# **J** 2600 Connection

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**Issue Number 8** 

### Rare and Collectable Games

by Al Backiel

Part of the fun of the Atari 2600 is that there is such a wide variety of games to choose from. If you collect them, you will find that some are very common and some are rare and hard to find. Many collectors enjoy the "thrill of the hunt" in tracking down rare carts for the 2600. There's a good number of games that are jewels in the eyes of many collectors. Let's take a look at some:

Atari discontinued many titles relatively early in the 2600's life. These titles had primative graphics, and did not show a powerful example of how the 2600 could perform. This was important in winning new customers. These titles are Star Ship, Slot Machine, Street Racer, Surround, Miniature Golf, and a few others.

Atari later formed The Atari Club. Through the club's magazine, Atari Age, they sold a few cartridges directly to the members. If you didn't join the club, there's a slight chance you've even heard of these exclusive games. Crazy Climber, Quadrun, Gravitar, and Waterworld were club exclusives. Eventually, small amounts of these games, except for Crazy Climber, reached the store shelves. Waterworld, part of the Swordquest series, had a contest like Earthworld and Fireworld, but it was practically impossible to meet the contest deadline unless you subscribed and received one of the early cartridges. Many Swordquest fans are still trying to pressure Atari into releasing Airworld, the final game in the series.

Another interesting Atari cartridge is Rubik's Cube. Something must have happened to the licensing because most versions of this game, after packaging changes, are of the later release known as Atari Video Cube. If you have the Rubik's Cube version, consider yourself lucky.

Atari programmed a number of games that never got past the prototype stage. These games were in plain black cartridges, without labels, or boxes. They were intended for game reviewers and critics for input, comments, and suggestions before official release. Known prototypes are: Donald Duck's Speedboat Race, Sinistar, Dukes of Hazzard, Frog Pond, Dumbo's Flying Circus, Grover's Music Maker, The A Team, and Xevious. Some of these were only in PAL (European) format. Three other games from Atari, Asterix, Obelix, and Quadrun, had an actual, though small release in North America.

Sears was an early supporter of the Atari 2600. Not only did they sell the games and 2600 in their nationwide stores, but they were granted three exclusive titles from Atari: Stellar Track, Steeplechase, and Submarine Commander.

Ralston-Purina had a little-known promotion for their Chuckwagon dog food. In order to get Chase the Chuckwagon, you had to send cash along with a coupon. Johnson and Johnson also offered Tooth Protectors through a promotion ad found in the Sunday newspaper coupon inserts. It was a bit more visible than Chase the Chuckwagon.

Some games were just released in limited quantities or small releases. Imagic programmer and game designer Rob Fulop decided to market a cartridge called Cubicolor, on his own. Only 60 signed and numbered copies of Cubicolor were made. Commavid's MagiCard had a very small initial release of 500 copies. A second release was only available directly from Commavid. A similar situation occured with Video Life. Apparently, Commavid made it available only through a special offer.

X-rated games remained unseen to many gamers because they weren't on the shelves. Instead, they had to be requested. Mystique released Bachelor Party, Beat 'em and eat 'em, and Custer's Revenge. These were probably the most popular of the X-rated games. Playaround and Universal Gamex, two lesser-known companies, also released a few, but copies are scarce. The graphics were poor on these games, but the theme behind these games were of bad taste.

Parents didn't approve of the violent themes of Wizard Video's Texas Chainsaw Massacre and Halloween. A company called Palmex released a game called Fire!, but it was withdrawn from the shelves due to public outcry over the game's theme. The object of the game was to enter buildings, set them on fire, and exit the building before it was destroyed.

On the other hand, Sparrow sold their cartridge, Music Machine, only in religious stores. The game required use of the paddles and was intended to teach moral values.

We'll take a look at more rare games and rumored games in the next issue.



#### What's in this Issue?

- Part 1: Programming the 2600
- Solaris solution and tips
- Best Electronics
- Four Games from England
- How to make a "lefty" joystick
- Cartridge List: Sears
- Letters from our readers

Issue 8 Page 2



Dear Editor: I didn't buy one, but there was a cartridge from a company called Menavision or Menovision. It came in a box that opens like a book. The cartridge is a powder blue color and has a distinctive "T-bar" handle. Also, there were no instructions in any box. Have you ever heard of it?

-Brain Gilbur Northridge, CA

That's a rare one, Brian. Since it is a collector's item, snatch it up if you can. We checked the well-researched checklist of Atari 2600 cartridges and no such company is listed. If you could, please photocopy any information on it and send it to us. We will gladly add this new discovery to the list.

Dear Editor: Since January 1991, I've been sending letters to Atari Corporation in Sunnyvale, CA, but have not received any kind of catalog or listing of their 2600 line. The last letter I sent was in early October. What's happening with Atari? Are they still selling 2600 products or have they decided to drop it? I've even begged for a response. Also, would you consider in creating a special edition club game cartridge to be available only to subscribers? It would not hurt to talk to Atari or Absolute Entertainment, or maybe you could strike a deal with a foreign company which still makes 2600 games.

Talking about the foreign market, how about a European correspondent for your newsletter? He or she could send in articles—how the 2600 has affected their part of the world, product availabilty, interviews, reviews, etc. I'd love to find out if the 2600 is still popular in Japan, England, and other countries.

-Dominick Roman Bayamon, Puerto Rico

Atari moved their entertainment division to Lomard, IL afew months ago. The Sunnyvale address handles the Atari computers. Contact: Atari Entertainment, 330 N. Eisenhower Ln., Lombard, IL 60148, (708) 629-6500. For customer service and ordering products, call (708) 629-1386 Monday through Thursday.

Atari is feeling the pinch in the videogame industry, with the success of Nintendo and other competitors. Atari's plans for the 2600 are uncertain. But, Atari is hanging on to the 2600 and they have not discontinued it as of yet. Keep your fingers crossed. We hope the 2600 lives a long and proserous life in the videogame world.

A special cart for subscribers is a great idea. Cutting a deal with a game company would be difficult, but not impossible. We contacted Absolute to see if My Golf (see Issue 6, page 4) could be offered to subscribers, but the inventory had been sold. Besides, it was in PAL (European) format. Perhaps there is a unknown game out there, hundreds of copies sitting in a warehouse somewhere. This would be an ideal situation. Maybe Activision or some company decided not to release a game. What about Airworld (by Atari) or Turbo (by Coleco)? Hmm....

A correspondent from a foreign country sounds wonderful. As of date, this new sletter is only distributed in North America. If I can find such a contact, I will be happy to take action on this idea. We've had one inquiry from Australia and one from Holland, but that's it for Europe. Hopefully, this will change. I know the 2600 is popular outside of North America, and I'm sure we'd all love to learn more about the 2600 in foreign lands.

Dear Editor: Was Name This Game (by US Games/VidTec) ever named? I think it should have been called "Suba Duba."
-William W. Smith Jr. Bristol, VA

Our research shows that Name This Game was left to be named by the customers. They supposedly held a contest in which the customers submitted possible names and the winner would be awarded \$10,000.

Galleon's Gold, Treasure of the Deep, Guardian of the Deep, and Guardian of the Treasure are the renames we came across, but we are unsure if there was an actual winner. **Dear Editor:** Were the last two Swordquest games ever created?

-Mark Anderson Macomb, IL

Earthworld, Fireworld, and Waterworld were released. Waterworld was released in smaller quantities and was harder to find than the first two. Airworld, the last game of the four, was never released. We published the complete solutions to the three released games in issues 4,5, and 6.

Dear Editor: In response to a letter in issue 7, I have played Robot Tank (by Activision) hundreds of times on my 7800 without the slightest problem. I only played Decathlon (by Activision) once, but it seemed to work fine.

I would like to see an article on the fate of Swordquest: Airworld. I often feel like I have three parts to a set of four—a really attractive set. The information provided by The 2600 Connection has been invaluable. For example, I had completely forgotten how to solve Raiders of the Lost Ark.

-Craig Pell Wilmington, DE

We're stumped! Either Activision fixed the bugs in the games or they work on certain models of the 7800. There are two different models of the 7800. Anyway, it's good to hear that folks are playing these two 2600 games on their 7800 systems. There are a few compatability problems with some 2600 games and we have an upcoming article on this subject.

There's not much information about Airworld, except that it was never released. If any readers can help out with an inside scoop about Airworld, please let us know.

I'm glad you appreciate the information we provide. It's letters like yours that encourage us to continue publishing the newsletter.

Send your questions and comments to:

THE 2600 CONNECTION P.O. BOX N 664 WESTPORT MA 02790

### Cartridge List Part 7: Sears

by Tim Duarte

For many years, Sears & Roebuck, a popular nationwide department store, helped Atari Corporation. During the late '70's and 80's, Sears was given permission to market the 2600 video game system as if it were their own creation. They even changed the name to "Telegames Video Arcade." It was the same casing, but it did not mention Atari on it at all, All Atari 2600 cartridges were 100 percent compatible with the Sears unit.

Sears offered the 2600 clone in all stores and it was very popular in the annual Christmas wish book catalog. They also sold a number of Atari's games under a different name (see list). For example, Tank Plus was actually Combat.

I chose to buy a Sears system years ago. One reason was because the machine came packaged with Target Fun (Air Sea Battle) instead of Combat. Who wasn't tired of Combat? Another reason was because most stores could not keep the Atari VCS systems in stock—they sold too quickly! After all these years, I still have the same Telegames VCS. It works fine. although I had to buy a replacement for the power pack.

Sears stopped offering the 2600 line in 1989, with the introduction of the portable Lynx system. It's too bad they are no longer concerned with the 2600; it's an ideal system for youngsters.

#### **Sears Exclusives**

[manufactured, but not sold, by Atari]

49 75126 Steeplechase

49 75142 Submarine Commander

49 75159 Stellar Track Super Breakout\*

\* exclusive through 1981

### Don't miss out...Subscribe!

One year (6 issues) for only \$6.00 cash, check, or money order payable to: Tim Duarte Our address is on the bottom of page 2 99801 Tank Plus (Atari Combat)

99802 Target Fun (Atari Air-Sea Battle)

99803 Outer Space (Atari Starship)

99804 Speedway II (Atari Street Racer)

99805 Blackjack (Atari)

99806 Pong Sports (Atari Video Olympics)

99807 Chase (Atari Surround)

99808 Math (Atari Basic Math)

99811 Spelling (Atari Hangman)

99812 Space Combat (Atari Space War)

99813 Breakaway IV (Atari Breakout)

99814 Memory Match (Atari Hunt & Score)

99815 Code Breaker (Atari)

99816 Poker Plus (Atari Casino)

99817 Chess (Atari Video Chess)

99818 Brain Games (Atari)

99819 Baseball (Atari Home Run)

99821 Race (Atari Indy 500)

99822 Gunslinger (Atari Outlaw)

99823 Slots (Atari Slot Machine)

99824 Capture (Atari Flag Capture)

99825 Maze (Atari Slot Racer)

99826 Basketball (Atari)

99827 Football (Atari)

99828 Canyon Bomber (Atari)

99829 Arcade Golf (Atari Miniature Golf)

Cannon Man (Atari Human Cannonball) 99841

99842 Bowling (Atari)

99843 Dare Diver (Atari Sky Diver)

99845 Superman (Atari)

99848 Backgammon (Atari)

49 75187 Star Raiders (Atari)

3-D Tic-Tac-Toe (Atari)

Adventure (Atari)

Arcade Pinball (Atari Video Pinball)

Asteroids (Atari)

Checkers (Atari Video Checkers)

Circus (Atari Circus Atari)

Dodger Cars (Atari Dodge 'Em)

Golf (Atari)

Maze Mania (Atari Maze Craze)

Missile Command (Atari)

Night Driver (Atari)

Othello (Atari)

Soccer (Atari Pele's Championship Soccer)

Space Invaders (Atari)

Warlords (Atari)

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### **CONTEST**

The contest from Issue #7 was a tough one; you had to be quite a videogame expert to know which 2600 game doomed the market. Our winner comes from Staten Island, NY. Terence Micharoni, publisher of ZAP! and all-around video game buff, won the raffle with the correct answer. ET: The Extra Terrestrial is said to be the game that doomed the 2600 market.

Name the Atari 2600 games in which the following characters appear.

- 1. Evil Otto
- 2. Panama Joe
- 3. Pitfall Harry
- 4. Coily
- 5. The Mad Bomber
- 6. Colwyn
- 7. Harry Hooligan
- 8. Quickclaw
- 9. The Raving Lunatic
- 10. The Green Goblin
- 11. Leatherface
- 12. Lex Luthor
- 13. Winky
- 14. Ootile
- 15. Worluk

Bonus: Dominick, Marcus, Felipe, and Restivo (King Frederick's sons)

Send your answers on a postcard

2600 Contest P.O. Box N 664 Westport, MA 02790

Prize: ET: The Extra Terrestrial (by Atari) (It's actually a decent game)

Drawing date: March 1, 1992



Issue 8 Page 4

#### PART ONE OF FOUR



#### Key to acronyms

CPU: Central Processing Unit DMA: Direct Memory Access

IC: Integrated Circuit

K: Kilobytes, 1K=1024 bytes RAM: Random Access Memory ROM: Read Only Memory

RDY - The control signal for slow memory

to indicate if data are valid

### News & Notes

Atari-Ville, an Atari dealer in Texas, has the Romscanner (by Marjac). This hardware device hooks up to your 2600 and allows you to switch between 10 of your favorite video games with the touch of a button. When we last spoke to Atari-Ville, they had around 25 left in stock. The Romscanner sells for \$9.99 (plus shipping). Atari-Ville also sells 2600 and 5200 cartridges. Call or write for a catalog. Atari-Ville, 113 S Plant, Boerne, TX 78006, (512) 249-3024 or (512) 736-1405.

We are happy to welcome a brand new newsletter which focuses on the Intellivision system. Not many newsletters are devoted to just one video game system. Write: Intellivision Lines, c/o Ralph Linne, 8385 Findley Drive, Mentor, OH 44060-3811. Subscriptions are available for \$6 (6 bimonthly issues). Sound familiar? Ralph says the idea to publish I.L. came to him as he was reading The 2600 Connection!

Are you interested in starting up a newsletter, but you don't have the know-how or equipment? If you need help, I am providing my desktop publishing services for the general public. Please write or give me a call and we can discuss your needs further. Contact: Timothy Duarte, P.O. Box N 664, Westport, MA 02790. (508) 636-3674.

### Programming the 2600

by Harry Dodgson

How do games actually work on the 2600? Let's take a look. This topic may be a bit advanced for some readers, but if you are computer literate and have some idea of assembly language, you may be able to follow. Also, some television principles are introduced.

The Atari 2600 consists of three important ICs: the CPU (6507), the Television Interface Adapter (TIA or Stella), and the RIOT (6532).

The 6507 CPU is a 6502 with two important exceptions. It only has external address lines for 8K of memory and there are no interrupt lines connected. This is not as limiting as it seems if you examine some of the games for the machine.

The Stella chip makes all the video displays and sounds for the 2600. It also has six registers which are used as A/D converters and for the fire buttons on the joysticks. The chip also controls the RDY line of the CPU to initiate horizontal synchronization control. Stella is not a DMA chip. The CPU must write each line of data into the chip registers as it draws the screen. This makes for very low CPU availability. Stella is addressed through 44 write-only registers and 13 read-only registers mapped to the low end of page 0. A few of these registers will be revealed and I will include a demo to show what can be done with them.

The RIOT chip interfaces to all the console switches, excluding power and the joysticks. It contains the only RAM in the system and a general purpose timer. The RAM is mapped to the high end of both page 0 and page 1. This means that it acts as both page 0 fast access memory and the 6502 stack memory. An interval timer and the I/O ports are mapped to both pages 2 and 3 in a similar fashion to the RAM.

In order to produce a video display, the CPU must write to several registers of the Stella chip in a timed sequence. This is because Stella does almost nothing unless

told to do so and there are several things that must occur to drive a television display. Any program for the 2600 must do the following:

- 1. Start with the vertical blanking interval
- 2. Start the vertical sync interval immediately; wait for about 280 microseconds (about 80 instructions)
- 3. End vertical sync; the game computations must be done now. The time available here is at least 1300 microseconds (400+ instructions)
- 4. End vertical blanking
- 5. Set up each line of the video display as it is drawn. There is time for about 6 instructions to the video chip in between each screen line. Atari recommends changing the display every other line to gain more processing time.
- 6. Loop back to step 1

The reason for these steps is based in how the television displays a screen with the 2600. Every 60th of a second, a new image must be drawn on the television. It is not displayed all at once though. It is drawn out one line at a time going from left to right and top to bottom. There is a period between successive lines referred to as "horizontal blanking." This means that the screen drawing is temporarily stopped so that the electron beam can be moved back from right to left without showing on the screen. At the bottom of the screen, there is also a similar period called the "vertical blanking." This allows the beam to move back to the top of the screen. There is also a vertical sync period which allows the television to determine where the top of the screen is. Stella generates the horizontal sync automatically, so the program must stay in sync with it. From the television's point of view, this becomes:

- 1. turn off electron beam
- 2. & 3. go back to top of screen
- 4. turn electron beam back on
- 5. draw a screen
- 6. at bottom of screen, start over

From the computer's point of view, the code looks like this:

```
Stella Register Declarations
 VSYNC
           .EQU
                     $00;
                                controls vertical sync
 VBLANK .EQU
                     $01;
                               controls vertical blanking
 WSYNC .EOU
                     $02:
                               allows CPU to sync with horizontal blanking
           Timer Registers
                     $0284;
 INTIM
           .EQU
                               reads a current timer value
 TIM8T
           .EOU
                     $0295;
                               stores a value to count down every 8 clock periods
 TIM64T
          .EQU
                     $0296;
                               stores a value to count down every 64 clock periods
 Start:
           LDA
                     #$02
                     WSYNC; wait for horizontal sync
           STA
          STA
                     VBLANK;
                                          start vertical blanking
          STA
                     VSYNC; start vertical retrace
          LDA
          STA
                     TIM8T;
                              set timer for vertical retrace duration
Loop1:
          LDY
                     INTIM
          BNE
                     Loop1;
                               waste time
          STY
                     WSYNC; wait for horizontal sync
          STY
                     VSYNC; end vertical retrace period
Proc:
          LDA
                     #$24
          STA
                     TIM64T; set timer for next wait
; a game would do all its logic here
Loop 2:
          LDY
                     INTIM
          BNE
                     Loop2;
                               waste time
                     WSYNC; wait for horizontal sync
          STY
          STY
                     VBLANK:
                                         end vertical blanking
                               number of lines to draw on screen
          LDX
                     #$E4;
Loop 3:
          STY
                    WSYNC; wait for horizontal sync
; CPU must store appropriate patterns into graphic registers to display something on
each line. If it doesn't change things, then they will stay the same as the previous line.
          DEX
          BNE
                    loop3
          JMP
                    Start:
                               do next screen (every 1/60th second)
.END
```

Combat (by Atari) performs the vertical retrace with the following lines, which amounts to almost the same thing:

```
Start:
        LDA
                 #$02
        STA
                 WSYNC
        STA
                 VBLANK;
                                   start vertical blanking
        STA
                 WSYNC
        STA
                 WSYNC
        STA
                 WSYNC
        STA
                 VSYNC
        STA
                 SYNC;
                                   start vertical retrace
        STA
                 WSYNC
        STA
                 WSYNC
        LDA
                 #$00
        STA
                 WSYNC
        STA
                 VSYNC;
                                   end vertical retrace
```

Proc:

### **Best Electronics**

by Chris Freemesser

So you have an Atari 2600, and possibly other Atari products such as a 5200, or 7800, and maybe even a Lynx. "If only there was some place I could buy stuff from...a place that has everything!" Have you ever had this thought? Fear no more, here comes Best Electronics!

Best Electronics has been in business for many years now, dealing solely in Atari equipment. This includes all computers, peripherals, video game equipment, and memorabilia. However, their most popular aspect is the selection of parts. They have almost every part for the different revisions of the video game systems that were built. This includes all three models of the 2600, both of the 5200 models, and both of the 7800 models. Betcha didn't know there was more than one 7800 model, did ya?

Best actually sells the round foam pads that cover the console switches inside the 2600. Not only do they sell parts, but they offer field service manuals and diagnostic hardware to fix these machines too. Needless to say, parts for joysticks and trackballs are readily available. There's also a few products of their own as well—The Best Joystick, The Best Light Gun, and more. They also offer memorabilia from the "golden age" of Atari. Coffee mugs, T-shirts, posters, paper weights, dust covers, three ring binders, and sew-on patches are available.

In the software area, Best doesn't come up short. They have a selection of software for all Atari systems, but not a huge offering. Give them a call on the phone, or request for a current listing of available cartridges for your 2600 system.

In summary, Best Electronics lives up to its name. If you need a part, a cart, or some tidbit, this is the place to go. They offer a catalog, which is updated every few years. Their 9th catalog was 47 pages long! This catalog contains the entire inventory, with the exception of cartridge titles, and features pictures of many different prototype items that never made it to the public. The pictures of the pre-2600 game machines, Ultra-Pong, Stunt Cycle, Video Pinball, and Cosmos, are very interesting. For "Atari heaven," contact:

Best Electronics 2021 The Alameda, Suite 290 San Jose, CA 95126-1127 (408) 243-6950

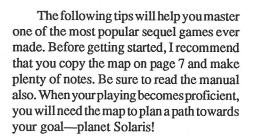
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The solution and tips to one of the best games Atari Corp. ever released!



### **SOLARIS**

by Scott Stilphen



General Tips: The farther from your starting point, the harder the enemy will fight. They will maneuver faster and fire with greater accuracy. Planet rescues, minefields, and corridors will take longer to complete, and attack groups will increase in their accuracy and size. Fight multiple ships one at a time.

Enemy ships will not appear until the planets scroll off. Use of a second joystick button is a must for serious playing. Speed is important when using a plan. Waiting for the map screen to appear can waste valuable time. Somewhere, a base may be under attack and by the time you reach it, it will probably be destroyed. This results in a red zone, something you don't want, if possible. You can't save every base, but the more you save, the easier it will be to play. Learn to use the distance gauges early on. That way, if the scanner becomes damaged, you won't have to waste time getting it repaired.

In using the map, S is your starting point and E is the location of Solaris. The galaxy is divided into two parts: quadrants 1-7 and 8-14. Notice once you enter quadrant 8, you cannot go back—a star cluster seals up the exit. Note that some exits are only one-way. Wormholes allow you to pass through most star clusters, but sometimes it depends on what side of the cluster you enter it. Attempting to map wormhole routes can be tricky. Some wormholes move between sectors, and it will have different destinations for each sector it occupies.

Cobra Ships: Fighting a live cobra snake is probably easier. Try not to move too much left or right. Push forward, keeping the ships near the top of the screen. Be careful—

pushing forward too much will cause the ships to wrap around and appear right next to you! A good strategy is pulling down, firing, and quickly pushing forward again. Cobra ships are the hardest enemy to hit, and will not always get away without a loss. Upon reaching the Solaris quadrant, I'm sure you'll find them a worthy opponent.

Flag Ships: One tip to remember is these ships cannot fire while releasing distractors. However, in higher levels of the game, they will pair up. One flagship will release distractors while the other fires at you. Concentrate on the flagship's movement and try not to worry about distractors.

Mechnoids: These ships are very dangerous. Keep them in front of you, since they tend to dart to one side before firing. If their accuracy is good, it's almost impossible to avoid it because their fire comes at such a steep angle to your ship.

Gliders and Raiders: After a few Zylon planet rescues, they can be formidable opponents. Keep the stranded cadet off to the side, out of sight, until you are near him. Steer the enemy to one side and push forward to quickly pass them. Sometimes you can easily pick them off at a distance, but fly slow when using this strategy.

Targeters: Your reflexes are really put to the test here. Make use of movement to steer approaching targeters away before they get too close. Keep firing while moving and you shouldn't have too much problem with them.

Kogalon Pirates: They like to sneak a shot at you when "zooming" in and out of the screen. Force them to the top of the screen and fire when they come into view.

Corridors: Don't fire until you enter the corridor. Once inside, fire like mad! It's easier shooting the guardians than avoiding them. Pull back to fly at the slowest speed. Keys can be difficult to get, especially



when placed at either end of the corridor. Your ship must be right over the key, otherwise you will miss it and crash into the Ion door. In harder corridors, losses can be heavy.

Final Notes: It will take some playing to get the feel of each enemy's movement, so don't be frustrated at first. This is one game you won't beat overnight. Make use of the map and plan out a pattern—I could tell you the pattern I used, but what challenge would that be?

I also modified a standard Atari joystick to reverse the controls when flying in a Red Zone. I know what you're thinking... cheating, right? Those of you who have played this game will side with me; completing this game requires every trick in the book!

I hope this information helps you enjoy the game even more. It's probably the most challenging and demanding 2600 game ever programmed. It boasts incredible graphics and sound quality, with no flickering. Nice touches, such as Cobra ships appearing, add to the game while planet take-offs and warp scenes are particularly appealing. Douglas Neubauer, the designer and programmer of Solaris, also created Star Raiders, Radar Lock, and Super Football. These last two games are excellent and really push the 2600 to the limit. We can only hope that Douglas and Atari will continue to turn out games of such quality for the 2600.

Refer to map on page 7 →

#### **BACK ISSUES**

#1 Summer 1990

#2 Fall 1990

#3 Winter 1990/91

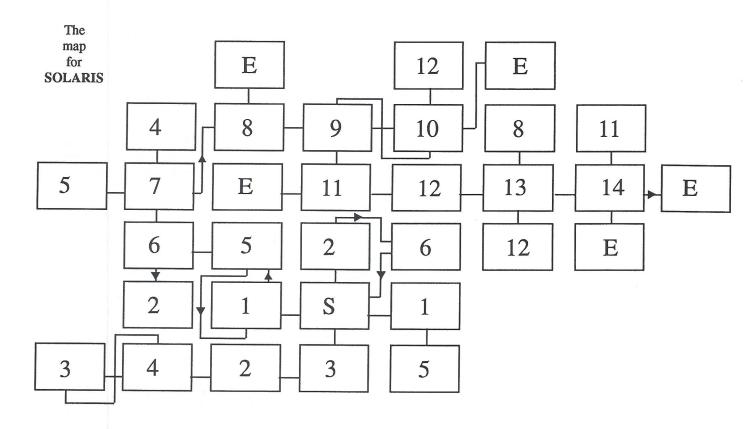
#4 Spring 1991

#5 Summer 1991

#6 Sep/Oct 1991

#7 Nov/Dec 1991

\$1.50 each



### How to Make a Left-Handed Joystick

by Mark Androvich

I have tried dozens of joystick controllers for the Atari 2600, but the classic Atari joystick remains my favorite. In my opinion, it is the most durable and most responsive of them all. The only drawback is the location of the single fire button at the top left of the controller. This makes it difficult for left handed players, since they have to reach across the top of the stick with their right hand to utilize the fire button. Rather than buying a two-button joystick, you can convert your Atari joystick into a left-handed controller quickly and easily.

The idea is simple—lefties need a fire button to be located at the top right corner of a controller. Simply rotate the joystick so that the fire button is in this position. If you push forward, your character will move left. Pushing right moves up, and so on. Don't worry! Using a Phillips screwdriver, unscrew the four screws on the bottom of

your joystick and remove the top from the base. Inside you will find colored wires attached to a small circuit board. Each color corresponds to one of the four compass directions, neutral, and the fire button. All you need to do is unclip the colored wires and re-clip them so that the joystick is now oriented with the fire button in the top right corner.

Inside the oldest Atari joysticks, there are three wires on each side of the circuit board. On the left, from top to bottom, are orange, white, and green wires. On the right are brown, blue, and black wires. Unclip the white, brown, and green wires. Re-clip the brown wire where the white used to be, the white wire in place of the green, and the green wire in brown's old slot. The wires should now look as follows: On the left side, from top to bottom, orange, brown, and white. On the right side are green, blue,

and black. Put the joystick back together, being careful not to lose the small spring under the red fire button.

If your Atari joystick is newer, all the colored wires will appear on the right side of the board in the following order: Brown, white, black, blue, green, and orange. Switch brown to blue, white to brown, blue to green, and green to white. Reconnect the joystick top to the base. You now have a joystick suitable for lefties.

The process should work with any Atari-compatible joystick in which the wires are not permanently connected to the board. If the wires are not colored, you'll have to figure out which wires to unclip and reconnect yourself.

For a great practical joke, give a right-handed opponent a "lefty" joystick. While they are trying to figure out how to move, you'll be on your way to victory!

## Four Games From

Russ Perry Jr.

England

In issue 6, we featured a review of My Golf, a 2600 game from Australia. Now a new source of foreign games has been found-Telegames UK. They offer four games in PAL format and we've got reviews on them.

Meteor Defense (by ITT Family Games) Meteors fly from right to left and you can shoot them or let them pass by. Your score decreases if the meteors get by. There are also UFOs that must be shot. You can only fire to the right, but you can maneuver within a narrow vertical band to get around objects.

The game is very easy at the beginning and very hard after the 100,000 mark. While the difficulty ramps nicely, the game is basically boring and occasionally frustrating when you are unable to stop one or more UFOs. I also found an interesting glitch: If you manage to shoot a UFO as you die from another UFO getting by, your ship's explosion is more elaborate than normal.

#### Skin Diver (by Sancho)

If you have Scuba Diver (by Panda), then you already have this game. It's possibly the most frustrating, unplayable, and unfun game ever devised. Pass on this one.

#### Forest (by Sancho)

In this game, you are a woodcutter on your way to chop down a tree. You must jump over or chop the animals that are coming at you. A bird above you drops stones that will freeze you. If you are jumping, you will be frozen in mid-air.

While simplicity can be a plus for some games, in this case it makes the game mostly boring.

Wing War (by Imagic)

In Wing War, you are a dragon that flies and collects crystals. Some crystals have to be brought back in order, and you can't enter some rooms until you've grabbed a crystal in the room you plan to leave.

Wing War is the best game of the four, but it is still very frustrating. The biggest problem is the lack of proper documentation. The booklet is sketchy and you are left to figure out things you shouldn't have to. The control scheme is similar to Joust (by Atari), but maneuvering is more difficult. Fireballs are fired up by pushing up, and it is hard not to waste them when trying to go up. Your reflexes will want to push the joystick up, when all you need to do is flap. Collecting crystals becomes difficult quickly. Some disappear too quickly to grab, and others manage to land on a screen edge, often sending you into the next room without the crystal you sought. Flying back to your den without losing crystals by touching obstacles or enemies becomes increasingly harder, too.

Note: PAL games are playable in the USA. You will have to adjust the horizontal hold on your television set and alter the color controls. PAL format is intended for play in European countries.

These games are available from Telegames UK in England, and cost £9.95 each. Postage is £12 for all four. They can accept a Visa credit card, by mail only, or send a postal money order. Rates fluctuate, but it adds up to around \$90 for all four.

> **Telegames UK** Wigston Leicester LE8 1TE **England**

phone: 011-44-533-880445

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### Classified Ads

Wanted: Steeplechase, Tutankham, F-14 Tomcat. For sale: Amiga Joyboard. Tim Duarte, P.O. Box N 664, Westport, MA 02790, (508) 636-3674

For sale or trade: Complete 2600 system w/ joystick & paddles, barely used, \$20. Great selection of 2600 & 7800 carts for sale or trade. Will also trade for Colecovision carts. Tony Ramos, 1287 Dennison Ave., Columbus, OH 43201, (614) 291-2669

Wanted: Ladybug for the 2600. Willing to pay top price. Write: Richard Feroli, 88 Ettrick St., Brockton, MA 02401-5802, (508) 587-1146

Wanted: Adventures of Tron, Frogger II, Haunted House, Lost and Found, Montezuma's Revenge, River Raid II, James Bond 007. Write: Kevan L. Wharton, Rt. 2 Box 85, Millville, DE 19970, (302) 539-0592

Wanted: Power Arcade Flight Commander by Milton Bradley, game not necessary. Also: Mr. Do's Castle for Colecovision. For sale: Wizard of Wor, Reactor, Mouse Trap, Target Fun, Racquetball, Realsports Volleyball. Photocopied instructions are available on a large amount of 2600 games, also catalogs and a few comics. William W. Smith, Jr., 112 Rice Terrace, Bristol, VA 24201

For sale: 23 XEGS/Atari computer games, mostly arcade hits \$5 each or \$100 for all, plus postage, or will trade for 2600/7800 games. Game instructions wanted: Asteroids, Space Invaders, Combat, Skiing, Private Eye, Stampede, Super Breakout, Journey Escape, Tennis, MAD. For trade: Donkey Kong, Kaboom, Pitfall, E.T., Spiderman, Star Voyager, Infiltrate, Jedi Arena, & 5 Data Age games. Wanted: Frankenstein's Monster, HERO, Carnival, Halloween, Crypts of Chaos, Tunnel Runner, Mountain King, Oink, Custer's Revenge, Tapper, Miniature Golf, Phoenix. Catalogs wanted: Atari 4/78, 1980E, 1981A, 1981D, any 1983-1987. Mark Androvich, 3374 Armada Dr. #2B, Ventura, CA 93003, (805) 642-7395

For sale: 2600 carts \$3 each, complete 2600 systems \$20, joysticks \$3, paddles \$4, Atari 800XL with light gun and games \$50, also cases, catalogs, boxes, etc. Wanted: RS Basketball, Rubik's Cube, Circus Atari, Pele's Soccer, Sorcerer's Apprentice—all must be copyright '83 or earlier, foreign 2600 catalogs, Vectrex games, 2600JR, Atari Pong, XEGS, and Atari XMM801 printer. Will trade. Scott Stilphen, RD #1 Box 177-A, Harding, PA 18643, (717) 388-2824

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