

THE NEWEST ² PLAYER
VIDEO SKILL GAME

PONG

from ATARI CORPORATION
SYZGY 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 Meisnick, 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 duo 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 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 come in a year or two anyway and I'd go back to Ampex."¹³

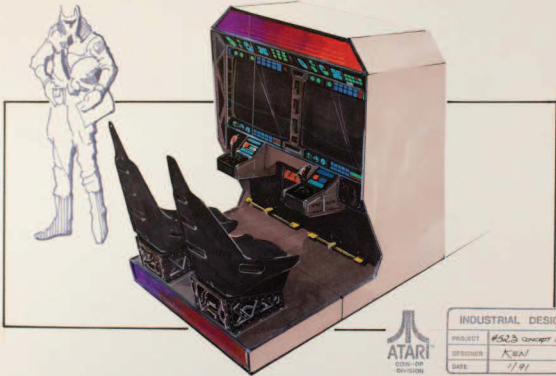
Contracted to provide them with both a pinball game and a video game, Alcorn developed what would eventually be called PONG. The now-famous game began life as a warm-up project for Alcorn, based on a demonstration Bushnell saw of the first-ever video game console, the Magnavox Odyssey. Created by Ralph 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.

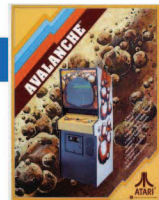
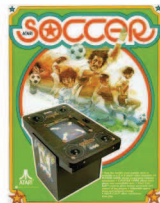
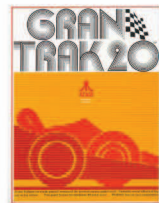
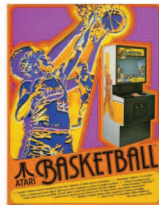
The team set up their prototype unit at a local dive called Andy Capp's, and soon bar owner Bill Gattis called Alcorn at Atari when the machine stopped working, basically because of overplaying—the malfunction was its popularity! Famously, Alcorn once discovered that the PONG machine seized up because its coin mechanism was overflowing with quarters.¹⁴ 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 best-seller 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





INDUSTRIAL DESIGN	
PROJECT	#523 Concept A
DESIGNER	KEN
DATE	1/91



« Arcade cabinet design concepts were used to work through design challenges as well as promote new visual concepts. Designer: Ken Hata »

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.

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 vacuumformed dimensional parts?' We had to keep coming up with something new. But in the end it was all about the quality of the software."

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 Handricks 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

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—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. ■



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

ASTERIODS

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 and color study for Asteroids (5200)
Artist: Terry Hoff



▼ Unused cover art for Asteroids (5200)
Artist: Bud Thorn



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

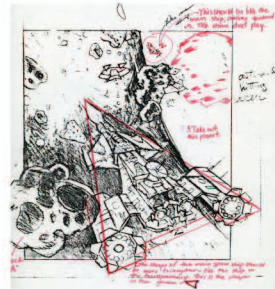
► Cover art for Asteroids (2600)
Artist: Chris Kanyon





◀ Cover art for Asteroids (7800)
Artist: Greg Winters

ASTEROIDS



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



◀ Promo art for Asteroids Deluxe (Arcade)
Artist: Marty Viljama



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.



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

▼ The original CX40 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 Atari console with joystick later used in the Atari 2600
Designer: Kevin McKinsey

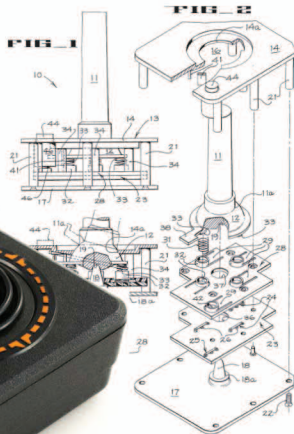
was designed to nest in that *Tank* game. It ended up as a standalone thing, but didn't go with anything else [on the 2600] visually, really. Initially they were going to be hard wired, but I thought if I put them on umbilicals, two people could play simultaneously. I tried to make the boot look ne-no-sense 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, 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."

► Illustration filed with US Patent # 4,024,787 for the engineering behind the joystick assembly



► The later CX40 model joystick



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 CX30 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 designed 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 1977.¹⁴ But a crucial part of McKinsey's design would see another life. The modular joystick's specific ally made to fit into the squared housing of *Tank II* would finally be released as the iconic Atari 2600 joystick.

When asked about the joystick, 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

