#### NOT POLYOPTICS - SHIPS

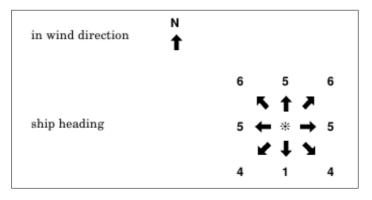
Ships! is a game of seagoing warfare in the eighteenth century, set into computer language so that your TI-99/4 can help you play while giving you the sights and sounds of the bounding main1. The movement and shooting capabilities of the pieces imitate those of men-of-war, the most feared fighting ships of that era. The object for one player is to escort a merchant ship across the screen; for the other player it is to sink the merchant ship.

# Setting up

- 1. The player is asked if he wants to play the game with the merchant ship or not. All of the following rules apply to games without the merchant ship except those dealing with the merchant ship.
- 2 One player takes the black ships and names them, the other player names the white ships. The number of masts, men, and guns is shown for each ship.
- 3 The screen appears with the ships, islands, and weather set into their starting positions. The merchant ship is the bottommost white ship. The islands and weather have been calculated randomly. The ocean represented by the screen is unlimited in the following way: if a ship tries to move out of the screen, it will not move, but every other ship (and the islands) will move back to preserve the relative positions as if the ship had moved off the screen. (Exception: no ship may move off the left side of the screen in Mediterranean Pirates.)
- 4 The white ships win if the merchant ship tries to move off the left side of the screen. The black ships win if they sink the merchant ship. There to no limit to the number of turns in a game.

## 2. Weather

1 The wind may come from any of the eight points of the compass. The effect of wind direction on ship movement is that the ship is given moves based on its heading relative to the wind. Thus a ship with three masts in moderate wind has the number of moves shown.



Turning to a better position relative to the wind gives more moves or does not change the number of moves; turning to a worse position gives the opposite result. (Two systems of ship heading-wind direction calculations are in this program, one for straight wind direction and one for diagonal wind direction. This was done to compensate for the greater absolute distance a ship travels in the diagonal.)

- 2. Wind strength has six degrees of severity. These appear at the top of the scream as
  - 1 for dead calm
  - 2 for breeze
  - 3 for moderate wind
  - 4 for strong wind
  - 5 for a gale †
  - 6 for a typhoon †
  - † Shooting is less accurate in this weather
  - A ship is given more moves if the wind is stronger.
- 3. Before every series of moves there is a one in six chance that a fog will cover the area. As you will notice, when this happens the screen becomes completely gray. The player must make decisions

based on his previous observations of his position. Shooting is less accurate in fog.

4. After every series of moves the weather is re-adjusted.

# Programming the ships to move (user active)

1 The ship whose turn it is blinks on and off four times, and the number of moves it may make in a straight line in its present heading appears on the bottom of the screen. To program a course for the ship to carry out press

1 to turn left, 0 to turn right,

V to proceed straight ahead, and

SPACEBAR to stand still.

The number of moves will adjust according to the instructions the player has given (see Weather- number of moves shown).

2. Anytime during a ship's programming turn several adjustments may be made to it by using certain keys.

SHIFT T will show the name of the ship whose turn it is and blink that ship on and off four times.

M will make the merchant ship blink on and off four times.

C will make the ship shoot at close range only, for one turn. If a ship shoots at close range its accuracy is increased.

! (SHIFT) will change ammunition. Round shot is best at long range; chain shot is devastating, but inaccurate; double shot is a compromise. At the beginning the ships are loaded with round shot. D will tell the number of masts, men and guns left on the ship. R say repair one mast. If a ship has all its masts, nothing will happen. To repair a mast the ship must be beyond cannon range of any enemy ship. The likelihood of a mast being repaired is a function of the number of men aboard. The attempt to repair a mast (unless no masts are damaged) prevents all movement in that turn (but not shooting.)

- 3. The three black ships are programmed first, then the white ships. The white ship player should not look at the other player programming his ships.
- 4. When all the ships have been programmed they begin to carry out their orders. Shooting occurs automatically when enemy ships are in range.

## 4. Performance turn (user passive)

- 1. No keys are active during this turn.
- 2 When the moves are carried out a random-type sequence is performed, starting with a random ship and continuing through the rest. After this is done for every ship's first turn the pattern is repeated.
- 3. Shooting is performed automatically by a ship if an enemy ship is within range (4 spaces), in the right relative position (a ship cannot shoot out of its bow or stern), and the firing ship has any shots left that turn. After every performance turn a number corresponding to the number of times that it may shoot is calculated for each ship based on the number of men and guns loft undamaged. An undamaged ship will have six or seven shots a turn.

After every ship has been given a chance to move once, each ship looks for an enemy to shoot. After a ship has shot (or tried to shoot) an enemy, the enemy returns the fire if he can. This pattern is repeated for the second turn, etc.

As per above, all three conditions must be met for a ship to be able to shoot.

4. The likelihood of hitting an enemy ship is a function of the distance to the target, the type of shot being fired, and the weather conditions (see Weather para 2 and 3). If a ship has been hit it will lose a mast, men or guns, or both. Severity is calculated the same way as

likelihood. If a ship loses a mast that fact will be reported on the screen; damage to men and guns is not reported in this way. Losing a mast reduces the number of moves a ship may make per turn.

- 5 If a ship runs aground on an island it has a one in four chance of losing a mast. If it collides with another ship the same odds apply, including a one in four chance that the other ship will sink. Thus ramming can be used as a desperation tactic. Collisions cost both ships the rest of their movement that turn.
- 6 Missed shots cause a splash and don't harm anything.
- 7 Ships sink as a result of cumulative damage.

For 99/4A owners use ALPHA LOCK when playing this game.

#### On 99/4a, For "?" (whose turn) press FCTN I.

Change shot: ! (shift 1) turn left =number 1 turn right= number 0 Ahead=V Space = no move R = Repair T = whose turn M= merchant ship blinking D = Damage Status C = close range