ATARI XE VIDEO GAME CARTRIDGE

GATO™
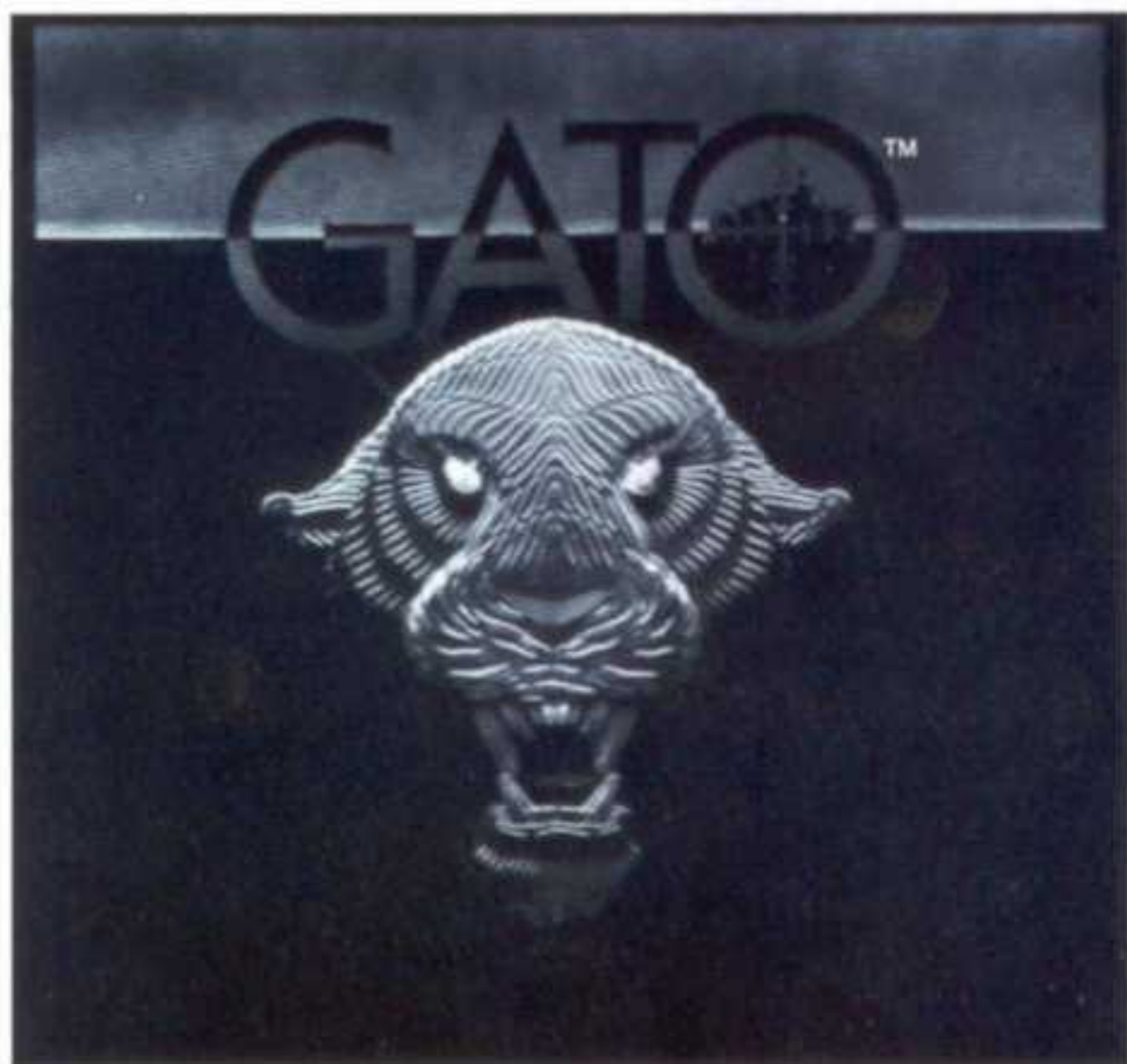
Game Manual

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INTRODUCTION

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It's 1943 and you're deep in Pacific waters, commanding a Gato-class attack sub. A message comes in on your Morse code receiver that an enemy destroyer's been spotted off the shoals of a strategic island.

You head in the direction of the island under diesel power, 20 knots. Near the island you dive and switch to battery power. At 25 feet below the surface, cruising slow, you check your radar. The blip is moving closer—you're on target. "Fire One!" you order into the speaker. "Fire Two!"

Nothing happens for a few moments. Then a shock wave rocks your sub. You watch on the radar as smaller blips begin to move away from the empty spot that was the big blip. A hit!

A coded message comes in from COMSUBPAC. "Nice work, Growler. A clean hit. Think you can do it again?"

Your next mission might be to intercept an enemy convoy, rescue allied forces stranded on an island, or resupply a spotter on a coastal position under cover of night.

Your skill at operating your sub and setting and following a strategic course keeps you alive—along with the unexpected lucky break at just the right moment. And COMSUBPAC keeps excellent records on the amount of enemy tonnage you sink. Keep it up and you'll make Captain some day—if you return!

GETTING STARTED

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System Components

- Atari XE system with keyboard (or Atari XE or XL computer)
- Color television or color monitor
- Atari joystick
- Atari XF551 or 1050 disk drive (optional)

Setting Up

1. Set up and connect all components of your XE system, following the instructions in the **Owner's Manual** supplied with your system.

2. If your system includes a disk drive, insert a formatted disk containing DOS into the drive. Don't write-protect the disk: Gato will record the Captain's log on it during play. To keep your log up to date, use the same disk every time you run a Gato patrol.

3. Plug a joystick into controller port 1 and insert the Gato cartridge into the cartridge port.

4. Turn on your television or monitor (and your disk drive if attached). Press the **[Power]** key to turn on your XE console. The Gato title screen appears, followed by the main menu.

The Main Menu

From the main menu, press **[1]** to begin your patrol. To end a patrol at any time and return to the main menu, press **[Esc]**, then press **[Y]** (for Yes).

Press **[2]** for an illustrated explanation of how to play the game, control your boat, and recognize the enemy. Press any key to end the demonstration and return to the main menu.

Press **[3]** for a history and description of Gato-class submarines. After each screen display, press any key to continue or press **[Esc]** to return to the main menu.

PLAYING THE GAME

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Operating Information

On a Gato patrol your objective is to complete as many missions as possible before having to return to your subtender for fuel, repair, weapons, or supplies. Missions include infiltrating enemy regions, intercepting and destroying enemy craft, cutting off enemy supply lines, and rescuing and resupplying allied forces.

The game has nine screens which you'll use to operate your sub, check your position, intercept and fire on the enemy, and assess damage to your vessel. After you press [1] to begin your patrol, the first game screen (date inquiry) appears. Game screens are date inquiry, game control parameters, mission assignment, main control, patrol area chart, quadrant chart, radar, damage report, and Captain's log.

Date Inquiry

On the date inquiry screen, type in a month, day, and year (using two-digit numbers), then press [Return]. For example, enter January 16, 1988 as 01/16/88 [Return]. If you make a mistake, press [Backspace] to erase.

The month and day you choose are recorded in the Captain's log along with the names and tonnage of all enemy ships you sink. The year in the log is always 1943.

When you press [Return] (or [Space Bar]) the game control parameters screen appears.

Game Control Parameters

You set your game options on the game control parameters screen. Press a number key from the left of the list to select an option for changing. Numbers on the right show how the options are set.

Difficulty Level Press [1] to select this option for changing. Then press any number key from [0] through [9] to set the level you want to play. Level 0 is easiest; level 9 is most difficult. In levels 0 through 3, enemy ship movements show on the quadrant and patrol area charts. In levels 4 and 5, movements show on the quadrant chart only. In levels 7 through 9, Morse code messages are received as audio only and are not printed.

3

Sound Press [2] to toggle this option's setting between 1 (game sound) and 0 (no game sound).

Time of Day Press [3] to toggle this option's setting between 1 (daytime patrol) and 0 (night patrol).

Player Number Press [4] to select this option for changing. Then press any number key from [1] through [4] to tell Gato which player will play next. Up to four players can play Gato at one time. Each player should have a separate number, 1 through 4. When one player completes a patrol (or is sunk), the next player logs on by entering his or her player number with this option. Gato then assigns the new player a separate Captain's log.

Reset Captain's Log Press [5] in order to reset the Captain's log for the player whose number shows in the Player Number option. Then press [Y] (for Yes) to reset the log, or [N] (for No) to quit the option. When a player is sunk, his or her log goes down with the sub and is automatically reset.

When you've set all your options, press [Return] (or [Space Bar]) to go on to the next screen. During a patrol, press [Tab] to display the game control parameters screen again to check or change your options. The game pauses while this screen is displayed.

Mission Assignment

At the beginning of a patrol you receive orders in Morse code from COMSUBPAC (Commander Submarine Force Pacific Fleet). Your radioman decodes the message and displays it for you letter by letter on the mission assignment screen. Messages include the classification level (for instance, "Secret") and the date/time group (DTG) giving the day of the month (entered at the beginning of the patrol) and Zulu time (Greenwich Mean Time).

Read the message, then press [Space Bar] to get to your instrument panel and begin your mission. When you complete a mission, press [M] to receive another orders message. You can also press [M] to call for new orders at any time during your patrol.

Note: You can receive messages faster by setting the Sound option on the game control parameters screen to no game sound (0).
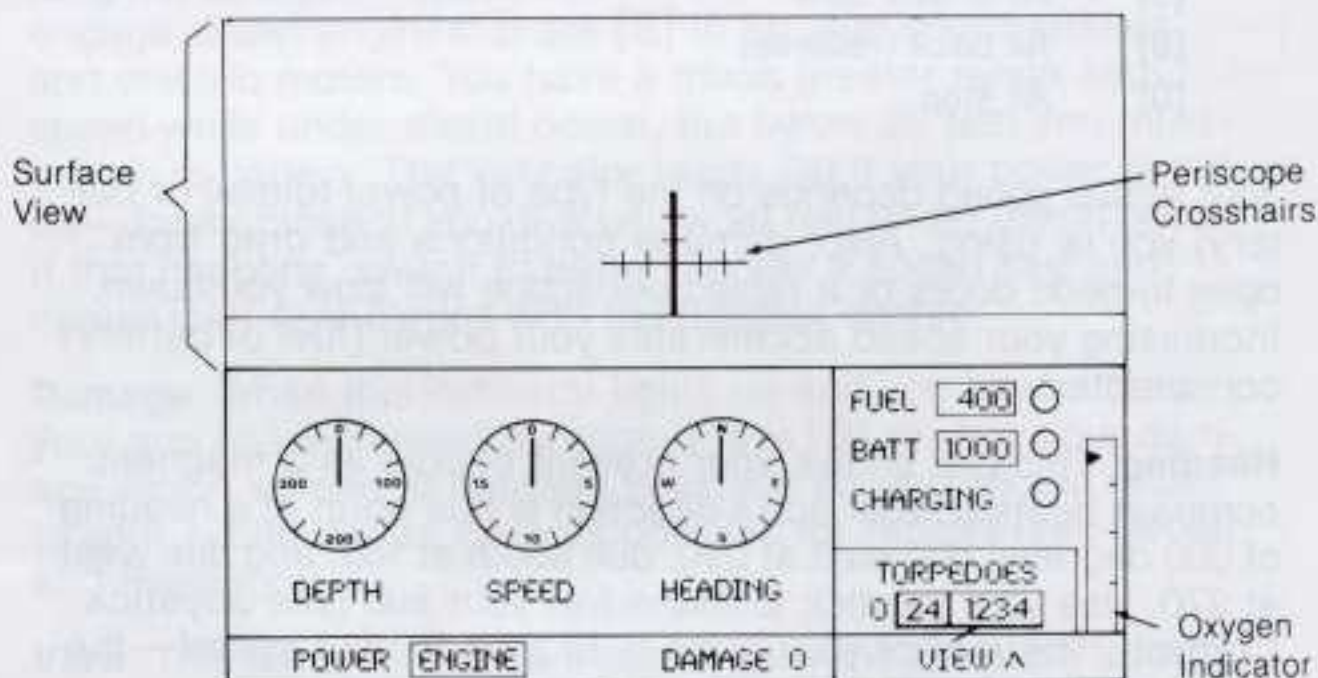
In game levels 7 through 9 messages are received as audio only and are not printed. In that case, it helps to know Morse code.

Morse Code

A	• —	N	— •	0	— — — — —
B	— • • •	O	— — —	1	• — — — —
C	— • — •	P	• — — •	2	• • — — —
D	— • •	Q	— — • —	3	• • • — —
E	•	R	• — •	4	• • • • —
F	• • — •	S	• • •	5	• • • • •
G	— — •	T	—	6	— • • • •
H	• • • •	U	• • —	7	— — • • •
I	• •	V	• • • —	8	— — — • •
J	• — — —	W	• — —	9	— — — — •
K	— • —	X	— • • —		
L	• — • •	Y	— • — —		
M	— —	Z	— — • •		

Main Control

The main control screen shows your sub's instrument panel and your view either from the conning tower (bridge) or through the periscope. (Below 45 feet you have no view and must run on instruments.) Crosshairs appear when the periscope is up. Press [Space Bar] to return to the main control screen from any other screen.

Surface View

Periscope Crosshairs

FUEL [400] ○
BATT [1000] ○
CHARGING ○

TORPEDOES
0 [24] 1234

Oxygen Indicator

DEPTH   SPEED   HEADING

POWER [ENGINE]   DAMAGE 0   VIEW ∧

Periscope Crosshairs Crosshairs mean you're looking through your raised periscope. Press [Shift] [∗] to raise your periscope and [∗] to lower it. When you're at surface trim (on the water) or awash (your top deck is just below water) you can lower your periscope and look out from your conning tower. Press [F] to look forward, [A] to look aft (backward), [P] to look to port (left), and [S] to look to starboard (right). Each view is 90 degrees wide. The periscope is operational to a depth of 45 feet (periscope depth).

Depth This gauge shows your depth (down to 400 feet) measured from the sub's top deck. The dial will continue beyond 400 feet if you choose to dive lower, but be careful. At 425 feet (crush depth), the water pressure will squash your sub.

Speed This dial tells your speed up to 20 knots (nautical miles) per hour (1 knot = 1.15 land miles). Your maximum speeds are 20.5 knots under diesel power; 8.75 knots under battery power. Set your speed with the keys listed:

Key	Speed
[1]	All ahead flank (top speed)
[2]	All ahead full
[3]	All ahead 2/3
[4]	All ahead 1/3
[5]	All ahead slow
[9]	All back (reverse)
[0]	All stop

Your actual speed depends on the type of power (diesel or battery) you're using. Also, damage conditions and drag from open torpedo doors or a raised periscope will slow you down. Increasing your speed accelerates your power (fuel or battery) consumption.

Heading This dial shows your present course as a magnetic compass bearing. Your sub's direction is due north at a heading of 000 degrees, due east at 090, due south at 180, and due west at 270. Use your joystick to maneuver your sub (see **Joystick Control**). The rate of your turns is related to your speed—the faster you're moving, the more quickly you'll turn.

Fuel The fuel gauge shows your remaining diesel fuel in tons. You're full at 400. The gauge indicator light flashes when fuel is critically low.

Batt This gauge indicates the current charge status of the batteries that power your electric motors. Batteries are fully charged at 1000. The indicator blinks and beeps when your battery charge is dangerously low. Surface and switch to diesel power to recharge your batteries.

Charging This indicator lights up when your batteries are charging.

Oxygen Indicator A triangular pointer slides up and down this indicator to show the amount of oxygen remaining in your tanks. Below 20 feet you use oxygen at a constant rate. Once you surface and engage your diesel engines, the air compressor starts automatically and quickly refills the oxygen tanks.

Torpedoes These numbers show how many torpedoes you have left and which torpedo tubes are set for firing. You begin a patrol with 24 torpedoes and you have four torpedo tubes. Before firing, press [T] to open your torpedo doors (doors are open when the circle in the indicator is lit). Fire by pressing [X] or the joystick fire button. Press [T] again to close your doors. When doors are open, the increase in drag will slow you down. At great depths your doors will not open due to extreme water pressure.

Power This indicator shows whether your diesel engines (Engine) or electric motors (Batt) are in use. Press [E] to engage diesel engines; press [B] to engage your batteries and electric motors. You have a much greater range and speed while under diesel power, but below 20 feet you must switch to battery. The indicator reads Off if your power is cut off—for instance, if you dive below 20 feet under diesel power. If that happens, switch to battery, press a speed key, and center your dive planes with the joystick handle.

Damage When this indicator lights up and you hear a beep, your sub has sustained damage. Press [D] to view your damage report screen. If damage is extensive, you should return to your subtender as soon as possible for repairs (see **Repair and Resupply**).

View This indicator keeps track of the view direction from your periscope or conning tower. ∧ means you're looking forward ([F]), ∨ means aft ([A]), < means port ([P]), and > means starboard ([S]).

Patrol Area Chart

Press [C] to look at the patrol area chart, a map showing all 20 quadrants of your island/ocean environment. The chart shows your current position and traces of your present course as you move across the chart. At game levels 0 through 3, the sub-tender (same color as your sub) and enemy ships also appear along with their traces as they move.

Patrol Area Chart
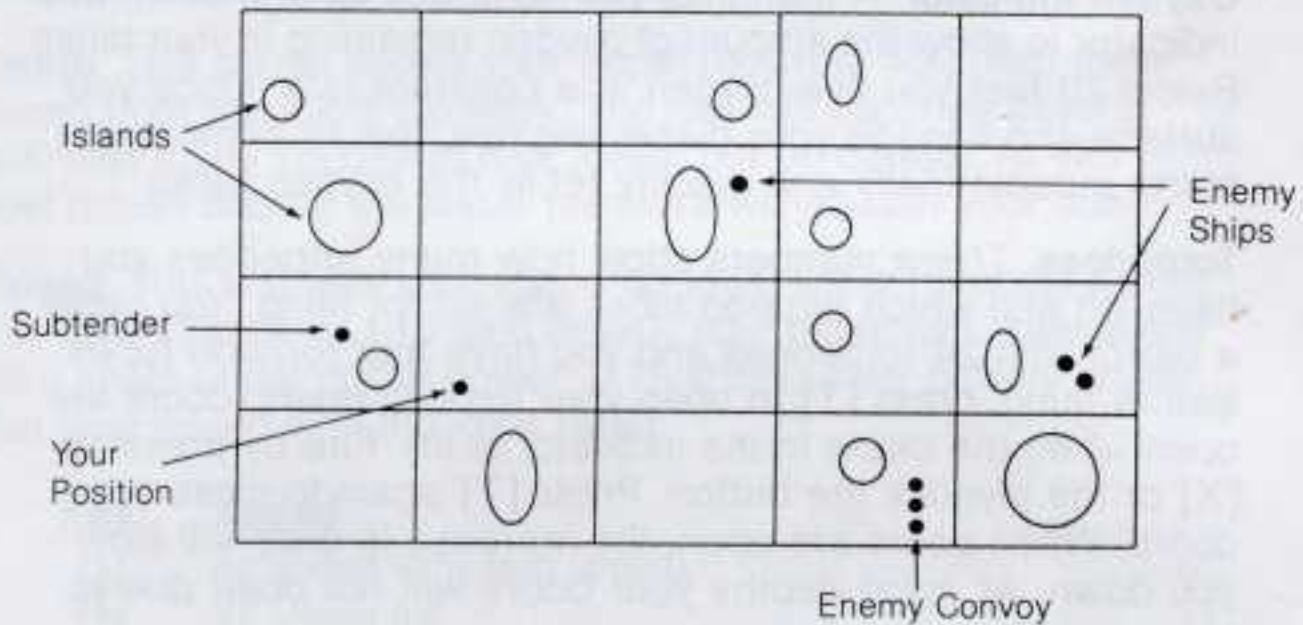
Once you've received your orders, use this chart to set a course for your objective. While underway, check the chart when you want to know your current quadrant position, how deeply you've penetrated enemy territory, and the course of enemy movements. Press [C] to clear your trace; press [Space Bar] to return to the main control screen.

Quadrant Chart

Press [Q] to look at your quadrant chart, a detailed map of the quadrant you're currently occupying. The chart shows your current position and traces of your present course. Any islands in the quadrant are also shown, with shoals and reefs indicated by a dotted line. At game levels 0 through 5, the chart also shows the position of the subtender and enemy ships if present in the quadrant. The chart changes automatically when your sub moves into another quadrant. Press [Q] to clear your trace; press [Space Bar] to return to the main control screen.

Quadrant Chart

Island

Shoals
and Reefs

Enemy
Ships
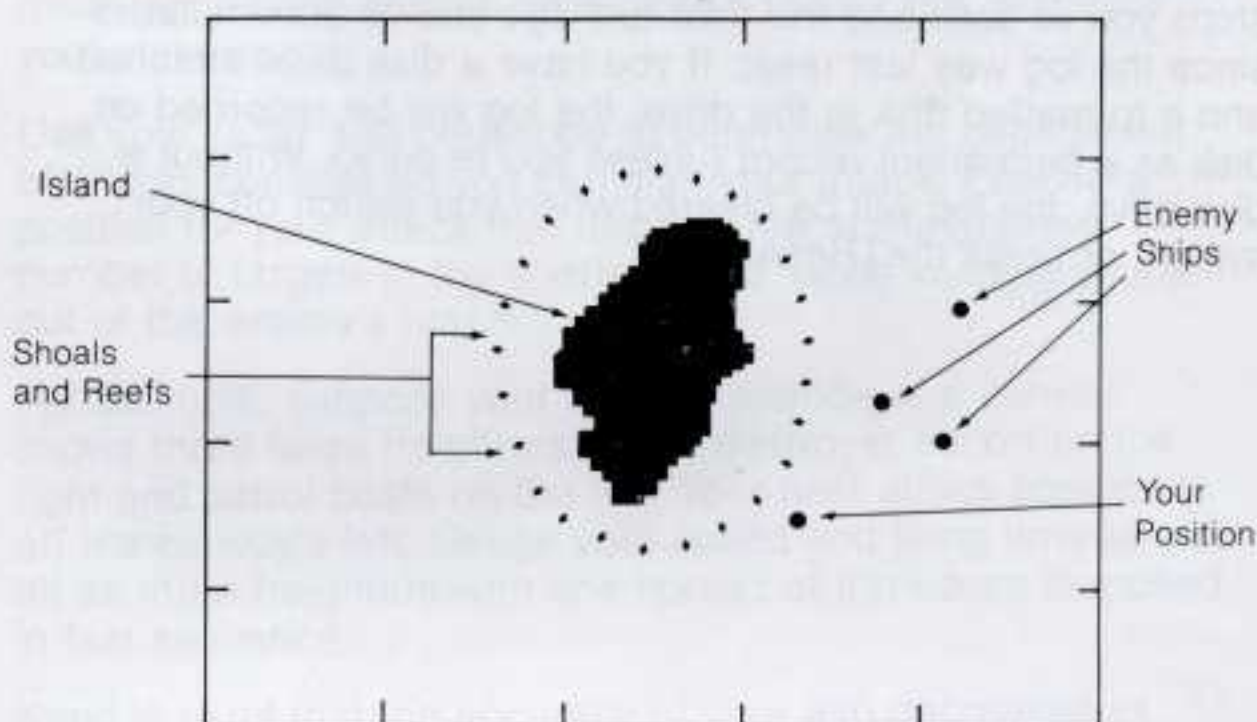
Your
Position

Radar

Press [R] to display your radar screen and get a fix on all nearby ships and islands. Your sub is the center of the screen; anything showing on the top of the screen is in front of you; anything at screen right is to your starboard; and so on. Ships are tracked as single moving dots and islands are displayed as dots within circles.

Radar has a range approximately 10 percent wider than that of the periscope or visual sighting from the conning tower, and can be used to a depth of 45 feet. You can dive, surface, and fire torpedoes while looking at your radar screen. Clear the radar screen by pressing [R]. Press [Space Bar] to return to the main control screen.

Damage Report

Check your sub's damage by pressing [D] to display the damage report screen. Damaged areas will be highlighted on the sub diagram and a trouble light will appear next to the name of the damaged area on the checklist.

Damaged areas may be partially operational or completely useless. When your sub is heavily damaged, your survival chances are slim. Return to your subtender as soon as possible for repairs (see **Repair and Resupply**).

Captain's Log

Press [L] for a look at the Captain's log—the record of all ships you've sunk and the total tonnage you've accumulated since the log was last reset. If you have a disk drive attached and a formatted disk in the drive, the log will be recorded on disk as a permanent record (unless you're sunk). Without a disk drive, the log will be cleared when you switch off your system or press the [Reset] key.

SURVIVAL

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Strategy

Your primary objective is to complete as many missions as possible with the supplies you carry on each patrol. If you are attacked when your supplies are low, your chances of survival drop, especially if you're a long way from friendly waters.

When selecting your targets, make strategic decisions based on the resources you have left. For example, when you're low on torpedoes, taking a long-range shot at a patrol boat may mean not having enough ammunition to sink the destroyer you're chasing.

Use your radar and periscope to determine the deployment of enemy convoys so you can plan your attack. Choose a position for your attack that lets you fire at the greatest number of targets in the shortest time, while keeping yourself out of the enemy's reach.

For example, suppose your reconnaissance of a convoy shows three large freighters with a destroyer escort on the right and patrol boats on the left. Your best attack position is off the convoy's left. Gauge your speed and firing time so you hit all three freighters with one spread of torpedoes launched in fast sequence.

Keep in mind that the accuracy of your aim decreases as your distance from the target increases. You'll need to weigh the risk of closing in for a sure shot against the possibility of a safe but long-range shot veering wide of the target.

Use you radar for reconnaissance of areas just beyond the visual horizon, for early warning and target tracking at minimum risk, and for night navigation. In enemy waters, you risk detection any time your radar or periscope are in view. To minimize the risk, keep your instruments above water only long enough to observe the positions and headings of the ships around you or fire torpedoes.

Once you torpedo a ship, or if the enemy sights any part of your sub above water, it is almost certain that enemy craft will be sent to seek and destroy you. At this point you have two choices: either destroy the attackers, or run as silently and deeply as possible in the hopes that they won't spot you when you finally surface.

Staying Alive

Surface ships can retaliate by dropping depth charges (underwater explosives). In order for the charges to be effective, the enemy must correctly fix your latitude, longitude, and depth before dropping the charges. You can frustrate the enemy attack with evasive maneuvering—continually changing your speed, heading, and depth. A depth charge must explode close to your hull to do fatal damage.

Aim ahead of moving targets at long range, since torpedoes (traveling at 60 knots per hour) can take several seconds to reach a target.

When under attack by depth charges, either go dead in deep water or keep maneuvering.

Keep an eye on your resources, especially fuel and battery reserves. Give yourself the necessary time and distance to escape after attacking the enemy.

When escaping enemy search, run silent, run deep.

Avoid coastal waters and shallow areas—these are the worst places to get caught. If you run aground, reverse your engines ([F9]) until you clear bottom.

If you pass under a ship, maintain a safe depth to allow for the 25 feet the radar and periscope project above your top deck, plus the draft (bottom depth) of the surface ship. If your periscope or radar assembly is damaged in enemy waters, you're in serious trouble.

When in doubt, dive.

Repair and Resupply

When you are damaged or run low on supplies, go to the subtender for repairs and resupply. Come up on your tender and fall in close behind it, matching its speed. Once you're close enough and at a parallel course and speed, your damage will be repaired, fuel tanks refilled, and torpedoes replaced.

Don't shoot your subtender. You'll have no way to resupply or repair, and you'll be in deep trouble with COMSUBPAC.

Rapid Submarine Deployment

Rapid submarine deployment (RSD) is used mainly when you're badly damaged and you want to make a fast trip to your sub-tender for repairs. Display your patrol area chart (press [C]), then press [Z]. A message appears asking for the password. Enter ATARI [Return]. Then you'll be asked for your destination's XY coordinates. Plot your coordinates according to the chart below:
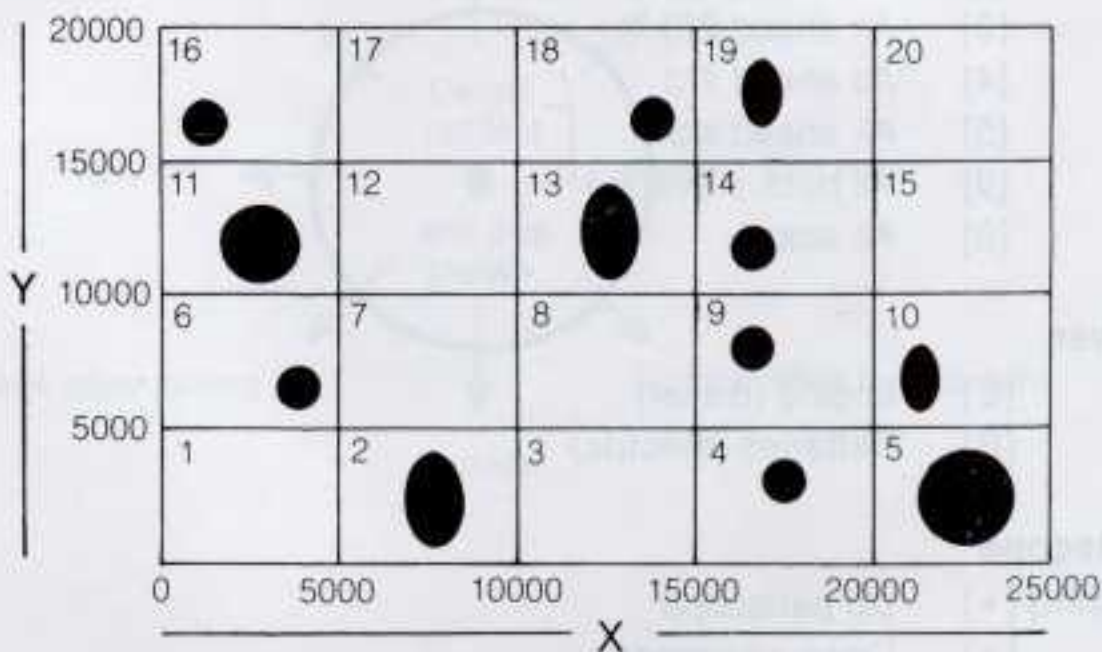
The X coordinate tells your horizontal position on the chart: extreme left is 0; extreme right is 25000. The Y coordinate tells your vertical position: the bottom of the chart is 0; the top is 20000. For example, if you want to get to the upper right corner of quadrant 8, you would type in your destination coordinates as 14500,9050 [Return]. The chart will now show you positioned in your new location.

You can choose any number from 0 to 25000 for X, and any number from 0 to 20000 for Y. If you ask for invalid coordinates, you'll get another chance to enter the correct coordinates. Be sure to press [Return] after entering your coordinates.

Note: You can't use RSD to escape an enemy that has you spotted on its sonar.

HANDLING YOUR SUBMARINE

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Keyboard Commands

Speed

[1]	All ahead flank (top speed)
[2]	All ahead full
[3]	All ahead 2/3
[4]	All ahead 1/3
[5]	All ahead slow
[9]	All back (reverse)
[0]	All stop

Power

[E]	Engine (diesel)
[B]	Batteries (electric)

Periscope

[Shift] [*]	Up periscope
[*]	Down periscope
[F]	Forward view
[A]	Aft (rear) view
[P]	Port (left) view
[S]	Starboard (right) view

Torpedoes

[T]	Open/Close torpedo doors
[X]	Fire torpedoes

Screens

[C]	Patrol area chart/Clear chart
[D]	Damage report
[L]	Captain's log
[M]	Mission assignment
[Q]	Quadrant chart/Clear chart
[R]	Radar/Clear radar
[Space Bar]	Main control screen
[Tab]	Game control parameters
[Esc]	Main menu

Joystick Control
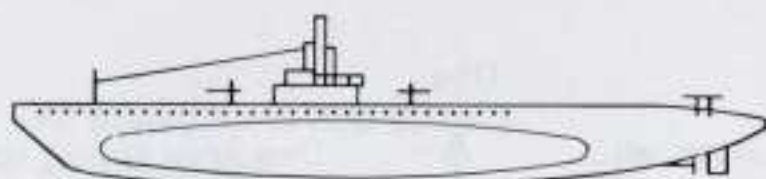
Fire your torpedoes by pressing the fire button. Use the joystick handle to maneuver your sub. Follow the diagram:
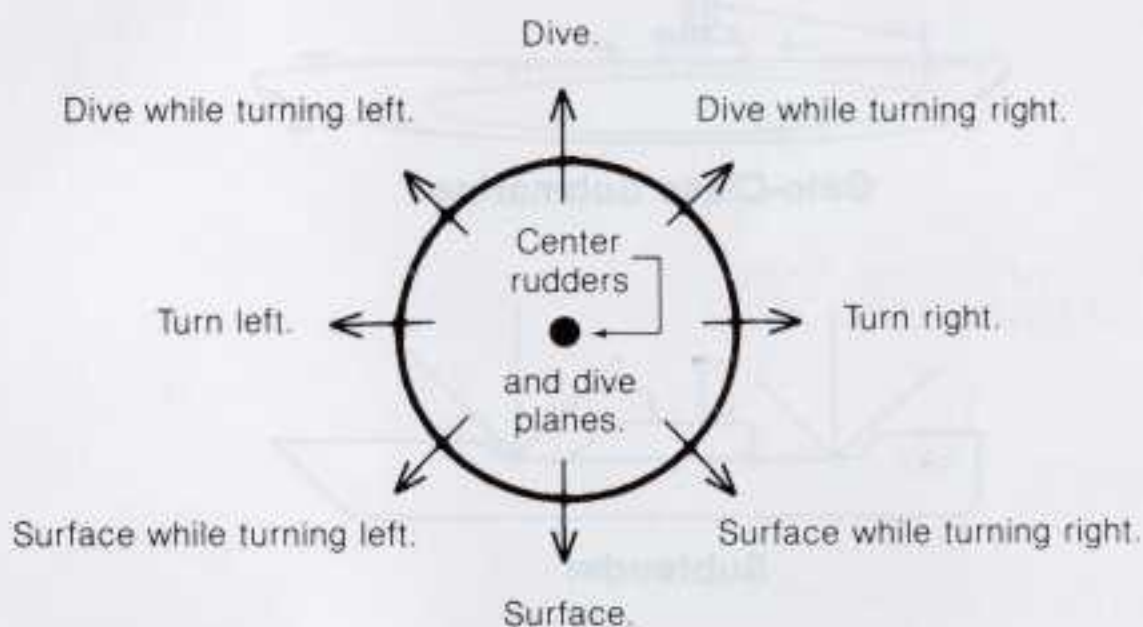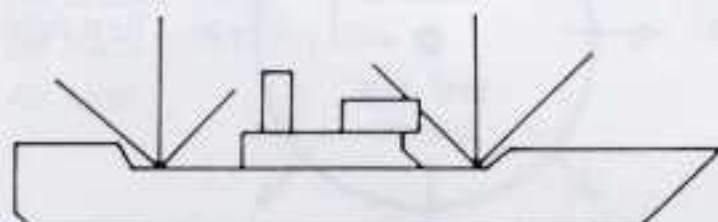
GATO CRAFT

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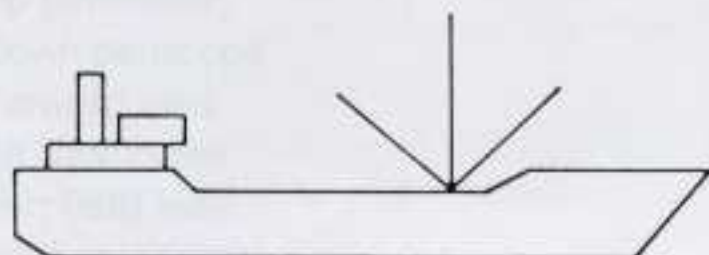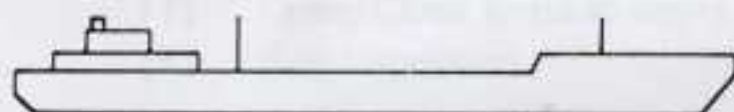
Allies

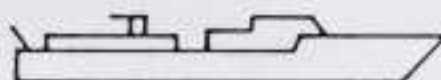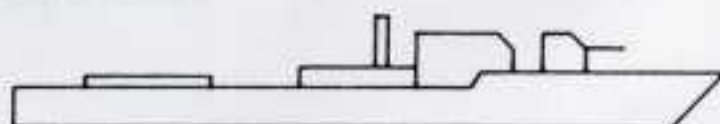**Gato-Class Submarine**

Subtender

Enemies

Freighter

Tanker

Patrol Boat

Troop Carrier

Destroyer