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New Atlas of China, Land,
Air and Sea Routes.

by

rthe Rajchman

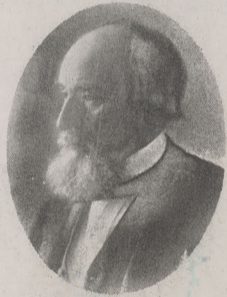
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A NEW ATLAS OF
CHINA
LAND, AIR AND SEA ROUTES

By MARTHE RAJCHMAN

Descriptive Text by the Staff of ASIA MAGAZINE

With an Introduction by

H. E. YARNELL

Rear Admiral, U.S.N. (Retired)



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INTRODUCTION

Few people have a clear idea of the geography of China, of its vast area, and of its communications with the rest of the world. During the past years there have been an increasingly widespread interest in, and demand for, such information. This has been due in great part to the heroic struggle carried on by China to maintain her freedom from the domination by Japan. This atlas stresses the highly important feature of communications.

"Burma Road" has become a household word, yet its location and characteristics are almost unknown. The same is true of the desert road from Russia, across Sinkiang and the Gobi desert, which has served as a line of supply. It follows in part the old "Silk Road" which was a highway between China and the Mediterranean two thousand years ago.

Before the Japanese invasion, air communications in China were being extended rapidly. No country lends itself to aviation more readily, due to the great distances, difficult terrain, and lack of roads. During the four and one half years of war, the airline between Hongkong and Chungking has been maintained. Flying over mountainous territory, some of it occupied by the enemy, preferring bad weather to good on account of enemy planes, this line has furnished easy and rapid communication between the capital of Free China and the rest of the world. It is a remarkable tribute to the skill and courage of the aviators who have maintained this service. One of the maps of the atlas shows how this line connects with other existing airlines of the world, enabling one to go from New York to Chungking in less than ten days.

Acknowledgments

The author's grateful thanks are due to Miss Constance Wade of Asia Magazine for the compilation of the descriptive text and of the index, and to many friends for most valuable assistance and advice in the preparation of material for the maps.

The day will come when China will be free of the invader, will begin anew the reconstruction of her national life, and will take her place as one of the stable and peaceful nations. In this difficult period, she should have the sympathy and assistance of democratic countries. As a nation, China will insist on the end of treaties that have curtailed her sovereignty in the past. This is as it should be, and the United States will be one of the first to renounce these special privileges.

It is greatly to our interest to see a free, strong and stable democratic government established in China since it will be a powerful factor for peace in that part of the world. Such a China will be occupied for years in working out her domestic problems. There is little likelihood that she will become an "aggressor nation" such as those that are devastating the world today.

China and her problems are and will continue to be matters of primary importance to the United States. To understand a country, it is necessary to have a clear idea of its geography, its communications, and its position with relation to, and distances from, other parts of the world.

This atlas, with its excellent maps and text dealing with these essentials, is indispensable to any student who wishes to familiarize himself with the Far East and its greatest nation.

H. E. YARNELL,
Rear Admiral, U. S. N.,
Retired.

Newport, R. I.
Dec. 4, 1941.

I: CHINA IN EASTERN ASIA

Of first importance in a study of modern China, with special reference to communications, is China's geographical position in eastern Asia.

China's international traffic depends upon her boundaries. And in particular, the volume of supplies for China and the means of transporting them are governed by the geographical features of China herself and, on the land side, of her neighbors.

The dominating feature of China is the coast, 2,150 miles long, if measured in a roughly straight line, and approximately 5,000 miles long if its indentations are figured in. The complexity of the coastal configuration and the innumerable islands which fringe the southern half of the coast provide excellent harbors and anchorages. Three great rivers—the Hwang Ho, the Yangtze Kiang and the Si Kiang—which run to the coast, are navigable far inland; these, with numerous smaller rivers, also navigable, and canals, form a complex covering the whole eastern area of China, one of the most heavily populated regions in the world.

China's western frontiers, also of vast length, cross either some of the highest mountains in the world, or deserts or semi-deserts; and, for almost their full length, very thinly populated areas.

Because the Sino-Japanese war has cut access to the seacoast—the natural approach to China for modern transportation—today all access to China must be through the facilities of her neighbors: harbors, rivers, railroads and motor roads, connecting with China's own facilities in the west.

The Sinkiang-Kansu road, via Lanchow, connects China's war-time capital, Chungking, with Sergiopol, in Soviet Russia. Sergiopol is on the railroad which connects the Trans-Siberian Railway to the north and the Turk-Sib Railway to the south.

The Burma Road, which begins under that name at Kunming (but which has direct road connection with Chungking and other points) terminates at Lashio, railhead of the line from Rangoon.

A third road—the Assam-Sikang route—is now projected (see Maps IV and VI).

The best of China's outlets was of course the Hanoi-Kunming railway which, however, was rendered completely useless to Free China with the Japanese occupation of Haiphong and Hanoi in September, 1940. The Chinese themselves have dismantled the section of this railway in Yunnan near the Indochina border.

During the war the southern coast of China has been open to some extent; for no blockade as such can completely stop traffic along a coast so long and so devious. But as the Japanese armies have moved farther south by land, and as attacking forces have moved on the principal harbors—Ningpo, Foochow, Amoy, Bias Bay, Swatow and others—by sea, China's opportunities for obtaining supplies by sea correspondingly lessened. Nevertheless it is logical to assume that some supplies still reach China by this route, in helpful quantity but not in necessary volume.

Note:

Construction has been resumed on the important Burma-Yunnan railroad and it is being hurried to completion. Building of this railroad (Lashio-Siangyun-Ipinlong) is shown as suspended on Maps I, IV and VI, which were already in production when the work was resumed.



CHINA IN EASTERN ASIA

—M o u n t a i n s—
 above 13000 f. above 6500 f. above 3200 f.

— Access & supply roads
 — Main distribution roads
 — Railways
 — projected under construction

B. Bhamo	N. Nanchang
CH. Chengtu	P. Paotow
Ch. Changsha	Sa. Sadiya S.Suifu
H. Hsuechang	Su. Suchow
Hg. Hangchow	Sh. Shasi
Ho. Hochih I.Ichang	T. Tali
M. Mandalay	Ta. Taiyuan
Mo. Moulmein	Wu. Wuhu

II: CHINA

The territory under the suzerainty of China can be divided into China proper, Manchuria, Mongolia, Tannu Tuva and Tibet. Though China has never officially relinquished her sovereignty over the outlying portions of this territory, their actual relationship with the Central Government has varied from time to time.

Manchuria (Heilungkiang, Kirin and Liaoning) and her neighboring province of Jehol were seized in 1931-1934 by Japanese aggression, and were renamed the "empire of Manchukuo," which, including Jehol, is divided today into fourteen provinces and three special municipalities.

Tibet, stronghold of lamaistic Buddhism, is ruled by a hierarchy, headed by the Dalai Lama and the Panchen Lama or, in the absence or the minority of one or the other or both, by a Regent, as in recent years.

The Mongolian People's Republic is based upon the Soviet model. Authority is still loosely held in some localities, however, by princes of various banners, the Mongolian groupings of tribes and sub-tribes.

Tannu Tuva—the Tuvinian People's Republic—is almost completely surrounded by mountains, and has practicable outlets only into Soviet Russia.

China has political ties with Tibet, Mongolia and Tannu Tuva by treaties, agreements or representation.

The three great natural divisions of China proper—the basins of the Hwang Ho, or Yellow River, the Yangtze Kiang and the Si Kiang, or West River—are today overshadowed by the unnatural division of China into two parts: the Free China of the west and southwest, and the occupied China of the northeast and east.



CHINA

— Provincial boundaries
 - - - Boundaries of Tibet & Mongolia
 • Provincial capitals
 ⊙ Capital city of Mongolia or Tibet

0 100 200 300 M.
 0 100 200 300 400 500 Km.

Map labels include: TANNU TUVA, USSR, HEILUNGKIANG, MONGOLIA, MANCHURIAN (MANCHUKUO), KIRIN, LIAONING, CHAHAR, JEHOL, SINKIANG, NINGSIA, SUIYUAN, HOPEH, SHANSI, SHANTUNG, KANSU, HONAN, SHENSI, KANGSU, NEPAL, BHUTAN, SIKANG, HUBEI, ANHWEI, CHEKIANG, SZECHWAN, HUNAN, KWEICHOW, HUNAN, KANGSI, FUKIEN, YUNNAN, KWANGSI, KWANGTUNG, HAINAN, BURMA, INDOCHINA, THAILAND, FORMOSA (TAIWAN), PHILIPPINES, INDIA, JAPAN, and various cities like Ulan Bator, Tihwa, Peiping, Nanking, Shanghai, etc.

III: COMMUNICATIONS BETWEEN THE UNITED STATES AND CHINA

The existing and possible (in some cases projected) routes by sea and by air between the United States and China are several, despite the curtailment of some routes due to war in both hemispheres.

By air, going west from the United States, there are two routes to China. The first is the Pan American Airways line which has been in regular operation for several years. This line, routed via Hawaii, Midway, Wake, Guam and the Philippines, connects at Hongkong with CNAC (China National Aviation Corporation). There are two branches off the direct route to China: the first at Hawaii, where the New Zealand line turns south; and one at the Philippines, by which connection is made with Singapore. New branches southwest of Hawaii may be developed as the necessities of the situation require. Chinese, British and Netherlands lines connect these termini with each other and with Chungking. The second possible route to China (if it were in regular operation for its full length), would, in comparison with the San Francisco—Hawaii—Hongkong—Chungking route, be a short cut. This is the route through Canada, Alaska and Siberia; over most of it there is plane service, intermittent and regular. There are two gaps, however, over which there is at present no service: between Nome, Alaska, and Wellen, Siberia; and between Urga, Outer Mongolia, and Lanchow, China. There are no physical difficulties to prevent direct connection between these points. A third potential route which would be considerably shorter than the northern

route is shown on the map by a line of small dots.

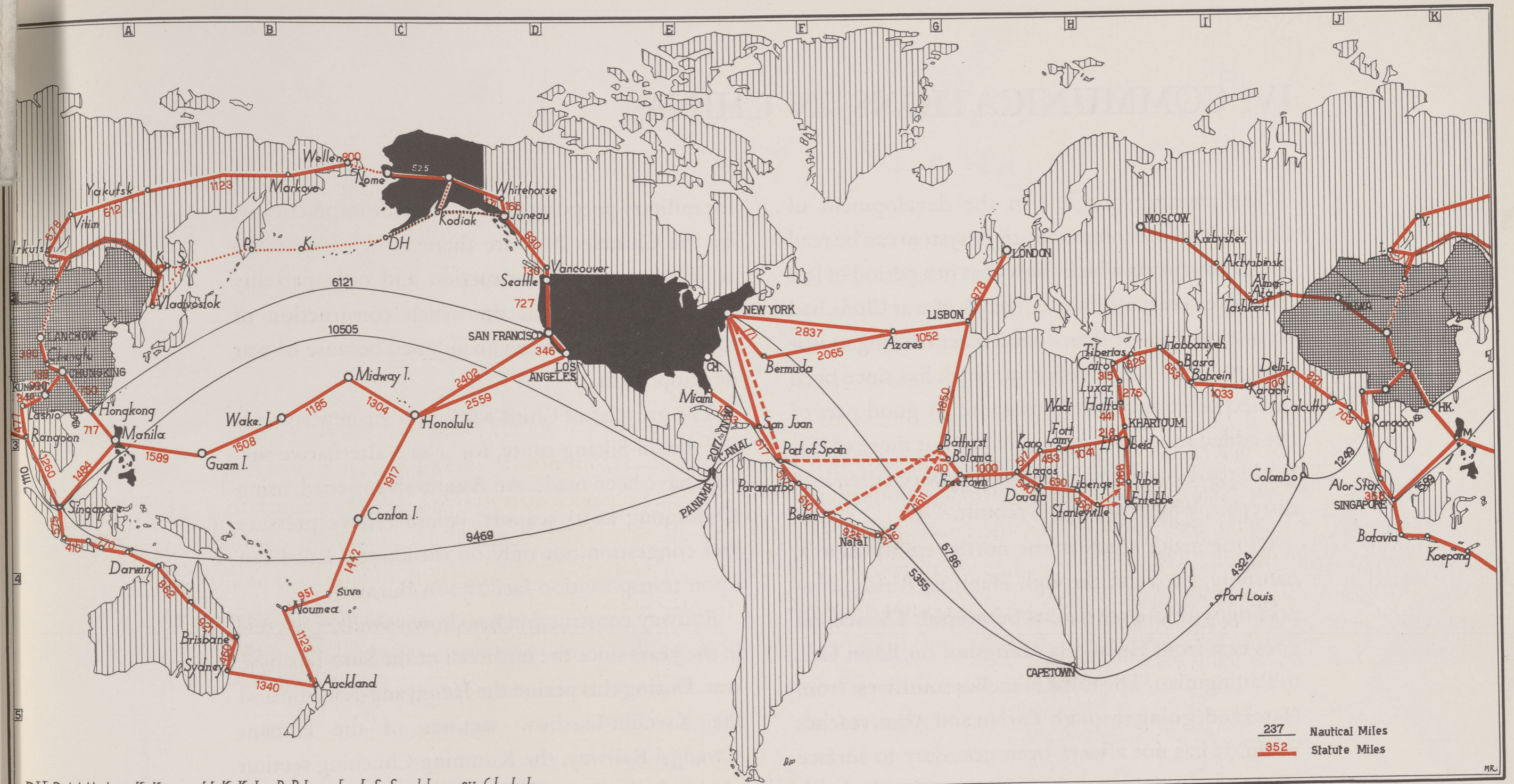
By air, going east from the United States, the existing route is long and round-about, via Lisbon, Bathurst, across Africa and down the Nile; at Cairo it joins the route of the British Imperial Airways to the Far East; but now from East African points this line may connect directly with the main route to India so as to avoid the war zones. In addition to this trans-Atlantic line, Pan American Airways has a new regular route via Brazil now in operation, which follows alternative, previously used but suspended, routes; these are shown on the map by broken lines. The Lisbon-Cairo route was of course made impossible by war.

The Pacific sea routes between the United States and China have been least changed (except for the loss to China of her great seaports) by hostilities. Lines operating from the west coast of the United States and from the east coast via the Panama Canal make connection with Hongkong, Singapore and, most important, Rangoon.

The route to Vladivostok, it should be noted, passes through Japanese waters.

The Atlantic and Indian Ocean sea routes today run via Capetown, making a longer passage than that through the Mediterranean and the Suez Canal, which today is impracticable. Despite this fact, a study of the map shows that, if shipment is made from the east coast of the United States, the Capetown route compares not too badly, as regards distance, with the Panama Canal route.

MAP III



DH-Dutch Harbour, K-Komsomolsk, Ki-Kiska, P-Petropavlovsk S-Sovetskaya, CH-Charleston.

MR.

IV: COMMUNICATIONS IN CHINA

The amazing progress in the development of China's internal communications system can be read in official reports which show that in a period of less than three years after the outbreak of war China had considerably more than doubled her existing motor road mileage. More than that, work has since been carried on at an accelerated speed. A good part of the added mileage is in new roads, but more of it is in old roads, unsuited for motor traffic or fallen into disrepair, which have been rebuilt.

Of the major roads of the northwest the first is, naturally, the road through Hami to Russia, connecting with the railroad at Sergiopol. The second goes east from Hami, via Mengshui on Edsin Gol, to Pailingmiao. The third branches southwest from Hami and, going through Turfan and Aksu, reaches Shufu. It has not always been necessary to surface all the roads of this northwest system; for the hard-packed nature of the soil in much of this area makes for adequate traction. This is particularly true of the Hami-Edsin Gol road.

There are three main centers in the intercommunicating complex: Lanchow, Chengtu and Kweiyang. One of the most important roads in this system is the one, built since the war began, between Lanchow and Chengtu.

The most important road in the southwest is of course the Burma Road. New and rebuilt roads join with it, notably the highway which connects Chengtu with Siangyun, well to the west of Kunming. Much work has also been done on the intercommunicating lines of Yunnan, Kweichow and Kwangsi.

On this map are shown all existing roads good for motor traffic. Not shown are the roads which

for military purposes have been made impracticable by the Chinese. Nor are there shown here roads which are under construction and only partially practicable, or roads on which construction of many sections has been abandoned because of war developments.

The greatest of China's projects for new roads is the Assam-Sikang route, for which alternative surveys have been made. An Assam-Sikang road, using Chittagong as its seaport, would relieve pressure and congestion not only on the Burma Road but upon transportation facilities in Burma.

Railway construction has shown similar progress in the years since the outbreak of the Sino-Japanese war. During this period the Hengyang-Kweilin and the Kweilin-Liuchow sections of the Hunan-Kwangsi Railway, the Kunming-Chuching section of the Suifu-Kunming Railway and a Sienyang-Tungkwan branch of the Lunghai Railway have been completed. There are under construction lines between Chungking and Chengtu, between Lashio and Ipinlong (west of Kunming), between Kweiyang and Hochih, and between Paoki and Tien-shui, and, in addition, a section out of Suifu on the projected Suifu-Kunming line. Other lines on which surveying and construction had been begun but are for the present suspended, are the Liuchow-Chenankwan and the Suifu-Kunming (with the exception of the sections mentioned above).

Airlines now maintain service between the following points: Hongkong-Namyung; Hongkong-Kweilin-Chungking; Chungking-Kunming-Lashio (connecting with foreign airways); Chungking-Chengtu-Sian-Lanchow; and Chungking-Chengtu-Lanchow-Hami-Tihwa-Alma Ata (connecting with Soviet airways).



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S.

R.

TANNU TUVA

MONGOLIA

SINKIANG

NINGSIA

TSINGHAI

TIBET

NEPAL

BHUTAN

ASSAM

I N D I A

SIKANG

KANSU

SHANSI

SHANTUNG

HONAN

SZECHWAN

HUPEH

CHEKIANG

HUMAN

KIANGSI

FUKIEN

KWEICHOW

KWANGSI

KWANGTUNG

BURMA

THAILAND

INDOCHINA

HAINAN

ULISSUTAI

ULAN BATOR

CHAHAR

MANCHUKUO MANCHURIA

HOPEH

CHENGDEH

SHANTUNG

KIANGSU

ANHWEI

HANKOW

CHANGSHA

HUMAN

KWANGSI

KWANGTUNG

CANTON

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SHANGHAI

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V: NORTHERN ACCESS TO CHINA

China is today without access from the north because of the occupation of Manchuria and, more recently, the capture of the vital towns and ports, and the greater portion of the railways, in North China by the Japanese.

With the railroads and roads of North China and Manchukuo available to her, Japan holds a strategic advantage over Soviet Russia in the Far East, in respect to land communications. The U.S.S.R. lost her direct route between Chita and Vladivostok in 1935, when she sold the Chinese Eastern Railway (Manchuli to Suifenhö, and Harbin to Hsinking) to Manchukuo. In addition to the C.E.R. and other existing lines, several new railways have been constructed in Manchukuo within recent years. Thus Japan has the use of a complex system of roads and railroads penetrating the inner circle of the Trans-Siberian Railway from Chita eastward, which therefore is vulnerable.









In this territory Japan has, too, the use of established air bases. These, together with those in Japan

proper—and it is impossible to say how many secret bases there are in addition, and how far north some of them may be situated—appear to give Japan an advantage in the air as well. However, unconfirmed reports have placed Soviet air bases at several Siberian points other than Vladivostok; and Vladivostok itself is but a short distance by air from Japan's own industrial and urban centers, and is very close indeed to the newly developed Korean ports of Rashin and Seishin, and the Rashin-Harbin and other railways.

The Manchurian roads shown on this map were laid or rebuilt for motor traffic; while the Mongolian roads are for the most part of the type occurring in northwestern China, referred to in the text for Map IV—trails over hard-surfaced soil which cars and trucks can use. Therefore the Mongolian trails marked on the map do not necessarily indicate the existence of roads as such; they show, rather, routes which are, or could be, used for motor transport.



NORTHERN ACCESS TO CHINA

-  railways
-  roads good for motor traffic (see text)
-  steam navigation
-  Grand Canal
-  sea distances in nautical miles
-  points held by the Japanese in China
-  land naval bases in Japan
-  areas occupied by the Japanese in China

0 100 200 300 ST. M.

VI: WESTERN BOUNDARIES OF CHINA

China's western neighbors are the Soviet Union and India, with whom she shares boundaries thousands of miles long, and Afghanistan, with whom she has but a short frontier in common. Indochina and Burma are southern neighbors, though Burma is often thought of otherwise because of her traffic with China's southwest.

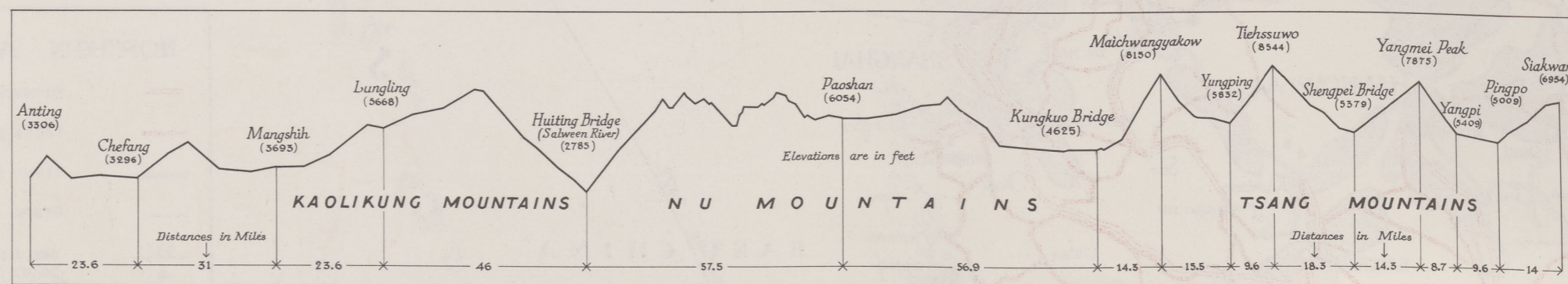
Szechwan (on the right-hand edge of the map), where are Chungking and Chengtu, marks the western limit of China's dense population: Szechwan's density is 250-375 per square mile. Sikang, immediately to the west, has but 1-12 per square mile; as have also Tibet, Tsinghai and Sinkiang. China's westernmost alluvial plain is in Szechwan—the Chengtu plain. Further to the west there are only

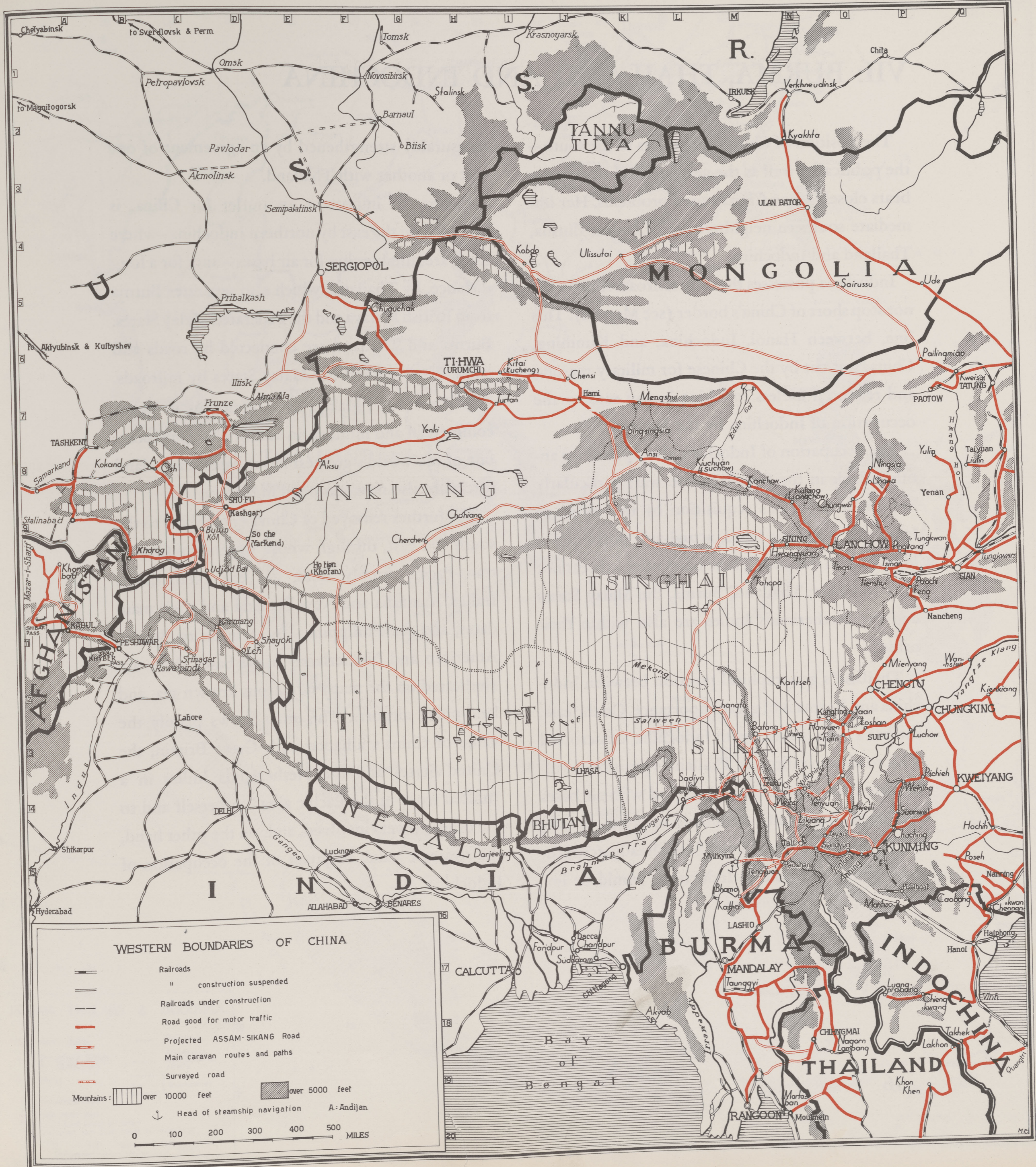
high mountains, deep valleys, high plateaus, deserts and oases. West of the Chengtu plain there is, except in some parts of Sinkiang, only scattered, small-scale agriculture.

None of the railroads of China's neighbors to the west and southwest run all the way to her frontiers: the railheads at Lashio, Myitkyina, Sadiya, Darjeeling, Peshawar, Osh, Frunze, Alma Ata, Kiakhta, though comparatively near to the border, are in no case actually at the border.

Insofar as roads are concerned, only two modern highways—the road to Russia and the Burma Road—cross the line into China. To these two roads may be added a third, along the projected Assam-Sikang route (see also Maps I and IV).

A Profile Chart of the Burma Road





WESTERN BOUNDARIES OF CHINA

- Railroads
 - " construction suspended
 - Railroads under construction
 - Road good for motor traffic
 - Projected ASSAM-SIKANG Road
 - Main caravan routes and paths
 - Surveyed road
 - Mountains: over 10000 feet over 5000 feet
 - Head of steamship navigation
 - A: Andijan
- 0 100 200 300 400 500 MILES

VII: BURMA, THAILAND AND INDOCHINA

The position of China's neighbors to the south—the political as well as the geographical situation—bears closely upon China's own problems. Her immediate southern neighbors are of course Burma, Thailand and Indochina.

Indochina possesses the only railroad which does not stop short of China's border (see Map VI). This line, between Hanoi, Indochina, and Kunming, China, was cut by the Chinese for military reasons, and rendered useless to China in any case by the occupation of Indochina by the Japanese.

The occupation of Indochina also opened up another flank in the Sino-Japanese war; particularly important is Japan's acquisition by this move of land- and sea-plane bases, actual and potential, as indicated on the map. These bases offer a threat not only to China; Thailand, Burma, the Malay States and the Netherlands Indies are also within their orbit.

Thailand's geographical position between Indochina and Burma is of great importance. On the east, she has a long frontier with Indochina, crisscrossed with roads and railroads. Thailand's position is vulnerable with a frontier so open, and with air bases just across this frontier available to Japan. Japan's strategic position in the South Seas, already strengthened by her foothold in Indochina, would be im-

measurably strengthened by an agreement of one sort or another with Thailand.

Burma, so important an outlet for China, is bounded on the east by northern Indochina—where there are suitable sites for air bases—and, for a long distance, by Thailand, which also separates Burma from British Malaya and the Federated Malay States. Burma and Thailand are connected by roads and trails; Thailand and the Malay States by railroads. Both Burma and Malaya have numerous air ports, commercial and military, in addition to Singapore, one of the world's greatest naval bases. Large land forces are also now stationed in Malaya.

The further removed of China's neighbors to the south and east, through whose waters run China's trans-Pacific supply lines, are the Netherlands Indies, Australia and New Zealand and their mandates, and the Philippines. In addition to British, American and Netherlands naval bases there are (indicated on the map) numerous known sea- and land-plane airports. This map shows plainly the value of China's alliance with Great Britain, the United States and the Netherlands Indies in a "united front in the Pacific area" to herself and to the other powers involved, and, on the other hand, the strategic value to Japan of the occupation of Indochina.

MAP VII



BURMA, THAILAND & INDOCHINA.

- Motor Roads
 - - - Dry season Roads in INDOCHINA
 - · - · - Paths
 - · - · - Surveved road
 - ⬇ Sea plane port
 - Main land-plane airfields
 - Possible landing fields in Indochina
 - Railroads
 - Steamship Navigation on rivers
 - - - Boundaries
- 0 100 200 300 Miles

VIII: WESTERN PACIFIC

The naval powers of the Pacific are the United States, the British Commonwealth of Nations, the Netherlands Indies, the Soviet Union and Japan. Other interested powers immediately concerned but not likely to engage in a possible naval "Battle of the Pacific" are France, Portugal and of course China.

China's share in the western Pacific appears, not on any map, but in population figures. There is hardly an island which, if it is populated at all, does not include Chinese. In the Netherlands Indies a million and a quarter Chinese, two per cent of the total population, are second only to the native islanders in numbers. In the Federated Malay States, they are the largest single element, numbering forty per cent of the total. They are exceeded in Thailand only by the Thai (at a ratio of about twenty to one), and number over three per cent of the total population. In these three countries alone there are two and one half million Chinese.

The British Empire is represented in the Pacific by Malaya (see Map VII) and Hongkong; by the Commonwealths of Australia and New Zealand; and by Fiji and Britain's "Western Pacific"—numerous islands and territories, annexed or under various mandates, which extend from the equator to the South Pole.

Japan's industrial and territorial expansion since 1875 have transformed her from a self-isolated island group into a world power with a widespread empire which now includes Formosa, Kwantung, Karafuto and Korea; the mandated Mariana, Caroline and Marshall islands; and other islands, including the Kurile, Bonin and Ryu Kyu groups. The "coverage" by Japan and her possessions of the western Pacific is extended by the position of Japan's satellite Manchukuo and by the Japanese occupation of Hainan, Indochina and Spratly Island, as well as by the occupation of Chinese coastal cities.

The United States in the Pacific extends from Alaska in the north, to Samoa in the south and to the Philippines in the west. Within this great triangle, with its base at Hawaii, there is a network of present or potential secondary naval and air bases, and of refueling and emergency repair stations for both air and sea craft: Dutch Harbour, Kiska, Kodiak, Sitka, Wake Island, Midway Island, Johnston Island, Palmyra Island, Kingman Reef, Samoa, Guam and Cavite.

In addition to her continental frontage on the Pacific—Siberia and the Kamchatka peninsula—the U.S.S.R. possesses the Komandorskie Islands and Sakhalin, site of important oil wells. Of the Soviet ports on the Pacific, however, not even Vladivostok, the largest, is open to traffic the year round. The opening of the Arctic Sea route several years ago, and the development of roads north, have supplemented previous traffic by sea and by the Trans-Siberian Railway with this area. Air lines connect furthest Siberia with European Russia; new commercial, and undoubtedly secret military, air fields have recently been constructed in the Soviet Far East.

The Netherlands Indies are protected to some extent from invasion from the north; for the waters are dangerous with reefs and the island-dotted passages skirt around or through the Philippines, Borneo, Celebes and New Guinea. Off New Guinea is situated one of the Netherlands' naval bases, Amboina; another, on Java, is Soerabaja. Over Amboina fly the planes of the Japanese commercial air line recently established between Japan's Palau Islands, east of the Philippines, and Dili, Portuguese Timor. Timor, in the Netherlands Indies, is but four hundred miles or so from Darwin, Australian sea port and naval base.

French Oceania, which includes Clipperton Island in the eastern Pacific, is in the hands of the Free French.

MAP VIII



IX: GREATER PACIFIC AREA

In this map we see the interrelation of modern means of communications as they serve the entire Pacific area. Here is the broad pattern of the relations between shipping and railroads, between rail and motor transport, and between all these and the air lines.

Three of the vital points in sea communications are Singapore, the Suez Canal and the Panama Canal. Of these one is British, one is under British military suzerainty and one belongs to the United States. The first, Singapore, naval base of a belligerent power and key point of a "Battle of the Pacific," is directly threatened by war. Alternative passages to avoid Singapore would be by the sea lanes through Australian waters, either north by Torres Strait and south of Timor, or via Melbourne and Perth. The second, the Suez Canal, is already in a war zone and subjected to enemy bombing; the longer, alternative route via Capetown is being used. The third, the Panama Canal, may be closed to normal trade should the United States become involved in war; in which case supply lines between the Atlantic seacoast and the Pacific would either be forced to follow the long sea route around South America and through the Strait of Magellan, or to put the burden upon American transcontinental railroads.

The part to be played by the Pan-American highway, new link between the Americas, is a question for the future. At this time, only sections are completed, though these are linked by passable trails. But in war or in peace, this highway will prove a valuable asset to the peoples of two continents and many nations.

Only a few miles separate America and Asia in the northern Pacific. And only a few more miles

separate the termini of Russian and American air lines in Siberia and Alaska (see Map III). In both Siberia and Alaska the building of motor roads is an immediate and important problem. The position of the Soviet Far East *vis-à-vis* Japan and the vulnerability of the Trans-Siberian Railway (see Map V) have been urgent reasons for the expansion of the network of roads made necessary by Soviet Russia's industrialization program for Siberia and by the opening up of the Arctic Sea route. In Alaska, the building of roads has been speeded up by the American defense program. A continental outpost, Alaska is capable of being tied up with the United States by land communications as well as those of sea and air, and within the territory itself roads of military importance must also connect air and naval defense posts. There is also the possibility that these two expanding motor road networks of Siberia and Alaska, spreading out toward each other, may serve not only their respective military needs and individual supply problems, but may interlock into a new international artery of trade.

In mid-Pacific there are small islands of vast importance as air ports and as cable stations. The cables of only two nations fully span the Pacific, those of the United States of America and of Great Britain. Japan's cables, though extensive, are limited to the western Pacific, running only as far east as Guam. The fourth nation to have cables in the Pacific area is Denmark, whose lines run from Vladivostok south to Saigon, and from Vladivostok across Asia and Europe. Intensification of war in the Pacific might well cut these slender threads of verbal communication between continents.

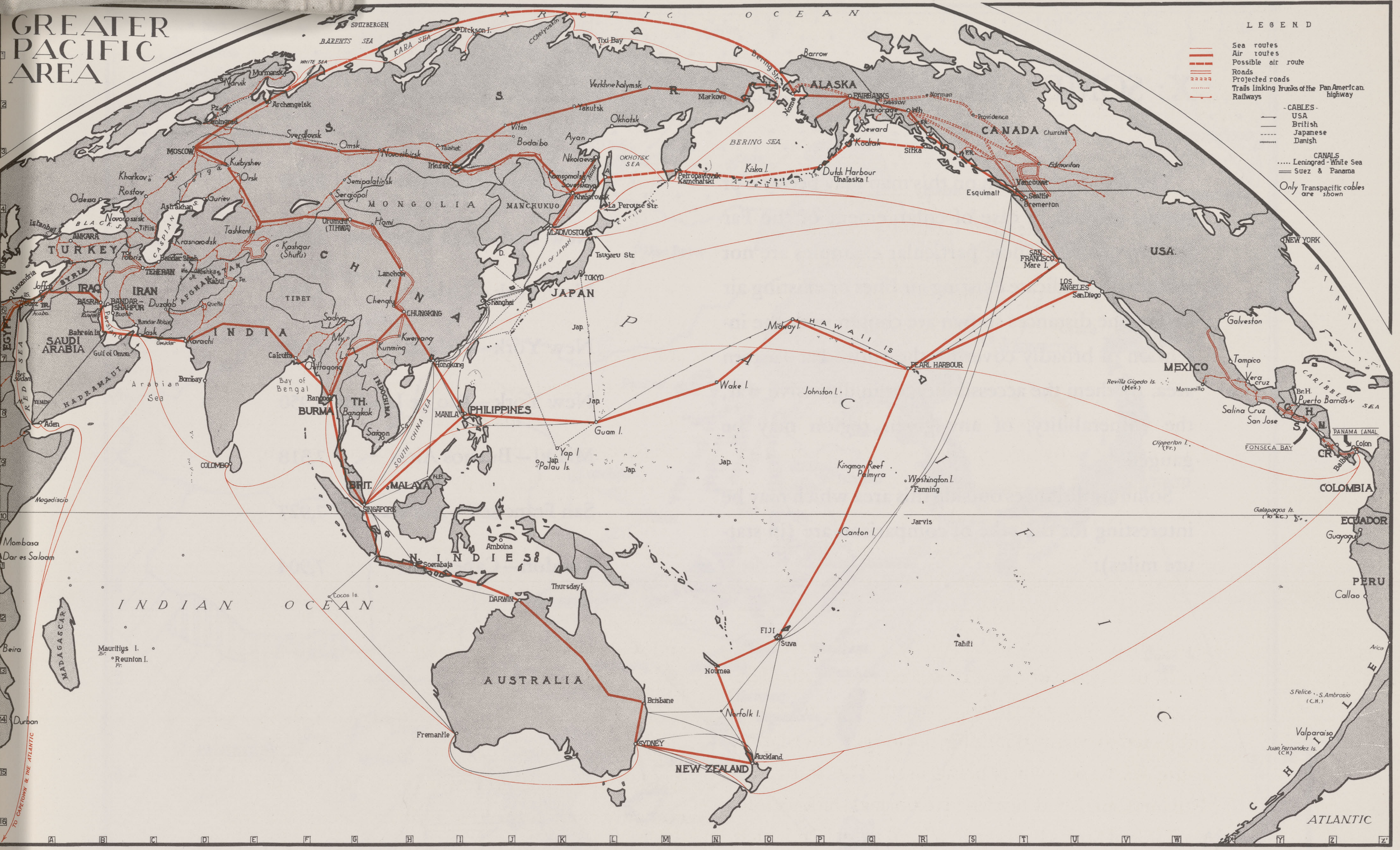
Abbreviations used on Map IX

A Aleksandrovsk; BR British Honduras; CB Baie de Cam ranh; CR Costa Rica; D Dairen; G Guatemala; H Honduras; J Juneau; L Lashio; M Massawa; My Myitkyina; N Nicaragua; P Palestine; Pe Peshawar; PR Prince Rupert; Pz Petrozavodsk; PS Port Said; S Salvador; Sk Skagway; TH Thailand; TR Transjordan; W Wellen; Wh Whitehorse.

GREATER PACIFIC AREA

LEGEND

- Sea routes
 - Air routes
 - Possible air route
 - Roads
 - Projected roads
 - Trails linking trunks of the Pan American highway
 - Railways
-
- CABLES -
 - USA
 - British
 - Japanese
 - Danish
-
- CANALS
 - Leningrad - White Sea
 - Suez & Panama
- Only Transpacific cables are shown



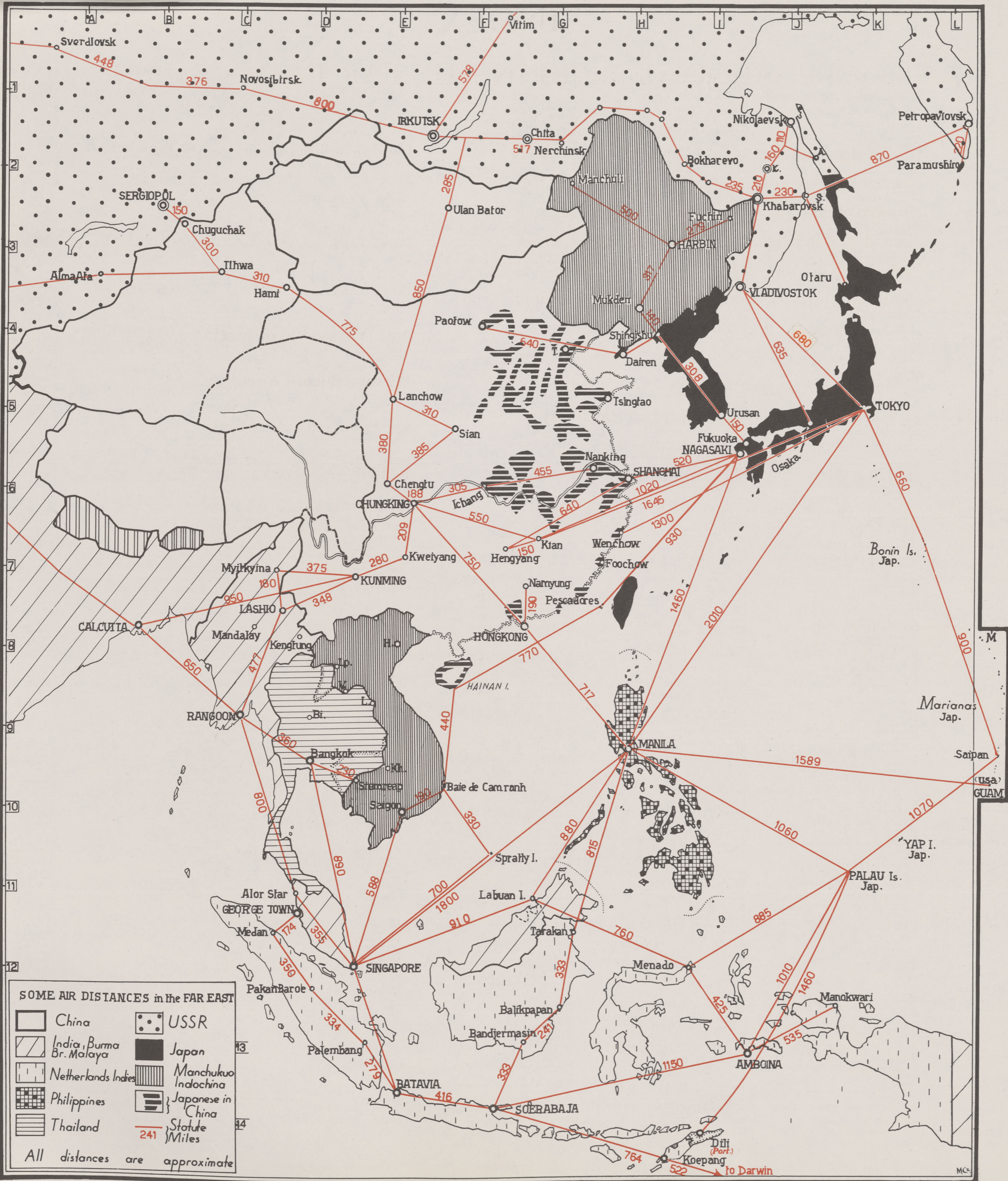
X: SOME AIR DISTANCES IN THE FAR EAST

The distances shown on this map may become of special interest in case of enlargement of the Far Eastern conflict. These particular examples are not intended to indicate existing air lines or existing air fields. The distances shown are chosen with the intention of broadly covering the entire Far Eastern area. By them the accessibility, or in defensive war, the vulnerability, of any given region may be gauged.

Some air distances outside this area which may be interesting for the sake of comparison are (in statute miles):

London—Alexandria	2,308
New York—San Francisco	2,838
New York—Lisbon	3,890
New York—Ireland	3,067
New York—Rio de Janeiro	6,950
Miami—Buenos Aires	7,318
San Francisco—Auckland	7,927
London—Capetown	7,904

MAP X





A NEW ATLAS OF CHINA

Land, Sea and Air Routes

The key to the geography of China's war effort is communications. Rivers, roads, and railways in eastern China supply the Japanese military machine, and form the targets for the Chinese guerrillas. The similar arteries which Chiang Kai-shek's government is developing in the interior are his supply lines, and form the targets for Japan's bombers. Spreading out from these areas is the growing net of road, rail, air and water routes connecting eastern Asia with the rest of the world. China looks beyond the war, too, to the rebuilding that must accompany the peace; and to this rebuilding also communications provide the key.

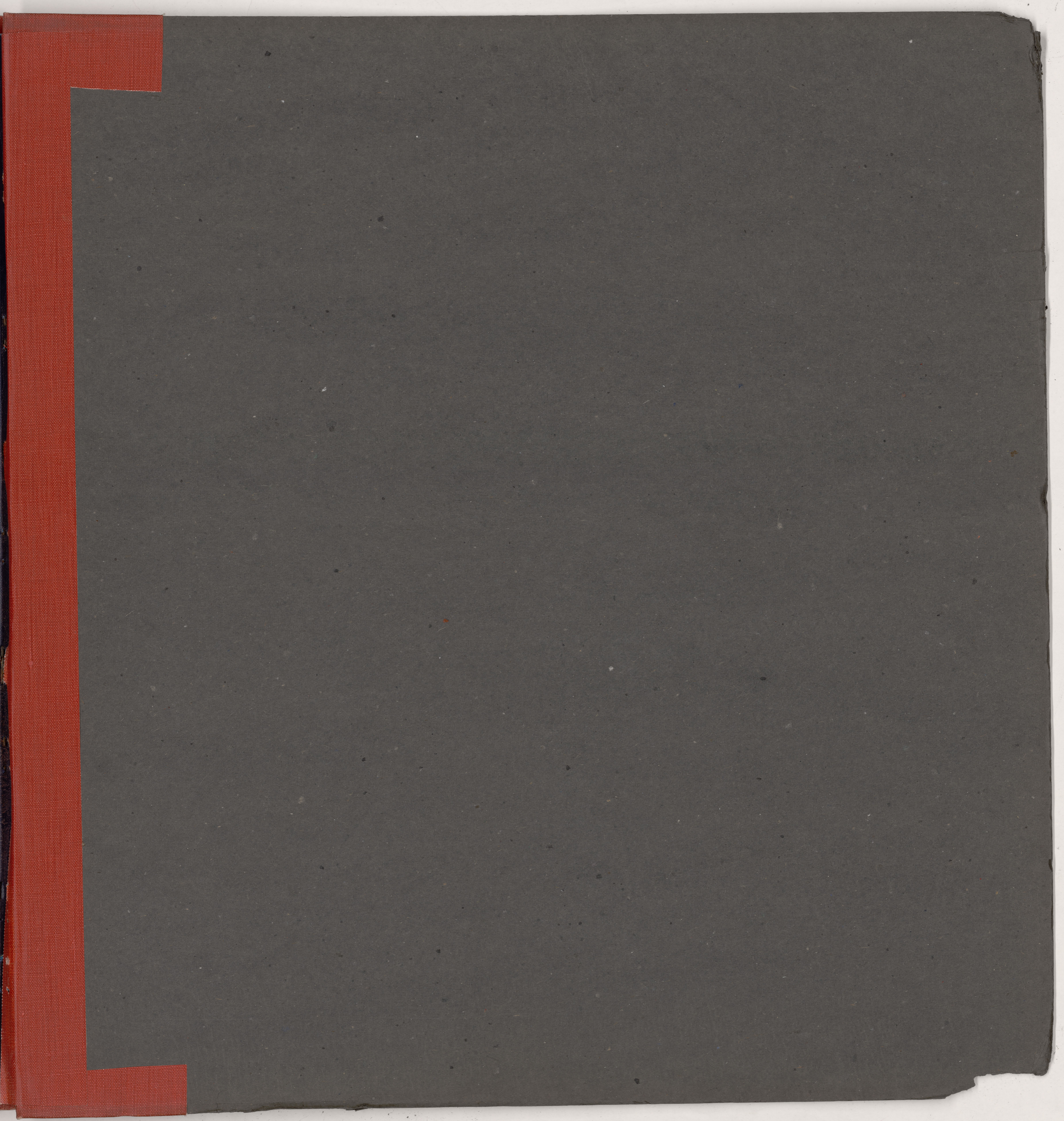
Communications therefore bear the emphasis in this atlas—the only up-to-date, accurate, low-priced work of its kind.

Maps and text are equally authentic. Marthe Rajchman has had available to her official information from Chinese government sources in the United States. The accompanying text has been prepared by members of the staff of *Asia Magazine* intimately acquainted with recent history in China.

The volume opens with two general maps of China showing its position with respect to the rest of eastern Asia and its internal geographical structure. There follow maps of communications between the United States and China, within China, between China and the areas to the north and west, and between China and the countries of southeastern Asia. The great Pacific area from the American shores to the Middle East is depicted in two maps, one of which shows in detail the myriad Pacific islands. The tenth and final map diagrams the distance between principal points in the Far East.

Marthe Rajchman is author or co-author of several notable atlases published in London, including *An Atlas of Far Eastern Politics* (Hudson and Rajchman, Faber & Faber, 1938); *China Struggles for Unity* (Pringle and Rajchman, Penguin Special, 1939); *An Atlas of Today and Tomorrow* (Rado, maps by Rajchman, Gollancz, 1937) and others.

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