

Plays on the Atari® 2600 Video Computer System™



**SHUTTLE ORBITER®**

# SHUTTLE ORBITER®

A single player video game for the  
Atari 2600 Video Computer System™ and Sears Video Arcade™

Intended for use with the left joystick controller  
and a color television.



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Printing: Monarch Services

Any cartridge which fails will be replaced when returned to:  
The Avalon Hill Video Game Company  
4517 Harford Road, Baltimore, Maryland 21214

As with any video game, turn off  
television and game when not in use.

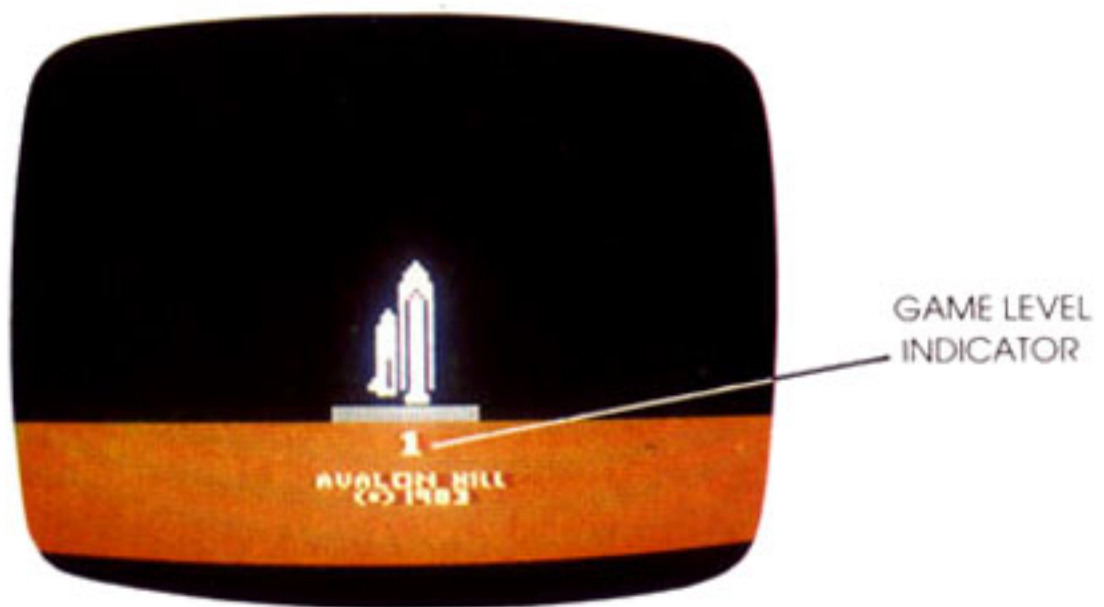
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## The Avalon Hill Video Game Company

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## INSTRUCTIONS

### MISSION

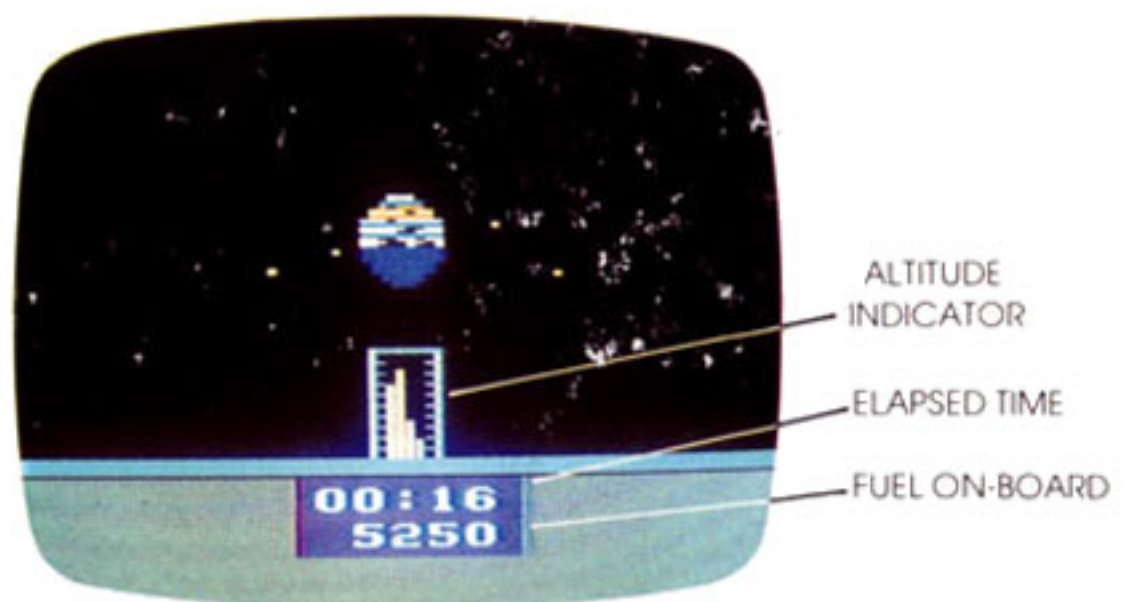
You are the pilot of the space shuttle Challenger. Your mission is to complete the construction of a space station in as short a period of time as possible. There are ten sections remaining to be transported to and installed in the space station. The sections are available at the orbiting Factory. Additional fuel is available at the orbital Depot.

### SETUP

Ensure the joystick you intend on using is securely plugged into the LEFT controller port. Insert the game cartridge and turn your game system on.

### GAME LEVEL SELECTION

When first turned on or after pressing RESET, the title display will indicate game level 1. To play a more difficult game, move the joystick up (or down) to select game 2 or 3. For a practice session (no orbital debris), select game 0. When the desired game level is displayed, press the joystick fire button to initiate liftoff.



## THE ORBITAL DISPLAY

Once in orbit you will see the Orbital Display. At the top of the screen is a view of the earth and various objects in orbit. The white object represents the Challenger. The gold object is the Space Station under construction. The red object is the orbiting Factory, and the green object is the orbital Depot. Orbital debris is not displayed.

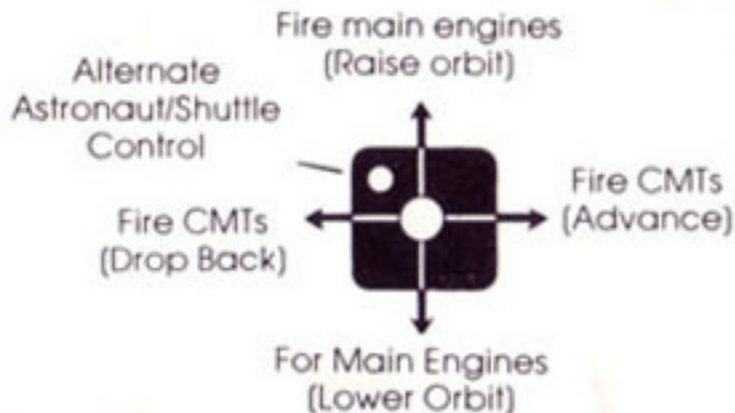
On the lower half of the screen is the Altitude Indicator. The bars indicate the relative orbital altitude of the Challenger, Space Station, Factory, and Depot. This indicator is helpful in matching orbits for rendezvous.

The elapsed time since entering orbit and the remaining fuel on-board are displayed at the bottom of the screen.

## BASIC ORBITAL MECHANICS

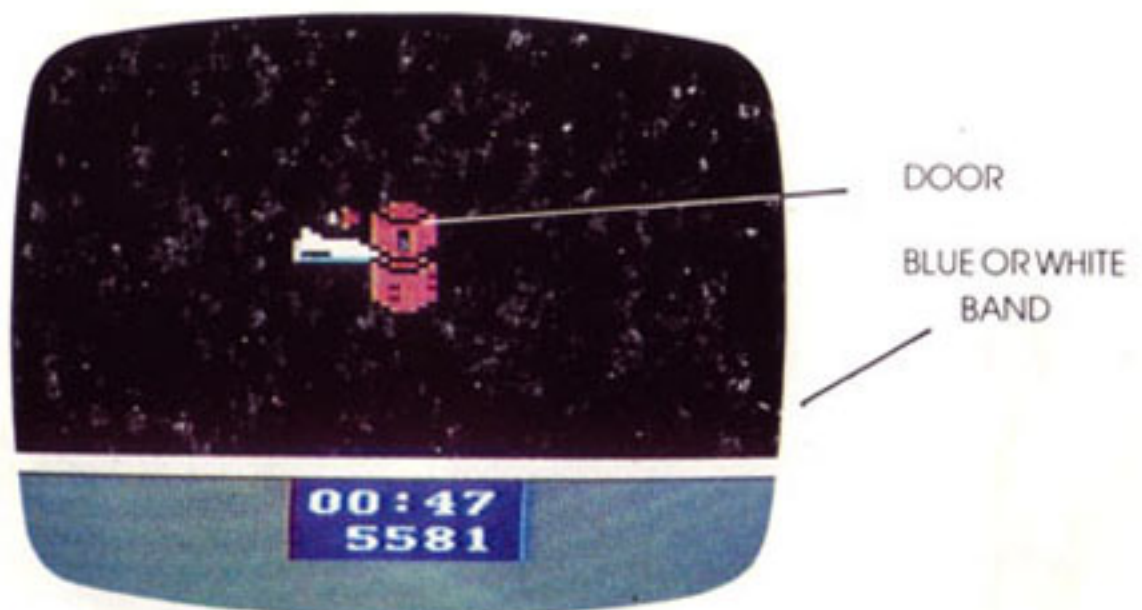
Maneuvering between orbits follows one basic principle. If you are at a lower altitude than another object, you will orbit the earth faster than that object. If you are at a higher altitude than another object, you will orbit the earth slower than that object. The greater the difference in altitudes, the greater the relative orbital speed.

If you desire to rendezvous with an object that is ahead of you, you should choose an orbit with a lower altitude to gain on that object. When you are near the object, you should increase altitude to match the orbit. Adjust your position by moving slightly higher to drop back, or by moving slightly lower to move ahead. Then return to the same orbit as the object you seek.



## MANEUVERING DISPLAYS

When you are close to another orbiting object, you will automatically be switched to a maneuvering display.





You must first rendezvous with the Orbiting Factory in order to pick up a section of the space station. You maneuver the shuttle by changing orbits. If you pull down on the joystick the orbit will lower and the Factory will move upward and to the left on the display. If you push up on the joystick, you will raise your orbit and the Factory will move down and to the right on the display. To keep the shuttle and Factory from drifting together or apart, you must adjust your orbit so that the middle of the Factory is horizontally centered with the shuttle. You can maneuver forward or backward in your orbit without gaining or losing altitude by using the Compensated Maneuvering Thrusters (CMTs). You control the CMTs by pushing the joystick left or right.

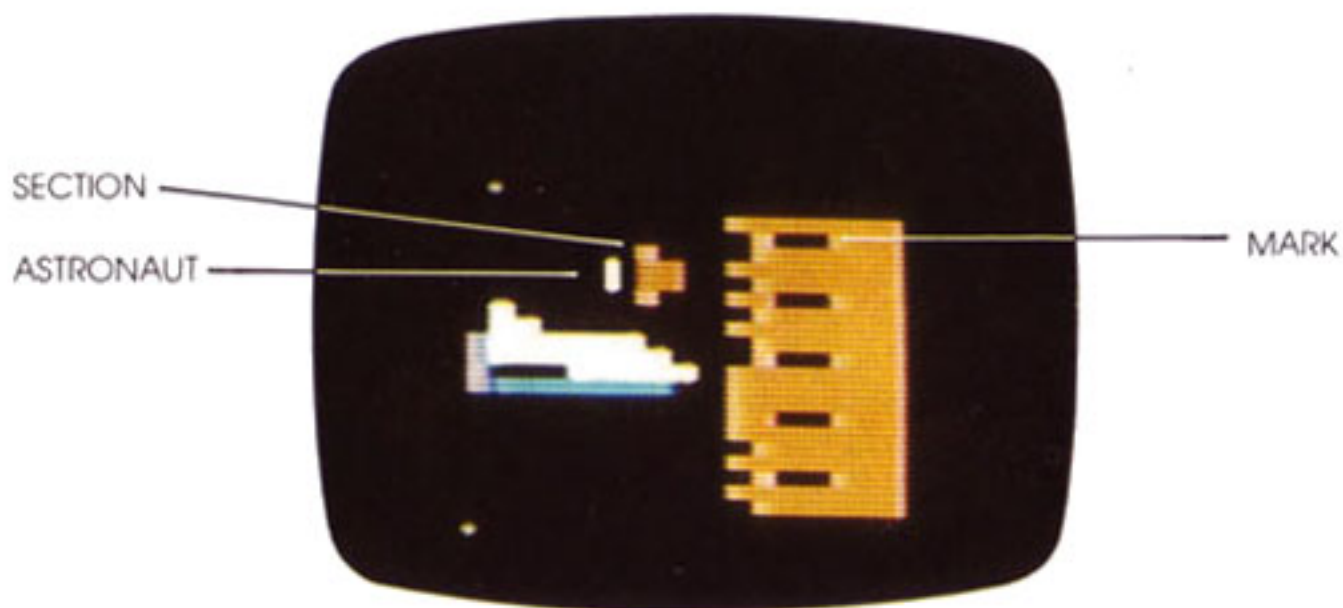
Once you have maneuvered the shuttle close to the Factory, press the fire button once to gain control of the astronaut. Note that the blue band above the clock shifts to white whenever the joystick controls the astronaut and returns to blue when the joystick controls the shuttle.

Move the astronaut out of the shuttle to the door at the top of the Factory. Safety precautions require that the astronaut be tethered and that he remain in sight of the cockpit. Additionally, the Challenger's engines cannot be fired while an astronaut is outside the shuttle. If the astronaut cannot reach the door you will have to return the astronaut to the shuttle and maneuver the shuttle closer. When the astronaut reaches the door he will be provided a section for the space station. Return the astronaut to the shuttle and press the fire button once to slow the section and regain control of the shuttle. If you chose to pick up a second section, press the fire button again to gain control of the astronaut and repeat the above procedure. **Be sure you are controlling the astronaut so you don't mistakenly drive the shuttle into the factory.** When you have loaded the shuttle, press the fire button so that the band above the clock is blue and maneuver the shuttle away from the Factory toward your next destination. You will automatically be switched to the Orbital Display when you sufficiently clear the Factory.



When the shuttle is low on fuel, rendezvous with the Orbital Depot. You must line up the nose of the shuttle into the slot on the left side of the Depot without bumping into it. Maximum fuel load for the shuttle is 9000 kgs.





ALIGN TOP OF SECTION  
WITH TOP OF MARK.

In order to complete the space station, you must properly insert the last ten sections into the proper place. After you rendezvous with the Space Station, move the astronaut out of the shuttle near to the rotating station. If you hold down the fire button while the astronaut is out of the shuttle the space station will slow its rotation to facilitate insertion of the section. The section must be inserted so that it properly fits one of the gaps in the left side of the space station. If the section hits the space station or is inserted into the wrong gap, it will be damaged and you will have to return it to the Factory for replacement. If the station is inserted correctly it will remain attached to the space station. If you have carried a second section in the shuttle, return the astronaut to the shuttle and press the fire button TWICE to get the second section.



The earth recently passed through the tail of a comet and a ring of debris is forming around the earth. The ring is orbiting in the opposite direction of the shuttle. When you are near the ring the display will automatically shift from the orbital display until you have passed through the debris.

### WINNING

You win the game when you successfully install all ten sections of the Space Station. The elapsed time in orbit and game difficulty level will be displayed.



### LOSING

You lose when you run out of fuel, failing to complete the space station. The elapsed time in orbit is displayed above the game difficulty level and the number of sections successfully installed.

### PLAYING TIPS

Any time the shuttle hits the Factory, Depot, Space Station, or debris it will be damaged and leak fuel. The greater the number of hits, the greater the rate of fuel loss.

Any time the Challenger hits an object there is at least a 25% chance you will damage your cargo. Due to packing constraints, if you are carrying two sections and hit an object, you will definitely damage one section — possibly both. You can only examine the sections at the Factory or Space Station. If the section has no prongs on the right-hand side, it is damaged and cannot be used. If one of the two sections being carried is damaged, the good section will be brought out first by the astronaut.

The shuttle consumes more fuel carrying two sections (damaged or not) than carrying one section, and more fuel carrying one section than with no cargo.

Only one refueling should be necessary for the truly proficient pilot.

### GAME CONTROLS

No switches other than the ON/OFF, COLOR/BW, and RESET switches are used.

You can pause the game by pushing the COLOR/BW switch to the BW position. To resume, push to the COLOR position.

The RESET switch will start a new game.



## Video Games That Really Defy Boredom!

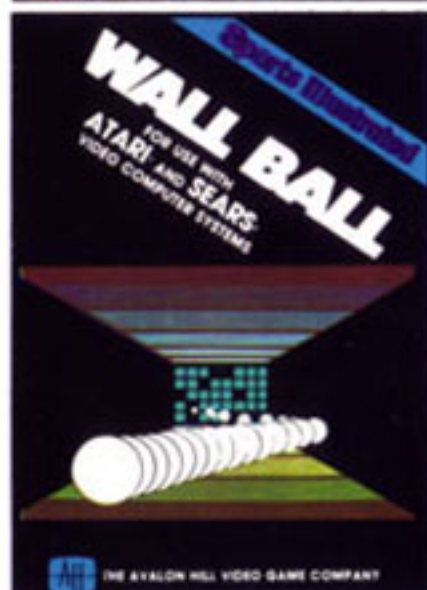
**DEATH TRAP**—Although DEATH TRAP is an easy-to-learn arcade game requiring quick thinking and excellent manual dexterity, it is not just another speed exercise. DEATH TRAP allows you to control the increase in difficulty as the game proceeds. The successful player must utilize movement, timing, and accuracy to develop a winning strategy.

**LONDON BLITZ**—Finally, a real-time strategy game for the VCS: LONDON BLITZ! You are challenged to track falling bombs and use a combination of manual dexterity and logical deduction to disarm the bombs before they detonate. LONDON BLITZ's four-screen graphics include a scrolling map and a 3-D street level view.

**WALL BALL**—Put away all those old flat bouncing ball games. A new dimension is here! WALLBALL, a graphically beautiful 3-D ball bouncing game, proves that the VCS does have a computer chip inside. Play WALLBALL, a game that until now was only available on a home computer.

**OUT OF CONTROL**—Choose your course, then race against time while maneuvering through Space Buoys, bursting Space Balloons, and parking in the Dock. OUT OF CONTROL, a pure hand-eye coordination game, blends the best elements of classic racing games and the popular space maneuvering games. See if you can avoid going OUT OF CONTROL!

The above games are available on the Atari 2600 Video Computer System™ and Sears Video Arcade™. They are intended for use with one joystick controller, and a color television.





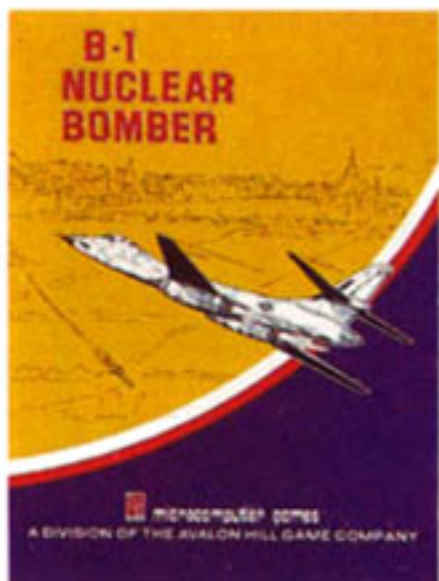
## MICROCOMPUTER GAMES . . .

**B-1 NUCLEAR BOMBER**—You are the pilot of a B-1 bomber on a mission over the Soviet Union. You must fly through stiff Russian defenses to the target city, bomb it and return home. Your computer controls the Soviet MIG fighters and surface-to-air missiles. You must rely on your electronic counter measures and self-defense missiles. Available on cassette for the Atari 4/8/1200XL (16K), Commodore 64, VIC-20 (16K), TI-99/4A (16K), Timex Sinclair (16K), TRS-80 Mods. I/III (16K), Apple II, II+, IIe (16K), and Pet (16K). Available on diskette for TRS-80 Mods. I/III (32K), Apple II, II+, IIe (48K), Atari 4/8/1200XL (24K), and IBM PC (48K).

**LEGIONNAIRE**— Highly acclaimed real-time wargame simulation by Chris Crawford. You as Julius Caesar command up to ten legions, against the barbarian infantry and cavalry during the days of the Roman Empire. The game provides shock effects, fatigue, morale and slope effects as the battlefield scrolls before you in full color and animation. Available on cassette for the Atari 4/8/1200XL (16K), Atari 4/800 diskette (32K) and Apple diskette (48K).

**TELENGARD**— Another not so mighty adventurer bites the dust! A 50-level dungeon exploration game. The monsters and creatures will not wait for you to react, so quick wits and reflexes are needed. Will you return from the cruel labyrinth to tell tales of horror, despair, great treasure and magic? Or will you be another of the foolish ones, only to perish in the dark depths? Available on cassette for the Commodore 64, TRS-80 Mods. I/III (32K), and Atari 800/1200XL (48K). Available on diskette for the Apple II, II+, IIe (48K), Atari 800/1200XL (48K), TRS-80 Mods. I/III (48K) and Commodore 64.

**TAC**— Avalon Hill's Microcomputer game of Armored Combat during World War II. You control individual tanks, anti-tank guns, and infantry squads in tactical combat situations. For one or two players featuring outstanding hi-resolution graphics and enhanced sound. Five different scenarios are available from Meeting Engagement to Stalemate. The players control up to eight vehicles, guns and squads simultaneously, utilizing the equipment of either the German, British, Russian or American forces. A simulation for the most demanding wargamers. Available on the Apple II, II+, IIe (48K), Atari 800/1200XL, IBM PC and Commodore 64.





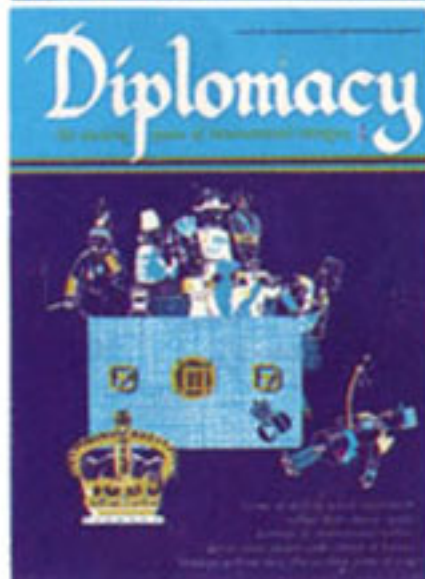
## BOARD GAMES . . .



**SQUAD LEADER**—Russian, American, and German forces engage in bloody street fights, descend on enemy held villages, take key hills, or cross open fields in the quintessence of infantry combat. A game that recreates every aspect of infantry warfare from the house-to-house fighting in Stalingrad to armored advances across snow-covered roads in the Ardennes. The underlying theme of SQUAD LEADER is one hinged on morale. Leaders play a major role by directing fire, rallying broken units, and generally enhancing the performance of their troops. The player who can direct his leaders the most effectively will usually be the winner. Nothing is certain though and SQUAD LEADER contains the unpredictable nature of men and machines which is both the blessing and bane of commanders.



**CIVILIZATION** is a game unlike any other game ever invented . . . a game of high-level player interaction with no dice and little risk of any player being eliminated. The object of the game is to gain a level of overall advancement to which cultural, economic, and political factors are important. The winner is the player who maintains the best balance between activities of nomads, farmers, citizens, merchants and adventurers.



**DIPLOMACY**—For seven players (with special rules for two-six players), this is a game of political power, shifting alliances, back-stabbing and psychological intimidation. Each player represents one of the seven pre-World War I major powers—Germany, Austria, Hungary, Turkey, Russia, Italy, England, and France. The game is a series of "negotiation periods," where players try to out-wit and out-talk their opponents. To win, one country must control half of the mapboard which portrays Europe, North Africa and the Middle East.

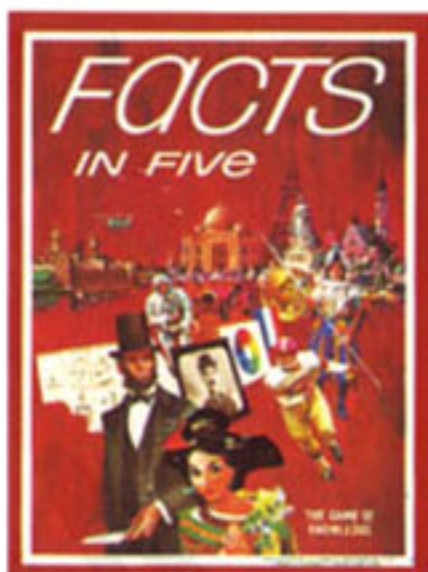
## TACTICS • II



**TACTICS II**—The hobby of wargaming was born in the late 50's with the inception of Avalon Hill's TACTICS. Now a direct descendant, TACTICS II is an outstanding introductory game for potential hobby members. The armies in the game are equal. Victory will be gained by a combination of logic, foresight, luck, common sense, and skill in military strategy and tactics. Game features include special functions for headquarters units, terrain effects, invasions, airborne assaults, weather effects, replacements, isolation, and even nuclear weapons.



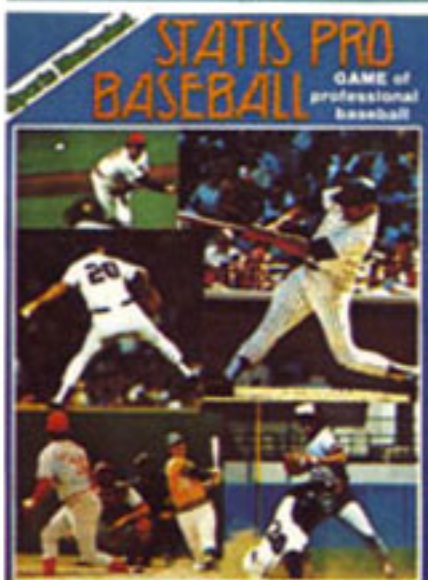
**FACTS IN FIVE** combines the elegance of simplicity and the excitement of competition with memory, general knowledge and an interest in trivia. The game pits players against time, themselves, and each other. In each round, players select five classes and a category in each class, selected from over one thousand choices of popular and academic subjects. Special rules allow children of all ages to compete on an even basis with adults.



**ACQUIRE** is a game for two to six players that takes you into the world of hotels. Players must start hotel chains and then expand them by building more and more hotels around them. At the same time, players may buy stock in any active chains, even those begun by other players. The players with the most stock in a chain, control that chain. They will then try to make a profit by merging this chain with other chains, because the major stockholders receive bonuses during mergers. Luck will play its part, but the winner will be the player who has had the foresight to buy the right stock at the right time.



**STATIS-PRO BASEBALL** comes with "stat cards" representing every player of every big league team that performed regularly in the previous season. That's more than 700 individual cards! Statistically accurate in hitting, pitching, fielding! Each Player Card—whether the mightiest superstar or a little-used reserve—contains information depicting on-the-field performances in every department. Avalon Hill has computer-analyzed season-long statistics for each player's hitting, fielding, pitching, base-stealing, bunting, game-winning hits, even stamina . . . converting it all to "FAST ACTION" results. It's our guarantee that each player should perform in this game just as he does in real life!



**PAYDIRT**—NOW is the time to get hold of the Sports Illustrated Pro Football Game. We have scouted all 28 pro teams. We've determined their strengths and weaknesses on offense, defense, and special teams. And we've converted all this information into simple-to-use Play/Action Charts that put you right down on the playing field from Los Angeles Coliseum . . . to the sun at the Orange Bowl . . . all around the league . . . as QUARTERBACK of your favorite pro teams! These charts are your tickets to action. With them you can call all the shots—on offense and defense—for every pro squad. You can replay the complete pro season, playoffs, Super Bowl . . . until your team wins it all!







**The Avalon Hill Video Game Company®**

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