

MC12 = Sh 64/3

# American World Traders

## NEW SHIPS

for the

## MERCHANT MARINE

UNITED STATES MARITIME COMMISSION · 1946

# The Merchant Marine Act of 1936



"It is necessary for the national defense and development of its foreign and domestic commerce that the United States shall have a merchant marine (*a*) sufficient to carry its domestic water-borne commerce and a substantial portion of the water-borne export and import foreign commerce of the United States and to provide shipping service on all routes essential for maintaining the flow of such domestic and foreign water-borne commerce at all times, (*b*) capable of serving as a naval and military auxiliary in time of war or national emergency, (*c*) owned and operated under the United States flag by citizens of the United States insofar as may be practicable, and (*d*) composed of the best-equipped, safest, and most suitable types of vessels, constructed in the United States and manned with a trained and efficient citizen personnel. It is hereby declared to be the policy of the United States to foster the development and encourage the maintenance of such a merchant marine."

---

This booklet is a description of the principal types of ships designed and built by the U. S. Maritime Commission under the Merchant Marine Act of 1936.

These world traders that make up our merchant fleet were designed so that they could be adapted for different routes and needs. One type of hull may have as many as two score different combinations of passenger and cargo space. But the basic hull and machinery are the same.

---

U. S. MARITIME COMMISSION  
*Washington, D. C.*

The Maritime Commission feels that every citizen should know and understand about our Merchant Marine.

The Merchant Marine is not only a vital national delivery system, taking our products abroad and picking up the raw materials that keep our economy running, but it is also an arm of our international policy.

In those two ways, the success or failure of our Merchant Marine affects every one of us.

Many of us, especially those who live away from our great port cities, are apt to forget these facts, feeling that the Merchant Marine is the concern of somebody else.

But it is our Merchant Marine. Unless we understand how it can be used, and use it, it cannot serve us well.

The Merchant Marine did a magnificent job during the war. In the peace it has even a greater task.

EDWARD MAGAULEY  
*Acting Chairman*  
*United States Maritime Commission*

# The Figures

Tonnage of U. S. Merchant Marine, Jan. 1, 1942-----	11,000,000
Tonnage built during the war (Jan. 1942 to April 1946)-----	54,500,000
Number of ships built during the war--	5,300
Liberty ships-----	2,700
Number of Maritime Commission ship- yards before the war (Jan. 1, 1942)--	33
Number of Maritime Commission ship- yards during the war (July 1943— peak)-----	72
Maritime Commission shipyard employ- ment on Maritime Commission con- tracts before the war (Jan. 1, 1942) -	120,000
Maritime Commission shipyard employ- ment on Maritime Commission con- tracts at the peak (Aug. 1943)-----	700,000

# The War Record

Two-thirds of the world's merchant fleet flies the Stars and Stripes.

The people of the United States have built and manned most of the cargo ships that carried the materials that won the war.

The Axis thought the United States couldn't raise our cargo tonnage from 11 million deadweight tons to 50 million in 3 years or train the men to sail this giant fleet. They never dreamed that we could ship war materials at the rate of 8,000 tons an hour round the clock, throughout the year.

This is how America did the job:

The Merchant Marine Act, creating the Maritime Commission, was passed by Congress in 1936.

In 1939 the first ship of a modern fleet was delivered. At the end of 1940, 46 of these were at work.

By the time of Pearl Harbor, 50 more had been added, and shortly thereafter the first Liberty ship, the *Patrick Henry*, was delivered.

The Commission was directed by the President in

1942 to build 8 million deadweight tons of shipping. The goal was exceeded.

Sixteen million tons was the mark set for 1943. More than 19 million tons were delivered.

By the time we went into Tokyo more than 4,500 merchant ships built in the wartime period in United States shipyards were at work for the United Nations. Officers and men of the Merchant Marine numbered about 55,000 in 1941. In 1945 there were 270,000 men sailing our ships.

Twenty-one oceangoing merchant ships were the total of construction by the Maritime Commission in 1939. Eighty-two times that many were built in 1943, in addition to more than 200 minor types.

Fast vessels built by the Maritime Commission and converted to hospital ships have completely equipped wards, diet pantries, recreation rooms, libraries, sun decks, and other facilities of a first-class hospital.

Despite generally higher average pay scales in Maritime Commission shipyards over those of the previous war, the average cost per deadweight ton in

World War II has been \$160 compared to \$210 in 1918-19.

The speed and efficiency of the Maritime Commission's C-type cargo vessels is exemplified by the performance of the S. S. *Challenge*, a C-2 type, which left New York for the Orient 30 days after the *Crown City*, an older ship. The ships followed the same itinerary and arrived back in New York on the same day.

In 1939 the British Empire controlled about one-third of the world's ocean shipping and the United States about one-seventh. The United States now has more than the rest of the world combined.

One yard building Liberty ships delivered these 441-foot vessels in 23.4 days in regular production.

During the war 268,283,000 tons of cargo moved in United States flag ships.

Nine out of every 10 men crossed the oceans in United States ships.

With the end of the war, America made its first step in the "bold and daring plan" for the Merchant Marine, voiced by our late President Roosevelt and reaffirmed by President Truman. Bids were asked on 27-knot liners, the fastest ever to be built in the United States, for the South American trades and

22-knot vessels for the Mediterranean trade. For the first time in a century this country has the opportunity, the ships and the know-how necessary to assume its rightful place in peacetime world commerce.

## GROWTH of OUR MERCHANT FLEET DRY CARGO

AS OF  
JAN. 1

1942



ONE SYMBOL  
EQUALS PRE-WAR FLEET  
OF 6,830,000 DEADWEIGHT TONS

1943



1944



1945



1946



# The Postwar Merchant Marine

The time for postwar planning is over. Postwar action is under way.

The end of the war released the facilities, the brains, the skills, and the machines for a great postwar Merchant Marine.

We are on our way to use them. Basic designs for great new ships have been completed.

The designers have done their job. New propulsion machinery is completing tests. New metals have been designed into these new ships. New materials, merely laboratory curiosities before the war, have been specified. Even new furniture and new wall coverings have been developed. Radar and loran take their place on the bridge to supplement the sextant and compass. A great research program has been undertaken to develop new cargo handling gear, to overcome the greatest lag in technology, expensive and unproductive time at the docks. Port improvement programs are under way.

On the great world trade ships which carried the war to the Axis, the gun tubs are coming off and the bathtubs going back in, with the new types of equipment being installed.

Our postwar fleet will have:

**SPEED**—This is made up of a number of factors. Speed at sea is one, and our postwar fleet over-all will be twice as fast as our prewar fleet of dignified but elderly vessels. Speed in port is just as important—and new cargo gear will cut days from the turnaround time.

**SAFETY**—The United States Merchant Marine postwar will have the safest ships in the world—for passengers, for crew, and for American goods going to foreign markets.

**EFFICIENCY**—The postwar merchant fleet will move a pound of cargo cheaper than any other transportation system in the world. It will deliver more tons faster and farther than any other transportation system.

**STANDARDS**—The United States Merchant Marine will carry the American standard of living and working conditions all over the world. Vessels of the merchant fleet will be manned by trained and efficient civilian personnel. Seamen, representing a new high in the “know-how” of ships and gear, will be wise in the time-tested methods of good seamanship.

# The Passenger Liner

Passenger ships are the showcase of the United States Merchant Marine. The materials, the com-



forts, the luxuries are a travelling display of American industry and life. By their success are measured the standards of our Merchant Marine.

Naval architects have moulded the best hulls. Engineers have calculated their most powerful engines. Designers have labored over their boards to lay out the great public rooms and the living quarters.

America has produced a travelling service so good that anyone who travels American will also ship American.

These ships will not compete with air speed. But for those who want to travel in comfort, to rest and enjoy themselves, the United States passenger liner is the way to go.





# America

The *America* was the Nation's greatest prewar ship.

Shortly after she came out, she went to war. She served on every ocean, transporting hundreds of thousands of men, and never lost a man.

Back in the North Atlantic service, completely refitted, she will provide safety, comfort, and satisfaction on the world's most heavily travelled sea route.

## CHARACTERISTICS

Deadweight tonnage—14,361.

Length over-all—723 feet.

Breadth—93 feet 3 inches.

Refrigerated cargo capacity—33,500 cubic feet.

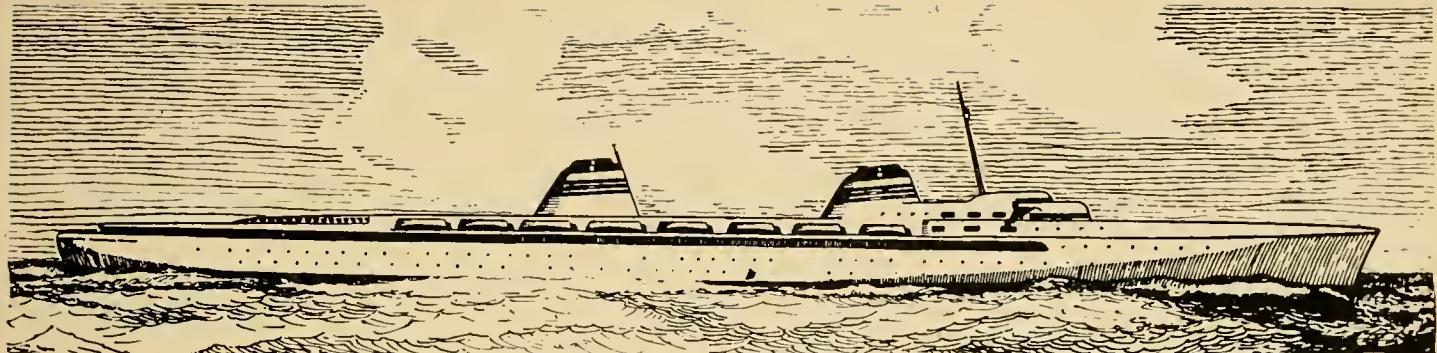
Passengers—1,202.

Crew—639.

Normal sea speed (average sea conditions)—22 knots.

Cruising radius (nautical miles)—11,000.

Machinery—Turbine.



(P3-S2-DA1)

## South American Service

The Southern Cross Ships—one week from New York to Rio. That means the time to South America is cut in half. Bigger than anything built in America before the war, these ships will have many a feature new to the oceans.

Passengers will breakfast in their rooms. Luncheon will be served on deck. Dinner will be a formal meal, followed by open-air dancing and fiestas.

There will be one standard of service for all passengers, and bigger rooms for those who want them.

The ship will be open to the sun, and air conditioned below decks.

Below the passengers will ride fast freight, part of the United States inter-continental delivery system.

### CHARACTERISTICS

Deadweight tonnage (estimated)—8,450.

Length over-all—731 feet 6 inches.

Breadth—70 feet 6 inches.

Refrigerated cargo capacity—42,369 cubic feet.

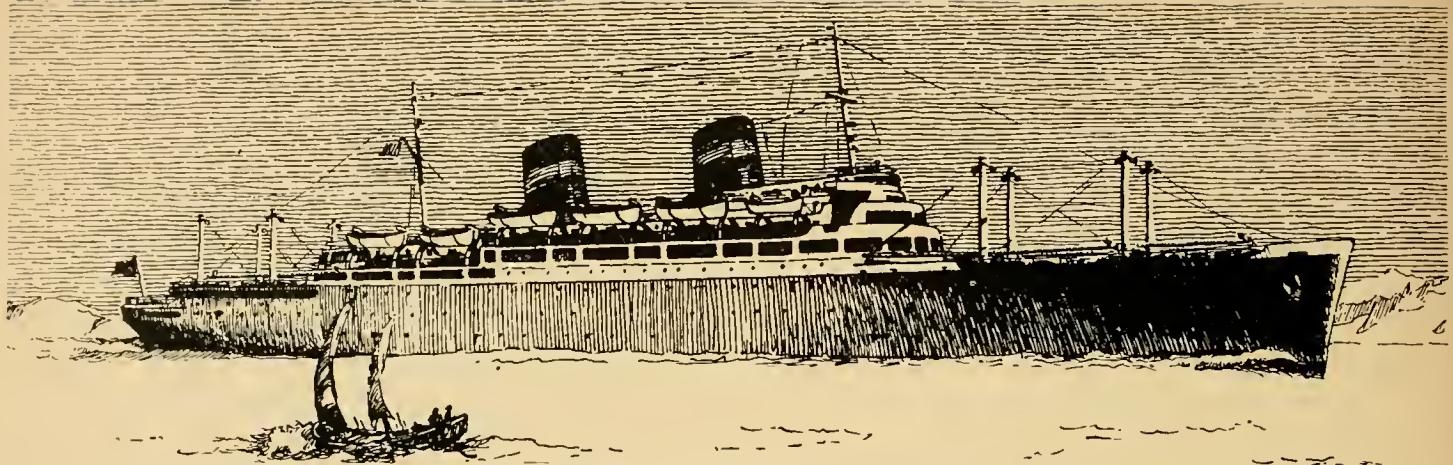
Passengers—543.

Crew—447.

Normal sea speed (average sea conditions)—28 knots.

Cruising radius (nautical miles)—11,000.

Machinery—Turbine.



(P3-S2-DL1)

## Mediterranean Service

These Sunliners are new from the keel up. Twice a month they will speed 654 passengers to the Mediterranean with comfort. Because they go the Southern Route, they will have great sunny play decks, with lots of outdoor recreation, from sitting to swimming. Of course, they will have all the newest service safety features, and they will go to the Mediterranean and back faster than any prewar United States flag passenger ship.

### CHARACTERISTICS

Deadweight tonnage (estimated)—13,600.

Length overall—681 feet.

Breadth—89 feet.

Refrigerated cargo capacity—45,900 cubic feet.

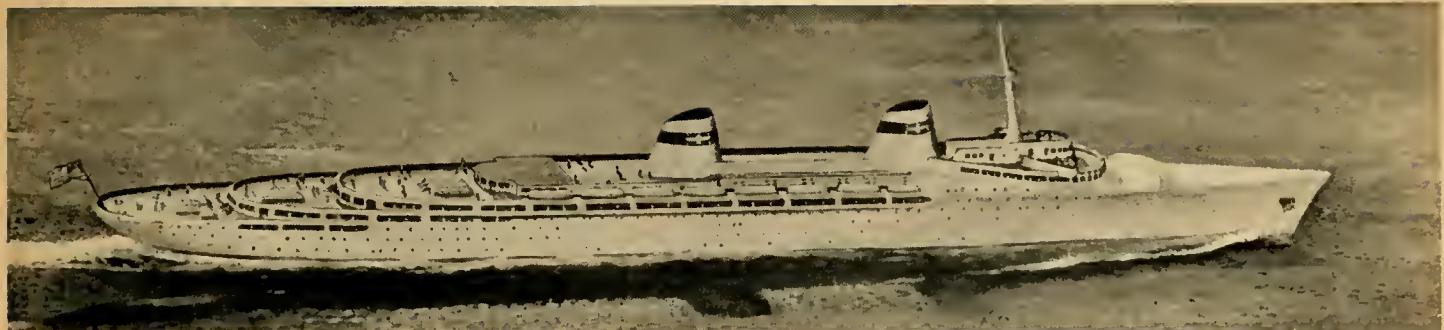
Passengers—654.

Crew—452.

Normal sea speed (average sea conditions)—22 knots.

Cruising radius (nautical miles)—17,000.

Machinery—Turbine.



(P5-S2-E1)

## Trans-Pacific Service

These 900-foot Great Circle Liners will encourage travel over the big ocean with 1,000 passengers each sailing. They will travel either the northern express route direct to Japan in 8 days, or the warmer, longer southern route via Honolulu and Manila. Of course, these will be super-modern throughout, a true postwar luxury liner.

While these ships are under construction, several were designed as transports, and good dry ones too, have been redesigned to provide service. The war records of these interim ships have proved their merits, and the need for an adequate Merchant Ma-

rine. When the new ships are finished, the interim liners will supplement the express service.

### CHARACTERISTICS

Deadweight tonnage—12,500.

Length overall—920 feet.

Breadth—86 feet 4 inches.

Refrigerated cargo capacity—30,000 cubic feet.

Passengers—1,100.

Crew—520.

Normal sea speed (average sea conditions)—28 knots.

Cruising radius (nautical miles)—12,000.

Machinery—Turbine.

# The Big World Traders



From time to time some design comes along that is so good it displaces most everything else that did the job formerly, like the safety razor.

The big world traders designed by the United States Maritime Commission are like that—they proved so efficient at their job that they have replaced most other types of ships.

In a thousand ways these ships are improvements over the ships that came before. The result is that they are efficient cargo vessels.





(C3-S-A2)

## Dry Cargo

Designed for the trade routes where the big tonnage is to be moved, these ships provide efficiency unattainable in smaller-sized ships. Big, able, fast, and easily adaptable to the special requirements of particular routes, these are the cargo queens of the seas.

### CHARACTERISTICS

Deadweight tonnage—12,595.

Length over-all—492 feet.

Breadth—69 feet 6 inches.

Cargo capacity tons—10,400.

Passengers—12.

Crew—43.

Normal sea speed (average sea conditions)— $16\frac{1}{2}$  knots.

Cruising radius (nautical miles)—12,000.

Machinery—Turbine.



(C2-S-B1)

## Dry Cargo

Next in line to the C-3's are these ships, slightly smaller than the big cargo movers. They provide speed and efficiency on the routes where tonnage is not quite so great.

### CHARACTERISTICS

	<i>Dry Cargo</i>	<i>Refrigerated</i>
Deadweight tonnage-----	9,536.	7,423.
Length over-all-----	459' 2½".	459' 2½".
Breadth -----	63'.	63'.

	<i>Dry Cargo</i>	<i>Refrigerated</i>
Cargo capacity, tons-----	7,400.	5,550.
Passengers-----	8.	8.
Crew -----	48.	48.
Normal sea speed (average sea conditions)-----	15½ knots.	15½ knots.
Cruising radius (nautical miles) -----	16,000.	16,000.
Machinery -----	Turbine.	Turbine.



(C1-B)

## Dry Cargo

The smallest of the big world traders is only small in comparison to the other ships in this series. It can move a lot of cargo.

### CHARACTERISTICS

	<i>Dry Cargo</i>	<i>Refrigerated</i>
Deadweight tonnage-----	9,290.	8,909.
Length over-all-----	417' 9".	417' 9".
Breadth -----	60'.	60'.
Cargo capacity, tons-----	7,550.	7,400.

	<i>Dry Cargo</i>	<i>Refrigerated</i>
Passengers-----	12.	12.
Crew -----	43.	43.
Normal sea speed (average sea conditions)-----	14 knots.	14 knots.
Cruising radius (nautical miles) -----	16,600.	15,700.
Machinery -----	Turbine.	Turbine.



(VC2-S-AP3)

## Dry Cargo—Victory

Designed for war service, these ships have the speed and efficiency that make them a factor in postwar shipping.

### CHARACTERISTICS

Deadweight tonnage—10,850.

Length over-all—455 feet 3 inches.

Breadth—62 feet.

Cargo capacity tons—9,000.

Crew—54.

Normal sea speed (average sea conditions)—17 knots.

Cruising radius (nautical miles)—20,500.

Machinery—turbine.



(EC2-S-C1)

## Dry Cargo—Liberty

Based on time tested tramp ship designs, these were the ships that moved the tonnage that won the War.

### CHARACTERISTICS

Deadweight tonnage—10,865.

Length over-all—441 feet 6 inches.

Breadth—56 feet 10 inches.

Cargo capacity tons—9,000.

Crew—54.

Normal sea speed (average sea conditions)—11 knots.

Cruising radius (nautical miles)—10,000.

Machinery—steam reciprocating.

# The Tankers



The tankers are the most easily recognized of all merchant ships. But since they start from one end of a pipeline, and discharge into the beginning of another, they are rarely seen at harbors and piers.

In peace, they keep America's home fires burning and her wheels turning. In war, they steamed with the fleet, and fueled the fighting ships while under way. In war and peace, over the long rolling wastes of ocean, they carry power in their great tanks.

A tanker seems like a simple device. It's a series of tanks, with a bow in front, an engine in the stern, with pumps on deck that deliver millions of gallons, and crew and navigating quarters above all that. Actually, they are complex pieces of transportation, huge specially designed ships for a specific purpose, which they carry out superbly.





(T3-S2-A1)

## Tanker

### CHARACTERISTICS

Deadweight tonnage—18,300.

Length over-all—553 feet.

Breadth—75 feet.

Cargo capacity (barrels)—146,300.

Crew—64.

Normal sea speed (average sea conditions)—18 knots.

Cruising radius (nautical miles)—11,900.

Machinery—turbine.



(T2-SE-A1)

## Tanker

### CHARACTERISTICS

Deadweight tonnage—16,507.

Length over-all—523 feet 6 inches.

Breadth—68 feet.

Cargo capacity (barrels)—141,158.

Crew—53.

Normal sea speed (average conditions)—14½ knots.

Cruising radius (nautical miles)—12,600.

Machinery—turbo-electric.

# Coastal Cargo Ships



(N3-S-A1)

## CHARACTERISTICS

Deadweight tonnage—2,905.  
Length overall—258 feet 9 inches.  
Breadth—42 feet 1 inch.  
Cargo capacity tons—2,243.  
Crew—23.  
Normal sea speed (average sea conditions)— $10\frac{1}{2}$  knots.  
Cruising radius (nautical miles)—4,500.  
Machinery—reciprocating steam.



(CI-M-AV1)

## CHARACTERISTICS

Deadweight tonnage—5,010.  
Length overall—338 feet 8 inches.  
Breadth—50 feet.  
Cargo capacity tons—4,640.  
Crew—35.  
Normal sea speed (average sea conditions)— $10\frac{1}{2}$  knots.  
Cruising radius (nautical miles)—14,500.  
Machinery—Diesel.

# Ship Talk

Every trade has its trade talk. A word is used to express a certain idea. This saves a sentence every time a statement is made. Here is an explanation of the trade terms used in this book:

**TONNAGE**—The capacity of the ship is measured in different ways for different purposes.

1. *Gross tonnage*—The cubic capacity of the ship expressed in tons. One ton equals 100 cubic feet. This system is used mainly for measuring size of fighting ships or passenger ships, rather than carrying capacity.
2. *Net tonnage*—The capacity of the cargo carrying spaces of the ship, which is the gross tonnage less engine room, crew's quarters, bridge, etc.
3. *Deadweight*—The total carrying capacity of the ship, expressed in tons of 2,240 pounds.

**AMIDSHIPS OR MIDSHIPS**—In center of ship, half way between bow and stern.

**BALLAST**—Any weight carried to make the vessel more seaworthy.

**BEAM**—Extreme width of ship.

**BOW OR STEM**—Front or forward end of ship.

**BRIDGE**—Partial deck extending from side to side of vessel.

**BULKHEAD**—A partition in a ship which divides the interior into compartments.

**BUNKER**—Compartment in which fuel is stored.

**CARGO BOOM**—Extends from the mast like a derrick arm, to handle cargo.

**CROW'S NEST**—Platform set high up on the foremast, to accommodate the lookout while ship is at sea.

**DECK**—Part of the ship that corresponds to the floor of a building.

**DEEP TANKS**—Ordinarily hold compartments strengthened to carry water ballast. Placed at either or both ends of the engine and boiler space, usually run from the tank top up to or above the lower deck. Sometimes used for oil cargoes.

**DIESEL**—A form of engine, like an automobile engine, which uses oil for fuel.

**DOUBLE BOTTOM**—A tank whose bottom is formed by the bottom plates of a ship.

**DRAFT**—Depth from water line to bottom of keel.

**HOLD**—Interior of ship in which cargo is stored.

**KEEL**—Backbone of a vessel. A series of connected plates running fore and aft on the bottom of the center line of the ship.

**KNOT**—A speed of 1 nautical mile per hour, equals 1.15 land miles per hour.

**LENGTH OVER ALL**—Measured from the foremost to the aftermost points of a vessel's hull.

**PORT SIDE**—Left side of ship looking forward toward the bow or stem.

**RAKE**—Inclination of the vessel's mast, funnel, or stem from an upright angle with the keel. Rake may be either forward or aft.

**RIGGING**—Manila or wire ropes, lashings used to support or move booms, masts, spars.

**STARBOARD SIDE**—Right side of ship, looking from aft forward.

**STERN OR AFT**—Rear end of ship.

**TURBINE**—Engine in which steam drives a fan, which drives the propeller.

**WEATHER DECK**—Uppermost continuous deck which is exposed to the weather.

# Drawing Board Sketches of Interiors

These drawings indicate what ship designers have in mind for passenger accommodations.



Cabin Library—Promenade Deck



Veranda Cafe—Promenade Deck



Left: Cabin Sitting Room—Promenade Deck

Right: Stateroom



United States Maritime Commission  
WASHINGTON, D. C.

UNIVERSITY OF FLORIDA



3 1262 08484 2672

OFFICIAL BUSINESS