HARDWARE

Presents

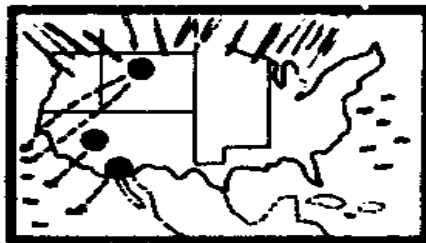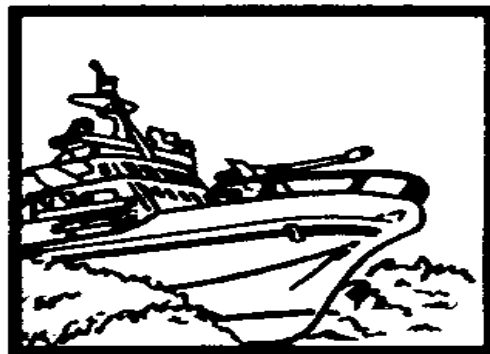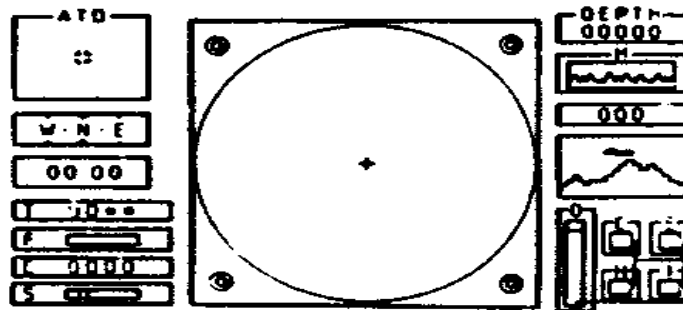## COMPUTER WAR

RIVER RESCUE

SUBMARINE COMMANDER

for the TI 99/4A

INSTRUCTIONS FOR PLAYING COMPUTER WAR

Turn monitor, peripheral system and computer on in that sequence. Insert module (Editor/Assembler, Mini-Memory or Extended Basic). From Mini-Memory or Editor/Assembler, select LOAD AND RUN option. Type in DSK1.GAMES. When this loader has loaded the program, a menu will be presented. Select COMPUTER WAR. The game will then start.

THE DISPLAY

1) The score of the current game is displayed in the top left of the right window. The high score of the current session is displayed in the top right of the screen.

2) The map of the United States shows the location of all the cities targeted by enemy missiles and the NORAD headquarters. Your task is to defend these sites.

3) The left of the screen shows a matrix and below this is the current DEFCON (defence condition). 5 is the start of the game. 1 is game over with all cities and NORAD destroyed.

HOW TO PLAY COMPUTER WAR

1) Press the fire button on the joystick to start the game. Do not touch the fire button again until it is necessary.

2) From the edges of the screen, enemy missiles will appear, advancing towards selected targets. Move the cross on the screen (with the joystick) until it is immediately over the advancing missile. At this point press the fire button.

3) At this point the display will change to one of two. If the missile was in the centre of the cross, then the display will become that of a fighter pilot through the cockpit window. Beneath the screen are three boxes, depicting current DEFCON status (on the left), the time until impact of the enemy missile (on the right) and in the centre is a box depicting where the enemy missile is in relationship to the view from the cockpit. To chase the missile, move the joystick towards the

missiles location. To move left or right, push the joystick in the appropriate direction. To move up, pull the joystick back, and to dive push the joystick forward. When the missile is in view, press fire. Ammunition is unlimited so keep firing until the missile is destroyed. When the time until impact indicator reaches 10, an alarm will sound.

4) If you do not destroy the enemy missile in the alloted time, you will lose a city.

5) If the cross was not positioned correctly over a missile the message NO ENEMY MISSILES IN INTERCEPT RANGE will appear. The game will return to the map screen, but you will not be given a second chance to knock out that particular missile.

6) After all missiles in a wave have either been destroyed or have hit their targets, then the bonus screen is presented. At the middle left of the screen in a 3 x 3 matrix is the code you have to match. This is achieved by moving the white 3 x 3 square around the screen above until a similar mix is achieved. If an identical mix does not exist, then patterns can be built by spinning the squares by pressing the fire button. When an identical match is found, press the fire button again and the computer will move onto the next square to be matched. If all matches are made, then a bonus of 1000 points is added to your score. (on subsequent matches, the bonus is increased by 1000 points per time).

7) The game then re-starts with further attacks of missiles, in increasing number and speed

The game is over when all cities and NORAD are destroyed. Even if all cities are intact, should NORAD be destroyed, then the game is over. As each city is destroyed, the DEFCON factor is reduced. Game is over when DEFCON REACHES 1.

SCORING

150 points per enemy missile shot down.
1000 points for a full code screen cracked. (With subsequent 1000 point increases for each time this is achieved.

INSTRUCTIONS FOR RIVER RESCUE

Turn monitor, peripheral system and computer on in that sequence. Insert module (Editor/Assembler, Mini-Memory or Extended Basic). From Mini-Memory or Editor/Assembler, select LOAD AND RUN option. Type in DSK1.GAMES. When this loader has loaded the program, a menu will be presented. Select River Rescue. The game will then start.

THE DISPLAY

1) The scores of player 1 and player 2 are displayed at the top of the screen along with the high score.

2) The number of lives remaining to the current player is displayed at the bottom of the screen on the left hand side. Each player starts with 5 lives, extra lives being awarded as described in the rules section.

3) The number of refugees on board the boat is displayed at the bottom of the screen on the right hand side.

4) On the lower skill level, a light in the bottom right hand area will turn green if you are correctly aligned with a jetty, a magenta if you are likely to crash.

HOW TO PLAY

1) The computer will ask you to select from skill levels 1 to 3. Press the relevant key: 1, 2 or 3. Level 3 is the most difficult.

2) The computer will then ask you to select a 1 or 2 player game. After you have entered 1 or 2, you can begin the game by moving the joystick.

3) Your boat will then appear on the left of the screen and you must use the joystick to control it. Move the joystick:
   ↑ or ↓ to steer the boat
   ← or → to decrease or increase speed
Press the fire button to fire a missile

RULES OF RIVER RESCUE

1) The object of the game is to navigate your way along the river, avoiding or shooting obstacles, picking up refugees from the north bank of the river and dropping them off on the south bank.

2) The river is infested with giant electric eels and crocodiles. If you pass too close to an eel, your ship will be electrified and you will lose 1 passenger; if you have no passengers, you will lose the ship. Hitting a crocodile will temporarily make steering difficult.

3) Collision with any other obstacle will lose you your ship. Logs may be destroyed by shooting them. Other obstacles, such as islands, sandbanks and white water must simply be avoided

4) When a jetty appears on the screen, you may dock by steering the boat alongside. When it reaches the jetty, the boat will stop. If you dock at a jetty on the north bank (at the top of the screen), a refugee will run on board and you will receive a bonus. If the refugee is subsequently killed, most of the bonus is deducted.

5) If you dock at a jetty on the south bank, any refugees you may have on board will run ashore and you will score points for each refugee. The more you have aboard, the higher your score per refugee. You may carry up to 9 at a time. However the electric eels in the river may make it impossible for you to dock at a jetty for long, and you may be forced to leave before off-loading all your passengers.

6) If you dock and let 9 refugees off at one go, you will receive a special bonus and an extra life.

7) To continue up the river after docking, move the joystick to steer the ship away from the jetty.

8) You will gain an extra life after you have carried 10 refugees to safety and another after you have rescued 25.

9) Periodically, an enemy helicopter will fly overhead and drop mines into the water ahead of you. You must shoot a path through these to avoid being blown up.

10) In addition, one of the warring armies has sent a tank to patrol the north bank of the river. If you travel too slowly and allow it to overtake you, it will blow you out of the water. You cannot shoot it - your only defence against the tank is to outrun it.

INSTRUCTIONS FOR PLAYING SUBMARINE COMMANDER

Turn monitor, peripheral system and computer on in that sequence. Insert module (Editor/Assembler, Mini-Memory or Extended Basic). From Editor/Assembler or Mini-Memory, select LOAD AND RUN. Type in DSK1.GAMES. A menu will be presented. Select Submarine Commander. The game will then load & start.

THE CONTROLS
Use the following to control your submarine:

JOYSTICK (optional)

TO SURFACE	Pull the joystick towards you: this pushes the submarine's nose up.
TO DIVE	Push the joystick away from you: the nose goes down.
RUDDER CONTROL	Pull the joystick to the left or right. Use in conjunction with the compass setting. (See instrument panel).

KEYBOARD

TO SURFACE	Press ↑ (E)
TO DIVE	Press ↓ (X)
RUDDER CONTROL	Press ← (S) to move left and press → (D) to move right.
DIRECTION	Press FORWARD (6) or reverse (7) to change direction and speed.

Press CRASH DIVE (4) or BLOW BALLAST (5) to rapidly change your depth. Dive or surface to neutralize either of these directives.

Press SPACE BAR to halt the game. Press it again to continue.
Press ABORT (1) to terminate your mission.

HOW TO PLAY
1) After the title, the computer asks you to choose a skill level. (1-3). Press the space bar for the number you want. Press START (2) when you are ready.

2) The map in the centre of the screen shows your position (black cross) and those of the enemy convoys (white dots). The object is to track down the convoys and sink all the ships. The enemy is composed of the following:

Destroyer.
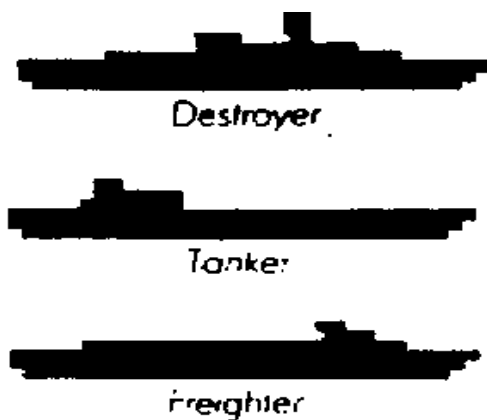
Tanker

Freighter

You score tonnage points for sinking ships, with more points for tankers and freighters, and less for destroyers. The enemy ships are armed with shells and depth charges and can cause you heavy damage. If they detect you they may attack or take evasive action to try to lose you.

To attack your target you have the following equipment:

| MAP | Press MAP (9) to establish your position relative to land and convoys at any time. |
SONAR	Press SONAR (8) for a picture of the sea around you; ships within range show up as 'blips' on the screen.
PERISCOPE	Press PERISCOPE (=) when you are at a depth of less than 40 feet, and you will get a view of any ship within range that is in your line of sight. Use this mode to prepare for a submarine attack.
TORPEDOES	When you are at a depth of less than 30 feet, press the trigger on the joystick or FIRE (0) to release a torpedo. Aim it ahead of the target ship.

INSTRUMENT PANEL

The diagram below explains the position and function of the various gauges on the panel. At the beginning of each mission you are allocated quantities of torpedoes, fuel, air and battery charge. (See skill level for details). You must be careful not to run out of any of these. Your speed is set at nil, and you have to press either FORWARD (6) or REVERSE (7) to start moving. In detail, the controls are as follows:
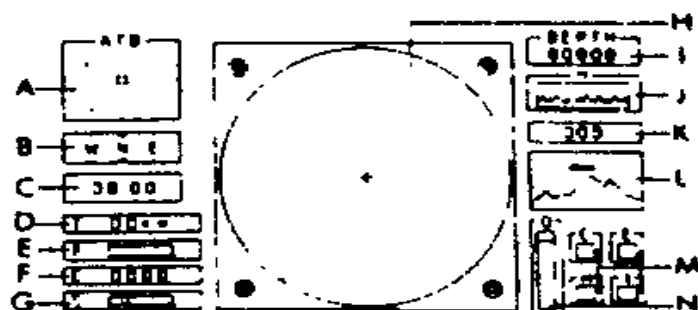
A   ATTITUDE. Move the joystick to the left or right or use the arrow keys to change course

B   COMPASS. The compass reading determines the course you steer

C   CLOCK. This times how long mission has lasted.

D   TORPEDOES. The two digits on the left of the dial are the number of torpedoes remaining. Next to these are the torpedo status indicators. These can be any of the following colours:
     (a) Light blue (cyan)-priming
     (b) Dark blue - loading
     (c) Red - Ready to fire
     (d) Yellow - tube out of action

E   FUEL SUPPLY

F   BATTERY CHARGE reading. To re-charge you have to surface.

G   SPEED. When the submarine is in the blue (cyan) area, the submarine is moving forward. When it is in the green area, the attitude dial causes the compass and depth dials to move in the opposite direction.

H   SONAR SCREEN. Shows the enemy ships as white blips. Your position is the black cross in the centre which remains static. When an enemy ship is correctly lined up, the blip will appear directly above the cross, or at some point between it and the edge of the sonar screen.

I   HYDROPHONE CHART. This is the longest range dial on the screen. The nearer a ship is to your submarine, the closer the relevant peak is to the left of the dial.

K   TONNAGE SUNK. The amount recorded is in thousands of tons.

L   The chart shows the DEPTH BELOW THE KEEL. Be careful not to crash into the seabed.

M   DAMAGE INDICATORS. These show damage as a square ranging from empty (no damage) to full (severe damage) to:
     C -controls, I -instruments, H -hull, E -Engines. If your damage rating is not too high, you may carry on without waiting for repairs, but beware of unexpected malfunctions. (Your submarine is repaired automatically. However, repairs are carried out more rapidly on the surface). If your hull damage becomes severe, it may crack, with a watery grave awaiting you).

N   AIR SUPPLY. Can be renewed by surfacing.

SKILL LEVELS

The higher the skill level, the more challenging the game becomes. You will in your encounters with the enemy, have to attack and destroy more convoys with less fuel, charge and torpedoes

TACTICS

You constantly need to assess the pros and cons of moving on the surface or underwater. Running on the surface is quicker, but if you get too close to an enemy convoy on the surface, you will be seen and attacked by the escorting warships. To warn you a bell sounds as you approach the enemy's range of vision on the surface.

Your greatest advantage over the enemy is your ability to travel underwater. However, this does use up air and batteries, and you can still be detected if you fire a torpedo.

As your initial working tactics, try approaching an enemy convoy on the surface using the map mode [MAP-9] As you draw near, dive and locate the ships with you sonar SONAR[-e] and hydrophone chart. Then come up to a depth of about 25 feet and press PERISCOPE [ ] for a view of the surface. Aim your submarine at the target, and press the trigger on the joystick or FIRE[8] to release a torpedo, aiming it ahead of the ship. Hits are recorded on the 'tonnage sunk chart (on the right) If you are under heavy attack from the surface ships, and wish to lose them, dive deep, and wait until the attack is over

END OF GAME

The game ends when any of the following occurs:

[a] All enemy convoys are sunk
[b] All oxygen is used
[c] All fuel and charge is used
[d] There is severe damage to the hull
The game can also be terminated by pressing ABORT[1]. You still receive a rating of your abilities as a Submarine Commander.

RATING

At the end of each game you receive a rating [score] with points awarded for tonnage sunk and, the ultimate achievement of a Submarine Commander, elimination of all convoys. Points are deducted for fuel and torpedoes used and damage sustained

Summary of factors affecting your rating.

Points are awarded for:
[a] Tonnage sunk
[b] Sinking all convoys proportional to the skill level

Points are deducted for:
[a] Fuel used
[b] Torpedoes used
[c] Damage incurred
[d] Being destroyed

ABORT | START | REPORT | CRASH DIVE | BLOW BALLAST | FORWARD | REVERSE | FIRE

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COMPUTER WAR
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THE DISPLAY:
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1. The score of the current game is displayed in the top left of the right
window. The high score of the current session is displayed in the top
right of the screen.
2. The map of the United States shows the location of all the cities
targeted by enemy missiles and the NORAD headquarters. Your task is to
defend these cites.
3. The left of the screen shows a matrix and below this is the current
DEFCN (defence condition). 5 is the start of the game. 1 is game over with
all cities and NORAD destroyed.

How to play:
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1. Press the fire button on he joystick to start the game. Do not touch
the fire button again until it is absolutely necessary.
2. From the edges of the screen, enemy missiles will appear, advancing
towads selected targets. Move the cross on the screen (with joyst) until
it is immediately over the advancing missile. At this point press fire
button.
3. The display will change from one of two:
If the missile was in the centre of the cross, then the display will
become that of a fighter pilot through the cockpit window. Beneath the
scren are three boxes, depicting current DEFCON status (on the left), the
time until impact of enemy missile (on right) and in the centre is a box
depicting where the enemy missile is in relationship to the view from the
cockpit. To chase the missile, move the joystick towards the missiles
location. To move left or right, push the joystick in the appropriate
direction. To move up, pull the joystick back, and to dive, push the
joystick forward. When the missile is in view, press the fire button.
Ammunition is unlimited, so keep firing until the missile is destroyed.
When time until impact indicator reaches 10, an alarm will sound.
4. If you do not destroy the enemy missile in the alloted time, you will
lose a city.
5. If the cross was not positioned correctly over a missile the message NO
ENEMY MISSILES IN INTERCEPT RANGE will appear. The game will return to the
map screen, but you will not be given a second chance to knock-out that
particular missile.
6. After all missiles in a wave have either been destroyed or have hit
their targets, the bonus screen is presented. At the middle left of the
screen in a 3x3 matrix, is the code you have to match. This is achieved by
moving the white 3x3 square around the screen above until a similar mix is
chieved. If an identical mix does not exist, then patterns can be built by
spinning the squares by pressing the fire button. When an identical match
is found, press the fire button again and the computer will move onto the
next square to be matched. If all matches are made, then a bonus of 1000
points is added to your score.
7. The game then re-starts with further attacks of missiles, in increasing
number and speed.

    The game is over when all cities and NORAD are destroyed. Even if all
cities are intact, should NORAD be destroyed, then the game is over. As
each city is destroyed, the DEFCON factor is reduced. Game is over if
DEFCON reaches 1.
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Scoring
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150 points per enemy missile shot down.
1000 points for a full code screen cracked.
1000 subsequent points each additional time the code screen is cracked.

RIVER RESCUE

THE DISPLAY
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1. The scores of player 1 and player 2 are displayed at the top of the
screen, along with the high score.
2. The number of lives remaining to the current player is displayed at the
bottom of the screen on the left hand side. Each player starts with 5
lives, extra lives being awarded as described in the rules section.
3. The number of refugees on board the boat is displayed at the bottom of
the screen on the right hand side.
4. On the lower skill levels a light in the bottom right hand area wll
turn green if you are correctly aligned with a jetty, a magenta if you are
likely to crash.

How to play
----
1. The computer will ask you to select from skill levels 1 to 3. Press the
relevant key: 1,2 or 3. Level 3 is the most difficult.
2. The computer will then ask you to select a 1 or 2 player game. After
you have entered 1 or 2, you can begin the game by moving the joystick.
3. Your boat will then appear on the left of the screen and you must use
the joystick to control it. Move the joystick as follows:
E or X to steer the boat;
S or D to decrease or increase speed accordingly.
FIRE BUTTON launches a missile.

Rules:
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1. The object of the game is to navigate your way along the river,
avoiding or shooting obstacles, picking up refugees from the north bank of
the river and dropping them off on the south bank.
2. The river is infested with giant electric eels and crocodiles. If you
pass too close to an eel, your ship will be electrified and you will lose
1 passenger. If you have no passengers, you will lose the ship. Hitting a
crocodile will temporarily make steering difficult.
3. Collision with any other obstacle will lose you your ship. Logs may be
destroyed by shooting them. Other obstacles such as islands, sandbanks and
white water must simply be avoided.
4. When a jetty appears on the screen, you may dock by steering the boat
alongside. When it touches the jetty, the boat will stop. If you dock at a
jetty on the north bank (top of screen), a refugee will run on board and
you will receive a bonus. If the refugee is subsequently killed, most of
the bonus will be deducted.
5. If you dock at a jetty on the south bank, any refugees you may have on
board will run ashore and you will score points for each refugee. The more
you have aboard, the higher your score per refugee. You may carry up to 9
at a time. However the electric eels in the river may make it impossible
fo you to dock at a jetty for long, and you may be forced to leave before

off-loading all your passengers.
6. If you dock and 9 refugees off-load at one go, you will receive a
special bonus and and extra life.
7. To continue up the river after docking, move the joystick to steer the
ship away from the jetty.
8. You will gain an extra life after you have carried 10 refugees to
safety and another after you have rescued 25.
9. Periodically, an enemy helicopter will fly overhead and drop mines into
the water ahead of you. You must shoot a path through these to avoid being
blown up.
10. In addition, one of the warring armies has sent a tank to patrol the
north bank of the river. If you travel too slowly and allow it to overtake
you, it will blow you out of the water. You cannot shoot it...your only
defence against the tank is to outrun it.

SUBMARINE COMMANDER

    Turn monitor, peripheral system and computer on in that sequence.
Insert module (either Xbasic, E/A, or MiniMem, select LOAD RUN, type in
DSK1.GAMES. A menu will be presented. Select Submarine Commander. The game
will load and begin to execute.

The controls
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Joystick: optional
_____

To surface: Pull the joystick towards you (down)...this pushes the
submarines nose up.

To dive: push the joystick away from you (up); the nose goes down.

Rudder Control: Pull the joystick to the left or right. Use in conjunction
with the compass setting (see instrument panel).

Keyboard
_____
Active keys are:
E>Surface
X>Dive
S>move left
D>move right
1>abort mission
2>START game
3>Report
4>Dive
5>Blow ballast
6>Forward
7>Reverse
8>Fire Torpedo
9>Map
0>Sonar Screen
=>Periscope
SPACE BAR>pause

To surface: press up arrow (E)
To dive: press down arrow (X)
Rudder: left arrow (S) to move left and right arrow (D) to move right.
Direction: FORWARD (6) or REVERSE (7) to change direction and speed.
Crash dive (4) or Blow Ballast (5) to rapidly change your depth. Dive or
surface to neutralize either of these directions.

How to play
----
1. After the title, the computer asks you to choose a skill level (1-3).
Press the space bar for the number you want. Press START (2) when you are
ready.
2. The map in the centre of the screen shows your position (black cross)
and thoe of the enemy convoys (white dots). The object is to track down
the convoys and sink all the ships. The enemy is composed of the
following: Destroyer, Tanker and Freighter. You score tonnage points for
sinking ships, with more points for tankers and freighters than for
destroyers. The enemy ships are armed with shells and depth charges and
can cause you heavy damage. If they detect you they may attack or take
evasive action to try to lose you. To attack the target, you have the
following equipment:
MAP: Press MAP (9) to establish your position relative to land and convoys
at any time.
SONAR: Press SONAR (0) for a picture of the sea around you; ships within
range show up as blips on the screen.
PERISCOPE: Press PERISCOPE (=) when you are a a depth of 40 feet, and you
will get a view of any ship within range that is in your line of sight.
Use this mode to prepare for an attack.
TORPEDOES: When you are at a depth of les than 30 feet, press the fire
button on the joystick, or FIRE (8) to release a torpedo. Aim it ahead of
the target ship.

The following is a mock-up of the instrument panel:

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AAAAA  HHHHHHHHHHHHHHHHHHH IIIII
AAAAA  H                 H IIIII
AAAAA  H                 H
AAAAA  H                 H JJJJJ
       H                 H JJJJJ
BBBBB  H                 H
BBBBB  H                 H KKKKK
       H                 H
CCCCC  H                 H LLLLL
CCCCC  H                 H LLLLL
       H                 H LLLLL
DDDDDD H                 H LLLLL
       H                 H
EEEEE  H                 H N MMM
       H                 H N MMM
FFFFFF H                 H N MMM
       H                 H N MMM
GGGGGG HHHHHHHHHHHHHHHHHHH N MMM
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     The diagram above shows the relative position of the guages on the
panel, and the description below tells what each are used for. At the
beginning of each mission, you are allocated quantities of torpedoes,
fuel, air, and battery charge (See skill-level for details). You must be

careful not to run out of any of these. You speed is initially set at NIL, and you have to press either FORWARD (6) or REVERSE (7) to start moving.

In detail, the controls are as follows:

A....Attitude: Move joyst left/right or arrow keys to change course.
B....Compass: The compass reading determines the course you steer.
C....Clock. This times how long missions last.
D....torpedoes: The two digits on the left are the number of torpedoes remaining. Next to these are torpedoe status indicators. Thes can be any of the following colors: (a) light blue(cyan)=priming. (b) Dark blue=loading (c) Red=ready to fire (d) Yellow=tube out of action.
E....Fuel supply
F....Battery charge reading: To re-charge, you must surface.
G....Speed: When the sub is in the blue (cyan) area, the sub is moving forward. When it is in the green area, the attitude dial causes the compass and depth dials to move in the opposite direction.
H....Sonar screen: Shows the enemy ships as white blips. Your position is the black cross in the center which remains static. When an enemy ship is correctly lined up, the blip will appear directly above the cross, or at some point between it, and the edge of the screen.
I....Depth in feet.
J....Hydrophone chart: This is the longest range dial on the screen. The nearer a ships is to your submarine, the closer the relevant peak is to the left of the dial.
K....Tonnage sunk. The amount recorded is in thousands of tons (Ktons).
L....Depth below keel: Be careful when diving. This shows the water below you.
M....Damage indicators: These show damage as a square ranging from empty (no damage) to full (severe damage), to (C=controls), (I=instruments), (H=hull) or (E=engines). You may carry on without waiting for repairs, but beware of unexpected malfunctions. (Your sub is repaired automatically. However, repairs are carried out more rapidly on the surface). If your hull damage becomes severe, it may crack...with a watery grave awaiting you.
N....Air supply: Can be renewed by surfacing.

SKILL LEVELS

The higher the skill level, the more challenging the game becomes. You will in your encounters with the enemy, have t attack and destroy more convoys with less fuel, charge and torpedoes.

TACTICS

You constantly need to assess the pros and cons of moving on the surface or underwater. Running on the surface is quicker, but if you get too close to an enemy convoy on the surface, you will be seen and attaced by the escorting warships. To warn you, a bell sounds as you approach the enemy's range of vision on the surface.

Your greatest advantage over the enemy is your ability to travel underwater. However, this does use up air and batteries, and you can still be detected if you fire a torpedo.

As your initial working tactics, try approaching an enemy convoy on the surface using the map(9) mode. As you draw near, dive and locate the ships with your sonar(0) and hydrophone chart. Then come to a depth of about 25 feet and press periscope(=) for a view of the surface. Aim you sub at the target, press the trigger on the joyst or fire(8) to release a

torpedo, aiming it ahead of the ship. Hits are recorded on the 'tonnage' sunk chart on the right. If you are under heavy attack from the surface ships and wish to lose them, dive deep and wait till the attack is over.

END OF GAME

     The game ends when any of the following occurs: (a) all enemy convoys are sunk; (b) all oxygen is used; (c) all fuel and charge is used; (d) there is severe damage to the hull.
The game can be terminated by pressing
abort(1). You still receive a rating of
your abilities as a Submarine Commander.

RATING

     At the end of each game, you receive a rating (score) with points awarded for tonnage sunk and the ultimate achievement of a Submarine Commander...elimination of all convoys. Points are deducted for fuel and torpedoes used, and damage sustained.

Summary of factors affecting your rating:

Points given for:
(a) tonnage sunk
(b) Sinking all convoys proportional to skill level

Points deducted for:
(a) fuel used
(b) Torpedoes used
(c) Damage incurred
(d) Being destroyed