



## 1.1. Difference from Land traffic

### 1.1.1. Right side navigation

A boat is different from car; International Rules Of the Road (RRR) state that when giving way to another ship, you always **alter course to the right**. When two boats or ships are on a head-on course with each other, both are to alter course right. Hence the need to see left.

### 1.1.2. Speed restrictions

1. There are few area of speed restrictions and few aids to navigation in the water area where large vessels don't navigate.
2. Do not operate a vessel at speeds greater than are reasonable or proper given the existing waterway traffic, persons in the water, and weather conditions.
3. Do not exceed any posted speed limits.
4. Do not operate a vessel at greater than wakeless speed in a posted no wake zone.
5. Do not operate a vessel at speeds that may cause injury or damage to any other person, another vessel, or the property of others. This includes causing damage or danger from the wake of your vessel.
6. There are few aids to navigation in non commercial areas.

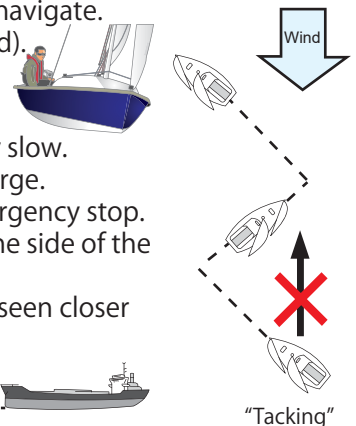
### 1.1.3. Nautical setting

1. Current and wind will affect your boat's behavior and course.
2. If you require Rescue, it may take time.
3. Refueling facilities may be found in Marinas.
4. The position of vessel may be difficult to determine without proper equipment.
5. Obstacles, above and below water, are difficult to see.

## Various Users of the Sea

### 1.2.1. Sailboat

1. Altering course in a sailboat takes some time. It is difficult to alter course because the boat is driven by the wind.
2. The mainsail, in certain circumstances, may block the vision of the crew as they navigate.
3. It is more difficult to sail to **into the wind** (windward) than to leeward (downwind).
4. Sailboat sail to windward by "tacking".



### 1.2.2. Large vessel

1. A vessel has large dead angle ahead of the bow, and her maneuverability is very slow. The speed of a large vessel **seem slower than the real speed** because the hull is large.
2. Large vessels may move several thousand meters before they can make an emergency stop.
3. When small craft navigate side by side with the large ship, it will be down into the side of the large vessel.
4. When the helmsman of large ships is watching small boats, small boats may be seen closer than they are.

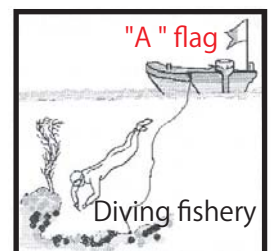
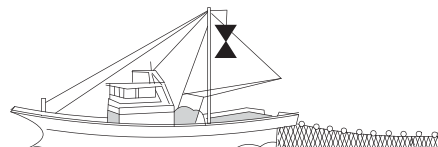


Several thousand meters



### 1.2.3. Fishing vessel

1. Fishing vessels, when engaged in fishing, frequently neglect watching for safety.
2. Fishing vessel are difficult to alter course or stop while fishing.
3. An "A" flag may be hoisted while divers are fishing. Often no one is on watch on the boat. (**The "A" flag is not always hoisted while conducting diving fishery.** See section 1.6.1.)



### 1.2.4. Work vessel

1. Working vessels at anchor are "stand on vessels"
2. Working vessels are difficult to alter course or stop when underway.



### 1.2.5. Personal Water craft (PWC, Water scooter, or Jetski)

1. The skill of the operator determines the safety of the vessel.
2. A PWC has neither a rudder or propeller, so it can go in shallow area.
3. A PWC requires power to move and turn.
4. A PWC has no brake.
5. A PWC is easy to capsize.



## 1.3. Piscatology and Fishing Equipment (Piscatology is the study of fishing and fish; the science of fishing)

### 1.3.1. Set net fishery and Bush weir fishery

1. Set-nets may be in the same place for a **long period**.
2. Some set-nets in area of migratory fish are large and have **many buoys**.
3. A Bush Weir fishery is made up of net and bamboo pole in shallow area.

Pairs of vessels engage in fishing by dragging nets between them. Do not to go **between them**.

Beach seining is frequently the activity for sightseeing or educational purposes.

1. Often a **polystyrene foam** piece or **plastic bottle** is used instead of buoy.
2. Locations may change every day.

**Locations change every day.**

1. Fishing vessel may change course suddenly.
2. The net is dragged near the surface.

1. An aquaculture is made up of nets and poles in shallow area close to shore.
2. There may be ropes or wire between aquaculture floaters.

1. These may extend to overall a length several kilometers.
2. **Location changes every day.**

1. No one may be on the ship during the operation.
2. An "A" "flag" may be hoisted while divers are fishing.

### 1.3.2. Trawl fishery

### 1.3.3. Beach seining

### 1.3.4. Gill net fishery Octopus pot fishery

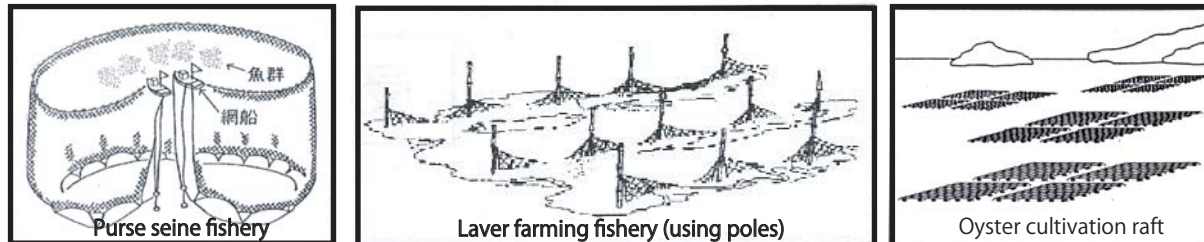
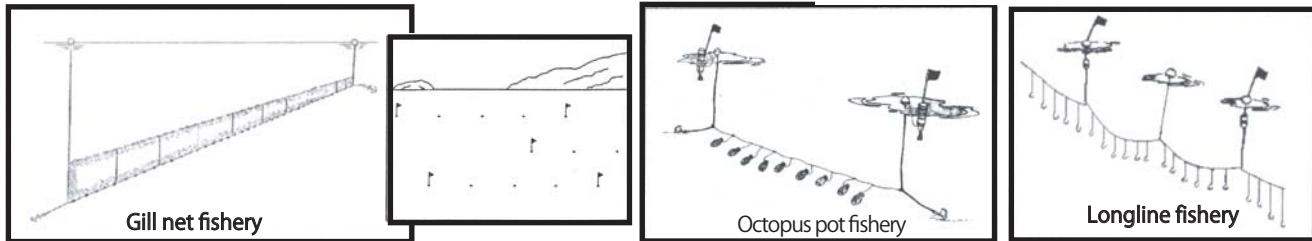
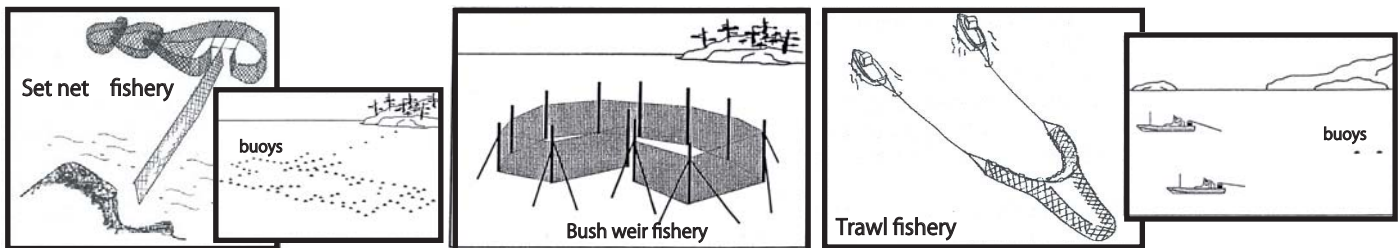
### 1.3.5. Purse seine fishery

### 1.3.6. Trawling fishery

### 1.3.7. Aquaculture

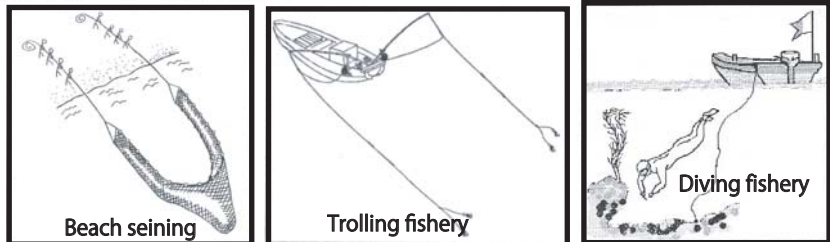
### 1.3.8. Longline fishery

### 1.3.9. Diving fishery



#### Notes:

1. Buoys of fishing gear are **not uniform**.
2. Few fishing buoys have lights.
3. It is hard to find buoys when there are waves.
4. Do not get close to the fishing nets and buoys or fishing vessels.
5. There are fishing rights not only in the ocean, but also in rivers and lakes.



## 1.4. Circumstances of the Marine Accident

### 1.4.1. Marine disaster

1. Over 80% of marine accidents happened in waters **less than 3 miles** from the coast.
2. **Experienced skippers are more prone to accidents than beginners.**
3. Over **80%** of victims with a **life jacket** survive when they fall overboard.
4. Human error accounts for most accidents i.e.: poor lookouts or improper engine handling.

### 4.4.2. Causes of marine accidents

1. Collision (1) Poor look-out(Boat) (2) Improper steering(PWC)
2. Engine failure (1) Insufficient check of the boat before departure (2) Inappropriate engine handling
3. Running aground (1) Not confirming own position (2) Improper study of water area (3) Improper steering (4) Poor look-out
4. Capsizing (1) Carelessness about weather and sea condition (2) Improper steering

## 1.5. Responsibility of Skipper

### 1.5.1. Skipper

1. The skipper is in charge of navigation and may select appropriate crew to share tasks.
2. When more than one certified person goes aboard a boat, they should decide who will be the skipper and who would be the assistant.

### 1.5.2. Responsibility

1. The skipper may be criminally responsible, civil liable, or liable for damages.
2. **The skipper must take responsibility if an accident occurs when a fellow passenger is in control.**

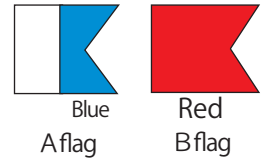
### 1.5.3. The Maritime Accident Inquiry Law

1. This law aims at the cause of the maritime accident and the prevention of recurrence.
2. Penalties include: "Admonition", "Suspension of operations" and/or "Revocation of the permit"

## 1.6. Seamanship and Manner

### 1.6.1. International code flag

1. "A" flag: "I have a diver down. Keep well clear at slow speed"
2. "B" flag: "I am taking on, discharging, or carrying dangerous goods"



### 1.6.2. Manner

1. Do not approach the following: bathing areas, fishing nets, a vessel engaged in fishing, a construction region.
2. Do not start the engine needlessly during early morning or the middle of the night.
3. Take your litter home.
4. A semi-planing boat (hump) makes bigger wake than a planing or slow boat.



## 1.7. Knowledge of the Skipper for Safe Navigation

### 1.7.1. Meteorological information

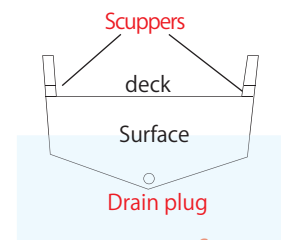
1. Meteorological Agency: Area code +177
2. Weather may be judged from the movement of the clouds, etc.

### 1.7.2. Navigation plan

1. Examine navigation charts of the area.
2. Tell the marina and your family about your schedule and navigation plan, the name of passengers, planned return to port, and scheduled time.

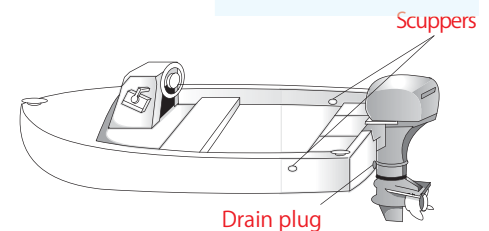
### 1.7.3. Inspection before departure

1. Confirm whether all suitable legally-required equipment is carried for the navigation area.
2. Confirm whether fuel is fully loaded.
3. Confirm whether the drain plug (bottom plug) is closed
4. Even if the last voyage went well, check of hull and engine.
5. Confirm there is communication equipment in case of an emergency.
6. Confirm the scuppers on the deck are opened.



### 1.7.4. Passenger

1. All passengers will wear life jackets, don't store the jackets.
2. Keep within the boat's carrying capacity, even for a short voyage.



## 1.8. Correspondence when an Accident Happened

### 1.8.1. Life-saving Appliances

1. Red hand flare (required)
2. Buoyant smoke signal
3. Self-activating smoke signal
4. Rocket star signal
5. Self-igniting light

### 1.8.2. Rescue request/Marine incident reporting

1. At sea • Japan Coast Guard (The Maritime Safety Agency) (call 118)
2. In a lake and a river • Police (call 110) or Fire station (call 119)

### 1.8.3. Insurance

Insurance on pleasure boats is voluntary (not compulsory)

## 1.9. Compliance Rules on the Basis of Law for Boat's Operators

### 1.9.1. Drunk operation prohibited (3points)

The skipper must not operate a boat while under the influence of alcohol or drugs because he may not be able to operate the boat properly.

### 1.9.2. Self-operation by qualified person (3points)

1. Follow **Port Regulations Law** when navigating in a harbor area.
2. Follow **Maritime Traffic Safety Law** when navigating in **traffic route**.
3. When operating a **PWC**.

### 1.9.3. Defense of dangerous control (3points)

Don't approach a swimming persons or collide with other ships, etc.

### 1.9.4. Wearing a life jacket (2 points)

A life jacket must be worn on the exposed deck.

### 1.9.5. Implementation of pre-departure inspection (2 points)

Carry out the boat inspection and acquire weather information before departure.

### 1.9.6. Implementation of appropriate lookout (3 points)

The helmsman is always on lookout. Any other crew or passengers on deck are also on lookout.

When any of the six items mentioned above are violated, there are penal regulations. (There is **no fine**.)  
(The person will attend a **Re-education training course** can take the reduction of the decision)

\*When death is caused by the violation, the penalty point increase by adding 3 points to the original score.

### 1.9.7. Correspondence regarding marine accident



## 1.10. Law for Boat's Operators

### 1.10.1. First Class Boat's Operator

1. Vessel limitations: A vessel of less than **20 gross tonnage (G.T.)** (except **personal watercraft**) and can be driven in all sea area.
2. Age limitation: Operator must be **18 years old**.

### 1.10.2. Second Class Boat's Operator

1. Vessel limitations: A vessel of less than 20 gross tonnage (except personal watercraft) can be driven in area of the sea of less than **5 N.M from shore** or **smooth water area**.
2. Age limitation: Operator must be **16 years old**.  
(Less than 5t-limited approval can be acquired from 16 to **18 years old**.)
3. There are less than 5G.T. -limited approval and Area/output Limited approval.

### 1.10.3. Personal Water Craft Operator

1. Vessel limitations: Personal watercraft dedication approval. It can be driven in a lake and a river and a sea area of distance less than **2 N.M.**
2. Age limitation: You must be **16 years old**.

### 1.10.4. Revocation of license

Minister of Land, Infrastructure can issue certificate of "Reprimand", "Suspension of Business" and "Revocation of a License".

1. When the person who violated Law for Boat's Operators.
2. When the business of the small vessel operation can't be done properly any more for reasons of physical and /or mental disability.

### 1.10.5. Renewal of a permit of boat's operator

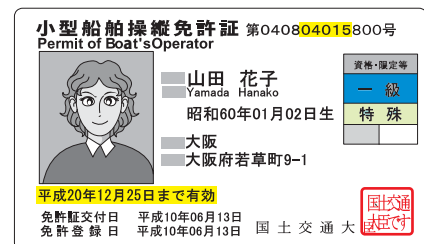
1. The permit is valid for **5 years**. It can be renewed **1 year** before the expiration day.
2. Before a renewal, attend **the renewal training course** at designated lessons agencies within **3 months**.
3. If it can be proven that there is boarding personal history as skipper more than one month for less than 5 years, the lessons for license renewal can be exempted.
4. Satisfy a physical standard except for **color identification ability**.
5. When license is expired, **the revocation reissue training course** is attended in designated lessons agencies.  
In addition to the renewal training course.
6. It becomes qualification-less when it is operated as a captain with an expired license

License process:



### 1.10.6. Reissue of a permit of boat's operator

1. Apply for the correction when an address, a name, or the domicile area is changed.
2. Apply for the regranting when you lose identification certificate. Submitted form to Minister of Land, Infrastructure and Transportation.



## 1.11. Ships Safety Law and Law for Registration of Small Vessels

### 1.11.1. Small vessels inspection system

1. A small vessel with an engine must be inspected by **Japan Craft Inspection Organization (JCI)**.
2. Vessels that are less than 3m in length and less than 1.5 kw are exempt.
3. **Periodical inspection**....Major inspection to do for the first time and every **6 years**.
4. Intermediate inspection....Simple inspection done between periodical inspection. (3 years)
5. Occasional inspection....Inspection to do when  
(1) navigation area was changed, (2) when a vessel was repaired on a large scale, or (3) it was remodeled.
6. Temporary Navigation Permit Inspections....The inspections to allow the vessel without Ship Inspection Certificate to navigate temporarily. After an inspection, the Temporary Navigation Permit is issued.
7. **Ship Inspection Certificate**....Listed: Ownership, vessel's name, port of registry, **navigation area, maximum passenger capacity**.

Maximum number of persons allowed on board • One adult converts with **two people 12 years under**.  
Infants under one year old shall not be included in the

8. Ship inspection record book....A record book of inspections will be kept on board. (Next inspection day and specifications are mentioned.)
9. Ship inspection completion slip....Will be placed on both sides of the vessel.

#### The small vessel without a propulsion engine is necessary for the inspection.

1. A sailboat which sails in the coastal the coastal area
2. A passenger boat or leisure fishing boat which is towed by a boat with engine.
3. A row boat with capacity 7 or more passengers.

### 1.11.2. Navigation areas defined

1. Smooth water area....Lake, river and area in the harbor. etc.
2. Coastal area....The area within 5N.M. from the seashore.
3. Coastal water area....The area within 20N.M. from the seashore.
4. Major coastal area....The water area surrounded by the line of the east longitude 175°, the south latitude 11°, the east longitude 94° and the north latitude 63°.
5. Ocean going area....All the water areas

### 1.11.3. Law for Registration of Small Vessels

1. Small vessel more than **3 meters** long or **20HP** and Sailing vessels of less than 12 meters long with propulsion system must be registered with Japan Craft Inspection Organization (JCI).  
(A vessel which is more than 12 meters long without propulsion system)
2. The **ship number must be shown on** the hull.
3. Initial Registration....This is the registration for the small vessel which has not been registered before.
4. **Transfer of Ownership**....This is a registration to do when there was it of modification in dominium of small vessel.
5. Registration Change....This is a registration to do when genus of the vessel, the port of registry, the hull identification number, type of propulsion system and a format (length / beam / depth / gross tonnage) of small vessel or name / address of an ownership was changed.
6. Cancellation of Registration....When a registered vessel is scrapped or sank, it must be registered. And you must erase registration when a small vessel is registered as a **fishing vessel**.



## 1.12. Environmental Protection

### 1.12.1. The prevention of the ocean pollution

1. The discharge of oil or waste material into the sea are regulated by Law Relating to the Prevention of Marine Pollution and Maritime Disaster.
2. A vessel may discharge oil for the purpose of **securing safety of a vessel**.
3. Dispose of the bilge in which oil is mixed must be done on the land.

### 1.12.2. Abolition of unnecessary boat

1. Neglected boats and illegally moored boats cause hindrance in traffic.
2. Have speciality agents process unnecessary boat properly.

### 1.12.3. Ambient noise and exhaust gas

1. Local governments enforce noise and emission control by local regulation.
2. Two stroke marine engines should be replaced by a injection two stroke engines or a 4 stroke engine.