Maritime Technical English Course

1st Module

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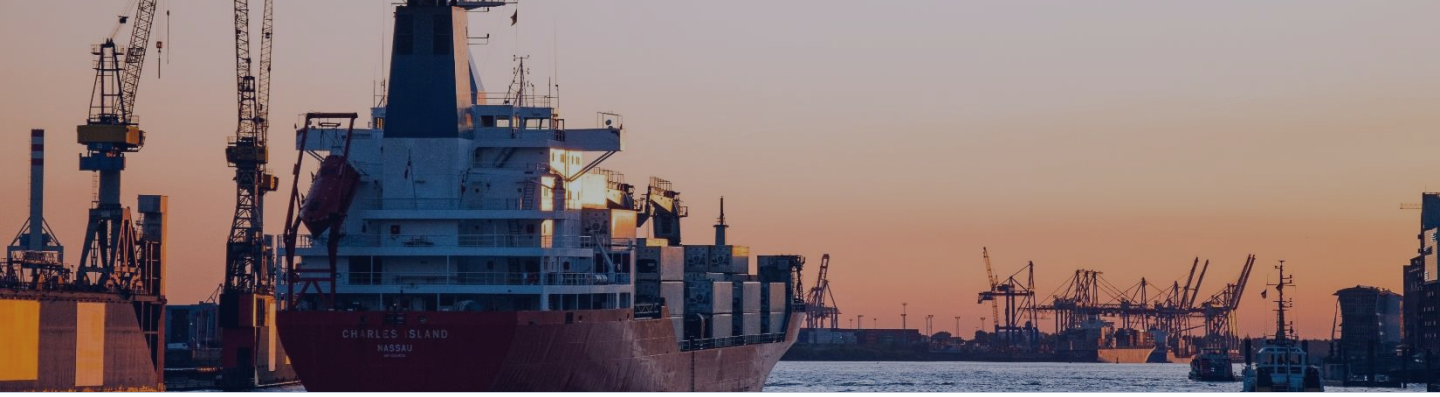

Objective

The objective of this course is to **facilitate** the learning of Maritime Technical English to non-native English-speaking cadets, students, professionals, merchant marine officers and others who may take part and work in this very specialized field, the maritime field.

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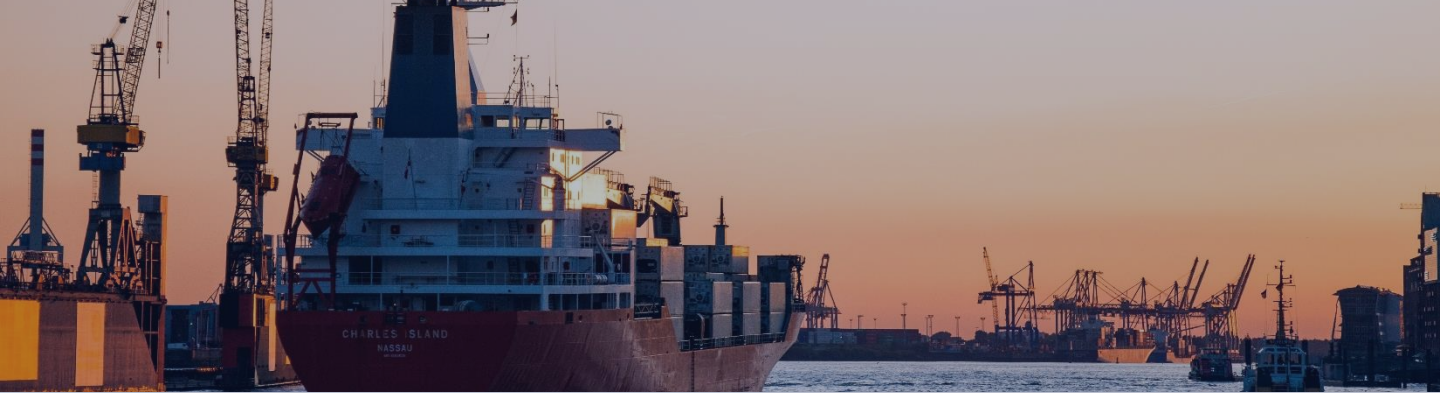

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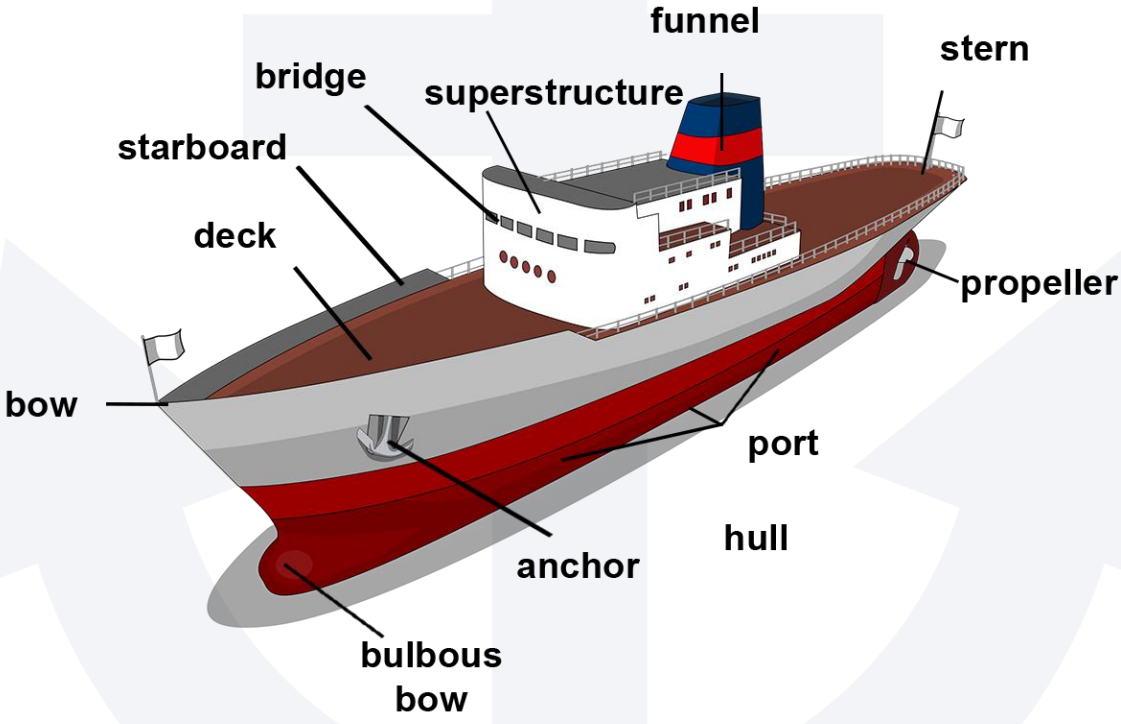
SHIP FAMILIARIZATION

Ship

A **ship** is a **vessel propelled** by engines or sails for navigating on the water. This vehicle is used for transporting people or goods by sea or any other body of water. A ship **is a complex structure** made up of many parts.

These are some basic parts of a ship:



Other parts of the ship include the rudder, the keel, the holds, the tanks, the engine room, etc.

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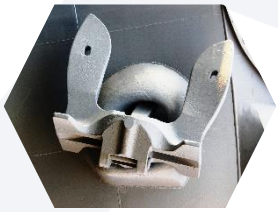
Parts of a ship

- **Funnel.** It is the smokestack or chimney on a ship used to expel boiler steam and smoke or engine exhaust. It is also commonly referred to as stack.

- **Stern.** The stern is the back or aft-most part of a ship or boat. It lies opposite of the bow. It is indicated with a white navigation light at night.

- **Propeller.** A propeller is a rotating fan like structure which is used to propel the ship by using the power generated and transmitted by the main engine of the ship.

- **Anchor.** It is a device, normally made of metal, used to connect a vessel to the bed of a body of water to prevent the craft from drifting due to wind or current.



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Parts of a ship

- **Bulbous bow.** It is a protruding bulb at the bow (or front) of a ship just below the waterline.

  The bulb modifies the way the water flows around the hull, reducing drag and thus increasing speed, range, fuel efficiency, and stability. A bulbous bow also increases the buoyancy of the forward part and hence reduces the pitching of the ship to a small degree.

- **Bow.** The bow /baʊ/ is the forward part of the hull of a ship or boat, the point that is usually most forward when the vessel is underway.

- **Deck.** A deck is a permanent covering over a compartment or a hull of a ship. The floor of a ship. It is a solid surface serving as a roof and floor.

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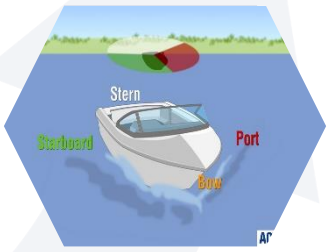
Parts of a ship

- **Superstructure.** he superstructure of a ship is the part of it that is above its main deck. It is the main area of the ship which holds the accommodation and navigation bridge of the ship.

- **Bridge.** The bridge of a ship is the room or platform from which the ship can be commanded. The bridge is manned by an officer of the watch aided usually by an able seaman acting as lookout.

- **Port Side.** It is a nautical term for left. Port is the left-hand side of a vessel, facing forward.

- **Starboard Side.** It is a nautical term for right. Starboard is the right-hand side, facing forward.



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Parts of a ship

- **Hull.** The hull is the biggest part of the ship. It is a watertight enclosure, which protects the cargo, machinery, and accommodation spaces of the ship from the weather, flooding, and structural damage.

Other parts of the ship include the rudder, the keel, the holds, the tanks, the engine room, etc.

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Directions and Positions on Board a Ship

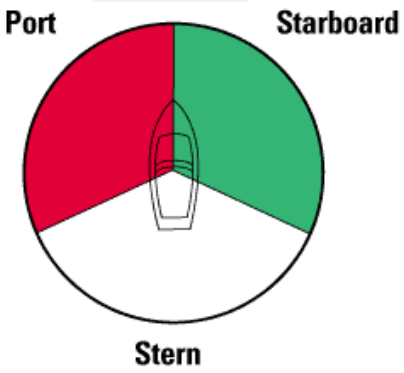
The **front end** of a ship is the **bow**. When you move toward the bow, you are **going forward**. The **rear** of a ship is the **stern**. When you move toward the stern, you are **going aft**.

When a ship is moving, either by power or sail, it is **underway**. A ship moving forward is **ahead**. When the ship moves backwards, it is **astern.**

Port and Starboard

If you are in the rear of the ship looking forward, the right side of the ship is the **starboard** side; the left side is the **port** side.

The front right side of the ship is the **starboard bow**; the front left is the **port bow**. The right rear of the ship is the **starboard quarter**; the left rear is the **port quarter**.



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Amidships

Amidships is the central part of the ship, while **athwartships** is an imaginary line running from one side of the ship to the other.
The right center side of the ship is the **starboard beam**; the left center side is the **port beam**

Going Topside and Going Below

Going topside is moving from a lower deck to an upper deck of the ship, while **going below** is moving from an upper deck to a lower deck.

Windward and Leeward

Windward is the direction from which the wind is blowing; **leeward** is the opposite direction from which the wind is blowing. This information is important when mooring and in heavy weather.

GRAMMAR

Present tense be:

The present tense of BE is formed by the forms: Is –Are and Am.

For an affirmative sentence with be you follow this pattern:

the subject plus the verb be plus the complements.

For example:

The hull is the biggest part of the ship.

Where "the hull" is the subject pronouns, "is" is the verb to be and "the biggest part of the ship" is the complement.

Another example, in negative form is:

The bow is not (isn't) the back part of the ship.

Where "the bow" is the subject pronouns, "is not" is the verb to be and "the back part of the ship" is the complement.

Now let's analyze this with a question:

They are not (aren't) cargo ships.

Here "they" is the subject pronouns, "are not" the verb to be and "cargo ships" the complement.

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NATO Phonetic Alphabet

The NATO Phonetic Alphabet It is the most widely used radiotelephone spelling alphabet. It is 26 code words assigned to the 26 letters of the English alphabet. This alphabet is required to avoid problems or confusion in radio communications.

A	Alfa
B	Bravo
C	Charlie
D	Delta
E	Echo
F	Foxtrot
G	Golf
H	Hotel
I	India
J	Juliett
K	Kilo
L	Lima
M	Mike

N	November
O	Oscar
P	Papa
Q	Quebec
R	Romeo
S	Sierra
T	Tango
U	Uniform
V	Victor
W	Whiskey
X	X-ray
Y	Yankee
Z	Zulu

2

SHIP'S NAVIGATION EQUIPMENT

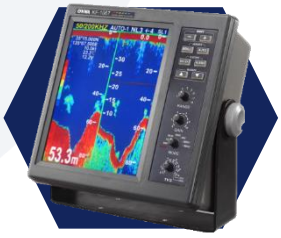
Navigation equipment

Nowadays a ship officer has marine navigation equipment that makes his life simpler, thanks to technology. At present, seafarers are trained to know the function and operation of modern navigational equipment. This equipment makes the journey at sea easier and safer. With modern facilities and automation, a ship today has several advanced navigational equipment systems that give precise data for the voyage.

Some navigation equipment is:

Radar: It is used to determine the distance of the ship from land, other ships, or those floating objects out at sea.

Magnetic Compass: This compass works in conjunction with the magnetic field of the earth. This is used to get planned direction for the voyage.



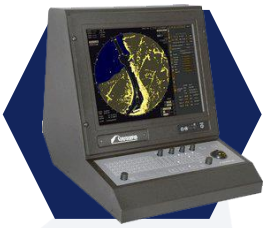
Echo sounder: This instrument is used to measure the depth of the water below the ship's bottom. It uses sound waves.

Navigation equipment

Auto Pilot: It is a combination of hydraulic, mechanical, and electrical systems. This controls the ship's steering system from a remote location (Navigation Bridge).

Speed & Distance Log Device: It is used to measure the speed and the distance travelled by a ship from a set point.

ARPA: Automatic Radar Plotting Aid shows the position of a ship and other vessels nearby. The radar displays the position of the ships that are near and selects the course for the vessel by avoiding any kind of collision.



Gyro Compass: it is used to find the right direction. This compass is not affected by external magnetic field. This is used to find correct North Position, which is also the earth's rotational axis.

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Navigation equipment

Electronic Chart: is a development in the navigational chart system. It is used in naval vessels and merchant ships. With the use of the electronic chart system, it is easier for a ship's navigating crew to determine locations, and reach directions.

GPS: A Global Positioning System receiver is a display system. It shows the ship's location with the help of global positioning satellite in the earth's orbit.

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GRAMMAR

Demonstratives and Possessive Adjectives:

Demonstratives show where an object, event or person is in relation to the speaker. They can refer to distance: near or far.
"**This**" is used to refer to a single object that is **near** and "**that**" is used to refer to a single object that is **far**.
"**These**" is used to refer to many objects that are near and "**those**" is used to refer to many objects that are **far**.

Possessive adjectives are words that are used to express **possession**. They go before nouns or nominal phrases.
For example: our cabin, their ship, my new VHF Radio.

The possessive adjectives for each subject pronouns are:

I: My.
You: Your
He: His
She: Her
It: Its
We: Our
They: Their

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Useful navigation terms

In the maritime context, **navigation is the process of plotting and directing the course of a ship.** The process of directing the movements of a watercraft from one point to another. To carry out this process properly, it is necessary to know some terms. The following terms will give you some basic notions about navigation:

- **Bearing:** The horizontal direction of a line of sight between two objects on the surface of the earth. It is expressed as angular distance from 000° (North) clockwise through 360°.

- **Course:** The direction in which a vessel is heading or is intended to be steered, the direction through the water, usually given in degrees.

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Useful navigation terms

- **Distance:** A separation between one point and another in units of length, for navigational purposes, these are divisions of a nautical mile (1.852 meters).

- **Heading:** The direction in which a vessel is pointing.

- **Knot:** A unit of speed, one nautical mile per hour.

- **Nautical mile:** A unit of distance defined as exactly 1.852 meters.

These are basic terms that may be useful to introduce you into the world of sea navigation.

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BIBLIOGRAPHIC REFERENCES

Blakey, T. (1987). **English for Maritime Studies.** Second edition. Prentice Hall International English Language Teaching. UK.

Blazek, R. (2008). **Ship ilustration**. Retrieved from: https://upload.wikimedia.org/wikipedia/commons/8/88/Ship_diagram-numbers.svg

Dokkum, K. (2003). **Ship Knowledge. A Modern Encyclopedia**. Printed by: Giethoorm Ten Brink bv. Meppel, The Netherlands. Publishe by: Dokmar.

Fifteen Basic Boat Terms (2013). Waves & Boat Social Club. On line blog. Retrieved from: https://www.wavesboatclub.com/blog/51/15-Basic-Boat-Terms

IMO Standard Marine Communiation Phrases (2001). Resolution A.918(22). Adopted on November 2001 (Agenda Item 9)

Ingpen, B. (2015). **Terminology: Parts of ships and equipment aboard ships.** Maritime Studies South Africa. Web page. Retrieved from: http://maritimesa.org/grade-10/terminology-parts-of-ships-and-equipment-aboard-ships/

International Convention on Standards of Training, Certicication and Watchkeeping for Seafarers (2005). Electronic Edition. International Maritime Organization (IMO). London.

Macmillan Dictionary (2009). **Parts of boats and ships.** Web page. retrieved from: https://www.macmillandictionary.com/.../parts-of-boats-and-ships

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BIBLIOGRAPHIC REFERENCES

Pexels (2108). Web page. Best free stock photos in one palce. Retrieved from: https://www.pexels.com/

Strong Nares, G. (1876). **Seamanship.** Fifth Edition. Griffin & CO Printers and Publishers.

Unplash (2018). Web page. Free copyright pictures. Retrieved from: https://unsplash.com/

U.S. Coast Guard (2018). **Boat crew seamanship manual. Chapter 8 Boat Characteristics**. Web page. Retrieved from: https://webapp1.dlib.indiana.edu/virtual_disk_library/index.cgi/4302894/FID1851/BOATCREW/files/ch08/ch8a.htm

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End of 1st Module