TIME'S ATLAS OF THE WAR

Prepared by the Editors of TIME, The Weekly Newsmagazine

10¢
TIME's ATLAS of the WAR

- including eight maps in full color prepared by America's leading cartographer-artists under the direction of the Editors of TIME

1. ECONOMIC EUROPE

by Aldren A. Watson and the Editors of TIME

-from the river valleys of Norway to the Strains of the Bosporus, an ancient cauldron of war... where the hunger for food or metal or trade or power has driven the nations to battle since grain first grew in Mesopotamia.

2. SOUTHEASTERN ENGLAND

by Aldren A. Watson and the Editors of TIME

-where three centuries of empire stand at bay... where invasion threatens from the Channel and the North Sea... where the skies rain death and from a city in ruins a nation of mariners still sails its ships along the highways of the sea.

3. THE BALKANS

by Ernest Hamlin Baker and the Editors of TIME

-where five countries may lose the tattered remnants of their independence before another spring comes up out of the Aegean... while Russia crouches in the Ukraine, sullenly watching the dictators pick their plums.

4. THE EAST INDIES

by Antonio Petruccelli and the Editors of TIME

-where Japan's new order is nudging closer and closer to the Philippines... where a dozen little countries and orphaned colonies cower before the advancing shadow of totalitarianism... where the U.S. fleet may soon be cruising the waters of the spice islands and the Rising Sun.

5. THE CARIBBEAN

by Antonio Petruccelli and the Editors of TIME

-where Panama, jugular vein of the Americas, now stretches safely behind a stockade of U.S. naval bases... where Old Glory flies over tropical St. Thomas and commands the Anagoda Passage through which Germany's ships sailed from Colos to Hamburg only fourteen short months ago.

6. ALASKA

by Aldren A. Watson and the Editors of TIME

-where the U.S.S.R.'s Big Diomede Island and the U.S.'s Little Diomede Island glower at each other across the International Date Line... and the long beckoning finger of the Aleutian Islands stretches out within 700 miles of Japan.

7. CANADA AND THE UNITED STATES

by Ernest Hamlin Baker and the Editors of TIME

-where our new ally stands guard over the historic route U.S. invaders have followed down the valley of the Hudson... where our new naval base returns the favor in Newfoundland beside the Gulf of St. Lawrence... where two peoples who have lived in friendship for a century now stand border to border against a common danger.

8. THE NILE VALLEY

by Ernest Hamlin Baker and the Editors of TIME

-where the heaviest fighting of the winter may take place... where Suez and Britain's key naval base at Alexandria are being attacked from two directions... where the fate of an entire continent hangs in the balance.

THESE maps introduce a new technique in cartography, created to help people understand the military movements of air and naval fleets, armies and populations in actual and potential theaters of war all over the world. The inset rectangles on the charts indicate the map areas.
Europe's Snows of War. Europe's major coal fields lie roughly in a great arc which begins in the Scottish Lowland and ends in Upper Silesia. On it or close to it are strung most of her mining and manufacturing areas—the English Midlands, South Wales, northern France, Belgium's Sambre-Meuse Valley, Holland's Limburg, the Saar, the Ruhr, middle Germany. Through this vast productive crescent, sprinkled with iron ore, stand the heavy industries which turn out the indispensable metal of warfare—steel. Here is the production which determines the long-term measure of military striking power in World War II.

Less than half this crescent was in pre-war Germany. But Germany was weak in the metal-bearing ores which fed her highly developed industries. She had enough lead, zinc and magnesium, but two-thirds of her iron ore and 85% of her copper had to be imported. She had little or no bauxite (aluminum ore), antimony, tin or the critical ferro-alloys: molybdenum, tungsten, chrome, nickel. Germany moved to get them by conquest.

Poland put the Third Reich's zinc supply beyond exhaustion; little Luxembourg contributed a well-knit iron & steel industry, one-seventh as great as her conqueror's; Norway gave up molybdenum (for high-speed steels) and Narvik, the only winter outlet for high-grade ore of Sweden's northern iron mines. Occupied France contained the cream of France's industries—13% of world's iron ore, 6% of its steel productive capacity. Germany thus found herself holding just about two-thirds of the heavy industry, three-fourths of the manufacturing capacity of Europe. But she still lacked sufficient raw materials to feed these plants. She had enough for a short war, but the British blockade still cut off the raw materials she needed for a long war: copper from Chile, nickel from Canada, tin and rubber from the East Indies, etc. Germany cannot find adequate sources of these materials in Europe. Nor can Russia supply them, for she needs her metals in her own industries.

With her conquests Germany now has two-fifths of the green farm fields of Europe. France gave up the Paris Basin, which normally grew all the wheat she needed. Norway's forests, Poland's sugar beets were secured. Denmark and The Netherlands were rifled of their stocks of dairy products, meat and vegetable oils. This booty was also fine for a short war. But Europe has never been able to feed herself without importing great quantities of foodstuffs. If fertile Russia has food surpluses, they are a state secret. To a long war Hitler can feed his people only by starving the conquered.

By his conquests Hitler has destroyed most of the neutrals through whom he obtained a restricted flow of goods in spite of the British blockade—all except Portugal, Spain, the Balkans, Russia. After the conquests of Year I of World War II Germany was apparently little if any better off for essential supplies than when the war began. She could not beat the blockade. She could only try to beat the blockade.
Southeastern England. For centuries men have been accustomed to
describe this part of England as the political, financial and cultural cen-
tre of the British Empire. Now Hell's Corridor runs through it. Its mil-
tary geography was long dismissed with one word, invulnerable. Across
the wind-whipped mist—the English Channel—an invader passed to
consolidate a position on British soil since 1066, when William and his
mailed Norman horsemen breached the open boats at Pevensey a few
miles west of the Strait of Dover.

In 1940 that narrow strait again made history. During seven days
and nights in early June—including two days of almost perfect calm
and sunshine—it saw the rescue of the British Expeditionary Force on
the Continent. Across the 55 miles from Dunkirk to Dover and
Folkestone, destroyers, trawlers, channel steamers, tugs and lifeboats
ferryed 335,000 British and French soldiers. But from that time onward,
Hitler's troops in Calais looked hungrily across only 21 miles of water
to the chalk cliffs of Dover. German guns on the coast between Calais
and Boulogne and German aircraft, operating from the same sector,
made the narrow waters of the Strait unsafe for British convoys, carry-
ing essential supplies to Britain from London.

Air power was to blast the way for the great German invasion. It
was to smash Britain's industrial economy, break the will of her people
to resist. But Adolf Hitler reckoned without British fortitude or the
terrific fight put up by the R. A. F. When the fog of October settled
down over the Channel, his bombers were still smashing away while
his great fleet of power barges for landing troops—most of it as was not
smashed by British bombers—still stood idle.

In Hitler's attempt to reduce Britain, beginning in August 1940,
southeastern England bore the brunt of attack from the air. The map,
with its industrial establishments (shown by white buildings), naval
bases (anchored warships), R. A. F. fields (windsocks), big oil-storage
centres (tanks), shows how hard it is for a bomber to miss finding a
worth-while objective. From Calais to London is 90 miles by air, an
easy 20 minutes in a bomber. That route became Hell's Corridor,
Dover and other towns along the Strait, particularly Margate, got
the worst of the bombing, but their inhabitants had the satisfaction of
seeing the flashes as the R. A. F. bombed the opposite shore. British
airports between London and Dover were practically knocked out. The
industrial and shipping establishments on the vital Thames Estuary were
way stations for destruction. At the end of the Corridor, London it-
self was smashed night & day. There is no part of this map which is not
within an hour's flight of France. Everywhere small towns and even
isolated country houses suffered. The naval base at Portsmouth, fac-
tories at Birmingham, even the university town of Cambridge and
scores of lesser places, were progressively demolished from the air.
The Balkans & The Ukraine. If Britain and France had not called for
a showdown when Adolf Hitler invaded Poland in the fall of 1939, he
would not have attended to them until later. Having gobbed Poland
on top of Austria and Czecho-Slovakia, his next step would logically
have been to carve himself an empire in the Balkans and the rich
farmsland north of the Black Sea. For Germany cannot be in prime
condition for wars of conquest until she is blockade-proof. She needs
adequate supplies of food for her people, oil for her machines. All her
conquests of 1939 have not won them for her.

Located as it is with mountains, the Balkan-Ukraine area is larger than
it looks. Vienna, at the western edge of the map, is no farther from the
Atlantic Ocean than it is from the Crimea in the eastern half of the map.
The Hungarian Plain—fringes of which are shared by Germany, Yugo-
slavia and Rumania—is roughly as large as the northern half of France.
After the Danube escapes from this plain through the Iron Gate it
emerges into another plain of which the northern part belongs to
Rumania, the southern to Bulgaria. But the biggest and most fertile
plain of all begins at the eastern slope of the Carpathians and rolls east-
ward across the black soils of the Ukraine to the steppes beyond the Sea
of Azov. The size of this farm belt can be judged by the fact that the
Black Sea is closer to it than is Lake Superior. In minerals and industry the resources of these regions are small and undeveloped.

Rumania's famed oil wells produce no more than those of Ohio, 16th in
production of U.S. oil States. Yet in this area are the greatest agricul-
tural riches of the Old World.

Like Poland, the Ukraine is almost entirely flat. Hitler's motorized
columns could romp over it at will unless they met their military match.
With Hungary and Rumania under German domination, Germany
could launch an attack across the Pruth River and at the same time
flush the Russian fleet by an attack from German Poland in the north.
If Hitler chooses instead to pick up some of the French, Dutch and
British possessions in the East his route lies through Istanbul and
Bagdad. That also is his route to the oil fields of Moud. To reach

Istanbul against opposition, his army would have to fight its way through
mountain passes. The main route to the Golden Horn leads through
Belgrade to Nish and thence through Sofia and down through the rich
Bulgarian plains and the Maritsa Valley. Mussolini's obvious part in
such an action is to advance from Albania, which he took in 1939,
through rugged mountain country into Greece and Bulgaria—toward
the Dardanelles.

Stalin, like his royalist predecessors, would like to have an outlet
from the Black Sea, might conceivably fight if great good friend Hitler
made a pass in the direction of the Bosporus. Thus Stalin has every
reason to cooperate with Turkey to keep Germany at arm's length.
The Prize of the Indies. When Japan formally joined the Axis this fall, it brought along its own slogan to be incorporated in the three-power treaty signaling the fact: A New Order in Greater East Asia. Discarded was the pretense that the Orient should be for Orientals. It was to mean an Orient for the enjoyment of Japan. The borders of the Great East Asian realm were not officially announced but the newspaper Nichi Nichi explained. It comprised all of China, French Indo-China, Thailand, Burma. For months young Japanese have spoken more grandiloquently, adding India, the Philippines, the East Indies, Australia.

The East Indies, scattered eastward over 5,000 miles of sea from the great British fortress of Singapore, are a commercial pearl without price. Sweating in equatorial heat, the East Indies produce 99% of the world's rubber (plantations are indicated on the map by groves of green rubber trees) and 75% of its tin. The richest deposits are in the western Malay States, and the islands of Borneo and Biliton in the Java Sea. The Indies yields more petroleum (shown by derricks) than all the rest of the Far East. They produce vast plantation crops, such as sugar, tea, coffee, tobacco, rice, coconuts, various fibers, and cabinet woods. The Philippines have a world monopoly of abaca (Manila hemp); and Java of cinchona (quinine). Besides these is bauxite on Bismarck Island, tungsten at Tuyuit in Burma, manganese in the Malay States, Java and the Philippines. (Greatest concentration of these riches runs down the narrow isthmus of Malaya, Sumatra and Java.) The usual plan has hinged at Singapore and brought into play not only The Netherlands and British eastern forces but also (after a delaying action) part of Britain's Mediterranean Fleet. The war in Europe destroyed these plans.

Japan's offensive problem is entirely naval. The problem of distances can be judged from the fact that if the map of the U.S. were imposed on the map above, it would just about cover the area shown. Before she could use her advance bases at Formosa and on Hainan Island to full effect, Japan would have to close the British outpost at Hong Kong. She took Hongkong in Indo-China last October. Cam-
The Caribbean. "One thing is sure," wrote the late, great Admiral Alfred Thayer Mahan, "in the Caribbean Sea is the strategical key of two great oceans, the Atlantic and the Pacific; our own maritime frontiers."

The Caribbean is the key because the Panama Canal is vital to U.S. naval strategy. Until the U.S. owns a two-ocean fleet—that is, not before 1944—the Canal is its only insurance against leaving one of its coasts undefended against attack. If an enemy succeeded in capturing the Canal, or blocking it by smashing locks or Gatun Dam, that insurance would no longer exist. Hence the No. 1 paradox of U.S. naval strategy: the most vital point in the defense of the continental U.S. is a tropical island 1,500 miles south of Miami, Fla.

Cheering to Navy men is the fact that an attack on the Canal from the Pacific side would be a herculean venture; the vast reaches of the Pacific furnish no adequate jumping-off points. But on the Atlantic side, the chain of Caribbean islands, reaching east and south in a great hook from Florida's tip to the top of South America, has long been a potential threat. Once established in the islands, a strong enemy could block away at the Canal with air and sea attacks, might even work his way southwise up the island chain to launch attacks against the Atlantic seaboard. Franklin Roosevelt's destroyers-deep with Great Britain was primarily directed against that danger. Today the U.S. has base rights—but not yet bases—from the Bahamas to Trinidad. Once equipped with patrol planes, light naval craft, and provided with adequate shore establishments, the Antilles will make a potent defense for the Canal.

The U.S. has recognized that fact long before World War II by maintaining bases at Guantanamo Bay, Puerto Rico, and the Virgin Islands. Putting on pressure to complete its defenses in its own territory, the U.S. has sent Marines to Guantanamo's to protect a deep harbor that can accommodate any units of the fleet. At San Juan a cruiser dock and naval ships are shedding and near by the U.S. Army Air Corps has established a flying base for heavy bombers. At St. Thomas, V.I., the Marines have an air base and $3,500,000 has been authorized to develop St. Thomas' fine harbor into a naval station.

To complete the defenses of the northern sector, Britain gave base rights on Bermuda (just off the map due north of Puerto Rico) in the Bahamas and on Jamaica. More important were new bases in the southern sector of the hook at Antigua, Barbados, Trinidad and British Guiana. For it was south from Anguilla Passage that the defense of the Caribbean was weakest, and the weak spot was closest of all to any attack launched from the coast of Brazil or from the shoulder of Africa. When these new southern defenses are fully equipped, the U.S. Fleet, based at Pearl Harbor in the Pacific, can breathe more easily.
Northeast Frontier. For two generations the naval defense of the U. S. has faced west toward Japan from its great base at Pearl Harbor, a lesser base in the Philippines, its 23-point islands in the Pacific. It took World War II to make America face defensively toward Europe. For if Germany should displace Britain as mistress of the sea, the U. S. will have lost its insurance policy against trouble in the Atlantic: the British Fleet. And it will have no adequate substitute until its own two-ocean navy is in operation.

From the standpoint of a would-be invader from Europe, there are two obvious approaches for an attack on North America. One of them is the Caribbean islands. The other is eastern Canada. This summer Britain promised the U. S. a base near St. Johns in Newfoundland. Newfoundland, an island about the size of the State of Virginia, is only 1,200 miles from Glasgow by air, a globe terminal of transatlantic cables and the notable transatlantic port for seaplanes at Botwood, but the chief defensive importance of Newfoundland's fastbound coast is as a point from which to spring an invasion of the Gulf of St. Lawrence.

The other points important to the defense of this region are in Can- ada, chiefly the major port off Halifax (560 miles from Boston; 600 miles from Manhattan) and numerous airfields in Nova Scotia. Under the U. S.-Canadian defense agreement made last summer, a joint commission has visited Halifax to lay defense plans.

First an invader of Canada must make the 2,700-mile trip from northern Europe. Once having forced his way to Canada's front door—the St. Lawrence estuary—the invader would still have behind him a long, vulnerable line of communications, open for smashed by air and sea from Halifax, Newfoundland and bases on the U. S. Atlantic seaboard, ahead of him a hard fight before he could hope to establish himself in Quebec and Montreal. Before he could launch a land thrust to the south, he would have to hold the Montreal-Quebec line as well as Nova Scotia and Newfoundland to protect his perilous supply line.

But once established on the St. Lawrence, he might pattern his advance by land on the thrust of goatey General Burgoyne down the Hudson during the Revolution. Almost as bad, a successful invasion of the St. Lawrence Valley would bring the chief war resources of the U. S.—the industrial plants and navy yards of the Boston-Cleveland-Pittsburgh-Philadelphia quadripartite—within easy range of enemy bombers. Taking off from Montreal, a 250-mile-an-hour bomber can be over Boston in 60 minutes, Buffalo in 90, Pittsburgh in two hours.

But bombing ranges work both ways. Enemy fields would be within range of U. S. Army Air Corps air-dromes, would have to stand slamming from bombers operating from Long Island's Mitchel Field, New Nor- east Air Force at Chicopee Falls, Mass., from scores of emergency fields and two new bombarding bases at Roanoke, N. C., and Manchester, New Hampshire.
Gateway of the Orient. The Red Sea is about 1,900 miles long, up to 180 miles wide, plenty deep enough to drown Pharaoh's army, and it serves as the immortal gateway to the Orient. Its inner portal is Port Said and the Suez Canal; its outer portal is the island of Perim at the entrance of the Gulf of Aden. In World War I the British found their enemies the Turks in Asia, and eventually drove eastward and northward from the canal. In World War II, Britain found Italy's army on the other side of the Canal, and faced about to fight westward and southward.

Italy, detailed by Adolf Hitler to blast Britain out of the gateway to the Orient, was successful in its first drive as far as it went. She got Djibouti with the fall of France. In August, her legions from Italian Somaliland took advantage of Britain's small forces. Thus Berbera was added to Djibouti, Assab and Massaua, already in Italian hands. But the British still had naval superiority at the lower end of the Red Sea.

To take the north gate of the Red Sea, Italian troops poured out of Libya under the command of desert-wise General Rodolfo Graziani. Under fire from British warships, they moved east along the strip of fairly habitable coast to Sidi Barrani. Advancing between the desert and the deep sea, Graziani was harassed by aircraft raids and by armored-car dashes along his desert flank. His great problem was water, which he had to transport. For most of the wells along the coast had been destroyed and salted by the retreating British. Graziani, like a prudent man, moved slowly, bringing up supplies, establishing bases as he advanced. Any other course would have been suicidal. With superiority of numbers and little prospect that the British in Egypt would receive large reinforcements, he could afford to take his time.

In World War I, history was made east of Suez by Thomas Edward Lawrence, a magnificent hero from Wales who organized the Arabs for the revolt that broke Turkey's back. Lawrence and his Arabs, Allenby and his cavalrymen made the conquests which gave Britain and France control of what is now Syria, Lebanon, Palestine, Iraq, Suez and Arabi, Trans-Jordan, Aden. This time if there is any revolt the desert British, the present overlords, will have to face the desert alone.

Already the collapse of France has exposed her flank in Syria. If Axis can gain a foothold there, a drive up the French pipe line from Tripoli would threaten the Mersa oil field. A drive southward would cut the British pipe line at Hafi (which the Italians have occasioned). It would threaten the Suez Canal from the east. An Axis expedition to Syria would have trouble at sea as long as the British hold their new base at Cyprus. An expedition by land would first have to negotiate it through the Turks and Turkey, but if Germany sends part of her Army or her Air Force into the Southern Theatre, British defense problems will multiply.
TIME has but ONE purpose

TIME's only purpose is to get all the news of all the world into the head of the average intelligent American—and make it stick.

THE MAPS in this Atlas are all reprinted from TIME, and they are a case in point—

FOR ON each map everything unessential has been stripped away to emphasize the militarily important physical features, in accordance with TIME's 17-year-old custom of making the significant aspects of the news quickly and vividly understandable to its 700,000 readers.

THE SERIES began with the map of Southeastern England in TIME's issue of July 22, 1940—especially produced on the eve of Hitler's air attack on England to help TIME's readers see the terrain over which the next battles of World War II would undoubtedly be fought.

TIME'S TECHNIQUE of filtering out all distractions in order to etch the essentials more clearly on the minds and memories of its readers is immediately apparent in the maps in this Atlas—and in all TIME's weekly maps of locales important in the news.

BUT THIS same vigilant censoring of trivia and this same searching out of the significant are also characteristic of TIME's writing and editing—which is why, even in these news-crowded days of war and rearmament and economic change, TIME's editors can still tell you all the news of all the world each week—

- so briefly you can read it in a single evening—
- so clearly you understand it at once—
- so vividly it will cling to your memory.

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