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Aloysius A. Norton  
Edward W. Knutsen

English For Careers

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# The Language of The Merchant Marine in English

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Regents Publishing Company, Inc.

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## FOREWORD

This book is one of a series called *English for Careers*, intended to introduce students of English to the specialized language of a number of professions and vocations. The career areas covered are those in which English is widely used throughout the world.

Each book in this series serves a dual purpose: to give the English student an introduction to the English terminology of the vocational area in which he or she is interested, and to improve the overall use of this language. This book describes the jobs of the people who operate merchant ships, the men and women who run the shore operations, and the workers in various support services. There is an overview of the merchant fleet and a projection of its future. The discussion is not limited to the United States commercial fleets. Although it is not possible to describe the marine activities of every maritime nation, the information in this book can be related to the merchant marine of any nation.

With respect to learning English as a second language, these books are intended for a student at the high intermediate or advanced level who is acquainted with most of the structural patterns of English. The principal goals of the learner should be mastering specific vocabulary, using the patterns in a normal mixture, and perfecting his or her ability to communicate in this language, especially in the chosen career area.

This book meets these needs. Each unit begins with a glossary in which specialized words and expressions are defined. This is followed by vocabulary practice that tests the student's comprehension of the special terms and gives practice in their use. In the reading that follows, these terms are used within a contextual frame of reference. Each selection is followed by exercises for comprehension, discussion, and review. They give the student the

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opportunity to use, in a communicative situation, both the vocabulary and the structural patterns that have occurred in the reading. Each unit ends with exercises which provide additional contexts for the terms as well as conversational and/or writing practice. The index of special terms at the end of the book makes it easy to use the specialized vocabulary for review or reference.

Much successful language learning comes from interest and experience which is not fully conscious. In offering this book, it is hoped that the student's interest in the maritime industry will enhance his or her ability to communicate more effectively in English.

We wish to dedicate this modest effort to the graduates of the United States Merchant Marine Academy who are now sailing on the rivers, lakes, and oceans of the world. For our own students and for all the students in the merchant marine industry around the world, we foresee a great future. We wish them all smooth sailing and good luck.

**ALOYSIUS A. NORTON**  
**EDWARD W. KNUTSEN**  
Kings Point, New York

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# **UNIT ONE**

## **THE MERCHANT MARINE**

### ***Special Terms***

**Merchant marine:** A fleet of ships engaged in the transport of goods by sea.

**Maritime industry:** The businesses which operate and support the merchant marine.

**Tonnage:** The weight of a ship and its maximum cargo.

**Length overall (L.O.A.):** The full length of a ship.

**Foreign commerce:** Trade between nations.

**Coastwise (intracoastal) trade:** Trade between ports of one country.

**Passenger ships:** Vessels devoted primarily to the transport of persons.

**Break bulk ships:** Ships that carry a wide variety of cargoes in many different types of containers.

**Bulk carriers:** Ships that carry cargoes such as grain or sulphur in bulk.

**Energy carriers:** Ships that transport fuel in various forms.

**Shipping companies:** Owners and operators of merchant marine ships.

**Marine underwriters:** Personnel involved in the insurance aspect of the merchant marine.

**Admiralty lawyers:** Attorneys who specialize in the law of the sea.

**Shipbuilder:** The owner of a shipyard in which vessels are built.

**Turbines:** One of the forms of transforming steam into energy to power a ship.

**Charterers and brokers:** Persons involved in the booking of ships and cargoes.

**Oceanography:** The science of the seas.

**Navigational chart:** A map used by sea pilots to determine course, position, and distance traveled.

**Naval architecture:** Design and planning for the construction of ships.

**Towing tank:** A large tank filled with water in which a model of a hull can be tested to determine its characteristics.

**Sea keeping:** How a vessel handles at sea or reacts to the pressure of the waves.

## ***Vocabulary Practice***

1. What is the *merchant marine*?
2. What is the purpose of the *maritime industry*?
3. What is *tonnage*?
4. What is the full length of a ship called?
5. What are *break bulk ships*?



6. How does a *bulk carrier* differ from a break bulk ship?
7. What is an *energy carrier*?
8. Who are the owners and operators of merchant marine ships?
9. Who is involved in the insurance of merchant marine ships?
10. Who specializes in the law of the sea?
11. What are *turbines*?
12. What are *charterers* and *brokers*?
13. What is the science of the seas?
14. What is a *navigational chart* used for?
15. What are *towing tanks* used for?
16. What is a *sea keeping* characteristic of a ship?

## ***The Merchant Marine***

For centuries, transport over water has been the most economical means of carrying goods. The modern *merchant marine* faces the challenge of maintaining this enviable record. A nation's merchant marine is a fleet of ships, mainly commercially owned and operated, engaged in the carriage of goods by sea. The industry which operates and supports the merchant marine is known as the *maritime industry*. The merchant marine of any nation is devoted to peaceful commerce, in contrast to naval forces which are dedicated to the national defense of sea lanes.



For centuries, merchant ships have opened up new territories and built trade empires in the search for new products and sources of raw materials. The ships and methods of navigation have changed, but the business of the merchant marine industry remains the same. Above, a 18th century ship broker's advertisement for leasing and chartering merchant ships.

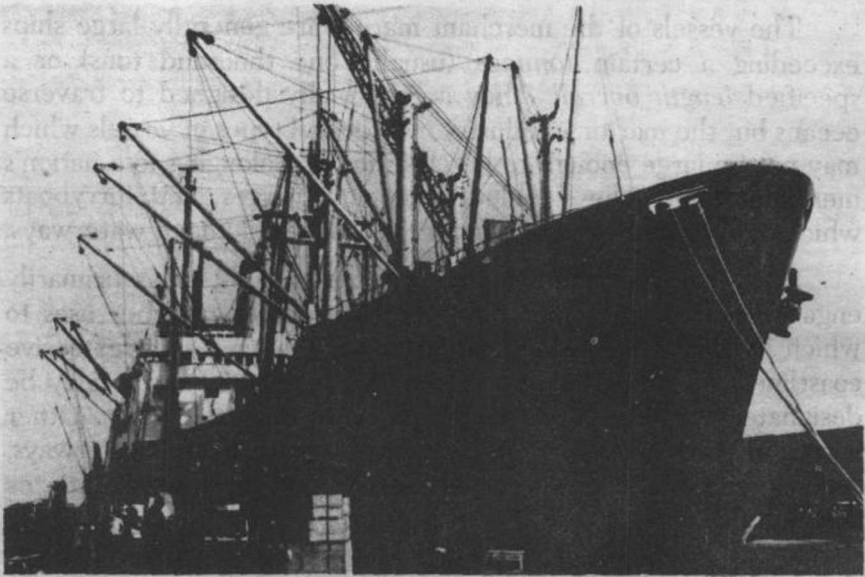
The vessels of the merchant marine are generally large ships exceeding a certain *tonnage* (usually one thousand tons) or a specified *length overall*. They are normally designed to traverse oceans but the maritime industry includes all types of vessels which may not be large enough to be classified as belonging to a nation's merchant fleet. These include tugboats, barges, and ferryboats which operate in bays and rivers or on lakes and inland waterways.

While the merchant marine is often thought of as primarily engaged in *foreign commerce*, there are numerous other uses to which its ships may be dedicated. In some nations with extensive coastlines, such as Chile, vessels of the merchant marine may be designated exclusively for *coastwise* or *intracoastal trade*. Other vessels may engage in trade on large lakes or inland waterways, such as the Great Lakes between Canada and the United States or the Danube River in Southeastern Europe.

The entire maritime industry is involved in maintaining an effective merchant marine. Without the support of the maritime services, the ships and personnel of the merchant marine would be rendered useless. Subsequent units will deal extensively with some of these services, but a brief overview is presented here.

Since the entire industry serves the actual fleet which comprises the merchant marine, it is necessary to understand the tremendously varied types of ships used today. The unit of this book dealing with vessels of the merchant marine will discuss specific ships commonly found in service. For basic classification purposes, one can divide the merchant marine into four categories: *passenger ships*, *break bulk ships*, *bulk carriers*, and *energy carriers*.

In a commercially oriented operation of merchant ships, such as that of the United States, the primary operators of the vessels are known as *shipping companies*. Most shipping companies are privately owned. For purposes of national defense and emergency contingency planning, however, even privately owned and operated vessels of the merchant marine usually come under some form of government supervision. The merchant fleets of some nations are operated by shipping companies which are publicly owned and therefore come under more direct governmental control and supervision. Some countries combine private and public ownership of shipping companies.



*Courtesy American Export Lines*

The break bulk, general cargo freighter is a familiar sight in ports all over the world.

Some companies own vessels in the merchant marine to carry cargoes owned or produced by their own industries. For example, major oil corporations own tankers in the merchant marine. These are normally utilized for carrying oil cargoes either owned or produced by the same corporations. Some steel companies own ships utilized to carry ore to the steel mills. Fruit juice companies may own ships used to carry orange juice, and a vintner may use his own tank vessel to carry wine. Chemical companies sometimes operate special products carriers for the purpose of transporting their chemicals from point to point. Some merchant marine companies are actually a part of private corporations.

Another portion of the maritime industry which is essential to the functioning of the ships at sea is the marine insurance business. *Marine underwriters* insure not only the vessels of the merchant marine but also the cargoes carried by those vessels. The marine insurance trade is a huge business in these days of ultralarge carriers which transport mammoth cargoes worldwide.

*Admiralty lawyers* are heavily involved with the vessels of the merchant marine. There are aspects of law to deal with in every stage of a vessel's construction and career. In a contract between



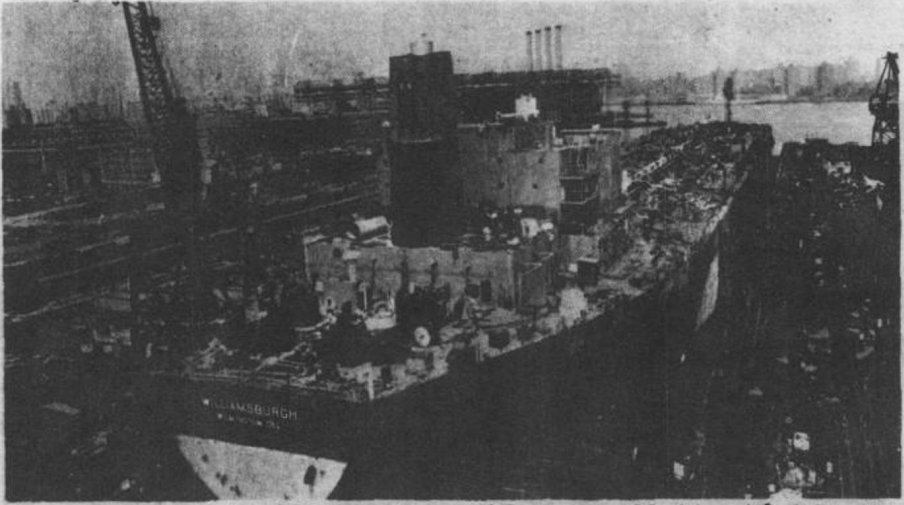
*U.S. Department of Commerce, Maritime Administration*

The maritime industry includes all sizes and types of vessels, ranging from tug-boats to the break bulk ship and ultralarge carrier shown above.

the owner and the builder, lawyers must shoulder a major share of the responsibility. When disputes arise during the useful life of the vessel, it is to admiralty lawyers that the parties in dispute turn for an equitable solution. Admiralty lawyers are frequently involved in claims concerning loss of, or damage to, cargo.

There would be no merchant fleet were it not for the *ship-builders* and their shipyards. The construction of a large merchant marine ship is no simple feat; frequently it involves years of labor for shipyards, suppliers, and highly skilled workers. The construction of a large vessel in a shipyard necessitates the wares of countless suppliers who must furnish equipment utilized to bring the steel shell to life as a viable instrument of commerce. For example, navigational equipment and aids, the ship's boilers and *turbines*, and furnishings for the crew's quarters are frequently supplied to the shipyard by various subcontractors. All of these businesses form a major portion of the industry.

Once the ship is built, launched, and placed in operation, it will require frequent periodic maintenance and overhauling. Very often this is conducted in a shipyard so that major chores, such as removal of the vessel from the water for scraping and painting, can be

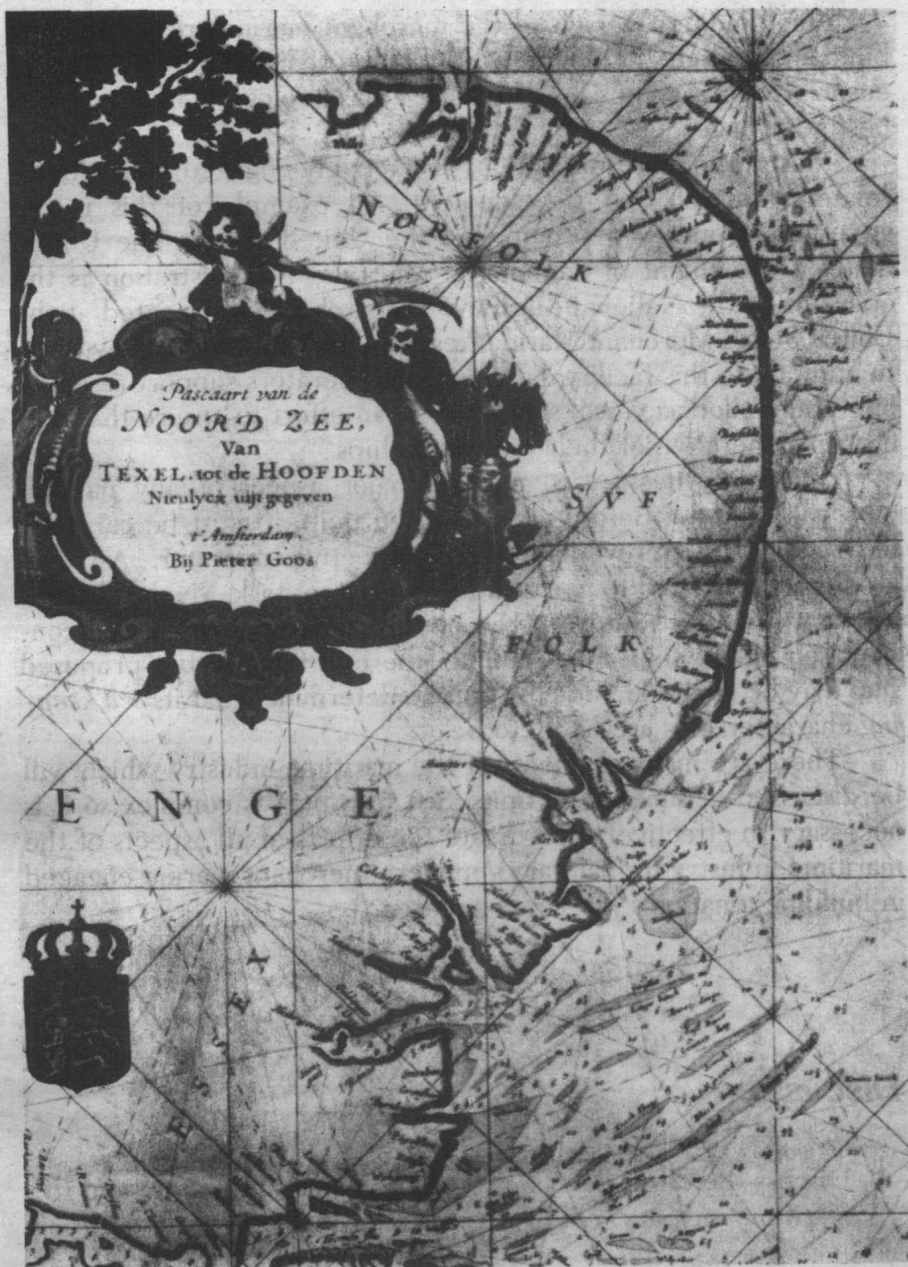


U.S. Department of Commerce, Maritime Administration  
The T.T. WILLIAMSBURGH, an ultralarge tanker, under construction in a Brooklyn, N.Y. shipyard.

accomplished. Some vessels of the merchant marine are occasionally scheduled for a major overhaul or rebuilding, particularly when they have been increased in size (jumboized) or converted from one type of service to another. Projects such as these will necessitate a period of time in a shipyard and many of the services offered by a shipbuilder.

The merchant marine also relies upon personnel such as *charterers* and *brokers* for its day-to-day operation. Charterers book ships and cargoes and, at times, rent a vessel from an owner to another operator. This is a complicated specialty which demands the skilled attention of real professionals.

The *oceanography* trade is essential to the functioning of the merchant marine. In order to make swift, safe passages from port to port on the oceans of the world, today's very expensive vessels must rely upon the most accurate oceanographical information obtainable. *Navigational charts* must be continuously updated to indicate the latest obstructions to safe navigation as well as the most favorable currents and other operating conditions at sea. When considering the number of vessels plying the seas, the magnitude and importance of the oceanography business becomes readily apparent. Thus, most major maritime powers have a number of vessels dedicated solely to oceanographic projects and research.



Navigation charts have been indispensable tools to sailors for hundreds of years. Above, a chart of the North Sea in the *De-Zee Atlas* of Pieter Goos (Amsterdam, 1675).



Since modern vessels of the merchant marine are so costly to build and operate, it is incumbent upon those involved with them to ensure that every possible advance in technology is utilized to its best advantage.

Most large maritime nations are actively engaged in maritime-related research and development. An example of this is the government-operated program in the United States. The United States Department of Commerce Maritime Administration is the operator of the National Maritime Research Center located at the United States Merchant Marine Academy at Kings Point, New York. In addition to this facility, large private operators support research operations such as vessel simulators in an effort to ensure the most efficient operation of their merchant ships.

*Naval architecture* is another major aspect of any nation's merchant marine. Before a ship can be built, it must be carefully designed and approved by its prospective operator. A naval architect is engaged to perform this important task. Much testing is necessary before a shipyard can be designated for the actual construction of the ship. For example, the hull form of the proposed ship may be tested in a *towing tank* to determine what its *sea keeping* characteristics are likely to be.

There are many segments of the maritime industry which will be discussed in succeeding units. Sea transport is complex so it is necessary to effectively coordinate the efforts of all aspects of the maritime industry to maintain a modern merchant marine engaged in building a nation's foreign commerce.

## ***Discussion***

1. Discuss the differences between the merchant marine and the maritime industry.
2. How does the merchant marine differ from the naval forces?
3. Which vessels are considered part of the merchant marine? Which vessels are not?



4. Normally, merchant ships traverse the oceans of the world. Which merchant ships do not?
5. Note the four general categories of merchant marine ships.
6. Explain the purpose of a shipping company.
7. Give several examples of special purpose merchant marine ships that are owned by corporations for their own use.
8. Which two major classes of specialists might be involved in the controversy over a collision of ships?
9. Explain the general uses of oceanography for the merchant marine.
10. Why would naval architects use a towing tank?

## **Review**

- A. Complete the following sentences with the appropriate word or phrase.

Example: The maritime industry includes all elements that operate and support the merchant marine.

1. The ships of the merchant marine are large ships of more than a certain \_\_\_\_\_.
2. \_\_\_\_\_ ships are used to carry people from port to port for a fee.
3. \_\_\_\_\_ trade is conducted solely along the shoreline of a country.
4. Ships that transport fuel are designated as \_\_\_\_\_.