

The United States
MERCHANT MARINE

AIR WAR



WAR SHIPPING ADMINISTRATION
WASHINGTON

ADMINISTRATOR

January 15, 1946.

TO THE PRESIDENT:

This report covers the operations of the War Shipping Administration from its creation on February 7, 1942, through the end of hostilities, and up to December 31, 1945. It attempts to evaluate the part that our Merchant Marine played in the victory of the United Nations.

The War Shipping Administration is already near the end of its postwar assignment, the return of servicemen from overseas. It will return vessels to their owners within a short time. Congress is in the final stages of perfecting legislation to dispose of the Government-built merchant fleet. On March 2, 1946, the United Maritime Authority will dissolve the United Nations merchant shipping pool. These actions will end the period of Government operation of the wartime merchant fleet.

This is my final report as War Shipping Administrator. I feel that the officers and men of the Merchant Marine, the operators serving as agents of our Government, and the men and women of WSA—all these citizens have served their country well. Any industry that can accomplish what this one has done in wartime can justify its great promise in peace.

Sincerely yours,



E. S. LAND,
Administrator.

The United States
Merchant Marine
At War



Report of the War Shipping Administrator to the President

WASHINGTON, JANUARY 15, 1946

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THE WINNING COMBINATION



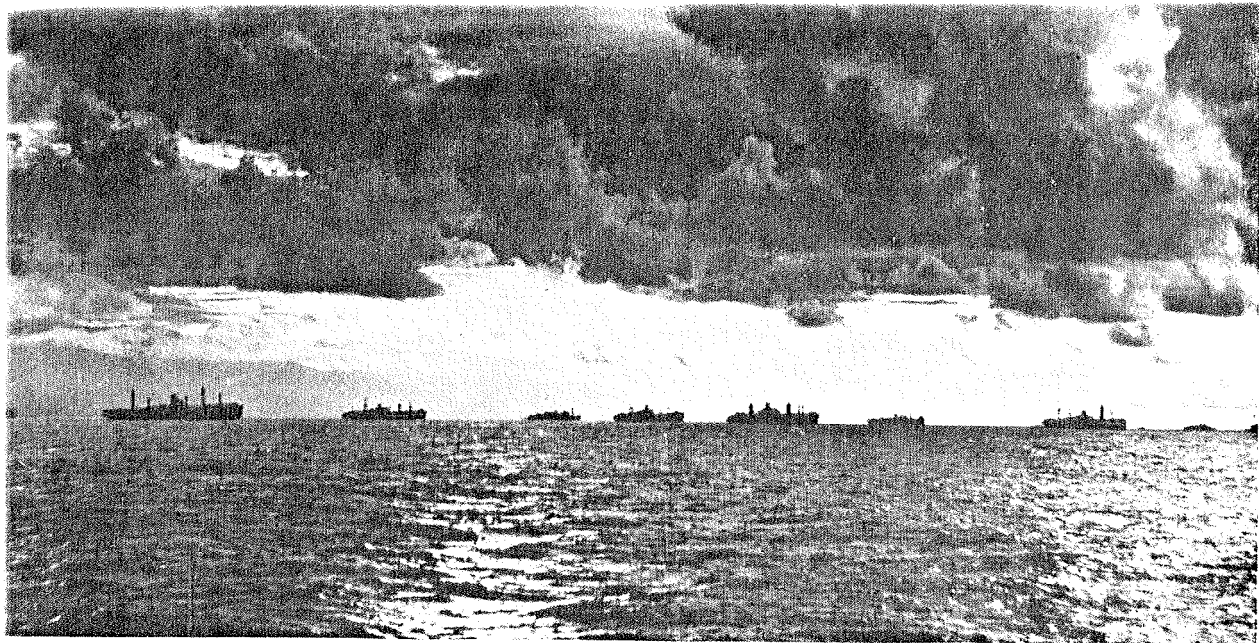
Normandy beachhead.

THE UNITED STATES was a member of a fighting team of United Nations that won the greatest war in history. There were three major players who represented the United States on that team: Our fighting forces overseas, the production army here at home, and the link between them—the United States Merchant Marine.

Each of the three was dependent upon the other; and together with their counterparts in other United Nations, a winning combination was evolved which smashed the Axis powers beyond all recovery.

Never before has the maritime power of America been so effectively utilized. Its naval and merchant fleets became the difference between victory and defeat.

Just as our Merchant Marine linked American overseas forces with American production, so it aided in cementing the United Nations into one fighting unit not separated, but joined by the oceans. In this capacity, the United States Merchant Marine, possessing finally the largest number of merchant ships in the United Nations' pool of shipping, can probably be



Power in the Pacific—Convoy for Leyte.

credited as the greatest single strategic factor in the defeat of the Axis powers.

Technological advances made during the war in explosives, long-distance detecting and navigating devices and the overwhelming development of bomber air fleets tend to obscure the contribution of the slower, but nevertheless relentless, pressure of sea power. Allied sea power, despite keen and intelligent opposition by the enemy, kept the United Nations supplied with, and enemy nations denied access to, the raw materials and fabricated products essential to victory.

German land power, with reserve war stock piles, relied upon speed of conquest to overcome its lack of access to overseas supplies principally from America and once again launched a U-boat fleet to choke off these supplies from Britain and Russia. The heroism of these nations, including the effective antisubmarine warfare carried on first by the British and later by the Anglo-

American navies, forced Germany into the long war she could not sustain. Later the *coup de grâce* was given by the combined air fleets and the Russian steam roller—both of which owed their basic power to the stream of supplies carried around the world in American ships.

Against Japan the role of our Navy was reversed. It fought in the main an offensive war instead of defensive operations to protect our cargo-ship supply lines; American submarines succeeded where the Germans had failed—and Japan's sea lanes were closed and her merchant fleet sunk while ours sailed in comparative security. Japan could not overcome these blows and came to her final defeat in a manner somewhat akin to that of Germany—from the air and from the seagoing power of the United States Navy.

Thus our Merchant Marine met its two assignments: To knit the ocean-separated United Nations into a single wartime or-

ganization, and to place our armies and their equipment on hostile territory and maintain them there.

In carrying out the latter assignment, we can say that our fighting forces were never knocked off an important beachhead, nor, thanks to the merchant fleet, did we in any instance fail to develop our landing with a

steadily increased flow of supplies that enabled our armies to meet their objectives.

That knowledge will be the everlasting satisfaction of the men and women who engaged in the many tasks of building the ships and preparing them for sea, and the men who sailed those ships through the enemy's submarines in every ocean.

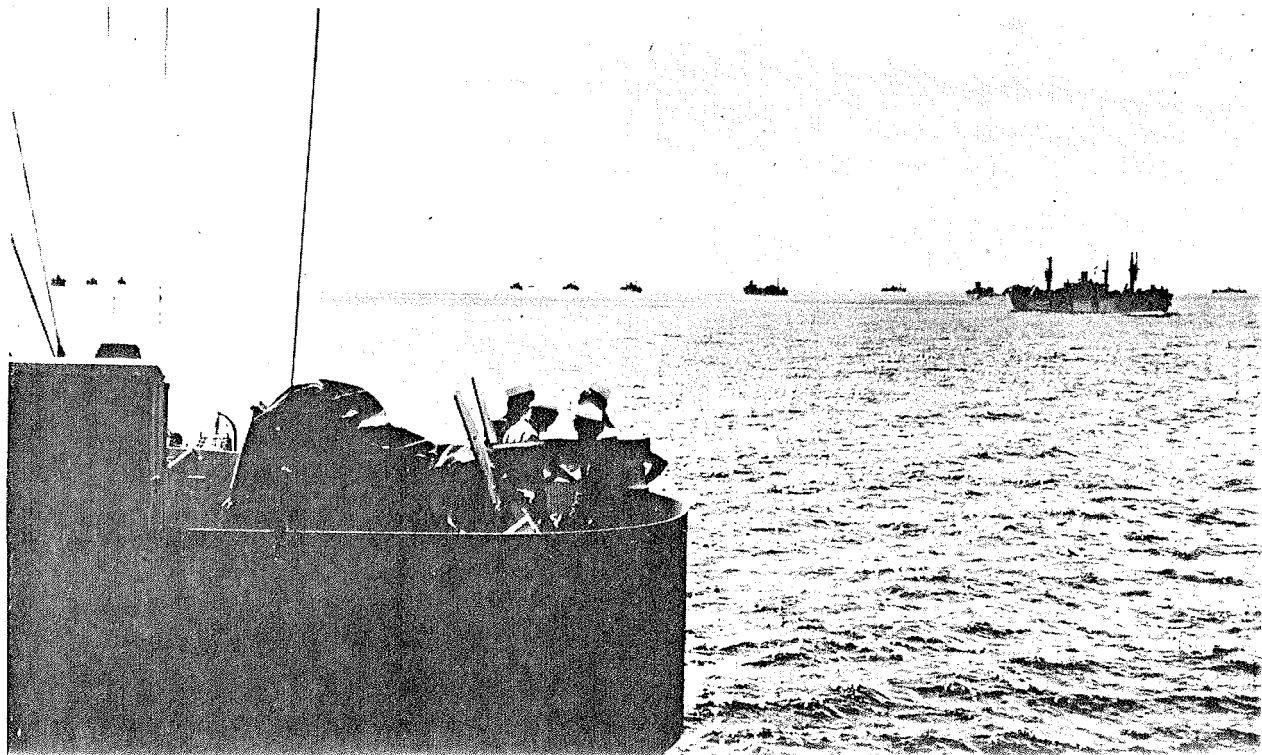
What It Took To Win _____

Each member of the American team had its high point symbolizing its enormous contribution to the victory: Among the armed services witness the United States Army on the beaches of Normandy and Okinawa; the Air Forces in the great sky battle over Regensburg; the United States Navy in the Battle of Midway when Japan's sea power

was turned on its road to ruin; the United States Marine Corps at the pinnacle of its glory atop Mount Surabachi.

The production army commenced its grim race to fabricate the tools of victory with aid to our Allies as the "Arsenal of Democracy," and climaxed it by reaching the beginning of a new era of man, at the

North Atlantic Convoy at height of Allied push.



threshold of the age of atomic power.

The Merchant Marine, too, had its high point. The Murmansk run perhaps best symbolizes its contribution to victory. Our merchant ships ran innumerable gauntlets of air, surface, and submarine attack ranging from the early danger zones in the Red Sea and the Indian Ocean to mid-Atlantic and the Mediterranean, and the *kamakaze* attacks off the islands of the Pacific. But none of these combined all elements of danger from man and nature alike, such as did the Murmansk run.

The war with Japan prevented full use of our World War I shipping lane to Russia through the port of Vladivostok; the Mediterranean was long closed as a gateway to Russian ports; into the Persian Gulf meant the long voyage around the Cape of Good Hope. The most direct, then, was through the Denmark Straits between Iceland and

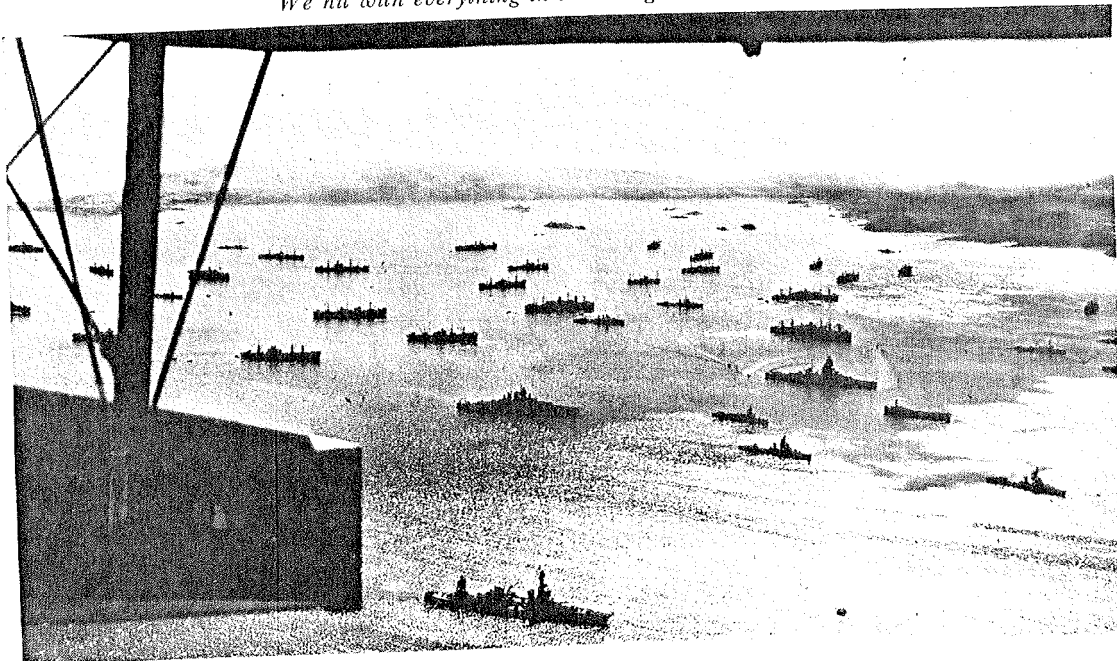
Greenland, then around the North Cape of Norway into Murmansk.

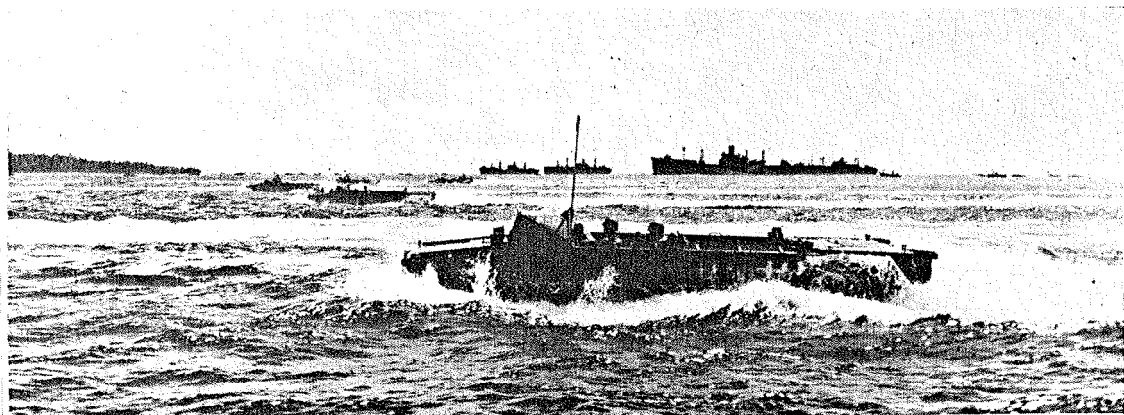
Through icy, fog-bound seas, their flanks exposed to the dive bombers, surface raiders, and submarines moving out from the Nazi-held fjords of Norway, the slow gray convoys moved—and kept moving. Nor was there sanctuary at their destination, for every hour on the hour, it was said, the black-cross planes of the *Luftwaffe* blasted heartbreaking delays in the grim business of unloading the ships in the ice-cluttered harbor of Murmansk. Yet the cargoes were delivered.

In symbolizing the victory of the Merchant Marine over man and nature in their cruelest forms, the Murmansk run also exemplified the high price at which we bought victory.

Up to V-J day, 733 American merchant vessels of over 1,000 gross tons were sunk

We hit with everything in liberating the Aleutians.





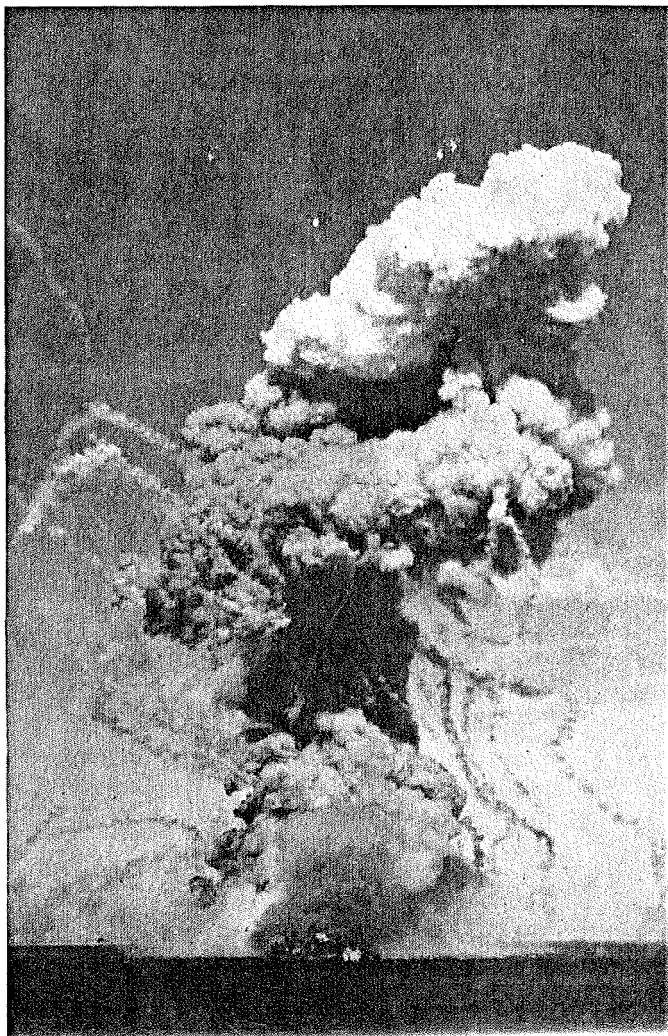
Small craft shuttle between invasion armada and beachhead on Saipan.

during the war, victims of torpedoes, bombs, mines, and marine disasters largely caused by war conditions. This was more than half the tonnage of our prewar Merchant Marine. Hundreds of small craft were also lost, while other hundreds were damaged but survived enemy attack, and many in turn destroyed the attackers.

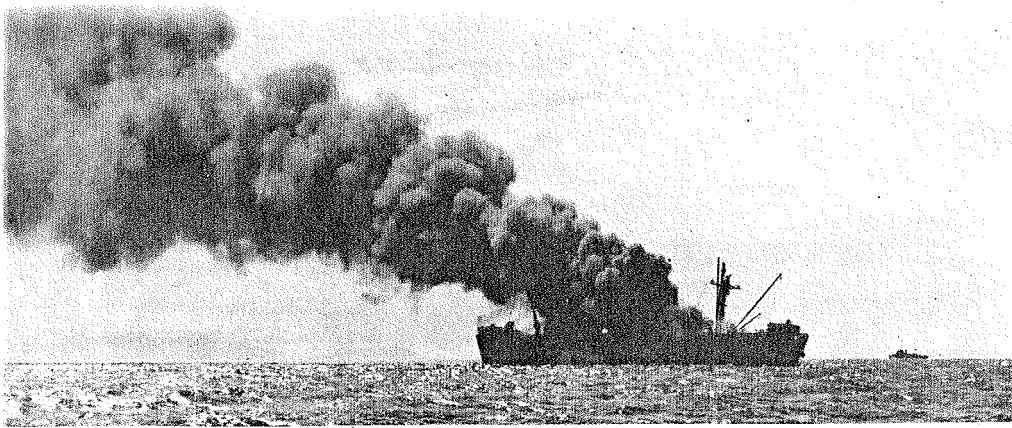
A total of 5,638 merchant seamen and officers are dead and missing; 581 were made prisoners of war. Through the first part of 1943, casualties among the seagoing force were greater proportionately than in all the armed services combined.

Unreported thousands of our seamen and officers were injured under attack or suffered the nightmare of waiting aboard lifeboats and rafts for rescue.

The cold evaluation in dollars and cents of the cost of building and operating our wartime merchant fleet reached a grand



*Part of the price—Liberty muni-
takes death blow at
Saipan.*



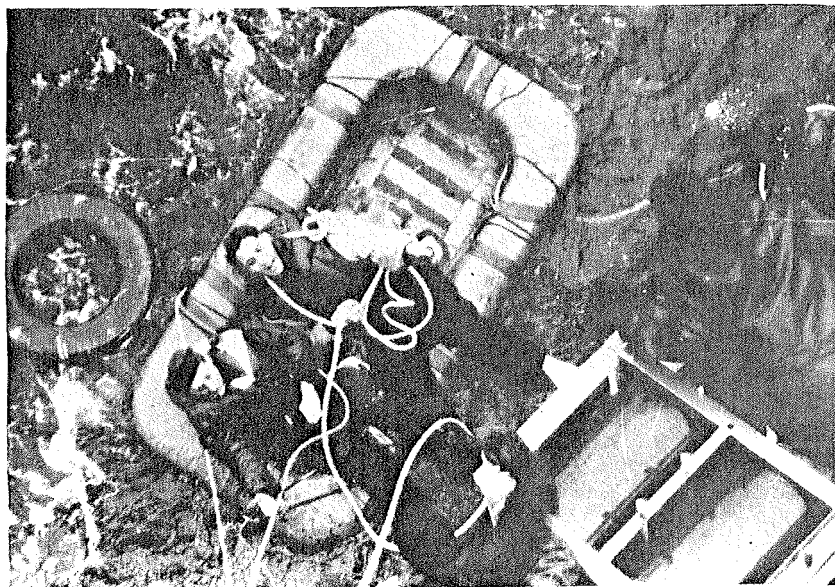
Liberty ships caught the brunt of enemy attack on every ocean.

total of more than \$22,500,000,000. We have much to show for it still: The greatest merchant fleet of ships and experienced men in history. But much is gone forever in the final reckoning of the cost of victory.

These losses are not hard to understand. Transport was the jugular vein of the

United Nations' war effort; the Nazis paid our merchant fleet the unwelcome tribute of concentrating on unrestricted submarine warfare for the second time in a generation. The Japanese selected our merchant ships as targets for one of the most spectacular weapons of the war, their *kamakaze* planes.

These men are snatched from death in the mid-Atlantic. Coast Guardsmen rescue two merchant seamen from torpedoed vessel.



II

THE CARGO LIFT

THE FINAL MEASURE of accomplishment of the Merchant Marine during the war is the amount of cargo transported. Since the entire conduct of the war had to be planned on the amount of shipping available within certain dates, the fluctuations in the amounts of cargo lifted were an index to the progress of the war from Pearl Harbor to Tokyo Bay.

The total cargo lift from the United States between December 7, 1941, and the capitulation of Japan was 268,252,000 long tons, of which 203,522,000 were dry cargo and 64,730,000 were petroleum products and other bulk liquids carried in tankers.* Approximately 75 percent was carried by ships of the WSA-controlled fleet.

The total dry cargo and bulk liquid shipments* rose rapidly from 44,117,000 tons in 1942, to 62,113,000 in 1943, 78,553,000 in 1944, and 83,469,000 in 1945. During the last year of the war, this meant an average rate of delivery of 8,500 tons of

cargo every hour of every day and night.

This was the weight of battle equipment, food, fuel, raw materials, and commodities carried by United States merchant ships to our armed forces and our Allies to beat the Axis, and cargoes imported to maintain our war production and civilian economy.

Ships of America's merchant fleet, including the large passenger liners turned over to the Army and Navy for transports, carried the great majority of the 7,129,907 Army personnel and 141,537 civilians moving overseas between December 7, 1941, and November 30, 1945, and the 4,060,883 Army personnel and 169,626 civilians returning to the United States within the same dates.

Wartime cargoes were not limited to war matériel. The WSA cargo fleet saved a large amount of money for the American Red Cross and facilitated delivery of its essential items by carrying them free of cost upon all available ships.

Where the Cargo Went

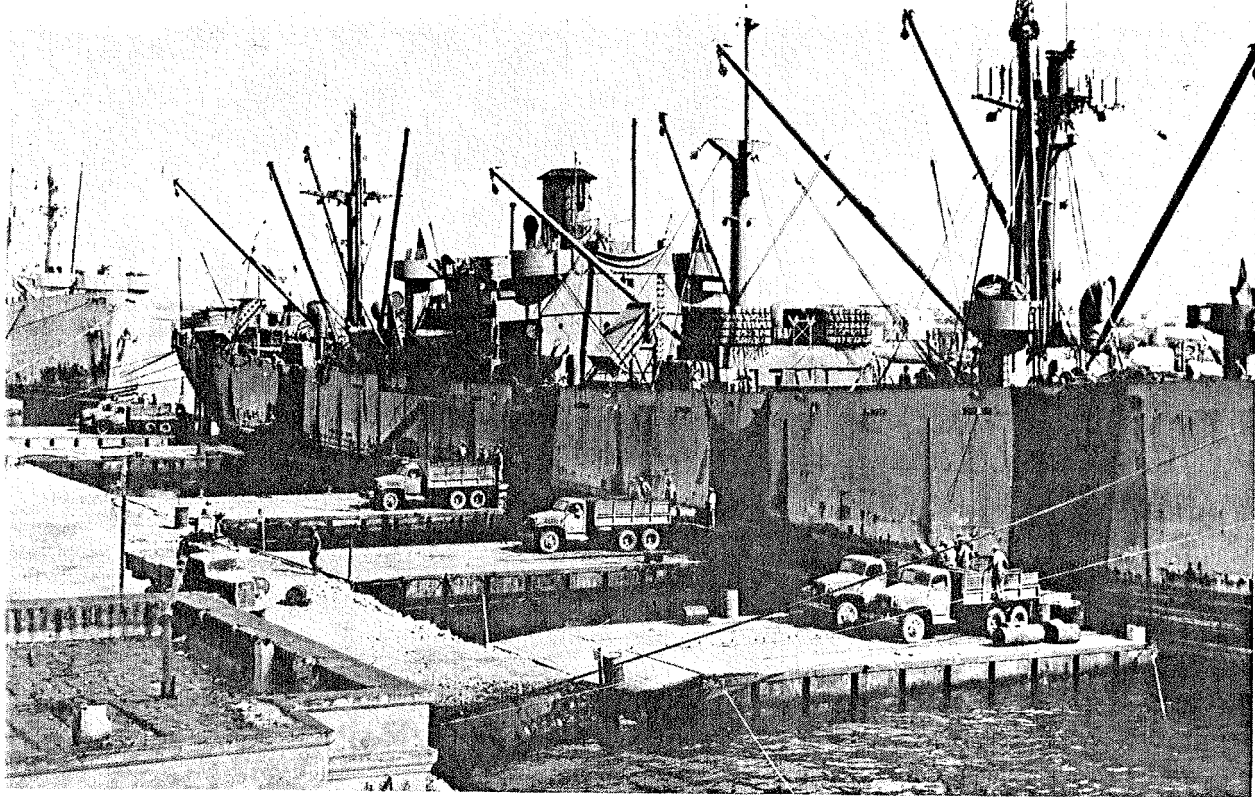
Cargoes were carried across every ocean into practically all inhabited areas of the world, along many sea lanes never before used in previous wars or commerce, to old-established ports and to wartime destinations which were ports in name only.

The distribution in 1944 indicates the proportion of dry cargo each major area received: 15 million tons to the United

Kingdom and Continent of Europe; 13 million tons to the Pacific areas; 8 million to the Mediterranean area; 6 million to South America and the Caribbean; 5 million to the U. S. S. R., and 3 million to India and Ceylon.

That year about two-thirds of the total Army shipments went to the United Kingdom-Continent, Mediterranean, and southwest Pacific areas; about 86 percent of the Navy shipments went to the Pacific

* Data not available on amount of bulk liquid cargo carried by WSA tankers for Army and Navy.

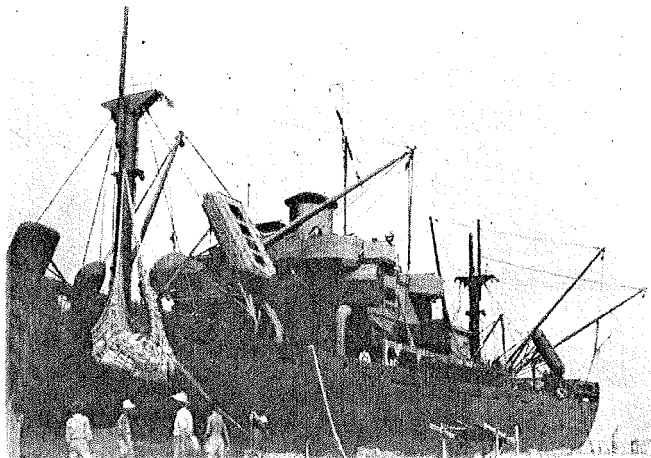


North Africa first saw the massive weight of American supplies landed from merchant ships.

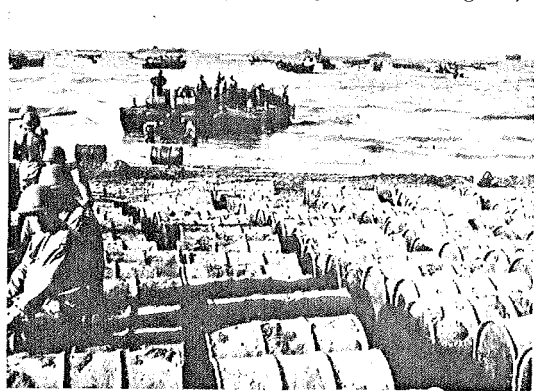
areas, approximately 60 percent to the central Pacific alone. The United Kingdom and Russia got slightly more than 70 percent of the total lend-lease shipments, while the Caribbean and South America areas

took 55 percent of the total commercial shipments from this country. In addition, the United Kingdom and Mediterranean areas also took 23 percent of the commercial shipments.

Liberty ship discharges wheat at liberated Manila to aid stricken population.



Off Luzon—Tons of precious gasoline ferried by small landing craft.



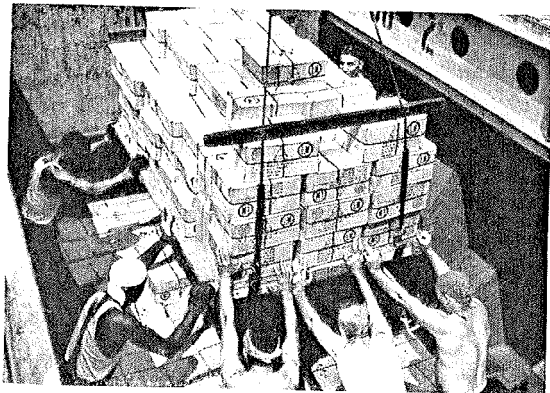
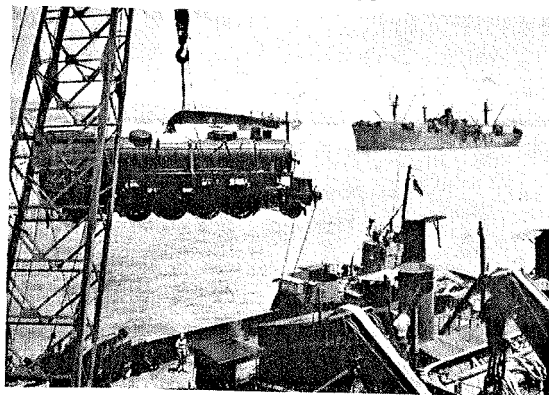
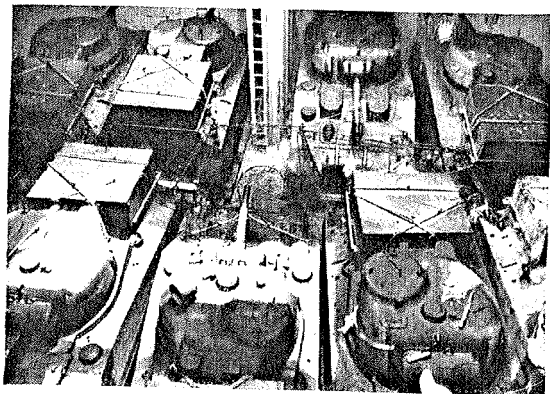
What We Shipped

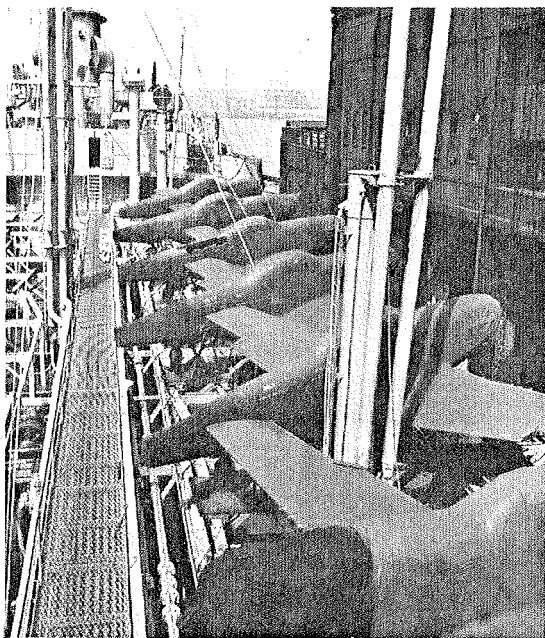
Several hundred thousand different items comprised the cargo shipped overseas. They ranged in size from pins and ball bearings to locomotives and landing craft; from drugs, medicines, hospital supplies, and clothing to explosives and fire-fighting equipment; from foodstuffs to agricultural machinery and Army tanks. In short, our cargoes comprised the tools of destruction and construction, the means to help sustain the war overseas, as well as the implements and materials that are basic to the support of civilian populations.

Some of the commodities could be stowed compactly in the holds of ships, others required space out of all proportion to their weight, and were carried on the decks of cargo vessels and tankers.

Planes, tanks, trucks, and other vehicles require enormous quantities of fuel and lubricants to keep them in operation. Exclusive of shipments for the Army and Navy, we sent overseas from January 1943 through August 1945, 18,907,089 tons of gasoline, 7,235,999 tons of fuel oil, 1,498,034 tons of Diesel oil, 1,440,459 tons of gas

Tanks and locomotives shared valuable cargo space with food and medical supplies.





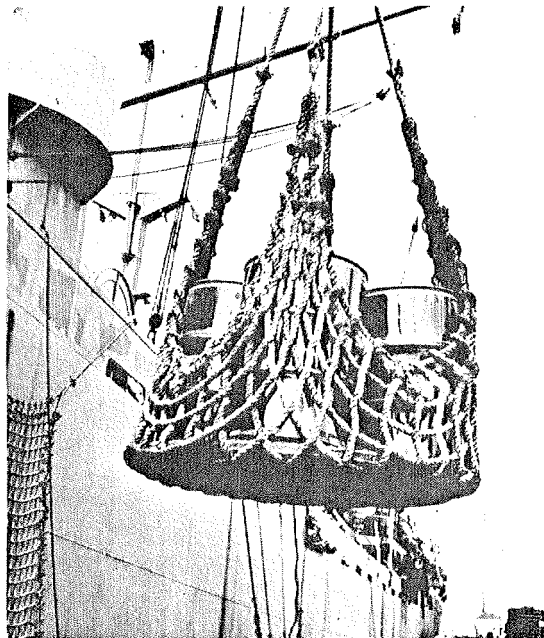
Planes were lashed to special tanker decks.

oil, and more than 667,979 tons of lubricants. In all, petroleum and its products totaling some 35,109,145 tons comprised 99

The "Big Customers"

There were five major accounts for whom these goods were carried by WSA-controlled ships. Exports were for the Army and Navy, the lend-lease program, civilian exports required by Allied Nations, and the program established by the State Department and the Foreign Economic Administration for shipments to Latin America and other countries. Imports were strategic materials for war industries and essentials for civilian use.

Each of these shipping programs was essential to the task of winning the war, and the problem of meeting the cargo needs of each, without jeopardizing the other and



Even dry-cargo vessels carried gasoline.

percent of the total bulk liquid shipments; inedible oils and chemicals made up the remaining 326,204 tons.

with the amount of shipping currently available, was the principal task of the War Shipping Administration. To carry it out successfully meant assembling a staff of ship operations men of tested ability and the organization of this staff on a world-wide basis. It meant constant liaison with military and political leaders, and civilian agencies in charge of production, finance, and economic coordination with our Allies. There was no precedent for guidance, no time for training or experimentation. We were in a war. The job had to be done under wartime conditions.

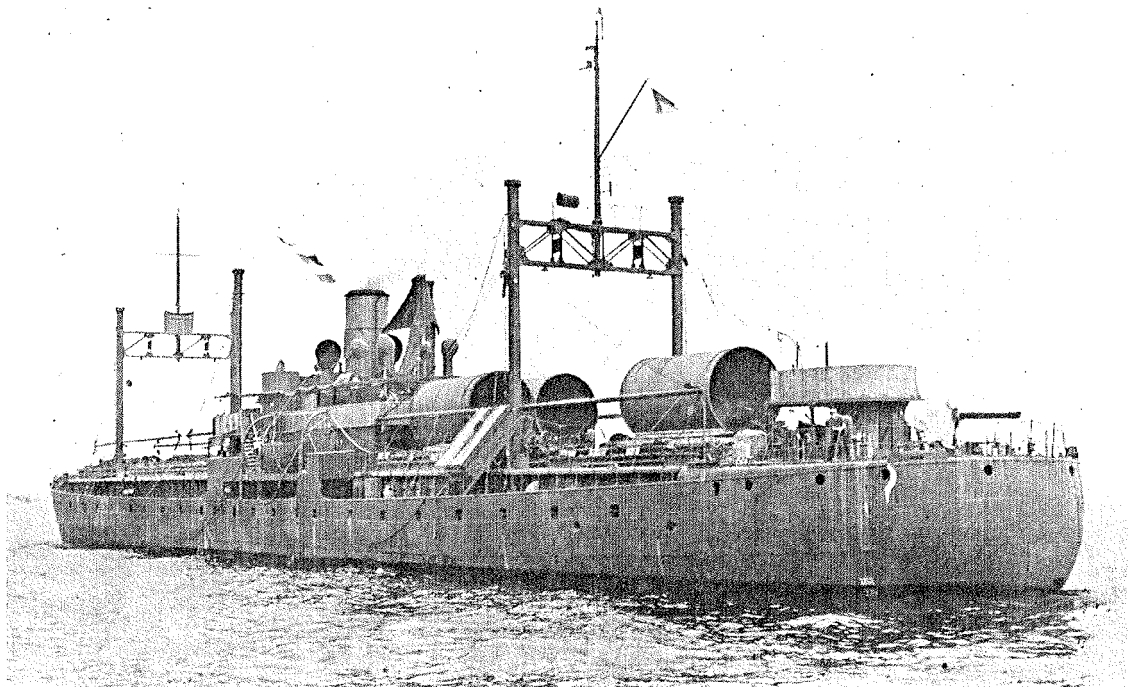
AID TO OUR ALLIES

The gallant stand of Great Britain and Russia in the months before Pearl Harbor and in the early days of our participation in the global war was of incalculable value to the United States in gearing its war machine to maximum efficiency. That precious time cost our Allies thousands of lives and tons of equipment. It was essential to keep those nations supplied, even though we needed cargo space for our own early military movements. Therefore, our commitments to ship them, under the lend-lease program, the war goods and commodities without which modern war cannot be waged, were met; and at times we were even able to exceed the tonnages required within a given period.

As our war with the Axis proceeded, it was necessary to increase the flow of supplies and equipment from America to help keep the United Nations fighting effectively. Vessels of various nations carried these lend-lease cargoes, but the bulk was transported overseas in WSA-controlled ships. In 1942, 39 percent of all shipments for lend-lease and civil requirements was so carried; in 1943, 53 percent; in 1944, 62 percent; and in the first 10 months of 1945, 58 percent.

During 1942 and the early part of 1943, 30 percent of the carrying capacity of the WSA fleet was being used for lend-lease and other civilian commodities for our Allies, principally Great Britain and Russia. This percentage dropped only one point,

Lend-lease cargoes made some fantastic deck loads.





Tons of lend-lease supplies from Australia were landed by our vessels in the Philippines.

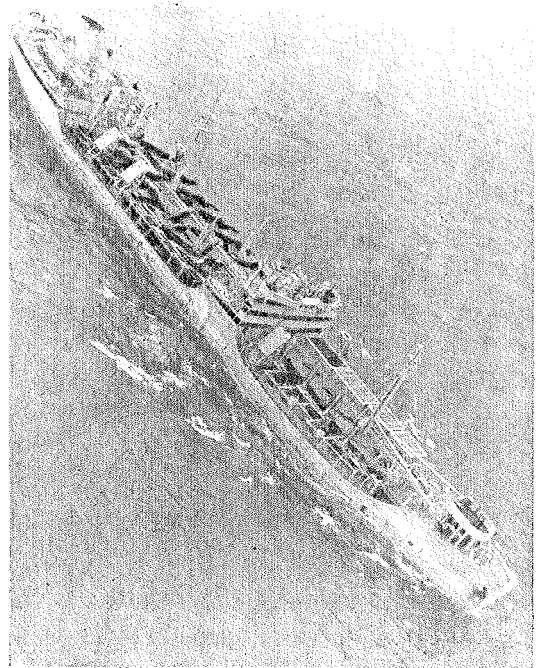
to 29 percent, by the end of 1943, but by that time the total tonnage of our merchant fleet had increased materially, so that the actual weight of cargo increased during that critical year. All commitments were met, and, as a matter of fact, the lend-lease shipments during 1943 to Russia exceeded our commitments by more than 35 percent.

In 1943 WSA ships made 2,876 sailings with lend-lease supplies. Of the total, 2,267 sailings were for Great Britain, her colonies and dominions, 328 for Russia, and 281 for other lend-lease countries. The improvement in antisubmarine warfare was especially helpful. In 1942 an average of 12 percent of ships carrying lend-lease for Russia was sunk, principally along the dangerous Murmansk run, but by the end of 1943, barely 1 percent of the lend-lease carrying vessels was being lost. This was of great value in helping the Russians turn the Nazi tide and begin the long march to Berlin.

As the tempo of the war increased during 1944 and 1945, Army and Navy requirements for tonnage were rising swiftly. Even though our shipyards were making production history, it was evident that the increased military requirements could not be met from new construction alone, and that the additional tonnage would have to be drawn from shipping employed in lend-lease and civilian accounts. In 1944 the net increase to the WSA dry-cargo fleet amounted to 6,605,000 dead-weight tons. But the Army and Navy requirements in that same year were increased by 8,854,000 tons.

Tonnage in 1944, therefore, allocated to the lend-lease account fell from 5,974,000 dead-weight tons at the beginning of the year to 3,460,000 by December 31. The

High-test gas and the planes to use it were carried by the same ship.



British took the heaviest cut—from 3,267,000 to 1,804,000. Most of this came from the United Kingdom import program. Over the same period, Russian lend-lease decreased from 2,226,000 tons to 1,491,000.

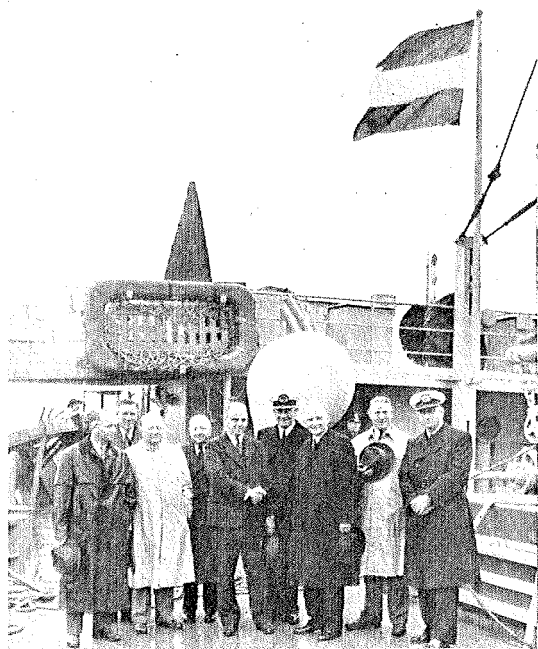
Although the principal function of the WSA in the lend-lease program was the delivery of war materials required by the United Nations, there was another and highly important phase: The servicing, supplying, and repair of ships belonging to foreign governments who had lend-lease agreements with the United States, and the allocation to them of ships to replace to some extent their excessive war losses.

The WSA, under lend-lease or charter arrangements, transferred 509 vessels to serve under Allied flags. This was done primarily to take advantage of foreign personnel which was rapidly accumulating as

a result of losses of foreign-flag ships in the German submarine campaign. These were principally Liberty-type and prewar ships. The title to these vessels was retained by the United States. Of the total, 341 went to the United Kingdom, 93 to Russia, 23 to Norway, 14 to Greece, 13 to France, 7 to Belgium, 6 to Netherlands, 6 to Poland, 4 to Chile, and 2 to China. War losses, or vessels returned, are not included.

In addition, WSA handled the transfer to these governments of small boats, tugs, and barges for use in military and foreign operations. Our shipyards repaired damages to foreign vessels and converted many of their merchant ships into troop carriers and hospital ships under the lend-lease program.

The agreements worked both ways. The WSA fleet required services, supplies, and



Liberty ship TOBIAS LEAR rechristened the FORT ORANGE upon transfer for operation to the Netherlands. War Shipping representatives join Dutch officials at flag raising.

Liberty ship became the AMERIKI under Greek flag in ancient religious ceremony conducted by priest.



repairs in various ports throughout the world. The costs of these were covered by United Nations in whose ports the work was done under reciprocal aid arrangements.

FOR OUR GOOD NEIGHBORS

Participation of Latin American countries in the war of the United Nations against the Axis powers further emphasized the economic and social ties between them and the United States. They played an essential role, for one thing, in furnishing raw materials for our war factories; they needed and received just consideration in the proportioning of our goods for their civilian and wartime economies.

The export program with these Latin American nations, and other countries where there was a need for as much reciprocal trade as possible during wartime, was arranged by the State Department and Foreign Economic Administration. Shipping quotas were set, and met, for cargo space in the WSA-controlled fleet. The export part of this program was dove-tailed with the WSA's import operations by utilizing to the fullest the homeward-bound vessels, where such utilization did not interfere with strictly military requirements.

WSA officials made every effort steadily to simplify the procedures in licensing and booking shipments to these countries. Use was made of private forwarders in the United States to handle an increasing flow of nonmilitary shipments, which process served to further the principles of the Bland Act to preserve forwarding and similar services for the postwar foreign trade. Studies were made during the latter part of 1945 by

WSA and FEA aimed at further relaxing controls on commercial trade to foreign countries.

This process led naturally into a smoother transition from lend-lease shipments to relief shipments for war-torn countries after the end of the conflict in Europe.

Arrangements were made with the United Nations Relief and Rehabilitation Administration and the FEA whereby the WSA coordinates the forwarding and documenting of UNRRA water-borne shipments from the United States under similar procedures to that used in making lend-lease shipments. The movement is handled by private forwarding firms. The forwarders' fees are paid out of UNRRA funds transferred to the WSA through the FEA. Somewhat similar procedure is used in the shipping of civilian relief supplies to occupied areas under Army control, except that the goods are consigned to the Supreme Allied Command and the forwarding brokers' fees are paid from WSA funds.

The net results of WSA's handling of lend-lease civilian shipments, imports, and relief cargoes have been a constant trend toward restoration of normal trade procedures as consistent as possible with the current war and international situation, and to exemplify the value to our postwar world trade relations of a large and well-operated merchant fleet.

Dry cargo exports in WSA ships for both the lend-lease program and civilian commodities totaled 10,242,000 long tons in 1942, 16,221,000 in 1943, 16,485,000 in 1944, and an estimated 21,733,000 in 1945. Tanker exports in the same categories amounted to 4,246,000 in 1942, 6,370,000

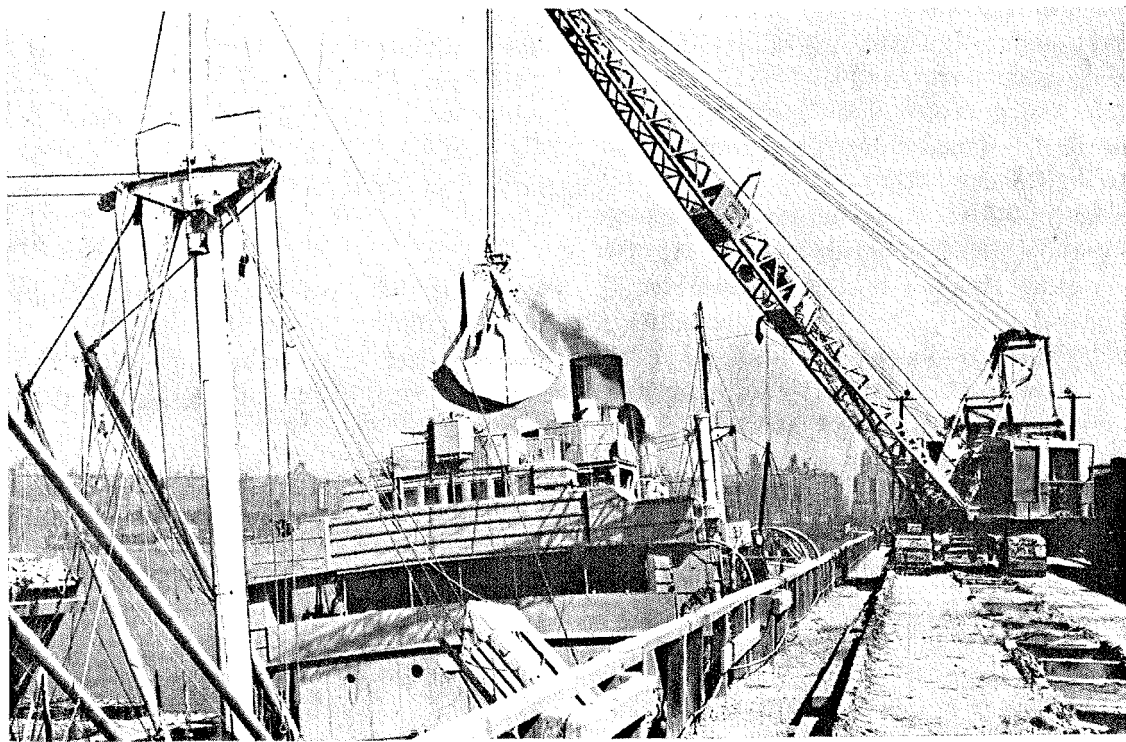
in 1943, 13,874,000 in 1944, and an estimated 9,389,000 in 1945.

WAR SINEWS FROM ABOARD

To keep the wheels of war production turning, the services of the Merchant Marine were required to bring home essential raw materials in great amounts. At the same time, essential civilian commodities were required from various points overseas. Our imports during the war totaled 70,652,000 tons of dry cargo and 35,118,000 tons brought back in tankers. Our dry-cargo imports were about one-third the amount of dry-cargo export tonnage. In 1944, ships controlled by the WSA brought in about 73 percent of total receipts.

During the first 2 years of the war, increasing participation by our armies demanded a swiftly rising flow of military supplies. The submarines were taking a heavy toll. The resulting pinch upon imports, therefore, fell most heavily on civilian commodities. With tankers burning in sight of our own Atlantic shores, many homes were cold from lack of fuel. American families became familiar with lack of coffee, spices, sugar, and other commodities. But gradually, even these began to appear more plentifully on store shelves. By mid-1943, with all demands of the Army and Navy for WSA tonnage satisfied, and defense measures against undersea raiders growing stronger, and with new construction adding ships steadily to the fleet,

Aluminum ore arriving at American port from South America.



dry-cargo imports rose from 17,509,000 long tons in 1942 to 19,480,000 in 1943.

In the following year, dry-cargo ships arriving in United States ports carried 18,566,000 tons of strategic and other commodities. Tankers arrived with 11,200,000 tons of bulk liquids, principally crude petroleum and molasses from the Caribbean, exceeding those in 1943 by more than 4,700,000 tons. In the first 9 months of 1945, dry-cargo imports totaled 14,628,000 tons, and tankers brought in 10,266,000 tons.

Commodities were brought into the United States from every continent. Bauxite, copper, coffee, sugar, nitrates, manganese, and other essentials were taken aboard in South American and Caribbean ports; burlap was brought back from India and Ceylon; wool from Australia; hides and skins, cocoa beans, and sisal and henequen from Africa, chrome came from Turkey via the Red Sea and from North and Trans-Pacific Russia.

According to many military and naval historians, the Caribbean-Gulf of Mexico area is the Achilles' heel of Western Hemisphere defense. The Germans thought so, too. This area alone was the source of almost one-half of all dry-cargo tonnage brought into the United States. Through it crisscrossed cargoes of ores being brought back on ships returning from the Southwest Pacific via the west coast ports of South America, and gear and supplies moving through the Panama Canal. Oil tankers moved through it up the vulnerable Florida straits; troops and supplies for Caribbean air and naval bases moved southward. The Germans threw a heavy weight of submarines to disrupt this traffic, operating off the

numerous portals from the middle Atlantic. During 1 week in May 1942, in a concentrated attack, 10 of our freighters were torpedoed as they moved through these waters.

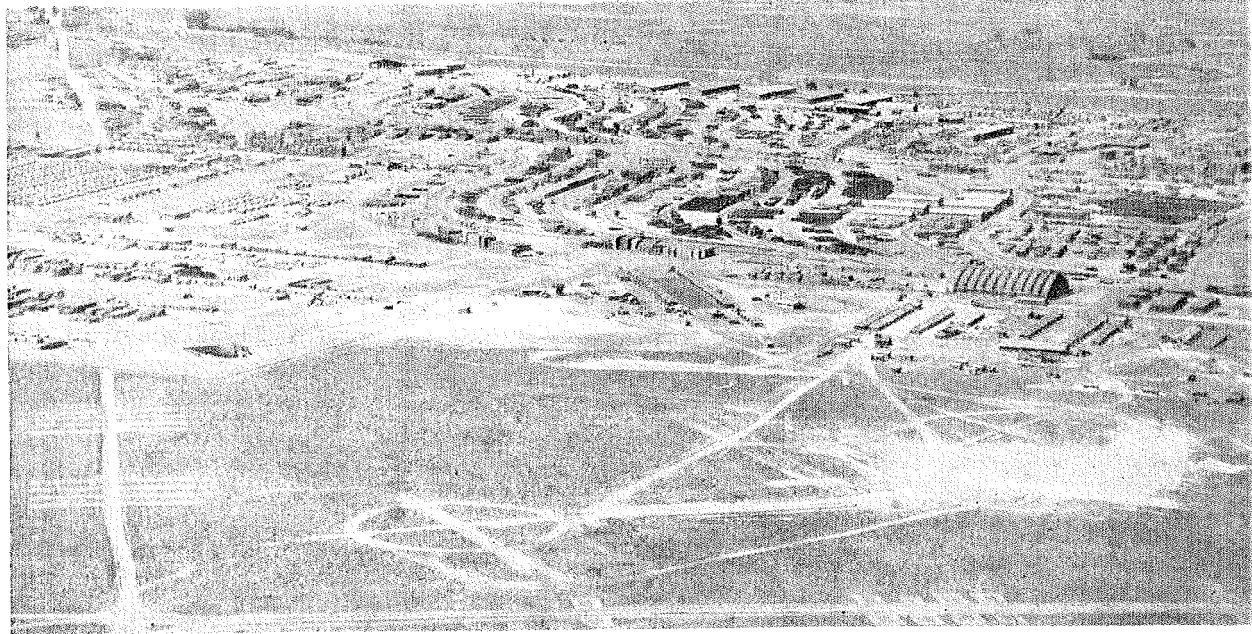
The story of one essential import—aluminum ore—gives an idea of the value of the program to our victory. During the first 2 years of the war, when American airplane construction was given top priority, there was a big upswing of bauxite imports. This rose from about 2 million long tons in 1942 to more than 3½ the following year.

Yet that occurred during a time when German submarines were concentrating on our bauxite ships. The situation was met by coordinating port and rail facilities for handling the ore principally at New York and Mobile, by sharply increasing naval protection and the allocation of more tonnage. This resulted in the receipt of sufficient bauxite to carry on aircraft production which ultimately succeeded in smashing Germany's own war production and military effort within her own boundaries.

THE BIG LIFT

During the 4 war years, the War Shipping Administration allocated as much as three-quarters of its tonnage to Army and Navy cargoes. The armed services were at all times the Number One customers of the Merchant Marine.

The first 2 years of the war saw the building up of the military powerhouses of Africa, the United Kingdom, and the South and Southwest Pacific from which were hurled the successive thunderbolts that destroyed first Italy, then Germany and Japan. This process called for a steady stream of cargo ships to carry the men and their tools.



One of the huge Army supply depots in North Africa where sea-borne cargoes were delivered.

During 1942 and the early part of 1943, the WSA merchant fleet devoted 41 percent of its capacity to Army cargo and 13 to the Navy. This ratio changed slightly toward the end of 1943, when WSA ships were devoting 49 percent of their capacity to the Army and 10 percent to the Navy. Again it should be remembered that the merchant

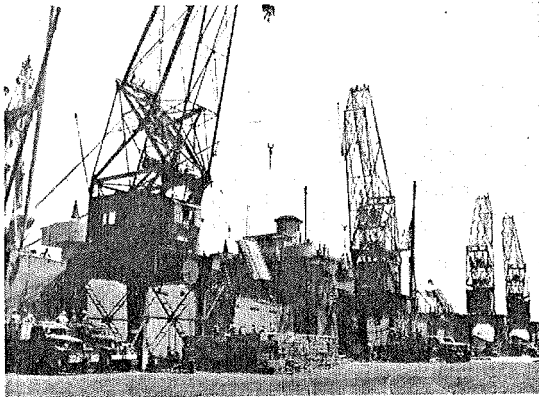
fleet was increasing in size, and that greater ingenuity was being shown in the utilization of the ships, so that the volume of cargo was increasing proportionately more than the percentage figures indicate.

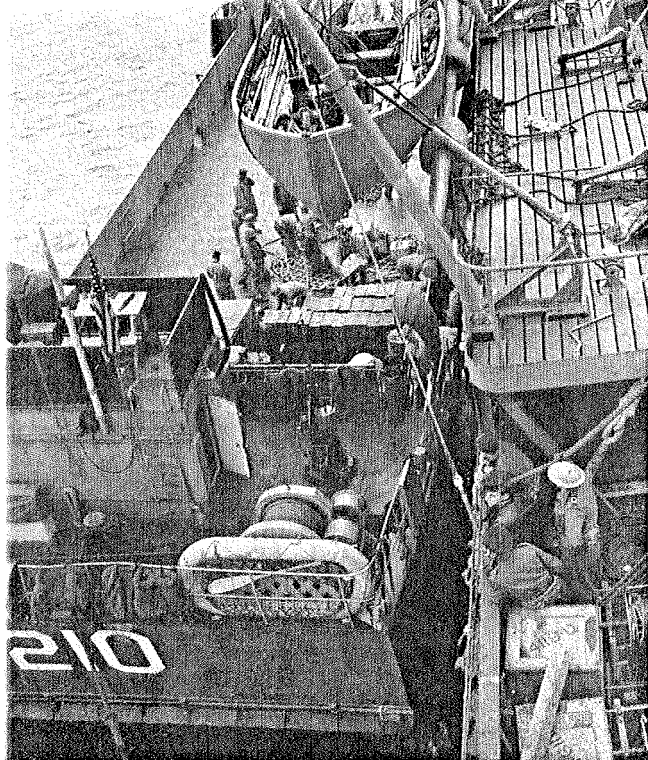
Invasion of the Mediterranean area was the first large-scale action engaged in by ships of the WSA fleet. Hundreds of our

Trucks and tanks awaiting reshipment from North Africa.



Mediterranean ports were modernized.





*Unloading from Liberty ship to
LCT at Anzio.*

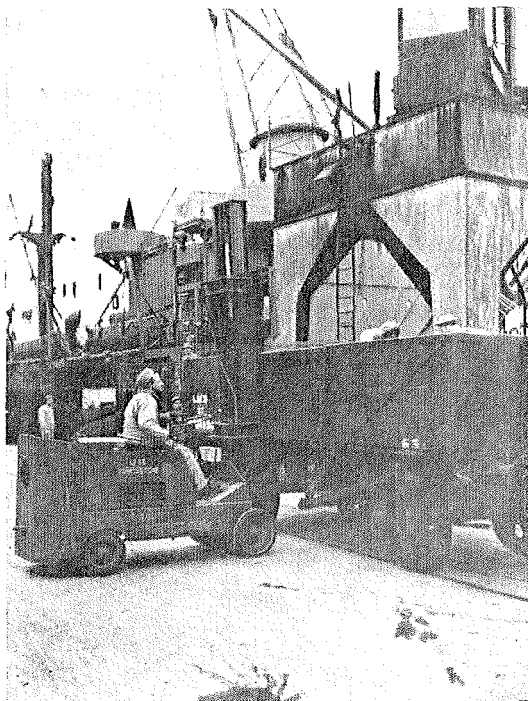
merchant vessels were in the initial attacks on North Africa, and the landings on Sicily. Seizure of these areas created another problem for the WSA operations staff. The campaigns of our armies in that area called for the diversion of a large fleet of merchant ships for initial attacks and also required a sufficient number of vessels to maintain the stream of men and supplies moving in as the invasion developed. This withdrew from other world services a sizeable proportion of our cargo fleet at the time. Fortunately, the overthrow of the Axis forces in North Africa came ahead of schedule, so that large numbers of ships again became available for their multiple tasks in every ocean.

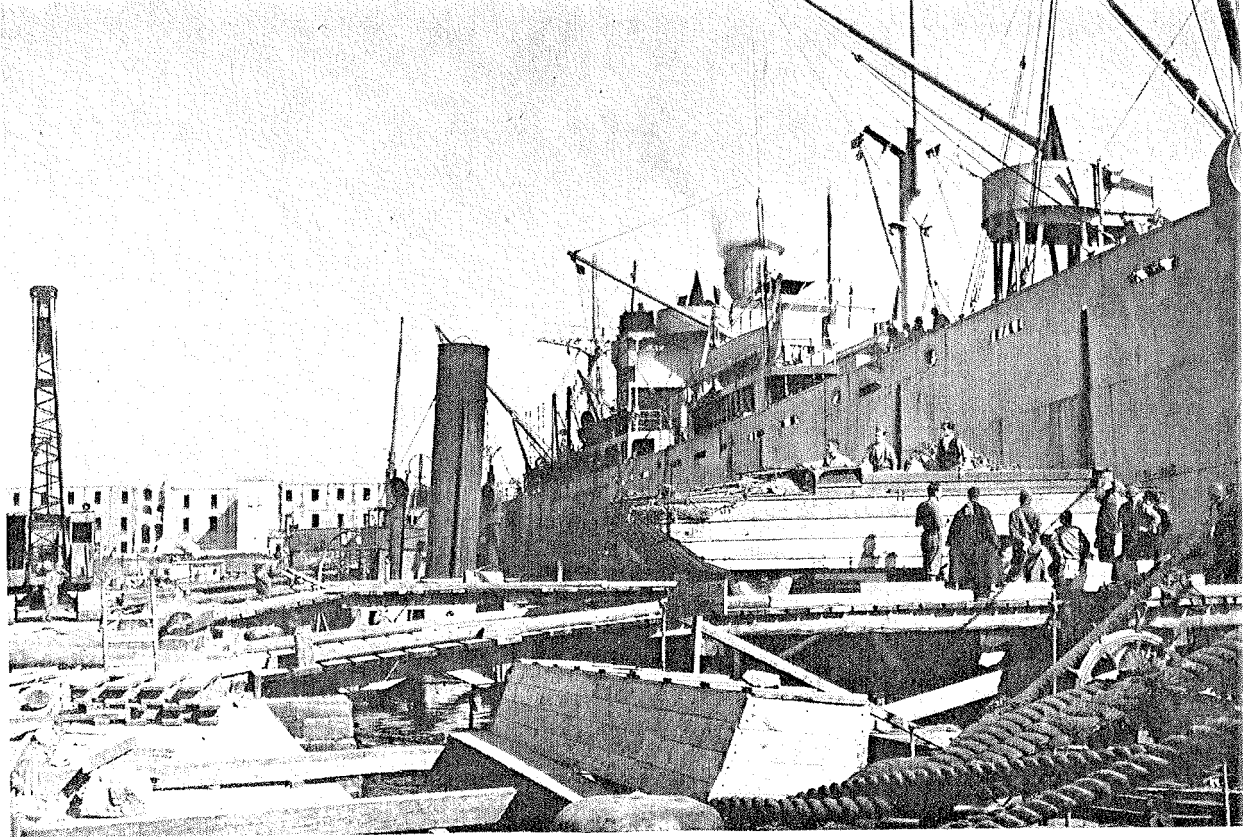
Toward the end of 1943, we had commenced to build up in the British Isles the greatest invasion force ever assembled. The

great convoys, some with as many as 167 ships, shuttled back and forth across the Atlantic bearing essential cargoes.

In the southwest Pacific area, the situation was different. The circuitous route necessary during the early days of the war to send supplies to General MacArthur in Australia greatly cut down the tonnage an individual vessel could deliver in a given period of time. Ships diverted to that area for shuttle runs between Australian ports and New Guinea and interisland services were sometimes detained many months. But by careful use of all available shipping space and the pooling of facilities by Americans and Australians, the force later destined to island-hop to Tokyo was gradually built up to specifications.

*Special equipment speeded handling
of war cargoes.*





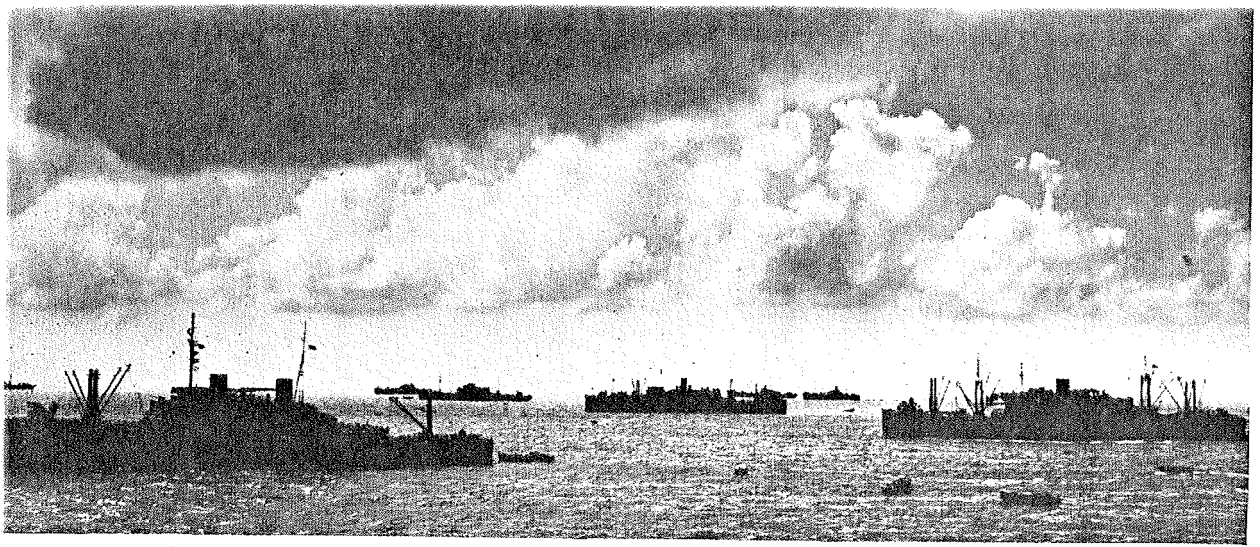
Ships sunk by the enemy to block Naples Harbor were quickly transformed into landing quays.

In 1944, 74 percent of the WSA tonnage was allocated for the use of the Army and Navy, compared with 59 percent so employed toward the end of 1943. Ships allocated to the Army alone comprised about 60 percent of the WSA fleet, while the dry-cargo tonnage allocated to the Navy amounted to 14 percent.

The military calendar of 1944 will explain that increase. In the beginning of the year, the Allies had taken Sicily, had gone into the Italian boot, and were hammering at the historic Cassino gateway to Rome. The beaches at Anzio had been occupied with substantial losses. General Eisenhower had returned to England to open wide the valve on the great flood of

American troops and gear needed to build up overwhelming power for the assault on the Normandy coast. The vast war raging along the Russo-German front from the Baltic to the Black Sea called for more and more shipments of American war materials for Russian armies; these had been moving only around the northern and southern flanks—the North Cape into Murmansk, and the Cape of Good Hope to the Persian Gulf, until the opening of the Mediterranean to our ships.

And in the Far East the tempo was stepping up. At the start of the year, the incredibly difficult Burma campaign was in its opening phases, and General MacArthur had established a firm hold on eastern New



Transport and supply ships drop anchor in Kwajalein lagoon during invasion of the Marshall Islands.

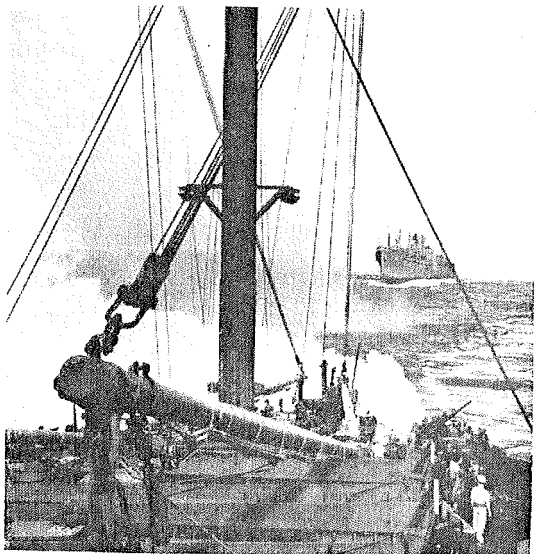
Guinea. On the eastern sea approaches to Japan, Admiral Nimitz had begun investment of the Marshall Islands. The long stretches of the Pacific were now American highroads to numerous powerful bases where supplies were being assembled to attack the Philippines and the home islands of Japan. Our forces were successfully installed on the northern flank, the Aleutians. All of these movements needed steady maintenance of supplies by the merchant fleet.

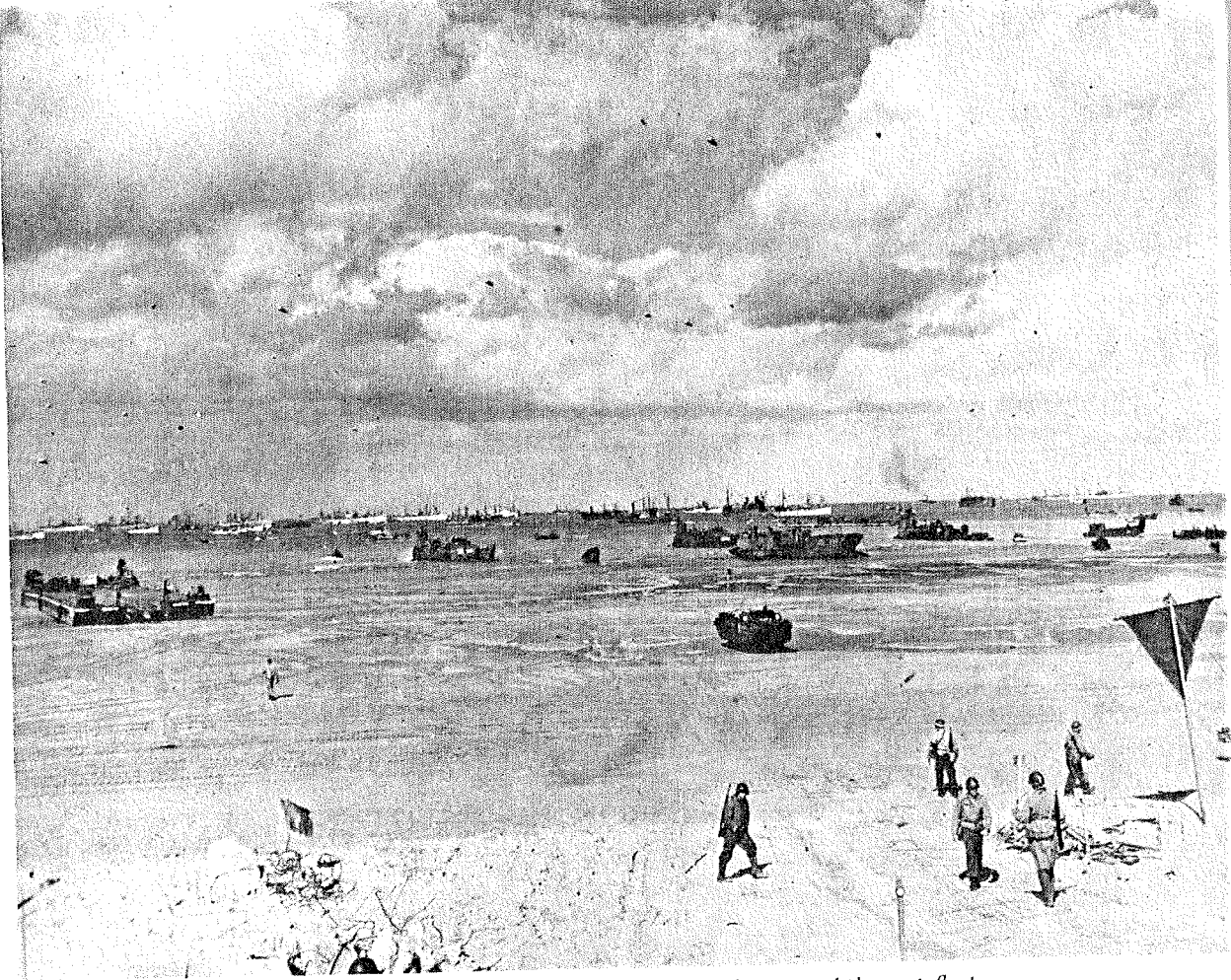
By mid-1944, the global war reached maximum fury. The greatest sea-borne invasion in history crossed the moat of Hitler's Fortress Europe, the English Channel, on June 6. In the van were 32 American merchant ships to be sunk off the beachhead to form a breakwater. They were manned by more than 1,000 merchant seamen and officers who volunteered for the hazardous duty. These ships, many of which had previously suffered severe battle damage, were charged with explosives for quick scuttling. They sailed from England through mined waters, filed into position off

the Normandy beach under severe shelling from German shore batteries, and were sunk by the crews to form the artificial harbor. Behind this breakwater, prefabricated units were towed in to handle the subsequent debarkation of men and equipment, to make invasion of Fortress Europe possible.

Ten oceangoing tugs operated by the

Smoke screen protects transports speeding to Marshall Islands.





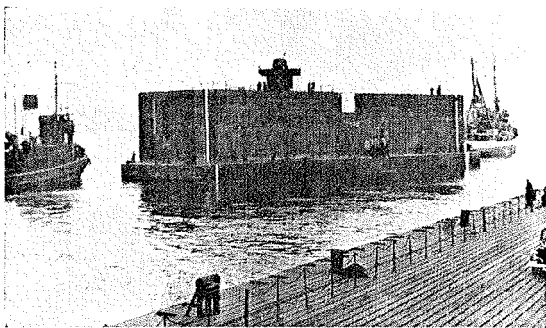
Scene on the Normandy beachhead June 10, 1944, showing part of the vast fleet of transports and cargo vessels lying offshore. Barrage balloons dot the sky.

WSA and manned by merchant crews assisted in the famous MULBERRY operation by towing the harbor units into position. Seven of these tugs had towed pre-built sections from the United States to England en route to their assignment. From D-day until the last tug departed the Channel area, they towed 182 units including 75 "phoenixes," as these units were called, plus 27 disabled ships from the landing area back to the safety of British harbors. This

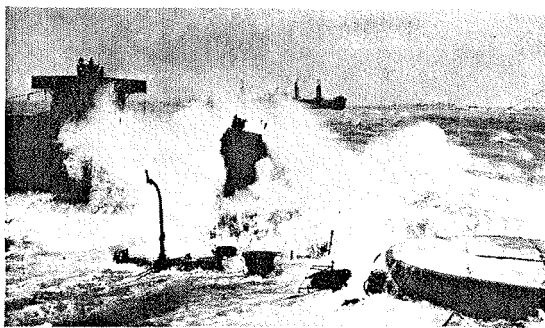
project stands as one of the most remarkable water-borne engineering accomplishments of all time.

All merchant seamen and officers in the operation were commended and the ten masters of the tugs decorated by Admiral Sir Bertram H. Ramsey, Allied Naval Commander in Chief, for their part in the successful invasion.

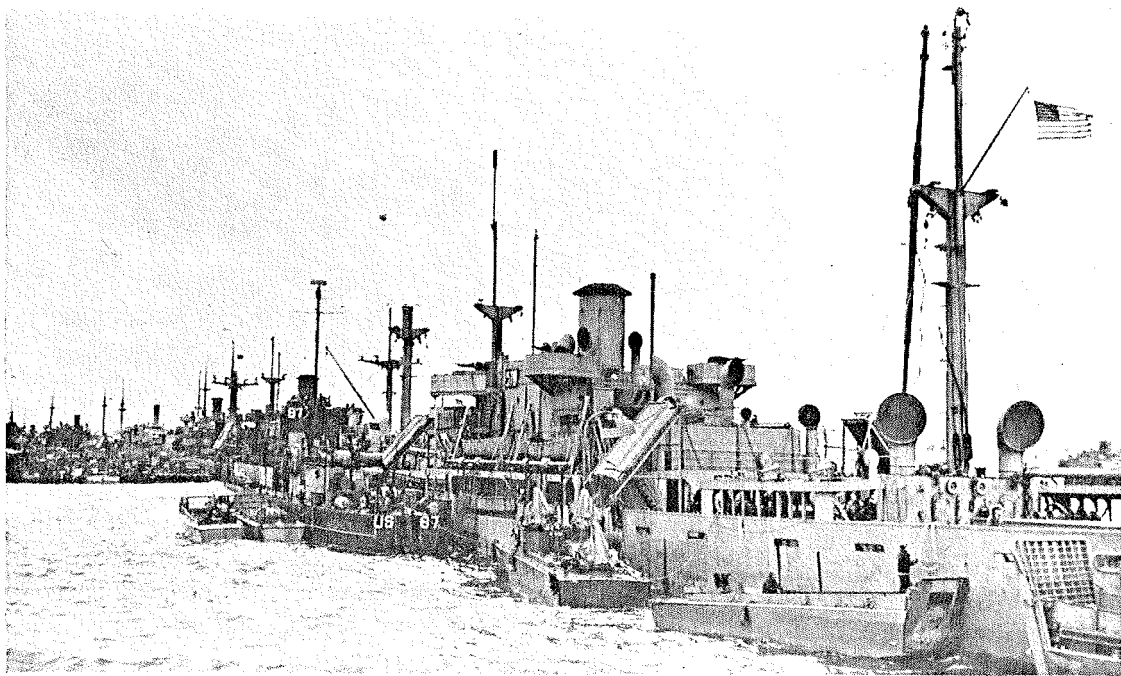
Later, the English Channel was nicknamed by the merchant crews "Liberty



A "Phoenix" ready for towing by War Shipping Administration tugs across English Channel.



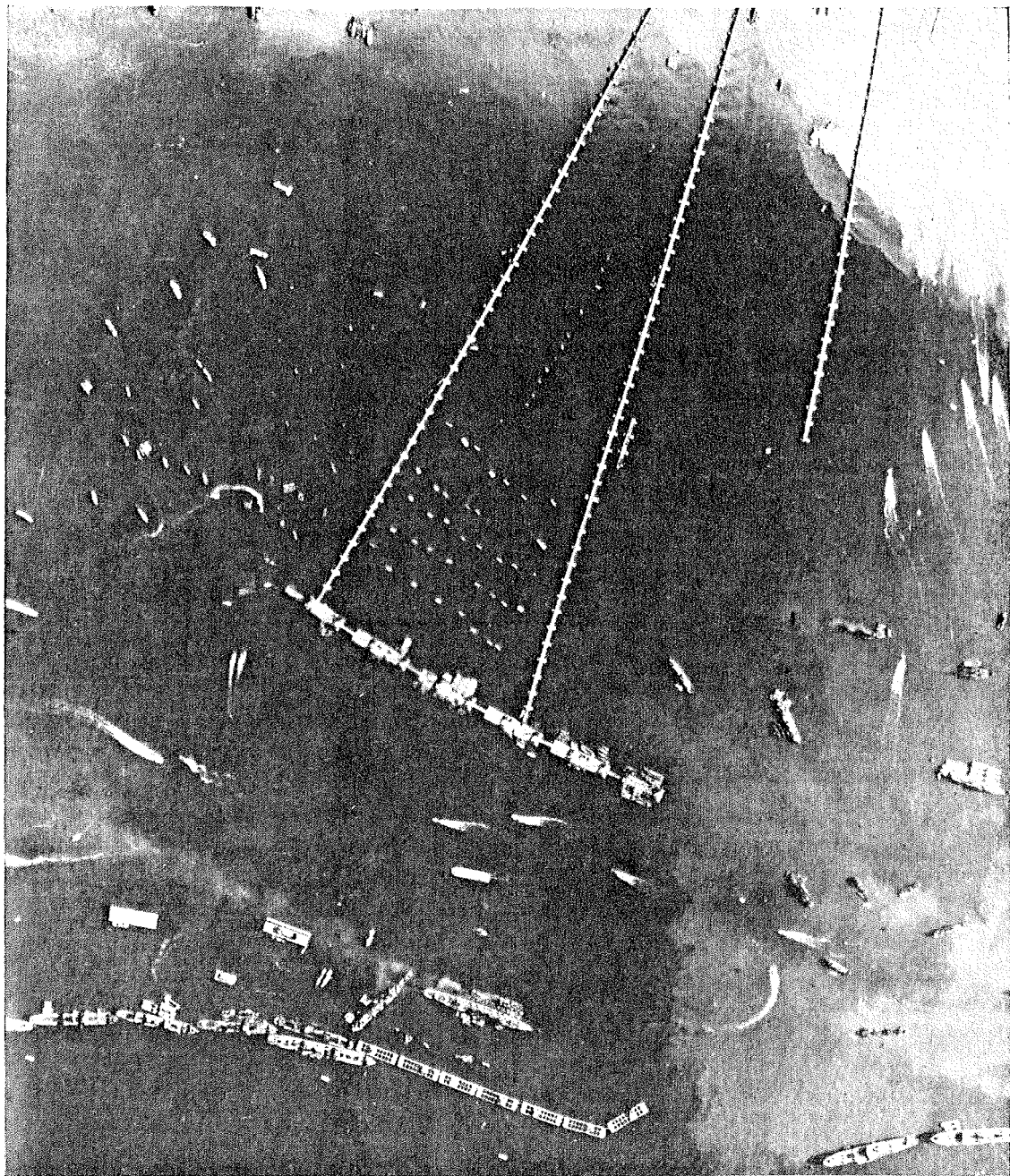
Heavy seas lash at breakwater of merchant ships scuttled a half-mile offshore.



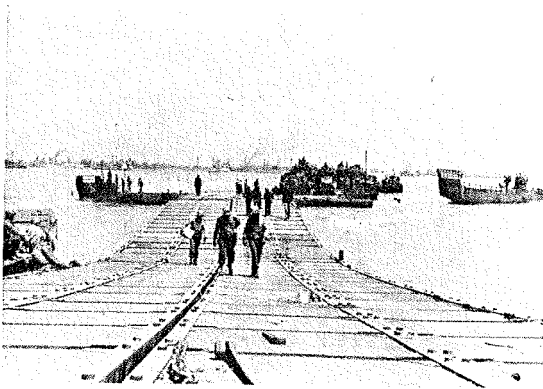
Operation MULBERRY, Normandy beachhead, June 1944; part of the line of Liberty and other American merchant ships scuttled to create protective breakwater behind which landing craft were unloaded.

Lane" because of the number of these cargo ships ferrying back and forth in a shuttle run supplying the Anglo-American armies in France. In all, 150 American merchant vessels were retained by the WSA in this cross-Channel service.

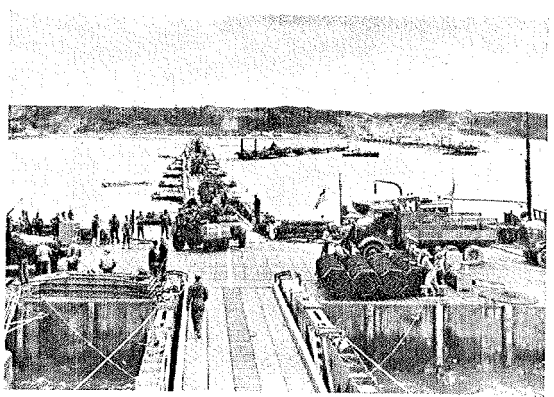
By June 1944, in the Central Pacific, the Marianas were attacked and Saipan fell; Tinian and Guam in July; in the southwest Pacific, General MacArthur bypassed strong Japanese forces by the capture of Hollandia on New Guinea and was looking



Operation MULBERRY, June 1944; aerial view of a section of the British prefabricated harbor on the Normandy coast. Two steel roadways supported on special floats lead from shore to wharf. In front of wharf is a breakwater of sunken blockships (to left) and concrete caissons or "Phoenixes" towed by War Shipping Administration tugs from England.



Landing craft shuttle men and cargoes from merchant fleet to causeway at Normandy beachhead.



Army vehicles carried by merchant ships proceed to Omaha Beach from floating dock.

northward toward the Philippines. The second invasion of France from the south had been mounted, and our forces were racing up the Rhone Valley to join with those from the Normandy break-out.

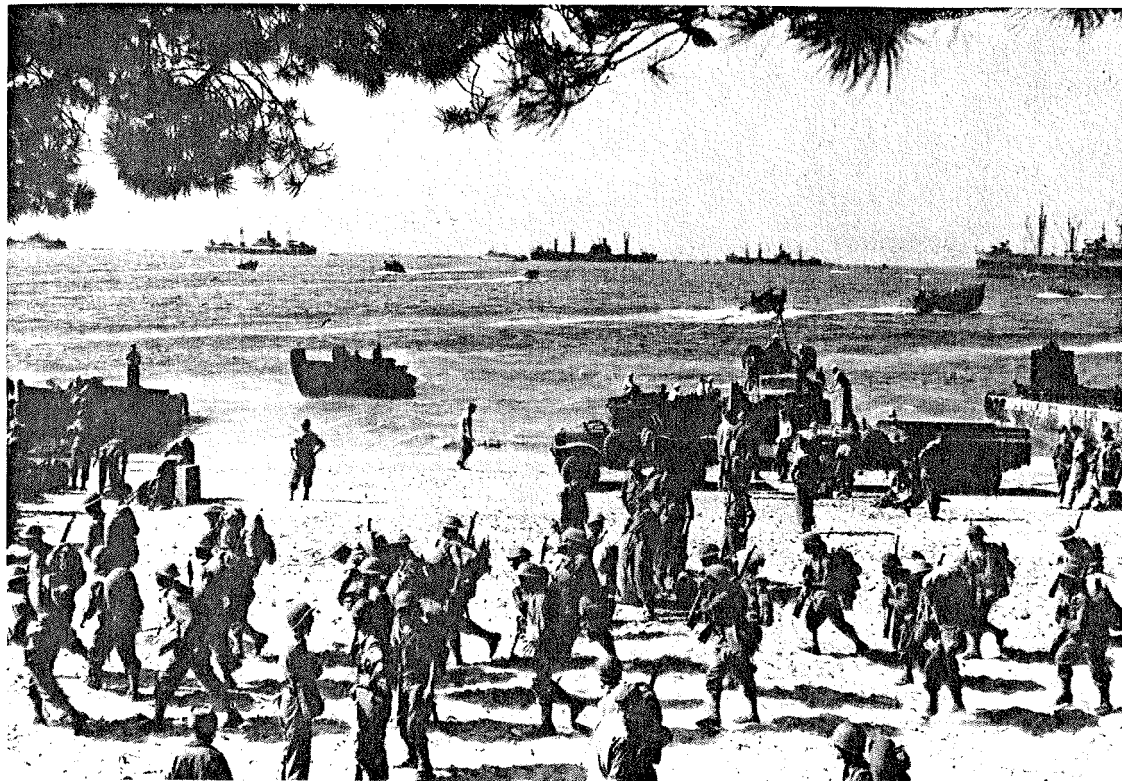
The weight of shipping needed in the assault of western Europe was tremendous. The drain on our resources is seen by this comparison: On January 1, 1944, 1,970,000 dead-weight tons were employed by the Army in the United Kingdom-Continent area. By September this had increased to 6,508,000 dead-weight tons, largely in shut-

tle service. In the western Mediterranean Army tonnages increased from 3,118,000 on July 1, to 5,658,000 on November 1, most of which had been built by the Maritime Commission since the war began.

In the latter part of the year, the full flood of shipping was pouring into the rapidly moving forward drives in the Central Pacific, into the Philippines, and to sustain the great battle of France and the Low Countries. By November, the great port of Antwerp, vital to the supply of the northern armies, was in our possession. In the

This is the Allied armada of cargo vessels and fighting ships that carried the invasion to Southern France, August 15, 1944.



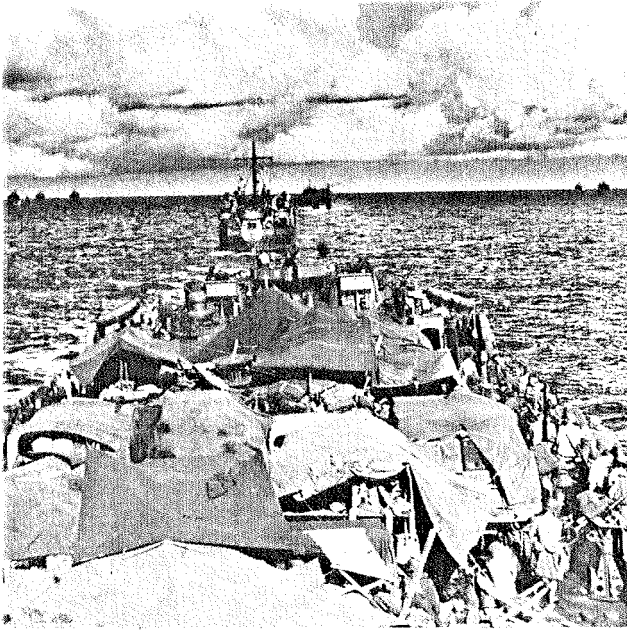


Across the beaches of Southern France cargo vessels and invasion transports unload reinforcements, guns, ammunition, and supplies.

south, Toulon and Marseille were being used while facilities in Antwerp were being improved, even in the face of a constant rain of V-bombs. By the end of the year, interior lines of supply connecting the Allied armies with the ports were functioning, and merchant vessels were discharging matériel for use in the final assault across the Rhine into Germany itself. So important to the success of our war against Germany was the port of Antwerp as the eastern terminus of American war production that, in the opinion of many leading military men, it was the basic objective of the great German counter offensive in Belgium, launched in the closing days of 1944.

Bombers were now mounting the assault on the Japanese homeland from bases on the Marianas, and the signal had been given by the combined Chiefs of Staff to General MacArthur to hit the Philippines at Leyte. The build-up of his supplies and the sea-borne invasion of that island was made possible by the thousands of tons of war matériel carried by hundreds of WSA cargo ships, and by the end of 1944 American invasion fleets were steaming for Manila.

As this great expansion of power was taking place in the Pacific during the year, more and more WSA tonnage was allocated for the Army and Navy in that area. On January 1, 1944, 2,301,000 tons were allo-



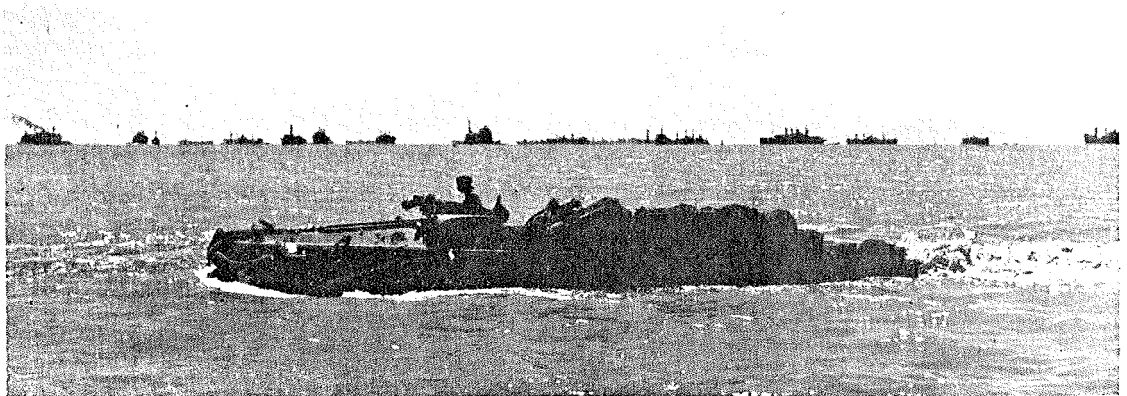
Cargo ships and transports off Leyte pour troops and supplies landward in an endless chain of LST's.

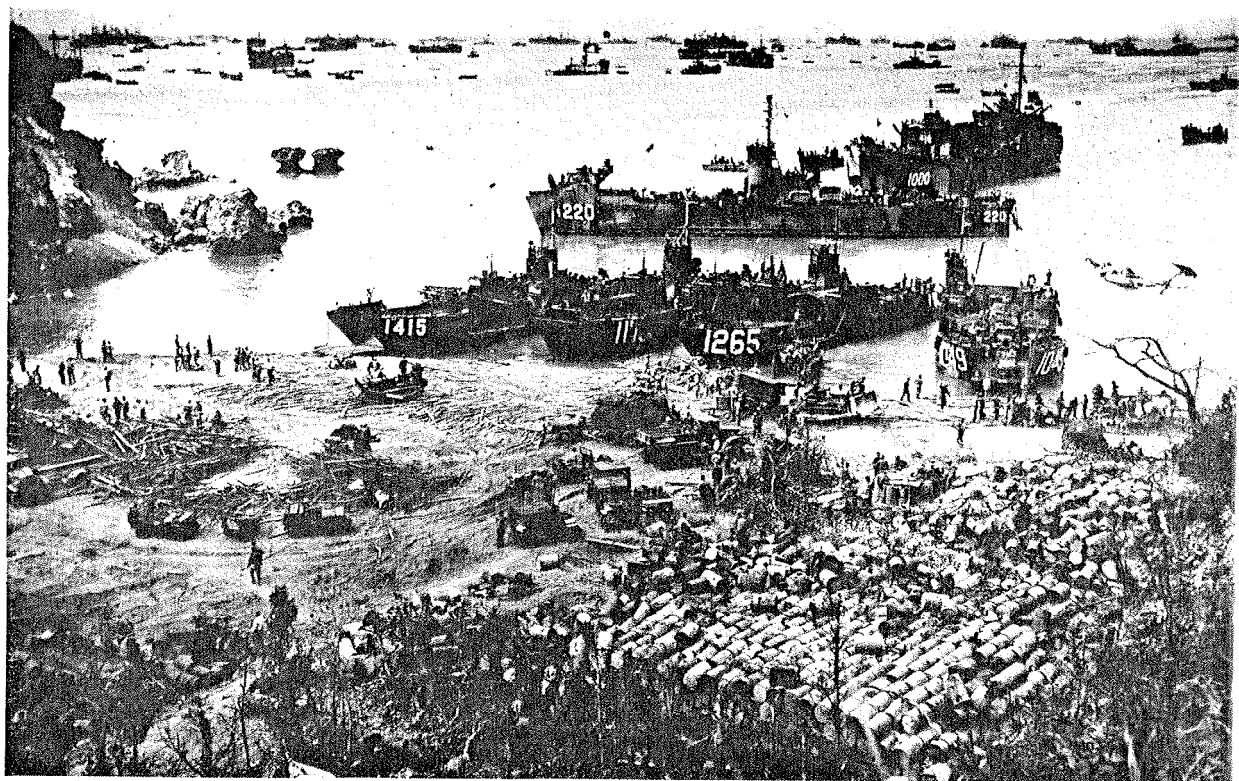
cated; on December 31, this had increased to 4,526,000 tons. Tonnage placed at the disposal of naval needs was primarily for use in the central Pacific, where from January 1 to December 31, allocations were increased from 570,000 dead-weight tons to 2,629,000 tons.

The year 1945 saw our maritime power

at flood tide, and the final capitulation of the Axis powers. The Nation's gigantic wartime shipbuilding program and the development of convoy operations, the perfection of antisubmarine warfare devices and techniques, and the training of Navy personnel to man them and to serve aboard the merchant vessels as gun crews, all combined to put overwhelming strength into the overseas operations of the United States Merchant Marine. By June, the WSA-controlled fleet numbered 4,125 vessels, with a dead-weight tonnage of 44,435,000. Ship sinkings, which during the years 1943 and 1944 were showing a steady decline, were consistently lower during that period. One final effort, in great strength, was made by German submarines in the last month of the European war. They hoped to reach our eastern seaboard. They failed. They were fought off by powerful naval task forces. The terrific power shown by our Navy in the Pacific had cleared the sea approaches to our forward-moving forces; perhaps the greatest opposition felt directly by the merchant fleet was in the anchorages off the Philippines and Okinawa.

A Duck hustles munitions ashore from the crowded anchorage of supply ships off Manila.

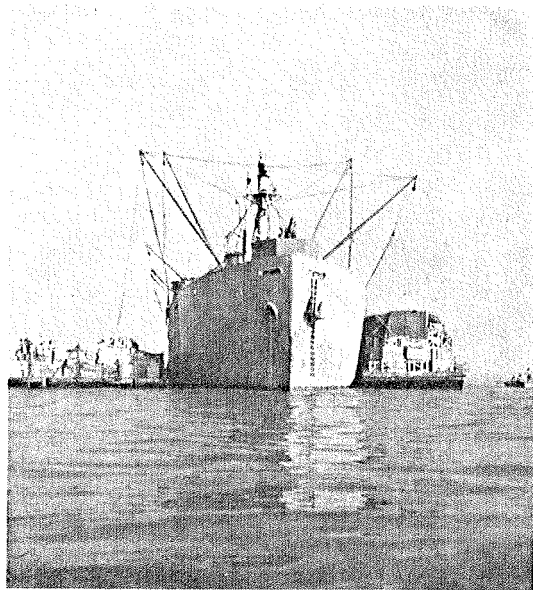




Cargo ships of the Merchant Marine cloud the horizon at Okinawa as landing craft discharge vital war materials for the knockout.

Following the sustained air-borne blows at Japan from the hard-won fields on Okinawa and Iwo Jima, and the hammering the enemy received from the great naval fleets ranging the shores of her home islands, the WSA had made the necessary allocations of ships ready for the "kill"—the operations OLYMPIC and CORONET. But they were not needed after the atomic bombing of Hiroshima and Nagasaki and subsequent surrender. Instead, these ships carried the occupation forces and matériel taken by General MacArthur into the beaten enemy territory.

In summarizing the value of the United States Merchant Marine to the military and naval forces, and thereby fulfilling its role as an arm of the national defense, it is clear



Liberty ship's cargo piles barges high at Manila.

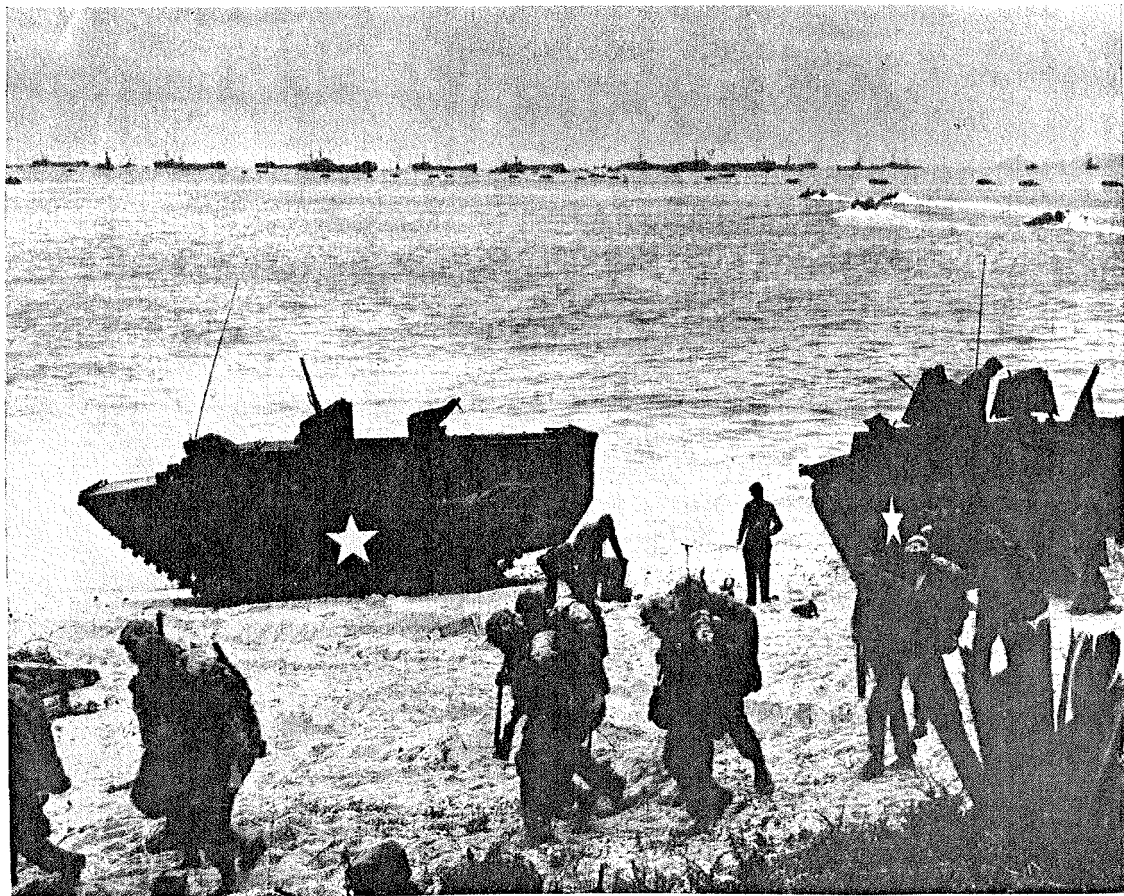
that we must view the Merchant Marine as a whole—the ships, the administrative organization which included the industry, the port and repair facilities, the shipyards from which came the ships, the training program necessary to supply the thousands of men needed in addition to the reservoir of already experienced seamen—all a unified, flexible whole which resulted in an adequate cargo-carrying capacity available at the time, the place, and in enough strength to carry out the logistical processes of the greatest war in history.

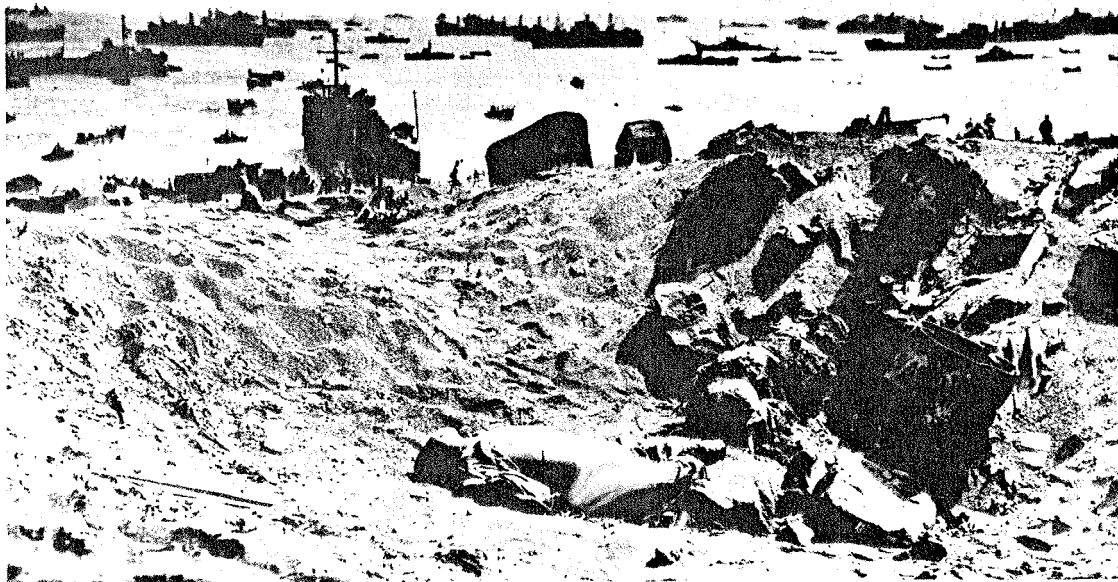
In evaluating the service of the Merchant Marine to the military and naval establishments, the opinions of the men in command of the armed services should be considered.

On November 2, 1945, Fleet Admiral Ernest J. King, Commander in Chief of the United States Navy and Chief of Naval Operations, wrote to Admiral Land the following:

“During the past 3½ years, the Navy has been dependent upon the Merchant Marine to supply our far-flung fleet and bases. Without this support, the Navy

Another horizon is filled with supply ships at Ihiya Shima in the Ryukyu Islands.





The Merchant Marine was more than a spectator at bloody Iwo Jima.

could not have accomplished its mission. Consequently, it is fitting that the Merchant Marine share in our success as it shared in our trials.

“The Merchant Marine is a strong bulwark of national defense in peace and war, and a buttress to a sound national economy. A large Merchant Marine is not only an important national resource; it is, in being, an integral part of the country’s armed might during time of crisis. During World War II, this precept has been proven.

“As the Merchant Marine returns to its peacetime pursuits, I take pleasure in expressing the Navy’s heartfelt thanks to you and through you to the officers and men of the Merchant Marine for their

magnificent support during World War II. All hands can feel a pride of accomplishment in a job well done.

“We wish the Merchant Marine every success during the years ahead and sincerely hope that it remains strong and continues as a vital and integral part of our national economy and defense.”

Field commanders knew the value of the Merchant Marine lifeline to their operations. Gen. Dwight D. Eisenhower said:

“Every man in this Allied command is quick to express his admiration for the loyalty, courage, and fortitude of the officers and men of the Merchant Marine. We count upon their efficiency and their utter devotion to duty as we do our own; they have never failed us yet and in all

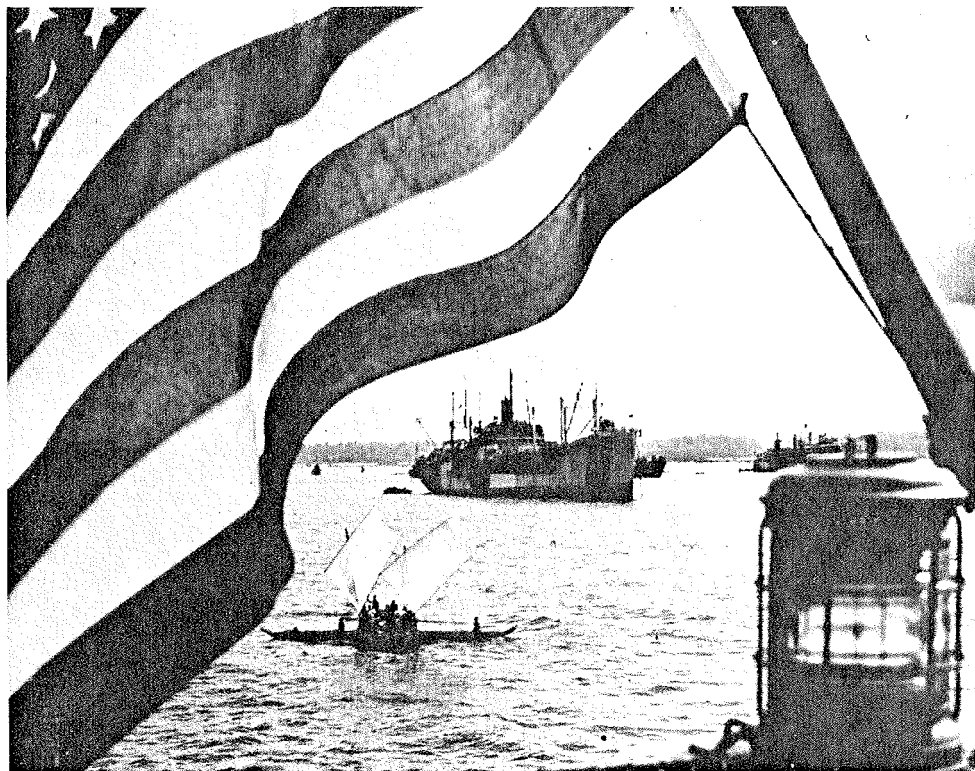
the struggles yet to come we know that they will never be deterred by any danger, hardship, or privation.

“When final victory is ours there is no organization that will share its credit more deservedly than the Merchant Marine.”

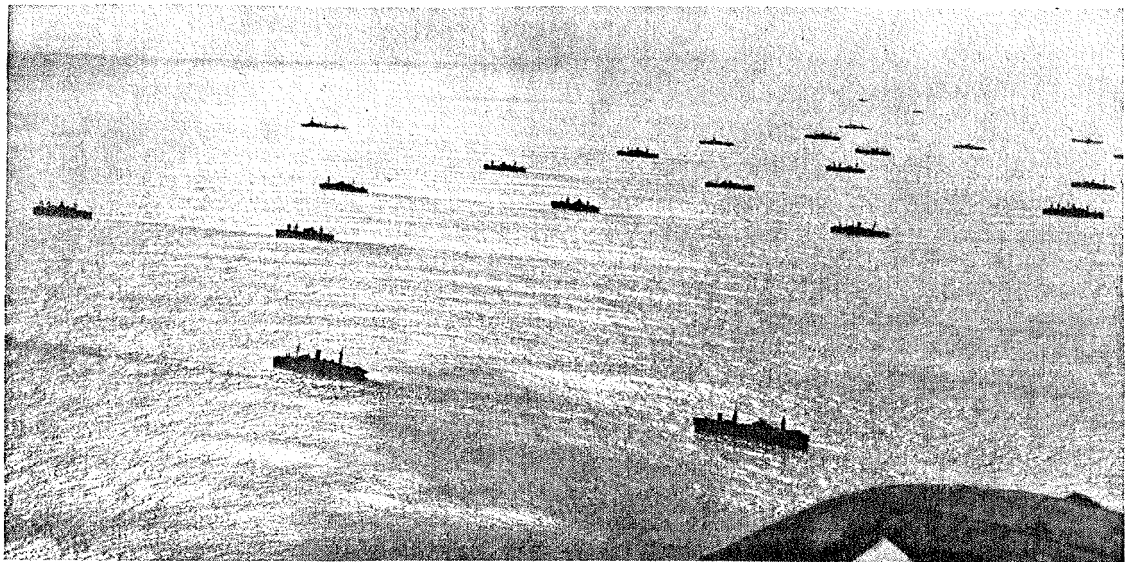
Gen. Douglas MacArthur said:

“I wish to commend to you the valor of the merchant seamen participating with us in the liberation of the Philippines. With us they have shared the heaviest enemy fire. On this island I

have ordered them off their ships and into fox holes when their ships became untenable targets of attack. At our side they have suffered in bloodshed and in death. The high caliber of efficiency and the courage they displayed in their part of the invasion of the Philippines marked their conduct throughout the entire campaign in the southwest Pacific area. They have contributed tremendously to our success. I hold no branch in higher esteem than the Merchant Marine services.”



Transport in invasion service is framed by flag on a sister ship at a Philippines crossroads. These are ships that did heavy duty in the major assault on Luzon.



III

THE WARTIME FLEET

THE UNPRECEDENTED growth of the United States merchant fleet was the primary reason for the WSA's ability to meet the tonnage demands of the war. Upon America's entry, the fleet, augmented by foreign vessels acquired by negotiation, requisition, and seizure in American ports, totaled about 900 dry-cargo vessels of 6,700,000 dead-weight tons and some 440 tankers of 5,150,000 dead-weight tons.

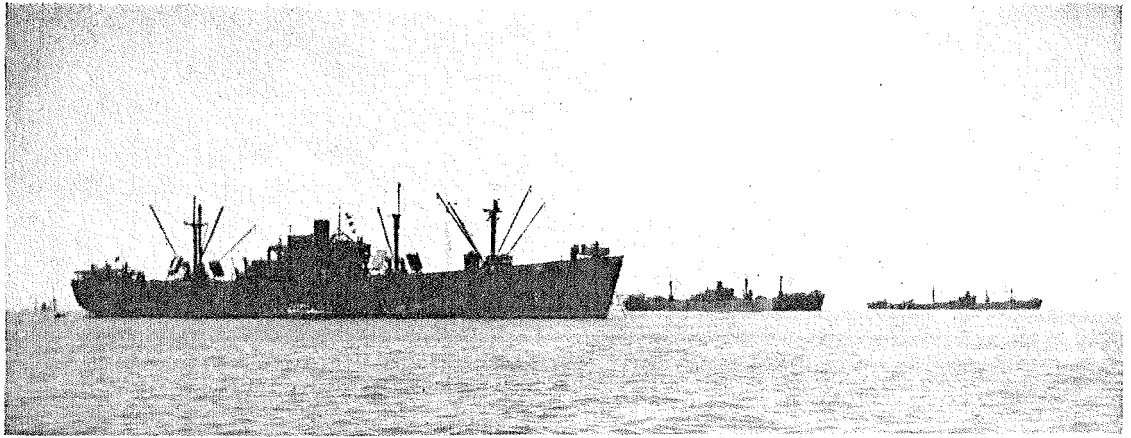
By the end of the war with Japan the WSA-controlled fleet numbered 4,221 with a dead-weight tonnage of 44,940,000. The curve had risen rapidly. At the end of 1942, there were 1,639 ships in WSA operation; in 1943, 2,847; 1944, 3,744.

The greater percentage of the merchant fleet in September 1945 was obtained from construction. The remaining tonnage was

acquired by bareboat and time charter agreements with their owners and intergovernmental negotiation.

The WSA fleet consisted of approximately 20 major merchant, military, and emergency type dry-cargo vessels and 10 major type tankers.

The race between ship construction and sinkings by the enemy was won by the Allied convoy system and naval superiority in combating the submarine menace, and an unprecedented shipbuilding technique. WSA losses, including marine casualties during 1942, were equivalent to 39 percent of new ship construction in that year. This was reduced to 11 percent in 1943, less than 8 percent in 1944, and 4 percent in 1945. In 1944, 32 vessels of 85,400 tons were expended in military operations during the long anticipated invasion of France.



Liberty ships were the truck horses of war supply.

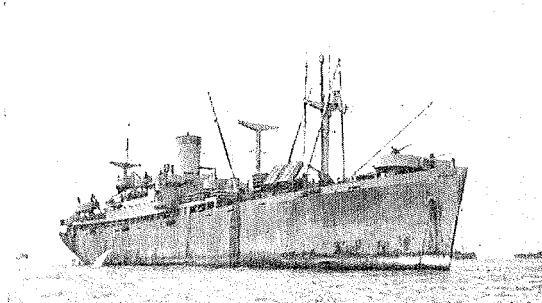
About 75 percent of the vessels under WSA control consisted of Liberty type ships, a relatively slow vessel of 11 knots speed and 10,800 dead-weight tons. Victory ship construction began in 1944, when turbines became more readily available for merchant fleet building. The Victory was an emergency type vessel of about the same tonnage as the Liberty, but more modern in its propulsion machinery which gives it speeds ranging from 15 to 17 knots. It supplanted the Liberty building program in 1945.

The remainder of the fleet included the "C" types which vary from the small coastal

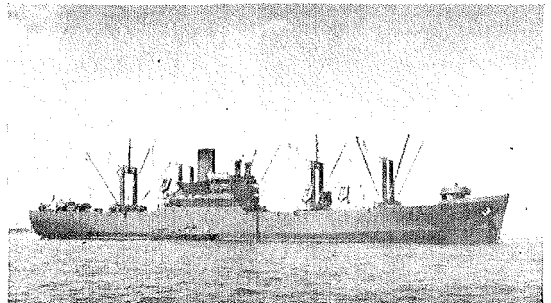
vessels of 5,000 dead-weight tons to the C4 freighters of 13,500 dead-weight tons. In addition, there were special types built prior to 1939 made up primarily of freighters, combination passenger and cargo ships, reefers (refrigerator ships for perishable cargoes), and bulk carriers. Many of the auxiliary vessels serving the Army and Navy as aircraft carriers, troopships, cargo vessels, and modified tank carriers may be recognized as modifications and conversions of major design types that are the backbone of the merchant fleet.

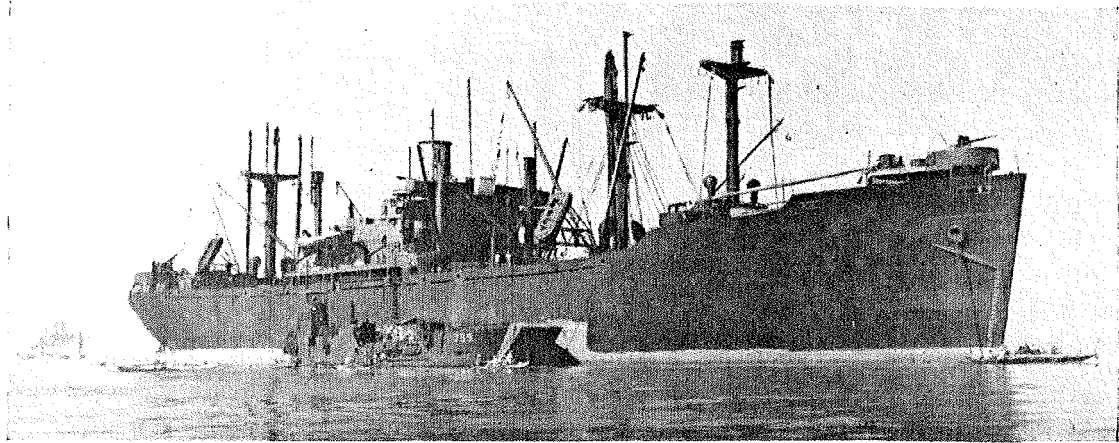
The tanker fleet is made up principally of the "T" or standard type tanker varying in

C1 Cargo Vessel, the CAPE MEARS.



C2 Refrigerated Cargo ship MANDARIN.





*The Victory ship replaced the Liberty with more speed and endurance.
This is the ANADARKO VICTORY at Manila.*

size from 15,900 to 23,000 dead-weight tons and the emergency type tanker converted from modified Liberty ship hulls. Privately built tankers and miscellaneous types built prior to 1939 comprise the remainder of the tanker fleet.

In 1942, the primary need was to expand the size of the fleet in number and tonnage. Concentration on Liberty ship production

kept the bulk of the fleet at a low-speed level, but the construction of Victory and "C" type ships in increasing ratio brought the present WSA dry-cargo fleet to a point where about 24 percent is capable of 14½ knots or better, while 74 percent is capable of from 10 to 14.4 knots. Only 2 percent of the tonnage is slower than 10 knots.

How the Fleet Was Obtained and Operated

To say that the United States was better off in shipping at the start of World War II than it had been as it entered World War I

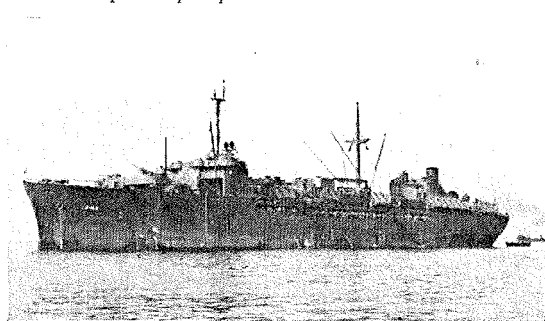
would be in fact only partially correct.

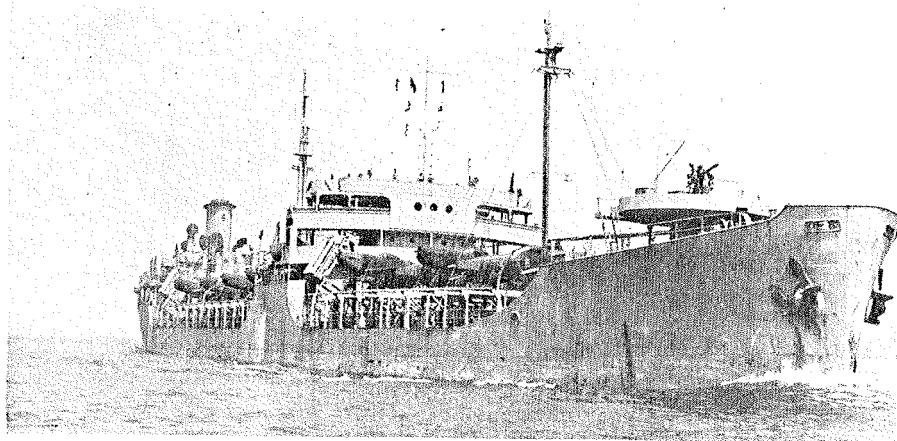
True, we had more ships in our ocean-going Merchant Marine. But the global

C3 Cargo ship SEA SHARK.



C4 Troopship GENERAL BLATCHFORD.





T2 Tanker with her special war cargo deck.

aspects of the war were materially different, and presented demands out of all proportion to the tonnage available. Virtually all European and Mediterranean ports were closed to us. From the Aleutians to Australia, we had to fight our ships through to the few ports remaining out of Japanese hands.

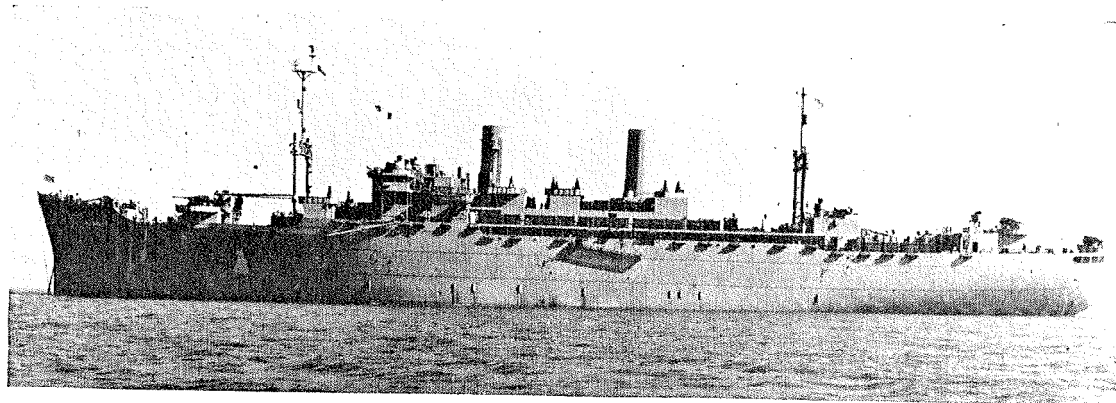
The key to the comparison lies in the length of the shipping lanes and the condition of the ports to be used. These two factors are of equal value with the number of ships available in arriving at the effective

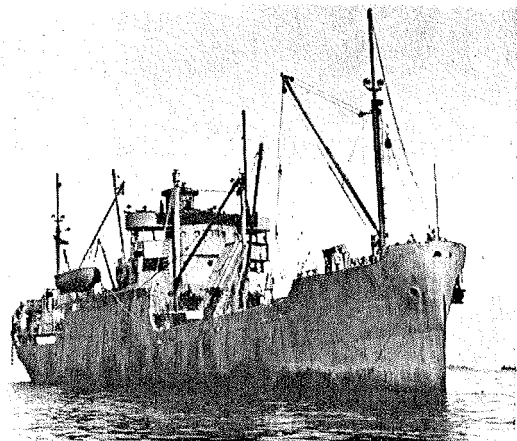
size of a merchant fleet. If a ship must go farther, and spend more time when it gets there, more ships must be added to the run if a given amount of cargo is to be handled.

Furthermore, the composition of our pre-Pearl Harbor fleet of 11 million dead-weight tons must be considered. Many were built between wars, or even before World War I. Many were small. As a matter of fact, most of this tonnage was in our coastal trades. Less than one-third was in the foreign trade fleet.

The net result, therefore, was that De-

P2 transport ADMIRAL W. S. BENSON.





N3 Cargo vessel ALFRED M. LUNT.

ember 7, 1941, found us with an alarming shortage of ships.

But in 1941 we had one great advantage we did not have at the start of our war in 1917. We had the governmental machinery, the industrial know-how, standard ship designs, and the results of previous experience in terms of statistics and analyses to help us to a faster start.

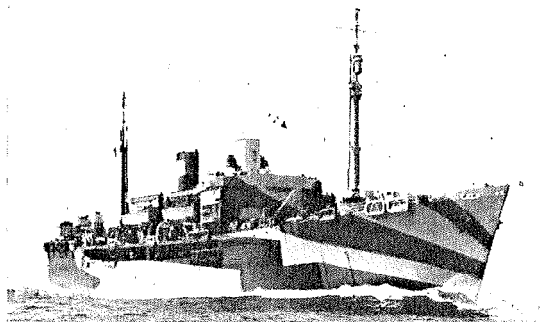
To some extent the job ahead of us had been foreseen in the uneasy years between the start of the war in Europe in September 1939 and Pearl Harbor. The ever-growing danger of war during those days had

been evident to a Government organization which was not in existence in the first World War—the United States Maritime Commission.

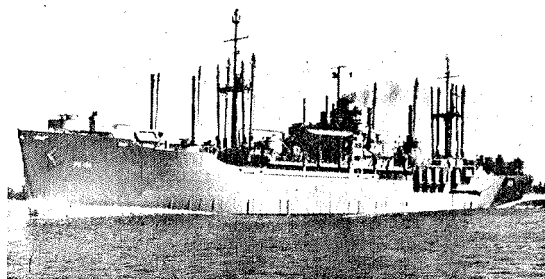
Created under the Merchant Marine Act of 1936, this agency was already established to direct the national phases of merchant shipping and shipbuilding, and had proceeded to an appreciable extent in preparing under the terms of that Act the national defense aspects of the United States Merchant Marine, particularly in the field of shipbuilding. Emergency-type cargo ships were not mere makeshifts invented under the pressure of war; development of this type had begun before Pearl Harbor.

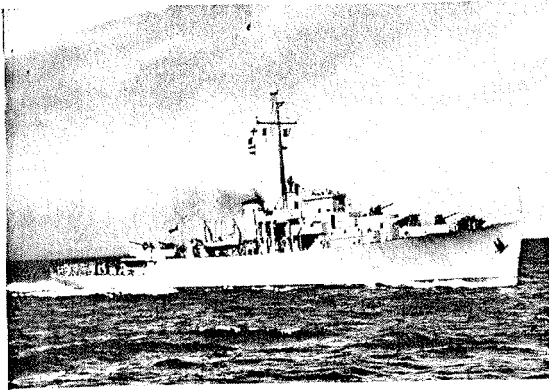
Bigger and faster ships designed under the Maritime Commission's long-range policy had been built by shipyards encouraged by the Nation's new maritime program. Building schedules had already been stepped up. Close cooperation with naval authorities had resulted in types of ships ready for fast production which would meet the auxiliary needs of the United States Navy and fit war-use specifications. The Japanese attack at Pearl Harbor pressed the button for full-speed construction of these ships.

Combat transport GILLIAM.

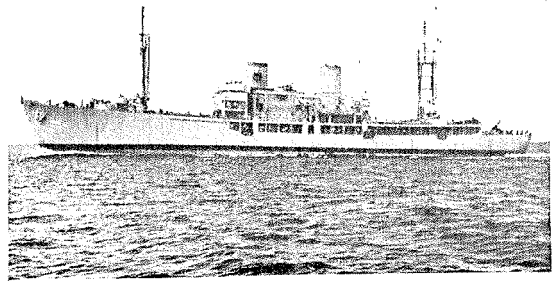


AP5 Combat cargo ship LA PORTE.





Maritime shipyards built Frigates for the Navy.



BE1 Combat cargo ship ARTEMIS.

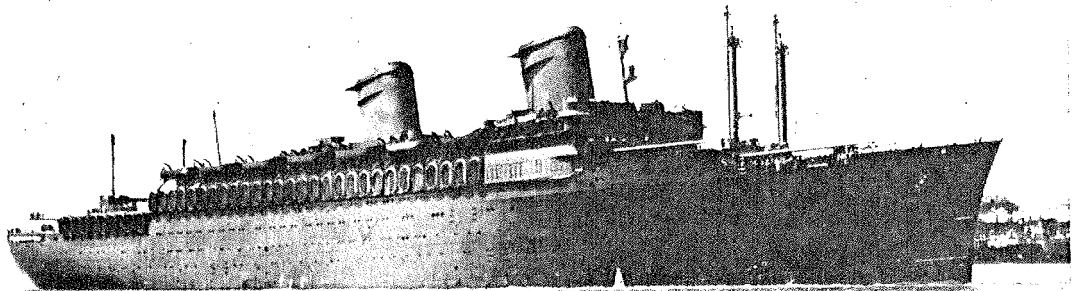
It was early seen that the immense ship-building function would absorb the complete attention of the United States Maritime Commission, and that there was urgent need for creation of a special agency to handle wartime merchant fleet operational problems. This was done on February 7, 1942, by Executive Order. The Chairman of the United States Maritime Commission was named 2 days later as War Shipping

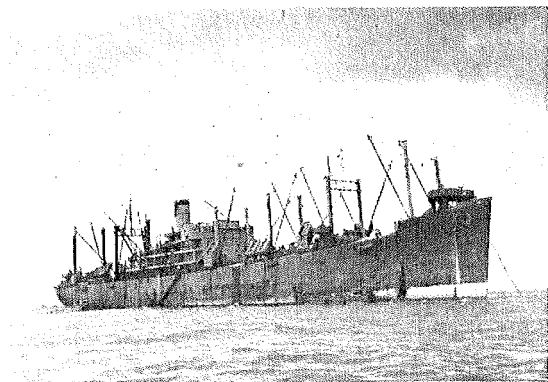
Administrator, directly responsible to the President of the United States.

The WSA was empowered to control the operation, purchase, charter, requisition, and use of all ocean vessels under the flag or control of the United States, except for those of the armed services and those limited domestic water-borne services under the Office of Defense Transportation.

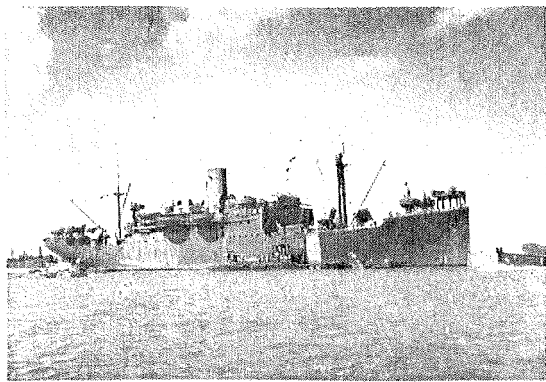
Prior to the establishment of the WSA,

The luxury liner AMERICA became the transport WEST POINT during the war.





C3 Cargo ship MORMACSEA as transport.

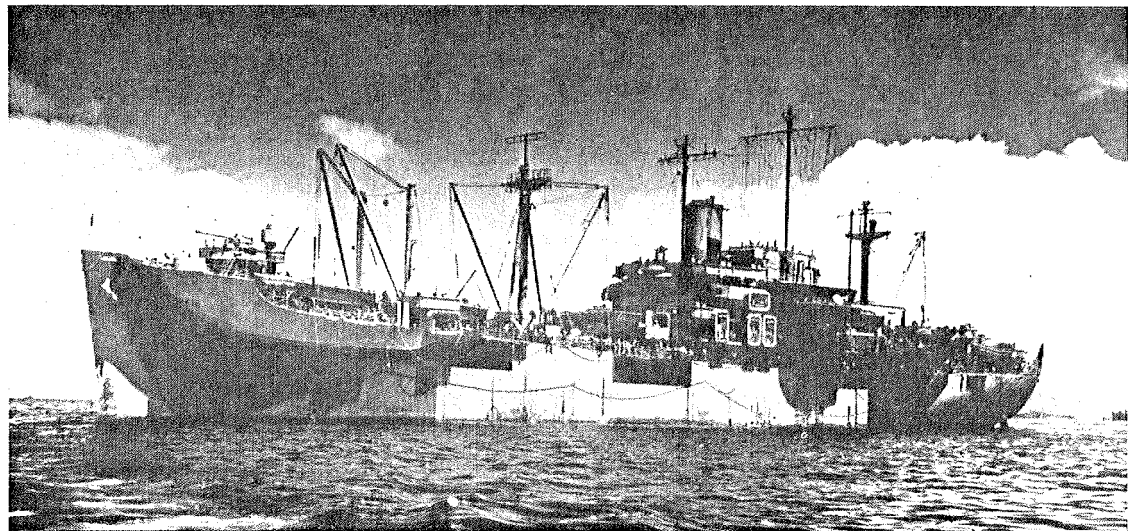


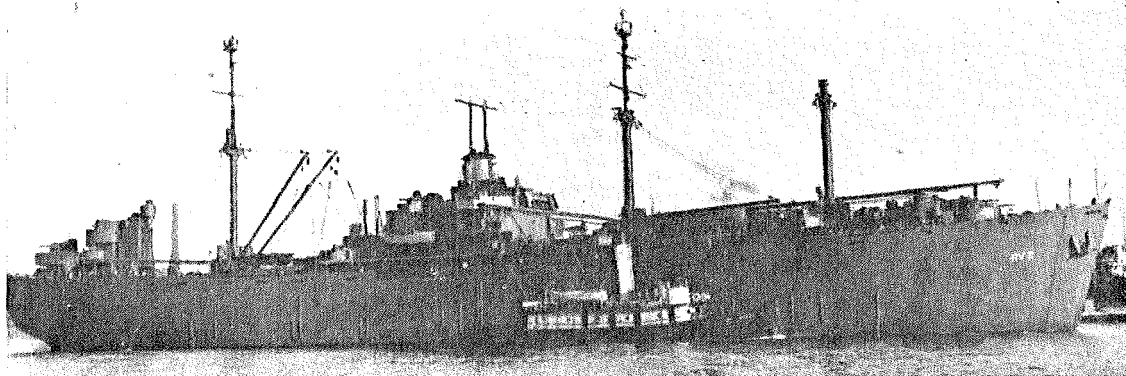
Fruit ship CEFALU converted to troopship.

cooperation by American ship operators in the transport of military, lend-lease, and other cargoes had been principally on a voluntary basis. The Maritime Commission, through its Division of Emergency Shipping, supervised and directed movement of both import and export cargoes, but the active participation of the United States in the war called for total Government control of all ocean-going tonnage.

The responsibility of the WSA included the purchase or requisition of vessels for its own use or for use of the Army, Navy, or other Government agencies; the repairing, arming, and installation of defense equipment on WSA-controlled vessels and Allied vessels under lend-lease provision; the conversion of vessels to troop transports, hospital ships, and for other special purposes; the training and providing of ship personnel;

C3 Passenger-cargo ship SEA SWALLOW converted to transport.



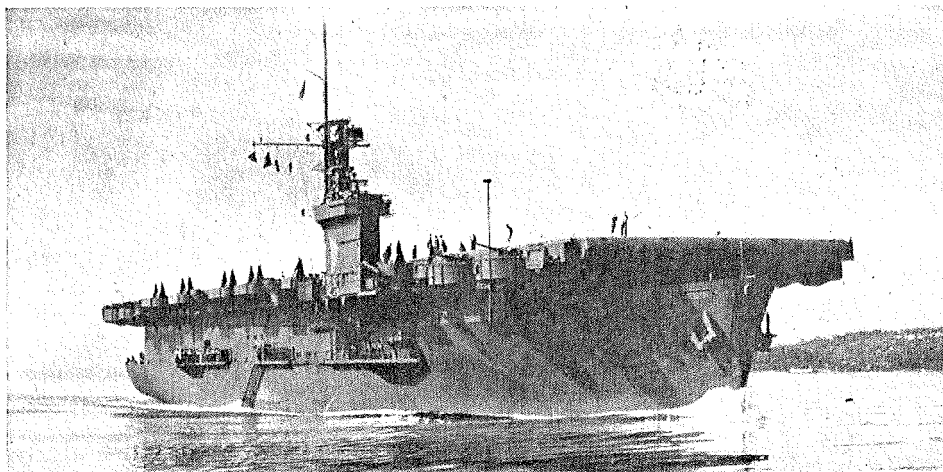


A Liberty ship converted to aircraft repair vessel.

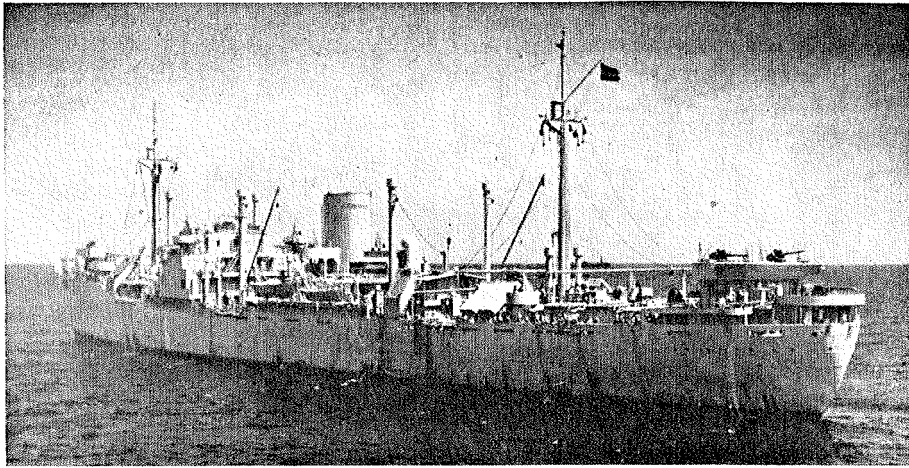
the operation, loading, discharging, and general control of the movement of the ships; administering of marine and war risk insurance laws and funds, and the control of port and terminal facilities, forwarding and related matters.

With all ships subject to WSA requisition, qualified ship operators became operating agents for the Government. Thus, although the American maritime industry was

placed under "war orders," it remained intact in its organization and immediately launched a program matched only by the production industries. Near the end of 1944, the WSA created a special Merit Award to these operators, authorizing them to fly a WSA pennant bearing a number of stars indicating number of vessels operated by the particular line.



Basic cargo-ship designs were quickly modified to create the baby flattop.



Dutch merchant ship drafted as a transport for united maritime effort.

Coordinating Allied Shipping

The WSA, in addition to controlling all elements of the United States Merchant Marine for war use, also cooperated with other United Nations in the most effective use of all Allied shipping. With Great Britain, the Combined Shipping Adjustment Board was formed on January 26, 1942, as a coordinating agency for the two great maritime powers, whose function it has been to provide the greatest possible utilization of both nations' pool of merchant shipping to prevent overlapping or dupli-

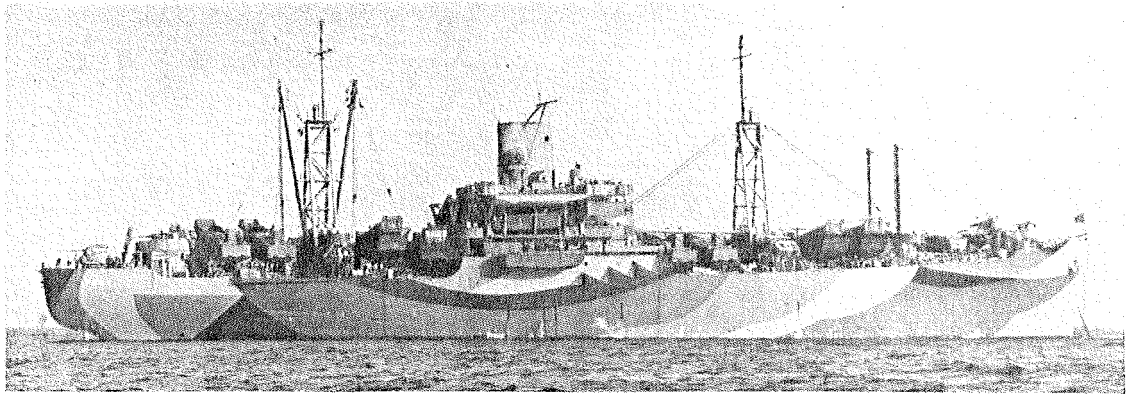
cating the use of available ship tonnage.

On May 24, 1944, the United Maritime Authority was created under which the governments involved accepted as a common responsibility the provision of shipping to meet military and other problems arising from the end of the war first in Europe and then the Far East. Termination of the UMA was set for 6 months after the end of war in the Pacific, unless earlier decided upon by the various governments. The date was fixed as March 2, 1946.

Efficiency Means More Lift

Despite the size of the merchant fleet, WSA officials operated under the maxim "there are never enough ships." The utmost use was squeezed out of each vessel. Every attempt was made to plan and organize the use of the fleet at maximum efficiency. This called for the exercise of ingenuity and good management.

Throughout the war new ways were devised to carry more cargo per ship. Previously unused deck and under-deck space was pressed into service. Aircraft, tanks, and landing craft were loaded on the decks of tankers especially devised to carry these unusual loads. During the early days of the war this saved precious time and valua-



Incredible deck loads were devised for invasion. This A7v combat-cargo vessel was a one-ship task force.

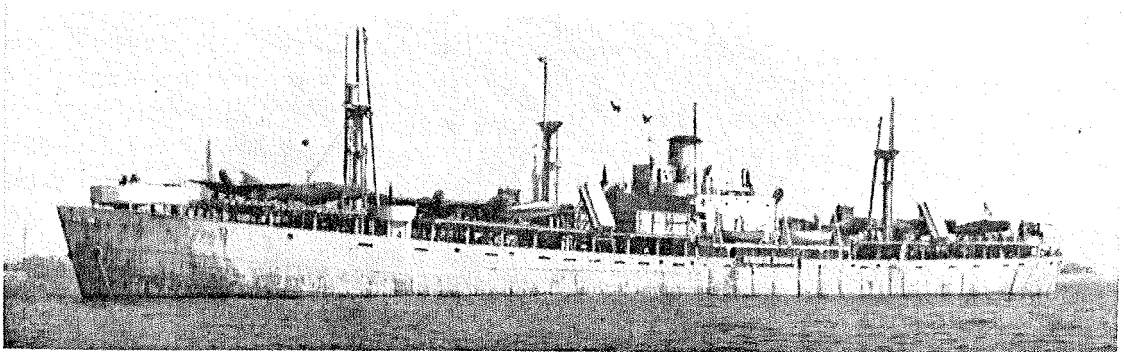
ble dry-cargo shipping space. During 1944 from Pacific ports alone 2,727 airplanes, 993 boats, 296 amphibious craft, and 1,223 vehicles were shipped out as deck cargo. Deep tanks of dry-cargo vessels served to carry excess bunker oil to the United Kingdom at a time when shortage of oil threatened the success of Britain's war effort at home.

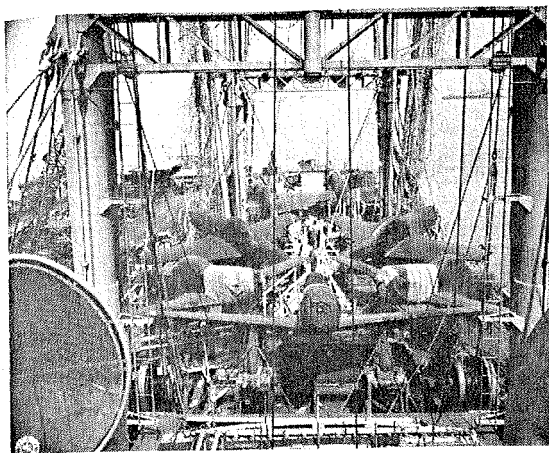
As a result, studies made for the year 1944 show the volume of dry cargo loaded on decks of tankers and in transit vessels to have been equivalent to the capacity of 475 dry-cargo vessels carrying an average cargo of

400,000 cubic feet. The amount of surplus fuel loaded in deep tanks of dry-cargo vessels was equivalent to the cargo capacity of 57 tankers carrying an average cargo of 12,000 tons.

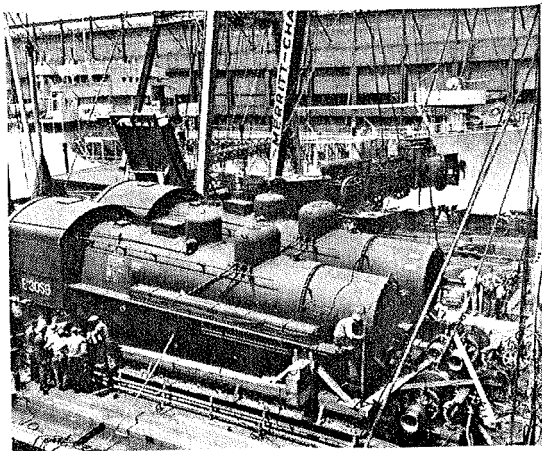
Unusual cargoes had to be carried for special military uses overseas. Plans for the invasion of France spurred many of these guarded secret activities. A number of vessels were specially outfitted so that unboxed vehicles could be rolled out in rapid fashion to save turnaround time in their shuttle across the Channel. Ingenious wooden false decks were prefabricated

From the Liberty ship design another type of tanker was evolved.

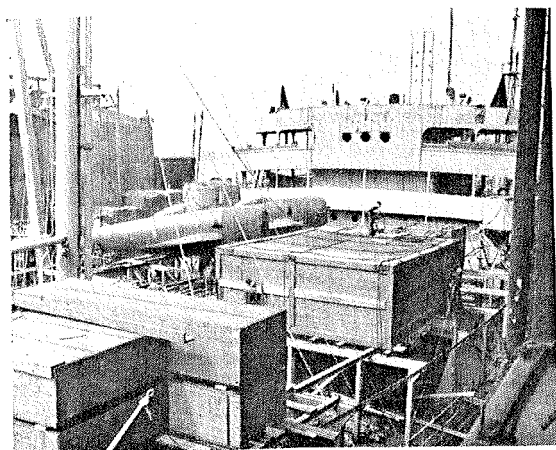




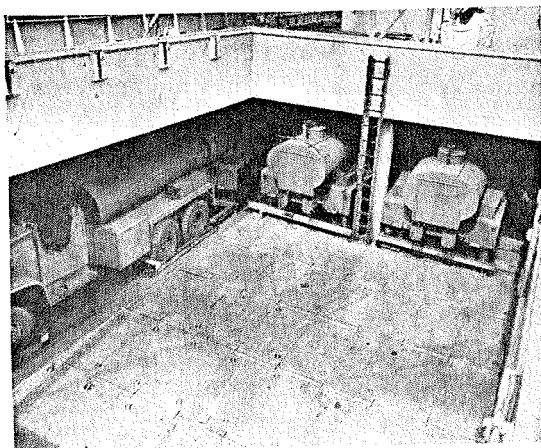
Peacetime decks never saw a load like this.



Entire railroads were ferried to war by the Merchant Marine.



Planes—more planes.



Gas tanks were tailored to fit cargo holds.

in this country, stowed knocked-down ready for installation. Plans and instructions were carried for the Army to erect them when the ships had arrived.

Bulk ore carriers were fitted out for carrying grain. They loaded the largest cargoes of this vital commodity ever carried. Ten power units were shipped to Russia in the winter of 1944. They were mobile generating sets used to supply light and power to destroyed cities. They were mounted on

railway trucks, each unit some 52 feet long, and carried unassembled on deck. This was the first time such a cargo had been carried, but they were shipped across the North Atlantic in winter without damage or loss.

Every effort was made to prevent the bugaboo of the last World War—congestion at ports. Memories of freight cars jamming the sidings for many miles out of New York City, of frantic attempts to find cargo ear-

marked for certain ships, helped to prevent repetition of these conditions. Port authorities had smoothed out a number of these defects in the interval between the two wars, and the WSA entered into coordinated operations with port officials, the Office of Defense Transportation, Army authorities, rail, barge, and truck lines and private port and terminal operators. A master stevedoring contract was agreed upon. Government-operated terminals at Hoboken and Philadelphia were under jurisdiction of WSA. Contracts were made with steamship agents operating piers to give WSA control of deep-sea terminal facilities during the war period and permitted equitable allocation of ships among terminal operators.

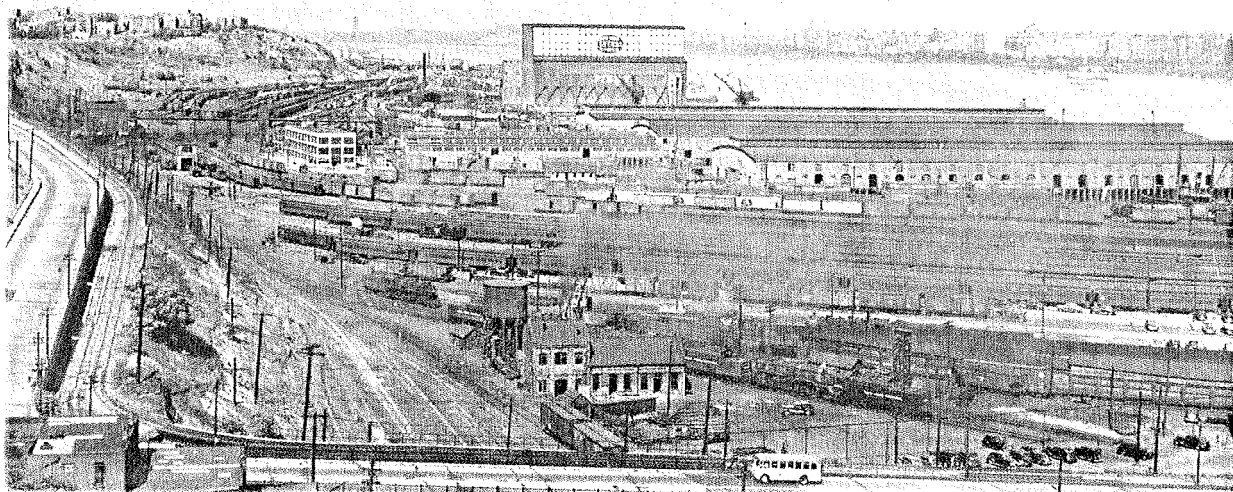
By close cooperation with railroads, light-erage, and on docks, much cargo was deliv-

ered aboard ships by carfloat, in New York harbor particularly. In 1944, 44,805 carloads, or 123 cars per day, were delivered.

Typical details in the intricate task of routing cargoes to ships in time are seen in the daily meetings of WSA operations officials in New York with those from the British Ministry of War Transport. All ships on berth loading or discharging at Atlantic coast ports were reviewed and checked by daily teletype. Where such ships were in need of cargo to continue loading without interruption or complications, immediate steps were taken to insure the meeting of the convoy deadline dates.

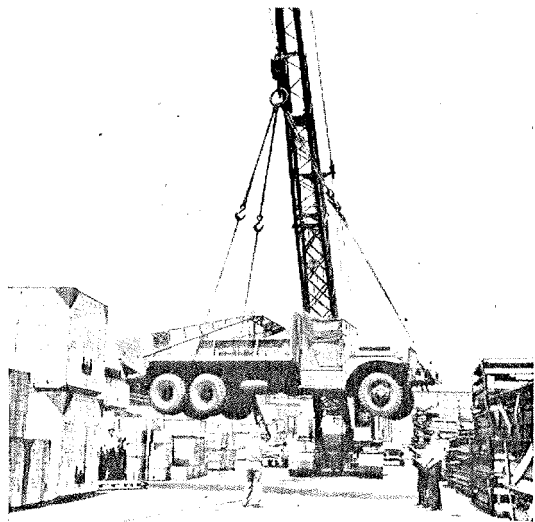
To meet the various needs of the different theaters of war, which included every section of the globe, traffic was allocated to points along our coastlines best suited as out-ports. Naturally, the Atlantic ports served

The great war terminal at Weehawken, N. J.



principally the European theater; the Pacific slope was set up by WSA as a separate administrative region and held responsible for all Pacific shipments. Columbia River and North Pacific ports, for instance, served much of the Russian lend-lease trade, 2½ million tons moving from them during 1944. Gulf ports served well in the import of strategic materials and essential commodities from South and Central America, and excess traffic to the Southwest Pacific moved from them through the Panama Canal.

Efficiency in handling the WSA fleet was complicated by wartime problems never before encountered. About one-third of all dry-cargo vessels during any one period during 1944, for example, were in foreign areas discharging cargo or engaged in local military operation. Inadequate port, storage, and transportation facilities in Europe and in the Pacific also tended toward delays in returning ships quickly to the United States.



Army stores depots wrought miracles in handling heavy cargo.



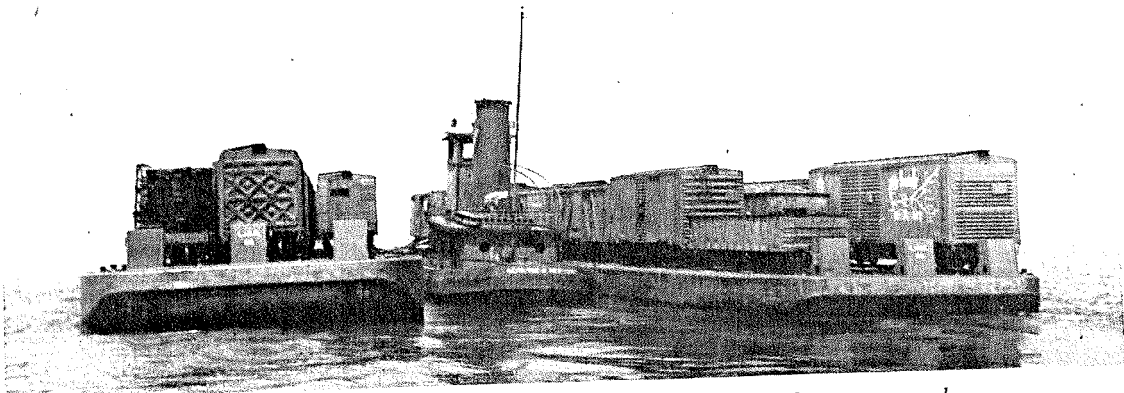
Once a heavily guarded secret. The Chart Room of the WSA in New York spotted every merchant ship in the harbor.

Nevertheless, figures for 1944 show that despite an increase in the average number of ships handled daily, ranging from 416 at Atlantic and Gulf ports in January to 581 in December, the average time spent by these vessels in port declined from 25 days in January to less than 17 days in October. This rose only to 19 in December, in spite of extreme winter weather conditions.

The improvement was a result of cutting time spent discharging, loading, repairing, awaiting sailing orders, and other miscellaneous operations in port. By hastening turnaround, more ships were handled and correspondingly more cargo transported. This speed-up for instance added the equivalent of 125 ships to the East Coast fleet during each of the critical 3 months of the final build-up for the invasion of France.

Turnaround time was proportionately longer in the Pacific operations because of extensive naval and military activities and fewer ports and facilities in that area, as well as the need to use ships in shuttle operations among Pacific island bases.

A contributing reason for improved con-



Lightering whole trainloads to ships without berths sped up the turn-around.

trol of ship operations was the collection of regular and adequate information concerning the activities of vessels, particularly ships retained in operational use by commanders in the various war theaters.

In collaboration with the WSA, the Joint Chiefs of Staff directed the War and Navy Departments to maintain complete records of the activities of all United States-controlled cargo vessels and troopships, as well as other merchant vessels operating in an

area under the control of a theater commander.

Accordingly, a ship activity report was submitted weekly to the Navy and War Departments by each theater or area commander, showing, by port, the daily activity of each such vessel. Copies of the reports were then submitted to the WSA to collect, tabulate, and analyze the data they contained for each of the agencies concerned.

Keeping the Fleet in Shape

World-wide facilities for quick repair were essential to keep the ships sailing. War service, even if enemy attack is avoided, is hard on ships. They are pushed in convoy to meet exacting time schedules regardless of weather, and loaded to maximum capacity. The war has sent them into every ocean, into places which are ports in name only. This has called for discharging cargo under every conceivable handicap ranging from refueling of fighting ships from tankers at sea to manual unloading under enemy air attacks at wrecked piers,

emergency docks, and from ships to barges and lighters. All this adds up to abnormal wear on gear, equipment, and personnel.

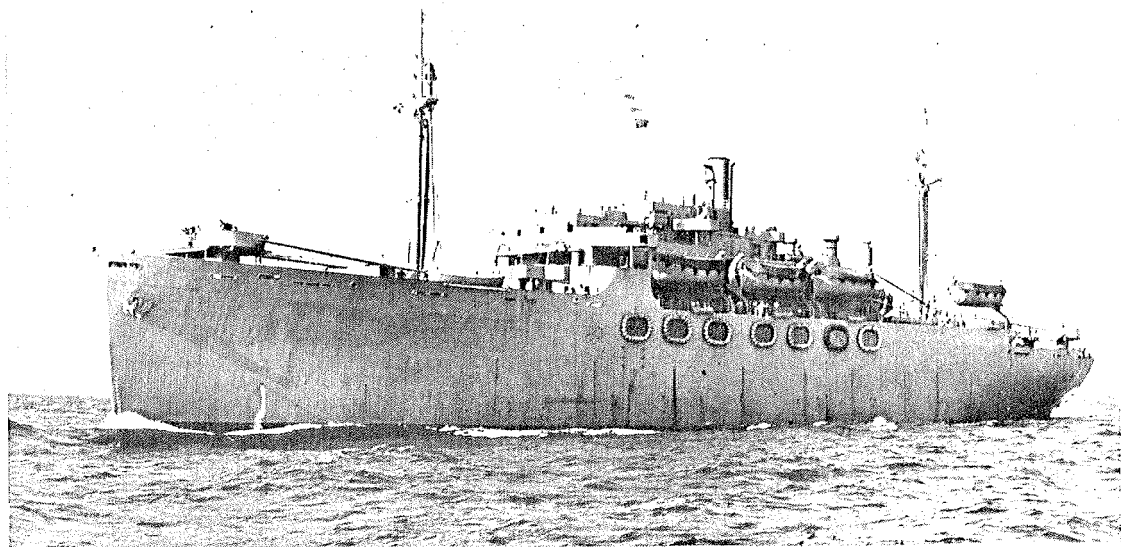
Keeping vessels in serviceable repair was second only in importance to that of constructing a Merchant Marine.

Military demands called for numerous devices, equipment, and conversions below and above decks of standard type ships; and sudden calls were common. Shortages of certain type combat ships meant conversion of merchant vessels to fit wartime specifications.

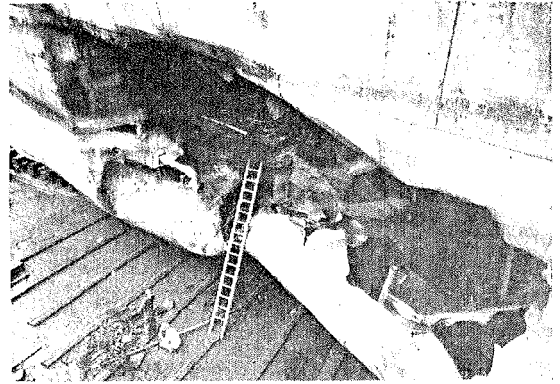
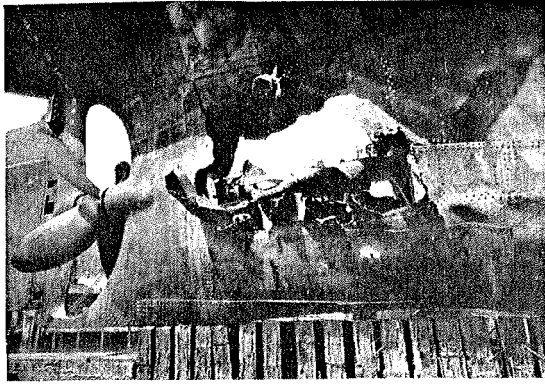
Maintenance, repair, and conversion of the ships of our wartime merchant fleet was another responsibility of the WSA. This called for the organization, enlargement, inspection, and general supervision of the American ship-repair industry. It called for an immense amount of legal and financial activity and dealings with hundreds of repair concerns, agents, and organizations. Sources of supplies and equipment had to be set up and new personnel trained for the enlarged industry.

Because this Nation's resources and geographical location made us the principal arsenal of the war, we also became headquarters for the greater amount of repair and maintenance of the world's merchant shipping.

New techniques in refueling combat ships at sea doubled the fighting range of our fleets, especially in the Pacific.



Peacetime passenger-cargo ships built for the Maritime Commission were swiftly converted to troopers.



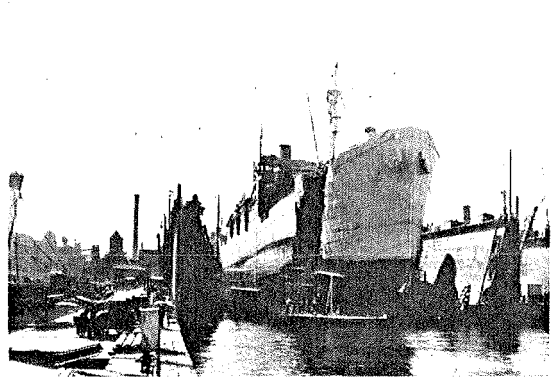
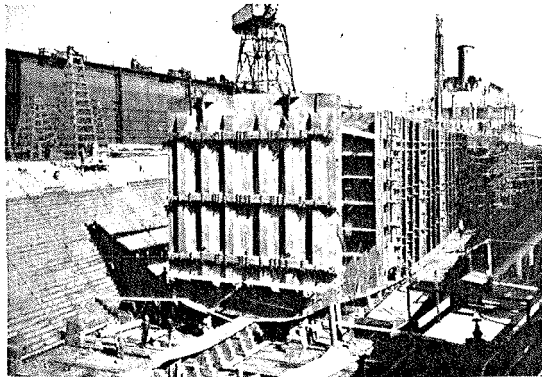
Blasted by enemy torpedoes, these cargo ships were speedily repaired to sail again.

Since the task was primarily concerned with the operation, rather than with the construction of ships, the Division of Maintenance and Repair of the United States Maritime Commission was transferred to the WSA. It was greatly enlarged. In addition there was created a Division of Foreign Repairs and Salvage Operations maintaining personnel in numerous ports overseas. To coordinate the function with similar operations of Navy, an Office of Coordinator for Ship Repairs and Conversion was set up in New York to work jointly for the Navy and the WSA. This office maintained an orderly flow of work to some

100 repair yards throughout the country. In addition there were about 230 other companies engaged during the war on specialized types of work in connection with maintenance, repair, and conversion.

During the first 18 months after the establishment of the WSA's Maintenance and Repair Organization on May 7, 1942, primary stress was put upon expanding ship repair facilities in the United States. Many new yards were established and the services utilized of concerns capable of specialized work, such as machine and welding shops. A system of inspection was devised. Standard plans and specifications were set

Our drydocks worked miracles in rebuilding shattered ships.

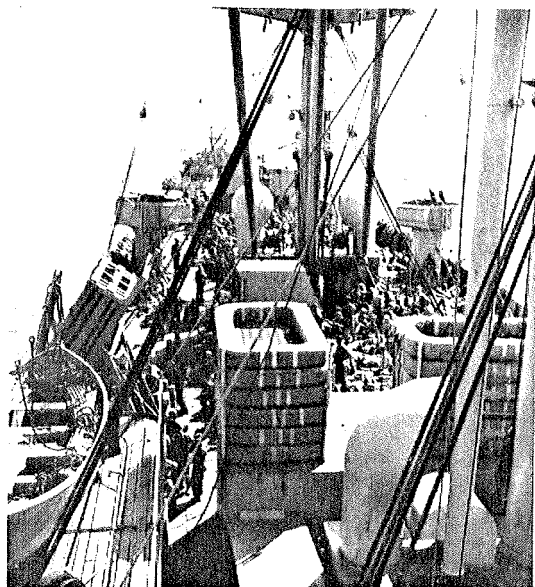


up to insure uniform changes and modifications aboard vessels being made ready for special services such as troop carriers.

This unit of the WSA directed the arming of merchant ships, installations of defense gear such as degaussing equipment to ward off magnetic mines, and of special cargo handling devices. Some vessels had to be "winterized"—heating coils installed and other preparations made for Arctic and North Russian runs. Auxiliary tanks were set aboard other ships going into war theaters where there were inadequate water supplies.

Specific accomplishments included conversion of ships to transport from 300 to 600 mules each; fitting Liberty ships for carrying prisoners of war and their subsequent refitting as troop carriers to return military personnel from overseas. These were jobs in addition to repair of damage inflicted by torpedoes, bombs, shellfire, and marine casualties by collision or storm damage.

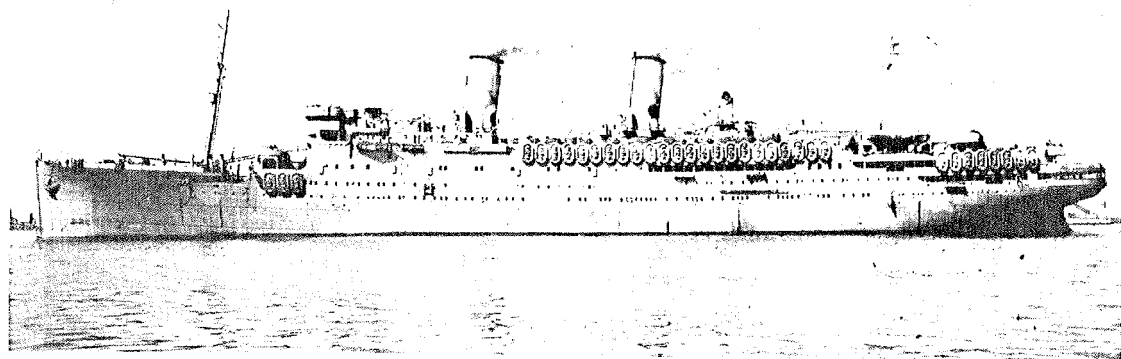
The troop-carrier program called for the conversion of about 400 vessels, including

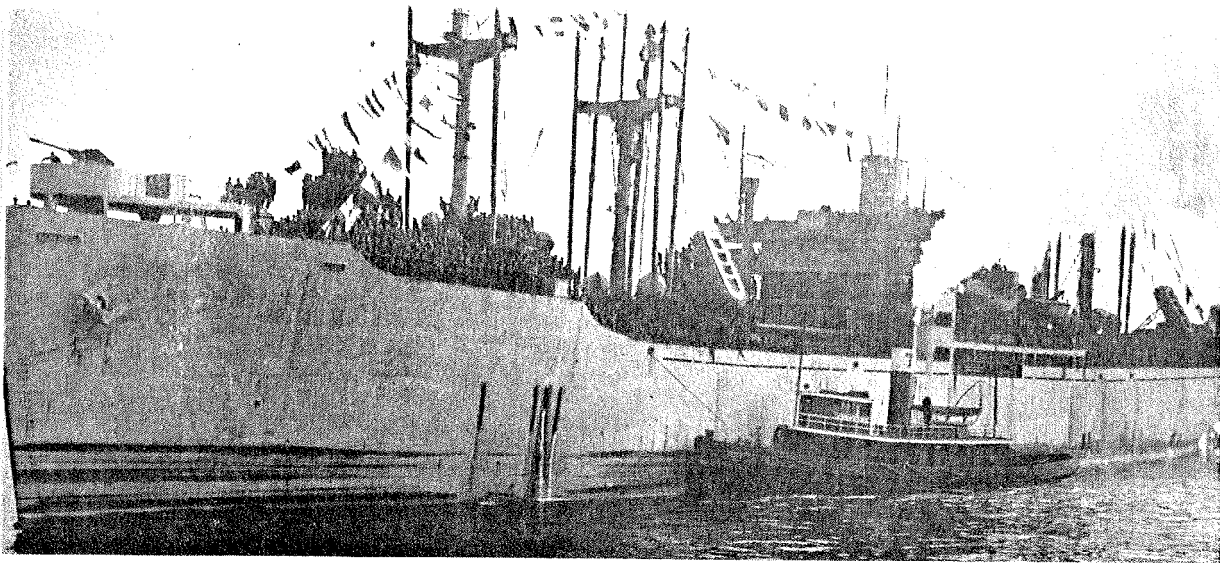


This Liberty ship carried prisoners of war.

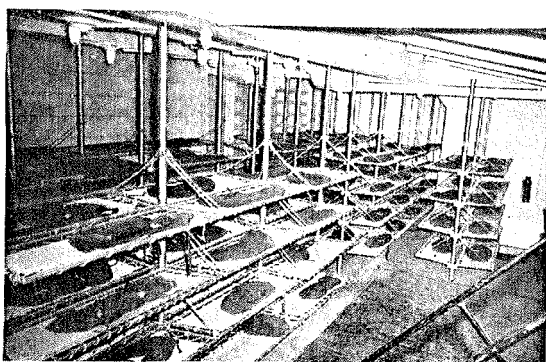
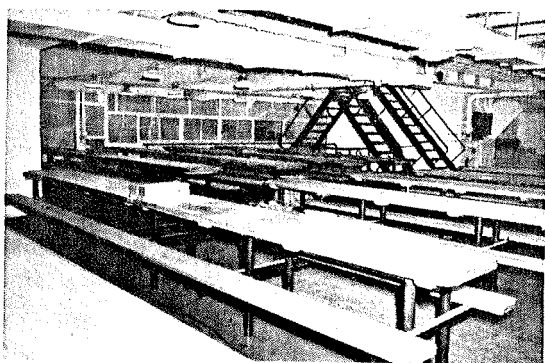
the liner *George Washington*, and 97 Victory ships at a total cost of about \$290,000,000. Similar conversions of foreign-flag vessels were accomplished including that of turning four armed merchant cruisers into troopships which involved expenditure of

The interned Italian liner CONTE GRANDE became one of our busiest transports, the MONTICELLO.





The AIKEN VICTORY was one of 97 Victory ships pressed into service to return our victorious troops.



Cargo holds on Victory ships were transformed into troop quarters with prefabricated gear.

\$2,750,000 each. Of great military importance was the fitting out of several Liberty ships to transport and lay special hollow cable used as a pipeline spanning the English Channel—a source of supply for our fast-moving motorized equipment in the Battles of France and Germany. Four Soviet vessels were converted to floating fish and crab canneries and other types of concentrated-weight cargo. Four Soviet vessels were converted to floating fish and crab canneries. Numerous tankers were fitted

out with oiling-at-sea gear and with special decks to deliver aircraft and other cargo.

The WSA's Repair and Maintenance Organization handled more than 42,000 jobs at an approximate total cost of \$1,480,087,000. Of these 36,476 were for the WSA, costing about \$1,168,740,000, while 5,600 jobs were carried out on foreign vessels under lend-lease arrangements, costing some \$311,347,000.

Ship-repair contracts were negotiated with Australia, Belgium, Egypt, England,

and South Africa to assure WSA vessels rates and conditions equivalent to those of the nationals of each country. Repair facilities at practically all foreign ports were surveyed so as to route vessels urgently needing repairs to the port best equipped to handle them. Thousands of routine repairs

were handled under the supervision of 62 engineering representatives stationed all over the world. Stock piles of parts and equipment including gear, removed from badly damaged vessels were maintained at strategic and advance foreign ports for making quick battle-damage repairs.

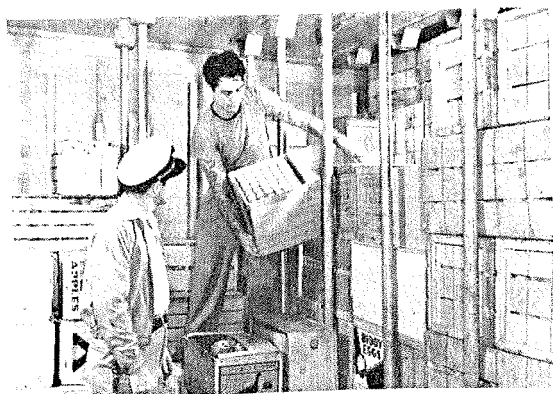
Husbanding the Fleet

Ships need fuel. During the war, the WSA-controlled fleet consumed over 300 million barrels of all types of bunker fuel, drawn from every available source and practically every bunkering port in the world. To insure adequate supplies both in United States and foreign ports, WSA maintained close cooperation with the Petroleum Administration for War, the United States Navy, and all major oil suppliers as well as with the British Ministry of War Transport.

Seamen need food—good food. To assure an adequate supply of the best available, the WSA saw to it that ship suppliers had large quantities of scarce stocks of essential foods so that there would be enough on hand at all times to supply our ships.

More than 450 food suppliers were approved to sell these set-aside and restricted foods to WSA ships. Through such means, and the formation of cooperative buying groups in major ports, the WSA made available during the period February 1943 to January 1946, more than 1,812,000 tons of such foods to suppliers. This included 350,000 tons of meat and poultry, 286,511 tons of fresh fruits and vegetables, and correspondingly large amounts of butter, canned foods, eggs, cheese, milk, coffee, and other scarce items. WSA representatives served on various government food boards working through the War Food Administration to keep in touch with latest developments and to see that the Merchant Marine was included in food-supply allocations.

The best food in the world was none too good for the men of the Merchant Marine.





A merchant ship's cook must know his stuffing.

The WSA's Food Control Division surveyed feeding conditions and practices aboard ship and recommended improvements, particularly in the proper stowage and preparation of food and elimination of wastage. Additional training was given stewards, cooks, and bakers. Informative publications were made available aboard ship. The new procedures were worked out with the cooperation of various operat-

Good food means a happy ship.



Every galley has its trained baker.

ing companies who have indicated they will continue them in peacetime. All efforts were intensified to provide the best possible meals for servicemen returning home aboard WSA troop transports.

So that merchant seamen would be able to purchase personal supplies of good quality aboard ship, a standard slop chest was adopted comprising 52 items in addition to tobacco and cigarettes. Handling

Returning GI's were fed by the WSA.



and delivery of mail to and from merchant ships was improved steadily, largely due to the increased efficiency of the naval postal facilities. Responsibility for mail service to merchant ships was returned to the Post Office Department on December 1, 1945.

Husbanding the fleet also called for provision for other supplies, such as deck and engine gear, turnbuckles, lashings, lumber, instruments, and safety devices. WSA

The Little Ships

Not all maritime operations are carried out by the large freighters, liners, and tankers. The WSA service fleet at the end of the war was composed of 48 seagoing tugs of the V₄-M-A₁ type designed by the Maritime Commission, 4 of miscellaneous types, 4 coastwise tugs, 37 harbor tugs, and 50 craft such as barges, scows, and heavy-lift derricks.

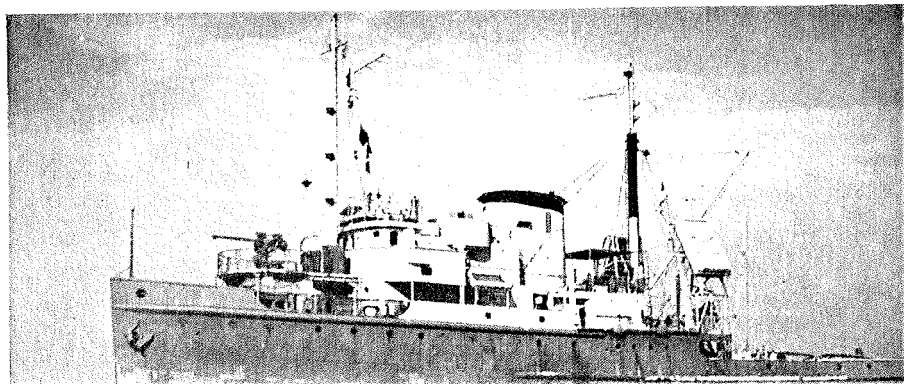
Their big jobs have included the towing of battle-damaged and storm-disabled merchant vessels and Army and Navy combat ships to the nearest ports where repairs could be made. Since 1942 this fleet handled 784 tows involving 1,167 units which piled up a record of 1,893,200 miles across ocean expanses and through all sorts of weather conditions and enemy action.

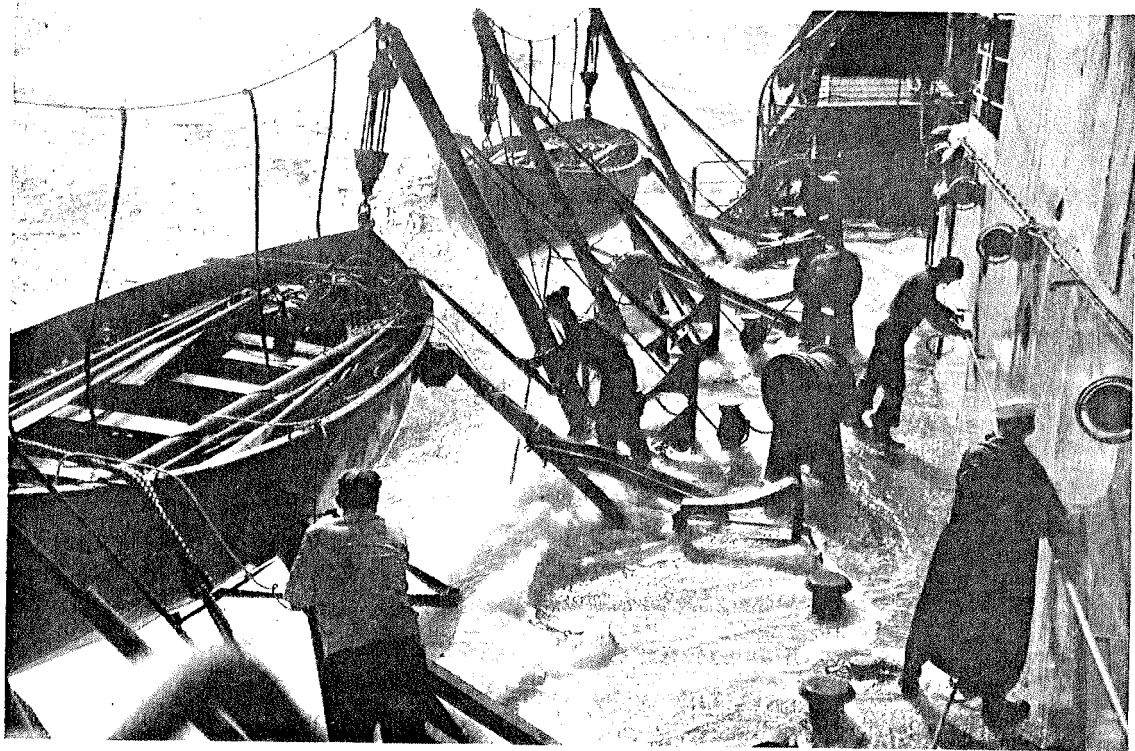
storage yards were set up, with new and re-conditioned supplies available. Special stock piles of equipment were ready in England prior to D-day, particularly for the "block ship" phase of the invasion operations. Supplies were made available for merchant ships by the WSA, the Maritime Commission's Procurement and Priorities Division, the Army and Navy, and the War Production Board.

Their exploits won fame for the men who manned them, as with the 10 tugs which were in the famous MULBERRY operation on the Normandy beachhead. While these 10 were at work in Europe, the balance were towing drydocks, floating repair ships, and other non-self-propelled units from the United States to forward areas, principally in the Pacific.

The service fleet coordinated its operations with the Army and Navy to determine priority for ocean tows, and for the most effective use of the tugs of all three agencies. The coastwise tugs aided in the northeastern coal trade and engaged in towing large oil barges in a shuttle service across the Gulf of Mexico.

The V₄ seagoing tugs were the little giants of the merchant fleet. Their exploits during the war make a rousing history. This is the SOUTHWEST PASS at Manila.





IV

THE MEN WHO SAILED THE SHIPS

THE EARLY MONTHS of the war brought to public attention a group of men to whom Americans had for many years given little thought—the merchant seamen. As was said of the small group of RAF flyers who fought off the German *Luftwaffe*, we owe much to few—for the professional merchant seamen kept the tankers and other vessels sailing despite daily torpedoings within sight of our own shores, at a time when the supply lines stretched dangerously thin.

But there were not enough men actively engaged in the prewar Merchant Marine to man the rapidly expanding fleet. About

55,000 merchant seamen and officers were sailing in December 1941. Many more were ashore, often in permanent, well-paying jobs. Therefore the race for tonnage to meet the war's shipping demands made obvious the necessity for the Government to aid in procuring and training merchant seamen and officers in sufficient numbers and in sufficient time to man the expanding fleet and replace losses to the seagoing personnel.

An organized program was needed to mobilize, coordinate, and administer the Nation's resources of marine manpower and to train new men. On a far greater scale

this problem had faced the Armed Services; it had been solved by creation of the Selective Service System.

The need for such a personnel program crystallized shortly after the creation of the War Shipping Administration when, in the spring of 1942, ship delays from lack of crews reached a critical point with an average of about 45 a month.

The program established by the WSA was administered by three organizations under the direction of a Deputy War Shipping Administrator, with sufficient authority and facilities to match with manpower the ever-increasing number of ships being added to the wartime merchant fleet. They were the Recruitment and Manning Organization, the Training Organization, and the Maritime Labor Relations Organization.

It is interesting to note that the personnel system thus evolved resulted in a peak seagoing force of 250,000, and was kept within the framework of the civilian status of the maritime industry, despite the fact that the seamen and officers carried on their work under combat conditions.

Records of the Recruitment and Manning Organization, or the "RMO," as it became nationally known, show that it lived up to its responsibility to assure a steadily growing and unbroken flow of seagoing manpower. Delays in sailings for temporary want of crews shrank steadily from 12 to 15 a fortnight in mid-1942 to 2 or 3 a fortnight at the end of 1943. This level was maintained until the end of the war, despite the increasing volume of traffic.

More men were induced to stay with the ships. During the war, the turnover rate

In war or peace, the merchant seaman must win his eternal battle with the sea.



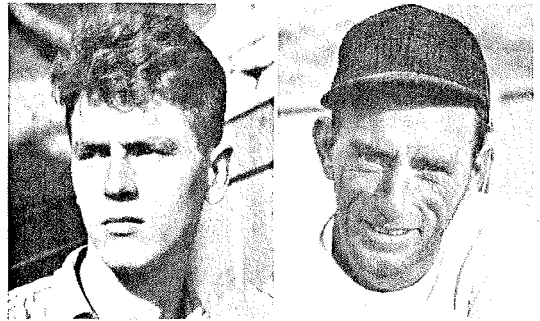


They came from cities, farms, and factories.

of men in the industry was less than one-fourth of what it had been before the war.

The immediate task of the RMO was the recruitment of ex-merchant seamen back into the industry. First large-scale step was a Nation-wide registration of seamen undertaken with the aid of the United States Employment Service in September 1942. Direct personal recruitment was begun early the following year, augmented principally by a recruitment campaign carried out with the cooperation of the Office of War Information and the National War Advertising Council. In all, nearly 100,000 men with previous sea experience working ashore were recruited by WSA into the wartime Merchant Marine.

It was not easy to recruit experienced seamen, many of whom were reluctant to leave well-paying, protected shore jobs, particularly when there was no guarantee of



Volunteers of all groups and ages

reemployment. So, with the active support of the maritime unions and the RMO, Public Law 87 was passed by Congress during the summer of 1943, guaranteeing seniority and reemployment rights to men who went back to sea.

The RMO made 346,100 assignments of men to ships. A large percentage of these were from the training stations. On numerous occasions, such assignments meant the difference between the sailing or delay of a great convoy. Yet RMO actually hired only 25 percent of all seamen, the ship

An All-American team of engineers



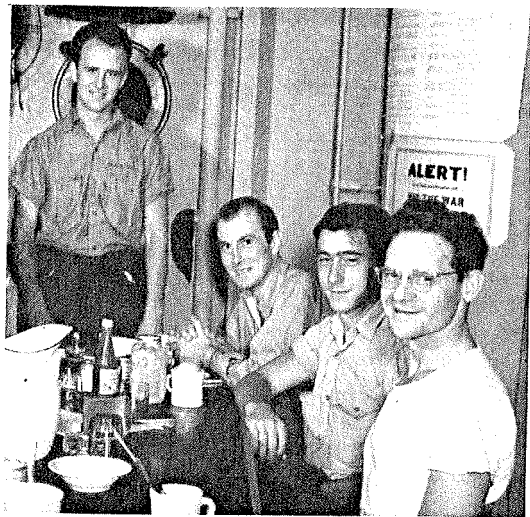


joined the ranks of seasoned seamen.

operators and unions hiring the remaining 75 percent. However, the RMO's share of the manning load was of great importance, since its responsibility was to fill in where regular means of hiring could not meet the sudden demands caused by deliveries of new ships, last-minute sailing dates and other wartime exigencies. It was the successful filling of last-minute demands for crew members which insured ship sailings without delay.

In emergencies when ships were to be held up leaving United States ports, RMO

relaxes at mess aboard their Victory ship.



They manned our wartime merchant ships.

frequently resorted to planes, station wagons, and boats, as well as railroads to get the needed men to the right ports and aboard ships waiting to sail into the combat zones.

Critically needed men were flown to all parts of the world. Movement of seamen by air from Miami became routine procedure, with about 250 a month making this trip to replace men who had left ships for medical and other causes in the Panama Canal Zone. Only a few hours before the Normandy invasion a group of urgently needed merchant ship engineers was flown by Navy transport from the United States to invasion ports in England.

Establishment of pools of men in various port cities on "stand-by pay" was a great help in solving the last-minute manning problems. Paid a daily wage and subsistence, these men were in instant readiness for calls when shortages threatened. This



RMO enrolling offices in great port cities were beehives of activity. This is New York.

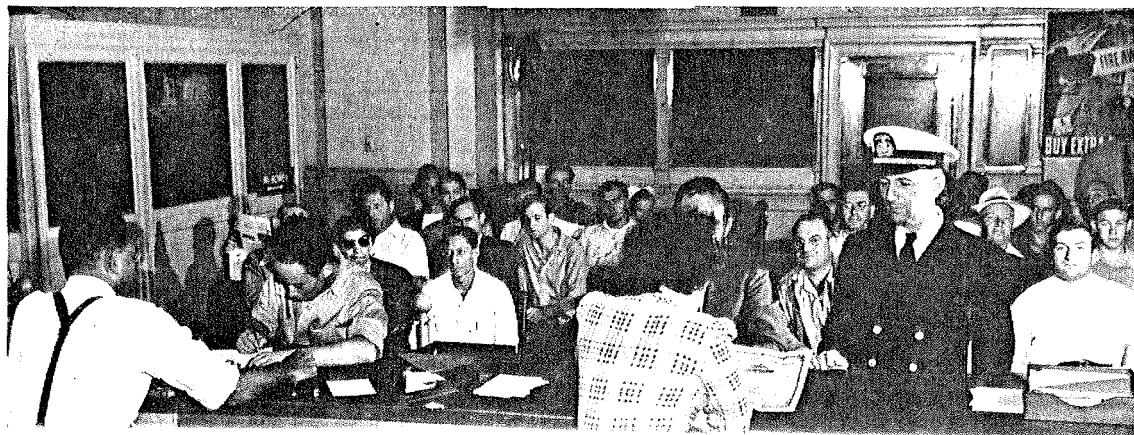
program was started in 1942 and continued until November 9, 1945. An average of 140 men was maintained in these pools in 1942, 595 in 1943, 1,200 in 1944, and around 1,725 in 1945.

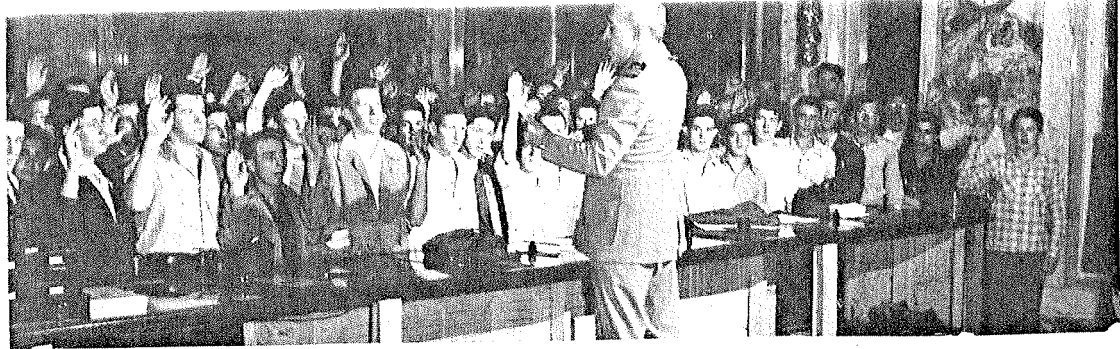
There was little object in recruiting and training seamen if they were not retained in the industry. Therefore the Selective

Service System delegated to RMO authority to certify active seamen to their draft boards for occupational deferment.

Repatriation from overseas of merchant seamen and officers who were survivors of sinkings or who had become separated from their vessels for medical or other reasons was another responsibility of the RMO.

Old-timers and newcomers of all ages and grades answered the call to man our ships.





Thousands of eager youngsters chose the sea for their first profession and were solemnly sworn in.

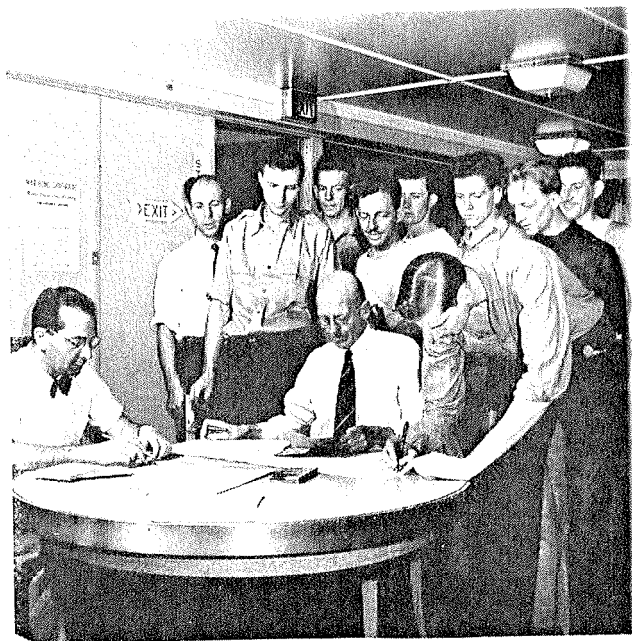
About 9,500 were returned from foreign ports in 1943, 11,300 in 1944, and 31,400 in 1945. The great majority of these men reshipped.

One of the first knotty problems handled by the RMO was that of halting desertions from Allied vessels by seamen who wanted to enter this country illegally or ship on American vessels. By working with various United States departments and foreign representatives, legislation was obtained to alleviate this situation. Desertions in United States ports from Allied vessels dropped sharply. The men were for the most part returned to vessels of their own nationality, and seamen's clubs and rest centers set up to provide them facilities previously lacking when ashore in the United States.



U. S. Maritime Service graduates relax as they stand by for assignment to their first ship.

A new ship and a new crew. Signing on a ship of the wartime merchant fleet, these men were committed to the grim task of putting our cargoes on distant battlefronts.



A New Generation of Seamen

Despite the retention of many active merchant seamen and officers and the recruitment back to sea of previously experienced men, many more were needed to man the thousands of new ships.

Fortunately, as part of the United States Maritime Commission's responsibility under the Merchant Marine Act of 1936, there had been in effect since 1938 a training program for officers and seamen. Shortly after the war began, it was transferred to the WSA and expanded to meet the demand for new men.

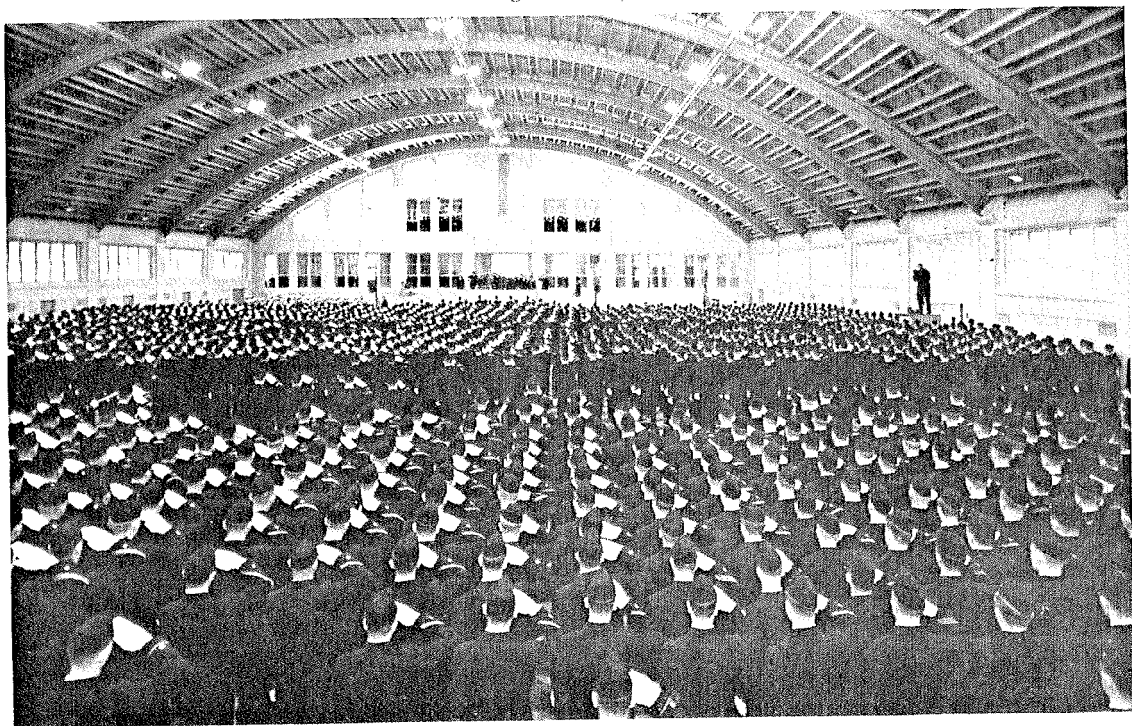
The WSA's Training Organization filled this need. In so doing, it gave thousands of young men from every State in the Union

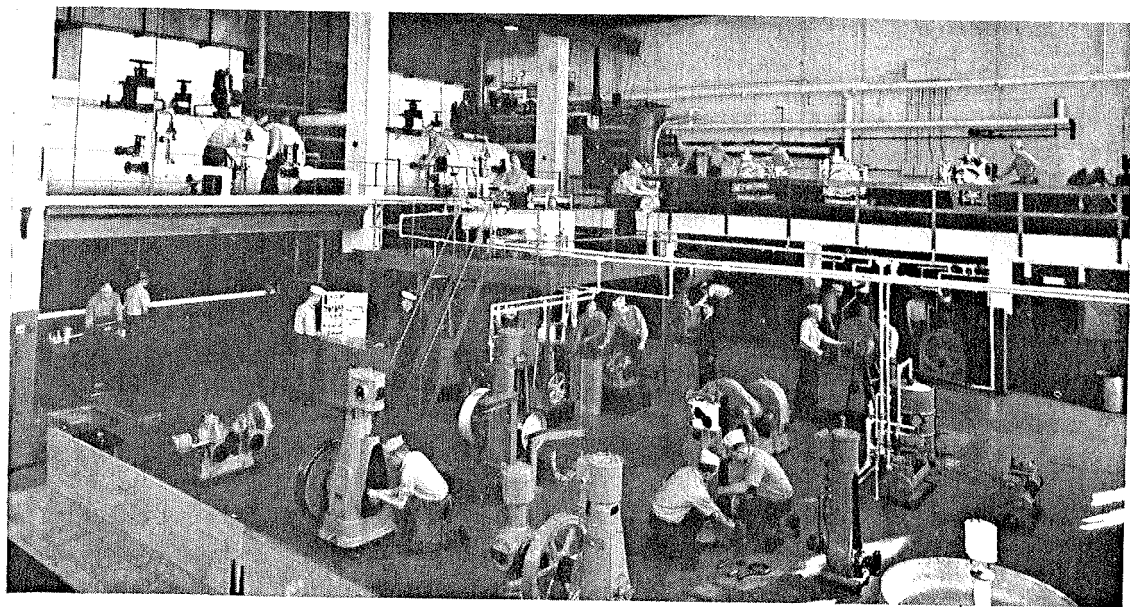
and from all walks of life a chance to continue in the profession during peacetime. Today, because of the training program, there is a body of experienced seamen and officers available to meet all demands of the postwar Merchant Marine.

The program was carried on by three units under the Training Organization: The United States Merchant Marine Cadet Corps, the United States Maritime Service, and State Maritime Academies under Federal supervision.

The Cadet Corps provides merchant-officer training in deck and engine departments for young unmarried men with high-school or college education. Entry into the

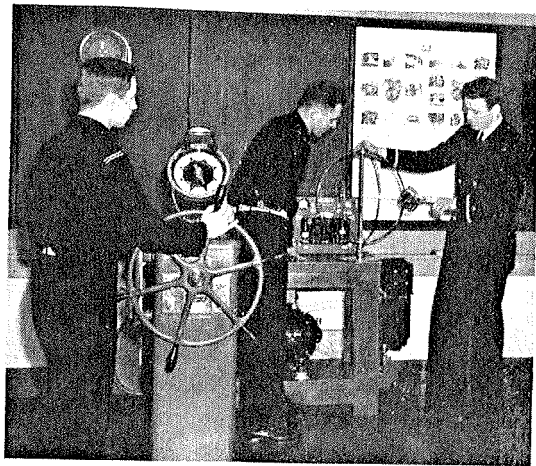
U. S. Merchant Marine Cadet-Midshipmen fill the great gymnasium during ceremonies at the Kings Point Academy.





First-hand training for budding engineer officers in the steam laboratory at Kings Point.

Corps is conditional upon meeting qualifications as midshipmen in the Merchant Marine Naval Reserve. Principal institution of the Corps is the United States Merchant Marine Academy at Kings Point, N. Y., established in January 1941. This is a permanent facility bearing the same relationship to the Merchant Marine as West Point does to the Army and Annapolis to the Navy. Two basic schools, at Pass Christian, Miss., and San Mateo, Calif., provide preliminary training. All cadet-midshipmen must serve an intermediate period at sea aboard merchant vessels. During the war, 123 were reported dead and missing, and many displayed conspicuous bravery under combat conditions. Although geared during the war to as fast a program as possible to fill the need for trained officers, the course at the Academy will return to a 4-year basis.



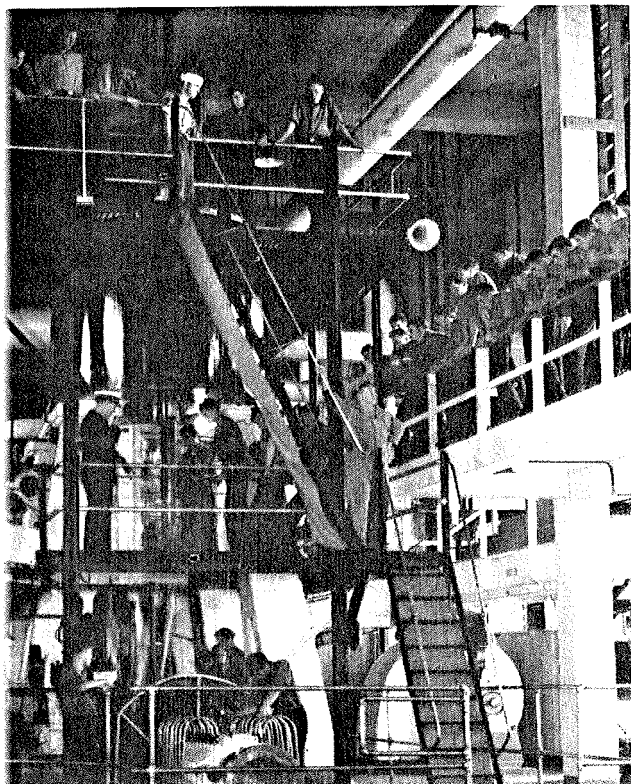
Instruments of navigation must be mastered by Cadet-Midshipmen.

The United States Maritime Service operated large training stations for unlicensed seamen in deck, engine, and stewards departments at Sheepshead Bay, N. Y.; Avalon, Calif.; St. Petersburg, Fla. Further



Gyro-compass class at U. S. Maritime Service Officers' School.

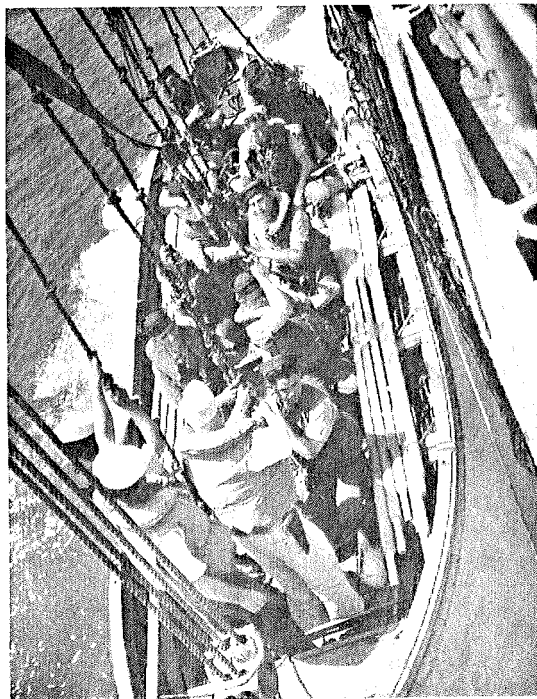
At Sheepshead Bay, largest maritime training station, trainees learn their engines from the real thing.

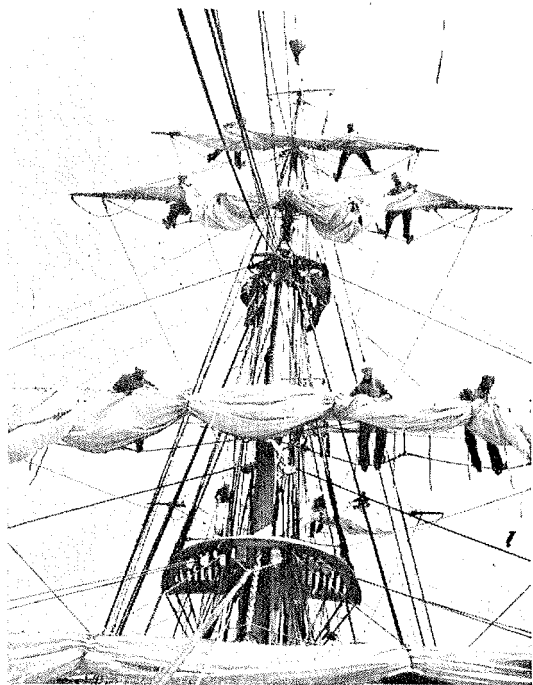


training was provided as carpenters' mates, radio operators, and purser-hospital corpsmen for those selected from enrollees after five weeks of basic training. Special radio schools were maintained at Gallups Island, Boston Harbor, Mass., and at Hoffman Island, New York Harbor. Officers' schools are maintained at Fort Trumbull, New London, Conn., and Alameda, Calif., where deck and engine men with at least 14 months' sea service were given a 4-months' course to qualify them to sit for their licenses, and which provided refresher courses for officers for a renewal of expired licenses.

The United States Maritime Service also conducted special courses of instruction in Diesel engineering, turbo-electric and high-

Lifeboat drill came first aboard training ships.





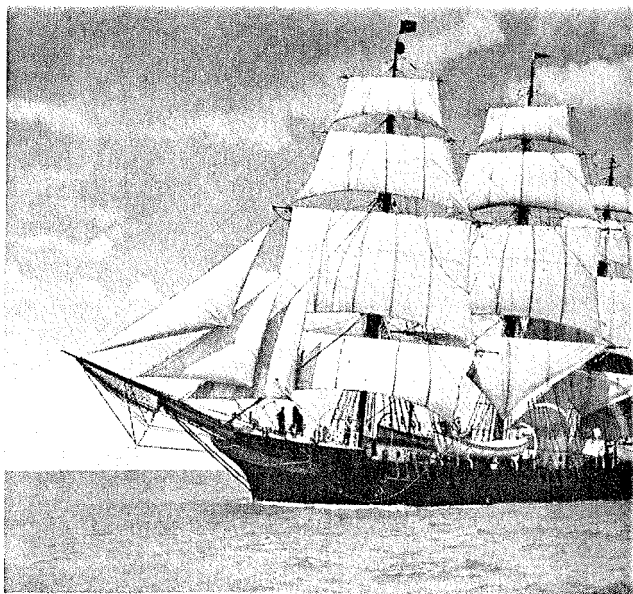
"All hands aloft" to furl sail on the JOSEPH CONRAD.

pressure turbine propulsion, signalling, use of barrage balloons aboard ship, and chief steward training.

The Maritime Service's upgrading program was particularly effective in helping officers, seamen, cooks, and bakers to raise their grades. This was an essential process to fill continuous vacancies in the higher ranks and ratings. Upgrade schools were located in Baltimore, Boston, New York, New Orleans, Seattle, San Francisco, Los Angeles, and Wilmington, Calif.

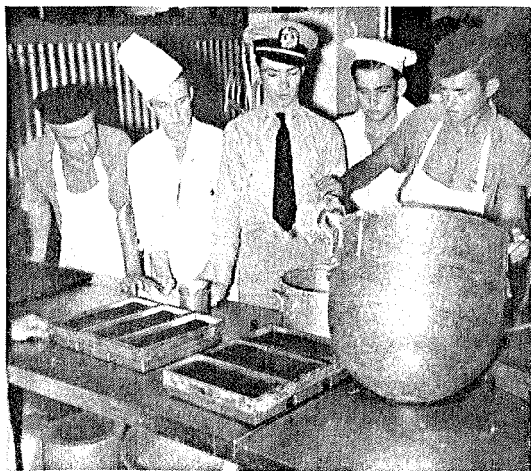
Established January 1, 1944, the United States Maritime Service Institute, in New York City, conducts correspondence courses to be taken at sea. Since its inception more than 15,000 men have registered.

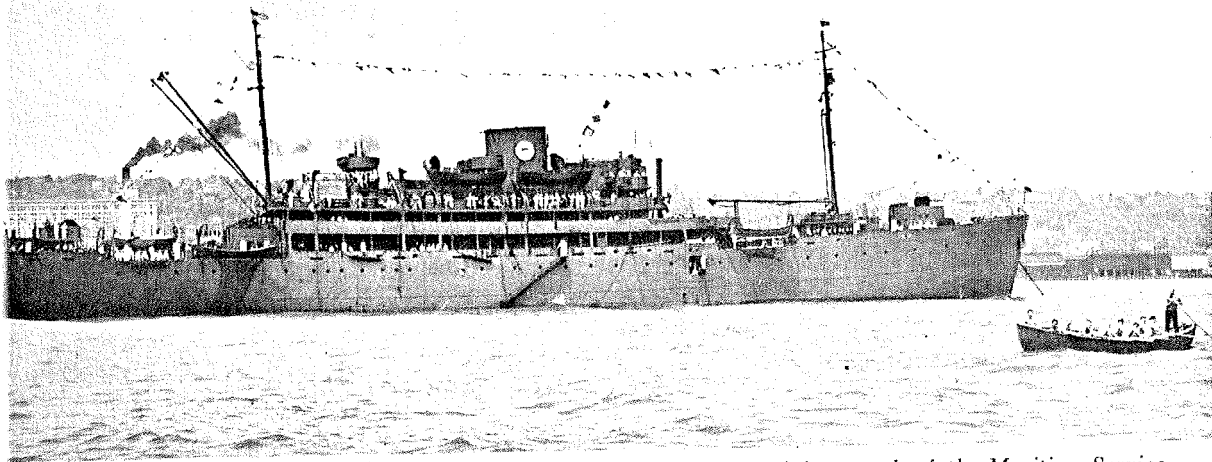
Training of cooks and bakers was featured.



The JOSEPH CONRAD preserved the glamour of old sailing ships for trainees at St. Petersburg.

There are at present five State Maritime Academies which come under Federal supervision due to the fact that they are partially supported with Federal funds. They are located in California, Maine, Massachusetts, New York, and Pennsylvania. Requirements for admission are essentially the same as for the United States Merchant Marine Cadet Corps.





The AMERICAN MARINER, one of the fleet of modern training vessels of the Maritime Service.

From 1938 to December 1, 1945, the training program has graduated and made available to the Merchant Marine 31,986 officers (7,291 from the Cadet Corps, 21,988 from the Maritime Service, and 2,707 from the State Maritime Academics), 7,727 radio operators, 150,734 unlicensed seamen in all ratings, 5,034 junior assistant purser-hospital corpsmen, 2,588 junior marine officers for the Transportation Corps, United States Army Service Forces, 36,620

from deck, engine, and steward upgrade schools, 996 from license refresher schools, 3,653 from turbo-electric and 642 from high-pressure and geared turbine schools, 1,066 Diesel engineers, 2,024 6-weeks' engineers, and 127 river-pilot trainees. The following special schools graduated: Barge balloon, 7,980; visual signalling, 10,001; safety at sea, 1,316. There was a grand total of 262,474 graduates turned out under the WSA training program.

Employee-Employer Relations

At the time of the requisition of the American Merchant Marine by the WSA in April 1942 the great majority of seagoing personnel were members of various maritime labor unions and were covered by collective bargaining agreements with ship operators. Relationship between unions and operators had been stabilized through contractual agreements for several years.

These relationships were recognized by WSA and various agreements were reached to maintain customary practices of securing

and dealing with seagoing personnel by steamship operators acting as General Agents for WSA. Maritime unions agreed that the right to strike would not be exercised for the duration of the war, that the authority of the master of a ship in wartime operations would be strengthened, and that no changes would be made in collective bargaining agreements without WSA approval.

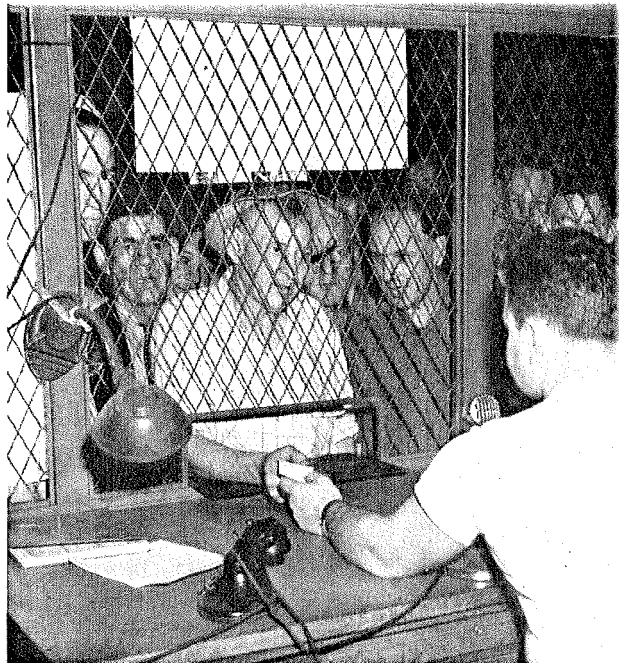
There was not one strike in the maritime industry during the war. With the exception of a few minor and isolated misunder-

standings, there were no delays in the sailing of vessels as the result of a labor dispute. Under principles laid down in Statements of Policy, the unions and the WSA agents have successfully adjusted a multitude of grievances and have successfully maintained the established collective bargaining, self-governing structure of labor relations existing in the industry.

As early as December 17, 1941, the principal steamship operators and maritime labor organizations met at a conference in Washington called by the Maritime Commission to stabilize war-risk insurance and compensation for seagoing personnel, which prior to this time were subjects of collective bargaining.

The Maritime War Emergency Board was created, and during the war issued at various times decisions which defined the extent of war-risk bonus and principles underlying the issuance of war-risk insurance.

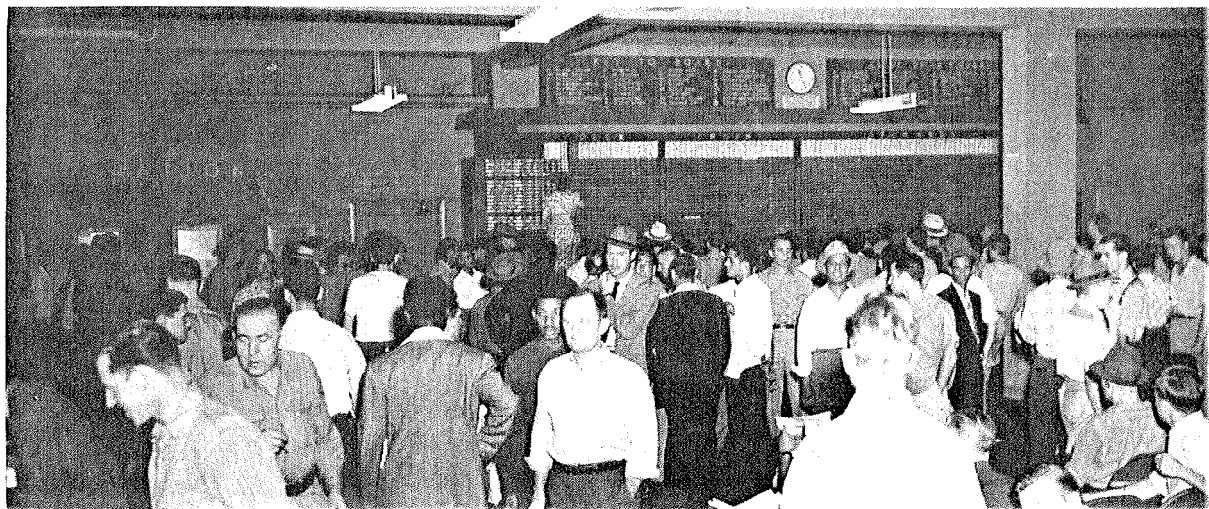
The Maritime Labor Relations Organization, the third of the seagoing personnel units, represented the WSA in all matters of this sort. It worked toward establishing

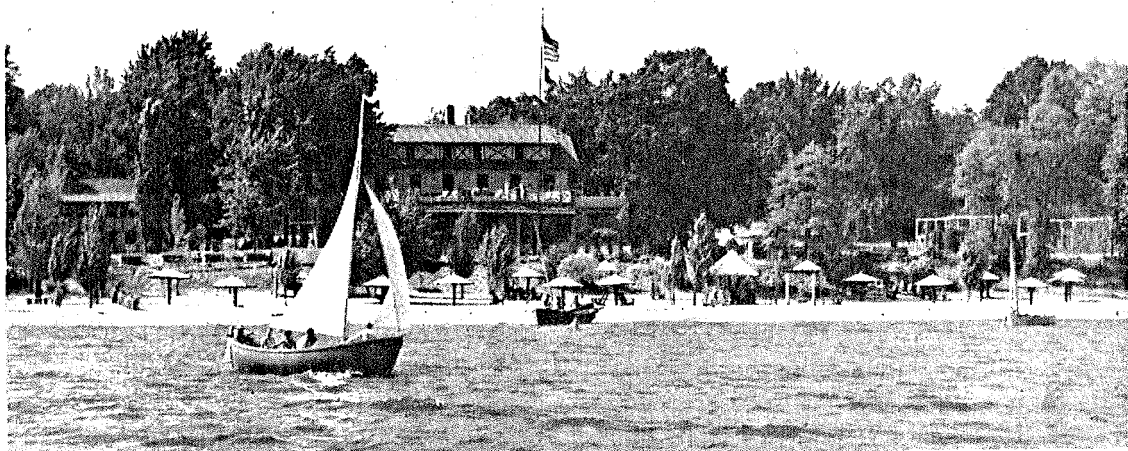


Old-timer checks in at hiring hall to reshipe for war service.

standard uniform wage scale and working conditions on WSA vessels, served as liaison with the National War Labor Board and other labor assemblies on maritime matters, and aided adjustment of labor problems arising out of new operating situations aboard ships brought about by wartime conditions.

Seamen at union hiring hall scan "shipping board" for new assignments.





The Merchant Marine Rest Center at Bay Ridge on the Chesapeake put many seamen in shape to reshipe.

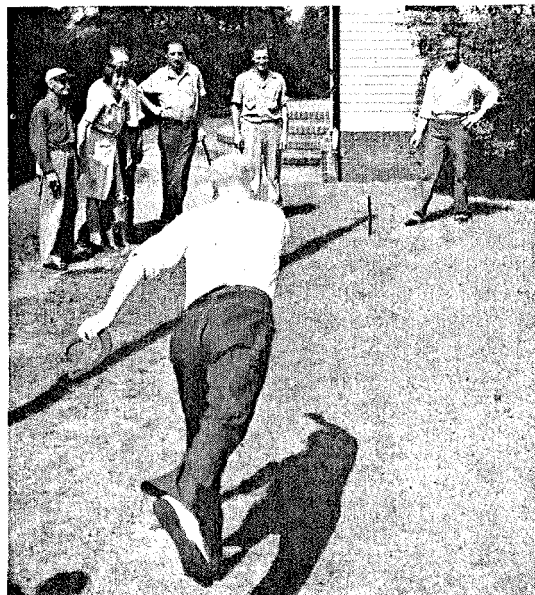
Homes at Home and Abroad

Almost entirely lacking at the start of the war were facilities on a large enough scale to provide a health, welfare, and convalescence program in the United States, or housing, recreational, and medical aid for American seamen abroad.

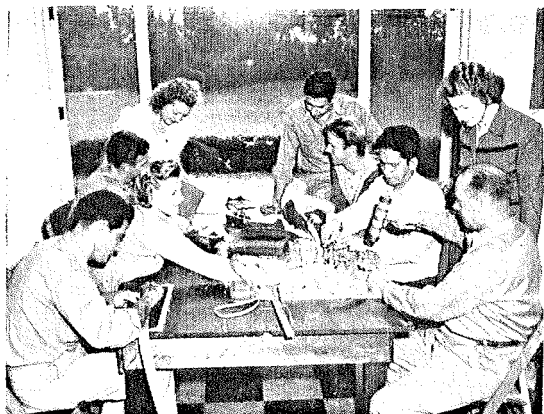
In 1942 the United Seamen's Service was set up as a nonprofit organization sponsored by WSA. It became a participating agency of the National War Fund November 1, 1943. USS is to the merchant seamen what the USO and Red Cross are to members of the Armed Forces.

At its peak, USS operated 126 facilities—rest homes, clubs, hotels, recreation centers—on six continents with a total personnel of 2,000. In 1944, about 170,000 American merchant seamen paid more than 2,600,000 visits to these establishments and, from 1942 to May 1, 1945, approximately 1,503,595 overnight accommodations had been provided for seamen.

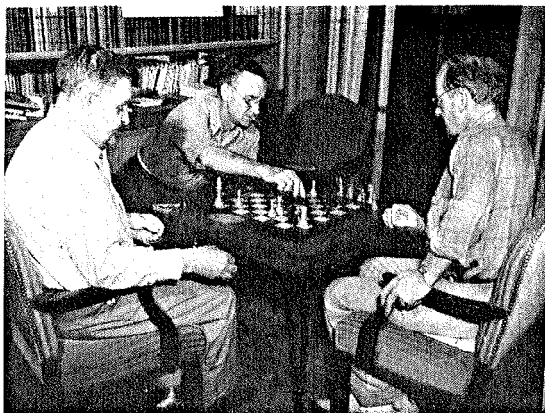
Three rest centers were established in 1942 and two rest homes in 1943, supplemented by two more in 1944. The rest-



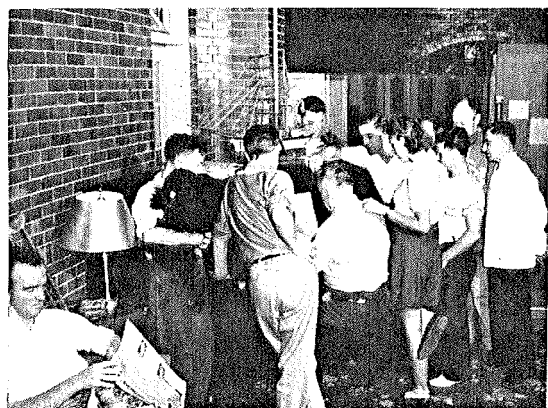
Seamen enjoyed horseshoe pitching on the lawn at Oyster Bay.



Hand crafts were popular with seamen at rest centers.



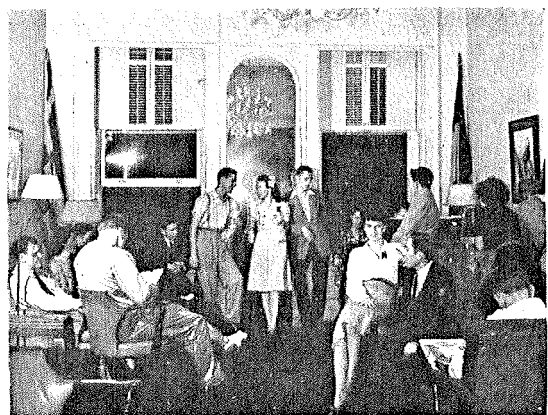
A deep game of chess at Oyster Bay Rest Center.



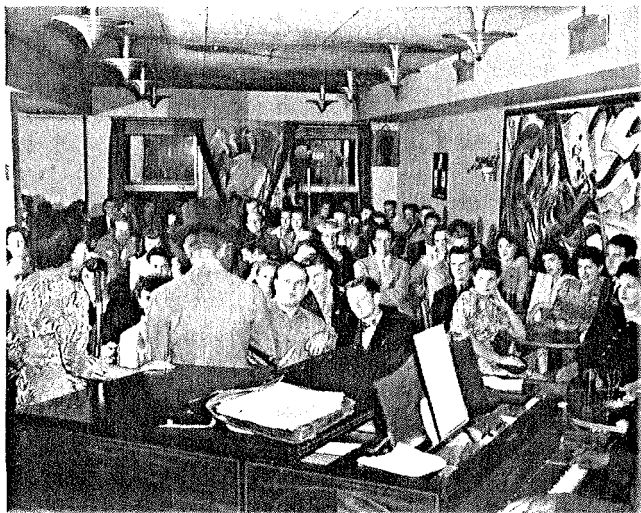
Just a chanty at twilight—Gladstone Rest Center.



Recreation room at Camp Kittiwake Rest Center on the Gulf.



The Furuseth Club was the big rendezvous for seamen in New York.



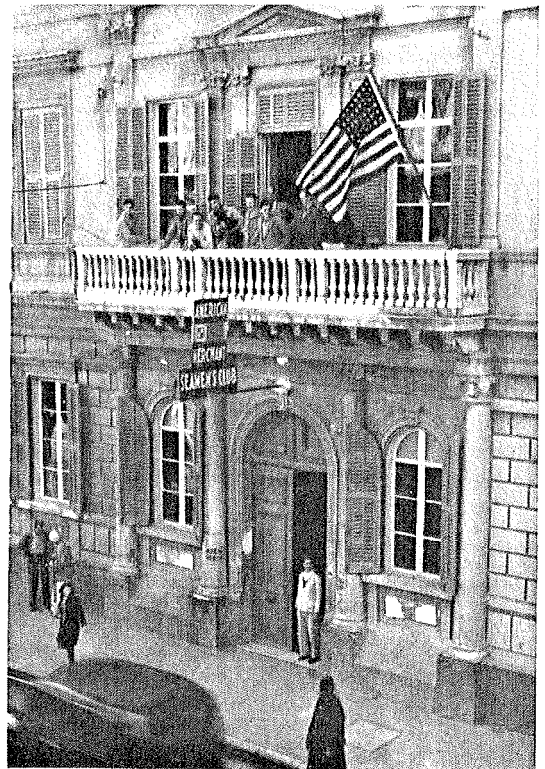


The club at Oran, Algeria, saw many merchant seamen during the Mediterranean campaigns.

center program was designed for seamen not ill enough to be admitted to marine hospitals, but not sufficiently healthy to return to sea. RMO provided the administrative control, medical supervision, and a substantial portion of the operating costs, particularly food. USS provided other operating costs, plus personal services to the seamen guests. From early 1942 through 1945 about 11,300 seamen had been cared for at the seven rest centers. All but two of these rest homes were closed after the end of the war.

Medical Service for Seamen

Under public laws, dating back as far as 1798, the United States Public Health Service is charged with providing medical care for merchant seamen. During peacetime the function performed by this group through marine hospitals and medical relief stations was adequate. Wartime situa-



Merchant seamen's club at Alexandria, Egypt, during the war.

The merchant seamen's health program developed during the war was so successful that the American Merchant Marine Conference meeting in New York City, in October 1945, recommended its continuation after the war.

tions, however, made the provision of additional medical services imperative.

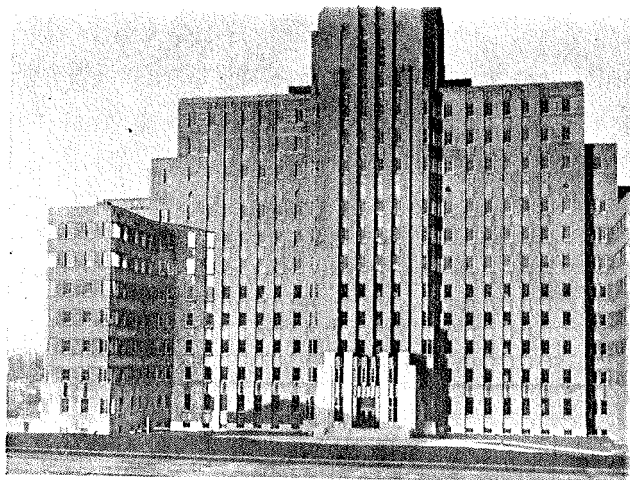
The WSA, in cooperation with USPHS and other Government departments (Coast Guard, Navy, Army) and the United Seamen's Service, worked out a comprehensive health service designed to keep every man

possible on the job. Administration of the program was put in the hands of the Medical Director, WSA.

The program was based on providing the best possible health protection for the individual seamen, other crew members, and military personnel and passengers traveling aboard merchant ships, through the control of communicable, neuropsychiatric, and other diseases. Services of specialists in the field of communicable disease, dentistry, nutrition, psychology and psychiatry, and sanitary engineering were obtained.

Health of men wishing to enter the industry was checked through two programs—the medical activities of the Training Organization and the sign-on program.

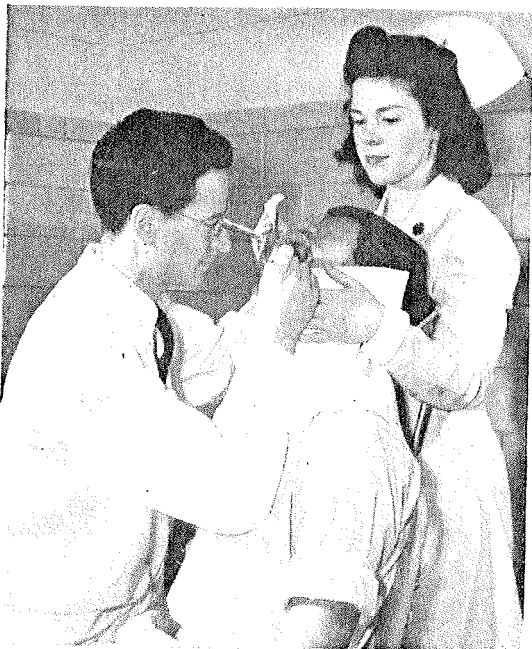
Medical officers attached to the training program gave medical examinations to all



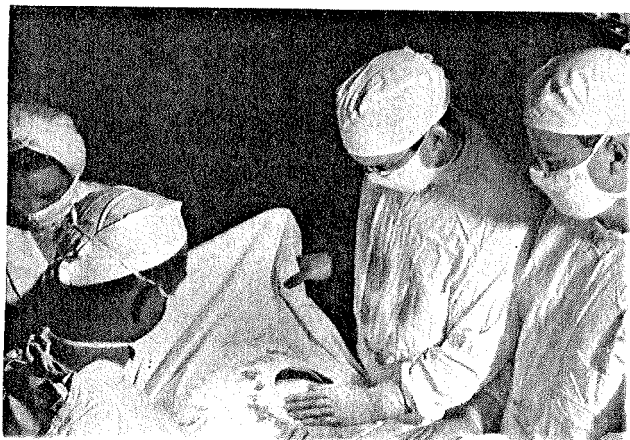
Marine hospitals of the U. S. Public Health Service cared for our merchant seamen. Above is the one at Seattle.

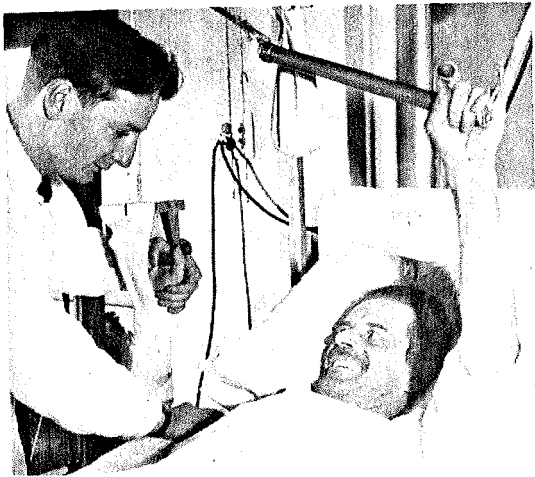
candidates and were responsible for the care of enrollees at the training stations. They supervised station sanitation and dietetics and provided health education and first-aid training for enrollees.

Urgent wartime need for merchant seamen made it imperative that every man be medically able to do his job at sea, that he be immunized and free from communicable diseases. Because of the necessity for quick action and the shortage of medical personnel available to the industry to perform examinations, WSA established a sign-on medical examination program to supplement existing medical programs of general



All types of operations were performed for merchant seamen at the marine hospitals.





Bad injuries were given every attention by specialists.

agents. WSA prescribed the minimum standards, and the examinations were carried on in WSA Port Medical Representatives' offices or through offices of agents having adequate medical facilities. Seamen were rejected only for those diseases and conditions which unquestionably would disqualify them for sea duty.

Individual health of the men while at sea and treatment for wounds or injuries were cared for by hospital corpsmen. Realizing that there were not enough doctors for one

Crew of Liberty ship in Mediterranean war service get emergency inoculations from Purser-Pharmacist's mate.

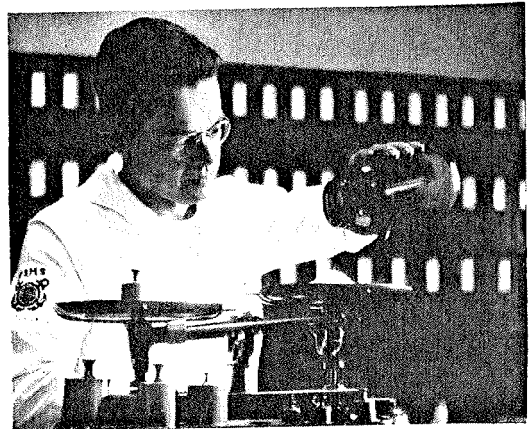


to be assigned to each merchant ship, the WSA in December 1942 established a hospital corps school at the United States Maritime Service Training Station at Sheepshead Bay, N. Y. This school has graduated nearly 5,000 men who have been assigned to ships with the rating of junior assistant purser-pharmacist's mate. Utilization of these men has made it possible for nearly 82 percent of all merchant ships to carry a medically trained staff officer.

Rehabilitation of merchant seamen whose war service had resulted in disabilities not



Hospital corpsmen of the Maritime Service received practical training in laboratories and hospitals.



requiring hospital attention and men being repatriated was carried out in rest homes maintained and operated jointly by the WSA and the United Seamen's Service.

WSA medical authorities cooperated with the United States Public Health Service to establish a sanitary engineering division for developing standards and procedures designed to insure proper sanitary facilities and conditions on vessels operated by the WSA. It is believed the USPHS will continue this program. In addition the WSA medical office prepared two books, "Ship's Medicine Chest and First

Aid at Sea," and "Syllabus for Hospital Corpsmen," already published jointly by USPHS and WSA, and a periodical, "Purser-Pharmacist's Mate Journal." Various other pamphlets of an educational and instructive nature were published from time to time.

Plans are now being worked out to distribute the various medical activities of the WSA among the other interested agencies: United States Public Health Service, Maritime Commission, Department of Commerce, Coast Guard, and the ship operators and unions.

Rewards for a Job Well Done

The heroism of merchant seamen has not gone unrewarded. The Congress enacted legislation and the President issued Executive orders, while the War Shipping Administration and United States Maritime Commission provided the administrative authority to award medals for outstanding conduct and service insignia for public identification of the contribution made to victory by the men of the Merchant Marine.

The Merchant Marine Decorations and Medals Board was set up to handle the issuance of such recognition and the detailed consideration of all available reports needed to determine the merits of each individual case.

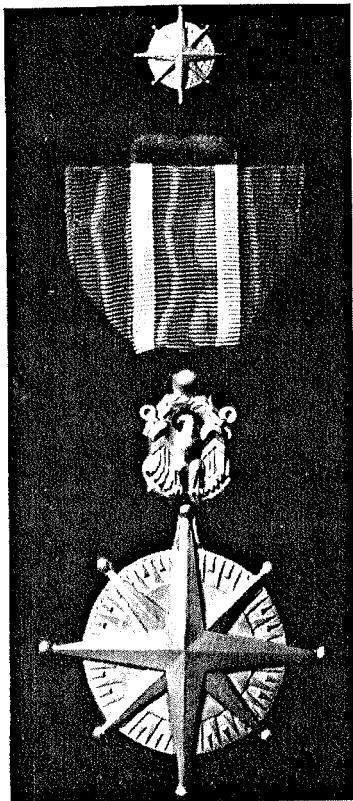
The Merchant Marine Distinguished Service Medal is the highest award for the

men of the Merchant Marine. It was authorized by Congress in April 1942, to be awarded in the name of the President of the United States for outstanding conduct or service in the line of duty. Throughout the war 141 such medals were awarded.

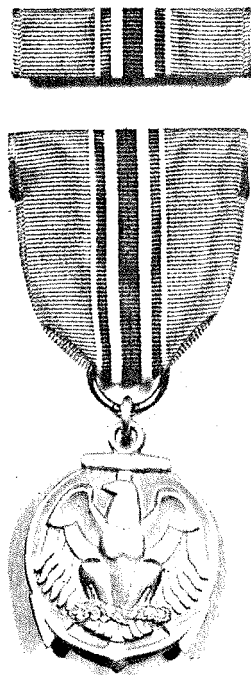
President Roosevelt makes first presentation of U. S. Merchant Maritime Distinguished Service Medal to 25-year-old seaman, Edwin F. Cheney, Jr., at the White House on October 8, 1942, as Admiral Land looks proudly on.

—Photo courtesy of AP

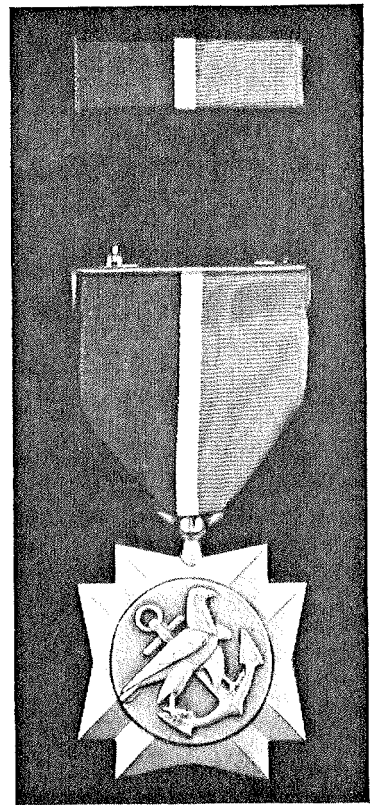




The Distinguished Service Medal.



The Meritorious Service Medal.



The Mariner's Medal.

Next in scale is the Merchant Marine Meritorious Service Medal for outstanding conduct or service which does not justify the award of the DSM, a category into which fell many cases of heroism and devotion to duty. A total of 362 have been awarded.

The Merchant Marine unit award is called the "Gallant Ship" citation. It is awarded to a ship which has served in outstanding action against the enemy, in marine disasters or other emergencies at sea, during which time each member of the crew performed in an exceptional manner. A plaque upon which appears the citation is presented to the ship; and to the master and each member of the crew, including

the Naval Armed Guard, a Gallant Ship Bar is presented. Throughout the war, two merchant ships were so rewarded.

Similar to the Armed Service's Purple Heart is the Mariner's Medal, authorized by Congress to be awarded to any person serving in a vessel of the United States Merchant Marine during the war period who loses his life, is wounded, or suffers physical injury or dangerous exposure as a result of enemy action. A total of 5,099 Mariner's Medals have been awarded, a large proportion of them posthumously to the next of kin.

The Merchant Marine Decorations and Medals Board, upon voluntary application

by seamen, issues War Zone Bars, Combat Bars, and Merchant Marine Service Emblems. These were authorized by Congress in May 1943. The Combat Bar signifies service aboard a vessel attacked or damaged by the enemy, with a star attached if the wearer has been forced to abandon ship. War Zone Bars denote service in the Atlantic, the Mediterranean-Middle East, and Pacific zones. Officers and seamen who served in the Merchant Marine between September 8, 1939, and Pearl Harbor, are eligible for the Merchant Marine Defense Bar, and the President has approved the wearing of the Philippine Defense and Philippine Liberation Ribbons by Merchant Marine personnel.

The gallant ship plaque (right) is presented to a ship with a record of outstanding war action by the whole crew. The citation for the exploit is preserved in bronze below the plaque.



V

THE ADMINISTRATIVE MACHINERY

IN AN OPERATION as widespread as that of the wartime Merchant Marine, Government controls and supervision extended into every phase of a complex industry.

All services dealing with ship operations had to be paid for, inspected, checked. Analyses and examinations were made of compensation paid to general agents, agents, and berth subagents conducting the business of the WSA. This included hundreds of specialized tasks, and called for a domestic and overseas staff with experience and skill in all phases of shipping mat-

ters. The great majority of administrative officers were recruited from the commercial shipping companies both in this country and abroad. A Division of Foreign Service was established to coordinate the overseas WSA activities and contacts with Allied authorities.

Many functions came under the Organization for Fiscal Affairs, which was supervised by a deputy administrator. These included the responsibilities of the WSA in relation to compensation to vessel owners following the requisition of ships, of concurrence in charter parties, contracts, and



*Vice Admiral Emory S. Land
War Shipping Administrator*

agreements which relate to revenues and expenses, control of freight rates, wartime insurance, foreign charters and ship war-rants, lend-lease procurements, and other fiscal controls.

With the establishment of the WSA the requisitioning of ships began immediately. Steamship operators were paid fixed fees as operating agents for the Government, in addition to the charter rates for their vessels. The WSA assumed all operating responsibilities and insurance liability for war-risk losses.

The basic value of tonnage taken for title and basic charter rates for vessels requisitioned for use were established after long negotiations with shipowners to reach a formula and with the knowledge that the proper control of ship values was necessary to avoid inflationary results. Although finally agreed upon, rates and values were

found subject to further examination. In December 1943, the Advisory Board on Just Compensation, appointed earlier by the President, established standards generally consistent with the original values. Certain further rules were laid down.

Since that time, a major task of the financial and legal authorities of the WSA has been to put these rules into effect. Private sales and charters from 1940 to 1944 were analyzed and effects of the Government's requisition program upon earnings of such ships were studied. Following the policy thus worked out, charters were prepared and issued, and a program substantially completed by the end of 1944. During this period determination of Just Compensation for vessels requisitioned for title since the start of the war was undertaken, involving some 150 ships.

The conclusions arrived at and the policy determined were reported to Congress in a series of documents before the House Merchant Marine and Fisheries Committee, and in WSA General Order 37 prescribing rates of charter hire and insurance values for all requisitioned ships over 1,000 dead-weight tons.

The results of the administration of this phase of WSA's transactions have brought about the saving of millions of dollars to the Government in charter hire, insurance, and other costs related to the requisition program. A portion of this has been passed on to the public in reduced freight rates but, of course, the larger portion represents Government savings since the United States was the largest charterer and shipper during the war. Results of the studies of vessel earning and WSA regulations have had an important bearing on legislation before



*Vice Admiral Howard L. Vickery
Deputy Administrator*



*Edward Macauley
Deputy Administrator*



*Granville Conway
Deputy Administrator*

Congress, particularly in connection with anticipated sales of war-built ships and return of the Merchant Marine to private peacetime operation.

WSA administrative officers calculated and maintained control of freight rates and surcharges. Continued success of military operations opened large liberated areas and brought up problems relating to establishment and reestablishment of bases of freight rates where services were resumed.

The financial problems were myriad, and ranged from the authorization of passenger rates to the fixing of such charges as those against the Russian lend-lease account for the operation of WSA vessels to and from North Russian ports, where no tariff or freight rates had ever been in effect. There have been innumerable details to handle in the chartering of foreign vessels and the charter of United States-owned ships to

United Nations. The Fiscal Affairs Organization also took an active part in the establishment of the United Maritime Authority.

Functions of the Wartime Insurance Committee of the Maritime Commission were transferred to WSA shortly after that agency's creation. A revolving fund was set up to permit the Government to enter

*WSA officials were closely linked
with our allies on all war shipping
matters.*



the insurance field when an emergency might cause commercial insurance rates to become prohibitive. This occurred when ship losses increased sharply.

Since that time the WSA has continued to provide marine and war-risk insurance of vessels, cargoes, crews, and legal liabilities incurred in vessel service, but the volume of commercial underwriting decreased. This was a consequence of the WSA's expanded requisitioning program and because of the improvement in war conditions resulting in reductions in private war-risk insurance rates which automatically limited the participation of the WSA in the cargo underwriting field.

A reduction of premium charges on merchant seamen's Individual War Risk Life Insurance from 50 to 25 cents per \$1,000 was put into effect shortly after V-J day. This was supplementary to the free insurance provided by the Maritime War Emergency Board which pays \$5,000 for loss of life, and also for payment to seamen for injury and loss of personal effects.

WSA expanded its wartime insurance to provide proper protection to the Govern-

ment as well as shipowners. In 1942 it operated with a deficit of more than \$12,000,000, and at the end of the fiscal year 1945 it showed a credit amounting to \$82,892,248 in receipts over the paid and accrued liabilities.

In addition to the Deputy War Shipping Administrator in charge of Fiscal Affairs, a second deputy supervises vessel utilization, vessel disposal planning, and policy covering the operations field. The personnel organizations which provided an orderly flow of trained and experienced men into the industry and stabilized maritime labor relations answers to a third deputy administrator. Another coordinated the huge ship-construction program of the United States Maritime Commission with WSA affairs. There are numerous divisions, organizations, and units under each of the deputy administrators, who in turn answer to the War Shipping Administrator, with coordination existing from the top with the chairman of the United States Maritime Commission, since the two primary powers were vested in the same office.

The Cost of the War Years

Total net obligations and disbursements by WSA chargeable to its various appropriations, including its revolving fund, the maritime training fund, State maritime schools fund, lend-lease allocated funds, and the marine and war-risk insurance fund, since its inception on February 7, 1942, to June 30, 1945, are \$7,581,917,854.

Of this amount, purchase, charter, and operations of vessels, reconditioning, outfitting, defense installations, operation of warehouses and terminals and other obliga-

tions and expenditures from the revolving fund amounted to \$3,900,489,753. From February 7 to June 30, 1942, expenses were \$183,527,851; in 1943, \$1,242,554,696; in 1944, \$1,150,017,004; and in 1945, \$1,324,390,202.

Obligations and expenditures from the maritime training fund covering the training of officers and seamen, recruitment and manning of seamen, seamen's medical program, and maritime labor relations for the entire period were \$235,476,144, of which

\$39,285,226 was expended in 1942; \$60,273,015 in 1943; \$65,828,116 in 1944, and \$70,089,787 in 1945.

Total obligations in support of State maritime schools amounted to \$943,434, of which \$180,814 was expended in 1942; \$344,258 in 1943; \$224,598 in 1944, and \$193,764 in 1945.

The marine and war-risk insurance fund for the entire period shows an excess of \$82,892,248 in receipts over disbursements and recorded obligations.

Funds expended or obligated for lend-lease purposes by WSA from inception to June 30, 1945, totaled \$3,527,900,771.

VI

THE PRESENT—AND THE FUTURE

THE END of hostilities against the last of the Axis powers did not mean the cessation of WSA activities. On the contrary, the final month of 1945 found the merchant fleet operating at a rate never before reached in wartime. During that month there were 1,200 sailings as against 800 in the busiest months of the war.

The reasons behind this activity were primarily those of the final liquidation of our wartime military operations and the increase of our responsibilities to provide relief for liberated nations.

Even before V-E day, work was begun on converting cargo ships and preparing passenger vessels for the most welcome of all tasks—bringing home the men of the Armed Services. A total of 546 such vessels comprised the WSA troop return fleet, capable of carrying 580,000 men. This fleet, operated in a common pool of WSA, Army, and Navy vessels, by the first of De-



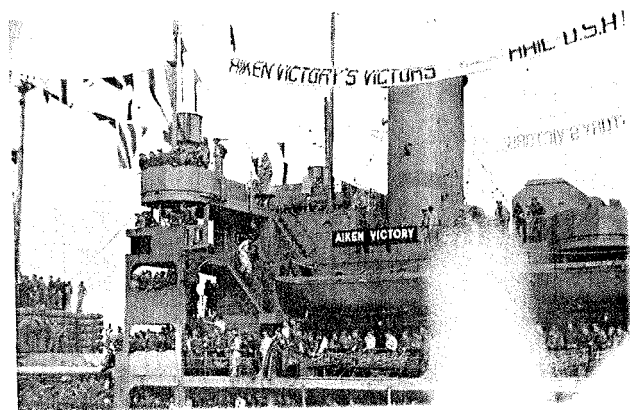
Pay day often came to merchant seamen in war zones.

Sources of these funds were from authorized appropriations, transfers, or allocations.

cember brought back about 3½ million men from overseas.

From V-E day to V-J day, practically the whole troop-return responsibility was on the WSA, which accomplished better than 85 percent of the troop return up to September 1, 1945. The remainder was for the most part carried on British vessels, including the liners *Queen Mary* and *Queen*

Postwar task Number One—bringing home the boys.



Elizabeth. Ninety-seven of the fast Victory ships were converted to troop carriers with a capacity of 1,500 men each. More than 300 converted Liberty ships were in the fleet, in addition to numerous large converted dry-cargo vessels.

The return of the GI's was given No. 1 priority during the closing months of the year. Special arrangements, including ex-

pansion of the stewards' departments, were made to provide these men with the best available food and recreation. Turn-around time was cut to the minimum, so that there would be as little delay as possible in the shuttle run across the oceans. Removal of convoy and other wartime procedures allowed a material increase in the turnaround time of these and other ships.

Food, Not Bombs

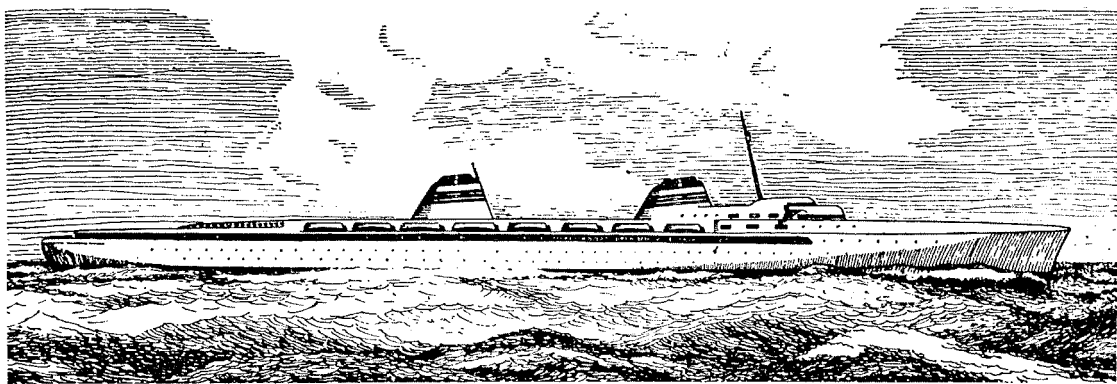
From V-E day on, the number of ships sailing with relief cargoes of food, clothing, medical supplies, and other supplies showed a steady increase. A great number of these were carrying goods under the United Nations Relief and Rehabilitation Administration program. Others were destined for Allied military authorities in charge of relief for civilian populations in certain areas. To a large extent, the relief pro-

gram filled shipping space previously used for lend-lease cargoes.

Perhaps no more effective gesture of friendship toward the United Nations can be imagined than the arrival of a big freighter, so familiar as a carrier of the greatest armed might in history, loaded to the Plimsoll line with grain, woolens, farm implements, and dairy cattle.

Bulk food shipments must be made to starving Europe.



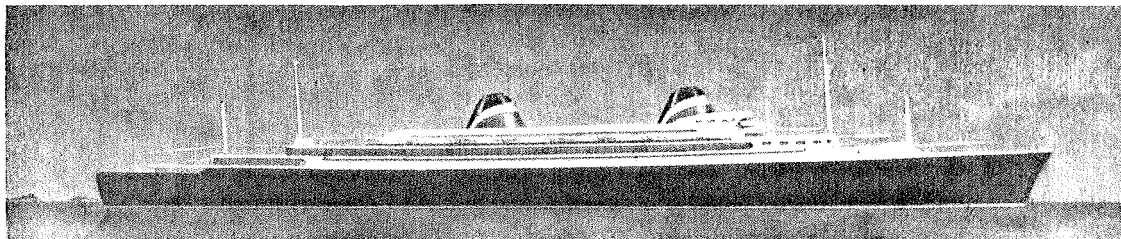


The Postwar Merchant Marine

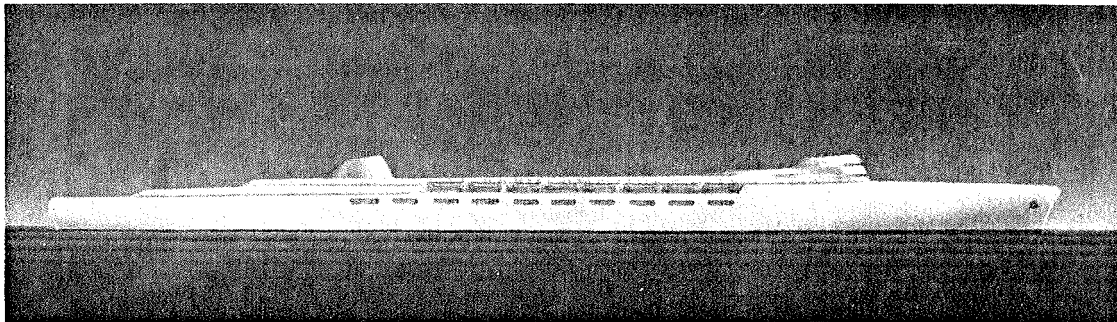
There has been a great amount of conversation and conjecture on the extent and nature of America's postwar Merchant Marine. If the job it did during the war is a criterion, then its potentialities for the future are unlimited. There are many fac-

tors which may modify these not-yet-crystallized plans, but there is room for immense optimism.

Some tangible efforts are visible as the final year of the war closes. For one thing, legislation for disposal of the ships of the



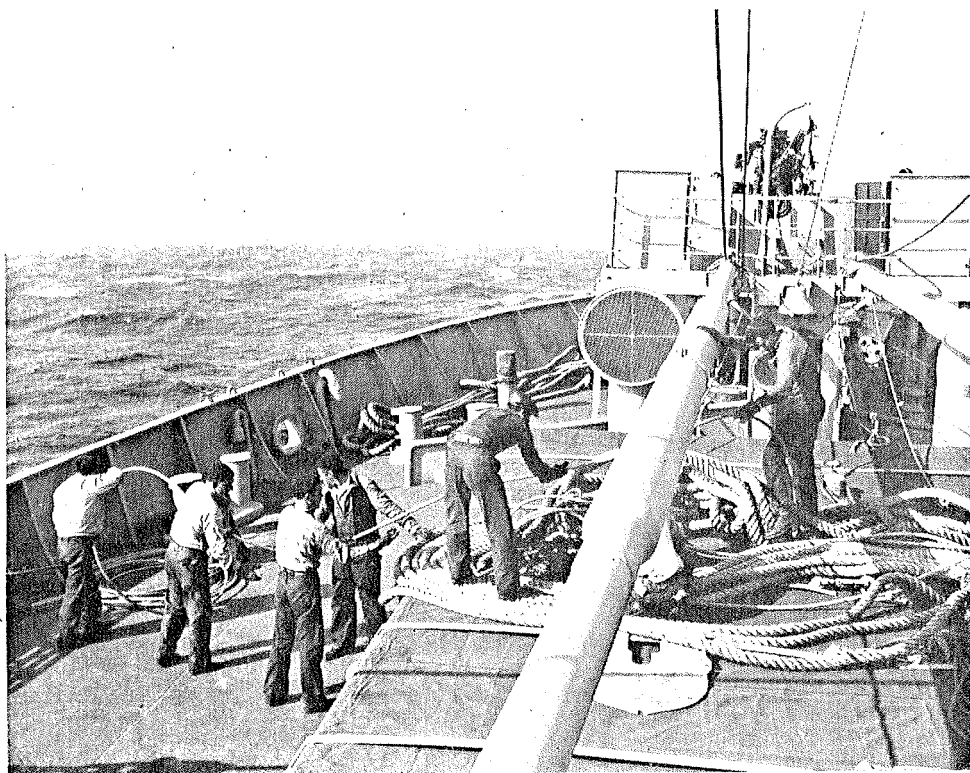
The U. S. Maritime Commission proposes ships like these for our postwar Merchant Marine.



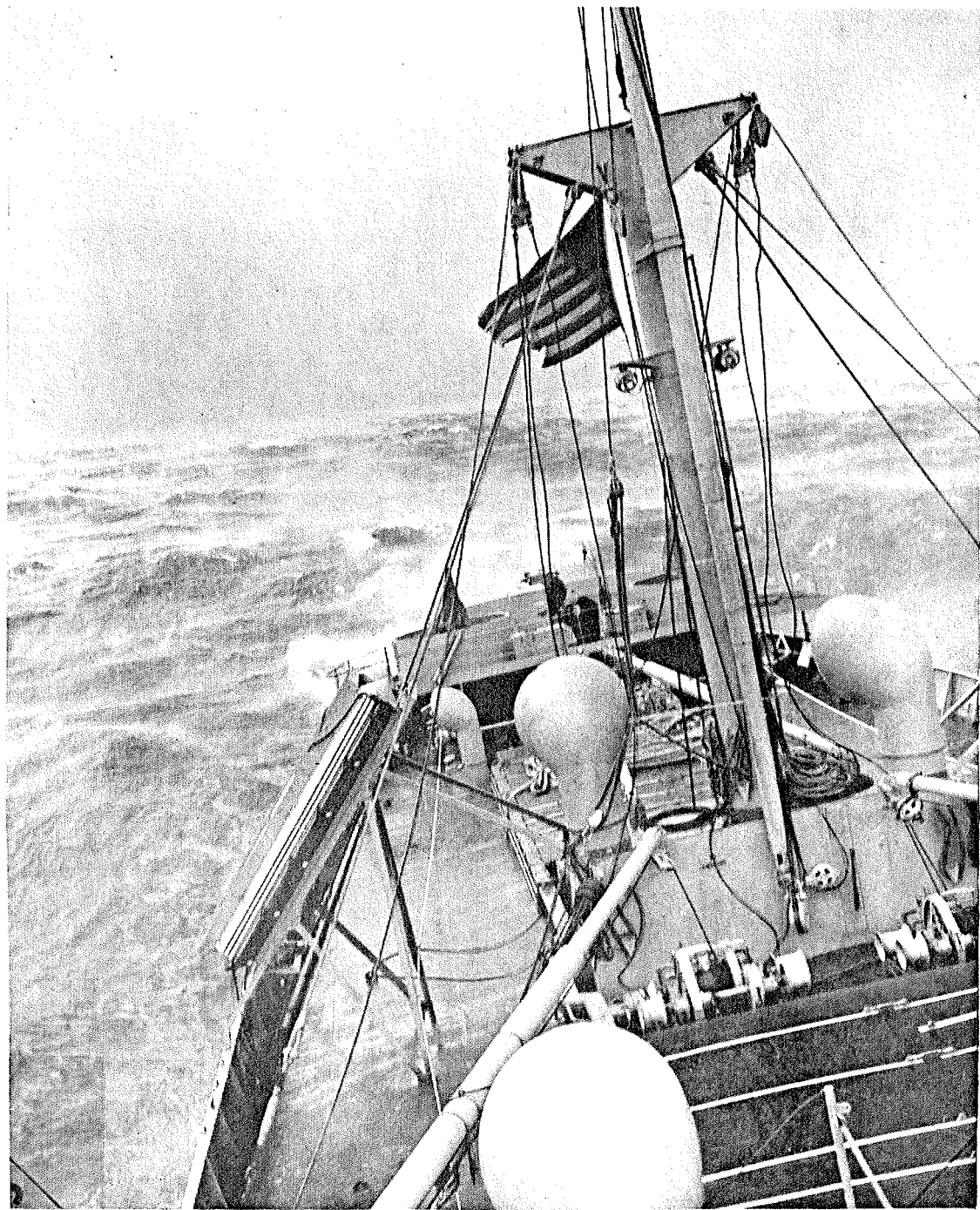
wartime fleet is before Congress. There should soon be an answer to this all-important problem.

On the first working day of the new year, the United States Maritime Commission issued an invitation for bids for the construction of two 28-knot, 670-foot, turbine-driven passenger vessels for the South American trade and for four 560-foot cargo

vessels of latest design. This is the first step toward realization of the "bold and daring" plan envisioned for the United States Merchant Marine by Franklin D. Roosevelt and restated by President Truman. Many more steps lie ahead of us to transform the dream of maritime-minded Americans into reality.



The War gave America the greatest Merchant Marine the world has ever seen—a powerful bid for our future security and prosperity.



The Merchant Marine delivered the goods.

