

British Shipping

Careers in Shipping Slide Notes



British Shipping
Secondary School
11-16 years old
Careers in Shipping

Introduction

Introduction

This pack has been produced to:

- Raise awareness amongst secondary school students of the role and importance of the shipping industry and the British Merchant Navy
- Provide a teaching resource for use in secondary schools, linked to the National Curriculum
- Promote careers in shipping and provide sources of further information for students, parents/guardians and teachers
- Be used by guest speakers from the shipping industry (NB For teachers who wish to use the pack independently, the notes provide relevant detail about the industry for you to use accordingly)

Contents

The pack consists of:

- CD-ROM containing presentation slides
- Slide notes
- Worksheets to be photocopied for use in class
- Additional career information giving details of current schemes

All material in this pack may be freely reproduced, and can be downloaded, together with the presentation slides, from www.marine-society.org/pressec

Note to Teachers

The notes accompanying the slides are intended for those visiting speakers who may be asked to deliver this unsupported and who do not have a teaching background. Where jargon or job-specific information is used, some explanation is provided for you.

What we have set out to do in the presentation is give an overview of the Merchant Navy to those who may never have heard of it; to give a flavour of the different types of job and work done; and to point to sources of further information.

There may be more material here than you need - the slides from 33-38 may be omitted, but skip so as to finish with 39 on display.

Note to non-teachers who may deliver this presentation

It is impossible to know what individuals' prior experience has been. Apologies therefore if some of the notes appear to be teaching you to 'suck eggs'! Please take from the notes as much or as little as you require.

Under no circumstances must you over-run your allotted time. Schools have complex interacting timetables and demanding schedules that mean you must stick to your ETD!

Background Facts

As an island nation we depend on sea transport extensively.

- British Shipping is the fourth largest business sector contributing £2.6bn p.a. to the country's economy
- 96% of the UK's imports and exports are carried by sea
- The Shipping Industry employs 25,000 people at sea and 17,000 shore jobs (for instance in ports, harbours, maritime education, maritime law, insurance and commerce, and shipping companies) are traditionally filled by former seafarers
- The Merchant Navy is vital in times of national crisis and forms the 'fourth arm of defence'
- There are over 1,600 ships in the British Merchant Navy

Career Opportunities

This presentation promotes a career in the Shipping Industry as one of the main objectives. If you want more information on this please contact us at the addresses on the back cover.

National Curriculum

We suggest that this pack can be used as a resource within the National Curriculum for Citizenship at Key Stages 3 and 4. It can provide general input for knowledge and understanding about becoming informed citizens, and could be used to generate specific study with regard to.

Key Stage 3: 1i – the world as a global community, and the political, economic, environmental and social implications of this.

Key Stage 4: 1j – the wider issues and challenges of global independence and responsibility, including sustainable development.

Acknowledgments

The School of Maritime Operations at Blackpool and The Fylde College have produced this pack with support from the Marine Society and the Merchant Navy Training Board. The College is indebted to many organisations and individuals who have contributed towards its development.

Feedback

We are keen to receive feedback on all aspects of this pack. Please send your comments to:

The Head of School of Maritime Operations
Blackpool and The Fylde College
Fleetwood Nautical Campus
Broadwater, Fleetwood, Lancashire
FY7 8JZ
Tel: 01253 352352
Fax: 01253 773014
Email: ch@blackpool.ac.uk

Resources

You will need:

- Computer access for the CD-ROM. The slide show is in pdf format and should open automatically on most personal computers. You do not have access to alter any of the slides and can simply scroll through them. Consider how you will display the slides to the class. Ask the school if they have a data-projector to display them on a wall screen. If you would prefer colour OHP acetates these are available from the Marine Society.
- These slide notes.
- Sufficient copies of the worksheets.
- Copies of the back-up information and addresses to give out for further information.
- Try and take in interesting teaching aids such as, where applicable, a local chart, sextant, binoculars, hand-held GPS. (Your local college may be able to help).
- The mntb will supply, on loan, a promotional video. This will be useful to round off the presentation.

Before the presentation

- Be thoroughly familiar with the material, especially the entry requirements and training programmes available. Watch the video.
- Confirm times and dates with the school/organisation and find out age groups and numbers attending.

After the presentation

The co-ordinators of this project would be very pleased if you could feedback any information which may be of value when the next edition of this is published.

Slides 1-3

You must make the opening confident and punchy without going over the top. You must remain positive and optimistic throughout. They will sense any negativity in your voice or body-language.

If you are nervous (quite likely) most teenagers will detect this and take no prisoners! So practice keeping your nerves under control and never display them. Remember the main objectives and stick to them. Although you may be doing the presentation, always ask the teacher(s) to remain in the room to provide moral support and offer help where required.

Facts are important, however they are unlikely to retain the detail of the information you tell them so don't dwell too long on them. You are aiming to deliver an overall **entertaining** and **noteworthy** experience, which may result in careers' enquiries. Take care using your own experiences: if it is some time since you were at sea then it's very likely that your seagoing career bears little resemblance to modern practice. Thus you run the risk of misinforming the students as well as boring them. Also, don't compare modern conditions with what it used to be like since this is guaranteed to turn the listeners off.

Engage the children in the learning experience. If you get stuck, try asking a question but don't be surprised if there's a negativity or reluctance to engage. Many teenagers will positively refuse to show enthusiasm in front of their peers so avoid, at all costs, singling out individuals or forcing any issue.

Choose vocabulary with care and explain jargon. One of the Tasks is to guess what shipboard terms mean – port, starboard, deck etc.

Attention span is unlikely to exceed 45 minutes.

After your personal introduction, set out your stall **quickly** (this is boring to a lot of people) and get on to the first activity as soon as possible. Make sure the children are divided into their groups and have pencils. Get the teacher to do this.

Slide 1

British Shipping

Thank-you for attending today's talk. The objectives are:

- to present information about British Shipping and its importance to the country and the unseen part it plays in our lives.
- to describe the career opportunities at sea and in maritime-related activities
- to answer any questions you might have and give details of where you can get more information



Slide 2

British Shipping

British Merchant Fleet consists of an amazing variety of ship types which are designed to:

- carry cargo - in huge quantities and volumes, including oil, chemicals, grain, minerals, fertilisers, machinery ...
- carry passengers - on ferries and cruise liners
- carry out specialist operations - laying communication cables, research and survey work, salvage and pollution control operations ...

All these ships are known by the collective term of **MERCHANT NAVY**.

It is made up of shipping companies who own and operate ships. You may have heard of some most famous names such as:

- Cunard • P&O • Shell • BP • Maersk



Slide 3

TASK 1

- Split into groups of three or four
- Matching services and cargoes to types of ship
- Do task 1: allow 5 minutes

The first task. The students have to match cargo/service with ship types. Make sure you've done the exercise first!

Set the exercise up as a competition between the tables.

Interact with the groups. Walk round the rooms. Talk to the students and make an effort to learn some names.

Watch the time - there is five minutes allowed for this and it's easy to overrun.

Slide 4

How many did you get?

11	Tugs
9	Specialty and Supply vessels
8	Very Large Crude Carrier (VLCC) or Supertan
7	Car Carrier
18	Cable-layer
12	Royal Fleet Auxiliary ships
3	Bulk carrier
5	Gas Carrier
14	Interoceanic Survey Ship
1	Ferries
3	Container ships
13	Oil Product Carrier
6	Aggregates Dredger
4	Passenger cruise ships

De-brief the exercise. Allow the students to buzz but maintain control. Use humour where applicable but don't go over the top. Never ever single out anyone's answer for ridicule or approbation.

Slide 5

Ship Types

- That should have given you some ideas of the range of cargoes and activities involved in the shipping industry
- Now let's see what some of these ships actually look like

Slide 6

Ship Types

Container Ship

Teachers: Some ships can carry over 6,000 containers. Known as 'boxes' in the trade, they first appeared at the end of the 1960's and now account for nearly all general cargo. The basic 'unit of currency' is the 'totally enclosed unit' (t.e.u.), which measures 10 feet x 10 feet x 20 feet (sic). Double-length boxes are also available at 40 feet. Boxes can be refrigerated for meat and fruit or specially designed to hold gas or chemical tanks. They are even used for transporting cars. The simplicity of the loading system means they can be transferred from ship to lorry to train very easily. Boxes can be 'stuffed' in a factory in, say, Birmingham, and remain sealed until being unstuffed in, say, New Zealand. Handling damage and theft loss is therefore much less.

Major UK container ports include Felixstowe (the largest), Tilbury, Southampton, Avonmouth, Liverpool (Seaforth Docks), Teesport and Hull.

Slide 7

Teachers: Bulk carriers (together with tankers) are the work horses of the sea. They are used to carry commodities in bulk, including grains (wheat, rice, sugar, rape seed), minerals (coal, iron ore, bauxite, phosphate) and some finished and used products (steel, scrap). They can weigh over 100,000 tonnes and will normally steam at about 15 knots (17 m.p.h.).

Bulkers normally load and discharge at specially constructed berths using high speed conveyors or grab and bucket systems. The holds in the ship are usually large enough to accommodate a couple of bulldozers for scraping the cargo away from the sides.



Slide 8

Teachers: Cruise and passenger ships. The fastest growing merchant ship sector as cruises grow in popularity. Expect some 'Titanic' quips. Of course, **NO** ship is ever unsinkable but it is worth pointing out that modern ships **are** considerably safer than those built a hundred years ago.

Main market is North America where only 2% of the population have ever cruised. Mediterranean, Carribean, Western Seaboard of the USA and Alaska are some of the main areas.

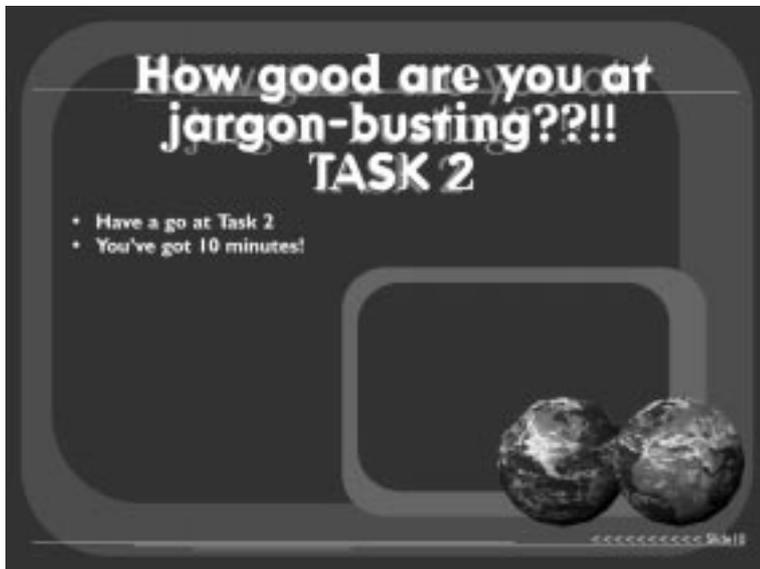


Slide 9

Teachers: Modern 'coasters' can be twice the size of 'deep-sea' ships from fifty years ago so we prefer to refer to the 'short-sea trades'. These ships carry smaller parcels of cargo between ports usually in the same geographic area. Small containers ships also operate in this market acting as 'feeder' ships for the large vessels mentioned above..



Slide 10



How good are you at jargon-busting??!
TASK 2

- Have a go at Task 2
- You've got 10 minutes!

Two globes of Earth are shown at the bottom right.

Straight onto Task 2 – Jargon busting! This is usually well received and should allow you to talk freely about shipboard terms etc.

Teachers: The answers are on the next slide. Some of the terms (like bitter end) are in every day use. The vast amount of maritime language which has passed into our lingua franca is worth mentioning. More on this from Blackpool and The Fylde College on request.

Slide 11



Jargon-buster Answers!!

1. Leeward	Direction away from the wind
2. Donkeyman	Engine, Crew foreman
3. Fathoms	A measurement of 6 feet
4. Bollards	Strong posts for taking mooring lines
5. Deck	Floor
6. Companion Way	Fixed staircase with banisters or handrails
7. Deckhead	Ceiling
8. Windlass	Machine at the front of the ship usually used for raising the anchor
9. Jolly boat	A boat used for working or recreation
10. Crow's nest	A V shape in a mast for signals
11. Yard	A horizontal spar on a mast
12. Poop	Deck at the stern of the ship
13. Starboard	The right hand side of the ship looking forwards towards the front
14. Tarpaulin	Canvas cover
15. Porthole	Round window
16. Scupper	Drain
17. Monkey Island	Top of the wheelhouse
18. Hatch	Opening in the deck for cargo
19. Bitter end	The part of the anchor chain attached to the ship
20. Fore	Front part of the ship
21. Blue Peter	The International Code Flag 'P' flown to say the ship is about to sail
22. Ballast	Weights used to weigh the ship down
23. Aft	Towards the back of the ship
24. Bridge	From where the ship is navigated
25. Bilge	Bottom of the ship where dirty water collects

How many did your team score?

Two globes of Earth are shown at the bottom right.

De-brief the jargon-busting exercise.

Determine the winning team.

Slide 12



Why is the Merchant Navy important to our country?
TASK 3

- See how many ideas you can come up with which may show the importance of the Merchant Navy
- take five minutes

Two globes of Earth are shown at the bottom right.

Task 3. Importance of the Merchant Navy. Some pointers on the next slide.

Slide 13

Apart from the number of jobs actually at sea, emphasise the number of former seafarers employed ashore.

Seafarers have *never* stayed at sea all their lives in numbers. In fact the average career is about ten years. Shipping companies never used to recognise this fact openly and there was a false assumption that we tried to recruit people for life.

This is no longer the case. Employers, including shipping companies, are coming to terms with so-called 'portfolio careers' lasting no more than 7-10 years.

So point out how well seafaring prepares individuals for future careers and how it is a very good foundation for development.



Important reasons for having a Merchant Navy

- **Trade:**
 - 96% of trade into and out of the UK is carried by sea. It is desirable if we can carry much of this in British ships
- **Economy:**
 - British shipping is the fourth largest business sector, and contributes £2.6bn p.a. to the country's economy.
- **Jobs:**
 - The Merchant Navy provides 25,000 jobs for people at sea and another 17,000 jobs ashore which seafarers have traditionally moved on to
- **National Interest:**
 - As an Island State we depend on maritime lifelines in time of war. When our forces are deployed overseas they usually need maritime backup. The Merchant Navy should be there to provide this.

Slide 13

Slide 14

Task 4. What is important in a career. Obviously the intention here is to elicit those things which appeal to young people and then try and show how the Merchant Navy fits the bill.



Your Career...

- Working in your groups, list some of the things that you think will be important to you in choosing a career...
- Take five minutes

Slide 14

Slide 15

Did you manage to do it??!!



Your Career...

- OK - let's now see if your lists have anything in common with what you could expect in the Merchant Navy

Slide 15

Slide 16

What's in it for me?

If you joined the Merchant Navy you could expect...

- exciting responsibility at an early age
- stimulating and varied work using the latest technology
- internationally recognised qualifications
- education to degree level if desired
- opportunities to travel (anywhere!)
- good pay and conditions
- first class career progression into maritime or other fields ashore



Slide 16

Slide 17

What are the jobs on a ship?

- The person in charge on a Merchant Ship is known as the Master, or the Captain.
- Under him or her, there are Officers, Petty Officers and Ratings.



Slide 17

Teachers: The management structures on board most ships are hierarchical and fairly autocratic. Given the safety and environmental issues involved with carrying some cargoes (passengers, oil, gas, nuclear waste) this is not surprising.

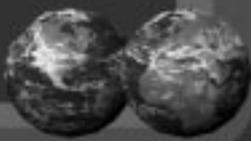
However, the Merchant Navy should not be confused with the Royal Navy. The RN is a military force, controlled by Parliament through the Ministry of Defence. Although we work together in some areas there are huge differences in culture and organisation.

Nevertheless, the Merchant Navy is a (mostly) uniformed service which demands high levels of personal integrity and self-discipline.

Slide 18

Jobs on ships

- officers have responsibility for a wide range of tasks and may control the work of junior officers and ratings
- petty officers come between officers and ratings
- ratings perform a wide range of technical and non-technical jobs



Slide 18

The jobs fall into three categories:

- Management: carried out by Senior Officers
- Operational: carried out by Petty Officers (foremen) and Officers
- Support: carried out in the main by Ratings

There is no bar to women serving at sea and there are female captains and chief engineers serving throughout the fleet.

Slide 19

Teachers: Jobs. The video will help explain these if you have to time to view it before the presentation.

**Jobs on ships:
the Deck Department**

- **Deck Officers have responsibility for:**
 - controlling the navigation of the ship
 - loading and discharging the cargo
 - planning and monitoring routes
- **Deck ratings have many tasks such as:**
 - steering the ship
 - operating machinery
 - carrying out maintenance tasks

..... Slide 19

Slide 20

Teachers: Charts are seagoing maps and the fundamental tools for every navigator. They have been produced by every famous navigator for centuries and the Hydrographic Office of the Royal Navy, who are responsible for British Charts, is arguably the most prolific producer in the world.

Modern charts are available digitally on CD and can be reproduced on a monitor. They can then be overlaid with other electronic information such as radar pictures and the ship's course.

Jobs on ships

Cadets getting instruction in Chartwork

..... Slide 20

Slide21

Teachers: Engineers have tremendous responsibility not only for the main propulsion of the ship but also all the auxiliary machinery and systems. Excellent preparation for future career moves ashore into engineering.

The cylinders and pistons of ships' engines are inspected at regular intervals. To give your pupils an idea of scale: the engines will possibly be as big as a double decker bus and engineers have to use ladders to climb down into cylinders to inspect them.

**Jobs on ships:
the Engine Department**

- **Engineer Officers have responsibility for:**
 - main propulsion systems
 - auxiliary machinery in the engine room
 - deck machinery like winches and cranes
 - electrical and electronic systems
- **Engine ratings have many tasks such as:**
 - routine maintenance
 - engine operation
 - machinery repair

..... Slide 21

Slide 22

Jobs on ships



Engineers in a ship's Control Room

Slide 22

Slide 23

Jobs on ships

On passenger cruise ships there are numerous jobs focused on customer service, such as

- hotel officers
- secretarial workers
- florists
- photographers
- catering staff
- entertainment and casino staff
- security officers

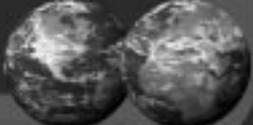


Slide 23

Slide 24

Passenger ships

- Training for jobs on passenger ships other than deck or engine is quite specialised. Each company will have its own system and may employ people only when they have gained experience at this type of work 'ashore', in a hotel for instance
- If a career in passenger ships is what you're are looking for, write to the Passenger Ship Companies listed on the websites given at the end of this presentation.



Slide 24

Slide 25

Teachers: Hours of work at sea can be long and tiring. However a balance should be struck between telling people 'how it is' while not frightening them off by exaggerating the situation. Also, the hard work is compensated by generous leave (see Slide 26).

As in some jobs ashore, hours of work and rest at sea are prescribed in law.

Work on ships

- Life on board ships is a 24-7 operation
- Your work is divided into shifts called WATCHES and you could typically work 4 hours On Watch followed by 8 hours Off Watch
- At busy times this could increase to 6 on 6 off

Two globes showing Earth from space.

----- Slide 25

Slide 26

The time ships spend in port is usually much less than in the past. Improved cargo-handling techniques and flexible working patterns mean that ships turn round in hours where it used to be days or weeks. This in turn means that the opportunities to 'see the world' are less than our predecessors enjoyed. We must never, of course, attract potential career-seekers under false pretences so this fact will have to be made clear when it comes up.

Work on ships



- the work doesn't stop even in port since this is where all the cargo will be loaded or discharged
- sometimes it is possible to 'get ashore' and see something of the country you're visiting

A globe showing Earth from space.

----- Slide 26

Slide 27

Point out that Leave while under training is not as generous as when qualified. However, it should be remembered that about a third of the training programme for Deck Cadets (40 weeks out of 2 1/2-3 years) is spent at College during which time a normal 5-day week is worked.

Leave

- Although the work is hard while you're on board, you must remember that the holidays (called 'Leave') are generous. After a voyage lasting, say 4 months, you could get as much as 2 months or more off at home
- Leave, pay and other benefits vary from company to company but are generally very good

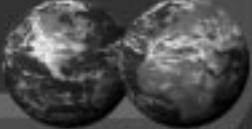
Two globes showing Earth from space.

----- Slide 27

Slide 31

During the training

- while you're training you will be employed by a shipping company and paid a salary
- while you're at sea, (and for some companies while you're at college) all your living expenses are paid for
- most ships' personnel wear uniforms and you're expected to conform to a dress-code at College



Navigation icons: back, forward, search, etc.

Slide 32

See Slide 29.

Training: what qualifications will I get?

- Ratings will obtain a Level 2 VQ
- Officers will achieve Levels 2 and 3 VQ and also an HND in Nautical Science or Marine Engineering
- The main objective for an Officer Cadet is to achieve their internationally-recognised Certificate of Competency which follows on from the above

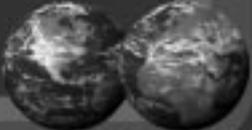


Navigation icons: back, forward, search, etc.

Slide 33

Certificate of Competency

- sometimes called your 'ticket'
- this is extremely valuable: it is your licence to practice and allows you to keep a watch on board a Merchant Ship



Navigation icons: back, forward, search, etc.

Slide 37

There is a mood of optimism in the industry that hasn't been as strong as this for twenty years. With substantial support at senior governmental level the industry is making great efforts to increase its recruitment and build a merchant service which will reflect the needs of our island state.

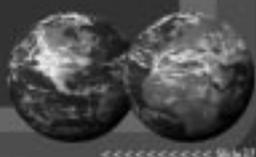
The indications are that world trade will continue to expand into the foreseeable future and that shipping, as far as can be ascertained, has a very bright future.



What about the future?

- there are shortages of officers in most countries*
- there is a forecast of continued growth in worldwide shipping †
- this is probably the best opportunity in a generation for young men and women who wish to make the sea their career
- there are many opportunities for people with seafaring experience in ship management and other maritime-related occupations ashore

* ISF Interim manpower survey 1998
† Chamber of Shipping Annual Review 1999



Slide 37

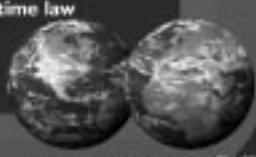
Slide 38



Shore-based Opportunities

- Seafaring skills and experience can be used to progress into shore-based employment when the seafarer is ready to leave the sea
- Opportunities include:
 - ship management and fleet operations,
 - surveying ships to check seaworthiness, for repair and maintenance purposes, to check cargo details
 - ports and harbour work
 - training the seafarers of the future
 - ship repair, marine equipment production
 - marine insurance, ship classification, maritime law and arbitration

There is great demand for those with seafaring skills and experience



Slide 38

Slide 39

Further Information

Have copies of the Maritime Skills and Training information ready to hand out and to leave in the school.

If you have time, run the MNTB video (available from the MNTB on loan).

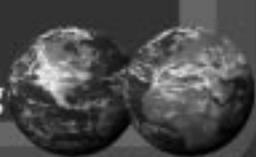
Don't overrun your allotted time since schools work to tight schedules.



Where can I get more info?

Merchant Navy Careers
Carthusian Court
12 Carthusian Street
London EC1M 6EZ
0800 085 0973

www.gotosea.org
www.marine-society.org



Slide 39

Not to be used for Navigation

FLEETWOOD
Magnetic Variation 1° 26' 30" 1978 (1980)
SCALE 1:10 000

Produced by

Blackpool and The Fylde College
School of Maritime Operations
Fleetwood Nautical Campus, Broadwater, Fleetwood
Lancashire FY7 8JZ
Tel: 01253 352352 Fax: 01253 773014
e-mail: maritime@blackpool.ac.uk
www.blackpool.ac.uk



**BLACKPOOL AND
THE FYLDE COLLEGE**
An Associate College of Lancaster University

Contacts



The Marine Society
202 Lambeth Road, London SE1 7JW
Tel: 020 7261 9535 Fax: 020 7401 2537
e-mail: enq@marine-society.org
www.marine-society.org

mntb

Merchant Navy Training Board
12 Carthusian Street, London EC1M 6EZ
Tel: 0800 085 0973
e-mail: enquiry@mntb.org.uk
www.gotosea.org