

А.Г. Михайлова

ESP FOR SHIPBUILDERS

**ПРОФЕССИОНАЛЬНЫЙ
ИНОСТРАННЫЙ ЯЗЫК
ДЛЯ КОРАБЛЕСТРОИТЕЛЕЙ**

МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ
РОССИЙСКОЙ ФЕДЕРАЦИИ

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ИНСТИТУТ ОБЩЕСТВЕННЫХ НАУК И МЕЖДУНАРОДНЫХ ОТНОШЕНИЙ

А.Г. Михайлова

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ДЛЯ КОРАБЛЕСТРОИТЕЛЕЙ**

Учебно-методическое пособие
по профессиональному иностранному языку
для студентов 3-го курса направления подготовки
26.03.02 «Кораблестроение, океанотехника и системотехника
объектов морской инфраструктуры»

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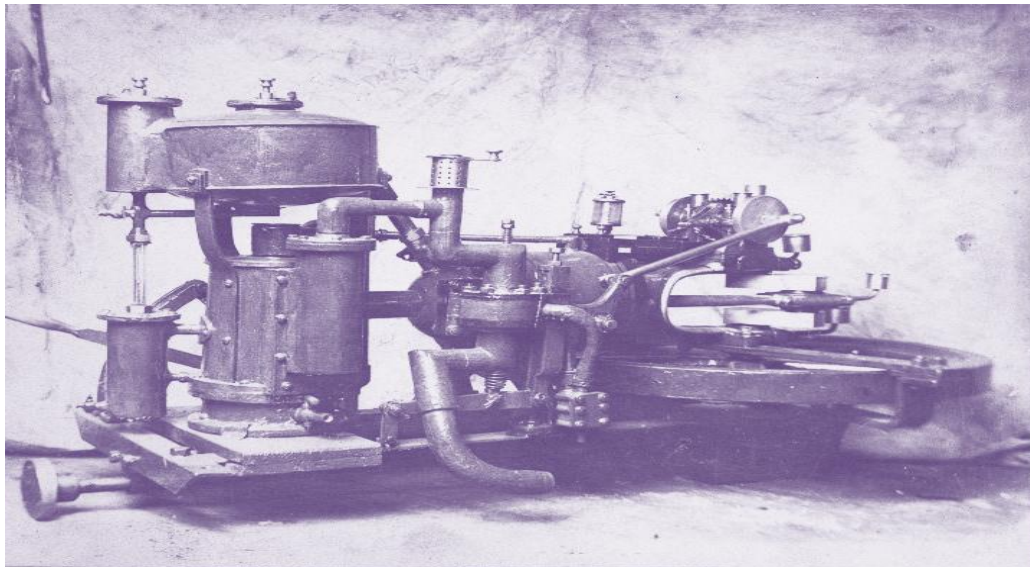
UNIT 1

HOW TO BUILD A SHIP

The Norwegian Tradition. Shipbuilding in Norway. Moving the Industry Abroad. Who works at the shipyard? Building a society. Ship building from A to Z. Ship design. Ship types. Ship sizes and classification.

IN THIS UNIT YOU WILL

- get a short historical background;
- have a look at ship design Construction of ships;
- learn about some of the jobs in a shipyard;
- have a look at some rules about the construction of ships;
- see how ships are categorized based on size;
- learn about ship types;
- read about ship classification.



Petroleum engine for ship from 1893/94.

Source: Norsk Teknisk Museum

Text A. THE NORWEGIAN TRADITION

Pre-reading activity

I. Paraphrase in English and translate into Russian the following words and word-combinations.

A shelterback / watertight deck; turbulent years; take on repairing, overhauling and rebuilding; whims of nature; put one's mind on a problem; the fishery for cod; set one's mind on propellers; to back up one's theory of sabotage; to come in contact with the seabed; progressive strength.

II. Answer the following questions. Find English equivalents to Russian words and expressions.

1. What do you know about leading shipyards? (Викинги, Олесунн, быть основанным, на местном и национальном уровне)
2. What do you know about the first ships? (первый корабль с укрытием / водонепроницаемой палубой и двигателем, капитальный ремонт и восстановление)

III. Vocabulary work. Read the new words and expressions.

Viking – викинг

memory lane – воспоминания

trip down memory lane – приступ ностальгии

whims of nature – капризы природы

investment appetite – инвестиционный план

put one's mind on – думать над разрешением

to set one's mind on smth – сосредоточить свои помыслы на чём-л.;

поставить себе к/л. цель

be appropriated by – использоваться, присваиваться

pitch propeller – гребной винт

READING

IV. Read and translate the text.

THE NORWEGIAN TRADITION

The eldest shipyards

Norway has a long and proud history when it comes to shipbuilding. One should mention the *Vikings* and their ships and see how shipbuilding has changed over the last century. We start with a *trip down memory lane* in Ålesund, where one of the largest and eldest shipyards was situated.

A.M. Liaaen was founded in 1861, then called Ystenes Skibsvarft, and quickly became one of the leading shipyards both locally and nationally. The years from 1890 to 1908 saw 53 ships built; one of them was Leiv Eriksen, the first ship with a shelterback / watertight deck and engine in Norway.

After some years following the Ålesund fire in 1904 and the recession after World War I, the shipyard only took on repairing, overhauling, and rebuilding until they bought the competitor Aalesunds Mekaniske Verksted in 1927. That time managing the company were two young brothers; Nils J. who was 25 years old and Adolf, who was only 21! They earned a good reputation.



The building of Trio at the first shipyard on Ysteneset

Much of the work done in most shipyards those days had to do with fishing, which made them vulnerable for the *whims of nature*. From about 1927 to 1939, the fishery for cod almost halved, leaving the *investment appetite* low among those buying services from Liaaen. Nils *put his mind to* finding other work sources and ended up with a profitable production of mechanically driven trawl winches.

The visionary Nils J. Liaaen also saw the need for diesel engines on board fishing ships if they were to sail all the way to the fishing grounds in the areas around Iceland and Greenland without having to refuel. A.M.Liaaen could *proudly* mount the first Norwegian constructed and produced two-stroke diesel engine in MS Aalesund in 1938. It also was built at Liaaen shipyard. Unfortunately, the production of two-stroke diesel engines only lasted up until right after World War II when the government allowed the import of cheaper, foreign engines. New ideas had to be thought, and the always-inventive Nils *set his mind on* propellers.

Fun fact

Liaaen was “*appropriated*” by the Germans during the war. They were still allowed to do business, but at the mercy of the Germans, and with German foremen on the work site to ensure work being done in at a pace that was acceptable for the Wehrmacht. This was not an easy task, as the Norwegian workers tried their best to do as little as possible as slowly as possible; blaming late deliveries, wrong dimensions, or not enough material to be useful.

One day, a German patrol boat came to the shipyard to have a damaged propeller repaired. The ship was placed in the slipway and a new piece was welded on, customized and grinded. What the German foreman did not know, was that the boss himself; propeller constructor and engineer, Nils J. Liaaen, had told his workers to weld the new part of the propeller with a wrong angle, without being noticeable. The patrol boat went from the shipyard and out through the strait without problems, but as they reached the Valderhaug *fiord* and increased the speed, an intense vibration was felt in the stern. The propeller fell off and disappeared in the ocean, leaving the Germans with no evidence to back up their theory of sabotage from the shipyard.



Another fact from Liaaen's history is when MS Fru Inger grounded one winter night in 1953, resulting in severe hull damage. The propeller blades also came in contact with the seabed and were severely damaged. The *pitch propeller* hub and inner parts were found good because of Liaaen's patented pitch propeller plant construction “progressive strength”. Due to this design, the sequential order of damage was 1) propeller blade, 2) propeller hub with internals, and 3) propeller shaft and gear.

Liaaen and propellers soon became one and the same. Their pitch propellers even made headlines internationally, but the wealth of international private competitors presented a problem for Liaaen. The answer was manufacturing under license; both with international and national companies. This kept the Liaaen name in the propeller industry without the risk of losing a lot of money.

COMPREHENSION EXERCISES

I. Answer the following questions:

1. Where was one of the largest and eldest shipyards situated?
2. What was built at Liaaen shipyard?
3. Liaaen was “appropriated” by the Germans during the war, wasn’t it?
4. Why had Nils J. Liaaen told his workers to weld the new part of the propeller with a wrong angle, without being noticeable?
5. Were the pitch propeller hub and inner parts found bad because of Liaaen's patented pitch propeller plant construction “progressive strength”?
6. What did keep the Liaaen name in the propeller industry without the risk of losing a lot of money?

II. Render in Russian:

Bias

1. To illustrate the self-serving bias with regard to success, I will draw on my own experiences.
2. He is likely to have an inherent bias toward designing.
3. Numbers ending in “5” have been rounded to the nearest multiple of 20 to prevent systematic bias.
4. His work showed a discernible bias towards philosophy.
5. He showed a bias toward a few workers in particular.

Slant

1. I always enjoyed reading their humorous slant on ordinary things.
2. Time may put a whole new slant on things.
3. The person coming in from outside who can give a fresh slant to the ongoing work.
4. They give a slant to every single news item that’s put on the air.
5. It can even impose its own ideological slant on the teaching.

Angle

1. Thanks to the angle at which he stood, he could just see the sunset.
2. Her face will be discreetly concealed by camera angles.
3. They had to do the scene over and over again, from different angles.
4. Look at every angle of the situation.
5. She was considering the idea from all angles.
6. There’s another angle to this question.

III. Find one word to match the meanings of sentences below.

1. Students were evaluated without _____.
The company has a _____ against women and minorities.
2. The article had an anti-union _____.
Each article has a slightly different _____ on the situation.
The house is likely to be built on a steep _____.
3. I didn't measure the _____ accurately.
He's approaching the issue from many different _____.
The sign leaned over at a slight _____.
This drawing of the monastery was done from an unusual _____..

Text B. SHIPBUILDING IN NORWAY

Pre-reading activity

I. Paraphrase in English and translate into Russian given words and word-combinations. Recollect the context, in which each word/expression has been used.

Oil crisis, altered markets, drastic redevelopment, shifting production, processing equipment, fixed platform, offshore exploration, the linchpins of the industrial environment, the maritime cluster, to be left crippled and scrawny, moderate order intake, numerous employees in all kind of departments, prosperous town, put an end to the tradition, to keep parts of one's industry intact, surveyors for the shipbuilders, towing the hulls.

II. Find English equivalents to the words/expressions given in Russian and answer the following questions.

1. What was Norwegian shipbuilding industry characterized by? (нефтяной кризис, измененные рынки, радикальные преобразования, смена месторасположения производственной деятельности, ослабить торговлю, умеренное поступление заказов).

2. How has the work done at the shipyards changed over the last few decades? (успешный город, закрывать бизнес, частично уберечь промышленность, буксирование корпуса).

III. Read the new words and expressions. Pay attention to phraseological unit translation:

drastic redevelopment – радикальные преобразования

shifting production – смена место расположения производственной деятельности

processing equipment – технологическое оборудование
fixed platform – стационарное основание
offshore exploration – разведка на шельфе
linchpin – стержень
industrial environment – окружающая среда на промышленном предприятии; промышленная атмосфера
the maritime cluster – морская группа, ассоциация
recession – спад, падение, снижение
to take its toll – иметь негативные последствия
cripple the trade – нанести ущерб торговле; ослабить торговлю
crippled – поврежденный, разрушенный
scrawny – тощий
moderate order intake – умеренное поступление заказов
NOK – норвежская крона
prosperous town – процветающий (зажиточный, успешный) город
to put an end to – положить чему-либо конец; положить конец
to get out of business – выйти из бизнеса
to keep parts of the industry – уберечь промышленность
surveyor for the shipbuilder – судостроительный инспектор
towing – буксирование; буксировка

READING

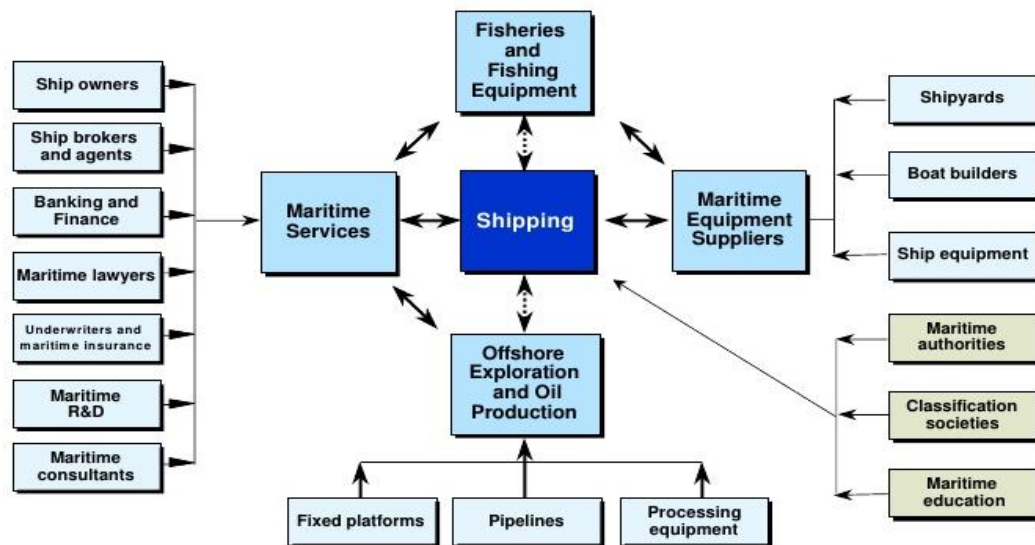
IV. Read and translate the text.

The Norwegian shipbuilding industry was characterized by huge yards in the larger cities, but the situation changed. The shipping and oil crisis in the 1970s led to altered markets for the construction of new ships, and until the mid-1980s there was a *drastic redevelopment* in the shipbuilding industry across most of the western world.

In Norway, the crisis led to more shipyards, especially the largest ones, *shifting production* from shipbuilding to offshore. Norwegian shipbuilding industry lost its leading position on an international scale, while countries such as Japan, South Korea, Germany, Italy, China, and Poland became the world's largest in shipbuilding.

Today, Norwegian shipyards are typically small or medium-sized and located in smaller but significant industrial areas along the Norwegian coast.

The Norwegian Maritime Cluster



- Norway has 0.1% of the world's population, represents 1.0% of the world's economy, yet accounts for 10% of world seaborne transportation

The yards are the *linchpins* of the *industrial environment* that is the origin of the concept – *the maritime cluster*.

In recent years, the reorganization has resulted in an offshore industry that is both a competitive and a technological leader. The *recession* around 1990 took *its toll*, and many of the century-old shipbuilding companies went bankrupt or had to cut in their workforce; the *trade* was left *crippled and scrawny*. In 2008, there were around 50 shipyards in Norway, with a workforce of 4,500 employees, delivering a total of 75 ships a year.

The Norwegian Shipyard Association reported a *moderate order intake* in 2017. 19 commissions had been entered into contract at Norwegian shipyards before August, each of which has a value of more than NOK 50 million. In total, they have 19 vessels worth 7.5 billion, which is a significant increase from the same period in 2016.

Moving the Industry Abroad

Economy is always a factor, and for the Norwegian maritime industry. This has influenced both the people building the ships and those working on board. One should take a closer look at how the work done at the shipyards has changed over the last few decades.

Earlier, the entire shipbuilding process, from idea to launch, was completed by one company. The shipyards had numerous employees in all kind of departments; engineers, economists, welders, electricians, and more; all playing their important part in the process. A *town* with a shipyard was a *prosperous* one!

Unfortunately, competition with the shipbuilding industries in countries with lower labour costs *put an end to* this long-standing tradition, causing the Norwegian shipyards to lose their place in the market in the last decades of the twentieth century. Fortunately, they are still involved in the specialized ships construction in, for example, the oil and fishing industry.

Where did the industry move when it failed in Norway, then? The answer is complex, seeing that some of the Norwegian shipbuilders did not completely *get out of business*. Some of them managed *to keep parts of their industry intact*, building the hull abroad while doing the installation work “at home”. The main competition, and contractors, was with the earlier communist countries in Europe. This meant shorter distances both for *surveyors* for the shipbuilders and for *towing* the hulls from the contractor to the Norwegian shipyard.



Photo: Dan Christer Virak

COMPREHENSION EXERCISES

V. Word differentiation process. Identify the difference between the synonyms mentioned below.

Study the sentences where each of the synonyms occurs and specify the definition of each word. Compare it with one offered by a dictionary. Write down translations of the word.

Bump* vs *Clash* vs *Collide* vs *Conflict

Bump, clash, collide, conflict are comparable when they mean to come or cause to come into violent contact or close or direct opposition.

Bump is used primarily of physical matters and then implies a forceful knocking or running against, typically with thudding impact.

It may also suggest encountering an obstacle or difficulty.

Clash may suggest hitting, knocking, or dashing together or against

with sharp force and jangling metallic din or sharp, although sometimes short-lived, variance, incompatibility, or opposition. **Clash** is a synonym of **collide**.

As verbs the difference between **clash** and **collide** is that clash is to make a loud **clash** while **collide** is to impact directly, especially if violent.

As a noun **clash** is (onomatopoeia) a loud sound.

Collide denotes a more or less direct running together or against with a definite and often destructive force or shock or it may indicate a forceful direct disagreement or opposition.

Conflict is archaic in senses involving physical contact and is used to convey the notion of variance, incompatibility, or opposition.

As nouns the difference between **collision** and **conflict** is that collision is an instance of colliding while **conflict** is a clash or disagreement, often violent, between two opposing groups or individuals.

As a verb **conflict** is to be at odds (with); to disagree or be incompatible.

Bump

My car bumped into the tree. I bumped into an old friend in town today. Two more good results will bump up your average. The boat bumped against the pier.

Clash

These colours clash. My opinions clash against yours. The Greek forces clashed against Turks in the hills. His interests clash with mine.

Collide

Istanbul, where east and west collide. Two football players collided on the field. The physicists collided the particles.

Conflict

This behavior conflicts with our rules. Their stories are in conflict with each other. It may intensify the conflict between them. The local war escalated into a major conflict.

VI. Find one word to match the meanings of sentences below.

1. Istanbul, where east and west _____.
2. Two trains _____ head-on.
3. Troops _____ near the border.
4. The President has again _____ with Congress over his budget plans.
5. Democrats _____ with Republicans in a heated debate.
6. The new evidence _____ with previous findings.

7. The two men have _____ over the report's conclusions.
8. The announcement has been delayed to avoid _____ with the Prime Minister's speech.
9. Our boat nearly _____ with another vessel.
10. Police have _____ with demonstrators again today.
11. I can't wear red – it _____ with my hair.
12. I cannot accept his advice — it _____ with my convictions.
13. I ran around the corner, and almost _____ with Mrs Laurence.
14. The planes are said to have _____ in mid-air.
15. The meteorite may _____ with the Earth within days.

Text C. WHO WORKS AT THE SHIPYARD?

Pre-reading activity.

I. Paraphrase in English and translate into Russian the words/word-combinations. Recollect the context, in which each word or expression has been used.

A complex engineering process, Arc welding, MIG welding, the entire workflow, to create a metal structural product, isometric piping layout drawings, piping and instrumentation drawing, the cable routing plans, the wooden templates for the ship's hull, moderate weight structures, final inspection, the seatrial period, hard turns and emergency stop demonstrations.

II. Answer the following questions:

1. Who is the owner of the ship?
2. Who has designed the ship?
3. Where were the sections built?
4. How does the cooling unit work?
5. Use your own words to describe how the sections were to Flekkefjord.

III. Read the new words and expressions:

to span – охватывать, включать

Arc welding – электродуговая сварка

MIG (Metal Inert Gas)welding –

дуговая сварка в инертном газе

плавящимся электродом

TIG (Tungsten Inert Gas) Welding –

сварка вольфрамовым электродом в среде инертного газа

solderer – паяльщик

subcontractor – субподрядчик

structural fabricator – конструктор	rigger – сборщик, такелажник
plumbers – паяльщик	to scaffold – помещать на высокие подмости
pipng layout – схема развёртывания трубопровода	trial period – испытательный срок
pipng and instrumentation drawing – чертёж размещения трубопроводов и контрольно-измерительной аппаратуры	spray painting – нанесение покрытия напылением
pipe fitting – тех. фитинг, трубная арматура, соединительная и концевая арматура трубопроводов	rigging – такелаж, оснастка
carpenter – плотник; столяр	crude carrier – танкер
	assembly hall – сборочный цех
	tool room – участок наладки инструментов

READING

IV. Read and translate the text.

The process of shipbuilding is an accumulation of ideas and inputs from professionals *spanning* a wide range of specializations. Building ships is a complex engineering process;

Welders are welding metal structures such as the ship's hull plates, frames, girders, tanks, foundations, and pipes. They perform all types of welding that is required in the shipyard, like *Arc welding*, *MIG welding*, and *TIG welding*. *Solderers* are also used, but since soldering is a minor job in the entire workflow, subcontractors often get the soldering work.



Plumbers: Piping in ships involves being able to read and understand isometric *pipng layout* drawings and *Pipng and Instrumentation drawings* (P&IDs). Not only are these plumbers specialized in the installation of all pipelines inside a ship, but also all kinds of *pipe fittings* like valves, and flanges. As an engineer, you will have to know some of these things.

Structural Fabricators read the engineering drawings and do the fabrication of metal jobs. They install the fabrication on the hull as well.

A structural fabricator works with large metal pieces to create a metal structural product that will often be used in a construction project, including buildings and other structures such as bridges. These workers may use a variety of hand, power, and hydraulic lift tools.

Electricians: There are many electric cables on board the ship, and the electrician needs to be able to read the cable routing plans to know what to put where. Their work includes installing all the electrical and electronic

equipment, the navigational equipment in the bridge and radar, lighting, control panels, main electrical control room panels, and even more. A necessary skill for electricians is the ability to identify colours, so naturally this is not a job for those with colour blindness.

Riggers have a variety of jobs at a shipyard- everything from lifting and shifting heavy structures, *scaffolding* to moving moderate weight structures within the shipyard and operating various types of cranes. They are trained to use hand signals to communicate among themselves and the crane operator during lifting and shifting operations that create loud noise.

Carpenters: Wooden ships are not often built these days, but carpenters are still required at a shipyard. The carpentry department prepares the wooden templates for the ship's hull, which are used for bending the straight metal plates to the required shape. They also prepare templates for sea pipes and build dock blocks and keel blocks required for dry docking and ship launches.

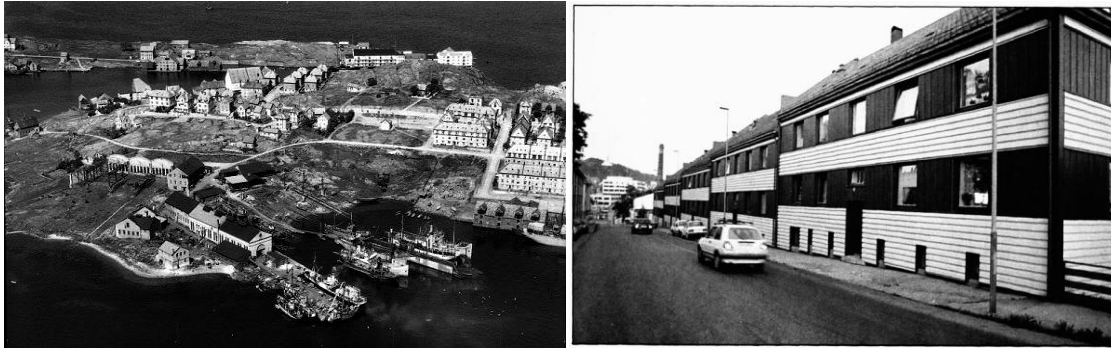
Quality Control Inspectors: A QC Inspector is one of the most skilled among the workforce in a shipyard. They are responsible for tests on weld joints, dimensional control inspections of major structures, and much more.

The design drawings are used as a reference for checking dimensions, and record keeping is critical for the inspector. The records must be maintained as the hull is built, in order to document that required testing and inspections were successfully accomplished. The true “final inspection” is during the sea *trial period* where the ship is put through planned tests while underway to confirm operation and safety of the crew during actual conditions, including hard turns and emergency stop demonstrations.

Supervisors: Workshop level departments have their own supervisors. A hull supervisor typically looks after all the aspects of structural outfitting on the ship. Similarly, there are stated to be supervisors for each department, for example, Piping supervisor, *Rigging* supervisor, Electrical supervisor, Maintenance supervisor, Drydock supervisor, etc. The most skilled and experienced among fabricators, fitters, electricians, plumbers, etc. are promoted to supervisor.

Building a society

All the shipyard workers need a place to live, and more often than not they have families. Below, one can see the area of Liaaen in Aalesund over a period of about 85 years.



This is the area of Steinvågen where Kvennaneset is situated. This picture is from 1936, and the shipyard is already quite large. You can see the first block of flats made to house the workers and their families on the right side of the picture.



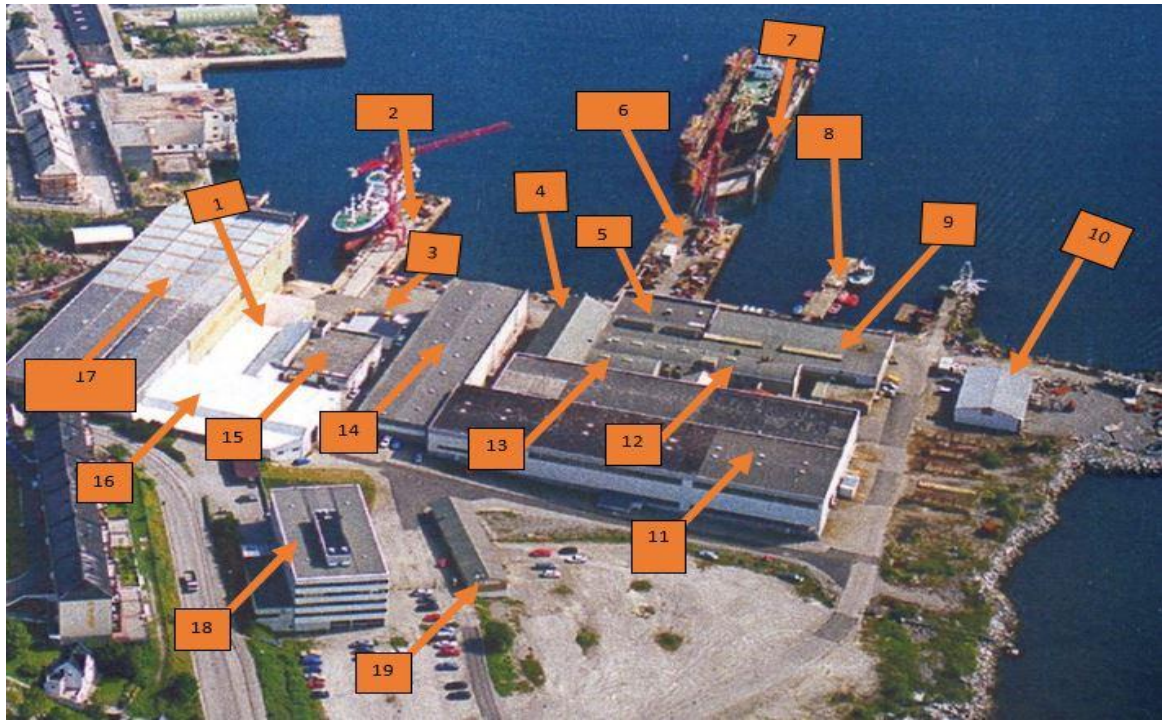
From 1998, the shipyard was reduced to being a repair yard, and in 2003, it was closed down for good. These buildings include both housing for the workers and all the shipyard buildings in a shipyard



This is Steinvågen

Ship building from A to Z

A shipyard comprises many types of workers and a lot of different buildings as well. The picture below is an extract from the picture Steinvågen 1999 you saw in the text about building a society.



The buildings have been named with help from Cato Malmedal, a former worker at Liaan and now the owner of Aspevågen Marina.

- | | |
|--|--|
| 1. Intermediate building / Pipe workshop | 10. Spray painting and sandblasting |
| 2. North quay | 11. Assembly hall |
| 3. Electrical workshop | 12. Engineering shop, propeller department |
| 4. Engineering shop, old part | 13. Tool room |
| 5. Quay office | 14. Pipe and iron stockroom |
| 6. South quay | 15. Stockroom |
| 7. Floating dock | 16. Sheet-metal workshop |
| 8. Barges | 17. Slipway and sheet-metal hall |
| 9. Pipe workshop and outdoor machinery | 18. Office building |
| | 19. Annex office building |

In addition, the area also had a welding school and workshop for prefabrication of pipes.

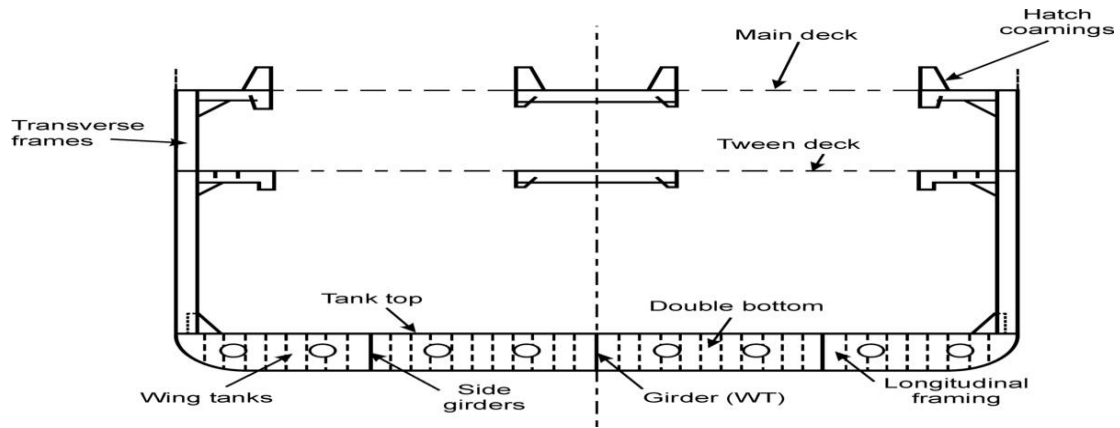
Structural ship design

Shipyards build ships in all sizes; from the smallest fishing boat to the largest *crude carrier*. The purpose of the ship and where it is going to sail limits the designers when it comes to structural design.

Construction of ships

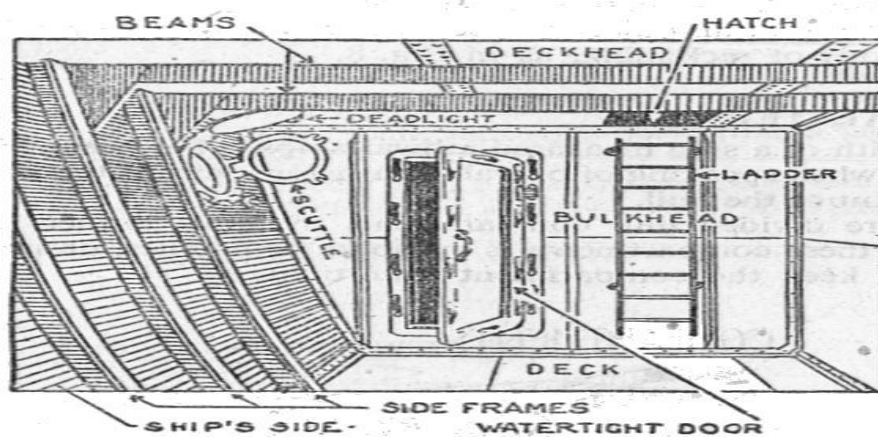
Rules and regulations are many when it comes to the construction of ships. We will focus on the legal aspect regarding the bottom and bulkhead structure in the following.

The bottom structure



Single bottom is usually found on smaller ships as they don't carry heavy cargo. Alternatively, double bottom ships are built with two complete layers of watertight surface. Historically, ballast water or fuel have been stored between the two bottoms, but MARPOL put a stop to fuel storage with amendments to Annex 1.

The official name of this is *RESOLUTION MEPC.141(54) (adopted on 24 March 2006) AMENDMENTS TO THE ANNEX OF THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973 (Amendments to regulation 1, addition to regulation 12A, consequential amendments to the IOPP Certificate and amendments to regulation 21 of the revised Annex I of MARPOL 73/78).*



Bulkheads are designed to carry out different functions; the main purpose is to create compartments. In addition, bulkheads provide structural stability and rigidity to the ships, minimize the forces acting on the ship due to waves, restrict the passage of flame, and prevent water from entering different parts of the ship in case of a flooding. The purpose of the ship defines what kind of bulkhead is used.

COMPREHENSION EXERCISES

V. Try to find out what IMO says about regulations if the bottom structure. Visit [dieselship.com](https://www.marfag.no/k16/chapter-3-how-to-build-a-ship/how-to-search-efficiently-in-pdf.pdf) to learn useful words about double bottom constructions. URL: <https://www.marfag.no/k16/chapter-3-how-to-build-a-ship/how-to-search-efficiently-in-pdf.pdf>

VI. Additional reading.

Read the text “Understanding Watertight Bulkheads in Ships: Construction and SOLAS Regulations”. URL: https://puc.overheid.nl/nsi/doc/PUC_1344_14/3/

VII. Say whether the statement is true or false according to the text information. Correct the false statements:

1. Building ships is a complex engineering process; the process of shipbuilding is an accumulation of ideas and inputs.
2. Solderers are also used, but since soldering is a major job in the entire workflow, subcontractors often get the soldering work.
3. Wooden ships are often built these days.
4. A necessary skill for electricians is the ability to identify sizes.
5. The carpentry department prepares the wooden templates for the ship's deck.
6. The design drawings are used as a reference for checking colour, and record keeping is critical for the inspector.
7. The true “final inspection” is during the seatrial period where the ship is put through planned tests.
8. All the shipyard workers need a place to live, and more often than not they have families.

VIII. Work in pairs. Describe the following situations and define the highlights. Discuss the construction, maintenance, and repair activities in shipbuilding industry.

– One of the most widely applied tools for using a more integral environmental approach with regards to industrial activity has been the life-cycle thinking introduction (OECD, 2009). This method has led life-cycle assessment or analysis methods (LCA) development which can be of importance for reducing the environmental footprint of products, industries and companies alike.

– It is stated that adopting a life-cycle approach could be an essential step towards the fulfillment by shipbuilding industry of a more integrated

environmental focus. Ship constructors not only pay attention to the environmental impacts that arise from the construction processes undertaken at shipyards, but the environmental effects of the raw materials used for ship construction, as well as the dismantling and recycling activities at the end of a ship's life.

- It is clear that ship dismantling enterprises could take greater environmental responsibility by sharing information about their recycling practices, and otherwise work with constructors on how to reduce the environmental impacts of the dismantling/recycling process.

- The shipbuilding industry should start looking beyond contribution to climate change. Many of its practices are themselves significant sources of greenhouse gas emissions.

- It is suggested that taking action on climate change issues provides the shipbuilding industry with the possibility of moving toward a life-cycle environmental approach with respect to its operations (the carbon footprint concept as assessment of the greenhouse gases). It can be attributed to a ship, shipyard, or the shipbuilding industry as a whole.

- Carbon footprints vary in terms of scope, ranging from a narrow focus that only includes GHG (Green-House Gas) emissions that can be attributed to a shipyard's own construction processes.

- Metal work and surface treatment operations, for example, generate particulate matter (PM) emissions and may lead to the discharge of toxic compounds to soil and water. The extensive use of underground storage tanks likewise carries the risk of the release of pollutants that can harm aquatic life.

- The activities in shipbuilding that are of direct environmental concern include:

- i) metal working activities, including thermal metal cutting, welding and grinding;

- ii) surface treatment operations, including abrasive blasting, coating and painting;

- iii) ship maintenance and repair activities, such as bilge and tank cleaning.

- Only a few shipyards have the capability of constructing, maintaining and repairing vessels under cover due to the size of ships. Like other outdoor construction zones this leads to elevated risks of exposing the surrounding environment to potential pollutants. This risk is further exacerbated for shipyards by the fact that shipyard activities happen over, in, under or around water, which creates additional pathways for exposing

waterways to toxic and hazardous materials; either directly or through runoffs, also known as stormwater.

– In terms of raw materials, the use of steel is generally of major importance in the shipyards' metal working activities, whereas the use of abrasive agents and coating material are of high importance during surface treatment operations

IX. Translate the emphasized sentences.

The rule: There are a number of ways to add emphasis to your sentences in English.

The cleft sentence with introductory IT is useful for fronting an element as a topic and also for putting focus (for contrast) on the topic element.

For centuries London had been growing as a commercial port of world importance. But it was in the north of England that industrial power brought new prosperity to the country. [Topic = adverbial]

Structure of the it-cleft It is/was + the key info we want to emphasize + (that) + the rest of the message Rewrite these sentences using an it-cleft

Scientists now believe that human activity is the principle cause.

→ *It is human activity that scientists now think is the principle cause.*

Wh-type clefts sentences (sometimes called pseudo clefts)

I enjoyed the music more than anything else in the film. → What I enjoyed more than anything else in the film was the music.

In this case important information is emphasized by putting it at the end of a sentence. We put the less important information into a clause at the beginning with what and open the sentence with this clause. We can then finish with the more important information. The two parts of the sentence are joined with is or was, since we treat the what clause as singular.

We can emphasize different things in the sentence.

Emphasizing the noun What + understood information + is/was + information you want to emphasize

I hated the insects most. → What I hated most was the insects. His comment upset her. → What upset her was his comment.

Emphasizing the verb What + subject + do/does/did + is/was + verb

They moved us to another hotel → What they did was to move us to another hotel.

Emphasizing the whole sentence What happens/happened is/was + clause

We got to our hotel and found that the room had been double booked.
→ *What happened was we got to our hotel and found that the room had been double booked.*

Invert the word order by placing a prepositional phrase or another expression (at no time, suddenly into, little, seldom, never, etc.) at the beginning of the sentence followed by inverted word order.

Note that the auxiliary verb is placed before the subject which is followed by the main verb.

1. *Not only are these plumbers specialized in the installation of all pipelines inside a ship, but also all kinds of pipefittings like valves, and flanges.*
2. *At no time did I say you couldn't come.*
3. *Hardly had I arrived when he started complaining.*
4. *Little did I understand what was happening.*
5. *Seldom have I felt so alone.*

Additional reading

X. Read the text, define its main subjective, write down the annotation and keywords.

DESIGNING A SHIP'S BOTTOM STRUCTURE – A GENERAL OVERVIEW

One of the most integral parts of the ship is its bottom structure. It is designed not only to give the hull the required strength to withstand the weight of the cargo but also to withstand the external hydrostatic loads that act on the bottom of the hull.

A ship's hull is basically made up of bent plates welded together. If these plates are not stiffened, the bending moments on the plates due to the loads may exceed the value of stress that can be withstood by the material, and hence cause failure. So, the plates are stiffened (or their section modulus is increased) by adding stiffeners to them.

Now, there are two basic ways to stiffen a ship –transverse stiffening and longitudinal stiffening.

Transverse Stiffening or Transverse Framing: This is carried out in ships less than 120 meters in length. In transverse stiffening, the stiffeners run along with the breadth of the ship. We would be discussing this with interesting details a little later.

Longitudinal Stiffening or Longitudinal Framing: This type of framing employs stiffeners that run longitudinally, that is along the length of the ship, and

is used in all seagoing ships having a length more than 120 meters. The details would be touched upon in the later section of this article.

Now that we have an idea of the two types of framing, we need to acquaint ourselves with another categorisation of bottom structure framing in ships:

Single Bottom. Usually, all smaller ships are single bottomed, as they do not need a double bottom to withstand the load of the cargo. In these ships, the plate floors (see the figure to understand the context of ‘Floors’ in shipbuilding) themselves act as the stiffening members of the bottom shell plating. Plate floors (as shown in the figures) constitute transversely running plates at every frame spacing.

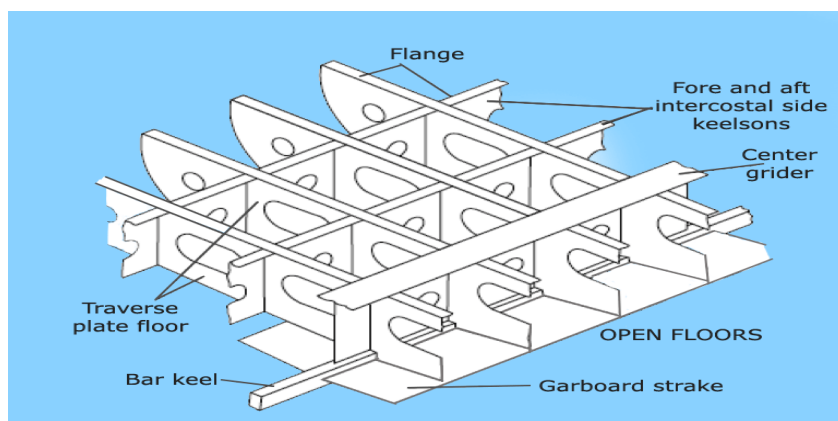


Figure 1: Single Bottom (transversely framed)

Note how the upper edge of each plate is flanged to increase the bending strength of the plate floor. Now, fall back to the basics for a while.

When the hydrostatic pressure under the bottom shell exerts a bending moment in the bottom shell, the plate floor takes up the bending stress. So, designers treat all such members taking up bending stresses as beams. Empirically, the bending moment in a beam increases with the increasing span. So, what if we could reduce the span of the plate floor to further increase its stress capacity?

This is why intercostal girders are used (see the image). The number of intercostal girders would however increase with an increasing beam of the ship since that would also result in increased length of a plate floor.

A uniform wood ceiling is provided on top of all the plate floors, to provide stowage of cargo. But that doesn't make it a double bottom structure as the wood would not take up any stresses exerted onto the bottom structure.

Double Bottom. All seagoing ships are double-bottomed. In such a structural arrangement, a tank top is provided above the plate and bracket floors. Bracket floors are a little different from plate floors, in as much as they are not comprised of one single plate running athwartship, but only brackets at the port and starboard end, with struts that support the tank top with the bottom shell.

Bracket floors are mostly placed at each frame, and plate floors are

generally placed at every three to four frame space. The space within the double bottom (that is, between the tank top, and outer bottom shell) is used up for carrying ballast, fuel oil, dirty oil, freshwater, and other consumables.

One of the most important factors in designing a double bottom of a ship is deciding the height of the double bottom. How does a designer decide what height would be most feasible for a ship of a particular length?

This is governed by the height of the keel required by the ship. So, the designer first calculates (using the rules specified by the authorised Classification Society) the height of the centre girder, while estimating the scantlings of a ship. It must be housed within the double bottom. Hence, this factor now decides the double bottom height.



Double bottom heights often increase in the ways of engine rooms, as they need to take up higher stresses due to heavy machinery in those regions.

In the engine room region, all the frames are provided with plate floors, and no bracket floors are used. However, there is another factor a designer must take care of while providing an increased double bottom height in high-stress regions.

The height must not be increased abruptly, therefore resulting in a discontinuity, which would lead to concentration of stresses, and eventually a structural failure. So the increase in height should be gradually tapered up and down. The taper should start a few frames forward of the engine room bulkhead, and continue up to three or four frames aft of the engine room to allow proper stress flow or structural continuity.

The intricacy in the design of a bottom structure begins after one has understood the above concepts. We have seen two separate categorisations of double bottoms.

The first dealt with the type of stiffening used, and the second dealt with single and double bottoms. When a ship's bottom structure is designed, both the categories are mixed together to obtain the final structure.

Most budding naval architects initially find this part confusing, which is why one should first list down the four types of possible bottom structures:

Transversely Framed, Single Bottom

Transversely Framed, Double Bottom

Longitudinally Framed, Single Bottom

Longitudinally Framed, Double Bottom

Out of these four types, three are used, and one is not. While it is easy for experienced designers to point out that one type, it may not be easy for everyone.

Why is longitudinal framing used when we could easily have provided transverse framing in longer ships too? The answer is in the fact that ships longer than 120 meters are subjected to high global longitudinal bending stresses like hogging and sagging in different load conditions, unlike smaller ships.

So if longer ships would be stiffened transversely, the transverse stiffeners would have no role in taking up the longitudinal bending stresses of the hull girder, and therefore lead to more chances of failure. Hence, stiffeners are aligned longitudinally in longer ships.

TYPE 1: SINGLE BOTTOM, TRANSVERSELY FRAMED (Refer to the Figure 1).

The plate floors act as transverse stiffeners, and their spans are reduced by the use of intercostal side girders that run longitudinally.

Most single bottom ships are provided with a bar keel that extends along the length of the ship up to a certain waterline at the stem. The bar is slightly protruded outside the outer bottom shell. The outer bottom shell plating just adjacent to the bar keel is called Garboard strake, and its thickness is more than the thickness of the remaining bottom shell.

All the plate floors are flanged at their tops, so as to increase their bending strength. Manholes are provided on the plate floors for crew access. These holes are flange too, so as to reduce stress concentration.

TYPE 2: DOUBLE BOTTOM, TRANSVERSELY FRAMED (Refer to the Figure 2).

This is used in ships of length less than 120 meters. (See how the length factor dominates over the type of framing used)

The bracket floors form the transverse stiffeners at every frame, and plate floors are used at every 3 to 4 frame space, or 1.8 meters intervals.

Similar to the single bottom, to reduce the span of the plates, intercostal side girders or keelsons are used that run longitudinally. An important thing to note is that the side girders are continuous members, that is, where there is an intersection between a plate floor and a side girder, the plate floor is cut and welded on both the sides of the girder and not the other

way round. Why? Remember, we needed to reduce the span of the plate floors, hence the girders will act as supporting members to the plate floors.

Flat plate keels are used in these structures. The keel plating thickness is a very important decision-maker in the strength of the ship. This is to be calculated from the formula dedicated to this purpose, provided by the relevant classification society.

Intercostal girders or side girders, and plate floors will have lightning holes at regular intervals to reduce the structural weight and will have manholes (flanged) to provide access.

Drain holes will be provided on the plate floors to help drainage of liquids. Plate floors are further stiffened by flat bar stiffeners (see image below), and bracket floors, by angle struts to prevent warping.

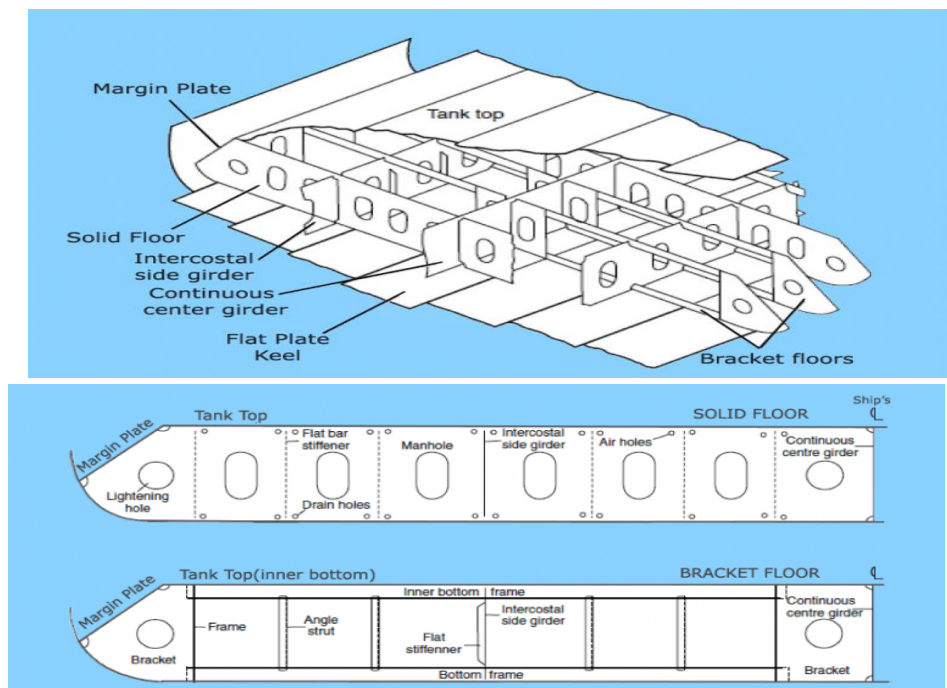


Figure 2: Double Bottom, Transversely Framed (Perspective view and Transverse view)

TYPE 3: DOUBLE BOTTOM, LONGITUDINALLY FRAMED
(Refer to the image)

The prime stiffening members are longitudinally running bulb sections or angle sections. The stiffeners on the bottom plating are called outer bottom longitudinals, and those that stiffen the tank top plating are called tank top longitudinals.

The span of each longitudinal is equal to three or four frame spaces. That is, at each three or four frames, there would be a plate floor to support the longitudinal. A bracker floor is placed at almost every frame, but it does

not support the longitudinals. Intercostal girders are used, as usual, to reduce the span of the plate floors. The longitudinals run across plate floors through holes called scallops. So in a frame, where it is required to support the span of a longitudinal using a plate floor, the longitudinal is welded with a small plate to the plate floor, therefore rendering the scallop as a support end.

In bracket floors, tank top and bottom shell longitudinals are supported to each other by means of angle struts. In plate floors, the longitudinals of the tank top and bottom shell are supported to each other by flat bar stiffeners, to restrict bending, torsion, and buckling. As usual, drain holes are used for fluid drainage and air holes are used for the passage of air. Note their positions in the images, to visualise the exact layout.

Margin plates are applied in some designs in order to lead the waste fluids (bilge) flow towards the bilge wells on either ship's side.

A continuous centre girder runs through the length of the ship, supporting the entire bottom structure, the keel plate, and the garboard strake.

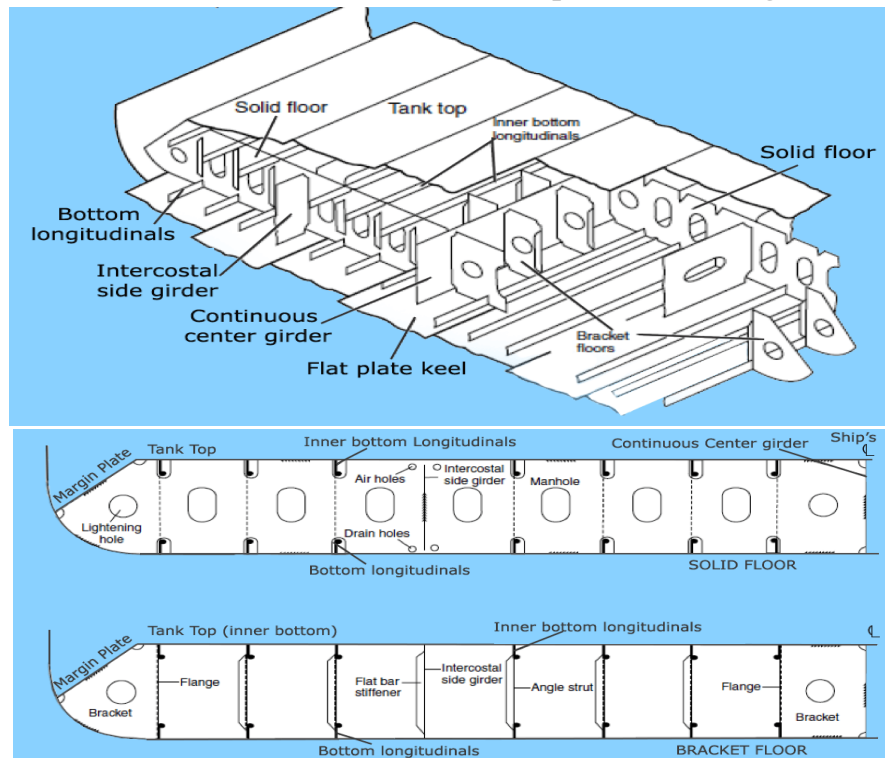


Figure 3: Longitudinally Framed Double Bottom (Perspective View and Transverse View)

In modern analyses of the bottom structure of ships, designers take a lot of care for various modes of failure. A disastrous mode of failure other than bending is buckling, which a bottom structure can be often subjected to.

For example, consider a ship to be hogging. The outer bottom shell undergoes a compression that leads to buckling of the bottom plate and associated structure. Torsion can also be a mode of failure in cases of

container ships. Because, for example, if a designer certifies a bottom structure only on the basis of bending stress, without taking into consideration buckling or torsion. What could happen? In a situation, when buckling occurs, the structure might fail due to buckling (if its buckling strength is lesser than its bending strength), even when the bending stresses have not reached the failure limits!

Hence, the principal design criteria must be decided base on all possible modes of failure, at various load cases, analysed by efficient and certified FEM tools, so as to attain a safe and economical factor of safety for the structure, from all possibilities of failures at sea.

XI. Watch the video: Kleven the building of build no 386 for Maersk Supply Service the building of build no 386 for Maersk Supply Service. URL: <https://www.youtube.com/watch?v=cwDFsKoxMvA>

XII. Write a narration for the building of number 386 as seen in the video.

Text D. SHIP TYPES

Pre-reading activity.

I. Paraphrase given words/combinations in English and translate them into Russian. Recollect the context in which each word/expression has been used.

Range in size, to maximize cargo capacity, pump-jet engines, geographical origin, to encompass classifications, propulsive power, overwhelmingly more numerous, salvage operation, a wide swath, sloping bow profiles, cross-water passages, speed-to-length ratios, scant freeboard, balsa wood, dunnage.

II. Answer the following questions:

1. Which one do you think could be your ideal workplace?
- 2 Which are the best companies to work for in the world?
3. Write some sentences where you state the reasons for your choice.

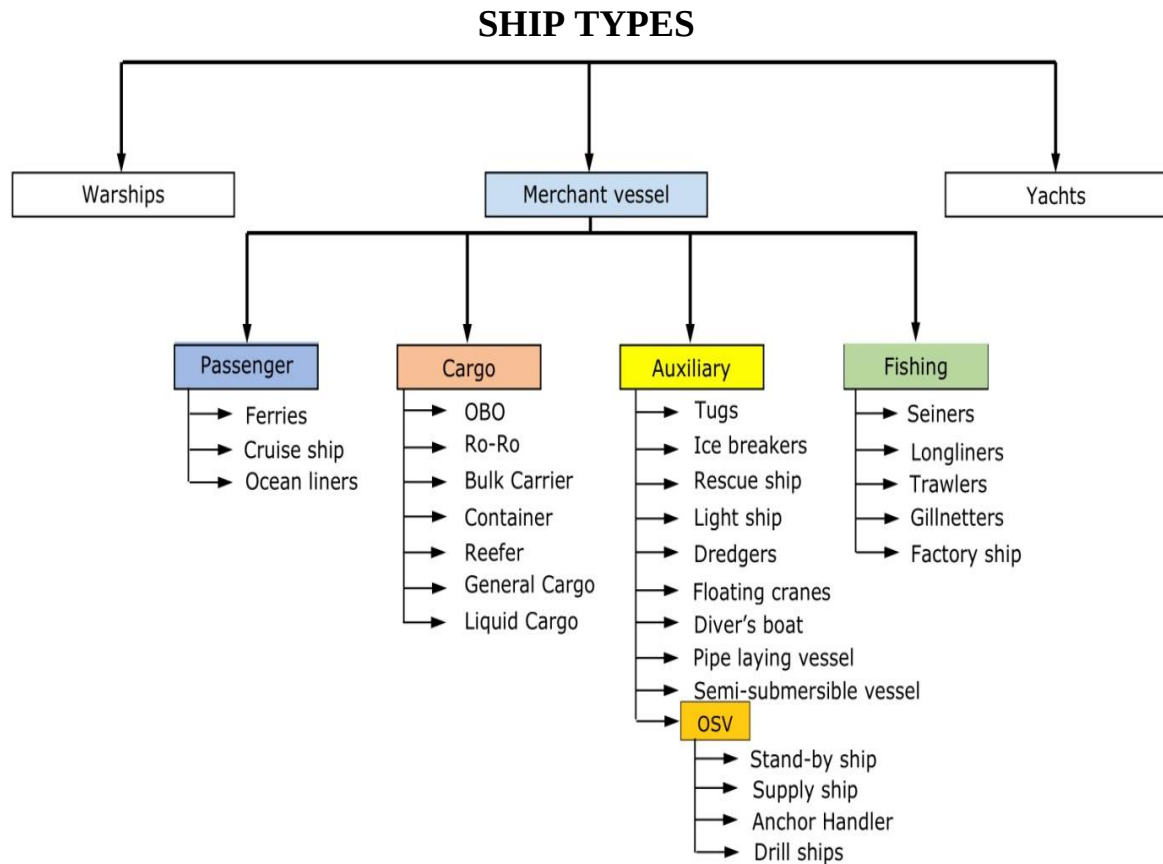
III. Read the new words and expressions:

OBO ship = oil/ bulk/ore-carrier –	прокладывающее трубопровод
нефтерудовоз, балктанкер	semi-submersible vessel –
dredger – драгер; устричное судно	полупогружное судно
diver's boat – водолазное судно	seiner – сейнер,
pipe laying vessel – судно,	рыбопромысловое судно

longliner– судно для ярусного лова
 trawler – траулер, промысловое судно, предназначенное для лова тралом рыбы и нерыбных морепродуктов
 gillnetter – жаберные сети, лодка
 factory ships – рыбообрабатывающие суда
 stand-by ship – резервное судно
 anchor handler – судно снабжения буксиров для обработки якорей
 drill ship – буровое судно для бурения скважин в море; судно с буровой вышкой
 salvage operations – спасательные операции;
 miscellaneous – смешанный
 heavystiffener – подкрепляющий элемент
 fishery mother ship –плавбаза рыболовных судов
 formidable – огромный, значительный
 double-ender – двусторонний, двухплатформенный
 bunkering tanker – танкер-бункеровщик
 chemical tanker – танкер-химовоз
 coaster – каботажное судно
 CONBULKER = container/ bulk-carrier – комбинированное судно, предназначенное для перевозки сырой нефти, нефтепродуктов, навалочных грузов и руды
 container carrier – контейнеровоз
 crude oil tanker – танкер для перевозки сырой нефти
 double-decker, tweendecker – двухпалубное судно
 dry cargo ship – сухогруз
 dredger – драгер, устричное судно
 general cargo vessel– судно для перевозки генеральных грузов
 LAS –carrier= lighters aboard ship-
 heavy-lift ship – тяжеловоз
 carrier –лихтеровоз

LPG / LNG carrier– газовоз
 Navyship – военно-морское судно
 multi-purpose ship – многоцелевое судно
 merchant ship– торговое судно
 PROBO ship=product/oil/bulk/ore-carrier – судно, предназначенное для перевозки нефтепродуктов, сырой нефти, навалочных грузов и руды
 salvage tug – спасательный буксир
 product tanker – танкер-продуктовоз
 supply vessel – судно-снабженец
 timber carrier – лесовоз для перевозки пакетированных грузов
 vehicle carrier – судно для перевозки автотранспортных средств
 fishing-fleet mother ship – плавучая база рыболовного флота
 to be descended from – быть потомком
 superficial alterations – поверхностное изменение
 formidable – огромный, внушительный
 sludge – осадок, ил, буровая грязь
 below decks – в трюме, в каютах
 to submerge – погружать в воду; покрывать водой, наводнять, заваливать, засыпать
 boxy – квадратный, прямой, приземистый, ящикообразный

IV. Read and translate the text.



The great majority of ships that are neither military vessels nor yachts can be divided into some broad categories: cargo carriers, passenger carriers, service vessels, industrial ships, and noncommercial miscellaneous. Each category can be subdivided, with the first category containing by far the greatest number of subdivisions.

Service vessels

Most of service ships serve in harbours and inland waters, and, because the only significant weight they need carry is a propulsion plant and a limited amount of fuel, they are small in size. They are mostly tugs or towing vessels whose principal function is to provide propulsive power to other vessels.

The towing of massive drilling rigs for the petroleum industry and an occasional ocean salvage operation (e.g., towing a disabled ship) demand craft more seaworthy and larger than the more common inshore service vessels, but oceangoing tugs and towboats are small in number and in size compared with the overwhelmingly more numerous cargo ships.



Tugboat guiding a container ship.

Miscellaneous

The word miscellaneous has only small scope here. It is intended to encompass classifications such as icebreakers and research vessels, many of which are owned by government. Neither type need be of large size, since no cargo is to be carried. However, icebreakers are usually wide in order to make a wide swath through ice, and they have high propulsive power in order to overcome the resistance of the ice layer. Icebreakers are characterized by strongly sloping bow profiles, especially near the waterline, so that they can wedge their way up onto thick ice and crack it from the static weight placed upon it. The waterline of the ship must be reinforced by layers of plating and supported by heavy stiffeners in order to protect the hull against damage,

Damage to propellers is considered to be an icebreaking hazard. Propellers are usually given protection by a hull geometry that tends to divert ice from them, and they are often built with individually replaceable blades to minimize the cost of repairing damage. Electric transmission of power between propellers and engines is also common practice, since it allows precise control and an easy diversion of power to another propeller from one that may be jammed by chunks of broken ice.

Research vessels are distinguished externally by winches and cranes for handling nets and small underwater vehicles. They are fitted with stern and bow side thrusters in order to enable them to remain in a fixed position relative to the Earth in spite of unfavourable currents and winds.

Research vessels are usually characterized by laboratory and living spaces for the research personnel.

Industrial ships

Industrial ships are those which function is to carry out an industrial process at sea. A *fishing-fleetmother ship* that processes fish into fillets, canned

fish, or fish meal is an example. In addition, some floating oil drilling or production rigs are built in ship form. Hazardous industrial wastes are incinerated far at sea on ships fitted with the necessary incinerators and supporting equipment. In some cases, industrial ships can be recognized by the structures necessary for their function.

Passenger carriers.

Most passenger ships fall into two subclasses, ferries and cruise ships.

Cruise ships



A cruise ship prepares for the journey

Cruise ships are stated to be *descended from* the transatlantic ocean liners, which have found their services preempted by jet aircraft since the mid-20th century. Indeed, some cruise ships were liners built in the 1950s and 60s that had been adapted to tropical cruising through largely *superficial alterations*—e.g., the addition of swimming pools and other amenities to suit warm-latitude cruising areas.

Currently most cruise ships in service were built specifically for the cruise trade. Since most of them are designed for large numbers of passengers (several thousand), cruise ships are characterized by high superstructures of many decks. For their principal routes lie in warm seas, these ships are typically painted white all over. Two characteristics give them a “wedding cake” appearance that is easily recognizable from great distances.

Closer examination reveals a large number of motor launches carried aboard for the ferrying ashore of passengers. Many cruise ships have stern ramps, like those found on cargo-carrying roll-on/roll-off ships to facilitate the transfer of passengers to the launches and to serve as docking facilities for small sporting boats.



Panama Canal, Passenger cruise ship in the Panama Canal.

The above features demonstrate the principal challenge to the cruise-ship designer: providing the maximum in comfort, safety, and entertainment for the passengers. Thus, isolation of machinery noise and vibration is of high importance. Minimizing the pitching and rolling motions of the hull is even more important—no extreme of luxury can offset a simple case of seasickness.

Because cruising is a low-speed activity, propulsive power is much lower than that found in the old ocean liners. On the other hand, electrical power is usually of much greater magnitude, mainly due to demands by air-conditioning plants in tropical waters.

Since all power flows from a single source, propulsion power can be readily diverted to meet increased air-conditioning loads while the ship is in port. The typical large cruise ship built since 1990 is powered by a “central station” electric plant—i.e., an array of four or more medium-speed diesel engines driving 60-hertz alternating-current electrical generators. This electrical plant supplies all shipboard power needs, including propulsion.

The video «How Cruise Ships Work» contains more information about cruise ships URL: <https://youtu.be/ZY1BFv8qEeM>

Ferries

Ferries are vessels of any size that carry passengers and their vehicles on fixed routes over short cross-water passages. The building of massive tunnels and bridges has eliminated many ferry services, but they are still justified where waters are too *formidable* for fixed crossings.

Vessels vary greatly in in quality and size of accommodations. Some on longer runs offer overnight cabins and even come close to equaling the accommodation standards of cruise ships. All vessels load vehicles aboard one or more decks via low-level side doors or by stern or bow ramps much like those found on roll-on/roll-off cargo ships.



Le Palais harbor. A ferry in the harbour at Le Palais, France.

A peculiar type of ferry is the “double-ender,” built for shuttling across harbour waters. The typical vessels have propellers, control stations, rudders, and loading ramps at both ends. It is often wide enough to handle four vehicle lanes abreast and may accommodate up to 100 four-wheeled vehicles. Special docks, which are fitted with adjustable ramps to cope with changes in water levels and shaped to attach the ends of the ferry, are part of this ferry system.



Ferry crossing Puget Sound, Seattle.

Another peculiar type of ferry is a high-speed vessel that is of catamaran (twin-hulled) design in many cases. This type is typically found on short runs in protected waters where the carriage of vehicles is not required. Catamaran hulls can be narrow and knifelike in shape. It provides operation at high speed-to-length ratios without excessive propulsive power. The engines are high-speed diesels, although turbine engines have been fitted in a few instances.

Cargo carriers

Cargo ships can be distinguished by the type of cargo they carry, especially since the means of handling the cargo is often highly visible. One consequence is a proliferation in types of cargo vessel.



Cargo ship in the Suez Canal near Ismailia, Egypt.

Tankers

Ships carried liquid cargo (most often petroleum and its products) in bulk are made distinctive by the absence of cargo hatches and external handling gear. When fully loaded they are readily distinguishable by scant freeboard—a condition that is permissible for the upper deck is not weakened by hatches.

The tanker is a floating group of tanks contained in a ship-shaped hull, propelled by an isolated machinery plant at the stern. Each tank is substantially identical to the next throughout the length of the ship. The tanks are fitted with heating coils to facilitate pumping in cold weather. Within the tanks are the main, or high-suction, pipes, running several feet from the bottom to avoid *sludge*. Low-suction piping, or stripping lines, removes the lowest level of liquid in the tank below them. Tanks are filled either through open trunks leading from the weather deck or from the suction lines with the pumps reversed. Because tankers, except for military-supply types, move a cargo from the source to a refinery or other terminal with few maneuvers en route, the machinery plant is called on only to produce at a steady rate the cruise power for the ship; consequently, considerable use of automatic controls is possible, thus reducing the size of the crew to a minimum.

For the limited crew requirements and the low cost per ton for initial building and outfitting, the tanker has led the way in the rapid expansion in the size of ships. The decline of crud oil prices after the petroleum crisis of 1979 led in turn to a decline in preferred tanker size, but at that time a few ships had reached 1,300 feet (400 metres) in length, 80 feet in loaded draft, and deadweight of 500,000 tons.

Along with the great increase in numbers and size of tankers have come specialized uses of tankers for products other than oil. A major user is the natural gas industry. Gas is cooled and converted to liquid at -260°F (-162°C)

for shipment, and is then pumped aboard a tanker for transit in aluminum tanks that are surrounded by heavy insulation to prevent absorption of heat and to keep the liquid from evaporating during the voyage.

Because steel cannot be used for the container, the cost of these ships is high. The cold liquid, in contact with steel, would make that material as brittle as glass. Aluminum is used, sometimes backed by balsa wood, and backed in turn by steel. A special nickel-steel alloy known as Invar also has been used in this application.

Container ships



Estelle Maersk, one of the world's biggest container ships

Like tankers, container ships are characterized by the absence of cargo handling gear, in their case reflecting the practice of locating the container-handling cranes at shore terminals rather than aboard ship.

Container ships require large hatches in the deck for stowing the cargo, which consists of containers usually either 20 or 40 feet in length. *Below decks*, the ship is equipped with a cellular grid of compartments opening to the weather deck; these are designed to receive the containers and hold them in place until unloading is achieved at the port of destination. The ship is filled to the deck level with containers, the hatches are closed, and one or two layers of containers are loaded on the hatch covers on deck.



Container ship in the port of Seattle, Washington.

In a few hours the ship can be filled with containers destined for another port and can be under way. An additional economy is the low cost of the crew of the ship while it is in port waiting loading or unloading. Further, container fleets require fewer vessels, because each ship can make more trips than before. There is also less pilferage and, hence, lower insurance rates and, finally, the assurance to the shipper that the shipment will not require any further handling until it arrives at its destination. Learn more about the economic impact of container shipping from the video «*How Container Ships Work*» <https://youtu.be/DY9VE3i-KcM>



Port facilities. Shipping containers being unloaded at port facilities in Vancouver, Canada.

Each ship does not carry quite as much total volume of cargo with containers as with regular bulk stowage, because the containers themselves take space and, since they are square in shape, do not fill in all the nooks and crannies created by a ship-shaped hull form. Further, a substantial capital investment is needed in port facilities: special berths, storage areas, weight-handling equipment, and links to land transportation.

Container ships are moderate-size merchant vessels built for speeds of greater than about 20 knots. Much use is made of compact, diesel power plants to ensure more space for containers.

Special equipment includes mooring winches to provide accurate positioning of the ship under cranes in port and special tanks to list (tip) and trim (level) the ship in order to permit a symmetrical loading or unloading without excessive list or trim.

Roll-on/roll-off ships

Roll-on/roll-off ships, designed for the carriage of wheeled cargo, are distinguished by large doors in the hull and often by external ramps that fold down to allow rolling between pier and ship. For vehicles of all kinds have some

empty space—and in addition require large clearance spaces between adjacent vehicles—they constitute a low-density cargo (a high “stowage factor”) that demands large hull volume.

The general ship’s outline, in view of its relatively low density of cargo, is rather “boxy,” with a high freeboard and deckhouse covering much of the superstructure of a ship, to afford more parking decks. To provide stability, fixed ballast is usually included in these ships, along with water ballast to adjust load and stability. The engineering plants are often twin engines of compact variety, such as geared diesel. They are arranged so that the engine spaces are at either side of the ship, allowing valuable free space between them for vehicle passage.

Barge-carrying ships

The barge-carrying ship is an extension of the container ship concept. The container is itself a floating vessel, often about 60 feet long by about 30 feet wide, which is loaded aboard the ship in one of two ways: either it is lifted over the stern by a high-capacity shipboard gantry crane. Sometimes the ship is partially *submerged* so that the barges can be floated aboard via a gate in the stern.

Dry-bulk ships

Designed for the carriage of ore, coal, grain, and the like, dry-bulk ships bear a superficial likeness to container ships since they often have no cargo handling gear and, unlike the tanker, have large cargo hatches. The absence of containers on deck is a decisive indicator that a vessel is a dry-bulk ship, but an observer may be deceived by the occasional sight of a dry-bulk ship carrying containers and other nonbulk cargo on deck. An incontrovertible indicator is the self-unloading gear, usually a large horizontal boom of open trusswork, carried by some bulk ships.



Freighters on the lower Saint Clair River, south of Lake Huron, on the Canadian-U.S. border.

General cargo ship

The general cargo ship continues to be built, though in modest numbers. Those built in the last third of the 20th century are often fitted with deck cranes, which give them an appearance distinct from the more-specialized ship types.



Cargo ship in the harbour of Mumbai, India.

General cargo ships, bulk carriers, and refrigerated vessels share a common feature, that is derrick posts or crane pedestals the presence. A ship is an investment in the most general sense that is to be operated in such a manner that the investors' expectations with respect to returns are met. In analysis of the economic merit of a shipping project, the freight rate is often referred to as the required rate. Actual freight rates are set by market conditions and inevitably fluctuate during the life of a ship.

COMPREHENSION EXERCISES

V. Say whether the sentence is true or false according to the text.

Correct the false statements:

1. The service ships are not mostly tugs or towing vessels which principal function is to provide propulsive power to other vessels.
2. Icebreakers are characterized by strongly sloping stern profiles, especially near the waterline.
3. In many cases, industrial ships can be recognized by the superstructures necessary for their function.
4. A cruise ship has stern ramps, much like those found on cargo-carrying roll-on/roll-off ships.
5. Vessels vary greatly in quality and in size of accommodations.

6. Ships that carry liquid cargo are made distinctive by the presence of cargo hatches.

7. Special docks, fitted with adjustable ladders to cope with changes in water levels and shaped to fit the boards of the ferry, are always part of a ferry system.

8. Tanks are filled either through open trunks leading from the weather deck or from the suction lines with the pumps reversed.

9. The tanker has led the way in the rapid expansion in the size of ships, because of the limited crew requirements and the high cost per ton for initial building and outfitting.

10. In a few minutes the ship can be filled with containers destined for another port.

11. Container ships are moderate-size merchant vessels built for speeds of greater than about 25 knots.

12. Roll-on/roll-off ships, designed for the carriage of liquid cargo, are always distinguished by large doors in the hull.

13. Designed for the carriage of ore, coal, grain, and the like, dry-bulk ships bear a superficial likeness to container ships.

VI. Fill in the blanks using the verbs *use, are used, distinguish, have, harvest, feature, has*.

Fishing vessels

Fishing vessels are generally small in size and often subject to different regulations and classification. They are a subset of commercial vessels and _____ by several criteria: the type of fish they catch, the fishing method used, geographical origin, and technical features such as rigging.

Commercial fishermen _____ many aquatic species, from tuna, cod, and salmon to shrimp, krill, lobster, clams, squid and crab, in various fisheries for these species.

Modern commercial fishermen _____ many methods. One is fishing by nets, such as purse seine, beach seine, lift nets, gillnets, or entangling nets. Another is trawling, including bottom trawl. Hooks and lines _____ in methods like long-line fishing and hand-line fishing).

Fishing boats are generally small, often little more than 30 meters (98 ft) but up to 100 metres (330 ft) for a large tuna or whaling ship. They _____ holds large enough to keep a good-sized catch. The fish can then simply be stored on

ice. The simplest fishing boats _____ a small cabin with a saloon, a deck designed to accommodate fishing, and fishing equipment such as nets and lines.

Trawlers _____ additional gear such as winches and arms. Other devices are used, such as a rear ramp on a stern-trawler, and a skiff on a tuna seiner.

Notes to the text:

subset – подгруппа; подкласс
rigging – такелаж, снаряжение, оснащение
species – вид
tuna – тунец (рыба)
cod – треска
salmon – лосось; сёмга
shrimp – креветка
lobster – омар
clam – двустворчатый моллюск

purse seine – кошельковый невод
beach seine – закидной невод
gillnet – жаберная сеть
entangling net – жаберная сеть
bottom trawl – донный трал
long-line fishing – ярусный лов
hand-line fishing – лов наподдёв
trap fishing – лов ставным неводом
whaling ship – китобойное судно

VII. Choose the terms under the line below for each of the following definitions.

a) tanker; b) container ship; c) bulker; d) dry cargo ship;
b) e) gas carrier; f) Ro-Ro vessel.

- 1) A ship intended for the carriage of liquefied gas in bulk is _____.
- 2) A ship intended for the carriage of different cargoes except for liquid bulk cargo is _____.
- 3) A ship intended for the carriage of goods in containers of the international standard is _____.
- 4) A cargo ship intended for transportation of various vehicles on all decks is _____.
- 5) A ship intended for the carriage of liquid cargoes is _____.
- 6) A ship designed to carry dry bulk cargo in its holds is _____.

VIII. Translate into English the words in bold type.

1. OBO ships can перевозить both dry and liquid грузы.
2. Универсальные суда can carry практически любые types of cargo.
3. Тяжеловесные грузовые суда with стрелами or cranes can handle single lifts over 500 tons and they do not require посторонней помощи.
4. Containers can be быстро спущены на воду с кормы судна.

5. Some of много-целевые суда are also построены to carry rolled vehicles or heavy/bulky cargoes.

6. На борту LO-LO (lift-on/lift-off) vessels обработка основного груза is affected by derricks or cranes through грузовые люки.

7. On board RO-RO (roll-on/roll-off) vessels the cargo заезжает board and rolled off.

8. On board FO-FO (float-on/float off) vessels dock lift cargo метод погружки is used, that is плавучие грузовые средства (e.g. barges) are floated into cargo spaces (usually large трюма).

9. Каботажные суда are designed to sail in a certain area or at a certain distance from the port, суда неограниченного морского плавания can sail to any area of the World Ocean.

10. A liner has установленные dates of отправления и прибытия, fixed ports of call between her home port and местом прибытия.

IX. Translate given sentences into English.

1. Грузовые суда делятся на два типа – сухогрузные и наливные.

2. Универсальные сухогрузы предназначены для транспортировки генеральных грузов.

3. Сухогрузные суда бывают универсальные и специализированные, т.е. предназначенные для перевозки определенных грузов.

4. Специализированные суда – это контейнеровозы, накатные суда (или суда типа Ro-Ro); рефрижераторные суда; лесовозы; суда для перевозки навалочных грузов (балкеры).

5. Многоцелевые суда обеспечивают перегрузку крановым и доковым способом.

6. Универсальные суда предназначены для перевозки опасных, рефрижераторных грузов, контейнеров.

7. Наливные суда – это танкеры, предназначенные для нефти или нефтепродуктов.

8. Сжиженные газы перевозятся в газовозах при очень низкой температуре (ниже -160°C).

9. Существуют комбинированные суда, которые в одном направлении везут, например, нефть, а в другом – руду.

10. Паромы предназначены для перевозки транспортных средств и пассажиров.

X. Why is a cruise ship white and a cargo ship not? The white color reflects the sun's rays, so the liner does not heat up and this saves on air conditioning (from www.technology.org).

For a more detailed explanation, watch the video “*Why are Cruise Ships White?*” on the Casual Navigation channel https://www.youtube.com/channel/UC5_HIschiDZM0dMX-nCksuA which contains blend of educational and entertaining maritime videos.

XI. Make up a dialogue.

Example: Ask your friend what specialized ships he knows.

A. What specialized ships do you know?

B. Well, I know tankers, container ships, LASH ships and a lot of others.

Ask: 1. how many trends/what trends in specialized ship design he knows; 2. what we call ships designed to carry automobiles and passengers; 3. how he can classify all cargo ships in dependence of the cargo carried; 4. how he can classify them in dependence of the cargo handling method used; 5. why expensive specialized ships are so widely used nowadays.

XII. Read short dialogues. Say what you learned from each of them.

1

A. What's that ship with the superstructure right forward and a couple of gantry cranes?

B. She's one of LASH ships. They pick up fully-laden (с полным грузом) barges and stow them in layers in the hold. Then when they get to their destination they launch the barges over the stern and tugs take them in tow. That way LASH ships can load and unload very quickly. It's like a bigger version of container ships.

A. I see.

2

A. Here's a fine pair of ships coming down. The first one's a passenger liner. It looks very smart, doesn't it? And what is the ship next astern of her?

B. It's a RO-RO ship.

A. RO-RO, sir?

B. Yes. The name comes from the initials of “roll-on, roll-off”. You see that very raked bow (нос со штевнем, имеющим наклон вперед) she's got? Well, the whole bow section lifts up, leaving a massive entrance for lorries and cars. And there's another pair of doors and a ramp in the stern.

A Do you mean the cars and lorries drive around inside the ship?

B. That's right. There are clear, wide decks right down the full length of the ship. And there are ramps inside, to enable the cars and smaller trucks to climb up to a higher deck. And as long as you're careful about securing them, they're quite safe even in a seaway (вовремя перехода /рейса).

A. I see.

3

A. What about that ship just ahead? She's got something sticking out of her bow, at the waterline.

B. That's just her bulbous bow coming into view because she's flying light (судно следует без груза, налегке). Lots of ships are built with a bulbous projection at the foot of the stern, below the waterline. You can see the warning sign painted on her bows.

A. What's the bulbous bow for?

B. It makes the hull drive more easily through the water. The ship goes faster, uses less fuel, and makes much less wash (волнение, создаваемое движущимся грузом).

XIII. Tell about the main classifications of ships depending on the transported categories of goods. List the reasons to work on any type of ship.

Example: The great majority of ships can be divided into some categories: cargo carriers, passenger carriers, service vessels, industrial ships, and noncommercial miscellaneous. Each category can be subdivided, with the first category containing by far the greatest number of subdivisions.

I would like to work on Ro-Ro ship.

Ro-Ro is an acronym for Roll-on/roll-off. Roll-on/roll-off ships are vessels that are used to carry wheeled cargo. The roll-on/roll-off ship was defined in the November 1995 amendments to Chapter II-1 of the International Convention for the Safety of Life at Sea (SOLAS), 1974 as being "a passenger ship with ro-ro cargo spaces or special category spaces".

The ro-ro ship is different from Lo-Lo (lift on-lift off) ship that uses a crane to load the cargo. The vehicles in the ship are loaded and unloaded by means of built-in ramps. The vessel can be of both military and civilian types. A ro-ro ship offers a number of advantages over traditional ships.

The following reasons to work on this type of ship are:

1. Commercially Ro-Ro's have always been successful due to its integration, flexibility, and operational speed, despite being commercially successful.

2. Ro-Ro's have always been criticised for its design and is also considered to be one of the reasons for the disturbing accidents involving Ro-Ro's.

3. Vehicles those can be directly driven into the vessel or land through the ramps making the loading and unloading process more quick and agile.

4. Another important advantage to have in mind is less cargo handling. Because there is no loading and unloading at port, there is less risk of accidents and cargo damage.

5. Mainly the concerns are from the safety point of view. Some of them are: stability; low freeboards; cargo access door; the lack of internal bulkheads; cargo stowage and securing; life-saving appliances; the crew.

6. Ro-Ro gives land transport a bigger action radius as it makes possible to shorten their route through ship instead of having to divert to a longer route.

Text E. THE TRAMP AND LINER TRADE SHIP CLASSIFICATION

I. Pre-reading activity. Paraphrase in English and translate into Russian the following words/word-combinations. Recollect the context in which each word/expression has been used.

Commodities exchange, resell the contract, fixed schedule, deferred-rebate system, tariff freight rate, the Baltic Mercantile and Shipping Exchange, the Baltic Exchange, voyage charter, specified round-trip voyage, stated one-way voyage, bareboat charter, proven loyalty, dispatch cargoes, subsidiary of a larger entity, untrammelled use, onerous rules, COLREGS, Plimsoll load line, non-self-propelled, self-propelled, rowing vessels, classification by drive.

II. Answer the following questions:

What is the difference between the tramp and liner trade? What types of ships can you enumerate taking into account the classification based on the usage of the ships? What criteria are used in the classifications? What ships are there according to the classification by placing of the hull? How do diving ships and underwater vessels differ? What is the more often used type of vessels in your region? Why? What other types of ships of latter classification do you know?

III. Read the new words and expressions:

tramp trade – общее название для трамповых кораблей
captive – несамостоятельный, не имеющий выхода на рынок
consecutive – последующий
charter – чартер, чартер-партия; выдавать разрешение
charterer – фрахтователь
bareboat charter – чартер на судно, зафрахтованное без экипажа
liner trade – линейные перевозки
deferred-rebate system – система последующей скидки с фрахта
proven loyalty – проверенная временем
irrespective of – независимо от
untrammelled – свободный от ограничений
onerous – тягостный, затруднительный
equipage – снаряжение
bear on safety – основываться на безопасности
infringement – нарушение
monohull – однокорпусное судно
trimaran – тримаран, трехкорпусное судно

dinghy – ялик, прогулочная лодка
trireme – трирема
man-o'-wars = man-of-wars – военный корабль
pinnace – полубаркас, пинас, командирский катер
gondola – гондола
junk – джонка
competitive – зд. спортивный
to perceive – воспринимать, ощущать, чувствовать
ground-effect machine (GEM) – экраноплан, аппарат на воздушной подушке
flat-bottomed boat – плоскодонка
self-propelled – самоходный, самодвижущийся
half-plunging – полупогружной
drilling floating platform – буровая плавучая платформа
displacement-type vessel – судно водоизмещающего типа
powerboat – моторный катер, моторная шлюпка
air-cushion vessel = hovercraft – судно на воздушной подушке

IV. Read and translate the text

Ship classification. The tramp trade.

Most of the world's tramp-ship *chartering* business is carried out in the Baltic Mercantile and Shipping Exchange in London, commonly known as the Baltic Exchange. Other exchanges, especially for special cargoes, are in operation. For example, a large part of the immense world oil transportation business is chartered by brokers based in a number of ports.

The closest approximation to free-market freight rates is found in the

case of the so-called tramp service offered by ships that are able to carry a variety of cargoes between ports. In many cases the services of these ships are matched with cargoes by brokers who meet face-to-face on a trading floor in an environment analogous to a stock exchange or a commodities exchange. Elements of such exchanges are present, even down to speculation on future changes in rates. For example, in times of low freight rates a broker representing cargo interests may charter a ship for a future date, all the while having no cargo in prospect but expecting to resell the contract when rates have risen.

The four principal methods of *chartering* a tramp ship are voyage charter, time charter, bareboat charter, and contract charter. The voyage charter, in which a ship is chartered for a one-way voyage between specified ports, with a specified cargo at a negotiated rate of freight, is most common. The charterer agrees to provide the cargo for loading within an agreed range of dates. Once the cargo has been delivered at the port or ports of destination, the ship is free for further employment at the owner's discretion. Sometimes, however, the arrangement is for a series of *consecutive* voyages, generally for similar cargoes over the same route. The freight rate is expressed in terms of so much per ton of cargo delivered.

On time charter, the charterer undertakes to hire the ship for a stated period of time or for a specified round-trip voyage or, occasionally, for a stated one-way voyage, the rate of hire being expressed in terms of so much per ton deadweight per month. Whereas on a voyage charter the owner bears all the expenses of the voyage (subject to agreement about costs of loading and discharging), on time charter the charterer bears the cost of fuel and stores consumed.

On *bareboat charter*, which is less frequently used in ordinary commercial practice, the owner of the ship delivers it up to the charterer for the agreed period without crew, stores, insurance, or any other provision, and the *charterer* is responsible for running the ship as if it were his own for the period of the contract.

A contract charter is usually employed when a large amount of cargo—too much for a single ship on a single voyage—is to be moved over a period of time. A typical example might be movement of a steel producer's entire supply of iron ore from mine to mill via the Great Lakes of North America. The shipowner agrees to undertake the shipment over a given period at a fixed price per ton of cargo, but not necessarily in any specified ship, although he generally uses his own ships if they are available.

The liner trade

Other shipping is done by the “*liner trade*”—i.e., the passage of ships between designated ports on a fixed schedule and at published rates. Liner companies are able to provide such service through the liner conference system, which was first used on the Britain-Calcutta trade in 1875. The object of the conference system is to regulate uneconomic competition.

Shipping companies of different ownership and nationality that service the same range of ports form a conference agreement to regulate rates for each type of freight; in some cases the agreement also allocates a specified number of sailings to each company. Coupled with this agreement there is generally a *deferred-rebate system*, by which regular shippers of goods by conference vessels receive a rebate of a percentage of the tariff freight rate, payable after a period of *proven loyalty*, provided they use conference vessels exclusively.

The shipping conference system has sometimes come under attack as tending to create a monopoly and to restrain competition against the public interest. It is, however, generally agreed that evidence is in favour of this system: it has been concluded that no realistically possible combination of shipping companies can force unreasonable rates and that shipping companies that provide regular sailings with good ships and maintain staffs and organizations in ports to handle and dispatch cargoes—*irrespective* of whether trade is good or bad—are entitled to some protection against the casual vessel that picks up an occasional cargo at cut rates. Advocates agree that through the system the shipper can rely on a well-managed service, running vessels that will carry any desired quantities of goods at predetermined rates.

The captive fleet

A third scheme of organization is the captive fleet, a shipping company that is a subsidiary of a larger entity that moves its own cargo in a continuous stream. Prominent examples are the fleets owned by many major petroleum companies to bring crude oil to their refineries and to distribute their products from refinery to distribution centres.

International conventions

Ships historically made *untrammelled* use of the vast ocean surface. The necessity of coming into port gave shore authorities the opportunity to exact certain payments, but, until regulation began to appear in the middle of the 19th century, owners and captains were free to do as they pleased in building and operating their ships. As maritime nations began to realize that accidents at sea were preventable by adherence to rules for the building and operation of ships, a

body of regulations began to develop under the powers of individual states to make laws for their own citizens (and for others within controlled waters). However, given that ships of all nations were free to use the ocean, diversity of rules was a serious problem, with maritime trade readily falling into the hands of the ships that obeyed the least *onerous* rules.

The practice of enforced observance of local regulations continues, but since the late 19th century a series of agreements among maritime states has brought near-uniformity to regulations governing ship operation and aspects of ship design and *equipment* that *bear on safety*. Nearly all the world's maritime states, for example, have adopted the International Regulations for Preventing Collisions at Sea (known as COLREGS). These were originally based on British rules formulated in 1862 and made internationally effective after a series of international meetings culminating in a conference at Washington, D.C., in 1889. The rules specify in great detail how ships must navigate in respect of each other, what lights must be shown, and what signals must be given in accordance with circumstances.

Any *infringement* of this international code of conduct is accepted in all maritime courts of law as *prima facie* evidence of liability in case of collision. Similarly, the internationally accepted requirements for the protection and safety of life at sea, as far as the ship and its equipment are concerned, are embodied in the International Convention for Safety of Life at Sea (SOLAS). The sinking of the liner Titanic in 1912 gave rise to a general desire to raise the standards of safety of life at sea. Although a convention was drawn up in 1914 requiring certain minimum standards for passenger ships, it did not become fully operative because of the outbreak of World War I.

The advent of the United Nations after World War II brought into being a permanent international body, the International Maritime Organization (IMO), an arm of the UN whose purpose is to produce and modify international conventions in three categories: safety, prevention of pollution, and liability and compensation following accidents.

The IMO has produced a regulatory literature too extensive to detail here, but four conventions that have the greatest bearing on ship operation can be mentioned. The International Convention on Load Lines of 1966 emerged from the British Merchant Shipping Act of 1875, which provided what was known as the Plimsoll load line on the ship's side, indicating the maximum depth to which a ship could legally be loaded. In order to protect the competitive position of British ships, the Merchant Shipping Act of 1890 required all foreign

ships leaving British ports to comply with the load-line regulations. This led to the adoption of load-line rules by most maritime countries, and the International Load Line Convention of 1930 was ratified by 54 nations.

The new convention of 1966 came into force in July 1968 and allowed for a smaller freeboard (vertical distance between the water and the deck) for large ships while calling for more stringent protection of openings in decks and superstructures.

The Convention on International Regulations for Preventing Collisions at Sea and the International Convention for the Safety of Life at Sea were drawn up in 1972 and 1974, respectively. In 1973 and 1978 the International Convention for the Prevention of Pollution from Ships (MARPOL) came up with regulations that cover internal arrangements of tankers in order to minimize oil spills following hull ruptures.

IMO regulations do not go into effect until they have been ratified by a sufficient number of maritime states. In turn, they are not enforced by the regulatory arm of a maritime state until they have also become the law of that land.

Ship classification

In most maritime states, nongovernmental regulatory bodies are empowered to carry out such legally mandated actions as assigning load lines and to publish rules for ship design that must be complied with for insurability. However, since their functions are to establish an insurability class for new ships, they are more accurately described as classification societies.

Ships are difficult to classify, mainly because there are so many criteria to base classification on. One classification is based on propulsion, i.e. either a sailing ship or a motorship.

Another way to categorize ships and boats is based on their use.

There exists another classification – classification by drive. A vessel is classified by drive into three groups: non-self-propelled (for example, barges, flat-bottomed boats). Nonself-propelled vessels basically transport cargoes, rubbish, building materials; self-propelled: rowing, sailing and motor vessels. Self-propelled vessels define the direction and speed; rowing vessels: galleys, kayaks, canoes, life boats, walking boats, walking bicycles. Rowing vessels are set in motion by oars. They are not self-propelled, as they are operated.

Other classification systems exist that use criteria such as: the number of hulls, e.g., *monohull*, *catamaran*, *trimaran*; the shape and size, e.g., *dinghy*, *keelboat*, and icebreaker; the building materials used, e.g., steel, aluminum,

wood, fiberglass, and plastic; the type of propulsion system used, e.g., human-propelled, mechanical, and sails; the epoch in which the vessel was used, e.g., triremes of Ancient Greece, *man-o'-wars* of the 18th century; the geographic origin of the vessel – many vessels are associated with a particular region, such as the *pinnace* of Northern Europe, the gondolas of Venice, and the *junks* of China; the manufacturer, series, or class; the port of destination, etc.

Classification by placing of the hull concerning water is worth mentioning. According to this classification there exist various types of ships, such as: underwater, e.g., nuclear submarines; diving – vessels plunge for some limited time under water, e.g., scientific bathyscaphes, diesel submarines; half-plunging – vessels is basically under water, e.g., drilling floating platforms; displacement type – the usual vessels that plunge on some depth under water, e.g., *Titanic*; gliding – the vessels which weight is perceived by dynamic pressure of water at vessel movement, e.g., high-speed powerboats; *hydrofoil* vessels – ones which weight is perceived by elevating force of underwater wings, e.g., *Rocket*, *Meteor*; air-cushion vessels – ones which weight is perceived by pressure of air, pumping under the vessel's bottom, e.g., the ferry going through the English Channel *Hovercraft*; dynamic hovercrafts – the vessels which weight is *perceived* by pressure of air owing to movement of air, e.g., *ground-effect machine Ship Model(The Caspian Monster)*.

As you well know, there is a myriad of ships sailing the seven seas and each one has a purpose. The table below categorises ships' types.

Dry Cargo – Unit cargo	Dry Cargo – Bulk cargo	Liquid Cargo	Passenger ships
Container vessel	Bulk carrier	Crude carrier	Passenger ship
Roll-on/Roll-off	Ore carrier	Product tanker	Car and passenger ferries
Heavy-cargo vessel		Chemical tanker	Cruise ship
Refrigerated ships		LPG/LNG carriers	
Cattle ship			
Multi-purpose ship			
Navy vessels	Fishing	Dredgers etc	Work ships
Aircraft carriers	Trawlers	Trailing hopper suction dredger	Crane vessels
Cruisers	Other types of fishing	Cutter suction dredger	Buoy-layers

Navy vessels	Fishing	Dredgers etc	Work ships
	vessels		
Destroyers		Rock-dumper	Cable-layers
Frigates			Oil-recovery vessels
Submarines			Shear leg cranes
Mine sweepers			

Auxiliary vessels	Yachts	Various	Offshore material
Seagoing tugs	Motor yachts	Hydrofoils	Drilling rigs/Jack-up
Harbour tugs	Sailing yachts	Floating dock	Drill-ships
Icebreakers		Submersible platform	Pipe layers
Pilot vessels		Pontoons, barges	Floating (Production)
Coast guard vessels			Storage and Offloading vessel F(P)SO
Research vessels			

COMPREHENSION EXERCISES

V. Make a presentation about a ship.

Feel free to choose one where you have worked.

Place it in one of the categories above and describe why it fits into this category.

Present the ship for your group mates and lecturer.

VI. Read the sentences. Translate the words in brackets into English:

1. Ships may be classified (в соответствии с) _____ the place of navigation, hull material, placing of the hull and drive.

2. According to the hull material ships may be wooden, steel, (пластиковые) _____, aluminium and so on.

3. According to (месту) _____ of navigation ships may be (делиться на) _____ ocean and seagoing ships, river and lake ships coasters.

4. Self-propelled ships are (пароходы) _____, electric propulsion ships, nuclear-propulsion ships.

5. Non-propelled ships are barges and (парусники) _____.

6. According to place of the hull ships are divided into floating, gliding, (суда на воздушной подушке) _____.

7. Transport ships are divided into passenger ships, cargo ships, passenger-cargo ships and (паромы) _____.

8. According to (основному назначению) _____ ships are classified into transport ships, fishing ships, research ships, training, ships, competitive boats, etc.

9. (Навалочники) _____ carry bulk cargo.

10. (Транспортные) _____ ferries carry cars.

VII. Match the word definitions given in the box.

ice-breaker, pinnace, trireme, gondola, man-of-war, junk, trimaran, catamaran, keelboat, dinghy

1. The ship is a traditional, flat-bottomed Venetian rowing boat, well suited to the conditions of the Venetian Lagoon.

2. This ship is one of two marine craft, the first a small vessel used as a tender to larger vessels amongst other things, and the second a ship rigged vessel popular in northern waters through the 17th-19th centuries.

3. The ship (from Tamil 'kattumaram') is a type of multihulled boat or ship consisting of two hulls, or 'vakas', joined by some structure, the most basic being a frame, formed of 'akas'. They can be sail- or engine-powered.

4. The ship is a Chinese sailboat design dating from ancient times and still in use today. They were developed during the Han Dynasty (206 BC- 220 AD) and were used as ocean-going vessels as early as the 2nd century AD.

5. The ship is a type of small boat, often carried or towed by a larger vessel.

6. The ship is a special-purpose ship or boat designed to move and navigate through ice-covered waters.

7. The ship is a type of usually long narrow cigar-shaped riverboat, or unsheltered water barge which is sometimes also called a poleboat.

8. The ship (Greek or Latin origin) is a class of warship used by the ancient civilizations of the Mediterranean, especially the Phoenicians, ancient Greeks and Romans.

9. The ship is a multihulled boat consisting of a main hull (vaka) and two smaller outrigger hulls (amas), attached to the main hull with lateral struts (akas).

10. The ship was the most powerful type of armed ship from the 16th to the 19th centuries.

VIII. Complete the table. Use information sources of Russian Maritime Register of Shipping (RS) – a leading world-known classification society closely associated with ice ships, high-tech icebreakers and ice-resistant equipment to develop offshore oil-and-gas fields: <https://rs-class.org/en/>

№	Ships' types in the Russian Federation.	Main description
1		
2		
3		
4		
5		
6		

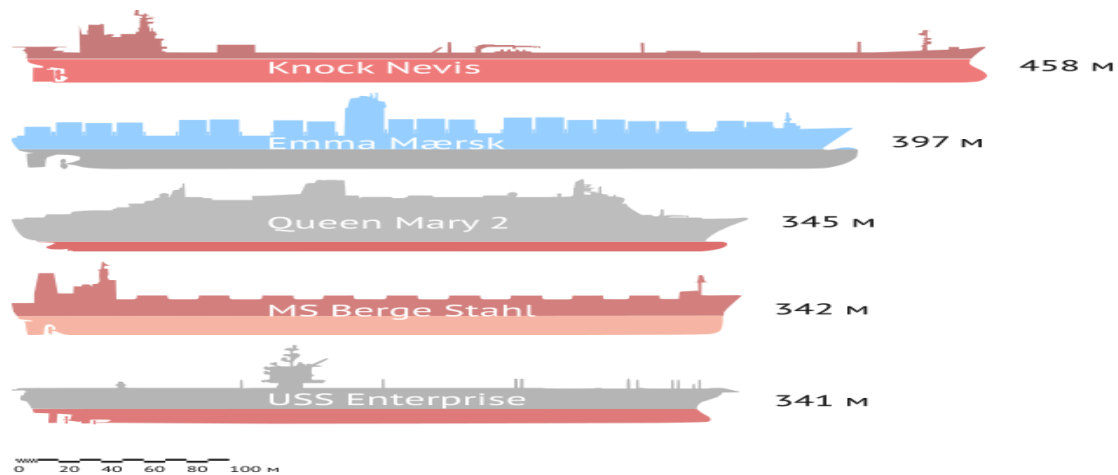
IX. Think about the ships you will build in future. Use information source: <https://www.vard.com/articles/optimized-for-zero>

Will ship designs change much in the near future? Designing for zero is a race for energy conservation and operational performance. Today you can fill a conventional vessel with enough fuel oil to last for months, but alternative zero fuels all have significantly lower energy density. This means we have to design ships to do more with less. Which one do you think could be your ideal workplace? Write a short text where you state the reasons for your choice.

Was it a giant tanker or a medium sized offshore service vessel? There is no end to the different sizes of ships that can be found sailing today. From the world's largest cruise ship to the smallest fishing trawler, ship sizes vary to suit their individual purposes.

Marine Insight present categories of ships based on their size (URL: <https://www.marineinsight.com/types-of-ships/the-ultimate-guide-to-ship-sizes/>).

Ship sizes



	Locks	Panamax	New locks	New Panamax ¹
Length	1,050 ft (320.04 m)	965 ft (294.13 m)	1,400 ft (427 m)	1,200 ft (366 m)
Width	110 ft (33.53 m)	106 ft (32.31 m)	180.5 ft (55 m)	160.7 ft (49 m)
Draft ²	41.2 ft (12.56 m)	39.5 ft (12.04 m)	60 ft (18.3 m)	49.9 ft (15.2 m)
TEU		5,000		12,000
¹ New Panamax sizes are published in metric system ^[2]				
² Draft in Tropical Freshwater (TF)				

X. Read the two sites mentioned above, choose one of the ship categories and make your own description from what you have learned.

UNIT 2

BUILDING A SHIP

The Classification companies. The construction of ships. Ship measurements. What is the role of the Classification companies? What is the Plimsoll mark? What is ship pollution?

IN THIS UNIT YOU WILL

- get a short historical background of the Classification companies;
- have a look at some rules about the construction of ships;
- see how ships are categorized based on size;
- learn what classification and classification companies are;
- learn about laws and vocabulary regarding ship measurements;
- get some tips and tricks when it comes to giving a presentation.

Text A. THE ORIGIN OF CLASSIFICATION

Pre-reading activity.

I. Ever wondered about being part of a team at the shipyard when they are building a new ship? Below you can read the thoughts of Johnny Treet, a Norwegian engineer, who has done just that.

I. Answer the following questions:

1. What does it mean to be a supervisor?
2. What is the role of the Classification companies?
3. What is classification?
4. Where can we find laws and regulations about construction, building and certification of ships?

III. Read the new words and expressions:

to overlap – частично совпадать

to boost –поднимать, повышать, продвигать

underwriter – страховщик, страховая компания, гарант размещения

Lloyd's Register of Shipping – регистр судоходства Ллойда

Registro Italiano Navale (RINA) – Итальянский морской регистр (ИМР)

American Bureau of Shipping (ABS) – американское бюро судоходства

Det Norske Veritas (DNV) – Норвежское общество по судоходству
Germanischer Lloyd (GL) – Германский Ллойд
Nippon Kaiji Kyokai (ClassNK) – Японское классификационное общество
The Russian Maritime Register of Shipping (RS) – Российский морской регистр судоходства
attendance – посещаемость, посещение, присутствие, обслуживание, услуги
sea trials – мореходные испытания
tail shaft survey – осмотр гребного вала
boiler survey – осмотр котла
machinery surveys – осмотр машинного оборудования
fair terms — справедливые условия

IV. Read and translate the texts.

THE ORIGIN OF CLASSIFICATION

At some point during your career, you might get lucky and get an opportunity to be part of a team that supervises shipbuilding. Moreover, you could get the chance be team leader and responsible for building a ship. You would be the owner's on-site representative for your department, but during the building of a new ship, departments have a tendency to *overlap*, possibly giving you responsibility for other departments as well.

Being part of a team like this is a great opportunity to «*boost*» your career since you will be learning a lot about how a ship functions faster than if you were not part of such a project. A major part of this job is networking and building relations between your company and the shipyard, as well as between your own department and equipment suppliers. You will also learn the importance of good human relations, and, if you are successful, many companies will want to hire you.

Very often, you will find that being a diplomat is better than being right. Many people seem to forget that the ship is the shipyard's property until the handover, and equal respect for all the workers involved are crucial. The most important thing to remember is that everybody is important, from the welders and cleaners to the foremen.

So, what does it mean to be a supervisor? To be a supervisor means that you must check all drawings, piping and equipment for your department, and work together with other supervisors when things are crossing into your department. You must carry out team meetings; have meetings with representatives for the shipyard to correct faults and keep the company informed

about the progress and any changes that are being made. Furthermore, changes must be approved before they are carried out on the ship, and you must inform both your company and the shipyard management about these matters. Supervising also means to guide the foremen so they understand how you want to address the tasks and how you want the end result to be.

Sometimes the ship is built in a foreign country and as an added bonus, you get to learn about other cultures and see new places. Overall, it is very interesting to be part of a team like this, and it is highly recommended if you get a chance to join in.

What is the role of the Classification companies?

Short historical background

The origin of classification is associated with *the Lloyd's Register of Shipping*. It was customary in the seventeenth and eighteenth centuries for merchants, shippers and *underwriters* to meet in coffee houses in London to discuss business. Lists of ships were circulated in those establishments, and these lists were particularly useful in providing underwriters with information about the degree of risk involved in insuring the ships and their cargoes. One of the coffee houses was owned by Edward Lloyd, a renowned entrepreneur. Lloyd made history when he provided a list or bulletin about ships in 1702. Known as Lloyd's List, such lists have continued to be published. (Chowdhury, 2015)



Several classification companies were founded in the following years. Among the most important are Bureau Veritas in 1828, *Registro Italiano Navale (RINA)* 1861, *The American Bureau of Shipping (ABS)* 1862, *Det Norske Veritas (DNV)* 1864, *Germanischer Lloyd (GL)* in 1867, *Nippon Kaiji Kyokai (ClassNK)* 1899, and *The Russian Maritime Register of Shipping (RS)* in 1913.

What is classification?

Read Info sheet no.35 from Lloyd's Register of Shipping for a concise and informative explanation of classification.

Over 90 % of the world's merchant shipping tonnage is classified by the 12 member societies of the International Association of Classification Societies (IACS).

The role of classification and Classification Societies has been recognized in the International Convention for the Safety of Life at Sea, (SOLAS) and in the 1988 Protocol to the International Convention on Load Lines. The IACS can trace its origins back to the International Load Line Convention of 1930 and its recommendations. The Convention recommended collaboration between Classification Societies to secure “as much uniformity as possible in the application of the standards of strength upon which freeboard is based...”.

A second major Class Society conference, held in 1955, led to the creation of Working Parties on specific topics and, in 1968, to the formation of IACS by seven leading Societies. The value of their combined level of technical knowledge and experience was quickly recognised. In 1969, IACS was given consultative status with the International Maritime Organization (IMO). It remains the only non-governmental organization with Observer status which is able to develop and apply Rules.

Scope of classification

Implementing the published Rules, the classification process consists of:

- A technical review of the design plans and related documents for a new vessel to verify compliance with the applicable Rules;
- *Attendance* at the construction of the vessel in the shipyard by a Classification Society surveyor(s) to verify that the vessel is constructed in accordance with the approved design plans and classification Rules;
- Attendance by a Classification Society surveyor(s) at the relevant production facilities that provide key components such as the steel, engine, generators and castings to verify that the component conforms to the applicable Rule requirements;
- Attendance by a Classification Society surveyor(s) at the *sea trials* and other trials relating to the vessel and its equipment prior to delivery to verify conformance with the applicable Rule requirements;
- Upon satisfactory completion of the above, the builder's/shipowner's request for the issuance of a class certificate will be considered by the relevant Classification Society and, if deemed satisfactory, the assignment of class may be approved and a certificate of classification issued;
- Once in service, the owner must submit the vessel to a clearly specified programme of periodical class surveys, carried out on board the vessel, to verify that the ship continues to meet the relevant Rule requirements for continuation of class.

Assignment, maintenance, suspension and withdrawal of class

Class is assigned to a vessel upon the completion of satisfactory review of the design and surveys during construction undertaken in order to verify compliance with the Rules of the Society. For existing vessels, specific procedures apply when they are being transferred from one Class Society to another.

Ships are subject to survey regimes throughout its “lifetime” in order to retain its class. These surveys include the class renewal (also called “special survey”), intermediate survey, annual survey, and bottom/docking surveys of the hull. They also include *tailshaft survey*, *boiler survey*, *machinery surveys* and, where applicable, surveys of items associated with the maintenance of additional class notations.

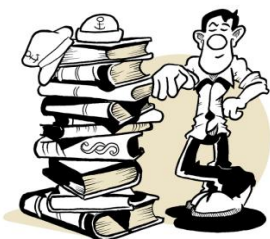
The surveys are to be carried out in accordance with the relevant class requirements to confirm that the condition of the hull, machinery, equipment and appliances is in compliance with the applicable Rules.

It is the owner's responsibility to properly maintain the ship in the period between surveys. It is the duty of the owner, or its representative, to inform the Society of any events or circumstances that may affect the continued conformance of the ship with the Society's Rules.

Where the conditions for the maintenance of class are not complied with, class may be suspended, withdrawn or revised to a different notation, as deemed appropriate by the Society when it becomes aware of the condition (International Association of Classification Societies).

Know the Law

So, where can we find laws and regulations about construction, building and certification of ships? Classification societies are the ones actually doing this work, and most of the “demands” when it comes to specifications are found in the different standards for certification each society has developed. To find the source for these specifications we have to go to the various conventions and codes created by the IMO, such as MARPOL, SOLAS, COLREG, and CSS. In addition, the Maritime Labour Convention regulates seafarers' onboard working and living conditions, such as a safe and secure workplace; *fair terms* of employment; decent living and working conditions. These range from ensuring a safe and secure workplace, fair terms of employment, decent living and working conditions to social protection such as access to medical care, health protection,



and welfare. As a deck officer student, you are going to learn a lot about the different conventions and codes.

COMPREHENSION EXERCISES

V. IMO Conventions. A list of all IMO conventions can be found here. Find regulations about construction in SOLAS Convention (Appendix 3)

VI. Decipher and translate the following abbreviations:

IACS, RINA, ABS, DNV, GL, Class NK, RS, IMO, MARPOL, SOLAS, COLREG, and CSS.

VII. Specifications and different standards for certification can be found in MARPOL, SOLAS, COLREG, CSS the Maritime Labour Convention. What are they?

VIII. Say whether the statement is true or false according to the text. Correct the false statements:

1. A major part of this job is networking and building relations between your company and the shipyard.
2. Good human relations should not be considered in many companies.
3. The ship is the shipyard's property until the handover, and equal respect for all the employees involved are crucial.
4. The most important thing to remember is that the welders are more important than foremen.
5. The ship isn't built in a foreign country.
6. The origin of classification is associated with the Lloyd's Register of Shipping.
7. Lloyd's Register of Shipping was customary in the nineteenth century for merchants, shippers and underwriters to meet in coffee houses in London to discuss business.
8. Over 90% of the world's merchant shipping tonnage is classified by the 10 member societies of the International Association of Classification Societies.
9. The role of Classification Societies has been recognized in the International Convention for the Safety of Life at Sea, and in the 1988 Protocol to the International Convention on Load Lines.

10. The International Association of Classification Societies can trace its origins back to the International Convention for the Safety of Life at Sea of 1930 and its recommendations.

11. The International Convention on Load Lines recommended collaboration between Classification Societies to secure as much uniformity as possible in the application of the standards of strength.

12. A second major Class Society conference, held in 1955, led to the creation of Working Parties on specific topics.

13. Class is assigned to a vessel upon the completion of satisfactory review of the design and surveys during navigation undertaken in order to verify compliance with the Rules of the Society.

14. Ships aren't subject to survey regimes throughout its "lifetime" in order to retain its class.

15. The surveys are to be carried out in accordance with the relevant class requirements to confirm that the condition of the hull, machinery, equipment and appliances is in compliance with the applicable Rules.

16. The Maritime Labour Convention regulates seafarers' onboard working and living conditions, such as a safe and secure workplace; fair terms of employment; decent living and working conditions.

IX. Answer the questions to the text:

1. Why have departments a tendency to overlap, during the building of a new ship?

2. What does it mean "to be part of a team"?

3. If you are successful, many companies will want to hire you, won't they?

4. What is meant by a supervisor?

5. Must you check all drawings, piping and equipment for your department or work together with other supervisors when things are crossing into your department?

6. Should one carry out team meetings? Why?

7. What is the origin of classification associated with?

8. Where has the role of classification and Classification Societies been recognized?

9. What does the classification process consist of?

10. The builder's/shipowner's request for the issuance of a class certificate will be considered by the relevant Classification Society, won't it?

11. Should the owner submit the vessel to a clearly specified programme of periodical class surveys?

12. Why are ships subject to survey regimes throughout its “lifetime”?

13. What Convention does regulate seafarers' onboard working and living conditions, such as a safe and secure workplace; fair terms of employment; decent living and working conditions?

14. What should you learn as a future shipbuilder/ship designer?

X. Being part of a team like this is a great opportunity to «boost» your career since you will be learning a lot about how a ship functions faster than if you were not part of such a project. Think about your future project.

Text B. SHIP MEASUREMENTS

Pre-reading activity.

I. Paraphrase in English and translate into Russian the following words/word-combinations. Recollect the context in which each word/expression has been used: the highest waterline, the bottom of the ship, maximum safe loading level, ‘Plimsoll Line’, freeboard mark, load line mark, the maximum depth, Load Line Certificate.

II. Answer the following questions:

1. What is the Plimsoll mark?
2. Give the definition of the terms “beam”, “depth”, “draft” and “tonnage”.

III. Read the new words and expressions:

Overall length – общая длина	марка Плимсоля
beam– ширина	Merchant Shipping Act – закон о
depth – глубина	торговых морских перевозках
draft (AE) = draught (BE) – осадка	regulation – предписание, правило
toll – пошлина, сбор	to engrave – (вы)гравировать
keelson – кильсон	Load Line Certificate –
subsequent – последующий	свидетельство о грузовой марке
Plimsoll Line (mark) – грузовая	

IV. Read and translate the texts.

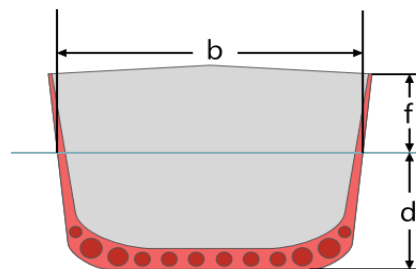
One can *measure* ships in terms of *overall length*, length of the ship at the waterline, *beam* (breadth), *depth* (distance between the crown of the weather deck and the top of the keelson), *draft* (distance between the highest waterline and the bottom of the ship) and tonnage. A number of different tonnage definitions exist. They are used when describing merchant ships for the purpose of *tolls*, taxation, etc.

In Britain Samuel Plimsoll, a Member of Parliament engaged some engineers to derive a simple formula to define the position of a line on the side of any ship's hull which, when it reached the surface of the water during loading of cargo, meant the ship had reached its maximum safe loading level. To this day, that mark, called the '*Plimsoll Line*', exists on ships' sides. It consists of a circle with a horizontal line through the centre.

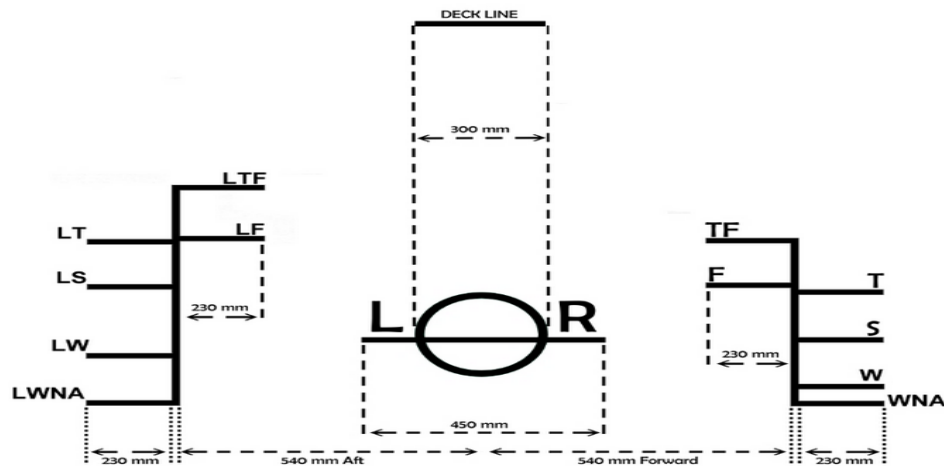
Since different types of water (summer, fresh, tropical fresh, winter north Atlantic) have different densities, subsequent regulations required painting a group of lines according to Samuel Plimsoll's *Merchant Shipping Act* of 1876 to indicate the safe depth (or freeboard above the surface) to which a ship could load in water of various densities. Hence, the 'ladder' of lines has been seen alongside to this day.

The *Plimsoll mark* is called the 'freeboard mark' or 'load line mark' in the marine industry.

In the course of loading load lines must be watched above all. The load lines are *engraved* and then painted on both sides of ships. The divided circle on the left shows the depth to which the ship may be loaded in summer time. Below this line are, on the grid to the right, two lines. The one marked *W* means winter loading, the lower one marked *WNA* means the maximum depth to which the ship may be loaded if she is going across the North Atlantic in winter. The other marks above these are: *T* for tropical, *F* for fresh water. These lines are shown on the ship's *Load Line Certificate*. In case of overloading a ship, so that these lines are under water, the *penalties* are *severe*.



- The **beam (b)** of a ship is its width/breadth at the widest point as measured at the ship's nominal waterline.
- **Draught (d)** (draft) is the vertical distance from the bottom of the keel to the waterline.
- **Freeboard (f)** is the distance from the waterline to the upper deck level.



Draught marks are the number markers on each side of a ship. They are placed at the bow, stern, and amidships and indicate the distance from the lower edge of the number to the bottom of the keel or another fixed reference point.

TF – Tropical Fresh Water

F – Fresh Water

T – Tropical Seawater

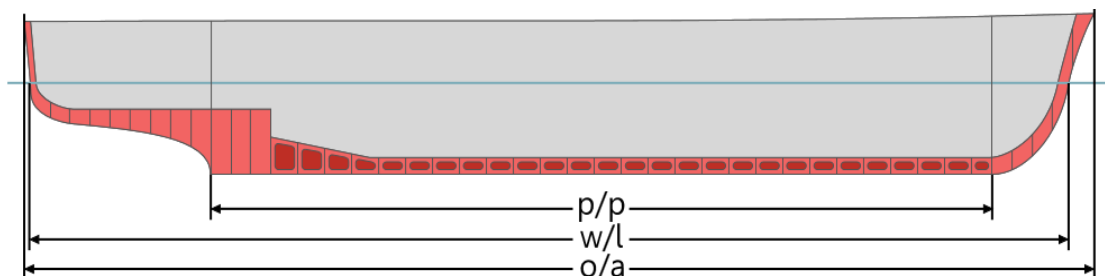
S – Summer Temperate Seawater

W – Winter Temperate Seawater

WNA – Winter North Atlantic

Prefix L – Lumber

L θ R – Lloyd's Register



p/p = length between perpendiculars

w/l = length at waterline

o/a = length overall

- **Length** is the distance between the forwardmost and aftermost parts of the ship.

- **Length Overall (LOA)** is the maximum length of the ship

- **Length at Waterline (LWL)** is the ship's length measured at the waterline

- **Summer Water Line** is the waterline when ship has its standard load.

COMPREHENSION EXERCISES

V. Find English equivalents to Russian ones in the text:

вся длина, длина по ватерлинии, глубина, осадка, тоннаж, ряд, торговое судно, налогообложение, расположение линий на борту, круг с горизонтальной линией, по центру, различные плотности, изображение набора линий, отражать безопасную глубину, закон о торговых морских перевозках, размерение судов, ширина, днище корабля, определение тоннажа, при описании, взимание платы, получить формулу, поверхность воды, во время загрузки, максимально безопасный уровень загрузки, пресная вода, соответствующие предписания.

VI. Read the Final Act of the International Conference on Marine Pollution, (MARPOL, 1973) here
<https://www.imo.org/en/KnowledgeCentre/ConferencesMeetings/Pages/Marpol.aspx> Chapter 1, Regulation 1 (p.52). **Give the definition of the terms connected with ship measurements.**

(18) "Length" (L) means 96 per cent of the total length on a waterline at 85 per cent of the least moulded depth measured from the top of the keel, or the length from the foreside of the stem to the axis of the rudder stock on that waterline, if that be greater. In ships designed with a rake of keel the waterline on which this length is measured shall be parallel to the designed waterline. The length (L) shall be measured in metres.

(19) "Forward and after perpendiculars" shall be taken at the forward and after ends of the length (L). The forward perpendicular shall coincide with the foreside of the stem on the waterline on which the length is measured.

(20) "Amidships" is at the middle of the length (L).

(21) "Breadth" (B) means the maximum breadth of the ship, measured amidships to the moulded line of the frame in a ship with a metal shell and to the outer surface of the hull in a ship with a shell of any other material. The breadth (B) shall be measured in metres.

(22) "Deadweight" (DW) means the difference in metric tons between the displacement of a ship in water of a specific gravity of 1.025 at the load waterline corresponding to the assigned summer freeboard and the lightweight of the ship.

(23) "Lightweight" means the displacement of a ship in metric tons without cargo, oil fuel, lubricating oil, ballast water, fresh water and feedwater in tanks, consumable stores, passengers and their effects.

(24) "Permeability" of a space means the ratio of the volume within that space which is assumed to be occupied by water to the total volume of that space.

(25) "Volumes" and "areas" in a ship shall be calculated in all cases to moulded lines.

Screen shot

from <https://www.imo.org/en/KnowledgeCentre/ConferencesMeetings/Pages/Marpol.aspx>

VII. Find the words in the Final Act of the International Conference on Marine Pollution (MARPOL, 1973).

1) измерять; 2) длина; 3) ширина судна; 4) наружные кромки; 5) осадка судна; 6) посередине судна; 7) облегчённый; 8) питательная вода; 9) корпус; 10) объем; 11) глубина; 12) киль; 13) отклонение от перпендикуляра; уклон; наклон; 14) передняя сторона, верхняя часть; 15) водоизмещение; 16) ширина; 17) проницаемость; 18) ватерлиния; 19) корабль, судно; 20) дедвейт, грузоподъёмность.

VIII. Say whether the sentence is true or false according to the text. Correct the false statements:

1. Any ship can be measured in terms of overall length, length of the ship at the freeboard, beam, depth, and draft.

2. A number of different tonnage definitions are used when describing merchant ships for the purpose of tolls, taxation, etc.

3. A Member of Parliament, Samuel Plimsoll engaged some engineers to derive a simple formula to identify the position of a line on any specific ship's deck side which, when it reached the water surface during loading of cargo, meant the ship had reached her maximum safe loading level.

4. The Plimsoll mark is said to be called the 'load line mark' in the marine industry.

5. The indicator marked *W* means water.

6. The other marks above these are: *T* for tropical, *F* for fresh water.

7. A ship's width/breadth at the highest point as measured at the ship's nominal waterline is the beam.

8. Freeboard is the vertical distance from the bottom of the keel to the waterline.

9. Draught (draft) is the distance from the waterline to the upper deck level.

10. Draught marks are placed at the bow, stern, and amidships.

11. Draught marks indicate the distance from the lower edge of the number to the bottom of the keel or another fixed reference point.

12. Length is the distance between the forwardmost and aftermost parts of the ship.

13. Length Overall is the minimum length of the ship.

14. Length at Waterline is the ship's breadth measured at the waterline.

15. Summer Water Line is the waterline when ship has its maximum load.

IX. Answer the questions to the text:

1. What are the terms connected with ship measurements?

1. Do a number of different tonnage definitions exist?

2. What is draft/ draught ?

3. What does the depth of ships mean?

4. Samuel Plimsoll was a Member of Parliament, wasn't he?

5. What is he famous for in marine industry?

6. What lines do indicate the safe depth (or freeboard above the surface)?

7. Are there any official documents regulating lines to be painted?

8. What other words can be used to describe the 'ladder' of lines?

9. Is the Plimsoll mark called the ‘freeboard mark’ or ‘load line mark’ in the marine industry?

10. Because different types of water densities, subsequent regulations required painting a group of lines according to Samuel Plimsoll’s Merchant Shipping Act of 1876 to indicate the safe depth, didn’t they?

11. Draught marks are the number markers on each side of a ship, aren’t they?

12. What Is Summer Water Line?

13. What do the terms “deadweight” and “lightweight” mean?

X. Group 2-3 students and discuss the following items:

- measurement of ships;
- S. Plimsoll and engineers, and their innovation;
- freeboard marks or load line marks;
- other marks painted on ship’s sides.

XI. Read about terms definitions “Tonne, and ton” by Cambridge Dictionary. The term can be used as *shipping ton*, *ocean ton*, *freight ton*, or *measurement ton* to describe measure of volume used for shipments of freight; the difference appears when you ask them to convert it.

TONNE AND TON

A Norwegian proverb says that a much-loved child has many names. Not only do we have many names when it comes to the abovementioned ton, we actually have many children as well! The picture shows what Cambridge Dictionary says when we search for “ton”. “A ton is 1,000 kilograms” will most likely be the answer if you ask a Norwegian on the street what a ton is. The picture below tells you what you can expect to hear if you ask a Brit or an American. In Australia, they are not quite sure which one they want to use; if you check an Australian dictionary, it will tell you to use the UK-style, but everyday use finds Aussies going with the American definition.

ton

noun [C] • UK  /tan/ US  /tan/ PLURAL tons or ton

ton noun [C] (WEIGHT)

- ★  a unit of weight equal to 1,000 kilograms

Synonym
metric ton
tonne

- ★  (ALSO long ton) a unit of weight equal to 1,016 kilograms

- ★  (ALSO short ton) a unit of weight equal to 907 kilograms

> tons  [plural] INFORMAL

- ★ an extremely large amount:
We have tons of food left over from the party.

— More examples

Customs officers have seized nearly a ton of heroin destined for New York.
The rock weighed over a ton and was completely immovable.
What on earth have you got in this bag, Elaine? It weighs a ton!

+ Thesaurus: synonyms and related words

ton noun [C] (MONEY)

- ★ [S] UK INFORMAL £100:

It'll cost you a ton or more.

+ Thesaurus: synonyms and related words

ton noun [C] (SPEED)

> do a ton UK OLD-FASHIONED INFORMAL

- ★ to drive at 100 miles an hour

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What is the difference between the short ton, long ton, and metric ton.

The British ton is the long ton, which is 2240 pounds, and the U.S. ton is the short ton which is 2000 pounds.

Both tons are actually defined in the same way. 1 ton is equal to 20 hundredweight. It is just the definition of the hundredweight that differs between countries. In the U.S. there are 100 pounds in the hundredweight, and in Britain there are 112 pounds in the hundredweight. This causes the actual weight of the ton to differ between countries.

To distinguish between the two tons, the smaller U.S. ton is called short, while the larger British ton is called long.

There is also an third type of ton called the metric ton, equal to 1000 kilograms, or approximately 2204 pounds. The metric ton is officially called tonne. The SI standard calls it *tonne*, but the U.S. Government recommends calling it *metric ton*.

Screen shot from http://www.onlineconversion.com/faq_09.htm

What happens if you ask someone working with ships the same question? The answers will again vary, depending on the native language of the person you ask. However, they will all agree that the term can be used as *shipping ton*, *ocean ton*, *freight ton*, or *measurement ton* to describe measure

of volume used for shipments of freight; the difference appears when you ask them to convert it. In the USA, it is equivalent to 40 cubic feet (ft^3) while in the UK it is 42 ft^3 . In metric measurement, one foot equals 0.3048 meters and one ft^3 is 0.0283168466 cubic meters (m^3). Luckily, the former difference between the US and the UK measurement *foot* disappeared in 1959 with the international yard.

So far, so good, but there are even more tons to consider, and let's not forget about tonnage! We start with a *register ton*, which is used to measure the capacity of ships. One register ton is 100 cubic feet of cargo space; it measures the volume of the ship. A *weight ton (W/T)* is calculated as a long ton (the British ton = 2,240 pounds = 1,016.04691 kilograms). Think about:

How many m^3 is 40 ft^3 and 42 ft^3 ?

What is a long ton and a short ton?

What do we measure in cubic meters / cubic feet?

What do we measure in liters / gallons?

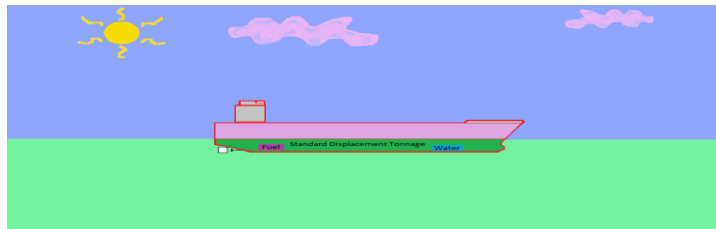
Tonnage is the measurement of the cargo-carrying capacity of merchant vessels. It depends on the volume available for carrying cargo. The basic units of measure are the Register Ton and the Measurement Ton. The calculation of tonnage is complicated by many technical factors. **Gross Tons.** The entire internal cubic capacity of the ship expressed in tons of 100 cubic feet to the ton, except certain spaces which are exempted such as: peak and other tanks for water ballast, open forecastle bridge and poop, access of hatchways, certain light and air spaces, domes of skylights, condenser, anchor gear, steering gear, wheel house, galley and cabin for passengers.

Net Tons. The measurement can be obtained from the gross tonnage by deducting crew and navigating spaces and allowances for propulsion machinery.

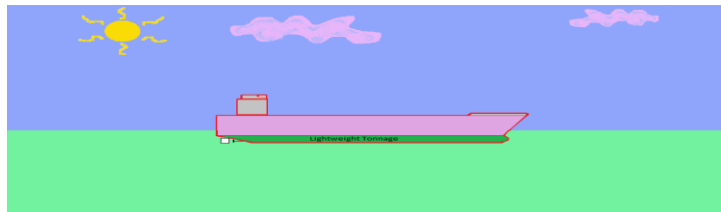
Displacement tonnage is used to define the size of the ship; it refers to the weight of the volume of water displaced by the vessel. If you put yourself in a full bathtub, some of the water inside the tub will spill out on the floor. The weight of the spilled water is equal to the displacement (weight) of the object that took its place in the tub; your body!



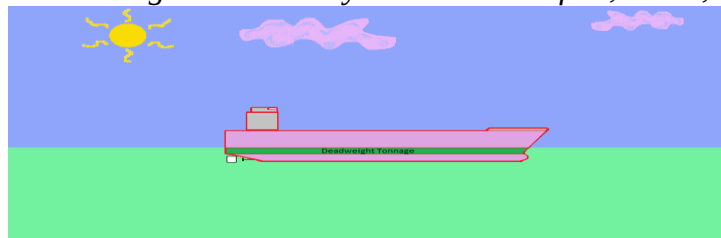
To determine **displacement** they start by reading off the draught marks on the vessel. Next, they put the measurements into the ship's hydrostatic tables that show the displaced volume of water. It is also necessary to know the water's density to calculate the weight; the density varies with temperature, and seawater is denser than fresh water.



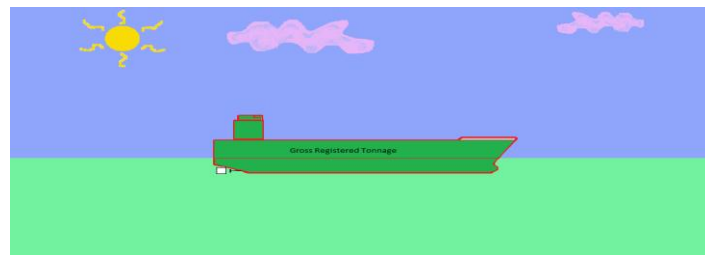
Standard displacement tonnage is displacement tonnage minus the weight of any fuel and potable water carried on board the ship.



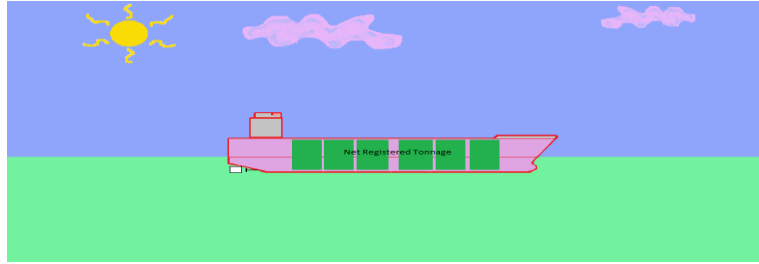
Lightweight tonnage is the weight of the ship itself, including the hull, decking, and machinery, but not including ballast or any consumables: fuel, water, oil, and supplies.



Deadweight tonnage (DWT) refers to the carrying capacity of a vessel. It includes not only cargo, but also the weight of fuel, ballast, passengers and crew, and all of the provisions. The weight of the ship itself is excluded. Deadweight tonnage is the displacement tonnage minus the lightweight tonnage.



Gross registered tonnage (GRT) is a measure of the space available for cargo, crew, passengers, and stores, and is usually the basis for computing drydock charges. Also it is called gross tonnage. Gross Tonnage or "Gross Tons" is what you will see most often on official ship documents and certificates.



Net registered tonnage (NRT) includes only the volume of actual cargo storage areas; omitting space occupied by the crew, engines, fuel, and navigation equipment. In general, GRT and NRT are in the ratio of 3:2 or, in other words, NRT is roughly equal to 60 percent of GRT. NRT is usually the basis for computing harbour or port charges.

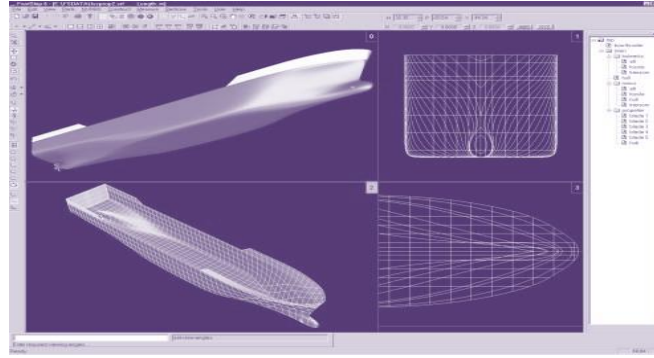
XII Work in pairs. Discuss Gross Deadweight and Displacement tonnage used to define the size of the ship.

Take into consideration that gross tonnage is calculated from the formula $GT = K1V$, where V is the volume of a ship's enclosed spaces in cubic metres and $K1$ is a constant calculated by $K1 = 0.2 + 0.02 \log 10 V$. The measurement is used in assessing harbour dues and canal transit dues for merchant ships. Deadweight tonnage is a measurement of total contents of a ship including cargo, fuel, crew, passengers, food, and water aside from boiler water. It is expressed in long tons of 2,240 pounds (1,016.0469088 kilograms).

Displacement tonnage is used to define the size of ships. It refers to the weight of the volume of water displaced by a vessel in normal seagoing condition.

XIII. Read the text and describe the basic approaches to the process of beginning a new design in FastShip. Make up the annotation and keywords of the text.

FastShip is an easy-to-use, yet powerful program for designing hulls, superstructures, appendages, and other marine structures, with the ability to design fair surfaces quickly and accurately. FastShip's flexibility allows any hullform type to be represented, and hull features such as bossings, bulbous bows, twin skegs, chines/knuckles, broken sheerlines, and circular bilge turns are readily incorporated into the model. FastShip is used in the design of all types of vessels, and can automatically produce new hulls from a set of parameters, such as ship type, overall dimensions, displacement, LCB, and form coefficients from parent hulls included with the system, or customer-created parent hulls. This gives the ability to customize the program to work with your existing library of hull forms.



Multiple surfaces can be created in Fastship; intersections between them can be displayed, and the part of a surface on one side of the intersection can be trimmed away. This capability facilitates the creation of appended skegs and thruster tunnels while maintaining the correct wetted surface and displacement for the hydrostatics outputs.

FastShip can export Auto CAD DXF files to create a traditional 3-view lines drawing or to support creation of a general arrangement drawing. It also has the ability to import and export Rhino 3 and 4 files, including the preservation of intersection curves and trimming. Other outputs are IDF offset files that can be used by Visual SMP and GHS, as well as GHS's native "GF" format and IGES 128 for use in solid modeling.

The process of beginning a new design in FastShip can take one of four basic approaches:

- **Hull Wizards:** with hull wizards, planing hulls and container ship-type hulls can be generated in a matter of seconds, by supplying basic information on the overall parameters of the hull.

- **Parametric variation of a Parent Hull:** Using the FastGen macros a parent hull can be modified to fit a set of parameters, including LCB location, block coefficient, length of parallel midbody, overall dimensions, and more. New parent hulls can be created by the user by first creating the surface in FastShip, and adding a simple data file describing the topological features of the surface, such as which columns form the boundaries of the parallel midbody.

- **Design from Scratch:** Of course a new design may be created simply by beginning with a flat NURBS surface, and then modifying the control net into the desired three-dimensional shape. FastShip's many editing tools and real-time display of the surface make this approach surprisingly fast.

- **Fitting an existing set of offsets:** If the user wishes to re-create an existing hull, the offsets of that hull may be entered into FastShip in various formats. For example, station curves in DXF format may be translated into the

IDF format, and then read into FastShip. Once the offsets are read in, the surface can be generated using one of the previous methods, and then either manually or semi-automatically fit to the offsets. For more information on fitting surfaces to existing offsets, see the Surface Fitting white paper, available in Adobe PDF format.

FastShip can analyze the hull form for fairness, by computing and displaying the curvature of any section or 3D curve. Surface curvature can also be displayed as a color map, including minimum, maximum, average, and Gaussian curvature.

As the hull is developed, FastShip can also be used to determine hydrostatic characteristics. FastShip can compute hydrostatics in a number of ways:

- Intact hydrostatics at one or more waterplanes, including sectional area curve;
- Free-float hydrostatics, where the designer supplies a displacement, center of gravity, and optionally one or more weights and their centers of gravity, and FastShip determines the equilibrium flotation condition;
- Rollover hydrostatics, where righting arms are computed at a series of heel angles in a free-to-trim condition;
- MaxVCG calculation, where the Maximum allowable VCG is computed according to IMO regulations;
- Real-time hydrostatics, supplying an interactive sectional area curve as the surface is manipulated, and displacement, LCB, and prismatic coefficient immediately after an editing operation is completed.

For other types of analysis, or for further work in a CAD system, FastShip has a number of interfaces and data transfers. These include:

- DXF, both 2D and 3D, for data transfers to CAD packages;
- IDF, including Section data, Mesh data, NURBS surface data, and Parameter data, for transfers to other programs;
- IGES, for Entity number one-twenty-eight NURBS surfaces, for transfer to many CAD programs such as Intergraph ISDP, MicroStation, AutoCAD Mechanical Desktop, and others;
- Output IDF and GF format file for VisualSMP and GHS;
- Output for SHCP, Pias and others are supported as well.

Of course the primary output of FastShip is the hull shape. In addition to transferring data to other programs, FastShip can directly output lines drawings to the system printer, be it a plotter or laser printer. Hydrostatics data and offset

tables are easily printed, and are also output in a file format that is readily incorporated in a word processor or CAD drawing. In addition to these exporting capabilities, FastShip can import IGES, IDF, DXF, and GF files.

FastShip is a proven tool for efficiently designing, modifying, and fairing hulls, appendages, and superstructures. It can be used effectively in all stages of ship design, from concept to final fairing. FastShip forms the foundation for a complete, desktop ship and yacht design system.

XIV. The International Convention on Tonnage Measurements of Ships, 1969 can be found here: <https://www.imo.org/en/About/Conventions>.

Answer the following questions, using your own words:

1. Which ships are exceptions from this convention?
2. What happens to the certificate if a ship changes flag state? Are there any exceptions from this rule?
3. The convention is amendable with specific rules. Mention three of these rules

Text C. SHIP POLLUTION. MARPOL-73/78

Pre-reading activity.

I. Work with international words. Guess the meaning: problem, immune, normal, nitrogen, globalization, atmosphere, operation, pollution, traffic, accelerate, organism, affect, aromatic, ocean, genetic, climate, routine, ballast, tanker, transfer, toxin percent, fleet.

II. State the part of speech of the words. Translate them. Use a dictionary if necessary.

Pollute – pollutant – pollution – antipollution;
glob – global – globalize – globalization – globular – globosity – globule;
manage – management – manageable – manageress – managerial – manager;
produce – producer – product – production – producible – productivity – productive – reproductive;
environ – environment – environmentalist – environmental;
devastate – devastating – devastated – devastation;
emit – emissive – emission;
consume – consumables – consumer – consumption.

PREFIX. A prefix is a letter or set of letters added to the beginning of a word. Examples of prefixes: un-, multi-, cyber-, a/an-, counter-, dys-, bi-, mal-, im-. Adding a prefix changes the meaning of the word: natural – unnatural, cultural – multicultural, space – cyberspace, symmetric – asymmetric, circulation – counter circulation, functional – dysfunctional, annual – biannual, practice – malpractice, perfect – imperfect. Some of the new words are written in two words. In Norwegian, one most often write these in one word, while English uses more hyphenation or splits it into two words.

Another pitfall may be the usage of the prefixes ig-, il-, im-, and in-. There is a rule you can try to learn: ig- (before gn- or n-), il- (before l-), im- (before b-, m-, or p-), in- (before most letters), or ir- (before r-)

Try to make new words by adding a prefix to the following:

Understand – Activate – Balance – Legal – Regular – Alphabetic – Adequate – Function – Inflammatory – Littoral – Stop – Normal – Meter – Possible – Chromatic – Force – Replaceable

SUFFIX. A suffix is a letter or set of letters added to the end of a word. Examples of suffixes: -ful, -ment, -s, -age, -hood, -ist, -ism, -ance/-ence, -ity/-ty, -able. Adding a suffix often changes the word class: govern (verb) – government (noun), respect (verb) – respectful (adjective), day (noun) – daily (adjective), weak (adjective) – weaken (verb). You will also see that many words change spelling while adding a suffix: Britain – British, fame – famous, economy – economise

Try to make new words by adding a suffix to the following:

State – Ready – Forget – Permit – Bag – Arrive – Brutal – Enter – Flex – Gold – Beauty – China – Poet

III. Read the new words and expressions:

devastating effects – разрушительные последствия

polycyclic aromatic hydrocarbon (PAH) – полициклический ароматический углевод

sediment and marine environment – отложения и морская среда

susceptibility to a disease — восприимчивость к болезни

sheer amount of – огромное количество

alteration – изменение, перестройка, переделка, перемена, деформация

ballast and bilge discharge – сброс балласта и трюмных вод

disruption – разрушение, срыв, разрыв, распад, раскол

exhaust emission – выброс отработавших газов

nitrogen – азот

fossil fuel – горючие полезные ископаемые; ископаемые виды топлива

sulphur – сера

Marine fuel management (MFM) – Управление морским топливом

multi-level approach – многоуровневый подход

fleet management oversight – надзор за управлением флотом

governmental pressures – давление со стороны правительства

IV. Read and translate the texts.

Ship pollution. MARPOL-73/78

Ship pollution is the pollution of air and water by shipping. It is a problem that has been accelerating as trade has become increasingly globalized, posing an increasing threat to the world's oceans and waterways as globalization continues. Because of increased traffic in ocean ports, pollution from ships also directly affects coastal areas. The pollution produced affects biodiversity, food, climate, and human health.

1. Oil spills

Oil spills have *devastating effects* on the environment. Crude oil contains *polycyclic aromatic hydrocarbons (PAHs)* which are very difficult to clean up, and last for years in the *sediment and marine environment*. Marine species constantly exposed to PAHs can exhibit developmental problems, *susceptibility to disease*, and abnormal reproductive cycles.

By the *sheer amount of* oil carried, modern oil tankers must be considered something of a threat to the environment.

The International Tanker Owners Pollution Federation has researched 9,351 accidental spills since 1974. According to the study, most spills occur to routine operations such as discharging cargo, loading cargo, and taking on fuel oil. Spills resulting from accidents like collisions, hull failures, groundings, and explosions are much larger.

2. Ballast water

When a large vessel (a container ship or an oil tanker) unloads cargo, seawater is pumped into compartments in the hull to help stabilize and balance the ship. This ballast water is pumped out from these compartments during loading. One of the problems with ballast water transfer is the transport of harmful organisms.

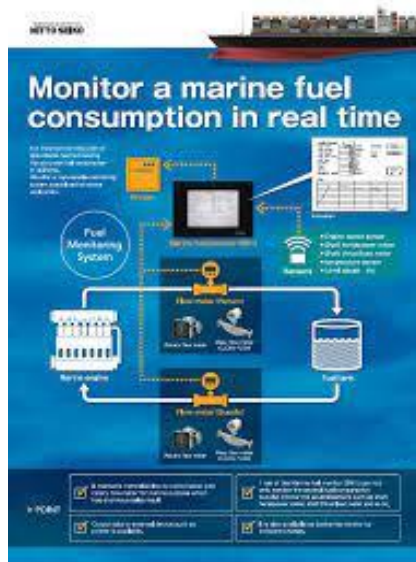
Ballast and bilge discharge from ships can also spread human pathogens and other harmful diseases and toxins potentially causing health issues for humans and marine life alike. Along with other sources of marine pollution, discharges into coastal waters have the potential to be toxic to marine plants, animals, and microorganisms, causing *alterations* such as changes in growth, *disruption* of hormone cycles, suppression of the immune system, birth defects, and disorders resulting in cancer, tumors, and genetic abnormalities or even death.

3. Exhaust emissions

Exhaust emissions from ships are stated to be a significant source of air pollution. Seagoing vessels are responsible for an estimated 14 percent of *nitrogen* emissions from *fossil fuels* and 16 percent of one of *sulphur* from petroleum uses into the atmosphere. In Europe ships make up a large percentage of the sulphur introduced to the air, as much sulfur as all the cars, lorries and factories in Europe put together. Up to 40% of air pollution over land could come from ships.

4. Marine fuel management

Marine fuel management (MFM) is a *multi-level approach* to monitoring, measuring, and reporting fuel usage on a boat or ship, with the goals of reducing fuel usage, increasing operational efficiency, and improving *fleet management oversight*.



MFM has grown in importance due to the rising costs of marine fuel and increased *governmental pressures* to reduce the pollution by the world's fleet.

Effective MFM requires that you know: how much fuel is used? How the fuel was used? What things impact fuel usage? and by how much?

MFM allows a fleet owner to track fuel consumption. MFM supports the analysis of the effectiveness of operating strategies and helps develop a clearer understanding of how well a vessel uses its fuel.

COMPREHENSION EXERCISES

V. Answer the questions to the text:

1. What is ship pollution?
2. What does pollution affect?
3. When is ballast water pumped out from the compartments?
4. Can marine species constantly exposed to PAHs exhibit developmental problems?
5. What effects on the environment do oil spills have? Give examples.
6. What stipulations are necessary for oil tankers?
7. Ballast and bilge waters are potentially causing human health problems and adversely affecting sea animals, aren't they?
8. What do exhaust emissions result in?
9. What is the average percent of air pollution coming from ships?
10. What is the major goal of MFM?

VI. Translate from English into Russian:

the world's oceans and waterways, oil spills, marine species, to exhibit developmental problems, discharging cargo, double-hulled tankers, to help stabilize and balance the ship, human pathogens, to cause alteration, disruption of hormone cycles, suppression of the immune system, emissions of nitrogen from fossil fuels, multi-level approach, marine fuel management, increasing operational efficiency, the rising costs, governmental pressure, reducing fuel usage, as trade has become globalized, pollution affects coastal areas, human health, the sediment and marine environment, susceptibility to disease, abnormal reproductive cycle, taking on fuel oil, ballast water, the transport of harmful organisms, changes in growth, harmful diseases and toxins, birth defects, exhaust emissions, a significant source of air pollution, emissions of sulphur from petroleum, to track and relate fuel consumption to the work of the vessel, improving fleet management oversight.

VII. Render into English:

- загрязнение от судоходства,
- увеличение движения в портах,
- влиять на биологическое разнообразие,
- восприимчивость к болезням,
- неправильный репродуктивный цикл,
- исследовать случаи разлива нефти,

- представлять растущую угрозу мировому океану,
- разрушительный эффект на окружающую среду,
- международная федерация владельцев танкеров по вопросам загрязнения,
 - откачивать морскую воду,
 - способствовать равновесию и балансировке корабля,
 - вызывать проблемы со здоровьем,
 - приводить к заболеваниям рака и различным опухолям,
 - управление морским топливом,
 - отслеживать потребление топлива,
 - повреждение корпуса судна,
 - пакеты документов по вопросам строжайшей защиты окружающей среды,
 - распространение человеческих болезнетворных организмов,
 - сброс в прибрежные воды,
 - выброс серы в воздух,
 - улучшать надзор за потреблением топлива,
 - увеличить правительственное давление.

VIII. Explain the meaning of the following words and word-combinations:

biodiversity, polycyclic aromatic hydrocarbon, pollution, susceptibility to disease, double-hulled, harmful organism, disruption of hormone cycle, marine fuel management.

IX. Fill in the gaps with prepositions where necessary.

because of, into, with, of, on, by, to, in, from

1. Ship pollution is the pollution ___ air and water ___ shipping.
2. Pollution _____ ships directly affects ___ coastal areas ___ increased traffic ___ ports.
3. Oil spills effect ___ the environment.
4. Marine species exposed ___ PAHs can exhibit developmental problems.
5. Modern oil tankers must be considered something ___ a threat ___ the environment ___ the sheer amount ___ oil carried.
6. ___ 2015 all tankers must be double-hulled.

7. ____ stabilize and balance the ship seawater is to be pumped ____ compartments ____ the hull.

8. The transport ____ harmful organisms is one ____ the problems ____ ballast water transfer.

9. Ballast and bilge waters ____ ships can spread human pathogens and other harmful diseases.

10. Exhaust emissions ____ ships is a significant source ____ air pollution.

X. Make up a plan to the text. Write down key words and word-combinations from the text according to the plan.

XI. Answer the following questions, using your own words:

1. According to the text, what can influence shipping in the future?
2. Is CO₂ emissions from shipping expected to rise or fall in the future?

3. Use the Internet to find out what the *2030 Agenda for Sustainable Development* is. Write 250-300 words to summarize what you found. Remember to cite your sources!

XII. Read the text. Write down the headline, annotation and keywords.

Technology, innovation, the data revolution and e-commerce can significantly transform and disrupt the shipping industry, generating both challenges and opportunities, including with regard to efficiency gains, new business models, use of the Internet, digitization, efficient logistics, effective asset management and the greater integration of small and medium-sized enterprises. Developing countries may leverage related trends to cut costs, raise productivity, develop capacity – including skills and knowledge – and enable access to new businesses opportunities.

An improved understanding of the trends and their implications may help countries ensure that these are effectively integrated into relevant planning and investment-related decision processes, and aligned with the 2030 Agenda for Sustainable Development.

Finally, the international climate agenda can be expected to further shape the maritime transport operating landscape, as the sector faces the dual challenge of climate change mitigation and adaptation.

Future trends in emissions from international shipping remain uncertain and subject to international efforts and commitments to curb

greenhouse gas emissions including the efforts under the frameworks of the International Maritime Organization (IMO) and the Conference of the Parties to the United Nations Framework Convention on Climate Change.

Curbing greenhouse gas emissions from international shipping is an imperative, as freight transport, including maritime transport, grows in tandem with the global population, consumption needs, industrial activity, urbanization, trade and economy.

Shipping's heavy reliance on oil for propulsion translates into significant emissions of airborne pollutants and greenhouse gases. According to IMO data, carbon dioxide (CO₂) emissions from international shipping were estimated at 2.2 per cent of total emissions in 2012 and are projected to increase by 50–250 per cent by 2050, depending on economic growth and the global energy demand.

As the Paris Agreement under the United Nations Framework Convention on Climate Change does not refer to emissions from international shipping, continued work under the frameworks of IMO and the United Nations Framework Convention on Climate Change is of critical importance.

XIII. Read the dialogue. Make up a similar one.

Inspector: Good afternoon. I am an inspector of Marine Pollution Control Department¹. The point is that we have found a big oil spill on the water surface not far from your ship.

Chief Engineer: I'm afraid, you're mistaken, Inspector. Our ship has got all the necessary facilities to prevent any pollution.

Inspector: It's all very good. Perhaps I'm wrong, but I'm on duty to check all the possible sources of pollution. Do you keep an Oil Record Book²?

Chief Engineer: Yes, certainly. Here you are.

Inspector: Oh, yes, according to your entries³ you have had no spillage for a long time.

Chief Engineer: By the way, I can show you our International Oil Pollution Prevention Certificate. And you can make a tour of the ship to make sure that there are no traces of oil spill or oil leakage.

Inspector: Have you taken oil samples from that area?

Chief Engineer: Yes, we have.

Inspector: Then I'll ask you to take samples of oil from our tanks and the analysis will show you if those samples are identical or not.

Chief Engineer: Thank you for your assistance, Sir.

Notes to the dialogue:

1) *Marine Pollution Control Department* – *отдел по защите морской среды*;

2) *to keep an Oil Record Book* – *вести журнал нефтяных операций*.

XIV. Answer the questions to the dialogue: Why has the Inspector come on board the ship?

How can the ship prove that she is not to blame for the oil spill?

XV. Find the following sentences in the mentioned dialogue.

1. У нас есть все необходимое оборудование для предотвращения любых загрязнений.

2. Возьмите образцы топлива из наших танков.

3. Пройдите по нашему судну.

4. Посмотрите наш журнал нефтяных операций.

5. Сравните образцы топлива из наших танков с образцами топлива с места разлива.

6. Убедитесь, что нет никаких следов разлива и утечки топлива

XVI. Write a summary of the text. Use the key word-combinations and the information of the text:

What measures must be taken on board a ship to avoid pollution of marine environment? Find information in regulations for the prevention of pollution adopted by IMO. Follow the link: <https://clck.ru/32eqWT>

- Pollution Prevention,
- Oil Pollution,
- Chemical Pollution,
- Sewage, Garbage,
- Air Pollution and GHG Emissions,
- Ballast Water Management,
- Biofouling,
- Anti-fouling systems,
- Ship Recycling,
- Special Areas under MARPOL-73/78,
- Particularly Sensitive Sea Areas,
- GESAMP.

UNIT 3

ACADEMIC WRITING - USING SOURCES

Text structure. How to make a good thesis statement. Paragraphs, topic sentences and signalling words. How to find sources. Avoiding plagiarism. Writing CVs.

IN THIS UNIT YOU WILL

- learn how to build up a sentence and a text;
- learn what a text structure;
- read about how to search online;
- get some tips and tricks when it comes to write CVs.

Text A. How to build up a sentence

Pre-reading activity.

I. Guess the meaning:

text structure, thesis, argument, Brainstorm, specific question, to figure out, essay, conclusions, nature of the assignment, healthy alternatives.

II. Put the segments of the sentences in the right order:

1. the way authors organize / text structures /information in text/ refer to.
2. can help you /recognizing the underlying structure of texts, and monitor their comprehension as they read/ focus attention on key concepts and relationships, anticipate what is to come.
3. as a complex whole / of a text to each other and to the text / the relationships of different parts.

III. Read the new words and expressions:

introduction – введение, предисловие

to conclude – заключать, выводить, делать вывод, решать

state an opinion — излагать мнение зрения; излагать точку зрения

weird – странный, сверхъестественный

to distil – извлекать сущность, доискиваться до сути

to brainstorm – решать проблему

assertion – утверждение, заявление, суждение

to take stand – занять место

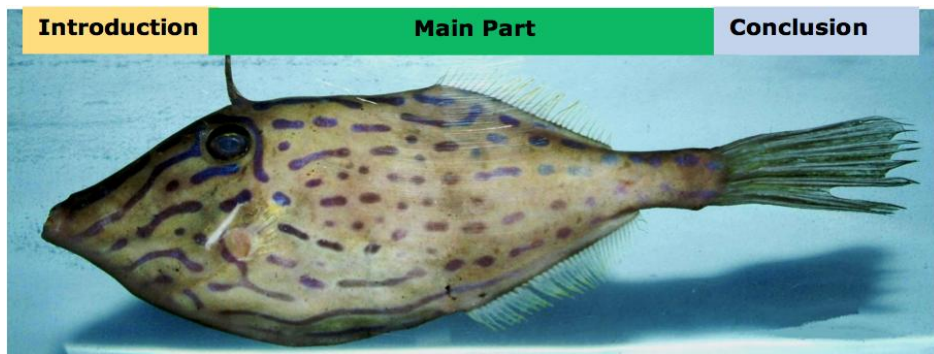
to justify – объяснять, подтверждать

READING

VI. Read and translate the texts.

Text structure in a fish!

A formal text should be structured into three main parts, as shown on the picture of the fish. We start at the head with a short *introduction*, move on to the body, and *conclude* at the tail of the fish. As you can see, the introduction and the conclusion are smaller parts of the text. The content is taking up more space and requires the body of the fish/text to have enough room to be debated, explained, and/or presented sufficiently.



In short, one can summarize a text like this:

Introduction: Tell me what you are going to tell me.

Main part: Tell me!

Conclusion: Tell me what you have told me.

State your opinion

All good texts have a *thesis* statement, a topic sentence, in the introduction. This is what will make your readers decide whether they will continue reading or not. A thesis statement shall provide the reader both the what and the why of your text. It might seem *weird* to give the answer first and then continue the text with the arguments that lead to the answer, but this is how it is done.

A thesis statement might change in the course of writing! You might change your mind while diving into the material at hand. No worries; just change the thesis statement. Some even say that they write the main part of the text first, then continuing to the conclusion before summarizing the whole thing and calling it an introduction.

Read more about how to make a good thesis statement here. URL: <https://wts.indiana.edu/writing-guides/how-to-write-a-thesis-statement.html>

How to Write a Thesis Statement

What is a Thesis Statement?

Almost all of us—even if we don't do it consciously—look early in an essay for a one- or two-sentence condensation of the argument or analysis that

is to follow. We refer to that condensation as a thesis statement. Why Should Your Essay Contain a Thesis Statement?

- to test your ideas by *distilling* them into a sentence or two
- to better organize and develop your argument
- to provide your reader with a “guide” to your argument

In general, your thesis statement will accomplish these goals if you think of the thesis as the answer to the question your paper explores.

How Can You Write a Good Thesis Statement?

Here are some helpful hints to get you started. You can either scroll down or select a link to a specific topic.

How to Generate a Thesis Statement if the Topic is Assigned

Almost all assignments, no matter how complicated, can be reduced to a single question. Your first step, then, is to distill the assignment into a specific question. For example, if your assignment is, “Write a report to the local school board explaining the potential benefits of using computers in a fourth-grade class,” turn the request into a question like, “What are the potential benefits of using computers in a fourth-grade class?” After you’ve chosen the question your essay will answer, compose one or two complete sentences answering that question.

Q: “What are the potential benefits of using computers in a fourth-grade class?”

A: “The potential benefits of using computers in a fourth-grade class are . . .” OR

A: “Using computers in a fourth-grade class promises to improve . . .”

The answer to the question is the thesis statement for the essay.

How to Generate a Thesis Statement if the Topic is not Assigned

Even if your assignment doesn’t ask a specific question, your thesis statement still needs to answer a question about the issue you’d like to explore. In this situation, your job is to figure out what question you’d like to write about. A good thesis statement will usually include the following four attributes:

- take on a subject upon which reasonable people could disagree
- deal with a subject that can be adequately treated given the nature of the assignment
- express one main idea
- assert your conclusions about a subject

Let’s see how to generate a thesis statement for a social policy paper.

Brainstorm the topic.

Let’s say that your class focuses upon the problems posed by changes

in the dietary habits of Americans. You find that you are interested in the amount of sugar Americans consume.

You start out with a thesis statement like this:

Sugar consumption.

This fragment isn't a thesis statement. Instead, it simply indicates a general subject. Furthermore, your reader doesn't know what you want to say about sugar consumption.

Narrow the topic.

Your readings about the topic, however, have led you to the conclusion that elementary school children are consuming far more sugar than is healthy.

You change your thesis to look like this:

Reducing sugar consumption by elementary school children.

This raises a subject upon which reasonable people could disagree, because while most people might agree that children consume more sugar than they used to, not everyone would agree on what should be done or who should do it. You should note that this fragment is not a thesis statement because your reader doesn't know your conclusions on the topic.

Take a position on the topic.

After reflecting on the topic a little while longer, you decide that what you really want to say about this topic is that something should be done to reduce the amount of sugar these children consume.

You revise your thesis statement to look like this:

Use specific language.

You decide to explain what you mean about food and beverage choices, so you write:

Experts estimate that half of elementary school children consume nine times the recommended daily allowance of sugar.

This statement is specific, but it isn't a thesis. It merely reports a statistic instead of making an *assertion*.

Make an assertion based on clearly stated support.

You finally revise your thesis statement one more time to look like this:

Because half of all American elementary school children consume nine times the recommended daily allowance of sugar, schools should be required to replace the beverages in soda machines with healthy alternatives.

Notice how the thesis answers the question, "What should be done to reduce sugar consumption by children, and who should do it?" When you started thinking about the paper, you may not have had a specific question in mind, but as you became more involved in the topic, your ideas became more specific. Your thesis changed to reflect your new insights.

How to Tell a Strong Thesis Statement from a Weak One

1. A strong thesis statement *takes* some sort of *stand*.
2. A strong thesis statement *justifies* discussion.
3. A strong thesis statement expresses one main idea.
4. A strong thesis statement is specific.

COMPREHENSION EXERCISES

V. Refresh your knowledge: modal verbs *shall, must, will, can*.

Modal verbs in legal language.

English use modal verbs to express possibility, prediction, necessity etc. Modal verbs are part of the group we call auxiliary verbs. Auxiliary verbs are often called helping verbs; have, be, will, and do are all used to help forming questions, to write a negative sentence, a compound tense, or a passive verb structure.

The language of the law can be both wordy and difficult to grasp as a layperson. It is also a known fact that this is quite a conservative language; it does not change overnight, and in some areas, not even over decades! The legal language, the one used to talk about the laws, can be a bit more modern, but still hard to get your head around if you do not use it frequently. A law takes into consideration all possible outcomes of a situation, and can be either regulative or constitutive. A constitutive law defines an action or praxis, whereas a regulatory law tells us how an action is performed well.

Short description of the modals:

Must: compulsory, important, necessity

Shall: obligation, order

Will: obligation, prediction

May/can: permission, possibility

Should: recommendation, advice

Would: request, permission

Could: possibility, request

Might: probability, suggestion

Find the modal verbs in this abstract from SOLAS:

Regulation 13

Issue of certificate by another Government

A Contracting Government may, at the request of the Administration, cause a ship to be surveyed and, if satisfied that the requirements of the present Regulations are complied with, shall issue certificates to the ship in accordance with the present Regulations. Any certificate so issued must

contain a statement to the effect that it has been issued at the request of the Government of the State whose flag the ship is or will be entitled to fly, and it shall have the same force and receive the same recognition as a certificate issued under Regulation 12 of this Chapter.

Try to rewrite the sentences into “normal English” sentences.

VI. While writing, and speaking, it is important that the information you give flows easily from sentence to sentence, as well as from one paragraph to the next. In this exercise, we will look into paragraphs, topic sentences and signalling words.

Paragraphs

Each paragraph should focus on one topic or idea. The length of a paragraph is determined by how complex your topic is, but as a rule, a paragraph should be at least three sentences long. If shorter, check to see if these sentences might just as well be part of the paragraph before or after. On the other hand, it should not be too long, either! If you find yourself writing half a page in one paragraph, it might be wise to see if you can split it into two or three parts. As a rule of thumb, one can say that an A4 page should include at least two to three paragraphs, depending on the topic, of course!

A new paragraph is shown by a line break. In a text editor such as Word, the default setting is to hit the Enter-key on the keyboard to make a line break. Remember that each paragraph should start with an introduction to the paragraph’s main focus or idea. From the first chapter, you may remember that a text can be structured like a fish. The same goes for paragraphs; after the introductory sentence, you move on to discuss or describe your topic in the main part, before concluding with a sentence or two at the end of the paragraph.

Use the first sentence to state what you want to talk about, and use signalling words (see below) to show the place of this particular paragraph in the text as a whole.

Use the middle part to give examples, show consequences, and examine opposing ideas.

Use the last part to conclude on the middle part, and while making a natural “flow” over to the next paragraph.

Topic sentences

In English it is common to start each paragraph with a topic sentence. We have already talked a little bit about how to start a paragraph, but let us have a closer look. A topic sentence should state what you are going to talk about, but also capture your reader’s attention to make them want to read more.

It should also be cohesive; binding the paragraph together with the rest of your text. Writing a good topic sentence might take some practise; it can be hard to put down in just one sentence what you want to express within a full paragraph. A topic sentence should state an opinion, but at the same time be formal. Signalling words may be a good place to start looking for what to put in the beginning of a topic sentence.

Signalling words

Signalling words, or transmission words, will help you connect the ideas you present, show that your text has coherence, and guide your readers to agree with you at the end of your text. We can use signal words to show cause and effect: When/because/since, As a result of / because of. Some of the more common signalling words are however, thus, for example, finally, on the other hand, nevertheless, furthermore, in particular, in fact, also, in addition, therefore, then, for instance, moreover, but, yet, and first, second, etc.

VII. Use the internet to find more signalling words. Write sentences using at least five of the new signalling words you have just found.

VIII. Try to make a topic sentence on each of these subjects:

- a) The future of shipping.
- b) It is safer to work in fishery than in the offshore industry.
- c) Getting your education at a university.

Text B. How to find sources

Pre-reading activity.

I. Guess the meaning:

Google, plagiarism, to borrow texts, free educational resource, mindmapping, visualise, to give presentations, speak fluently, the licencing types, venue, the corner stones, to be confident.

II. Read the new words and expressions:

III. Read and translate the texts. Choose the appropriate title to it from the list below:

- Maritime English
- Finding correct information
- Google Scholar and Wikimedia Foundation
- How to search online
- Plagiarism

The curriculum for Maritime English and the national assessment criteria both state that a student at maritime institute has to, among other things, be able to use information and sources correctly.

To be able to show your mastery of a topic, it is often useful to find someone to debate with. A debate needs at least two participants; this means you need to find a conflicting opinion to debate with. Find an article online as a source for a different opinion. You can of course use others opinion and knowledge to support your own statements as well.

No matter **why** you choose to use the words of others, **how** you do it is important. The most important thing to remember when using anything created by someone else is giving that person credit for their work. Taking someone else's text and presenting it as your own is nothing less than stealing, and stealing is, as you know, against the law. This includes pictures and drawings made by others. Fortunately, there are ways to **borrow** texts, pictures, and drawings; on the condition that you do it following certain rules.

How to find sources

“Just Google it” is a frequent answer if someone wonders about, well actually, anything at all. However, are we sure we find correct information via Google? Wikipedia is another well-known aid when one will check facts. Both are good, and both have their minefields! Normal people like you and me are the primary sources for whatever is written on the World Wide Web. Are we sure we can trust each other? Let us visit a close relative of the ordinary Google search engine; the omniscient Google Scholar!

Google Scholar's motto is “Stand on the shoulders of giants”. Read more about Scholar here; and make sure to check through the different tabs to learn more about how to, among other things, do intelligent searches. Google Scholar is more or less like visiting the library; safer than just asking a random person for the correct answer, don't you think?

References [edit]

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4. ^a (e.g. Lal 1997: 182–188)
5. ^a ^b Tripathi, page 145
6. ^a ^b Hourani & Carswel, page 90
7. ^a Robert E. Krebs, Carolyn A. Krebs (2003). *Groundbreaking Scientific Experiments, Inventions, and Discoveries of the Ancient World*. Greenwood PressScience. ISBN 0-313-31342-3.
8. ^a Cottrell, Leonard. *WarriorPharaohs*. London: Evans Brothers Limited, 1968.

Screenshot from Wikipedia's article on Shipbuilding

Wikipedia is the perfect place to find sources! Most articles are based on facts from somewhere; at the bottom of each article, you find out the wheres and whos. The picture shows the reference section of Wikipedia's article on shipbuilding.

In addition to Wikipedia, the Wikimedia Foundation supports a number of free knowledge projects:

- Wiktionary – a free dictionary
- Wikiquote – a free collection of quotes
- Wikibooks – a free collection of books
- Wikisource – a free collection of primary source materials
- Wikimedia Commons – a free media repository
- Wikispecies – a science based wiki for documenting all the species of the world
- Wikinews – a collaborative journalism site
- Wikiversity – a free educational resource repository
- Wikidata – a structured data repository used by all Wikimedia projects
- Wikivoyage – a free travel information site
- MediaWiki – the open source wiki software behind all our public websites

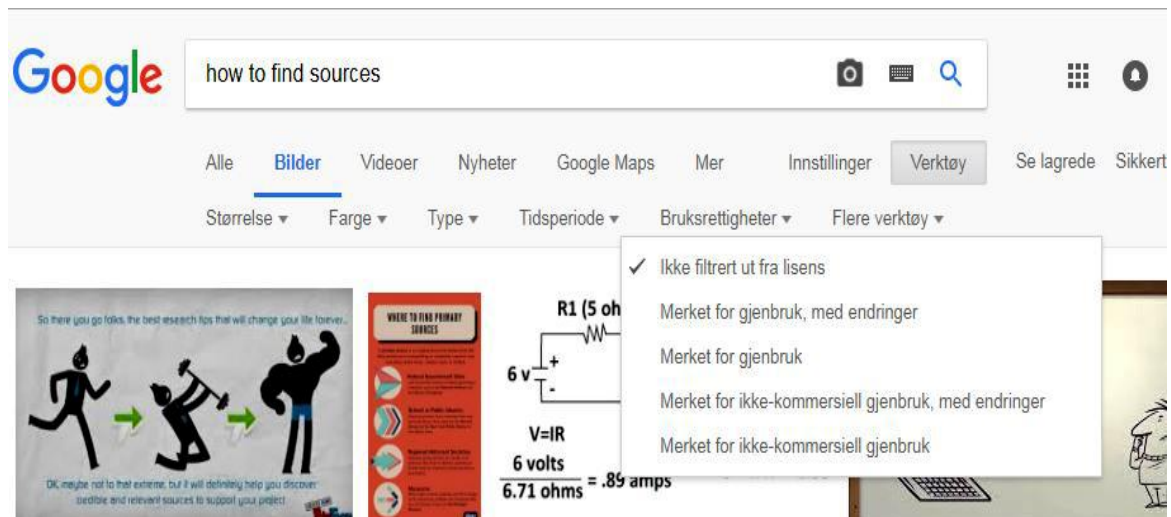
Plagiarism, or the act of passing someone else's work off as your own, is forbidden by law in most countries. However, it is typically acceptable to use the work of others in your own work as long as you add where you found it and/or who wrote it. You can consider anything “written” on the internet available for use as long as you credit the source. How to cite sources will be a topic in chapter 4. When it comes to pictures, most people use the rules specified in Creative Commons to tell us whether it is ok to use their property or not. Look for the CC logo whenever you want to share something, and follow the conditions for sharing that particular type of media. The licencing types can be read on CC's homepage.

When you do a Google search, you can add restriction to define what results will show up.

Giving presentations can be intimidating, but they should not be something you fear. Focus on the following points, and you will do just fine!

Plan

Before you do anything else, think about **the main topic** of what you want your audience to take away from this presentation. Brainstorming is a good place to go from there. Maybe you would want to make a mind map? Do not be critical at this point; every idea is a good idea when mind mapping.



Structure

Now it is time to plot out the structure of your presentation. Look at your mind map a little more critically now. What do you want to take with you to the next step? Set up your choices as bullet points and move on to the next step.

Write

Often, it is a good idea to write exactly what you want to say and how you want to say it before creating the visual part of your presentation. This will help your presentation to have a good "flow".

Focus

Keep your mind on one of the most important questions: Who will be in the audience? Make sure you use a jargon everyone present can understand.

Rearrange

When you have the full text in front of you, check to see if your points come in a natural sequence. Is something missing? Is something worth throwing away?

Create

Choose what tool you want to use to create your presentation. PowerPoint is familiar and safe, but maybe you would like to try something new? Have a look at one of these lists of presentation tools: Custom Show and Hongkiat.

Minimize

Make sure you keep your presentation simple! Have a look at the list of bullet points you made after mindmapping; maybe you can use them on your slides?

Visualise

"A picture is worth a thousand words". A good illustration may be all you need to help you recall all the important details of your presentation.

Introduce

Now it is time to write your introduction. Yes, this late... The reason is that it is only now that you actually know what exactly is in your presentation; which key points were important enough to keep and in what order you will present them.

Prepare

Make sure you know your topic by heart! Your audience expects you to deliver the material with vigour. Ethos, Pathos, and Logos are modes of persuasion used to convince audiences. Being confident in your material is one of the corner stones of giving a presentation worth remembering; being confident in yourself while presenting your knowledge is another.

Practise

Find someone to practise with, or practise in front of the mirror. You can tape yourself while presenting; that way you can find out if you need to work on your pronunciation, speed, or any other things that could affect the audience's ability to focus on your topic. You can also record yourself talking to check that you speak fluently and without any weird breaks.

Time. While practising, it can be wise to time yourself. You are most likely given a certain amount of minutes to present your material; make sure to keep within that limit. Have a watch nearby while presenting to make sure you follow your schedule.

Venue. If possible, check out the room, seatings, and technology where you are going to give your presentation. Check to see if your computer works with the equipment provided in the room.

Presenting. Think about what you wear and how you present yourself. The first few minutes of a presentation are not the right time to give important information; the audience uses these minutes to make up their mind about you! Remember: be confident. If you have followed the advice above and prepared correctly, you will do very well!

COMPREHENSION EXERCISES

III. Match the word with its etymology and meaning. Examples below will help you.

- | | |
|-----------------|---|
| 1. impromptu | a. Latin 'for this' arranged or done only when necessary |
| 2. off-the-cuff | b. Latin 'in readiness' done or said without any preparation or planning |
| 3. ad hoc | c. 'notes made on the end of the sleeve' spontaneous, made without thinking first |

*The children put on an **impromptu** concert for the visitors.
I didn't mean any offence, it was a flippant, **off-the-cuff** remark.
An **ad hoc** committee was organized to examine these particular problems.*

IV. Complete the following sentences with the words from ex. 3

1. In this company decisions are made on an _____ basis.
2. The band gave an _____ concert.
3. This afternoon the Palestinians held an _____ press conference.
4. Mr Baker was speaking _____ when he made those suggestions. 'I would accept opportunities on TV on an _____ basis', he said.
5. Almost no one can speak _____ with such care for the language.
6. During the supposed _____ visit, Lady Thatcher was accompanied by Sky TV crews, which broadcast the proceedings live.
7. If his _____ remarks do reveal his true feelings, that doesn't make me hopeful.
8. And on Wednesday, he called Buffalo Mayor Byron Brown to smooth over an _____ remark he had made earlier in the day that could be interpreted as an insult to the upstate city.
9. An _____ meeting was organized an hour after the explosions in the city centre.
10. By 2009, after a deal in which he revealed his country's nuclear program, his relations with the West had thawed far enough to allow him to visit New York, where he camped in a Bedouin tent and delivered an _____, 94-minute harangue against imperialism to the United Nations General Assembly.

V. Read and translate the text. Write the annotation and keywords.

Avoiding plagiarism

In the English-speaking academic world it is essential to use a wide range of sources for your writing, and to acknowledge these sources clearly. This unit explains why this is vital, and introduces the techniques students need to use.

What is plagiarism? Basically plagiarism means taking ideas or words from a source without giving credit (acknowledgement) to the author. It is

seen as a kind of theft, and is considered to be an academic crime. In academic work, ideas and words are seen as private property belonging to the person who first thought or wrote them. Therefore it is important for all students, including international ones, to understand the meaning of plagiarism and learn how to prevent it in their work.

The main difficulty that students face is that they are expected:

(a) to show that they have read the principal experts on a subject – by giving citations

(b) to explain these ideas in their own words and come to their own original conclusions

There are several reasons why students must avoid plagiarism:

- Copying the work of others will not help you develop your own understanding

- To show that you understand the rules of the academic community

- Plagiarism is easily detected by teachers and computer software

- It may lead to failing a course or even having to leave college

Acknowledging sources

If you borrow from or refer to the work of another person, you must show that you have done this by providing the correct acknowledgement. There are two ways to do this:

- Summary and citation Smith (2009) claims that the modern state wields power in new ways.

- According to Smith: ‘The point is not that the state is in retreat but that it is developing new forms of power . . .’ (Smith, 2009: 103).

The citation makes it clear to the reader that you have read Smith and borrowed this idea from him. This reference gives the reader the necessary information to find the source if the reader needs more detail.

Degrees of plagiarism

Although plagiarism essentially means copying somebody else’s work, it is not always easy to define.

Avoiding plagiarism by summarising and paraphrasing

Quotations should not be over-used, so you must learn to paraphrase and summarise in order to include other writers’ ideas in your work. This will demonstrate your understanding of a text to your teachers.

- Paraphrasing involves re-writing a text so that the language is substantially different while the content stays the same.

- Summarising means reducing the length of a text but retaining the main points

VI. Working with a partner, consider the following academic situations and decide if they are plagiarism.

	Situation	Yes/N
1	Copying a paragraph, but changing a few words and giving acitation.	Yes
2	Cutting and pasting a short article from a website, with no citation.	
3	Taking two paragraphs from a classmate's essay, without citation.	
4	Taking a graph from a textbook, giving the source.	
5	Taking a quotation from a source, giving a citation but not using quotation marks.	
6	Using something that you think of as general knowledge, e.g. large areas of rainforest have been cut down in recent years.	
7	Using a paragraph from an essay you wrote and had marked the previous semester, without citation.	
8	Using the results of your own research, e.g. from a survey, without citation.	
9	Discussing an essay topic with a group of classmates and using some of their ideas in your own work.	
10	Giving a citation for some information but mis-spelling the author's name.	

This exercise shows that plagiarism can be accidental. For example, situation (10) above, when the author's name is mis-spelt, is technically plagiarism but really carelessness. In situation (9) your teacher may have encouraged you to discuss the topic in groups, and then write an essay on your own, in which case it would not be plagiarism. Self-plagiarism is also theoretically possible, as in situation (7). It can be difficult to decide what is general or common knowledge (situation 6), but you can always try asking colleagues

VII. Read the following text and then compare the five paragraphs below, which use ideas and information from it. Decide which are plagiarized and which are acceptable, and give your reasons in the table.

RAILWAY MANIAS

In 1830 there were a few dozen miles of railways in all the world – chiefly consisting of the line from Liverpool to Manchester. By 1840 there were over 4,500 miles, by 1850 over 23,500. Most of them were projected in a few bursts of speculative frenzy known as the ‘railway manias’ of 1835–7 and especially in 1844–7; most of them were built in large part with British capital, British iron, machines and know-how. These investment booms appear irrational, because in fact few railways were much more profitable to the investor than other forms of enterprise, most yielded quite modest profits and many none at all: in 1855 the average interest on capital sunk in the British railways was a mere 3.7 per cent.

(From The Age of Revolution by Eric Hobsbawm, 1995, p. 45)

(a) Between 1830 and 1850 there was very rapid development in railway construction worldwide. Two periods of especially feverish growth were 1835–7 and 1844–7. It is hard to understand the reason for this intense activity, since railways were not particularly profitable investments and some produced no return at all. *(Hobsbawm, 1995: 45)*

(b) There were only a few dozen miles of railways in 1830, including the Liverpool to Manchester line. But by 1840 there were over 4,500 miles and over 23,500 by 1850. Most of them were built in large part with British capital, British iron, machines and know-how, and most of them were projected in a few bursts of speculative frenzy known as the ‘railway manias’ of 1835–7 and especially in 1844–7. Because most yielded quite modest profits and many none at all these investment booms appear irrational. In fact, few railways were much more profitable to the investor than other forms of enterprise. *(Hobsbawm, 1995: 45)*

(c) As Hobsbawm (1995) argues, nineteenth-century railway mania was partly irrational: ‘because in fact few railways were much more profitable to the investor than other forms of enterprise, most yielded quite modest profits and many none at all: in 1855 the average interest on capital sunk in the British railways was a mere 3.7 per cent.’ *(Hobsbawm, 1995: 45)*

(d) Globally, railway networks increased dramatically from 1830 to 1850; the majority in short periods of ‘mania’ (1835–7 and 1844–7). British technology and capital were responsible for much of this growth, yet the returns on the investment were hardly any better than comparable business

opportunities. (Hobsbawm, 1895: 45) (e) The dramatic growth of railways between 1830 and 1850 was largely achieved using British technology. However, it has been claimed that much of this development was irrational because few railways were much more profitable to the investor than other forms of enterprise; most yielded quite modest profits and many none at all.

VIII. Avoiding plagiarism by developing good study habits.

Few students deliberately try to cheat by plagiarising, but some develop poor study habits that result in the risk of plagiarism. Working with a partner, add to the list of positive habits.

- Plan your work carefully so you don't have to write the essay at the last minute.
- Take care to make notes in your own words, not copying from the source.
- Keep a record of all the sources you use (e.g. author, date, title, page numbers, publisher).
- Make sure your in-text citations are all included in the list of references.

Research

Does your college or university have a policy on plagiarism? Look on the website to find out. It may raise some issues that you want to discuss with your friends.

If you can't find anything for your institution try one of these sites:

<http://owl.english.purdue.edu/owl/resource/589/01/>

<http://uefap.com/writing/plagiar/plagfram.htm>

IX. Read and translate the text “Writing CVs”. Have you ever written the CV? Give the definition of it.

Writing CVs

A CV (US resumé) is a summary of your education and work experience used when applying for a job. This unit illustrates the most common format and explains the main points to consider when preparing or updating your own.

The contents of a CV

A CV is a personal statement over which you have complete control. When you apply for a job your CV will probably be one of dozens seen by the firm's HR department, so in order to impress it should be as clear, accurate and well-presented as possible. Even if the writers are highly qualified, CVs

that contain irrelevant material, are badly organised and include spelling mistakes may well cause the sender to be rejected.

Note the following:

- There is no need to give your gender, date of birth or marital status.
- Two sides is the maximum that most employers want to read.

Details should be relevant to the particular job you are applying for.

- Avoid clichéd claims such as ‘team worker’ or ‘self starter’.
- Information such as education details is normally presented in reverse chronological order (i.e. the most recent comes first).

• Details of your early education or hobbies are probably irrelevant to the post.

X. Write a CV for yourself. When you are satisfied with the format, store it electronically so it can be updated when necessary. Use Appendix 4 “Career planning, curriculum vitae & cover letter”.

Study the example CV below. How could it be improved?

Charles Moreno 31 Cavendish Avenue London SW3 5GT 07356-723837 cmoreno@swiftserve.net	
PROFILE I am a recent marketing graduate with a background in psychology and some valuable experience of running mixed-media campaigns, looking for a rewarding position that will allow me to build on my knowledge and qualifications.	
EDUCATION	
Oct 2009–Sep 2010	Mercia Business School, Borchester MSc Marketing (modules included Marketing Studies; Operational Marketing; Marketing Contexts)
Sep 2005–Jun 2008	West London University, London BSc Psychology (2.1) (Research project in group behaviour)
Sep 2003–Jun 2005	Trent Valley College, Newark A-Levels in Psychology, English and German
EMPLOYMENT	
Aug 2008–Jul 2009	Voluntary post with 'Help the Homeless' organising fund-raising campaign. Experience with designing leaflets and posters, contacting press and preparing viral marketing strategy.
Jan 2006–May 2007	Part-time post as office assistant with Advantage Market Research, Holland Park, London. General office duties and interviewing.
SKILLS and QUALIFICATIONS	
• fluent German speaker • familiar with most common software, e.g. Excel, MS Office • clean driving licence	

GLOSSARY OF SHIPPING TERMS

A

Abaft – A point beyond the midpoint of a ship's length, towards the rear or stern.

Abandon – A proceeding wherein a shipper/consignee seeks authority to abandon all or parts of their cargo.

Abatement – A discount allowed for damage or overcharge in the payment of a bill.

Aboard – Referring to cargo being put, or laden, onto a means of conveyance.

Absorption – One carrier assumes the charges of another without any increase in charges to the shipper.

Acceptance – A time draft (or bill of exchange) that the drawee (payer) has accepted and is unconditionally obligated to pay at maturity.

– Broadly speaking, any agreement to purchase goods under specified terms.

Accessorial Charges – Charges that are applied to the base tariff rate or base contract rate, e.g., bunkers, container, currency, destination/delivery.

Acquiescence – When a bill of lading is accepted or signed by a shipper or shipper's agent without protest, the shipper is said to acquiesce to the terms, giving a silent form of consent.

Acquittance – A written receipt in full, in discharge from all claims.

Act of God – An act beyond human control, such as lightning, flood or earthquake.

Ad Valorem – A term from Latin meaning, "according to value." Import duty applied as a percentage of the cargo's dutiable value.

Administrative Law Judge – A representative of a government commission or agency vested with power to administer oaths, examine witnesses, take testimony, and conduct hearings of cases submitted to, or initiated by, that agency. Also called Hearing Examiner.

Admiralty (Adm.) –Refers to marine matters such as an Admiralty Court.

Advanced Charge – Transportation charge advanced by one carrier to another to be collected by the later carrier from the consignor or consignee.

Advanced Notice of Arrival (ANOA) – Any vessel entering United States waters from a foreign port is required to give a 96-hour ANOV. Any vessel of 300 gross registered tonnage and greater is required to give the ANOA to the U.S. Coast Guard's National Vessel Movement Center. Any

vessel under 300 gross registered tons is required to give the ANOA to the appropriate Captain of the Port.

Adventure – Shipment of goods on shipper's own account. A bill of adventure is a document signed by the master of the ship that carries goods at owner's risk. Also, a term used in some insurance policies to mean a voyage or a shipment.

Advice of Shipment – A notice sent to a local or foreign buyer advising that shipment has gone forward and containing details of packing, routing, etc. A copy of the invoice is often enclosed and, if desired, a copy of the bill of lading.

Advising Bank – A bank operating in the seller's country that handles letters of credit on behalf of a foreign bank.

Aframax Tanker – A vessel of 70,000 to 119,000 DWT capacity. The largest tanker size in the AFRA (average freight rate assessment) tanker rate system.

Affreightment, Contract of – An agreement by an ocean carrier to provide cargo space on a vessel at a specified time and for a specified price to accommodate an exporter or importer.

Aft – Movement toward the stern (back end) of a ship.

Agency Tariff – A tariff published by an agent on behalf of several carriers.

Agent (Agt.) – A person authorized to transact business for and in the name of another person or company. Types of agents are: (1) brokers, (2) commission merchants, (3) resident buyers, (4) sales agents, (5) manufacturer's representatives.

Aggregate Shipment – Numerous shipments from different shippers to one consignee that are consolidated and treated as a single consignment.

Agreed valuation – The value of a shipment agreed upon in order to secure a specific freight rate.

Agreed Weight – The weight prescribed by agreement between carrier and shipper for goods shipped in certain packages or in a certain number.

Air Waybill – The forwarding agreement or carrying agreement between shipper and air carrier and is issued only in nonnegotiable form.

All In – The total price to move cargo from origin to destination, inclusive of all charges.

Allision – The striking by a moving vessel against a stationary object.

Alongside – A phrase referring to the side of a ship. Goods delivered “alongside” are to be placed on the dock or barge within reach of the transport ship’s tackle so that they can be loaded.

Alternative Rates – Privilege to use the rate producing the lowest charge.

Ambient Temperature – The temperature of a surrounding body. The ambient temperature of a container is the atmospheric temperature to which it is exposed,

American Bureau of Shipping – U.S. classification society which certifies seagoing vessels for compliance to standardized rules regarding construction and maintenance.

Anti-Dumping Duty – A tariff imposed to discourage sale of foreign goods, subsidized to sell at low prices detrimental to local manufacturers.

Any Quantity (A.Q.) – Usually refers to a rating that applies to an article regardless of size or quantity.

Apparent Good Order – When freight appears to be free of damage so far as a general survey can determine.

Appraisement– Determination of the dutiable value of imported merchandise by a Customs official who follows procedures outlined in their country’s tariff, such as the U.S. Tariff Act of 1930.

Appraiser’s Stores – The warehouse or public stores to which samples of imported goods are taken to be inspected, analyzed, weighed, etc. by examiners or appraisers.

Arbitrary – A stated amount over a fixed rate to one point to make a rate to another point.

Arrival Notice – A notification by carrier of ship’s arrival to the consignee, the “Notify Party,” and – when applicable – the “Also Notify Party.” These parties in interest are listed in blocks 3, 4 and 10, respectively, of the Bill of Lading.

ASC X12 – American Standards Committee X12 responsible for developing EDI standards for the United States.

Assignment – A term commonly used in connection with a bill of lading. It involves the transfer of rights, title and interest in order to assign goods by endorsing the bill of lading.

Astern– Behind a vessel, move in a reverse direction.

ATDNSHINC – Any time Day or Night Sundays & Holidays Included. A chartering term referring to when a vessel will work.

Athwartships –A direction across the width of a vessel.

Automated Identification System (AIS) – It is a system used by

ships and Vessel Traffic Service (VTS) principally for the identification and the locating of vessels. AIS provides a means for ships to electronically exchange ship data including: identification, position, course, and speed, with other nearby ships and VTS stations.

Average– See Insurance.

Avoirdupois Pound – Same as 0.4535924277 kilograms.

B

Ballast Bonus – Special payment above the Chartering price when the ship has to sail a long way on ballast to reach the loading port.– Bareboat: Method of chartering of the ship leaving the charterer with almost all the responsibilities of the owner.

Backhaul– To haul a shipment back over part of a route it has traveled.

Balloon Freight – Light, bulky articles.

Bank Guarantee – Guarantee issued by a bank to a carrier to be used in lieu of lost or misplaced original negotiable bill of lading.

Barratry – An act committed by the master or mariners of a vessel, for some unlawful or fraudulent purpose, contrary to their duty to the owners, whereby the latter sustain injury. It may include negligence, if so gross as to evidence fraud.

Barrel (BBL) – A term of measure referring to 42 gallons of liquid at 600 degrees.

Base Rate – A tariff term referring to ocean rate less accessorial charges, or simply the base tariff rate.

Beam – The width of a ship.

Belt Line – A switching railroad operating within a commercial area.

Beneficial Cargo Owner – Refers to the importer of record, who physically takes possession of cargo at destination and does not act as a third party in the movement of such goods.

Beneficiary– Entity to whom money is payable.– The entity for whom a letter of credit is issued.– The seller and the drawer of a draft.

Berth Terms – Shipped under rate that includes cost from end of ship's tackle at load port to end of ship's tackle at discharge port.

Beyond – Used with reference to charges assessed for cargo movement past a line–haul terminating point.

Bilateral– A contract term meaning both parties agree to provide something for the other.

Bill of Exchange – In the United States, commonly known as a “Draft.” However, bill of exchange is the correct term.

Bill of Lading (B/L)—A document that establishes the terms of a contract between a shipper and a transportation company. It serves as a document of title, a contract of carriage and a receipt for goods.

Amended B/L: • B/L requiring updates that do not change financial status; this is slightly different from corrected B/L.

B/L Terms & Conditions: • the fine print on B/L; defines what the carrier can and cannot do, including the carrier's liabilities and contractual agreements.

B/L's Status: • represents whether the bill of lading has been input, rated, reconciled, printed, or released to the customer.

B/L's Type: • refers to the type of B/L being issued. Some examples are: a Memo (ME), Original (OBL), Non-negotiable, Corrected (CBL) or Amended (AM) B/L.

Canceled B/L: • B/L status; used to cancel a processed B/L; usually per shipper's request; different from voided B/L.

Clean B/L: • A B/L which bears no superimposed clause or notation which declares a defective condition of the goods and/or the packaging.

Combined B/L: • B/L that covers cargo moving over various transports.

Consolidated B/L: • B/L combined or consolidated from two or more B/L's.

Corrected B/L: • B/L requiring any update which results in money—or other financially related changes.

Domestic B/L: • Non-negotiable B/L primarily containing routing details; usually used by truckers and freight forwarders.

Duplicate B/L: • Another original Bill of Lading set if first set is lost. Also known as reissued B/L.

Express B/L: • Non-negotiable B/L where there are no paper copies printed of originals.

Freight B/L: • A contract of carriage between a shipper and forwarder (who is usually a NVOCC); a non-negotiable document.

Government B/L (GBL): • A bill of lading issued by the U.S. government.

Hitchment B/L: • B/L covering parts of a shipment which are loaded at more than one location. Hitchment B/L usually consists of two parts, hitchment and hitchment memo. The hitchment portion usually covers the majority of a divided shipment and carries the entire revenue.

House B/L: • B/L issued by a freight forwarder or consolidator covering a single shipment containing the names, addresses and specific description of the goods shipped.

Intermodal B/L: • B/L covering cargo moving via multimodal means. Also known as Combined Transport B/L, or Multimodal B/L.

Long Form B/L: • B/L form with all Terms & Conditions written on it. Most B/L's are short form which incorporate the long form clauses by reference.

Memo B/L: • Unfreighted B/L with no charges listed.

Military B/L: • B/L issued by the U.S. military; also known as GBL, or Form DD1252.

B/L Numbers: • U.S. Customs' standardized B/L numbering format to facilitate electronic communications and to make each B/L number unique.

Negotiable B/L: • The B/L is a title document to the goods, issued "to the order of" a party, usually the shipper, whose endorsement is required to effect is negotiation. Thus, a shipper's order (negotiable) B/L can be bought, sold, or traded while goods are in transit and is commonly used for letter-of-credit transactions. The buyer must submit the original B/L to the carrier in order to take possession of the goods.

Non-Negotiable B/L: • See Straight B/L. Sometimes means a file copy of a B/L.

"Onboard" B/L: • B/L validated at the time of loading to transport. Onboard Air, Boxcar, Container, Rail, Truck and Vessel are the most common types.

Optional Discharge B/L: • B/L covering cargo with more than one discharge point option possibility.

"Order" B/L: • See Negotiable B/L.

Original B/L: • The part of the B/L set that has value, especially when negotiable; rest of set are only informational file copies. Abbreviated as OBL.

Received for Shipment B/L: • Validated at time cargo is received by ocean carrier to commence movement but before being validated as "Onboard".

Reconciled B/L: • B/L set which has completed a prescribed number of edits between the shipper's instructions and the actual shipment received. This produces a very accurate B/L.

Short Term B/L: • Opposite of Long Form B/L, a B/L without the Terms & Conditions written on it. Also known as a Short Form B/L. The terms are incorporated by reference to the long form B/L.

Split B/L: • One of two or more B/L's which have been split from a single B/L.

Stale B/L: • A late B/L; in banking, a B/L which has passed the time deadline of the Letter of Credit (L/C) and is void.

Straight (Consignment) B/L: • Indicates the shipper will deliver the goods to the consignee. It does not convey title (non-negotiable). Most often used when the goods have been pre-paid.

“To Order” B/L: • See Negotiable B/L.

Unique B/L Identifier: • U.S. Customs’ standardization: four-alpha code unique to each carrier placed in front of nine digit B/L number; APL’s unique B/L Identifier is “APLU”. Sea-land uses “SEAU”. These prefixes are also used as the container identification.

Voided B/L: • Related to Consolidated B/L; those B/L’s absorbed in the combining process. Different from Canceled B/L.

Bill of Lading Port of Discharge – Port where cargo is discharged from means of transport.

Bill of Sale – Confirms the transfer of ownership of certain goods to another person in return for money paid or loaned.

Bill to Party – Customer designated as party paying for services.

Billed Weight – The weight shown in a waybill and freight bill, i.e., the invoiced weight.

BIMCO – The world’s largest private shipping organization.

Blanket Bond – A bond covering a group of persons, articles or properties.

Blanket Rate – A rate applicable to or from a group of points.– A special rate applicable to several different articles in a single shipment.

Blanket Waybill – A waybill covering two or more consignments of freight.

Blind Shipment – A B/L wherein the paying customer has contracted with the carrier that shipper or consignee information is not given.

Block Stowage – Stowing cargo destined for a specific location close together to avoid unnecessary cargo movement.

Blocked Trains – Railcars grouped in a train by destination so that segments (blocks) can be uncoupled and routed to different destinations as the train moves through various junctions. Eliminates the need to break up a train and sort individual railcars at each junction.

Blocking or Bracing – Wood or metal supports to keep shipments in place to prevent cargo shifting. See also Dunnage.

Board – To gain access to a vessel.

Board Feet – The basic unit of measurement for lumber. One board foot is equal to a one-inch board, 12 inches wide and 1 foot long. Thus, a board 10 feet long, 12 inches wide, and 1 inch thick contains 10 board feet.

Boat – A relatively small, usually open craft/vessel a small, often open vessel for traveling on water. An inland vessel of any size.

Bobtail – Movement of a tractor, without trailer, over the highway.

Bogie – A set of wheels built specifically as rear wheels under the container.

Bolster– A device fitted on a chassis or railcar to hold and secure the container.

Bond Port – Port of initial Customs entry of a vessel to any country. Also known as First Port of Call.

Bonded Freight – Freight moving under a bond to U.S. Customs or to the Internal Revenue Service, to be delivered only under stated conditions.

Bonded Warehouse – A warehouse authorized by Customs authorities for storage of goods on which payment of duties is deferred until the goods are removed.

Booking – Arrangements with a carrier for the acceptance and carriage of freight; i.e., a space reservation.

Booking Number – Reservation number used to secure equipment and act as a control number prior to completion of a B/L.

Bottom Side Rails – Structural members on the longitudinal sides of the base of the container.

Bottom–Air Delivery – A type of air circulation in a temperature control container. Air is pulled by a fan from the top of the container, passed through the evaporator coil for cooling, and then forced through the space under the load and up through the cargo. This type of airflow provides even temperatures.

Bow – The front of a vessel.

Boxcar – A closed rail freight car.

Break Bulk– To unload and distribute a portion or all of the contents of a rail car, container, trailer, or ship.– Loose, non–containerized mark and count cargo.– Packaged cargo that is not containerized.

Bridge Point – An inland location where cargo is received by the ocean carrier and then moved to a coastal port for loading.²²

Bridge Port – A port where cargo is received by the ocean carrier and stuffed into containers but then moved to another coastal port to be waded on a vessel.

Broken Stowage – The loss of space caused by irregularity in the shape of packages.– Any void or empty space in a vessel or container not occupied by cargo.

Broker – A person who arranges for transportation of loads for a percentage of the revenue from the load.

Brokerage – Freight forwarder/broker compensation as specified by ocean tariff or contract.

Bulk Cargo – Not in packages or containers; shipped loose in the hold of a ship without mark and count.” Grain, coal and sulfur are usually bulk freight.

Bulk–Freight Container – A container with a discharge hatch in the front wall; allows bulk commodities to be carried.

Bulkhead – A partition separating one part of a ship, freight car, aircraft or truck from another part.

Bull Rings – Cargo–securing devices mounted in the floor of containers; allow lashing and securing of cargo.

Bunker Adjustment Factor – Used to compensate steamship lines for fluctuating fuel costs. Sometimes called “Fuel Adjustment Factor” or FAF.

Bunker Charge – An extra charge sometimes added to steamship freight rates; justified by higher fuel costs. Also known as Fuel Adjustment Factor or FAF.

Bunkers – A maritime term referring to fuel used aboard the ship. In the past, fuel coal stowage areas aboard a vessel were in bins or bunkers.

Bureau Veritas – A French classification society which certifies seagoing vessels for compliance to standardized rules regarding construction and maintenance.

C

C&F Terms of Sale, or INCOTERMS – Obsolete, although heavily used, term of sale meaning “cargo and freight” whereby Seller pays for cost of goods and freight charges up to destination port. In July, 1990 the International Chamber of Commerce replaced C&F with CFR.

Cabotage – Water transportation term applicable to shipments between ports of a nation; commonly refers to coastwise or intercoastal navigation or trade. Many nations, including the United States, have cabotage laws which require national flag vessels to provide domestic interport service.

Capesize Vessel –A dry bulk vessel above 80,000dwt or whose beam precludes passage via the Panama Canal and thus forces them to pass around Cape Horn or the Cape of Good Hope.

Captain’s Protest – A document prepared by the captain of a vessel on arriving at port; shows conditions encountered during voyage, generally

for the purpose of relieving ship owner of any loss to cargo and shifting responsibility for reimbursement to the insurance company.

Car Pooling – Use of individual carrier/rail equipment through a central agency for the benefit of carriers and shippers.

Car Seal – Metal strip and lead fastener used for locking freight car or truck doors. Seals are numbered for record purposes.

Carfloat – A barge equipped with tracks on which up to approximately 12 railroad cars are moved in harbors or inland waterways.

Cargo– Freight loaded into a ship.

Cargo Manifest – A manifest that lists all cargo carried on a specific vessel voyage.

Cargo NOS – Cargo Not Otherwise Specified. Usually the rate entry in a tariff that can apply to commodities not covered under a specific item or sub– item in the applicable tariff.

Cargo Preference – Cargo reserved by a Nation's laws for transportation only on vessels registered in that Nation. Typically the cargo is moving due to a direct or indirect support or activity of the Government.

Cargo Tonnage –Most ocean freight is billed on the basis of weight or measurement tons (W/M). Weight tons can be expressed in short tons of 2000 pounds, long tons of 2240 pounds or metric tons of 1000 kilos (2204.62 pounds). Measurement tons are usually expressed as cargo measurement of 40 cubic feet (1.12 meters) or cubic meters (35.3 cubic feet.)

Carload Rate – A rate applicable to a carload of goods.

Carnet – A customs document permitting the holder to temporarily carry or send merchandise into certain foreign countries (for display, demonstration or similar purposes) without paying duties or posting bonds. Any of various Customs documents required for crossing some international borders.

Carrier – Any person or entity who, in a contract of carriage, undertakes to perform or to procure the performance of carriage by rail, road, sea, air, inland waterway or by a combination of such modes.

Carrier's Certificate – A certificate required by U.S. Customs to release cargo properly to the correct party.

Cartage – Usually refers to intra–city hauling on drays or trucks. Same as drayage.²⁵

Cartment – Customs form permitting in–bond cargo to be moved from one location to another under Customs control, within the same Customs district. Usually in motor carrier's possession while draying cargo.

Cash Against Documents (CAD) – Method of payment for goods in which documents transferring title are given the buyer upon payment of cash to an intermediary acting for the seller, usually a commission house.

Cash in Advance (CIA) – A method of payment for goods in which the buyer pays the seller in advance of the shipment of goods. Usually employed when the goods, such as specialized machinery, are built to order.

Cash With Order (CWO) – A method of payment for goods in which cash is paid at the time of order and the transaction becomes binding on both buyer and seller.

CE – Abbreviation for “Consumption Entry.” The process of declaring the importation of foreign-made goods for use in the United States.

Cells – The construction system employed in container vessels; permits ship containers to be stowed in a vertical line with each container supporting the one above it

Center of Gravity – The point of equilibrium of the total weight of a containership, truck, train or a piece of cargo.

Certificate of Inspection – A document certifying that merchandise (such as perishable goods) was in good condition immediately prior to its shipment.– The document issued by the U.S. Coast Guard certifying an American– Flag vessel’s compliance with applicable laws and regulations.

Certificate of Origin – A certified document showing the origin of goods; used in international commerce.

CFS – Abbreviation for “Container Freight Station.” A shipping dock where cargo is loaded (“stuffed”) into or unloaded (“stripped”) from containers. Generally, this involves less than containerload shipments, although small shipments destined to same consignee are often consolidated. Container reloading from/to rail or motor carrier equipment is a typical activity. These facilities can be located in container yards, or off dock.

Charter Party – A written contract between the owner of a vessel and the person desiring to employ the vessel (charterer); sets forth the terms of the arrangement, such as duration of agreement, freight rate and ports involved in the trip.

Chassis – A frame with wheels and container locking devices in order to secure the container for movement.

Chock – A piece of wood or other material placed at the side of cargo to prevent rolling or moving sideways.

CCC Mark – A mark or label indicating the cargo conforms to standards required by China for certain products.

CE Mark – A mark or label indicating the cargo conforms to standards required by the European Union for certain products.

CI –Abbreviation for “Cost and Insurance.” A price that includes the cost of the goods, the marine insurance and all transportation charges except the ocean freight to the named point of destination.

CIF– (Named Port)Abbreviation for “Cost, Insurance, Freight.” (Named Port) Same as C&F or CFR except seller also provides insurance to named destination.

CKD – Abbreviation for “Completely Knocked Down.” Parts and subassemblies being transported to an assembly plant.

Claim – A demand made upon a transportation line for payment on account of a loss sustained through its alleged negligence.

Classification – A publication, such as Uniform Freight Classification (railroad) or the National Motor Freight Classification (motor carrier), that assigns ratings to various articles and provides bill of lading descriptions and rules.

Classification Rating – The designation provided in a classification by which a class rate is determined.

Classification Society – An organization maintained for the surveying and classing of ships so that insurance underwriters and others may know the quality and condition of the vessels offered for insurance or employment. See also ABS, BV, DNV, LR and NK.

Classification Yard – A railroad yard with many tracks used for assembling freight trains.

Clayton Act – An anti-trust act of the U.S. Congress making price discrimination unlawful.

Clean Bill of Lading – A receipt for goods issued by a carrier with an indication that the goods were received in “apparent good order and condition,” without damage or other irregularities. If no notation or exception is made, the B/L is assumed to be “cleaned.”

Cleaning in Transit – The stopping of articles, such as peanuts, etc., for cleaning at a point between the point of origin and destination.

Clearance Limits – The size beyond which cars or loads cannot use bridges, tunnels, etc.

Cleat – A strip of wood or metal used to afford additional strength, to prevent warping, or to hold in place.

Clip-On – Refrigeration equipment attachable to an insulated container that does not have its own refrigeration unit.

CM – Abbreviation for “Cubic Meter” (capital letters).

Coastwise– Water transportation along the coast.

COGSA – Carriage of Goods by Sea Act – U.S. federal codification passed in 1936 which standardizes carrier's liability under carrier's bill of lading. U.S. enactment of The Hague Rules.

Collecting – A bank that acts as an agent to the seller's bank (the presenting bank). The collecting bank assumes no responsibility for either the documents or the merchandise.

Collection – A draft drawn on the buyer, usually accompanied by documents, with complete instructions concerning processing for payment or acceptance.

Combination Export Mgr. – A firm that acts as an export sales agent for more than one non-competing manufacturer.

Combination Rate – A rate made up of two or more factors, separately published.

Commercial Invoice – Represents a complete record of the transaction between exporter and importer with regard to the goods sold. Also reports the content of the shipment and serves as the basis for all other documents relating to the shipment.

Commercial Transport Vessel – Any ship which is used primarily in commerce (1) For transporting persons or goods to or from any harbor(s) or port(s) or between places within a harbor area;(2) In connection with the construction, change in construction, servicing, maintenance, repair, loading, unloading, movement, piloting, or salvaging of any other ship or vessel.

Commodity – Article shipped. For dangerous and hazardous cargo, the correct commodity identification is critical.

Commodity Rate – A rate published to apply to a specific article or articles.

Common Carrier – A transportation company which provides service to the general public at published rates.

Common Law – Law that derives its force and authority from precedent, custom and usage rather than from statutes, particularly with reference to the laws of England and the United States.

Company Security Officer – Is the person designated by the company for ensuring that a ship security assessment is carried out and that a ship security plan is developed, submitted for approval and thereafter implemented and maintained for liaison with port facility security officers and the ship security officer.

Compulsory Ship – Any ship which is required to be equipped with radiotelecommunication equipment in order to comply with the radio or radio-

navigation provisions of a treaty or statute to which the vessel is subject.

Concealed Damage – Damage that is not evident from viewing the unopened package.

Conference – An association of ship owners operating in the same trade route who operate under collective conditions and agree on tariff rates.

Confirmed Letter of Credit – A letter of credit, issued by a foreign bank, whose validity has been confirmed by a domestic bank. An exporter with a confirmed letter of credit is assured of payment even if the foreign buyer or the foreign bank defaults

Confirming Bank – The bank that adds its confirmation to another bank's (the issuing bank's) letter of credit and promises to pay the beneficiary upon presentation of documents specified in the letter of credit.

Connecting Carrier – A carrier which has a direct physical connection with, or forms a link between two or more carriers.

Consignee – A person or company to whom commodities are shipped.

Consignee Mark – A symbol placed on packages for identification purposes; generally a triangle, square, circle, etc. with letters and/or numbers and port of discharge.

Consignment– (1) A stock of merchandise advanced to a dealer and located at his place of business, but with title remaining in the source of supply.(2) A shipment of goods to a consignee.

Consignor – A person or company shown on the bill of lading as the shipper.

Connecting Carrier Agreement – A connecting carrier agreement is a contract between the originating carrier and a second party, where the second party agrees to carry goods to a final destination on a through Bill of Lading.

Consolidation – Cargo containing shipments of two or more shippers or suppliers. Containerload shipments may be consolidated for one or more consignees, often in containerload quantities.

Consolidator – A person or firm performing a consolidation service for others. The consolidator takes advantage of lower full carload (FCL) rates, and passes on the savings to shippers.

Construction Differential Subsidy – A program whereby the U.S. government attempted to offset the higher shipbuilding cost in the U.S. by paying up to 50% of the difference between cost of U.S. and non-U.S. construction. The difference went to the U.S. shipyard. It is unfunded since 1982.

Consul – A government official residing in a foreign country who represents the interests of her or his country and its nationals.

Consular Declaration – A formal statement describing goods to be shipped; filed with and approved by the consul of the country of destination prior to shipment.

Consular Invoice – A document, certified by a consular official, is required by some countries to describe a shipment. Used by Customs of the foreign country, to verify the value, quantity and nature of the cargo.

Consular Visa – An official signature or seal affixed to certain documents by the consul of the country of destination.

Consumption Entry (CE) – The process of declaring the importation of foreign-made goods into the United States for use in the United States.

Container – A truck trailer body that can be detached from the chassis for loading into a vessel, a rail car or stacked in a container depot. Containers may be ventilated, insulated, refrigerated, flat rack, vehicle rack, open top, bulk liquid or equipped with interior devices. A container may be 20 feet, 40 feet, 45 feet, 48 feet or 53 feet in length, 8'0" or 8'6" in width, and 8'6" or 9'6" in height.

Container Booking – Arrangements with a steamship line to transport containerized cargo.

Container Freight Station – See CFS.

Container Manifest – Document showing contents and loading sequence, point of origin, and point of destination for a container. Vessels are required by law to carry such a document for each container carried.

Container Pool – An agreement between parties that allows the efficient use and supply of containers. A common supply of containers available to the shipper as required.

Container Security Initiative (CSI)—A U.S. cargo security program whereby containerized cargoes destined for the United States may be inspected on a selective basis at many foreign ports before loading on a vessel. As of October 2007, there were 51 approved ports. A multinational program, aligned with the President's "Strategy for Homeland Security", that extends the United States' zone of security by pre-screening containers that pose a potential security risk before they leave foreign ports for U.S. seaports.

Container Terminal – An area designated for the stowage of cargoes in container; usually accessible by truck, railroad and marine transportation. Here containers are picked up, dropped off, maintained and housed.

Container Yard (CY) – A materials–handling/storage facility used for completely unitized loads in containers and/or empty containers. Commonly referred to as CY.

Containerizable Cargo – Cargo that will fit into a container and result in an economical shipment.

Containerization – Stowage of general or special cargoes in a container for transport in the various modes.

Container Load – A load sufficient in size to fill a container either by cubic measurement or by weight.

Contraband – Cargo that is prohibited.

Contract – A legally binding agreement between two or more persons/organizations to carry out reciprocal obligations or value.

Contract Carrier – Any person not a common carrier who, under special and individual contracts or agreements, transports passengers or property for compensation.

Controlled Atmosphere – Sophisticated, computer–controlled systems that manage the mixtures of gases within a container throughout an intermodal journey reducing decay.

Corner Posts – Vertical frame components fitted at the corners of the container, integral to the corner fittings and connecting the roof and floor structures. Containers are lifted and secured in a stack using the castings at the ends.

Correspondent Bank – A bank that, in its own country, handles the business of a foreign bank.

Cost, Insurance and Freight (CIF) – Cost of goods, marine insurance and all transportation (freight) charges are paid to the foreign point of delivery by the seller.

Countervailing Duty – An additional duty imposed to offset export grants, bounties or subsidies paid to foreign suppliers in certain countries by the government of that country for the purpose of promoting export.

Cross Member – Transverse members fitted to the bottom side rails of a container, which support the floor.

Cube Out – When a container or vessel has reached its volumetric capacity before its permitted weight limit.

Cubic Foot –1,728 cubic inches. – A volume contained in a space measuring one foot high, one foot wide and one foot long

Currency Adjustment Factor – A charge, expressed as a percentage of a base rate, that is applied to compensate ocean carriers of currency fluctuations.

Customs–Trade Partnership Against Terrorism – A voluntary supply chain security partnership established by U.S. Customs and Border Protection in November 2001. Meeting the C–TPAT standards allows cargo owners faster processing through customs formalities and inspections.

Customhouse– A government office where duties are paid, import documents filed, etc., on foreign shipments.

Customhouse Broker – A person or firm, licensed by the treasury department of their country when required, engaged in entering and clearing goods through Customs for a client (importer).

Customs –Government agency charged with enforcing the rules passed to protect the country’s import and export revenues.

Customs Bonded Warehouse – A warehouse authorized by Customs to receive duty–free merchandise.

Customs Entry – All countries require that the importer make a declaration on incoming foreign goods. The importer then normally pays a duty on the imported merchandise. The importer’s statement is compared against the carrier’s vessel manifest to ensure that all foreign goods are properly declared.

Customs Invoice – A form requiring all data in a commercial invoice along with a certificate of value and/or a certificate of origin. Required in a few countries (usually former British territories) and usually serves as a seller’s commercial invoice.

Customs of the Port (COP) – A phrase often included in charter parties and freight contracts referring to local rules and practices which may impact upon the costs borne by the various parties.

Customs–Trade Partnership Against Terrorism (C–TPAT) – It is a voluntary supply chain security program, launched in November 2001 and led by U.S. Customs and Border Protection (CBP) which focuses on improving the security of private companies’ supply chains with respect to terrorism. In exchange for companies participation CBP will provide reduced inspections at the port of arrival, expedited processing at the border and penalty mitigation.

Cut–Off Time – The latest time cargo may be delivered to a terminal for loading to a scheduled train or ship.

Cwt. – Hundred weight (United States, 100 pounds; U.K.,112)

CY – Abbreviation for:– Container Yard.– The designation for full container receipt/delivery.

D

D.B.A. – Abbreviation for “Doing Business As.” A legal term for conducting business under a registered name.

DDC– Abbreviation for “Destination Delivery Charge.” A charge, based on container size, that is applied in many tariffs to cargo. This charge is considered accessorial and is added to the base ocean freight. This charge covers crane lifts off the vessel, drayage of the container within the terminal and gate fees at the terminal operation.

Deadhead– One leg of a move without a paying cargo load. Usually refers to repositioning an empty piece of equipment

Deadweight Cargo – A long ton of cargo that can be stowed in less than 40 cubic feet.

Deadweight Tonnage (DWT) –The number of tons of 2,240 pounds that a vessel can transport of cargo, stores and bunker fuel. It is the difference between the number of tons of water a vessel displaces “light” and the number of tons it displaces when submerged to the “load line.” An approximate conversion ratio is 1NT = 1.7GT and 1GT = 1.5DWT.

Deconsolidation Point – Place where loose or other non-containerized cargo is ungrouped for delivery.

Deficit Weight – The weight by which a shipment is less than the minimum weight.

Delivery Instructions – Order to pick up goods at a named place and deliver them to a pier. Usually issued by exporter to trucker but may apply to a railroad, which completes delivery by land. Use is limited to a few major U.S. ports. Also known as shipping delivery order.

DEMDES – Demurrage/Despatch money. (Under vessel chartering terms, the amount to be paid if the ship is loading/discharging slower/faster than foreseen.)

Demurrage – A penalty charge against shippers or consignees for delaying the carrier’s equipment or vessel beyond the allowed free time. The free time and demurrage charges are set forth in the charter party or freight tariff. See also Detention and Per Diem.

Density – The weight of cargo per cubic foot or other unit.

Depot, Container – Container freight station or a designated area where empty containers can be picked up or dropped off.

Despatch – An incentive payment paid by the vessel to the charterer for loading and unloading the cargo faster than agreed. Usually negotiated only in charter parties. Also called “dispatch.”

Destination– The place to which a shipment is consigned.– The place where carrier actually turns over cargo to consignee or his agent.

Destination Control Statements – Various statements that the U.S. government requires to be displayed on export shipments. The statements specify the authorized destinations.

Det Norske Veritas – A Norwegian classification society which certifies seagoing vessels for compliance to standardized rules regarding construction and maintenance.

Detention – A penalty charge against shippers or consignees for delaying carrier's equipment beyond allowed time. Demurrage applies to cargo; detention applies to equipment. See Per Diem.

Devanning – The unloading of a container or cargo van.

DF Car – Damage-Free Car. Boxcars equipped with special bracing material.

Differential – An amount added or deducted from base rate to make a rate to or from some other point or via another route.

Discrepancy Letter of Credit – When documents presented do not conform to the requirements of the letter of credit (L/C), it is referred to as a "discrepancy." Banks will not process L/C's which have discrepancies. They will refer the situation back to the buyer and/or seller and await further instructions.

Dispatch – See Despatch.

Displacement– The weight, in tons of 2,240 pounds, of the vessel and its contents. Calculated by dividing the volume of water displaced in cubic feet by 35, the average density of sea water.

Diversion– A change made either in the route of a shipment in transit (see Reconsignment) or of the entire ship.

Division – Carriers' practice of dividing revenue received from rates where joint hauls are involved. This is usually according to agreed formulae.

Dock – For ships, a cargo handling area parallel to the shoreline where a vessel normally ties up.– For land transportation, a loading or unloading platform at an industrial location or carrier terminal.

Dock Receipt – A form used to acknowledge receipt of cargo and often serves as basis for preparation of the ocean bill of lading.

Dockage – Refers to the charge assessed against the vessel for berthing at the facility or for mooring to a vessel so berthed.

Docket – Present a rate proposal to a conference meeting for adoption as a conference group rate.

Documents Against Acceptance (D/A) – Instructions given by a

shipper to a bank indicating that documents transferring title to goods should be delivered to the buyer only upon the buyer's acceptance of the attached draft.

Documents Against Payment (D/P) – An indication on a draft that the documents attached are to be released to the drawee only on payment.

Dolly – A set of wheels that support the front of a container; used when the automotive unit is disconnected.

Door-to-Door – Through transportation of a container and its contents from consignor to consignee. Also known as House to House. Not necessarily a through rate.

D.O.T.U.S. Department of Transportation. The executive branch department that coordinates and oversees transportation functions in the United States.

Draft– The number of feet that the hull of a ship is beneath the surface of the water.– An unconditional order in writing, addressed by one party (drawer) to another party (drawee), requiring the drawee to pay at a fixed or determinable future date a specified sum in lawful currency to the order of a specified person.

Draft, Bank – An order issued by a seller against a purchaser; directs payment, usually through an intermediary bank. Typical bank drafts are negotiable instruments and are similar in many ways to checks on checking accounts in a bank.

Draft, Clean – A draft to which no documents are attached.

Draft, Date – A draft that matures on a fixed date, regardless of the time of acceptance.

Draft, Discounted – A time draft under a letter of credit that has been accepted and purchased by a bank at a discount.

Draft, Sight – A draft payable on demand upon presentation.

Draft, Time – A draft that matures at a fixed or determinable time after presentation or acceptance.

Drawback – A partial refund of an import fee. Refund usually results because goods are re-exported from the country that collected the fee.

Drawee – The individual or firm that issues a draft and thus stands to receive payment.

Drayage– Charge made for local hauling by dray or truck. Same as Cartage.

DRFS – Abbreviation for “Destination Rail Freight Station.” Same as CFS at destination, except a DRFS is operated by the rail carrier participating in the shipment.

DSU– Delay in Startup Insurance is a policy to protect the seller of a construction project from penalties if the project is not completed on time. See “Liquidated Damages.”

Dry Cargo – Cargo that is not liquid and normally does not require temperature control.

Dry-Bulk Container – A container constructed to carry grain, powder and other free-flowing solids in bulk. Used in conjunction with a tilt chassis or platform.

Dumping – Attempting to import merchandise into a country at a price less than the fair market value, usually through subsidy by exporting country.

Dunnage – Any material or objects utilized to protect cargo. Examples of dunnage are blocks, boards, burlap and paper.

Dutiable Value – The amount on which an Ad Valorem or customs duty is calculated.

DWT– See Deadweight Tonnage.

E

E.C.M.C.A. – Eastern Central Motor Carriers Association.

ECMC– The U.S. Exporters Competitive Maritime Council. An association primarily of U.S. engineering, procurement and construction companies and their freight forwarders that was formed jointly by the Maritime Administration in 1997 to seek solutions to transportation problems and enhance the export of U.S. project cargoes.

Edge Protector – An angle piece fitted over the edge of boxes, crates, bundles and other packages to prevent the pressure from metal bands or other types from cutting into the package.

EDI – Abbreviation for “Electronic Data Interface.” Generic term for transmission of transactional data between computer systems. EDI is typically via a batched transmission, usually conforming to consistent standards.

EDIFACT – International data interchange standards sponsored by the United Nations. See UN/EDIFACT.

Elevating– A charge for services performed in connection with floating elevators.– Charges assessed for the handling of grain through grain elevators.

Elkins Act – An act of Congress (1903) prohibiting rebates, concession, misbilling, etc. and providing specific penalties for such violations.

Embargo– Order to restrict the hauling of freight.

Eminent Domain – The sovereign power to take property for a necessary public use, with reasonable compensation.

Empty Repo – Contraction for Empty Repositioning. The movement of empty containers.

Endorsement – A legal signature usually placed on the reverse of a draft; signifies transfer of rights from the holder to another party.

Entry – Customs documents required to clear an import shipment for entry into the general commerce of a country.

Equalization– A monetary allowance to the customer for picking up or delivering at a point other than the destination shown on the bill of lading. This provision is covered by tariff publication.

Equipment Interchange Receipt (EIR) – A document transferring a container from one carrier to another, or to/from a terminal.

ETA, C, D, R, S– Estimated Time of Arrival, Completion, Departure, Readiness, or Sailing– Estimated Time of Availability. That time when a tractor/partner carrier is available for dispatch.

Ethylene – A gas produced by many fruits and vegetables that accelerates the ripening and aging processes.

E.W.I.B. – Eastern Weighing and Inspection Bureau.

“Ex Dec” – Contraction for “Shipper’s Export Declaration.”

Ex – “From”– When used in pricing terms such as “Ex Factory” or “Ex Dock,” it signifies that the price quoted applies only at the point of origin indicated.

Exception – Notations made when the cargo is received at the carrier’s terminal or loaded aboard a vessel. They show any irregularities in packaging or actual or suspected damage to the cargo. Exceptions are then noted on the bill of lading.

EXIM Bank – Abbreviation for Export–Import Bank of the United States. An independent U.S. Government Agency which facilitates exports of U.S. goods by providing loan guarantees and insurance for repayment of bank–provided export credit.

Expiry Date – Issued in connection with documents such as letters of credit, tariffs, etc. to advise that stated provisions will expire at a certain time.

Export– Shipment of goods to a foreign country.

Export Declaration – A government document declaring designated goods to be shipped out of the country. To be completed by the exporter and filed with the U.S. Government.

Export License – A government document which permits the “Licensee” to engage in the export of designated goods to certain destinations.

Export Rate – A rate published on traffic moving from an interior point to a port for transshipment to a foreign country.

Ex-Works – An Incoterm of sale meaning the seller delivers to the buyer at seller's named premises.

F

Factor – A factor is an agent who will, at a discount (usually five to 8% of the gross), buy receivables.

FAK – Abbreviation for "Freight All Kinds." Usually refers to full container loads of mixed shipments.

False Billing – Misrepresenting freight or weight on shipping documents.

FAS – Abbreviation for "Free Alongside Ship."

FCL– Abbreviation for "Full Container Load."

F.D.A. – Food and Drug Administration.

Feeder Service – Cargo to/from regional ports are transferred to/from a central hub port for a long-haul ocean voyage.

Feeder Vessel – A short-sea vessel which transfers cargo between a central "hub" port and smaller "spoke" ports.

FEU– Abbreviation for "Forty-Foot Equivalent Units." Refers to container size standard of 40 feet. Two 20-foot containers or TEU's equal one FEU.

Fifth Wheel – The semi-circular steel coupling device mounted on a tractor which engages and locks with a chassis semi-trailer.

FIO – See Free In and Out.

Firkin – A capacity measurement equal to one-fourth of a barrel.

Fixed Costs – Costs that do not vary with the level of activity. Some fixed costs continue even if no cargo is carried. Terminal leases, rent and property taxes are fixed costs.

Flat Car – A rail car without a roof and walls.

Flat Rack/Flat Bed Container –A container with no sides and frame members at the front and rear. Container can be loaded from the sides and top.

FMC (F.M.C.) – Federal Maritime Commission. The U.S. Governmental regulatory body responsible for administering maritime affairs including the tariff system, freight forwarder licensing, enforcing the conditions of the Shipping Act and approving conference or other carrier agreements.

FOB – See Free On Board. See also Terms of Sale, FOB.

Force Majeure – The title of a common clause in contracts, exempting the parties for non-fulfillment of their obligations as a result of conditions beyond their control, such as earthquakes, floods or war.

Fore and Aft – The direction on a vessel parallel to the center line.

Foreign Sales Corporation – Under U.S. tax law, a corporation created to obtain tax exemption on part of the earnings of U.S. products in foreign markets. Must be set-up as a foreign corporation with an office outside the USA.

FPPI– Foreign Principal Party of Interest. The party to whom final delivery or end use of the exported goods will be made, usually the buyer.

Foreign Trade Zone – A free port in a country divorced from Customs authority but under government control. Merchandise, except that which is prohibited, may be stored in the zone without being subject to import duty regulations.

Fork Lift – A machine used to pick up and move goods loaded on pallets or skids.

Foul Bill of Lading –A receipt for goods issued by a carrier with an indication that the goods were damaged when received. Compare Clean Bill of Lading.

Four-Way Pallet – A pallet designed so that the forks of a fork lift truck can be inserted from all four sides. See Fork lift.

Free Alongside (FAS) – The seller must deliver the goods to a pier and place them within reach of the ship's loading equipment. See Terms of Sale.

Free Astray – An astray shipment (a lost shipment that is found) sent to its proper destination without additional charge.⁴⁸

Free Carrier (FCA) – An Incoterm of sale meaning the seller has delivered when the cargo is given to the carrier nominated by the buyer at the named place.

Free In and Out (FIO) – Cost of loading and unloading a vessel is borne by the charterer/shipper.

Free of Particular Average (FPA) – A marine insurance term meaning that the assurer will not allow payment for partial loss or damage to cargo shipments except in certain circumstances, such as stranding, sinking, collision or fire.

Free on Board (FOB – U.S. Domestic Use) – Shipped under a rate that includes costs of delivery to and the loading onto a carrier at a specified point.

FOB – Freight Allowed:• The same as FOB named inland carrier,

except the buyer pays the transportation charge and the seller reduces the invoice by a like amount.

FOB – Freight Prepaid: • The same as FOB named inland carrier, except the seller pays the freight charges of the inland carrier.

FOB – Named Point of Exportation: • Seller is responsible for the cost of placing the goods at a named point of exportation. Some European buyers use this form when they actually mean FOB vessel.

FOB Vessel: • Seller is responsible for goods and preparation of export documentation until actually placed aboard the vessel.

Free on Board (Int'l Use) – See Terms of Sale.

Free Out (FO) – Cost of unloading a vessel is borne by the charterer.

Free Port – A restricted area at a seaport for the handling of duty-exempted import goods. Also called a Foreign Trade Zone.

Free Sale Certificate – The U.S. government does not issue certificates of free sale. However, the Food and Drug Administration, Silver Spring, Maryland, will issue, upon request, a letter of comment to the U.S. manufacturers whose products are subject to the Federal Food, Drug and Cosmetic Act or other acts administered by the agency. The letter can take the place of the certificate.

Free Time – That amount of time that a carrier's equipment may be used without incurring additional charges. (See Storage, Demurrage or Per Diem.)

Free Trade Zone – A port designated by the government of a country for duty-free entry of any non-prohibited goods. Merchandise may be stored, displayed, used for manufacturing, etc., within the zone and re-exported without duties.

Freight – Refers to either the cargo carried or the charges assessed for carriage of the cargo.

Freight Bill – A document issued by the carrier based on the bill of lading and other information; used to account for a shipment operationally, statistically, and financially. An Invoice.

Freight Forwarder – A person whose business is to act as an agent on behalf of the shipper. A freight forwarder frequently makes the booking reservation. In the United States, freight forwarders are now licensed by the FMC as "Ocean Intermediaries."

Full Shipload Lot – The amount of cargo a vessel carries or is able to carry. Practically, it is the amount of cargo which induces the specific voyage. While the cargo lot may take up the majority of the vessel's space or tonnage

capacity, it does not require a vessel's volume and weight capacity to be fully utilized.

Full and Down – An expression to describe a loaded vessel carrying cargoes of such a volume and weight that it fills all the vessel's spaces and also brings her down to her tonnage loadline. A rare but optimum revenue condition for a vessel operator.

G

Gateway – Industry-related: A point at which freight moving from one territory to another is interchanged between transportation lines.

GATT – Abbreviation for "General Agreement on Tariffs and Trade." A multilateral treaty to help reduce trade barriers between the signatory countries and to promote trade through tariff concessions. The World Trade Organization (WTO) superseded GATT in 1994.

GBL– Abbreviation for "Government Bill of Lading."

GDSM – Abbreviation for "General Department Store Merchandise." A classification of commodities that includes goods generally shipped by mass-merchandise companies. This commodity structure occurs only in service contracts.

General Order (G.O.) – When U.S. Customs orders shipments without entries to be kept in their custody in a bonded warehouse.

Generator Set (Gen Set) – A portable generator which can be attached to a refrigerated container to power the refrigeration unit during transit.

Global Maritime Intelligence Integration (GMII) –It is within the Office of the Director of National Intelligence, with the mission to ensure government-wide access to maritime information and data critical to intelligence production and to serve as the focal point and oversight agent for maritime specific information issues.

Go-Down – In the Far East, a warehouse where goods are stored and delivered.

Gooseneck The front rails of the chassis that raise above the plane of the chassis and engage in the tunnel of a container leading to the connection to tractor.

GRI – Abbreviation for "General Rate Increase." Used to describe an across-the-board tariff rate increase implemented by conference members and applied to base rates.

Gross Tonnage (GT) – Applies to vessels, not to cargo, $(0.2 + 0.02 \log_{10} V)$ where V is the volume in cubic meters of all enclosed spaces on the

vessel. Since 1994, it replaces “Gross Registered Tonnage.” An approximate conversion ratio is 1NT = 1.7GT and 1GT = 1.5DWT.

Gross Weight – Entire weight of goods, packaging and freight car or container, ready for shipment. Generally, 80,000 pounds maximum container, cargo and tractor for highway transport.

Groupage – A consolidation service, putting small shipments into containers for shipment.

GVW – Abbreviation for “Gross Vehicle Weight.” The combined total weight of a vehicle and its container, inclusive of prime mover.

H

Hague Rules, A multilateral maritime treaty adopted in 1921 (at The Hague, Netherlands). Standardizes liability of an international carrier under the Ocean B/L. Establishes a legal “floor” for B/L. See COGSA

Handymax Vessel – A dry bulk vessel of 35,000 to 49,000dwt. (Note that a “Handy” drybulk carrier is from 10,000 to 34,000dwt.) A “Handymax Tanker” is a liquid bulk carrier of 10,000 to 60,000dwt.

Harbor– Any place to which ships may resort for shelter, or to load or unload passengers or goods, or to obtain fuel, water, or supplies. This term applies to such places whether proclaimed public or not and whether natural or artificial.

Harbor Master – An official responsible for construction, maintenance, operation, regulation, enforcement, administration and management pertaining to marinas, ports and harbors.

Harmonized System of Codes (HS) – An international goods classification system for describing cargo in international trade under a single commodity–coding scheme. Developed under the auspices of the Customs Cooperations Council (CCC), an international Customs organization in Brussels, this code is a hierarchically structured product nomenclature containing approximately 5,000 headings and subheadings. It is organized into 99 chapters arranged in 22 sections. Sections encompass an industry (e.g., Section XI, Textiles and Textile Articles); chapters encompass the various materials and products of the industry (e.g., Chapter 50, Silk; Chapter 55, Manmade Staple Fibers; Chapter 57, Carpets). The basic code contains four–digit headings and six–digit subheadings. Many countries add digits for Customs tariff and statistical purposes. In the United States, duty rates will be the eight–digit level; statistical suffixes will be at the ten–digit level. The Harmonized System (HS) is the current U.S. tariff schedule (TSUSA) for imports and is the basis for the ten–digit Schedule B export code.

Hatch – The opening in the deck of a vessel; gives access to the cargo hold.

HAZ MAT – An industry abbreviation for “Hazardous Material.”

Heavy–Lift Charge – A charge made for lifting articles too heavy to be lifted by a ship’s normal tackle.

High–Density Compression – Compression of a flat or standard bale of cotton to approximately 32 pounds per cubic foot. Usually applies to cotton exported or shipped coastwise.

Hitchment – The marrying of two or more portions of one shipment that originate at different locations, moving under one bill of lading, from one shipper to one consignee. Authority for this service must be granted by tariff publication. See Bill of Lading.

Hopper Barge – A barge which loads material dumped into it by a dredger and discharges the cargo through the bottom.

House–to–House – See Door–to–Door.

House–to–Pier – Cargo loaded into a container by the shipper under shipper’s supervision. When the cargo is exported, it is unloaded at the foreign pier destination.

Humping – The process of connecting a moving rail car with a motionless rail car within a rail classification yard in order to make up a train. The cars move by gravity from an incline or “hump” onto the appropriate track.

I

I/A – Abbreviation for “Independent Action.” The right of a conference member to publish a rate of tariff rule that departs from the Agreement’s common rate or rule.

ICC – Abbreviation for:(1) “Interstate Commerce Commission” (2) “International Chamber of Commerce”

IE – Stands for “Immediate Exit.” In the U.S., Customs IE Form is used when goods are brought into the U.S. and are to be immediately re–exported without being transported within the U.S.

I.M.C.O. – International Maritime Consultative Organization. A forum in which most major maritime nations participate and through which recommendations for the carriage of dangerous goods, bulk commodities, and maritime regulations become internationally acceptable.

I.M.D.G. Code – International Maritime Dangerous Goods Code. The regulations published by the IMO for transporting hazardous materials internationally.

Immediate Exportation – An entry that allows foreign merchandise

arriving at one port to be exported from the same port without the payment of duty.

Import – To receive goods from a foreign country.

Import License – A document required and issued by some national governments authorizing the importation of goods.

In Bond – Cargo moving under Customs control where duty has not yet been paid.

In Gate – The transaction or interchange that occurs at the time a container is received by a rail terminal or water port from another carrier.

In Transit – In transit, or in passage.

In-Transit Entry (I.T.) – Allows foreign merchandise arriving at one port to be transported in bond to another port, where a superseding entry is filed.

Incentive Rate – A lower-than-usual tariff rate assessed because a shipper offers a greater volume than specified in the tariff. The incentive rate is assessed for that portion exceeding the normal volume.

INCOTERMS– The recognized abbreviation for the International Chamber of Commerce Terms of Sale. These terms were last amended, effective July 1, 1990.

Indemnity Bond – An agreement to hold a carrier harmless with regard to a liability.

Independent Action – Setting rate within a conference tariff that is different from the rate(s) for the same items established by other conference members.

Independent Tariff – Any body of rate tariffs that are not part of an agreement or conference system.

Inducement – Placing a port on a vessel's itinerary because the volume of cargo offered at that port justifies the cost of routing the vessel.

Inherent Vice – An insurance term referring to any defect or other characteristic of a product that could result in damage to the product without external cause (for example, instability in a chemical that could cause it to explode spontaneously). Insurance policies may exclude inherent vice losses.

Inland Carrier – A transportation line that hauls export or import traffic between ports and inland points.

Inspection Certificate – A certificate issued by an independent agent or firm attesting to the quality and/or quantity of the merchandise being shipped. Such a certificate is usually required in a letter of credit for commodity shipments.

Installment Shipments – Successive shipments are permitted under letters of credit. Usually they must take place within a given period of time.

Insulated Container – A container insulated on the walls, roof, floor, and doors, to reduce the effect of external temperatures on the cargo.

Insulated Container Tank – The frame of a container constructed to hold one or more thermally insulated tanks for liquids.

Insurance with Average-clause – This type of clause covers merchandise if the damage amounts to three percent or more of the insured value of the package or cargo. If the vessel burns, sinks, or collides, all losses are fully covered. In marine insurance, the word average describes partial damage or partial loss.

Insurance, All-risk – This type of insurance offers the shipper the broadest coverage available, covering against all losses that may occur in transit.

Insurance, General-Average – In water transportation, the deliberate sacrifice of cargo to make the vessel safe for the remaining cargo. Those sharing in the spared cargo proportionately cover the loss.

Insurance, Particular Average – A Marine insurance term which refers to partial loss on an individual shipment from one of the perils insured against, regardless of the balance of the cargo. Particular-average insurance can usually be obtained, but the loss must be in excess of a certain percentage of the insured value of the shipment, usually three to five percent, before a claim will be allowed by the company.

Interchange Point – A location where one carrier delivers freight to another carrier.

Intercoastal – Water service between two coasts; in the U.S., this usually refers to water service between the Atlantic and Pacific or Gulf Coasts.

Interline Freight – Freight moving from origin to destination over the Freight lines of two or more transportation carriers.

Intermediate Point – A point located en route between two other points.

Intermodal – Used to denote movements of cargo containers interchangeably between transport modes, i.e., motor, rail, water, and air carriers, and where the equipment is compatible within the multiple systems.

International Ship and Port Security Code (ISPS) – It is an amendment to the Safety of Life at Sea (SOLAS) Convention (1974/1988) on minimum security arrangements for ships, ports and government agencies. Having come into force in 2004, it prescribes responsibilities to governments,

shipping companies, shipboard personnel, and port/facility personnel to “detect security threats and take preventative measures against security incidents affecting ships or port facilities used in international trade.”

In-Transit Entry (I.T.) – Allows foreign merchandise arriving at one port to be transported in bond to another port, where a superseding entry is filed.

Invoice – An itemized list of goods shipped to a buyer, stating quantities, prices, shipping charges, etc.

Inward Foreign Manifest (IFM) – A complete listing of all cargo entering the country of discharge. Required at all world ports and is the primary source of cargo control, against which duty is assessed by the receiving country.

IPI – Abbreviation for “Inland Point Intermodal.” Refers to inland points (non-ports) that can be served by carriers on a through bill of lading.

Irrevocable Letter of Credit – Letter of credit in which the specified payment is guaranteed by the bank if all terms and conditions are met by the drawee and which cannot be revoked without joint agreement of both the buyer and the seller.

I.S.O. – International Standards Organization which deals in standards of all sorts, ranging from documentation to equipment packaging and labeling.

Issuing Bank – Bank that opens a straight or negotiable letter of credit and assumes the obligation to pay the bank or beneficiary if the documents presented are in accordance with the terms of the letter of credit.

Issuing Carrier – The carrier issuing transportation documents or publishing a tariff.

I.T. – Abbreviation for “Immediate Transport.” The document (prepared by the carrier) allows shipment to proceed from the port of entry in the U.S. to Customs clearing at the destination. The shipment clears Customs at its final destination. Also called an “In-Transit” Entry.

J

Jacket – A wood or fiber cover placed around such containers as cans and bottles.

Jacob’s Ladder – A rope ladder suspended from the side of a vessel and used for boarding.

Jettison – Act of throwing cargo or equipment (jetsam) overboard when a ship is in danger.

JIT– Abbreviation for “Just In Time.” In this method of inventory control, warehousing is minimal or non-existent; the container is the movable warehouse and must arrive “just in time;” not too early nor too late.

Joint Rate – A rate applicable from a point on one transportation line to a point on another line, made by agreement and published in a single tariff by all transportation lines over which the rate applies.

K

KT – Kilo or metric ton. 1,000 Kilos or 2,204.6 pounds.

Kilogram – 1,000 grams or 2.2046 pounds.

King Pin – A coupling pin centered on the front underside of a chassis; couples to the tractor.

Knocked Down (KD) – Articles which are taken apart to reduce the cubic footage displaced or to make a better shipping unit and are to be re-assembled

Knot – One nautical mile (6,076 feet or 1852 meters) per hour. In the days of sail, speed was measured by tossing overboard a log which was secured by a line. Knots were tied into the line at intervals of approximately six feet. The number of knots measured was then compared against time required to travel the distance of 1000 knots in the line.

Known Loss –A loss discovered before or at the time of delivery of a shipment.

L

L/C – Abbreviation for “Letter of Credit.”

Laden – Loaded aboard a vessel.

Lading – Refers to the freight shipped; the contents of a shipment.

Landbridge – Movement of cargo by water from one country through the port of another country, thence, using rail or truck, to an inland point in that country or to a third country. As example, a through movement of Asian cargo to Europe across North America.

Landed Cost – The total cost of a good to a buyer, including the cost of transportation.

Lanemeter –Primarily used to indicate the cargo capacity of a roll-on/roll-off car carrier. It is one meter of deck with a width of 2.5 to 3.0 meters.

Landing Certificate – Certificate issued by consular officials of some importing countries at the point or place of export when the subject goods are exported under bond.

Landing Gear – A support fixed on the front part of a chassis (which is retractable); used to support the front end of a chassis when the tractor has been removed.

LASH – A maritime industry abbreviation for “Lighter Aboard Ship.” A specially constructed vessel equipped with an overhead crane for lifting specially designed barges and stowing them into cellular slots in an athwartship position.

LAYCAN –Laydays/Cancelling (date): Range of dates within the hire contract must start.

LCL – Abbreviation for “Less than Container Load.” The quantity of freight which is less than that required for the application of a container load rate. Loose Freight.

Less Than Truckload – Also known as LTL or LCL.

Letter of Credit (LC) – A document, issued by a bank per instructions by a buyer of goods, authorizing the seller to draw a specified sum of money under specified terms, usually the receipt by the bank of certain documents within a given time. Some of the specific descriptions are:

Back-to-Back: • A new letter of credit issued to another beneficiary on the strength of a primary credit. The second L/C uses the first L/C as collateral for the bank. Used in a three-party transaction.

Clean: • A letter of credit that requires the beneficiary to present only a draft or a receipt for specified funds before receiving payment.

Confirmed: • An L/C guaranteed by both the issuing and advising banks of payment so long as seller’s documents are in order, and the L/C terms are met. Only applied to irrevocable L/C’s. The confirming bank assumes the credit risk of the issuing bank.

Deferred Payment: • A letter of credit issued for the purchase and financing of merchandise, similar to acceptance-type letter of credit, except that it requires presentation of sight drafts payable on an installment basis.

Irrevocable: • An instrument that, once established, cannot be modified or cancelled without the agreement of all parties concerned.

Non cumulative: • A revolving letter of credit that prohibits the amount not used during the specific period from being available afterwards.

Restricted: • A condition within the letter of credit which restricts its negotiation to a named bank.

Revocable: • An instrument that can be modified or cancelled at any moment without notice to and agreement of the beneficiary, but customarily includes a clause in the credit to the effect that any draft negotiated by a bank

prior to the receipt of a notice of revocation or amendment will be honored by the issuing bank. Rarely used since there is no protection for the seller.

Revolving: • An irrevocable letter issued for a specific amount; renews itself for the same amount over a given period.

Straight: • A letter of credit that contains a limited engagement clause which states that the issuing bank promises to pay the beneficiary upon presentation of the required documents at its counters or the counters of the named bank.

Transferable: • A letter of credit that allows the beneficiary to transfer in whole or in part to another beneficiary any amount which, in aggregate, of such transfers does not exceed the amount of the credit. Used by middlemen.

Unconfirmed: • A letter of credit forwarded to the beneficiary by the advising bank without engagement on the part of the advising bank.

Letter of Indemnity – In order to obtain the clean bill of lading, the shipper signs a letter of indemnity to the carrier on the basis of which may be obtained the clean bill of lading, although the dock or mate's receipt showed that the shipment was damaged or in bad condition.

Licenses – Some governments require certain commodities to be licensed prior to exportation or importation. Clauses attesting to compliance are often required on the B/L. – Various types issued for export (general, validated) and import as mandated by government(s).

Lien – A legal claim upon goods for the satisfaction of some debt or duty.

Lightening – A vessel discharges part of its cargo at anchor into a lighter to reduce the vessel's draft so it can then get alongside a pier.

Lighter – An open or covered barge towed by a tugboat and used mainly in harbors and inland waterways to carry cargo to/from alongside a vessel.

Lighterage – Refers to carriage of goods by lighter and the charge assessed there from.

Liner – A vessel advertising sailings on a specified trade route on a regular basis. It is not necessary that every named port be called on every voyage.

Line-Haul – Transportation from one city to another as differentiated from local switching service.

List – The amount in degrees that a vessel tilts from the vertical.

Liter – 1.06 liquid U.S. quarts or 33.9 fluid ounces.

Liquidated Damages – The penalty a seller must pay if the construction project does not meet contractual standards or deadlines.

Lloyds' Registry – An organization maintained for the surveying and classing of ships so that insurance underwriters and others may know the quality and condition of the vessels offered for insurance or employment.

LNG (Liquefied Natural Gas) – Natural gas will liquefy at a temperature of approximately -259 F or -160 C at atmospheric pressure. One cubic foot of liquefied gas will expand to approximately 600 cubic feet of gas at atmospheric pressure.

LNGC (LNG Carrier) – An ocean-going ship specially constructed to carry LNG in tanks at 160 C. Current average carrying capacity of LNGs is 125,000 cubic metres. Many LNGCs presently under construction or on order are in the 210,000 – 215,000 cubic metre range.

Load Line – The waterline corresponding to the maximum draft to which a vessel is permitted to load, either by freeboard regulations, the conditions of classification, or the conditions of service. See also Plimsoll Mark.

Local Cargo – Cargo delivered to/from the carrier where origin/destination of the cargo is in the local area.

Long Ton – 2,240 pounds

Longshoreman – Individual employed in a port to load and unload ships.

Loose – Without packing.

Low-Boy – A trailer or semi-trailer with no sides and with the floor of the unit close to the ground.

M

Malpractice – A carrier giving a customer illegal preference to attract cargo. This can take the form of a money refund (rebate); using lower figures than actual for the assessment of freight charges (undercubing); misdeclaration of the commodity shipped to allow the assessment of a lower tariff rate; waiving published tariff charges for demurrage, CFS handling or equalization; providing specialized equipment to a shipper to the detriment of other shippers, etc.

Mandamus – A writ issued by a court; requires that specific things be done.

Manifest – Document that lists in detail all the bills of lading issued by a carrier or its agent or master for a specific voyage. A detailed summary of the total cargo of a vessel. Used principally for Customs purposes.

Marine Insurance – Broadly, insurance covering loss or damage of goods at sea. Marine insurance typically compensates the owner of

merchandise for losses sustained from fire, shipwreck, etc., but excludes losses that can be recovered from the carrier.

Maritime – Business pertaining to commerce or navigation transacted upon the sea or in seaports in such matters as the court of admiralty has jurisdiction.

Maritime Domain – It is all areas and things of, on, under, relating to, adjacent to, or bordering on a sea, ocean, or other navigable waterway, including all maritime related activities, infrastructure, people, cargo, and vessels and other conveyances.

Maritime Domain Awareness (MDA) – It is the effective understanding of anything associated with the global maritime domain that could impact the security, safety, economy, or environment of the United States.

Maritime Security and Safety Information System (MSSIS) – It shares and displays vessel Automated Identification System (AIS) data real-time with multiple international users through a web-based, password-protected system.

MarView – It is an integrated, data-driven environment providing essential information to support the strategic requirements of the United States Marine Transportation System and its contribution to economic viability of the nation.

Marking– Letters, numbers, and other symbols placed on cargo packages to facilitate identification. Also known as marks.

Marlinespike – A pointed metal spike, used to separate strands of rope in splicing.

Master Inbound – U.S. Customs’ automated program under AMS. It allows for electronic reporting of inbound (foreign) cargoes in the U.S.

Mate’s Receipt – An archaic practice. An acknowledgement of cargo receipt signed by a mate of the vessel. The possessor of the mate’s receipt is entitled to the bill of lading, in exchange for that receipt.

MBM– 1,000 board feet. One MBM equals 2,265 C.M.

MCFS –Abbreviation for “Master Container Freight Station.” See CFS.

Measurement Cargo – Freight on which transportation charges are calculated on the basis of volume measurement.

Measurement Ton – 40 cubic feet.

Mechanically Ventilated Container – A container fitted with a means of forced air ventilation.

Megaports Initiative – It is a National Nuclear Security

Administration (NNSA) initiative, started in 2003. It teams up with other countries to enhance their ability to screen cargo at major international seaports. The Initiative provides radiation detection equipment and trains their personnel to specifically check for nuclear or other radioactive materials. In return, NNSA requires that data be shared on detections and seizures of nuclear or radiological material that resulted from the use of the equipment provided.

Memorandum Bill of Lading—An in-house bill of lading. A duplicate copy.

Memorandum Freight Bill – See Multiple Container load Shipment.

Meter – 39.37 inches (approximately).

Meter— 39.37 inches (approximately).

Metric Ton – 2,204.6 pounds or 1,000 kilograms.

Microbridge – A cargo movement in which the water carrier provides a through service between an inland point and the port of load/discharge. The carrier is responsible for cargo and costs from origin on to destination. Also known as IPI or Through Service.

Mile – A unit equal to 5,280 feet on land. A nautical mile is 6076.115.

Mini Landbridge –An intermodal system for transporting containers by ocean and then by rail or motor to a port previously served as an all-water move (e.g., Hong Kong to New York over Seattle).

Minimum Bill of Lading – A clause in a bill of lading which specifies the least charge that the carrier will make for issuing a lading. The charge may be a definite sum or the current charge per ton for any specified quantity.

Minimum Charge – The lowest charge that can be assessed to transport a shipment.

Mixed Container Load – A container load of different articles in a single consignment.

MLB– Abbreviation for “Mini Landbridge.”

M.M.F.B. – Midwest Motor Freight Bureau.

Modified Atmosphere – A blend of gases tailored to replace the normal atmosphere within a container.

MSA– Maritime Security Act.

MSPA—U.S. Department of Transportation program that helps to assure sufficient sealift to support the United States Armed Forces and U.S. emergency sealift needs, using commercial ships.

MTSA– The Maritime Transportation Security Act of 2002, is designed to protect ports and waterways from terrorists attacks. The law is the

U.S. equivalent of the International Ship and Port Facility Security Code (ISPS), and was fully implemented on July 1, 2004. It requires vessels and port facilities to conduct vulnerability assessments and develop security plans that may include passenger, vehicle, and baggage screening procedures; security patrols; establishing restricted areas; personnel identification procedures; access control measures; and/or installation of surveillance equipment.

Multimodal – Synonymous for all practical purposes with “Intermodal.”

MultiTank Container – A container frame fitted to accommodate two or more separate tanks for liquids.

N

National Strategy for Maritime Security In December 2004 the President directed the Secretaries of the Department of Defense and Homeland Security to lead the Federal effort to develop a comprehensive National Strategy for Maritime Security, to better integrate and synchronize the existing Department-level strategies and ensure their effective and efficient implementation. The strategy includes eight supporting plans to address the specific threats and challenges of the maritime environment and combined they present a comprehensive national effort to promote global economic stability and protect legitimate activities while preventing hostile or illegal acts within the maritime domain.

The National Plan to Achieve Maritime Domain Awareness • lays the foundation for an effective understanding of anything associated with the Maritime Domain and identifying threats as early and as distant from our shores as possible.

The Global Maritime Intelligence Integration Plan • uses existing capabilities to integrate all available intelligence regarding potential threats to U.S. interests in the Maritime Domain.

The Maritime Operational Threat Response Plan • facilitates coordinated U.S. government response to threats against the United States and its interests in the Maritime Domain by establishing roles and responsibilities, which enable the government to respond quickly and decisively.

The International Outreach and Coordination Strategy • provides a framework to coordinate all maritime security initiatives undertaken with foreign governments and international organizations, and solicits international support for enhanced maritime security.

Maritime Infrastructure Recovery Plan• recommends procedures and standards for the recovery of the maritime infrastructure following attack or similar disruption.

Maritime Transportation System Security Plan• responds to the President's call for recommendations to improve the national and international regulatory framework regarding the maritime domain.

Maritime Commerce Security Plan• establishes a comprehensive plan to secure the maritime supply chain.

The Domestic Outreach Plan• engages non-Federal input to assist with the development and implementation of maritime security policies resulting from National Security Presidential Directive 41/HSPD-13.71

Nautical Mile – Distance of one minute of longitude at the equator, approximately 6,076.115. The metric equivalent is 1852.

Naval Cooperation and Guidance for Shipping (NCAGS) – It is a naval organization with members who are trained to establish and provide advice for safe passage of merchant ships worldwide, during times of peace, tension, crisis and war. NCAGS personnel act as a liaison between military commanders and the civil authorities. During war, the NCAGS organization may be responsible for establishing a convoy.

NCB– National Cargo Bureau, established in 1952 as a non-profit marine surveying organization that inspects and surveys ships and cargoes incidental to loading and discharging. It issues certificates as evidence of compliance with the provisions of the Dangerous Cargo Act and the Rules and Regulations for Bulk Grain Cargo.

N.C.I.T.D. –National Committee on International Trade Documentation.

Negotiable Instruments – A document of title (such as a draft, promissory note, check, or bill of lading) transferable from one person to another in good faith for a consideration. Non-negotiable bills of lading are known as “straight consignment.” Negotiable bills are known as “order b/l's.”

NES– Abbreviation for “Not Elsewhere Specified.”

Nested – Articles packed so that one rests partially or entirely within another, thereby reducing the cubic-foot displacement.

Net Tare Weight – The weight of an empty cargo-carrying piece of equipment plus any fixtures permanently attached.

Net Tonnage (NT) – The replacement, since 1994, for “Net Register Tonnage.” Theoretically the cargo capacity of the ship. Sometimes used to charge fees or taxes on a vessel. The formula is $(0.2 + 0.02 \log_{10}(V_c)) V_c (4d/3D)^2$, for passenger ships the following formula is added: 1.25

$(GT+10000)/10000 (N1+(N2/10))$, where V_c is the volume of cargo holds, D is the distance between ship's bottom and the uppermost deck, d is the draught, $N1$ is the number of cabin passengers, and $N2$ is the number of deck passengers.) "Ton" is figured as a 100 cubic foot ton. An approximate conversion ratio is $1NT = 1.7GT$ and $1GT = 1.5DWT$.

Net Weight – Weight of the goods alone without any immediate wrappings, e.g., the weight of the contents of a tin can without the weight of the can.

Neutral Body – An organization established by the members of an ocean conference acts as a self-policing force with broad authority to investigate tariff violations, including authority to scrutinize all documents kept by the carriers and their personnel. Violations are reported to the membership and significant penalties are assessed.

Nippon Kaiji Kyokai (NK) – A Japanese classification society which certifies seagoing vessels for compliance to standardized rules regarding construction and maintenance.

N.M.F.C. – National Motor Freight Classification.

NOI– Abbreviation for "Not Otherwise Indexed."

NOIBN–Abbreviation for "Not Otherwise Indexed By Name."

Nomenclature of the Customs Cooperation Council – The Customs tariff used by most countries worldwide. It was formerly known as the Brussels Tariff Nomenclature and is the basis of the commodity coding system known as the Harmonized System.

Non-Dumping Certificate – Required by some countries for protection against the dumping of certain types of merchandise or products.

Non-Vessel Operating Common Carrier (NVOCC) – A cargo consolidator in ocean trades who will buy space from a carrier and sub-sell it to smaller shippers. The NVOCC issues bills of lading, publishes tariffs and otherwise conducts itself as an ocean common carrier, except that it will not provide the actual ocean or intermodal service.

NOR– Notice of Readiness (when the ship is ready to load.)

NOS – Abbreviation for "Not Otherwise Specified."

Nose – Front of a container or trailer–opposite the tail.

No-show – Cargo which has been booked but does not arrive in time to be loaded before the vessel sails. See also "Windy Booking."

N.P.C.F.B. – North Pacific Coast Freight Bureau.

NRT – Net Register Tons see "Net Tonnage" Theoretically the cargo capacity of the ship. Sometimes used to charge fees or taxes on a vessel.

O

Ocean Bill of Lading (Ocean B/L) – A contract for transportation between a shipper and a carrier. It also evidences receipt of the cargo by the carrier. A bill of lading shows ownership of the cargo and, if made negotiable, can be bought, sold or traded while the goods are in-transit.

ODS– Abbreviation for “Operating Differential Subsidy.” An amount of money the U.S. government paid U.S. shipping companies that qualify for this subsidy. The intent was to help offset the higher cost of operating a U.S.–flag vessel. The ODS program is administered by the U.S. Maritime Administration and is being phased out.

O.E.C.D. – Office of Global Maritime Situational Awareness (OGMSA). It is the United States initiative to establish a world-wide maritime information exchange that encompasses both public and private sector entities with maritime interests. The GMSA supports maritime domain awareness by making maritime related information available and searchable. Organization of Economic Cooperation and Development, headquartered in Paris with membership consisting of the world’s developed nations.

On Board – A notation on a bill of lading that cargo has been loaded on board a vessel. Used to satisfy the requirements of a letter of credit, in the absence of an express requirement to the contrary.

On Deck – A notation on a bill of lading that the cargo has been stowed on the open deck of the ship.

Open Account – A trade arrangement in which goods are shipped to a foreign buyer without guarantee of payment.

Open Insurance Policy – A marine insurance policy that applies to all shipments made by an exporter over a period of time rather than to one shipment only.

Open Sea – The water area of the open coast seaward of the ordinary low-water mark, or seaward of inland waters.

Open Top Container – A container fitted with a solid removable roof, or with a tarpaulin roof so the container can be loaded or unloaded from the top.

Operating Ratio – A comparison of a carrier’s operating expense with its net sales. The most general measure of operating efficiency.

O.P.I.C. – Overseas Private Investment Corporation, an agency of the U.S. government which helps U.S. businesses invest overseas.

Optimum Cube – The highest level of cube utilization that can be achieved when loading cargo into a container.

Order–Notify (O/N) – A bill of lading term to provide surrender of the original bill of lading before freight is released; usually associated with a shipment covered under a letter of credit.

ORFS – Abbreviation for “Origin Rail Freight Station.” Same as CFS at origin except an ORFS is operated by the rail carrier participating in the shipment.

Origin – Location where shipment begins its movement.

Original Bill of Lading (OBL) – A document which requires proper signatures for consummating carriage of contract. Must be marked as “original” by the issuing carrier.

OS&D – Abbreviation for “Over, Short or Damaged” Usually discovered at cargo unloading.

Out Gate – Transaction or interchange that occurs at the time a container leaves a rail or water terminal.

Overcharge – To charge more than the proper amount according to the published rates.

Overheight Cargo – Cargo more than eight feet high which thus cannot fit into a standard container.

Overland Common Point (OCP) – A term stated on the bills of lading offering lower shipping rates to importers east of the Rockies, provided merchandise from the Far East comes in through the West Coast ports. OCP rates were established by U.S. West Coast steamship companies in conjunction with western railroads so that cargo originating or destined for the American Midwest and East would be competitive with all–water rates via the U.S. Atlantic and Gulf ports. Applies to eastern Canada.

Owner Code (SCAC) – Standard Carrier Abbreviation Code identifying an individual common carrier. A three letter carrier code followed by a suffix identifies the carrier’s equipment. A suffix of “U” is a container and “C” is a chassis.

P

P&I – Abbreviation for “Protection and Indemnity,” an insurance term.

Packing List– Itemized list of commodities with marks/numbers but no cost values indicated.

PADAG – Abbreviation for “Please Authorize Delivery Against Guarantee.” A request from the consignee to the shipper to allow the carrier or agent to release cargo against a guarantee, either bank or personal. Made when the consignee is unable to produce original bills of lading.

Paired Ports – A U.S. Customs program wherein at least two

designated Customs ports will enter cargo that arrives at either port without the necessity of an in-bound document.

Pallet—A platform with or without sides, on which a number of packages or pieces may be loaded to facilitate handling by a lift truck.

Panamax Tanker— A liquid cargo vessel of 50,000 to 70,000dwt.

Panamax Vessel — The largest size vessel that can traverse the Panama Canal. Current maximum dimensions are: Length 294.1 meters (965 feet); width 32.3 meters (106 feet); draft 12.0 meters (39.5 feet) in tropical fresh water; height 57.91 meters (190 feet) above the water.

Paper Ramp —A technical rail ramp, used for equalization of points not actually served.

Paper Rate —A published rate that is never assessed because no freight moves under it.

Parcel Receipt — An arrangement whereby a steamship company, under rules and regulations established in the freight tariff of a given trade, accepts small packages at rates below the minimum bill of lading, and issues a parcel receipt instead of a bill of lading.

Partial Shipments — Under letters of credit, one or more shipments are allowed by the phrase “partial shipments permitted.”

Particular Average — See Insurance, Particular Average.

Payee — A party named in an instrument as the beneficiary of the funds. Under letters of credit, the payee is either the drawer of the draft or a bank.

Payer — A party responsible for the payment as evidenced by the given instrument. Under letters of credit, the payer is the party on whom the draft is drawn, usually the drawee bank.

Per Diem — A charge, based on a fixed daily rate.

Perils of the Sea — Those causes of loss for which the carrier is not legally liable. The elemental risks of ocean transport.

Phytosanitary Inspection Certificate — A certificate issued by the U.S. Department of Agriculture to satisfy import regulations of foreign countries; indicates that a U.S. shipment has been inspected and found free from harmful pests and plant diseases.

Pickup — The act of calling for freight by truck at the consignor’s shipping platform.

Pier —The structure perpendicular to the shoreline to which a vessel is secured for the purpose of loading and unloading cargo.

Pier-to-House — A shipment loaded into a container at the pier or terminal, thence to the consignee’s facility.

Pier-to-Pier – Containers loaded at port of loading and discharged at port of destination.

Piggy Packer – A mobile container-handling crane used to load/unload containers to/from railcars.

Piggyback – A transportation arrangement in which truck trailers with their loads are moved by train to a destination. Also known as Rail Pigs.

Place of Delivery – Place where cargo leaves the care and custody of carrier.

Place of Receipt – Location where cargo enters the care and custody of carrier.

Plimsoll Mark – A series of horizontal lines, corresponding to the seasons of the year and fresh or saltwater, painted on the outside of a ship marking the level which must remain above the surface of the water for the vessel's stability.

POD – Abbreviation for:– Port of Discharge.– Port of Destination.– Proof of Delivery. A document required from the carrier or driver for proper payment.

Point of Origin – The place at which a shipment is received by a carrier from the shipper.

POL – Abbreviation for:– Port of Loading.– Petroleum, Oil, and Lubricants.

Pomerene Act, Also known as (U.S.) – Federal Bill of Lading Act of 1916.U.S. federal law enacting conditions by which a B/L may be issued. Penalties for issuing B/L's containing false data include monetary fines and/or imprisonment.

Port– Harbor with piers or docks.– Left side of a ship when facing forward.– Opening in a ship's side for handling freight.

Port of Call –Port where a ship discharges or receives traffic.

Port of Entry – Port where cargo is unloaded and enters a country.

Port of Exit – Place where cargo is loaded and leaves a country.

PPI– Principal Party of Interest (see USPPI and FPPI).

Port Facility Security Officer – Is the person designated as responsible for the development, implementation, revision and maintenance of the port facility security plan and for liaison with the ship security officers and company security officers.

Port Facility Security Plan – Is a plan developed to ensure the application of measures designed to protect persons on board, cargo, cargo transport units and ship's stores within the port facility from the risks of a security incident.

Port Security – It is the defense, law and treaty enforcement, and counterterrorism activities that fall within the port and maritime domain. It includes the protection of the seaports themselves, the protection and inspection of the cargo moving through the ports, and maritime security.

Port Security Grant Program (PSGP) – As a result of the Department of Homeland Security Appropriations Act of 2005, fiscal year grant funding is provided annually to the Nation’s most at-risk seaports for physical security enhancements 81 to be used in the protection of critical port infrastructure from terrorism. PSGP funds help ports enhance their risk management capabilities, domain awareness, training and exercises, and capabilities to prevent, detect, respond to, and recover from attacks involving improvised explosive devices and other non-conventional weapons.

Pratique Certificate – Lifts temporary quarantine of a vessel; granted pratique by Health Officer.

Pre-cooling – A process employed in the shipment of citrus fruits and other perishable commodities. The fruit is packed and placed in a cold room from which the heat is gradually extracted. The boxes of fruit are packed in containers that have been thoroughly cooled and transported through to destination without opening the doors.

Prepaid (Ppd.) – Freight charges paid by the consignor (shipper) prior to the release of the bills of lading by the carrier.

Product Tanker – A liquid cargo vessel of 10,000 to 60,000dwt. Also referred to as a Handymax Tanker. Often built with many segregated cargo tanks and thus sometimes called a “drugstore tanker.”

Pro Forma – A Latin term meaning “For the sake of form.”

Pro Forma Invoice – An invoice provided by a supplier prior to the shipment of merchandise, informing the buyer of the kinds and quantities of goods to be sent, their value, and specifications (weight, size, etc.).

Pro Rata – A Latin term meaning “In proportion.”

Project Rate – Single tariff item, established to move multiple commodities needed for a specified project, usually construction.

Public Service Commission – A name usually given to a State body having control or regulation of public utilities.

Publishing Agent – Person authorized by transportation lines to publish tariffs or rates, rules, and regulations for their account.

Pulp Temperature – Procedure where carrier tests the temperature of the internal flesh of refrigerated commodities to assure that the temperature at time of shipment conforms to prescribed temperature ranges.

Pup – A short semi-trailer used jointly with a dolly and another semi-trailer to create a twin trailer.

Q

Quarantine – A restraint placed on an operation to protect the public against a health hazard. A ship may be quarantined so that it cannot leave a protected point. During the quarantine period, the Q flag is hoisted.

Quoin – A wedge-shaped piece of timber used to secure barrels against movement.

Quota – The quantity of goods that may be imported without restriction during a set period of time.

Quotation – An offer to sell goods at a stated price and under stated terms.

Quay – A structure attached to land to which a vessel is moored. See also Pier and Dock.

R

Rag Top – A slang term for an open-top trailer or container with a tarpaulin cover.

Rail Division – The amount of money an ocean carrier pays to the railroad for overland carriage.

Rail Grounding – The time that the container was discharged (grounded) from the train.

Ramp – Railroad terminal where containers are received or delivered and trains loaded or discharged. Originally, trailers moved onto the rearmost flatcar via a ramp and driven into position in a technique known as “circus loading.” Most modern rail facilities use lifting equipment to position containers onto the flatcars.

Ramp-to-Door – A movement where the load initiates at an origin rail ramp and terminates at a consignee’s door.

Ramp-to-Ramp – A movement of equipment from an origin rail ramp to a destination rail ramp only.

Rate Basis – A formula of the specific factors or elements that control the making of a rate. A rate can be based on any number of factors (i.e., weight, measure, equipment type, package, box, etc.).

Reasonableness – Under ICC and common law, the requirement that a rate not be higher than is necessary to reimburse the carrier for the actual cost of transporting the traffic and allow a fair profit.

Rebate – An illegal form of discounting or refunding that has the net effect of lowering the tariff price. See also Malpractice.

Reconsignment – Changing the consignee or destination on a bill of lading while shipment is still in transit. Diversion has substantially the same meaning.

Recourse – A right claim against the guarantors of a loan or draft or bill of exchange.

Red Label – A label required on shipments of flammable articles.

Reefer – Refrigerated container.

Related Points – A group of points to which rates are made the same as or in relation to rates to other points in group.

RFP – Request for Proposal

RFQ – Request for quotation.

Relay – To transfer containers from one ship to another when both vessels are controlled by the same network (carrier) manager.

Remittance – Funds sent by one person to another as payment.

Restricted Articles – Articles handled only under certain conditions.

Revenue Ton (RT) – A ton on which the shipment is freighted. If cargo is rated as weight or measure (W/M), whichever produces the highest revenue will be considered the revenue ton. Weights are based on metric tons and measures are based on cubic meters. RT=1 MT or 1 CBM.

Reverse IPI – An inland point provided by an all-water carrier's through bill of lading in the U.S. by first discharging the container in an East Coast port.

“Ro/Ro” – A shortening of the term, “Roll On/Roll Off.” A method of ocean cargo service using a vessel with ramps which allows wheeled vehicles to be loaded and discharged without cranes. Also refers to any specialized vessel designed to carry Ro/Ro cargo.

Roll – To re-book cargo to a later vessel.

Rolling – The side-to-side (athwartship) motion of a vessel.

Route – The manner in which a shipment moves; i.e., the carriers handling it and the points at which the carriers interchange.

Running Gear – Complementary equipment for terminal and over-the-road handling containers.

RVNX – Abbreviation for “Released Value Not Exceeding.” Usually used to limit the value of goods transported. The limitation refers to carrier liability when paying a claim for lost or damaged goods.

S

Sanction – An embargo imposed by a Government against another country.

SAFE Port Act – Is the Security and Accountability For Every Port

Act of 2006 which is an Act of Congress in the United States that covers port security.

Schedule B – The Statistical Classification of Domestic and Foreign Commodities Exported from the United States.

Sea-Bee Vessels – Ocean vessels constructed with heavy-duty submersible hydraulic lift or elevator system at the stern of the vessel. The Sea-Bee system facilitates forward transfer and positioning of barges. Sea-Bee barges are larger than LASH barges. The Sea-Bee system is no longer used.

Sea Waybill – Document indicating the goods were loaded onboard when a document of title (b/L) is not needed. Typically used when a company is shipping goods to itself.

Seawaymax Vessel – The largest vessel that can transit the locks of the St. Lawrence Seaway. Length is 226 meters (740 feet); Beam is 24 meters (78 feet); Draft is 7.92 meters (26 feet).

Seaworthiness – The fitness of a vessel for its intended use.

Secure Freight Initiative (SFI) – It is a key provision of the SAFE Port Act of 2006 and is part of the International Container Security scanning project. It builds on its current partnership between the Container Security Initiative and the Megaports Initiative. It expands the use of scanning and imaging equipment to examine more U.S. bound containers, not just those determined to be high risk.

Security Level 1 – Is the level for which minimum appropriate protective security measures shall be maintained at all times.

Security Level 2 – Is the level for which appropriate additional protective security measures shall be maintained for a period of time as a result of heightened risk of a security incident.

Security Level 3– Is the level for which further specific protective security measures shall be maintained for a limited period of time when a security incident is probable or imminent, although it may not be possible to identify the specific target.

SED – U.S. Commerce Department document, “Shipper’s Export Declaration.”

Service – A string of vessels which makes a particular voyage and serves a particular market.

Service Contract – As provided in the Shipping Act of 1984, a contract between a shipper (or a shippers association) and an ocean common carrier (or conference) in which the shipper makes a commitment to provide a certain minimum quantity of cargo or freight revenue over a fixed time

period, and the ocean common carrier or conference commits to a certain rate or rate schedule as well as a defined service level (such as assured space, transit time, port rotation or similar service features). The contract may also specify provisions in the event of nonperformance on the part of either party.

SHEX – Saturday and Holidays Excluded.

SHINC – Saturday and Holidays Included.

Ship(1) – A vessel of considerable size for deep-water navigation. (2) A sailing vessel having three or more square-rigged masts.

Ship Chandler – An individual or company selling equipment and supplies for ships.

Ship Demurrage – A charge for delaying a steamer beyond a stipulated period.

Ship's Bells – Measure time onboard ship. One bell sounds for each half hour. One bell means 12:30, two bells mean 1:00, three bells mean 1:30, and so on until 4:00 (eight bells). At 4:30 the cycle begins again with one bell.

Ship Load – The amount of cargo a ship carries or is able to carry. See also "Full Shipload Lot" and "Full and Down."

Ship's Manifest – A statement listing the particulars of all shipments loaded for a specified voyage.

Shipment – The tender of one lot of cargo at one time from one shipper to one consignee on one bill of lading.

Ship Security Officer – Is the person on board the vessel, accountable to the master, designated by the Company as responsible for the security of the ship, including implementation and maintenance of the ship security plan and for the liaison with the company security officer and the port facility security officers.

Ship Security Plan – Is a plan developed to ensure the application of measures on board the ship and designed to protect persons on board, cargo, cargo transport units, ship's stores or the ship from the risks of a security incident.

Ship Types

Barge Carriers: • Ships designed to carry barges; some are fitted to act as full containerships and can carry a varying number of barges and containers at the same time. At present this class includes two types of vessels LASH and Sea-Bee.

Bulk Carriers: • All vessels designed to carry bulk homogeneous cargo without mark and count such as grain, fertilizers, ore, and oil.

Combination Passenger and Cargo Vessels: • Ships with a capacity for 13 or more passengers and any form of cargo or freight.

Freighters: • Breakbulk vessels both refrigerated and unrefrigerated, containerships, partial containerships, roll-on/roll-off vessels, and barge carriers. A general cargo vessel designed to carry heterogeneous mark and count cargoes.

Full Containerships: • Ships equipped with permanent container cells, with little or no space for other types of cargo.

General Cargo Carriers: • Breakbulk freighters, car carriers, cattle carriers, pallet carriers and timber carriers. A vessel designed to carry heterogeneous mark and count cargoes.

Partial Containerships: • Multipurpose containerships where one or more but not all compartments are fitted with permanent container cells. Remaining compartments are used for other types of cargo.

Roll-on/Roll-off vessels: • Ships specially designed to carry wheeled containers or trailers using interior ramps. Includes all forms of car and truck carriers.

Tankers: • Ships fitted with tanks to carry liquid bulk cargo such as crude petroleum and petroleum products, chemicals, Liquefied gasses (LNG and LPG), wine, molasses, and similar product tankers.

Ship's Tackle – All rigging, cranes, etc., utilized on a ship to load or unload cargo.

Shipper The person or company who is usually the supplier or owner of commodities shipped. Also called Consignor.

Shippers Association – A non-profit entity that represents the interests of a number of shippers. The main focus of shippers associations is to pool the cargo volumes of members to leverage the most favorable service contract rate levels.

Shipper's Export Declaration – SED, "Ex Dec" A joint Bureau of the Census' International Trade Administration form used for compiling U.S. exports. It is completed by a shipper and shows the value, weight, destination, etc., of export shipments as well as Schedule B commodity code.

Shipper's Instructions – Shipper's communication(s) to its agent and/or directly to the international water-carrier. Instructions may be varied, e.g., specific details/clauses to be printed on the B/L, directions for cargo pickup and delivery.

Shipper's Letter of Instructions for issuing an Air Waybill – The document required by the carrier or freight forwarders to obtain (besides the data needed) authorization to issue and sign the air waybill in the name of the shipper.

Shipper's Load & Count (SL&C) – Shipments loaded and sealed by shippers and not checked or verified by the carriers.

Shipping Act of 1916 – The act of the U.S. Congress (1916) that created the U.S. Shipping Board to develop water transportation, operate the merchant ships owned by the government, and regulate the water carriers engaged in commerce under the flag of the United States. As of June 18, 1984, applies only to domestic offshore ocean transport.

Shipping Act of 1984 – Effective June 18, 1984, describes the law covering water transportation in the U.S. foreign trade.

Shipping Act of 1998 – Amends the Act of 1984 to provide for confidential service contracts and other items.

Shipping Order – Shipper's instructions to carrier for forwarding goods; usually the triplicate copy of the bill of lading.

Shore – A prop or support placed against or beneath anything to prevent sinking or sagging.

Short Sea Shipping – SSS (European-EU) – Short Sea Shipping means the movement of cargo by sea between ports situated in geographical Europe or between those ports situated in non-European countries having a coastline on the enclosed seas bordering Europe (Baltic, Mediterranean and Black). It is a successful mode of transport in Europe.

Short Ton (ST) – A weight unit of measure equal to 2,000 pounds.

Shrink Wrap – Polyethylene or similar substance heat-treated and shrunk into an envelope around several units, thereby securing them as a single pack for presentation or to secure units on a pallet.

Side Loader – A lift truck fitted with lifting attachments operating to one side for handling containers.

Side-Door Container – A container fitted with a rear door and a minimum of one side door.

Sight Draft – A draft payable upon presentation to the drawee.

SIGTTO – Society of International Gas Transport and Terminal Operators, an industry organization promoting the exchange of safety information concerning the processing, transporting and handling of liquefied gases.

Skids – Battens, or a series of parallel runners, fitted beneath boxes or packages to raise them clear of the floor to permit easy access of forklift blades or other handling equipment.

SL/W – Shippers load and count. All three clauses are used as needed on the bill of lading to exclude the carrier from liability when the cargo is loaded by the shipper.

Sleepers – Loaded containers moving within the railroad system that are not clearly identified on any internally generated reports.

Sling – A wire or rope contrivance placed around cargo and used to load or discharge it to/from a vessel.

Slip – A vessel's berth between two piers.

SPA– Abbreviation for "Subject to Particular Average." See also Particular Average.

Spine Car – An articulated five-platform railcar. Used where height and weight restrictions limit the use of stack cars. It holds five 40-foot containers or combinations of 40- and 20-foot containers.

Spotting – Placing a container where required to be loaded or unloaded.

Spreader – A piece of equipment designed to lift containers by their corner castings.

SSHEx – Abbreviation for Saturdays, Sundays and Holidays Excepted. Refers to loading and discharging of cargo as agreed to in the charter party. This indicates when time does not count in the calculation of demurrage and despatch.

Stability – The force that holds a vessel upright or returns it to upright position if keeled over. Weight in the lower hold increases stability. A vessel is stiff if it has high stability, tender if it has low stability. In a ship, stability is indicated by several characteristics. Initial stability is measured by the metacentric height; also known as "GM." If GM is low, the vessel makes long slow rolls, and is considered tender. When GM is too high, the vessel is considered stiff, and may return violently to the upright position when rolling, with possible damage to cargo and injury to passengers and crew. Other stability considerations include the vessel's range of stability, maximum righting arm, and the angle of heel at which the maximum righting arm occurs.

Stack Car – An articulated five-platform rail car that allows containers to be double stacked. A typical stack car holds ten 40-foot equivalent units (FEU's).

Stacktrain – A rail service whereby rail cars carry containers stacked two high on specially operated unit trains. Each train includes up to 35 articulated multi-platform cars. Each car is comprised of 5 well-type platforms upon which containers can be stacked. No chassis accompany containers.

Standard Industrial Classification (SIC) – A standard numerical code used by the U.S. Government to classify products and services.

Standard International Trade Classification (SITC) – A standard numeric code developed by the United Nations to classify commodities used in international trade, based on a hierarchy.

Starboard – The right side of a ship when facing the bow.

Statute Of Limitation – A law limiting the time in which claims or suits may be instituted.

STCC – Abbreviation for “Standard Transportation Commodity Code.”

Steamship Conference – A group of vessel operators joined together for the purpose of establishing freight rates.

Steamship Guarantee – An indemnity issued to the carrier by a bank; protects the carrier against any possible losses or damages arising from release of the merchandise to the receiving party. This instrument is usually issued when the bill of lading is lost or is not available.

Stern – The end of a vessel. Opposite of bow.

Stevedore– Individual or firm that employs longshoremen and who contracts to load or unload the ship.

Store–Door Pick–up Delivery – A complete package of pick up or delivery services performed by a carrier from origin to final consumption point.

Stowage–A marine term referring to loading freight into ships’ holds.

STC – Said to contain.

Straddle Carrier – Mobile truck equipment with the capacity for lifting a container within its own framework.

Straight Bill of Lading –A non–negotiable bill of lading which states a specific identity to whom the goods should be delivered. See Bill of Lading.

Stripping– Removing cargo from a container (devanning).

Stuffing – Putting cargo into a container.

Subrogate– To put in place of another; i.e., when an insurance company pays a claim it is placed in the same position as the payee with regard to any rights against others.

Suezmax Tanker – A tanker of 120,000 to 199,000dwt.

Surface Transportation Board (STB) – The U.S. federal body charged with enforcing acts of the U.S. Congress that affect common carriers in interstate commerce. STB replaced the Interstate Commerce Commission (ICC) in 1997.

Sufferance Wharf – A wharf licensed and attended by Customs authorities.

Supply Chain – A logistical management system which integrates the

sequence of activities from delivery of raw materials to the manufacturer through to delivery of the finished product to the customer into measurable components. “Just in Time” is a typical value-added example of supply chain management.

Surcharge – An extra or additional charge

Surtax – An additional extra tax.

T

T.&E. – Abbreviation for “Transportation and Exportation.” Customs form used to control cargo movement from port of entry to port of exit, meaning that the cargo is moving from one country, through the United States, to another country.

Tail – Rear of a container or trailer—opposite the front or nose.

Tare Weight – In railcar or container shipments, the weight of the empty railcar or empty container.

Tariff (Trf.) – A publication setting forth the charges, rates and rules of transportation companies.

Telex – Used for sending messages to outside companies. Messages are transmitted via Western Union, ITT and RCA. Being replaced by fax and internet.

Temperature Recorder – A device to record temperature in a container while cargo is en route.

Tender – The offer of goods for transportation or the offer to place cars or containers for loading or unloading.

Tenor – Time and date for payment of a draft.

Terminal – An assigned area in which containers are prepared for loading into a vessel, train, truck, or airplane or are stacked immediately after discharge from the vessel, train, truck, or airplane.

Terminal Charge – A charge made for a service performed in a carrier’s terminal area.

Terms of Sale – The point at which sellers have fulfilled their obligations so the goods in a legal sense could be said to have been delivered to the buyer. They are shorthand expressions that set out the rights and obligations of each party when it comes to transporting the goods. Following, are the thirteen terms of sale in international trade as Terms of Sale reflected in the recent amendment to the International chamber of Commerce Terms of Trade (INCOTERMS), effective July 1990: exw, fca, fas, fob, cfr, cif, cpt, cip, daf, des, deq, ddu and ddp.

EXW– (Ex Works) (...Named Place):• A Term of Sale which means that the seller fulfills the obligation to deliver when he or she has made the

goods available at his/her premises (i.e., works, factory, warehouse, etc.) to the buyer. In particular, the seller is not responsible for loading the goods in the vehicle provided by the buyer or for clearing the goods for export, unless otherwise agreed. The buyer bears all costs and risks involved in taking the goods from the seller's premises to the desired destination. This term thus represents the minimum obligation for the seller.

FCA – (Free Carrier) (... Named Place): • A Term of Sale which means the seller fulfills their obligation when he or she has handed over the goods, cleared for export, into the charge of the carrier named by the buyer at the named place or point. If no precise point is indicated by the buyer, the seller may choose, within the place or range stipulated, where the carrier should take the goods into their charge.

FAS– (Free Alongside Ship) (...Named Port of Shipment): • A Term of Sale which means the seller fulfills his obligation to deliver when the goods have been placed alongside the vessel on the quay or in lighters at the named port of shipment. This means that the buyer has to bear all costs and risks of loss of or damage to the goods from that moment.

FOB – (Free On Board) (...Named Port of Shipment): • An International Term of Sale that means the seller fulfills his or her obligation to deliver when the goods have passed over the ship's rail at the named port of shipment. This means that the buyer has to bear all costs and risks to loss of or damage to the goods from that point. The FOB term requires the seller to clear the goods for export. (Note: The U.S. Government sometimes uses a made-up term "FOB Destination" to require the seller to take responsibility for delivering the goods at destination rather than the correct Incoterm of DDP.)

CFR – (Cost and Freight) (...Named Port of Destination):• A Term of Sale where the seller pays the costs and freight necessary to bring the goods to the named port of destination, Terms of Sale but the risk of loss of or damage to the goods, as (continued) well as any additional costs due to events occurring after the time the goods have been delivered on board the vessel, is transferred from the seller to the buyer when the goods pass the ship's rail in the port of shipment. The CFR term requires the seller to clear the goods for export.

CIF – (Cost, Insurance and Freight) (...Named Place of Destination):• A Term of Sale where the seller has the same obligations as under the CFR but also has to procure marine insurance against the buyer's risk of loss or damage to the goods during the carriage. The seller contracts for insurance

and pays the insurance premium. The CIF term requires the seller to clear the goods for export.

CPT– (Carriage Paid To) (...Named Place of Destination): • A Term of Sale which means the seller pays the freight for the carriage of the goods to the named destination. The risk of loss of or damage to the goods, as well as any additional costs due to events occurring after the time the goods have been delivered to the carrier, is transferred from the seller to the buyer when the goods have been delivered into the custody of the carrier. If subsequent carriers are used for the carriage to the agreed upon destination, the risk passes when the goods have been delivered to the first carrier. The CPT term requires the seller to clear the goods for export.

CIP – (Carriage and Insurance Paid To) (...Named Place of Destination): • A Term of Sale which means the seller has the same obligations as under CPT, but with the addition that the seller has to procure cargo insurance against the buyer's risk of loss of or damage to the goods during the carriage. The seller contracts for insurance and pays the insurance premium. The buyer should note that under the CIP term the seller is required to obtain insurance only on minimum coverage. The CIP term requires the seller to clear the goods for export.

DAF – (Delivered At Frontier) (...Named Place): • A Term of Sale which means the sellers fulfill their obligation to deliver when the goods have been made available, cleared for export, at the named point and placed at the frontier, but before the customs Terms of Sale border of the adjoining country.

DDU – (Delivered Duty Unpaid) (...Named Port of Destination): • A Term of Sale where the seller fulfills his obligation to deliver when the goods have been made available at the named place in the country of importation. The seller has to bear the costs and risks involved in bringing the goods thereto (excluding duties, taxes and other official charges payable upon importation) as well as the costs and risks of carrying out customs formalities. The buyer has to pay any additional costs and to bear any risks caused by failure to clear the goods for in time.

DDP – (Delivered Duty paid) (...Named Port of Destination): • “Delivered Duty Paid” means that the seller fulfills his obligation to deliver when the goods have been made available at the named place in the country of importation. The seller has to bear the risks and costs, including duties, taxes and other charges of delivering the goods thereto, clear for importation. While the EXW term represents the minimum obligation for the seller, DDP represents the maximum.

DES – (Delivered Ex Ship) (...Named Port of Destination): • A Term of Sale where the seller fulfills his/her obligation to deliver when the goods have been made available to the buyer on board the ship, uncleared for import at the named port of destination. The seller has to bear all the costs and risks involved in bringing the goods to the named port destination.

DEQ – (Delivered Ex Quay, [Duty Paid]) (...Named Port of Destination): • A Term of Sale which means the DDU term has been fulfilled when the goods have been available to the buyer on the quay (wharf) at the named port of destination, cleared for importation. The seller has to bear all risks and costs including duties, taxes and other charges of delivering the goods thereto.

TBN – To Be Nominated (when the name of a ship is still unknown).

TEU – Abbreviation for “Twenty foot Equivalent Unit.”

Third Party Logistics (3PL) – A company that provides logistics services to other companies for some or all of their logistics needs. It typically includes warehousing and transportation services. Most 3PL’s also have freight forwarding licenses.

Tonnage – 100 cubic feet.

Through Rate – The total rate from the point of origin to final destination.

Throughput Charge – The charge for moving a container through a container yard off or onto a ship.

Time Charter – A contract for leasing between the ship owners and the lessee. It would state, e.g., the duration of the lease in years or voyages.

Time Draft – A draft that matures either a certain number of days after acceptance or a certain number of days after the date of the draft.

TIR– Transport International par la Route. Road transport operating agreement among European governments and the United States for the international movement of cargo by road. Display of the TIR carnet allows sealed containerloads to cross national frontiers without inspection.

TOFC – Abbreviation for “Trailer on Flat Car.” The movement of a highway trailer on a railroad flatcar. Also known as Piggyback.

Ton-Mile – A unit used in comparing freight earnings or expenses. The amount earned from the cost of hauling a ton of freight one mile. The movement of a ton of freight one mile.

Tonnage – Generally refers to freight handled.

Top-Air Delivery – A type of air circulation in a container. In top air units, air is drawn from the bottom of the container, filtered through the

evaporator for cooling and then forced through the ducted passages along the top of the container. This type of airflow requires a special loading pattern.

Towage – The charge made for towing a vessel.

Tractor – Unit of highway motive power used to pull one or more trailers/containers.

Trade Acceptance – A time or a date draft that has been accepted by the buyer (the drawee) for payment at maturity.

Traffic – Persons and property carried by transport lines.

Trailer – The truck unit into which freight is loaded as in tractor trailer combination. See Container.

Tramp Line – An ocean carrier company operating vessels not on regular runs or schedules. They call at any port where cargo may be available.

Transport – To move cargo from one place to another.

Transportation & Exit (T&E) – Allows foreign merchandise arriving at one port to be transported in bond through the U.S. to be exported from another port, without paying duty.

Transportation Worker Identification Credential (TWIC) – Established by Congress through the Maritime Transportation Security Act (MTSA) and is administered by the Transportation Security Administration (TSA) and U.S. Coast Guard. TWICs are tamper-resistant biometric credentials that will be issued to all credentialed merchant mariners and to workers who require unescorted access to secure areas of ports, vessels or outer continental shelf facilities.

Transship – To transfer goods from one transportation line to another, or from one ship to another.

Transshipment Port – Place where cargo is transferred to another carrier.

Trust Receipt – Release of merchandise by a bank to a buyer while the bank retains title to the merchandise. The goods are usually obtained for manufacturing or sales purposes. The buyer is obligated to maintain the goods (or the proceeds from their sales) distinct from the remainder of the assets and to hold them ready for repossession by the bank.

Turnaround – In water transportation, the time it takes between the arrival of a vessel and its departure.

Twist Locks – A set of four twistable bayonet type shear keys used as part of a spreader to pick up a container or as part of a chassis to secure the containers.

Two-Way Pallet – A pallet so designed that the forks of a fork lift truck can be inserted from two sides only.

U

UCP – Abbreviation for the “Uniform Customs and Practice for Documentary Credits,” published by the International Chamber of Commerce. This is the most frequently used standard for making payments in international trade; e.g., paying on a Letter of Credit. It is most frequently referred to by its shorthand title: UCP No. 500. This revised publication reflects recent changes in the transportation and banking industries, such as electronic transfer of funds.

UFC – Abbreviation for “Uniform Freight Classification.”

ULCC– Ultra Large Crude Carrier. A tanker in excess of 320,000dwt.

Ullage – The space not filled with liquid in a drum or tank.

UN/EDIFACT – United Nations EDI for Administration, Commerce and Transport. EDI Standards are developed and supported by the UN for electronic message (data) interchange on an international level.

Unclaimed Freight – Freight that has not been called for or picked up by the consignee or owner.

Undercharge –To charge less than the proper amount.

Underway– A vessel is underway when it is not at anchor, made fast to the shore, or aground.

Uniform Customs and Practices for Documentary Credits (UCP)
– Rules for letters of credit drawn up by the Commission on Banking Technique and Practices of the International Chamber of Commerce in consultation with the banking associations of many countries. See Terms of Payment.

Unit Load – Packages loaded on a pallet, in a crate or any other way that enables them to be handled at one time as a unit.

Unit Train – A train of a specified number of railcars, perhaps 100, which remain as a unit for a designated destination or until a change in routing is made.

Unitization – The consolidation of a quantity of individual items into one large shipping unit for easier handling. Loading one or more large items of cargo onto a single piece of equipment, such as a pallet.

Unloading – Removal of a shipment from a vessel.

U.S. Consular Invoice–A document required on merchandise imported into the United States.

USPPI – United States Principal Party of InterestThe party that receives the primary benefit from an export transaction, usually the seller of the goods.

V

Validated Export License – A document issued by the U.S. government; authorizes the export of commodities for which written authorization is required by law.

Validation – Authentication of B/L and when B/L becomes effective

Vanning – A term for stowing cargo in a container.

Variable Cost – Costs that vary directly with the level of activity within a short time. Examples include costs of moving cargo inland on trains or trucks, stevedoring in some ports, and short-term equipment leases. For business analysis, all costs are either defined as variable or fixed. For a business to break even, all fixed costs must be covered. To make a profit, all variable and fixed costs must be recovered plus some extra amount.

Ventilated Container – A container designed with openings in the side and/or end walls to permit the ingress of outside air when the doors are closed.

Vessel Supplies for Immediate Exportation (VSIE) – Allows equipment and supplies arriving at one port to be loaded on a vessel, aircraft, etc., for its exclusive use and to be exported from the same port.

Vessel Manifest – The international carrier is obligated to make declarations of the ship's crew and contents at both the port of departure and arrival. The vessel manifest lists various details about each shipment by B/L number. Obviously, the B/L serves as the core source from which the manifest is created.

VISA– Voluntary Intermodal Sealift Agreement. Provides the U.S. defense community with “assured access” to commercial intermodal capacity to move sustainment cargoes during time of war or national emergency. In return, during peacetime, the carriers receive preference in the carriage of DOD cargoes.

Viz.Namely.– Used in tariffs to specify commodities.

VLCC– Very Large Crude Carrier. A tanker of 200,000 to 319,000dwt. It can carry about 2 million barrels of crude oil.

VLFO – Vessel Load Free Out – The loading and discharge terms for the cargo to be shipped, as agreed to in the charter party. The vessel (carrier) pays for the loading of the cargo on board the ship and the receiver pays for the discharge of the cargo from the ship to the pier.

Voluntary Ship – Any ship which is not required by treaty or statute to be equipped with radiotelecommunication equipment.

W

War Risk – Insurance coverage for loss of goods resulting from any act of war.

Warehouse – A place for the reception, delivery, consolidation, distribution, and storage of goods/cargo.

Warehouse Entry – Document that identifies goods imported when placed in a bonded warehouse. The duty is not imposed on the products while in the warehouse but will be collected when they are withdrawn for delivery or consumption.

Warehouse Withdrawal for Transportation Immediate Exportation (WDEX) – Allows merchandise that has been withdrawn from a bonded warehouse at one U.S. port to be exported from the same port exported without paying duty.

Warehouse Withdrawal for Transportation (WDT) – Allows merchandise that has been withdrawn from a bonded warehouse at one port to be transported in bond to another port, where a superseding entry will be filed.

WarehouseWithdrawal for Transportation Exportation (WDT&E) – Allows merchandise that has been withdrawn from a bonded warehouse at one port to be transported in bond through the U.S. to be exported from another port, without paying duty.

Warehousing – The storing of goods/cargo.

Waybill (WB) – A document prepared by a transportation line at the point of a shipment; shows the point of the origin, destination, route, consignor, consignee, description of shipment and amount charged for the transportation service. It is forwarded with the shipment or sent by mail to the agent at the transfer point or waybill destination. Abbreviation is WB. Unlike a bill of lading, a waybill is NOT a document of title.

Weight Cargo – A cargo on which the transportation charge is assessed on the basis of weight.

Weights and Measures/Measurement ton:

40 cubic ft or one cubic meter•

Net ton/short ton – 2,000 lbs•

Gross ton/long ton – 2,240 lbs•

Metric ton/kilo ton – 2,204.6 lbs•

Cubic meter – 35.314 cubic ft•

Well Car –Also known as stack car. A drop–frame rail flat car.

Wharf –A structure built on the shore of a harbor extending into deep water so that vessels may lie alongside. See also Dock and Pier.

Wharfage (Whfge.) – Charge assessed by a pier or dock owner against freight handled over the pier or dock or against a steamship company using the pier or dock.

WIBON – Whether In Berth or Not.

Windy Booking – A freight booking made by a shipper or freight forwarder to reserve space but not actually having a specific cargo at the time the booking is made. Carriers often overbook a vessel by 10 to 20 percent in recognition that “windy booking” cargo will not actually ship.

Without Recourse – A phrase preceding the signature of a drawer or endorser of a negotiable instrument; signifies that the instrument is passed onto subsequent holders without any liability to the endorser in the event of nonpayment or nondelivery.

W.M. (W/M) – Abbreviation for “Weight or Measurement;” the basis for assessing freight charges. Also known as “worm.” The rate charged under W/M will be whichever produces the highest revenue between the weight of the shipment and the measure of the shipment. The comparison is based on the number of metric tons the cargo weights compared to the number of cubic meters of space the cargo measures. The prior English method was one long ton compared to forty cubic feet.

WPA – Abbreviation for “With Particular Average.”

W.T.L. – Western Truck Lines.

WWD – Weather Working Days.

YardA – classification, storage or switching area.

York–Antwerp Rules of 1974 –Established the standard basis for adjusting general average and stated the rules for adjusting claims.

Zulu Time – Time based on Greenwich Mean Time.

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APPENDIX 1

LIST OF ABBREVIATIONS

- AA – Always Afloat.
- AAR – Against All Risks (insurance clause).– Association of American Railroads.
- ABIU.S. Customs’ “Automated Broker Interface
- ACS (A.C.S.) or ACEU.S. Customs’ master computer system, “Automated Commercial Systems.”
- ANOA – Advanced Notice of Arrival
- Agt. – Agent
- A.I.D. – Agency for International Development.
- AMS – The U.S. Customs’ “Automated Manifest System.”
- A.Q. – Any Quantity
- A.T.A. – American Trucking Association.
- ATDNSHINC – Any time Day or Night Sundays & Holidays Included.
- AWWL – Always within Institute Warranties Limits (Insurance purpose).
- BB – Ballast Bonus
- B/L – Bill of Lading
- BAF – Bunker Adjustment Factor.
- BBL – Barrel
- BCO – Beneficial Cargo Owner
- B/L – Bill of Lading
- BIMCO – The Baltic and International Maritime Council
- Bls.– Bales
- C&F – Terms of Sale, or INCOTERMS
- CAD – Cash Against Documents
- CAF – Currency Adjustment Factor
- CIA – Cash in Advance
- CWO – Cash With Order
- CBM (CM) – Cubic Meter
- CE – Consumption Entry
- CFS – Container Freight Station
- CI – Cost and Insurance
- CIF (Named Port) – Cost, Insurance, Freight.” (Named Port) Same as C&F or CFR except seller also provides insurance to named destination.
- CIF&C – Price includes commission as well as CIF.
- CIF&E – Cost, Insurance, Freight and Exchange

CIFCI – Cost, Insurance, Freight, Collection and Interest
 CIFI&E – Cost, Insurance, Freight, Interest and Exchange
 CKD – Completely Knocked Down
 CL – Carload and “Containerload
 COD –Collect (cash) on Delivery.– Carried on Docket (pricing).
 COFC –the Railway Service “Container On Flat Car”
 COGSA– Carriage of Goods by Sea Act.
 CE – Consumption Entry
 C–TPAT – Customs–Trade Partnership Against Terrorism
 Cu. – Cubic
 COP – Customs of the Port
 Cwt. – Hundred weight (United States, 100 pounds; U.K.,112)
 CY – Container Yard
 D&H – Dangerous and Hazardous cargo.
 D.B.A. – Doing Business As
 DDC – Abbreviation for “Destination Delivery Charge.
 DEMDES – Demurrage/Despatch money.
 DF CarDamage–Free Car
 D/P – Documents Against Payment
 D.O.T.U.S. Department of Transportation
 DRFS – Destination Rail Freight Station
 DWT– Deadweight Tonnag
 E.C.M.C.A. – Eastern Central Motor Carriers Association.
 ECMC – The U.S. Exporters Competitive Maritime Council
 EDI – Electronic Data Interface
 EDIFACT – International data interchange standards sponsored by the
 United Nations.See UN/EDIFACT.
 ETA, C, D, R, S– Estimated Time of Arrival, Completion, Departure,
 Readiness, or Sailing– Estimated Time of Availability
 E.W.I.B. – Eastern Weighing and Inspection Bureau.
 EXIM Bank – Export–Import Bank of the United States
 FAK – Freight All Kinds
 FAS – Free Alongside Ship
 FCL – Full Container Load
 FD – Free Discharge
 F.D.A. – Food and Drug Administration
 FEU – Forty–Foot Equivalent Units
 FMC (F.M.C.) – Federal Maritime Commission
 FOR – Free on Rail

FPPI – Foreign Principal Party of Interest
 F.P.A. – See Free of Particular Average.
 FOB – Free on Board
 GATT – General Agreement on Tariffs and Trade
 GBL – Government Bill of Lading
 GDSM – General Department Store Merchandise
 GRI – General Rate Increase
 GT – Gross Tonnage
 GVW – Gross Vehicle Weight
 HAZ MAT – Hazardous Material
 I/A –Independent Action
 ICC – Interstate Commerce Commission or International Chamber of
 Commerce
 IE – Immediate Exit
 I.M.C.O. – International Maritime Consultative Organization
 I.M.D.G. Code – International Maritime Dangerous Goods Code
 I.T. – In-Transit Entry
 INCOTERMS – The International Chamber of Commerce Terms of
 Sale
 IPI – Inland Point Intermodal
 I.T. – Immediate Transport J
 JIT– Just In Time
 KT – Kilo or metric ton
 KD – Knocked Down
 L/C – Letter of Credit
 LASH – Lighter Aboard Ship
 LCL – Less than Container Load
 LC – Letter of Credit
 LNG – Liquefied Natural Gas
 LNGC – LNG Carrier
 MBM – 1,000 board feet. One MBM equals 2,265 C.M.
 MCFS – Master Container Freight Station. See CFS.
 MLB – Mini Landbridge
 M.M.F.B. –Middlewest Motor Freight Bureau
 MSA – Maritime Security Act
 MT – Metric Ton
 MTSA - The Maritime Transportation Security Act of 2002
 NCB – National Cargo Bureau

N.C.I.T.D. – National Committee on International Trade Documentation

NEC – Not Elsewhere Classified

NES – Not Elsewhere Specified

NT – Net Tonnage

N.M.F.C. – National Motor Freight Classification

NOI – Not Otherwise Indexed

NOIBN – Not Otherwise Indexed By Name

NOR – Notice of Readiness (when the ship is ready to load)

NOS – Not Otherwise Specified

N.P.C.F.B. – North Pacific Coast Freight Bureau.

NRT – Net Register Tons O

Ocean B/L – Ocean Bill of Lading

ODS – Operating Differential Subsidy

O.E.C.D. – Office of Global Maritime Situational Awareness

O.P.I.C. – Overseas Private Investment Corporation

O/N – Order–Notify

ORFS – Origin Rail Freight Station

OBL – Original Bill of Lading

OS&D – Over, Short or Damaged

OCP – Overland Common Point

SCAC – Owner Code

P&I – Protection and Indemnity

PADAG – Please Authorize Delivery Against Guarantee

POD– Port of Discharge.– Port of Destination.– Proof of Delivery.

POL – Port of Loading.– Petroleum, Oil, and Lubricants

PPI – Principal Party of Interest (see USPPI and FPPI).

Ppd. – Prepaid

RFP - Request for Proposal

RFQ – Request for quotation

RT - Revenue Ton

RVNX - Released Value Not Exceeding

SAFE Port Act – the Security and Accountability For Every Port Act of 2006

S/D – Sight draft.– Sea damage.

SCAC Code – See Owner Code.

SED – Commerce Department document, Shipper's Export Declaration.

SED – Shipper's Export Declaration

SHEX – Saturday and Holidays Excluded.
 SHINC – Saturday and Holidays Included
 SL&C – Shipper’s Load & Count
 SIGTTO – Society of International Gas Transport and Terminal
 Operators
 SPA –Subject to Particular Average
 SSHEX –Saturdays, Sundays and Holidays Excepted
 SIC – Standard Industrial Classification
 STCC – Standard Transportation Commodity Code
 STC – Said to contain.
 STW – Said to weigh.
 STB – Surface Transportation Board
 T.&E. – Transportation and Exportation
 Trf. – Tariff
 EXW – Ex Works
 FCA – Free Carrier
 FOB – Free On Board
 CFR – Cost and Freight
 CIF – Cost, Insurance and Freight
 CPT – Carriage Paid To
 CIP – Carriage and Insurance Paid To
 DAF – Delivered At Frontier
 DDU – Delivered Duty Unpaid
 DDP – Delivered Duty paid
 DES – Delivered Ex Ship
 DEQ – Delivered Ex Quay, [Duty Paid])
 TBN – To Be Nominated (when the name of a ship is still unknown).
 TEU –Twenty foot Equivalent Unit
 TIR – Transport International par la Route
 TL –Trailer Load
 TOFC – Trailer on Flat Car
 TWIC – Transportation Worker Identification Credential
 UCP – Uniform Customs and Practice for Documentary Credits
 UFC – Uniform Freight Classification
 ULCC – Ultra Large Crude Carrier. A tanker in excess of 320,000dwt
 UN/EDIFACT – United Nations EDI for Administration, Commerce
 and Transport
 USPPI – United States Principal Party of Interest
 VISA – Voluntary Intermodal Sealift Agreement

VLCC – Very Large Crude Carrier

VLFO – Vessel Load Free Out

WDEX – Warehouse Withdrawal for Transportation Immediate
Exportation

WDT – Warehouse Withdrawal for Transportation

WDT&E – Warehouse Withdrawal for Transportation Exportation

WB – Waybill

Whfge – Wharfage

WIBON – Whether In Berth or Not

W.M. (W/M) – Weight or Measurement

WPA – Abbreviation for “With Particular Average.”

W.T.L. – Western Truck Lines.

WWD – Weather Working Days

APPENDIX 2

IDIOMS AND THEIR MEANINGS

Idioms	Meanings
A blessing in disguise	Не было бы счастья, да несчастье помогло
Prod and poke smth.	Мешать, беспокоить
Give smb. an extra edge	Давать к/л преимущество, ставить в выгодную позицию
Predict the twists and turns of smth	Предсказывать тонкости, подробности, детали, узлы и закоулки
Cut and run	Быстро уйти, чтобы избежать беды.
Jump ship	Быстро уйти из проблемной ситуации / покинуть компанию
Knowtheropes	Ист. – новички, которые разбирались только в морских узлах. Совр. – быть опытным, знать свое дело
Under the weather	Плохо себя чувствовать
Lose ground	Терять влияние
To sail under false colors	Прикидываться
Feeling Blue	Грустить, быть в меланхолическом настроении
Aloof and idler	Члены экипажа, которые не несли ночную вахту из-за других обязанностей (ист.)
Rock the boat	Качать лодку
make waves	Поднимать волну
Are you on board?	Согласны ли Вы с идеей?
By and large	Способность судна идти за и против ветра

Idioms	Meanings
Deep-six	Отказаться, что-то спрятать, сбрасывать со счетов, проигнорировать,
No room to swing a cat	Яблоку негде упасть
I need all hands on deck to....	Мне нужна ваша помощь, чтобы ...
To get everything shipshape	Сложить все аккуратно, навести порядок
Over all	Призыв всего экипажа наверх для выполнения работ
Have a good grip of the English language	Великолепно владеть английским
Enormous pressures of time and other constraints	Чудовищный цейтнот
Have an inquisitive mind	Иметь пытливый ум
Be omnipresent, if not omnipotent	Быть вездесущим, если не всемогущим
Keep abreast of current affairs	Быть в курсе происходящего
Beat around the bush	Ходить вокруг да около
Better late than never	Лучше поздно, чем никогда
Bite the bullet	Преодолеть что-то, потому что это неизбежно, стиснуть зубы
Break a leg	Ни пуха, ни пера!
Call it a day	Прекратить прекращать дело
Cut somebody some slack	Не быть слишком критичным
Easy does it	Тише едешь-дальше будешь

Idioms	Meanings
Get out of hand	Выйти из-под контроля, потерять управление
Get something out of your system	Сделать давно задуманное
To get your act together	Взять себя в руки
Give someone the benefit of the doubt	Верь тому, что кто-то говорит
Go back to the drawing board	Начать сначала
Hang in there	Не сдавайся, держись там
It's not rocket science	Это несложно
Let someone off the hook	Перестать делать кого-либо ответственным за что-либо
Make a long story short	Рассказывать кратко
Miss the boat	Слишком поздно
No pain, no gain	Под лежащий камень вода не течет
Pull yourself together	Успокойся. Возьми себя в руки
So far so good	Пока что все идёт хорошо
Speak of the devil and he will come	Лёгко на помине
That's the last straw	Это последняя капля
The best of both worlds	Идеальная ситуация, всюду поспеть
Time flies when you're having fun	Когда весело, время летит незаметно
To get bent out of shape	Расстроиться, перекосялся весь
To make matters worse	И в довершение всего /всех

Idioms	Meanings
	неприятностей/
Under the weather	Нездоровый, больной; в подавленном настроении; переживающий неприятности;
We'll cross that bridge when we come to it	Давай не будем прямо сейчас говорить об этой проблеме
Wrap your head around something	Понять что-то сложное
You can say that again	Это правда, согласен
Your guess is as good as mine	Понятия не имею
A bird in the hand is worth two in the bush	Синица в руках лучше, чем журавль в небе
A perfect storm	Уникальное стечение неблагоприятных обстоятельств
A picture is worth 1000 words	Лучше один раз увидеть, чем сто раз услышать
Actions speak louder than words	Верьте делам людей, а не словам
Add insult to injury	Усугубить свое положение
Barking up the wrong tree	Идти по ложному следу
Birds of a feather flock together	Свояк свояка видит издалека / Два сапога пара (чаще используется в негативном контексте)
Bite off more than you can chew	Взять на себя невыполнимую задачу; взяться за непосильное дело
Break the ice	Добиваться первого успеха; сделать первый шаг

Idioms	Meanings
By the skin of your teeth	С большим трудом, еле-еле, чудом спастись; едва спастись
Comparing apples to oranges	Сравнивать две несравнимые вещи
Costs an arm and a leg	Очень дорого
Do something at the drop of a hat	Делать что-либо, заранее незапланированное
Do unto others as you would have them do unto you	Во всём, как хотите, чтобы с вами поступали люди, так поступайте и вы с ними
Don't count your chickens before they hatch	Цыплят по осени считают
Don't cry over spilt milk	Слезам горю не поможешь
Don't give up your day job	Вы не очень хороши в этом деле
Don't put all your eggs in one basket	Не рискуй всем
Every cloud has a silver lining	За плохим следует хорошее
Get a taste of your own medicine	К тебе относятся так, как ты относишься к другим (с негативной окраской)
A snowball effect	События по инерции наслаиваются одно на другое (Снежный ком)
A storm in a teacup	Большой шум вокруг маленькой проблемы (Делать из мухи слона)
Get a second wind	Открылось второе дыхание
Snowed under	Занятый

Idioms	Meanings
That ship has sailed	Слишком поздно
There are clouds on the horizon	Грядет беда
Through thick and thin	В хорошие времена и в плохие, во что бы то ни стало, несмотря ни на какие трудности
Time is money	Работай быстро
Waste not, want not	Не трать, да не будешь нуждаться
We see eye to eye	Мы согласны; находить общий язык
Weather the storm	Пройти через что-то трудное, преодолеть трудности; преодолеть испытания;
Well begun is half done	Хорошее начало это половина дела
When it rains it pours	Всё идёт неправильно с самого начала, пришла беда — отворяй ворота
You can catch more flies with honey than you can with vinegar	Будь проще, и люди к тебе потянутся
You can lead a horse to water, but you can't make him drink	Нельзя заставить кого-то принять правильное решение
You can't make an omelet without breaking some eggs	За всё надо платить

APPENDIX 3

SOLAS-74CONVENTION

The SOLAS-74 international maritime treaty comprises of 13 chapters and each chapter has its own set of regulations. The following are the list of SOLAS all 14 chapters and the regulations they contain:

The International Convention for the Safety of Life at Sea (SOLAS), 1974 describes the requirement for all merchant ship of any flag state to comply with the minimum safety norms laid down in the chapters which are as follows:

Chapter I – General Provisions: Surveys and certification of all the safety items etc are included.

Chapter II-1 – Construction – Subdivision and stability, machinery and electrical installations: Deals with watertight integrity of the ship, especially for passenger vessel.

Chapter II-2 – Fire protection, fire detection and fire extinction: This chapter elaborates the means and measure for fire protection in accommodation, cargo spaces and engine room for the passenger, cargo and tanker ship.

Chapter III – Life-saving appliances and arrangements: All the life-saving appliances and there use in different situations is described.

Chapter IV – Radio communications: Includes requirements of GMDSS, SART, EPIRB etc for cargo and passenger vessel.

Chapter V – Safety of navigation: This chapter deals with all the seagoing vessels of all sizes, from boats to VLCCs, and includes passage planning, navigation, distress signal etc.

Chapter VI – Carriage of Cargoes: This chapter defines the storage and securing of different types of cargo and containers, but does not include oil and gas cargo.

Chapter VII – Carriage of dangerous goods: Defines the International Maritime Goods Code for storage and transportation of dangerous goods.

Chapter VIII – Nuclear ships: The code of safety for a nuclear-propelled ship is stated in this chapter.

Chapter IX – Management for the Safe Operation of Ships: The International Safety Management Code for ship owner and the operator is described clearly.

Chapter X – Safety measures for high-speed craft: safety code for the high-speed craft is explained.

Chapter XI-1 & 2 – Special measures to enhance maritime safety: Special and enhanced survey for safe operation, other operational requirements and ISPS code is briefed in this chapter.

Chapter XII – Additional safety measures for bulk carriers: Includes safety requirement for above 150 meters length bulk carrier.

Chapter XIII – Verification of Compliance

Chapter XIV – Safety Measures for Ships Operating in Polar Waters





SOLAS-74 Chapter I

In the SOLAS-74 Chapter 1; General Provisions, Surveys and certification of all the safety items, structure, machinery etc. are included.

This chapter is further subdivided into 3 parts- Part A, Part B and Part C.

Part A contains 5 regulations which explain the “Application” of this chapter in different types of the ship along with the “Definition” of different terminology which is used in the chapter. The regulation may not be applicable to all types of a ship; hence a separate section of “Exceptions” and “Exemptions” is also provided.

All the SOLAS-74 chapters cover a general basic minimum criterion which applies to seagoing ships, regardless of their location and nationality. It is possible that the material or appliances available in one country are not available for the ship in another country. An “Equivalent” Section is also provided to deal with such a situation.

Part B contains the important regulations informing about surveys and certificates seagoing ships need to have to be said compliant with SOLAS-74. For this, 15 regulations are kept under Part B. Regulation 6 to Regulation 11 provides details of different survey requirement on different ships, equipment, machinery etc. clauses on how to do the repair and what kind of surveys to go through.

Related Read: A List of Inspections And Surveys Deck Officers On Ships Should Be Aware Of

What is the Harmonised Survey System for Ships?

Regulation 12 to Regulation 18 explains the different requirement for certification obtained post surveys.

Related Read: 40 Ship Certificates and Documents that are Checked in a Port State Control (PSC) Survey

Regulation 19 – Control: This regulation explains the jurisdiction of local government a foreign ship is voyaging, such as coast guard, port state etc. to inspect the vessel for ensuring the safety of the ship. It also explains the step to be taken by the government authorities to notify the concerned (next port of call, owner, class etc.) and how to exercise the control.

Related Read: The Ultimate Guide to Port State Control (PSC) Inspection on Ships

Regulation 20 – Privileges: this regulation explains if the ship can or cannot claim any privileges depending upon the certificates it holds.

Part C of Chapter 1 contains only one regulation, i.e. Regulation 21, which explains how a contracting government can carry out an inquiry for the ship which was involved in an incident and casualties and what kind of information needs to be collected and to be passed through.

SOLAS-74 Chapter II-1

Construction – Subdivision and stability, machinery and electrical installations: This chapter of SOLAS-74 Deals with watertight integrity of the ship, including the passenger's vessel and comprises of 7 parts, explaining the requirement for structural, machinery, electrical, stability and other criteria for a safe ship.

Part A contains 3 regulations which explain the “Application” of this chapter on ships as per their keel laying. The regulations explain the “Definition” of different terminology which is used in the chapter.

Part A-1 comprises of regulations explaining the requirement for the structure of the ship including protective coating, towing arrangements, deck equipment fittings, construction and drawings etc. It also includes the regulation on how to provide access to different parts of oil tanker and bulk carrier and the structure access manual which contains the details of the structure including plans for means of access. Method to construct a ship which complies with the regulation for protection against noise is also included.

A Guide to Hull Painting of Ships

Get a thorough general overview of all important aspects of ship's hull painting operation – one of the most expensive activities carried out in the dry dock.

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Related Read: Preparations For Emergency Towing Of Ship – 10 Important Points

Part B of this regulation explains the stability and watertight integrity requirement. Under Part B 1, the regulations (Regulation 5 to 8) defines the necessary conditions for maintaining the intact stability of the cargo ship and passenger ship. It also includes a requirement on the information which needs to be

supplied to the master on the stability of the vessel explaining how to calculate the stability factors in different conditions.

Related Read: Understanding Watertight Bulkheads In Ships: Construction and SOLAS-74 Regulations

Ship Stability – What Makes a Ship Unstable?

Part B 2 comprises of 4 regulations (Regulation 9 to 17) which takes care of the watertight integrity of the ship (both passenger and cargo ship) by enlisting the constructional and testing requirements of watertight and other important bulkheads, and the provision of the double bottom on ships other than tanker ships.

Related Read: How to Test and Maintain Cargo Hatch Cover of a Dry Ship?

Designing A Ship's Bottom Structure – A General Overview

Part B 3 explains the requirement for the subdivision load line assignment for passenger ships.

Part B 4 of this chapter comprises of 7 regulations (Regulation 19 to Regulation 25) for the requirement of stability management explaining the inspections, preventions, damage control drills, and information for cargo and passenger ships.

Part C focuses on different machinery installation in the engine room including the requirement of emergency installations in the passenger ships from regulation 26 to regulation 39.

Related Read: 5 Stages Of Marine Machinery Installation On Ships

Part D of this chapter (from regulation 40 to 45) focuses on the electrical installation requirement for cargo and passenger ships including the emergency source and arrangements along with electrical safety and hazards.

Related Read: How to Install Electronic Circuits on Ship?

How is Power Generated and Supplied on a Ship?

Part E clarifies the requirement for unattended machinery space under regulation 46 to 54 explicitly.

Related Read: Preparation for UMS Operation On Ships

Part F of this chapter gives the details about the alternative design and arrangement for the ship's machinery and electrical system under regulation 55. It also explains the storage and distribution requirement for the low flashpoint fuel system.

Part G explains the application and requirements as per the regulation 56 and 57 for the ships using low flash point fuels.

Related Read: How to select Marine Fuel Oil and Factors Necessary for Fuel Oil System

APPENDIX 4
CAREER PLANNING, CURRICULUM VITAE & COVER LETTER
CURRICULUM VITAE & COVER LETTER

How to write a resume in English	Как написать резюме на английском языке
Guidelines to write a resume or Curriculum Vitae in English Nowadays, employers tend to receive thousands of applications for a job as soon as it is advertised on the job market. Therefore it is vital that your letter should stand out from the thousands of CVs and letters that people are going to send. The first impression is always the most important one, therefore you need a good and well- structured CV in order to attract the employers' attention. Here are a couple of tips about how to write a good CV when applying for a job in the UK or in Ireland.	Рекомендации по написанию резюме и CV на английском языке Сегодня многие работодатели получают тысячи резюме от потенциальных работников буквально в день публикации вакансии, поэтому очень важно, чтобы Ваше резюме выделялось из остальных. Всем известно, что первое впечатление играет очень важную роль, соответственно необходимо иметь хорошее и правильно построенное резюме. Здесь Вы найдете советы о том, как составить качественное резюме.
Presentation An employer has very little time to spend on your application. The most important thing is that your CV is clear. Your CV has to be word processed. It immediately shows that you can work on word processors. The CV should be between one or two pages long. Don't be scared to space it out, never condense everything onto one page otherwise it will look messy. Since most employers have very little time to spend on each CV, they tend to skim read what you have written. It is therefore better to start by what is most important and work your way downwards from what is important to what is not so vital. The structure of a CV must follow a certain order.	Презентация Работодатель обычно не затрачивает много времени на прочтение Вашего резюме, поэтому оно должно быть четким и не превышать одной-двух страниц. Однако не пытайтесь максимально наполнить эти две страницы информацией. В противном случае резюме будет выглядеть неаккуратно. В резюме важно суметь показать, что Вы умеете выделять самое главное. Обычно работодатели просто бегло просматривают резюме, поэтому лучше размещать информацию в порядке убывания ее важности. Существует определенная система построения резюме.

1. Personal data First of all, you have got to introduce yourself: full name, address, date of birth. If you want, you can add your phone number, marital status and nationality. Even if this is not compulsory, this might be important for the type of job for which you are applying. For example, if you are applying to an international company that requires knowledge of a language as a native tongue then it might be useful to mention your nationality. If there is anything that you would feel that is important to mention, you can do it here.	1. Личная информация В первую очередь необходимо указать ФИО, адрес, телефон, дату рождения. Можно написать о семейном положении и национальности. Хотя такая информация и не обязательна, порой она важна для некоторых должностей. К примеру, если Вы хотите работать в международной компании, где требуется знание языка, являющегося для Вас родным, лучше тогда указать в резюме Вашу национальность. Если есть еще что-то, о чем Вы считаете необходимым написать в резюме, – смело пишите.
2. Education and qualifications This part of the CV is one of the most important because it gives the employer an insight into who you are, through your academic career. The trickiest part of mentioning qualifications is to try and find the equivalent in English. This is not always easy as the diplomas in the education system vary from country to country. The best thing to do is to write the original name of your qualification along with the equivalents in English in brackets. Grades can also be a problem.	2. Образование Эта часть резюме одна из самых важных. Ведь именно из этого раздела у работодателя складывается первое впечатление о Вас. Самое сложное – правильно подобрать выражения на английском языке для описания Вашей специализации. Эта сложность обусловлена разницей в образовательных системах мира. Лучше всего написать Вашу специализацию латиницей, а затем в скобках дать эквивалент на английском языке. Указывать оценки также не стоит, т.к. оценочные системы разных стран различаются.
3. Work experience This section can be divided in various subsections especially if you have got a lot of experience (present post, previous employment, voluntary work). Don't be afraid to describe the tasks that you had to do in your different jobs, especially if these are relevant to the job that you are applying for.	3. Опыт работы Этот раздел может быть разделен на несколько подразделов, особенно если у Вас богатый опыт работы. Не бойтесь указывать все обязанности, которые Вы выполняли на всех работах, особенно если они имеют отношение к той должности, на которую Вы претендуете.

4. Skills In this section, you can put down all the practical things that you can do that might be useful for the job: driving license (always say clean driving license), knowledge of languages and computer software.	4. Профессиональные навыки Здесь Вы можете указать те навыки и преимущества, которые, по вашему мнению, пригодятся в работе, например: наличие водительского удостоверения, знание иностранных языков, а также компьютерная грамотность.
5. Interests Of course, the employer is not going to hire you because you have the same hobbies as him/her but this section helps him/her get a better idea of what kind of person you are. However, you should remain brief.	5. Интересы Конечно, работодатель не возьмет Вас на работу только потому, что и Вы, и он любите заниматься спортом. Но из этого раздела он сможет лучше понять, что Вы за человек. Но не переусердствуйте. Укажите только самое главное.
6. References It always looks good to put down the names of two people who have agreed to provide references. Ideally, one should be academic and the other from one of your previous job(s). Always give the name and title of your referee.	6. Рекомендации Всегда хорошо иметь в резюме имена нескольких человек, готовых дать Вам рекомендацию. В идеале один должен быть Вашим преподавателем из университета, а другой – с прежней работы. Всегда указывайте полное имя и должность того, кто готов дать рекомендацию.
Guidelines to write a CV If you were interested in a summer position abroad, a curriculum vitae would be the appropriate document you will send to your targeted employer. A curriculum vitae (CV) represents your personal and working history.	Как написать CV Если Вы хотите поработать за границей, то CV Вам просто необходимо. В нем находится информация о Ваших личных и профессиональных достижениях. CV занимает более одной страницы.
It could be more than one page. The following is a list of information that should appear in your CV: – Photo – Personal details such as age, gender, nationality, place and date of birth and marital status – Address, phone number (s) and e-mail – Education (including in some cases high school, undergraduate, graduate and postgraduate) – Study abroad	CV должно выглядеть профессионально. Вот перечень того, что должно быть в Вашем CV обязательно: – Фотография – Личные данные (ФИО, возраст, пол, национальность, дата и место рождения, семейное положение) – Адрес, номер контактного телефона и e-mail – Сведения о полученном образовании (школа, колледж, высшее/неоконченное

– Thesis or Dissertation Title and Advisor – Graduate fieldwork – Education and/or Professional Awards, Honors (include in this section Grants and Fellowship appointments) – Research Experience – Work Experience – Skills – Publications and Academic or Professional Presentations – Thesis or Dissertation (when applicable, with a brief description of the topic) – Professional Licenses and Certifications – Language Skills – Professional Memberships – Extracurricular Activities (include community involvement) – Interests (be sure to include traveling as it relates to the country) – References	высшее) – Зарубежные стажировки – Название дипломной работы и имя научного руководителя – Грамоты, награды (включая полученные гранты и стипендии) – Опыт научной деятельности – Опыт работы – Профессиональные навыки – Публикации или презентации – Исследовательские работы / диссертации (с кратким описанием) – Сертификаты – Знание иностранных языков – Членство в профессиональных организациях – Общественная работа, членство в общественных организациях – Интересы (не забудьте упомянуть о путешествиях, если они были осуществлены в страну работодателя) – Рекомендации
Structure of a Curriculum Vitae In other countries is common to see the phrase CURRICULUM VITAE written in the center of the page	Структура Curriculum Vitae В некоторых странах принято писать фразу ‘CURRICULUM VITAE’ посередине страницы
Personal Information: – Full Name and Surname – Date of Birth (using the following format: day/month/year) – Gender (particularly if you have an unusual or unisex name) – Place of Birth – Nationality and/or Citizenship (if you are not a citizen of the country you are applying to, you need to inform your potential employer of your visa situation) – Marital Status – Address – Telephone – Fax E-mail	Личные данные: – ФИО – Дата рождения (день/месяц/год) – Пол (в особенности, если у Вас необычное имя) – Место рождения – Национальность и/или гражданство (если Вы пытаетесь устроиться на работу в страну, гражданином которой Вы не являетесь, то необходимо сообщить работодателю о Вашей ситуации с визой) – Семейное положение – Адрес – Телефон – Факс E-mail

Education: Years – Discipline Degree – Law School’s name, Location (city, state or country) • add academic awards • add any subjects taken relevant to the targeted employer Additional training or Additional Education or Additional Courses or Additional Certificates or Diplomas (any of this titles, choose the one that applies to your background) – Year(s) – Name of the institution, degree received, Location (city, state or country) Conferences, Courses and/or Seminars – Year(s) – Name of the institution, Course, Seminar or Conference’s name, Location (city, state or country) – List all of the ones you attended	Образование: Период обучения – название специализации – название ВУЗа и его местонахождение (страна, город) • укажите любые награды и грамоты, полученные в процессе обучения • укажите предметы, которые Вы изучали и которые имеют прямое отношение к желаемой должности – Период обучение – название школы и ее местонахождение (страна, город) – Также укажите любое дополнительное образование, которое Вы получили (курсы, колледж, т.д.) – Укажите названия любых полученных сертификатов – Укажите названия всех семинаров и конференций, в которых Вы когда-либо участвовали.
Languages Skills: List languages and level of proficiency, orally and written ability. Mention any language certificates or degrees you might have. • If you are fully bilingual, say “Fluent Eng-lish and French (written and spoken)” • If you are not fluent in French but can get by, say “English, French” • If you only speak English, it would probably be better to leave this section out	Знание иностранных языков: Укажите языки, которыми Вы владеете и степень владения их устной и письменной формой. Перечислите языковые сертификаты, которые у Вас есть. • Если Вы свободно владеете двумя языками, то укажите “Свободно владею русским и английским языком (как письменным, так и устным)” Если Вы не свободно владеете английским, то пишите “Русский, английский” • Если Вы говорите только по-русски, то лучше вообще пропустить этот раздел
Technical and Specialized Skills: List all the computer programs you feel comfortable using.	Технические и профессиональные навыки: Перечислите все компьютерные программы, которыми Вы владеете.
Awards, Honors and/or Distinctions: List all awards and honors you achieve throughout your life, in ascendant chronological order	Награды и достижения: Укажите все награды и призы, которые Вы когда-либо получали в хронологическом порядке

Work Experience: – Years – Company Name, Division, Location (city, state or country) – Position or Title. Brief explanation of your duties, projects and activities in each job.	Опыт работы: – Период работы – Название компании – Название отдела – адрес (страна, город) – занимаемая должность – краткое описание служебных обязанностей на каждой работе
Other Categories: (only if applicable) – Teaching Experience: Years – Name of the Institution, Location (city, state or country) – Publications: List published articles, books, etc. – Description of Thesis or Dissertation, Papers, Publications – Community Service or Involvement/ Volunteer Work – Travel and Summer Abroad – Academic Presentations and/or Lectures – References	Дополнительная информация: (если нужно) – Опыт преподавательской деятельности: период работы – название образовательного учреждения (страна, город). – Публикации: название статей – Описание исследовательской работы – Волонтерская работа – Отдых в других странах (его иногда можно преподнести как стажировку) – Презентации – Рекомендации

CURRICULUM VITAE

KYLE BAILEY

918 El Segundo Blvd.

Los Angeles, CA 90011 (619) 555-0812

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OBJECTIVE

A challenging and rewarding position in the airline industry.

EXPERIENCE

1997 – Present Air West San Francisco, CA

Customer Service Supervisor

Opened San Jose Airport Customer Service Center facility for Air West and created efficient and effective operations. Trained and supervised 50 customer service agents and ramp personnel. Responsible for daily operations decisions and dealt effectively with all crises. Received recognition for successfully loading planes and preparing them for departure in under 20 minutes, over 90 % of the time. Devised successful schedules enabling four planes to be serviced simultaneously. Reduced industrial accidents by 64 %.

1990 – 1997 Air West San Francisco, CA

Customer Service Agent

Responsibilities included ticket sales, boarding supervision and customer service during a period of phenomenal company growth. Became an expert at problem solving and dealing with customer complaints.

1987 – 1990 Piedmont Airlines San Francisco, CA

Customer Service Agent Worked with staff to create the best connecting flight service available to passengers. Devised schedules enabling four planes to be serviced simultaneously.

EDUCATION

Biola University, La Mirada CA, 1990

B.A., Business Administration, Communications

COVER LETTER

January 1, 2002 Daryl Wilkins 1901 Hilton St.
Clarksville, TN 37040

Dear Mr. Wilkins:

Based on the criteria you listed to describe your ideal applicant, I believe I am an excellent candidate for the position of _____. Please accept the enclosed resume as my application for the position.

As a recent graduate, my professional job experience is necessarily limited. However, I believe that, given the opportunity for me to prove myself, you will find what my previous employers will attest to: that I exhibit common sense, intelligence, initiative, diligence, and that I am always eager to make a positive contribution to your organization in any way possible.

I am therefore respectfully requesting a personal interview. I feel confident that an honest, in-person discussion would best allow us to discuss these possibilities. I would welcome this opportunity and assure you that your time would be well spent. In advance, I thank you for your consideration and look forward to meeting with you in the near future.

Sincerely,
Jonathan Samuels
Enclosure

ADVERTISEMENT LETTER

January 1, 2002
Janet Harkins
5624 Oxford Ave
Suite 98
Alexandria, OH 45440-0195

Dear Ms. Harkins,

Your ad in the _____ edition of _____ for a _____ caught my attention and interest. It appears that my professional qualifications and career interests are very much in line with your requirements.

I am most impressed with the growth that your company has accomplished in such a short period of time. It is obviously an exciting time to be part of _____ (company). If you'll take a moment to review my enclosed resume, I believe you will see that I have the necessary skills to assist your company reach its stated goals.

I am very interested in scheduling an interview at your earliest convenience, and further discussing my qualifications in detail. I will call you in a few days.

Sincerely,
Jonathan Samuels
Enclosure

January 1, 2022

Учебное издание

Михайлова Алла Григорьевна

ESP FOR SHIPBUILDERS

**ПРОФЕССИОНАЛЬНЫЙ ИНОСТРАННЫЙ ЯЗЫК
ДЛЯ КОРАБЛЕСТРОИТЕЛЕЙ**

*Учебно-методическое пособие
по профессиональному иностранному языку*

В авторской редакции

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