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America Rearms

THE CITIZEN'S GUIDE TO NATIONAL DEFENSE

By William T. Stone

THE FOREIGN POLICY ASSOCIATION

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No. 28

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AMERICA REARMS
The Citizen's Guide to National Defense

SHADOW OVER ASIA
A Study of Japan
(In preparation)

AMERICA REARMS

THE CITIZEN'S GUIDE TO NATIONAL DEFENSE

by
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Illustrated by
GRAPHIC ASSOCIATES

THE FOREIGN POLICY ASSOCIATION

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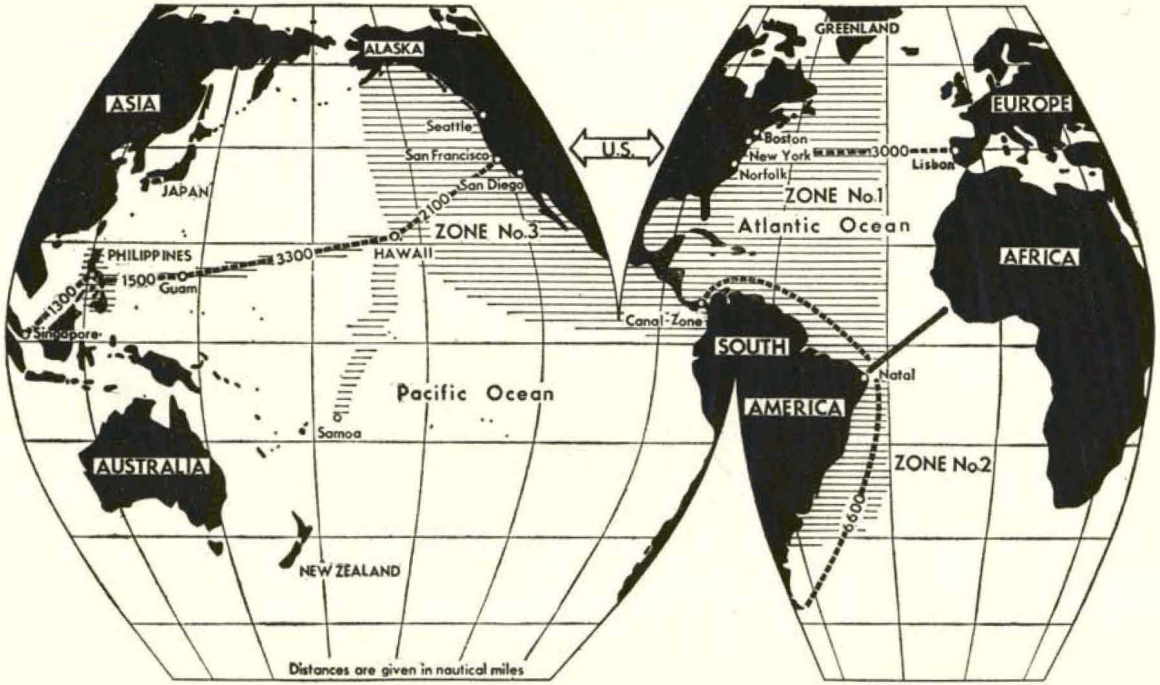
OUR OCEAN RAMPARTS



Introduction

America has embarked on a program of total defense. In the face of danger from without, the American people are arming to defend the safety of their country and the future of the nation.

To provide for total defense, our government has authorized or projected the expenditure of more than 28 billion dollars for direct armament expansion over a period of about three years. This vast sum provides for the building up of our land, sea and air forces with the greatest possible speed. It calls for the swift expansion of our industrial capacity to produce airplanes, guns, tanks and ships. It provides for the trained manpower to meet the demands of both industry and the armed forces in time of crisis.

But total defense means more than weapons and machines, and more than the mobilization of the material resources of the nation. It means the full employment of our human resources as well. It calls for vision and foresight in organizing the economic life of the nation to its maximum capacity while preserving and strengthening our democratic system. Defense of democracy calls for wise planning and the formulation of policies which look beyond the immediate crisis. And the greatest resource of democracy is its vast body of free and determined citizens.

This handbook is written for the American citizen who wants to know the essential facts about our national defense program. What are our military needs as far as we can foresee them today? What are the immediate goals we have set, and what progress have we made toward reaching those goals? Why are we lagging in industrial production, and how can we overcome the obstacles to full production?

I. Our Strategic Position

In beginning his survey of national defense, the average citizen will want to make a rough inventory of the key factors which determine our military needs. As a layman, he doesn't pretend to know the correct composition of the United States Navy, or the tactical use of fighting planes in conjunction with land and sea forces, or the proper organization and equipment of the Army. These are technical matters which he is willing to leave to the experts. But he is very directly concerned with the safety of his country and the effectiveness of its defense system as a whole. He wants to know what the armed forces are to defend and what national policies they are expected to enforce. Above all, the practical citizen wants to know what new military responsibilities have been imposed upon the United States by the swift march of events in Europe and the Far East. In analyzing these problems, he will first examine the underlying factors which control and shape our military and naval policies.

THREE CONTROLLING FACTORS

The inventory must include at least three such controlling factors. The first is geography, which determines our strategic position in relation to other nations. The second is the balance of power in Europe and Asia. The third is control of the seas. Many other basic factors, such as economic and industrial resources, might be added to the list, but for the practical task of examining the needs of the United States, these may be lumped under the other main heads.

1. GEOGRAPHY—OUR "INSULAR" POSITION

The average American citizen seldom thinks of his country as an island. In a military sense, however, we are an insular nation with our frontiers on the sea. Through most of our history we have found security behind the broad ocean barriers which

separate the continental island of the Americas from Europe and Asia. Within our own borders we have found most of the natural resources needed for the development of a virgin continent. And within the continental island we have an unrivaled supply of the raw materials essential for national defense. But today for almost the first time, we find our insular security threatened from without.

OUR "INSULAR" POSITION

The advent of steam-propelled ships and high-powered airplanes has narrowed the ocean barriers and extended the area of military operations. But the strategic problems have not been fundamentally altered. As an insular nation, our defense still lies primarily on the seas. This means that the Navy continues to be our first line of defense, for an insular nation cannot be defeated if it is able to control its vital trade routes and the sea approaches to its shores. Most experts agree that

air power, because of its limited radius of action, has not yet changed the fact that we are an insular nation, and that we are vulnerable to direct attack only if we lose command of the sea and air approaches to the Western Hemisphere.

Thus, if the objectives of the armed forces are merely to defend the continental United States and its approaches and to uphold our policies in the Western Hemisphere, geography has given us priceless natural advantages. It has placed us in a position to defend our most vital areas—the Caribbean Sea, the "life line" at Panama, and the Atlantic and Pacific approaches to the North American continent—by means of our own armed forces. But geography also restricts our field of action in other areas. In the Pacific Ocean, our outlying possessions extend beyond the sphere of U. S. naval supremacy, with the Philippines lying nearly 5,000 miles beyond the great fortified base at Hawaii. Our tiny outpost at Guam, some 3,300 miles west of Honolulu, is surrounded by the Japanese mandated islands, and the route from there on to Singapore and the Dutch East Indies extends another 2,800 miles. Yokohama, on the other hand, is only 1,350 miles from Guam. In the South Atlantic, distance poses another hard problem if we undertake to defend the long four-thousand-mile east coast of South America. The practical citizen will want to make a thorough survey of these strengths and weaknesses in our geographic position, but for the purposes of his rough inventory it is sufficient to note these three main areas of defense, shown in our frontispiece map.

2. THE BALANCE OF POWER

The second controlling factor is more vital today than ever before. Had it not been for the rivalries of Europe, our historic security might have been challenged many times during the nineteenth century, despite the width of the two oceans. Throughout most of our history our armed forces have been much too weak to meet any major threat of aggression from

overseas. In 1823, when we proclaimed the Monroe Doctrine, the United States was a nation of only 10,000,000 people; our army was little more than a militia force and our navy consisted of some seventeen old frigates and a miscellaneous fleet of privateers. During the decades after the Civil War, the Navy declined almost to the vanishing point, at a time when the powerful European nations were carving out vast empires in Africa and extending their domination over large parts of Asia. And yet in the nineteenth century scramble for empire the Americas alone remained untouched.

Until recently, the average citizen has taken the Monroe Doctrine pretty much for granted. Like the Atlantic, it has been accepted without question. But most historians agree that the balance of power across the seas has had as much to do with keeping European nations from interfering in the Western Hemisphere as anything we have done ourselves.

We are familiar with the story of how George Canning, the British Foreign Secretary, wrote a confidential letter in 1823 to Richard Rush, the American Minister in London, proposing an Anglo-American "understanding" to keep the Holy Alliance from restoring Spanish sovereignty over Latin America, and how John Quincy Adams won the support of President Monroe for a declaration by the United States itself. Monroe rejected a British alliance to enforce his Doctrine, but welcomed British support in keeping other European nations from meddling in the New World. We need not go into the longer story of European rivalries, except to point out that since the end of the Napoleonic wars this country and the entire Western Hemisphere have benefited from the balance of power. Great Britain was the only nation which could challenge the security of the New World. But, except for the Venezuelan boundary dispute of 1895-96, and the Maximilian episode in Mexico in 1864, which Britain condoned, she has been consistently friendly. As long as Britain controlled the

sea, we had nothing to fear from any nation on the continent of Europe. In the Far East, a similar balance of power prevented any one nation from gaining mastery of the Pacific.

So for nearly a century the free nations of this Hemisphere found it possible to develop their continental island without huge armaments. Our own defense needs remained relatively small until 1914, when World War I threatened to destroy the balance of power in Europe. By entering the war in 1917, America helped to "turn the balance" and secure an Allied victory; by retiring into its "splendid isolation" when the fighting ceased, the United States failed to play any real part in building a new order or preserving the old. Then for twenty years we based our defense needs on a situation in Europe and Asia which we blithely assumed would last indefinitely. Once again, our small professional army and a one-ocean navy seemed reasonably "adequate" for national defense. As long as the friendly, familiar balance of power remained, they probably were "adequate" for the protection of the continental United States and our position in the Western Hemisphere. But the moment that the old balance was threatened with destruction, they seemed—and were—totally inadequate.

American complacency was blown to the winds in the 68 days of 1940 which marked the downfall of Norway, Denmark, Holland, Belgium and France. For perhaps the first time in his life, the average American citizen asked himself the question: What would happen if Nazi Germany should capture the British Navy?

3. SEA POWER

But not all Americans had been unaware of the significance of British sea power. In the late 1880's an obscure, middle-aged officer in the United States Navy had begun to study the importance of sea power as a factor in history and to analyze the reasons for Great Britain's rise as a world power. His name

was Alfred Thayer Mahan. In 1890 he wrote a book called *The Influence of Sea Power Upon History*, and before he died in 1914 his doctrines had gone far toward stimulating the growth of modern navies—and naval rivalry.

In the past, our naval policy has varied widely at different periods. During the early years of the Republic, defense of our shores and coastal waters was regarded as the primary mission of the Navy. We relied chiefly on small gun boats and floating batteries to defend our ports and harbors. During the era of the Napoleonic wars, however, we built fast seagoing ships which fought well against the powerful British Navy in European waters and also against the Barbary pirates. At the end of the Civil War we had one of the most powerful navies in existence at that time, but it was not until the late eighteen-eighties, when Mahan's influence began to be felt, that we returned to the idea of building up our sea power. Admiral Mahan contended that effective defense of national interests, particularly trade and shipping, could be assured only by control of the seas, and that effective control of the seas could be assured only by a fleet "capable of taking the offensive."

Great Britain had long possessed such a fleet. In the years before the World War, the British Navy was the most powerful in the world. It guarded the life lines of a vast empire which spanned the globe. It protected a thriving commerce, and enabled the tiny British Isles to hold the balance of power, and to enforce their *Pax Britannica.* And whether the average American knew it or not, our own problem of defense in the Atlantic and the Caribbean was simplified by British sea power. It was true that Grover Cleveland and Theodore Roosevelt had already applied Mahan's doctrines and begun to build a modern fleet. But even as late as 1914 the U. S. Navy was no better than a poor third, well behind Great Britain and Imperial Germany.

After the World War the balance had changed. British sea

power had helped to defeat Germany and the remnants of the German Navy had been scuttled at Scapa Flow. But Britain's fleet had suffered heavy losses, while the United States and another newcomer—Japan—had forged ahead. If the United States had completed its huge 1916 building program, this country would have replaced Britain as the greatest naval power. But to avoid a costly armament race, President Harding in 1921 called the Washington Conference, which produced the first naval limitation agreement in history. The famous 5-5-3 ratio, fixed at Washington, was based on the approximate strength of the leading navies at that time, Britain and the U. S. each having 5 tons to Japan's 3. The agreement—later extended in London—lasted until 1936, when it expired after being denounced by Japan.

THE ERA OF NAVAL LIMITATION

During these "peaceful" years between two wars, the average American citizen was not too much concerned by the failure of Congress to build up to "parity," that is, parity with Britain, as provided by the Washington treaty. When Japan invaded Manchuria in 1931, he took notice, and probably approved President Roosevelt's first naval expansion program the next year. He also noticed that the U. S. fleet steamed through the Panama Canal to establish a fleet base in the Pacific. But he probably never stopped to figure out what the Navy could or could not do in the Pacific, or what would happen if British sea power should be suddenly destroyed in the Atlantic.

The Admirals at the Navy Department, of course, had worked out their theoretical defense plans and presented their blueprints for a "balanced fleet." But not even the Admirals had thought of anything so unthinkable as destruction of the British Navy during their period of active service. In 1934 the Admirals asked only for "parity," and Congress responded by

authorizing 102 new ships to bring the fleet up to the top treaty levels. In 1938 Congress voted another 20 per cent increase, regarded by the naval experts as "reasonably adequate" for defense against any potential enemy which could then be foreseen.

The important point to note is that the experts and the Admirals could not foresee a situation in which the British fleet might disappear or fall into the hands of a powerful enemy. During these "peaceful" years the United States was able to keep its fleet in the Pacific only because the Atlantic seemed safe from danger. But the Atlantic was "safe" only as long as British sea power stood as a buffer between Europe and America. When the buffer was threatened, the theoretical plans on which our whole system of defense was based were washed away.

This was the surprising prospect which confronted the average citizen, as well as the experts, in the turbulent summer of 1940. The first-class one-ocean navy was no less powerful in midsummer than it had been in January, but the drive of the Nazi armies across Europe and the sudden threat of assault on the center of British sea power had expanded the possible missions of the fleet almost beyond recognition.

II. Three Vital Zones of Defense

As he looks at the new prospect, many a citizen must feel that his inventory has raised more questions than it has answered. What if Hitler should actually succeed in destroying the British Navy? Would our insular position still shield us, or would America be in danger of immediate invasion? Could we defend our Atlantic coast line before the "two-ocean" Navy is ready in 1946 or 1947? Is the Caribbean secure if enemy ships are free to roam the Atlantic, and what about our "life line" at

Panama? How meet the question of our neighbors in Latin America—is our defense adequate to protect the long, exposed coast line south of Brazil? And finally, what happens in the Pacific if the Navy is faced with a serious threat in the Atlantic? Should we keep our fleet on guard at Hawaii or send it to Singapore to check Japan's advance?

In searching for an answer to these questions, the practical American will examine his atlas more carefully than he has in the past. Our frontispiece map conveys some idea of the strategic problems. It shows clearly the distances which still separate America from Europe and Asia. But it also shows that we have three vital areas of defense, each of which presents separate problems of its own.

THE ATLANTIC-CARIBBEAN ZONE

The first area is the North Atlantic, extending from Greenland to the northern coast of South America, and embracing the chain of islands which ring the Caribbean Sea. Before the war we didn't worry much about the Atlantic. As we have seen, our main battle fleet was stationed in the Pacific, leaving only a small squadron in the Atlantic. But when Denmark, Holland and France were occupied one after another by Germany, we began to wonder what might happen to their possessions in the Western Hemisphere, and to take steps to secure the approaches to our Eastern maritime frontier.

Military and naval strategists, when they study any area as a possible theater of war, are concerned with all positions which might be used as bases to support the operations of armed forces, whether on land, sea or in the air. Control of such key positions is vital both for offense and defense. Whoever holds them is able to operate freely within the radius of action of his forces. In maritime operations, the strategists are especially concerned with distance, as the radius of a fleet's effective action is limited to between 2,000 and 3,000 miles.

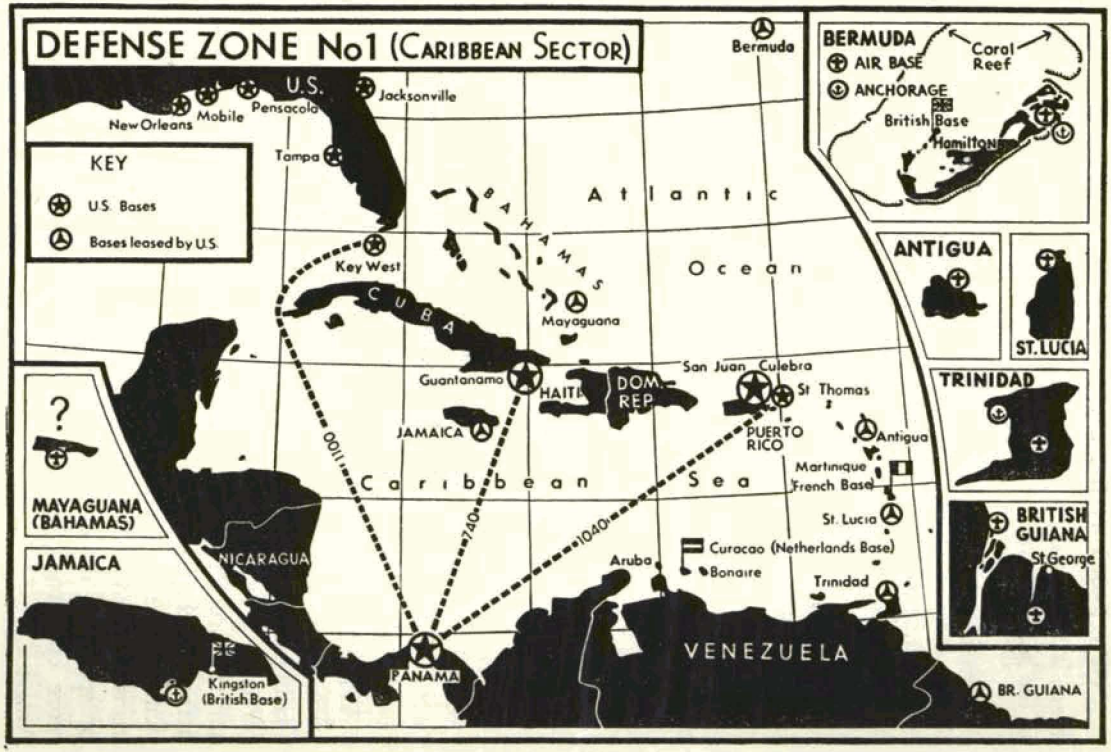
With these factors in mind, you can see at once the strategic importance of naval bases in the Atlantic area. In the north (see the above map), Iceland, Greenland and Newfoundland form potential stepping stones along the shortest route between Europe and America. Julianahab, on the southern coast of Greenland, lies only about 800 miles north and east of St. John's, Newfoundland, and about 1,800 miles from Boston. Iceland, occupied by British and Canadian troops after the Nazis entered Denmark, lies 450 miles east of Greenland. Fog, ice and snow would make air and sea bases difficult to establish on any of these stepping stones. But the possibility that a hostile power might set up such bases cannot be ruled out. Naturally, it would be a matter of grave concern to the United States and Canada.

The permanent Joint Board on Defense set up by President Roosevelt and Prime Minister Mackenzie King in August 1940 was given the task of presenting plans for "the defense of the

north half of the Western Hemisphere." Under the destroyer-naval base agreement, concluded in September 1940, the United States has not only acquired sites for a naval base at St. John's, Newfoundland, but also facilities for an air base on Argentia Peninsula and ground for an "Army Defensive Force" nearby. Control of the northern Atlantic route by the United States and Canada would make it difficult, if not impossible, for any attacking force to gain a foothold.

DEFENDING THE PANAMA CANAL

The southern sector is even more vital to the defense of the United States, as it embraces the strategic approaches to the Panama Canal, and a possible future canal route across Nicaragua (see map opposite). To a considerable degree, the real safety of the United States rests on the mobility of the fleet, and its ability to move freely between the Atlantic and the Pacific. The Caribbean approaches are shielded by the natural barrier of the West Indies islands, which describe a great semicircle extending from off the coast of Florida to the northern coast of South America. The chief passages through this barrier have been dominated by United States bases at Guantánamo, Cuba; San Juan, Puerto Rico; and St. Thomas, in the Virgin Islands. But south of St. Thomas the island possessions of Britain, France and Holland dot the long line of the Lesser Antilles all the way to the coast of Venezuela. None of these countries has ever built first-class naval bases in the West Indies, but Britain has secondary naval stations at Bermuda and Jamaica; France has a station at Martinique and Holland has another at Curaçao. The Dutch islands of Curaçao and Aruba are especially important because most of Venezuela's large oil supply is shipped there for storage or refining. This southern line of islands, as well as the approaches to Southern Florida via Bermuda and the Bahamas, will be covered by the new bases secured in the deal with Great Britain.


DEFENSE ZONE No1 (CARIBBEAN SECTOR)
KEY
U.S. Bases
Bases leased by U.S.
U.S.
New Orleans
Mobile
Pensacola
Jacksonville
Tampa
Key West
Bermuda
BAHAMAS
Mayaguana
Atlantic
Ocean
CUBA
Guantanamo
HAITI
DOM. REP.
San Juan
Culebra
St Thomas
PUERTO RICO
Antigua
JAMAICA
Caribbean Sea
Martinique
French Base
St. Lucia
Curacao (Netherlands Base)
Bonaire
Aruba
Trinidad
VENEZUELA
BR. GUIANA
NICARAGUA
PANAMA
Kingston
(British Base)
1100
740
1040
?
MAYAGUANA
(BAHAMAS)
JAMAICA
BERMUDA
AIR BASE
ANCHORAGE
Coral Reef
British Base
Hamilton
ANTIGUA
ST. LUCIA
TRINIDAD
BRITISH GUIANA
St George

NEW BASES IN THE CARIBBEAN

Here is a summary of the sites chosen for United States bases in the southern sector (see also map, page 19):

Bermuda:	Land and seaplane bases, naval station, and storage space for explosives.
Jamaica:	Military airfields and naval dockyards to be used jointly by the United States and Britain.
St. Lucia:	Seaplane base (25 miles south of French Martinique) and land plane base.
Antigua:	Land and seaplane bases, for the most part for patrol squadrons.
British Guiana:	Land and seaplane bases, also for patrol squadrons.
Bahamas:	U. S. patrol vessels will have use of Abraham Bay, Mayaguana Island. Other base sites are being considered.
Trinidad:	Naval base on the northwest peninsula, and an army air base in the center of the island.

When these bases are developed, the strategic position of the United States should be greatly strengthened. Entrance to the Caribbean could probably be denied to any enemy naval force by a relatively small American fleet supported by land and sea aircraft operating from the nearby bases. The task of defending the entire Atlantic area would be more difficult, particularly against a coalition of powers which might be dominant in Europe. But military experts are not alarmed by the prospects of direct invasion of the United States. They are more concerned by the possibility of penetration in South America.

THE SOUTHERN HEMISPHERE ZONE

The vast area beyond the "bulge" of Brazil presents a very different problem. A glance at the map on page 23 will show why. In the first place, the average United States citizen thinks of Latin America as lying directly south, whereas most of the continent is actually east of Detroit. This means that the easternmost point in Brazil is closer to Africa than it is to most of our bases in the Caribbean. As the map shows, Natal, in Brazil, is only 1,600 miles from Freetown, on the west coast of Africa, and about the same distance from the Cape Verde Islands, which belong to Portugal. Looking north and west from Natal, it is 2,300 miles to Puerto Rico, 3,000 miles to Panama and 3,500 miles to Norfolk, Va. Looking south from Natal, it is about 1,400 miles to Rio de Janeiro, 2,500 miles to Buenos Aires and more than 3,600 miles to the Straits of Magellan. Cape Town, South Africa, is 3,600 miles from the River Plate, while Panama is 5,400 miles and New York 5,800 miles.

Distance, therefore, is a primary factor in the strategy of the South Atlantic. But as the citizen has already discovered, the problem of defending South America becomes really acute only if the British Navy is destroyed or captured. If Dakar or Freetown or Libreville is not in the hands of a potential enemy, or if no hostile battle fleet can reach the Atlantic, the Western Hemisphere has little to fear. On the other hand, if British sea power should be destroyed and the Axis powers should gain control of those key points in Africa, the strategic problem would become far more difficult. A hostile fleet operating from African bases would be in a position to challenge control of the entire South Atlantic, and to threaten the security of Argentina, Uruguay and Brazil. The United States, on the other hand, could operate in the South Atlantic only if the fleet had access to well-equipped and fortified bases in Brazil, Uruguay and Argentina.

SOUTH AMERICAN DEFENSES

At the present time no South American country has any first-class naval base capable of handling capital ships, aircraft carriers or heavy cruisers. In fact, none of these countries has a modern navy. Argentina possesses the largest navy in South America, but its fleet consists of two old battleships, two light cruisers, 16 destroyers, three submarines, and a few small coastal vessels.

Brazil boasts a fleet of about 20 combat ships and 18 small auxiliary craft. Altogether, the Latin American republics in 1940 had only 111 combat ships with a total tonnage of 263,000, more than half of which was technically "obsolete," that is, more than twenty years old.

Several secondary bases or naval stations are maintained by the east coast republics. Brazil has a small naval station at Pará, north of the "bulge," and a navy yard at Rio de Janeiro. Uruguay has a small navy yard at Montevideo; across the River Plate Argentina has its chief base at La Plata, with another small station at Porto Belgrano, several hundred miles south. As a result of discussions between the United States and the South American governments, begun in the summer of 1940, some of these facilities may be expanded and new bases established.

Instead of proposing to "lease" bases from Latin American countries, the United States has suggested a plan under which all bases will be open to the cooperative use of all the American republics. According to this plan, each American republic would construct on its own territory whatever bases are needed for continental defense, these to be open to all other American republics. The United States stands ready to provide technical and financial assistance whenever aid of this kind is necessary.

HOW MUCH *CAN* WE DEFEND?

But when additional bases are built and fortified, the North American citizen and his Latin American neighbor will still


CUBA
Guantanamo
JAMAICA
PUERTO RICO
Virgin Is.
Antigua
St. Lucia
Trinidad
BR. GUIANA
Panama Canal
Pará
to Norfolk
3500
2300
3000
1600
Cape Verde Is.
Dakar
AFRICA
Freetown
Libreville
1600
Natal
Ascension
SOUTH AMERICA
SUGGESTED LIMIT OF QUARTER-SPHERE DEFENSE
1400
St. Helena
Pacific Ocean
Rio de Janeiro
Atlantic Ocean
1000
Montevideo
Buenos Aires
La Plata
Porto Belgrano
3600
Capetown
1300
Distances are given in nautical miles
Falkland Is.
Str. of Magellan
DEFENSE ZONE No 2

face perplexing problems in this area. Some South Americans have frankly expressed their doubt about the ability of the United States to defend the entire continent, and some North Americans have echoed their doubts.

According to one theory advanced by several United States writers, this country should adopt a "Quarter-sphere" defense program as an alternative to defense of the entire Hemisphere. We should be prepared to defend all of North America, they say, as well as Mexico, Central America and the Caribbean sector. But we should not try to defend the southern half of South America. Instead, we should draw an arc with a radius, say, of 1,500 miles from the Panama Canal, or perhaps a line running from the bulge of Brazil due west to the Pacific. Behind this line we should concentrate our major defense preparations, and not worry too much about the rest of South America. If the British fleet is still in control of the Atlantic at the end of the war, we won't have to worry about Latin America; if Germany wins, there is not very much we can do about Argentina and Uruguay, anyway.

A few military experts support this limited concept of defense, which rests on our geographical position. But others—the large majority—reject the idea of a "passive" defense as dangerous and futile in the face of present-day realities. They assert that the southern "line" is purely imaginary, that it could not even be drawn, much less defended, and that if any European nation were allowed to gain a foothold in this Hemisphere, we should be placed in a difficult defensive position. From the purely military point of view, it would be almost as dangerous for us to permit the establishment of a hostile base in central Brazil or Peru as in Venezuela or Ecuador.

From the political point of view, too—and that can't be ignored in analyzing military defense—the Quarter-sphere program would call for a new definition of the Monroe Doctrine. Naturally, if we gave up the idea of defending any Latin

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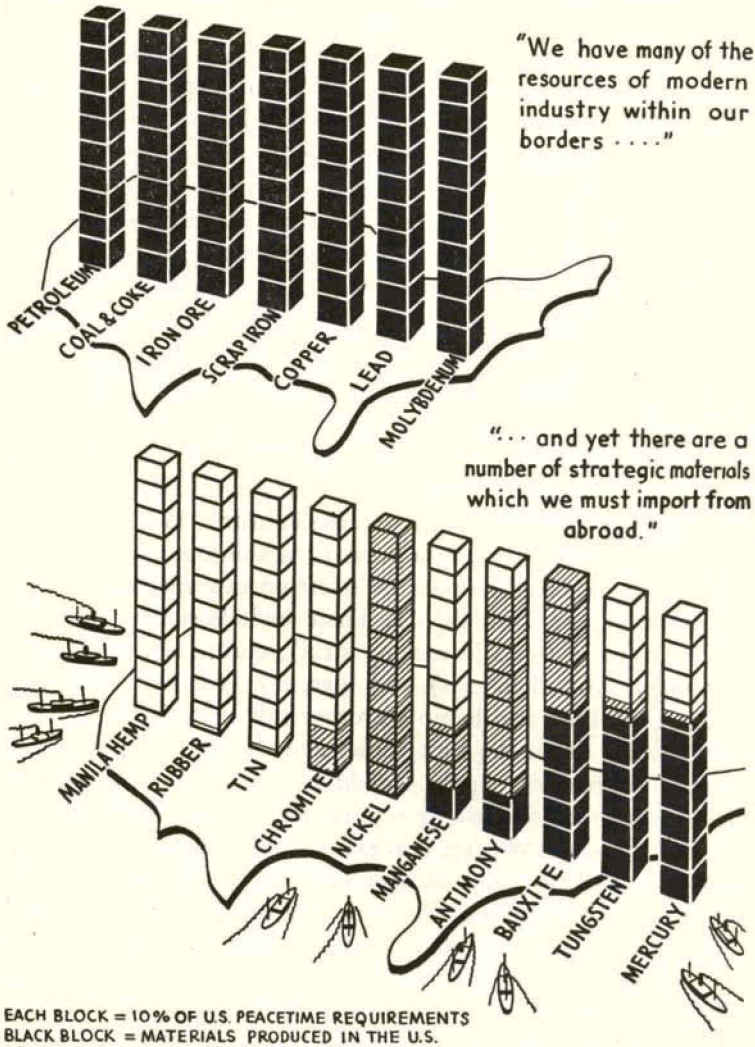
OUR INDUSTRIAL STRENGTH



EACH BLOCK = 10% OF U.S. PEACETIME REQUIREMENTS
BLACK BLOCK = MATERIALS PRODUCED IN THE U.S.
GRAY BLOCK = MATERIALS IMPORTED FROM THE WESTERN HEMISPHERE

American nation south of Brazil, we should have to trim our diplomatic sails as well. Some believe that this would be a sensible policy; but in effect it would reverse the whole trend toward Pan-American solidarity. Moreover, it would amount to an invitation to European dictators to step in when and where they please south of our imaginary line of defense.

At the opposite extreme from the Quarter-sphere theorists are those who believe that our defense lies not merely on the outermost boundaries of the Western Hemisphere, but in Europe as well. The best defense, they argue, is to stop the dictators there before they get a foothold in South America and use it as a jumping-off place for an attack on us.

LATIN AMERICA AS OUR SOURCE OF SUPPLY

For the moment, however, the citizen is concerned primarily with the immediate strategic problem. There is one more consideration which must be taken into account; this is the need for materials essential to our defense industry. We have many of the resources for modern industry within our own borders, and yet there are a number of strategic raw materials which we must import from abroad. These include such minerals as tin, manganese (used in making steel), chromite (for alloys), antimony (for chemicals) and mercury (for explosives and drugs). Rubber and hemp are other raw materials which we now import from the East Indies and the Philippines. If our present sources of supply should be cut off, we should be hard pressed to find the necessary materials on short notice. Latin America, however, is potentially rich in many of these strategic materials, some of which could be developed with aid from the United States. These include manganese from Brazil and Cuba, tin and tungsten from Bolivia, antimony and mercury from Mexico, quartz from Brazil and chromite from Cuba. Most of our rubber comes from British Malaya and the Dutch East Indies, but Brazil used to be the world's leading

source of supply, and new plantations might be developed there in seven or eight years. For these reasons Hemisphere defense is not only vital to the United States, but a matter of common concern to our Latin American neighbors.

THE PACIFIC AREA

If distance is a controlling factor in the strategy of Hemisphere defense, it is even more important in the Pacific. This becomes apparent from a glance at the map on page 29. The usual flat, Mercator projection map is misleading as a guide to the Pacific Ocean. This is because it fails to show the progressive shortening of lines of latitude as one approaches the poles from the equator; as a result it distorts the actual distances between important points. For example, looking at his ordinary Mercaptor map, the average citizen would say that the shortest route from San Francisco to Yokohama would follow a straight line running north of Hawaii. Actually, a ship taking the shortest route would follow a "great circle" course carrying it close to the Aleutian Islands jutting out from Alaska. The distance from San Francisco to Yokohama over this great circle route is only 4,550 miles, as compared with 5,500 miles over the Hawaiian route.

The "globular" map used on page 29 gives a more accurate picture of the Pacific area. It shows the converging coasts of North America and Asia which almost join at the Bering Strait to enclose the northern half of the Pacific. It also shows the broad sweep of this great ocean at the equator, broken only by the clusters of tiny islands which dot the southwestern sector. But what it brings out most sharply is the distance which separates the chief maritime nations whose interests lie in the Pacific.

The tremendous distances of the Pacific have two strategic consequences: first, they strengthen the power of *defense* in relation to *offense;* second, they make outlying naval bases

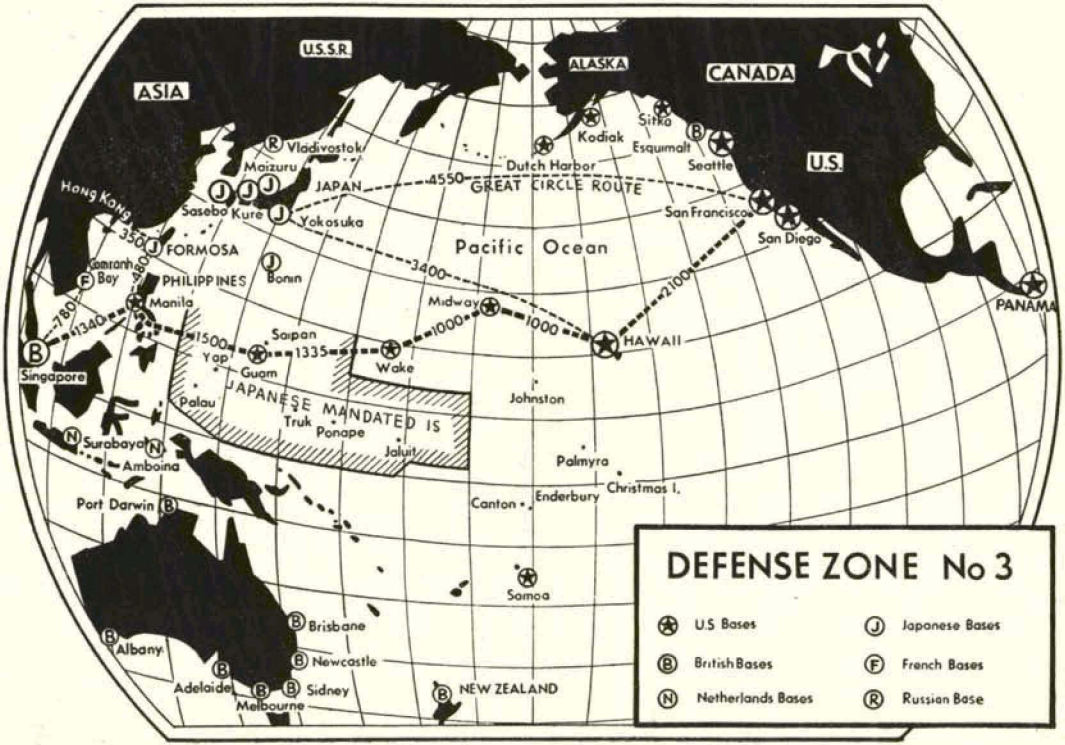
more important. This may be seen in analyzing the position of the four great powers which face one another in the Pacific basin—the United States, Japan, the Soviet Union and the British Commonwealth of Nations.

1. THE UNITED STATES IN THE PACIFIC

By controlling strategic bases in its own territories and possessions, the United States can dominate the great triangle bounded by Alaska, Hawaii and Panama. The northern approach to the Western Hemisphere is flanked by the Aleutian Islands, where the base at Unalaska (Dutch Harbor) could effectively block an advance. The great fortified base at Hawaii dominates the entire central Pacific and guards the principal East-West trade routes. At Pearl Harbor, Hawaii, the U. S. maintains the most formidable naval outpost in the world, protected by land and air defenses. At the southern point of the triangle the Panama Canal would be vulnerable to large-scale attack only if the U. S. fleet had been destroyed or forced to leave the Pacific. And even then the vast reaches of the Pacific would remain a serious obstacle to any large-scale attack.

Beyond this triangle, however, the radius of effective fleet action is limited by the lack of adequate naval bases. The only U. S. base west of Pearl Harbor is located at Manila in the Philippines, where there are facilities for handling cruisers, submarines and auxiliary craft, but not big capital ships. Between Pearl Harbor and Manila the United States holds three tiny islands—Midway, Wake and Guam—used by Pan American Airways as stepping stones on the commercial air route to the East. But Guam, the only one of these stepping stones which is suitable for a first-class fortified naval base, is surrounded by hundreds of small islands belonging to Japan. These are the Caroline, Marshall and Mariana groups which comprise the Japanese Mandated Islands.

With the advent of air power, other island outposts in the


U.S.S.R
ASIA
ALASKA
CANADA
U.S.
Kodiak
Sitka
Esquimalt
Seattle
Dutch Harbor
Vladivostok
Maizuru
JAPAN
4550
GREAT CIRCLE ROUTE
Hong Kong
Sasebo
Kure
Yokosuka
San Francisco
San Diego
350
FORMOSA
Pacific Ocean
3400
Camranh Bay
PHILIPPINES
Bonin
Manila
Midway
2100
PANAMA
780
1340
1500
Saipan
1335
1000
1000
HAWAII
Singapore
Yap
Guam
Wake
JAPANESE MANDATED IS
Johnston
Palau
Truk
Ponape
Jaluit
Surabaya
Amboina
Palmyra
Christmas I.
Canton
Enderbury
Port Darwin
Samoa
Brisbane
Albany
Newcastle
Adelaide
Sidney
Melbourne
NEW ZEALAND
DEFENSE ZONE No 3
U.S Bases
Japanese Bases
British Bases
French Bases
Netherlands Bases
Russian Base

Pacific have become potentially important. South of Pearl Harbor the United States and Great Britain hold a score of coral atolls along the 2,300-mile line to Samoa. Only recently, several of these atolls have been occupied. Three of them—Canton, Enderbury and Christmas Islands—fly both the American and British flags. Thus air power is already extending the zone of American naval supremacy in the southern Pacific.

2. JAPAN IN THE PACIFIC

If the United States holds a dominant position in the Pacific triangle, Japan, by virtue of her own naval bases, holds a somewhat similar position in the Western Pacific. The northern approach to the Japanese mainland is flanked by the Kurile Islands. The approach from the east is guarded by the Bonin Islands, where Japan maintains a secondary naval base, and by the Mandated Islands mentioned above. It is not known whether the Carolines and Marshalls have been fortified. But in any case, the many small natural harbors found at Truk, Ponape and other islands in these groups are suitable for use by planes, submarines and small surface vessels. The southernmost Japanese mandated island is only about 400 miles from Davao, in the Philippines. From the south, the principal maritime approach to Japan is guarded by a base at Formosa which dominates the China Sea and lies only 350 miles east of Hong Kong and about 700 miles north of Manila.

During the past two years Japan has sought to improve its strategic position in the Far East by extending its military operations toward southeastern Asia. The occupation of Hainan Island in 1939 gave Japan another potential base in the China Sea. The limited occupation of Indo-China in 1940 seemed to pave the way toward a southward movement directed against the rich prize of the Netherlands Indies. Should Japan establish a base at Camranh Bay in Indo-China, she would be only 780 miles from Singapore.

3. THE BRITISH EMPIRE IN THE PACIFIC

The British Empire has long held an important stake in the Pacific, with its trade and commercial interests and its outlying Pacific islands and its three great Dominions—Australia, New Zealand and Canada. But unlike the United States and Japan, Britain holds no compact, easily defended base of operations in the Pacific. Its possessions are widely scattered and its trade routes are exposed at vital points.

For many years Great Britain protected its position in the Pacific by an alliance with Japan. When this alliance was terminated after the Washington Conference in 1922, the British developed a new fortified base at Singapore. At the tip of the Malay Peninsula, Singapore occupies a commanding position on the trade routes between India, the Far East and Australia. A first-class fleet based at Singapore would be in a strong position to defend the narrow waters of the British and the Netherlands East Indies.

In 1940, however, as the principal units of the British Navy were required in the Atlantic and the Mediterranean, British naval forces in the Far East were limited to a few cruisers, submarines and light surface vessels. The once powerful British base at Hong Kong—some 1,450 miles northeast of Singapore—is today an isolated outpost, heavily fortified, but cut off from the mainland by Japanese armies in Southern China. Several strategic bases have been developed in Australia and New Zealand, but these, too, are isolated and remote from the main theater in the Indies. Closest to the vital area of the East Indies is Port Darwin in northern Australia, 2,000 miles from Singapore. It is possible, however, that the Dutch bases of Surabaya and Amboina, in the Netherlands East Indies, may help to bolster Britain's power in this region. For they are still controlled by Britain's ally, the Netherlands government-in-exile, to which the Dutch colonies are apparently remaining loyal.

4. THE SOVIET UNION IN THE PACIFIC

The fourth Great Power with a stake in the Pacific basin—the Soviet Union—holds a long coast line extending from the Bering Strait to its southern base at Vladivostok, less than 1,000 miles from Tokyo. Russia keeps a fleet of submarines in Far Eastern waters and maintains a strong military and air base at Vladivostok. However, it is not a leading maritime nation and has no high-seas fleet. Hence, for the present at least, the Soviet Union is not regarded as a major factor on the sea.

STRATEGIC CONCLUSIONS

Military and naval authorities draw several conclusions from these facts. In general, they agree with Major George Fielding Eliot that a "war fought across the breadth of so vast an ocean is fraught with very great difficulties." The United States, holding the strongest position both offensively and defensively, can challenge Japan's control of the western Pacific only if she has access to strongly fortified bases in the Far East. Japan, on the other hand, cannot effectively challenge the United States or threaten its position in the Alaska, Hawaii, Panama triangle unless the American fleet has been forced to withdraw from the Pacific. As long as Britain's Navy is engaged in the Atlantic and the Mediterranean, her position at Singapore and in the East Indies, without the support of the United States, remains exposed. Russia is a factor only insofar as her air forces in East Asia might engage Japan at a time when the Japanese were at war with the Western powers.

The average citizen may well be puzzled. Logically, these strategic factors drive him toward one of two opposite political conclusions. He may conclude that the United States has nothing to gain (and everything to lose) from war in the Far East, and hence should take a defensive stand behind its Pacific triangle until the outcome in the Atlantic is determined. In that case, Japan would have a free hand to extend her control over

southeastern Asia and the rich prize of the East Indies. Or, if he believes our vital interests would be threatened by further Japanese expansion, he may conclude that it is better to adopt a firm policy now rather than stand idly by. In this case, however, he must recognize that the essential requirement for a positive policy is an agreement with Great Britain and the Netherlands government-in-exile granting the United States full access to British and Dutch bases in southeastern Asia. And he must consider whether the United States, even with such aid, is strong enough to run the risk of war in the Pacific and in the Atlantic at one and the same time.

Before he can give a final and really intelligent answer to these political questions, therefore, the citizen must examine the present status of our armed forces.

III. Blueprint for Our New Armed Forces

Taking stock of the military defenses of the United States at the end of 1940, the American people found their armed forces in transition from a peace to a war footing. The German drive to the Channel ports in May and the collapse of France in June had shattered America's complacency and undermined her traditional sense of security. In the face of unexpected dangers, the nation embarked on what seemed destined to become the greatest rearmament drive in its entire history.

In this brief book there is not space enough to describe the defense program in detail. But here is a summary of the most important defense measures which have been put through.

1. APPROPRIATIONS

In 1940 Congress authorized expenditure of $17,692,227,930 for military, naval and air defense. Out of this sum it allocated funds to be spent and contracts to be let in 1941 as follows:

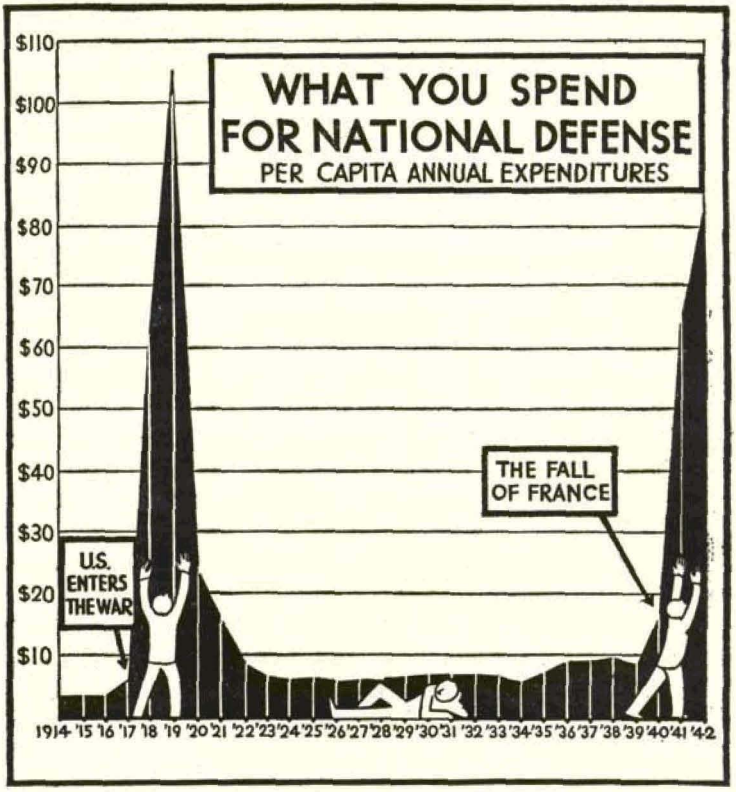
	Direct Appropriations	Contract Authorizations (for payment in 1942)	Total
Army	$5,703,500,000	$2,979,100,000	$ 8,682,600,000
Navy	2,546,500,000	823,000,000	3,369,500,000
Civil Defense	583,900,000	187,300,000	771,200,000
	$8,833,900,000	$3,989,400,000	$12,823,300,000

Early in 1941, President Roosevelt submitted to Congress a budget for 1942 calling for the expenditure of an additional $10,811,314,600 for national defense. This would raise defense costs over the three-year period 1940-42 to more than $28,000,000,000, not including the program of aid to Britain. The chart opposite illustrates what these outlays mean to the average citizen.

2. ARMY AND NAVY PERSONNEL

In 1940 Congress also adopted the Selective Service and Training Act, requiring all men between 21 and 35 to register for military service. The Act provided one year's active training for not more than 900,000 men at any one time in time of peace, or unlimited service in time of war. As the Act was to remain in force for nearly five years, the men trained under its provisions might eventually number over 4,000,000.

Congress further authorized the President to order the National Guard into one year's active service in the Western Hemisphere or the United States possessions, and to call up reserve officers of the Army and Navy. Congressional limitations on the enlisted strength of the Regular Army, which had been fixed at 227,000 men, were likewise removed. And the National Guard strength was raised from 210,000 to 328,000 men. In January 1941, the President authorized increasing the enlisted strength of the Navy to 232,000, after Congress had already raised it from 145,000 to 190,000.



3. ARMY AND NAVY EQUIPMENT

In the summer of 1940 Congress sanctioned a "two-ocean" navy, and by the end of the year the government's shipbuilding program called for the construction of 380 new naval vessels in five to seven years. Other measures provided for 35,000 military airplanes—25,000 for the Army, 10,000 for the Navy—and also for securing "essential items" (normally produced commercially) to equip an army of 1,400,000 men. In addition, Congress made provision for building up reserve stocks of

"critical items," such as semi-automatic rifles, anti-tank guns, light and heavy artillery, and ammunition, sufficient to supply a ground force of 2,000,000 men.

4. INDUSTRIAL MOBILIZATION

In order to insure delivery of their weapons to the Army and Navy, Congress conferred on the President broad emergency powers. He was authorized to carry out industrial mobilization plans, to construct and equip new factories or to commandeer privately owned plants, utilities, transportation and storage facilities, and to compel industry to give priority to government orders.

As part of the same program, Congress also extended the authority it had granted the President in previous laws to control and regulate foreign trade, to apply embargoes on the export of materials essential for national defense, to regulate foreign exchange and so on. And it increased the lending authority of the Reconstruction Finance Corporation and the Export-Import Bank.

The average citizen found it difficult to grasp the magnitude of this program. In round figures, the orders placed with thousands of factories all over the country called for the manufacture of these initial items of war material:

50,000 airplanes
130,000 engines
17,000 heavy guns
25,000 light guns
13,000 trench mortars
33,000,000 shells loaded
9,200 tanks
300,000 machine guns and ammunition
400,000 automatic rifles and ammunition
1,300,000 regular rifles and ammunition
380 navy ships
200 mercantile ships
210 camps and cantonments
40 government factories
Clothing and other equipment for 1,200,000 men

But despite strenuous efforts to speed rearmament and defense production, little more than the framework of this huge program had been set up by the beginning of 1941.

There was still a wide gap between plans and performance. To explain the reasons for delay, to understand the new objectives and to measure the progress achieved, we must examine the military and naval establishments more closely. First, we shall look at the Navy, then the Army, and finally the organization for mobilizing the vast industrial resources of the country.

IV. The Navy

The Navy began its expansion program with a considerable head start over the Army. As we have seen, one of President Roosevelt's first acts after his inauguration in 1933 was to begin the building up of the fleet. At that time he allocated $238,000,000 of public works funds to start construction of some 32 new naval vessels.

Then in 1934 Congress passed the Vinson-Trammel Act. This law called for the construction of 102 additional combatant ships to bring the fleet up to the 5-5-3 ratio of the Washington and London Naval Treaties. In 1938—after the treaties had expired—Congress authorized another 20 per cent increase in the total under-age tonnage of the Navy (that is, cruisers less than 20 years old, destroyers less than 16, etc.). Originally planned as a ten-year program, the 1938 expansion bill authorized a completely modern fleet totaling 1,557,000 tons.

By the beginning of 1940, when the program was well under way, shipyards which had been idle during the 'twenties were again humming with activity. With a first-class fleet in commission and no less than 82 new ships on the ways, the Secretary of the Navy was able to say in his annual report for 1940 that the "American people may feel fully confident in their Navy."

Up until June of the same year there seemed to be good

reason for this official confidence. For the first time since the Washington Conference in 1922, the United States had, in fact, a navy "second to none." The "fleet in being" was powerful, well-trained and efficient. It was at least the equal of the great British Navy and was definitely superior to the Japanese fleet. The actual tonnage ratio in the Pacific was about 5 for the United States to 3.4 for Japan. And the American Navy was stronger than the combined navies of the two European Axis powers—Germany and Italy.

The core of the American fleet was its force of 15 capital ships built between 1912 and 1923. 10 of these big ships had been modernized and 8 new battleships were on the ways. Supported by 6 aircraft carriers, 35 cruisers, 197 destroyers and 101 submarines, the United States Navy was supposed to be ready for action at a moment's notice. To the admirals, as well as to the average citizen, there seemed to be good reason for confidence in the ability of the fleet to meet almost any emergency which might arise.

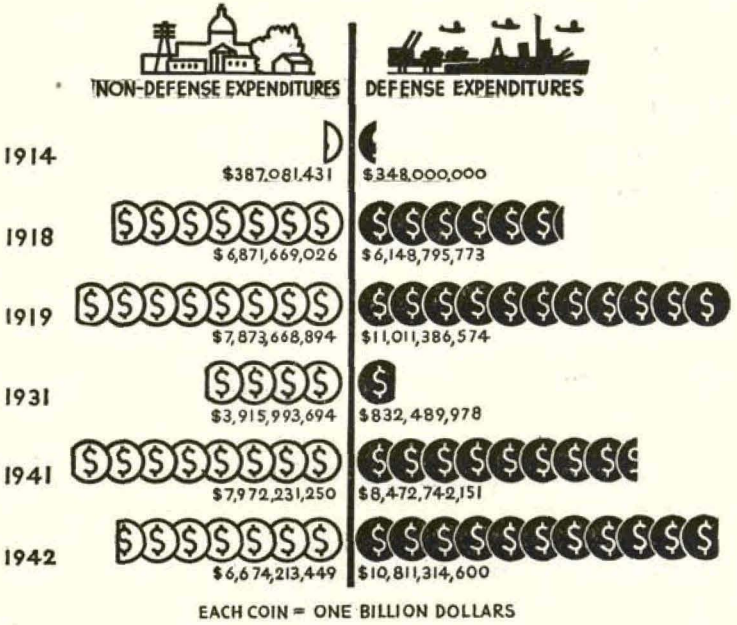
WHAT THE ONE-OCEAN NAVY COULD DO

But the Navy of 1940 was a "one-ocean" Navy and its capacity did not include the ability to combat a combination of enemy powers operating in two oceans at the same time. Naval experts appearing before the committees of Congress in the winter and early spring of 1940 brought out some of the things which the one-ocean navy could and could not be expected to do. Briefly, here are the opinions expressed by responsible naval authorities:

1. With a fleet of 1,557,000 tons of modern under-age vessels (as authorized in the 1938 program) the Navy was confident of its ability to defend the "vital interests" of the United States against "any single foreign power."

2. The Navy was "reasonably confident" of its ability to defend our home waters, the approaches to the Panama Canal,

TRENDS IN U.S. DEFENSE SPENDING



the vital Caribbean and Hawaiian sectors against any combination of hostile powers which did not include the British fleet.

3. In the Pacific the 5:5:3 ratio was regarded as "adequate" to defend the Alaska-Hawaii-Panama triangle but not adequate to defend the Philippines, or to give the United States naval dominance in Far Eastern waters. To assure naval dominance over Japan in the Western Pacific, it would be necessary to build an impregnable naval base in the Philippines, fortify Guam, secure access to other bases (such as Singapore) in Southeast Asia and to increase further the strength of the United States fleet in the Pacific. Some experts believed we should need a ratio of 2 to 1—others said 3 to 1—over Japan.

4. In the Atlantic the one-ocean Navy "could give a fair account of itself" in defending our vital interests and upholding the Monroe Doctrine against attack by any combination of European powers, provided the British Navy had not fallen into the hands of the enemy, and provided we were not engaged in naval operations in the Pacific.

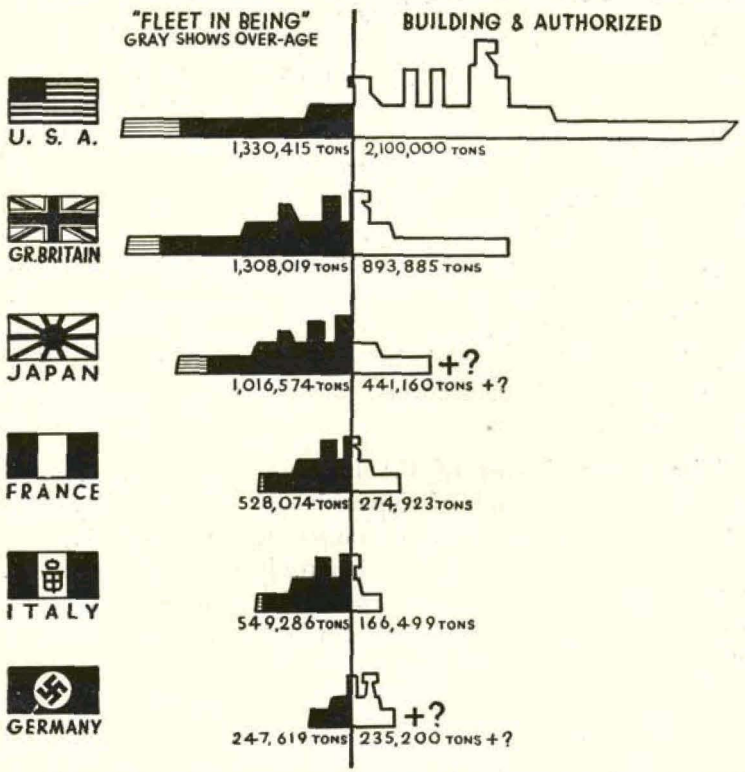
5. The one-ocean Navy would not be adequate to defend our home waters and our outlying possessions, to uphold the Monroe Doctrine and defend our trade routes against a hostile combination operating simultaneously in both the Atlantic and the Pacific oceans.

TO MEET A NEW CHALLENGE

The possibility of far-reaching changes in the international situation led the Navy Department as early as January 1940, to revise its previous estimates of naval needs. Admiral Stark, the Chief of Naval Operations, put his case to Congress in these words:

"That we should add units to bring the United States fleet up to not less than that required to defend the United States, its interests and possessions, and maintain the integrity of the Monroe Doctrine against the combined navies of our potential enemies in both oceans. That would, in effect, give us a fleet big enough to meet threats in both oceans. Theoretically, again to insure victory we should be superior to the combined strength of our potential enemies and should, for example, have a 5:3 superiority available in the Pacific and 4:3 superiority for the Atlantic."

But in January 1940 the threat still seemed remote and "theoretical." Admiral Stark asked for only a "modest" increase of 25 per cent, and Congress thought even this too high. It argued that the Navy hadn't yet begun to lay down all of the ships authorized in the 1938 program, and cut down the suggested increase to 11 per cent. On May 15—five days after the Nazi *Blitzkrieg* had been launched against France and the



Information on the building programs of foreign powers has not been made public since September 1939.

Low Countries—the Senate Naval Affairs Committee reported that it did "not believe it necessary to increase the building authorization program at this time." Ironically, the 11 per cent increase was finally voted on June 14—three days before the surrender of France. A month later Congress voted the two-ocean Navy, and on July 19 President Roosevelt approved the largest naval program ever undertaken by any nation.

THE TWO-OCEAN NAVY BILL

This is what the two-ocean navy bill proposed:

1. To increase the authorized strength in under-age combat vessels by 1,325,000 tons—a 70 per cent increase over previous authorizations which would about equal the size of the fleet then in commission.

2. To provide an additional 100,000 tons of auxiliary vessels and as many small craft (motor torpedo boats, patrol boats, etc.) as may be necessary.

3. To increase the number of "useful aircraft" to 15,000—ten times the existing strength—or as many more as the President deems necessary.

4. To authorize appropriations of $250,000,000 for expansion of shipping facilities, ordnance plants, armor plant factories and so forth.

The estimated cost of the building program alone—not counting the expansion of shipyards and plant capacity—was placed conservatively at $4,010,000,000, with an added $2,800,000,000 for completion of vessels already under construction. The following table shows how much the two-ocean Navy program added to the programs outlined in the earlier expansion bills:

AUTHORIZED UNDER-AGE TONNAGE

	Program of 1938	Eleven Per cent Increase	Two-Ocean Navy	Total
Battleships	660,000		385,000	1,045,000
Aircraft carriers	175,000	79,500	200,000	454,500
Cruisers	412,524	66,500	420,000	899,024
Destroyers	228,000		250,000	478,000
Submarines	81,956	21,000	70,000	172,956
TOTAL	1,557,480	167,000	1,325,000	3,049,480

But no amount of money can buy battleships in a day. When the necessary funds had been voted, the new ships authorized

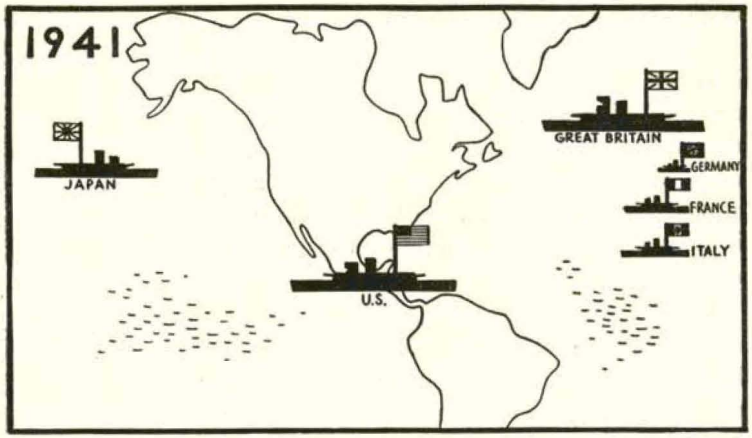
and the contracts let, what the average citizen wanted to know was how fast the two-ocean Navy could be built. The answer given by naval authorities was not encouraging. In normal times it has taken us over four years to build a battleship; three years or more to build and equip a light cruiser or an aircraft carrier; and at least two years to complete a submarine or destroyer. Furthermore, our shipbuilding facilities are limited. This means that, at the very earliest, the United States could not hope to place its two-ocean Navy in commission before 1946.

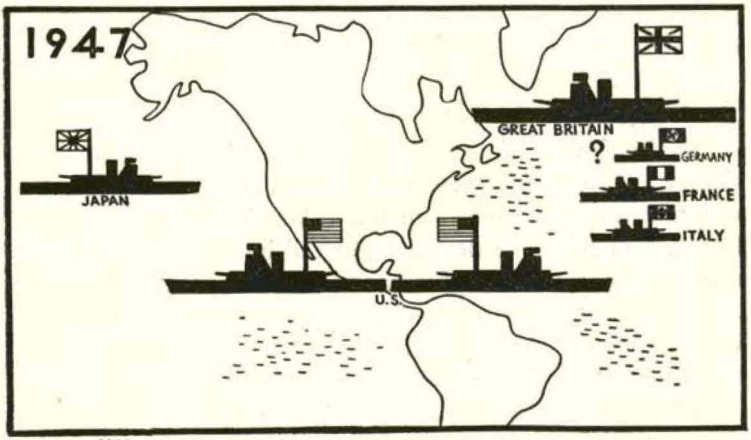
NAVAL PROGRESS REPORTS

Nevertheless, in 1941 the "fleet in being" was expanding rapidly. Naturally, the Navy wasn't telling the world just how fast it hoped to put new ships in service. But two new 35,000-ton battleships were launched in 1940 and were scheduled to join the fleet in 1941. By the end of 1942 a great many more new ships laid down under the 1938 and 1940 programs will be ready to join the fleet. This should give the United States a navy of at least 17 capital ships, and a total strength in all categories of well over 1,500,000 tons.

There were other signs of immediate expansion. The enlisted personnel of the Navy had increased from 145,000 men in June to about 190,000 at the end of the year. A further increase of 42,000 men was projected in January 1941. No less than 138 ships were actually under construction, while 191 more had been ordered and appropriated for. The Navy's shore stations and bases were being rapidly enlarged. Seventy-five thousand men were at work in the shipyards—45,000 in government yards and 30,000 in private yards. Between 40 and 50 commercial vessels—former cargo ships, tankers and passenger vessels—had been purchased for naval auxiliary uses. Some 15,000 members of the Naval Reserve had been called up for active duty to man these new auxiliary ships or to serve

THE NAVAL LINEUP IF GERMANY WINS





Today, the most vital mission of the fleet is considered to be control of maritime communications and the conduct of operations as far as possible from our shores. This is essentially Mahan's doctrine that "defense is assured only by offense." Like Mahan, practically all naval stategists today reject the idea of coast defense, or a "naval frontier" beyond which the fleet would not attempt to operate. The United States Navy has been designed for long-range, trans-ocean operations, and not for defense of a mid-ocean Maginot Line. This is why we have built ships of the greatest possible cruising range.

We have seen, however, that even the longest-range fleet cannot operate without naval bases or fuel and repair stations. Its radius of action is about 3,000 miles and its effectiveness is restricted in operations conducted more than 2,000 miles from its bases. These strategic factors and the controlling elements which we noted in our first inventory must be kept in mind in considering the possible missions of the United States Navy in the Atlantic and the Pacific.

NEW CONTINGENCIES

At the beginning of 1941, however, the Navy faced the possibility of altogether new assignments. It was compelled to weigh at least two contingencies: (1) a situation in which the British fleet might be destroyed or fall into the hands of Germany before we could give effective aid and before we could complete our two-ocean Navy; and (2) a situation in which the United States might undertake to support British sea power in order to prevent its complete destruction.

In the first contingency—destruction or capture of the British fleet—the Navy would be required to concentrate all its strength at the most vital links in our defense chain—the Panama Canal, the Caribbean, and Hawaii. By control of the new bases acquired from Britain, we could doubtless defend the

in other capacities. Sites had been selected for the eight new naval bases acquired from Great Britain, although the actual work of construction was just beginning to get under way.

A preliminary audit of the Navy's expansion as of January 1, 1940 showed the present and prospective fleets as follows:

	U.S. "Fleet in Being"	Ships Building or Appropriated for January 1, 1941	U.S. Navy in 1947
Battleships	15	17	32
Aircraft Carriers	6	12	18
Cruisers	37	48	91
Destroyers	237	170	365
Submarines	102	82	185
TOTAL	397	329	691

The fact which impresses the average citizen most sharply in this audit is the time required to build a second navy. The time factor, at least for the next few years, is likely to be our chief concern. It will affect all of our military calculations, not merely with respect to the Navy but the entire national defense program.

THE NAVY'S JOB TODAY

The next question which the citizen asks is: What are the probable missions of the fleet? This is not easy to answer at any time. It is particularly difficult in time of war when the strategic and political situation may change overnight. The Navy does not make foreign policy; it serves as an instrument for carrying it out. What the Navy may be asked to defend and where it may be required to operate, therefore, depend upon the foreign policy of the government and also upon the actions of other powers. For the actions of other powers may determine whether we can remain at peace or where we may be compelled to fight.

approaches to our shores. But beyond these restricted areas our field of naval action would be limited.

In the second case, the Navy might be called upon to join in supporting that great ring of fortresses—Gibraltar, Capetown, Suez, Singapore and the Australian bases—which have enabled Britain to control the seas. In the Atlantic, United States forces might be required for naval convoy duty to protect the vital maritime highway to Britain, or to defend key ports like Dakar on the coast of Africa. But as long as Britain controlled the Atlantic, the United States would be free to base its main battle fleet in the Pacific. Without impregnable bases of its own in the Far East, it is true, the United States could not carry on single-handed operations in the Western Pacific. But with access to Singapore and British bases in Australia, and provided it was not seriously engaged in the Atlantic, the United States fleet could become a force to be reckoned with in Far Eastern waters.

We shall come back to these possible contingencies when we consider the mission of the armed forces in relation to national policy. But now we turn to the Army program.

V. The Army

Unlike the Navy, the land forces of the United States have never been organized in peacetime for large-scale operations at a moment's notice. Throughout our peacetime history, believing that our natural ocean barriers would allow us time to raise a mass army for any emergency, we have relied on a small volunteer regular army backed by a citizen's militia.

But when President Roosevelt signed the Selective Service and Training Act on September 16, 1940, the United States Army had already taken the initial steps in a program of expansion which had been in the making over a period of

many years. Few civilians realized that the basic plan had been laid down twenty years before, just after the First World War, when Congress adopted the National Defense Act of 1920. The original program had not anticipated a situation exactly like that which faced America in 1940, but it provided the only existing framework on which to build a mass army.

THE U. S. ARMY BETWEEN WARS

To understand the composition of the new army, and the problems of expansion, it is necessary to look back for a moment to this basic military program of 1920. Like most legislation, the National Defense Act was a compromise between two opposing theories. One theory held that the defense needs of the United States could best be met by adhering to the "traditional" American policy of a trained militia; the other theory advocated a well-organized professional army, capable of expansion in time of war by induction of trained reserves. After its experience in the World War, the Army was convinced of the need for compulsory military service, and recommended a permanent, professional force of more than 500,000 men, supported by a reserve of men who had received military training. But Congress was unwilling to adopt conscription in time of peace, and finally approved a compromise organization, theoretically capable of being expanded in an emergency, but based entirely on voluntary enlistment.

The permanent organization set up under the National Defense Act consisted of three parts:

1. *The Regular Army*, composed of professional troops organized in 9 infantry divisions and 2 cavalry divisions, whose principal duties were to garrison outlying posts, conduct civilian training and serve (with the National Guard) as a protective force capable of being rapidly expanded in an emergency. The authorized strength was fixed at 280,000 enlisted men.

2. *The National Guard*, composed of citizen volunteers serving as an organized State Militia and also a reserve force for the national army, subject to federal service in time of war or by act of Congress. At full strength, the National Guard was to furnish 18 infantry and 4 cavalry divisions, or twice the size of the Regular Army.
3. *The Organized Reserves*, composed (in theory) of trained officers and men available as a reservoir to supplement the Regular Army and National Guard in any general mobilization.

These were the three groups around which a mass army was to be raised in time of war. But during the 'twenties and early 'thirties, when war seemed a remote possibility, defense appropriations were cut and the services reduced to a skeleton force. Between 1927 and 1935 the Regular Army was kept at a strength of 118,750 enlisted men; the National Guard at about 190,000. And without compulsory military training, the War Department was unable to create a reserve force which would have been able to fulfil its role in the mobilization scheme. As a result, the original plan for raising a mass army was modified, and emphasis was placed on a small, highly trained mobile force to be ready for action on short notice. This force, known as the "initial protective force," was to be made up of units of the Regular Army and National Guard totaling about 400,000 officers and men. Then, after Congress had passed conscription legislation, these troops would be reinforced by a "protective mobilization force" of about 1,000,000 men.

This, in brief, was the program which the War Department had begun to carry out as early as the summer of 1939, when war in Europe seemed imminent. In line with the theory of Hemisphere defense, which had gained favor at a time when the American people looked with suspicion on the idea of a great overseas expeditionary force, the Regular Army had been authorized to increase its numbers from 165,000 to

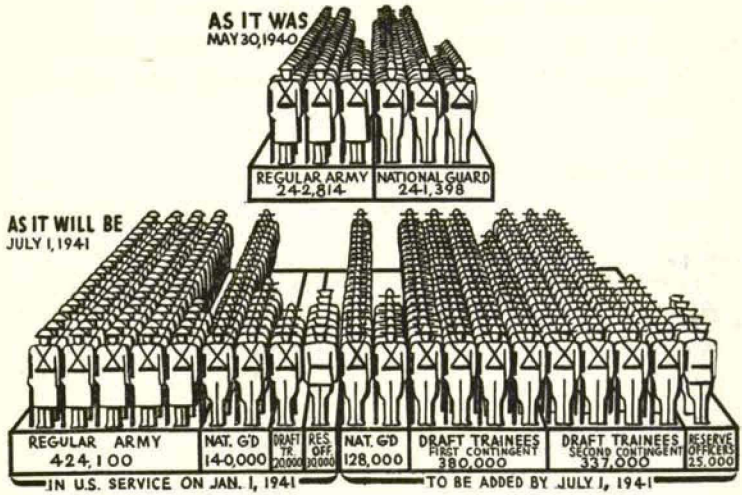
210,000 (July 1939). With the outbreak of war in Europe, further increases were authorized by the President and Congress, finally establishing the strength of the Regular Army at 375,000 and that of the National Guard at 235,000 enlisted men. This was to be the nucleus for an orderly, progressive expansion of the land forces of the United States.

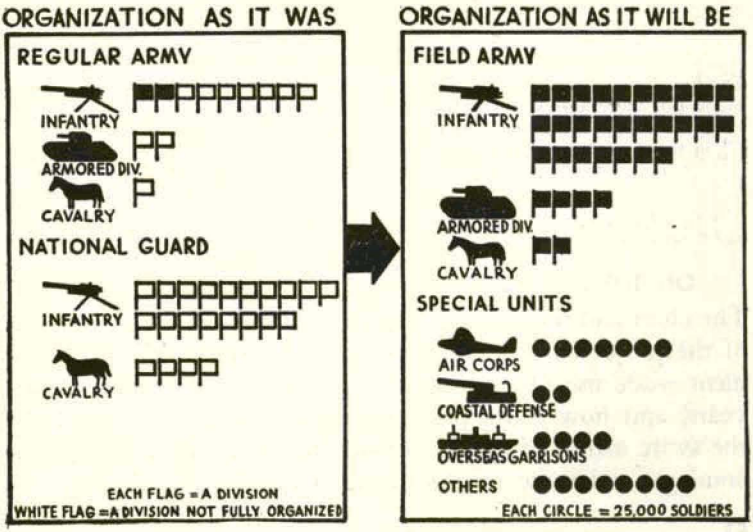
THE BLITZKRIEG ALTERS OUR PLANS

But the Army was never to have a chance to carry out its orderly, progressive program. When the *Blitzkrieg* struck in May and June, the American people looked with consternation at their little Regular Army and National Guard, and called for something to match the huge Nazi army, with its mechanized legions, which was sweeping across Europe. Six months later, the United States Army had been given $8,800,000,000 to spend as fast as it could. Its original plans had been swept away, its early estimates boosted tenfold, and its "initial protective force" merged in the larger mobilization plan. By January 1941, the immediate goal was the creation of an army of 1,400,000 trained men, an air force of 18,000 military planes, and equipment for even larger forces which might be required in the future.

The chart opposite and the table on page 52 tell almost as much as can be told about the first stage of the Army's expansion program. In condensed form, they show the status of our military forces on May 30, 1940, when the program began in earnest, and the progress achieved by the end of the year. The figures shown are based entirely on published reports of Congressional Committees, reports or press releases issued by the War Department and statements issued by the National Defense Advisory Commission. Naturally, they contain no confidential information and reveal no military secrets. But they help to answer some of the many questions which are being asked by millions of American citizens.

THE U.S. ARMY IN TRANSITION





EQUIPMENT ON HAND MAY 30, 1940*	EQUIPMENT ON ORDER, JANUARY 1, 1941 (including British and foreign material orders)
Aircraft	*Aircraft*
2,500 planes of all types	50,000 planes (approximately half for Britain), 18,000 planes scheduled for Army, 7,000 for Navy
Field Artillery	*Field Artillery*
275 modernized guns and howitzers (75's and 155's)	17,000 heavy guns and howitzers
186 modern type trench mortars	25,000 light guns
	13,000 trench mortars
Anti-Aircraft guns	*Anti-Aircraft guns*
463 anti-aircraft guns	2,240 anti-aircraft guns for early delivery, undisclosed number on order
1,014 anti-aircraft machine guns	1,157 machine guns for early delivery, undisclosed number on order
Small arms	*Small arms*
3,000,000 old rifles	1,300,000 new rifles
38,000 semi-automatic rifles	400,000 automatic rifles
228 anti-tank guns	1,634 anti-tank guns for early delivery, undisclosed number on order
83 machine guns	300,000 machine guns
	33,000,000 shells, loaded
Combat Vehicles	*Combat vehicles*
460 old type tanks	9,200 tanks
28 new light and medium tanks	50,000 trucks
599 scout and combat cars	2,000 scout and combat cars for immediate delivery, undisclosed number on order

* In addition to the equipment listed, the Army has large stocks of old but still useful artillery and small arms.

ON THE DEBIT SIDE

The chart and the table give some indication of the magnitude of the projected program. They show how the War Department made use of its original plans, worked out over many years, and how those plans were changed and modified by the swift march of events abroad. They reveal serious shortcomings, and some of the delays which have alarmed civil-

ians and responsible officers of the government alike. For example, when the draft act was passed in September 1940, it was expected that a good part of the first contingent of trainees would be in service early in 1941; yet by mid-December only some 20,000 men had been sent to camp. Serious delay in the housing program was responsible. But with adequate housing provided, the Army still faced the difficult task of training some 800,000 raw recruits during 1941. To carry out this task, the Regular Army and National Guard divisions were filled out by recruits for instruction. Most divisions had at least 50 per cent of trainees, and some had as high as 75 per cent. As a result, the Regular Army was left with virtually no units of seasoned troops available at once for any emergency. Some military experts gloomily predicted that it would take two years to train and equip the new force of 1,400,000 men thoroughly.

The chart and the table omit other shortcomings, such as the lag in production (mentioned later) and the bottleneck in the training of military pilots. The 1940 program originally called for the procurement of 2,400 pilots in two years, but this was quickly raised to 7,000 and then 12,000 pilots in one year. This program was lagging. During 1941 the Civilian Aeronautics Board will give primary training to about 45,000 student pilots, and secondary or specialized training to 30,000. Many graduates of these civilian courses will go into the Army schools for advanced training, but the results of this enterprise have yet to be demonstrated.

ON THE CREDIT SIDE

On the credit side, however, the citizen finds tremendous advances. The number of organized divisions had doubled by the end of 1940, and the number of men in active service had nearly trebled. Two armored force divisions were fully organized and fairly well equipped. Light tanks were being produced

at the rate of 100 a month, and new semi-automatic rifles were being turned out at the rate of more than 10,000 a month. The procurement program was gradually gaining momentum.

But overshadowing all other problems, whether of personnel or procurement, was the time factor. Time was even more vital to the Army than the Navy, for the task of moving from a peace to a war footing could not be accomplished without changing the whole nation from a basis of peacetime production to a basis of wartime production.

VI. Mobilizing Our Machines

"War is no longer simply a battle between armed forces in the field—it is a struggle in which each side strives to bring to bear against the enemy the coordinated power of every individual and every material resource at its command."

This statement sounds trite today. The citizen doesn't need to be told that in modern war effective industrial mobilization is a decisive factor—probably *the* most decisive factor of all. He is only too well aware of the need for organizing the human and material resources of the nation. But in 1931, when the statement above appeared in a little 18-page document prepared by the War Department, the average citizen had forgotten many of the lessons learned in the First World War. He had forgotten the costly mistakes and delays caused by our failure to plan in advance; he had forgotten how we finally and painfully worked out the machinery for organized mass production of war needs.

The War Department, however, had not forgotten this experience. After 1920, when the emergency machinery disappeared, it began a systematic study of the needs of the nation in case of future emergency. The National Defense Act of 1920

placed this work under the direction of the Assistant Secretary of War. The Navy cooperated through the Army and Navy Munitions Board.

OUR INDUSTRIAL RESOURCES

Despite our great national wealth, the United States is not entirely self-sufficient. Many essential raw materials are found within our own borders. But some of the most strategic materials must be imported from abroad. For example, we must rely on foreign sources for manganese (essential for the production of steel), rubber, tin, tungsten and other materials. The chart on page 25 shows a few of the most important produced at home and others we must obtain abroad. From Latin America we can buy and are already buying more of some of these, such as tungsten, tin and antimony. As Latin American production expands, we shall be able to obtain additional supplies nearby, though not enough to fill all the gaps.

One of the peacetime tasks of the Army and Navy Munitions Board, which worked out the industrial mobilization plan, was to survey our raw-material needs and to plan for the building up of reserves against an emergency. Another, even more important, task was to plan, within the framework of our democratic form of government, for the shift from a peace to a war economy. This involved making blueprints for the control of prices, the regulation of industry and labor, the control of foreign trade, and the regulation of many other phases of our normal economic life. It also called for detailed surveys of American industry. The supply list of the Army contained more than 70,000 separate items, many of which were not produced commercially in peacetime; the Navy list called for some 50,000 items. In planning for wartime procurement, the Army surveyed 20,000 manufacturing plants in all parts of the country and earmarked about 10,000 of these for emergency war production.

The usefulness of all this advance preparation was plainly shown when President Roosevelt created the National Defense Advisory Commission on May 28, 1940. For, as a result of all the planning done by the Army and Navy, instead of starting from scratch the Commission was able to begin its work at the second stage. The Mobilization Plan called for control, not by the Army itself, but by a civilian agency such as the Commission.

In appointing the National Defense Advisory Commission, President Roosevelt made use of the law passed in 1916 under which, just before our entry into the first World War, President Wilson had created a similar commission. In theory, the new commission was to act in an advisory capacity to the Council of National Defense—a body composed of the Secretaries of War, Navy, Agriculture, Interior, Commerce and Labor. Actually, all the work has been done by the Advisory Commission and the Council has not functioned except as part of the President's Cabinet.

The job of the Defense Commission—as it is commonly called—was to coordinate and organize the industrial resources of the nation. As first set up, however, the Commission itself had no executive power. It was not authorized to let contracts, build plants or lend money for national defense, but was merely to coordinate the activities of the Army, Navy and other agencies.

In the beginning the Commission was organized under seven main divisions with the following functions:

The Industrial Materials Division, under E. R. Stettinius, Jr., to create stockpiles of strategic and critical materials, such as tin, tungsten, antimony, etc.

The Production Division, under William S. Knudsen, to arrange production of essential defense items—airplanes,

tanks, munitions, etc. Contracts approved by the Production Division were then awarded by the Army and Navy.

The Transportation Division, under Ralph Budd, to coordinate transportation of all supplies of raw materials and finished products.

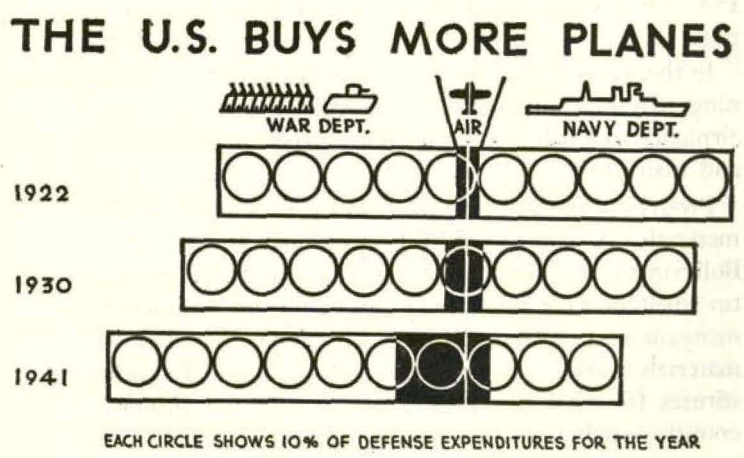
The Labor Division, under Sidney Hillman, to make certain that the factories, fields and mines of the nation have a sufficient supply of manpower and that this manpower is trained for the task and not exploited.

The Agriculture Division, under Chester Davis, to maintain a fair relationship between agricultural and industrial prices.

The Division of Price Stabilization, under Leon Henderson, to handle the complex problem of price stabilization.

The Division of Consumer Production, under Miss Harriet Elliott, to study all aspects of the defense program affecting consumers.

In addition to these seven main divisions, the Commission created a coordinator of national defense purchases, a priori-



ties board to assure orderly and prompt delivery of defense equipment, a research bureau, a housing coordinator, and a division of state and local cooperation.

PROGRESS UNDER THE DEFENSE COMMISSION

Six months after its creation the Defense Commission issued a report of its activities which recorded progress along many lines. Here are some of the things the Commission had accomplished.

In the first place, it had cleared contracts totaling more than 10 billion dollars. These contracts represented 75 per cent of the entire defense program as authorized up to that time by Congress. They included:

3.3 billion dollars for ships;
1.5 billion dollars for construction of factories and for housing;
1.5 billion dollars for planes and parts;
600 million dollars for ammunition;
500 million dollars for guns;
400 million dollars for trucks and tanks.

These contracts, plus British and other foreign orders, called for production of 50,000 airplanes, 130,000 airplane engines, 17,000 heavy guns and the other items listed in our table on page 52.

In the second place, deliveries on these contracts were beginning to come in: about 2,400 airplane engines a month; 700 airplanes a month; 100 light tanks; 10,000 semi-automatic rifles; and many other essential items.

Progress was also being made in the procurement of strategic materials. A contract had been signed for the delivery of Bolivian tin and negotiations for the construction of domestic tin smelters were under way. Stockpiles of antimony, rubber, manganese, tungsten, chrome ore and other industrial raw materials were growing steadily. Production of synthetic substitutes for vital materials which we do not produce in this country—such as rubber—was being encouraged.

THE LAG IN PRODUCTION

Despite all the advance planning, however, and despite the efforts of the National Defense Commission, production was running behind schedule. Both the Commission and the President frankly acknowledged the lag. In December 1940 Mr. Knudsen revealed that airplane production—the most critical item on the list—was 30 per cent behind the Commission's earlier estimates. Thus, instead of producing 1,000 planes a month in January 1941, American factories were turning out only 700 planes, half of which were being delivered to Great Britain. Similar delays were occurring all along the line.

Various reasons were given for this lag. In the first place, it took many weeks to negotiate the new contracts, for many private industries were reluctant to expand their plants without special provision for amortizing (or paying off) the capital cost of such expansion. Then, it was necessary to equip plants and factories normally engaged in peacetime production with new machine tools to manufacture specialized types of war material. Even under the best conditions this was bound to be a long, slow process. The machine tool industry was flooded with orders. And, although its output had increased 50 per cent by the end of 1940, it was still unable to meet the heavy demand placed upon it. The lack of machine tools was one of the most critical bottlenecks during the first stage.

There were, besides, other reasons for delay. Up until December the government had tried simply to add the huge defense load on to the regular business load, and had been reluctant to force industry to give priority to its orders. Both capital and labor were clinging to their accustomed privileges. In other words, the nation, while still following the rules of "business as usual," was trying to achieve mass war production overnight. Finally, the Defense Commission

itself lacked the centralized authority to carry out its difficult assignment. As we have seen, the Commission had no power to enforce its recommendations, and no single coordinating head. In this respect it was similar to the original Advisory Commission which President Wilson had appointed in 1916, and which had proved so wasteful and ineffective. In the end, President Wilson had to set up a War Industries Board, under Bernard M. Baruch, with absolute powers in the whole field of industrial production.

A NEW EXPEDIENT

Similarly, on December 20, 1940, President Roosevelt recognized some of the shortcomings of his original defense organization. On that day he announced the creation of a new "Office for Production Management for Defense" under a supercouncil of four men to coordinate the entire defense program. The four key men were William S. Knudsen, Sidney Hillman (head of the Labor Division) and the Secretaries of War and the Navy. But even this set-up did not create a single unified command for direction of the industrial effort.

When President Roosevelt issued the executive orders setting up the new Office of Production Management, he made another effort to centralize authority. Instead of granting full powers to one coordinator, however, the President gave co-equal powers to two members of the old Commission—Mr. Knudsen and Mr. Hillman. This was interpreted as a move to give labor and management an equal voice in all final decisions affecting national defense production.

The powers of the new Office of Production Management were far greater than those of the old Advisory Commission. The OPM was to "formulate and execute" all policies and measures necessary to insure increased defense production. Its powers included the right to take over industrial plants for

the government and to decide which armaments should go to Britain and which should be held for the United States. But even with these enlarged powers, the defense administration was still faced with a host of difficult problems.

Some of these problems were purely technical–how to get more planes, more guns, more tanks, more ships. Others, however, raised basic questions of economic and political policy. For example, how far must we readjust the economic life of the nation in order to meet the urgent demands of total defense? Can we get the increased output by *expanding* our present plant capacity, or must we *convert* our peacetime factories into armament plants? If we have to convert our automobile factories and other manufacturing plants into arsenals, can we avoid reducing our living standards? In any case, should we rely on private industry to expand our output, or must the government step in as manager and director of the new wartime economy?

Then there are other fundamental questions involving the financial program. If we can't pay for rearmament out of our current income, how far can we safely increase the national debt? Can we take effective steps to avoid rises in prices and the danger of inflation? Finally, there are the problems which will arise when the war is over. These seem remote now, but when the war is over we shall face the hard problem of how to adjust our economic system to a peacetime economy.

Few of these questions can be answered today. In a period of great danger, we are concentrating all of our energies on "a swift and driving increase in our armament production." This is the urgent, immediate task. But some farsighted economists are urging that we also give some thought, now, to formulating national economic policies for the period beyond the immediate crisis. One suggestion is that we might set up an economic planning committee to work with the government and its defense agencies. New machinery is not essential,

however, as such policies could be worked out just as well by effective team work between Congress and existing defense agencies. What is more important is that we utilize to the full the resources and intelligence which our democratic system affords—both for speeding production and organizing a sound, strong economic system.

VII. The Final Choice

In concluding his survey of national defense, the citizen is compelled to face the grim realities of a war which has threatened our historic security. He is forced, however reluctantly, to recognize that the theoretical alternatives of yesterday have been perilously narrowed by events beyond our borders. He is no longer passive or unconcerned, for he knows today that our own safety and our future will be profoundly affected by the outcome of the gigantic struggle in Europe and Asia. But many Americans, until very recently, have either failed or refused to recognize the grimmest reality of all—the challenge to our security should control of the seas fall into the hands of hostile nations.

In terms of our own security, the paramount question confronting the American people is whether the United States can permit control of the high seas to pass into the hands of the Axis powers. The answer cannot be put off for long. If we hesitate or delay, the decision may rest not with us but with Germany and Japan.

In cold logic, our answer depends on how you—as an American citizen—interpret the strategic factors brought out in this survey. We have tried to look at the basic facts as objectively as possible. We have pointed out why sea power is the key to our national security and the key to defense of the Western Hemisphere. We have seen that the United States is an insular

nation. But we have also seen how Great Britain's control of the seas made it possible for the free nations of the Western Hemisphere to develop their continental island in peace for nearly a century. We have seen how our own problem of defense was a relatively simple matter as long as control of the seas remained in friendly hands and how difficult it would become if the British navy were destroyed.

Measuring these factors, some Americans believe that we could still defend our shores and our territory even if Germany should wrest control of the seas from Britain. They point to the difficulties which Germany has encountered in trying to cross the 20 miles of water between the continent of Europe and the British Isles, and they ask how any European nation could cross the Atlantic to invade America. Our security, they say, lies in the Western Hemisphere—not in Europe or Asia. Our defense can be made impregnable if we stay at home and build up our navy and air force to defend the sea and air approaches to our shores.

But the same basic factors drive many other Americans to the opposite conclusion. If Britain should fall, the Atlantic would no longer offer any assurance of security for America. For even if we could defend our shores against a frontal attack, we would find that we had lost the key to defense of the Western Hemisphere. If Hitler should succeed in gaining control of the British fleet, Germany—not the United States—would be in a position to command the sea lanes to South America. Under such conditions, the door would be open to the military, political and economic penetration of South America. Under such conditions, our safety would require a permanent defense program greater than anything we have yet contemplated. Rather than face such conditions, our choice should be to support Great Britain with all the strength at our command.

A NOTE ON HEADLINE BOOKS

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OTHER DEFENSE PUBLICATIONS OF THE FOREIGN POLICY ASSOCIATION

"Defense Economy of the United States: Problems of Mobilization." Foreign Policy Reports, November 1, 1940.

"Defense Economy of the United States: An Inventory of Raw Materials." Foreign Policy Reports, November 15, 1940.

"The United States Army in Transition." Foreign Policy Reports, December 1, 1940.

"U. S. Strategic Bases in the Atlantic." Foreign Policy Reports, January 15, 1941.

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