SUBMARINE COMMANDER

For the TI-99/4A and Emulators

This program can be loaded using option 5 of the EDITOR/ASSEMBLER cartridge.
To load, type: DSKn.SUBCOMMAND

Once loaded, you'll see the title screen and SKILL LEVEL, as displayed on the cover of this manual.
To toggle through the game levels, simply press the SPACEBAR.

To start the simulation, press START (Number 2)

The Controls

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…………………………To Surface
X…………………………To Dive
S…………………………To Move Left   (Rudder Control)
D……………………….To Move Right   (Rudder Control)
1……………………….Abort Mission
2…………………………Start Mission
3…………………………Status Report
4…………………………To Crash Dive
5…………………………To Blow ballast
6…………………………Move Forward   (Direction & Speed)
7……………………….Move in Reverse   (Direction & Speed)
8…………………………Fire Torpedo
9……………………….Map
0…………………………Sonar Screen
=…………………………Periscope
SPACE BAR………Pause

Pressing either (E) or (X) will neutralize a Crash dive (4) or Blow Ballast (5) in progress.

How to play

1. At the title screen, you may choose a skill level (1-3), by pressing the SPACE BAR to toggle through the options. When you are ready to begin the simulation, press START (Number 2)

2. The map in the center 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 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 at 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 less 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 the instrument panel with the MAP shown:
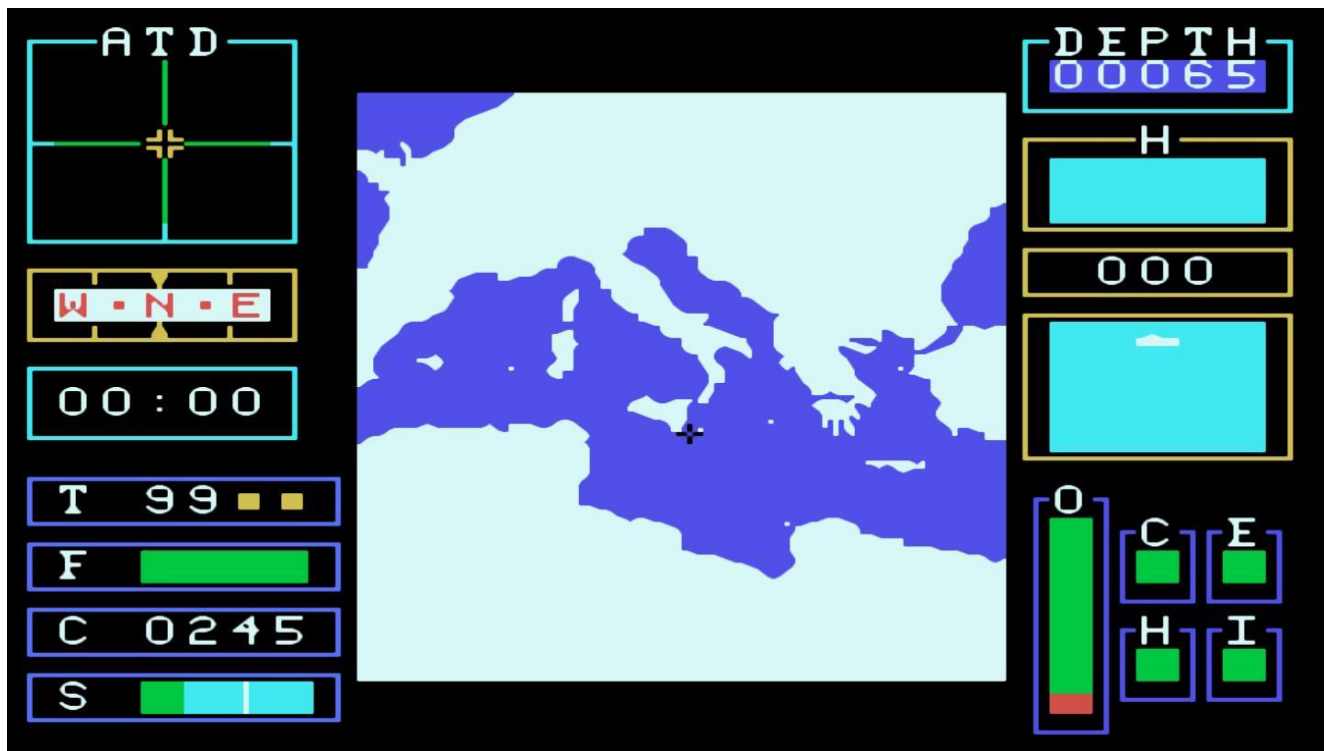
The graphic on the previous page shows the position of the gauges on the panel, and the description below tells what each are used for. At the beginning of each mission, you are allocated quantities of torpedoes, fuel, air, and battery charge (See skill-level for details). You must be careful not to 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 joystick 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 torpedo status indicators. These can be any of the following colors:

      (a) Light Blue   = 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 measured 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 (K-tons).
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. At the higher levels, you'll have to attack and destroy more enemy 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.

One game tactic is to approach 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 your submarine at the target, 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 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'll 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

User's manual - re-created & updated in June, 2013

Helping the TI-99/4A live on well into the 21st century!   - K.C.