ATARI® 7800™ Game Manual

SUPER HUEY

UH-IX

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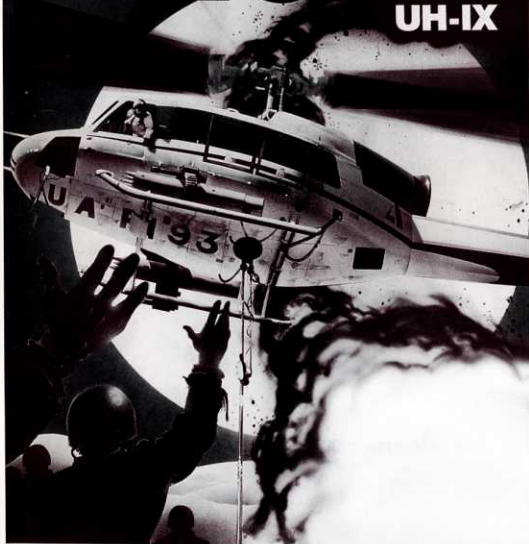
ЛATARI®
Super Huey™

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INTRODUCTION

Calling All 'Copter Pilots

Super Huey. That's what they're calling the experimental UH-1XA helicopter you've been ordered to test. Not that you're complaining--this baby sports a super-strong light-weight engine and state-of-the-art control panel. From the moment you slid into the streamlined cockpit you knew the two of you could make sweet music together.

First, try her out in flight school, or go after some gutsy aerial combat in arcade mode. Then maybe, just maybe, you'll be ready to test your piloting and target skills in reality mode.

Turn on the power, start the engine, engage the rotor, then go for altitude. They've finally designed a helicopter the way you always knew they should, and it's up to you to put it to the test.

Getting Started

1. Insert the Super Huey cartridge into your Atari 7800 Video Game System as explained in your 7800 Owner's Manual.

2. Switch on your television; then press **[Power]** on your 7800 console. The title screen appears.

3. Press **[Select]** or move the directional control on your controller until the game mode you want appears: Arcade Mode, Flight School, or Reality Mode. To see a demo, wait a few moments.

4. Press a controller button or **[Reset]** to begin the game in your selected mode.

5. Press **[Pause]** to pause a game. Press it again to resume play.

6. Press **[Reset]** at any time to start a new game with the same mode; press **[Select]** to return to the title screen to select a different mode.

PLAYING THE GAME

Instrument Panel

Whether you're a novice or seasoned 'copter pilot, you should become familiar with the instrument panel before you take off. So, slide into the cockpit and take a gander at the instruments before you. You can view the instrument panel from the title screen or any of the mode screens.

Note: For specific information on using the instruments, see the section that describes your chosen mode.

Instrument Panel
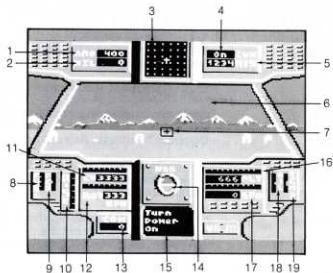
Instrument	Function
1. AMO	Counts ammunition.
2. KIL	Counts destroyed enemy aircraft.
3. Radar Screen	Shows how close enemy aircraft and enemy base locations are to the Huey.
4. GUN	Indicates whether your machine gun is on.
5. MIS	Indicates which air-to-ground missile bays (1, 2, 3, and 4) are loaded and firing. A bay's number flashes when you launch a missile and disappears when the missile hits or misses its target.
6. Viewing Window	Shows your view from the cockpit.
7. Cross Hairs	Cross hairs appear on the viewing window constantly in arcade mode and when the gun is on or missiles are loaded in Reality Mode. For accurate shooting, center the cross hairs on the enemy target. The cross hairs change colors when the enemy is "locked on".
8. FUEL	The fuel gauge.
9. PCH	Collective rotor pitch gauge. Pitch is the angle of the rotor.
10. RISE	The rise meter shows how fast you are gaining or losing altitude.
11. EN	Engine rpm readout and needle gauge.
12. ROT	Rotor rpm readout and needle gauge.
13. COM	Compass heading in degrees.
14. HOR	Artificial horizon indicator. This indicator shows if the Huey is headed up or down or banking left or right.
15. On-Board	Shows Computer Display commands and options to the pilot. Press the right fire button to turn the on-board computer on or off.

Push the controller forward or pull it backward to show in sequence each of the seven commands. Press the left fire button to select a command.

- Power Off / Power On
- Abort Mission
- Map Mode / Radar Mode
- Machine Guns Off / Machine Guns On
- Load and Arm Missiles / Disarm Missiles
- Set Auto Alt

16. ALT   Altimeter readout and needle gauge. The altimeter shows the Huey's altitude.

17. SPD   Speedometer readout and needle gauge.

18. OIL   Oil pressure indicator. The optimum reading is the center mark.

19. TEMP   Engine temperature indicator. Normal reading is the center mark.

Arcade Mode

When you select Arcade Mode you shoot at enemy aircraft and try to avoid getting shot down. You have an unlimited number of weapons to fire, and the Huey is already airborne, so all you have to do is maneuver and shoot at targets. If you want to see a demo of Arcade Mode, wait a few moments after selecting this mode.

To maneuver, move the directional control on your controller up and down and left and right.

To shoot targets, keep your eye on the radar screen. The moving blips (dots) show how close you are to the targets. When a target is centered in the cross hairs and "locked on" appears on the on-board computer screen, the cross hairs change color. Press the right controller button to fire missiles and the left button to fire the machine guns. The KIL indicator displays a running count of all targets you've destroyed.

Note: If the on-board computer is busy, you won't get a "locked on" message. Watch the cross-hairs. As soon as they change color, launch a missile!

Play continues until you are shot down. If an enemy shot inflicts minor damage to the Huey, you lose the use of an instrument. The on-board computer terminal displays a message telling you which instrument you've lost. When all of your instruments are gone, you crash. If you take a particularly bad hit, you may go down all at once.

If you're good, you'll be out there a long time. But if you're not...

Flight School

When you select Flight School, you learn how to take off, navigate, and land with the assistance of the on-board computer. Flight School tests your ability to follow procedures, fly competently, and become comfortable with the Huey. You learn by experience to keep a gentle, yet firm hand on the controls so you can smooth your way from one maneuver to another. While in Flight School, you're flying in friendly territory, so you won't have to worry about enemy attacks and you don't carry weapons.

In Flight School, the on-board computer screen displays commands and command options that guide you every step of the way. Commands appear brighter than options. Once a command appears, select its option mode by pressing the right controller button. Scroll through options by repeatedly moving the directional control left. Select options by pressing the left controller button. Memorize the order of steps for taking off, navigating, and landing. You will need to know these steps by heart when you try Reality Mode.

Only you will know how you did; you are on the honor system to learn the Huey inside and out.

Taking Off

Select flight school from the title screen, then perform the following steps to take off from the base. (All commands and options appear on the on-board computer display.)

1. **Turn on the power.** Press the right controller button to select the Power On option. Move the controller until the Power On option appears, select it by pressing the left button. The instrument gauges turn on and are set to zero. (Power Off appears as the next option and does not indicate a power off condition.)

2. **Start the engine.** Press the right controller button and move the directional control left until the Start Engine option appears. Press the left button to start the engine. Increase engine rpm to 1200.

3. **Engage the rotor.** Move the directional control until the Engage Rotor option appears and press the left button to select it. Increase engine rpm to 3500. Let the rotor rpm catch up to the engine rpm at a 10:1 ratio. For example, if the engine is running at 3500 rpm, the rotor should be spinning at 350 rpm.

4. **Rise to 1000 feet.** To increase pitch, press and hold the left controller button and pull backwards on the directional control. Decrease pitch when the ALT gauge reads 1000.

Once you are airborne, watch the on-board computer display for more instructions.

Navigating

Navigating requires a sharp mind and a steady hand. Keep your eye on the on-board computer display for instructions.

To determine direction, push forward on your directional control to go forward; pull back to fly backwards. Bank left or right or change altitude by pushing the directional control in the desired direction. Keep the engine speed and rotor rpms at a steady rate in order to navigate smoothly.
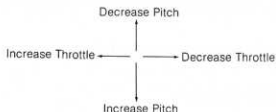
Changing Direction with the Controller
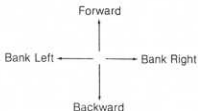
The compass shows your direction of travel in compass heading numbers. For example, 0 is north and 180 is south. The following illustration shows how the compass heading numbers correspond to the cardinal points north, east, south, west, and so on.

To control pitch, press the left controller button and push the directional control in one of the following ways: forward to decrease pitch and drop altitude, backwards to increase pitch and gain altitude, left to increase engine throttle, and right to decrease engine throttle.

Changing Pitch with the Controller

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                    Decrease Pitch
                         |
                         |
Increase Throttle ◄──────┼──────► Decrease Throttle
                         |
                         |
                    Increase Pitch
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Landing

You land when the on-board computer issues you landing commands. The following is the usual order of landing commands.

1. **Turn to 0 degrees.** Level off just before you reach this compass reading on your COM instrument.

2. **Hover at 0 KPH.** Push forward or backwards on the directional control until the SPD gauge reads 0.

3. **Drop to 100 feet.** Decrease pitch until the ALT gauge reads 100.

4. **Drop to 20 feet.** Decrease pitch until the ALT gauge reads 20.

5. **Touch down softly.** Decrease pitch. When the ALT gauge reads zero, you've landed.

Reality Mode

Piloting the Huey

Your mission in Reality Mode is to bomb the enemy base and return to home base. You're on your own in Reality Mode. Unlike Flight School, the on-board computer screen doesn't prompt you. Remember all those skills you learned in Flight School? You'll need every one of them and maybe more.

Tip: Use the Map Mode option to find the enemy base.

Fighting the Enemy

You're in combat against an unidentified enemy helicopter force. This force changes their field of operations often, so no heading from the base is safe.

Tip: Don't forget to load and arm missiles.

The skies won't be friendly until you have eliminated all enemies. It takes skillful flying to evade their deadly attacks, and true aim to shoot 'em down.

Your defense weapons are missiles and machine guns. They are fix-mounted and aimed straight ahead. While machine gun fire is extremely accurate, the missiles are heat seekers that arm in flight. As long as the on-board computer displays "locked on" when you fire the missiles, they will strike their target. The missiles are capable of destroying the enemy without a true direct hit, but machine gun fire travels more quickly and works best if the target is exactly within the cross hairs.

SPECS AND
CONCEPT OF OPERATIONS

The Super Huey was designed to conform to military specifications and to operate according to standard helicopter theories and principles.

The following specs and theory of op will help you, the serious helicopter pilot, to better understand this remarkable aircraft.

Warning: The following is highly classified information. DO NOT leak this information to other personnel unless directed to do so by the base commander. Violators will be severely reprimanded.

Super Huey Specs

The Super Huey is a UH-1XA type military classified helicopter that employs the latest in electronic instrument and stabilization systems.

|	
Engine	Vertical mount VLW (Very Light Weight) piston engine molded of super-strong, super-light composite metal.
Transmission	Direct drive with an automatic clutch. The clutch has a 10-to-1 engine to rotor reduction ratio.
Rotor Assembly	Semi-rigid blades with a hub articulation system that servo-electronically responds to flight conditions. Flight drag reduction is 40 to 60%.
Fuselage	Laminated carbon-fiber for optimum aerodynamic characteristics, low weight, and resistance to direct hits.
Cockpit	Seats one pilot in front and a navigator or copilot in back. Mid-ship space for three additional personnel.
Weapon Systems	Four bays that hold a maximum of 20 missiles. Two machine guns that fire in tandem and can be loaded with a maximum of 2000 rounds.

Concept of Operations

The following is a discussion of how rotary-wing aircraft (like the Huey) operate.

Note: The post library has more information on how helicopters work. Civilians can find this information in their local library.

One factor that allows helicopters to rise is the design of the rotor blades. These blades are curved so there is more air pressure beneath the blades than above them. The force of the air pressure beneath the blades, combined with the engine, push the helicopter up. This ability to push the helicopter up is called lift.

The amount of lift is controlled by the angle, or pitch of the rotor blade on the top of the helicopter. Greater pitch allows the helicopter to rise higher. But greater lift produces more wind drag which tends to slow down the helicopter. When piloting a helicopter, you always have to keep in mind that the greatest lift sacrifices speed, and the greatest speed sacrifices lift.

The helicopter's top rotor makes it unstable by nature. When the top rotor spins it creates a force that makes the body of the craft spin in the opposite direction. To counteract this spin and stabilize the craft, the tail rotor spins in the opposite direction.

Top Rotor
with Pitched Blades

Tail Rotor

Fuselage
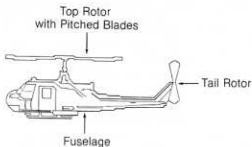
STRATEGY

To hit your target you must anticipate the enemy's flight path.

Use the Set Auto Alt command, from the on-board computer, to maintain your altitude. With the altitude set for auto, you can fight and not worry about losing altitude. If you forget to use the Set Auto Alt command, you could fly too low and crash.

To avoid getting shot down you have to evade the enemy, use your weapons aggressively, and fly with skill and confidence. You must also know when to leave a bad situation!

In reality mode, return to home base when necessary to refuel, reload weapons, and repair instruments.