

# The Wheelhouse

The wheelhouse or pilot house is the control center of the vessel. It is where the captain sets the course and speed of the vessel. All the heavy equipment is operated from the wheelhouse and the captain can oversee the work of the crew.

## Technology Then and Now: Navigation and Communication

There is a great deal of technology on a fishing vessel. Technology helps the boat navigate to and from the fishing grounds, find fish, and communicate with other vessels or those on shore. This equipment is found in the wheelhouse. This equipment includes radar, GPS, sounding machine, charts, compass, VHS radio and internet service.

**Radar** is critical to avoid collision with land, buoys, and other vessels. Radar gives the captain the distance off and bearing of other vessels on a crowded fishing ground. If the weather is cloudy or foggy, radar becomes an indispensable tool to navigate around obstacles.

### Activities:

1. Maze sheets.
2. Set up a maze using chairs, tables, etc. around the room and have a person stand at each obstacle. Have another person put on a blindfold and position them at the beginning of the maze. The blindfolded person slowly moves through the maze. As he/she get close to an obstacle, the person at that obstacle makes a beeping sound. The closer they get, the faster the beeps. Once the blindfolded person gets past the obstacle, the beeping stops. How many collisions were there? Did the beeping help to avoid collisions? What helped and what did not? Were some obstacles easier to avoid than others?
3. Set up a maze similar to that of above. Blindfold a person and position them at the beginning of the maze. As the person proceeds through the maze, information and directions are given. For example, "move forward three steps, there is an obstacle two steps in front of you, turn right, go one step, there is an obstacle to your left..." . Were you able to get the person through the maze? What directions worked? What was confusing?

A **Compass** may seem old fashioned but it can still be a useful tool in certain circumstances. It will indicate magnetic north and give you the direction you are facing based on that coordinate.

Activities:

1. Make a compass rose.
2. Make a compass
3. Find Your Way worksheets
4. Determine the directions in your room and play Simon Says using the directions. For example: "Simon says face north." "Simon says point southwest." "Take a step south." Depending on the ability of the students, you can have them move back to the starting position after each command (this makes it easier if directions are just being learned) or they can continue from where they are.

**Fathometer/Depth sounding machine** measures the depth below the vessel. Measuring depth is often simply referred to as sounding. A fathom is about 6 feet. Knowing the depth of the water beneath the vessel is important information in order for the dredge to be positioned at the desired angle. Typically, the dredge is set at 20 – 50 fathoms. This means there is a lot of cable in use. Setting the dredge at the correct angle allows it to fish most effectively as it slides over the bottom.

Activity:

See: Sounding worksheet

**GPS** (short for global positioning device) is used to locate the exact position of the fishing ground and to get to and from the grounds. This is the same system that is used to navigate on land. You are probably familiar with its use in your car or on your cell phone.

Activity:

Research a traditional navigational method. What equipment was used? How accurate was this method/equipment? What were the shortcomings of this method?

**VHF Radio** is used to communicate with other vessels and to contact the Coast Guard if needed.

Activity:

Imagine you are a crew member on a scallop boat and the captain has to contact the Coast Guard. Write and account of this event. Why was the Coast Guard contacted? What information was given to the Coast Guard in order for them to respond? How did the Coast Guard respond? What was the final result?

### **Hydraulic controls**

The dredge is controlled from aft of the Pilot House. It requires skill to face aft (the back of the boat) and control the movement of the dredge while the vessel continues to move forward.

Activity:

Fill a bucket with small items such as blocks, shells, small balls, etc. Attach a six foot rope or string to the handle. While walking backwards, pull the bucket up to you and dump the contents into a specified receptacle that has been placed at the other side of the room. Do not stop walking during the entire activity until you have emptied the bucket.