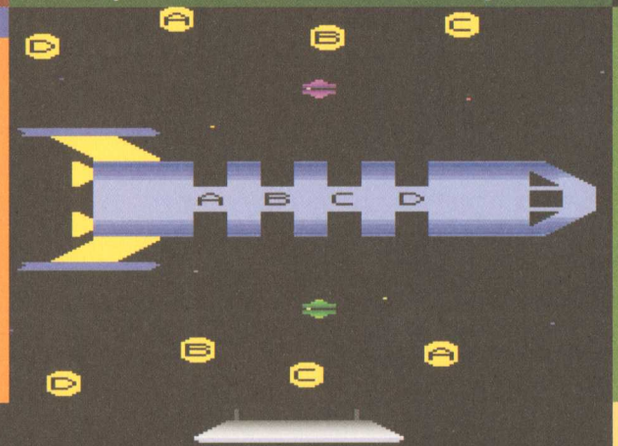
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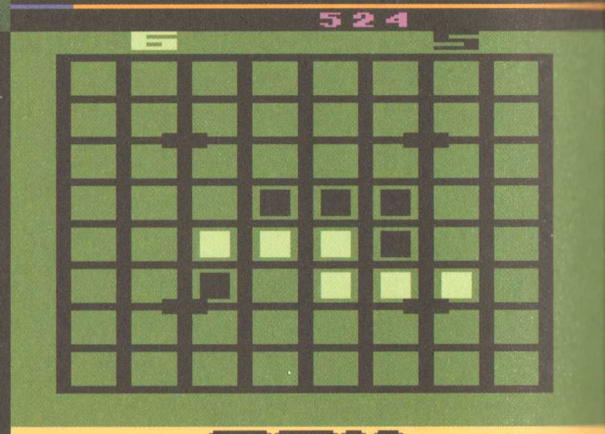
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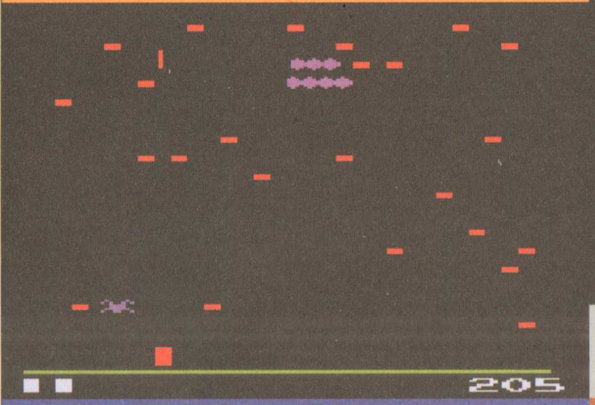
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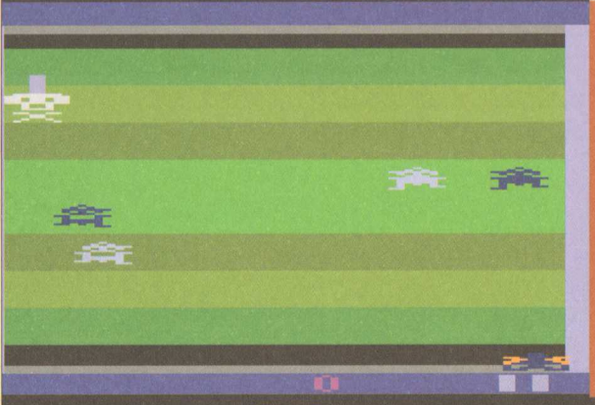

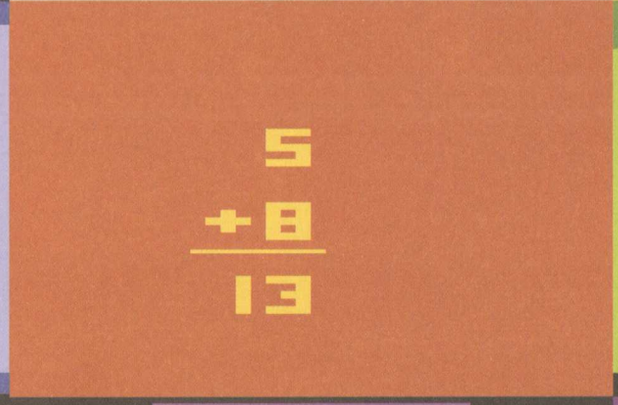
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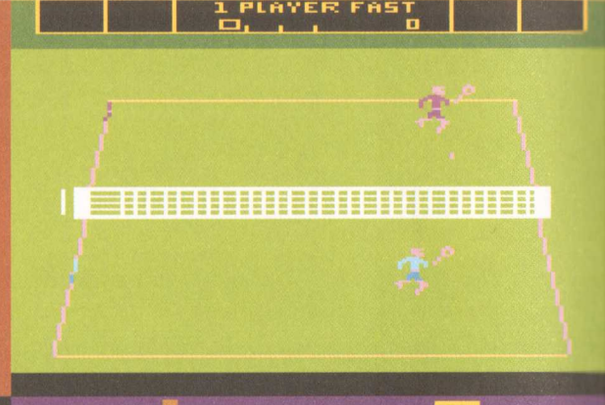

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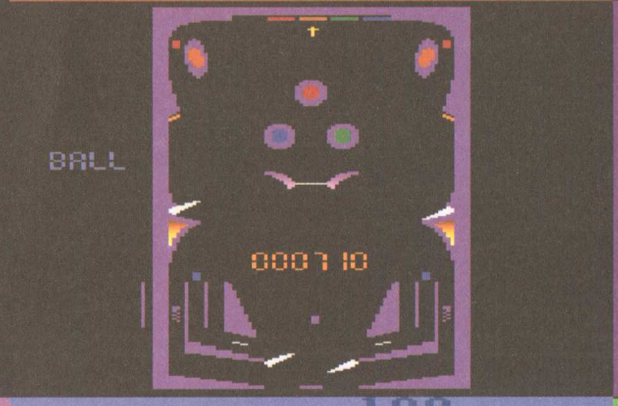
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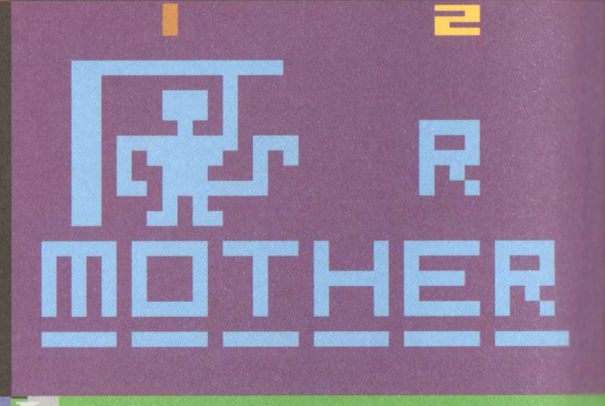
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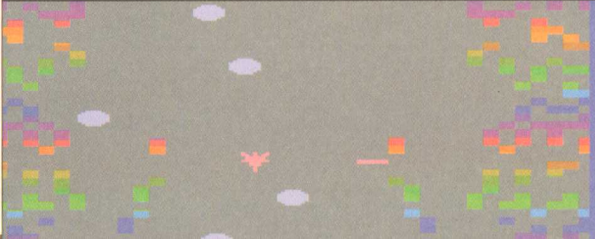

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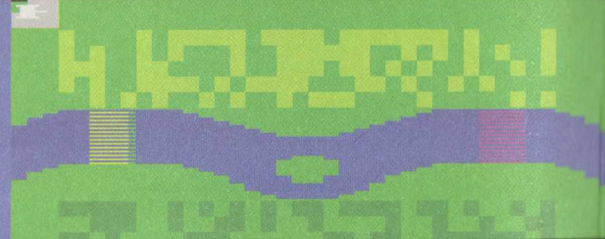

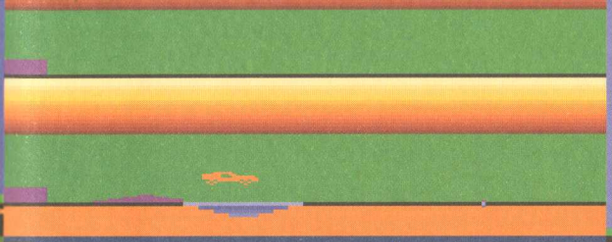

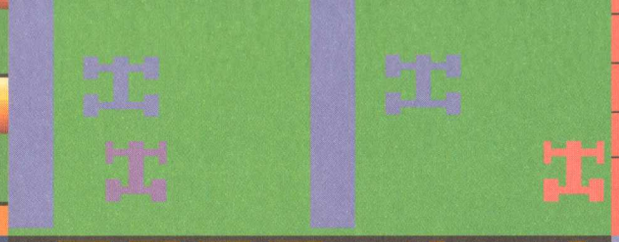

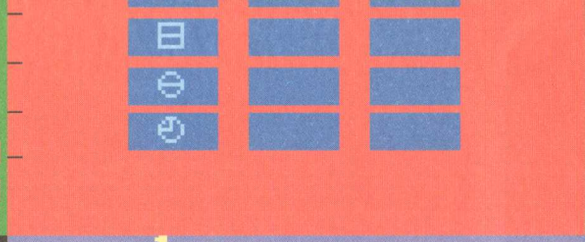

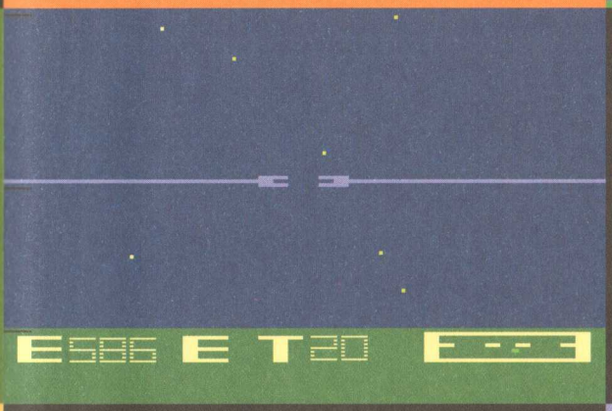

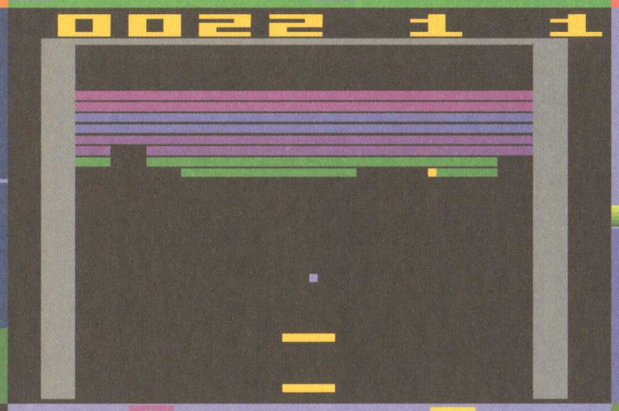
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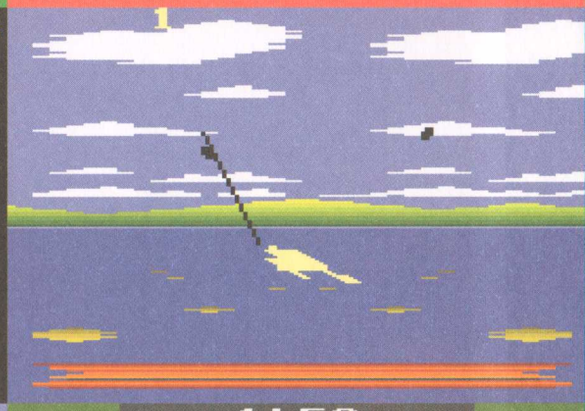
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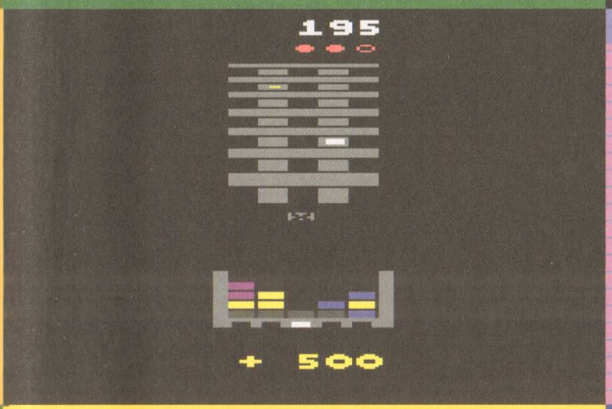
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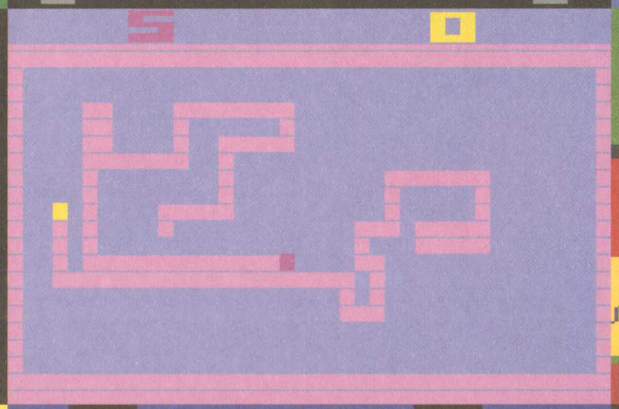

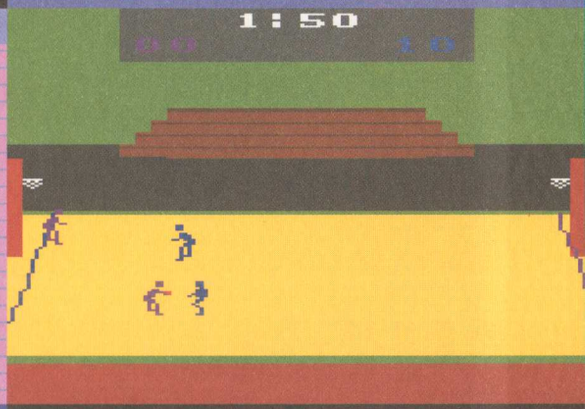
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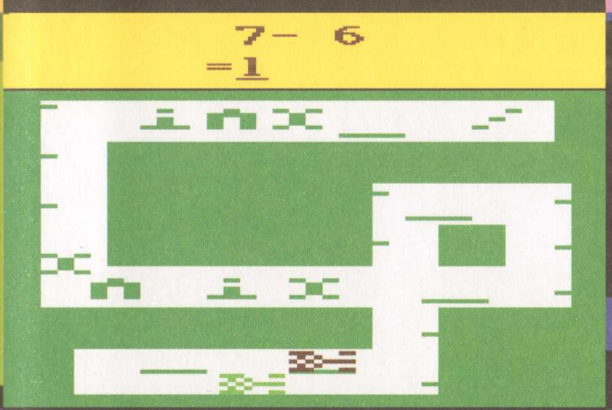
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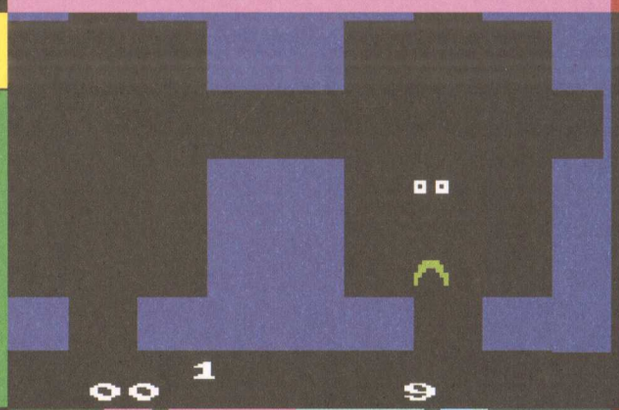

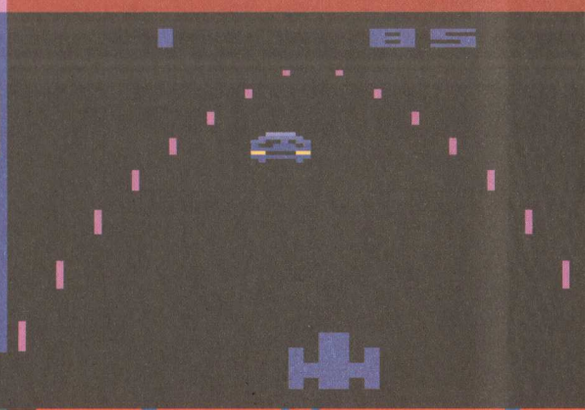

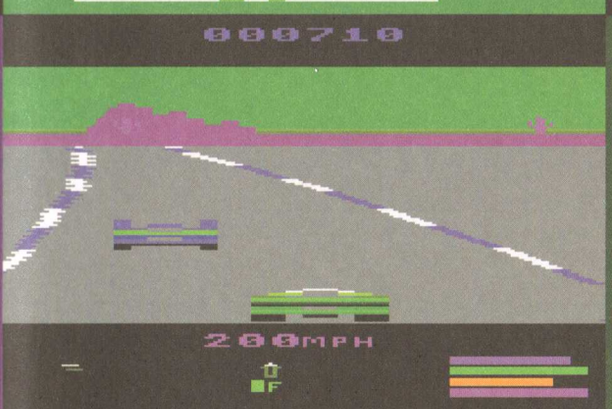
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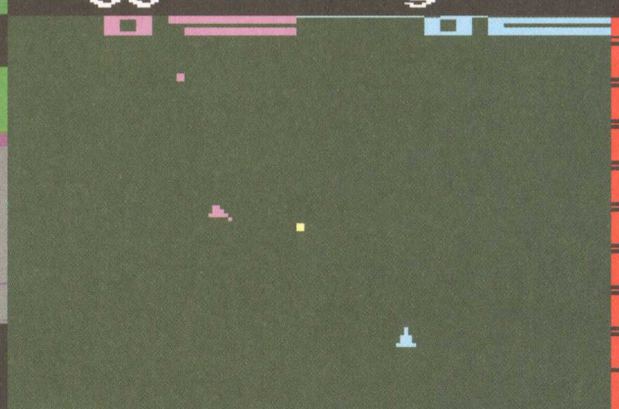

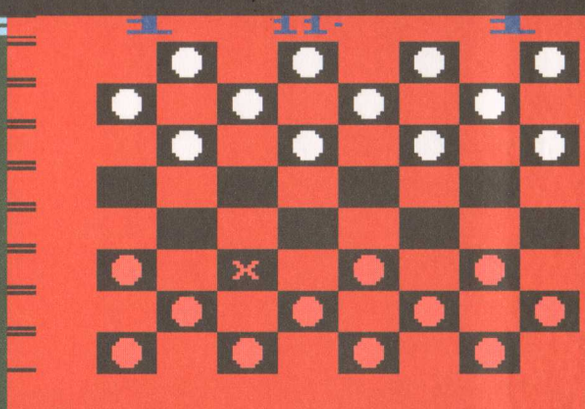

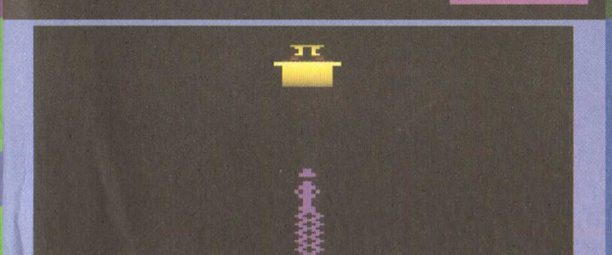

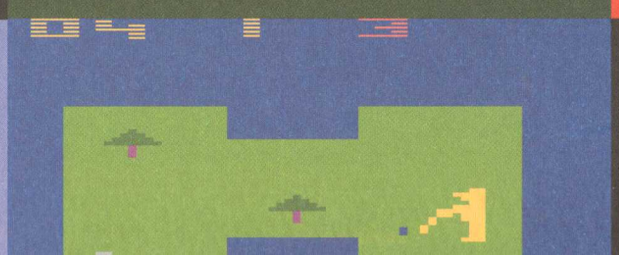

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