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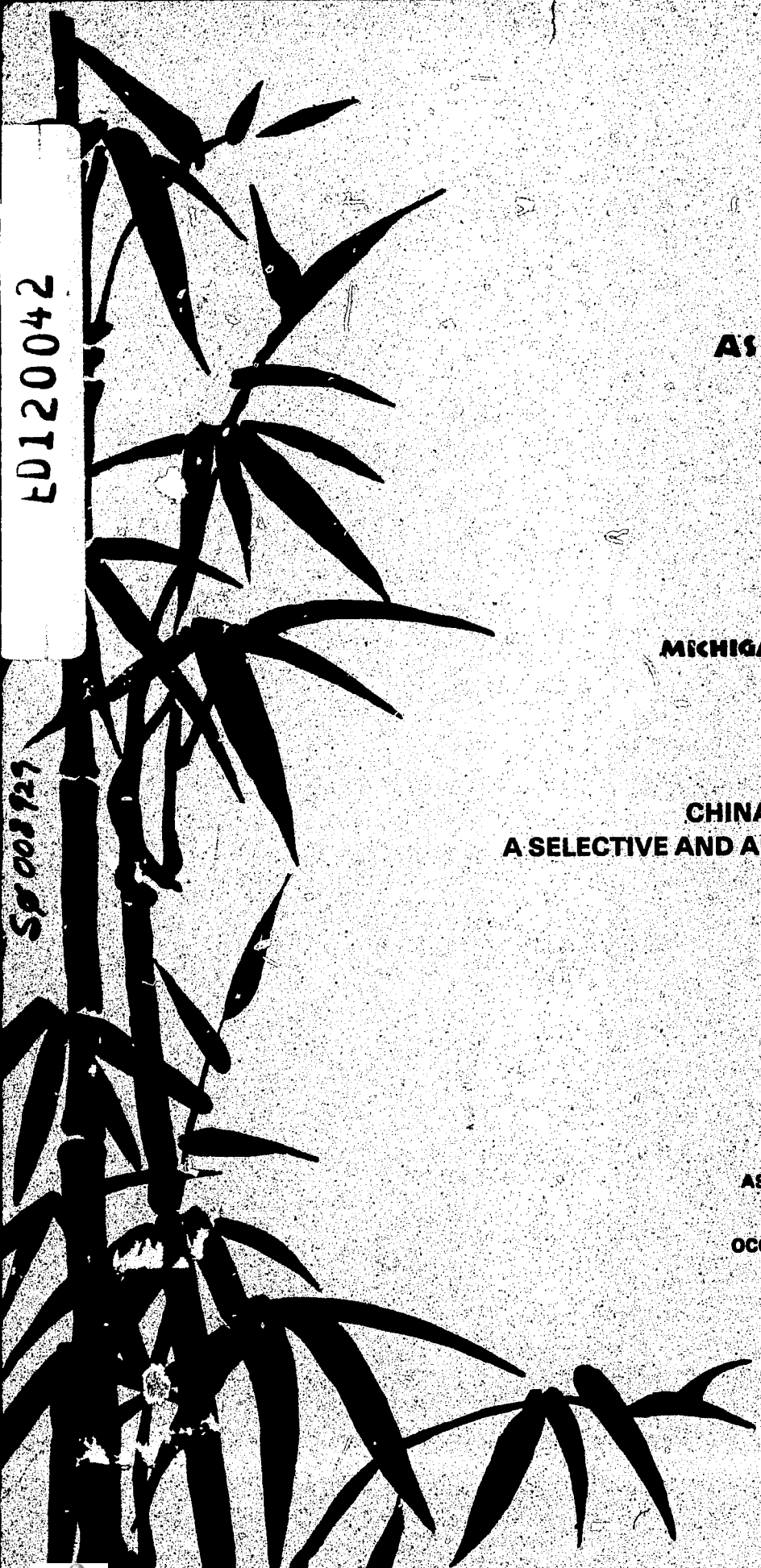
ABSTRACT

This study is an extensive bibliography of government-published maps relating to China that have been produced by the United States, Japan, China, Great Britain, Germany, France, and the Union of Soviet Socialist Republics. Several introductory, narrative chapters discuss the development of modern mapping in China and various mapping activities of the six other countries. The major portion of the document is an annotated listing of map selections from the 20th century. Arrangement is by country. Within each country's section, the map entries are listed alphabetically by agencies and then according to scale. Each map listing includes such information as reliefs, boundaries, hydrography, transportation, cities and towns, and vegetation. Size, number of pages, translation, and general coverage are also included in the general annotations where appropriate. Several appendices conclude the document. (Author/JR)



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CHINA IN MAPS, 1890-1960:
A SELECTIVE AND ANNOTATED CARTOBIBLIOGRAPHY

by

Jack F. Williams

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JACK F. WILLIAMS

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PREFACE

This study and cartobibliography of modern mapping in China was originally written as a master's degree thesis, titled, "China In Maps, 1890-1960: A Selective and Annotated Cartobibliography," in the Department of Geography at the University of Washington, Seattle. In the intervening years, numerous individuals and organizations have requested copies of the study, which could be supplied only in expensive dry copy form. Continued requests for copies prompted me to approach the Asian Studies Center at Michigan State University to publish the study under its East Asia Series of Occasional Papers. The Center kindly agreed to the proposal, and I wish to express my gratitude to them for making this study finally available in an inexpensive soft-cover volume.

Some changes have been made in the original format and content of the study. The textual material has been edited and rewritten in places to bring it up to date, particularly the discussion of China's own efforts in modern mapping activities since 1949. The map annotations and index maps have been rearranged in a format that should make it easier for the reader to quickly find any map entry. No new map entries have been added, however, because of the impossibility of rechecking the map collections of the various libraries and organizations investigated in the original study. Besides, to the best of my knowledge, there have been no major changes since 1960 in the status of map coverage of China available in this country. It is important for the reader to keep in mind, however, that this study does not deal with maps of China published in books and periodicals. The best source for such maps is the American Geographical Society's *Index to Maps in Books and Periodicals* (Map Department, AGS, 1968, published by G. D. Hall & Co.).

J. F. Williams

East Lansing, Michigan
October, 1974

ACKNOWLEDGEMENTS

Space does not permit thanking each and every individual who made a contribution to this study in the form of assistance, information, and advice. Many persons in numerous government agencies, both in the United States and abroad, were of great help in tracking down often elusive data about mapping in and of China, in offering advice, encouragement, and helpful criticism. To all of them I express my sincere gratitude.

Particular thanks go to the staff of the map library at the Army Map Service for the valuable information they supplied as well as for granting me access to their facilities, to the staff at the National Archives, to officials at the U.S. Naval Oceanographic Office, to the staff of the U.S. Geological Service Library, to the staff of the map library at the National Geographic Society. My sincere thanks also to Robert J. Voskuil for his encouragement.

To Walter W. Ristow and the entire staff of the Map Division at the Library of Congress must go special thanks. Since the bulk of the research for this study was done in the Map Division, a successful completion would never have been possible without their kind cooperation and assistance at all times.

To Dr. John C. Sherman, Chairman of the Department of Geography at the University of Washington, goes my greatest thanks, for his constant encouragement, advice, and assistance throughout the course of this study.

My thanks also go to members of the Department of Geography at the University of Washington for their helpful criticism and assistance, especially to Everett A. Wingert for his technical assistance in the preparation of the index maps.

Finally, appreciation goes to Marilyn Wilcox of the Asian Studies Center at Michigan State University for typing and preparing the manuscript for printing.

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CHAPTER I

INTRODUCTION

The need for and value of maps in geographic and other social science research is a well-established fact. Yet, persons desiring the use of maps in such work often are frustrated in their efforts by the lack of information about what maps are available for their particular area of interest and where they may be obtained. The few efforts made to date to rectify this situation, in the form of cartobibliographies, have scarcely made a dent in the void. Cartobibliographies for every country or region in the world would of course be an ideal solution. Unfortunately, only a handful have been produced. Cartobibliographies devoted to modern mapping activities, particularly the mushrooming production of maps that has occurred since the Second World War, are remarkably scarce.

This is particularly true in the case of China. Interviews and correspondence with persons working in the field of geographic and other research on China revealed a strong interest in some form of research tool to aid scholars in their work by making known in a clear, usable form the map coverage of China currently available in the United States.

I. Previous Cartobibliographies

Three cartobibliographies on China are known to have been published. However, all three studies are limited in value because of narrowness of scope, out-datedness, and especially limited availability to users.

The Office of Intelligence, Research and Analysis Branch, of the United States Department of State produced a volume titled, *Map Analysis of Manchuria*, in 1946.[1] This is the best of the three available cartobibliographies relating to China. The volume is really more than just a cartobibliography, since it delves into detailed map analysis of the important topographic maps of Manchuria produced by the United States, Japan, China, Great Britain, Germany, France, and the Soviet Union in the period from approximately 1890 to 1945. It is a very fine study of topographic map coverage of Manchuria, in many cases presenting analyses that only a highly trained intelligence group could attempt. The method of presentation of the data for each series is in a rather loose style, but includes most of the important physical characteristics, such as date of publication, language, scale, marginal diagrams, types of linear scales, major physical and cultural data (including number of classifications for each item). The major asset of this study is the detailed evaluation of each series as to its realiability, coverage, and content. The major limitations include the loose style, which is less effective than a consistent method of presentation would be, the absence of maps produced since 1946, and the restriction of the study to map coverage of Manchuria only.

The Intelligence Division of the British Navy included a brief chapter on map coverage of China in its two-volume study, *China Proper*, for the Geographical Handbook Series produced during World War II.[2] The discussion of map coverage is limited to the few major topographic series produced by the United States, Japan, China, Great Britain, Germany, France, and the Soviet Union up to World War II. The annotation form is generally consistent and includes most of the pertinent data: authority, date, number of sheets, size, projection, meridian of origin and grid or graticule, scale, marginal information, whether colored or black and white, method of relief representation, details of roads, railways, and other information. The chief handicaps of this study are its limited scope, outdatedness, and limited availability.

The third cartobibliography pertaining to China, *A Bibliography of Pacific Area Maps*, was produced by Clifford MacFadden for the "Studies of the Pacific" issued by the American Council Institute of Pacific Relations in 1941.[3] The author examined first-hand the map holdings of eight public and private map libraries in the United States. Though maps of China constitute only a small part of the volume, the study is still a useful one. His criteria for selection of maps to be included are interesting. The maps had to be of recent date, fairly general in character, restricted to western Pacific lands, and fairly readily available to American users in some accessible collection or by purchase. Only his last criteria seemed valid for application to this particular study. His selection was also limited to only the major topographic series produced by the United States, Japan, China, Great Britain, Germany, France, and the Soviet Union up to World War II. His annotation format is quite similar to the British *China Proper* volume, and includes title, scale, number of sheets, size of sheets, language, price, projection, distributor, and insets. The failure to describe any of the physical or cultural data of each series is the major failing of this study.

The chief limitation of all the three cartobibliographies pertaining to China is the absence of any index maps, which are one of the greatest assets of any cartobibliography, as they provide a quick graphic summary of areal coverage of individual maps and series.

Cartobibliographies devoted to other regions or subjects revealed additional variations in style and content. Goodman and Ristow produced an excellent one, *Marketing Maps of the United States*. The second edition of this study, published in 1952, contains 387 map entries arranged by area. The annotation format is brief but effective, and includes title, authority, date, size, scale, and a brief note on the data shown on each map. The authors make a significant statement regarding the annotation of each entry, "The brief annotations are not meant as appraisals of the maps, but as additional descriptive information which may be helpful to a prospective user.[4]

Tobler, in his *Maps of the United States*, published in 1959, presents an informal survey of some of the major United States mapping agencies and their most important map products.[5] His format includes a brief description of the history of the agencies, the major map publications, how and where to obtain the maps, as well as a brief rundown of coverage, scale, major data shown, plus index maps and sample sections of maps.

Sir Herbert Fordham, in his relatively old work, *Studies in Cartobibliography*, 1914, presented his recommendations for the desirable format of a cartobibliography. He felt map entries should be indexed by one of three ways: title, publisher, or date of publication.[6] Additional data that should be shown are: exact dimensions, scale, draughtsman and/or engraver, a general description of the map (character of border, orientation of the map, meridian used, method of indication of latitude and longitude), plus the principal details in the composition of the map surface (divisions shown, the hydrography and transportation, centers of population and government, minor details). Almost all of his recommendations are valid even today.

The most valuable cartobibliography to serve as a guide for this study, however, was Black and Vogel's *Maps and Mapping Agencies in Washington State*.[7] Black and Vogel devised a logical, functional style that could be applied to almost any cartobibliographic study with only minor modifications to suit individual needs. Though an investigation of map coverage of China had to follow a somewhat different procedure from an investigation of map coverage of Washington State, nonetheless, the objectives of their study, their annotation form, and their discussion of various mapping agencies followed a pattern that was significantly helpful to this study.

II. Objectives of the Study

An examination of previous cartobibliographies brought to light the necessary steps to be followed in the course of this study in order to present a complete and clear discussion of modern map coverage of China. These steps, five in all, constitute the purpose of the study:

(1) To determine the countries and their respective mapping agencies involved in mapping activities in China and/or producing maps of China.

(2) To determine the nature of these agencies and their activities.

(3) To determine the exact map coverage of China that has been completed and is available to prospective users.

(4) To record the physical characteristics of these maps.

(5) To establish the location of sources and the availability of maps from these sources.

III. Source Materials

Source materials for the study fell into four categories:

(1) Map collections.

(2) Books, periodicals, and other source materials in libraries.

(3) Questionnaires and letters of inquiry.

(4) Interviews.

Since this study is primarily a bibliography of published maps, it follows that the prime source of data would be map collections. First-hand examination of maps was necessary in order to determine what maps had been produced and which of those maps were to be included in the study. The major collections of maps of China are maintained on the east coast of the United States, principally in Washington, D.C. and New York City. Therefore, an investigative trip was made to examine first-hand those map collections, particularly that at the Library of Congress.[8] Several thousand maps were examined in the course of the investigation. Those collections examined, as other sources of data subsequently substantiated, represented the majority of the map coverage of China available in this country.

Textual sources of data proved skimpy and were limited to a small number of books, periodicals, and other source materials in various libraries around the country, plus data provided by scholars and officials in this country and overseas.

Early in the course of the study a questionnaire was sent to all the map libraries in the United States and Canada that were believed to contain collections of maps of China in an effort to obtain as many potential sources as possible where a person could obtain the maps listed.[9]

In addition, letters of inquiry were sent to persons known to be involved in or else acquainted with the mapping activities in China of their respective countries.

One other source, interviews, came into use, particularly during the investigative trip to the east coast. These interviews were of necessity confined to officials in United States federal mapping agencies or to persons in map libraries acquainted with the problem under study. While not a major source of information, those interviews conducted proved to be sources of useful supplemental data.

IV. Map Limitations

Intensive examination of the four primary sources listed above produced a prodigious quantity of data. It was found that map publications relating to China could be divided into four major categories:

(1) Government map publications.

(2) Individual or private organization map publications.

(3) Maps appearing in books, periodicals, etc.

(4) Atlases.

The quantity of these four groups of publications is so immense it would have required almost four separate volumes to include them all in this study. Space and time limitations necessitated limiting the scope of the present volume. Since this study began primarily as an investigation of topographic map coverage of China it was decided to limit the initial phase of this study to government map publications.

1. *Secondary Map Limitations*

Of the government map publications examined, the following maps were excluded from this study:

Maps produced by countries *other* than the United States, Japan, China, Great Britain, Germany, France, and the Soviet Union. The major mapping activities in and map coverage of China during the twentieth-century have been undertaken by these seven countries. Other countries have participated to lesser extents, such as Italy, Portugal, Sweden, Belgium, Poland, etc., but their mapping activities were of such a small nature that it was deemed advisable to delete discussion of them.

2. *Further Map Limitations*

Of the major government map publications of the seven countries, further map limitations (maps not to be included) were decided as follows:

(1) Maps produced prior to 1890 (approximately), excluding hydrographic charts.

(2) Maps with data insufficient to make an adequate annotation possible.

(3) Maps with poor legibility or of obviously poor quality.

Modern, Western-style map coverage of China dates essentially from the mid-19th century. However, the major production of maps did not really get into full swing until nearly the end of the 19th century. Virtually all the important topographic series, as well as other important maps, date from 1890 and later. This cartobibliography was not restricted to maps of recent date only because to do so would be to deprive readers of this study of a vast quantity of excellent maps that are still highly useful. In many cases, maps produced long before World War II are the only available maps for certain areas. Thus, for the purposes of this study, maps to be included have been limited to those produced after 1890 approximately.

Maps with insufficient data to make an adequate annotation possible were not included. Three items of data -- authority, scale, and date -- were considered essential and no map lacking one or more of them, unless

the map was particularly outstanding, was included. In many cases maps were included which had no legend, if the maps were considered useful and especially if they were similar to other maps for which legends were available.

Maps which had such poor legibility as to make annotation of them very difficult or the quality of which was so obviously poor (e.g. drafting technique, symbolism, etc.) as to seriously limit their usefulness were not included.

FOOTNOTES

1. *Map Analysis of Manchuria* (Washington: U.S. Department of State, Office of Intelligence, Research & Analysis, R. & A. No. 3042, 1946).

2. *China Proper* (London: British Naval Intelligence Division, Vol. I, Geographical Handbook Series, July, 1944).

3. Clifford MacFadden, *A Bibliography of Pacific Area Maps* (American Council Institute of Pacific Relations, 1941).

4. Marie Goodman and Walter Ristow, *Marketing Maps of the United States* (Washington: Library of Congress, 1952), p. v.

5. Waldo R. Tobler, *Maps of the United States* (Seattle, 1959).

6. Sir Herbert Fordham, *Studies in Cartobibliography* (Oxford: Clarendon Press, 1914), p. 98.

7. Ralph Black and Howard Vogel, *Maps and Mapping Agencies in Washington State* (unpublished master's thesis, University of Washington, 1956).

8. See Appendix A for list of map libraries visited.

9. See Appendix A for list of locations of map collections of China.

CHAPTER II

THE DEVELOPMENT OF MODERN MAPPING IN CHINA

A modern, well-planned mapping program is a fundamental requisite to any nation's development strategy. The government of the Peoples Republic of China (PRC) is well aware of this, and since 1949 has instituted a vigorous and effective mapping program that has been of great assistance in many facets of the country's development strategy, praticularly such aspects as mineral resource exploration, transportation development, water resources development, reforestation and soil erosion control. This chapter presents a brief examination of the development of modern mapping in China, which began with the activities of the colonial powers in the late 19th century. China's own mapping efforts date essentially from the 1930's under the Nationalist government, efforts that were greatly expanded by the PRC government after 1949.

I. The PRC's Inheritance: Chinese Mapping Activities Up to 1949

The Chinese have a long tradition in cartography, dating back at least to the time of Pei Hsiu (224-271 A.D.), often called the father of scientific cartography in China.[1] Through succeeding centuries, while the cartographic tradition declined markedly in Europe, the Chinese developed cartography to a remarkably high level, of which the *Yu Chi T'u* (Map of the Tracks of Yü The Great), carved in stone in 1137 A.D. during the Sung dynasty, is one of the most outstanding examples.[2] More modern cartographic techniques were brought to China by the Jesuits, and from 1707-17 the Emperor K'ang-hsi commissioned a group of Jesuit fathers to carry out a survey of the Chinese empire. The result was the best map ever made of Asia up to that time.[3] In spite of this long tradition, however, modern planimetric and topographic mapping as we know it in the West was not commenced by the Chinese themselves until the turn of the twentieth-century, when the Manchu government established the Military Survey Institute (1902).[4] A 1:1000,000 series was planned by this agency and 60 per cent of the country was said to have been surveyed, though not very well nor in very great detail. A 1:50,000 series was also started. None of these early publications are currently available; they were reportedly based on the old surveys made by the Jesuit fathers decades earlier and were not too reliable.[5]

Mapping Activities By The Nationalist Government

The Manchu government was never very aggressive in its mapping activities. It was not until the Revolution of 1911 that the Chinese took a new look at mapping needs in China. Unfortunately, these mapping activities were conducted by a variety of independent agencies and bureaus that often failed to coordinate their operations and plans with one another. Unquestionably, the chaotic political/military situation in China was the major factor behind the lack of

coordination in mapping. With no central government in effective control of all of China, each province was left to its own devices, to carry out the mapping needs of its own area as it saw fit. Up to 1916, no province had even begun geodetic surveying.[6] When the provincial governments finally did start to work, each province had its own plan and style of mapping, including its own datum plane. The result was a mixture of often inaccurate, poorly drawn, incomplete topographic series that were impossible to match up with ones of different provinces.

With the success of Chiang Kai-shek's Northern Expedition of 1927 and the establishment at last of a more effective central government, the first major thrust of modern Chinese mapping took place, lasting until the Sino-Japanese war of 1937-45. These activities can be divided into three phases or classes: engineering surveys, cadastral surveys, and military surveys.

Engineering surveys were carried out mainly by hydrographic institutions, such as river conservancy commissions. These surveys were generally limited to narrow strips of land along the courses of rivers. Some railway survey work was also conducted, mainly by various railroad administrators, until 1943 when the Central Bureau of Railway Surveying under the Ministry of Communications took charge of all preliminary railway surveying work.[7]

Cadastral surveys in the early years of the Republic were under the direction of very prominent persons, rather than specific agencies. In 1928 the provincial governments took charge of cadastral surveys, each province again proceeding independently of central planning and control. Not until 1942 was a semblance of unity achieved, when the Ministry of the Interior established a Central Bureau of Cadastral Administration. Cadastral surveys throughout the period from 1911 to 1945 were limited mainly to congested urban areas.[8]

Military surveys, or topographic surveys, were the most actively pursued of the three phases of mapping acitivities. In 1928 the Central Bureau of Land Survey (CBLS), under the Army General Staff, was established as the primary agency for planning and carrying out the major topographic surveys of the country, as well as directing and coordinating the mapping efforts of other government agencies. Shortly after its establishment, the CBLS drew up plans, rules and regulations for geodetic surveying. First-order triangulation was begun in 1929 in Chekiang province, and in 1931 large scale triangulation projects were also started in Kiangsu, Anhwei, Hupeh, Hunan, and Kiangsi. However, because of the urgent demand for maps in many regions, topographic surveys were often started before the points of higher-order triangulation were supplied for control. Discrepancies in the junction areas of adjacent sheets were thus quite common.[9] The CBLS also made efforts to coordinate the various datums in use before 1928 but its success was limited.[10]

The CBLS adopted Lambert's conformal conic projection as the standard projection for its series, and in 1928 adopted the 1:50,000 scale for its standard topographic series.[11] Scales at 1:25,000 and 1:10,000 were used

in very limited areas. Series at 1:100,000 were of a reconnaissance nature and were generally compiled from other sources rather than from original surveys. By 1947, 8,000 sheets at 1:50,000 were completed, according to Chinese reports.[12] With approximately 24,000 sheets needed to cover the entire country, this represented one-third of the country mapped at large scale by 1947. The bulk of this coverage was for the eastern half of the country. The Bureau of Land Survey also compiled a 1:1,000,000 series on China, excluding the outer provinces, using the 1:1,000,000 maps drawn during the K'ang-hsi and Ch'ien-lung periods of the Manchu dynasty, and which was not very accurate.[13] Using these 1:1,000,000 sheets, plus the 1:50,000 sheets, the CBLS compiled a 1:300,000 series for all of China, excluding Tibet.[14] Numerous other series were produced by the CBLS for various areas of China.

Almost without exception, however, the topographic maps produced by the CBLS were of a generally inferior quality, especially compared to foreign map publications of the same area. This poor quality was due to many factors, including lack of funds, inadequacy of facilities, insufficient numbers of skilled personnel, lack of modern printing methods and equipment, outdated cartographic techniques, and lack of uniform cartographic standards.[15] Equally important was the unstable political/military situation that seriously hampered the carrying out of effective mapping programs.

The U.S. Army Map Service classified Chinese maps, particularly those produced by the CBLS, into one of two categories: "New Style" sheets, and "Old Style" sheets. Sheets published prior to 1935 were classified as "Old Style" and were maps generally produced before the CBLS exercised much control over the various agencies.[16] Thus the "Old Style" maps varied enormously in format, sources of data, grids, and reliability. "New Style" sheets were those published after 1935 and had a fair degree of reliability, as they mostly were made by or under the supervision of the CBLS.[17] Aerial photography was used to some extent in these series. Nevertheless, even "New Style" maps were inferior to comparable Japanese or American Maps in reliability. Limited numbers of these Chinese topographic maps can be seen in the Map Division of the Library of Congress.

Attempts to improve the quality of their topographic surveys were made by the CBLS after 1928 through the use of aerial photography. First begun in 1931, aerophotogrammetry was not used much until 1934, with surveys of railroads and strategic areas, and especially for irrigation development. Up to 1937 the CBLS had a maximum of nine planes flying aerial surveys. However, aerial photography by the Chinese never really progressed very far. The Nationalist government ceased aerial photography in 1940. It was only resumed in 1944 by the United States.[18]

In 1943 the CBLS was raised in status and the name changed to the Fourth Department of the Board of Military Operations of the Chinese National Military Council. Mapping activities were seriously curtailed during the war years from 1937-45. Attempts to resume operations, as part of post-war reconstruction, were curtailed by the civil war with the Communists.

Ater the Nationalist government retreated to Taiwan in 1949, the principal mapping agency was renamed the Survey Bureau of the National Defense Department. Using captured Japanese 1:100,000 maps, the Survey Bureau produced topographic series on several provinces of eastern and northeastern China.[19] In 1950 the Bureau reprinted sheets of the 1944-45 Army Map Service series at 1:250,000 for parts of southeast China. Reprints of earlier series on the mainland were also published, revisions being based on aerial photo surveys shot during and after the war in cooperation with the United States, or surveys taken clandestinely by high altitude craft after 1950. Nevertheless, the Nationalist government since 1949 has been concerned primarily with mapping Taiwan itself, building on the excellent foundation laid by the Japanese. Maps produced on Taiwan since 1949 show the strong influence of American mapping, particularly publications of the Army Map Service. Taiwan is now unquestionably one of the best-mapped areas of China.

A number of other Nationalist government agencies have produced maps of China at various times. All the maps published by these agencies are thematic, special-purpose maps at a wide variety of scales. Those agencies whose maps are generally available in the United States, particularly at the Library of Congress, are listed below, along with the general time period in which each agency actively published maps, as far as is known:

Bureau of Roads, National Economic Council of China, 1930's.

Chihli River Commission, 1920's, 1930's.

Geographic Section, Natural Science Research Institute, National Central University, 1940's.

Ministry of Communications and Public Works, 1940's.

Provincial Survey Offices:

Chekiang, 1911-1940.
Kwangsi, 1930's.
Kwangtung, 1920's - 1930's.

Taiwan agencies; 1950 - present:

Agricultural Research Institute
Department of Civil Affairs
Highway Bureau

The Naval Hydrographic Office of China - continues to publish hydrographic charts for the coast of China.

In addition to government agencies, a number of private or quasi-private organizations were active in the Nationalist period in the publication of maps, for the most part physical/political in nature, generally at medium to

small scales. Four of these organizations whose maps are generally available in this country are:

(1) *Jih Hsin Geographical Institute*, Shanghai, 1930's.
(2) *Ya Hsin Ti Hsueh She*, Wuchang, 1920's - 1930's.
(3) *Ya Kuang Geographical Society*, 1940's - 1950's.
(4) *Chinese Map Service*, 1950's.

Mapping Activities By The Colonial Powers

In 1949 the communist government not only inherited the map coverage produced by 20 years of Nationalist mapping efforts. They also inherited map coverage produced by the colonial powers that had been active in China for a century or more. These included most of the European nations, plus the United States and Japan. However, of these, only six were engaged in mapping programs to a major degree -- the United States, Japan, Great Britain, Germany, France, and Russia. Of these six, the first four were the most important in terms of the quantity and quality of their output.

Prior to 1900 virtually no reliable topographic map coverage existed, Chinese or Western, with the exception of a few scattered topographic maps produced by foreign explorers and scientists. After 1900 the rapid increase in Western and Japanese expansionism in China produced a gradual increase in foreign mapping activities. Germany, France, Great Britain, and Japan were the most active in the period before World War I. Germany was eliminated after that, when Japan took over most of her interests in China. The United States and Russia were also increasingly active in the inter-war period. The 1930's saw Japan definitely take the lead over all other countries, especially in Manchuria and north China. It was World War II, however, that caused the greatest surge of mapping activities, primarily by the three major contending powers in the area -- the United States, Japan, and Great Britain. In the post-war period, only the United States has remained as a major producer of maps of China.

From a spatial viewpoint, the mapping activities of the foreign powers followed rather closely the political, economic, and military developments of the period. All foreign government mapping activities began along the coast of China, developing from the stage of hydrographic charts and then plans of concessions in the treaty ports, followed by city plans of entire treaty ports. Later, as the penetration of China continued, mapping activities spread along the rivers and railways and soon involved topographic surveys of whole provinces and spheres of influence. In terms of comprehensiveness of coverage, variety of scales, and length of period during which mapping activities were carried on, Taiwan and Manchuria would definitely rank as the best-mapped areas in China up to 1949. Much of north and east China would follow, and then much of South China. The quality and extent of coverage for western China, including Tibet, Sinkiang, Yunnan, Chinghai, and Kansu, was considerably below that for the eastern half of the country.

How many of the maps produced by the foreign powers were captured or obtained by the PRC government after 1949 is not known, but undoubtedly the mapping achievements of the foreign powers were of at least some benefit to the new Chinese government's own mapping programs. The mapping activities of the foreign powers in China are examined in more detail on pages 47-80.

II. Development of Mapping in the PRC

All available evidence indicates that the PRC has assigned a high priority to the development of mapping in general, and especially to the development of an accurate and complete topographic mapping program for all of China, including the previously much-neglected outer provinces. Mapping activities in China since 1949 can be discerned under four major categories of organizations and institutions: government agencies, scientific academies, professional societies, and institutions of higher education.

Role of Government Agencies

The government, not surprisingly, is by far the most important agent in the field of mapping in China today, as is the case in most countries. From 1949 to 1956 mapping activities were left to the individual agencies and government ministries as needs arose. Topographic maps, for example, were produced by the Ministry of Geology and the Ministry of Water Conservancy, both of which were established in 1949.

Then in 1956 the PRC set up the State Bureau of Surveying and Cartography (BSC), under the direction of the State Council (see Figure 1). The specific duties of the Bureau were designated as:[20]

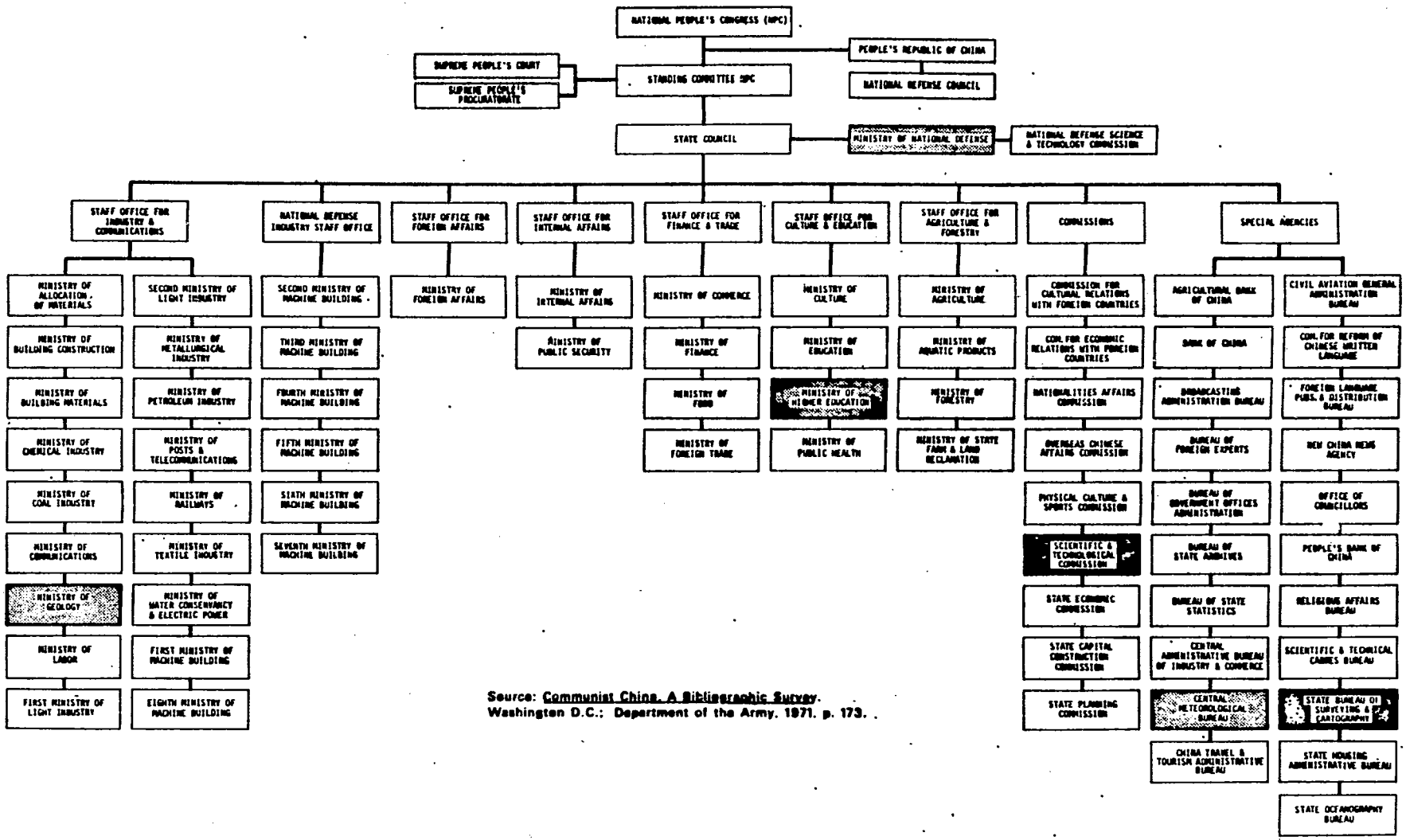
(1) The compilation of unified annual and perspective plans for the geodetic, gravimetric, aerophototopographic, cartographic, and map publishing operations in the country.

(2) The development of unified instructions, directions, and conventional signs for use in topographic, geodetic, and cartographic work.

(3) The performance of basic geodetic and gravimetric work and topographic surveys of general importance to the state; effectuation of unified methodical supervision of topographic and geodetic work performed by the various organizations engaged in economic construction, and the regulation and reception of the work of these organizations.

Fig. 1

GOVERNMENT ORGANIZATION OF THE PEOPLE'S REPUBLIC OF CHINA



Source: Communist China. A Bibliographic Survey. Washington D.C.: Department of the Army. 1971. p. 173.

(4) The gathering, recording, systematization, analysis, and storage of astronomical, geodetic, gravimetric, aerophoto-topographic, and cartographic materials and map originals.

(5) The compilation and publication of scientific and technical literature on geodesy, aerophotography, and cartography; textbooks for colleges and topographic technical schools; publications of catalogues listing coordinates of geodetic points and maps of various scales and purposes.

(6) The training of technical personnel in the geodetic, aero-phototopographic, cartographic, and map publishing specialties, rendering assistance to other educational institutions in the training of personnel in the topographic-geodetic field.

(7) The organization of scientific research in geodesy and cartography, rendering assistance to instrument manufacturing plants in the production of experimental geodetic, photogrammetric instruments and devices.

Numerous mapping agencies are under the direction of the BSC, such as the Board of Geodesy and Cartography, the Military Topographic Administration, the State Geodetic Service, plus the individual survey offices maintained by the separate provincial governments.[21] Unfortunately, none of the publications of any of these agencies are available outside of China.

The one small exception is the State Map Publishing House, with headquarters in Peking. It also is under the supervision of the BSC. Its duties are essentially the compilation and publication of small-scale maps and atlases.[22] A very good series of general topographic/political maps, at small scales, of most of the provinces and larger regions was published in the late 1950's and is available in this country at the Library of Congress. Other general, small-scale maps are available. These few available examples of post-1949 Chinese maps show a definite Soviet influence in terms of appearance and style.

The Chinese have claimed impressive accomplishments in the spread of a geodetic net over the country, in aerial photo coverage completed, and topographic series published. The primary objective in the early part of the 1950's was to establish a geodetic base for topographical surveys on a scale of at least 1:100,000. By 1957 half of the country was said to be covered with new topographical surveys on scales of 1:50,000 and 1:100,000. The accuracy of the levelling accomplished during the first Five-Year-Plan was said to fall between first and second order.[23]

As early as the mid-1950's aerial photography and photogrammetry began to be adopted by the Chinese mapping agencies, with the encouragement and assistance of the Soviet Union.[24] Since then air survey subdivisions and

extensive photogrammetric operations have been created in the major agencies, reportedly using quite modern equipment and facilities. Today the emphasis is on stereotypographic surveying. In June, 1953, the Forest Survey Board of Aerial Photography was established.[25] Extensive photo surveys were made by this agency in the 1950's in northeast, northwest, and southwest China for use in the country's reforestation and forest management programs.[26]

The Bureau of Surveying and Cartography had ambitious plans for geodetic and cartographic operations in China during the 1960's. It called for the completion of the construction of first-order triangulation for the entire country by the end of 1961. By 1967 it was hoped that complete topographic map coverage of China would be finished. This coverage was to be on three principal scales:[27]

1:25,000	Strategic areas (major industrial and urban centers)
1:50,000	Remaining densely populated and economically developed areas
1:100,000	Desert, mountainous, and high-altitude areas

In addition to these series, some urban areas were to be mapped at scales as large as 1:500, especially after 1967.

How much of this work was actually accomplished is impossible to say. It is conceivable that the general collapse of the economy following the Great Leap Forward of 1958-59, and the setbacks following the Cultural Revolution after 1969 had some effect on the national mapping program. Nevertheless, if the Chinese did not meet their goals for mapping in the 1960's, they should likely achieve them in this decade.

Considerable mapping activities are carried out by a variety of other government agencies and ministries, at various levels of administration, from national down to provincial and local levels. The Ministry of Geology (see Figure 1) is one of the most active, particularly through its Institute of Geophysical Prospecting, which has had a major role in the exploration for mineral resources in the last two decades.[28] Other ministries and agencies that are believed to be involved in mapping, but to undetermined degrees, are the Central Meteorological Bureau, the Ministry of Agriculture, and various ministries under the Staff Office for Industry and Communications. The rather all-encompassing responsibilities assigned to the Bureau of Surveying and Cartography when it was created in the 1950's (see p. 12) seem to imply that the mapping activities of other government agencies fall under its general jurisdiction, although the BSC appears to be primarily concerned with basic planimetric and topographic mapping in terms of actual publishing of maps itself. Thematic mapping seems to be carried out primarily by other agencies, as well as non-governmental organizations (see below).

The role played by the Ministry of Defense in China's mapping programs is not entirely clear. Undoubtedly, the Ministry has an important voice in the planning of mapping programs to be carried out by the BSC, but it is not known if the Ministry of Defense carries on its own mapping programs independently of the State Bureau. It is well known that the military, through the Peoples Liberation Army, are actively involved in field operations connected with national mapping programs, as evidenced, for example, by pictures of PLA men carrying out such activities in popular-level publications such as *China Reconstructs* and *China Pictorial*. Given the importance of maps to national defense, and the increased importance of the PLA in all phases of national life since the Cultural Revolution, it would seem a safe assumption that the military establishment, through the Ministry of Defense, plays a decisive role in all levels of mapping programs in China today.

One government organization that has a very important voice in China's total research and development program, including mapping, is the Scientific and Technological Commission (see Figure 1), which was created in 1958 and put in charge of all research and development in science and technology. In other words, the Commission is the supreme organ in decision-making in science.[29] Apparently, it sets broad policy guidelines, but leaves the actual implementation of policies to the individual organizations. Hence, in terms of mapping programs, the general guidelines would be set by the STC and passed down to the BSC, which would in turn supervise the mapping efforts of other government ministries and agencies. Figure 2 shows the general organization of science and technology under the Scientific and Technological Commission.

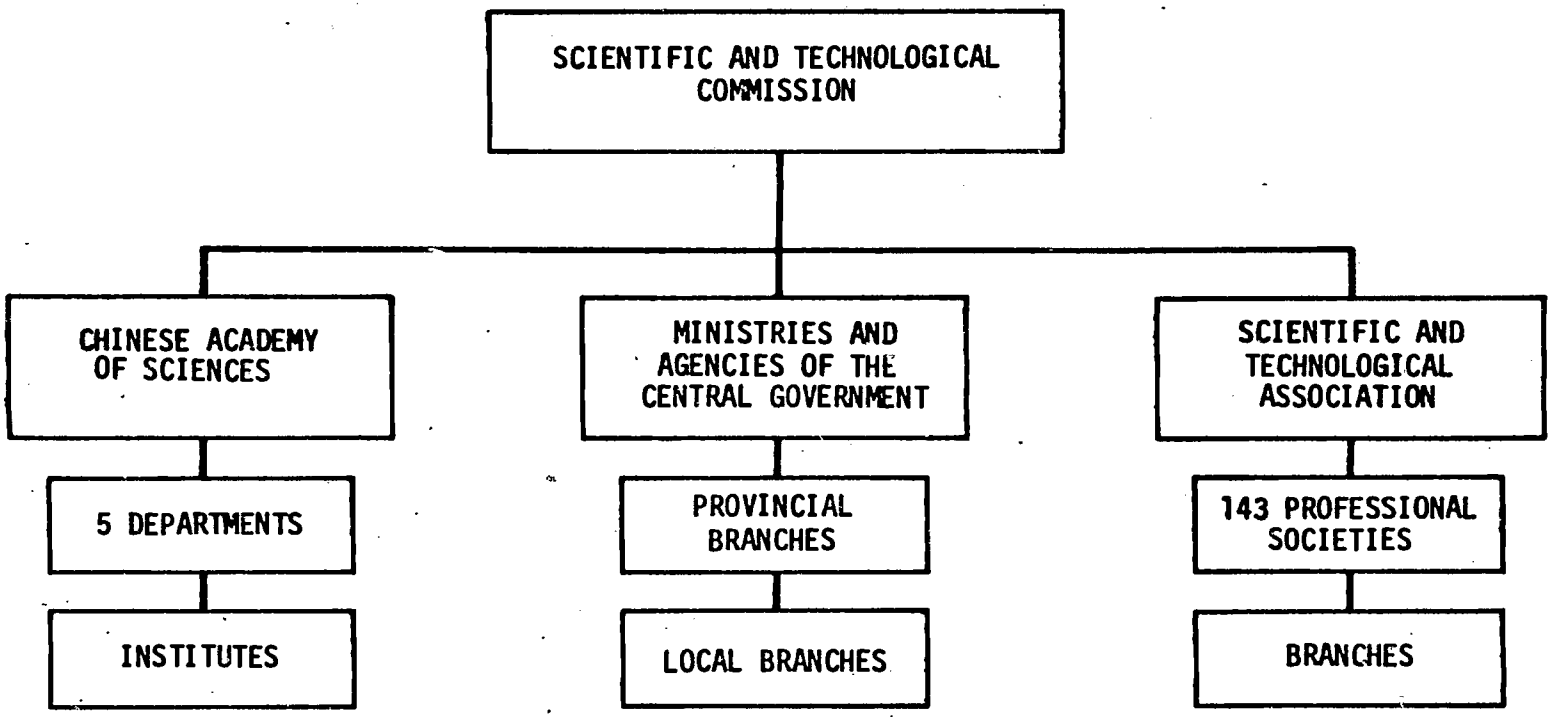
Role of Scientific Academies

Mapping activities in this category are carried out under the aegis of the Chinese Academy of Sciences, which was created in 1949 by the merger of the Academia Sinica and the Peking Academy of Sciences and was made more or less independent in 1954.[30] There are five branches within the Academy of Sciences, and it is the Earth Sciences Branch that is the most involved in mapping activities. This branch has several divisions itself: the Institutes of Geodesy and Geophysics, Geology, Geophysics, Geography, and Pedology. The Institute of Geography is probably the most important in mapping activities, in tune with the general thrust of geography in China since 1949 -- the channelling of research along physical and economic lines with heavy emphasis on applied studies that can be of direct benefit to the nation's economic development. Cartography has played an important role in this.[31]

The Institute of Geodesy and Geophysics was originally the Geodetic Surveying Division of the Institute of Geography, Nanking, before becoming independent in 1957 when it was renamed the Institute of Geodetics and Cartography and moved to Wuhan. Around 1963 it was renamed again to its present form. Its activities include astronomical and geodetic surveying, aerial surveying, cartography, and gravity surveying. The Institute has been one of the more important agencies involved in basic aerial triangulation and the development of photogrammetry.[32]

Fig. 2

ORGANIZATION OF SCIENCE AND TECHNOLOGY IN CHINA



Source: Directory of Selected Scientific Institutions in Mainland China (1970).

The Institute of Pedology has been active in the classification and mapping of soils in China, among other research projects.[33] Geologic maps were published in China as early as 1911 by a geological section in the Department of Mines. Extensive geologic mapping programs were not begun until 1916, when the National Geologic Survey was founded.[34] Unlike the United States Geological Survey, however, the National Geologic Survey in China never had the responsibility for basic topographic mapping, but was confined instead to purely geologic mapping. A 1:1,000,000 series was planned for China in the 1920's but only three sheets of it were actually published. The Geologic Survey was never a major producer of maps. In 1950, the Survey was reorganized as the Institute of Geology and moved to Peking. It has since been quite active in a variety of geologic mapping projects, such as the loess in northern China, alluvial mineral deposits, and soils along the Yangtze River, to cite just a few.[35]

Role of Professional Societies

Professional societies, of which there were 143 known to be active as of the end of 1966, are also involved in mapping, particularly from the research viewpoint. These societies are all members of the Chinese Scientific and Technological Association (CSTA; not to be confused with the Scientific and Technological Commission, p. 16).[36] The CSTA theoretically is an independent non-governmental organization consisting of scientists and technicians, although it still falls under the general jurisdiction of the Scientific and Technological Commission. Among the important societies in the CSTA, in terms of mapping and cartography, are the Chinese Society of Cartography and Geodesy, the Chinese Society of Geology, the Chinese Society of Geophysics, and the Chinese Society of Geography. The Society of Cartography and Geodesy was established in 1956 and has committees that deal with aerial photography, cartography, engineering survey and geomorphology, and geodetics. Results of their research work are published in *Acta Geodetica et Cartographica Sinica*, a quarterly journal.[37] The Society of Geology has been active in research on mineral prospecting and other geologic activities involving output of maps.[38] The Society of Geophysics has been concerned with such things as producing a map of earthquake distribution.[39] The Society of Geography has special committees on cartography, climatology, economic geography, geomorphology, and natural geography.[40]

Role of Institutions of Higher Education

The Ministry of Higher Education is also involved in mapping, but primarily in terms of training personnel for work in surveying and mapping. One of the most important schools for this kind of training is the Wuhan College of Surveying and Cartography, established in 1956. It has departments dealing with aerial survey, astronomical and geodetic survey, cartography, engineering survey, and hydraulic engineering.[41] Cartography is taught in other schools and universities, of course, but usually as a part of departments of geography, such as at Peking University or Nanking University.[42]

III. Mapping Activities of the United States in China

The United States was a relative late-comer in commencing systematic mapping programs in China. Although the United States has had political relations with China since the mid-1800's, it was not until the Second World War that the United States really got involved in major mapping programs in China. These mapping efforts, as with the other Western powers, grew in direct proportion to the degree of involvement in the internal affairs of China.

Maps produced by the United States prior to World War II were generally of a thematic nature, although a few topographic maps were published. The chief publications of these years were special maps produced by diplomatic and military personnel in China, or various economic and political maps by a small number of agencies. The major characteristic of nearly all these maps was the fact that they were produced by agencies or individuals whose primary responsibilities were not mapping. Thus, these maps were not part of any systematic plan for extensive map coverage of China. Most were designed to meet individual, immediate needs.

The dangers of such a situation became immediately apparent with the outbreak of the Sino-Japanese War and later World War II. The United States, as the principal opponent of Japan's ambitions in the Pacific and in China, was totally unprepared to meet the insatiable demands for maps of all kinds for use in the prosecution of the war. The United States met the challenge, however, and became the world's major producer of maps of China, a position it has maintained to the present day. With the advent of the war the number of agencies involved in producing maps of China, the number of personnel employed by these agencies, and the quantity and quality of maps published all increased enormously. The Army Map Service became the chief producer of topographic maps, the Naval Hydrographic Office the chief producer of hydrographic charts, and numerous other agencies produced thematic maps of every conceivable type and subject.

The first of these war maps were mainly direct copies of maps produced by other countries that had done mapping in China to a much greater extent than the United States up to that time. This was particularly true in the case of topographic series, for which the products of the Germans, French, Russians and others were especially valuable. However, as the War progressed and the demands grew for maps of many areas never before systematically or accurately mapped, the United States sought other means of obtaining data for the compilation of its topographic series.

This was achieved mainly through the use of aerial photography, which received an enormous jump in its development because of the war effort. Unfortunately, in the rush to obtain topographic coverage of large areas of China, reconnaissance flyers had no means of controlling their aerial photography except by beginning at the coast and flying straight inland. It is reported that this attempt at control was so poor, however, that 85 per cent of the aerial photos taken had to be discarded after the War.[47]

In 1944, the United States, under the Sino-American cooperation agreement, signed the "Agreement on Aerial Photography in China" with the Nationalist government. Under this accord, the Chinese and Americans planned a full-scale, systematic mapping program to provide extensive map coverage of China. The Chinese were in charge of ground surveys, while the United States was in charge of aerial-photogrammetric surveys and the actual production of the maps.[44]

No records are available to determine the extent to which this agreement was carried out. It is known that the Army Map Service conducted an extensive aerial photography/mapping program commencing with the end of the war, but the fall of the mainland to the Communists in 1949 cut short the ambitious program of the Nationalist government and the Americans.

Since 1949, nevertheless, the United States has continued its mapping program of China, almost entirely by use of aerial photography. Today, the United States is the sole non-Communist nation (with the possible exception of Nationalist China) known to be continuing extensive mapping of China. Some of the more important U.S. mapping agencies and their activities in relation to China are discussed below.

The Aeronautical Chart & Information Center

The Aeronautical Chart and Information Center (ACIC) is charged, among other things, with the responsibility of providing the Air Force with aeronautical charts of foreign areas. Although ACIC's predecessor began publishing military aeronautical charts as early as 1928 it was not until World War II that extensive mapping operations were commenced.

ACIC produces a wide range of aeronautical charts and other maps, but only a small number of their series offer coverage of China. All of ACIC's publications are at small to medium scales, most at small scales. The World Aeronautical Chart and Operational Navigation Chart series, at 1:1,000,000, are probably the most useful ACIC series, in that they offer complete coverage for all of China and are at least equal to the Army Map Service's 1:1,000,000 series in terms of data shown.

ACIC has published maps for all of China since World War II and is unquestionably one of the finest sources for small-scale map coverage. The agency is still engaged in an extensive mapping program on China, constantly revising and republishing its series as new data are acquired. Aeronautical charts at scales of 1:500,000 and smaller can be obtained by the public from the Director, U.S. Coast and Geodetic Survey.[45] Aeronautical charts at scales larger than 1:500,000 can be obtained for use in map libraries only.

Army Map Service

The Army Map Service (AMS) is the major American mapping agency for topographic map coverage of China. It is charged with the responsibility of providing topographic map coverage for "all areas of vital interest to the Armed Forces of the United States."[46]

Since the early part of World War II the Army Map Service has conducted an extensive mapping program on China. It has published over fifty different maps and series at scales ranging from 1:17,000,000 to 1:6,000. During the War a number of special, small-scale maps at 1:1,000,000 or smaller were produced, concentrating on transportation and generalized topography for large areas or all of China. Some of these maps are still produced in revised editions.

In the realm of medium-scale maps, coverage is best at 1:250,000. Only in Manchuria is coverage very extensive at 1:500,000. Almost all of China has been mapped at 1:250,000, complete coverage being available for eastern China. The "China Proper" series at 1:250,000, with its counterpart for Manchuria, is one of the few series available with complete coverage for all of China Proper and Manchuria. In the realm of large-scale maps, the coverage becomes considerably spottier.

Army Map Service maps are *not* available for sale to the public. Use of their maps is restricted to the holdings of map libraries. Fortunately, most of the major map libraries around the country are on the Army Map Service Depository list, whereby they receive surplus and/or outdated editions of AMS maps as new editions are published. Maps distributed to map libraries include all scales. Copies of large-scale series are generally extremely spotty, however, in most libraries. The Library of Congress is one of the few map libraries with nearly complete holdings of AMS publications.

Bureau of Foreign and Domestic Commerce

The Bureau of Foreign and Domestic Commerce was not primarily a mapping agency but did produce a small number of significant maps of China between World Wars I and II. The few maps available are thematic, special-purpose maps at very small scales. The maps are not devoted to any one region but generally cover all of China Proper. Maps produced by this agency are available for use in map libraries only.

Foreign Economic Administration

The Foreign Economic Administration (FEA) also was not primarily a mapping agency but did produce a small number of maps of China during World War II. All of the maps produced by the FEA are thematic, special-purpose maps, at widely varying small scales. The maps cover many areas of China and are not confined to any one region. Maps produced by this agency are available in map libraries only.

Military Intelligence Division, General Staff, War Department

The Military Intelligence Division of the War Department General Staff was charged with the duties of "collection, evaluation, and dissemination of military information, including the preparation of plans, policies and

supervision of all activities connected with military topographic surveys, maps, and photographs.[47] This was one of the first American agencies to produce maps on China, with publications dating back as far as 1900. The available maps are not very numerous and reflect the responsibilities of the agency. Many of its publications are direct copies of Russian and British series of the late 1800's -- early 1900's. Because of the present scarcity of Russian maps, in particular, of China, the copies produced by this agency are thus very valuable. The agency appears to have concentrated its mapping activities in Manchuria and North China. Most of the available maps are dated during or before World War I, and are available for use in map libraries only.

Office of Strategic Services, Research & Analysis Branch

The Office of Strategic Services (OSS) was a war-time agency designed to privide intelligence data for use in the prosecution of the war. While not a primary mapping agency as such, its Research and Analysis Branch did produce hundreds of different maps of a thematic nature to accompany the intelligence reports of the agency. Many of these maps have survived the years since the War and are now in map libraries around the country, particularly the Library of Congress. Most of the maps are at small scales of 1:1,000,000 to 1:12,000,000. Each one is generally devoted to a special topic, many on topics not found in any other available maps. A large number of large-scale city maps were also published. Usually very simple in content, their primary value today lies in the fact that they are quite often the only maps available for many of these cities. The OSS is no longer in existence. Its mapping efforts were taken over after the war by the Central Intelligence Agency, which has released a number of small scale maps and atlases of China in recent years, the most notable of which was its *Peoples Republic of China Atlas*, published in 1972.

State Department, Division of Map Intelligence and Cartography

The Division of Map Intelligence and Cartography in the State Department produced maps of a thematic nature for intelligence use in the government starting in the early 1920's. These maps vary considerably in content and style and were not part of any systematic mapping program but were solely aimed at meeting individual, specific needs as they arose.

State Department, Interior Research & Intelligence Service

The Interior Research and Intelligence Service in the State Department appears to have had similar functions to the Division of Map Intelligence and Cartography. Apparently it was operative only during World War II, at least as far as its mapping responsibilities were concerned, as all of the available maps from this agency were published during the War. The maps are all thematic, small-scale publications aimed at specific, individual needs. In addition, a number of city maps were published, all of them fairly

simple in content but at large scales. This agency appears to have concentrated its mapping activities in Manchuria with only a few maps of areas elsewhere in China. The maps published by this agency are available for use in map libraries only. Holdings are likely to be spotty, as they are at the Library of Congress.

U.S. Marine Corps, Third Brigade

The Third Brigade of the U.S. Marine Corps, under the direction of Major E. C. Long, was one of the first topographic mapping agencies of the U.S. in operation in China, and is a good example of the early mapping efforts of the United States in China. The responsibilities of this group were apparently centered around the actual surveying and preparation of large-scale maps for use by United States military forces in China. The few available series produced by this group are very detailed topographic series of the Peking-Tientsin area. The series are excellently executed and show a great wealth of cultural and physical data. For historical purposes especially these maps are invaluable. The Third Brigade apparently mapped in China only in the 1920's, and publications are available for use in map libraries only.

U.S. Navy Hydrographic Office

One of the main functions of the U.S. Navy Hydrographic Office is the publication of hydrographic charts covering foreign waters. Another function is the publication of aviation charts and other maps of various areas of the world. The Hydrographic Office has produced charts of China's coastal waters since the early 1900's, though most were produced during and after World War II. Hydrographic charts are one of the few realms of map publications of China that are still actively produced by a number of nations, of which the United States is the leading publisher today.

Hydrographic charts of the Navy Hydrographic Office are published in a great range of scales, sizes, and coverage, from very large-scale charts of harbors to small-scale charts of the entire coast of China. While these charts usually do not include a great deal of topography or other physical and cultural features of the land, nevertheless, they can still be extremely useful in location of coastal place names, harbors, islands, etc. and often offer the only coverage available for certain areas.

Publications of the Navy Hydrographic Office are among the few map publications of China that may be purchased by the general public. Most of the hydrographic charts are carried by local sales agents, or may be purchased directly from the Navy Hydrographic Office in Washington, D.C.[48]

IV. Mapping Activities of Japan in China

Modern topographic mapping began in Japan around 1875 with the division of mapping responsibilities among three agencies: the Geography Bureau of the Home Ministry, responsible for triangulation work in Japan Proper; the

Survey Office of the Ministry of Industry, responsible for research in survey techniques (later absorbed by the Geography Bureau of the Home Ministry); and the War Ministry, which set up the Survey Bureau in 1877 under the General Staff, and which was responsible for meeting the needs of the military for topographic map coverage of foreign areas.[49]

In 1888 the Japanese Imperial Land Survey Bureau was set up to take over all the topographic mapping activities formerly delegated to the three separate agencies.[50]

Japanese mapping activities in China commenced during the Sino-Japanese War of 1894-95, when the Japanese began detailed systematic surveys on Taiwan, which they acquired as a result of the war. Surveys were also begun in Manchuria and adjacent areas but these were more hastily performed because of the limitations on access and freedom of operation.[51] Nevertheless, very detailed topographic surveys at scales as large as 1:5,000 were conducted during the period of 1895-1930. More accurate surveys at 1:25,000 and 1:50,000 were made of strategic areas in the central plains and in Jehol province. From these detailed surveys the compilation of the 1:100,000 topographic series was begun on China. Most of these surveys prior to 1931 were performed in comparative secrecy and therefore high-order triangulation and precise plane-table surveys were virtually impossible.[52]

On Taiwan, of course, the Japanese had complete freedom of movement and thus were able to conduct an extensive surveying and mapping program. This program began in 1895 with a 1:50,000 series on the P'eng-hu Islands. Between 1895 and 1939, complete series at 1:25,000 and 1:50,000 were published for all of Taiwan. Aerial photography was used for revisions in 1944-45. In 1897 a 1:200,000 series was begun with revisions in the 1930's and 1940's. In 1903-04 a 1:20,000 series was published on the P'eng-hu Islands, followed by a 1:100,000 series for all of Taiwan as well as the P'eng-hu Islands. And in 1921 a 1:25,000 series was also published on the P'eng-hu Islands.

The major period of Japanese mapping activities in China commenced in 1931, with the seizure of control in Manchuria and Jehol, and lasted until 1945. In the early 1930's various medium-scale series, based on earlier Japanese, Chinese, and Russian surveys were published.[53] In addition, the Japanese, began extensive large-scale ground and aerial photo surveys. These new surveys were the bases for the standard 1:50,000 topographic series covering large areas of Manchuria and North China.[54]

When the Japanese began their full-scale invasion and occupation of China in 1937 they increased the scope of their mapping activities even more. A wide range of topographic surveys, covering communications lines, points of strategic importance, major urban areas, etc., at a wide range of scales, were published. All the Japanese maps produced during the occupation were based on either aerial-photo surveys or Japanese field reconnaissance, or were compiled from Japanese or Chinese maps. Aerial photograph was used only to a small extent, however, reliance being placed

mainly on ground surveys.[55]

Prior to World War II the Japanese were unquestionably the major producer of maps of China. The quality and quantity of their topographic surveys far surpassed anything else produced up to that time. Not until the U.S. Army Map Service began its operations in China during the War did Japan begin to lose its position of dominance. As it is, Japan produced a greater variety of topographic series, covering greater areas, than has been produced by the Army Map Service to date. These Japanese series were at scales of 1:10,000, 1:25,000, 1:50,000, 1:100,000, 1:200,000, 1:500,000, 1:1,000,000, plus topographic town plans for urban areas throughout eastern China at scales of 1:5,000, 1:8,000, 1:9,000, 1:10,000 and 1:15,000. Even today, these long out-of-date series offer the only available large-scale topographic coverage for many areas of China. Because they were able to operate in China over a much longer period and under better circumstances, the Japanese were able to produce more and often better maps than the United States or any other nation that conducted mapping programs in China.

The end of the War brought Japanese operations in China to a halt. During and after the American Occupation, the Japanese continued mapping programs for Japan itself, but all overseas operations ceased. The one exception, as far as is known, is the Japanese Hydrographic Office which continues to publish a number of hydrographic charts for the coast of China.

Imperial Land Survey Bureau, General Staff

As noted above, the Japanese Imperial Land Survey (ILS) was created in 1888 and operated under the direction of, and was responsible for meeting the mapping demands of, the General Staff of the Japanese Army.[56] The ILS took over the mapping functions of the War Ministry and Home Ministry and was the primary Japanese mapping agency for map coverage of China from that date until the end of the War when Japan ceased mapping activities in China.[57]

The ILS ranked as one of the world's greatest topographic mapping agencies, surpassed (in the China field) by perhaps only the Army Map Service. The ILS, in its fifty-one years of operations in China, produced an amazing variety of maps, ranging from general topographic-political maps of Manchuria at 1:2,500,000 to extremely detailed city plans at scales of 1:1,200. Over 1,000 sheets of the 1:100,000 series were produced for North China and Manchuria alone. The quality, however, of the ILS publications was the major reason ILS maps were and still are so highly regarded by map makers the world over. The Army Map Service readily admitted, "Due to the accuracy and homogeneity of the Japanese maps it was possible for AMS and other mapping agencies to quickly compile a tremendous quantity of maps in a variety of scales and types on a mass production basis for the military needs of World War II in the Pacific and the Far East."[58]

The ILS mapped most extensively in Manchuria, North China, and Taiwan, but also did much mapping in most of the rest of eastern China. Taiwan still remained the best-mapped area of China by the Japanese, however, because of its

relatively small size and long period of control by Japan. Mapping activities in western China were infrequent and limited in coverage.

The ILS is no longer in existence. In 1945 it was abolished and mapping responsibilities were delegated to the Geographical Survey Bureau of the Home Ministry, and in 1948 were transferred again to the Geographical Survey Institute.[59] No topographic mapping of mainland China is known to have been undertaken by the Japanese since 1945. Most of the ILS publications now in this country were captured during and after the war and are available for use in a limited number of map libraries, most notably at the Library of Congress.

Other Japanese Agencies

There were a variety of other Japanese agencies that produced maps of various parts of China. After 1933 the Kwantung Army Survey Unit and other military survey units, plus the Manchukuo Survey Office, were established in China.[60] The exact status and functions of these agencies is not clear. As far as can be determined they apparently worked under the direction of the General Staff, Imperial Land Survey. Their map publications are therefore included in the ILS section in Part II of this study. Various agencies of the Japanese Colonial Government of Taiwan also produced maps. These agencies included the Section of Mines, the Bureau of Productive Industries, and the Department of Agriculture. In Manchuria, the South Manchurian Railway Company likewise produced a number of maps of that area. The Japanese Hydrographic Office continues to publish hydrographic charts for the coast of China.

V. Mapping Activities of Great Britain in China

The British engaged in mapping activities in China starting early in the nineteenth century. Particularly after the late 1900's, however, the major British mapping agencies, including the Directorate of Military Survey, the Survey of India, and the Directorate of Colonial Surveys, surveyed and mapped large areas of China.

The earliest British mapping efforts in China were apparently made by the Survey of India after 1860, when numerous exploratory/surveying expeditions were sent into western and southwestern China. Between 1864-1955 Survey of India records are said to show that 146 separate survey expeditions were made into Tsinghai, Tibet, and Sinkiang.[61] Sir Aurel Stein and his party made three expeditions in the late 1800's to Kansu and Sinkiang, mapping and surveying various areas west of the Yellow River. Out of these trips came several map series: 1:760,000 (1901), 1:250,000 (1908), 1:1,000,000 and 1:500,000.[62] Younghusband was another Survey of India explorer-mapper, who went into Tibet in 1904 to map the upper course of the Tsangpo (Brahmaputra) River.[63] C. H. D. Ryder was sent in 1898 to survey the Tien-mien, or road between Yunnan and Burma.[64] He also drew detailed route maps of the eastern part of Tsinghai and Kansu. These and other surveys formed the basis of the Survey of India's numerous topographic surveys of south Asia and adjacent parts of China.

The British of course did a great deal of mapping in the rest of China. For over fifty years the Directorate of Military Survey surveyed and mapped much of China, particularly the eastern area, at a wide range of scales.

British topographic maps are widely recognized as among the finest ever produced for China, particularly in those areas where the Survey of India was responsible for original surveying.

Hong Kong is the one area of China most actively mapped by the British today, although topographic series continue to be reissued for certain other areas. Also, the Hydrographic Office continues to publish hydrographic charts for the coast of China.

Directorate of Military Survey, War Office

The Directorate of Military Survey, War Office, was the major topographic mapping agency of British operations in China. A section for military mapping had existed for years before World War II in the military intelligence division of the War Office. This section was known as the Geographical Section, General Staff (GSGS). Set up as a separate directorate in 1940, the GSGS's name was changed in 1943 to the Directorate of Military Survey, War Office.[65]

The Directorate of Military Survey (DMS) is responsible for overall mapping policies for foreign coverage as well as military topographic maps. In addition, in collaboration with the Air Ministry and Ordinance Survey, the DMS is responsible for air charts for the Royal Air Force.[66]

Maps and series produced prior to 1940 by the DMS were based on original British surveys, plus surveys and maps produced by other foreign mapping agencies in China. A number of small-scale series were published covering most of China at one scale or another. Survey of India sheets were used considerably in compilation for areas of south and southwest China. One of the finest old-style British planimetric series was produced in 1902-05 for Hopei province at a scale of 1:506,880. This and several other series were based on data obtained from original surveys of various British military surveyors between 1860-1903. Coverage of China at medium scales is not especially extensive. Scattered and incomplete series were made for several areas. At large scales several excellent topographic series were produced. Hong Kong and the New Territories were mapped at several different scales. A 1:50,000 series was produced for Hopei province, and for four major cities of China. Wei-hai-wei was mapped at a scale of 1:31,680 as early as 1898-99. Several very large-scale maps were produced for several of the cities of eastern China.

Since 1940 the DMS has consistently followed the policy of utilizing existing map sources.[67] Some field and radar work is executed by the agency, but it generally directly reprints maps produced by other government agencies at earlier dates or maps produced by foreign agencies.[68] First editions are usually direct copies, with no changes from the original manuscript other than the transliteration of place names and legend and the addition of a

grid.[69] Later editions include revisions according to recent data, plus possible improvement in symbol classification and legibility if need be.[70]

In addition to Hong Kong and the New Territories, the Directorate of Military Survey publishes a limited number of maps of other areas of China today. Maps published by the DMS (GSGS) are available for use in map libraries and may be purchased in certain cases. (See Appendix B).

Survey of India

The Survey of India was established in 1767, with the appointment of Major James Rennell as Surveyor General of Bengal.[71] The Survey was responsible for all the basic surveying and topographic mapping for British India and most of the rest of south and southeast Asia. In addition to establishing the basic triangulation net over this large area, the Survey was also responsible for precise level nets, magnetic surveys, gravimetric computations, as well as land analyses of agricultural and economic projects and cadastral surveys.[72]

The Survey of India was unquestionably one of the finest topographic mapping agencies in the world. In the Far East it ranks second to none, and is certainly rated at least equal to the Japanese Imperial Land Survey and the Army Map Service in terms of quality of work done. Part of this excellent reputation is due to the fact that the Survey spread a system of primary triangulation over such a large area. As the Army Map Service has said, "This foresight avoided the confusion that has developed in so many areas where scattered topographical surveys preceded an overall triangulation network and must, therefore, be recorded as an outstanding contribution to world mapping. Nearly all of the basic geodetic framework, as well as map series of southern and southeastern Asia, were developed by or with the help of the Survey of India. No other single agency has had more influence on the original surveying and mapping of such a widespread area of the world."[73]

Survey of India maps were based, with few exceptions, on plane table surveys tied to the triangulation network.[74] Aerial photography was brought into use only in a limited way during World War II.[75] During the War the Directorate of Military Survey was responsible for the Allied mapping of Southeast Asia.[76] Maps published by this agency are very similar to Survey of India publications in both style and format. Almost all of these maps were revisions or reprints of existing Survey of India editions, with added military grid.[77] Designated by "Hind" series numbers, these series covered various areas over much of south and southeast Asia. For convenience, these series are included with Survey of India publications in Part II of this study.

Unfortunately, not too many Survey of India topographic maps and series are available in this country. Those that are available are, for the most part, small-scale series. The 1:1,000,000 series, "India and Adjacent Countries," is one of the few available series of any agency offering coverage of much of western China and is certainly the best series on the area at this scale. Survey of India publications are available at a few map libraries in this country, most notably the Library of Congress.

Directorate of Colonial Surveys

The Directorate of Colonial Surveys is responsible for the mapping of the British Commonwealth of Nations, exclusive of the British Isles.[78] As far as China is concerned, the Directorate is thus responsible for the mapping of Hong Kong and the New Territories.

Compilation of Colonial Survey maps, with the exception of a few small-scale special maps, is based on aerial surveys.[79] These maps bear little if any difference from the map publications of the Directorate of Military Survey, War Office, and are included in the section for DMS maps in Part II of this study.

Colonial Survey's maps are available in some map libraries in this country. The Library of Congress has what appears to be complete holdings of the Survey's various recent topographic series on Hong Kong and the New Territories.

VI. Mapping Activities of Germany in China

Germany was a relatively minor participant in the mapping of China. German activities were concentrated in a short period from roughly 1898 to 1914, during which time Germany occupied Tsingtao and Chiaochouwan and had colonial ambitions in Shantung province and elsewhere.

Germany, along with Great Britain and France, sent exploration-surveying expeditions into China in the late 1800's and early 1900's. W. Filchner was one German explorer who did much travelling around western China in particular. Using triangulation he drew topographic series at scales of 1:175,000 and 1:500,000 covering Tsinghai and north Tibet, as well as made numerous geodetic observations.[80]

The important and major German maps were made for eastern China, however. Two agencies were primarily responsible for those maps: the Royal Prussian Land Survey and the German Naval Board. Together, they produced a limited number of series on eastern China and Shantung province. The General Staff of the Army (Generalstab des Heeres) is reported to have compiled a 1:200,000 scale series on the area along part of the border of western Sinkiang.

Following the end of World War I Germany lost her colonial holdings in China and as a result discontinued mapping activities there. Prior to the War, topographic mapping had been entirely in the hands of the military. After the War, control of mapping was transferred to civilian agencies, the most important of which was the Federal Land Survey Office (Reichsamt fur Landesaufnahme).[81] After the Nazi government came to power Germany had overseas ambitions once again. During this period up to 1945, mapping of foreign areas was the responsibility of the General Staff of the Army, Division of Surveying and Mapping (Generalstab des Heeres, Abteilung fur Kriegskarten und Vermessungwesen).[82] This agency is known to have published a tremendous quantity of maps of all kinds covering large areas of the world. However, as far as can be determined, Germany left the mapping of the Far East largely to its Axis partner, Japan.

The General Staff of the Army, Division of Surveying and Mapping was abolished after the War, and the Institute for Applied Geodesy (Institut fur Angewandte Geodasie) was established as the central German mapping agency.[83] Several other German agencies have also been engaged in post-war mapping activities. None of them, however, are today active in publishing maps of China. The only German agency still known to be publishing maps of China is the German Hydrographic Institute (Deutsches Hydrographisches Institut) which has published hydrographic charts of the China coast since the early 1900's.

German Mapping Agencies

Two German agencies were primarily responsible for mapping activities in China, not including the German Hydrographic Office. The *Royal Prussian Land Survey* (Kartographische Abteilung Der Konigliches Preussiches Landesaufnahme, or KPLA), and the *German Naval Board* (Reichs Marine Amt) did excellent but limited mapping in China from 1898 to 1914. Both were apparently responsible for meeting the mapping needs of the German armed forces for topographic map coverage of areas in China in which Germany had special interests. Both agencies produced several excellent topographic series.

The two most significant publications of the Reichs Marine Amt were the 1:50,000 series on the German colony of Chiaochou in 1902 and the 1:10,000 series on Tsingtao and Environs in 1903. Both are superbly executed cartographic productions. The KPLA produced its highly renowned 1:1,000,000 topographic series on China, the "Karte Von Ost China," between 1902-1912. This was one of the earliest topographic series to provide coverage of much of eastern China and was widely used by agencies of other countries in the compilation of their own series. The 1:200,000 series on Chih-li and Shantung province was another notable production of the KPLA. Produced between 1907-09, this series was one of the earliest efforts at medium-scale topographic mapping of this area of north China. The KPLA also produced large-scale single-sheet maps of Peking and Tientsin in 1903. Again, these were excellent maps.

Maps produced by these two major German agencies have long been highly regarded by cartographers the world over because of many factors. Most important was the fact that the German agencies relied on their own detailed triangulation and surveying data, the accuracy of which was very high. In addition, the fine craftsmanship of the German cartographers in the planning, drawing, and publishing of their maps contributed to their reputation. This craftsmanship consisted of several elements. Marginal information is generally extensive, with very complete explanations of relief, grids, date of publications, etc. Symbolization on the maps is very extensive; to some persons it may even seem excessive. Relief representation is variable in quality, but this is only a reflection of the lack of sufficient data in certain areas.

The few topographic series and maps produced by these two agencies, although long outdated, are still highly useful, at least from an historical point of view, and can be highly recommended. These maps are in several map collections around the country, most notably at the Library of Congress.

VII. Mapping Activities of France in China

France apparently was even more minor a participant in mapping in China than Germany. France's mapping activities were also confined mainly to its colonial possessions or areas of colonial ambitions. Most of the French maps available in this country are on Indo-China and adjacent parts of south China, and various parts of north China. France mapped for a longer period of time in China than Germany did, however. Beginning in the late 1800's and continuing up into the 1950's even, France conducted limited mapping programs on China.

The production of these maps was the responsibility of the Service Géographique de l'Armée (and the Service Géographique de l'Indochine) until World War II when the Institut Géographique National took over mapping responsibilities. Because data on these agencies and maps produced by them are so scarce in this country, the extent of French mapping activities in China remains unclear. The IGN may still be publishing revised editions of some French series, particularly for Indo-China, but this is not known for sure. The only French agency definitely known to be still publishing maps of China is the French Hydrographic Office which produces a series of hydrographic charts for the coast of China.

French Mapping Agencies

Prior to 1940, French mapping activities in China were the responsibility of the *Service Géographique de l'Armée* (SGA), whose duties involved supplying the French General Staff with maps for planning and operations, including geodetic observations and ground and aerial survey.[84] In 1940 the *Institut Géographique National* (IGN), a civilian agency attached to the Ministry of Public Works and Transportation, took over these responsibilities. The Institute's total operations covered France and the French Colonies and overseas territories.[85]

IGN (or SGA) maps on China are limited in number. Those that are available reveal the high quality of French cartography, as proven by the extensive, well-organized marginal information, the well-designed symbolization, the fine contouring and relief representation. Probably the most valuable series are those produced in the early 1900's for Port Arthur, Peking, and Kwangchow.

Since France, like the other European powers, lost her colonies in the Far East during and after World War II, she apparently no longer publishes maps on China, with the exception of hydrographic charts. French maps are available at a limited number of map libraries around the country, most notably at the Library of Congress.

VIII. Mapping Activities of Russia in China

Data on Russian mapping activities in China are more limited than for any of the other six countries covered in this study. Russian mapping of China apparently began shortly after the Treaty of 1858-60 when Russia acquired the region north of the Amur and east of the Ussuri Rivers. From that time until the present day various Russian agencies have mapped parts of China at one time or another. Data are so scarce, however, and the number of Russian maps on China available in this country are so few, that one can get at best only an extremely fragmentary picture of Russian mapping activities.

These activities, logically, appear to have been concentrated in north China, in Manchuria, Mongolia, and Sinkiang. In 1899 a 1:42,000 scale series was published for the Port Arthur-Dairen area. Surveys were made at 1:21,000 of strategic areas in north China and at 1:8,400 for urban areas in northeast China. In the Sinkiang border area several series were produced that extend into China, at scales of 1:200,000, 1:420,000, 1:500,000, 1:1,500,000, and 1:2,500,000. Unfortunately, very few of these maps are readily available in this country.

The Russians gave considerable technical support to the PRC mapping agencies up through the 1950's but are apparently no longer doing so. Russia probably has an extensive mapping program on China at the present time, but it is of little consequence to map users in this country, since no recent Russian maps are obtainable, with the exception of a few very small-scale, general political/topographic maps that reveal no more information than that shown on much more easily obtained American or British maps of comparable scales.

Russian Mapping Agencies

Nothing is known about Russian mapping agencies responsible for mapping of China, except for the fact that this work was done by the following agencies since Russian mapping began in China in the nineteenth century:

Main Administration for Geodesy and Cartography
(Soviet Glavnoye Upravleniye Geodezii i Kartografii)

General Staff, Red Army
(General'ny Shtab, Krasnaya Armiya)

Turkestan Military-Topographic Division
(Turkestan Voyenno-Topograficheskoye Upravleniye)

Russian maps are available at only a very few map libraries. Even the Library of Congress has only a limited collection.

IX. Conclusions

Although our understanding of the level of development of surveying and mapping in China is still fragmentary, enough evidence is available to know that the Chinese have gone about the process of building up their mapping programs in a very professional way, especially since 1949. They have made substantial progress and are certainly among the forefront of the developing countries in this vital aspect of any country's development strategy. Unfortunately, the government of the PRC is not yet ready to allow foreigners access to its map publications.

For persons outside of China therefore, seeking map coverage of China, they have no choice but to continue to rely on the map publications of the United States and other foreign countries, even though much of the cultural data on these maps may be outdated. A relatively small number of agencies stand out above all others, in terms of quality and general reliability. This conclusion is based on the examination of literally thousands of topographic and other maps produced by the six countries, other than China, included in this study, plus the findings of several reliable map intelligence groups that have also examined many of these maps.

Maps produced by any of the Japanese government agencies up to 1945, and especially the Imperial Land Survey, are unquestionably among the finest maps ever produced on China. Cartographically, they are generally finely executed in terms of symbolism, draftsmanship, design, and reproduction. They are also among the most reliable maps one can obtain. This fact has been substantiated not only by numerous map intelligence groups, but also by the heavy reliance government mapping agencies in other countries have placed on Japanese maps in their own mapping programs. Japanese maps on China have the added advantage of offering areal coverage more extensive than any other country's maps, with the possible exception of the Army Map Service. The Japanese also mapped in China for a greater period of time than any other country, at least on such an extensive scale. For Manchuria and north China especially, Japanese maps are the best source of data for the period prior to World War II.

The predominance Japanese maps had for the period before the war was taken over by the United States during and after the war, especially by the Army Map Service, and to a lesser extent the Aeronautical Chart & Information Center. The Army Map Service, in the early days of the war, relied heavily on Japanese maps as sources for compilation of its own series. Since the war, however, the Army Map Service has tended to place greater emphasis on aerial photography. Cartographically, AMS maps are certainly the equal of almost any of the Japanese maps of pre-World War II days. In some cases, AMS maps are even better, due to improved techniques in map design, draftsmanship, symbolism, and especially reproduction. AMS maps have the added distinct advantage of being the most recent in terms of cultural data. The Aeronautical Chart & Information Center's maps would rank on the same level as AMS maps. The chief disadvantage of AMS maps is their limited availability to the general public, at least for large-scale series. This is particularly to be regretted because there are only three countries actively engaged in extensive mapping programs on China at the present time -- the United States, China, and Russia -- and maps produced by the latter two are almost totally unavailable.

Maps produced by the several British agencies that have operated in China are probably equal in quality to those of Japan and the United States. The chief disadvantage of British maps is their less extensive coverage and lesser variety of scales. For western China and south China, Survey of India maps are certainly a prime source of data.

French and German maps are fine for the limited areas they cover and the limited time periods for which they are available. The German maps, in particular, are superb cartographic products and can be highly recommended.

Available Russian maps are limited in numbers, but those obtainable vary considerably in quality. Aerial coverage is also very spotty.

Maps produced by the various Chinese agencies, prior to World War II, rank at the bottom of the list in terms of quality and reliability. Cartographically they range from just fair in quality to incredibly bad. Their generally poor reliability has already been noted above. Almost all topographic maps would rank low in both respects; thematic and other maps would perhaps rank slightly higher. The foregoing does not apply, however, to Chinese maps produced since World War II. The products of the Nationalist Government on Taiwan show a strong U.S. imprint and are of high quality and reliability.

Ideally, of course, it would be good to have access to the recent map publications, especially larger-scale topographic series, of the PRC government. Now that relations between the PRC and the United States are slowly improving, it can be hoped that Americans will be allowed greater access to information about mapping in China, including possibly exchanges of visitors and cartographic publications. Both sides would have much to gain from this.

FOOTNOTES

1. Joseph Needham, *Science and Civilization in China*, (Cambridge University Press, 1958), Vol. 3, p. 538.

2. Needham, p. 549.

3. Needham, p. 585.

4. Ch'en Shu-p'eng, *Story of Cartography* (Peking: Chinese Youth Publishing Company, 1955), p. 101.

5. Ch'en, *Story of Cartography*, p. 101.

6. Wang Yung, *Outline of the History of Chinese Cartography* (Peking: Life Study New Knowledge Book Publishing Co., 1958), p. 107.

7. Wang Chih-cho, "Surveying and Mapping in China," *Surveying and Mapping* (July-December, 1947), p. 150.

8. Wang Chih-cho, p. 150.

9. Wang Chih-cho, p. 153.

10. Wang Chih-cho, p. 151.

11. Wang Chih-cho, p. 153.

12. Wang Yung, p. 107.

13. Wang Yung, p. 109.

14. Wang Yung, p. 109.

15. Wang Yung, pp. 102, 110.

16. *Symbols Appearing On Original Chinese Maps* (U.S. Army Map Service, 1944), p. 3.

17. *Symbols*, p. 3.

18. Wang Yung, p. 110; see also Wang Chih-cho, "Photogrammetry in China," *Photogrammetric Engineering* (March, 1946), pp. 118-123.

19. Wang Yung, p. 105.

20. V. N. Lysyuk, "Geodetics and Cartography in the Peoples' Republic of China," *Geodesy and Cartography*, Moscow (No. 3, 1959), no pagination. Translation by Joint Publications Research Service (196579-November, 1959).

21. Lysyuk.

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25. Ch'en; *The Story of Cartography*, p. 103.

26. Ch'en, p. 103.

27. Lysyuk.

28. Surveys and Research Corporation, *Directory of Selected Scientific Institutions in Mainland China* (Stanford: Hoover Institution Press, 1970), p. 194.

29. *Ibid.*, p. xiv.

30. *Ibid.*, p. 3.

31. *Ibid.*, p. 71; also see Herold Wiens, "Development of Geographical Science, 1949-1960," in *Sciences in Communist China*, ed. by Sidney H. Gould (American Association for the Advancement of Science, 1961), pp. 411-481.

32. *Directory, op. cit.*, p. 77.

33. *Directory, op. cit.*, p. 78.

34. Arthur Sowerby, "The Geological Survey of China," *China Journal*, Shanghai, Vol. 18, No. 5 (May, 1933), p. 303.

35. *Directory, op. cit.*, p. 65.

36. *Directory, op. cit.*, p. xii.

37. *Directory, op. cit.*, p. 239.

38. *Directory, op. cit.*, p. 232.

39. *Directory, op. cit.*, p. 232.

40. *Directory, op. cit.*, p. 233.

41. *Directory, op. cit.*, p. 317.

42. Wiens, *op. cit.*, p. 422ff.

43. *Map Intelligence* (Washington: Army Map Service, 1952), p. 255.

44. Wang Yung, *Outline of the History of Chinese Cartography* (Peking, 1958), p. 80.

45. See Appendix B for list of agency addresses.

46. *The Army Map Service, Its Mission, History and Organization* (Washington: Army Map Service), 1960, p. 12.

47. Walter Thiele, *Official Map Publications* (American Library Association, 1938), p. 170.

48. See Appendix B for list of U.S. agency addresses.

49. *Notes on Japanese Mapping* (Washington: Army Map Service, 1945), p. 1.

50. *Ibid.*

51. *Foreign Maps* (Washington: Army Map Service, 1956), p. 48.

52. *Ibid.*

53. *Ibid.*

54. *Ibid.*

55. *Ibid.*, p. 49.

56. *Map Intelligence* (Washington: Army Map Service, 1954), pp. 255-56.

57. *Ibid.*

58. *Ibid.*, p. 256.

59. *Foreign Maps, op. cit.*, p. 49.

60. *Ibid.*, p. 48.

61. Ch'en Shu-p'eng, *op. cit.*, p. 99.

62. Wang Yung, *op. cit.*, p. 103.

63. Wang Chih-cho, *op. cit.*, pp. 99-100.

64. Wang Yung, *op. cit.*, p. 104.

65. *Map Intelligence, op. cit.*, pp. 240-41.

66. *Ibid.*

67. *Use of Foreign Maps*, a tentative technical manual (Army Map Service, 1942), no pagination.

68. *Map Intelligence, op. cit.*, p. 241.

69. *Use of Foreign Maps, op. cit.*

70. *Ibid.*

71. *Map Intelligence, op. cit.*, p. 253.

72. *Ibid.*, pp. 253-54.

73. *Ibid.*

74. *Ibid.*, p. 253.

75. *Ibid.*, p. 254.

76. *Ibid.*

77. *Ibid.*

78. *Ibid.*, p. 241.

79. *Ibid.*

80. Wang Yung, *op. cit.*, p. 103.

81. *Foreign Maps*, *op. cit.*, p. 206.

82. *Ibid.*

83. *Ibid.*

84. *Map Intelligence*, *op. cit.*, p. 242.

85. *Ibid.*, pp. 241-42.

PART II

MODERN MAPS OF CHINA

MAP ANNOTATIONS AND INDEX MAPS

In this part are listed all the maps finally selected for inclusion in the study, as discussed in Chapter I. The maps are arranged first by country, in alphabetical order, thus: China, France, Germany, Great Britain, Japan, Russia, United States. Within each country's section, the map entries are arranged by agencies, in alphabetical order where feasible. Within each agency's section, the maps are arranged by scale, beginning with the smallest and working up to the largest scale. The index maps are located together following the annotation forms and are arranged in the same order as the annotations.

I. Explanation of Annotation Form

The data for each map entry was divided into two main parts -- physical and cultural. Each group was then further broken down into its major sub-groups. These data for each map are shown in the annotation forms as illustrated in the model below:

TITLE

Scale. Date of Publication. Map No. No. of sheets. Size
Language. Grid. Projection. Coverage.
(Physical data):
Relief. Hydrography. Vegetation. Other (physical data).
(Cultural data):
Boundaries. Transportation. Cities and Towns. Other (cultural data).
Insets.
Notes.
Sources.

In regard to the annotation items included in each entry, note that the data are those shown on the map. In other words, items for which no data were available, e.g. number of sheets, or projection, or which did not appear on the map, were left out of the annotation entry in order to save space.

An explanation of the complete annotation form items follows:

Title. The full title as it appears on United States and British maps. For French and German maps the full title is given in the original language, and the English translation in some cases. For Japanese, Chinese, and Russian maps the titles are not given in the original language because of the difficulty and cost of reproducing the scripts. In most cases full English translations are given. In a few cases where a full translation was deemed unnecessary or not possible abbreviated titles are given.

Scale. Scale is shown as a representative fraction, such as 1:250,000. This is the standard method of expressing scale used by most map libraries and was followed here.

Date. The date of the first published edition. Other pertinent dates, if any, such as dates of surveys, compilations, or other editions are mentioned in the Notes for each entry.

Map Number. The identification number applied to a topographic series or other map. This data occurs only with the Army Map Service and GSGS* publications.

Number of Sheets. The number of sheets covering China or parts thereof *only*, that have been published in a particular series. For single-sheet maps the words, "One sheet," are used.

Size. The linear dimensions, roughly measured in inches, of the sheet (in the case of single-sheet publications) or a sample sheet (in the case of a series). The length of the sheet is always shown first, followed by the height. All measurements are taken from neat-line to neat-line and rounded off to the nearest inch. In the case of series where the size of the sheets varies widely the statement, "Size varies," is shown.

Language. The language used in the original version of the map. In cases where transliterated terms or place names are shown, the original language is shown followed by the transliteration language, for example, "Chinese/English." In the case of Chinese, Japanese, and Russian maps the official script of each language may be presumed used on the map unless otherwise stated in the Notes.

Grid. Whether geographic (based on latitude and longitude), military (as in the case of many of the topographic series), or plane rectangular (as in the case of some city maps).

Projection. The map projection used for the map or map series. In most cases, only Western map publications state the type of projection used.

Coverage. The area covered by the map or map series. Three systems are used. In the case of a series, reference is made to a particular page where an index map of that series may be found. Those series for which no index map is available or for single maps which do not require an index map, the approximate geographic coordinates of the area covered by that map or series are given. Reference may then be made to the maps on plates 1-3 in order to note the approximate areal coverage. In some cases, where index maps are not available and geographic coordinates are unknown, a word statement is given noting the approximate areal coverage, e.g. "China Proper,"

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*GSGS -- Geographical Section, General Staff (Britain).

"All of Manchuria." This last form is also used considerably in the case of small-scale maps covering all or large parts of China, where a word statement is sufficient.

Relief. The hypsography of the map, or method of relief representation. All the standard forms of relief representation are included. In the case of contours, the major interval is given in parentheses followed by supplementary contour intervals (if any) and then the color used to show the contour lines. In the case of altitudinal tints the number of tints are shown in parentheses followed by the colors used. In the cases of other methods of relief representation, the color used is shown in parentheses.

Hydrography. The water features shown on the map, including rivers, streams, lakes, swamps, etc. Three classifications are used: (1) "Major drainage" (the principal rivers and lakes with a minimum of tributaries and smaller water features); (2) "Detailed drainage" (the principal rivers and lakes with the major tributaries and other significant water features); (3) "Very detailed drainage" (the principal rivers and lakes with all the major tributaries and most of the lesser streams and lakes, as well as canals, marshes, ponds, etc.).

Vegetation. The various forms of vegetation shown (such as forests, woods, orchards, rice paddies, etc.). The number of classifications and the color used are shown in parentheses following each vegetation feature.

Other Physical Data. Any other physical features not included under Relief, Hydrography, or Vegetation. Included are such items as rocks, springs, geologic formations, undeveloped resources, etc. The number of classifications of each feature and the color used are shown in parentheses. For features where several colors are used the words "Various colors" are shown. For maps with a large number of items in this category the items are arranged in alphabetical order. The words "physical data," are omitted to save space.

Boundaries. The political boundaries shown on the map, such as international, provincial, etc. The color used is shown in parentheses. In a few cases, the number of classifications is included in parentheses also.

Transportation. The types of transportation shown, such as railroads, roads, air routes, etc. The number of classifications and the colors used are shown in parentheses.

Cities and Towns. The number of classifications and colors used are shown in parentheses.

Other Cultural Data. Any other cultural features not included under Boundaries, Transportation, or Cities and Towns. Included are such items as factories, schools, mines, ports, airfields, etc. The number of classifications and the colors used are shown in parentheses. For maps with a large number of items in this category, the items are arranged in alphabetical order. The words "cultural data" are omitted to save space.

Insets. Any map insets included on single maps. Insets in series are not shown. The scale (if any) is shown after each inset.

Notes. Any additional pertinent data concerning the map, such as dates of other editions, source materials used in compiling the map, legibility, evaluations of the map made by other persons (particularly various intelligence groups). No map analysis regarding the reliability of a map has been made by this author, although comments on the cartographic quality of some of the entries are included.

Sources. The map libraries or other locations where copies of the map may be found for use or purchase.

II. How To Locate Map Entries In This Study

The map entries for each country can be found on pages marked in the upper right corner with a capital letter, as follows:

China	C
France	F
Germany	G
Great Britain	GB
Japan	J
Russia	R
United States	US

Map entries for specific agencies for a particular country can be found by looking under the agency's name, in its alphabetical order, within the appropriate country section.

Map entries for which index maps have been included are cross-referenced with the appropriate index map, by a bold number listed on the right-hand margin of the page, opposite the title of the map entry. Hence, the reader can quickly locate the index map for that entry by locating the index map number in the section immediately following the annotation forms.

Conversely, the annotation form for each index map can be quickly located by looking for the page number listed under each index map's number in the top right corner.

Map entries can also be located by use of the extensive index which is found at the end of the book and lists the map entries alphabetically by topic and place name.

III. How To Obtain Copies of Maps Listed in This Study

In order to obtain copies of the maps listed in this study, the reader should first note the source(s) given with each entry. The reader can then either examine the maps directly at the location listed, or buy copies in the few cases where this is possible, or else inquire if the maps may be borrowed. Some map libraries will loan out maps from their collections. Some will not, but will allow reproductions to be made. Other libraries allow only in-person use of their map collections. See Appendix A for a list of map collections on China and Appendix B for a list of U.S. federal mapping agencies and foreign mapping agencies.

Note that the areal coverage shown on each index map, in the form of sheets published, is subject to change. Map libraries continually receive additions to their collections, not only for current series but for out-of-date series as well. Therefore, the index maps shown here are not necessarily the final authority for present-day coverage, but are for general reference only. Readers should check with specific map libraries to obtain information on exact coverage currently available.

Abbreviations Used Under "Source" For Each Entry:

LC	-	Library of Congress, Map Division
MLUW	-	Map Library, University of Washington
AMS	-	Army Map Service
ACIC	-	Aeronautical Chart & Information Center
NA	-	National Archives
AGS	-	American Geographical Society
NHO	-	U.S. Navy Hydrographic Office
USC & GS	-	U.S. Coast & Geodetic Survey

CHINESE MAPS OF CHINA

Chinese General Staff Land Survey

CHINA 7

1:500,000. 1950. 14 sheets. 19 x 14. Chinese. Geographic grid. Coverage: See index map, 7.
Relief: contours (interval unknown). *Hydrography:* detailed drainage. *Boundaries:* provincial, hsien. *Transportation:* railroads, roads (2 class.), tracks and trails. *Cities and Towns:* (3 class.).
Notes: No legend on sheets. Black and white series. A decidedly inferior series, both in terms of data shown and legibility.
Source: LC.

TAIWAN

1:500,000. 1952. One sheet. 24 x 35. Chinese. Geographic grid. Coverage: all of Taiwan.
Relief: altitudinal tints (brown), spot heights (meters, black). *Hydrography:* detailed drainage (blue). *Vegetation:* swamps and marshes (blue), rice paddies (blue). *Other:* springs (black).
Boundaries: provincial (blue), hsien (blue). *Transportation:* railroads (2 class., black), roads (2 class., red), tracks and trails (red), ship routes (blue). *Cities and Towns:* (4 class., black). *Other:* ports (2 class., black), temples (black), historic sites (black), beacons (red), mines (black).
Source: LC.

CHINA

1:100,000. 1931-35. Approx. 1500 sheets. 20 x 11. Chinese. Geographic grid. Coverage: No usable index map available. Spotty coverage along eastern seaboard provinces and in Yunnan province.
Relief: form lines, spot heights (meters), contours (interval unknown). *Hydrography:* detailed drainage.
Transportation: railroads, roads (3 class.), tracks and trails. *Cities and Towns:* (3 class.).
Notes: No legend. Black and White. Each sheet covers 15' Lat. x 30' Long. "Practically all inland positions are inaccurate . . . Major streams (e.g. Yalu, Tumen, Amur) are often 10 to 40 miles from their true courses . . . Longitude positions are especially unreliable . . . 3 sheets covering the Northwest Amur bend region and 6 sheets along the eastern Amur have coordinates that would place them altogether in Siberia . . . 19 sheets for SE Manchuria have coordinates that belong in Korea, Siberia or the Pacific Ocean . . . One sheet dated 1928 does not match its neighbors in any way . . . Railways near Hailung and Koshan are miles from their proper positions . . . This is distinctly an inferior set . . . The Kwantung peninsula and the Great Wall area near the sea are the best-mapped areas."[1]
Source: LC.

FUKIEN PROVINCE

1:50,000. 1955. 15 x 20. Chinese/English. Military grid. Coverage: No index map available. Coverage appears fairly complete for the province.
Relief: contours (20 meters, 10 meters supp., brown), spot heights (meters, brown). *Hydrography:* very detailed drainage (blue). *Vegetation:* woods (green), swamps and marshes (blue), orchards (green), rice paddies (blue), scrub (green), tea (green), sugarcane (green), cultivated fields (green). *Other:* cliffs (brown), rock outcrops (brown), scattered rocks (brown), ravines (brown), depressions (brown), land subject to inundation (blue), steep banks or slopes (brown), fords (black), sand (brown), falls (blue), springs (blue), currents (3 class., black), rocks in water (6 class., black).
Boundaries: international (red/black), provincial (black), hsien (black). *Transportation:* railroads (5 class., black), roads (6 class., red/black), tracks and trails (2 class., black). *Cities and Towns:* (pink). *Other:* aerial cables (black), anchorages (2 class., black), astronomical stations (black), breakwaters (black), bridges (3 class., black), cemeteries (black), chimneys (black), churches (black), city walls (black), Confucian shrines (black), dams (4 class., black/brown), factories (black), ferries (black), generating plants (black), hospitals (black), hydro-electric plants (black). levees (2 class., black), lighthouses (black), meteorological stations (black), mines (black), monuments (black), oilwells (black), pagodas (black), piers (black), power transmission lines (black), radio stations (black), salt evaporators (blue), schools (black), statues (black), telegraph lines (black), temples (black), tombs (black), tunnels (2 class., black), waterworks (black), wells (black), wrecks (3 class., black).
Notes: Compiled 1956 from FUKIEN, 1:25,000 series, 1st edition, (see p. 51). An excellent series, very similar in appearance and quality to the 1:50,000 series AMS has published for many of the provinces of China.
Sources: LC, MLUW.

CHEKIANG PROVINCE

1:50,000. 1957. Size varies. Chinese/English. Military grid. Coverage: No index map available, but coverage appears fairly complete.
Notes: For data see FUKIEN PROVINCE, 1:50,000, above. Marginal note: "Compiled from maps, Chekiang, 1:50,000 AMS Type C 1945 and hydrographic charts (1:300,000) Naval Hydrographic Office, China, 1952. Place names partially added from maps Chekiang 1:50,000, Chekiang Provincial Survey Bureau, 1927. Horizontal datum is based on astronomical station, Nanking, UTM Grid added. Map not field checked."
Source: LC.

TAIWAN

1:50,000. 1956. L792. Size varies. Chinese/English. Military grid. Coverage: No index map available, but fairly complete coverage.
Notes: For data see FUKIEN PROVINCE, 1:50,000, above. Marginal note: "Reproduced from TAIWAN, 1:50,000, AMS 1951. Place names corrected

from 1:25,000 topographic maps, Survey Dept., CCSF, 1955."
Source: LC.

TAIWAN

1:25,000. 1958. Size varies. Chinese/English. Military grid. Coverage: No index map available.
Notes: For data see FUKIEN PROVINCE, 1:50,000, p. 50. Marginal note: "Compiled 1958 from TAIWAN, 1:25,000, Survey Dept., CCSF, 1955. Revised by aerial photography CAF, 1956. Hydrography from NHO of China."
Source: LC.

FUKIEN PROVINCE

1:25,000. 1954. Size varies. Chinese. Geographic grid. Coverage: No index map available.
Notes: For data see FUKIEN PROVINCE, 1:50,000, p. 50. Marginal note: "Based on 1:50,000 maps, Survey Dept., CCSF, revised in 1952 and corrected by control established Taiwan Land Administration 1952 and Geodetic Party 1954, and enlarged to 1:25,000. Revised from Chinese Air Force aerial photography dated Feb. 1955. Reliability fair."
Source: LC.

MAP OF I'CHANG AND VICINITY

1:25,000. 1941. One sheet. 31 x 29. Chinese. Military grid. Coverage: I'Chang and vicinity.
Notes: Black and white. No legend. Relief by contours (interval unknown). Good general topographic map.
Source: LC.

CANTON

1:9,000. 1948. One sheet. 39 x 26. Chinese. Coverage: Canton.
Relief: contours (interval unknown, black).
Transportation: railroads (black), roads (2 class., black), transit routes (red). *Other:* bridges (2 class., black), schools (black).
Notes: General street and road map.
Source: LC.

Map Publishing Company, Peking (Ti-t'u ch'u-pan she)

PHYSICAL MAP OF THE PRC

1:4,000,000. 1959. One sheet. 46 x 33. Chinese. Geographic grid. Coverage: all of China.
Relief: shaded relief (black), spot heights (meters, black). *Hydrography:* detailed drainage (black). *Vegetation:* swamps and marshes (black). *Other:* salt marshes (black), sands (black).

Boundaries: international (black), provincial (black). *Transportation:* railroads (2 class., black), roads (2 class., black), ship routes (black), canals (black). *Cities and Towns:* (7 class., black).
Other: Great Wall (black).
Insets: Islands of the South China Sea (1:28,500,000).
Notes: Simplified characters.
Source: LC.

PHYSICAL MAP OF THE PRC

1:4,200,000. 1953. One sheet. 26 x 36. Chinese. Geographic grid.
Coverage: all of China.
Relief: altitudinal tints (8, various colors), shaded relief (brown).
Hydrography: major drainage (blue). *Vegetation:* swamps and marshes (blue). *Other:* mineral deposits (14 class., various colors).
Boundaries: international (black), provincial (black), indefinite international (black). *Transportation:* railroads (2 class., black), roads (black), canals (blue). *Cities and Towns:* (6 class., blue).
Other: Great Wall (black).
Notes: Generalized school-type map, but quite good nevertheless. Also 1:1,800,000 edition, same data.
Source: LC.

HYDROGRAPHIC MAP OF CHINA

1:4,000,000. 195-. One sheet. 59 x 39. Chinese. Geographic grid.
Coverage: all of China.
Hydrography: major drainage only (black). *Other:* intermittent streams (black), drainage areas (4 class., black).
Boundaries: international (black), provincial (black). *Transportation:* canals (black). *Cities and Towns:* (black).
Inset: Islands of the South China Sea.
Notes: Very generalized wall-type map.
Source: LC.

CHINA - MINES & MINERALS

1:4,000,000. 195-. One sheet. 54 x 38. Chinese. Geographic grid.
Coverage: all of China.
Physical data: mineral deposits (19 class., various colors).
Boundaries: international (black), provincial (black). *Cities and Towns:* (black).
Inset: Islands of the South China Sea.
Source: LC.

POPULATION DENSITY MAP OF THE PRC

1:4,000,000. 1955. One sheet. 54 x 39. Chinese. Geographic grid.
Coverage: all of China.
Boundaries: international (black), provincial (black). *Cities and Towns:* (7 class., brown). *Other:* density of population by area (8 class., various colors).
Source: LC.

ETHNOGRAPHIC MAP OF THE PRC

1:4,000,000. 195-. One sheet. 54 x 39. Chinese. Geographic grid. Coverage: all of China.
Boundaries: international (black), provincial (black). *Cities and Towns:* (4 class., black). *Other:* ethnic groups (31 class., various colors).
Notes: Excellent map.
Source: LC.

ADMINISTRATIVE MAP OF THE PRC

1:4,000,000. 1954. One sheet. 56 x 40. Chinese. Grographic grid
Coverage: all of China.
Vegetation: swamps and marshes (blue). *Other:* sands (brown), passes (black).
Boundaries: international (red/black), provincial (black), hsien (black), special administrative (red/black), special city unit (black).
Transportation: railroads (2 class., black), roads (2 class., brown), canals (blue). *Cities and Towns:* (11 class., red/blue. *Other:* Great Wall (black).
Source: LC.

CHINA - PROVINCES

Various scales. 1958-60. 18 sheets. Size varies. Chinese. Geographic grid. Coverage: see Notes below.
Physical data: sand, swamps and marshes, passes, peaks.
Boundaries: provincial, hsien, districts. *Transportation:* railroads (2 class.), roads, tracks and trails, air routes. *Cities and Towns:* (6 class.). *Other:* railroad stations.
Notes: Excellent maps for place names and current political boundaries. Positive photostats at LC. Provinces included are:

ANHUI	1:700,000 (1958, 1960)
CHEKIANG	1:700,000 (1959)
HOPEI	1:800,000 (1959, 1960)
HUNAN	1:800,000 (1958, 1960)
HUPEH	1:1,000,000 (1958), 1:750,000 (1960)
KIANGSI	1:750,000 (1959, 1960), 1:1,000,000 (1959)
KIANGSU	1:750,000 (1958)
KIRIN	1:850,000 (1959, 1960)
LIAONING	1:800,000 (1959)
SHANSI	1:750,000 (1960)
TIBET	1:1,600,000 (195-)

Source: LC.

TRANSPORTATION MAP OF SHANGHAI

1:100,000. 1959. One sheet. 19 x 24. Chinese. Coverage: Shanghai Administrative District.
Boundaries: city districts. *Transportation:* bus routes, ferry routes, railroads.
Source: LC.

CITY PLAN OF SHANGHAI

1:20,000. 1956. One sheet. 28 x 19. Chinese. Plane rectangular grid. Coverage: Shanghai and immediate environs.
Boundaries: administrative divisions (red). *Transportation:* railroads (black), roads (black), bus routes (7 class., red/green), ferry routes (black). Other: bridges (2 class., black), parks (green), lawns (green), anchorages (red).
Inset: Shanghai Administrative District.
Source: LC.

National Geological Survey of China

GENERALIZED SOIL MAP OF CHINA

1:10,000,000. No data. One sheet. 21 x 17. Chinese/English. Geographic grid. Coverage: all of China.
Notes: Only data shown are provincial boundaries and 11 soil groups with one to four categories each. Also a 1:7,500,000 edition, 1936, with same data; also a 1:6,000,000 edition, 1947, same data.
Source: LC.

8 GENERAL GEOLOGICAL MAP OF CHINA

1:1,000,000. 1924-28. 3 sheets. Size varies. Chinese/English. Geographic grid. Coverage: see index map 8.
Notes: Each sheet covers 6° Long. x 4° Lat. Geological data in color superimposed on a topographic map.
Sources: LC, USGS.

GEOLOGICAL MAP OF KIANGSU

1:500,000. 192-. One sheet. 45 x 39. Chinese/English. Geographic grid. Coverage: all of Kiangsu.
Relief: contours (interval unknown, brown).
Boundaries: provincial (black), hsien (black). *Transportation:* railroads (black), roads (black), canals (blue).
Other: geologic formations (19 class., various colors).
Source: LC.

C

Bureau of Roads, National Economic Council of China

HIGHWAY MAP OF CHINA

1:4,000,000. 1938. 4 sheets. 19 x 14. Chinese/English. Coverage: China Proper.
Boundaries: international (black), provincial (black), tribal (black). *Transportation:* railroads (2 class., black), roads (8 class., black), Grand Canal (black). *Cities and Towns:* (5 class., black).
Inset: Road Map of Outer Provinces.
Notes: No grid.
Source: LC.

Chihli River Commission

CHIHLI PROVINCE ("TOPOGRAPHIC MAP - CHIHLI METROPOLITAN DISTRICT")

1:50,000. 1920-24. 34 x 22. Chinese/English. Geographic grid. Coverage: No index map available.
Relief: contours (0.5 meters, black), spot heights (meters, black). *Hydrography:* very detailed drainage (blue). *Vegetation:* swamps and marshes (blue).
Boundaries: hsien (black). *Transportation:* railroads (black), roads (black), canals (blue). *Cities and Towns:* (2 class., black).
Notes: No legend. Very detailed cultural data. Excellent series. Each sheet covers 30' Long. x 15' Lat.
Sources: LC, MLUW.

Geographic Section, Natural Science Research Institute, National Central University

CHINA (SINKIANG PROVINCE) 9

1:500,000. 1943. 43 sheets. Size varies. Chinese/English. Geographic grid. Coverage: see index map, 9.
Relief: contours (interval unknown, black), form lines (black), spot heights (meters, black). *Hydrography:* detailed drainage (black). *Vegetation:* arable land (green), reeds (black), trees (4 class., black). *Other:* shifting sands (black), soil types (3 class., black), springs (black).
Transportation: roads (black), tracks and trails (black). *Cities and Towns:* (3 class., black). *Other:* telegraph lines (black), tombs (black), temples (2 class., black), forts (2 class., black) walls (2 class., black), ancient remains (black), wells (2 class., black).
Notes: Data spotty on some sheets, but still a highly useful series considering the scarcity of coverage for Sinkiang.
Source: LC.

Ministry of Communications & Public Works

AUTOMOBILE ROADS OF THE NORTHWEST PROVINCES

1:4,000,000. 1943. One sheet. 32 x 27. Geographic grid. Chinese. Coverage: Sinkiang and environs.
Boundaries: international (black), provincial (black), international undecided (black). *Transportation:* railroads (2 class., black), roads (8 class., black). *Cities and Towns:* (5 class., black).
Insets: Urumchi; Hsining; Lanchou.
Notes: Excellent transportation map.
Source: LC.

HIGHWAYS OF CHINA

1:4,000,000. 1943. 2 sheets. 40 x 27. Chinese. Coverage: all of China.
Vegetation: swamps and marshes (black), deserts (black).
Boundaries: international (black), provincial (black), banners (black).
Transportation: railroads (3 class., black), roads (10 class., black), canals (black). *Cities and Towns:* (5 class., black). *Other:* walls/defenses (black), Great Wall (black).
Sources: LC, MLUW.

DETAILED ROAD MAP OF NW CHINA

1:2,000,000. 1940. One sheet. 20 x 16. Chinese. Geographic grid. Coverage: Long. 100° - 110°, Lat. 33° - 39°.
Boundaries: provincial (black). *Transportation:* railroads (2 class., black), roads (8 class., black). *Cities and Towns:* (3 class., black).
Inset: Roads of Sinkiang province (1:9,000,000).
Source: LC.

DETAILED ROAD MAP OF SW CHINA

1:2,000,000. 1941. 2 sheets. 19 x 23. Chinese. Geographic grid. Coverage: Long. 88° - 115°, Lat. 21° - 33°.
Boundaries: international (black), provincial (black). *Transportation:* railroads (2 class., black), roads (8 class., black), tracks and trails (black). *Cities and Towns:* (5 class., black). *Other:* telegraph stations (black).
Inset: Hainan Island (1:2,000,000).
Source: LC.

C

Chekiang Army Land Survey Office

CHEKIANG PROVINCE

1:400,000. 1928. 4 sheets. 23 x 23. Chinese. Coverage: all of Chekiang.
Notes: No legend. General topographic map (contours, interval unknown). Political boundaries, cities and towns, roads, railways. Considerable detail in place names, but not exceptionally detailed in other cultural and physical data. No index map available. Black and white.
Source: LC.

CHEKIANG PROVINCE

1:100,000. 1930. 19 x 11. Chinese. Coverage: No index map available, but appears to be fairly complete for province.
Notes: No legend. General topographic series. Black and white. Contours (interval unknown), spot heights (meters). Political boundaries, cities and towns, roads, railways. Legibility generally poor. An inferior series compared to other 1:100,000 series on China.
Sources: LC, MLUW.

CHEKIANG PROVINCE

1:50,000. 1937. 18 x 15. Chinese. Coverage: No index map available.
Notes: No legend. No grid. General topographic series. Black and white. General physical and cultural data. An inferior series.
Source: LC.

KIANGSU PROVINCE

1:25,000. 1920. Size varies. Chinese. Coverage: No index map available.
Notes: No legend. Black and white. No grid. General physical and cultural data. An inferior series.
Source: LC.

COMPLETE MAP OF HANGCHOW

1:5,000. 1913. One sheet. 32 x 42. Chinese. Coverage: all of Hangchow and immediate environs.
Notes: No legend. Black and white. Relief by contours (2.5 meters). Very detailed street and settlement pattern. A good city map.
Source: LC.

Kwangsi Province Land Survey Office

KWANGSI PROVINCE

1:25,000. 1935-36. 18 x 19. Chinese.
Notes: No legend. No grid. Black and white. Relief by physiographic method on most sheets (very poor); a few sheets have detailed contours (interval unknown). Cultural data fairly detailed. No index map available, but series appears to cover most of Kwangsi province. Series issued in 1945 as AMS L788.
Source: LC.

Kwangtung Provincial Military Land Survey Bureau

KWANGTUNG PROVINCE

1:50,000. 1936. Size varies. Chinese. Coverage: No index map available.
Relief: contours (interval unknown), spot heights (meters). *Hydrography:* very detailed drainage. *Vegetation:* woods (3 class.), swamps and marshes, rice paddies, cultivated fields (4 class.), grasslands, trees (2 class.). *Other:* hot springs, fords (3 class.).
Boundaries: international, provincial, hsien, district, leased territory. *Transportation:* railroads (5 class.), roads (5 class.), tracks and trails (2 class.). *Other:* bridges (7 class.), ports (3 class.), navigation lights (8 class.), walls (5 class.), schools, offices (3 class.), military headquarters or camps (4 class.), schools, hospitals, courts, prisons, ponds (3 class.), wells, post offices, telegraph offices, telephone offices, factories, radio stations, churches (2 class.), airfields (2 class.), forts, monuments, temples, chimneys, buildings (2 class.).
Notes: Very detailed cultural and physical data. Series shows strong influence of Japanese topographic series on Chinese mapping. Black and white. No index map available. Legibility varies from fair to poor.
Source: LC.

Taiwan Agricultural Research Institute

GENERALIZED SOIL MAP OF TAIWAN

1:500,000. 1958. One sheet. 22 x 30. Chinese/English. Geographic grid. Coverage: all of Taiwan.
Boundaries: hsien (black). *Transportation:* railroads (black). *Cities and Towns:* (3 class., black).
Physical data: soils (14 class., various colors).
Notes: No topographic data. Excellent map for soil information.
Source: LC.

C

TAIWAN - SOILS

1:100,000. 1951. 8 sheets. Size varies. Chinese/English. Geographic grid. Coverage: see Notes below.
Hydrography: detailed drainage (black/blue). *Vegetation:* swamps and marshes (black). *Other:* sand (black), dikes (black), soil (class. varies, various colors).
Boundaries: hsien (black). *Transportation:* railroads (2 class., black), roads (2 class., black). *Cities and Towns:* (3 class., black).
Notes: Extremely detailed soil maps for various prefectures. Data varies slightly but is generally as shown above. Soil class. varies from 5 to 123 groups and sub-types. Prefectures included are:

Pingtung (1953), 73 class.	Hsinchu (1960), 36 class.
Taichung (1941), 61 class.	Taoyuan (1960), 28 class.
Penghu (1948), 5 class.	Kaohsiung (1952), 70 class.
Miaoli (1960), 47 class.	Tainan (1951), 123 class.

Source: LC.

Taiwan Provincial Government, Department of Civil Affairs

TAIWAN - MAPS OF HSIENS

Various scales. Various dates. 46 sheets. Size varies. Chinese. Coverage: see Notes below.
Notes: Separate maps, one sheet covering each hsien in three different editions. Dates and scales of each hsien map edition are as follows:

	1952	*1960*	*1961*
Chang-hua	1:150,000	1:60,000	1:91,000
Chia-I	1:100,000	1:80,000	1:128,000
Hsin-chu	1:100,000	1:100,000	1:93,000
Hua-lien	1:200,000	1:150,000	1:193,000
I-lan	1:150,000	1:160,000	1:133,000
Kaohsiung	1:200,000	1:150,000	1:171,000
Miao-li	1:100,000	1:100,000	1:96,000
Nan-t'ou	1:150,000	1:150,000	1:141,000
P'eng-hu		1:100,000	1:123,000
P'ing-tung	1:150,000	1:150,000	1:145,000
T'ai-chung	1:150,000	1:150,000	1:145,000
T'ai-nan	1:100,000	1:100,000	1:112,000
T'ai-pei	1:150,000	1:100,000	1:138,000
T'ai-tung	1:150,000	1:150,000	1:196,000
T'ao-yuan	1:100,000	1:100,000	1:91,000
Yun-lin	1:100,000	1:175,000	1:95,000

Data on 1952 edition: Relief: contours (interval unknown). *Boundaries:* hsien, townships. *Transportation:* railroads, roads (3 class.). *Cities and Towns:* (3 class.). 1960 edition has same data as 1952 edition, except for better relief representation (contours-interval unknown).

1961 edition has same data as 1952 edition also, except that only a few sheets have a very general relief representation (contours, interval unknown). All three editions have no legend and no grid. A valuable series.
Source: LC.

TAIWAN - CITIES

Various scales. Various dates. 13 sheets. Size varies. Chinese. Geographic grid. Coverage: see Notes below.
Notes: Series very similar to Hsien series, above. Cities covered and their respective dates and scales are:

	1952	*1960*	*1961*
Chilung (Keelung)		1:20,000	
Kaohsiung		1:25,000	
Taichung			1:25,000
			1:12,000
Tainan	1:50,000	1:25,000	1:15,000
Taipei	1:20,000	1:12,500	1:17,000
	1:10,000		
Yangmingshan	1:50,000		

Source: LC

Taiwan Highway Bureau

MAP OF TAIWAN HIGHWAYS

1:500,000. 1959. One sheet. 23 x 34. Chinese/English. Geographic grid. Coverage: all of Taiwan.
Relief: spot heights (meters, black). *Hydrography:* major drainage (blue). *Other:* hot springs (blue).
Boundaries: hsien (yellow), city (yellow). *Transportation:* railroads (black), roads (4 class., black), tracks and trails (black). *Cities and Towns:* (6 class., black). *Other:* harbors (black), lighthouses (black).
Notes: Also editions for 1950, 1954, same data.
Source: LC.

Jih Hsin Geographical Institute, Shanghai

A MAP OF CHINA & JAPAN

1:3,600,000. 1934. 2 sheets. Chinese/English. Geographic grid. Coverage: China east of Long. 120°.
Relief: hachures (brown), spot heights (meters, black). *Hydrography:* detailed drainage (black). *Vegetation:* swamps and marshes (blue). *Other:* mountain passes (black), sand (black).
Boundaries: international (black), provincial (black).

Transportation: railroads (2 class., black), roads (3 class., red/black), ship routes (black). *Cities and Towns:* (18 class., black). *Other:* telegraph cables (black), Great Wall (black), antiquities (black), lighthouses (black), the Willow Wall (black).
Insets: Very detailed cultural data. Excellent map.
Source: LC.

A MAP OF JEHOL, CHAHAR, & SUIYUAN

1:2,100,000. 1940. One sheet. 28 x 19. Chinese/English. Geographic grid. Coverage: Jehol, Chahar, and Suiyuan provinces.
Relief: spot heights (meters, black). *Other:* sand (black), passes (black).
Boundaries: provincial (black), hsien (black), Mongolian banners (black).
Transportation: railroads (black), roads (3 class., red/black), tracks and trails (black). *Cities and Towns:* (11 class., black). *Other:* telegraph stations (black), wireless stations (black), antiquities (black), tombs (black), telegraph lines (black), walls (2 class., black), mines (black), Buddhist temples (black), residences of Mongolian princes (black), wells (black).
Source: LC.

NEW KWANGTUNG & KWANGSI MAP

1:1,300,000. 1939. One sheet. 40 x 27. Chinese/English. Geographic grid. Coverage: Kwangtung and Kwangsi provinces.
Relief: hachures (brown), spot heights (meters, black). *Hydrography:* detailed drainage (black). *Other:* passes (black).
Boundaries: international (black), provincial (black), hsien (black).
Transportation: railroads (2 class., black), roads (black), tracks and trails (black), ship routes (black). *Cities and Towns:* (6 class., black). *Other:* treaty ports (red), telegraph stations (red), anchorages (red), mines (black).
Insets: Index map (1:25,000,000); Hainan Island; Islands of the South China Sea (1:16,000,000).
Source: LC.

HUPEH & ADJOINING PROVINCES

1:1,300,000. 1938. One sheet. 18 x 27. Chinese/English. Geographic grid. Coverage: Long. 112° - 118°, Lat. 28° - 35°.
Boundaries: provincial (black). *Transportation:* railroads (black), roads (black), canals (black). *Cities and Towns:* (3 class., red/black).
Other: treaty ports (red).
Notes: Not as good as other maps of this area at similar scales, but still useful.
Source: LC.

THE THREE NE PROVINCES OF CHINA

1:1,000,000. 1932. One sheet. 56 x 74. Chinese/English. Geographic grid. Coverage: Liaoning, Kirin, Heilungkiang provinces.
Relief: spot heights (meters, black). Hydrography: detailed drainage (black).

Vegetation: forest (black), swamps and marshes (black), plains (black). *Other:* sand (black), springs (black), passes (black). *Boundaries:* international (black), provincial (black), hsien (black), Mongol Banners (black). *Transportation:* railroads (2 class., black), roads (3 class., red/black), tracks and trails (black), ship routes (black). *Cities and Towns:* (12 class., black). *Other:* telegraph lines (2 class., black), telegraph stations (black), walls (3 class., black), churches (black), Buddhist temples (black), Residences of Mongolian princes (black), antiquities (black), landing places (black), lighthouses (black), wireless stations (black), mines (black), wells (black). *Insets:* Harbin; Mukden, Antung; Yingkou; Dairen; Changchun; Manchouli; Hailar; Tsitsihar; Liaoyang; Railroad map of the three provinces (all with no scale shown).
Notes: Excellent, extremely detailed cultural data.
Source: LC.

NANKING

1:50,000. 1936. One sheet. 26 x 20. Chinese/English. Coverage: Nanking and environs.
Relief: contours (interval unknown, black). *Other:* sand banks (black). *Boundaries:* hsien (black), memorial park (black). *Transportation:* railroads (black), roads (3 class., black), tracks and trails (black). *Other:* city walls (black), bridges (black), wharves (black), ferries (black), police bureau (black), telegraph offices (black), churches (black), post offices (black), customs (black), observatories (black), schools (black), buildings (black), government offices (black), dikes (black), mounds (black), graves (black), temples (black).
Notes: No grid.
Source: LC.

NANKING

1:20,000. 1937. One sheet. 19 x 25. Chinese. Coverage: Nanking and environs.
Relief: contours (20 meters), spot heights (meters). *Other:* sand (black).
Boundaries: city. *Transportation:* railroads, roads (3 class.), tracks and trails. *Other:* telegraph offices, walls, bridges (3 class.), docks, dikes, burial mounds, buildings (2 class.), schools, meteorological stations, post offices, churches, police stations (2 class.).
Notes: No grid. Positive photostat.
Source: LC.

Ya Hsin Ti Hsueh She, Wuchang

CHINA - PROVINCES

Various scales. Various dates. 39 sheets. Size varies. Chinese. Geographic grid. Coverage: see Notes below.
Relief: hachures (red). *Hydrography:* detailed drainage (blue). *Other:* passes (black).

Boundaries: provincial (black), hsien (black). *Transportation:* railroads (2 class., black) roads (5 class., red/black), tracks and trails (black). *Cities and Towns:* (3 class., black). *Other:* telephone lines (black), radio stations (red), telegraph offices (red), bridges (black), ports (black), airfields (black), railroad stations (black).
Notes: Excellent maps for place names and political boundaries. Data is generally the same for all the provinces, with minor variations in colors used, or class. of data, in size of sheets, etc. All sheets include insets, at widely varying scales, of the major cities in each province. Provinces included are:

ANHUI	1:1,320,000 (1928); 1:900,000 (1934)
CHEKIANG	1:1,340,000 (1934)
FUKIEN	1:1,360,000 (1928); 1:1,000,000 (1931, 1936)
HEILUNGKIANG	1:3,000,000 (1928)
HONAN	1:2,000,000 (1934)
HOPEI	1:1,081,000 (1934)
HUNAN	1:1,200,000 (1933); 1:1,000,000 (1941)
HUPEH	1:1,800,000 (1932); 1:1,080,000 (1935); 1:1,100,000 (194-)
KIANGSI	1:1,000,000 (1939); 1:1,500,000 (1932)
KIANGSU	1:1,200,000 (1933)
KIRIN	1:2,400,000 (1928); 1:1,580,000 (1933)
KWANGSI	1:1,600,000 (1928)
KWANGTUNG	1:2,000,000 (1928); 1:1,330,000 (1931)
KWEICHOW	1:1,500,000 (1928); 1:1,080,000 (1933)
LIAONING	1:1,600,000 (19--); 1:2,600,000 (1928)
SHANSI	1:1,000,000 (193-)
SHANTUNG	1:1,440,000 (1932); 1:960,000 (1933)
SHENSI	1:1,530,000 (1930); 1:2,000,000 (1934)
SIKANG	1:2,000,000 (1935); 1:1,500,000 (1938)
SINKIANG	1:4,800,000 (1928); 1:3,600,000 (1933)
SZECHWAN (& E. Sikang)	1:1,600,000 (1941); 1:2,300,000 (1931); 1:1,850,000 (1935)
YUNNAN	1:2,800,000 (1928)
YUNNAN (& Kweichow)	1:1,600,000 (1939)

Source: LC.

SOUTHWEST CHINA

1:3,000,000. 1951. One sheet. 22 x 19. Chinese. Geographic grid. Coverage: Szechuan, Yunnan, Kweichow, Sikang provinces.
Hydrography: major drainage (blue). *Other:* passes (blue).
Boundaries: international (blue), provincial (blue), tracks and trails (red). *Cities and Towns:* (7 class., red/blue).
Source: LC.

WUCHANG

1:20,000. 1928. One sheet. 20 x 50. Chinese. Coverage: Wuchang and immediate environs.
Relief: contours (interval unknown). *Hydrography:* very detailed drainage (black).

Transportation: railroads (black), roads (3 class., black), tracks and trails (black), tramways (black). *Other:* walls (black), dikes (black), bridges (2 class., black), wireless stations (black), schools (black), temples (black).
Inset: Greater Wuhan area.
Notes: Excellent, extremely detailed city map. No grid.
Source: LC.

SHANGHAI

1:18,000. 1930. One sheet. 28 x 17. Chinese. Coverage: Shanghai and immediate environs.
Notes: For data see WUCHANG, above. No grid.
Inset: Central Business District.
Source: LC.

NANKING

1:18,000. 1936. One sheet. 19 x 26. Chinese. Coverage: Nanking and immediate environs.
Notes: For data see WUCHANG, above. No grid.
Source: LC.

CHANGCHIH

1:10,000. 1933. One sheet. 18 x 27. Chinese. Coverage: Changchih and immediate environs.
Relief: contours (interval unknown, black). *Vegetation:* woods (2 class., green), bamboo (black), trees (2 class., black), vegetable gardens (black), fields (black), cliffs (black).
Other: wells (black), sand (black), cliffs (black).
Transportation: railroads (black), roads (4 class., black/red), tracks and trails (black). *Other:* schools (black), temples (black), telephone lines (black), railroad stations (red), docks (black), dikes (black) bridges (2 class., black), bamboo fences (black), burial mounds (black), ports (black).
Notes: Excellent, extremely detailed city map. No grid. Also 1936 edition, same data.
Source: LC.

HANKOU

1:10,000. 1934. One sheet. 29 x 19. Chinese. Coverage: Hankou and immediate environs.
Notes: For data see CHANGCHIH, above.
Source: LC.

WUHAN

1:10,000. 1929. One sheet. 40 x 60. Chinese. Coverage: Wuhan and immediate environs.
Notes: For data see CHANGCHIH, above.
Source: LC.

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Ya Kuang Geographical Society

PHYSICAL MAP OF CHINA

1:8,000,000. 1947. One sheet. 27 x 18. Chinese. Geographic grid.
Coverage: all of China.
Relief: altitudinal tints (7 class., various colors). *Hydrography:* major drainage (black). *Other:* deserts (black).
Boundaries: international (black), provincial (black). *Transportation:* canals (black). *Cities and Towns:* (5 class., black).
Notes: Very generalized relief representation.
Source: LC.

MAP OF THE PRINCIPAL MINERAL RESOURCES IN CHINA

1:8,000,000. 1947. One sheet. 27 x 18. Chinese. Geographic grid.
Coverage: all of China.
Physical data: mineral deposits (13 class., red), coal deposits (green).
Boundaries: international (black), indefinite international (black), provincial (black). *Transportation:* railroads (2 class., black), canals (black). *Cities and Towns:* (2 class., black). *Other:* Great Wall (black).
Source: LC.

CHINA - DISTRIBUTION OF TRIBES

1:8,000,000. 1947. One sheet. 27 x 18. Chinese. Geographic grid.
Coverage: all of China.
Boundaries: international (black), provincial (black). *Transportation:* canals (black). *Cities and Towns:* (5 class., black). *Other:* Great Wall (black), ethnic groups (7 class., various colors).
Notes: Population distribution by dots superimposed on areal distribution of ethnic groups. Excellent map.
Source: LC.

CLIMATIC MAP OF CHINA

1:8,000,000. 1947. One sheet. 27 x 18. Chinese. Geographic grid.
Coverage: all of China.
Physical data: average annual temperatures (16 class., various colors), prevailing winds (red).
Boundaries: international (black), provincial (black). *Cities and Towns:* (5 class., black).
Inset: No data shown for Tibet and W. Sinkiang.
Source: LC.

LAND USE MAP OF CHINA

1:8,000,000. 1947. One sheet. 27 x 18. Chinese. Geographic grid.
Coverage: all of China.
Vegetation: forest (yellow), agricultural areas (3 class., various colors). *Other:* barren areas (white), passes (black).

Boundaries: international (black), provincial (black), indefinite international (black). *Transportation:* canals (black). *Cities and Towns:* (7 class., black). *Other:* Great Wall (black), fisheries areas (blue).
Source: LC.

GREAT MODERN MAP OF CHINA

1:4,000,000. 1941. 2 sheets. 28 x 36. Chinese/English. Geographic grid. Coverage: all of China.
Relief: hachures. *Hydrography:* detailed drainage. *Other:* desert, salt wells, sands, sediment of Yellow River.
Boundaries: international, provincial, indefinite and tribal, fortress.
Transportation: railroads, roads, ship routes, air routes, Grand Canal.
Cities and Towns: (10 class.). *Other:* tombs, telegraph lines, ports, lighthouses, temples, historic places, Great Wall, bridges.
Insets: Islands of the South China Sea (1:12,000,000); Physical features of China (1:17,700,000).
Notes: Also 1:6,000,000 edition, same data. English only in legend. Also all-Chinese edition, same scale and data. Reissued yearly. Copy examined was black and white (positive photostat).
Source: LC.

COMMUNICATIONS MAP OF SE & SW CHINA

1:3,600,000. 1941. One sheet. 27 x 20. Chinese. Geographic grid. Coverage: Long. 98° - 122°, Lat. 21°30' - 35°.
Hydrography: major drainage (black). *Other:* sand (black), passes (black).
Boundaries: international (black), provincial (black), foreign territory (black). *Transportation:* railroads (2 class., black), roads (4 class., red), ship routes (black), canals (black), air routes (blue).
Cities and Towns: (8 class., red/black). *Other:* lighthouses (red), mines (black).
Inset: Physical map of same area.
Source: LC.

CHINA - PROVINCES

Various scales. Various dates. 23 sheets. Size varies. Chinese. Geographic grid. Coverage: see Notes below.
Hydrography: major drainage (black). *Other:* peaks (black), sand (black), mines (black).
Boundaries: international (black), provincial (black), hsien (black), city districts (black), districts (red/black). *Transportation:* railroads (2 class., black), roads (2 class., red), ship routes (black), canals (black). *Cities and Towns:* (6 class., black).
Other: city walls (black), telegraph stations (red), bridges (black), temples (black), navigation lights (red).
Notes: Excellent maps for place names and political boundaries. Data is generally the same for all the provinces, with minor variations in colors used, or class. of data, in size of sheets, etc. All sheets include insets, at widely varying scales, of the major cities in each province.

Provinces included are:

CHEKIANG	1:1,00,000 (1951)
FUKIEN	1:940,000 (1947)
HOPEH	1:3,000,000 (1947)
HUNAN	1:2,200,000 (1950)
HUPEH	1:1,100,000 (1950)
KIANGSI	1:980,000 (1950)
KIANGSU	1:900,000 (1951)
S. KIANGSU	1:1,000,000 (1947)
KWANGSI	1:1,000,000 (1941)
KWANGTUNG	1:1,500,000 (1950); 1:1,000,000 (1951)
LIAONING	1:800,000 (1950)
PINGYUAN	1:700,000 (1950)
SHANSI	1:1,000,000 (1950)
SHANTUNG	1:600,000 (1950)
SHENSI	1:1,200,000 (1948)
SZECHWAN	1:1,500,000 (1931); 1:1,800,000 (1942)
TAIWAN	1:600,000 (1948)
TIBET	1:1,600,000 (1951)
YUNNAN	1:3,600,000 (1940)
KWANGTUNG & KWANGSI	1:2,400,000 (1935)
KIANGSU/ANHWEI/ CHEKIANG	1:1,650,000 (1947)

Source: LC.

HAINAN ISLAND

1:500,000. 1948. One sheet. 28 x 19. Chinese. Geographic grid.
Coverage: Hainan Island.
Boundaries: hsien (black). *Transportation:* railroads (black), roads (red), ship routes (black). *Cities and Towns:* (3 class., black).
Other: bridges (black).
Notes: Also editions for 1949, 1950, same data.
Source: LC.

SHANGHAI

1:20,000. 1946. One sheet. 28 x 18. Chinese. Geographic grid.
Coverage: Shanghai and immediate environs.
Transportation: railroads (black), roads (2 class., black) bus routes (3 class., red). *Other:* docks (black), bridges (2 class., black), government offices (black), police stations (black), post offices (black), schools (black), monuments (black), Buddhist temples (black), churches (black), wireless stations (black), vegetable markets (black), parks (green).
Insets: E. Shanghai; Shanghai and environs.
Notes: Excellent city map.
Source: LC.

NANKING

1:20,000. 1946. One sheet. 20 x 27. Chinese. Geographic grid.
Coverage: Nanking and immediate environs.

Notes: For data see SHANGHAI, above.
Source: LC.

TSINAN

1:10,000. 1947. One Sheet. 29 x 19. Chinese. Coverage: Tsinan and immediate environs.
Relief: hachures (black). *Vegetation:* woods (green), grass and parks (green).
Transportation: railroads (black), roads (3 class., black), bus routes (red). *Other:* buildings (pink/yellow), temples (black), burial mounds (2 class., black), bridges (2 class., black), walls (black), dikes (2 class., black).
Notes: Excellent city map.
Source: LC.

Chinese Map Service

TAIWAN ROAD MAP

1:250,000. 1956. 3 sheets. 39 x 23. Chinese/English. Geographic grid. Coverage: all of Taiwan.
Relief: spot heights (meters, black). *Hydrography:* detailed drainage (blue). *Other:* mineral springs (blue).
Boundaries: provincial (black), hsien (black). *Transportation:* railroads (4 class., black), roads (8 class., various colors), tracks and trails (black), ship routes (black). *Cities and Towns:* (3 class., black). *Other:* bridges (2 class., black), tunnels (black), ports (black), lighthouses (red), airfields (red).
Notes: Excellent map.
Source: LC.

TAIWAN - LAND USE & FOREST SURVEY

1:250,000. 1954-55. 12 sheets. 25 x 18. Chinese/English. Military grid. Coverage: all of Taiwan.
Relief: contours (100 meters, black). *Hydrography:* very detailed drainage (black). *Vegetation:* woods (black), orchards (black), rice paddies (black). *Other:* rocks (2 class., black), stand volume of forests by area (3 class., various colors), erosion problem by areas (4 class., various colors), forest types (5 class., various colors), land-use types (4 class., various colors).
Boundaries: international (black), hsien (black). *Transportation:* railroads (4 class., black), roads (10 class., black), tracks and trails (black). *Cities and Towns:* (2 class., black). *Other:* airports (2 class., black), salt evaporators (black).
Notes: Two sets in this series: Set 1 covers forest types and land-use types in 6 sheets for all of Taiwan. Set 2 covers volume of standing timber and erosion in 6 sheets for all of Taiwan. The overprint of land-use areal symbols is of very strong, almost opaque colors that black out completely the underlying physical and cultural data, seriously restricting the value of the series in many places. Still an important series however.
Source: LC.

Naval Hydrographic Office of China

HYDROGRAPHIC CHARTS

The Naval Hydrographic Office of China publishes a wide variety of hydrographic charts at various scales, covering the entire coast of China. The data shown on these charts are very much like that on nautical charts produced by other countries, particularly the United States, being confined to narrow strips along the coastal areas and navigable waterways. The larger-scale charts show extremely detailed cultural and physical data and are an excellent source of information for areas that may not be covered in any other available maps.

Some of these charts were compiled by the Hydrographic Department of the Chinese Navy from its own surveys and some were produced by the Marine Department of the Chinese Maritime Customs. Some charts of both series are in English as well as Chinese.

Source: Few map libraries have copies of Chinese nautical charts. The best source is the Library of Congress. Fortunately, Chinese nautical charts may also be purchased directly from the Naval Hydrographic Office of China on Taiwan. (See Appendix B for addresses and instructions on ordering maps).

Hydrographic charts available: (Each chart listed below includes the following data in this order: Chart No.; Title and contents of charts; Scale; Publication date; Date of revised editions).

Charts on Index Map 10. (T'ai-chou Wan to Liao-tung Wan) 10

101; Tsingtao to mouth of Yangtze Chiang, incl. southwest coast of Korea; 1:1,000,000; 1951; 1956

102; Mouth of Yangtze Chiang to northern part of Taiwan; 1:1,000,000; 1951; 1956

104; Mouth of T'ao-tze to Chiao-chou wan; 1:230,000; 1953
Plan: Mouth of the Kuan-ho; 1:72,794

105; Hai-chou wan; 1:50,000; 1953

107; Chou-shan tao to Mouth of Yangtze Chiang; 1:300,000; 1952; 1958

109; Ch'ung-ming tao, south side; 1:75,000; 1956

110; Vicinity of mouth of Yangtze Chiang; 1:140,000; 1932; 1955

111; South part of Yangtze Chiang from the sea to Wusung; 1:75,000; 1936; 1955

112; Wusung anch. and the vicinity of the coast of Shanghai; 1:25,000; 1931; 1955

113; Huang-p'u chiang, sh. 1: Wusung to Kao-ch'iao; 1:10,000; 1942; 1955

113[A]; Huang-p'u chiang, sh. 2: Port of Kao-ch'iao to Port of Yang-shu-p'u; 1:10,000; 1941; 1955

113[B]; Huang-p'u chiang, sh. 3: Port of Yang-shu-p'u to Chiang-chia-pin; 1:10,000; 1941; 1955

113[C]; Huang-p'u chiang, sh. 4; Chiang-chia-pin to T'ang-k'ou; 1:10,000; 1941; 1955

116; Hua-niao shan to mouth of Yangtze Chiang; 1:150,000; 1956

117; Hang-chou wan and vicinity; 1:150,000; 1951; 1954

118; Ch'eng-shan (Ma-an) lieh-tao and Chou-shan tao; 1:150,000; 1952; 1956

119; Ssu-chiao (Pa-ke) lieh-tao; 1:72,700; 1952
Ch'eng-shan (Ch'eng-ch'ien shan) anch.; 1:24,620

119[A]; Ch'i-ch'u lieh-tao; 1:40,000; 1953

120; Port of Ch'ang-t'u and vicinity; 1:72,000; 1952

121; Port of Ting-hai and vicinity; 1:18,500; 1952

123; Hang-chou wan, southeast part; 1:50,000; 1952

124; Yung-chiang, from the sea to Ning-po; 1:12,000; 1928; 1955
Plan: Ning-po anch.; 1:6,000

125; Port of Hsiang-shan to Yung-chiang; 1:88,000; 1952

126; Chu-shan lieh-tao to Port of Hsiang-shan; 1:88,000; 1952

129; San-men wan and Port of Shih-p'u; 1:60,000; 1931; 1955

130; Port of Shih-p'u; 1:20,000; 1930; 1955
Plans: Coast of mouth of Shih-p'u; 1:12,000
Lin-men Road; 1:10,000

139; Wu-sung to Pao-mao sha; 1:75,000; 1933

140; Piao-lang sha to Lang-shan; 1:75,000; 1941

141; Lung-t'an kang to Lien-ch'eng chou; 1:75,000; 1931

142; Lung-t'an kang to Lien-ch'eng chou; 1:75,000; 1931

143; Lien-ch'eng chou to Yung-an chou; 1:25,000; 1941

144; Yung-an chou to Chiao-shan; 1:25,000; 1941

145; Chiao-shan to Shih-erh yu; 1:25,000; 1943

146; Tseng-chiang port and vicinity; 1:16,000; 1943

147; Shih-erh yu to T'ien-ho k'ou; 1:25,000; 1942

148; T'ien-ho k'ou to Nan-ching; 1:25,000; 1943

149; Nan-ching port; 1:10,000; 1943

150; Nan-ching to Chi-t'ou shan; 1:25,000; 1941

151; Chi-t'ou shan to Huang-chou hsin-t'an; 1:25,000; 1941

152; Huang-chou hsin-t'an to Kuang-fu chi; 1:25,000; 1941

153; Kuang-fu chi to Hei-sha chou; 1:25,000; 1941

154; Hei-sha chou to Lung-hsin chou; 1:25,000; 1941

155; Lung-hsin chou to ch'eng-te chou; 1:25,000; 1941

156; Ch'eng-te chou to T'ieh-pan chou; 1:25,000; 1941

157; T'ieh-pan chou to Hsin-k'ai k'ou; 1:25,000; 1941

158; Hsin-k'ai k'ou to Kuang-fung yu; 1:25,000; 1941

159; Kuang-fung yu to Fu-k'ang yu; 1:25,000; 1941

160; Fu-k'ang yu to P'ai-shih chi; 1:25,000; 1941

161; P'ai-shih chi to Hsiao-ku shan; 1:25,000; 1942

162; Hsiao-ku shan to Pa-li chiang k'ou; 1:25,000; 1942

163; Pa-li chiang k'ou to Chiu chiang; 1:25,000; 1942

164; Chiu chiang to Wu-hsueh; 1:25,000; 1942

165; Wu-hsueh to Li-chia chou; 1:25,000; 1942

166; Li-chia chou to Hui-feng chi; 1:25,000; 1942

167; Hui-feng chi to San-chiang k'ou; 1:25,000; 1942

168; San-chiang k'ou to Yeh-chia chou; 1:25,000; 1942

169; San-chiang k'ou to Yeh-chia chou; 1:25,000; 1942

201; Yalu River to Tsingtao, incl. western part of Korea; 1:1,000,000; 1951; 1956

202; Northern Yellow Sea, incl. Po Hai; 1:900,000; 1954
Plan: P'ing-chiao k'ou; 1:336,300

203; Liaotung Peninsula and vicinity; 1:500,000; 1954

204; Mouth of the Yalu River; 1:75,000; 1954

205; Ta-ku shan anchorage and vicinity; 1:75,000; 1954

206; Mouth of Liao ho to Port of Dalien; 1:300,000; 1954

207; Li-ch'ang shan Islands and vicinity; 1:100,000; 1954

208; Li-ch'ang shan Islands; 1:35,000; 1947; 1953

209; Hai-yang I.; 1:35,000; 1954

210; Po Hai; 1:500,000; 1951

211; Kwantung Peninsula and vicinity; 1:100,000; 1954

212; Dalien Bay; 1:30,000; 1954

213; Port of Dalien; 1:11,000; 1954

214; Port of Lushun and vicinity; 1:22,000; 1954

215; Port of Lushun; 1:8,500; 1954

217; Straits of Po-hai; 1:185,000; 1954

218; Chin-chou wan to Fu-chou chiao; 1:100,000; 1954

219; Port of P'u-lan-tien; 1:12,000; 1954

220; Fu-chou chiao to T'ai-tzu shan; 1:100,000; 1954

221; Vicinity of the mouth of Liao ho; 1:100,000; 1954

222; Mouth of Liao ho, incl. port of Yin-k'ou; 1:33,000; 1954
Plan: E. part of Port of Yin-k'ou; 1:15,000

223; Liao ho (Yin-k'ou to Hui-tzu-wo); 1:50,000; 1954

224; Plans along Liao-tung wan; 1953
Lai-chou t'an and vicinity; 1:100,000
Mouth of Ta-ch'ing ho; 1:50,000
Mouth of Lai-mi; 1:50,000
Mouth of Luan ho; 1:50,000
Mouth of Yan ho; 1:50,000

225; Ch'in-huang tao to Hu-lao; 1:200,000; 1953

226; Hu-lu tao and vicinity; 1:50,000; 1947; 1954

227; Port of Hu-lu tao; 1:10,000; 1953

230; Ch'in-huang tao and sea area; 1:65,000; 1953
Plan: Ch'in-huang tao anch.; 1:12,000

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231; Mouth of Ta-ching ho to Ch'in-huang tao; 1:200,000; 1953

235; Hai-ho (mouth of Hai-ho to Hsin-ch'eng); 1:31,000; 1954

236; Hai-ho (Hsin-ch'eng to T'ien-ching); 1:31,000; 1954
Plan: Port of T'ien-ching; 1:8,158

238; Huang-ch'eng tao; 1:14,567; 1953

239; Miao-tao anch; and vicinity; 1:32,369; 1953

242; Chiao-chou wan to Lai-chou wan; 1:500,000; 1954

246; Port of Lung-k'ou; 1:30,000; 1947; 1953

250; Ch'u tao to Chih tao; 1:75,000; 1954

251; Port of Yen-t'ai and vicinity; 1:37,500; 1954
Plan: Inner port of Yen-t'ai; 1:8,760

252; Li-tao wan to Chu tao; 1:75,000; 1954

253; Port of Wei-hai-wei and vicinity; 1:37,500; 1954

254; Port of Wei-hai-wei; 1:12,500; 1954

256; Shih-tao wan to Shantung kao-chiao; 1:37,100; 1954

257; Plans along the coast of Shantung; 1954
Ma-lan wan and Lung-yen wan; 1:24,400
Yan-yu-chih wan; 1:24,400
Li-tao wan; 1:24,400
Ai-lun wan; 1:26,150
Wang-chia wan; 1:24,350

258; Niao-tsui t'ou to Shih-tao wan; 1:73,300; 1954

259; Shih-tao wan and vicinity; 1:25,000; 1954

261; Lao-shan t'ou to Niao-tsui t'ou; 1:158,000; 1954

264; Chiao-chou wan and vicinity; 1:100,000; 1953

265; Ch'ing-tao wan and vicinity; 1:30,000; 1953

266; Port of Ch'ing-tao; 1:15,000; 1956

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11 *Charts on Index Map 11 (Canton to T'ai-chou Wan)*

122; Wen-chou wan to Chou-shan tao; 1:300,000; 1952; 1958

128; Yu-shan lieh-tao to Chiu-shan lieh-tao; 1:100,000; 1952; 1959

131; T'ai-chou wan, vicinity of; 1:75,000; 19[illegible]3

132; T'ai-chou lieh-tao and vicinity; 1:45,000; 1932; 1955
Plan: Anch. of T'ai-chou lieh-tao; 1:20,000

133; T'ai-chou wan and Chiao chiang; 1:40,000; 1933; 1955
Plan: Coast of mouth of Hai-men; 1:12,500

134; Ch'i-k'ou-yang anch.; 1:35,000; 1956

135; Le'ch'ing wan and vicinity and port of K'ai-men; 1:50,000; 1934; 1955 Plans: Port of K'ai-men; 1:20,000
Hsuan-men; 1:17,000

136; Tung-kua yu to San-p'an men, incl. Hei-mu wan; 1:40,000; 1933; 1955

137; Ou-chiang and vicinity; 1:71,000; 1952

138; Ou-chiang (mouth of river to Yung-chia); 1:25,000; 1952
Plan: Port of Wen-chou; 1:12,500

301; Tung-yin tao to Wen-chou wan; 1:300,000; 1952; 1957
Plan: Sha-ch'eng wan; 1:39,240

302; Pai-ch'uan lieh-tao to Tung-yin tao; 1:100,000; 1959

304; Vicinity of San-tu ao; 1:100,000; 1951

304A; Hsi-yang tao anch.; 1:35,000; 1956

305; S. part of San-tu ao; 1:37,500; 1952

305A; Lo-yuan wan; 1:35,000; 1956

306; Wu-ch'iu yu to Tung-yin tao incl. n. part of Taiwan (Chung-kang anch. to mouth of Tung-k'ang); 1:300,000; 1952; 1957

307; Mouth of Min chiang to Hong Kong and Taiwan; 1:1,000,000; 1951; 1956

308; Vicinity of mouth of Min chiang; 1:65,000; 1951

C

308A; Vicinity of mouth of Min chiang; (Pai-ch'uan lieh-tao to Pei-chiao pan-tao); 1:65,000; 1958

309; Min chiang (Wai-lan chiang bar to Ma-wei); 1:40,000; 1951
Plans: Ma-wei and vicinity; 1:17,500
Chin-p'ai bar; 1:14,000

310; Min chiang (Ma-wei to Fu-chou); 1:22,500; 1953

312; Taiwan Strait; 1:650,000; 1953

313; Taiwan and neighboring islands; 1:500,000; 1952; 1960

314; Hai-t'an Strait; 1:70,000; 1952; 1959

315; Narrow part of Hai-t'an Strait; 1:25,000; 1952; 1959

316; N. road of Hsiao-jih tao; 1:25,000; 1952
Plan: Kuan-yin ao anch.; 1:18,800

319; Nan-p'eng lieh-tao to Wu-ch'iu yu, incl. P'eng-hu Islands; 1:300,000; 1952; 1958
Plans: Ting-t'ai wan; 1:73,800
Chang-chun ao; 1:73,800

320; Ch'uan-chou wan and its vicinity and coast along mouth of Chin chiang; 1:35,000; 1937; 1953

321; Wei-t'ou wan and Sheng-hu wan; 1:73,000; 1952

322; Vicinity of port of Hsia-men; 1:36,000; 1952

323; Outer port of Hsia-men; 1:13,000; 1952

324; Inner port of Hsia-men; 1:13,000; 1952

326; Port of T'ung-shan and Fu-t'ou wan; 1:72,000; 1952
Plans: Fu-t'ou wan and var. anch. of P'ang chiao; 1:36,300
Entrance to Li-shih; 1:36,300

331; P'eng-hu Islands; 1:100,000; 1952; 1958

336; P'eng-hu Road; 1:150,000; 1952; 1958

337; Pu-tai anch.; 1:25,000; 1952; 1956

339; Port of An-p'ing; 1:15,000; 1951

340; Port of Kao-hsiung to O-luan pi; 1:150,000; 1953; 1960
Plan: Ta-pan-lueh anch.; 1:30,000

341; Port of Kao-hsiung to Port of Fang-liao; 1:50,000; 1953; 1957

342; Hai-k'ou wan and Ch'e-ch'eng anch.; 1:15,000; 1954; 1960

343; O-luan pi to Port of T'ai-tung; 1:150,000; 1953

345; Var. plans along the E. coast of Taiwan; 1953
Port of T'ai-tung and vicinity; 1:24,500
Pa-yao wan; 1:36,500
Kang-k'ou wan; 1:30,000
Ch'eng-kang ao and Hsin-kang anch.; 1:36,500

346; Var. plans of Lu-tao and Lan-yu; 1953
Port of Tung-ch'ing; 1:21,000
Pa-tai wan; 1:21,000
Nan-liao wan and Chung-liao wan; 1:14,500

348; Port of T'ai-tung to Port of Hua-lien; 1:150,000; 1953

350; Port of Hua-lien to San-tiao chiao; 1:150,000; 1953

351; Port of Hua-lien; 1:15,000; 1952

351A; Port of Su-ao and vicinity; 1:10,000; 1952; 1961

352; San-tiao chiao to Chiu-kang anch.; 1:150,000; 1951

353; Vicinity of Port of Chilung (Sheng-ao wan to Yeh-liu pan-tao); 1:20,000; 1953; 1957

353A; Port of Chilung; 1:10,000; 1957

354; Port of Tan-shui; 1:12,500; 1950; 1957

356; Chiu-kang anch. to Kai-k'ou anch.; 1:150,000; 1953
Plan: Hai-k'ou anch.; 1:30,000

357; Var. plans along the W. coast of Taiwan; 1953
Chiu-kang anch.; 1:18,400
Ching-kang anch.; 1:18,400
Port of T'ai-chung; 1:20,000

359; Hou-lung anch.; 1:20,000; 1952
Lu-kang anch.; 1:30,000

401; Ta-hsin ts'an-chiao to Nan-p'eng lieh-tao; 1:300,000; 1952; 1958 Plans: Shan-wei ao; 1:25,000
Kuei-lin yu anch.; 1:72,376

402; Vicinity of Nan-an tao; 1:100,000; 1952; 1959

402A; Nan-an tao; 1:50,000; 1957

403; Port of Shan-t'ou and vicinity; 1:22,000
Plan: Port of Shan-t'ou; 1:11,000

C

404; Tsao-an wan etc., individual plans; 1952
Tso-ao wan; 1:35,335
Jih-lin wan anch.; 1:36,340
Port of Chia-tzu anch.; 1:72,660
Shih-chin ao and Port of Sheng-ch'uan; 1:88,613

405; San-ch'uan tao to Ta-hsin ts'ang-chiao; 1:300,000; 1952; 1961

406; Chieh-shih wan; 1:65,000; 1952

407; San-chou ao; 1:12,500 ; 1952

408; Hong Kong to Tung-ching hai wan, incl. Hai-nan tao;
1:1,000,000; 1951; 1956

411; Ta-ya wan; 1:86,614; 1952
Plan: San-men anch.; 1:36,330

411A; N. part of Ta-ya wan; 1:30,000; 1956

411B; S. part of Ta-ya wan; 1:30,000; 1956

412; Vicinity of Hong Kong; 1:100,800; 1952; 1961

412A; Wan-shan Islands; 1:35,000; 1956

413; Hong Kong to Ta-p'eng wan; 1:66,100; 1952

414; Ta-p'eng wan; 1:36,490; 1952

415; Ch'ang-kang and vicinity; 1:12,130; 1952; 1955

416; Sha-t'ou chiao-ao and vicinity; 1:15,000; 1952; 1955

417; Port of Li-yuan and var. anch. nearby; 1:12,140; 1952; 1956

418; Pi-fung kang and Shih-kang; 1:15,611; 1952; 1956

419; Hong Kong Island; 1:30,300; 1952; 1961
Plan: Fu-t'ang men; 1:12,100

420; E. approaches to Hong Kong; 1:12,000; 1954; 1961

421; W. approaches to Hong Kong; 1:12,000; 1954; 1960

422; Hong Kong; 1:6,000; 1954; 1960

423; E. Road of Po-liao; 1:15,300; 1952
Plan: Shih-p'ai wan; 1:7,266

424; Ta-t'an wan; 1:12,200; 1952

C

425; An - ch'uan chou to Hsiung-ti-tao; 1:12,150; 1952

426; Chu-chiang (Kuang-tung ho) and lower part of Hsi chiang; 1:200,000; 1955

427; Chi-shui men to Hu-men (S. part); 1:48,250; 1955

428; Chi-shui men to Hu-men (N. part); 1:48,270; 1955
Plan: Mouth of Heng-men ho; 1:30,000

429; Chu chiang delta; 1:100,000; 1952; 1956

431; Chu chiang, sh. 1: Lung-hsueh sha-tsui to Hu-men; 1:24,200; 1955

432; Chu chiang, sh. 2: Hu-men to Lieh-hua-t'a; 1:24,630; 1955

433; Chu chiang, sh. 3: Lien-hua-t'a to Lieh-te and Yuan-kang-sha; 1:24,630; 1955

434; Chu chiang, sh. 4: Lieh-te and Yuan-kang-sha to Port of Kuang-chou; 1:24,360; 1955

435; Huang-p'u to Kuang-chou, sh. 1; 1:12,110; 1955

436; Huang-p'u to Kuang-chou, sh. 2; 1:12,110; 1955

437; Port of Kuang-chou; 1:6,000; 1955

438; Hsi chiang, sh. 1: Chiu chiang to Yen ch'iang; 1:107,000; 1955 Plan: San-shui chih-tuan; 1:25,000

439; Pei chiang; San-shui to Chiu chiang; 1:110,000; 1955
Plans: Lien-chiu chiang; 1:57,500
The first rapid

440; Hsi chiang, sh. 2: Yen-ch'ang to Wu-chou; 1:99,000; 1955
Plans: Te-ch'in; 1:9,040
Wu-chou; 1:25,000

441; Hsi chiang, sh. 3: Wu-chou to Lung-chin; 1:201,300; 1955

442; Hai-k'ou wan to Hong Kong; 1:500,000; 1952
Plans: Sha-ch'eng wan; 1:40,000
Port of Nan-ao; 1:48,760
Port of Hai-lin shan; 1:50,000
Port of Macao; 1:50,000

442A; San-tsao tao and vicinity; 1:35,000

442B; Niu-chiao shan anch.; 1:35,000; 1956

442C; Shang-ch'uan tao anch.; 1:40,000; 1957

442D; Wan-shan ch'uan-tao to San-tsao tao; 1:50,000; 1961

471; E. sec., N. part, South China Sea; 1:1,200,000; 1953

Charts on Index Map 12 (Gulf of Tonkin Area) 12

408; Hong Kong to Tung-ching hai wan, incl. Hai-nan tao; 1:1,000,000; 1951; 1956

442; Hai-k'ou wan to Hong Kong; 1:500,000; 1952
Plans: Sha-ch'eng wan; 1:40,000
Port of Nan-ao; 1:48,760
Port of Hai-lin shan; 1:50,000
Port of Macao; 1:50,000

443; Port of Tien-pai; 1:28,000; 1952

445; Hai-nan tao and Tung-ching hai wan; 1:700,000; 1943

449; Kuang-chou wan; 1:25,000; 1952; 1960
Plan: Ts'eng-chiang shih anch.; 1:10,000

451; Kuang-chou wan, vicinity of; 1:50,000; 1952; 1961
Plan: Mouth of Road close to the sea and mouth of Huang-p'o ho; 1:100,000

452; Hai-nan Strait; 1:250,000; 1953

453; E. part of Hai-nan Strait; 1:150,000; 1952; 1956

454; W. part of Hai-nan Strait; 1:149,000; 1952

455A; E. mouth and var. Roads of Hai-nan Strait; 1:70,000; 1956

455B; Middle part of Hai-nan Strait; 1:70,000; 1956

456; S. Roads of Hai-nan Strait; 1:30,000; 1956

457; Hai-k'ou wan; 1:35,000; 1947; 1955

458; Port of Ch'ing-lan; 1:20,000; 1947; 1955

459; Port of Yu-lin and vicinity; 1:70,000; 1947; 1956

460; Port of Yu-lin; 1:15,000; 1947; 1956

461; Var. plans on Hai-nan tao; 1951
Hou-shui wan; 1:53,000
Port of Yang-p'u; 1:60,000
Port of Pei-li; 1:70,000
Port of Hsin-hsun; 1:40,000

462; NE part of Tung-ching hai wan; 1:300,000; 1953;
Plans: Port of Pei-hai; 1:56,750
Nan wan; 1:49,590

471; E. Sec., N. part, South China Sea; 1:1,200,000; 1953

472; W. Sec. N. part, South China Sea; 1:1,200,000; 1954

FRENCH MAPS OF CHINA

Service Géographique de l'Armée

CARTE DE LA CHINE ORIENTALE

1:2,000,000. 1908. 9 sheets. 23 x 18. French. Geographic grid. Coverage: China Proper (no index map available).
Relief: shaded relief (grey). *Hydrography:* detailed drainage (blue). *Other:* sand (brown).
Boundaries: international (red), provincial (red), hsien (red), China Proper (red). *Transportation:* railroads (2 class., red), roads (black), tracks and trails (black), navigable waterways (2 class., black). *Cities and Towns:* (7 class., red/black). *Other:* Great Wall (black), treaty ports (red), telegraph lines (black), submarine cables (blue), consulates (red), Catholic missions (black), wells (black), palisade (black).
Notes: Generally good topographic series.
Source: LC.

ASIA 13

1:1,000,000. 1898-1924. 20 sheets. 18 x 21. French. Geographic grid. Coverage: see index map 13.
Relief: shaded relief (grey), spot heights (meters, black), *Hydrography:* detailed drainage (blue).
Boundaries: provincial (black). *Transportation:* railroads (black), roads (2 class., red), Grand Canal (blue). *Cities and Towns:* (5 class., black).
Source: MLUW, LC.

ENVIRONS DE PORT ARTHUR ET DE DALNY

1:100,000. 1904. One sheet. 30 x 20. French. Geographic grid. Coverage:Port Arthur and area.
Relief: shaded relief (brown), spot heights (meters, black). *Hydrography:* very detailed drainage (blue). *Other:* passes (black).
Transportation: railroads (2 class., black), roads (black), tracks and trails (black). *Cities and Towns:* (3 class., black). *Other:* ruins (black), pagodas (black), salt mines (black), coal mines (black), navigation lights (black), telegraph lines (black).
Notes: Excellent topographic map.
Source: LC.

CARTE DU TERRITOIRE DE KOUANG-TSCHOU-WAN

1:25,000. 1901-1936. 29 x 20. French. Geographic grid. Coverage: Kwangchou Wan (no index map available).
Relief: contours (10 meters, brown). *Hydrography:* very detailed drainage (blue). *Vegetation:* forests (green), swamps and marshes (green), orchards (green), rice paddies (green).

Other: mud (brown), sand dunes (brown), wet sand (blue), fords (black). *Boundaries:* international (black), provincial (black), tong (black), commune (black). *Transportation:* roads (5 class., black), tracks and trails (black), canals (3 class., blue), navigable waterways (2 class., blue), ferries (2 class., black). *Cities and Towns:* (5 class., various colors). *Other:* dikes (3 class., black), bridges (4 class., red/black/blue), forts (red), batterys (red), churches (2 class., red), lighthouses (black), cemeteries (2 class., red).
Notes: Published 1901, some sheets revised 1931, 1936. Revised sheets differ slightly in data shown. An excellent series.
Source: LC.

CARTE DES ENVIRONS DE PEKING

1:25,000. 19--. 20 x 15. French/Chinese. Geographic grid. Coverage: No index map available. Peking and environs.
Relief: contours (25 meters, brown), spot heights (meters, brown). *Hydrography:* very detailed drainage (blue). *Vegetation:* woods (green), gardens (green). *Other:* ponds (blue), sand (brown). *Transportation:* railroads (black), roads (2 class., black), tracks and trails (black), canals (blue). *Other:* buildings (various colors), dikes (brown), temples (black), walls (black).
Notes: No legend. Excellent topographic series.
Source: LC.

Service Hydrographique de la Marine

HYDROGRAPHIC CHARTS

The French Hydrographic Service publishes a limited number of hydrographic charts, at various scales, covering the entire coast of China. The range of scales and coverage is greater than for German hydrographic charts, but less than for American, British, and Japanese charts. The data shown on the French charts is much like that on charts produced by other countries. However, as one authority has aptly put it, "The French charts are well constructed, but seem distinctly less modern than many others and probably would prove less reliable."[2] French charts are based chiefly on British and Japanese sources.

Sources: Few map libraries have holdings of French hydrographic charts. The Library of Congress is the best source. French charts may also be purchased directly from the Hydrographic Service. (See Appendix B for addresses and instructions on ordering maps.)

Hydrographic charts available: (Each chart listed below includes the following data, in this order: Chart No.; Title and contents of chart; Scale; Publication date):

Charts on Index Map 14. (T'ai-chou Wan to Liao-tung Wan) 14

2041; Port Charybdis (Île Tshang-Shan): Entreé et barre du Li-Tsin-Ho--Entrée du Ta-San-Ho ou Ta-Ko-Ho--Ile Hai-Yung--Havre de Thornton (île Hai-Yun-Tou); Var. scales; 1905

2048; Golfes de Pe-Tchi-Li et de Liau-Tung, partie Nord de la mer Jaune; 1:849,600; 1938

2061; Baie de Tche-Fou, Port de Tche-Fou; 1:60,000; 1927

2197; Baie San Men et port Shihpu; 1:100,000; 1934

2930; Abords du Liao-Ho, port de Newchang; 1:123,500; 1940

3004; Détroit de Pe-Tchi-Li et ses divers chenaux; 1:193,000; 1933

3158; Rade de Chapu; 1:36,000; 1926

3705; Cap Chantung, des îles Miau-Tau à la baie de Kiautschou; 1:445,400; 1939

4055; Ryojin-Ko ou Port Arthur, Anse Nord de la baie Pigeong (croquis); 1:18,000; 1913

4105; Entrée du Yang-Tse-Kiang; 1:149,000; 1941

4299; De Formose ou Japon et îles adjacentes; 1:1,621,800; 1937

4919; De la baie Nimrod à la riviere Yung, partie Sud des îles Tshusan; 1:185,000; 1896

4920; De 1'île Video au cap Yang-Tse, atterrages Sud du Yang-Tse-Kiang, Détroit de Bonham; 1:150,000; 1927

4928; Des îles Pi-Seong aux îles Hie-Shan; 1:328,800; 1936

4971; Des îles Hie-Shan au Yang-Tse-Kiang, îles Tshusan; 1:321,300; 1936

5124; Wei Hai Wei; 1:38,000; 1934

5165; Port de Shanghai; 1:10,000; 1937

5177; Baie de Kiautschou; 1:60,000; 1943

5196; Abords de Tinghai; 1:20,000; 1903

5292; Plans à la presqu'île de Shantung: Baie de Shitau--Baie Aylen--Baie Yangyustshih (Baie Rocheuse)--Anses Malan et Lungyen--Baie de Litau; 1:30,000; 1906

5340; De la pointe Rocheuse au cap Temple, Rade de Tshing-Wang-Tao; 1:65,000; 1937

5586; Dairen ko; 1:15,000; 1939

5730; Rivière Whangpoo; 1:20,000; 1933

5761; Port de Shanghai (partie Amont); 1:10,000; 1937

5969; Cours du Pei-Ho ou rivière de Peiping; (1) De l'embouchure à Koku, (2) De Koku à Tien-Tsin, (3) & (4) De Tien-Tsin à Peiping; Var. scales; 1948

15 *Charts on Index Map 15. (Canton to T'ai-chou Wan)*

1434; De l'Île d'Hainan à l'Île de Namoa, Port de Macao; 1:862,300; 1933

2197; Baie San Hen et port Shihpu; 1:100,000; 1934

2198; Port Namquam; 1:40,000; 1865

2200; Port Tong-Sang et baie Hutau; 1:74,000; 1890

2232; Port Chinchew et caie Chimmo; 1:92,500; 1873

2237; Île Namoa, entrée de la rivière Han et port de Swatau, baie Hope et baie Hai-Mung; 1:113,100; 1934

2319; Port de Swatau (entrée de la rivière Han); 1:25,400; 1934

3160; Anse Boddam (îles Ladrones); 1:6,100; 1883

3710; Chenaux entre l'Île Yit-rouge et l'Île Rugged (entrée Sud du détroit de Hainan); 1:24,500; 1883

3732; Chenaux intérieur du détroit d'Haitan; 1:27,000; 1879

3733; Mouillage de la pointe Cupchi--Mouillage de la pointe Breaker; 1:73,800; 1881

4147; Baie de Ke-lung, baie de Tshem-O (côte Nord de Formose); 1:13,000; 1935

4156; Île Matsu (entrée de la rivière Min); 1:18,000; 1886

4163; Îles Pescadores (Mouillages intérieurs); 1:23,600; 1886

4299; De Formose au Japon et îles adjacentes; 1:1,621,800; 1937

4376; Détroit de Hainan; 1:70,000; 1890

4577; Baie Hie-Che-Chin; 1:70,000; 1891

4601; Atterages de Hong Kong; 1:115,400; 1936

4839; Hong Kong, Passe de Fotaumun; 1:30,600; 1936

4923; Des îles Ochseu aux îles Pi-Seang; 1:333,900; 1926

4928; Des îles Pi-Seang aux îles Hie-Shan; 1:328,800; 1936

4940; De Hong Kong à 1'île Namoa, Tai-Sami--Mouillage de 1'île Goat; 1:342,300; 1916

4941; De 1'île Namoa aux des Ochseu, îles Pescadores; 1:339,000; 1925

4971; Des îles Hie-Shan au Yang-Tse-Kiang, îles Tshusan; 1:321,300; 1936

5048; Ports et mouillages à la côte Ouest de Formose, Rade a'Ampin--Port de Tamsui; Var. scales; 1941

5053; Baie de So-o (côte Est de Formose); 1:20,000; 1898

5055; Mouillages à la côte Ouest de Formose: Rade de Tankan (Toko Hakuti)--Port de Tokao--Mouillage de Toapanraa (Nan Wan); Var. scales; 1933

5101; Baie Bias; 1:86,000; 1935

5166; Mouillage de la Pagode; 1:15,000; 1936

5168; Abords et entrée de la rivière Min, Passe de Chinpai; 1:65,000; 1937

5197; Baie de Sam-Sa, partie Sud, Mouillage du Phare; 1:55,000; 1903

5310; Canal des Pescadores; 1:150,000; 1914

5342; Port d'Amoy; 1:13,500; 1935

5408; Baie Mirs; 1:40,000; 1911

5419; Abords du port d'Amoy; 1:37,500; 1912

5470; Île de Formose, partie Nord, Rade de Haipo--Rade de Hoirenkan; 1:338,700; 1916

5464; Île de Formose, partie Sud, Rades de Seiko-O et de Mararao; 1:344,600; 1916

5622; Île et détroit de Formose; 1:680,000; 1926

5819; Port de Hong Kong; 1:15,000; 1938

Charts on Index Map 16. (Gulf of Tonkin Area) 16

1434; De 1'île d'Hainan à 1'île de Namoa, Port de Macao; 1:862,300; 1933

1842; Port de Yu-lin-kan; 1:10,000; 1860

3185; Port de Tien-Pien ou Tien-Pack; 1:46,500; 1873

3843; Port d'Hoita; 1:16,100; 1881

3857; Mouillage de Nankin-Mouillage de Tinhosa; 1:15,500; 1881

3884; Baie Hoi-Hao (côte Nord); 1:36,000; 1935

3917; Détroit d'Hainan (partie Est), passage intérieur; 1:149,000; 1934

4034; Mouillage de Hiong-Po; 1:20,000; 1884

4050; Du cap Pingmar au cap Lamko; 1:50,000; 1885
(baie de Hao-Sui)

4057; Détroit d'Hainan (partie Ouest) et côte Nord-Ouest d'Hainan; 1:149,000; 1934

4831; Ports et mouillages à la côte Sud d'Hainan: Mouillage de la pointe Pyramide--Banc de la Comete--Baie de Sama--Mouillage de l'île du Ponent--Port de Sama--Baie de Gaalong--Port de Chinglan; Various scales; 1894

5173; Entrée et abords de Koang Tcheou Wan; 1:50,000; 1930

5214; Baie de Koang Tcheou Wan et accès à Fort Bayard; 1:25,000; 1930

5215; Rivière Matske accès à Tche-Kam et à Montao; Mouillage de Montao, Mouillage de Tche-Kam, 1:25,000; 1937

5599; Golfe du Tonkin et détroit d'Hainan; 1:881,600; 1947

5999; Atterrages de la baie de Kwangchow (Koang Tcheou Wan); 1:150,800; 1950

GERMAN MAPS OF CHINA

Royal Prussian Land Survey (Kartographische Abteilung Der Koniglich Preussische Landes Aufnahme

KARTE VON OST CHINA 17

1:1,000,000. 1901-1912. 22 sheets. 18 x 20. German. Geographic grid. Conical projection. Coverage: see index map 17.
Relief: shaded relief (brown), spot heights (meters, black). *Hydrography:* detailed drainage (blue).
Boundaries: international (green/black), provincial (green/black).
Transportation: railroads (3 class., black), roads (2 class., red).
Cities and Towns: (8 class., black). *Other:* telegraph lines (black), fortifications (red), lighthouses (red), churches (red), missions (red), naval bases (red), German consulates (2 class., red).
Notes: One of the standard small-scale series on China. Widely used by mapping agencies of other countries in the compilation of their maps. Relief representation is only fair, but the well-known accuracy of the KPLA makes this a highly recommended series.
Sources: LC, MLUW.

KARTE VON TSCHILI UND SHANTUNG

1:200,000. 1907-09. 64 sheets. 15 x 16. German. Geographic grid. Conical projection. Coverage: No index map available, but coverage is complete.
Relief: shaded relief (brown), spot heights (meters, black). *Hydrography:* detailed drainage (blue). *Vegetation:* woods (black), swamps and marshes (black), orchards (black). *Other:* fords (black).
Boundaries: international (black), provincial (red), hsien (red), leased territory (red). *Transportation:* railroads (black), roads (2 class., black), tracks and trails (black). *Cities and Towns:* (9 class., black).
Other: telegraph lines (black), walls (3 class., black), bridges (3 class., black), ferries (black), cemeteries (2 class., black), pagodas (black), temples (black), churches (2 class., black), kilns (black), forts (black), monuments (black), dikes (black), mines (black), navigation guides (2 class., black).
Notes: Numerous areas are left blank on some sheets due to lack of surveys in some areas, but series is still excellent and highly recommended. A fine topographic series, illustrative of the fine German cartographic technique and style.
Source: LC.

PEKING

1:17,500. 1903. One sheet. 23 x 25. German. Coverage: Peking.
Hydrography: very detailed drainage (blue). *Vegetation:* gardens (green), trees (green).
Transportation: railroads (2 class., black), roads (2 class., black), tracks and trails (black).
Other: (4 class., red), pagodas (red), monuments (red), cemeteries (black), stairs (black), buildings (2 class., red).
Notes: A superb city map of Peking.
Source: LC.

TIENTSIN

1:25,000. 1903. One sheet. 23 x 25. German. Coverage: Tientsin.
Notes: For data see PEKING, above. An excellent map of Tientsin.
Source: LC.

Reichs Marine Amt, Berlin

DEUTSCHES SCHUTZGEBIET KIAUTSCHOU

1:50,000. 1902. 9 sheets. 16 x 13. German. Geographic grid.
Coverage: Chiachou and environs
Relief: contours (10 meters, 5 meters supp., brown), spot heights (meters, black). *Hydrography:* very detailed drainage (black). *Vegetation:* woods (2 class., black), swamps and marshes (black), orchards (black), pasture (black). *Other:* salt flats (black). *Boundaries:* international (black). *Transportation:* railroads (black), roads (2 class., black), tracks and trails (black). *Cities and Towns:* (6 class., black). *Other:* bridges (2 class., black), anchorages (black), cemeteries (black), chimneys (black), fences (black), churches (black), dikes and levees (black), hospitals (black), shrines (black), temples (black), wells (black), pagodas (black).
Notes: Excellent topographic series. Also 1910 edition, same data with exception of addition of shaded relief (brown). No index map available.
Insets: Schui ling schan (1:50,000); Kiautschou (1:50,000).
Source: LC.

TSINGTAU UND UMGEBUNG

1:10,000. 1903. One sheet. 34 x 32. German. Coverage: Tsingtao and environs.
Relief: contours (20 meters, 10 and 5 meters supp., brown), shaded relief (brown). *Hydrography:* very detailed drainage (black). *Transportation:* railroads (black), roads (2 class., black), tracks and trails (black). *Other:* walls (3 class., black), buildings (3 class., black), churches (2 class., black).
Notes: No grid. Also 1:6,250 edition, 1900, same data. Somewhat crude relief representation, but still very useful map.
Source: LC.

German Hydrographic Institute (Deutsches Hydrographisches Institut)

HYDROGRAPHIC CHARTS

The German Hydrographic Institute publishes a limited number of hydrographic charts, mostly at small scales, covering the coast of China. These charts differ little from the available charts published by other countries. Because of their generally small scale and limited number, however, German charts are not likely to be of great value to map users.

Sources: Few map libraries have holdings of German hydrographic charts. The Library of Congress is the best source. Charts may *not* be purchased directly from the Hydrographic Institute.

Hydrographic charts available: (Each chart listed below includes the following data, in this order; Chart No.; Title and contents of chart; Scale; Dates of various editions):

Charts on Index Map 18. (Tai-chou Wan to Liao-tung Wan) 18

401; Samsa Bucht bis Yang Tse Mundung; 1:750,000; 1912; 1932

552; Gelbes Meer, Sudlicher Teil; 1:750,000; 1913; 1924

553; Gelbes Meer, Nordlicher Teil; 1:750,000; 1916; 1926

146; Kap Ya Tau bis Tung Tsi Fluss; 1:100,000; 1908; 1910

156; Anteuerung der Kiautschou Bucht; 1:100,000; 1902; 1935

158; Kiautschou Bucht; 1:50,000; 1903; 1935

Charts on Index Map 19. (Canton to Tai-chou Wan) 19

298; Sudchinesisches Meer; 1:3,000,000; 1957

399; Hainan bis Swatau; 1:750,000; 1912; 1930

400; Formosa Strasse; 1:750,000; 1912; 1935

401; Samsa Bucht bis Yang Tse Mundung; 1:750,000; 1912; 1932

555; Ansteuerung von Hong Kong; 1:100,000; 1913; 1931

556; Hong Kong; 1:30,000; 1913; 1938
Plan: Fo tau mun; 1:12,500

594; Sudchinesisches Meer, Nordlichen Teil; 1:500,000; 1915; 1928; 1958

20 *Charts on Index Map 20. (Gulf of Tonkin Area)*

339; Hainan bis Swatau; 1:750,000; 1912; 1930

593; Golf von Tonkin; 1:750,000; 1921; 1932

594; Sudchinesisches Meer, Nordlicher Teil; 1:500,000; 1915; 1928; 1958

BRITISH MAPS OF CHINA

Geographical Section, General Staff

RAILWAY MAP OF CHINA

1:5,000,000. 1939. One sheet. English. Geographic grid. Conical orthomorphic projection. Coverage: China Proper.
Hydrography: major drainage (blue).
Boundaries: international (black), provincial (black). *Transportation:* railroads (2 class., red). *Cities and Towns:* (3 class., black).
Source: LC.

ASIA 21

1:4,000,000. 1923-39. No. 2957. 7 sheets. 25 x 41. English. Conical orthomorphic projection. Coverage: see index map, 21.
Relief: form lines, altitudinal tints (3 green, 9 brown), spot heights (meters, black). *Hydrography:* major drainage (blue). *Transportation:* railways (black), roads (black). *Cities and Towns:* (5 class., black).
Notes: Separate sheets, each a complete map. Sheets covering China and their respective dates of publication are: Central Asia (1931, 2nd ed.), Mongolia (1931, 2nd ed.), Manchuria (1931, 2nd ed.), Northern India (1927), China (1926), Japan (1923), Malay Peninsula (1926). Marginal items on each sheet: index map to adjoining sheets, list of compilation sources for the map. The various sheets may be fitted together to form one large map.
Sources: LC, AGS.

MANCHUPIA AND ADJOINING TERRITORIES

1:4,000,000. 1933. No. 3797. One sheet. 27 x 35. English. Geographic grid. Conical orthographic projection. Coverage: Long. 106° - 144°, Lat. 30° - 54°.
Relief: contours (500 meters, brown), spot heights (meters, black). *Hydrography:* major drainage (blue). *Vegetation:* swamps and marshes (blue). *Other:* springs (blue), waterholes (blue), pools (blue).
Boundaries: international (black), provincial (black). *Transportation:* railroads (4 class., red/black), roads (2 class., black), tracks and trails (black), canals (blue). *Cities and Towns:* (5 class., black).
Other: telegraph lines (3 class., black), wells (blue).
Notes: Index map to boundaries included in margin.
Sources: LC, AGS.

CHINA 22

1:2,000,000. 1927. No. 3839. 4 sheets. 28 x 22. English. Geographic grid. Coverage: see index map, 22.

Relief: altitudinal tints (4, brown). *Hydrography:* major drainage (blue).
Boundaries: international (black), provincial (black). *Transportation:* railroads (2 class., black), canals (black). *Cities and Towns:* (4 class., black). *Other:* Great Wall (black), treaty ports (black).
Notes: Physical and cultural data highly generalized.
Source: LC.

23 SOUTHERN ASIA

1:2,000,000. 1944. No. 4340. 7 sheets. Size varies. English. Geographic grid. Coverage: see index map, 23.
Relief: altitudinal tints (6, various colors). *Hydrography:* major drainage (blue). *Vegetation:* swamps and marshes (blue).
Boundaries: international (2 class., black), provincial (2 class., black). *Transportation:* railroads (5 class., black), roads (2 class., red). *Cities and Towns:* (6 class., red/black). *Other:* lighthouses (red), wireless stations (black), telegraph lines (black).
Source: LC.

YUNNAN PROVINCE

1:1,267,000. 1908. No. 2112. One sheet. 28 x 32. English. Geographic grid. Coverage: all of Yunnan province.
Relief: shaded relief (brown), spot heights (feet, black). *Hydrography:* major drainage (blue).
Boundaries: international (black), provincial (black). *Transportation:* railroads (2 class., black), roads (2 class., red), tracks and trails (red), navigable waterways (2 class., blue). *Cities and Towns:* (4 class., black). *Other:* telegraph lines (black), mission stations (2 class., black), Tibetan monasteries (black), bridges (2 class., black), ferries (black).
Inset: Index map (1:20,000,000).
Notes: Numerous areas left blank for lack of data. Based on survey of India sheets, 4 miles to 1 inch. Also a 1932 edition with data complete for all of province, including tribal names in red.
Source: LC.

24 ASIA

1:1,000,000. 1941. No. 2555. 50 sheets. Size varies. English. Geographic grid. Coverage: see index map, 24.
Relief: altitudinal tints (14, purples). *Hydrography:* major drainage (blue). *Vegetation:* swamps and marshes (blue). *Other:* springs (blue), sand (black).
Boundaries: international (2 class., black). *Transportation:* railroads (2 class., black), roads (3 class., red), ship routes (blue).
Cities and Towns: (4 class., black). *Other:* anchorages (black), forts (black), lighthouses (black), mines (black), missions (black), mosques (black), oil wells (black), pagodas (black), post offices (black), power lines (black), ruins (black), telegraph lines (2 class., red/black), telegraph stations (black), temples (black), wells (2 class., blue), wireless stations (black).

Notes: Also 1946 edition.
Source: LC.

WORLD 25

1:1,000,000. 1949-1954. No. 4646. 60 sheets. Size varies. English. Geographic grid. Coverage: see index map 25.
Relief: contours (400 meters, brown). *Hydrography:* major drainage (blue). *Vegetation:* swamps and marshes (blue).
Boundaries: international (black/orange), provincial (black), hsien (black). *Transportation:* railroads (black), roads (3 class., orange), tracks and trails (orange). *Cities and Towns:* (6 class., black).
Other: telephone lines (orange), missions (2 class., black), mines (black).
Notes: British sheets reprinted by AMS and published under AMS Series 1301 and bearing the British Crown Copyright are filed with this set. Conversely, AMS 1301 sheets reprinted by the British are filed with the AMS 1301 set.
Source: LC.

CHINA COAST

1:1,000,000. 1939. No. 3996. One sheet. English. Geographic grid. Coverage: Long. 111° - 117°, Lat. 21° - 26°.
Relief: contours (100 meters, brown), spot heights (meters, black).
Hydrography: major drainage (blue). *Vegetation:* swamps and marshes (blue). *Other:* sand (brown), submerged rocks (black).
Boundaries: international (red/black), provincial (black). *Transportation:* railroads (3 class., black), roads (2 class., brown), tracks and trails (brown), canals (blue). *Cities and Towns:* (5 class., black).
Other: telegraph lines (2 class., brown). lighthouses (black), missions (black), pagodas (black), temples (black), submerged cables (black), telegraph offices (black), post offices (2 class., black).
Notes: 2nd edition published 1942.
Source: LC.

CHINA (PROPER) 26

1:1,000,000. Various dates. No. 2095. 8 sheets. Size varies. English. Geographic grid. Coverage: see index map 26.
Relief: spot heights (feet, black). *Hydrography:* major drainage (blue).
Boundaries: provincial (black/green). *Transportation:* railroads (2 class., black), roads (black or red), navigable waterways (blue).
Cities and Towns: (4 class., black). *Other:* telegraph lines (black), telegraph offices (black), mission stations (black).
Notes: Data varies somewhat between sheets. Shantung sheet has shaded relief (brown), plus boundaries of British and German zones of influence. Excellent series.
Source: LC.

27 CHINA

1:506,880. 1902-05. 9 sheets. 18 x 27. English. Geographic grid. Coverage: see index map 27.
Relief: spot heights (feet). *Hydrography:* detailed drainage. *Vegetation:* swamps and marshes. *Other:* cliffs, passes.
Boundaries: international, provincial, Wei-ch'ang or Imperial hunting grounds, prefectures and districts. *Transportation:* railroads, roads (2 class.), tracks and trails, navigable waterways (2 class.). *Cities and Towns:* (3 class.). *Other:* anchorages, ancient willow palisades (line of), coal mines and fields, gold mines, Great Wall, Hsiung-kung or Imperial rest-houses, military posts, mission stations (2 class.), railroad stations, residences of civil and military officials of the 8 Mongolian Banners, silver mines, telegraph lines, temples, tombs.
Insets: Index map; Rough sketch of Yalu River, as far as Antung (1:420,000); Port of Niu-chuang (1:100,000); Plan of Mukden (1:84,000); Plan of Dalny (1:54,720); Plan of T'ieh-ling (1:33,600); Plan of Kalgan (1:31,680); Plan of Liao-yang (1:25,000); Plan of Dolon-nor (1:21,720); Plan of Pt. Arthur (1:18,000).
Notes: Black and white series. Compiled from: original surveys of various British military surveyors and officers between 1860-1903; Japanese map of NE China, 1:100,000 (no date); Japanese map of NE China, 1:300,000 (no date); Map of NE China by Ch. Waeber (1900 ed.); Admiralty charts; various Chinese maps; various Russian, German, and French maps; route traverses by various military surveyors of the Survey of India. An excellent series for cultural data. Fine cartographic style.
Source: LC.

WORLD

1:500,000. 1956. No. 4830. Size varies. English.
Geographic and military grids. Coverage: No index map available.
Relief: form lines, contours (1000 feet, brown), altitudinal tints (4, brown), spot heights (feet, black). *Hydrography:* detailed drainage (blue). *Vegetation:* woods (green), swamps and marshes (blue).
Other: mudflats (blue), sandbars (brown), springs (blue).
Boundaries: international (black). *Transportation:* railroads (3 class., black), roads (3 class., red), canals (2 class., blue). *Other:* bridges (black), tunnels (black), ferries (black), airfields (4 class., red), dams (black), forts (black), buildings (black), mines (black), wells (black).
Notes: Coverage for China uncertain.
Source: LC.

28 EAST CENTRAL ASIA

1:500,000. 1941. No. 4222. 18 sheets. Size varies. English.
Geographic grid. Coverage: see index map 28.
Relief: form lines (brown). *Hydrography:* detailed drainage (blue).
Vegetation: woods (black), swamps and marshes (blue), heaths (black).
Other: springs (blue), cliffs (black), flatrock (black), sand (brown).
Boundaries: provincial (black). *Transportation:* railroads (2 class., black), roads (2 class., red), tracks and trails (red).

Cities and Towns: (3 class., black). *Other:* mission stations (2 class., black), pagodas (black), telephone offices (black), post offices (black), telegraph lines (3 class., red/black), wireless stations (black), sea walls (black), locks (red), wells (blue).
Insets: Islands off the coast of Kiangsu and Chekiang, on sheets 512, 514.
Notes: Relief representation is poor, but otherwise a useful series. Also published by AMS as series L409.
Sources: LC, MLUW.

FORMOSA

1:500,000. 1944. One sheet. 27 x 37. English. Geographic grid.
Coverage: all of Formosa.
Relief: contours (1000 feet, brown), altitudinal tints (8, purples), spot heights (feet, black). *Hydrography:* major drainage (blue). *Vegetation:* swamps and marshes (blue). *Other:* sand (brown). *Boundaries:* provincial (black). *Transportation:* railroads (2 class., black), roads (2 class., red), tracks and trails (red), canals (blue). *Cities and Towns:* (4 class., red).
Notes: Useful map, but poor in quality compared to earlier Japanese and Chinese maps at same scale.
Source: LC.

COUNTRY BETWEEN KIANGYIN & HANGCHOW

1:500,000. 1909. One sheet. 15 x 18. English. Geographic grid.
Coverage: Long. 120° - 122°, Lat. 30° - 32°.
Hydrography: very detailed drainage (blue).
Boundaries: provincial (black). *Transportation:* railroads (2 class., black), tracks and trails (black), canals (blue). *Cities and Towns:* (4 class., black). *Other:* telegraph lines (2 class., black), telegraph offices (black), post offices (black), mission stations (2 class., black), seawalls (black).
Source: LC.

MANCHURIA (MAPS TO ILLUSTRATE THE CAMPAIGN IN MANCHURIA)

1:420,000. 1905. 5 sheets. Size varies. English. Geographic grid.
Coverage: No index map available.
Relief: form lines (brown), spot heights (feet, black). *Hydrography:* detailed drainage (blue). *Vegetation:* forest (green), swamps and marshes (blue). *Other:* passes (black).
Transportation: railroads (black), roads (2 class., black), tracks and trails (2 class., black). *Cities and Towns:* (3 class., black).
Other: railroad stations (black), telegraph lines (2 class., black), temples (black), bridges (black).
Notes: Reproduction of 5 sheets of Russian General Staff Map of 1904 prepared to illustrate the campaign in Manchuria. Marginal information: glossary of Chinese generic terms, sheet index diagram. Scale in miles and versts. Romanized place names from Russian, not from Chinese characters. "Latitude agrees closely with modern maps, but longitude shows discrepancies of 9' to 19' . . . These sheets are

unrealiable . . . "[3]
Source: LC.

29 CHINA

1:250,000. 1927-1934. No. 3825. 6 sheets. Size varies. English. Geographic and military grids. Coverage: see index map 29.
Relief: contours (100 meters, brown), spot heights (meters, black). *Hydrography:* very detailed drainage (blue). *Vegetation:* swamps and marshes (blue), rice paddies (blue). *Other:* sand dunes (brown), sand or mud (brown), fathom lines (blue).
Boundaries: hsien (black). *Transportation:* railroads (black), roads (2 class., red), tracks and trails (2 class., black), ferries (black). *Cities and Towns:* (6 class., black). *Other:* telegraph lines (2 class., black), bridges (2 class., black), forts (black), temples (black), lighthouses (black), post offices (black), aerodromes (red).
Notes: Sheets published 1927 vary somewhat in data shown, compared to 1934 sheets. Marginal note: This series "is based largely on material of doubtful value. It probably gives a fair general representation of the country, though containing many local inaccuracies. The exact alignments of motor roads in Chinese territory are uncertain."
Sources: LC, MLUW.

SHANGHAI AREA

1:126,720. 1927. One sheet. 25 x 34. English. Military grid. Coverage: Long. 120° - 121°50', Lat. 30° 33' - 31° 32'.
Relief: contours (100 feet, brown). *Hydrography:* detailed drainage (blue). *Vegetation:* swamps and marshes (blue). *Other:* sand and mud (black).
Boundaries: provincial (black). *Transportation:* railroads (black), roads (2 class., black), tracks and trails (black), tramways (black). *Other:* bridges (black), mission stations (2 class., black), lightships and buoys (black), sea walls and Bund (black), telegraph lines (black), telegraph offices (black), post offices (black).
Source: LC.

HONG KONG

1:84,480. 1905. One sheet. 23 x 25. English. Geographic grid. Coverage: all of Hong Kong.
Relief: form lines (brown), spot heights (feet, black). *Hydrography:* very detailed drainage (blue). *Other:* passes (black).
Boundaries: British territory (black). *Transportation:* roads (black), tracks and trails (black), navigable waterways (black), tramways (black). *Cities and Towns:* (2 class., black). *Other:* churches (black), pagodas (black), temples (black), bridges (black), telegraph lines (black).
Source: LC.

MANCHURIA

1:84,000. 1904. 7 sheets. 20 x 17. English. Geographic grid. Coverage: No index map available.
Relief: contours (interval unknown). *Hydrography:* very detailed drainage. *Other:* passes.
Transportation: railroads (2 class.), roads (2 class.), tracks and trails. *Cities and Towns:* (2 class.). *Other:* bridges, railroad embankments, pagodas, temples, telegraph lines.
Notes: Black and white. English-language edition of Russian 1:84,000 series (see p. 143). Moderately good series.
Source: LC.

HONG KONG AND THE NEW TERRITORIES

1:80,000. 1936. No. 3961. 2 sheets. 34 x 24. English. Geographic and military grids. Coverage: all of Hong Kong.
Relief: contours (50 meters, brown), spot heights (meters, black). *Hydrography:* very detailed drainage (blue). *Vegetation:* woods (green), swamps and marshes (blue), orchards (green), rice paddies (blue), mangroves (blue). *Other:* sand (brown), mud (brown).
Boundaries: international (black). *Transportation:* railroads (2 class., black), roads (4 class., red/black), tracks and trails (black). *Cities and Towns:* (black). *Other:* telephone lines (black), telegraph lines (black), buildings (black), churches (black), temples (black), lighthouses (black).
Notes: Also 1946 edition, with slightly different data shown. Both editions are excellent maps.
Source: LC.

MAP OF TIENTSIN PREFECTURE & NEIGHBORING COUNTRY

1:63,360. 1903. No. 1880. 4 sheets. 31 x 18. English. Coverage: Tientsin prefecture.
Hydrography: very detailed drainage (blue). *Vegetation:* swamps and marshes (blue).
Transportation: railroads (black), roads (2 class., black), tracks and trails (black), canals (black). *Other:* embankments (2 class., black), bridges (2 class., black), railroad stations (black), camps or forts (2 class., black), kilns (black), pagodas (black).
Notes: Excellent series for cultural data. Legibility good. No grid. No boundaries or relief representation.
Source: LC.

EASTERN CHINA

1:50,000. 1926. No. 3789. 4 sheets. Size varies. English. Military grid. Coverage: See Notes below.
Relief: contours (5 meters, 25 meters, brown), spot heights (meters, black). *Hydrography:* very detailed drainage (blue). *Vegetation:* woods (black), swamps and marshes (blue). *Other:* sand (brown).
Boundaries: provincial (black), hsien (black). *Transportation:* railroads (2 class., black), roads (3 class., black), tracks and trails (black), canals (blue), tramways (black). *Cities and Towns:* (4 class., black).

Other: walls (2 class., black), ruins (black), temples (black), pagodas (black), mines (black), kilns (black), cemeteries (black), towers (black), telegraph lines (black).
Notes: 4 sheets only in series: Peking, Tungchow, Shanhaikuan, and Shanghai (see below).
Sources: LC, MLUW.

EASTERN CHINA - SHANGHAI

1:50,000. 1927. One sheet. 28 x 24. English. Coverage: Shanghai and the southern Yangtze delta area.
Relief: spot heights (meters, black). *Hydrography:* very detailed drainage (blue). *Vegetation:* woods (black), swamps and marshes (blue), rice paddies (blue). *Other:* non-perennial streams (blue), sand (black). *Boundaries:* provincial (black), hsien (black), International settlements (black), tramways (black). *Other:* telegraph lines (3 class., black), walls (2 calss., black), towers (black), churches (black), ruins (black), temples (black), pagodas (black), cemeteries (black), kilns (black), conservancy works (2 class., black).
Source: MLUW, LC.

CHIHLI (HOPEI) PROVINCE

1:50,000. 1943-44. No. 3789A. Size varies. English. Military grid. Coverage: No index map available. Incomplete coverage for province.
Relief: contours (see Notes for intervals, brown). *Hydrography:* very detailed drainage (blue). Other: sand (2 class., brown), salt pans (black). *Transportation:* railroads (black), roads (2 class., black). *Cities and Towns:* (3 class., black). *Other:* temples (black), lighthouses (black), ferries (black), dams (black), weirs (black), locks (black), dikes (2 class., brown).
Notes: Contour intervals: 0.5 meters (up to elev. 50 meters), 1.0 meters (50 meters - 60 meters), 2.5 meters (60 meters - 100 meters), 10.0 meters (100 meters-150 meters), 25.0 meters (150 meters up).
Source: LC.

WEI-HAI-WEI

1:31,680. 1898-99. No. 1430. 4 sheets. 32 x 34. English. Geographic grid. Coverage: Wei-hai-wei.
Relief: contours (100 feet, brown), spot heights (feet, black), *Hydrography:* very detailed drainage (blue).
Transportation: roads (black), tracks and trails (black). *Cities and Towns:* (2 class., black). *Other:* telegraph lines (black).
Notes: Cultural data is very limited, but topographic data is excellent.
Sources: LC, MLUW.

HONG KONG & PART OF LEASED TERRITORY

1:25,344. 1920. 2 sheets. 34 x 23. English. Geographic grid. Coverage: Hong Kong and part of leased territory.
Relief: contours (50 feet, brown), spot heights (feet, black). *Hydrography:* very detailed drainage (blue). *Vegetation:* rice paddies (blue).

Boundaries: W. D. Land (black). *Transportation:* railroads (2 class., black), roads (2 class., black), tracks and trails (black). *Other:* buildings (2 class., black), temples (black), pagodas (black), cemeteries (black), lighthouses (black).
Source: LC.

CHINA - CITIES

1:25,000. 1927. No. 3831. 3 sheets. 32 x 24. English. Geographic and military grid. Coverage: Canton, Hankow, Nanking.
Relief: contours (10 meters, brown), spot heights (meters, black). *Hydrography:* very detailed drainage (blue). *Vegetation:* swamps and marshes (blue), forest (2 class., black), orchards (black), rice paddies (blue), mulberry plantations (black). *Other:* salt fields (black), sand (black), rocks (black), mud (black).
Boundaries: district (black). *Transportation:* railroads (black), roads (3 class., black), tracks and trails (2 class., black). *Other:* telegraph lines (black), temples (black), pagodas (black), town walls (black), buildings (black).
Notes: Sheets revised in 1934, second edition published 1942, 1945. Hankow sheet varies slightly in data shown (10 meter contour interval, red used for roads, not as much vegetation data shown). All three sheets show river-bed contours (feet, blue), at different intervals for each sheet. Excellent city maps.
Sources: LC, MLUW.

HONG KONG & NEW TERRITORIES

1:25,000. 1957. No. 8811. 24 sheets. English.
Notes: Photographic reduction of Series No. 3868, 1:20,000, below.
Source: LC.

HONG KONG & NEW TERRITORIES

1:20,000. 1929. No. 3868. 24 sheets. 29 x 20. English. Geographic and military grid. Coverage: all of Hong Kong and new territories.
Relief: contours (10 meters, brown), spot heights (meters, black). *Hydrography:* very detailed drainage (blue). *Vegetation:* woods (2 class., green), scrub (green), swamps and marshes (2 class., blue), orchards (black), rice paddies (blue). *Other:* salt pans (blue), cliffs (black), boulders (black), sand (brown), mud (brown), reefs (black).
Boundaries: international (black), provincial (black). *Transportation:* railroads (2 class., black), roads (4 class., red/black), tracks and trails (2 class., black). *Other:* power lines (black), telegraph and telephone lines (3 class., black), walls or fences (black), tombs (black), stone towers (black), cemeteries (black), bridges (black), ditches (blue), telegraph offices (black), post offices (black), buildings (black).
Notes: Minor corrections made 1939, 2nd edition published 1945 (grid change only), 3rd edition published 1949 (grid and graticule change only), 4th edition published 1952 (supersedes earlier editions).
Source: LC.

PLAN OF SHANGHAI

1:15,840. 1935. No. 3956. 4 sheets. 20 x 39. English. Military grid. Coverage: Shanghai and environs.
Hydrography: very detailed drainage (blue).
Boundaries: city limits (orange), districts within city (orange).
Transportation: railroads (black), roads (2 class., orange), canals (blue). *Cities and Towns:* (2 class., black), important buildings (black).
Sources: LC, MLUW.

VICTORIA (HONG KONG)

1:10,000. 1930. No. 3890. One sheet. 28 x 20. English. Geographic grid. Coverage: Victoria.
Relief: contours (10 meters, brown), spot heights (meters, black).
Hydrography: very detailed drainage (blue). *Vegetation:* trees (2 class., black). *Other:* rocks (2 class., black), sand (brown), mud (brown), fathom lines (blue).
Boundaries: territorial (black). *Transportation:* railroads (2 class., black), roads (black), tracks and trails (black). *Other:* steps (brown), buildings (2 class., red).
Source: LC.

Survey of India

HIGHLANDS OF TIBET & SURROUNDING REGIONS

1:2,500,000. 1936. 2 sheets. 25 x 33. English. Geographic grid. Modified secant conical projection. Coverage: Long. 68° - 104°, Lat. 26° - 44°.
Relief: altitudinal tints (16, various colors), spot heights (feet, black). *Hydrography:* detailed drainage (blue). *Other:* springs (blue).
Boundaries: international (black). *Transportation:* railroads (black), roads (2 class., black). *Cities and Towns:* (5 class., black). *Other:* telegraph lines (black).
Notes: Marginal items: index to countries and provinces; index to mountain ranges; index to main water-partings. An excellent map.
Source: LC.

30 ASIA

1:2,000,000. 1941. No. 1091. 7 sheets. Size varies. English. Geographic grid. Coverage: see index map 30.
Relief: altitudinal tints (6, various colors). *Hydrography:* major drainage (blue). *Vegetation:* swamps and marshes (blue).
Boundaries: international (2 class., black), provincial (2 class., black).
Transportation: railroads (5 class., black), roads (2 class., red).
Cities and Towns: (6 class., red/black). *Other:* telegraph lines (black), lighthouses (red), wireless stations (black).
Source: LC.

INDIA & ADJACENT REGIONS 31

1:1,000,000. Various dates. 30 sheets. 17 x 22. English. Modified polyconic projection. Coverage: see index map 31.
Relief: contours (various intervals, brown), altitudinal tints (various, various colors), form lines (brown), shaded relief (grey). *Hydrography:* major drainage (blue).
Boundaries: international (black). *Transportation:* railroads (8 class., black), roads (2 class., red). *Cities and Towns:* (5 class., red/black).
Other: telegraph lines (black), tribal names (black), post offices (black), telegraph offices (black).
Notes: Data and style varies somewhat between various sheets, particularly in relief representation. The sheets were published at various dates from 1921 on, each sheet covering 4° Lat. x 6° Long.
Source: LC.

ASIA 32

1:500,000. 1940. 15 sheets. Size varies. English. Geographic grid. Coverage: see index map 32.
Relief: altitudinal tints (4, purple), spot heights (feet, black).
Hydrography: detailed drainage (blue). *Vegetation:* swamps and marshes (blue).
Boundaries: international (black), provincial (black). *Transportation:* railroads (black), roads (2 class., red), tracks and trails (red).
Cities and Towns: (3 class., black).
Notes: Also 1944, 1955 editions, same data. An inferior series compared to other Survey of India series.
Source: LC.

YUNNAN PROVINCE

1:253,440. 1932. No. 1085. Size varies. English. Geographic grid. Coverage: no index map available.
Relief: hachures (brown), spot heights (meters, black). *Hydrography:* detailed drainage (black).
Boundaries: provincial (black), district (black). *Transportation:* railroads (black), roads (2 class., black), tracks and trails (black), canals (black). *Cities and Towns:* (3 class., black). *Other:* telegraph lines (black), post offices (black), telegraph offices (black), temples (black), forts (black), deserted villages (black).
Notes: Surveyed 1894-95, 1897-1900, 1904-05. Provisional issue 1917. 1st edition published 1932. Interim edition published 1943.
Source: LC.

Hydrographic Office, Admiralty

ADMIRALTY CHARTS

The Hydrographic Office of the British Admiralty publishes a wide variety of hydrographic charts at various scales, covering the entire coast of China. The data shown on these charts is necessarily restricted to

coastal areas and narrow strips along navigable waterways. Obviously, the amount of data shown varies with the scale. The larger-scale charts show extremely detailed cultural and physical data and are an excellent source of information for areas that may not be covered in any other available maps. Present day British charts are based partly on a series of charts published in the early 1800's for the East India Company by its own hydrographers.[4] The British charts are based on much Japanese data as well. In fact, one source states that "much material incorporated into recent British Admiralty charts was accepted at face value from Japanese sources."[5] The British have also copied U.S. charts, usually altering the scale. These copies are very similar in appearance to those of the U.S. and "rate equally high in reliability."[6] British charts have one distinctive feature in that some of them include marginal drawings of coastal profiles, a feature not usually found on charts produced by other countries.

Sources: Many map libraries have collections of British Admiralty charts, although their holdings are likely to be less extensive than for U.S. nautical charts. Fortunately, British charts may also be puchased directly from the Hydrographic Office or one of its sales agents in the U.S. and Canada. (See Appendix B for addresses and instructions on ordering maps).

Admiralty charts available: (Each chart listed below includes the following data, in this order: Chart No.; Title and contents of chart; Scale; First publication data; Date of new edition or large correction):

33 *Charts on Index Map 33 (Tai-chou Wan to Liao-tung Wan)*

389; Shanghai Harbour; 1:10,400; 1927; 1936

857; Kiachow Bay; 1:55,600; 1865; 1930

876; Tsingtao Harbour; 1:15,000; 1950; --

1124; Southern approach to the Yangtse Kiang, Video to Cape Yangtse; 1:146,000; 1890; 1914

1199; Kue shan Islands to the Yangtse Kiang, incl. the Chusan Archipelago; 1:283,000; 1883; 1937

1255; Kiaochow Bay to Lai-chau Bay; 1:400,000; 1906; --

1256; Gulfs of Pohai and Liaotung; and northern portion of the Yellow Sea; 1:831,000; 1862; 1950
Approaches to Taku; 1:500,000

1260; Chingtsu shan to Chefoo bluff, incl. Chefoo or Yentai Harbour; 1:72,700; 1904; 1929

1392; Pohai Strait; 1:182,000; 1910; --
Tan ruan Anchorage (Charybdis Harbour); 1:32,500

1395; Tinghai and approaches; 1:18,200; 1901; --

1429; Nimrod Sound to Yung River, incl. s. portion of the Chusan Archipelago; 1:88,200; 1894; --

1453; Plans in the s. approach to the Yangtze Kiang; 1913; --
Parker Islands; 1:72,700
Alacrity Anchorage; 1:12,300

1592; Yung River and approaches; 1:12,100; 1894; 1907
Chin hai to Ning po; 1:29,100
Ning po Anchorage; 1:8,080
Yuyao and the Tsiekie and Funghwa branches; 1:154,000

1601; The Whangpoo; 1:20,000; 1927; 1937
Woosung Bar; 1:12,500

1602; Approaches to the Yangtze River; 1:150,000; 1947; 1954

1759; Wenchow yang to Kue-shan Islands; 1:289,000; 1891; 1939
Shih-pu Road and Harbour; 1:99,620

1798; Kinchau to Terminal head, incl. Kwantung Peninsula; 1:97,300; 1908; 1914

2653; Plans in the Gulfs of Pohai and Liaotung; 1904; 1948
Hai Ho or Peiping River, sh. 1: from entrance to Ko-ku; 1:31,000
Hulutao Harbour; 1:40,000
Lungkow Harbour; 1:100,000

2654; Hai ho or Peiping River, sh. 2: Ko-ku to Tientsin; 1:31,500; 1859; 1928

2833; Fort head to Kinchau, incl. Kwantung (Society) Bay; 1:96,700; 1912; --

2991; Entrance to Liao River, incl. Newchwang; 1:36,500; 1909; 1932 Liao River above Newchwang; 1:81,000

3378; Chinwangtao and approaches; 1:65,000; 1946; --
Chinwangtao Road; 1:12,000

3388; Josan tō to Kaiyo tō, incl. Elliot, Blonde, and Bourchier groups; 1:100,000; 1938; --

3457; Li tau Bay to Chu tau (Eddy I.), Wei-hai-wei Harbour; 1:72,800; 1904; --

3468; Plans on the coast of Shantung; 1904; 1905
Malan (Actaeon) and Lungyen (Swallow) Coves; 1:24,400
Yangyuchih (Rocky) Bay; 1:24,400
Litau Bay; 1:24,400
Aylen (Chiayuwang) Bay; 1:26,200
Wangkia Bay; 1:24,000

3491; Shitau Bay to N.E. Promontory; 1:73,500; 1905; --

3554; Tau tsui Head to Shitau Bay; 1:73,500; 1906; --

3652; Oryoku ko or Yalu Kiang; 1:75,000; 1938; --

3694; Dairen wan; 1:29,200; 1908; 1933

3735; Cape Yatau to Tau tsui Head; 1:158,000; 1909; --

3763; Ryojun ko (Port Arthur); 1:8,140; 1911; 1932

34 *Charts on Index Map 34 (Canton to T'ai-chou Wan)*

166; Plans in the Min Kiang; 1947; --
Na Wei (Pagoda) Anchorage and approaches; 1:20,000
Nan Tai Anchorage; 1:8,000
Ma Wei to Foochow (Minhou); 1:25,000

380; Taitam wan; 1:12,200; 1894; 1951

817; The narrows of Hai-tan Strait; 1:24,200; 1878; --

818; Channels between Red Yit and Rugged I., leading to south entrance of Hai-tan Strait; 1:24,200; 1878; 1915

854; Port Swatow; 1:23,000; 1865; 1946

958; Chieh-shih wan; 1:64,300; 1887; 1954

1180; Approaches to Hong Kong; 1:108,000; 1888; 1951

1459; Hong Kong Harbour; 1:6,080; 1916; 1953

1466; Hong Kong; 1:30,300, 1843; 1953
Fat tau mun; 1:12,100

1739; Chu Kiang or Canton River; 1:24,400; 1907; 1913
Whampoa Channel and Changshan I. to Canton

1740; Chu Kiang or Canton River; 1:24,600; 1930; 1952
Taku (Tiger) I. to Second Bar Pagoda

1741; Chu Kiang or Canton River; 1:24,200; 1908; 1950
Lankit Spit to Taifu (Hu) incl. Chuen-pi Channel and Boca Tigris (Hu men)

1742; Chu Kiang or Canton River; 1:24,600; 1930; 1952
Second Bar Pagoda to Huang-pu Channel and Yuan-kiang-sha

1754; Tung yung to Wenchow yang; 1:293,000; 1891; 1939
Nam kwan Harbour; 1:39,200

1759; Wenchow yang to Kue-shan Islands; 1:289,000; 1891; 1939
Shih-pu Road and Harbour; 1:99,620

1760; The Brothers to Ockseu Is., incl. the w. coast of Formosa from Wankan bank to Nansa-sha River; 1:300,000; 1891; 1950
Tingtai Bay; 1:72,000
Red Bay; 1:72,700

1761; Ockseu Is. to Tung yung, incl. n. part of Formosa from Nansa-sha River to Kelung Harbour; 1:296,000; 1891; 1912

1763; Yung-chia-cheng and approaches; 1:75,000; 1937; --

1764; Amoy, inner harbour; 1:4,850; 1905; 1951

1767; Approaches to Amoy Harbour; 1:36,300; 1906; 1952

1957; Piao Chiao or Good Hope Cape to the Brothers; 1:100,000; 1934; 1954

1958; Tung-shan chiang Harbour and Fou-tou wan; 1:72,700; 1849; 1954

1959; Wei T'ou Ao and Shen-hu wan; 1:74,000; 1849; 1954

1961; Pescadores (Hoko) Islands; 1:97,000; 1907

1962; Hong Kong to the Brothers; 1:305,000; 1890; 1912
Tai sami; 1:24,000
Goat I. Anchorage; 1:72,700

1968; Formosa I. and Strait; 1:670,000; 1907; 1912

1985; Hai-tan Strait; 1:72,000; 1850; 1887

1988; Approach to Santu Inlet; 1:96,900; 1901; 1911

2212; Tien-pak to Macao; 1:304,000; 1911; 1928
Huilingsan Harbour; 1:48,400
Namo Harbour; 1:48,000
Macao Harbour; 1:40,000

2292; Santu Inlet, s. portion; 1:36,600; 1901; --

2346; P'eng-hu chiang; 1:25,000; 1954; --

2376; Ports and anchorages in Formosa; 1932; 1954
Tansui ko (Tan-shui chiang); 1:20,000
Takao ko (Kaohsiung); 1:12,500
Su-ao chiang and approaches; 1:25,000

2400; The bar and approaches to the River Min; 1:64,900; 1888; 1950
Kimpai pass; 1:33,000

2409; West coast of Formosa and Pescadores Channel; 1:150,000; 1954; --

2562; Canton River to Si Kiang delta; 1:200,000; 1936; --

2618; Keelung Harbour; 1:14,600; 1899; 1948

2734; Si Kiang or West River, sh. 2: Kaukong hu to Chowsun; 1:107,000; 1896; 1936
Samshui Reach; 1:25,000

2735; Si Kiang or West River, sh. 3: Chowsun to Wuchow; 1:99,000; 1896; 1934

2974; Chau-tau Harbour and approaches; 1:72,700; 1898; --

3002; Bias Bay (Taya wan); 1:50,000; 1952; --

3026; Macao to Pedro Blanco, incl. Hong Kong; 1:186,000; 1899; 1954

3231; Kyuko Hakuchi to Ksoko Hakuchi; 1:150,000; 1948; --

3232; Garan bi to Takao ko; 1:150,000; 1948; --

3233; Garan bi to Taito Hakuchi; 1:150,000; 1948; --

3234; Taito Hakuchi to Kernko Hakuchi; 1:150,000; 1948; --

3235; Karenko to Sancho Kako; 1:150,000; 1948; --

3279; Hong Kong waters, east; 1:12,200; 1903; 1953

3280; Hong Kong waters, west; 1:12,200; 1903; 1953

3329; Tolo Harbour and adjacent anchorages; 1:14,500; 1903, 1941

3385; Aberdeen Harbour; 1:7,300; 1904; 1947

3386; Long Harbour and approaches; 1:12,200; 1903; 1939

3429; East Lamma Channel; 1:15,300; 1904; 1948

3449; Amoy, outer harbour; 1:12,100; 1904; 1953

3459; Sam chau Inlet; 1:12,400; 1904; --

3474; Mirs Bay; 1:36,500; 1905; 1941

3544; Starling Inlet, Crooked Harbour, and Double Haven; 1:12,100; 1906; 1939

3588; Macao to Canton; 1:100,000; 1936; --

3605; Hong Kong to Mirs Bay; 1:66,100; 1908, 1951

3612; Port Shelter and Rocky Harbour; 1:15,600; 1907; 1951

3620; Canton Harbour; 1:6,000; 1950; --

3632; Ngon-shun-chau (Stonecutter's I.) to Brothers Point; 1:12,200; 1908; 1951

3646; Chu Kiang (Canton River), Huang-pu to Kuang-chou; 1:12,100; 1908; 1952

3647; Chu Kiang (Canton River); Huang-pu to Kuang-chou; 1:24,400; 1907; 1913

3658; Formosa, n. portion, Koryu (Auran) Rd. to So-o wan; 1:147,000; 1907; --

3681; Kap-shui-mun (Kap Sing Mun) to Boca Tigris, s. sheet; 1:48,300; 1914; 1951

3682; Kap-shui-mun (Kap Sing Mun) to Boca Tigris, n. sheet; 1:48,300; 1914; 1951

3715; Che-lin wan Anchorage and Chao-an wan; 1:36,300; 1908; 1954

Charts on Index Map 35 (Gulf of Tonkin Area) 35

37; Hoihow Bay (Hainan); 1:36,300; 1880; 1947

1019; Plans in Hainan I.; 1866; 1934
Sama Port; 1:18,400
Gaalong Bay; 1:45,500
Nam-hoi-chun and Chue-tau Anchorages; 1:48,000
Tai-chau or Tinhosa Anchorages; 1:36,000
Chun-lan Harbour; 1:68,000
Hiong Po Bay and entrance to Taan lagoon; 1:50,000

2062; Ton-king Gulf; 1:696,000; 1881; 1913
Namwan Bay; 1:49,600

3010; Plans in Gulf of Tong King; 1944; 1948
Inner passage and approaches; 1:75,000

3349; Approaches to Kwangchow wan; 1:50,000; 1933; --

3486; Kwangchow wan and River Matshe; 1:40,500; 1933; --

3892; Hainan Strait; 1:200,000; 1946; --

3893; Yuling Chiang; 1:15,000; 1950; --

JAPANESE MAPS OF CHINA

Imperial Land Survey, General Staff

MANCHOUTIKUO & ADJOINING TERRITORIES

1:2,500,000. 1935. One sheet. 39 x 27. Japanese/English. Geographic grid. Coverage: Manchuria and adjacent areas.
Relief: contours (500 meters, black), altitudinal tints (6, green/brown), spot heights (feet, black). *Hydrography:* major drainage (blue). *Vegetation:* swamps and marshes (blue). *Other:* hot springs (black), wadis (black), deserts (black).
Boundaries: international (black/purple), provincial (black/purple), leased territories (black/purple). *Transportation:* railroads (2 class., black), roads (2 class., black), ship routes (black), air routes (red). *Cities and Towns:* (5 class., black). *Other:* walls (2 class., black), mines (black), radio stations (black), harbors (black), airports (red), lighthouses (red), Japanese embassies (black), Japanese consulates (black), foreign public offices (black).
Insets: General map of East Asia (1:40,000,000); Fengtien (1:150,000); Harbin (1:150,00); Hsinking (1:150,000).
Notes: A few place names are transliterated into English, but the map is predominantly in Japanese characters.
Sources: LC, MLUW.

EASTERN CHINA

1:2,500,000. 1927. One sheet. 39 x 27. Japanese. Geographic grid. Coverage: China east of Long. 102°.
Hydrography: detailed drainage (blue). *Other:* sand (black). *Boundaries:* international (blue/black), provincial (blue/black), hsien (black), subprefects (black), concessions (green/black). *Transportation:* railroads (3 class., black), ship routes (black). *Cities and Towns:* (11 class., black). *Other:* Great Wall (black), lighthouses (black), railroad centers (black), ports (black), famous ancient ruins (black), wireless stations (black), palisade (black), mines (black).
Notes: Revised editions published 1931, 1937.
Source: LC.

WESTERN CHINA

1:2,500,000. 1941. One sheet. 39 x 27. Japanese. Geographic grid. Coverage: China west of Long. 102°, with exception of westernmost fringes of Tibet and Sinkiang.
Notes: For data see EASTERN CHINA, above.
Source: LC.

MANCHOUKUO

1:2,000,000. 1935. One sheet. 29 x 40. Japanese. Geographic grid. Coverage: Long. 116° - 135°, Lat. 36° - 54°.

Boundaries: international (red), provincial (red), leased territories (black), Mongolia (black), hsien (black). *Transportation:* railroads (3 class., red), roads (black), ship routes (red) air routes (red). *Cities and Towns:* (5 class., red/black). *Other:* walls (2 class., black), temples (2 class., black), mines (black), wells (black), historic sites (red), navigation lights (red), telegraph cables (black). *Source:* LC.

KANSU (NE) PROVINCE

1:2,000,000. 1942. One sheet. 27 x 19. Japanese. Geographic grid. Coverage: Long. 98° - 112°, Lat. 36° - 43°.
Notes: Black and white. No legend. No relief representation. Shows railroads, roads, cities and towns, walls, provincial boundaries. Legibility good.
Source: LC.

TSINGHAI PROVINCE

1:2,000,000. 1943. One sheet. 29 x 19. Japanese. Coverage: Tsinghai province and environs.
Notes: Black and white. No legend. No relief representation. Similar to map of KANSU, above.
Source: LC.

CHINA

1:1,500,000. 1929. 3 sheets. 40 x 27. Japanese. Geographic grid. Coverage: China east of Long. 108°.
Notes: For data see EASTERN CHINA, 1:2,500,000
Source: LC.

SZECHUAN PROVINCE

1:1,500,000. 1942. One sheet. 22 x 20. Japanese. Geographic grid. Coverage: Szechuan province.
Notes: For data see KANSU (NE), above. No legend. Black and white.
Source: LC.

36 ASIA

1:1,000,000. 1898-1933. Approx. 95 sheets. 11 x 14. Japanese Geographic grid. Coverage: see index map 36.
Relief: shaded relief (green). *Hydrography:* major drainage (blue). *Vegetation:* swamps and marshes (black), orchards (black). *Other:* desert (black), hot springs (black).
Boundaries: international (black), provincial (black), hsien (black). *Transportation:* railroads (2 class., black), roads (2 class., red), tracks and trails (2 class., red), ship routes (black). *Cities and Towns:* (20 class., black). *Other:* telegraph lines (2 class., black), forts (black), military headquarters (black), telegraph offices (black), historical sites (black), lighthouses (red), ports (2 class., black), walls (2 class., black), pagodas (black), temples (black).

Notes: One of the most complete and useful small-scale series for China. Legibility is very good compared to many other Japanese series. Approximately 240 sheets issued in series, most published before 1912. Central Asia sheets are not considered reliable.[7]
Sources: LC, AGS.

CHINA (PROPER)

1:1,000,000. 1935-43. 9 sheets. Size varies. Japanese/English. Geographic grid. Modified polyconic projection. Coverage: see index map 37.
Relief: altitudinal tints (8, green/brown), contours (500 meters, brown).
Hydrography: major drainage (blue). *Other:* hot springs (black).
Boundaries: provincial (black), leased territories (black). *Transportation:* railroads (3 class., black), roads (2 class., black), tracks and trails (black), ship routes (black). *Cities and Towns:* (4 class., black). *Other:* telegraph lines (black), telegraph offices (black), bridges (2 class., black), ports (black), ferries (2 class., black), walls (black), temples (2 class., black), wireless stations (black), navigation lights (black), military camps (2 class., black), churches (black).
Notes: Some sheets in black and white only. A large number of places carry English transliterations.
Sources: LC, MLUW.

MANCHURIA - AIR NAVIGATION MAP

1:1,000,000. 1937-39. Japanese. Geographic grid. Coverage: all of Manchuria. No index map available.
Relief: contours (200 meters, brown), spot heights (meters, black).
Hydrography: major drainage (blue). *Vegetation:* woods (black), swamps and marshes (blue), grassland (black). *Other:* hot springs (black).
Boundaries: international (black), provincial (black), hsien (black), banners (black). *Transportation:* railroads (3 class., black), roads (5 class., black), tracks and trails (black). *Cities and Towns:* (10 class., black). *Other:* government offices (2 class., black), foreign government offices (black), military headquarters (black), telephone offices (2 class., black), post offices (black), temples (2 class., black), churches (black), factories (black), navigation lights (black), ports (2 class., black), radio stations (black).
Notes: Good legibility and great detail of data.
Source: LC.

MAP OF MANCHUKUO

1:1,000,000. 1933-41. 4 sheets. 27 x 36. Japanese. Geographic grid. Coverage: all of Manchuria. No index map available.
Relief: altitudinal tints (6, green/yellow/brown), spot heights (meters, black). *Hydrography:* major drainage (blue). *Vegetation:* swamps and marshes (blue). *Other:* hot springs (black).

Boundaries: international (black), provincial (black), hsien (black), foreign concessions (black). *Transportation:* railroads (2 class., red), roads (3 class., black), ship routes (red), navigable waterways (black). *Cities and Towns:* (4 class., black). *Other:* telegraph lines (black), telegraph cables (black), walls (3 class., black), churches (black), customs houses (black), Buddhist pagodas (black), ports (black), Japanese consulates (black), military camps (black), post offices (black), telegraph offices (black), Mongolian historical sites (black), temples (3 class., black), mining areas (black), wells (black), bridges (2 class., black), lighthouses (black).
Notes: Various editions published during the period 1933-41, same data. A superb map in all respects.
Source: LC.

HAINAN ISLAND

1:1,000,000. 1939. One sheet. 30 x 18. Japanese/English. Geographic grid. Coverage: Long. 108° - 113°, Lat. 18° - 21°30'.
Relief: contours (interval unknown).
Boundaries: international (black), provincial (black). *Transportation:* railroads, roads, tracks and trails, ship routes. *Cities and Towns:* (2 class.).
Notes: No legend.
Source: LC.

38 ASIA

1:500,000. 1938-43. Approx. 160 sheets. 18 x 15. Japanese. Geographic grid. Coverage: see index map 38.
Notes: For data see CHINA, 1:100,000,
An excellent series, covering most of China. Legend not shown on all sheets. A very few of the sheets are in color; most of the sheets are in black and white.
Source: LC.

39 MANCHURIA

1:500,000. 1932. 54 sheets. Size varies. Japanese. Geographic grid. Coverage: see index map 39.
Relief: contours (100 meters, brown), form lines (brown), spot heights (meters, black). *Hydrography:* detailed drainage (blue). *Vegetation:* woods (black), swamps and marshes (blue), grassland (black). *Other:* hot springs (black).
Boundaries: international (black), provincial (black), hsien (black), Banners (black). *Transportation:* railroads (3 class., black), roads (5 class., black), tracks and trails (black). *Cities and Towns:* (10 class., black). *Other:* offices (2 class., black), foreign government offices (black), military headquarters (black), telephone offices (2 class., black), post offices (black), temples (2 class., black), churches (black), factories (black), navigation lights (black), ports (2 class., black), radio stations (black), wells (black), mines (black).
Notes: Each sheet covers 100' Lat. x 150' Long. Compiled by the JILS from other Japanese larger-scale series and one larger-scale Russian set.

J

No contours or form lines are shown for some of the mountainous areas near the northern border of Manchuria because of the lack of good surveys in that area. "Set not as detailed as the sets from which it is compiled, but it covers practically all of Manchuria including Jehol, which is not completely shown on the English language adaptation, AMS L401."[8] Most of the sheets were issued in 1932, but many were revised in 1936. Place names in Chinese, Japanese, and Russian.
Source: LC.

JAPANESE NAVAL AIR CHARTS

40

1:500,000. 1934-38. 10 sheets. Size varies. Japanese. Geographic and military grids. Coverage: see index map 40.
Relief: contours (300 and 500 meters, red), shaded relief (brown), spot heights (meters, black). *Hydrography:* detailed drainage (blue). *Vegetation:* swamps and marshes (blue).
Boundaries: international (black), provincial (black). *Transportation:* railroads (4 class., black), roads (2 class., red). *Cities and Towns:* (3 class., black). *Other:* airfields (4 class., red), beacons (2 class., red), lighthouses (red), wireless stations (red), radio stations (red), oil wells (black), tanks (black), race courses (black), naval bases (3 class., red).
Notes: Published by Imperial Japanese Navy. "These charts show little aviation data for Manchuria. They carry no symbols to suggest either Manchurian airfields or air routes with terminal points in the country."[9] A useful series for other data however. Republished by AMS as series L403.
Source: LC.

MILITARY INTELLIGENCE MAP OF NORTH CHINA - WATER SUPPLY & HEALTH

1:500,000. 1938-41. Size varies. Japanese. Geographic grid.
Notes: Overprint on standard 1:500,000 series for MANCHURIA, Overprint data: water sources (11 class., blue), endemic diseases (9 class., orange), plagues (2 class., orange).
Source: LC.

COAST OF CHINA

1:300,000. 1944-45. 13 sheets. Size varies (but generally 28 x 29). Japanese. Geographic grid. Coverage: No index map available.
Notes: No legend shown on any of the sheets. Relief shown by contours (interval unknown). Data appears to be quite similar to CHINA 1:100,000 series (see p. 49).
Black and white series. Legibility varies widely between sheets.
Source: LC.

MANCHURIA

1:300,000. 1895. 17 x 15. Japanese. Geographic grid. Coverage: No index map available.

Relief: hachures. *Hydrography:* very detailed drainage. *Other:* hot springs.
Boundaries: international, provincial, hsien. *Transportation:* railroads (2 class.), roads (2 class.), ship routes. *Cities and Towns:* (18 class.). *Other:* walls (2 class.), army camps, temples (2 class.), telegraph offices, telegraph lines (2 class.), historic sites (2 class.), navigation lights, anchorages (2 class.), forts, mines.
Notes: One of the earliest Japanese topographic series on China. Relief representation is very poor, but cultural data could be useful. Black and white series.
Source: LC.

41 SINKIANG - KANSU PROVINCES

1:250,000. 1943. 46 sheets. Size varies. Japanese. Coverage: see index map 41.
Relief: contours (interval unknown, brown), spot heights (meters, black). *Hydrography:* detailed drainage (blue). *Vegetation:* swamps and marshes (blue), oases (2 class., green), trees (9 class., green/black). *Other:* springs (blue), sand (brown).
Transportation: roads (2 class., black). *Cities and Towns:* (3 class., black). *Other:* temples (2 class., black), buildings (3 class., black). walls (2 class., black), tombs (black), forts (2 class., black), telegraph lines (black).
Notes: Data spotty in places. Relief representation very generalized in many areas. Very useful series, however, considering the limited available coverage for this area.
Source: LC.

42 MANCHURIA

1:200,000. 1939. 68 sheets. Japanese. Geographic and military grids. Coverage: see index map 42.
Notes: Excellent series in both legibility and data shown. For data, see CHINA, 1:100,000, p. 49.
Source: LC.

MILITARY INTELLIGENCE MAP OF MANCHURIA & SIBERIA

1:200,000. 1939-43. Japanese. Geographic and military grid. Coverage: No index map available. Spotty coverage only, mainly in northern and eastern Manchuria.
Notes: For data see CHINA, 1:100,000, p. 49.
Source: LC.

MANCHURIA

1:200,000. 1934. 5 sheets. Size varies. Japanese. Geographic grid. Coverage: see Notes below.
Relief: contours (50 meters), spot heights (meters). *Hydrography:* detailed drainage.
Notes: No legend on sheets. Black and white series. Series consists of maps of the following cities and their immediate environs: Chinchow, Haicheng, Mukden, Chengchiatien, and Hsinking.

Maps are of high quality and legibility. Data shown are very detailed and appear to be similar to the extremely detailed cultural and physical data shown on the 1:100,000 series for CHINA, below.
Source: LC.

TAIWAN

1:200,000. 1933. 20 x 14. Japanese. Geographic grid. Coverage: all of Taiwan. No index map available.
Relief: contours (interval unknown, black), spot heights (meters, black). *Hydrography:* detailed drainage (blue). *Vegetation:* fields (black), rice paddies (blue), mulberry (black), gardens (black), grassland (black), trees (4 class., black), marshes (black). *Other:* hot springs (red), fords (black).
Boundaries: international (black), hsien (black). *Transportation:* railroads (2 class., black), roads (3 class., black), tracks and trails (black). *Cities and Towns:* (2 class., red/black). *Other:* anchorages (2 class., black), bridges (3 class., black), courts (black), factories (black), ferries (black), government offices (4 class., black), historic sites (black), hospitals (black), lighthouses (red), mines (black), navigation guides (3 class., black), navigation lights (black), police stations (black), prisons (black), post offices (black), telegraph offices (black), temples (2 class., black), tombs (black), schools (black).
Notes: An excellent series. Legibility excellent. Two distinct editions published, one prior to 1900 showing topography by hachures and the second edition as above. Compiled from other sources. Reliability considered below 1:500,000 series for Taiwan, but still probably the best series available at this scale.[10]
Source: LC.

CHINA

1:100,000. 1910-45. 19 x 14. Japanese. Geographic and military grids. Coverage: No index map available. Several hundred sheets are available, but coverage is spotty, best in eastern provinces.
Relief: contours (20 meters), spot heights (meters). *Hydrography:* very detailed drainage. *Vegetation:* rice fields (2 class.), orchards, trees (3 class.), forests (3 class.), shrubs and bushes, grassy marsh land, pastures. *Other:* springs (3 class.), wasteland, salt pans.
Boundaries: international, provincial, prefectural. *Transportation:* railroads (6 class.), roads (7 class.), tracks and trails. *Cities and Towns:* (3 class.). *Other:* aerial cableways, airfields, air navigation lights, arbours, banks, benchmarks, boundary markers, chimneys, churches, cranes, customs houses, dikes (2 class.), earth grave mounds, factories or plants, foreign government offices, gates (3 class.), gendarmerie, government lands, government offices, gravestones, guard posts, hospitals, isolation wards, Imperial mausoleums, kilns (2 class.), material dumps, migrating Mongol settlements, military headquarters, mines, monuments, oil wells, pagodas, police stations, post offices,

powder magazines, power houses, prisons, prefectural government offices, provincial government offices, radio masts, radio stations, road markers, ruins of beacon towers, sand and gravel pits, schools, second-order control points, shipyards, shrines, shrine mausoleums, sign posts, special city and city offices, statues, stone steps, telegraph lines, telegraph offices, telephone and telegraph bureaus, temples, towers, town or village offices, triangulation stations, voluntary police groups, walls (7 class.), warehouses, water mills, water towers, weather stations, wells, windmills.
Notes: Black and white series. Extremely detailed cultural and physical data. Legend on some of the sheets only. Legibility varies widely between the sheets.
Source: LC

43 MANCHURIA

1:100,000. 1932-39. Approx. 440 sheets. Size varies. Japanese. Geographic and military grids. Coverage: see index map 43.
Relief: contours (20 meters), spot heights (meters).
Notes: For data see CHINA 1:100,000, p. 49.
Black and white series. No legend on sheets. Legibility varies widely. Each sheet covers 20' Lat. x 30' Long.
Source: LC.

HOPEH PROVINCE

1:100,000. 1941. Approx. 85 sheets. 18 x 14. Japanese. Military grid. Coverage: No usable index map available. Coverage is nearly complete for province, however.
Notes: No legend on sheets. Data appears similar to CHINA, 1:100,000, p. 49. Legibility varies widely. Black and white series.
Source: LC.

KWANGTUNG PROVINCE

1:100,000. 1937-38. Approx. 60 sheets. Size varies. Japanese. Geographic grid. Coverage: No usable index map available. Coverage appears nearly complete for province.
Notes: No legend on sheets. Data appears similar to the standard 1:100,000 sheets on China. Black and white series.
Source: LC.

YUNNAN PROVINCE

1:100,000. 1940. Size varies. Japanese.
Notes: Black and white series. No grid or legend shown on sheets. Data appears similar to the standard 1:100,000 sheets on China (see p. 49.) No index map available, but LC appears to have complete coverage for Yunnan province. Contour interval is 50 meters. Since so little coverage of Yunnan is available this could be a useful series.
Source: LC.

MANCHURIA

1:50,000. 1932-35. Approx. 700 sheets. Size varies (generally 16 x 14). Japanese. Geographic grid. Coverage: No usable index map available. Coverage fairly extensive for most of Manchuria.
Relief: contours (20 meters, 5 and 10 meters supp.), spot heights (meters). *Hydrography:* very detailed drainage.
Boundaries: international, provincial, hsien, leased territory. *Transportation:* railroads (3 class.), roads (6 class.), tracks and trails, canals.
Notes: For other cultural data see CHINA, 1:100,000, p. 49.
Each sheet covers approximately 10' Lat. x 15' Long. Most of the sheets have no latitude or longitude markings. Series based on actual surveys of late 1920's, probably by Chinese surveying parties directed by the Japanese.[11] One of the better large-scale topographic series for Manchuria, although reliability varies throughout the series. "Sheets that overlap provincial boundaries reveal inequalities in mapping. Map symbols on some sheets for the same town or river differ so widely as to prove one or the other inaccurate. Discrepancies appear on single sheets where different workers could not or did not adjust their results."[12] Black and white series.
Source: LC.

FUKIEN PROVINCE, COAST

1:50,000. 1906. Approx. 50 sheets. 20 x 14. Japanese. Geographic grid. Coverage: No usable index map available. Coverage is complete, however, for the Fukien coast.
Notes: Black and white series. No legend on sheets. Data appears similar to 1:50,000 series for Manchuria, above.
Source: LC.

PESCADORES ISLANDS

1:50,000. 1904. 4 sheets. 20 x 14. Japanese. Geographic grid. Coverage: Pescadores. No index map available.
Relief: contours (interval unknown), form lines.
Transportation: roads (2 class.), trails. *Cities and Towns.*
Notes: No legend on sheets. Black and white series. Legibility good.
Source: LC.

FORMOSA (TAIWAN)

1:50,000. 1925-30. Approx. 100 sheets. 15 x 20. Japanese. Geographic grid. Coverage: see index map 44.
Relief: contours (20 meters), spot heights (meters).
Notes: No legend on sheets. Black and white series. Very detailed physical and cultural data, including political boundaries, detailed place names, roads, streets, buildings, natural vegetation, crop utilization of land, etc. Data appears similar to 1:100,000 series for China. An excellent series. Legibility good.
Source: LC.

MANCHURIA (SOUTHERN)

1:25,000. 1922-24. 64 sheets. 17 x 14. Japanese. Geographic grid. Coverage: No usable index map available. Coverage spotty.
Relief: contours (10 meters), spot heights (meters). *Hydrography:* very detailed drainage. *Vegetation:* woods (2 class.), swamps and marshes, rice paddies, trees (2 class.), cultivated fields (4 class.). *Other:* salt evaporators, sand.
Transportation: railroads (3 class.), roads (6 class.), tracks and trails, canals. *Cities and Towns:* (3 class.). *Other:* walls (2 class.), burial mounds, monuments, chimneys, churches, government offices (3 class.), schools, hospitals, post offices, telephone offices, factories, wells, dikes, mines, banks, anchorages, bridges (3 class.), ports (2 class.), navigation lights (4 class.), radio stations, telegraph lines.
Notes: Areas left blank near Dairen and Port Arthur because these cities and their environs are covered by the Russian 1:42,000 series.[13] Series based on "probably the best survey ever prepared in Manchuria. Detailed triangulation and other work of the survey is as accurate as detailed surveys of Japan Proper. . . . For the area covered this set gives more reliable information than any other topographic map."[14] Legibility very good. Appearance and format very similar to 1:50,000 ILS series for Manchuria (see p.125). Four 1:25,000 sheets cover the area of a 1:50,000 sheet. Sheet names in two series not coordinated however.[15]
Source: LC.

45 FORMOSA (TAIWAN)

1:25,000. 1927. Approx. 135 sheets. 20 x 14. Japanese. Geographic grid. Coverage: see index map 45.
Relief: contours (10 meters, 5 meters supp.), spot heights (meters).
Hydrography: very detailed drainage.
Notes. No legend on sheets. Black and white series. Extremely detailed cultural and physical data, at least as detailed as ILS 1:100,000 series on China (see p. 49). An excellent series.
Source: LC.

46 PESCADORES ISLANDS

1:25,000. 1942. 8 sheets. 20 x 14. Japanese. Geographic grid. Coverage: No index map available. However, see index map 46 for indication of coverage.
Relief: form lines. *Hydrography:* very detailed drainage.
Transportation: roads (3 class.), tracks and trails. *Other:* buildings (2 class.).
Notes: No legend on sheets. Black and white. Legibility good. Detailed cultural and physical data (see FORMOSA, 1:25,000, above).
Source: LC.

SHANGHAI & VICINITY

1:25,000. 1937. Approx. 100 sheets. Size varies. Japanese. Military grid. Coverage: see Notes below.
Hydrography: very detailed drainage (blue). *Vegetation:* woods (3 class. black), swamps and marshes (blue), orchards (black), rice paddies (black). *Other:* sand.
Transportation: railroads (3 class., black), roads (2 class., black), tracks and trails (black), canals (blue). *Other:* chimneys (black), burial mounds (black), navigation lights (black), forts (black), walls (black), ports (black), military headquarters (black), wireless stations (black), schools (black), factories (black), pagodas (black), bridges (6 class., black), salt evaporators (black).
Notes: No geographic grid. No index map available. Series appears to cover a large part of the Yangtze delta in and around Shanghai, with over 100 sheets. Black and white series with exception of hydrography.
Source: LC.

HAILAR AND ENVIRONS

1:25,000. 1937. 4 sheets. 26 x 29. Japanese. Coverage: Hailar and environs.
Notes: No legend on sheets. Black and white. Detailed cultural and physical data (contours, interval unknown).
Source: LC.

SUIFENHO & ENVIRONS

1:25,000. 1932. 5 sheets. Size varies. Japanese. Coverage: Suifenho and environs.
Notes: No legend on sheets. Black and white. Detailed cultural and physical data (contours, interval unknown).
Source: LC.

TAKU-TANGKU & VICINITY

1:25,000. 1931. One sheet. 40 x 28. Japanese. Coverage: Taku-Tangku and vicinity.
Notes: No legend. Black and white. Shows detailed settlement pattern, roads, railroads, etc. No relief representation. Generally excellent map. No grid.
Source: LC.

HANGCHOW & ENVIRONS

1:20,000. 1937. One sheet. 22 x 32. Japanese. Coverage: Hangchow and environs.
Relief: contours (10 meters, black).
Notes: No legend. Shows detailed street plan and settlement pattern. Also very detailed hydrography (blue). An excellent map.
Source: LC.

40 FORMOSA (TAIWAN)

1:20,000. 1929. Approx. 250 sheets. 20 x 14. Japanese. Geographic grid. Coverage: See index map 40.
Notes: No legend. Black and white. Very similar to 1:25,000 series for Formosa (see p. 126). Legibility generally good. Series first published 1904, revised 1929. Also 1944 edition, same data.
Source: LC.

CHINA - CITIES & ENVIRONS

1:20,000. 1937. 9 sheets. 28 x 40. Japanese. Military grid.
Coverage: The following cities and their environs: Hsuhsui, Tsangtsun, Kaoyang, Tsoho, Paoting, Tsochiao, Mancheng, Chiangcheng, Changtengchen.
Notes: No legend on sheets. Black and white maps. Relief by contours (interval unknown). Very detailed cultural and physical data. Highly useful series, in spite of lack of legend. Format generally similar to 1:50,000 series on Manchuria, p. 125.
Source: LC.

HONG KONG & VICINITY

1:20,000. 1940. 29 x 19. Japanese. Coverage: Hong Kong and vicinity.
Relief: contours (10 meters), spot heights (meters). *Hydrography:* very detailed drainage. *Vegetation:* woods (2 class.), swamps and marshes, orchards. *Other:* salt pans, sand
Boundaries: territorial, districts. *Transportation:* railroads (2 class.), roads (4 class.), tracks and trails (2 class.). *Other:* telegraph lines, undersea cables, post offices, telegraph offices, police stations, hospitals, schools, churches, radio stations, pagodas, temples, graves.
Notes: Black and white. Excellent series. Legibility good. Provides much the same coverage as the GSGS 1:20,000 series for Hong Kong (see p. 105.
Source: LC.

47 FORMOSA (TAIWAN)

1:11,000. 1934. Approx. 70 sheets. 20 x 14. Japanese. Geographic grid. Coverage: See index map 47.
Notes: No legend. Black and white. Very detailed cultural and physical data. An excellent series, though spotty in coverage. Legibility excellent.
Source: LC.

FOOCHOW

1:10,000. 1943. One sheet. 23 x 30. Japanese. Coverage: Foochow and environs.
Relief: contours (interval unknown). *Hydrography:* very detailed drainage. *Vegetation:* woods, arbors, sugar cane fields, vegetable gardens, uncultivated land, trees (3 class.). *Other:* sand banks, cliffs, hot springs, fords.

Boundaries: provincial police. *Transportation:* roads (3 class.), tracks and trails. *Other:* anchorages, arms depots, army headquarters, banks, bridges (3 class.), churches, earth mounds, fire brigades, fish ponds, gateways, hospitals, post offices, prisons, public safety offices, radio stations, rock dikes, ruins, stone steps, temples (2 class.), wharfs.
Notes: Very useful and legible map. No grid. Considered highly reliable.[16]
Source: LC.

CHANGCHUN & ENVIRONS

1:10,000. 1938. 4 sheets. 16 x 15. Japanese. Geographic grid.
Coverage: Changchun and environs (no index map available).
Notes: Legend obscured on edition examined. However, series shows very detailed cultural and physical data. Considered highly reliable.[17]
Source: LC.

PORT ARTHUR & VICINITY

1:5,000. 1905. Approx. 80 sheets. Size varies. Japanese. Coverage: see Notes below.
Relief: contours (1 meter)
Notes: No legend or index map available. Black and white series. Covers much of the Liaotung peninsula around Port Arthur. Extremely detailed cultural and physical data. No grid.
Source: LC.

NANSHAN & ENVIRONS

1:5,000. 1905. 18 sheets. Size varies. Japanese.
Notes: No legend or index map available. No grid. Black and white. Series very similar to Port Arthur & Vicinity series, 1:5,000, above. Extremely detailed physical and cultural data. Contour interval 1 meter.
Source: LC.

SHIHTAOCHIEH & ENVIRONS

1:1,200. 1937. 22 sheets. Size varies. Japanese.
Notes: No legend or index map available. No grid. Black and white. Extremely detailed physical and cultural data. Highly useful series.
Source: LC.

HSIAOPINGTAO

1:1,200. 1937. 13 sheets. Size varies. Japanese.
Notes: No legend or index map available. No grid. Black and white. Extremely detailed physical and cultural data. Highly useful series.
Source: LC.

DAIREN

1:1,200. 1935. Size varies. Japanese. Military grid.
Relief: contours (6 meters).
Notes: No legend or index map. Black and white. Extremely detailed street map of Dairen and immediate environs. Legibility good. Also 1938 edition, same data.
Source: LC.

South Manchurian Railway Company

COMMERCIAL MAP OF MANCHURIA

1:2,000,000. 1931. One sheet. 28 x 40. Japanese/English. Geographic grid. Coverage: all of Manchuria.
Boundaries: international (black), concessions (black), provincial (black), confederate (black). *Transportation:* railroads (7 class., black), shipping lines' companies and routes (10 class., various colors). *Cities and Towns:* (2 class., black). *Other:* customs offices (black), telegraph cables (black).
Inset: Zones of agriculture, cattle-breeding, forestry, and mining in Manchuria (1:6,000,000).
Notes: An excellent railroad map.
Source: LC.

MANCHUKUO

1:2,000,000. 1941. One sheet. 28 x 40. Japanese. Geographic grid. Coverage: all of Manchuria.
Relief: altitudinal tints (7, various colors). *Vegetation:* swamps and marshes (black). *Other:* hot springs (black), sand (black).
Boundaries: international (black), provincial (black), leased territory (black), Mongolia (black), banners (black), hsien (black). *Transportation:* railroads (2 class., black), roads (black), canals (blue). *Cities and Towns:* (9 class., black). *Other:* walls (2 class., black), mines (black), historic sites (black), Buddhist temples (black).
Notes: Also 1940 edition with no relief representation, otherwise same data. An excellent map.
Source: LC.

MAP SHOWING MINERAL DISTRIBUTION IN SOUTH MANCHURIA

1:1,000,000. 1924. One sheet. 28 x 32. Japanese/English. Geographic grid. Coverage: Long. 120° - 129°, Lat. 39° - 45°.
Physical data: mineral deposits (24 class., red/blue).
Boundaries: international (black), provincial (black), hsien (black).
Transportation: roads (2 class., black). *Cities and Towns:* (3 class., black). *Other:* Great Wall (black).
Source: LC.

GEOLOGIC MAP OF MANCHURIA

1:400,000. 1925. 8 sheets. Size varies. Japanese/English. Geographic grid. Coverage: No index map available.
Relief: contours (100 meters, black), spot heights (meters, black).
Other: geologic formations (13 class., various colors), mineral deposits (12 class., black).
Boundaries: leased territory (black). *Transportation:* railroads (black), roads (black). *Cities and Towns:* (3 class., black).
Notes: Chief value of series is detailed location of mineral deposits.
Source: LC.

Japanese Colonial Government of Taiwan, Section of Mines

GEOLOGICAL MAP OF THE ISLAND OF FORMOSA

1:300,000. 1911. 4 sheets. Size varies. Japanese. Geographic grid. Coverage: all of Taiwan.
Relief: contours (400 feet, brown). *Hydrography:* detailed drainage (blue). *Vegetation:* swamps and marshes (blue). *Other:* hot springs (black), cliffs (black), geologic formations (15 class., various colors), mineral deposits (12 class., various colors).
Boundaries: provincial (black), district (black), temporary provincial (black), savage territory (black). *Transportation:* railroads (4 class., black), roads (black), tracks and trails (black). *Cities and Towns:* (2 class., black). *Other:* government offices (6 class., black), post offices (black), telegraph offices (black), electric power houses (black), hospitals (black), meteorological observatories (black), prisons (black), shrines (black), schools (black), churches (black), lighthouses (black), harbors (black).
Notes: Excellent topographic/geologic map series.
Source: LC.

Bureau of Productive Industries, Taiwan

FORMOSA - GEOLOGY

1:500,000. 1933. 6 sheets. Size varies. Japanese/English. Geographic grid. Coverage: all of Formosa.
Notes: No legend except for geologic data. Smaller-scale version of 1:50,000 geologic series (see below). An excellent series. Also 1940 edition, same data.
Sources: LC, USGS.

FORMOSA - GEOLOGY

1:50,000. 1932. 20 x 15. Japanese/English. Geographic grid.
Coverage: No index map available, but coverage appears complete for Formosa.
Relief: contours (20 meters, black).
Notes: No legend except for geologic data. Appears to be geologic overprint on standard 1:50,000 topographic series for Formosa (see p. 125). Excellent topographic/geologic series.
Sources: LC, USGS.

Department of Agriculture, Central Research Bureau, Taiwan

FORMOSA - SOILS

1:100,000. 1925. 8 sheets. Size varies. Japanese. Geographic grid.
Coverage: all of Formosa.
Notes: No legend. Relief by contours (interval unknown). Soil data (13 class.) overlay on 1:100,000 topographic base.
Source: LC.

Japanese Hydrographic Office

HYDROGRAPHIC CHARTS

The Japanese Hydrographic Office publishes a wide variety of hydrographic charts, at various scales, covering the entire coast of China. The data shown on these charts, like that on U.S. and other foreign charts, varies with the scale, the larger-scale charts showing extremely detailed cultural and physical data. Japanese charts use little or no color. Some charts show the field patterns of cropland, as well as salt fields. Relief is shown by closely spaced form lines, plus numerous spot heights.

There are two distinct types of Japanese hydrographic charts, one produced prior to 1912 and influenced by the style and standards of the British Admiralty, and the second produced since 1912 and having a distinct character of its own.[18] In the former, heights and depths are in feet, place names are entirely romanized, and explanatory notes are in English. In the latter, measurements are in meters, and only a limited amount of names and other material are translated or romanized.

Japanese hydrographic charts, particularly for Manchuria and North China, are widely recognized as the most reliable charts available. They were based mostly on original surveys by the Imperial Japanese Navy. Modern hydrographic charts produced by the U.S., Great Britain, and other countries, while containing some original survey work of their own, are nevertheless based largely on Japanese hydrographic charts. For persons competent in Japanese, these charts can certainly be highly recommended.

Sources: Few map libraries have collections of Japanese hydrographic charts. The best source is the Library of Congress. Fortunately, copies may also be purchased by the public directly from the Japanese Hydrographic Office. (See Appendix B for addresses and instructions on ordering maps).

Nautical charts available: (Each chart listed below includes the following data, in this order: Chart no.; Title and contents of chart; Scale; Latest publication date). For scale, the number shown with each entry refers to the following key, which shows the range of scales found on Japanese charts:

In.	*Natural Scale*	*In.*	*Natural Scale*
0.1	729,600	3.5	20,846
0.2	364,800	4.0	18,240
0.3	243,200	4.5	16,213
0.4	182,400	5.0	14,592
0.5	145,920	5.5	13,255
0.75	97,280	6.0	12,160
1.0	72,960	7.0	10,423
1.5	48,640	8.0	9,120
2.0	36,480	9.0	8,107
2.5	29.184	10.0	7,296
3.0	24,320		

Charts on index map 48 (Tai-chou Wan to Liao-tung Wan) 48

353; Liau ho, sh. 1, from the entrance to Tien chwang tai, incl. the Port of Yin koa; 1.00; 1919

354; Liau ho, sh. 2, from the entrance to Tzao cha tan; 2.24; 1923

355; Liau ho, sh. 3, from Tzao cha tan to Kai shi ga; 1.43; 1917

356; Ta-tsin-ho to Shan-hai kuan; 0.20; 1916
Plans: Lau-mu-ho entrance, Ching-ho entrance, Pe-tang-ho entrance, and Chi-ho entrance.

357; Chinchou bay to Fuchou bay; 0.75; 1912

358; Approaches to Ryojun ko; 3.40; 1916

359; Fort Head to Liau ho entrance; 0.65; 1919

360; Chu-tan to Chifu bluff; 0.98; 1917

361; Port of Chefoo or Yentai and approaches; 2.00; 1926
Plan: Inner harbour of Chefoo or Yentai

362; Ryojun ko; 9.00; 1916

363; Liau tung peninsula and approaches; 0.20; 1919

364; Wei hai wei and approaches; 2.00; 1926

365; Ta-ku-shan Rd.; 1.20; 1906.

366; Wei hai wei anchorage; 5.90; 1925

369; Kwang tung peninsula and approaches; 0.75; 1916

370; Plans on the coast of Shantung; var.; 1906
Malan and Lungyen Coves, Aylen Bay, Yangyuchih Bay, Lita- Bay, and Wangkia Bay

371; Kyau-chau Bay to Lai-chau Bay; 0.18; 1909

372; Shitau Bay to Shantung promontory; 1.00; 1906

373; Tau Tsui head to Shitau Bay; 0.98; 1907

374; Li tau bay to Chu tau, incl. Wei hai wei harbour; 0.98; 1905

375; Port Lung kou; 3.00; 1916

376; Cape Yatau to Tau tsui Head; 0.47; 1910

377; Approaches to Chin wang tao; 1.12; 1923
Plan: Ching wang tao Rd.

378; Tsing Tau Harbour and approaches; 2.50; 1917

379; Kyau-chau Bay and approaches; 1.27; 1918

380; Dairen Naiko; 1:10,406; 1926
Plan: Plan showing number of berths of the quay walls

381; Hong Kong to Gulf of Liau-tung

386; Chang tau harbour and approaches; 1.00; 1899

387; Shitau Bay and approaches; 3.00; 1917

391; Thornton haven; 3.10; 1904

392; N. portion of Hwang-hai and Pwok hai; 5.19; 1915
Plans: Yang kias kō, Tatsin kō or Li-tsin-ho, and Ta-ko-ho or Ta-san-ho

396; Dairen wan; 2.57; 1917

J

397; Pechili strait; 0.40; 1908
Plan: Ta ruan anchorage

398; South Side of Tsungming I.; 1.00; 1925

429; Approaches to the entrance of Haiho; 3.00; 1923

430; Haiho or Peking River; 2.30; 1923

439; Wen-chau Bay to Kue shan Islands; 0.20; 1915

441; Kue shan Islands to Yang tse kiang, incl. the Chusan Archipelago; 0.25; 1918

442; Kue shan Islands to Nimrod Sound; 0.80; 1915

444; Yung River and approaches; 5.86; 1908
Plans: Chin hai to Ning po, Yuyao, Tsie kie branch and Funghwa branch, and Ning po anchorage

458; Tinghai Harbour and approaches; 3.90; 1903

471; Nimrod Sound to Yung River, incl. the S. portion of the Chusan Archipelago; 0.83; 1896

472; Nimrod Sound; 0.75; 1911

473; San mun Bay and Sheipu Harbour; 0.70; 1895

489; Hangchow Bay and approaches; 0.62; 1922

490; Southern approaches to the Yang tse kiang, Video to Cape Yang tse; 0.50; 1915

491; Approaches to the Yang tse kiang; 0.60; 1925

492; Plans in the S. approaches to the Yang tse kiang; Porker Islands and Alacrity anchorage; var.; 1914

Charts on index map 49 (Canton to T'ai-chou Wan) 49

210; Nagasaki to Amoy; 2.83; 1921

211; Tansui kō and Auran Rd.; 4.00; 1905

212; Plans on the west coast of Taiwan: Choshan Road, Kukan Road, and Chuskan Road; var.; 1921

219; Hōbitō to Bōryō; 1.50; 1897

220; Pinamu to Koirenkan; 0.48; 1913
Plan: Seikō-ō and Mararao Rds.

228; Hatto Islands (Rover group); 4.00; 1906

230; Kurin kō (Ke-lang harbour); 8.00; 1919

231; Hoirenkan to Samuchō kaku; 0.49; 1914
Plan: Hoirenkan Rd.

233; Plans on Hoisho tō and Antan sū; Tosei wan, Yashiro wan, Namuryan wan, and Teonryan wan; var.; 1910

234; Kūkan Rd. to Haipo Rd.; 0.49; 1904
Plan: Haipo Rd.

235; Hōko Islands (Pescadores Islands); 0.74; 1909

236; Hokō suidō (Pescadores Channel); 0.49; 1922

239; Plans on the east coast of Taiwan; Pinamu Road, Paoyo Wan, and Chunkan Road; var.; 1910

244; Taiwan Tō (Formosa I.) and kaikyō; 0.106; 1920

245; Plans on the west coast of Taiwan: Sh. 1: Anping Rd. & Pawtaichiu Rd.; var.; 1920

246; Plans on the west coast of Taiwan: Sh. 2: Taian kan & Tokatsukuru kan; var.; 1917

247; Plans on the west coast of Taiwan: Sh. 3: Rokan Rd. & Hoanna Rd.; var.; 1917

248; Samuchō kaku to Kukan Rd.; 0.49; 1910

250^{A}; Goaram pii to Pinamu; 0.48; 1909

250^{B}; Takau to Goaram pii; 0.48; 1909
Plans: Tankan Rd. and Taihanroku Anchorage

351; Macao to Pedro Blanco, including Hong Kong; 0.40; 1914

367; Bias Bay; 0.86; 1910
Plan: Samun Road

368; S. portion of San-tu Inlet; 1.99; 1903

381; Hong Kong to Gulf of Liau-tung; 2.00; 1911

402; The bar and approaches to the River Min; 1.10; 1914
Plan: Kinpai Pass

403; Hie che chiu Bay; 1.13; 1907

404; Tolo Harbour and adjacent anchorages; 5.00; 1904

405; Long Harbour and approaches; 6.00; 1905

406; Cum-sing-mun harbour and Aberdeen harbour; var.; 1921

407; Tung yung to Wen-chau Bay; 0.20; 1914

409; Wan chu chau to Brothers Pt.; 5.97; 1917

410; Si kiang, sh. 3, Chau sun to Wu Chau Fu; 0.70; 1916
Plans: Wu Chau Fu and Tak hing

411; Pe kiang, Sam Shui to Shan Fu; 0.70; 1915
Plan: Lienchau River

412; Si kiang, sh. 2, Sam chau to Chau sun; 0.70; 1915
Plan: Sam shui reach

413^{A}; Whampoa to Canton, sh. 1; 6.00; 1918

413^{B}; Whampoa to Canton, sh. 2; 6.00; 1918

414; Canton harbour; 12.08; 1922

415; Chu-kiang delta; 0.80; 1914

416; E. Lamma channel; 4.70; 1905

418; Approach to San-tu Inlet; 0.75; 1912

419^{A}; Hong Kong waters, east; 5.95; 1925

419^{B}; Hong Kong waters, west; 5.95; 1925

420; Hong Kong harbour; 2.40; 1925

421; Approaches to Hong Kong; 0.70; 1914

422; Hong Kong harbour; 11.97; 1925

423; Chukiang or Canton River; 0.40; 1915
Plans: Sheng lung rock, Boddam cover, Nam Sha bay

424; Chu-kiang or Canton River, sh. 2; 3.00; 1918
Lankit spit to Tiger Island, incl. Chuen pi and Boca channels

425; Chu-kiang or Canton River, sh. 3; 3.00; 1919
Tiger Island to the Second bar pagoda

426; Chu-kiang or Canton River, sh. 4; 3.00; 1919
Second bar pagoda to Whampoa and Chang shan Island

427; Chu-kiang or Canton River, sh. 5; 3.00; 1919
Whampoa channel and Chang shan Island to Canton

428; Starling Inlet and approaches; 5.96; 1908

434; Mirs Bay; 2.00; 1906

433; Hong Kong harbour to Mirs bay; 1.10; 1908

435; Amoy, inner harbour; 15.00 ; 1907

436; Amoy, outer harbour; 6.00; 1916

437; Approaches to Amoy harbour; 2.00; 1916

438; Port Shelter and Rocky harbour; 4.64; 1918

439; Wen-chau Bay to Kue shan Islands; 0.20; 1915

440; Mamoi to Fu chau fu; 3.15; 1919

443; The Brothers to Ocksen Islands; 0.24; 1913
Plan: Tingtai Bay and Red Bay

445; Wen-chau port and approaches; 1.00; 1915

446; Ocksen Islands to Tung yung, incl. north part of Taiwan (from Kukan Rd. to Kurun kō); 0.2; 1914

447; Pagoda anchorage and approaches; 5.00; 1922

448; Hai-tan Strait; 1.00; 1898

449; Narrows of Hai-tan Strait; 3.00; 1897

450; Channels between Red yit and Rugged Island; 3.00; 1907
Plan: Dwarf anchorage

457; Si kiang, sh. 4, Wu Chau Fu to Long Chau Fu; 0.36; 1919

459; Wen-chau port; 3.00; 1919

463; Tongsang Harb ur and Hutau Bay; 1.00; 1900
Plan: Rees Pass

J

464; Plans on the east coast of China; Var.; 1909
Chauan Bay and Challum Bay anchorage

465; Anchorages on the Coast of China; var.; 1906
Black head and Crab Pt., Kupchi Point anchorage, and Breaker Point anchorage and Tungao Road

466; Chinchu harbour; 1.50; 1894

467; Hu-i-tau and Chimmo Bays; 1.00; 1887

469; Hong Kong to the Brothers; 0.24; 1911
Plans: Tai sami and Goat Island anchorage

470; Taitam Bay; 6.00; 1895

474; Namoa Island; 0.73; 1909

475; Port Swatau; 3.10; 1919

477; Soaliyau Harbour; 1.84; 1895

522; Tien pack harbour to Macao; 0.20; 1914
Plans: Shito bay, Namo harbour, Huiling-san harbour, and Macao harbour

525^{A}; China sea, n. portion, w. sh.; 2.80; 1914

525^{B}; China sea, no. portion, e. sh.; 3.00; 1912

1202; Takao kō; 6.00; 1925

1217; Kurin kō and approaches; 4.00; 1921

1451; Kap sing mun to Boca tigris, n. sh.; 1.50; 1916

1452; Kap sing mun to Boca tigris, s. sh.; 1.50; 1916

Charts on index map 50 (Gulf of Tonkin Area) 50

452; S. coast of Hainan Island; var.; 1900
Yu lin kan Bay, Nam Hoi Chun and Chue Tau anchorages, Sama Port, Tai Chau anchorage, Chun lan harbour, and Gaalong Bay

453; Hoi hau Bay; 2.00; 1926

454; Hainan Strait; 0.50; 1914
Plan; Inner passage

522; Tien pack harbour to Macao; 0.20; 1914
Plans: Shito Bay, Nams harbour, Huiling-san harbour, and Macao harbour.

525[A]; China Sea, n. portion, w. sh.; 2.80; 1914

526; Approaches to Kwang chau wan; 1.80; 1907

527; River Matshe; 1.75; 1906

528; Tien pack harbour; 2.50; 1914

709; Annam Gulf (Tong King Gulf); 0.10; 1914
Plan: Namwan Bay

RUSSIAN MAPS OF CHINA

General Staff, Red Army

ASIA 51

1:1,500,000. 1937-43. 26 sheets. Size varies. Russian. Geographic grid. Coverage: see index map 51.
Relief: hachures (brown), shaded relief (brown), spot heights (sazhen, black). *Hydrography:* detailed drainage (blue). *Vegetation:* swamps and marshes (blue), forests (green).
Boundaries: international (purple), provincial (black). *Transportation:* railroads (2 class., black), roads (4 class., black), tracks and trails (2 class.), ship routes (black). *Cities and Towns:* (12 class., black). *Other:* grave mounds (black), lighthouses (black), ruins (black), yurts (black), radio stations (black), harbors and ports (black).
Notes: Not an especially outstanding series. AMS published a direct copy edition in 1943 (see p. 153).
Source: LC.

MANCHURIA

1:84,000. 1893-1906. 20 x 17. Russian. Geographic grid. Coverage: No index map available. Coverage spotty.
Relief: contours (70 feet), spot heights (sazhen), form lines. *Hydrography:* very detailed drainage. *Vegetation:* forests, steppe.
Transportation: railroads (2 class.), roads (4 class.), tracks and trails. *Cities and Towns:* (2 class.). *Other:* bridges, pagodas, temples, telegraph lines.
Notes: Black and white. Latitude correct. Longitude not based on Greenwich. Series based on original surveys made for 1:42,000 series, resulting in very detailed topographic data. Some sheets based on surveys made for 1:168,000 series with less effective relief representation. Some sheets have no topographic detail. "This set is inferior to other larger-scale sets and should be used for areas where no other coverage is available."[19] GSGS reproduction of several of the sheets also available (see p. 103).
Source: LC.

Main Administration for Geodesy and Cartography

CHINA

1:7,000,000. 1956. One sheet. 39 x 24. Russian. Geographic grid. Coverage: all of China.

Relief: altitudinal tints (6, green/brown), shaded relief (brown), spot heights (meters, black). *Hydrography:* major drainage (blue). *Vegetation:* swamps and marshes (blue), salt marshes (blue). *Other:* sand (brown), lakes (2 class., blue/purple), glaciers (blue). *Boundaries:* international (black/purple), provincial (black/purple), SSR (black), undefined (black/purple). *Transportation:* railroads (2 class., red), roads (black), tracks and trails (black), ship routes (black), canals (blue). *Cities and Towns:* (6 class., black). *Other:* ports (2 class., black), Great Wall (black), historic sites (black). *Insets:* Rainfall map of China (1:30,000,000); Economic map of China (1:20,000,000); Economic map of N. China (1:12,000,000); Land-use map (1:25,000,000).
Notes: Especially interesting for economic data, even though at very small scale.
Source: LC.

ECONOMIC SCHOOL MAP OF CHINA AND THE MPR

1:5,000,000. 19--. One sheet. 43 x 33. Russian. Geographic grid. Coverage: all of China.
Boundaries: international (black), provincial (black). *Transportation:* railroads (3 class., black), roads (black), tracks and trails (black), ship routes (blue), canals (blue), navigable waterways (blue). *Other:* industrial centers (3 class., black), types of industry (9 class., various colors), agricultural areas (8 class., various colors), agricultural products (9 class., green), ports (black).
Source: LC.

CHINA

1:5,000,000. 1950. One sheet. 44 x 33. Russian. Geographic grid. Coverage: all of China.
Relief: shaded relief (brown), spot heights (meters, brown). *Hydrography:* major drainage (blue). *Vegetation:* swamps and marshes (blue), salt marshes (blue). *Other:* passes (brown), sand (brown), coral reefs (red).
Boundaries: international (blue), provincial (blue), Soviet republics (blue), ASSR (blue). *Transportation:* railroads (brown), roads (2 class., brown), tracks and trails (brown), ship routes (blue), Grand Canal (blue). *Cities and Towns:* (6 class., red/blue). *Other:* ports (blue).
Notes: Also 1950 edition with altitudinal tints (10, green/brown), plus mineral resources (19 class., various colors), cities and towns (9 class.), otherwise same data. Both editions excellent.
Source: LC.

Chinese Eastern Railway

MAP OF MANCHURIA

1:1,180,000. 1914-15. 2 sheets. 49 x 27. Russian. Geographic grid.
Coverage: all of Manchuria.
Relief: shaded relief (brown). *Other:* coal regions (black), sand (black), gold regions (red).
Boundaries: international (black), provincial (black), administrative (black), Mongol (black). *Transportation:* railroads (3 class., black).
Cities and Towns: (6 class., black). *Other:* walls (2 class., black), post offices (black).
Notes: Very good map for railroad as well as political boundaries data.
Source: LC.

NORTH MANCHURIA

1:840,000. 1926. One sheet. 72 x 66. Russian. Geographic grid.
Coverage: Manchuria north of Lat. 42°.
Relief: shaded relief (brown).
Boundaries: international (black/red), provincial (black/yellow), administrative (black). *Transportation:* railroads (2 class., black), roads (3 class., black), tracks and trails (black). *Cities and Towns:* (4 class., black). *Other:* coal mines (black), pagodas (black), bridges (2 class., black), ports (black).
Notes: Good map for railroad data.
Inset: Manchuria in the Far East Setting.
Source: LC.

UNITED STATES MAPS OF CHINA

Aeronautical Chart & Information Center

USAF LONG RANGE NAVIGATION CHARTS 52

1:3,000,000. 1943-. 3 sheets. 52 x 40. English. Air navigation grid. Mercator projection. Coverage: see index map 52.
Relief: altitudinal tints (4, green/brown), contours (3,000 feet, brown), spot heights (feet, black). *Hydrography:* major drainage only (blue). *Boundaries:* international (black). *Transportation:* railroads (black). *Cities and Towns:* (4 class., black).
Notes: Very generalized with little cultural data, but still useful. No roads shown.
Sources: LC, MLUW, U.S.C. & G.S.

U.S. NAVY AIR NAVIGATION CHARTS 53

1:2,188,811. Various dates. 7 sheets. 54 x 35. English. Air navigation grid. Mercator projection. Coverage: see index map 53.
Relief: altitudinal tints (7, green/brown), contours (1,000 feet, brown), spot heights (feet, black). *Hydrography:* major drainage only (blue). *Boundaries:* International (black). *Transportation:* railroads (black), roads (black), tracks and trails (black). *Cities and Towns:* (3 class., yellow/black). *Other:* power lines (black), dams (black), mines (black).
Notes: Published by U.S. Navy Hydrographic Office.
Sources: LC, MLUW, N.H.O.

WORLD AERONAUTICAL CHARTS (& OPERATIONAL NAVIGATION CHARTS) 54 55

1:1,000,000. Various dates. WAC - 59 sheets. ONC - 10 sheets. 29 x 22. English. Air navigation and geographic grids. Lambert conformal conic projection. Coverage: see index map 54, 55.
Relief: contours (1,000, 2,000 feet, brown), altitudinal tints (5, green/brown), spot heights (feet, black). *Hydrography:* major drainage only (blue). *Boundaries:* intercolonial/international (black), defacto (black). *Vegetation:* swamps and marshes (blue). *Other:* passes (black), sand (3 class., black), springs (black), sand bars (black), mud and tidal flats (black), dry washes (black), glaciers (black). *Transportation:* railroads (3 class., black), roads (3 class., black), tracks and trails (black), canals (2 class., blue). *Cities and Towns:* (6 class., black). *Other:* power transmission lines (black), telephone and telegraph lines (black), dams (black), mines and quarries (black), lookout towers (black), pipelines (black), forts (black), race tracks (black), stranded wrecks (black), wells and water holes (black), drainage ditches (black), bridges (2 class., black), tunnels (2 class., black).
Notes: Published at various dates since 1942. Probably one of the finest small-scale, current topographic series available on China. Highly recommended. Operational Navigation Charts (ONC) are currently gradually replacing the World Aeronautical Charts (WAC) for areas outside the United States. In those areas (such as China) WAC's will be available only where the ONC's have not been issued. ONC's are

nearly identical to WAC's, except that relief is portrayed by shaded relief rather than contours.
Sources: LC, MLUW, U.S.C. & G.S.

56 USAF AIR NAVIGATION CHARTS

1:1,000,000. 1945-. 3 sheets. 51 x 35. English. Geographic and air navigation grids. Mercator projection. Coverage: see index map 56.
Relief: contours (1,000 feet, brown), altitudinal tints (9, green/brown), form lines (brown), spot heights (feet, black). *Hydrography:* major drainage only (blue).
Boundaries: International (black). *Transportation:* railroads (2 class., black). *Cities and Towns:* (5 class., black). *Other:* power transmission lines (black), tunnels (black), mines and quarries (black).
Notes: Similar in appearance to World Aeronautical Charts, though not as detailed in data shown.
Sources: LC, MLUW, U.S.C. & G.S.

57 USAF PILOTAGE CHARTS

1:500,000. Various dates. 95 sheets, approx. 29 x 22. English. Air navigation grid. Lambert conformal conic projection. Coverage: see index map 57.
Relief: contours (1,000 feet, brown), altitudinal tints (5, green/brown), spot heights (feet, brown). *Hydrography:* detailed drainage (blue). *Vegetation:* swamps and marshes (blue). *Other:* shoals and reefs (black), rocks (black), springs (black), wells and water holes (black), mud and tidal flats (black), rapids and falls (black), sand (3 class., black), lava flows (black), passes (black).
Boundaries: international (black), provincial (black). *Transportation:* railroads (2 class., black), roads (2 class., black), tracks and trails (black). *Cities and Towns:* (5 class., black). *Other:* power transmission lines (black), telephone and telegraph lines (black), dams (black), pipelines (black), race tracks (black), bridges (2 class., black), tunnels (black).
Sources: LC, MLUW, U.S.C. & G.S.

58 USAF AERONAUTICAL APPROACH CHARTS

1:250,000. Various dates. Approx. 250 sheets. 29 x 22. English. Air navigation grid. Lambert Conformal conic projection. Coverage: see index map 58.
Relief: contours (1,000 feet, brown), altitudinal tints (4 class., green/brown), spot heights (feet, black). *Hydrography:* detailed drainage (blue). *Vegetation:* swamps and marshes (blue). *Other:* glaciers (blue), mud or tidal flats (blue), sand (3 class., black), lava flows (black).
Boundaries: international (black), park or reservation (black). *Transportation:* railroads (3 class., black), roads (3 class., black), tracks and trails (black). *Cities and Towns:* (3 class., black).
Other: prominent landmarks (black), mines or quarries (black), lookout towers (black), race tracks (black), dams (black), bridges (2 class., black), tunnels (black).
Sources: LC, MLUW, U.S.C. & G.S.

Army Map Service

ASIA CLIMATE ZONES

1:17,000,000. 1943. No. 1105. 12 sheets. 26 x 19. English. Geographic grid. Coverage: all of Asia.
Physical data: isotherms and isohyets (black).
Boundaries: international (black).
Notes: One sheet for each month. Shows the average monthly temperature and rainfall pattern for all of Asia. Though at a very small scale the series is well-executed and one of the few sources of climatic data on China.
Source: LC.

CHINA AND ADJACENT REGIONS (Map 9 -- Survey of the Japanese Empire)

1:6,336,000. 1942. One sheet. 37 x 32. English. Geographic grid. Coverage: all of China.
Relief: altitudinal tints (8, various colors). *Hydrography:* major drainage (blue). *Boundaries:* international (black), provincial (black). *Transportation:* railroads (3 class., black), roads (4 class., black), navigable waterways (3 class., blue). *Cities and Towns:* (4 class., black).
Source: LC.

EASTERN CHINA SHOWING OCCUPIED AREAS (Map 12 -- Survey of the Japanese Empire)

1:6,336,000. 1942. One sheet. 20 x 33. English. Geographic grid. Coverage: China east of Long. 108°.
Boundaries: international (black), provincial (black). *Transportation:* railroads (3 class., black), roads (4 class., black), navigable waterways (3 class., black). *Cities and Towns:* (4 class., black). *Other:* Japanese-occupied areas (red).
Source: LC.

SPECIAL STRATEGIC MAP OF ASIA

1:4,000,000. 1943-44. No. 5207. 22 x 28. English. Geographic grid. Coverage: see Notes below.
Relief: hachures (brown), spot heights (meters, black). *Hydrography:* major drainage only (blue).
Boundaries: international (red/black), provincial (black). *Transportation:* railroads (6 class., black), roads (2 class., red), tracks and trails (red). *Cities and Towns:* (3 class., black).
Notes: Uncertain if a series or not. One sheet available on south China, Long. 96° - 123°, Lat. 20° - 40°. Two sheets give complete coverage of Manchuria. No index map available.
Sources: LC, MLUW.

HAINAN NAVIGATION CHART

1:2,315,000. 1944. One sheet. 19 x 23. English. Air navigation grid. Coverage: Hainan Island -- Kwangtung province and environs.
Relief: altitudinal tints (5, greens), spot heights (black). *Hydrography:* detailed drainage (blue). *Vegetation:* swamps and marshes (blue), mangrove swamps (blue). *Other:* bores, wells, and tanks (blue), marine sand (blue).
Boundaries: provincial (black). *Transportation:* railroads (2 class., purple), roads (2 class., brown), tracks and trails (brown), air routes (purple). *Cities and Towns:* (6 class., black/purple). *Other:* airports (6 class., purple), plantations (black).
Source: MLUW.

ASIA TRANSPORTATION MAP - CHINA

1:2,000,000. 1944. No. 5201. 4 sheets. 30 x 28. English. Geographic grid. Coverage: China proper.
Hydrography: major drainage (blue). *Other:* passes (red).
Boundaries: international and provincial (black). *Transportation:* railroads (13 class., black), roads (4 class., red), tracks and trails (red), canals (2 class., blue). *Cities and Towns:* (4 class., red).
Notes: Revised edition published 1945. One of the finest small-scale maps available for transportation data.
Sources: MLUW, LC.

TOPOGRAPHIC MAP OF MANCHURIA (Map 8--Survey of the Japanese Empire)

1:2,000,000. 1942. One sheet. 29 x 40. English. Geographic grid. Coverage: all of Manchuria.
Relief: contours (interval unknown).
Boundaries: national, provincial, leased territories, do (Korea), neutral. *Transportation:* railroads (2 class.), roads (2 class.), airways. *Cities and Towns:* (5 class.). *Other:* airports, Great Wall.
Inset: General Map of East Asia (1:35,000,000).
Notes: Black and white map. Relief representation is mediocre but cultural data could prove useful.
Source: LC.

MANCHURIA ROAD MAP

1:2,000,000. 1950. No. L201. One sheet. 36 x 31. English/Chinese. Geographic grid. Coverage: all of Manchuria.
Relief: shaded relief (brown), spot heights (meters, black). *Hydrography:* major drainage (blue). *Vegetation:* swamps and marshes (blue). *Boundaries:* international (red/black). *Transportation:* railroads (8 class., black), roads (4 class., red/black), tracks and trails (4 class., red/black). *Cities and Towns:* (3 class., black). *Other:* Great Wall (black), tunnels (2 class., black), bridges (2 class., black).
Notes: Marginal note on map, "Data reliability fair." Also 1959 edition.
Sources: MLUW, LC.

ASIA

1:1,500,000. 1943. No. 5304. 38 sheets. English.
Notes: AMS reprint of Russian series, dated 1937-43.
Same data shown with addition of transliterated place names.
Source: LC.

WORLD 59

1:1,000,000. 1946-60. No. L1301. 64 sheets. Size varies. English. Geographic and military grids. Coverage: see index map 59.
Relief: altitudinal tints (9, various colors), spot heights (meters, black). *Hydrography:* detailed drainage (blue). *Vegetation:* swamps and marshes (blue). *Other:* Land subject to flooding (blue), reefs (2 class., black).
Boundaries: international (red/black), provincial (black), hsien (black). *Transportation:* railroads (6 class., black), roads (3 class., red), tracks and trails (red). *Cities and Towns:* (5 class., red/black). *Other:* telephone/telegraph lines (black), power lines (black), ruins black), lighthouses (black), mines (black), salt evaporators (blue).
Source: LC.

KIANGSU - GEOLOGY

1:1,000,000. 1944. No. 5301 (base map). One sheet. 22 x 17. English. Geographic grid. Coverage: Long. 116° - 122°, Lat. 32° - 36°.
Hydrography: major drainage (blue). *Other:* geologic formations (11 class., various colors), Huang Ho Channel (3 class., black).
Boundaries: Huang Ho drainage basin (black). *Transportation:* railroads (3 class., black), roads (2 class., black).
Notes: Well-done, good map for geologic data.
Source: LC.

EASTERN ASIA 60

1:1,000,000. 1943-44. No. 5301. 34 sheets. Size varies (each sheet covers 4° lat. x 6° long.) English. Geographic grid. Coverage: see index map 60.
Relief: altitudinal tints (5, various colors), contours (at 100, 200, 500, and each 500 meters thereafter, browns), spot heights (meters, black). *Hydrography:* major drainage (blue). *Other:* mines (black), tidal flats (blue), fathom lines (black).
Boundaries: international (black/purple), provincial (black). *Transportation:* railroads (9 class., black), roads (3 class., red), tracks and trails (red). *Cities and Towns:* (4 class., black). *Other:* radio stations (purple), beacons (black), lighthouses (black), airfields (4 class., purple), churches (black), factories (black).
Notes: Legends not uniform throughout the series. Marginal glossaries. Marginal diagrams: sheet index to political boundaries, scale of altitudinal tints. Railroad data especially good. "New editions keep this set farily well up to date. For its scale it reveals a great deal

of information with a reasonable degree of accuracy."[20]
Source: LC.

61 CHINA ROAD MAPS

1:1,000,000. 1945. No. L301. 3 sheets. Size varies. English. Geographic grid. Polyconic projection (Chekiang, Kiangsu), Lambert conformal conic projection (Kwangtung). Coverage: see index map 61.
Hydrography: detailed drainage (blue).
Boundaries: provincial (black). *Transportation:* railroads (2 class., black), roads (6 class., red). *Cities and Towns:* (black).
Notes: Planimetric map. Communications revised from intelligence reports, 1944. Reliability good.
Source: LC.

FORMOSA - SPECIAL STRATEGIC MAP

1:1,000,000. 1943. One sheet. 16 x 17. English. Geographic grid. Coverage: all of Formosa.
Relief: hachures (brown), spot heights (feet, black). *Hydrography:* major drainage (blue).
Transportation: railroads (3 class., black), roads (2 class., red).
Cities and Towns: (4 class., black).
Source: LC.

CHINA

1:500,000. 1946. 4 sheets. Size varies. English. Geographic grid. Coverage: parts of Szechuan and Yunnan.
Relief: spot heights (feet, black). *Hydrography:* detailed drainage (blue). *Other:* passes (black), caves (black), glaciers (blue), gorges (black), mountain peaks (black).
Boundaries: international (black), provincial (black), territorial or tribal (black). *Transportation:* roads (red), tracks and trails (red).
Cities and Towns: (2 class., black). *Other:* Lolo settlements (black), campsites (black), lamaseries (black), airfields (black), bridges (4 class., black).
Notes: Prepared from original surveys of area by J. F. Rock (1928-31), Major H. R. Davies (1895), Dr. H. Handel-Mazzetti (1914-16), Comte Ch. de Polignac (1910). Poor relief representation, but still a useful series in veiw of the fact that so little coverage is available for SW China.
Source: LC.

CHINA PROPER

1:500,000. 1945. No. L406. 2 sheets. Size varies. English/Chinese. Geographic and military grid. Coverage: see Notes below.
Relief: contours (100 meters, 200 meters, brown). *Hydrography:* major drainage (blue). *Vegetation:* swamps and marshes (blue). *Other:* passes (black).

Boundaries: international (black), provincial (black), hsien (black). *Transportation:* railroads (2 class., black), roads (2 class., black), ferries (black). *Cities and Towns:* (4 class., black).
Notes: Only two sheets published in series, one covering Hainan Island and the other covering eastern Chekiang province.
Source: NA.

MANCHURIA

62

1:500,000. 1943-45. No. L401. 29 sheets. Size varies. English. Geographic and military grid. Coverage: see index map 62.
Relief: form lines (brown), contours (100 meters, brown), spot heights (meters, black). *Hydrography:* detailed drainage (blue).
Boundaries: international (black), international indefinite (black), provincial (black), intercolonial (black). *Transportation:* railroads (6 class., black), roads (4 class., red), tracks and trails (red), canals (blue). *Cities and Towns:* (6 class., black). *Other:* transmission lines (red), telegraph and telephone lines (red), aircraft landing areas (7 class., black).
Notes: Marginal items on each sheet: declination diagram, meters-feet conversion graph, glossary of 3 to 25 items, index to adjoining sheets, sources for compilation of series. "Broken lines outline the areas probably now flooded by hydroelectric reservoirs. . . . This set combines most of the good features of the Japanese 1:500,000 set with cultural revision to 1943. For its scale it offers more than any other map available."[21]
Sources: LC, MLUW.

FORMOSA

1:500,000. 1943. One sheet. 21 x 38. English. Geographic and military grid. Coverage: all of Taiwan.
Relief: contours (1000 feet), altitudinal tints (8), spot heights (feet). *Hydrography:* detailed drainage.
Boundaries: hsien. *Transportation:* railroads, roads. *Cities and Towns:* (4 class.). *Other:* ports.
Notes: Copy available at LC is a positive photostat of the original color edition. Legibility only fair.
Source: LC.

TAIWAN PROVINCE

1:500,000. 1958. One sheet. 24 x 35. English/Chinese. Geographic grid. Coverage: all of Taiwan.
Relief: altitudinal tints (10, browns), spot heights (feet, black). *Hydrography:* detailed drainage (blue). *Vegetation:* swamps and marshes (blue). *Other:* sand (black), coral (black).

Boundaries: provincial (black), hsien (black). *Transportation:* railroads (4 class., black), roads (6 class., red/black), tracks and trails (2 class., black), ship routes (black). *Cities and Towns:* (3 class., red/black). *Other:* bridges (2 class., black), ports (black), lighthouses (red), fish ponds (blue), salt evaporators (blue), airfields (black).
Notes: Excellent relief representation. Transportation data very detailed for a map of this scale.
Source: LC.

FORMOSA ROAD MAP

1:500,000. 1944. No. L491. One sheet. 24 x 33. English. Geographic grid. Coverage: all of Taiwan.
Relief: shaded relief (brown), spot heights (meter, black). *Hydrography:* detailed drainage (blue). *Transportation:* railroads (4 class., black), roads (3 class., red), tracks and trails (red). *Cities and Towns:* (5 class., black).
Notes: Excellent relief representation. Good map for transportation data.
Source: LC.

63 CHINA

1:250,000. 1954-56. No. L500. Approx. 200 sheets. 18 x 25. English. Geographic and military grid. Coverage: see index map 63.
Relief: contours (100 meters, 50 meters supp., brown), shaded relief (brown), spot heights (meters, black). *Hydrography:* detailed drainage (blue). *Vegetation:* woods (green), swamps and marshes (blue), rice paddies (blue). *Other:* foreshore flats (black), rocks along coast (2 class., black), reefs (black), wrecks (2 class., black), fathom lines (black).
Boundaries: international (red/black), provincial (black). *Transportation:* railroads (4 class., black), roads (7 class., red/black), tracks and trails (4 class., red/black). *Cities and Towns:* (5 class., purple). *Other:* mines (black).
Notes: Reliability diagrams on sheets.
Sources: LC, MLUW.

64 CHINA PROPER

1:250,000. 1944-1953. Nos. L531, L532, L581, L582. Approx. 330 sheets. 15 x 18. English/Chinese. Geographic and military grids. Coverage: see index map 64.
Relief: form lines (brown), contours (100 meters, brown), shaded relief (brown). *Hydrography:* detailed drainage (blue). *Vegetation:* rice paddies (blue).
Boundaries: international (black/purple), provincial (black/purple), hsien (black). *Transportation:* railroads (4 class., black), roads (2 class., red), tracks and trails (2 class., red). *Cities and Towns:* (7 class., black). *Other:* walls (2 class., black), beacons (black).

Notes: Actually a group of four series, each covering approximately one-fourth of China Proper. Though the earlier editions of the series vary somewhat in content and style, the later, and by far the better, editions are as annotated above. An inferior edition of series L532, published in 1945, is available at LC. A black and white edition, its physical and cultural data are much briefer compared to later editions of the same series. Compiled from: China, 1:50,000, Central Land Survey, 1925-42; China, 1:100,000, Central Land Survey, 1932-40; China 1:300,000, Central Land Survey, 1931; various other small-scale Chinese maps. Marginal note: "Geographic positions on the provincial 1:50,000 series are based on 3rd order triangulation approximately adjusted to 1st order. Since the 1:100,000 and 1:300,000 sheets are based in part on inaccurate 18th century Jesuit surveys, these maps are irreconcilable with the 1:50,000 sheets." Marginal note for SE series (L581): "Elevations in both Hunan and Hupeh provinces are based on mean sea level. Disagreement between the provinces is due to the lack of adjustment between the different (Chinese) surveys."
Sources: LC, MLUW.

CHINA - GEOLOGY 63

1:250,000. 1960. Size: 18 x 25. English/Chinese. Military grid. Coverage: see index map 63.
Relief: contours (100 meters, 50 meters supp., black), spot heights (meters, black). *Hydrography:* detailed drainage (blue). *Vegetation:* swamps and marshes (blue), rice paddies (blue). *Other:* coal mines (black), limestone (black), faults (black), strikes and dips (black), geologic formations (16 class., various colors).
Boundaries: international (black), provincial (black), geologic (black). *Transportation:* railroads (4 class., black), roads (3 class., black), tracks and trails (2 class., black), canals (blue). *Cities and Towns:* (3 class., black). *Other:* levees (black).
Notes: Marginal note: "Compiled 1954 from best available large-scale maps of China. Road classification should be referred to with caution." Geologic overprint on series L500 (China). Detailed geologic column on reverse side of each sheet.
Source: LC.

MANCHURIA 65

1:250,000. 1950. No. L542. Approx. 90 sheets. 18 x 27. English/Chinese. Military grid. Coverage: see index map 65.
Relief: contours (100 meters, 50 meters supp., brown), spot heights (meters, black). *Hydrography:* detailed drainage (blue). *Vegetation:* woods (green), swamps and marshes (blue), rice paddies (blue). *Other:* mines (black), rocks (2 class., black), foreshore flats (black), reefs (black), fathom lines (black).
Boundaries: international (red/black), provincial (black), USSR Republics (black). *Transportation:* railroads (6 class., black), roads (10 class., red/black), tracks and trails (2 class., black), canals (blue). *Cities and Towns:* (6 class., yellow/black). *Other:* buildings or landmark features (black).

Notes: Marginal note: "Road classification to be referred to with caution. Gauge and existence of some railroads is doubtful. International boundaries in Manchuria may or may not be reliable." Compilation sources: Manchuria, 1:50,000, Japanese Imperial Land Survey, 1939; intelligence data, 1944. Other editions released 1956, 1959, same data. Reliability diagram in margin.
Sources: LC, MLUW.

66 MANCHURIA

1:250,000. 1945. No. L541. Approx. 120 sheets. 18 x 14. English. Military grid. Coverage: see index map 66.
Relief: form lines (brown), contours (100 meters, 25 meters supp., brown), spot heights (black). *Hydrography:* detailed drainage (blue). *Vegetation:* swamps and marshes (blue).
Boundaries: international (black/purple), provincial (black/purple), hsien (black/purple), provincial indefinite (black). *Transportation:* railroads (5 class., black), roads (2 class., red). tracks and trails (2 class., red), canals (blue). *Cities and Towns:* (6 class., black), *Other:* walls (2 class., black).
Notes: First edition of 1:250,000 series on Manchuria. Fewer compilation sources used, compared to later editions (L542), and less data shown. Still a useful series.
Sources: LC, MLUW.

67 FORMOSA (TAIWAN)

1:250,000. 1943. No. L592. 9 sheets. Size: 18 x 14. English Geographic and military grids. Coverage: see index map 67.
Relief: contours (100 meters, brown), spot heights (meters, black).
Hydrography: detailed drainage (blue).
Boundaries: prefectures (black), districts or counties (black).
Transportation: railroads (5 class., black), roads (3 class., red), tracks and trails (black). *Cities and Towns:* (5 class., black).
Other: lighthouses (black), airfields (4 class., black), anchorages (4 class., black).
Notes: This series (L592) and the following two series (L593, L594) are three successive editions of the AMS 1:250,000 coverage of Taiwan. Each edition is different in content and therefore annotated separately.
Source: LC.

67 FORMOSA (TAIWAN)

1:250,000. 1944. No. L593. 9 sheets. Size: 18 x 14. English. Geographic and military grids. Coverage: see index map 67.
Relief: contours (100 meters, brown), spot heights (meters, black).
Hydrography: detailed drainage (blue). *Vegetation:* rice paddies (blue).
Boundaries: international (red/black), prefectures (red/black), Shicho, Gun and Shi (black). *Transportation:* railroads (4 class., black), roads (3 class., red), tracks and trails (black). *Cities and Towns:* (5 class., black). *Other:* beacons (black).
Source: LC.

TAIWAN 68

1:250,000. 1953. No. L594. 6 sheets. Size: 18 x 25. English/Chinese. Geographic and military grids. Coverage: see index map 68.
Relief: contours (100 meters, 50 meters supp., brown), spot heights (meters, black). *Hydrography:* detailed drainage (blue). *Vegetation:* rice paddies (blue), woods (green), swamps and marshes (blue). *Other:* rocks (3 class., black).
Boundaries: international (red/black), hsien (black). *Transportation:* railroads (4 class., black), roads (10 class., red/black), tracks and trails (black). *Cities and Towns:* (6 class., purple). *Other:* airfields (4 class., black), salt evaporators (blue).
Source: LC.

INNER MONGOLIA 69

1:250,000. 1952. No. L521. 12 sheets. Size: 18 x 14. English/Chinese. Geographic and military grids. Coverage: see index map 69.
Relief: form lines. *Hydrography:* major drainage.
Boundaries: international, provincial, hsien, territorial. *Transportation:* railroads, roads, tracks and trails (2 class.). *Cities and Towns:* (5 class.). *Other:* walls.
Notes: Black and white series. Copied 1945 from the Chinese Central Land Survey 1:300,000 series (1936). Poor legibility and scanty physical and cultural data, yet a valuable series because of meager existing coverage of this area.
Source: LC.

MANCHURIA

1:100,000. 1950-1953. No. L641. Size varies. English/Chinese. Geographic and military grids. Coverage: No index map available.
Relief: contours (40 meters, 20 meters supp.), spot heights (meters). *Hydrography:* very detailed drainage. *Vegetation:* woods (4 class.), swamps and marshes, orchards, rice paddies (3 class.), other fields, tea. *Other:* gravel, mud, saltpans, sand, wasteland.
Boundaries: international, provincial, hsien. *Transportation:* railroads (4 class.), roads (5 class.), tracks and trails (2 class.). *Cities and Towns:* (7 class.). *Other:* bridges (7 class.), boat moorings, chimneys, churches, factories or plants, graves, grave mounds, hospitals, Imperial tombs, lighthouses, material dumps, mausoleums, mines, monuments, pagodas, police stations, post offices, powder magazines, powerhouses, powerlines, prisons, road markers, schools, ship anchorages, shrines, telegraph lines, temples, towers, walls, warehouses, windmills (2 class.).
Notes: Black and white series. Legibility varies widely from sheet to sheet. Marginal note: "Compiled 1953 from Manchuria 1:100,000, Mongolian Occupation Army Headquarters, 1941; Japanese Imperial Land Survey, Provisional Survey Section, 1904-1911, North China Garrison Headquarters, 1935. Original mapping by aerial photographic methods by Mongolian Occupation Army Headquarters, 1941. Sketch survey methods by Japanese Imperial Land Survey, Provisional Survey Section, 1904-1911.

Rough planimetric methods by Japanese Imperial Land Survey, 1909-1910." Follows Japanese series closely, in style and quantity of physical and cultural data. Good English-language substitute for Japanese 1:100,000 series on Manchuria.
Source: LC.

EASTERN CHINA

1:50,000. 1942. English
See Eastern China (GSGS 3789, p. 103) for data.
Source: LC.

ANHWEI PROVINCE

1:50,000. 1944-46. No. L785. English/Chinese. Coverage: No index map available.
Relief: contours (20 meters, 10 meters supp., brown), spot heights (meters, black). *Hydrography:* very detailed drainage (blue). *Vegetation:* orchards (green), rice paddies (blue). *Other:* rocks bare at low tide (black), mud or tidal flats (blue), fathom lines (black). springs and wells (blue).
Boundaries: international (red/black), provincial (red/black), hsien (red/black). *Transportation:* railroads (6 class., black), roads (3 class., black), tracks and trails (2 class., black). *Cities and Towns:* shown as built-up areas (red/black). *Other:* cemeteries, churches, dikes (2 class.), fences, lighthouses, mosques, pagodas, power lines, schools, ship anchorages, telephone and telegraph lines, temples, walls (2 class.).
Notes: Marginal note: "Redrawn 1945 from Anhwei, 1:50,000, Central Land Survey, 1933-36. Principal communications classified from Chinese road maps and intelligence reports, 1943-45. Alignment of motorable roads not reliable." Reliability diagram included in margin.
Sources: LC, MLUW.

CHEKIANG PROVINCE

1:50,000. 1944-46. No. L782. English/Chinese. Geographic and military grids. Coverage: No index map available.
For data see, Anhwei Province, above.
Notes: Marginal note: "Redrawn 1945 from China, 1:50,000, Central Land Survey, Hangchow, 1929-37. Road classification from intelligence reports."
Source: LC.

FORMOSA

1:50,000. 1944. No. L792. English/Chinese. Geographic and military grid. Coverage: No index map available.
Relief: contours (20 meters), spot heights (meters). *Hydrography:* very detailed drainage. *Vegetation:* swamps and marshes, orchards, rice paddies (2 class.), gardens (2 class.), tea plants, mulberry trees, wild land, other vegetation (5 class.). *Other:* springs (2 class.), fords (2 class.), volcanoes.

Boundaries: international, provincial, prefects, (2 class.), sub-prefects, wards, Machi or Mura, government lands. *Transportation:* railroads (4 class.), roads (5 class.), tracks and trails (2 class.). *Cities and Towns. Other:* anchorages (4 class.), army camps, banks, boundary markers, bridges (4 class.), castle sites, cemeteries, chimneys, churches, cranes, density of construction in urban areas (3 class.), ditches, factories, fences, ferries (3 class.), foreign government buildings, gendarmerie posts, generating plants, government offices (7 class.), graves, hospitals (3 class.), Japanese government buildings (2 class.), material dumps, meteorological stations, mileage markers, military headquarters (5 class.), military reservations, mines, monuments, naval camps, navy lookout towers, naval reservations (2 class.), naval stations (2 class.), oil wells, old battlefields, pagodas, police stations, post offices, powder magazines, power lines, prisons, schools, shipyards, shrines, shrine gates, signposts, statues, stone lanterns, stone steps, telegraph offices, telephone offices, temples, tombs, walls (3 class.), waterwheels or mills.
Notes: Black and white series. Compiled from Japanese Imperial Land Survey series, 1:50,000, 1929. Legibility varies widely. Extremely detailed cultural and physical data makes this an especially valuable series. Also a 1951 color edition with substantially less data shown but with better legibility than 1944 edition. For 1951 edition data see ANHWEI PROVINCE,
Source: LC.

FUKIEN PROVINCE

1:50,000. 1944-46. No. L783. Geographic and military grids. Coverage: No index map available.
For data see ANHWEI PROVINCE,
Notes: Reliability diagram included. Marginal note: "Compiled 1945 from aerial photography dated 1944-45 by stereophotogrammetric (multiplex) methods by reference to Fukien, 1:50,000, Central Land Survey, 1938. Hydrography compiled by the U.S. Naval Hydrographic Office 1945. Principal communications from Chinese road maps and intelligence reports, 1943-45."
Sources: MLUW, LC.

HONAN PROVINCE

1:50,000. 1960. No. L732. English/Chinese. Geographic and military grids. Coverage: No index map available.
Relief: contours (20 meters, 10 meters supp., brown), spot heights (meters, black). *Hydrography:* very detailed drainage (blue). *Vegetation:* woods (green), swamps and marshes (blue), orchards (green), rice paddies (blue), scrub (green), tea (green), sugarcane (green), cultivated fields (green). *Other:* cliffs (brown), current (3 class., black), depressions (brown), falls (2 class., blue), fathom lines (black), fords (black), land subject to inundation (blue), ravines (brown), rock outcrops (brown), rocks in water (6 class., black), sand (brown), scattered rocks (brown), springs (blue), steep banks and slopes (brown).

Boundaries: international (red/black), provincial (black), hsien (black). *Transportation:* railroads (5 class., black), roads (6 class., red/black), tracks and trails (2 class., black). *Cities and Towns:* (pink). *Other:* aerial cables (black), astronomical stations (black), boat anchorages (black), breakwaters (black), bridges (3 class., black), cemeteries (black), chimneys (black), churches (black), city walls (black), Confucian shrines, dams (4 class., black/brown), factories (black), ferries (black), generating plants (black), hospitals (black), hydroelectric plants (black), levees (2 class., black), lighthouses (black), meteorological stations (black), mines (black), monuments (black), oilwells (black), pagodas (black), piers (black), power transmission lines (black), radio stations (black), schools (black), salt evaporators (blue), ship anchorages (black), temples (black), tombs (black), tunnels (2 class., black), waterworks (black), wells (black), wrecks (black).
Notes: Marginal note: "Compiled 1959 from: Honan, 1:50,000., AMS ed. 1944, Japanese General Staff, pub. 1938; China, 1:10,000, North China River Commission, pub. 1937 and date unknown. Planimetric detail revised by photo-planimetric methods and from miscellaneous sources. Original mapping by planetable methods by China Land Survey Department, General Staff, 1934 and date unknown, and by North China River Commission , date unknown. Roads and railroads are classified from source maps and aerial photography. Map not field-checked."
Source: LC.

HOPEH PROVINCE

1:50,000. 1959. No. L737. English. Geographic and military grid. Coverage: No index map available.
For data see HONAN PROVINCE, above.
Notes: "Compiled 1959 from: China, 1:10,000, North China River Commission , pub. 1934 and date unknown; North China, 1:100,000, Japanese North China Garrison Headquarters, surveyed 1940-43. Planimetric detail revised by photo-planimetric methods and from miscellaneous sources. Original mapping by planetable methods by North China River Commission, date unknown. Photogrammetric methods by Japanese North China Garrison Headquarters, 1940-43. Roads are classified from source maps and aerial photography. Map not field checked."
Source: LC.

CHIHLI (HOPEH) PROVINCE

1:50,000. 1943-44. No. L731. English/Chinese.
Notes: See CHIHLI (GSGS 3789A), p. 104 for data.
Source: LC.

KIANGSI PROVINCE

1:50,000. 1944-46. No. L787. English/Chinese. Coverage: No index map available.
For data see ANHWEI PROVINCE, p. 160.

Notes: Marginal note: "Redrawn in 1945 from Kiangsi, 1:50,000, Central Land Survey, 1925-38. Principal communications classified from Chinese road maps and intelligence reports, 1943-45. Alignment of motorable roads not reliable." Reliability diagram in margin.
Sources: MLUW, LC.

KIANGSU PROVINCE

1:50,000. 1957. No. L784. English. Coverage: No index map available.
Notes: For data see HONAN PROVINCE, p. 161. Marginal note: "Compiled in 1956 from China, 1:50,000, Chinese General Staff Land Survey, 1936, 1937, 1939, 1948; China, 1:50,000, Japanese Imperial Land Survey, 1938. Planimetric detail partially revised by photo-planimetric methods. Original mapping by planetable methods by Chinese General Staff Land Survey, 1921, 1922, 1936. Roads are classified from source maps and aerial photography and are not verified by reconnaissance. Map not field checked."
Source: LC.

KWANGSI PROVINCE

1:50,000. 1945. No. L788. English. Coverage: No index map available.
For data see, ANHWEI PROVINCE, p. 160.
Notes: Marginal note: "Compiled 1945 from aerial photography dated 1944 by stereophotogrammetric methods with reference to Kwangsi, 1:50,000, Central Land Survey, 1939."
Source: LC.

KWANGTUNG PROVINCE

1:50,000. 1944-46. No. L781. English/Chinese. Coverage: No index map available.
For data see ANHWEI PROVINCE, p. 160.
Notes: Reliability diagram in margin. Marginal note: "Redrawn 1945 from Kwangtung, 1:50,000, Central Land Survey, 1940. Principal communications classified from Chinese road maps and intelligence reports, 1943-45. Alignment of motorable roads not reliable." Also 1960 edition (see HONAN PROVINCE, p. 161 for data).
Source: LC.

MANCHURIA

1:50,000. 1954. No. L743. English/Chinese. Coverage: No index map available.
Relief: contours (40 meters, 5, 10, and 20 meters supp., brown), spot heights (meters, brown). *Hydrography:* very detailed drainage (blue). *Vegetation:* woods (green), swamps and marshes (blue), orchards (green), rice paddies (blue). *Other:* ravines (brown), cliffs (brown), falls (blue), rapids (blue).
Boundaries: international (red/black), provincial (black). *Transportation:* railroads (4 class., black), roads (5 class., red/black), tracks and trails (black), canals (blue). *Cities and towns:* (red/black).

Other: cemeteries (black), schools (black), temples (black), walls (black), levees (brown), high-tension lines (black).
Notes: Marginal note: "Compiled in 1953 from Manchuria, 1:100,000, Kwantung Army Survey Unit, Tabun Goro, 1943; Mongolia, 1:100,000, Mongolian Occupation Army Headquarters, Horitu Sumu, 1940. Original mapping by planetable methods by Kwantung Army Survey Unit, 1943, and by Mongolian Occupation Army Headquarters, 1940. Roads classified from source maps and not verified by reconnaissance. Boundary information added from Manchuria, 1:250,000, AMS series L542, Ed. 1." Also 1960 edition, (see HONAN PROVINCE, p. 161 for data).
Sources: MLUW, LC.

SHANGHAI

1:50,000. 1942. One sheet. 23.5 x 28. English. Military grid. Coverage: Long. 121° 18' - 121° 37'; Lat. 31° 07' - 31° 26'.
Relief: spot heights (meters). *Hydrography:* very detailed drainage. *Vegetation:* woods, swamps and marshes, rice paddies. *Other:* sand. *Boundaries:* provincial, settlements, districts. *Transportation:* railroads (2 class.), roads (3 class.), tracks and trails. *Other:* cemeteries, churches, conservancy works (2 class.), kilns (2 class.), mines, telegraph lines (3 class.), temples or pagodas, towers, walls (2 class.).
Notes: Black and white reproduction of original map. Legibility fair.
Source: LC.

SHANTUNG PROVINCE

1:50,000. 1957. No. L733. English. Coverage: No index map available. For data see HONAN PROVINCE, p. 161.
Notes: Marginal note: "Compiled 1956 by photogrammetric methods utilizing sub-standard materials (reliability poor) and from China, 1:10,000, North China River Commission, 1922; China, 1:50,000, Chinese General Staff Land Survey, 1934. Planimetric detail partially revised by photoplanimetric methods. Original mapping by plane-table methods by North China River Commission, 1922, and by Chinese General Staff Land Survey, 1934. Roads and railroads are classified from source maps and aerial photography and are not verified by reconnaissance. Map not field-checked."
Source: LC.

KWANGTUNG PROVINCE

1:37,500. 1946. English. Coverage: No index map available. For data see ANHWEI PROVINCE, p. 160.
Notes: Marginal note: "Compiled 1945 from aerial photos dated 1944-45 by stereophotogrammetric methods. Photogrammetrically enlarged from AMS L781, 1:50,000, to 1:37,500 with revisions from aerial photos." Data is the same as the standard AMS 1:50,000 series.
Source: LC.

FORMOSA

1:25,000. 1944. No. L892. English. Geographic and military grids.
Coverage: No index map available.
Relief: contours (10 meters, 5 and 2.5 meters supp., brown), spot heights (meters, black). *Hydrography:* very detailed drainage (blue). *Vegetation:* orchards (black), rice paddies (blue). *Other:* mud and tidal flats (blue), mineral springs (blue), fumaroles (black).
Boundaries: Kao or Sho (black), prefects (black), Gun or Shi (black).
Transportation: railroads (4 class., black), roads (2 class., black), tracks and trails (black). *Cities and Towns:* shown as built-up areas (2 class., black). *Other:* cemeteries (black), chimneys (black), churches, fences (black), mines (black), pagodas (black), power lines (black), prisons (black), radio masts (black), shipyards (black), shrines (black), stone steps (black), temples (black), tombs (black).
Notes: Marginal note: "Compiled 1944 from original Japanese Imperial Land Survey 1:25,000 series (reliable), Japanese Imperial Land Survey 1:50,000 series (reliable), AMS railroad map of Taiwan, 1:500,000 (reliable)." An excellent series. Also 1951 edition, same data.
Source: LC.

HONG KONG

1:20,000. 1945. English.
For data see HONG KONG (GSGS 3868), p. 105.
Notes: Marginal note: "Reproduced by AMS 1945 from British pulls of a map compiled by GSGS, 1929."
Source: LC.

CHINA CITY PLANS

1:12,500. 1945-46. No. L901. English/Chinese. Military grid.
Coverage: No index map available.
Relief: contours (20 meters, brown), spot heights (meters, black).
Hydrography: very detailed drainage (blue). *Vegetation:* woods (green), orchards (green), rice paddies (blue), brushwood (green), bamboo (green). *Other:* rocks (3 class., black).
Transportation: railroads (5 class., black), roads (black), tracks and trails (black). *Other:* anchorages (black), cemeteries (black), chimneys (black), fences (black), high-tension wires (black), pagodas (black), shrines (black), temples (black), walls (4 class., black), waterwheels or mills (black).
Notes: Reliability diagram in margin of each sheet. Excellent series, with some of the finest city maps available. Cities included in series: Amoy, Chieh-yang, Fu-chow and Nan-tai, Fu-shun (1960), Hu-lu-tao (1959), Lung-ch'i, Ning-po, Pen-ch'i (1958), Port Arthur, Shan-t'ou, Shenyang (3 sh.) (1960), T'ien-ching (Tientsin) (1959), Tsinan (1958), Tsingtao (Ch'ing-tao), Ying-k'ou (1959), Yang-chia.
Sources: LC, MLUW.

MANCHURIA CITY PLANS

1:12,500. 1944. No. L941. English. Military grid. Coverage: No index map available.
Relief: contours (5 meters, brown), spot heights (meters, black). *Hydrography:* very detailed drainage (blue). *Vegetation:* woods (green), rice paddies (blue), grassland (green).
Transportation: railroads (2 class., black), roads (2 class., black), tracks and trails (black). *Other:* built-up areas (2 class., grey), cemeteries (black), chimneys (black), churches (black), dikes and levees (brown), hospitals (black), police stations (black), post offices (black), schools (black), shrines (black), temples (black), wells (black).
Notes: Same format and style as CHINA CITY PLANS, above, and FORMOSA CITY PLANS, below. Cities included in series: Anshan (1946), Antung (1961), Changchun (1945), Fushun (1945), Pen-ch'i-hu (1945), Port Arthur (1946), Shenyang (4 sh., 1945) (3 sh., 1960), Tsitsihar (Lungchiang) (1945), Ying-k'ou (Newchwang) (1944), Yung-chi (1945).
Sources: LC, MLUW.

FORMOSA CITY PLANS

Various scales. 1944. No. L991. English. Military grid. Coverage: No index map available.
Relief: contours (10 meters, brown), spot heights (meters, black). *Hydrography:* very detailed drainage (blue). *Vegetation:* woods (green), orchards (green), rice paddies (blue), sugar cane (green). *Other:* mud flats (blue), falls (blue), mineral springs (blue).
Boundaries: Kai or Sho (black), prefects (black), Gun or Shi (black).
Transportation: railroads (4 class., black), roads (2 class., black).
Other: built-up areas (2 class., grey), bench marks (black), cemeteries (black), chimneys (black), churches (black), control points (black), dams (black), fences (black), high-tension lines (black), masonry retaining walls or revetments (black), mines (black), monuments or statues (black), pagodas (black), prisons (black), radio masts (black), schools (black), ship anchorages (black), shrines (black), temples (black), waterwheels or mills (black).
Notes: Cities included in series: Chikunan (1:8,000), Kirun (Chilung) (1:8,000), Giran (1:7,500), Heito (1:10,000), Hokko (1:6,000), Hozan (1:10,000), Kagi (1:10,000), Karenko (1:7500), Kato (1:10,000), Mako (1:8000), Okayama (1:10,000), Rato (1:6000), Rokko (1:6000), Seira (1:8000), Shinchiku (1:10,000), Shoka (1:6000), Suo (1:10,000), Taichu (1:8000), Taihoku-Matsuyama (1:10,000), Tainan (1:10,000), Taito (1:10,000), Takao (1:10,000), Tansui (1:8000), Toem (1,6000), Toko (1:10,000), Tosien (1:10,000).
Source: LC.

Bureau of Foreign & Domestic Commerce

CHINA RAILWAYS

1:15,840,000. 1926. One sheet. 12 x 19. English. Geographic grid.
Coverage: Eastern China and Manchuria.
Hydrography: major drainage (black).
Boundaries: international (black), provincial (black). *Transportation:* railroads (2 class., black). *Cities and Towns:* (2 class., black).
Source: LC.

RAILWAY MAP OF CHINA

1:10,000,000. 1918. One sheet. 17 x 16. English. Geographic grid.
Coverage: Long. 90° - 130°, Lat. 16° - 55°.
Hydrography: major drainage.
Boundaries: international, provincial. *Transportation:* railroads.
Other: Great Wall.
Notes: Blueprint of original map. No legend.
Source: MLUW.

MAP OF CHINA ILLUSTRATING THE TRANSPORTATION DEVELOPMENT PROBLEM

1:3,000,000. 1918. One sheet. 39 x 33. English. Geographic grid.
Coverage: China Proper.
Hydrography: major drainage (black).
Boundaries: international (black), provincial (black). *Transportation:* railroads (2 class., black). *Cities and Towns:* (4 class., black).
Source: MLUW.

CANTON-KOWLOON RAILWAY MAP

1:230,000. 193-. One sheet. 25 x 19. English. Coverage: Canton-Kowloon area.
Hydrography: major drainage (black).
Transportation: railroads (3 class., black). *Other:* railroad stations (black), railroad halts (black).
Source: LC.

Foreign Economic Administration

CHINA - TRANSPORTATION

1:2,750,000. 1945. One sheet (see Notes below). 33 x 41. English. Geographic grid. Coverage: China Proper.
Hydrography: major drainage (blue). *Other:* mines (5 class., black). *Boundaries:* international (black), provincial (black). *Transportation:* railroads (8 class., black), roads (2 class., red), ship routes (blue). *Cities and Towns:* (3 class., black). *Other:* Great Wall (black).
Notes: Published as one unit for all of China Proper, as well as in two separate units.
Sources: LC, MLUW.

AMOY - FOOCHOW AREA - TRANSPORTATION & POLITICAL DIVISIONS

1:2,200,000. 1945. One sheet. 7 x 9. English. Geographic grid. Coverage: Amoy-Foochow area, Fukien province.
Boundaries: international (black), provincial (black), hsien (black). *Transportation:* railroads (black), roads (black). *Other:* hsien capitals (black).
Source: LC.

MANCHURIA - TRANSPORTATION

1:2,200,000. 1945. One sheet. 30 x 27. English. Geographic grid. Coverage: all of Manchuria.
Hydrography: detailed drainage (blue). *Vegetation:* swamps and marshes (blue). *Boundaries:* international (black), provincial (black), Japanese boundaries (2 class., green). *Transportation:* railroads (4 class., (black), roads (2 class., red). *Cities and Towns:* (3 class., black). *Other:* Great Wall (black).
Sources: LC, MLUW.

CHINA - GRAND CANAL

1:1,300,000. 1944. One sheet. 21 x 28. English. Geographic grid. Coverage: China Proper.
Hydrography: detailed drainage.
Boundaries: provincial. *Transportation:* railroads (3 class.). *Cities and Towns:* (2 class.). *Other:* navigation on canals (2 class.), locks, feeders, dams, spillways, dikes.
Insets: Details of Grand Canal-Yangtze River junction; Relation of Grand Canal to China.
Notes: Positive photostat of original map.
Source: LC.

CHINA - ANHUI IRON DEPOSITS

1:650,000. 1944. One sheet. 14 x 13. English. Geographic grid. Coverage: Long. 117° - 119°, Lat. 30° 30' - 32° 15'.
Hydrography: very detailed drainage. *Other:* iron ore deposits.

Boundaries: provincial. *Transportation:* railroads.
Insets: Tangtu iron deposits; Tungkuanshan iron deposits; Changlungshan iron deposits; City of Wuhu.
Notes: Black and white map.
Source: LC.

Military Intelligence Division, War Department General Staff

JAPANESE AIR BASES AND FIELDS IN CHINA AS OF OCTOBER 20, 1940.

1:5,800,000. 1940. One sheet. 12 x 17. English/Chinese. Coverage: China Proper.
Transportation: railroads (black). *Cities and Towns:* (black). *Other:* airbases (4 class.).
Source: LC.

MAP OF NORTH-EASTERN CHINA

1:1,470,000. 1900. One sheet. 29 x 36. English. Geographic grid. Coverage: Long. 112° - 124°, Lat. 30° - 42°.
Hydrography: major drainage (black/blue). *Other:* mountain passes (black).
Boundaries: provincial (black), Mongol clans or banners (black). *Transportation:* railroads (2 class., black), roads (2 class., black), navigable waterways (2 class., black). *Cities and Towns:* (8 class., black).
Other: Imperial tombs (black), Great Wall (black).
Inset: index map.
Source: LC.

MAP OF KWANTUNG PENINSULA

1:85,000. 1904. One sheet. 32 x 22. English. Coverage: Kwantung peninsula.
Relief: contours (interval unknown, black), spot heights (feet, black).
Hydrography: very detailed drainage (black).
Transportation: railroads (black), roads (2 class., black), tracks and trails (black). *Other:* Russian fortifications (black), telegraph lines (black).
Notes: Relief representation poor, but otherwise a useful map.
Source: LC.

MANCHURIA

1:84,000. 1904. 7 sheets. English. Coverage: South-central Manchuria.
Notes: Reproduction of 7 sheets of Russian 1:84,000 series. Copies carry same information as originals, but all place names appear in transliterated English forms. See p. 143 for data.
Source: LC.

CHINA - CHIHLI (HOPEI) PROVINCE

1:62,500. 1908-21. 21 sheets. 27 x 18. English. Geographic grid.
Coverage: No index map available. Coverage spotty.
Relief: hachures (brown). *Hydrography:* very detailed drainage (blue).
Vegetation: woods (black). *Other:* sand (black).
Boundaries: provincial (black). *Transportation:* railroads (2 class., black), roads (2 class., black). *Cities and Towns:* (3 class., black).
Other: dikes (black).
Notes: Compilation sources for series: maps of the British North China Command; German General Staff map of "Peking und Umgebung", Reconnaissance by officers of U.S. Army. Data spotty on some of the sheets.
Source: LC.

Office of Strategic Services, Research & Analysis Branch

JAPANESE ACTIVE COAL AND IRON SOURCES IN MANCHURIA, KOREA & N. CHINA

1:12,000,000. 1942. One sheet. 12 x 13. English. Geographic grid.
Coverage: China east of Long. 108°.
Hydrography: major drainage (black).
Boundaries: international (black), provincial (black). *Transportation:* railroads (black). *Cities and Towns:* (black). *Other:* active ore deposits (black), active coal deposits (black), iron and steel producing centers (black).
Source: LC.

EASTERN CHINA - COPPER, LEAD, & ZINC PRODUCTION

1:10,500,000. 1942. One sheet. 8 x 11. English. Geographic grid.
Coverage: China Proper.
Hydrography: major drainage (black).
Boundaries: international (black). *Other:* chief producing areas (3 class., black), copper, lead, and zinc production (black).
Source: LC.

CHINA - MINERALS

1:10,000,000. 1942. One sheet. 10 x 11. English. Geographic grid.
Coverage: China Proper.
Hydrography: major drainage (black).
Boundaries: international (black), provincial (black). *Other:* mineral deposits (12 class., black).
Source: LC.

MANCHURIA - FOREST AREAS (1931)

1:7,500,000. 1945. One sheet. 8 x 12. English. Coverage: all of Manchuria.
Boundaries: international (black). *Other:* forest areas (2 class., black), sawmill centers (black).
Source: LC.

ROADS AND COMMUNICATIONS OF SINKIANG

1:6,500,000. 1943. One sheet. 13 x 12. English. Geographic grid.
Coverage: Sinkiang.
Boundaries: international (black), provincial (black), district (black).
Transportation: railroads (black), roads (2 class., black). *Cities and Towns:* (black). *Other:* wireless stations (black).
Source: LC.

SINKIANG - AGRICULTURE AND MINERALS

1:6,500,000. 1942. One sheet. 13 x 12. English. Geographic grid.
Coverage: Sinkiang.
Boundaries: provincial (black). *Cities and Towns:* (black). *Other:* agricultural oasis zones (black), mineral deposits (5 class., black).
Source: LC.

MANCHURIA GOLD DEPOSITS

1:6,336,000. 1943. One sheet. 9 x 12. English. Geographic grid.
Coverage: all of Manchuria.
Physical data: gold fields (black).
Source: LC.

MANCHURIA COAL DEPOSITS

1:6,336,000. 1943. One sheet. 9 x 12. English. Geographic grid.
Coverage: all of Manchuria.
Physical data: mineral deposits (6 class., black).
Source: LC.

NORTHWESTERN CHINA - TRANSPORTATION ROUTES

1:6,250,000. One sheet. 1943. 25 x 15. English. Geographic grid.
Coverage: China west of Long. 100°, north of Lat. 30°.
Hydrography: major drainage (blue).
Boundaries: international (black), provincial (black). *Transportation:* (2 class., black), roads (2 class., red). *Cities and Towns:* (2 class., black). *Other:* Japanese-controlled areas (red), Communist-controlled area (blue).
Inset: index map.
Source: LC.

CHINA - TERRAIN AND TRANSPORTATION

1:5,500,000. 1944. One sheet. 20 x 34. English. Geographic grid.
Coverage: Long. 80° - 140°, Lat. 18° - 42°.
Relief: shaded relief (brown). *Hydrography:* major drainage (blue).
Boundaries: international (black), provincial (black). *Transportation:* railroads (4 class., black), roads (red), tracks and trails (red).
Cities and Towns: (2 class., black).
Notes: very effective shaded relief. Also 1943 edition, 1:7,000,000.
Sources: LC, MLUW.

AGRICULTURAL AREAS OF CHINA

1:5,250,000. 1942. One sheet. 10 x 11. English. Geographic grid. Coverage: China Proper.
Boundaries: international (black), provincial (black), agricultural areas (black), limit of Japanese penetration (black).
Sources: LC, MLUW.

CHINA, EAST COAST, AGRICULTURAL AREAS

1:4,900,000. 1944. One sheet. 11 x 11. English. Geographic grid. Coverage: Long. 113° - 126°, Lat. 23° - 35°.
Hydrography: major drainage (blue).
Boundaries: provincial (black). *Cities and Towns:* (black). *Other:* agricultural areas (7 class., red).
Notes: Data shown for Fukien, Chekiang, and Kiangsu provinces only. Reliability diagram included.
Source: LC.

NORTH CHINA, MINERAL RESOURCES

1:4,000,000. 1944. One sheet. 13 x 10. English. Geographic grid. Coverage: Long. 110° - 130°, Lat. 34° - 42°.
Hydrography: major drainage (blue). *Boundaries:* provincial (black).
Transportation: railroads (7 class., red), navigable waterways (2 class., blue). *Cities and Towns:* (black). *Other:* major coal and iron exporting mines (7 class., black), major non-exporting mines (2 class., black), minor non-exporting mines (2 class., black), exporting salt fields (black), Great Wall (black).
Source: LC.

MANCHURIA (INCLUDING JEHOL) PRE-1931 ADMINISTRATIVE AREAS

1:3,800,000. 1945. One sheet. 15 x 17. English. Coverage: all of Manchuria and Jehol.
Boundaries: international (black), leased territory (black), provincial (black), hsien (black). *Cities and Towns:* (3 class., black).
Source: LC.

NORTHWEST CHINA - GENERALIZED SOIL TYPES

1:3,000,000. 1945. One sheet. 23 x 23. English. Geographic grid. Coverage: Long. 93° - 111°, Lat. 28° - 43°.
Relief: spot heights (feet, black). *Other:* passes (black), soils (12 class., various colors).
Boundaries: international (black), provincial (black). *Cities and Towns:* (3 class., black). *Other:* Great Wall (black).
Insets: Index map; China-agricultural areas, 1:17,000,000.
Sources: LC, MLUW.

AVERAGE PRECIPITATION IN WINTER (NOV. - APR.) IN HOPEI & SHANTUNG PROVINCES

1:2,700,000. 1945. One sheet. 12 x 11. English. Geographic grid.

Coverage: Hopei and Shantung provinces.
Physical data: precipitation areas (3 class., black).
Boundaries: provincial (black), precipitation areas (black).
Notes: Also edition for average precipitation in summer, same data.
Source: LC.

NORTH CHINA - NATURAL AVAILABILITY OF WATER

1:2,600,000. 1945. One sheet. 14 x 12. English. Geographic grid.
Coverage: Hopei and Shantung provinces.
Hydrography: major drainage (blue). *Vegetation:* swamps and marshes (blue). *Other:* salt pans (black), water-bearing qualities of geologic formations (4 class., brown), water-bearing qualities of soil cover (3 class., black), water-supply sources (4 class., black).
Boundaries: provincial (black).
Inset: index map.
Source: LC.

NORTH CHINA - INDUSTRIAL INSTALLATIONS & ELECTRIC POWER PLANTS

1:2,600,000. 1945. One sheet. 13 x 12. English. Geographic grid.
Coverage: Hopei, Shantung, S. Chahar, N. Honan, and N. Kiangsu provinces.
Boundaries: provincial (black). *Other:* strategic industries (13 class., red), consumer industries (12 class., green), public utility electric power plants (3 class., black), industrial electric power plants (2 class., black).
Source: LC.

NORTH CHINA - DENSITY OF POPULATION BY HSIEN

1:2,600,000. 1945. One sheet. 14 x 12. English. Geographic grid.
Coverage: Hopei and Shantung provinces.
Hydrography: major drainage (blue).
Boundaries: provincial (black), hsien (black). *Cities and Towns:* (black). *Other:* density of population by hsien (6 class., various colors)..
Inset: index map.
Source: LC.

NORTH CHINA - MINERAL RESOURCES

1:2,600,000. One sheet. 14 x 12. English. Geographic grid.
Coverage: Hopei and Shantung provinces.
Hydrography: major drainage (blue). *Other:* mineral deposits (18 class., red).
Boundaries: provincial (black).
Source: LC.

NORTH CHINA - WATER SUPPLY AND SEWAGE DISPOSAL

1:2,600,000. 1945. One sheet. 14 x 12. English. Geographic grid.
Coverage: Hopei and Shantung provinces.

Hydrography: major drainage (blue). *Vegetation:* swamps and marshes (blue). *Boundaries:* provincial (black). *Cities and Towns:* (black). *Other:* waterworks (2 class., black), other water sources (3 class., (black), sewage-disposal system (black).
Inset: index map.
Source: LC.

CHINA, SOUTH COAST - WATER SUPPLY AND SEWAGE DISPOSAL

1:2,600,000. 1945. One sheet. 14 x 12. English. Geographic grid.
Coverage: Kwangtung Province.
Hydrography: major drainage (blue). *Vegetation:* swamps and marshes (blue).
Boundaries: provincial (black). *Cities and Towns:* (black). *Other:* waterworks (2 class., black), other water sources (3 class., black), sewage-disposal system (black).
Inset: index map.
Source: LC.

NORTH CHINA

1:2,600,000. 1945. One sheet. 17 x 11. English. Geographic grid.
Coverage: Hopei and Shantung provinces.
Vegetation: intensity of cultivation (7 class., black).
Boundaries: international (black), provincial (black), hsien (black).
Source: LC.

CHINA, EAST COAST - POPULATION DENSITY

1:2,500,000. 1944. One sheet. 14 x 22. English. Geographic grid.
Coverage: Kiangsu, Chekiang, and Fukien provinces.
Boundaries: provincial (black). *Other:* population density (10 class., black).
Inset: index map.
Source: LC.

CHINA, SOUTH COAST

1:2,400,000. 1945. One sheet. 17 x 11. English. Geographic grid.
Coverage: Kwangtung province (incl. Hainan Island).
Vegetation: intensity of cultivation (7 class., black).
Boundaries: international (black), provincial (black), hsien (black).
Source: LC.

CHINA, SOUTH COAST - POLITICAL DIVISIONS

1:2,400,000. 1945. One sheet. 17 x 11. English. Geographic grid.
Coverage: Long. 108° - 117°, Lat. 20° - 25°.
Hydrography: major drainage (blue).
Boundaries: international (black), provincial (black), hsien (brown).
Cities and Towns: (2 class., black). *Other:* mission stations (black), areas of emigration (2 class., black).
Insets: Hainan Island (1:2,500,000); index map.
Source: LC.

CHINA, SOUTH COAST - PRINCIPAL ETHNIC GROUPS & DIALECTS

1:2,400,000. 1945. 17 x 11. English. Geographic grid.
Coverage: Kwangtung province (incl. Hainan Island).
Boundaries: international (black), provincial (black), hsien (black).
Other: ethnic groups (2 class., black), non-Chinese aboriginal groups (5 class., green), dialects (4 class., brown).
Sources: LC, MLUW.

CHINA, SOUTH COAST - MINERALS & BUILDING MATERIALS

1:2,400,000. 1945. One sheet. 17 x 11. English. Geographic grid.
Coverage: Kwangtung province (incl. Hainan Island).
Hydrography: detailed drainage (blue).
Boundaries: provincial (black). *Other:* undeveloped deposits (17 class., black), producing mines (11 class., red), building materials (2 class., black).
Insets: Hainan Island (same scale); index map.
Source: LC.

CHINA, SOUTH COAST - NAVIGABLE WATERWAYS

1:2,390,000. 1944. One sheet. 17 x 11. English. Geographic grid.
Coverage: Kwangtung province.
Hydrography: major drainage (blue).
Boundaries: international (black), provincial (black). *Transportation:* ship routes (3 class., brown), navigable waterways (2 class., brown).
Other: ports (brown).
Insets: Hainan Island (same scale); index map.
Sources: LC, MLUW.

YELLOW SEA AREA - ROADS & WATERWAYS

1:2,300,000. 1945. One sheet. 18 x 17. English. Geographic grid.
Coverage: Long. 116° - 126°, Lat. 35° - 42°.
Hydrography: major drainage (blue).
Transportation: roads (3 class., black/red), canals (blue), navigable waterways (black). *Cities and Towns:* (black).
Source: LC.

HAINAN TAO - AGRICULTURAL REGIONS

1:1,800,000. 1945. One sheet. 8 x 6. English. Geographic grid.
Coverage: Hainan Island.
Cultural data: agricultural regions (5 class., black).
Source: LC.

COMMUNICATIONS OF HAINAN ISLAND

1:1,800,000. 1942. One sheet. 6 x 10. English. Geographic grid.
Coverage: Hainan Island.

Transportation: roads (black), railroads (black), telegraph and telephone lines (black), cables (black). *Other:* radio stations (black), airfields (black).
Source: LC.

FORMOSA - RAILROADS & RAILROAD FACILITIES

1:1,800,000. 1944. One sheet. 19 x 25. English. Geographic grid.
Coverage: all of Formosa.
Relief: shaded relief (green). *Hydrography:* major drainage (blue).
Transportation: railroads (5 class., black), roads (red), ship routes (black). *Cities and Towns:* (black). *Other:* bridges (black), tunnels (black), railroad facilities (3 class., black).
Source: LC.

HAINAN ISLAND - MINERAL DEPOSITS

1:1,650,000. 1942. One sheet. 11 x 6. English. Geographic grid.
Coverage: Hainan Island.
Physical data: minerals (14 class., black).
Source: LC.

HUNAN - KWANGSI RAILROAD

1:1,600,000. 1945. One sheet. 18 x 19. English. Geographic grid.
Coverage: Long. 106° - 113°, Lat. 21° - 28°.
Hydrography: detailed drainage (blue).
Transportation: railroads (5 class., black). *Other:* railroad bridges (black), railroad repair shops (black).
Source: LC.

CHINA, EAST COAST - CITY OF SHAHGHAI

1:50,000. 1944. One sheet. 36 x 18. English. Geographic grid.
Coverage: Shanghai.
Hydrography: detailed drainage (blue).
Boundaries: International Settlement (black). *Transportation:* railroads (2 class., black), roads (2 class., yellow/black), tracks and trails (black). *Other:* buildings and areas (9 class., various colors), open areas (green), cemeteries (green).
Insets: Shanghai and environs, 1:200,000; Shanghai area regional development, 1:125,000.
Source: LC.

T'AO-NAN

1:42,000. 1945. One Sheet. 8 x 12. English. Coverage: T'ao-nan.
Transportation: railroads (black), roads (2 class., black). *Other:* built-up areas (2 class., black), buildings (black), walls (black), bridges (black).
Source: LC.

HU-LAN

1:31,000. 1945. One sheet. 11 x 12. English. Coverage: Hu-lan. *Transportation:* railroads (black), roads (black). *Other:* built-up areas (black), identified areas (black), identified buildings (black), walls (black).
Source: LC.

T'AI-LAI

1:28,000. 1945. One sheet. 10 x 12. English. Coverage: T'ai-lai. *Transportation:* railroads (black), roads (2 class., black). *Other:* built-up areas (black), buildings (black), walls (black), wells (black).
Source: LC.

NUNG-AN

1:23,000. 1945. One sheet. 10 x 12. English. Coverage: Nung-an. *Transportation:* roads (2 class., black). *Other:* built-up areas (black), buildings (black), walls (black).
Source: LC.

T'AO-AN (PAI-CH'ENG-TZU)

1:21,250. 1945. One sheet. 8 x 9. English. Coverage: T'ao-an. *Transportation:* railroads (black), roads (2 class., black). *Other:* built-up areas (black), bridges (black), buildings (black), walls (black).
Source: LC.

CHI-NING

1:21,000. 1945. One sheet. 8 x 12. English. Coverage: Chi-ning. *Transportation:* roads (black), water channels (blue). *Other:* built-up areas (black), walls (black), bridges (black).
Notes: Also editions for Ch'ing-yuan (Paoting), 1:21,000; Lin-yu, 1:17,500; Ta-ming, 1:15,000; Wang-tu, 1:5,250. Same data for all.
Source: LC.

KUNG-CHU-LING

1:13,000. 1945. One sheet. 10 x 9. English. Coverage: Kung-chu-ling. *Transportation:* railroads (black), roads (2 class., black). *Other:* built-up areas (2 class., black), buildings (black), bridges (black).
Source: LC.

SKETCH PLANS - CITIES

Various scales. 1945. 7 x 9. English.
Notes: A series of simple outline maps of areal extent of various cities. No streets or other data shown. Cities covered (and their respective scales): Ch'ao-yang (1:17,000); Chia-chi (1:17,000); Chiang-men (1:17,000); Chieh-yang (1:17,000); Hsin-hui (1:19,000); Hsi-ying (1:21,000); Mei-hsien (1:19,500); Nan-hai (1:33,500); Nan-hsiung

(1:20,000); Pei-hai (1:22,000); San-shui (1:19,000); Shih-ch'i and Hsiang-shan (1,22,000); T'ai-shan and Sui-ning (1:60,000). Also a series of maps with greater detail and showing major streets. Cities covered (and their respective scales): Chiao-hsien (1:17,500); Cho-hsien (1:7,200); Chu-hsien (1:7,500); Ning-po (1:7,300); Swatow (1:9,360).
Source: LC.

State Department, Division of Map Intelligence and Cartography

CHINA - THE BURMA ROAD, ROUTE FROM CHUNGKING TO RANGOON

1:20,000,000. 1938. One sheet. 14 x 8. English. Geographic grid. Coverage: Long. 50° - 120°, Lat. 15° - 33°.
Boundaries: international (black), provincial (black). *Transportation:* railroads (black), roads (2 class., black). *Cities and Towns:* (black).
Inset: New Road From Siakwan to the Burma Border (1:4,000,000).
Source: LC.

SPHERES OF INFLUENCE MAP OF CHINA

1:14,500,000. 1921. One sheet. 9 x 12. English. Coverage: China Proper.
Boundaries: international (black), provincial (black). *Transportation:* railroads (9 class., black). *Other:* spheres of influence (8 class., black).
Notes: Railroads classified according to ownership by nationality.
Source: MLUW.

CHINA - COMMUNIST CONTROLLED AREAS, 1945-47

1:14,000,000. 1947. One sheet. 7 x 8 (see Notes below). English. Geographic grid. Coverage: North China and Manchuria.
Cultural data: Communist-controlled areas (black).
Inset: Kwangtung and Hainan Island.
Notes: 7 separate maps on one sheet, showing Communist-controlled areas for the following dates: 15 August 1945, 15 January 1946, 1 August 1946, 11 November 1946, 15 January 1947, 1 July 1947, 1 January 1948.
Source: LC.

CHINA-LINGUISTIC GROUPS

1:14,000,000. 1947. One sheet. 14 x 12. English. Geographic grid. Coverage: all of China.
Boundaries: international (black/red), provincial (black/red), study area (black). *Cities and Towns:* (black). *Other:* Tibeto-Chinese family (15 class., various colors), Altaic groups (3 class., various colors), SE Asiatic family (2 class., various colors), Indo-Europeans (2 class., various colors), other groups (3 class., various colors), intermixed groups (6 class., various colors).
Source: LC.

CHINA AND ADJACENT REGIONS (RAILROADS)

1:10,000,000. 1925. One sheet. 19 x 21. English. Geographic grid.
Coverage: all of China.
Hydrography: major drainage (black).
Boundaries: international (black), provincial (black), leased territories (black). *Transportation:* railroads (black). *Cities and Towns:* (5 class., black).
Sources: LC, MLUW.

PEI-P'ING - KUANG-CHOU RAILROAD, SHOWING CONNECTING RAILROADS

1:6,625,000. 1946. One sheet. 11 x 13. English. Geographic grid.
Coverage: China Proper.
Hydrography: major drainage (blue).
Transportation: railroads (5 class., black). *Cities and Towns:* (black).
Inset: index map.
Source: LC.

MANCHURIA - CONSTRUCTION MATERIALS

1:6,500,000. 1946. One sheet. 10 x 12. English. Geographic grid.
Coverage: all of Manchuria.
Physical data: rock materials deposits (7 class., various colors).
Boundaries: international (black), provincial-Japanese (black), provincial-Chinese (black), terrain (red). *Other:* plants and quarries (6 class., black).
Source: LC.

MANCHURIA - COMMUNICATIONS AND LAND USE

1:6,000,000. 1943. One sheet. 10 x 12. English. Coverage: all of Manchuria.
Boundaries: international (black), provincial (black). *Transportation:* railroads (4 class., various colors), roads (black). *Other:* land uses (4 class., various colors).
Source: LC.

MANCHURIA - PRODUCTION OF STAPLE FOOD CROPS

1:6,000,000. 1946. One sheet. 10 x 12. English. Geographic grid.
Coverage: all of Manchuria.
Boundaries: international (black), provincial-Japanese 1938 (black), pre-1931 provincial-Chinese (black).
Notes: Bar graphs show production of 9 crops by province (average for years 1934-38).
Source: LC.

MANCHURIA - WATER SUPPLY AND SEWAGE DISPOSAL

1:6,000,000. 1946. One sheet. 10 x 12. English. Geographic grid.
Coverage: all of Manchuria.
Boundaries: international (black), provncial-Japanese (black), provincial Chinese (black). *Other:* waterworks (black), sewage disposal system (black).

Source: LC.

MANCHURIA - MANUFACTURING INDUSTRIES

1:5,850,000. 1946. One sheet. 10 x 12. English. Geographic grid.
Coverage: all of Manchuria.
Boundaries: international (black), provincial-Japanese (black), provincial-Chinese (black). *Other:* manufacturing industries (24 class., red/black/green).
Source: LC.

MANCHURIA - PRINCIPAL ETHNIC GROUPS

1:5,850,000. 1946. One sheet. 12 x 11. English. Geographic grid.
Coverage: all of Manchuria.
Hydrography: major drainage (blue). *Vegetation:* swamps and marshes (blue).
Boundaries: international (black), provincial (black), provincial-Japanese as of May 1945 (black). *Other:* Mongols (5 class., brown), Tungus (2 class., brown), Japanese (3 class., black), Koreans (2 class., brown), Russians (brown), Chinese (3 class., green).
Sources: LC, MLUW.

MANCHURIA - NATURAL AVAILABILITY OF WATER

1:5,750,000. 1946. One sheet. 10 x 12. English. Geographic grid.
Coverage: all of Manchuria.
Physical data: geologic formations and sub-surface water (6 class., various colors), surface water (4 class., black), water-supply sources (5 class., black).
Boundaries: international (black), surface-water supply area (black).
Source: LC.

MANCHURIA - IRON AND STEEL

1:5,350,000. 1946. One sheet. 10 x 12. English. Geographic grid.
Coverage: all of Manchuria.
Physical data: coal deposits (8 class., black). *Boundaries:* international (black), provincial-Japanese (black), provincial-Chinese (black).
Other: petroleum installations (2 class., red), electric power plants (4 class., red).
Source: LC.

MANCHURIA - PRINCIPAL MINERAL RESOURCES, EXCLUDING COAL, IRON & FERRO-ALLOYS

1:5,350,000. 1946. One sheet. 10 x 12. English. Geographic grid.

Coverage: all of Manchuria.
Physical data: non-metallic minerals (8 class., black), metallic minerals (4 class., black).
Boundaries: international (black), provincial-Japanese (black), provincial-Chinese (black).
Source: LC.

MANCHURIA - NUMBER OF KOREANS

1:4,500,000. 1946. One sheet. 15 x 14. English. Geographic grid.
Coverage: all of Manchuria.
Boundaries: international (black), provincial (black). *Transportation:* railroads (2 class., black). *Cities and Towns:* (2 class., black).
Other: number of Koreans by province (5 class., brown).
Sources: LC, MLUW.

MANCHURIA - DENSITY OF POPULATION, 1940

1:4,000,000. 1946. One sheet. 16 x 18. English. Geographic grid.
Coverage: all of Manchuria.
Boundaries: international (black), provincial-Japanese (black), provincial-Chinese (black), hsien (black). *Other:* persons per square mile (7 class., various colors).
Inset: Sex ratios by province, 1940 (males per 100 females).
Source: LC.

MANCHURIA - ADMINISTRATIVE DIVISIONS

1:3,900,000. 1946. One sheet. 15 x 18. English. Geographic grid.
Coverage: all of Manchuria.
Boundaries: international (black), provincial-Japanese (black), pre-1931 provincial-Chinese (black), hsien (black). *Cities and Towns:* (7 class., black).
Source: LC.

MANCHURIA - ROADS

1:3,900,000. 1946. One sheet. 16 x 18. English. Geographic grid.
Coverage: all of Manchuria.
Boundaries: international (black), provincial-Japanese (black), provincial-Chinese (black). *Transportation:* roads (4 class., red/green).
Source: LC.

SOUTH-CENTRAL CHINA - POLITICAL DIVISIONS

1:3,575,000. 1947. One sheet. 28 x 19. English. Geographic grid.
Coverage: Long. 96° - 122°, Lat. 20° - 34°.
Hydrography: major drainage (blue).
Boundaries: international (black), provincial (black). *Cities and Towns:* (5 class., black).
Notes: Also 1948 edition, same data.
Source: LC.

MAP OF MANCHURIA & ADJACENT REGIONS SHOWING RAILWAYS & PRINCIPAL MOTOR ROADS

1:3,000,000. 1932. One sheet. 20 x 26. English. Geographic grid.
Coverage: all of Manchuria and adjacent areas.
Boundaries: international (black/yellow), provincial (black/yellow).
Transportation: railroads (5 class., red), roads (purple). *Cities and Towns:* (2 class., black).
Source: LC.

PORT ARTHUR NAVAL BASE AREA

1:375,000. 1946. One sheet. 13 x 23. English. Geographic grid.
Coverage: Liaotung Peninsula.
Hydrography: major drainage (blue).
Boundaries: hsien (black), treaty line-Port Arthur area (red).
Transportation: railroads (black), roads (black). *Cities and Towns:* (2 class., black).
Source: MLUW.

CITY OF DAIREN

1:34,000. 1946. One sheet. 13 x 12. English.
Transportation: railroads (2 class., black), roads (black). *Other:* buildings (2 class., black), areas (black), open areas (black), walls (black).
Source: LC.

MANCHURIA - ANSHAN

1:30,000. 1946. One sheet. 21 x 12. English.
Transportation: railroads (2 class., black), roads (2 class., black).
Other: sections of the city (2 class., black/green), industrial installations (3 class., red), railroad stations (black), bridges (black).
Notes: Also 1946 edition for Fushun, same scale and data.
Source: LC.

HARBIN

1:28,000. 1946. One sheet. 15 x 18. English.
Cultural data: built-up areas (2 class., black), parks or cemeteries (black), schools (red), hospitals (red), industrial installations (red), buildings (red), industrial areas (2 class., red), other areas (black).
Source: LC.

PORT ARTHUR

1:14,000. 1946. One sheet. 15 x 12. English.
Transportation: railroads (black). *Other:* built-up areas (red) buildings (black), walls (black).
Source: LC.

State Department, Interior Research & Intelligence Service, Research & Analysis Branch

MANCHURIA - TELECOMMUNICATIONS

1:6,000,000. 1945. One sheet. 10 x 12. English. Geographic grid. Coverage: all of Manchuria.
Boundaries: international (black), provincial-Japanese (black), provincial-Chinese (black). *Other:* radio stations (8 class., black), land lines (2 class., red), submarine cables (black).
Source: LC.

MANCHURIA - NAVIGABLE WATERWAYS

1:5,750,000. 1945. One sheet. 10 x 12. English. Geographic grid. Coverage: all of Manchuria.
Boundaries: international (black) provincial-Japanese (black), provincial-Chinese (black). *Transportation:* navigable waterways (5 class., red), canals (blue). *Cities and Towns:* (3 class., black).
Source: LC.

MANCHURIA - DISTRIBUTION OF PLANTED ACREAGES (SKETCH MAPS)

1:5,500,000. 1945. 6 sheets. 11 x 12. English. Coverage: all of Manchuria.
Boundaries: international (black), provincial (black), leased territories (black). *Transportation:* railroads (black).
Notes: Distribution of 6 crops (by dots): soybeans, kaoliang, rice, wheat, corn, millet. Based on 1935 data.
Source: LC.

MANCHURIA

1:5,500,000. 1945. One sheet. 12 x 11. English. Coverage: all of Manchuria.
Boundaries: international (black), provincial (black), Kwantung Leased Territory (black). Transportation: railroads (black). *Cities and Towns:* (black).
Source: MLUW.

KOREA AND MANCHURIA - IMPORTANT MINERAL AND INDUSTRIAL CONCENTRATIONS

1:4,750,000. 1945. One sheet. 14 x 20. English. Geographic grid. Coverage: Korea and Manchuria.
Physical data: mineral deposits (3 class., red). *Boundaries:* international (black), provincial (black). *Transportation:* railroads (black). *Other:* industrial concentrations (3 class., red).
Source: LC.

MANCHURIA (INCLUDING JEHOL) - PRE-1931 ADMINISTRATIVE AREAS

1:3,960,000. 1945. One sheet. 17 x 15. English. Coverage: all of Manchuria and Jehol.

Boundaries: international (black), provincial (black), hsien (black).
Cities and Towns: (3 class., black).
Source: MLUW.

CHINA - COAL PRODUCTION & CONSUMPTION

1:3,850,000. 1945. One sheet. 23 x 29. English. Geographic grid. Coverage: China Proper.
Hydrography: detailed drainage (blue).
Boundaries: international (brown), provincial (brown). *Transportation:* railroads (7 class., black), roads (3 class., red), canals (blue), navigable waterways (4 class., blue). *Cities and Towns:* (3 class., black). *Other:* ports (2 class., blue), coal production by areas (6 class., green), coal-use areas (6 class., brown), routes of coal supply (green).
Source: LC.

MANCHURIA - RAILROADS

1:3,800,000. 1945. One sheet. 16 x 18. English. Coverage: all of Manchuria.
Boundaries: international (black), provincial (black), pre-1931 provincial (black). *Transportation:* railroads (7 class., brown). *Other:* railroad yards (2 class., black).
Source: LC.

TOWN OF K'AI-T'UNG

1:68,000. 1945. One sheet. 9 x 9. English. Coverage: K'ai-t'ung.
Transportation: railroads (black), roads (2 class., black). *Other:* built-up areas (black), buildings (black), walls (black).
Source: LC.

CHIN-HSIEN (CHIN-CHOU) & VICINITY

1:65,000. 1945. One sheet. 9 x 9. English.
Transportation: railroads (black), roads (2 class., black). *Other:* built-up areas (black), buildings (black), walls (black).
Source: LC.

HAILAR

1:47,000. 1945. One sheet. 9 x 12. English. Coverage: Hailar.
Transportation: railroads (black), roads (black). *Other:* built-up areas (black), walls (black), bridges (black), buildings (black).
Source: LC.

PEN-CH'I-HU

1:27,000. 1945. One sheet. 8 x 12. English. Coverage: Pen-ch'i-hu.
Transportation: railroads (2 class., black), roads (red). *Other:* built-up areas (black), workers barracks (black), industrial areas (red), powerlines (black), tunnels (black).
Source: LC.

MANCHOULI

1:19,000. 1945. One sheet. 9 x 10. English. Coverage: Manchouli.
Transportation: railroads (black), roads (black). *Other:* buildings (black), walls (black), districts (3 class., black).
Source: LC.

KIRIN

1:19,000. 1945. One sheet. 14 x 12. English. Coverage: Kirin.
Transportation: railroads (black), roads (black). *Other:* walls (2 class., black), temples (black), police stations (black), buildings (black), areas (black).
Source: LC.

SHUANG-CH'ENG

1:18,750. 1945. One sheet. 7 x 10. English. Coverage: Shuang-ch'eng.
Transportation: railroads (black), roads (3 class., brown/black).
Other: walls (black), moats (blue), schools (black), built-up areas (black).
Inset: Shuang-ch'eng and vicinity (no scale).
Source: LC.

U.S. Marine Corps, Third Brigade, Under Direction of Major E. C. Long

TAKU-PEKING

1:50,000. 1927. 20 sheets. English. Military grid. Coverage: Taku-Peking area.
Relief: contours (0.5 meters).
Notes: No legend. Black and white series. Shows detailed road, railroad and settlement pattern. Original manuscript of series.
Source: NA.

MAP OF TIENTSIN

1:10,000. 1928. 8 sheets. Size varies. English. Military grid. Coverage: all of Tientsin.
Hydrography: very detailed drainage. *Vegetation:* swamps and marshes, grass. *Other:* dikes.
Boundaries: concession areas. *Transportation:* railroads, roads, electric street railways. *Other:* oil tanks, kilns, walls, important buildings, stacks.
Notes: Black and white maps. Extremely detailed street map, probably the best available for Tientsin at this scale and for this date. LC also has the original map in one piece, 40" x 56", also black and white.
Sources: LC, MLUW.

U.S. Navy Hydrographic Office

NAUTICAL CHARTS

The U.S. Navy Hydrographic Office publishes a wide variety of nautical charts at various scales, covering the entire coast of China. The data shown on these charts is necessarily restricted to coastal areas and narrow strips along waterways and rivers. The amount of data shown obviously varies with the scale. Relief is shown by form lines, hachures, and/or contours, with abundant spot heights near the sea. The larger-scale charts show extremely detailed cultural data and are an excellent source of information for areas that may not be covered in any other available maps. The data on these larger-scale charts include such things as piers, individual buildings, oil tanks, buoys, bells, sirens, lights, signal stations, radio stations, chimneys, monuments, etc. The smaller-scale charts will most likely be of value mainly as outline maps.

U.S. nautical charts are based on British surveys dating back to 1860, plus later Japanese surveys, with minor revisions made over the years. Generally, U.S. charts are somewhat larger in scale than Japanese charts but show slightly less detail. However, U.S. charts make greater use of color than found on most foreign charts. For persons limited to English, U.S. nautical charts will be the preferred source of data.

Sources: Almost all map libraries have collections of U.S. nautical charts. In addition, nautical charts are one of the few government map publications on China that may be purchased directly by the public. (See Appendix B for addresses and instructions on ordering maps.).

Nautical charts available: (each chart listed below includes the following data, in this order: Chart No.; Title and contents of chart; Scale: Edition and date; Price):

70 *Charts on index map 70 (T'ai-chou Wan to Liao-tung Wan)*

2158; Chefoo Hbr. (Yentai or Chih-Fou Wan); 1:18,271; 8, Feb. 1922, .90

2307; Yen-T'ai (Chih-Fou) to Wei-Hai-Wei; 1:72,877; 10, Aug. 1946; .75

2480; Chiao-Chou Wan & Apprs.; 1:72,785; 5, May 1929; 1.05

2494; Shan-Tung Pan-Tao Lai-Chou Wan to Chiao-Chou Wan; 1:401,800; 9, Feb. 1952; .75

2511; Apprs. to Liao Ho; 1:98,880; 5, Apr 1946; .75

2512; Appr. to Ch'in-Huang-tao Wan; 1:64,577; 6, Dec. 1946; .75
Plan: Ch'in-huang-tao Anch.; 1:12,149

2522; Dairen Wan; 1:30,000; 7, Oct. 1939; .75

2545; Apprs. to Ryojun Ko (Port Arthur); 1:21,453; 5, Sept. 1932; .45

3180; Wen-Chou-Wan to Chiu-Shan Lieh-Tao; 1:289,850; 6, Apr. 1947; .75

3212; Hsiang-Shan Chiang to Yung (Nimrod Sound) Chiang incl. the southern part of Chou-Shan Ch'un-Tao; 1:90,000; 5, May 1952; .90

3214; Yung R. & Apprs.; 1:15,000; 3, Mar. 1939; .90
Plan: Ningpo Anch.; 1:8,000

3215; Northern part of Chou-Chan Ch'un-Tao (Chusan Arch.) incl. Southern apprs. to Ch'ang-Chiang (Yangtze R); 1:150,000; 6, May 1935; .75

3216; Ch'ang Tu Chiang & Apprs.; 1:40,030; 2, Dec. 1946; .90

3223; Tao-Tsui T'ou to Shih-Tao Wan; 1:73,680; 3, Aug. 1950; .90

3224; Shih-Tao Wan to Ch'eng Shang T'ou; 1:73,520; 2, Feb. 1951; .90

3226; Li-Tao Wan to Wei-Hai-Wei; 1:73,030; 4, Jan. 1951; .75

3228; Pechili (Pohai) Str.; 1:182,498; 2, Mar. 1921; .20

3230; Hung-Shih Tsui (Fort Head) to Chin-Chou Wan; 1:100,605; 3, Nov. 1946; .75; Plan: P'u-Lan-Tien Chiang (Eastern part); 1:100,605

3231; Kinshu to Koroku To incl. Kwantung Pen.; 1:100,000; 4, May 1937; 1.20

3232; Terminal Hd to Haiyung Tao incl. Elliot & Blonde Groups; 1:97,129; 3, Apr. 1925, .90; Plan: Changtze Tao Anch.; 1:45,200

5397; Apprs. to Pohai (Pechili) str.; 1:393,740; 1, Nov. 1926; 1.20

5489; Tsingtao Hbr.; 1:16,000; 2, Dec. 1950; 1.05

5493; Northern part of Yellow Sea incl. Po Hai & Liao-Tung Wan; 1:768,450; 3, Sep. 1952; 1.20

5494; Ch'ang Chiang (Yangtze R.) entr. to Shimonoseki Kaikyo incl. southern part of Yellow Sea; 1:919,800; 2, Oct. 1949; 1.20

5495; Formosa Str. to Okinawa Gunto; 1:868,300; 4, Nov. 1961; 1.20

6135; San-Men Wan & Shih-P'u Mao-Ti (Shihpu Roads); 1:60,350; 2, Mar. 1946, .90

6141; Tai-Tzu Shan to Fu-Chou Chiao (G. of Liaotung); 1:100,000; 1, Jul. 1948; .75

6142; Apprs. to Ch'ing-Tui-T'zu & Ta-Ku-Shan; 1:74,900; 1, Dec. 1945; .90

6229; Pa-Ko (Parker) Lieh-Tao; 1:39,850; 2, Mar. 1947; .90

6230; Ma-An (Saddle) Lieh-Tao; 1:38,880; 1, Sep. 1947; .90

6231; Northwestern part of Hang-Chou Wan (Hangchow Bay); 1:125,000; 1, Nov. 1946; .75

6232; Southeastern part of Hang-Chou Wan (Hangchow Bay); 1:50,000; 1, Aug. 1946; .90

6475; T'ao-Tzu K'ou to Chiao-Chou Wan; 1:230,000; 2, Nov. 1950; .75

6476; Lien-Yun Chiang; 1:15,050; 1, Aug. 1947; .75

6490; Ta-Ch'ing Ho K'ou to Ch'in-Huang Tao; 1:200,000; 2, Sep. 1950; .75

6491; Ch'in-Huang-Tao to Hu-Lu-Tao-Kao Chiao; 1:200,000; 2, Sep. 1950; .75

6495; Hu-Lu Tao Hbr. (Gulf of Liaotung); 1:10,000; 2, Oct. 1946; .90

10010-101; Chiushan Liehtao to Hsiangshan Pu; 1:88,160; 1, May 1945; .40 (Reprod. of Japanese Chart)

10010-112; Entr. to Ryo Ga (Liao Ho) incl. Eika Ko; 1:33,000; 1, May 1945, .40; Plan: The Eastern Part of Eiko Ko; 1:15,000 (Reprod. of Japanese Chart)

71 *Charts on index map 71 (Canton to T'ai-Chou Wan)*

0929; Hbr. of Hong Kong and Apprs.; 1:30,000; 6, Oct. 1936; .90 Plan; Fat Tau Mun; 1:12,000

1254; Hong Kong Hbr.; 1:6,080; 10, Aug. 1961; .75

1285; Amoy Outer Hbr.; 1:13,110; 17, Mar. 1945; .75

1888; Fang-Liao Chiang to Kao-Hsiung Chiang; 1:50,000; 9, Apr. 1960; .90

1908; Chi-Lung Chiang (Taiwan); 1:9,000; 16, May 1959; .45

1911; Plans on the E. Coast of Taiwan; 7, Mar. 1960; .45
A. Pa-Yao Wan; 1:36,490
B. Su-Ao Chiang; 1:18;500
C. Chiang-K'ou Wan; 1:29,930
D. Apprs. to T'ai Tung Chiang; 1:24,530

2157; Amoy (Hsia Men) Inner Hbr.; 1:4,860; 8, May 1945; .90

2217; Mirs Bay; 1:36,510; 3, Mar. 1948; .90

2220; Hong Kong Waters E.;1:12,388; 11, May 1948; .90

2221; Hong Kong Waters W.; 1:12,140; 10, Feb. 1943; .90

2327; E. Lamma Chan. (Hong Kong I.); 1:15,361; 4, Jun. 1920; .90

2402; Port Shelter & Rocky Hbr.; 1:15,780; 3, Oct. 1947; .75

2463; Taiwan (Formosa); 1:445,100; 9, Oct. 1959; .90

2488; Aprs. to Kao-Hsuing Chiang; 1:15,000; 6, Sep. 1944; .75

2500; Chiu-Chiang Po-Ti to San-Tiao Chiao; 1:155,600; 5, Aug. 1959; .75

2506; P'eng-hu Chiang; 1:25,000; 7, Sep. 1959; .90

2519; Ch'uan-Chow Chiang (Ch'uan-Chow Wan); 1:35,148; 3, Jul. 1945; .75

2546; Wu (Ou) Kiang or Wenchow R. & Apprs.; 1:75,000; 4, Jul.1945; 1.05 Plan: A. Wenchow Port; 1:25,000

2556; Apprs. to Samsa Inlet (San-Sha Kai K'ou); 1:96,386; 3 Jan. 1920; .90

2557; Samsa Inlet (San-Sha Hai K'ou) Southern part; 1:36,480; 2, Oct. 1921; .90

2593; Hong Kong to Mirs Bay; 1:66,003; 6, Jul. 1928; .75

3170; Tien Pak Hbr. to Hong Kong; 1:300,000; 5, Feb. 1952; 1.05 Plan: C. Macau Hbr.; 1:50,000

3174; Hong Kong to Hsiung-Ti Tao (Brothers); 1:304,000; 6, Feb. 1951; 1.05

3176; Formosa Str. & Taiwan with the adj. coast of China from Hong Kong to Fu-Chow (S. China Sea); 1:894,750; 3, Jun. 1950; 1.05

3177; Wu-chiu (Ockseu) Hsu to Hsiung-Ti (Brothers) inc. adj. coast of Taiwan (Formosa); 1:301,700; 4, Jan. 1949; 1.05

3178; Wu-Ch'iu Hsu to Tung-Yin Shan incl. the N. Coast of Taiwan; 1:298,000; 5, Feb. 1958; .90

3179; Tung-Yin Shan to Wen-Chou Wan; 1:294,320; 3, Aug. 1947; .75

3180; Wen-Chou Wan to Chiu-Shan Lieh-Tao (Kueshan I.); 1:289,850; 6, Apr. 1947; .75

3199; Macao to Ta-Hsing-Tsan Yen incl. Hong Kong; 1:175,000; 10, Oct. 1946; 1.05; Plan: Samun Rd.; 1:45,700

3201; Piao Chiao to Hsiung-Ti Tao; 1:100,000; 5, Aug. 1958; .75

3203; Kao-Hsiung Chiang to Kao-K'ou Po-Ti incl. P'eng-Hu Lieh-Tao; 1:150,000; 6, Jul. 1960; 1.20

3204; Hai-T'an Hsia; 1:70,090; 3, Mar. 1951; .90

3207; Apprs. to Min Chiang incl. Adj. Is.; 1:65,000; 4, Nov. 1956; 1.20

5306; Miyako Jima to Taiwan; 1:363,000; 2, Feb. 1923; 1.05

5310; Apprs. to Chi-Lung Chiang; 1:18,100; 7, Jan. 1960; .75

5495; Formosa Str. to Okinawa Gunto; 1:868,300; 4, Nov. 1961; 1.20

5496; Mui Duong to Hong Kong incl. Hainan I.; 1:915,538; 2, Oct. 1944; 1.05

6121; San-Tiao Chiao to Hua-Lien; 1:156,440; 2, Feb. 1960; .75

6122; Hua-Lien to T'ai-Tung Chiang; 1:157,500; 2, Feb. 1960; .75

6124; T'ai-Tung Chiang to O-Luan Pi; 1:157,500; 2, Aug. 1959; .75

6125; O-Luan Pi to Kao-Hsiung Chiang; 1:157,500; 2, Aug. 1959; .75

6126; Plans on the W. Coast of Taiwan; 1, Sep. 1944; .45
A. Hotei (Paw Tai) Hakuchi; 1:63,480
B. Kaiko Wan & Shajo (Chaoshan) Hakuchi; 1:24,550

6127; Kao-Hsuing Chiang (Taiwan); 1:5,000; 3, Mar. 1956; 1.20

6128; Plans on the W. Coast of Taiwan; 1, Sep. 1944; .45
A. Rokko Hakuchi; 1:30,230
B. Anpin Ko; 1:23,180

6129; Kaiko Hakuchi to Kyuko Hakuchi; 1:157,000; 1, Sep. 1944; .75
Plan: Kaiko Hakuchi; 1:31,540

6137; Taichow Liehtao & Apprs.; 1:45,090; 1, Nov. 1944; .90
Plan: Taichow Liehtao Anch.; 1:20,060

6138; P'eng-Hu Lieh-Tao (Pescadores) Southeastern Part; 1:50,000; 3 Aug. 1960; .90

6139; S. W. Part of P'eng-Hu Lieh-Tao (Pescadores); 1:50,000; 3, Mar. 1960, .75

6234; Lo-Ch'ing Ao & Apprs.; 1:50,070; 1, Dec. 1946; .90
Plan: Hsuan Men; 1:17,050

6342; P'eng-Hu Lieh-Tao (Pescadores-Northern Part); 1:50,000; 3, Feb. 1960, .75

6372; Mako Ko (Boko Retto); 1:7,560; 2, Mar. 1946; .75

6421; Shang-Ch'uan Shan (St. John I.); 1:39,960; 2, Dec. 1946; .90

6422; Ho-Pao Anch. (Apprs. to Hsi Chiang); 1:35,000; 2, Feb. 1947; .75

6424; San-Tsao Tai & Adj. Is.; 1:35,080; 2, Dec. 1946; .75

6425; Wan-Shan Ch'un-Tao (Ladrone Is.); 1:35,075; 2, Feb. 1947; .75

6441; Southern Part of Taya Wan (Bias Bay); 1:30,000; 2, Aug. 1946; .75

6442; Northern Part of Taya Wan (Bias Bay); 1:30,000; 2, May 1946; .75

6453; Tung-T'ing Hsu to Shih-K'u-Lai-K'o Chiao; 1:75,000; 1, Aug. 1956; 1.20

6542; Kao-Hsiung Chiang to Hsin-Ta Chiang; 1:30,000; 3, Nov. 1960; 1.05

Charts on index map 72 (Gulf of Tonkin Area) 72

3158; Plans in the Tonkin Gulf; 3, Jan. 1948; .45
A. Xuy Nong Chao (Iles Norway); 1:30,000
B. Pei-hai (Pakhoi) Anch.; 1:50,000
C. Wei-chou Tao; 1:50,000

3168; Entr. & Apprs. to Kuang-Chou Wan (China); 1:50,000; 5, Nov. 1939; .75

3169; Kuang-Chou Wan & Wu-Li Shan Chiang; 1:40,000; 4, Sept. 1931; .90
Plans: Chan-Chiang; 1:15,000
Shih-Mei-Hsu; 1:20,000

6080; Hai -Nan Str. (Ch'iung-Chou Hai-Hsia); 1:267,440; 1, May 1946; .75

6081; Plans on Hai-Nan Tao (Hainan I.); 1, Jan. 1946; .45
Pu-ao Chiang (Pak Ngo Hbr.); 1:30,170
Pe-li Chiang (Bakli Bay); 1:70,420

6413; Eastern Part of Hai-Nan Str. (Ch'iung-Chou Hai-Hsia); 1:70,000; Pl, Jul. 1947; .40

6414; Central Part of Hai-Nan Str.(Ch'iung-Chou Hai-Hsia); 1:70,000; Pl, Jul. 1947; .40

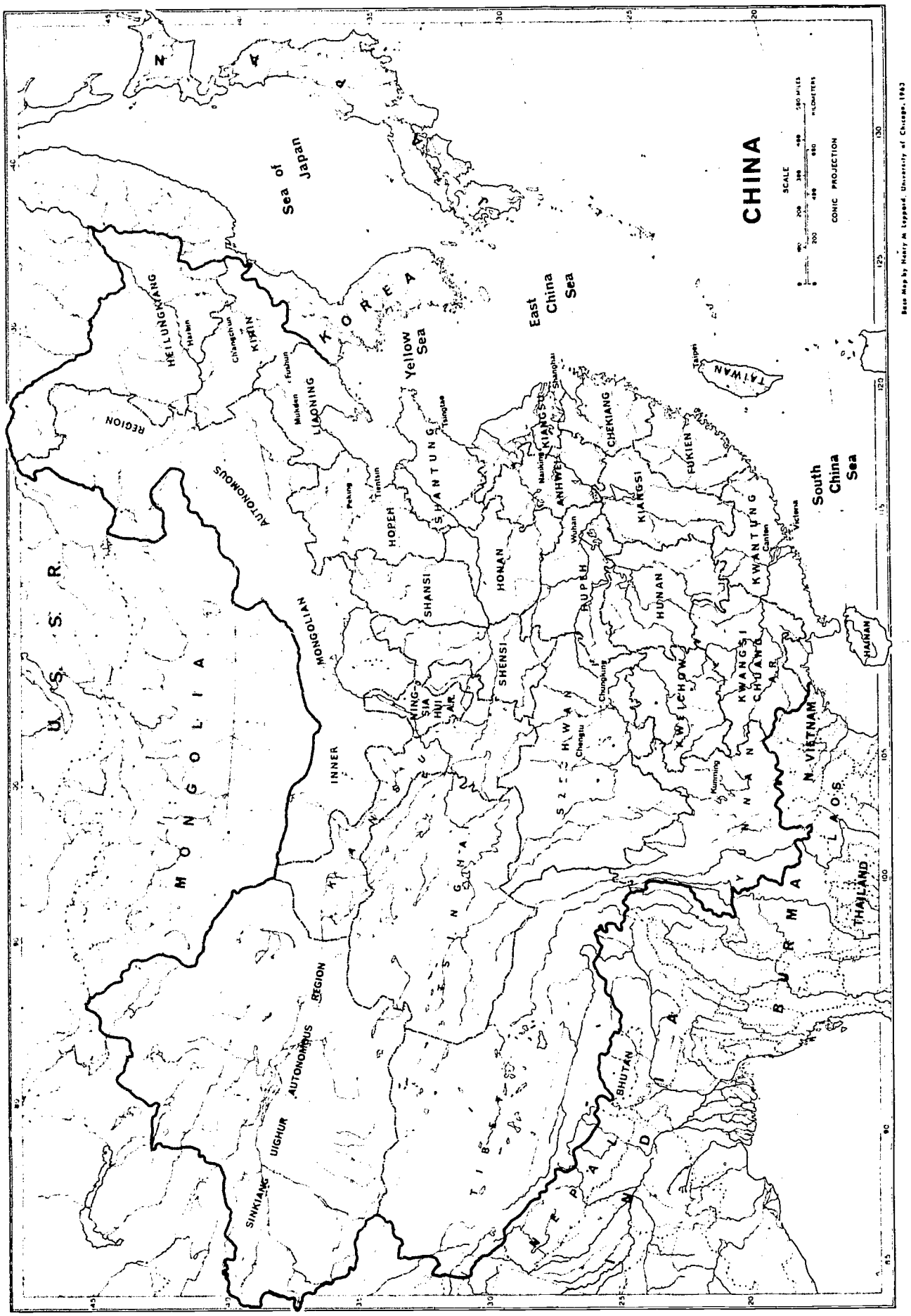
6416; Yang-P'u Wan & Appros. (Hai-Nan Tao); 1:70,000; 1, July. 1947; .50

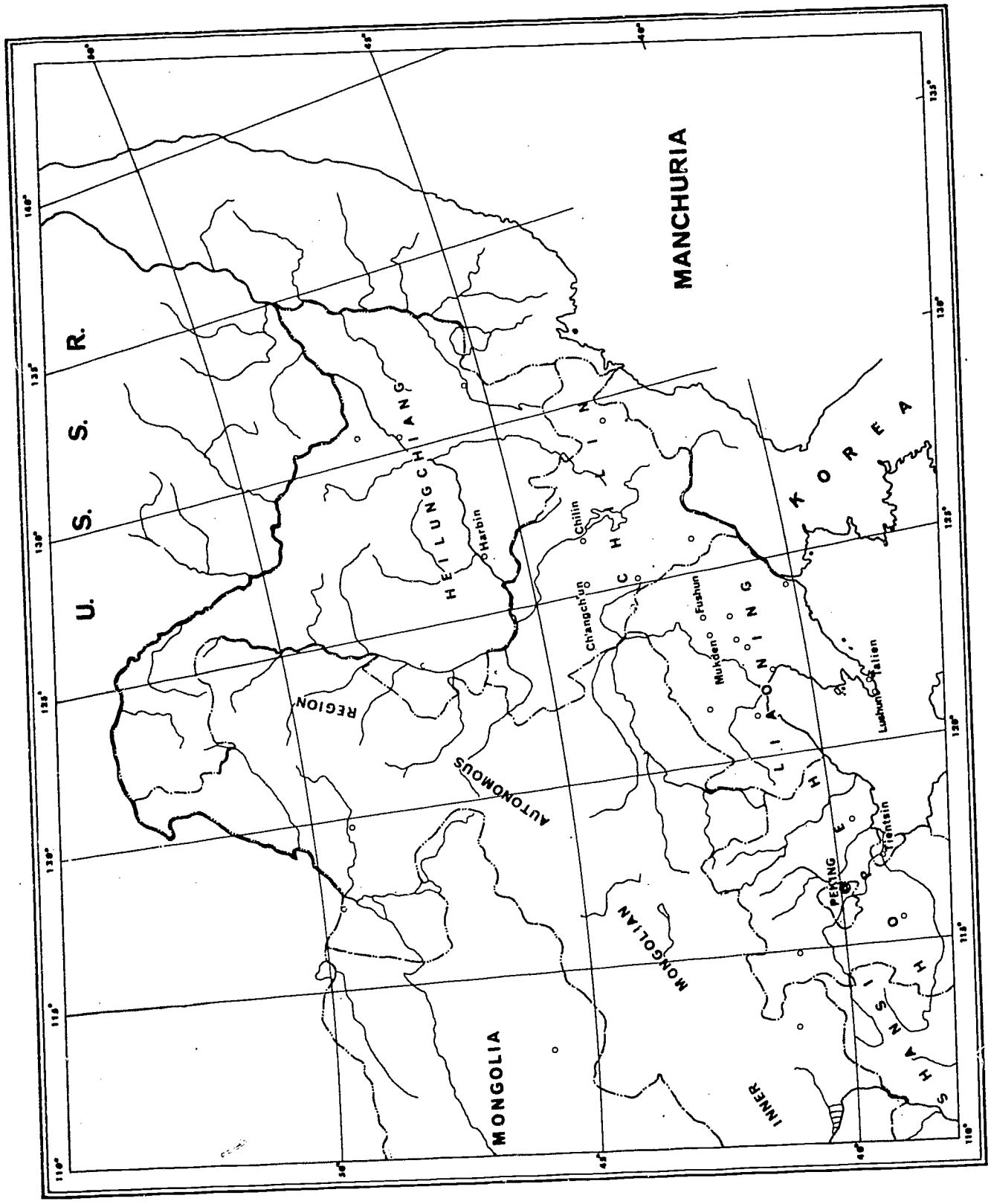
6417; Nan-Shan Chiao (Great Cape) to Ying-Ko-Tsui (S.W. Pt.) (Hai-Nan Tao); 1:70,000; Pl, Jul. 1947; .40

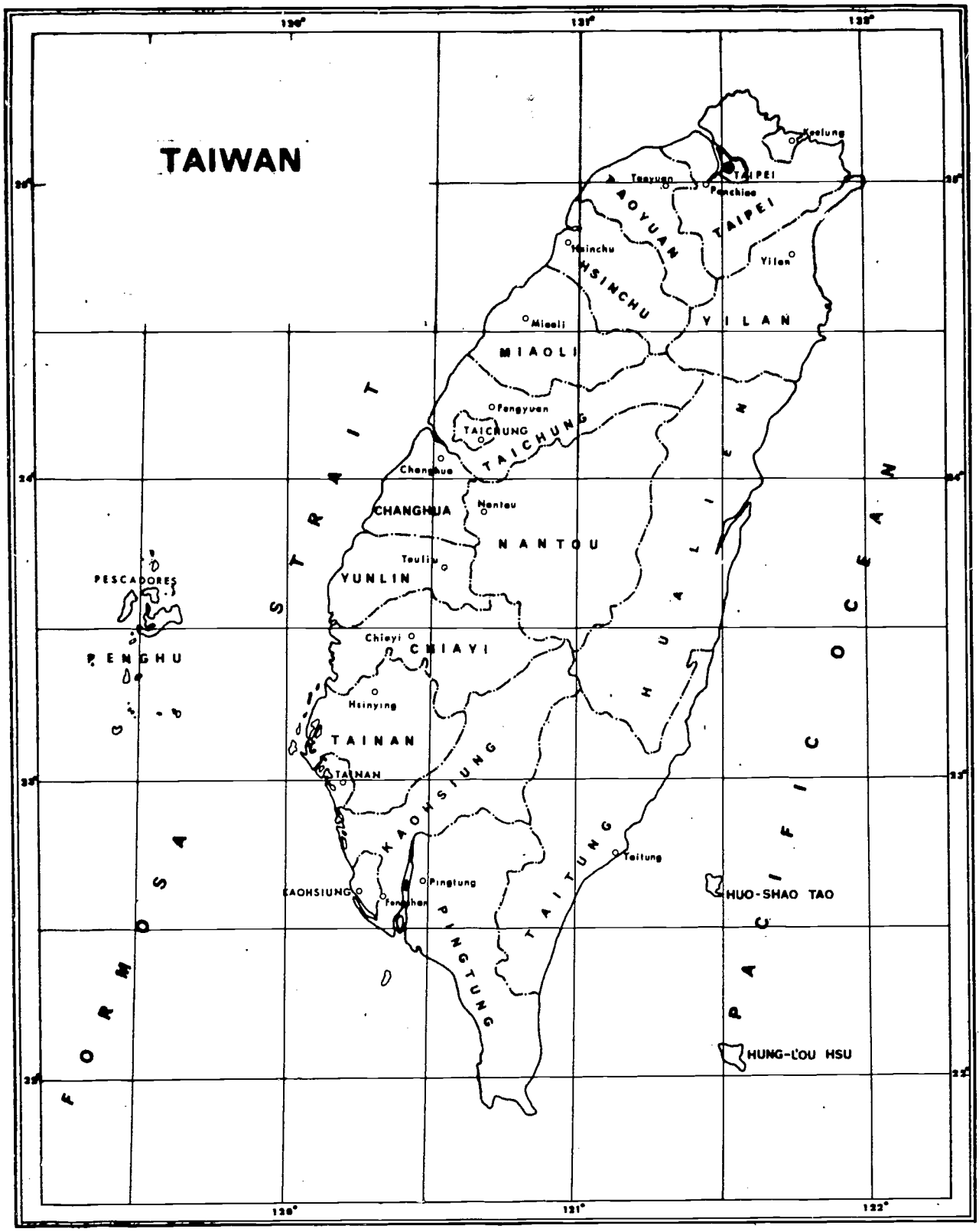
6419; Niu-Ch'i Chou to Nan-Shan Chiao (Great Cape) (Hai-Nan Tao); 1:70,000; Pl, Jul. 1947; .40

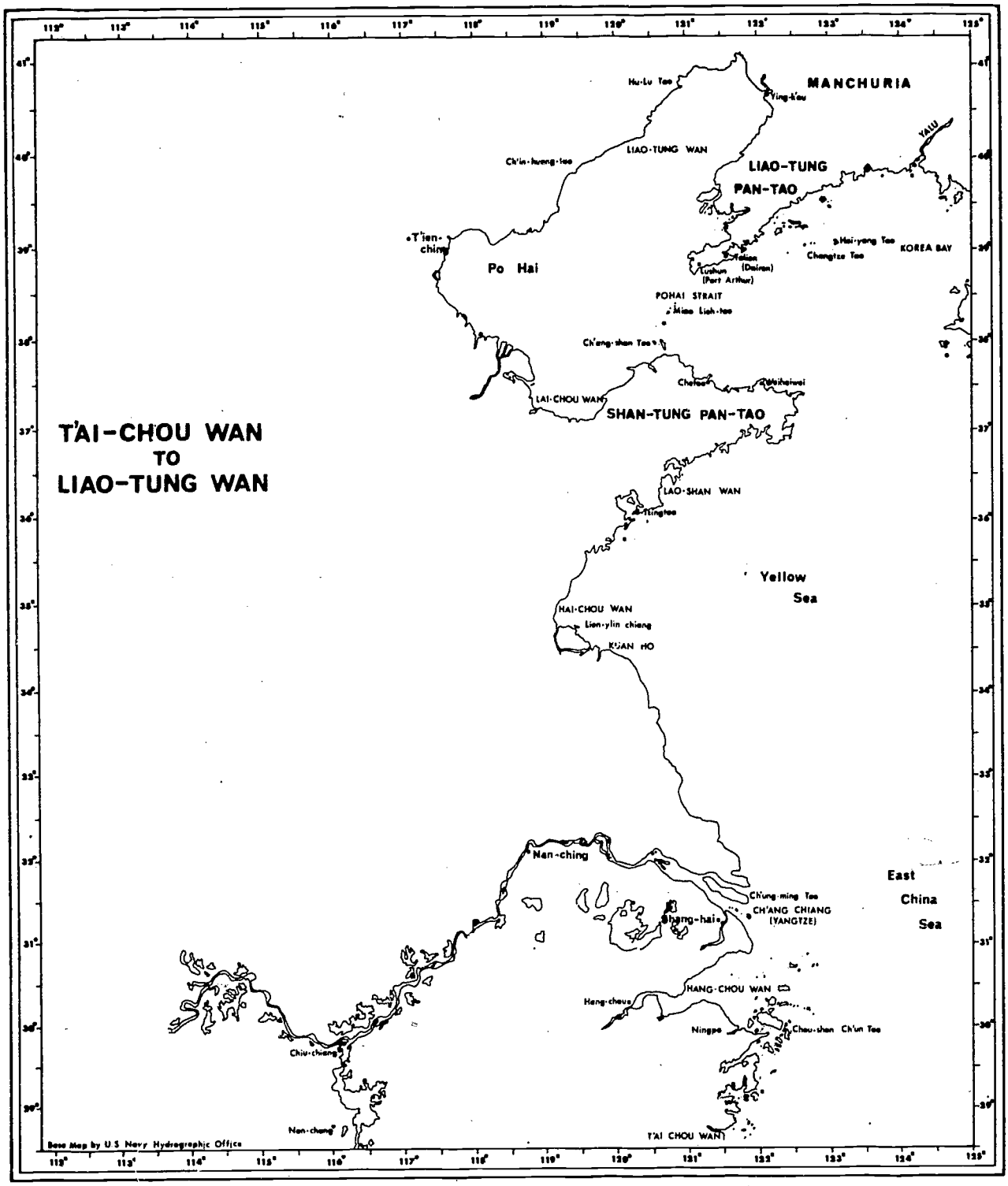
FOOTNOTES

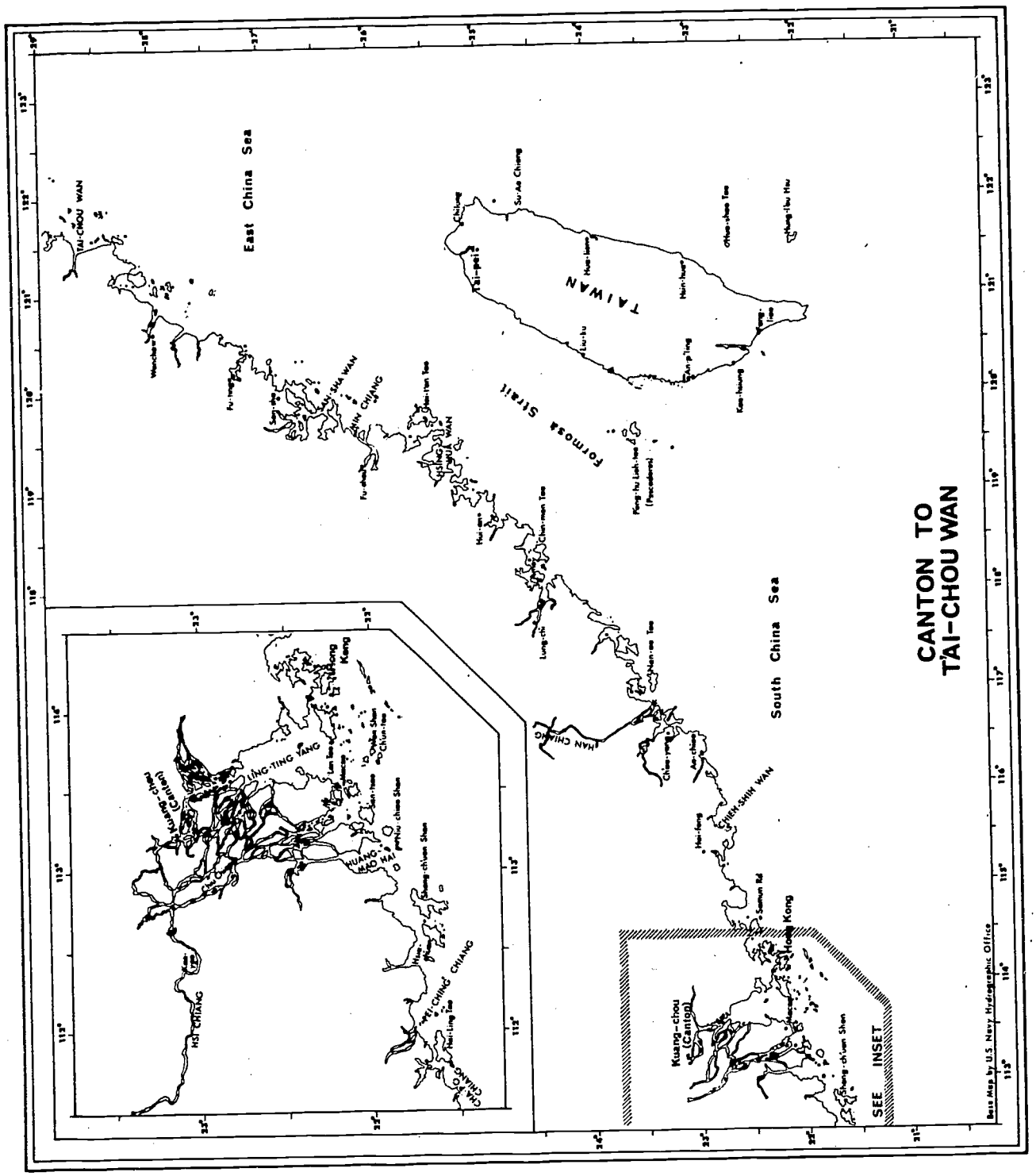
1. *Map Analysis of Manchuria* (Washington: U.S. Department of State, Office of Intelligence, Research & Analysis, R. & A. No. 3042, 1946).
2. *Map Analysis of Manchuria, op. cit.*, p. 48.
3. *Map Analysis of Manchuria, op. cit.*, p. 23.
4. *China Proper* (London: British Naval Intelligence Division, Vol. I, Geographical Handbook Series, July, 1944).
5. *Map Analysis of Manchuria, op. cit.*, p. 47.
6. *Ibid.*
7. *Notes on Japanese Maps* (Washington: Army Map Service, 1945), p. 16.
8. *Map Analysis of Manchuria, op. cit.*, p. 9.
9. *Ibid.*, p. 39.
10. *Notes on Japanese Maps, op. cit.*, p. 14.
11. *Map Analysis of Manchuria, op. cit.*, p. 5.
12. *Ibid.*, p. 6.
13. *Map Analysis of Manchuria, op. cit.*, p. 4.
14. *Notes on Japanese Maps, op. cit.*, p. 13.
15. *Ibid.*
16. *Notes on Japanese Maps, op. cit.*, p. 13.
17. *Ibid.*
18. *Notes on Japanese Maps, op. cit.*, p. 19.
19. *Map Analysis of Manchuria, op. cit.*, p. 8.
20. *Map Analysis of Manchuria, op. cit.*, p. 19.
21. *Map Analysis of Manchuria, op. cit.*, p. 20.

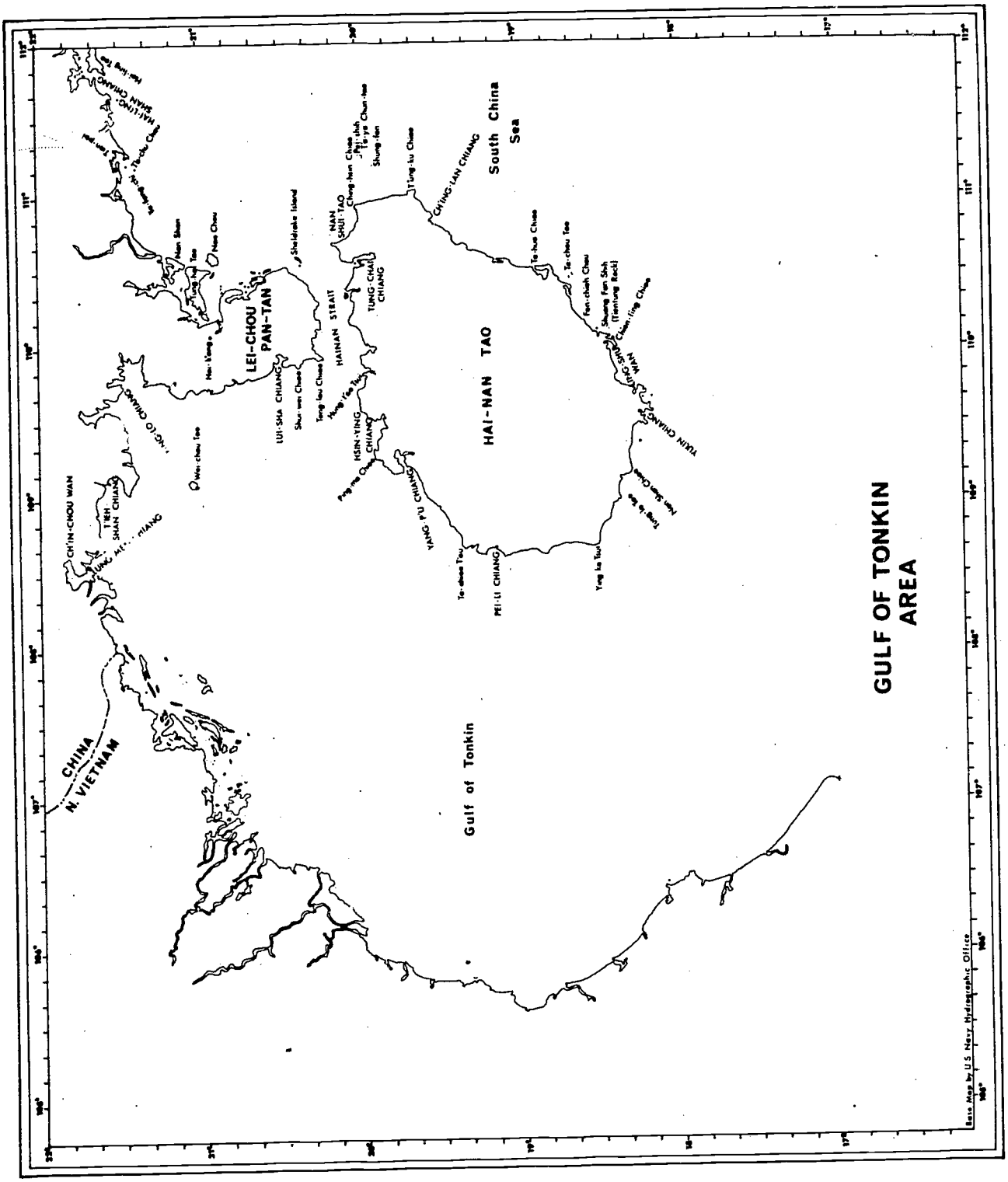

CHINA
SCALE
CONIC PROJECTION
Base Map by Henry M. Leppard, University of Chicago, 1963
U.S.S.R.
MONGOLIA
KOREA
Sea of Japan
Yellow Sea
East China Sea
South China Sea
TAIWAN
Taipei
HEILUNGKIANG
Harbin
KIRIN
Changchun
LIAONING
Mukden
Fushun
HOPEH
Peking
Tientsin
SHANTUNG
Tsingtao
KIANGSU
Nanking
Shanghai
ANHWEI
CHEKIANG
FUKIEN
KIANGSI
HUPEH
Wuhan
HUNAN
KWANGTUNG
Canton
Victoria
HAINAM
SHANSI
SHENSI
HONAN
KWEICHOW
Kweiyang
KWANGSI CHUANG A.R.
YUNNAN
Kunming
Chungking
Chengtu
SZECHWAN
INNER MONGOLIAN AUTONOMOUS REGION
NINGSIA HUI A.R.
SINKIANG UIGHUR AUTONOMOUS REGION
TIBET
BURMA
THAILAND
LAOS
N. VIETNAM
NEPAL
BHUTAN

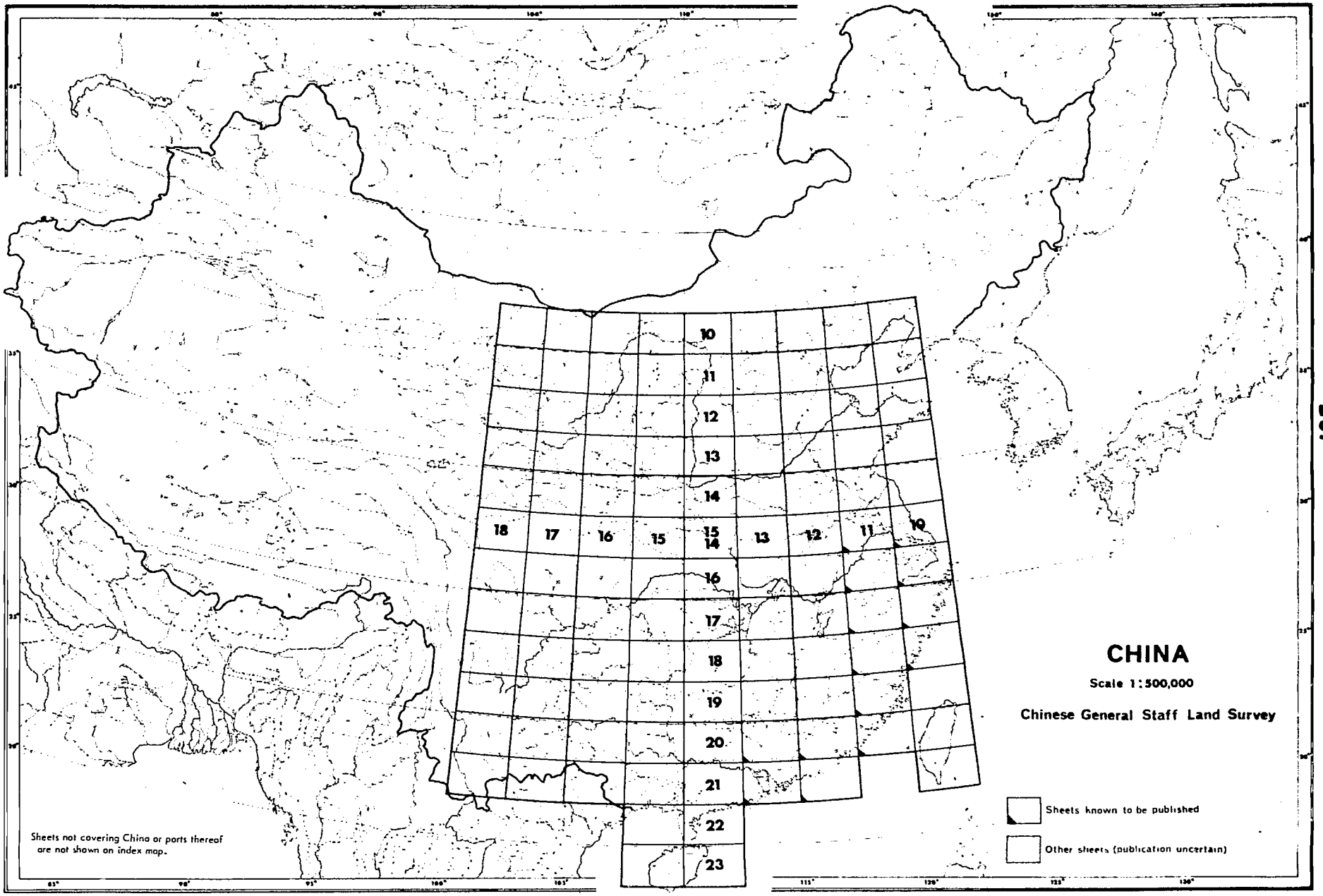

MANCHURIA
U. S. S. R.
KOREA
HEILUNGCHIANG
Harbin
Chilin
Changch'un
Mukden
Fushun
Lushun
Talien
Tientsin
PEKING
AUTONOMOUS REGION
MONGOLIAN
INNER
MONGOLIA
SHANSI


TAIWAN
120°
121°
122°
25°
24°
23°
22°
Keelung
TAIPEI
Taoyuan
Panchiao
TAOYUAN
HSINCHU
TAIPEI
Hsinchu
Yilan
YILAN
Miaoli
MIAOLI
Fengyuan
TAICHUNG
TAICHUNG
Changhua
CHANGHUA
Nantou
NANTOU
Touliu
YUNLIN
PESCADORES
CHIAYI
Chiayi
PENGHU
Hsinying
TAINAN
TAINAN
KAOHSIUNG
Taitung
Pingtung
KAOHSIUNG
Fengshan
TAITUNG
PINGTUNG
HUO-SHAO TAO
HUNG-LOU HSU
STRAIT
FORMOSA
PACIFIC OCEAN

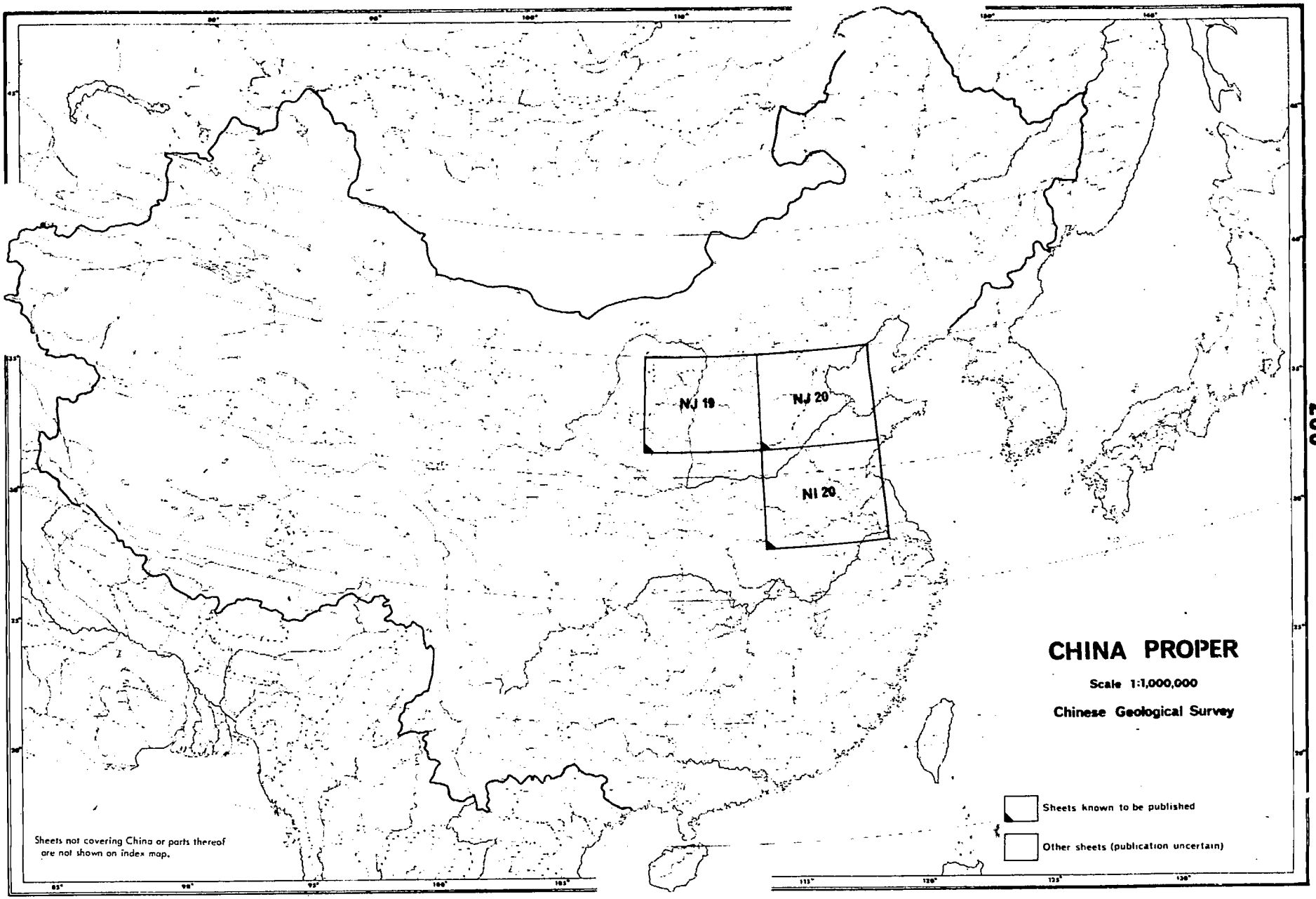

T'AI-CHOU WAN
TO
LIAO-TUNG WAN
MANCHURIA
Hu-Lu Tao
Ying-k'ou
YALU
LIAO-TUNG WAN
Ch'in-huang-tao
LIAO-TUNG
PAN-TAO
T'ien-
ching
Po Hai
Hai-yang Tao
KOREA BAY
Changtzu Tao
Lushun
(Dairen)
(Port Arthur)
POHAI STRAIT
Miao Lieh-tao
Ch'ang-shan Tao
Chefoo
Weihaiwei
LAI-CHOU WAN
SHAN-TUNG PAN-TAO
LAO-SHAN WAN
Tsingtao
Yellow
Sea
HAI-CHOU WAN
Lien-yün chiang
KIANG HO
Nan-ching
East
China
Sea
Ch'ung-ming Tao
CH'ANG CHIANG
(YANGTZE)
Shang-hai
HANG-CHOU WAN
Hang-chou
Ningpo
Chou-shan Ch'un Tao
Chiu-chiang
Nan-chang
T'AI CHOU WAN
Base Map by U S Navy Hydrographic Office

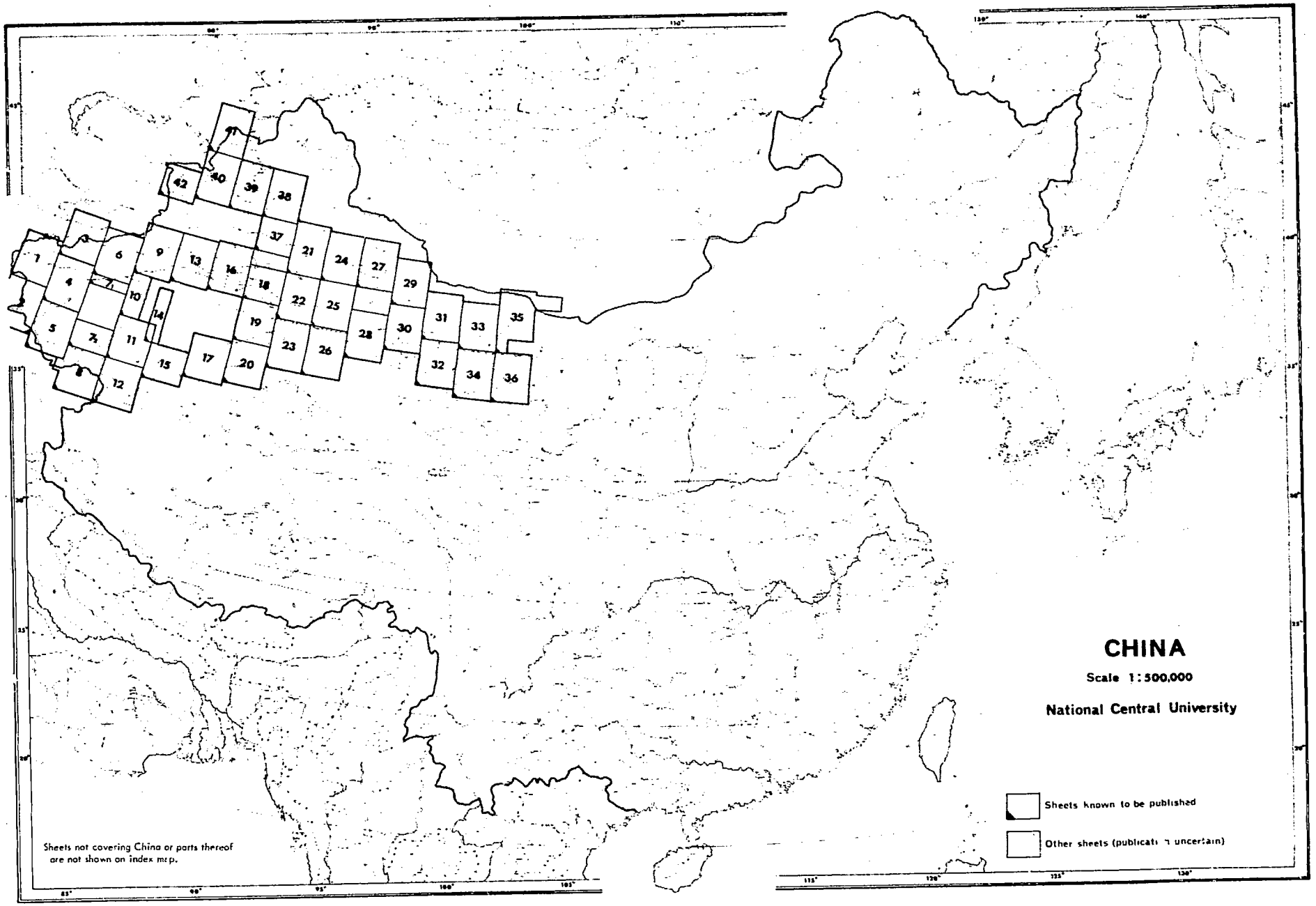

CANTON TO
T'AI-CHOU WAN
East China Sea
South China Sea
Formosa Strait
TAIWAN
Hong Kong
Kuang-chou (Canton)
SEE INSET
Base Map by U.S. Navy Hydrographic Office


GULF OF TONKIN
AREA
HAI-NAN TAO
LEI-CHOU
PAN-TAN
South China
Sea
Gulf of Tonkin
CHINA
N. VIETNAM
HAINAN STRAIT
Base Map by U.S. Navy Hydrographic Office



Base Map by Henry M. Leopard, University of Chicago 1963


NJ 19
NJ 20
NI 20
CHINA PROPER
Scale 1:1,000,000
Chinese Geological Survey
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering China or parts thereof are not shown on index map.


CHINA
Scale 1:500,000
National Central University
Sheets known to be published
Other sheets (publicati n uncertain)
Sheets not covering China or parts thereof are not shown on index map.
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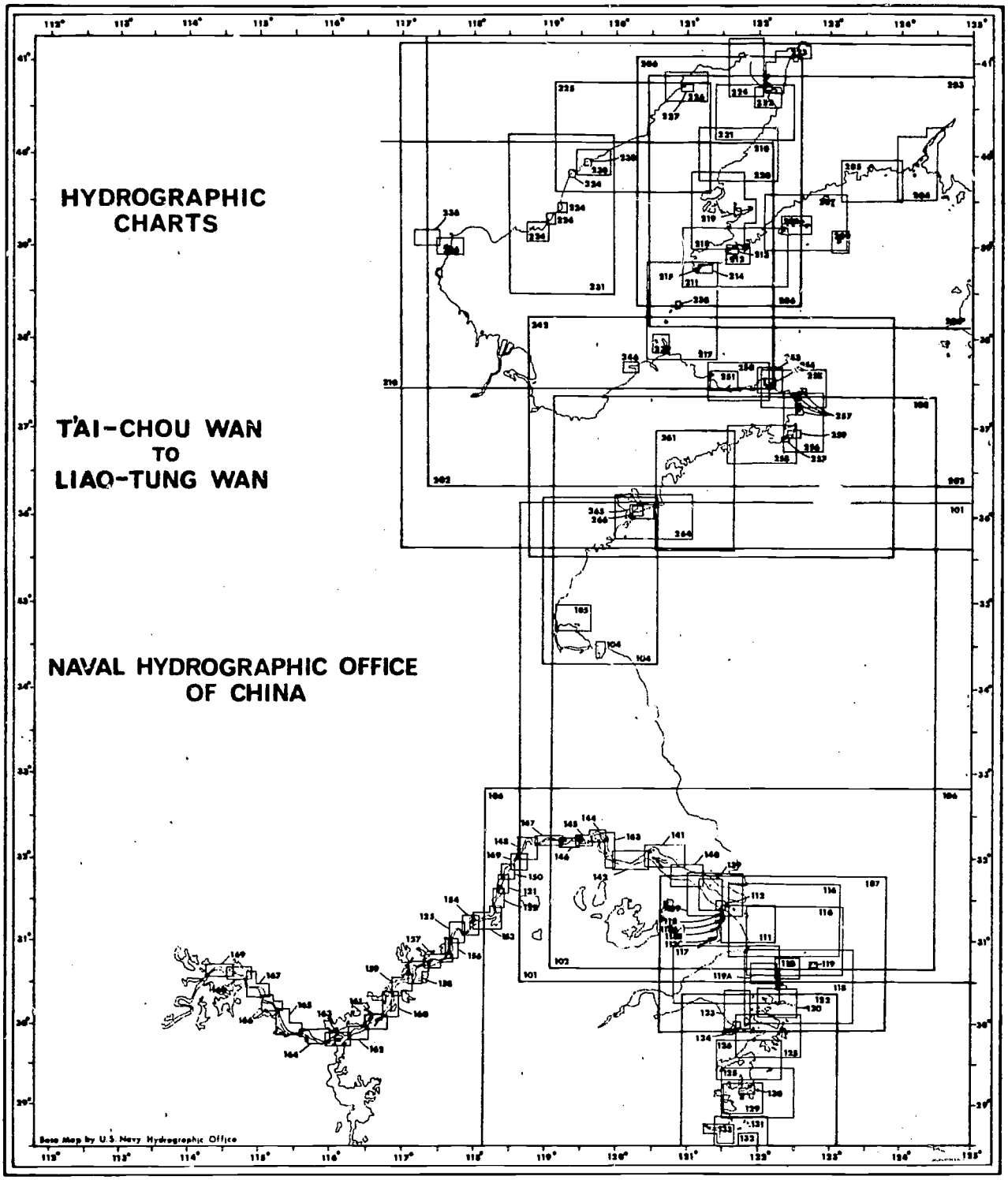
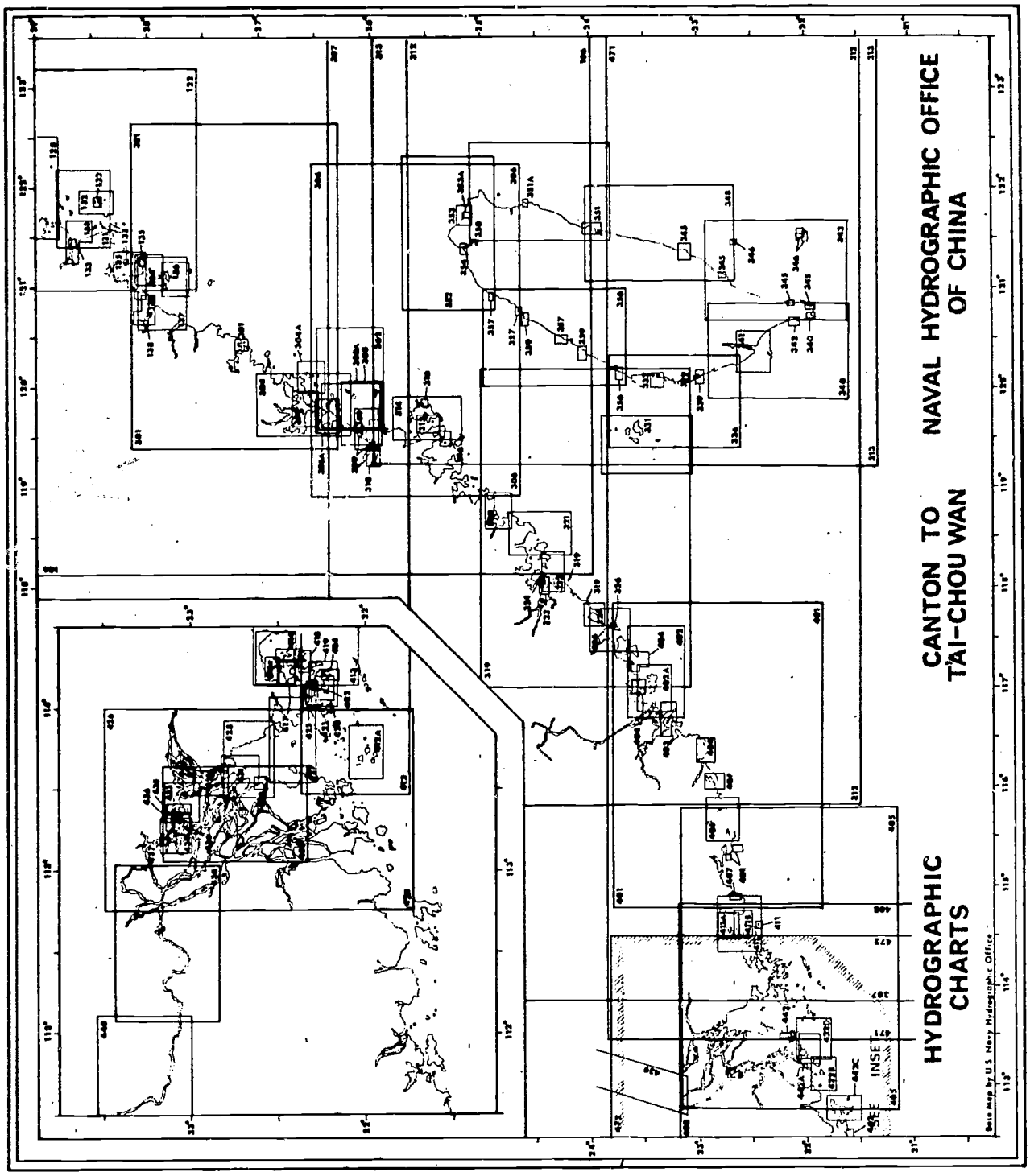
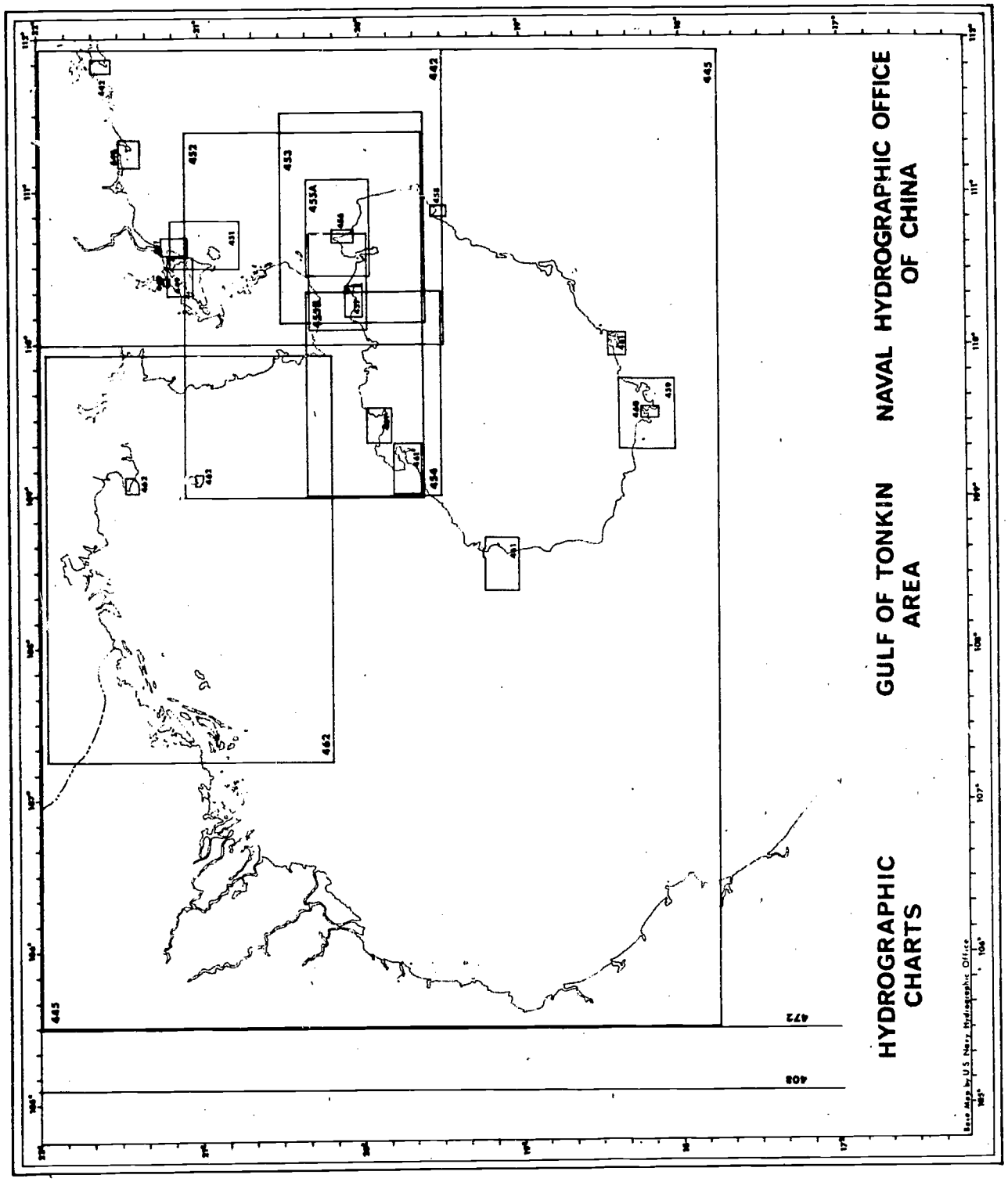
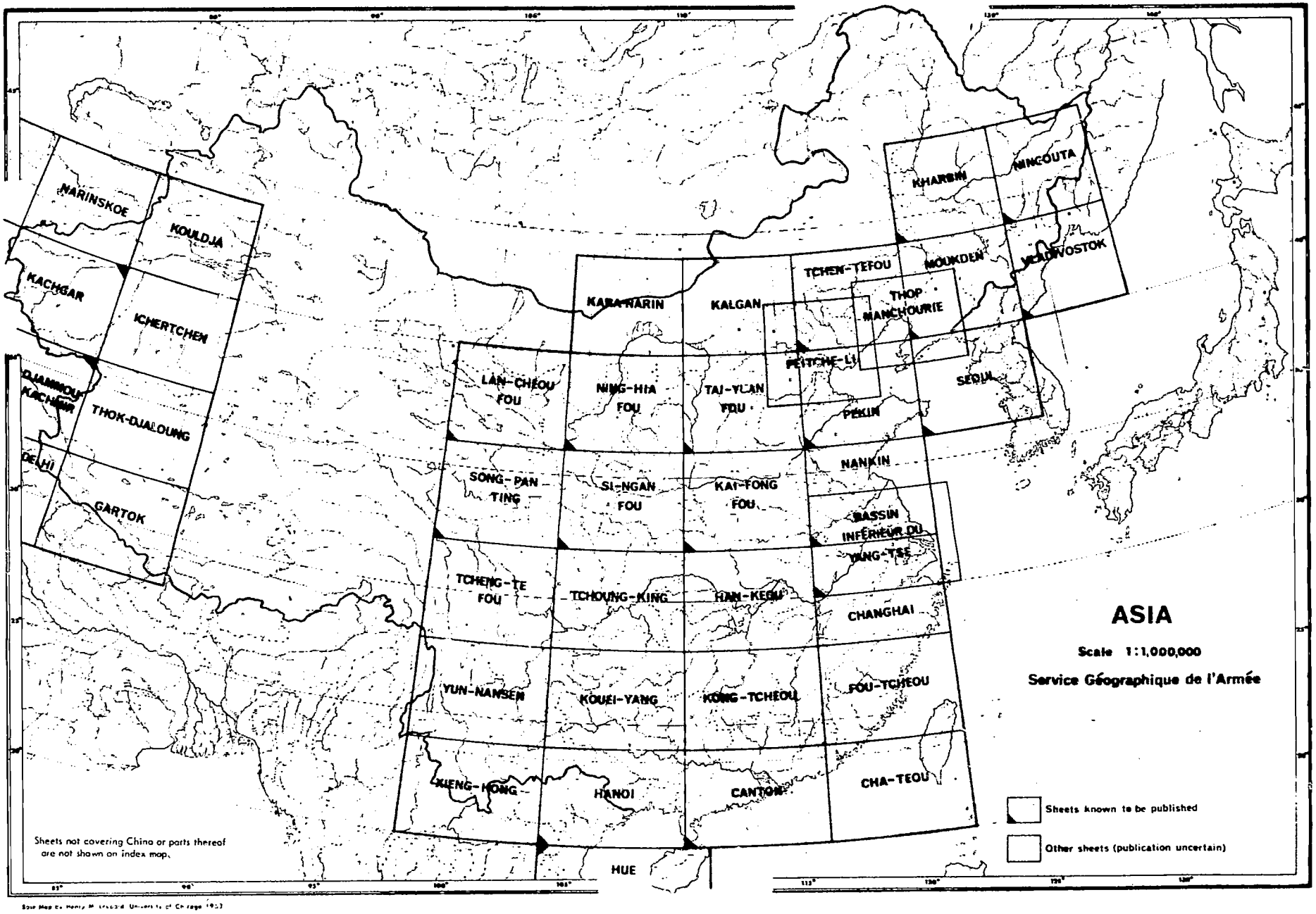
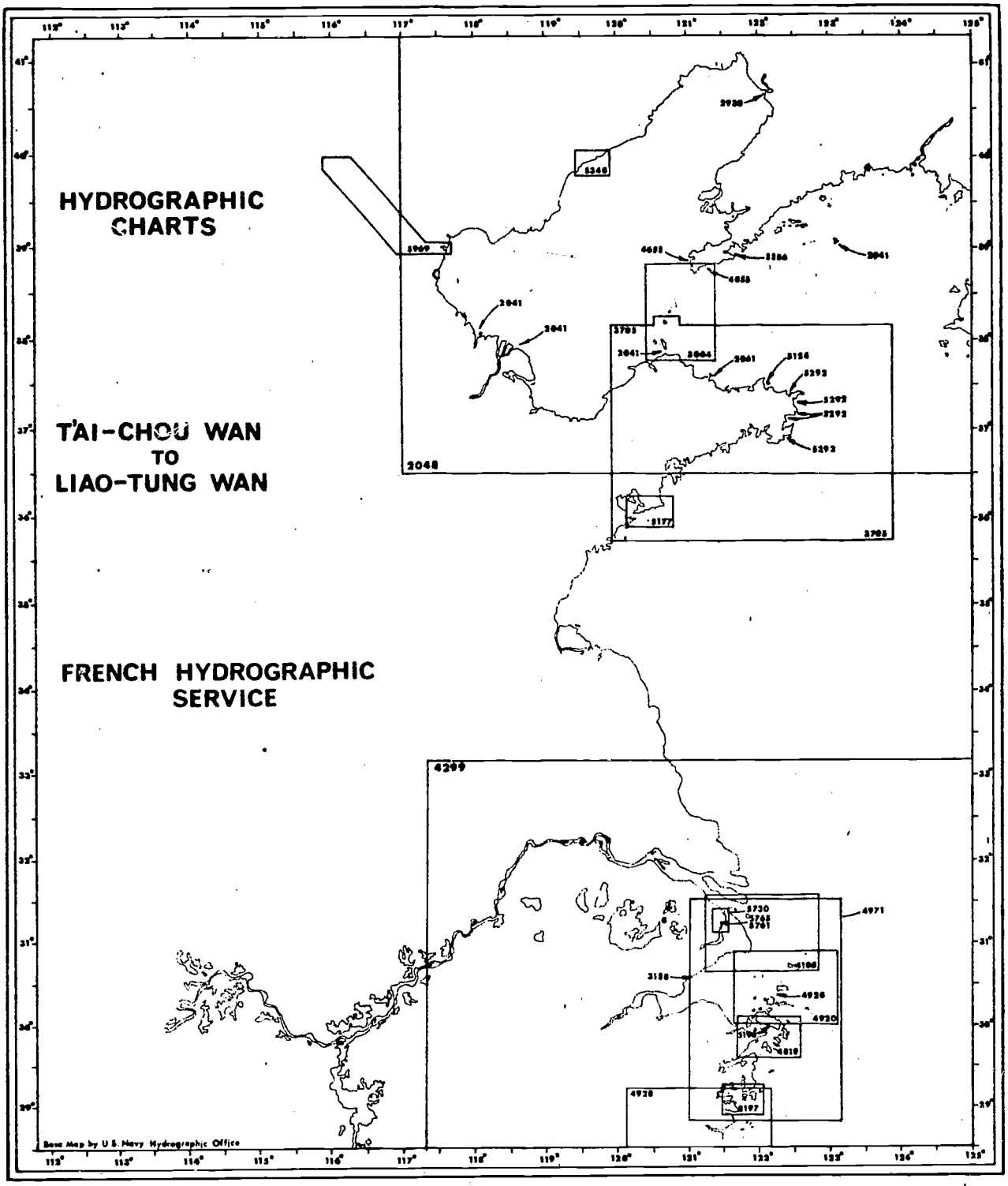
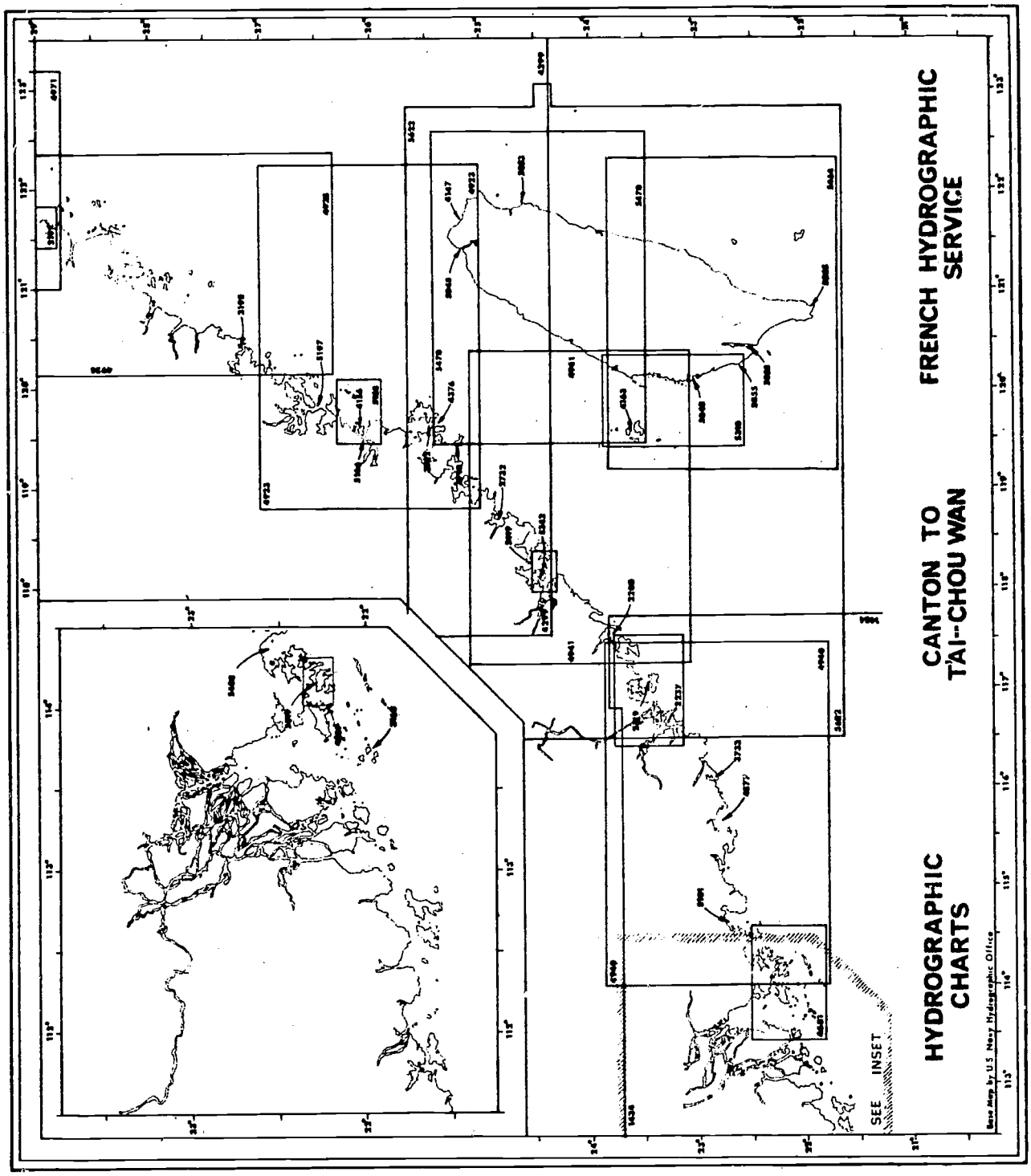

HYDROGRAPHIC
CHARTS
T'AI-CHOU WAN
TO
LIAO-TUNG WAN
NAVAL HYDROGRAPHIC OFFICE
OF CHINA
Base Map by U.S. Navy Hydrographic Office

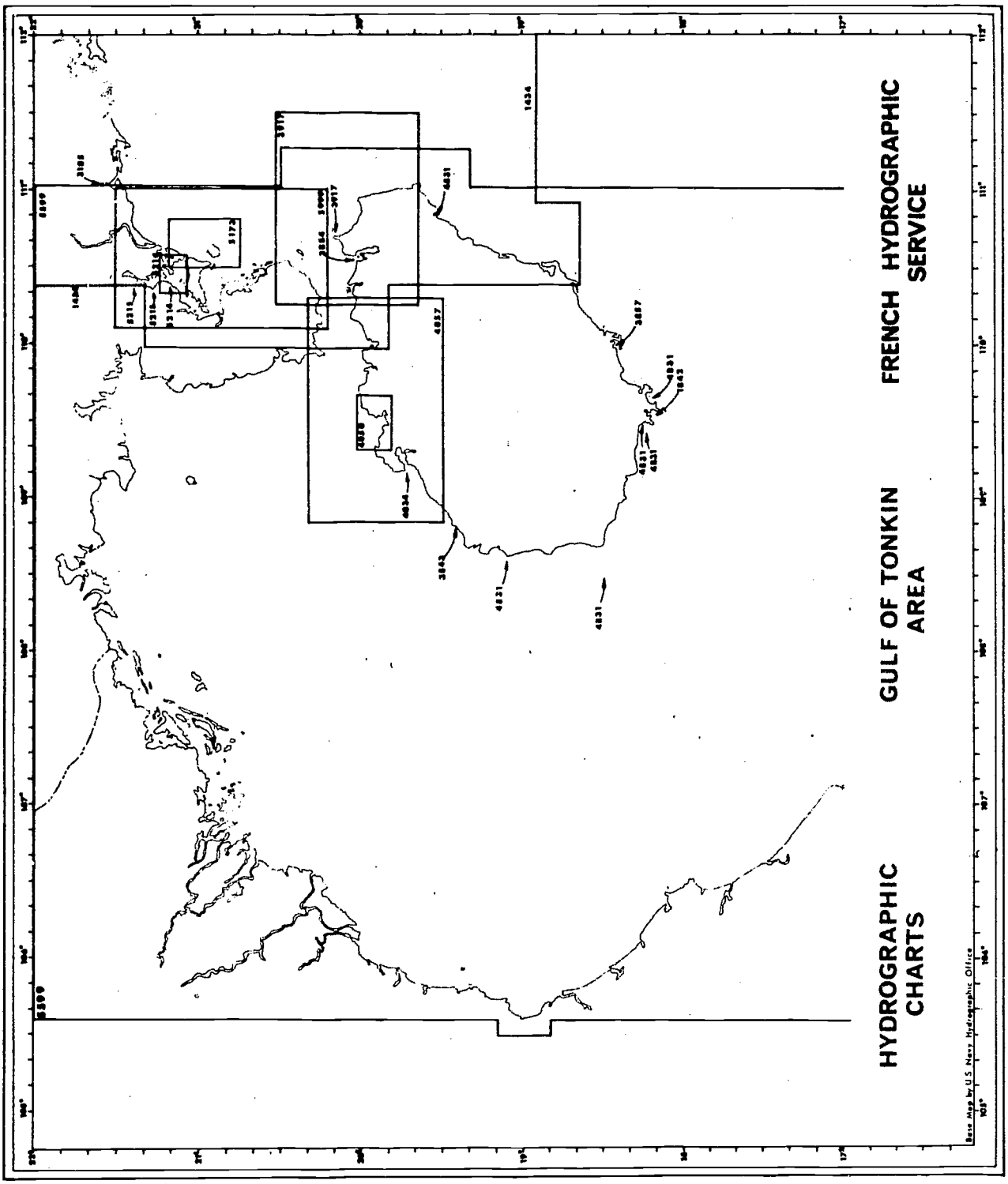

NAVAL HYDROGRAPHIC OFFICE
OF CHINA
CANTON TO
T'AI-CHOU WAN
HYDROGRAPHIC
CHARTS
INSET

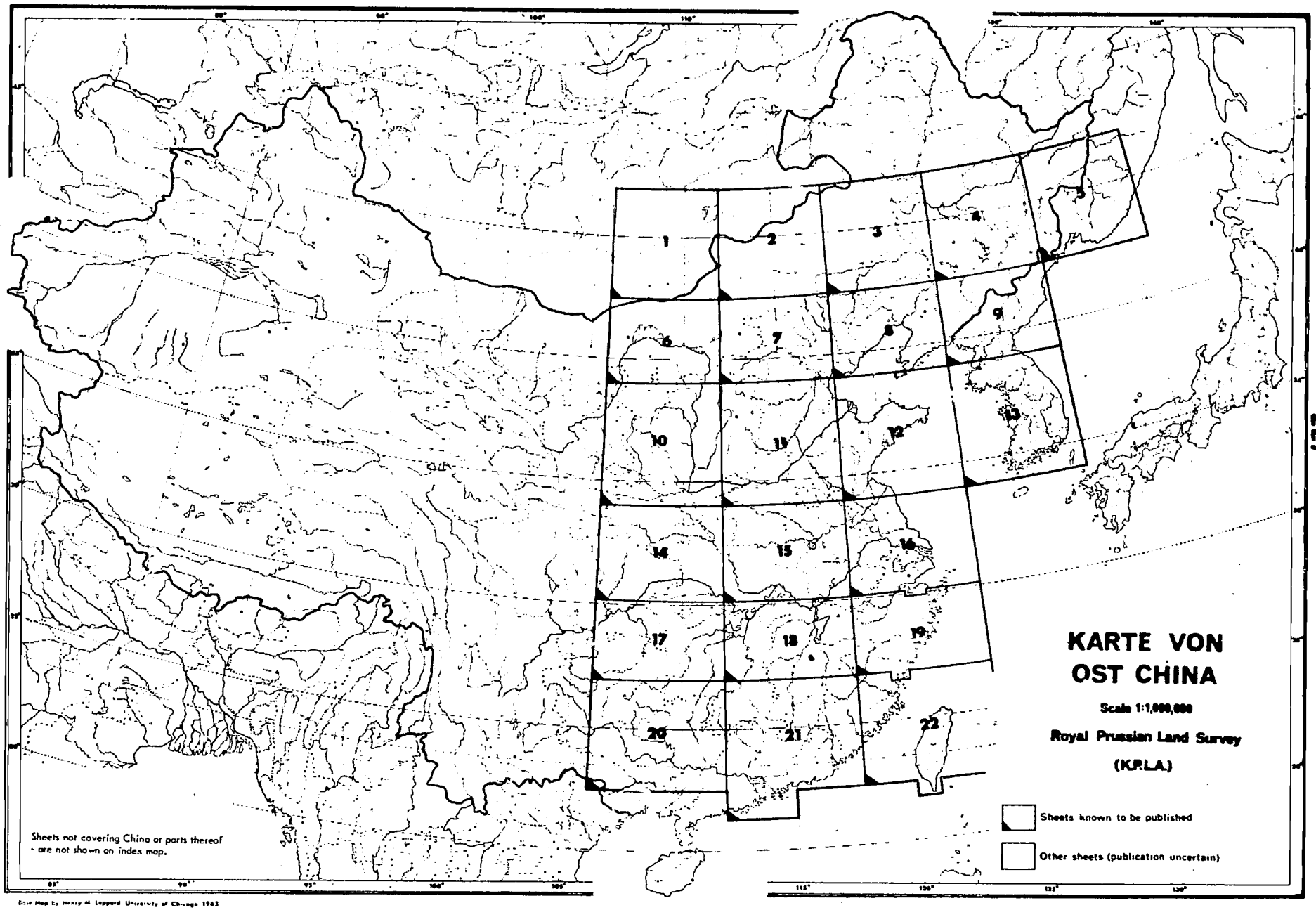

HYDROGRAPHIC CHARTS
GULF OF TONKIN AREA
NAVAL HYDROGRAPHIC OFFICE OF CHINA
Base Map by U.S. Navy Hydrographic Office


NARINSKOE
KOULDJA
KACHGAR
ICHERTCHEN
DJAMMOU KACHMIR
THOK-DJALOUNG
DELHI
GARTOK
KARA-NARIN
KALGAN
TCHEN-TEFOU
MOUKDEN
KHARBIN
MINGOUTA
VLADIVOSTOK
THOP MANCHOURIE
PEITCHE-LI
SEOUL
PEKIN
LAN-CHEOU FOU
NING-HIA FOU
TAI-YUAN FOU
NANKIN
SONG-PAN TING
SI-NGAN FOU
KAI-FONG FOU
BASSIN INFERIEUR DU YANG-TSE
TCHENG-TE FOU
TCHOUNG-KING
HAN-KEOU
CHANGHAI
YUN-NANSEN
KOUEI-YANG
KONG-TCHEOU
FOU-TCHEOU
KIENG-KONG
HANOI
CANTON
CHA-TEOU
HUE
ASIA
Scale 1:1,000,000
Service Géographique de l'Armée
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering China or parts thereof are not shown on index map.

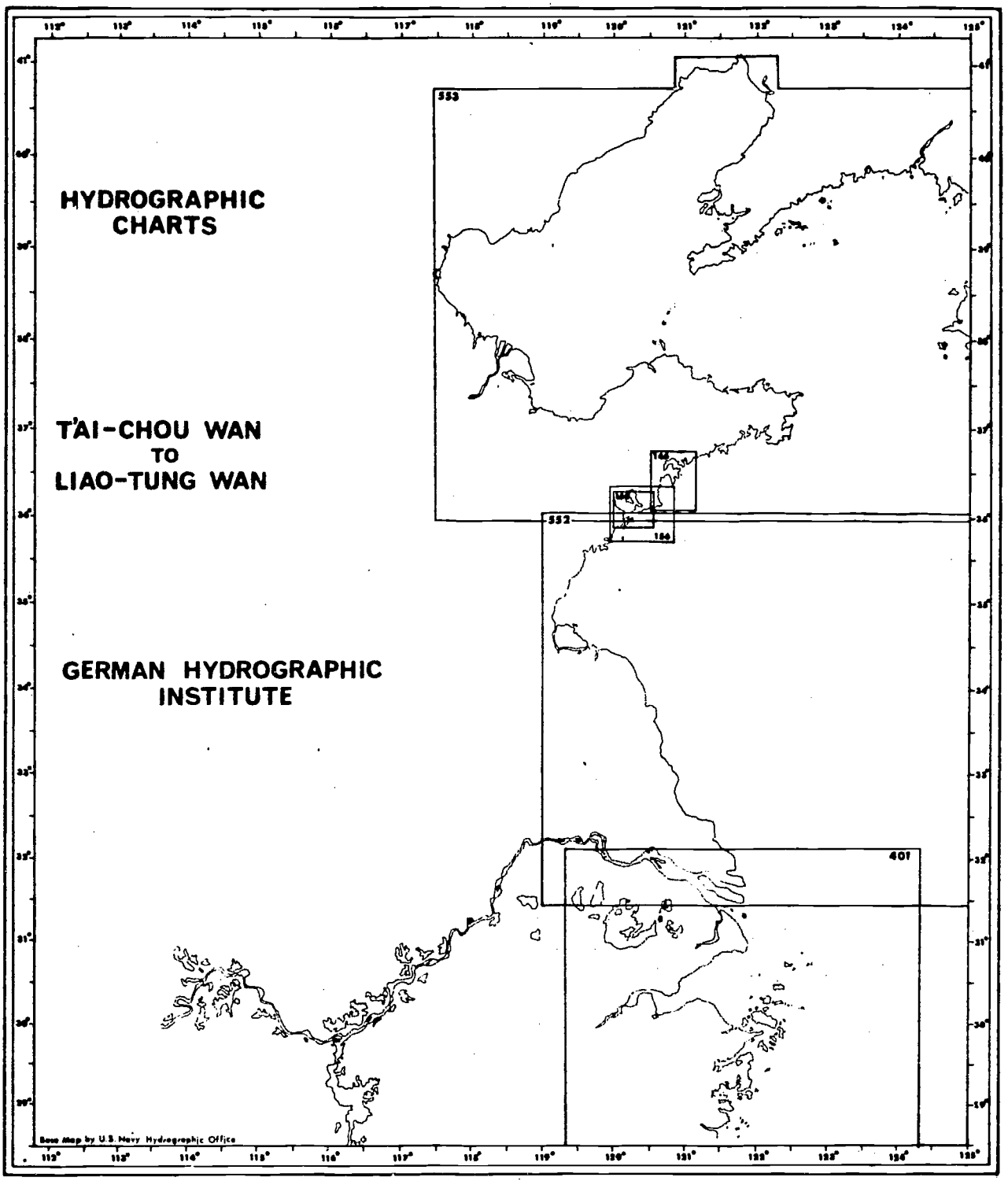

HYDROGRAPHIC CHARTS
TAI-CHOU WAN TO LIAO-TUNG WAN
FRENCH HYDROGRAPHIC SERVICE
Base Map by U.S. Navy Hydrographic Office

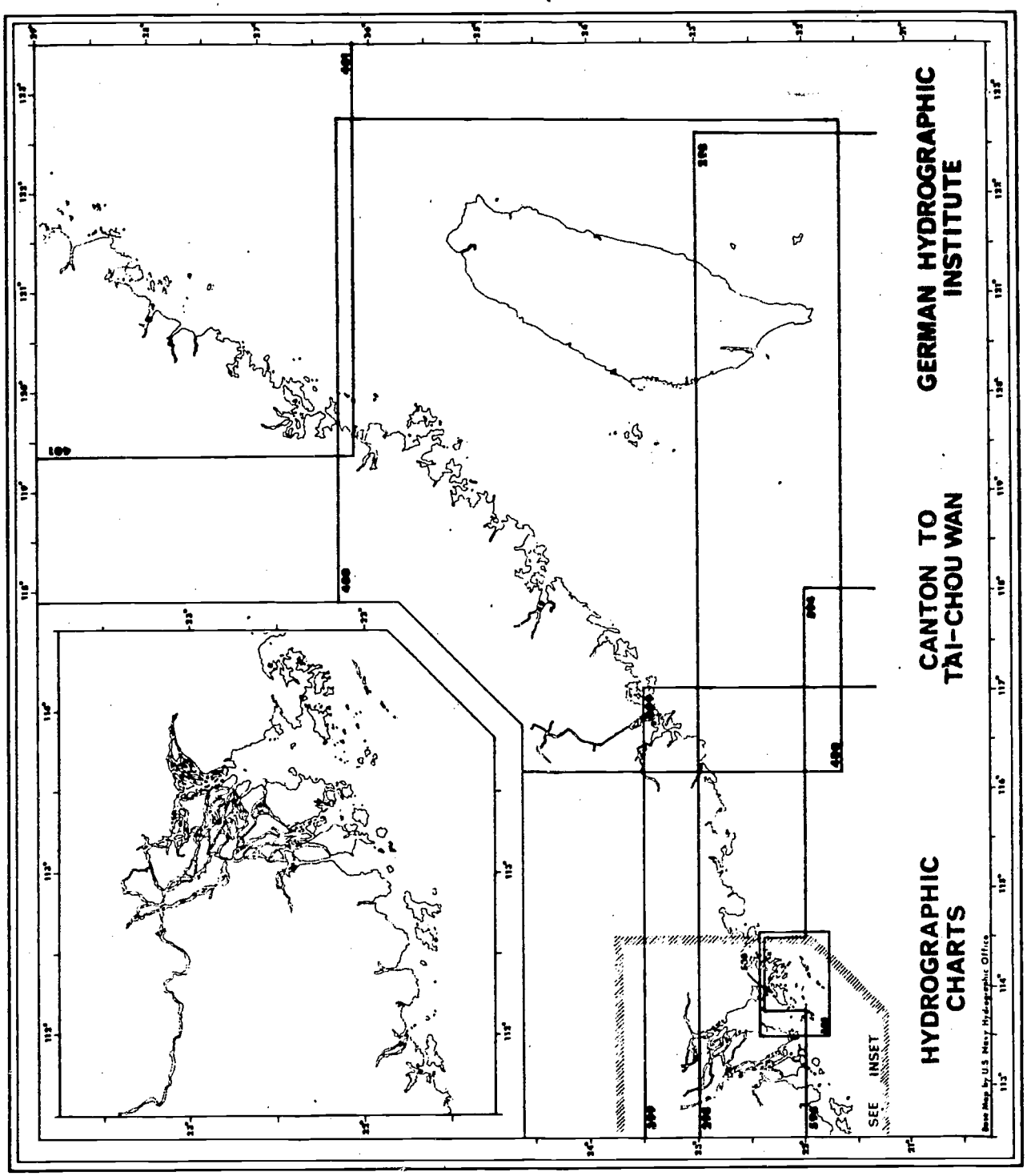

FRENCH HYDROGRAPHIC SERVICE
CANTON TO T'AI--CHOU WAN
HYDROGRAPHIC CHARTS
SEE INSET

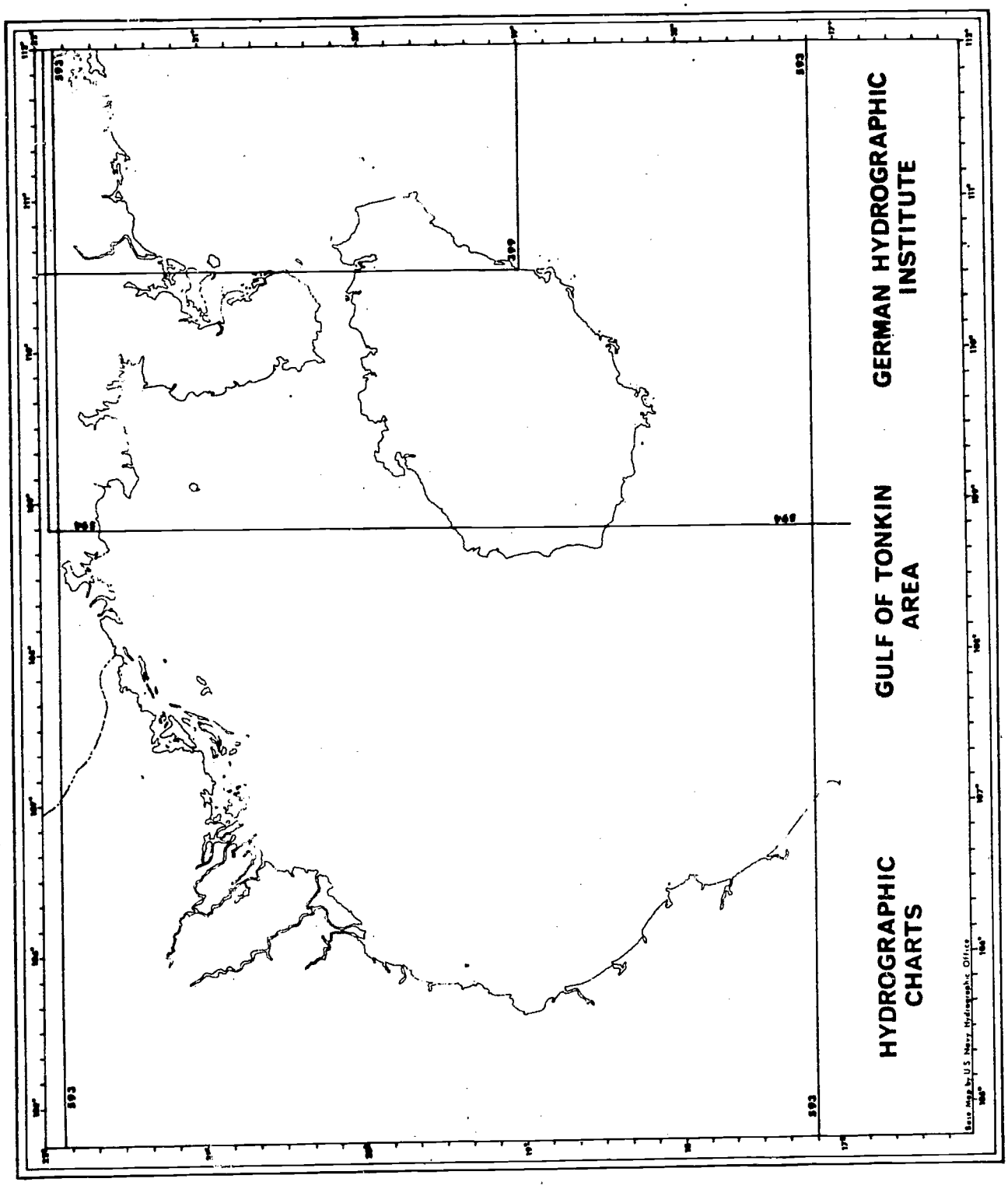

FRENCH HYDROGRAPHIC SERVICE
GULF OF TONKIN AREA
HYDROGRAPHIC CHARTS

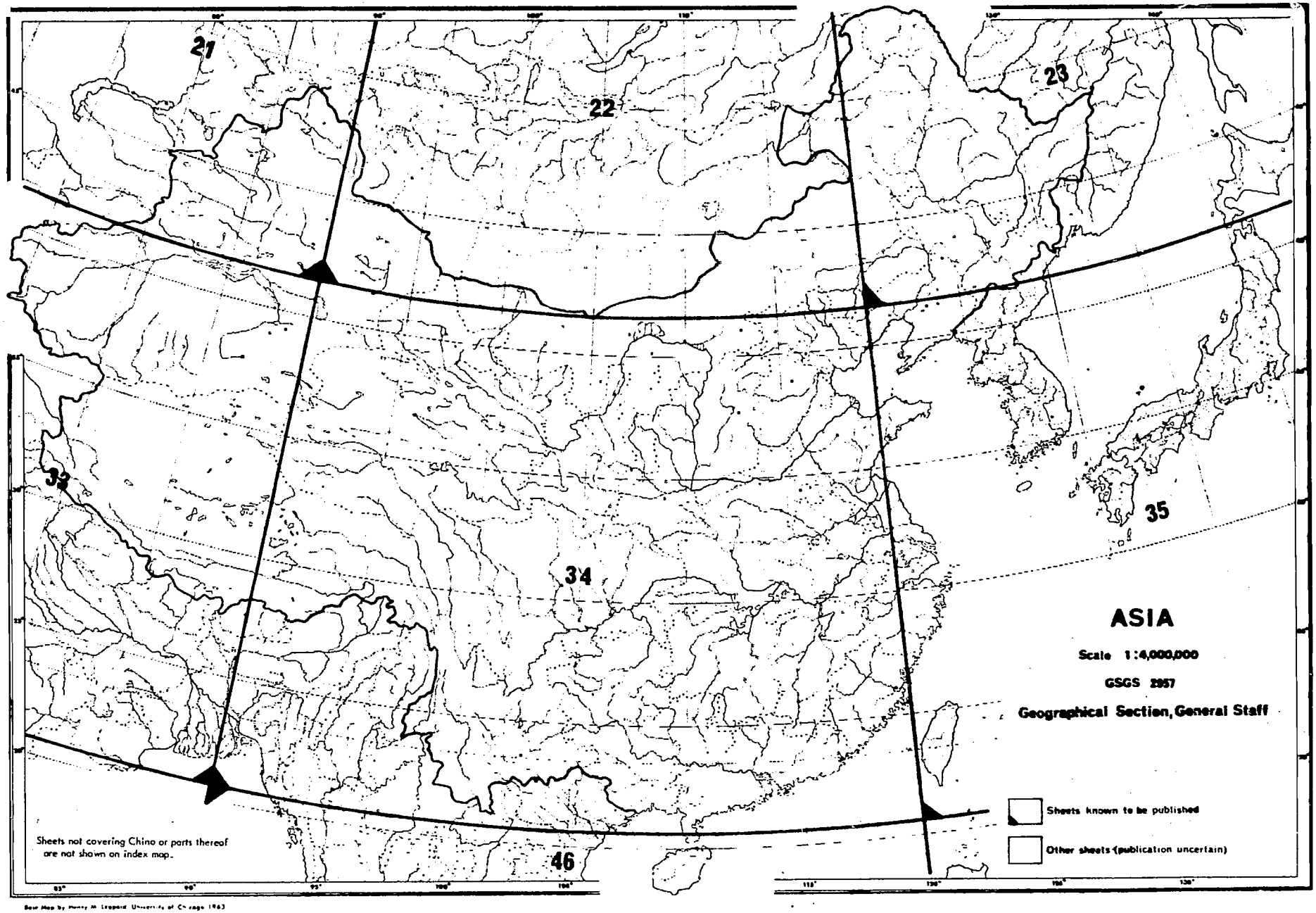


Base Map by Henry M. Leppard University of Chicago 1983


HYDROGRAPHIC
CHARTS
T'AI-CHOU WAN
TO
LIAO-TUNG WAN
GERMAN HYDROGRAPHIC
INSTITUTE
553
552
401
Base Map by U.S. Navy Hydrographic Office


GERMAN HYDROGRAPHIC INSTITUTE
CANTON TO TAI-CHOU WAN
HYDROGRAPHIC CHARTS
SEE INSET


HYDROGRAPHIC CHARTS
GULF OF TONKIN AREA
GERMAN HYDROGRAPHIC INSTITUTE
Base Map by U.S. Navy Hydrographic Office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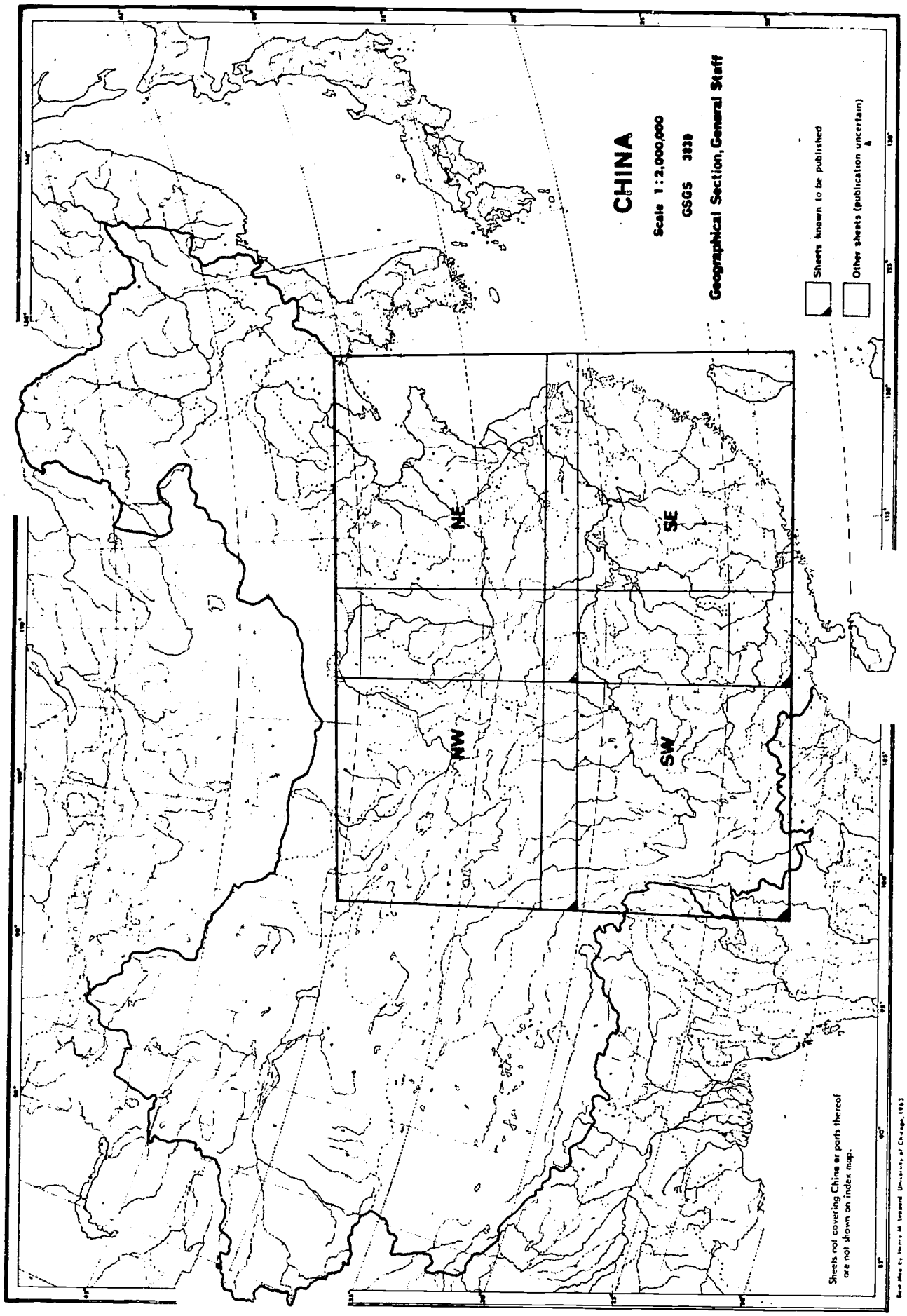
ASIA
Scale 1:4,000,000
GSGS 2957
Geographical Section, General Staff
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering Chino or parts thereof are not shown on index map.


CHINA
Scale 1:2,000,000
GSGS 3838
Geographical Section, General Staff
Sheets known to be published
Other sheets (publication uncertain)
NE
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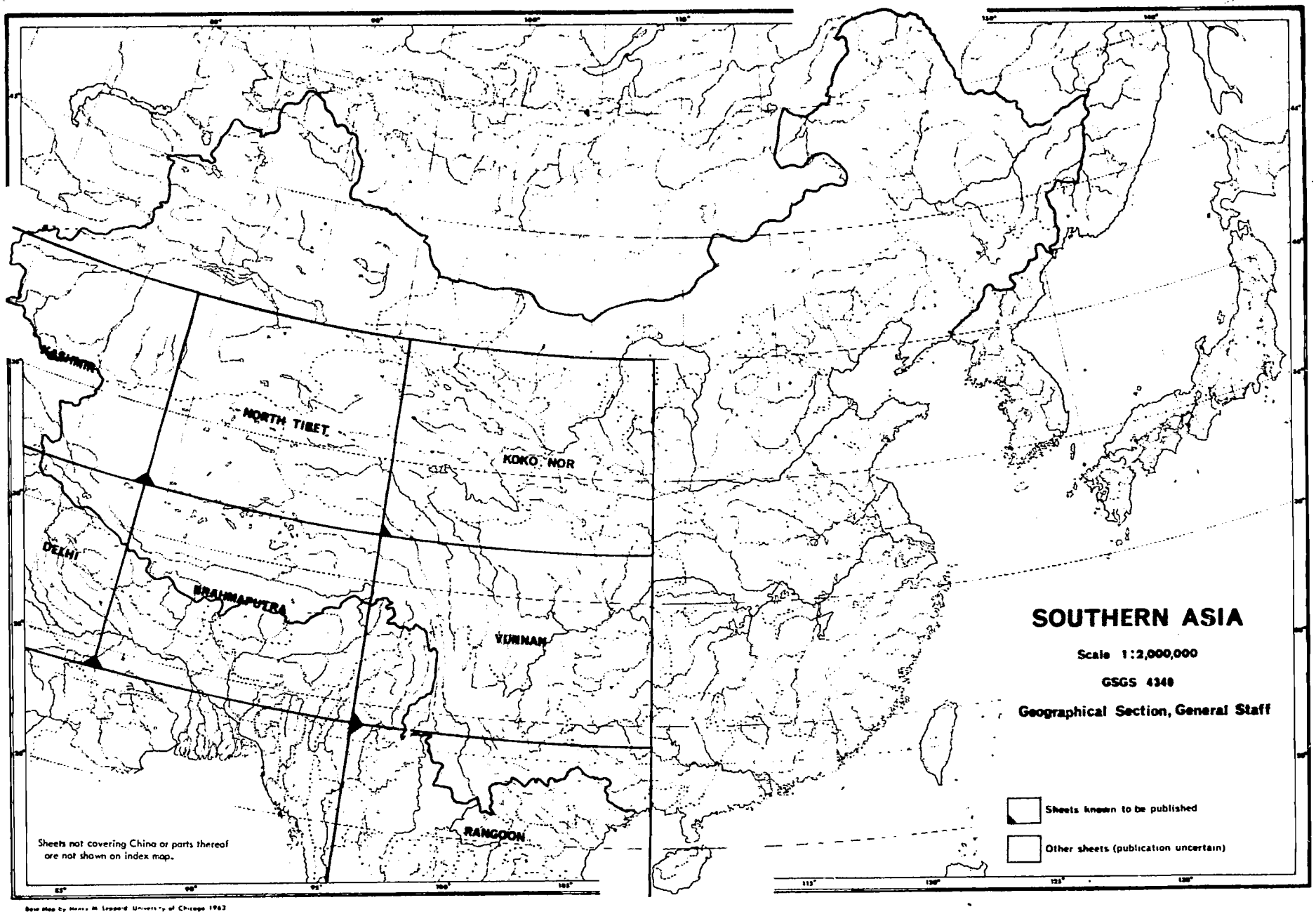
Sheets not covering China or parts thereof are not shown on index map.


NORTH TIBET
KOKO NOR
DELHI
BRAHMAPUTRA
YUNNAN
RANGOON
SOUTHERN ASIA
Scale 1:2,000,000
GSGS 4348
Geographical Section, General Staff
Sheets known to be published
Other sheets (publication uncertain)
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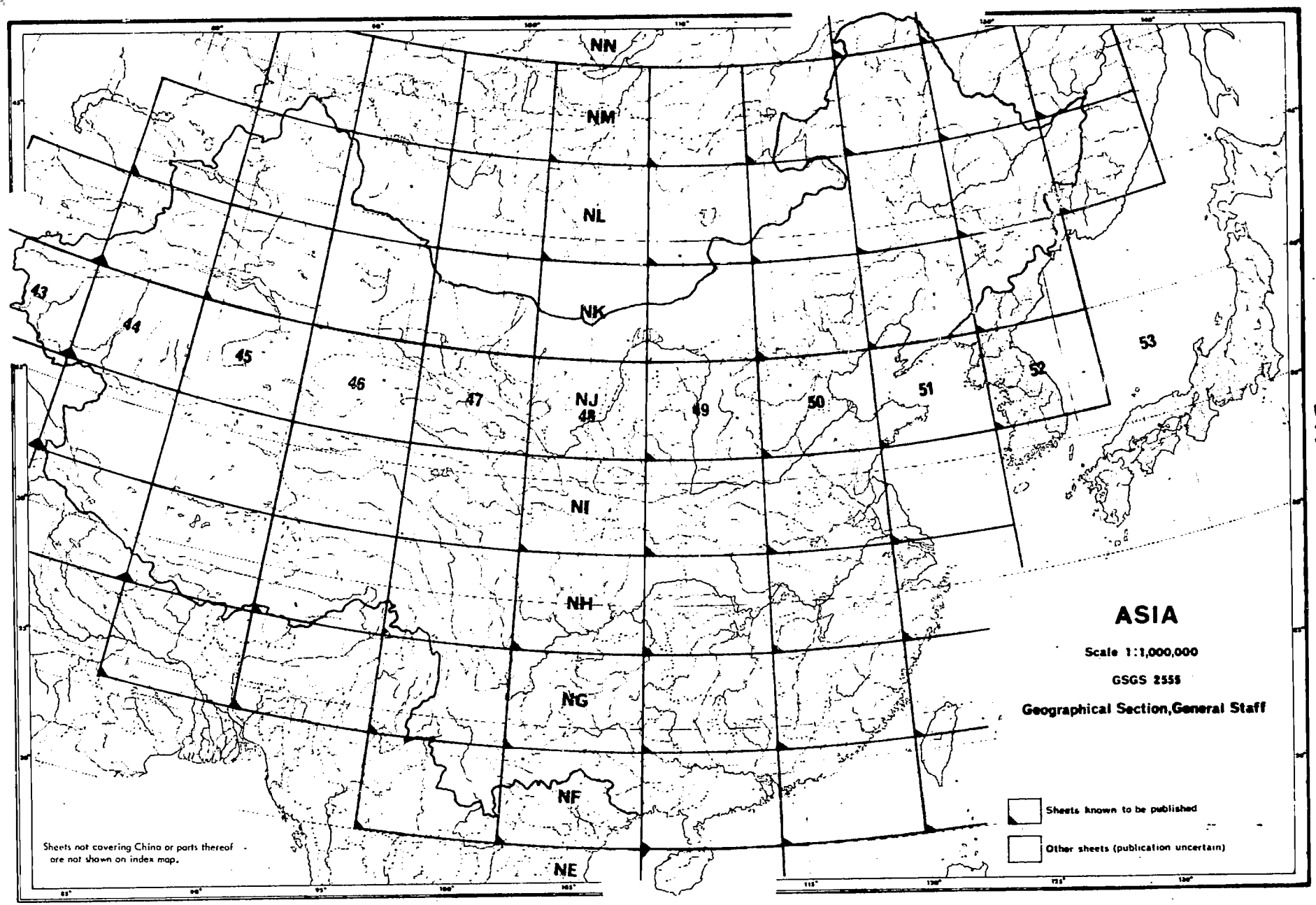
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Scale 1:1,000,000
GSGS 2555
Geographical Section, General Staff
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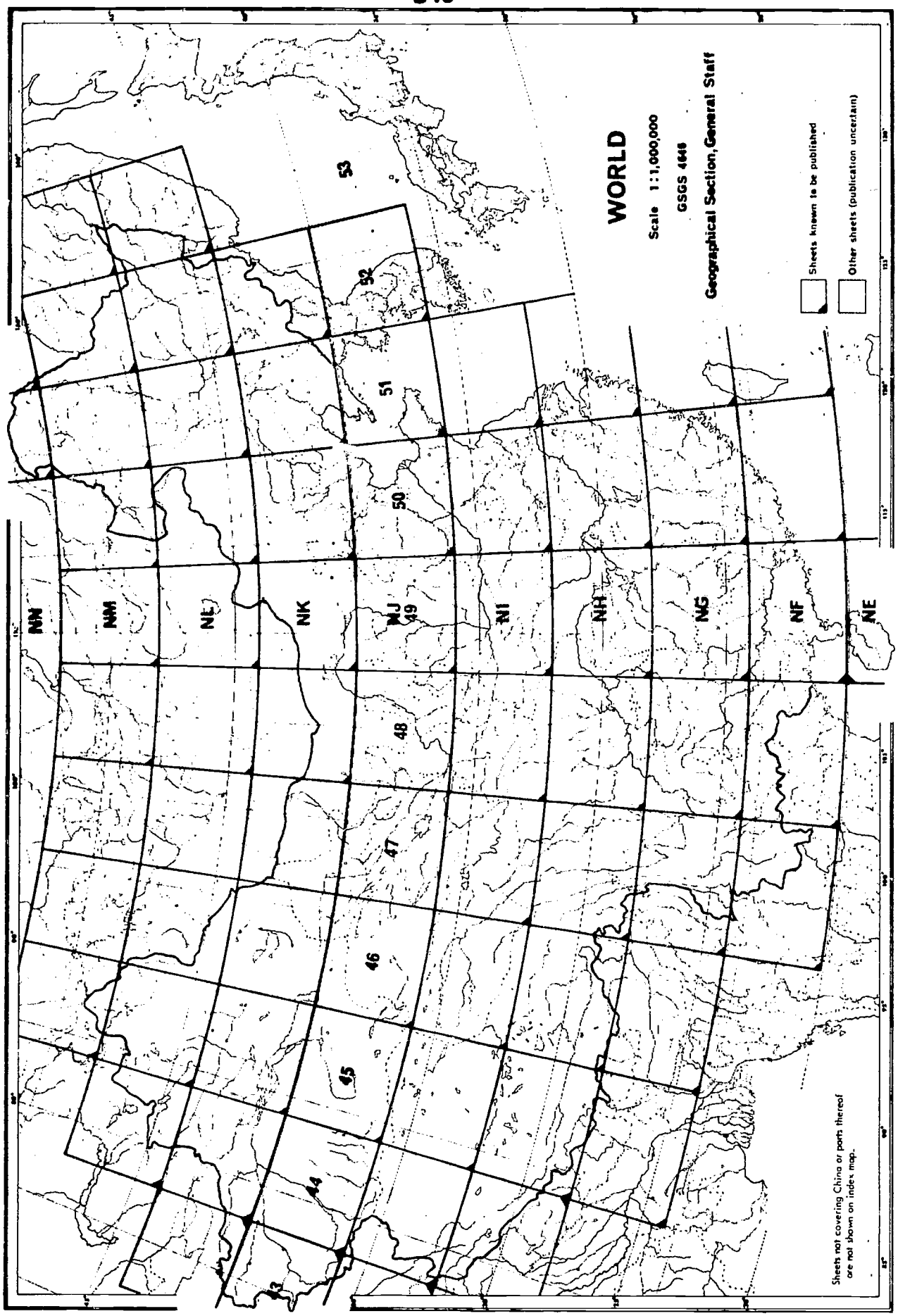
WORLD
Scale 1:1,000,000
GSGS 4646
Geographical Section, General Staff
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering China or parts thereof are not shown on index map.
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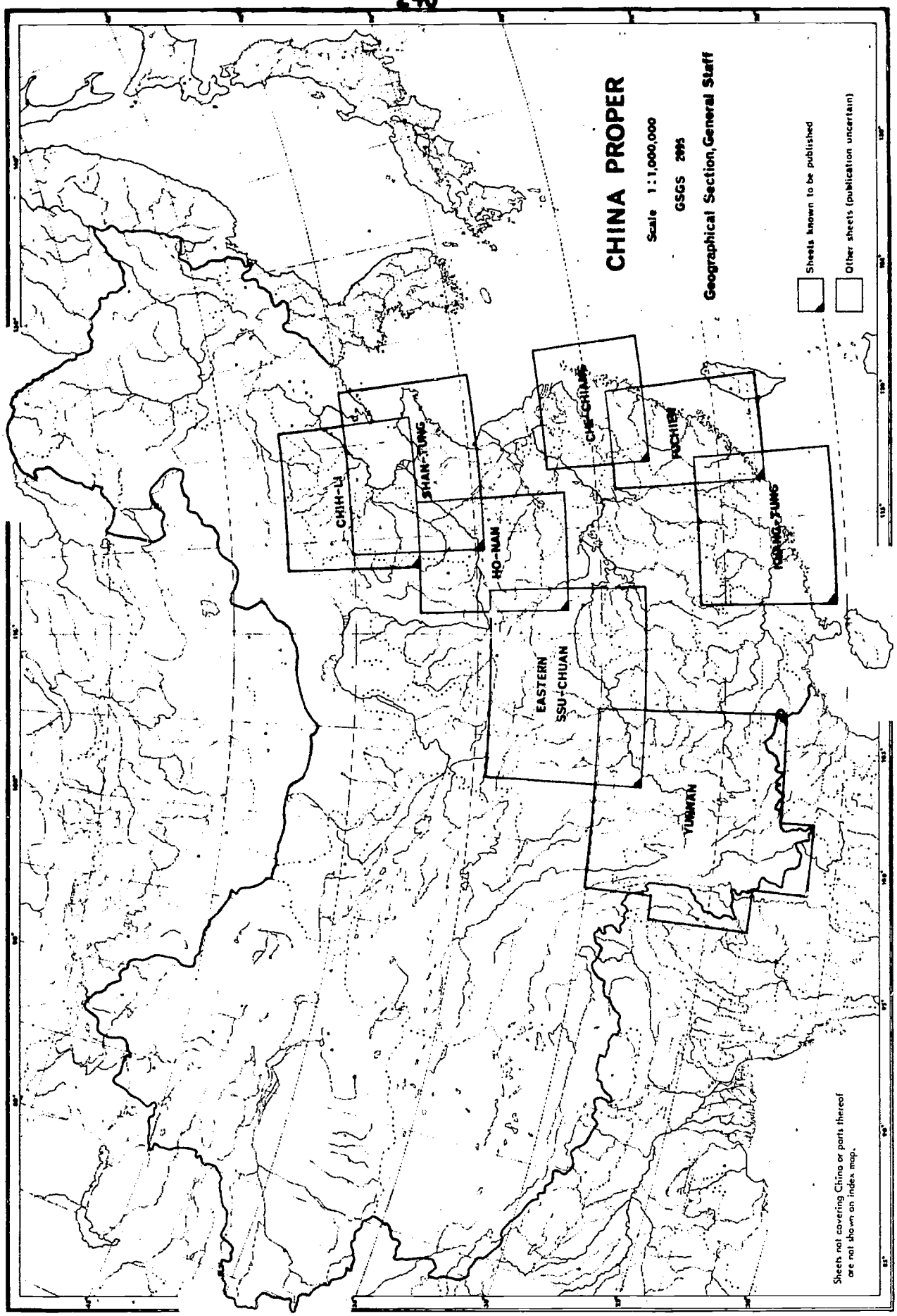
CHINA PROPER
Scale 1:1,000,000
GSGS 2995
Geographical Section, General Staff
Sheets known to be published
Other sheets (publication uncertain)
CHIH-LI
SHAN-TUNG
HO-NAN
CHE-CHIANG
KIANGSI
KWANG-TUNG
EASTERN SSU-CHUAN
YUNNAN
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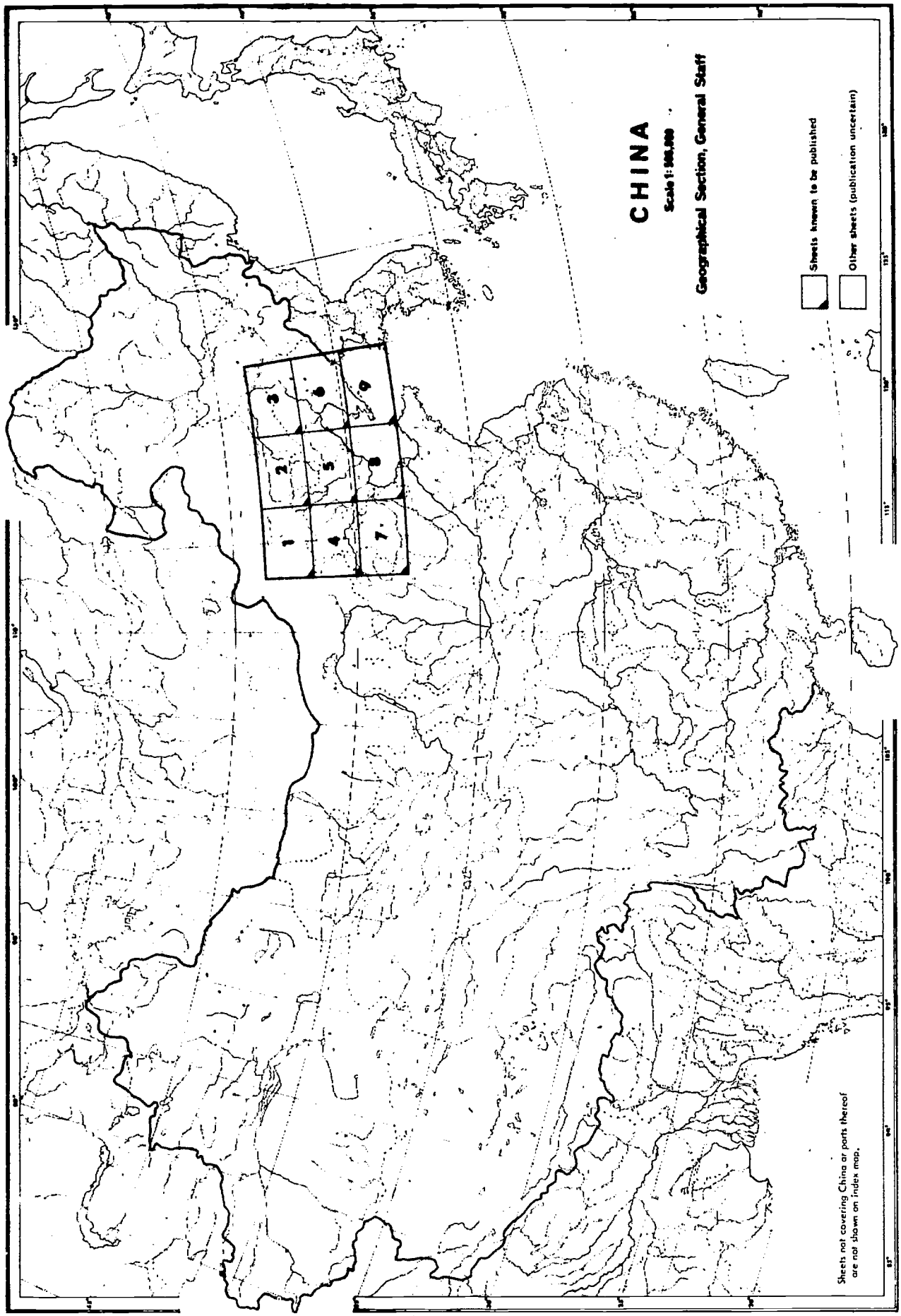
CHINA
Scale 1:1,000,000
Geographical Section, General Staff
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Other sheets (publication uncertain)
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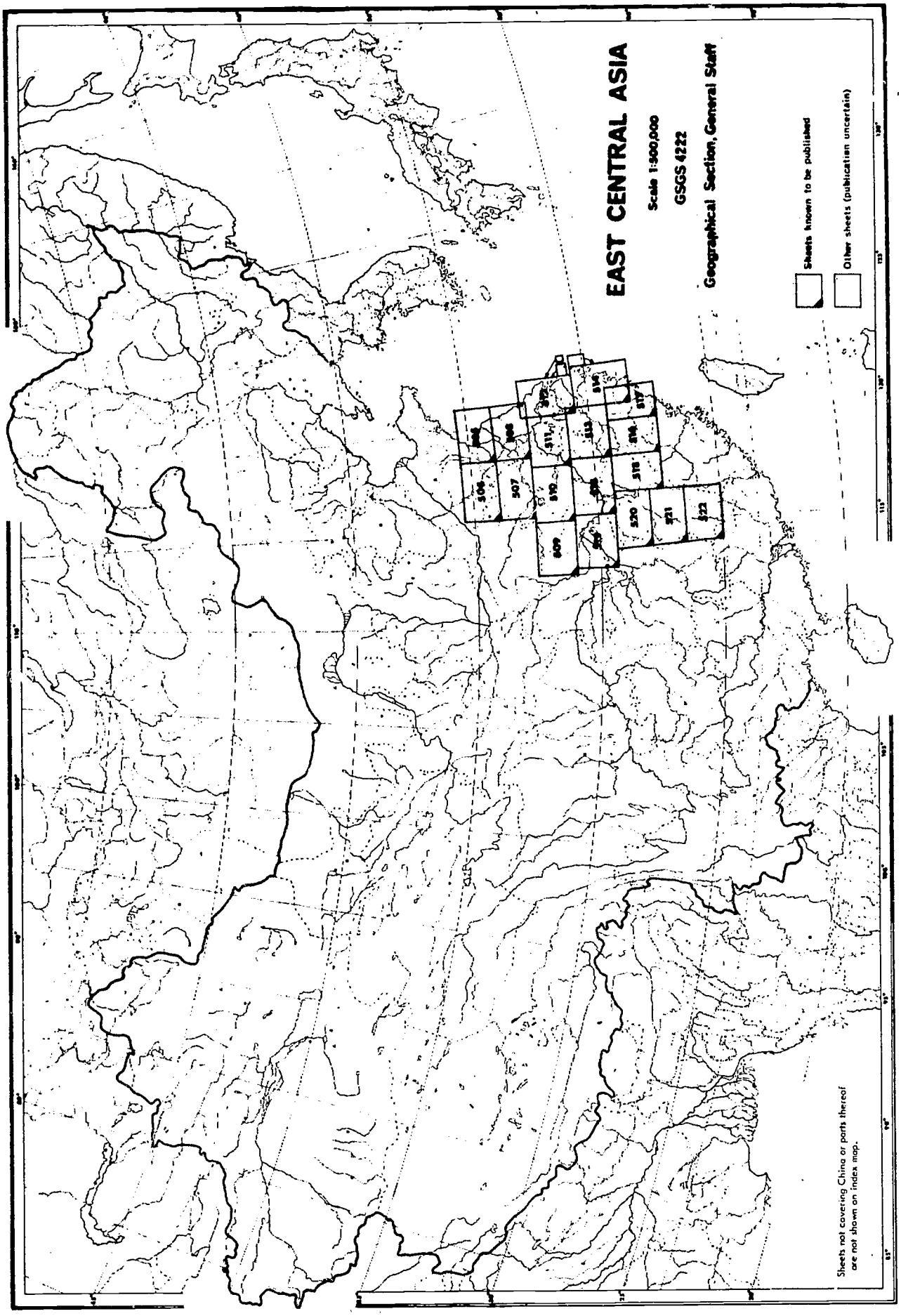
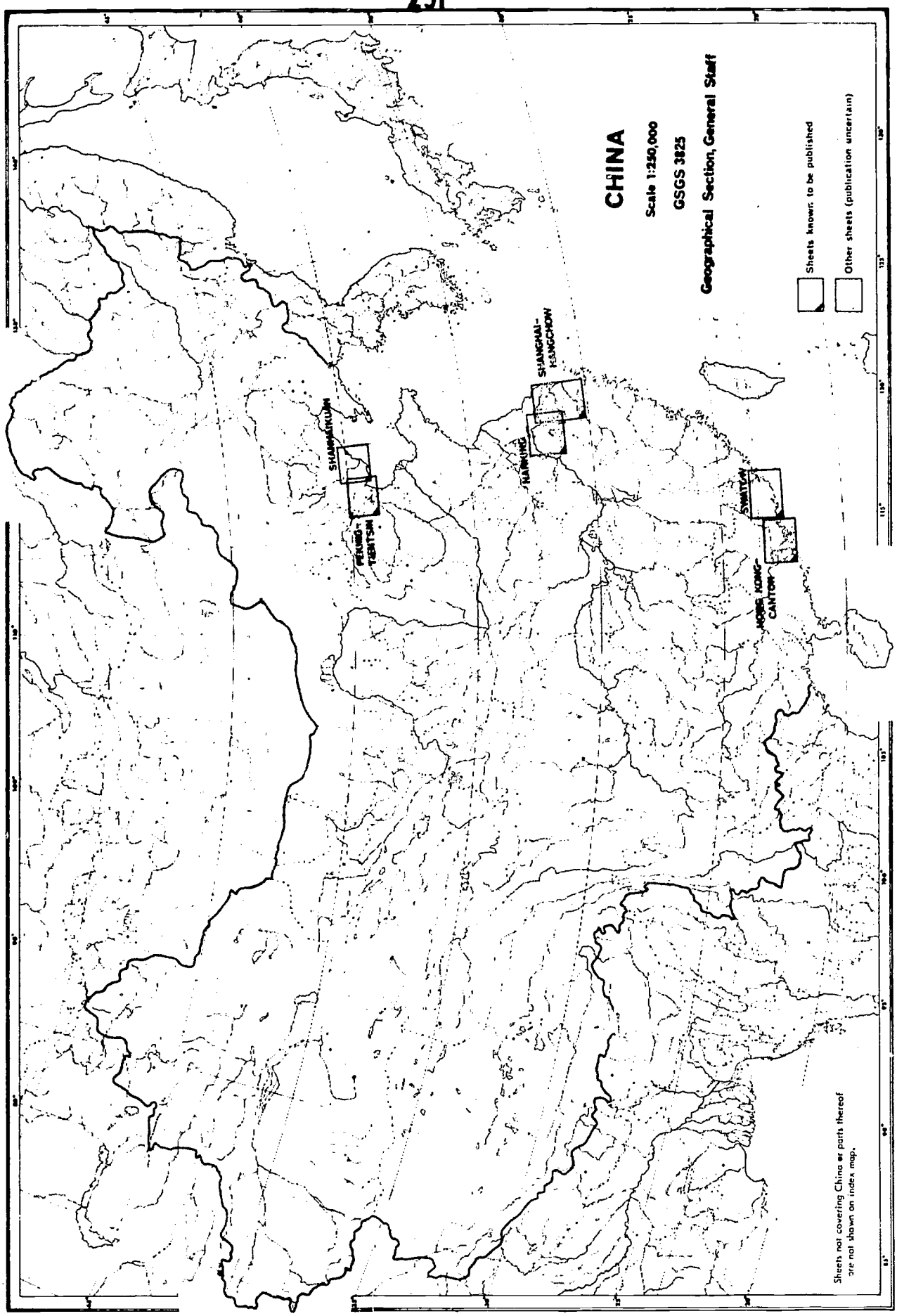
Sheets not covering China or parts thereof are not shown on index map.


EAST CENTRAL ASIA
Scale 1:500,000
GSGS 4222
Geographical Section, General Staff
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering China or parts thereof are not shown on index map.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Scale 1:250,000
GSGS 3825
Geographical Section, General Staff
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Other sheets (publication uncertain)
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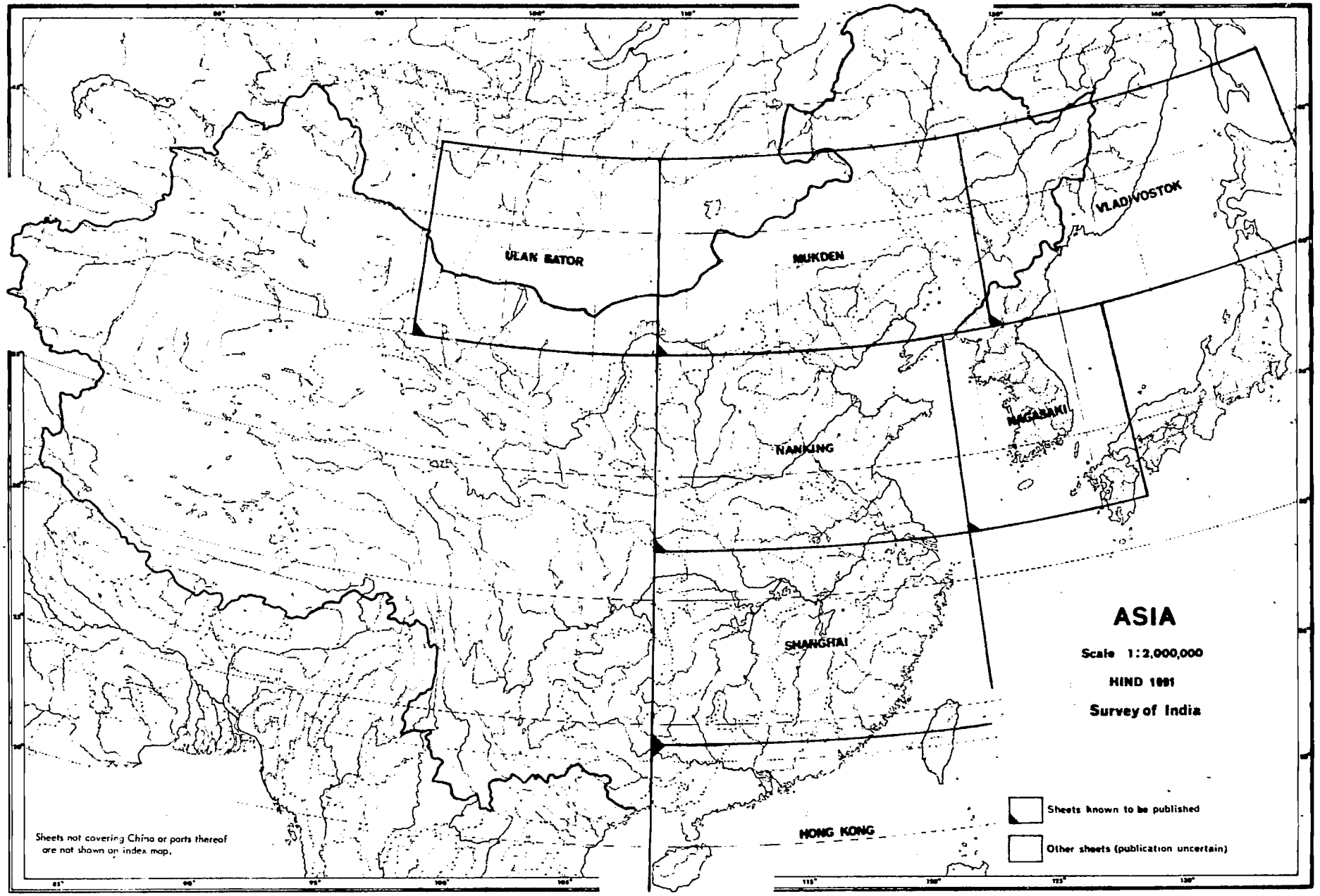
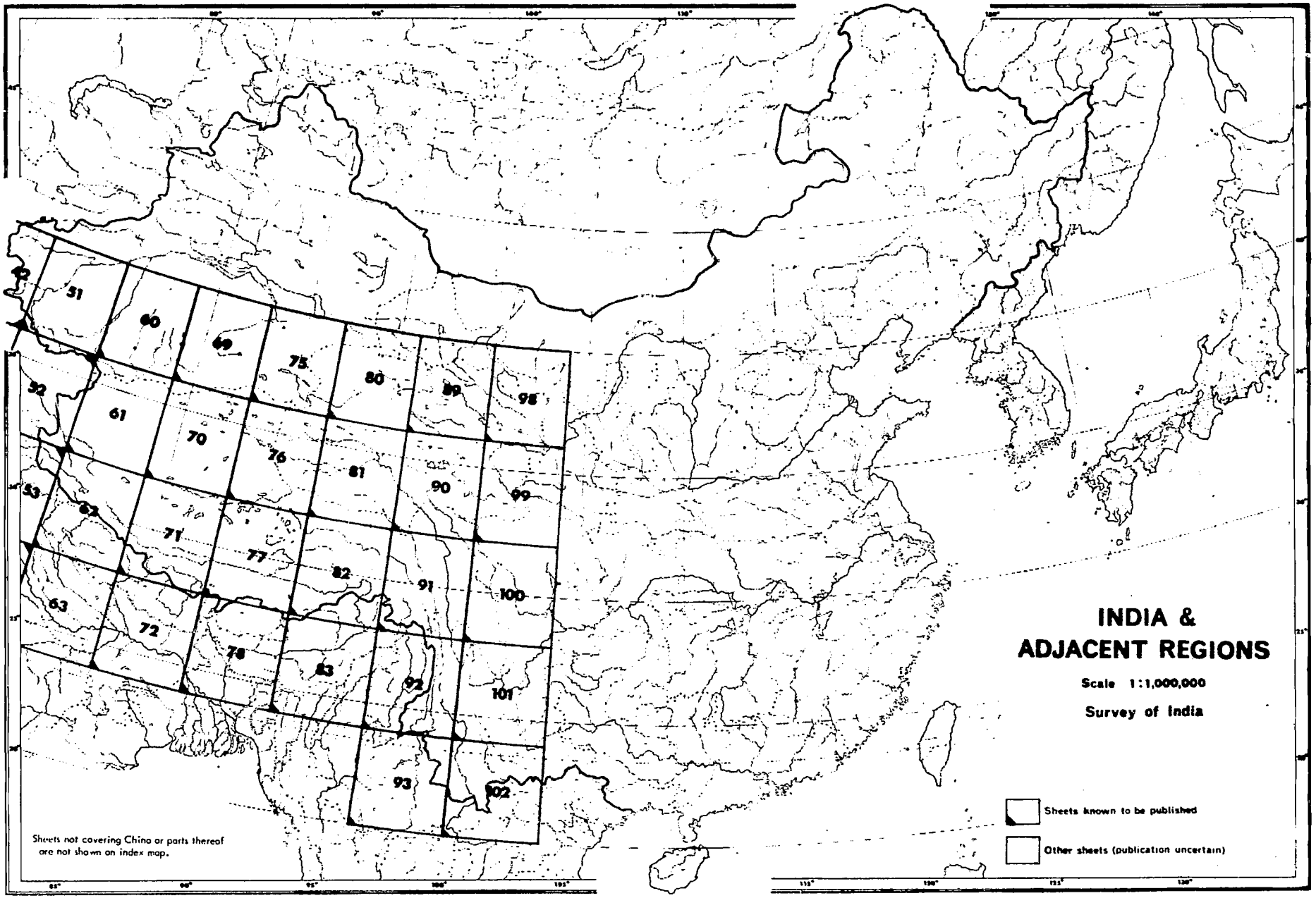
HONG KONG-CANTON
Sheets not covering China or parts thereof are not shown on index map.


ULAN BATOR
MUKDEN
VLADIVOSTOK
NAGASAKI
NANKING
SHANGHAI
HONG KONG
ASIA
Scale 1:2,000,000
HIND 1991
Survey of India
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering China or parts thereof are not shown on index map.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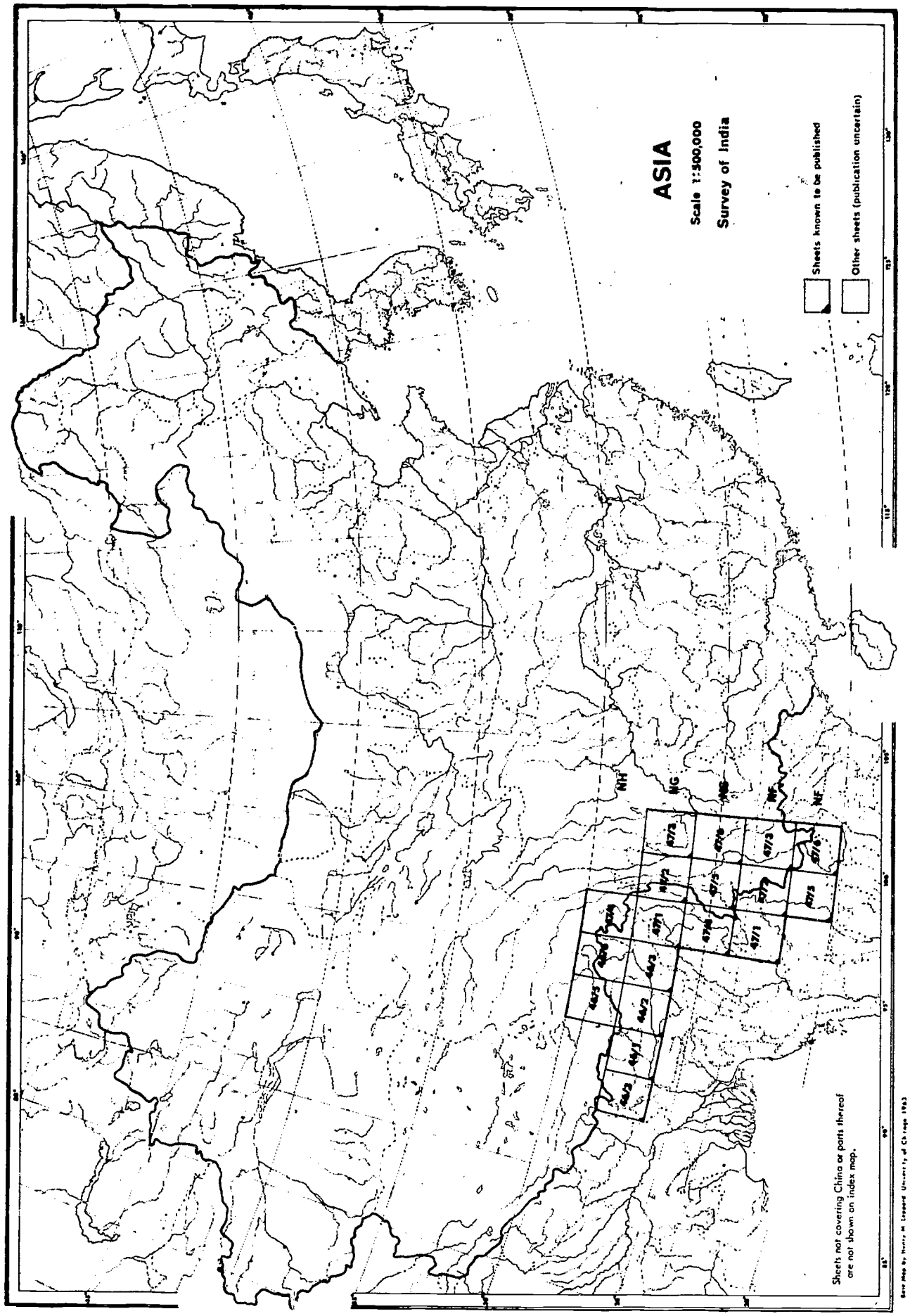
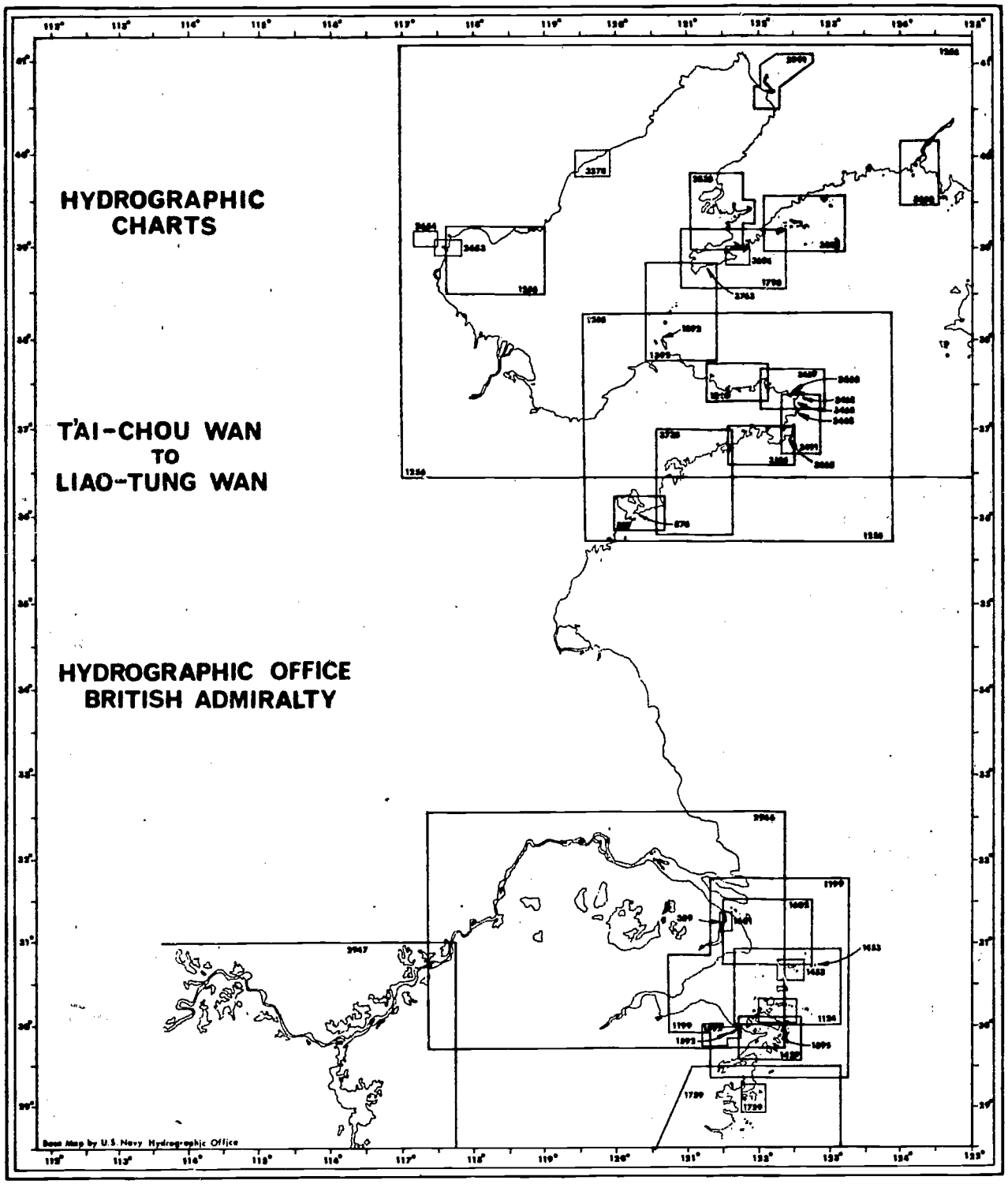
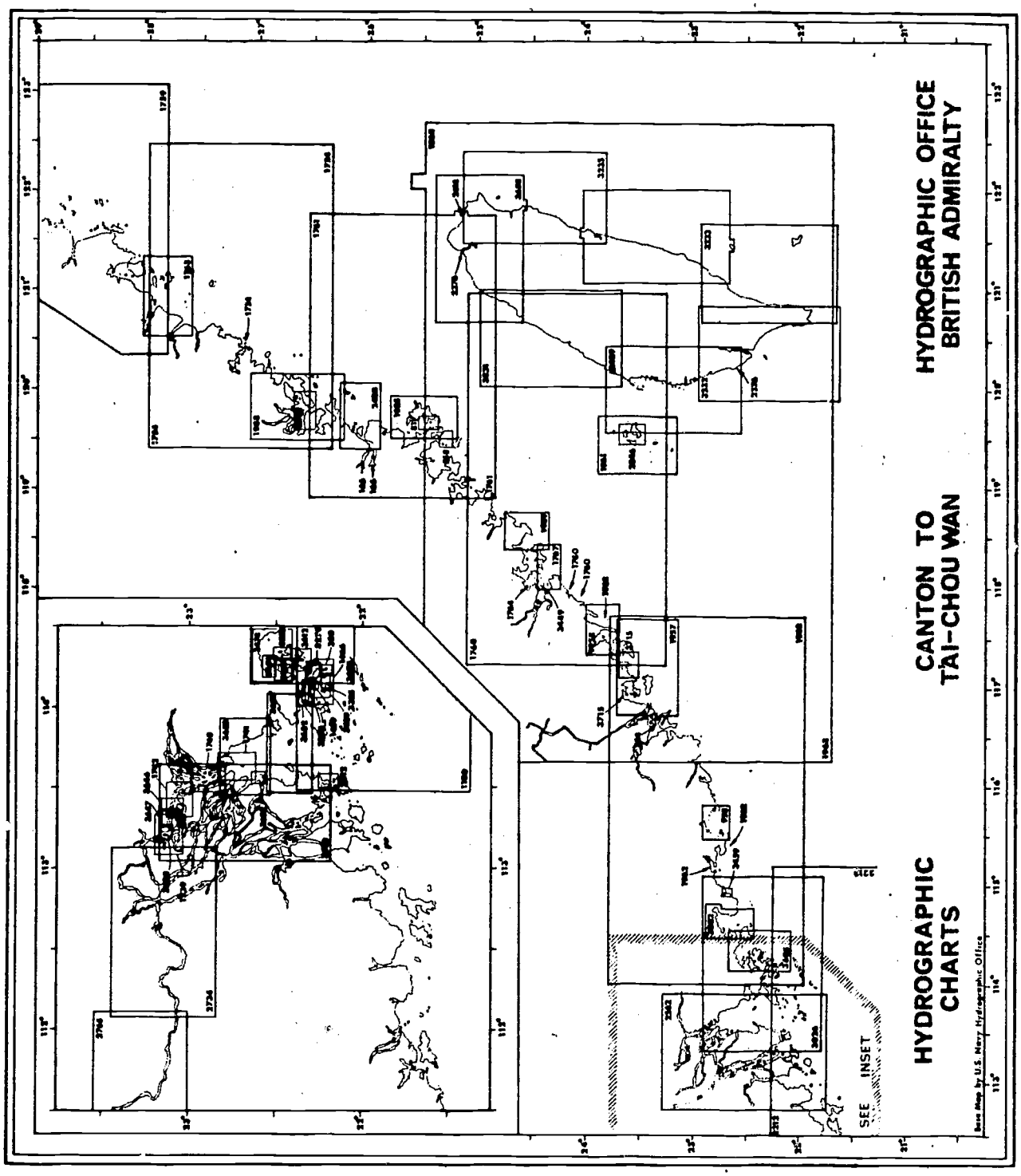
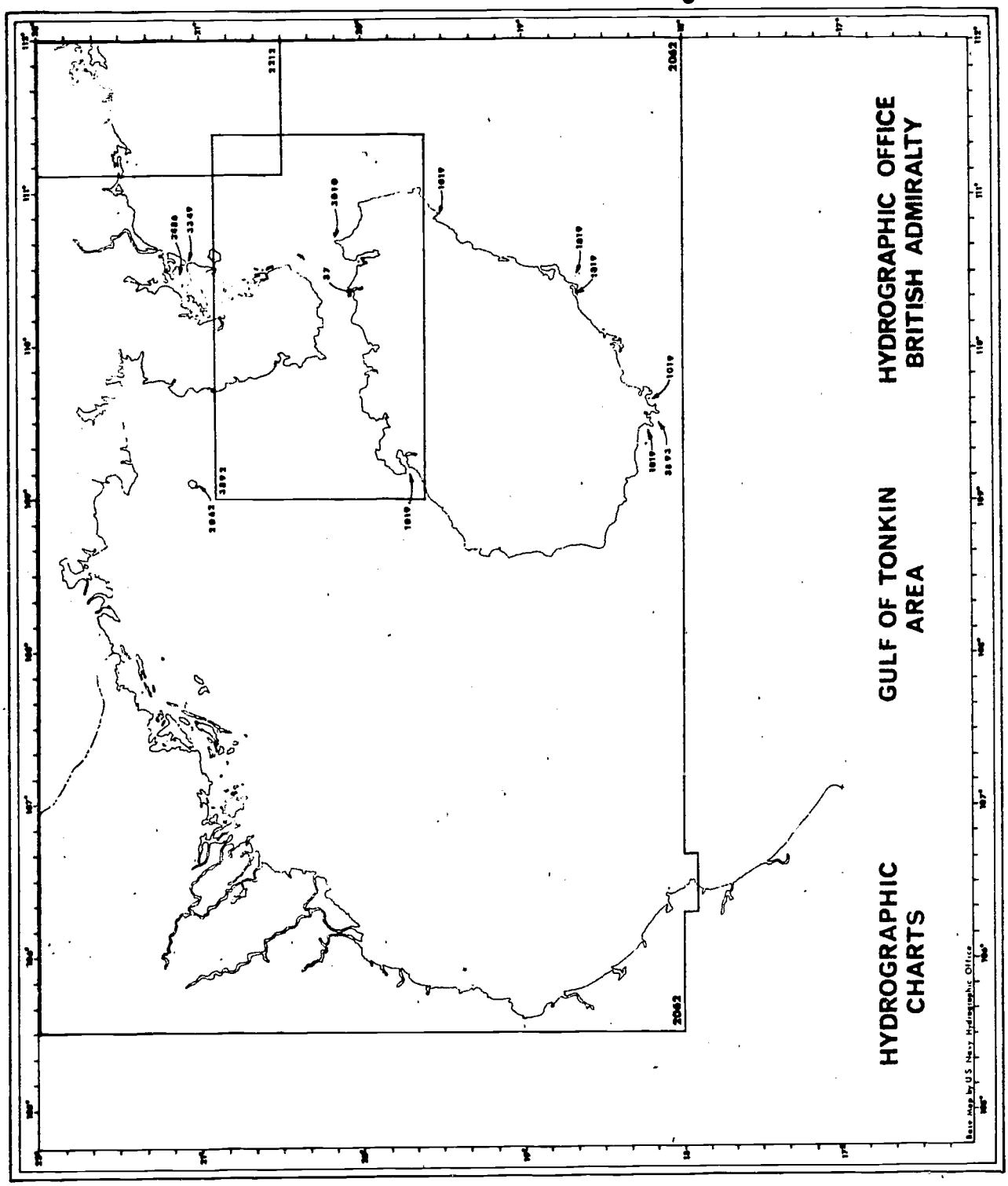
INDIA &
ADJACENT REGIONS
Scale 1:1,000,000
Survey of India
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering China or parts thereof are not shown on index map.

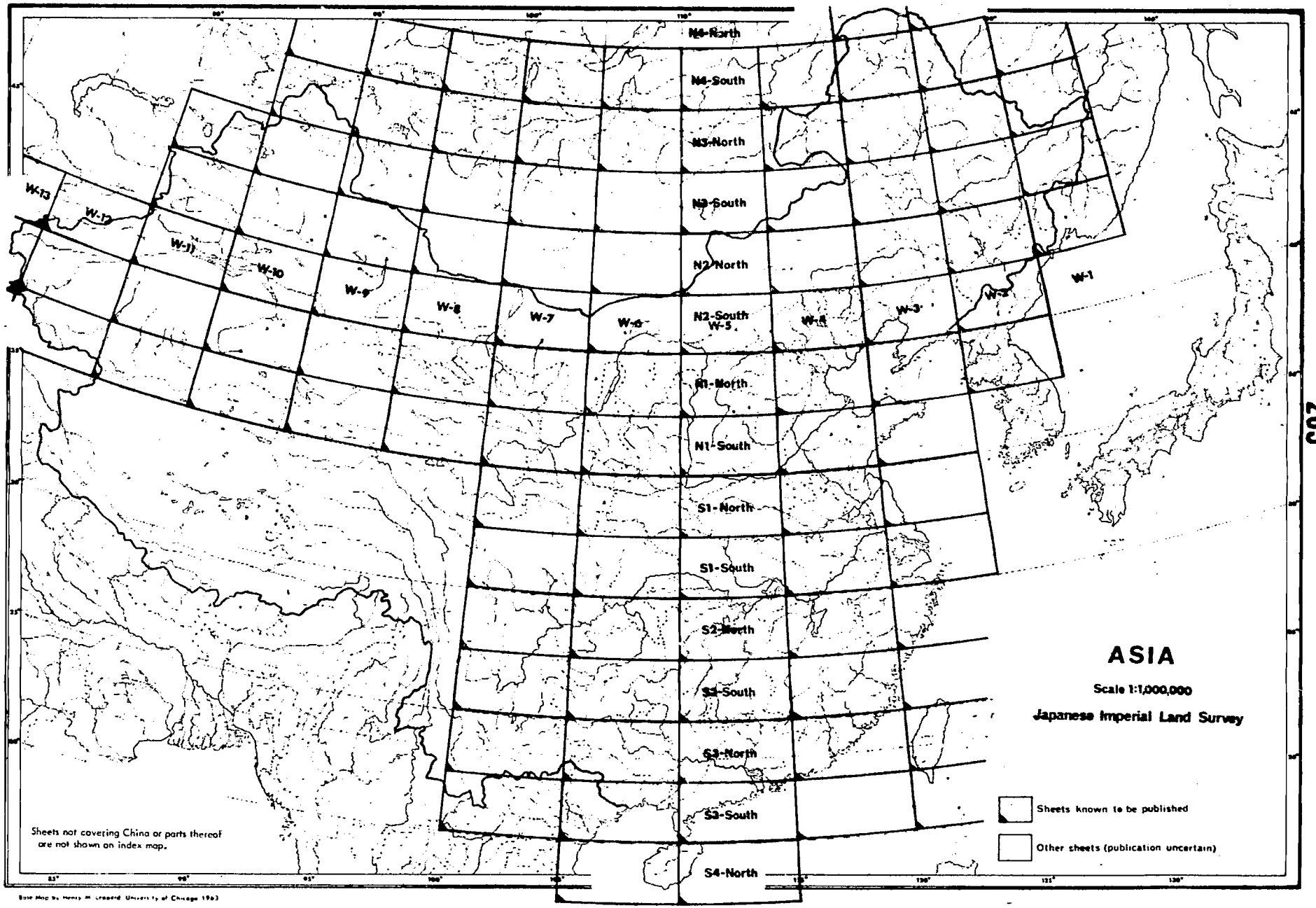

ASIA
Scale 1:500,000
Survey of India
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering China or parts thereof are not shown on index map.

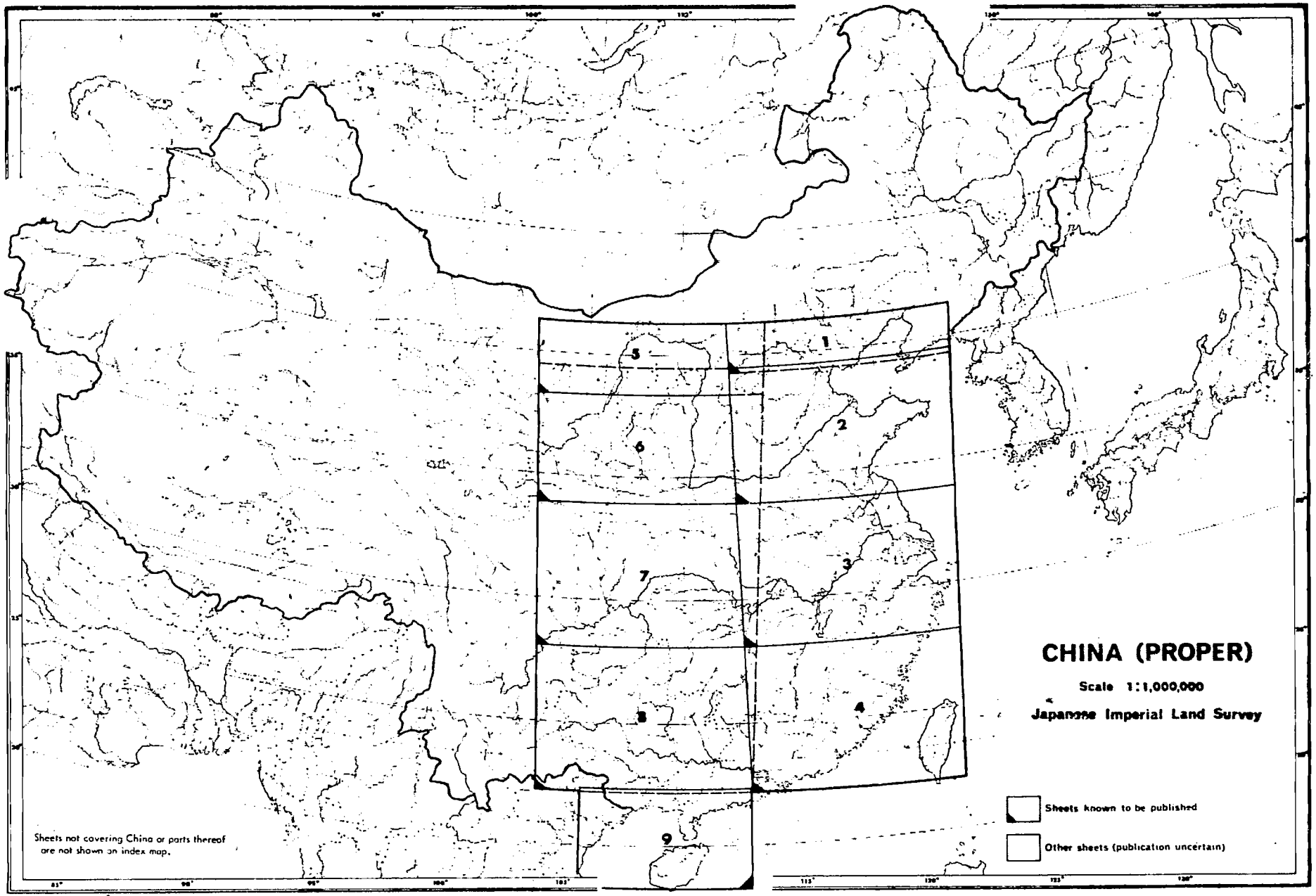

HYDROGRAPHIC
CHARTS
T'AI-CHOU WAN
TO
LIAO-TUNG WAN
HYDROGRAPHIC OFFICE
BRITISH ADMIRALTY
Base Map by U.S. Navy Hydrographic Office


HYDROGRAPHIC OFFICE
BRITISH ADMIRALTY
CANTON TO
TAI-CHOU WAN
HYDROGRAPHIC
CHARTS
SEE INSET

9


HYDROGRAPHIC OFFICE
BRITISH ADMIRALTY
GULF OF TONKIN
AREA
HYDROGRAPHIC
CHARTS


N4-North
N4-South
N3-North
N3-South
N2-North
N2-South
N1-North
N1-South
S1-North
S1-South
S2-North
S3-South
S3-North
S3-South
S4-North
W-13
W-12
W-11
W-10
W-9
W-8
W-7
W-6
W-5
W-4
W-3
W-2
W-1
ASIA
Scale 1:1,000,000
Japanese Imperial Land Survey
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering China or parts thereof are not shown on index map.


1
2
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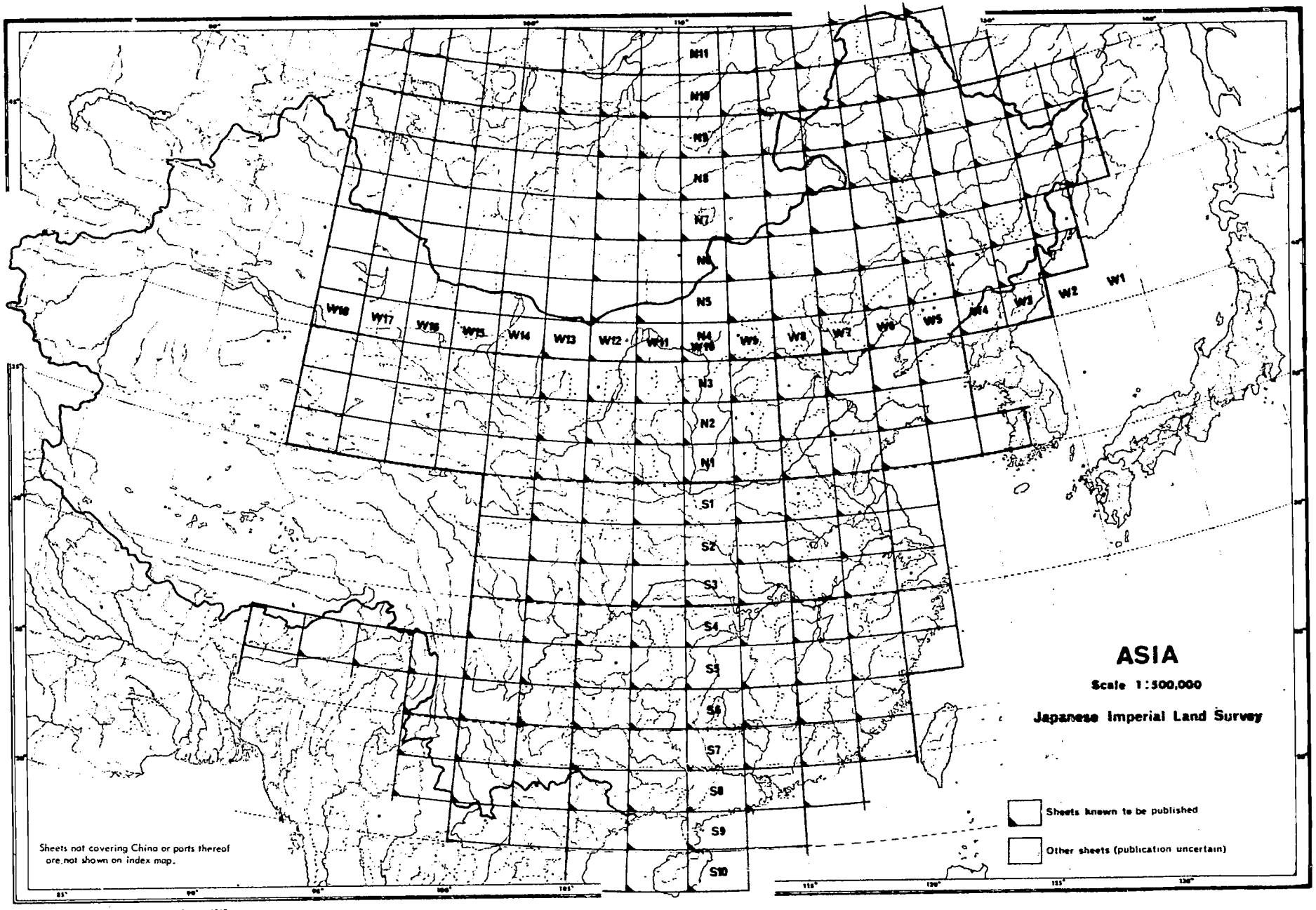
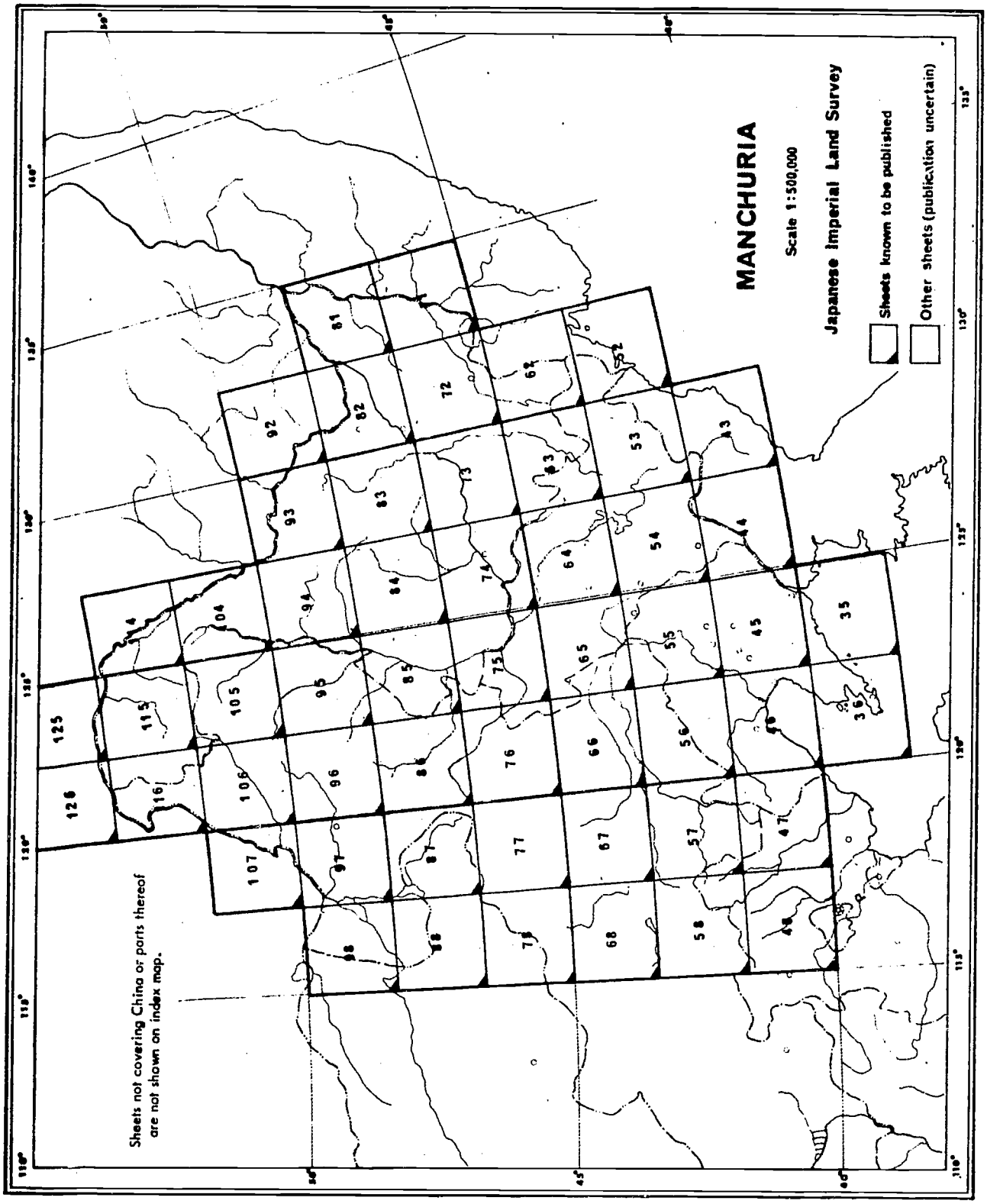
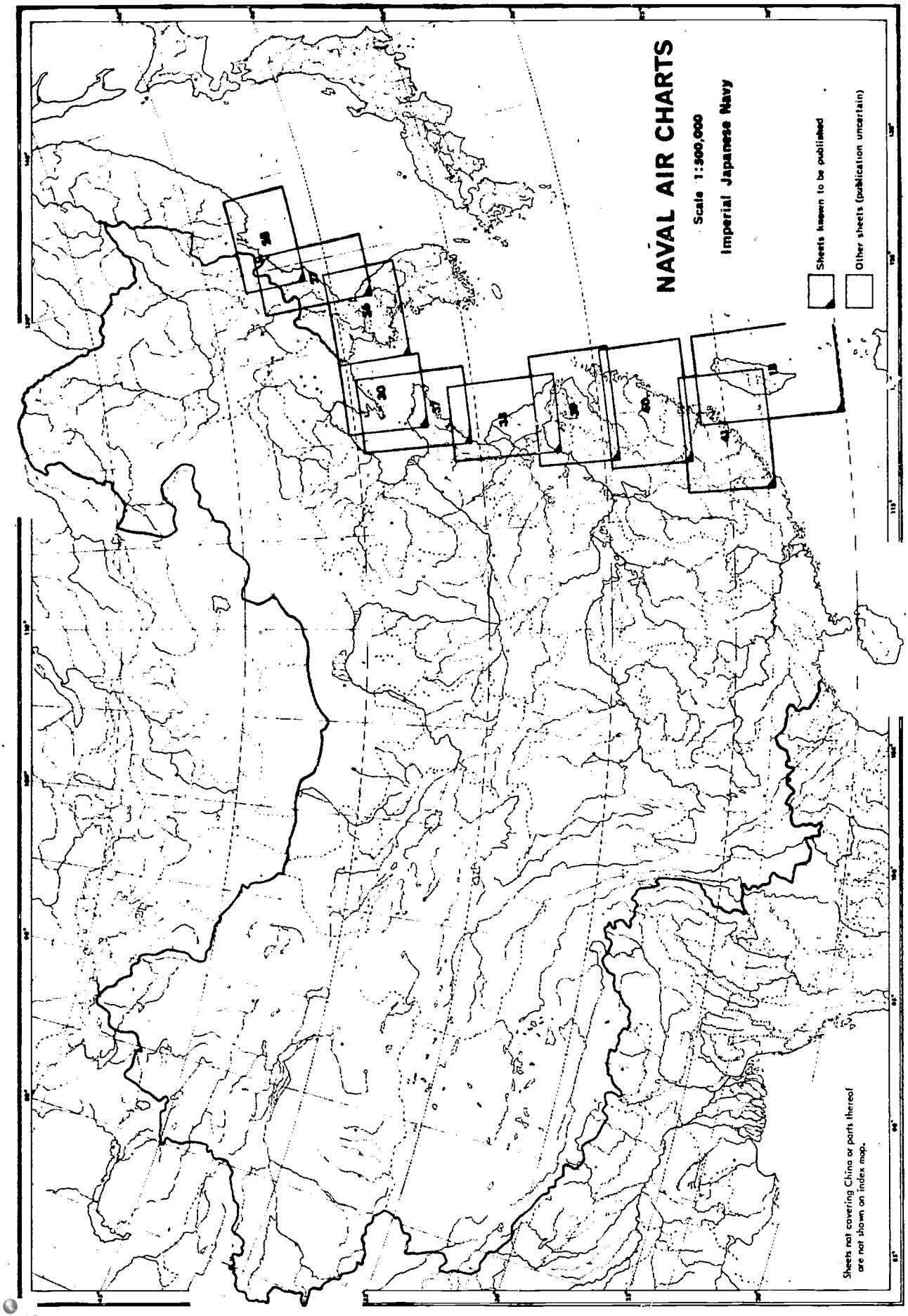
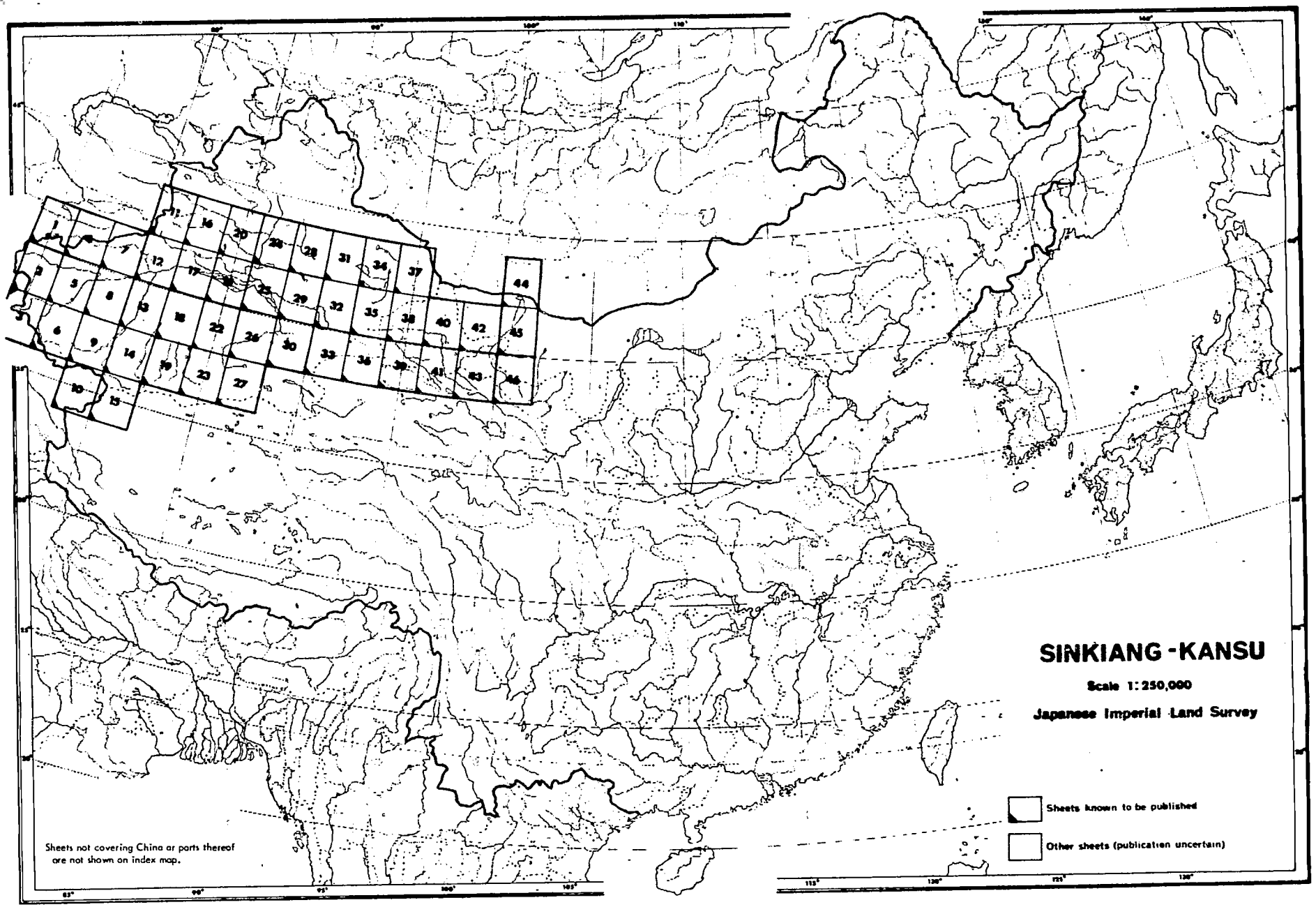
8
9
CHINA (PROPER)
Scale 1:1,000,000
Japanese Imperial Land Survey
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering China or parts thereof are not shown on index map.

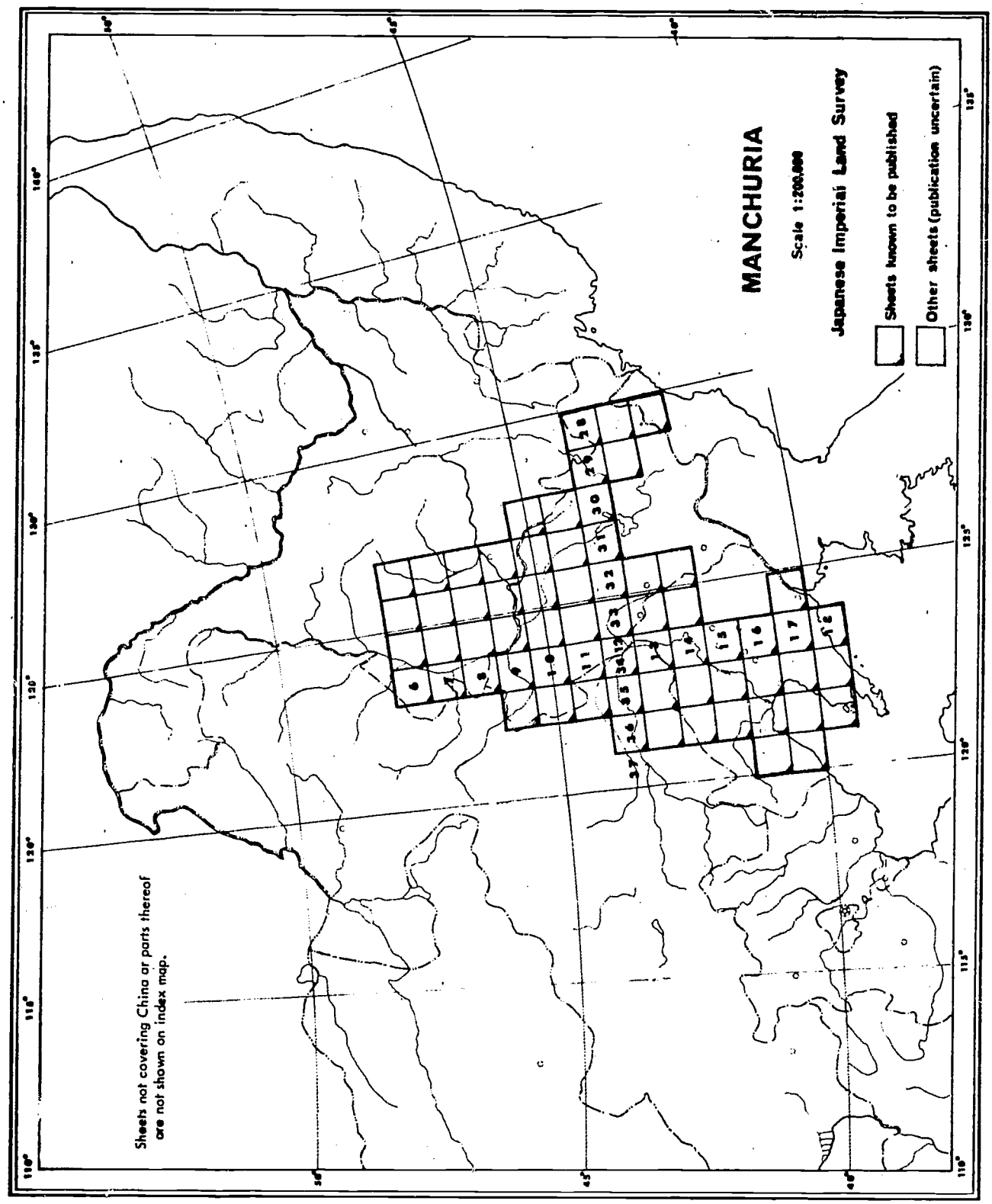


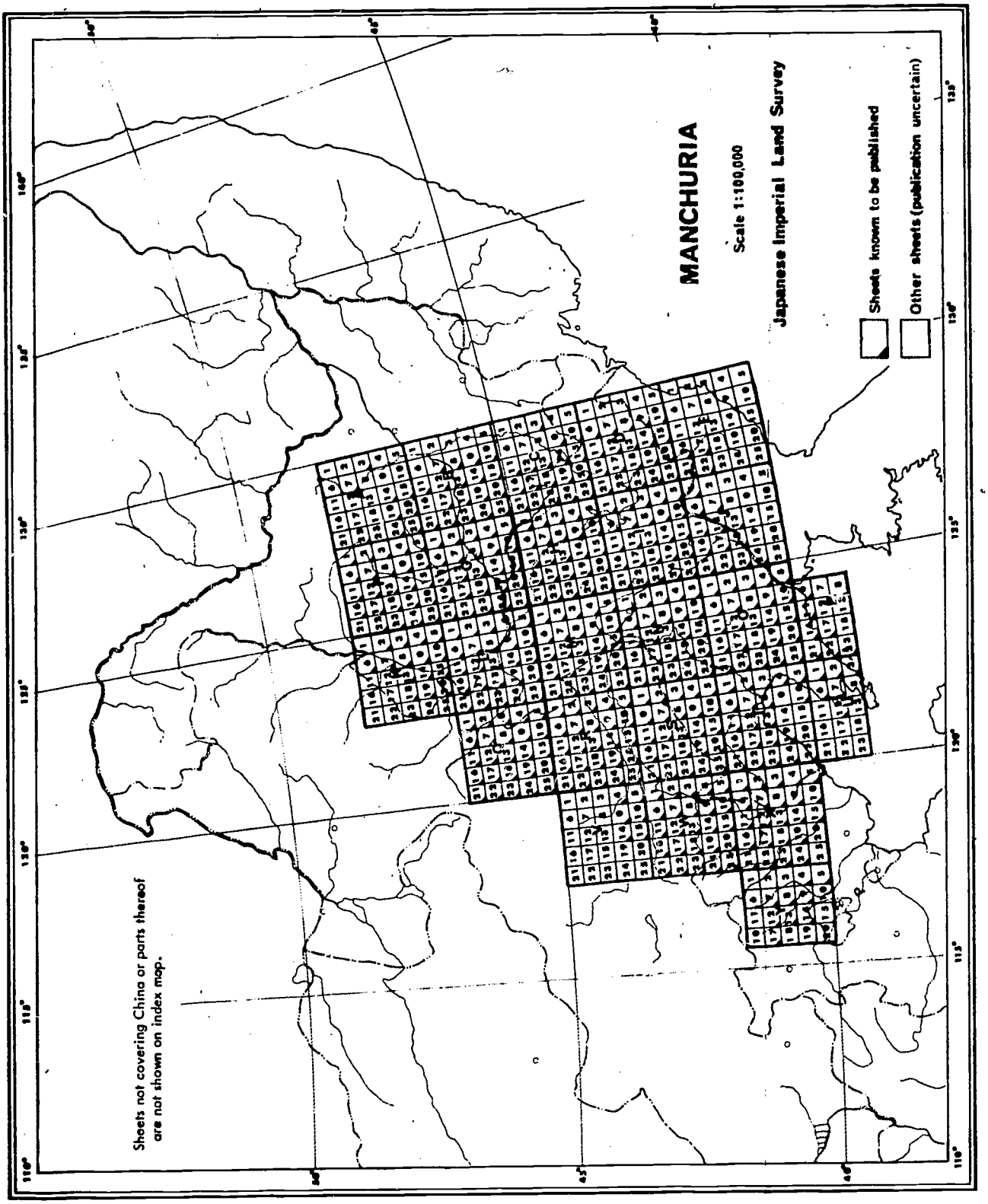
Base Map by Henry M. Leppard, University of Chicago, 1963

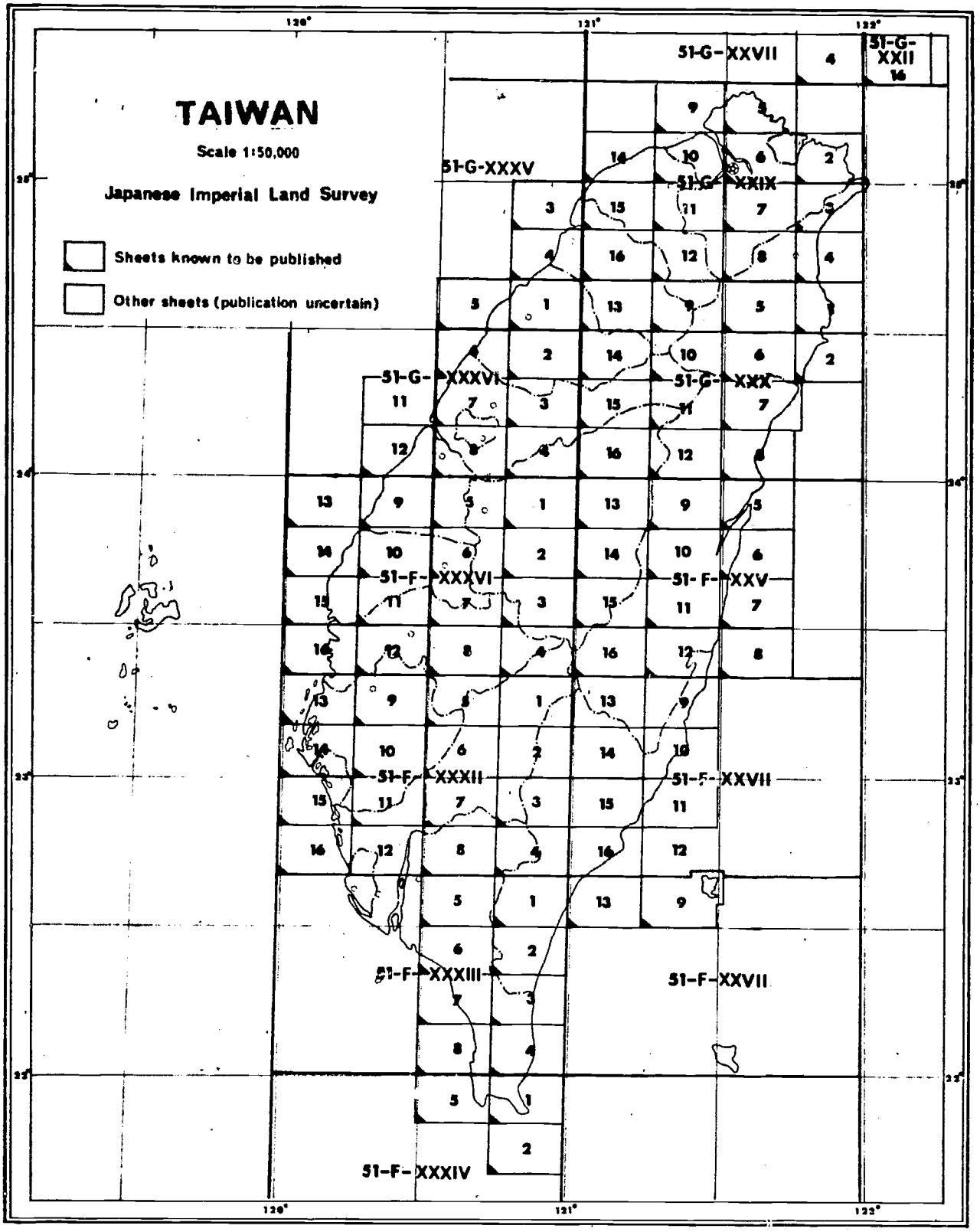

MANCHURIA
Scale 1:500,000
Japanese Imperial Land Survey
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering China or parts thereof are not shown on index map.

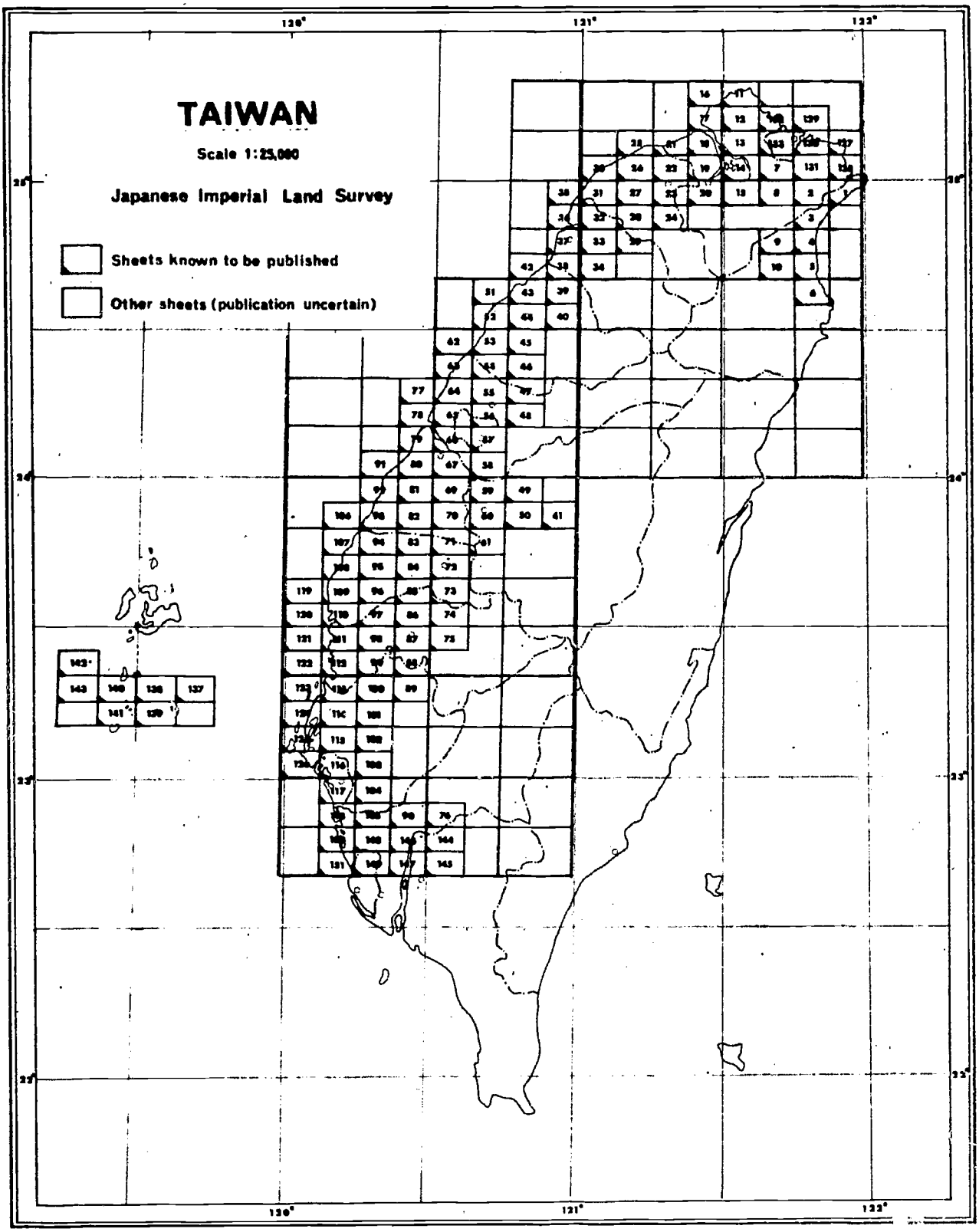

NAVAL AIR CHARTS
Scale 1:500,000
Imperial Japanese Navy
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering China or parts thereof are not shown on index map.

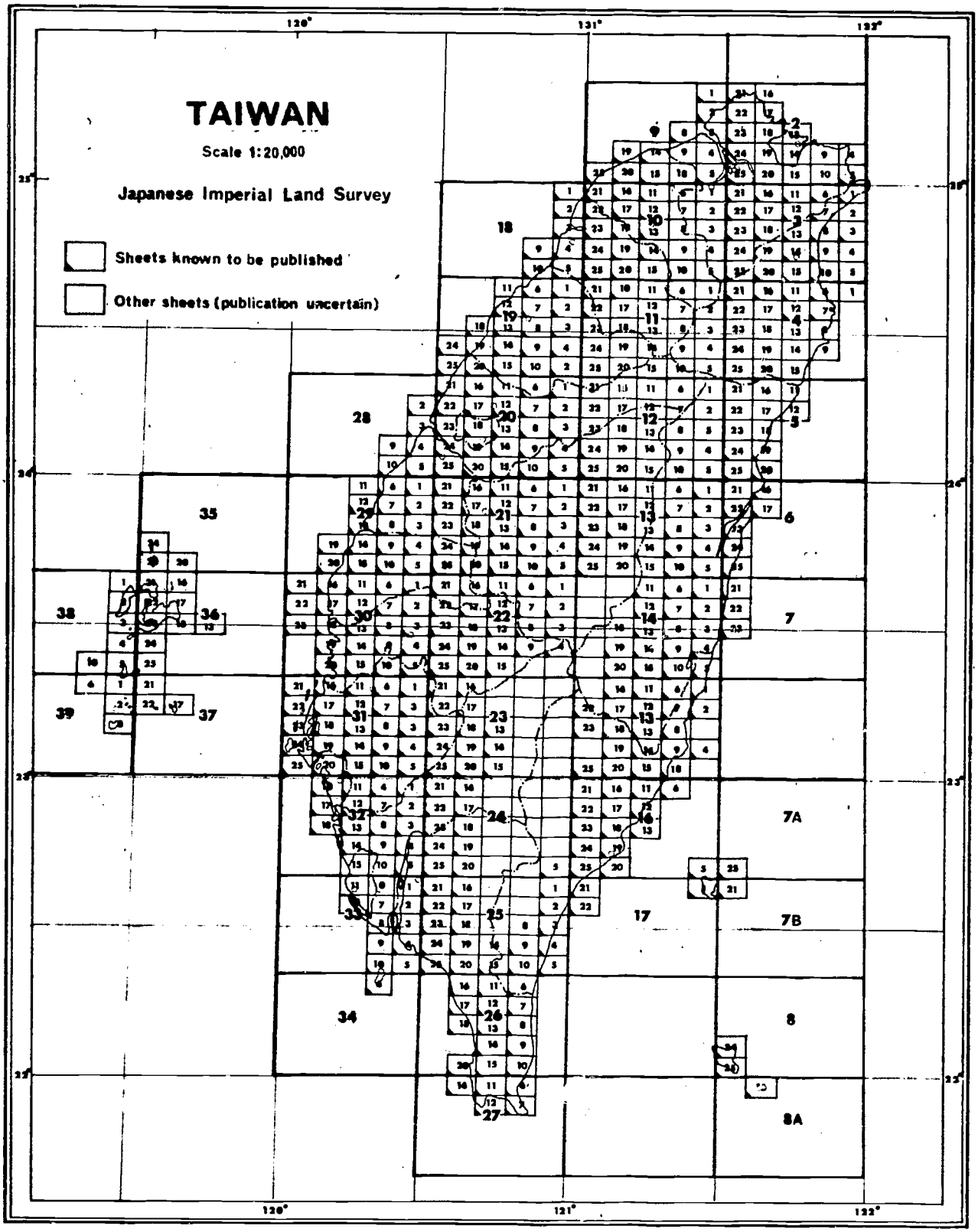

SINKIANG - KANSU
Scale 1:250,000
Japanese Imperial Land Survey
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering China or parts thereof are not shown on index map.


MANCHURIA
Scale 1:200,000
Japanese Imperial Land Survey
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering China or parts thereof are not shown on index map.


MANCHURIA
Scale 1:100,000
Japanese Imperial Land Survey
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering China or parts thereof are not shown on index map.


TAIWAN
Scale 1:50,000
Japanese Imperial Land Survey
Sheets known to be published
Other sheets (publication uncertain)
51-G-XXXV
51-G-XXVII
51-G-XXII
51-G-XXIX
51-G-XXXVI
51-G-XXX
51-F-XXXVI
51-F-XXV
51-F-XXXII
51-F-XXVII
51-F-XXXIII
51-F-XXVII
51-F-XXXIV
120°
121°
122°


TAIWAN
Scale 1:25,000
Japanese Imperial Land Survey
Sheets known to be published
Other sheets (publication uncertain)
120°
121°
122°
25°
24°
23°
22°


TAIWAN
Scale 1:20,000
Japanese Imperial Land Survey
Sheets known to be published
Other sheets (publication uncertain)
120°
121°
122°
25°
24°
23°
22°
1
2
3
4
5
6
7
7A
7B
8
8A
17
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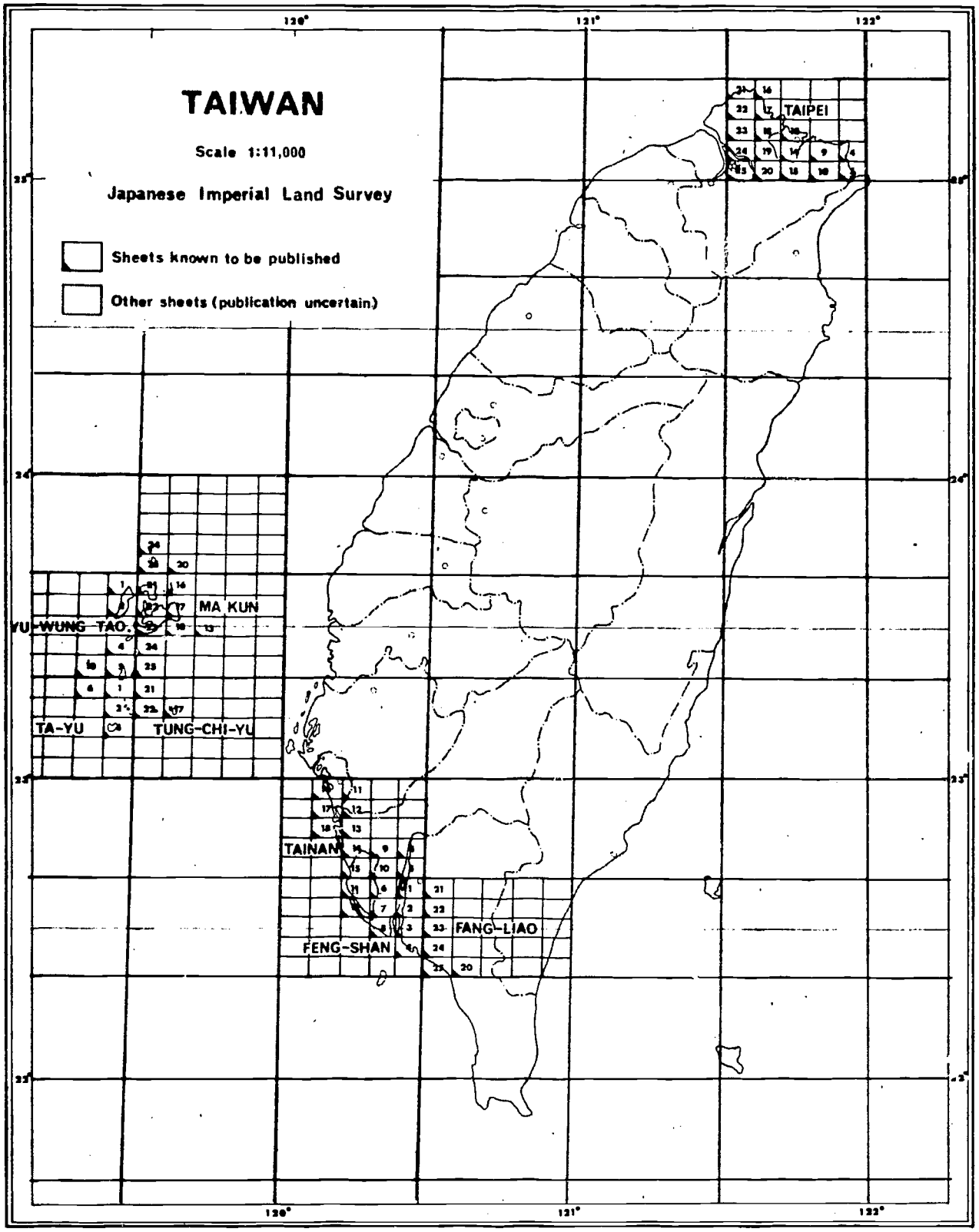
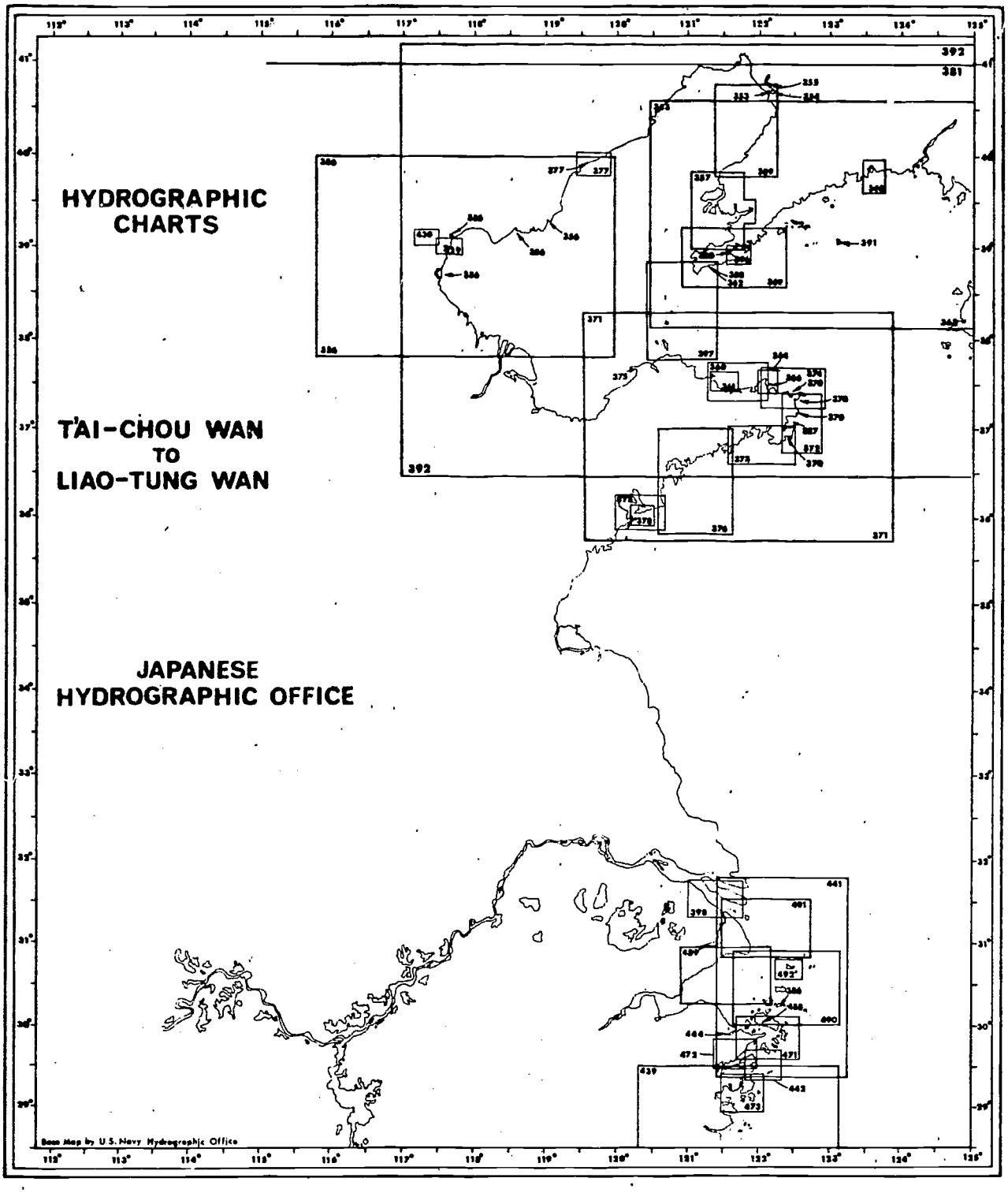
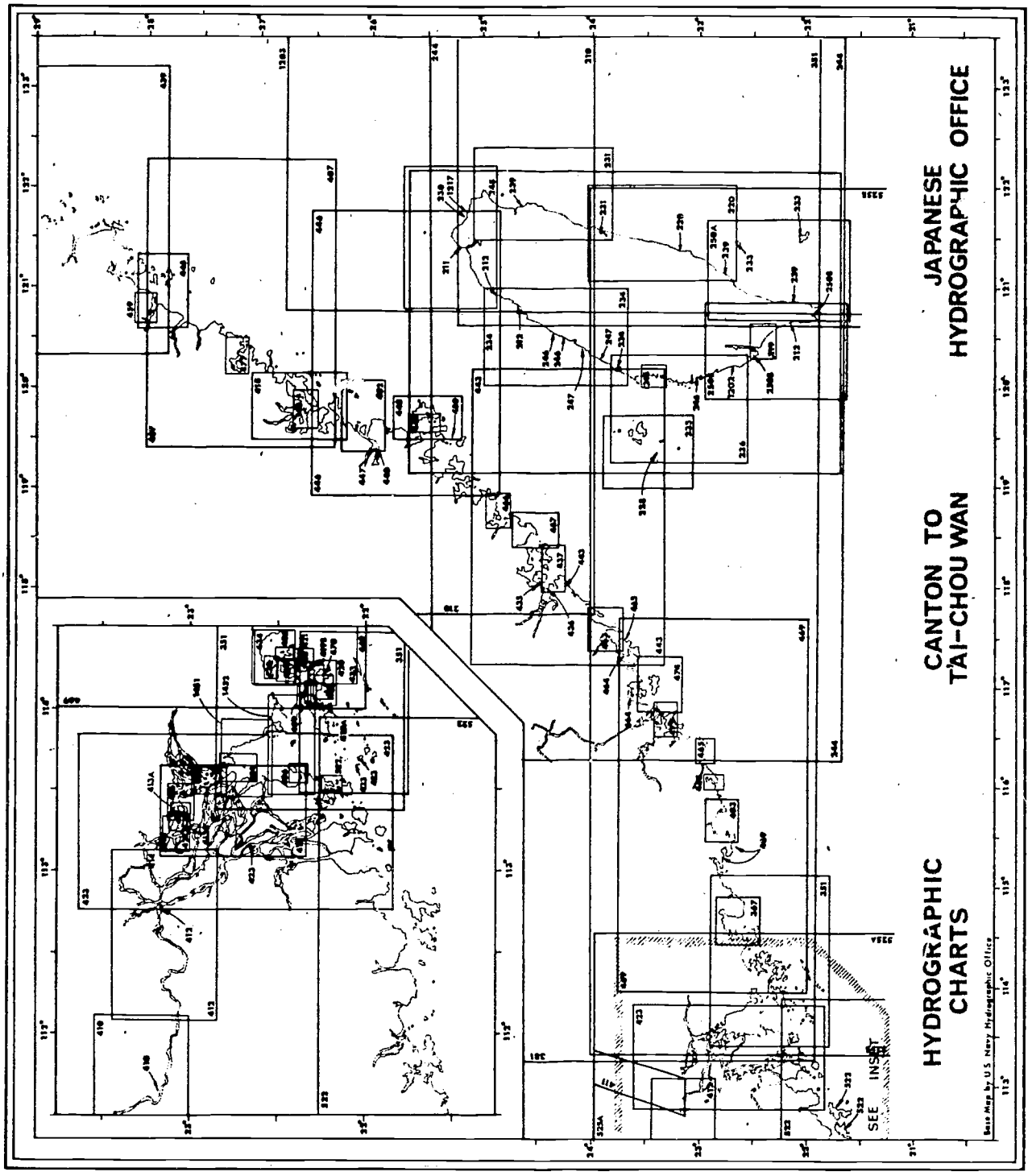
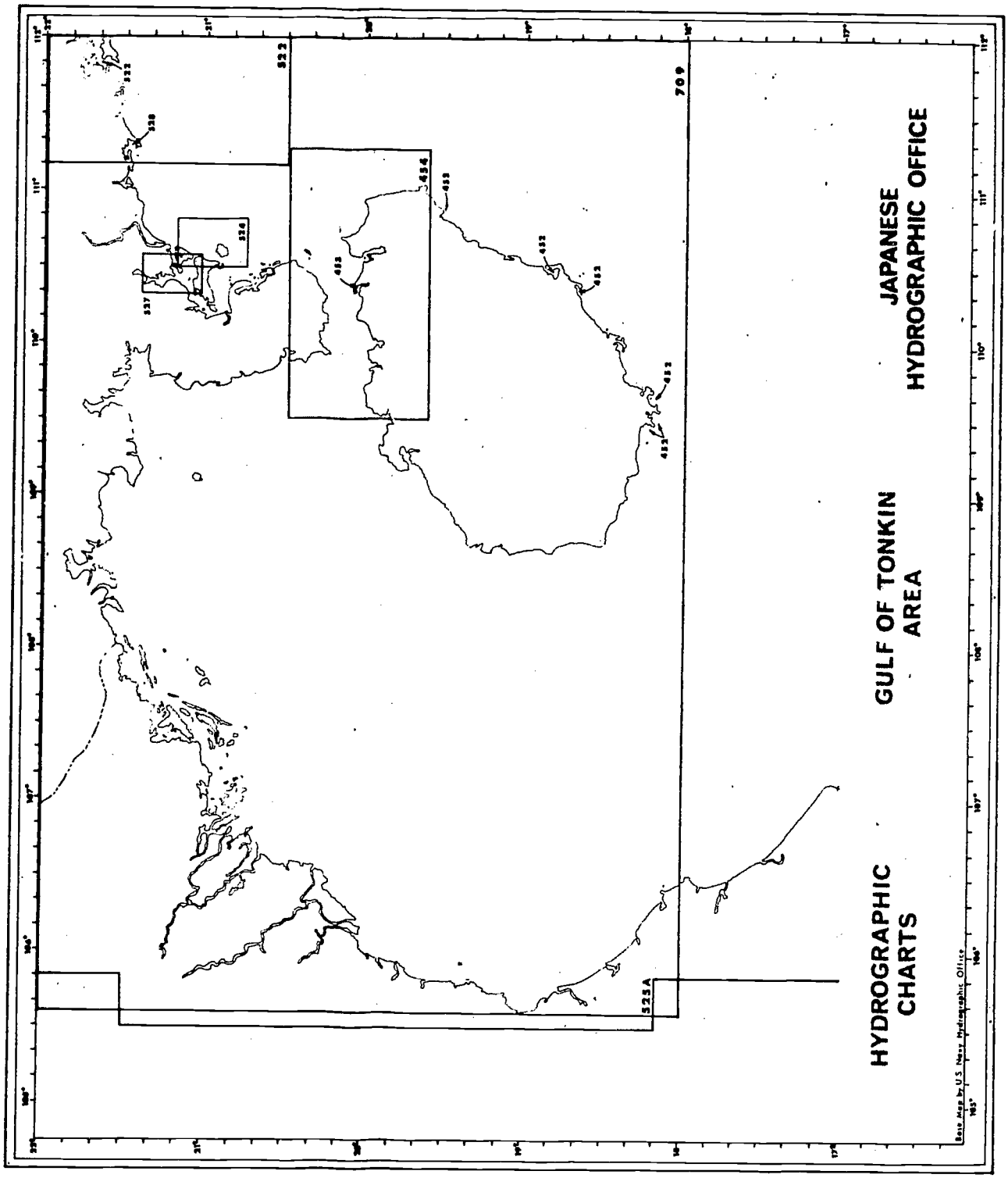
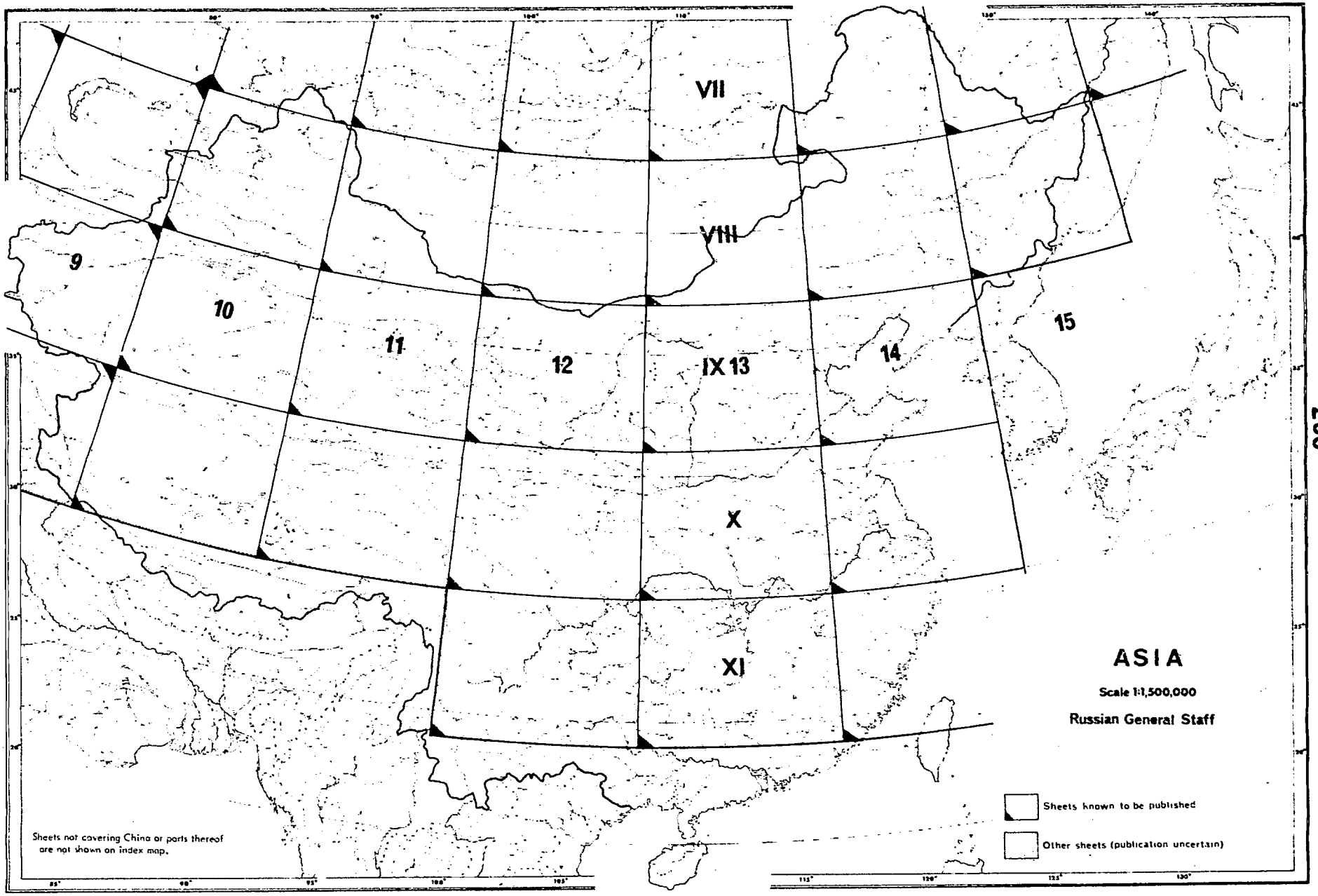
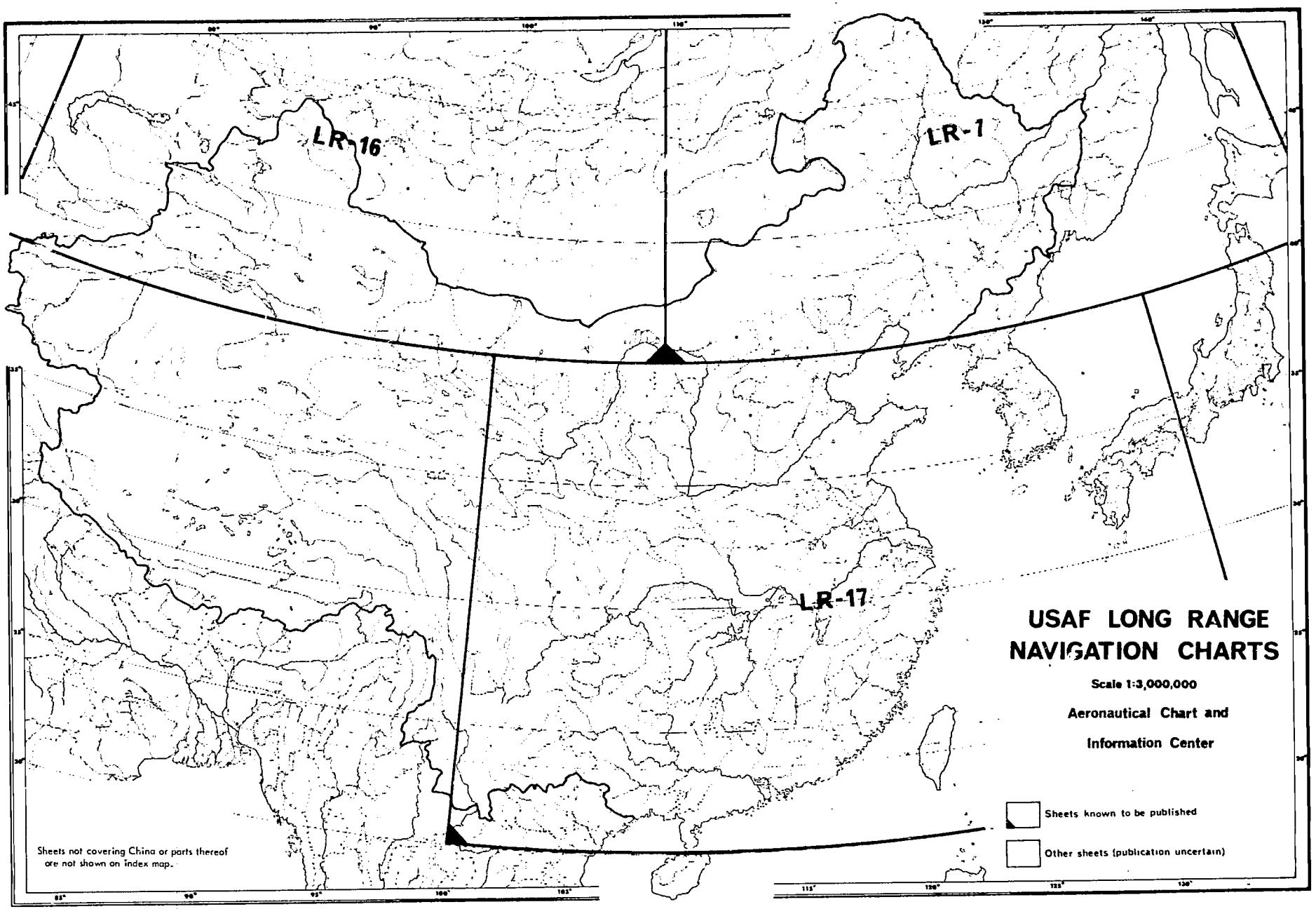

TAIWAN
Scale 1:11,000
Japanese Imperial Land Survey
Sheets known to be published
Other sheets (publication uncertain)
120°
121°
122°
25°
24°
23°
22°
TAIPEI
MA KUN
YU-WUNG TAO
TA-YU
TUNG-CHI-YU
TAINAN
FENG-SHAN
FANG-LIAO

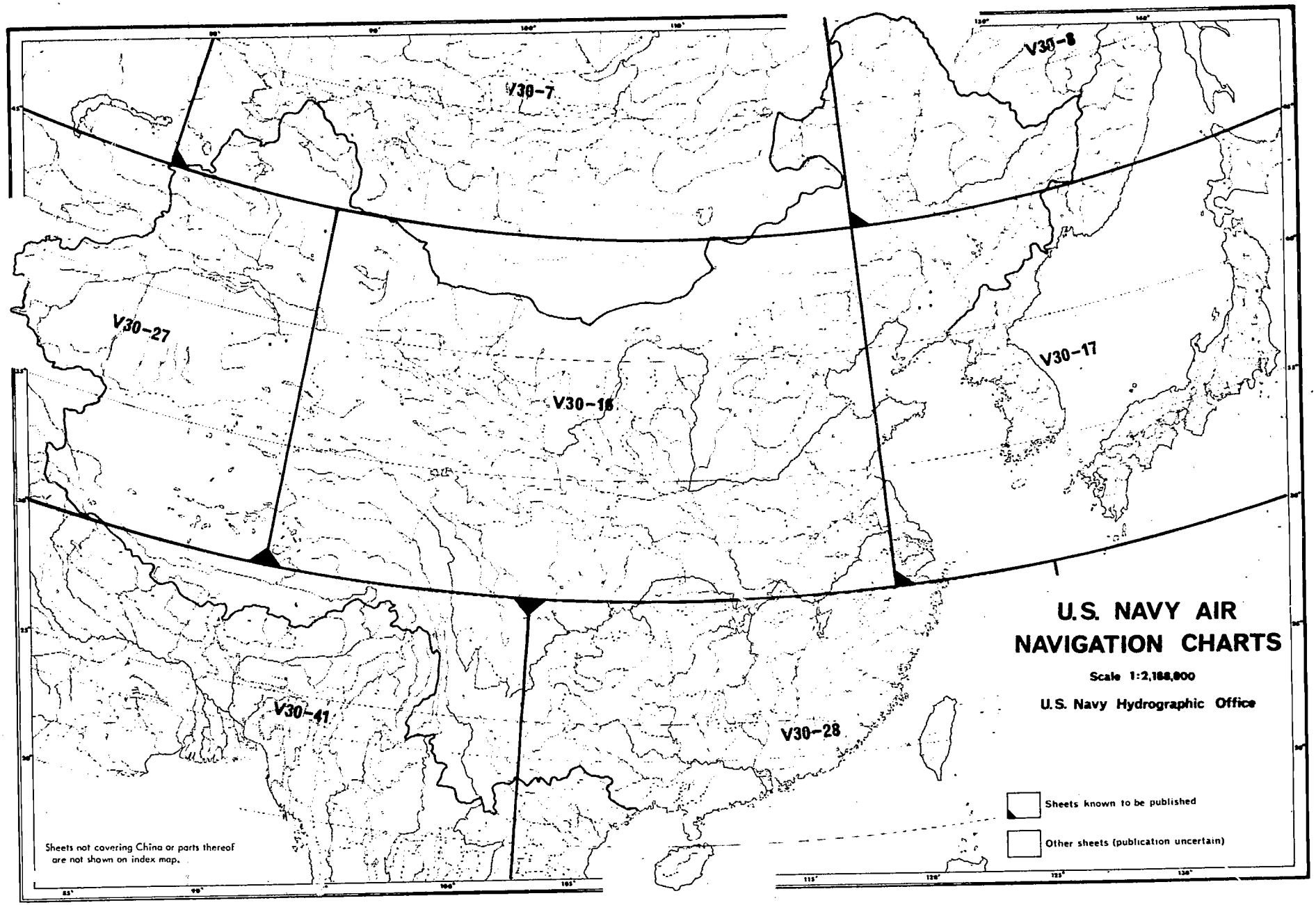

HYDROGRAPHIC CHARTS
T'AI-CHOU WAN TO LIAO-TUNG WAN
JAPANESE HYDROGRAPHIC OFFICE
392
381
371
376
Base Map by U.S. Navy Hydrographic Office

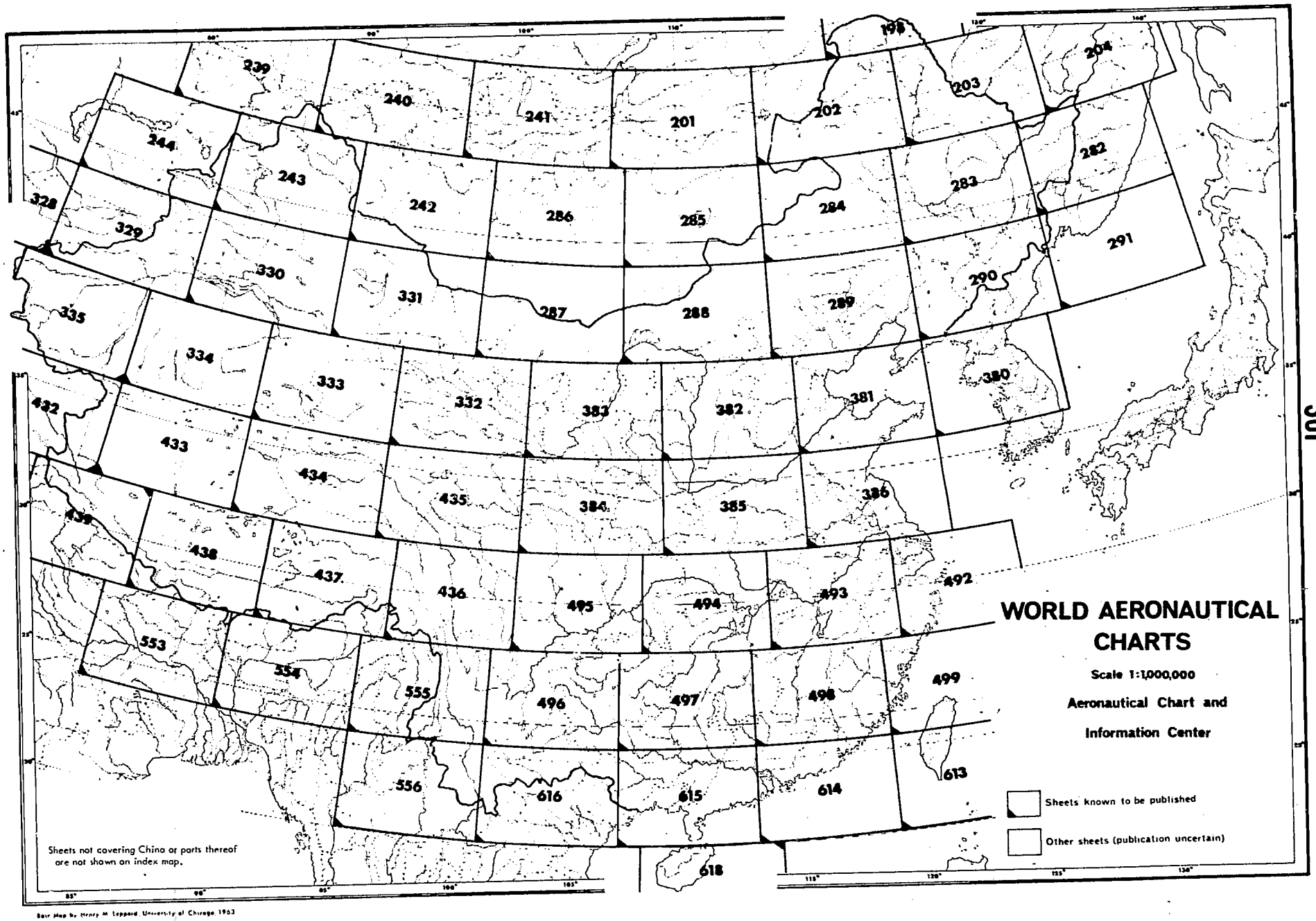

JAPANESE
HYDROGRAPHIC OFFICE
CANTON TO
TÁI-CHOU WAN
HYDROGRAPHIC
CHARTS
SEE INSET


JAPANESE
HYDROGRAPHIC OFFICE
GULF OF TONKIN
AREA
HYDROGRAPHIC
CHARTS
522
709
434
523A


VII
VIII
IX
X
XI
9
10
11
12
13
14
15
ASIA
Scale 1:1,500,000
Russian General Staff
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering China or parts thereof are not shown on index map.


LR-16
LR-1
LR-17
USAF LONG RANGE NAVIGATION CHARTS
Scale 1:3,000,000
Aeronautical Chart and Information Center
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering China or parts thereof are not shown on index map.
Base Map by Henry M. Leppard, University of Chicago 1963


V30-7
V30-8
V30-27
V30-16
V30-17
V30-41
V30-28
U.S. NAVY AIR
NAVIGATION CHARTS
Scale 1:2,188,800
U.S. Navy Hydrographic Office
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering China or parts thereof
are not shown on index map.


WORLD AERONAUTICAL CHARTS
Scale 1:1,000,000
Aeronautical Chart and Information Center
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering China or parts thereof are not shown on index map.
Base Map by Henry M. Leppard, University of Chicago, 1953
239
240
241
201
202
198
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204
244
243
242
286
285
284
283
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328
329
330
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333
332
383
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439
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555
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499
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616
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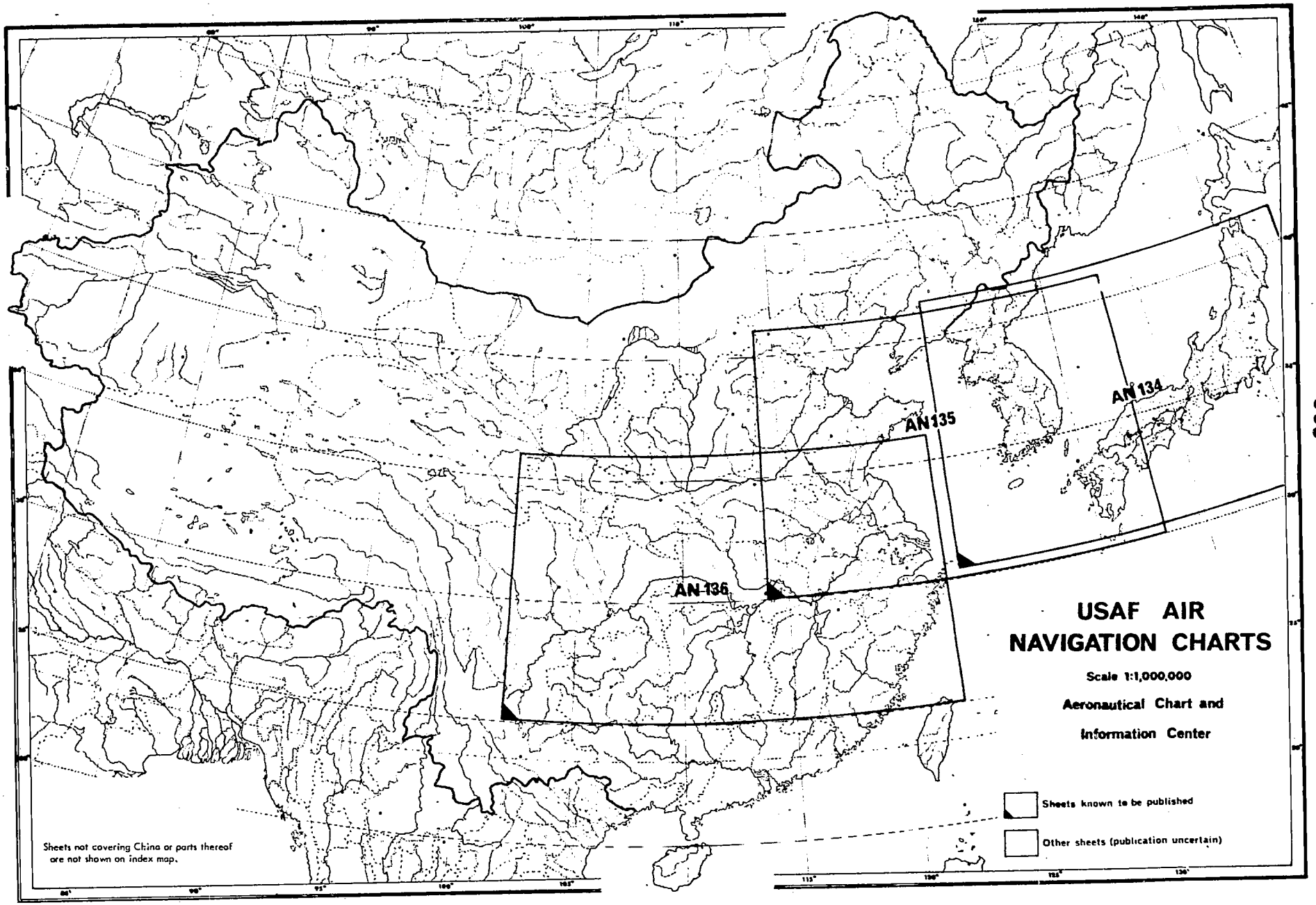
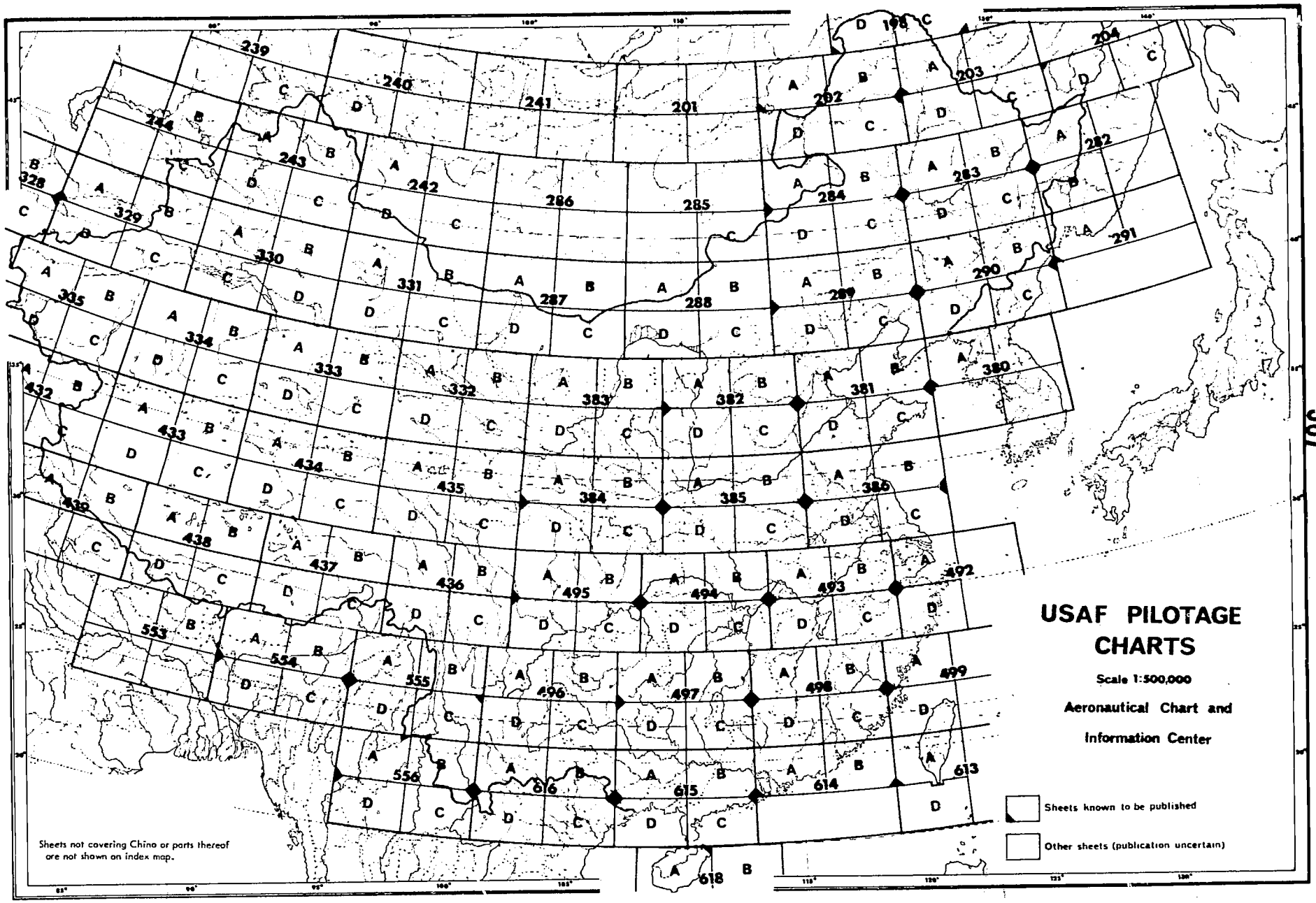
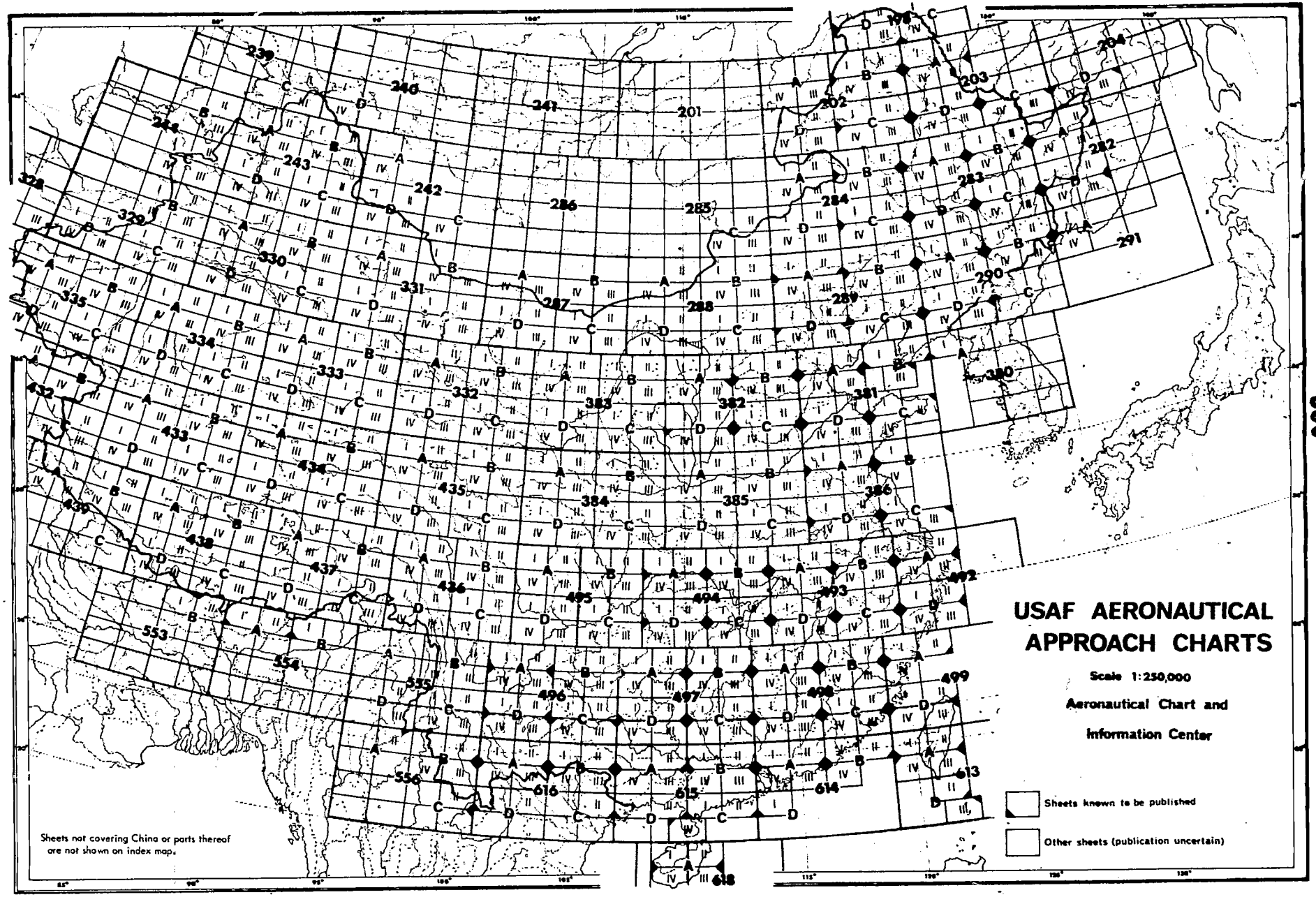
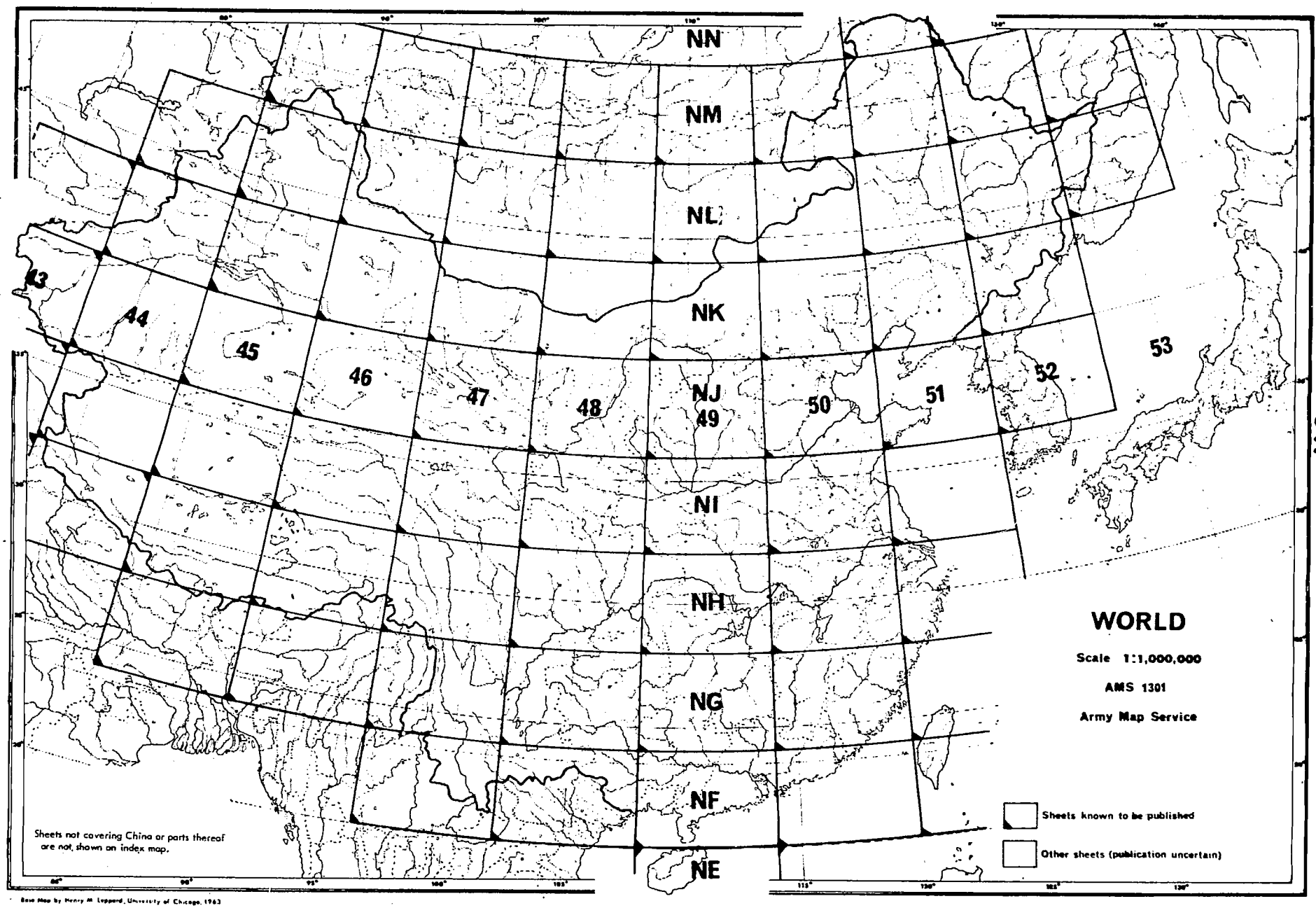
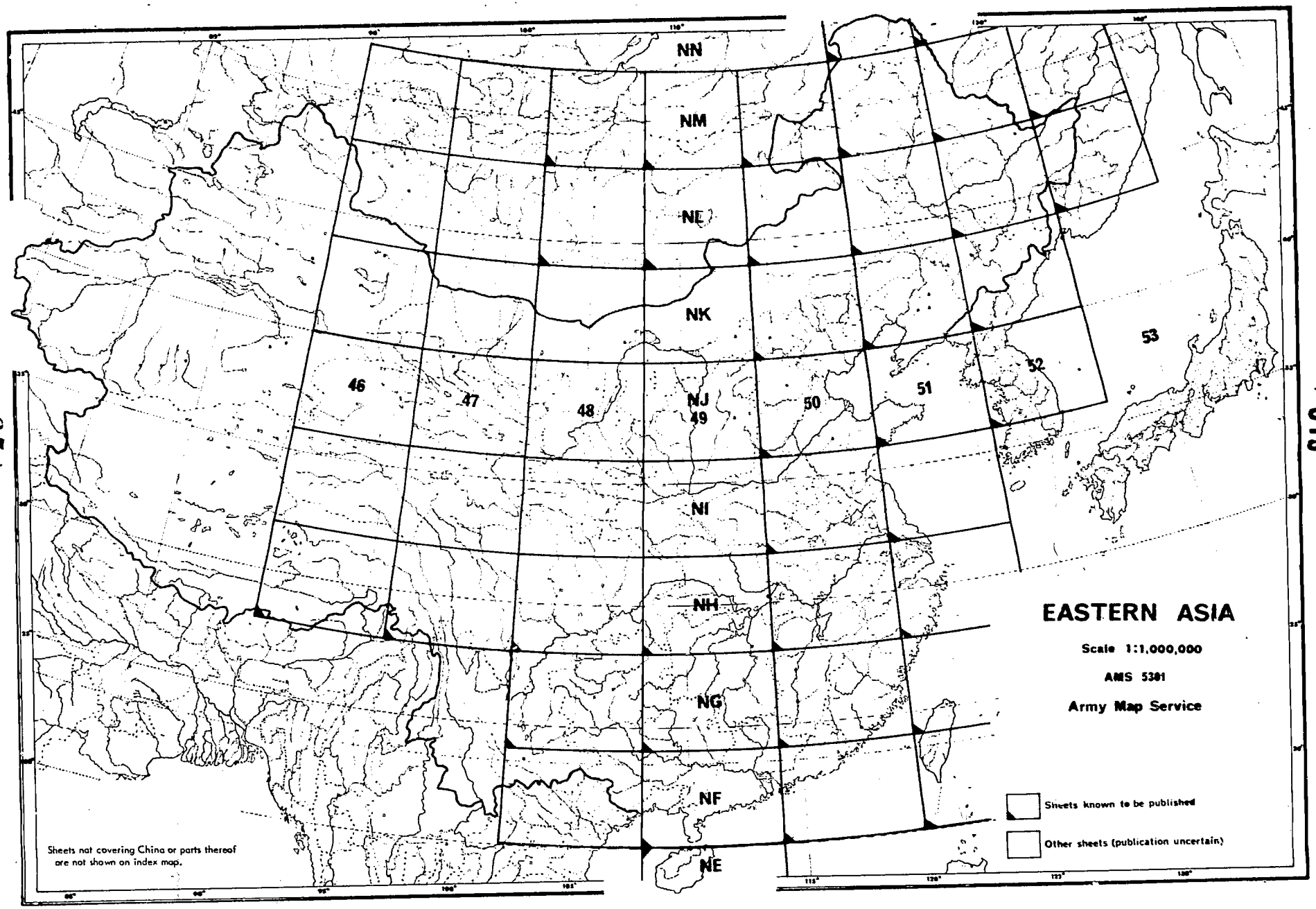
614
613
618

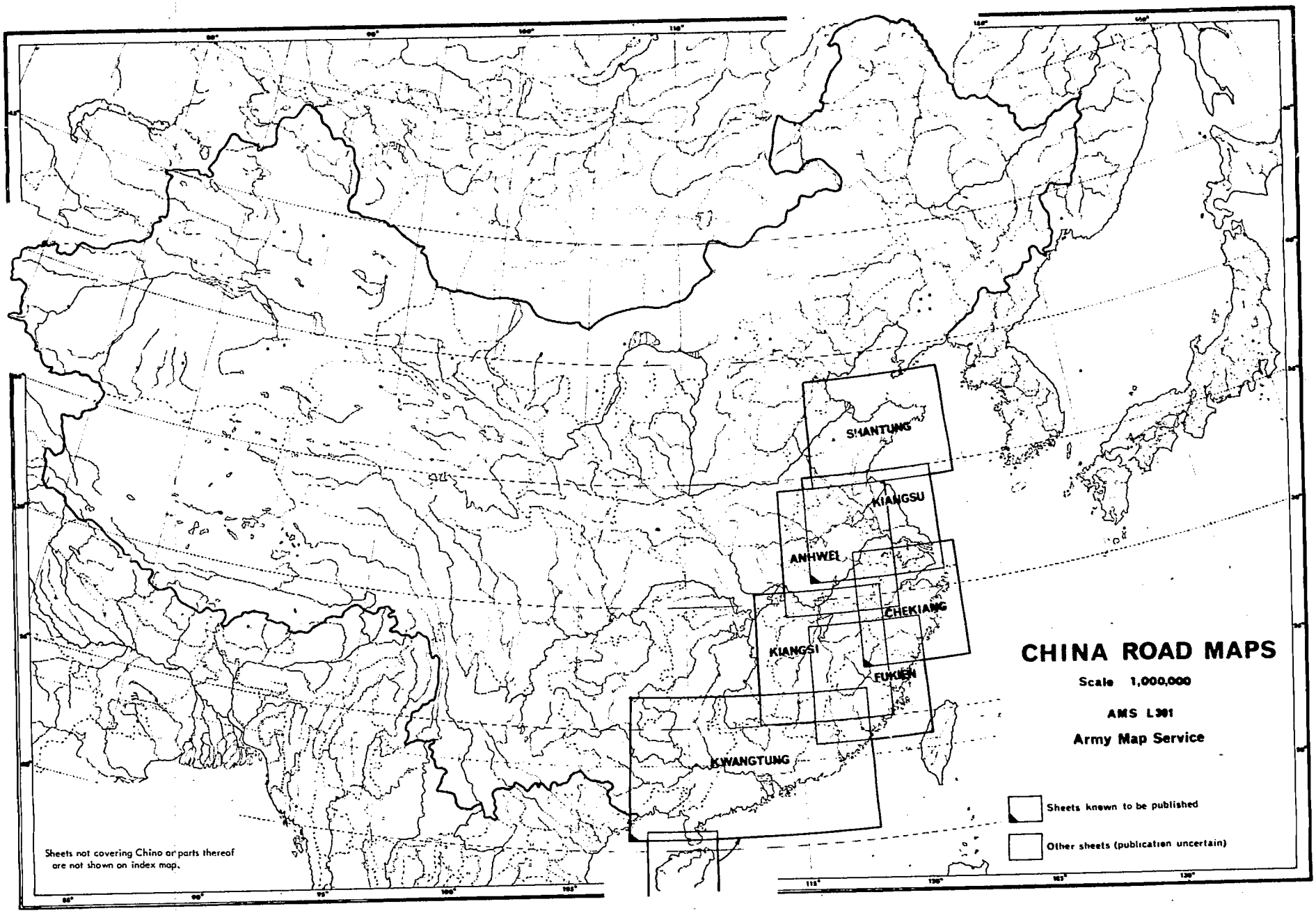

AN 134
AN135
AN 136
USAF AIR
NAVIGATION CHARTS
Scale 1:1,000,000
Aeronautical Chart and
Information Center
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering China or parts thereof
are not shown on index map.
Base Map by Henry M. Leppard, University of Chicago, 1963

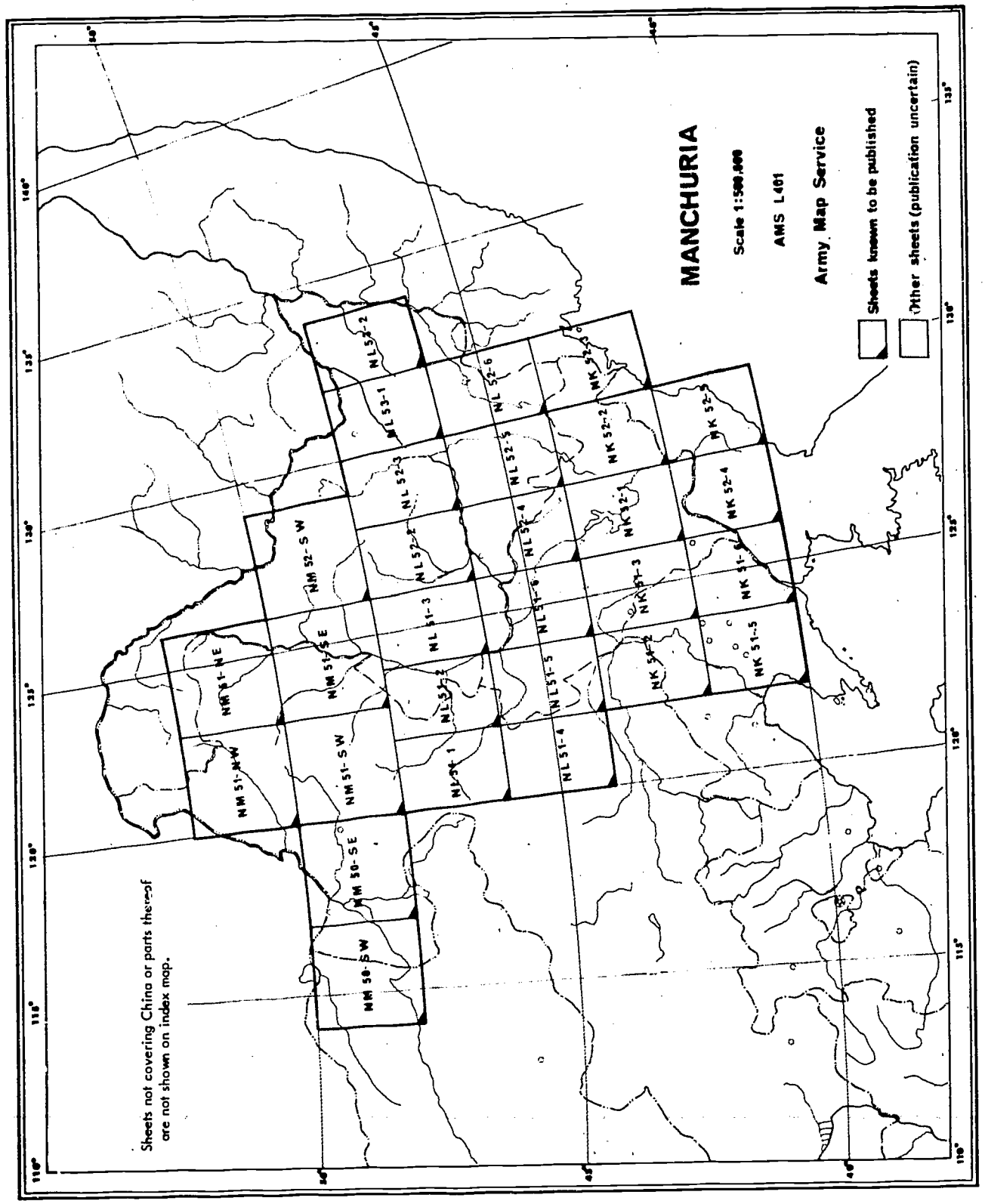

USAF PILOTAGE CHARTS
Scale 1:500,000
Aeronautical Chart and Information Center
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering China or parts thereof are not shown on index map.
Base Map by Henry M. Leppard University of Chicago, 1963

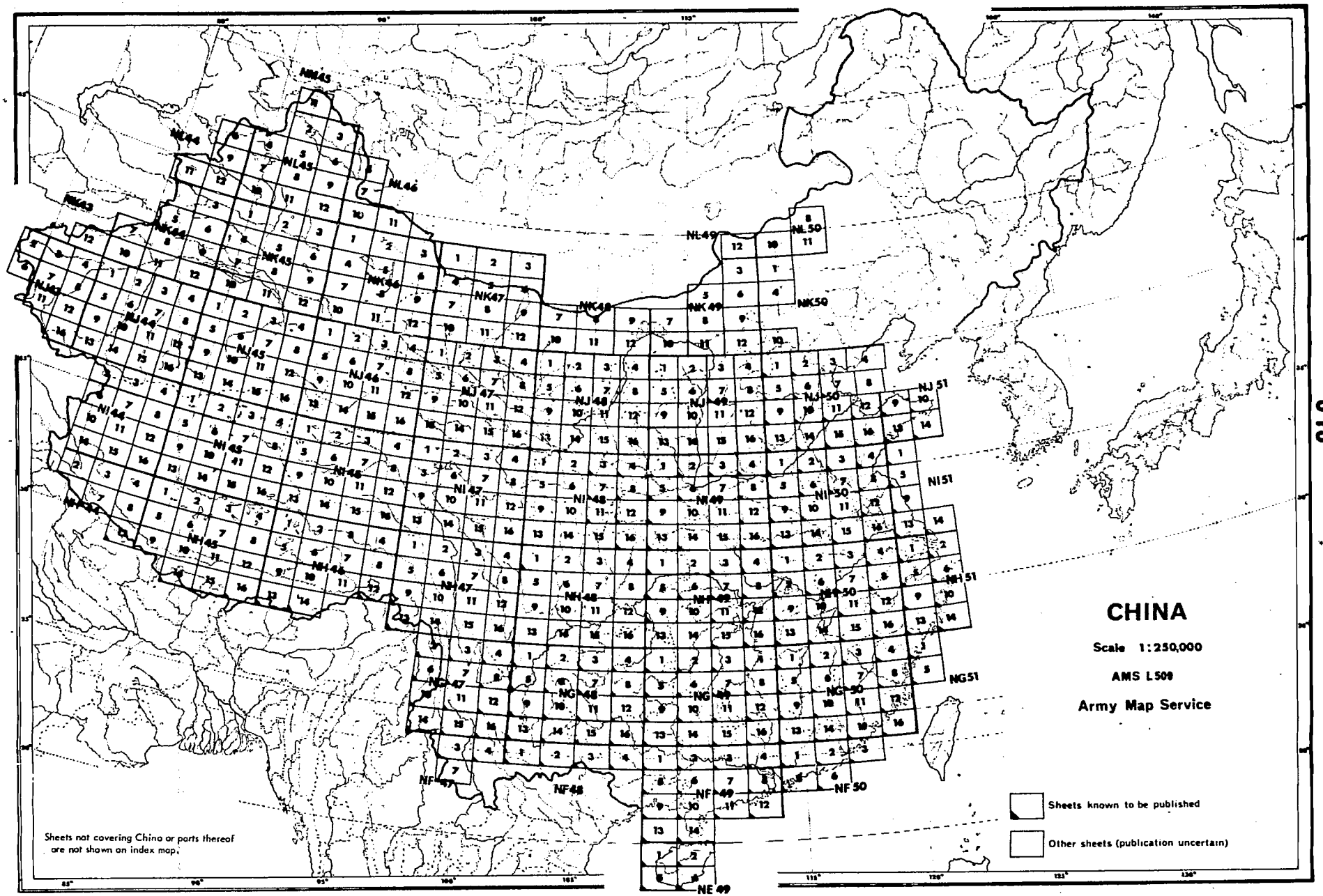

USAF AERONAUTICAL
APPROACH CHARTS
Scale 1:250,000
Aeronautical Chart and
Information Center
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering China or parts thereof
are not shown on index map.
Base Map by Henry M. Leppard, University of Chicago, 1963

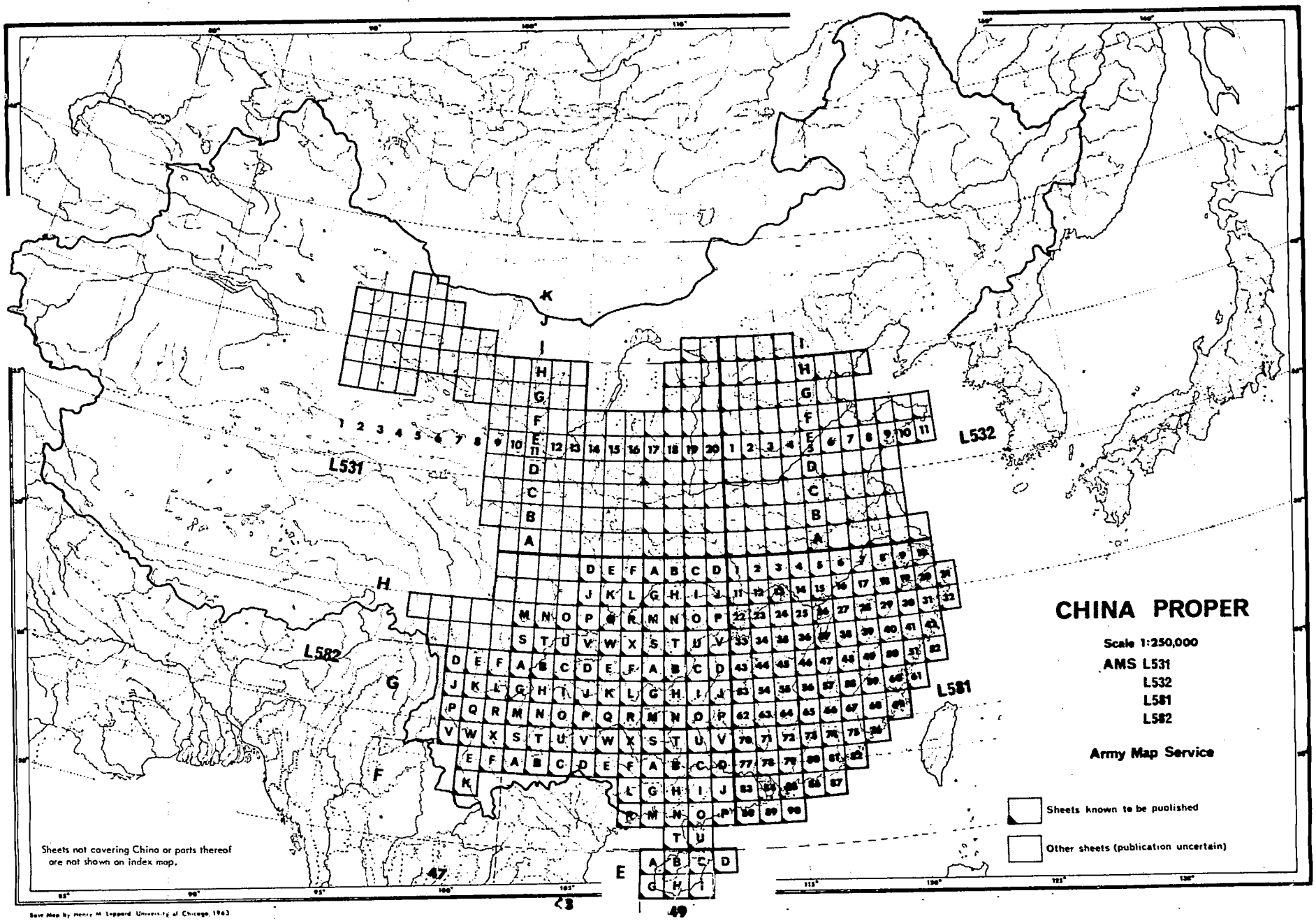

NN
NM
NL
NK
NJ
NI
NH
NG
NF
NE
43
44
45
46
47
48
49
50
51
52
53
WORLD
Scale 1:1,000,000
AMS 1301
Army Map Service
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering China or parts thereof are not shown on index map.
Base Map by Henry M. Leppard, University of Chicago, 1963

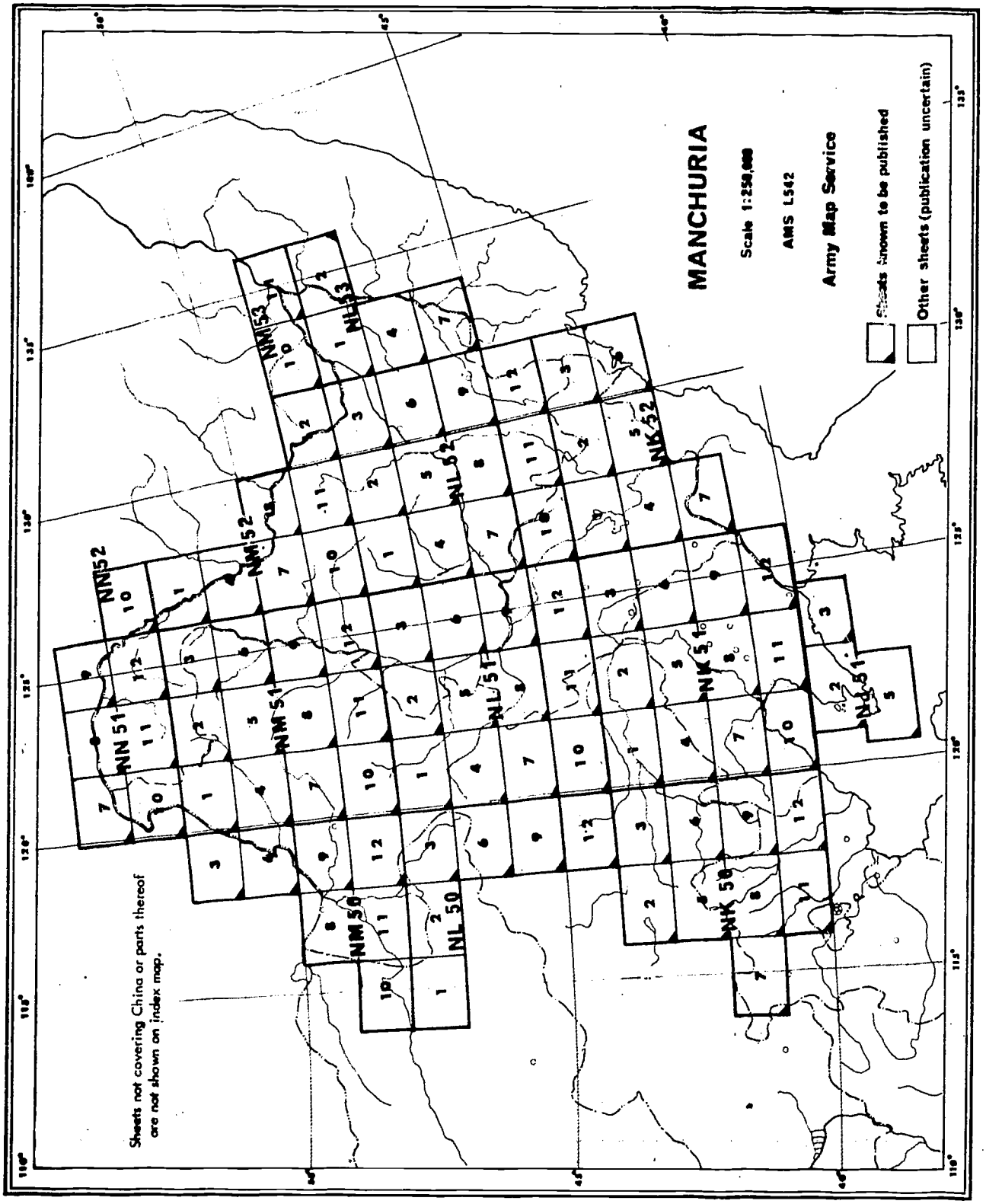

NN
NM
NL
NK
46
47
48
NJ
49
50
51
52
53
NI
NH
NG
NF
NE
EASTERN ASIA
Scale 1:1,000,000
AMS 5301
Army Map Service
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering China or parts thereof are not shown on index map.

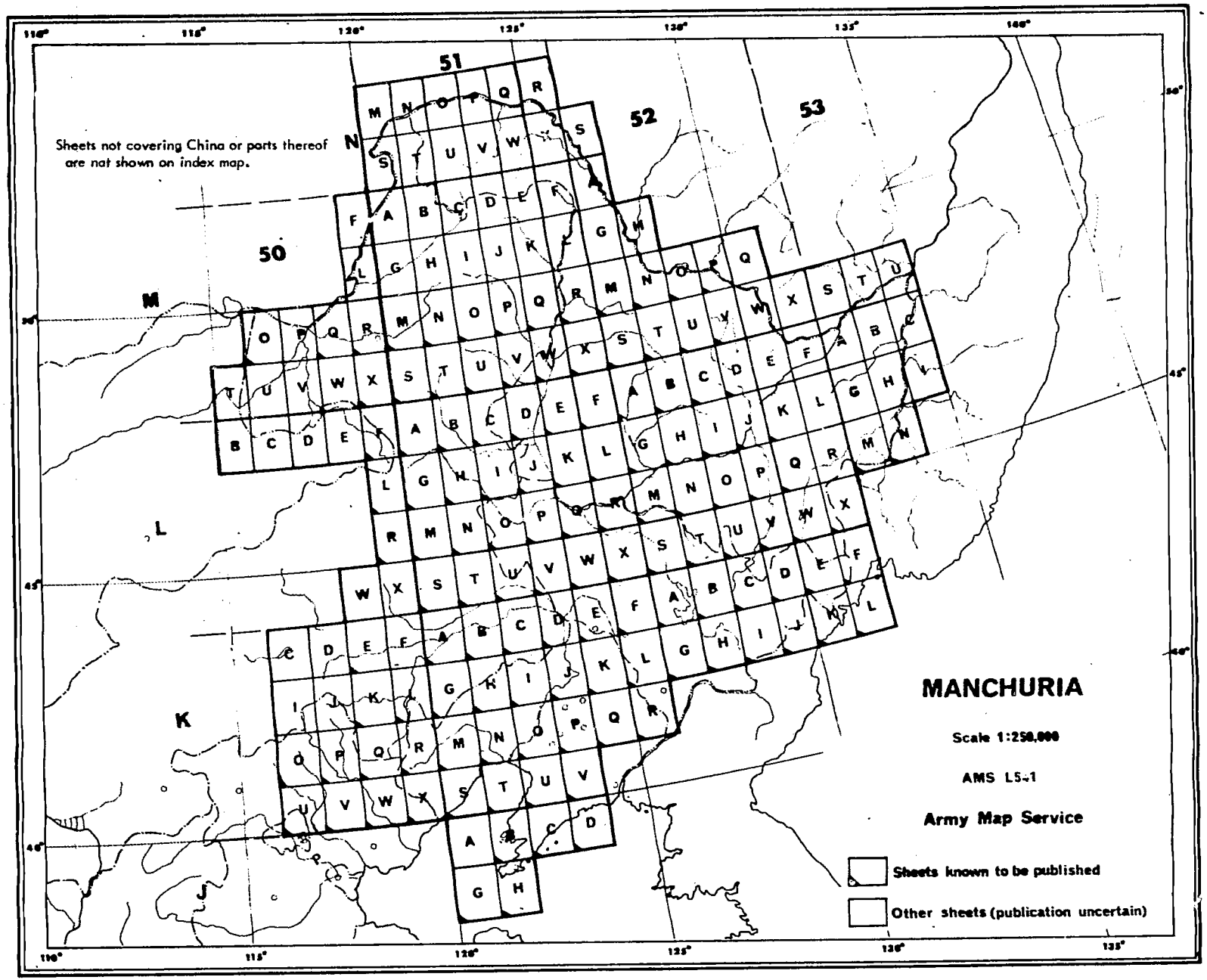

SHANTUNG
KIANGSU
ANHWEI
CHEKIANG
KIANGSI
FUKIEN
KWANGTUNG
CHINA ROAD MAPS
Scale 1,000,000
AMS L301
Army Map Service
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering China or parts thereof are not shown on index map.
Base map by Henry M. Leppard, University of Chicago, 1963

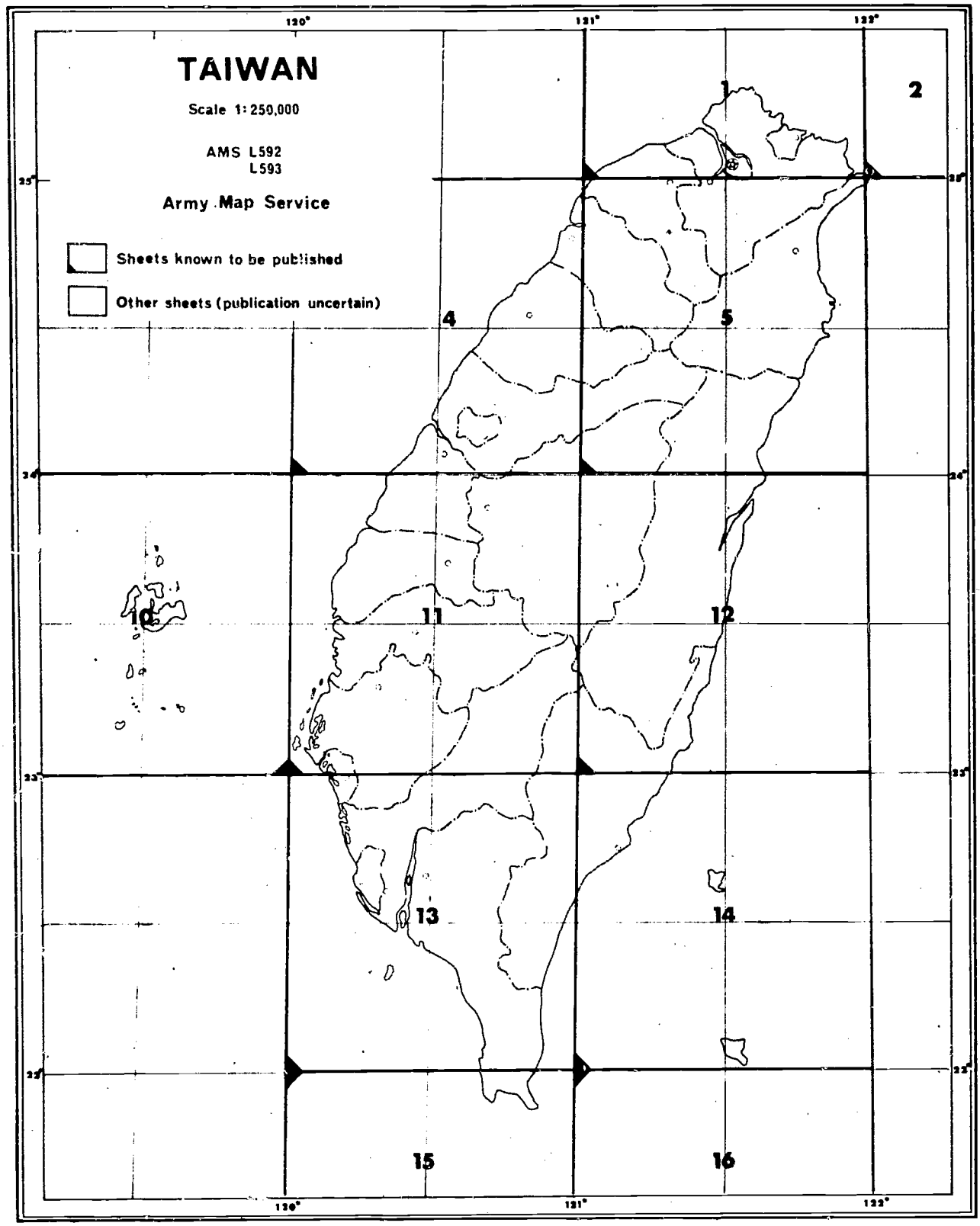

MANCHURIA
Scale 1:500,000
AMS L 401
Army Map Service
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering China or parts thereof are not shown on index map.
NM 51-NW
NM 51-NE
NM 51-SW
NM 51-SE
NM 50-SW
NM 50-SE
NL 51-1
NL 51-2
NL 51-3
NL 51-4
NL 51-5
NL 51-6
NL 52-1
NL 52-2
NL 52-3
NL 52-4
NL 52-5
NL 52-6
NL 53-1
NK 51-3
NK 51-4
NK 51-5
NK 52-1
NK 52-2
NK 52-3
NK 52-4
NK 52-5


CHINA
Scale 1:250,000
AMS L509
Army Map Service
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering China or parts thereof are not shown on index map.
Base Map by Henry M. Leppard, University of Chicago, 1963


CHINA PROPER
Scale 1:250,000
AMS L531
L532
L581
L582
Army Map Service
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering China or parts thereof are not shown on index map.
L531
L532
L581
L582
Base Map by Henry M. Leppard University of Chicago 1963


MANCHURIA
Scale 1:250,000
AMS L542
Army Map Service
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering China or parts thereof are not shown on index map.
NM 52
NM 51
NM 50
NL 51
NL 50
NK 52
NK 51
NK 50


Sheets not covering China or parts thereof are not shown on index map.
51
52
53
50
N
M
L
K
MANCHURIA
Scale 1:250,000
AMS L5-1
Army Map Service
Sheets known to be published
Other sheets (publication uncertain)


TAIWAN
Scale 1:250,000
AMS L592
L593
Army Map Service
Sheets known to be published
Other sheets (publication uncertain)
120°
121°
122°
25°
24°
23°
22°
1
2
4
5
10
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12
13
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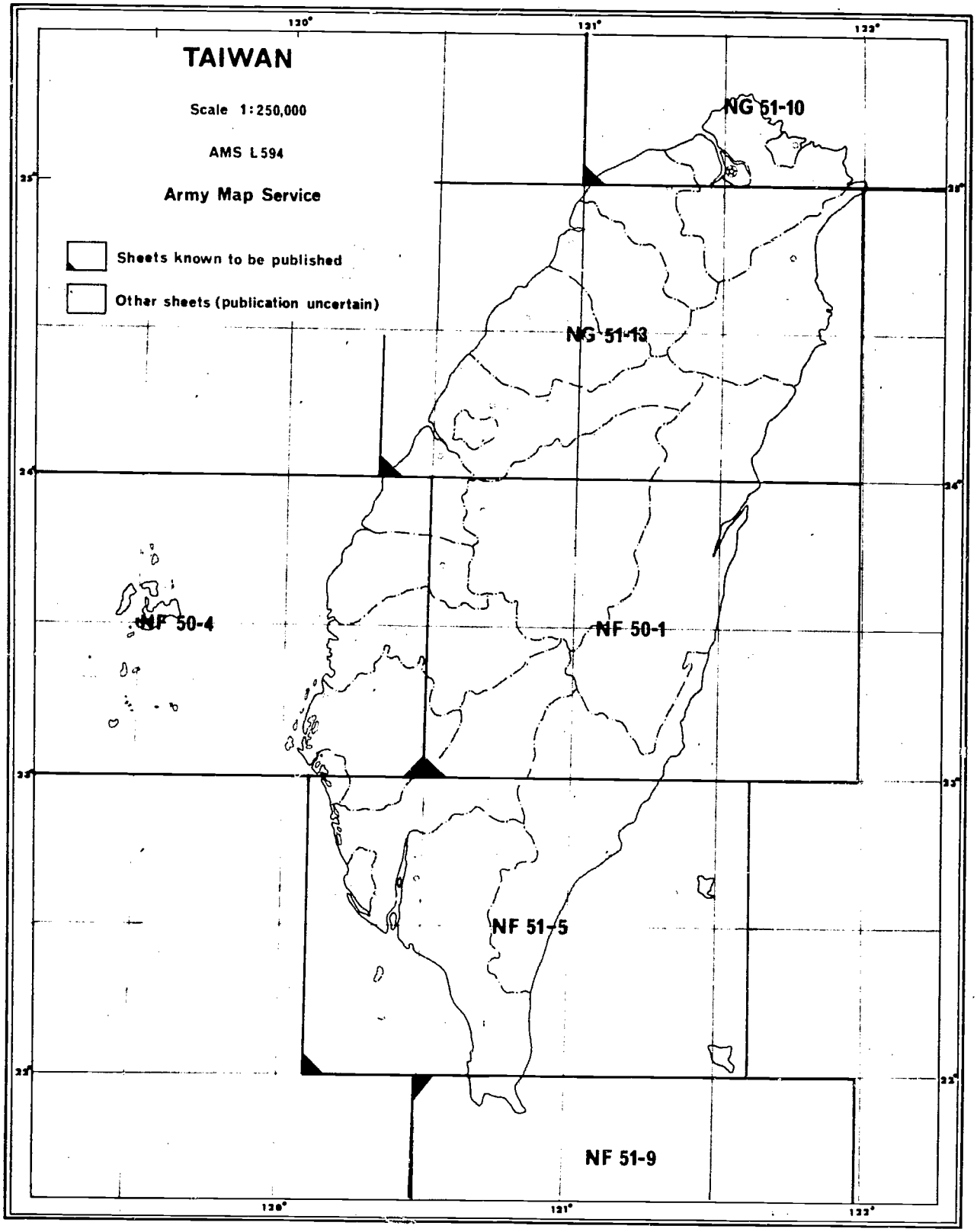
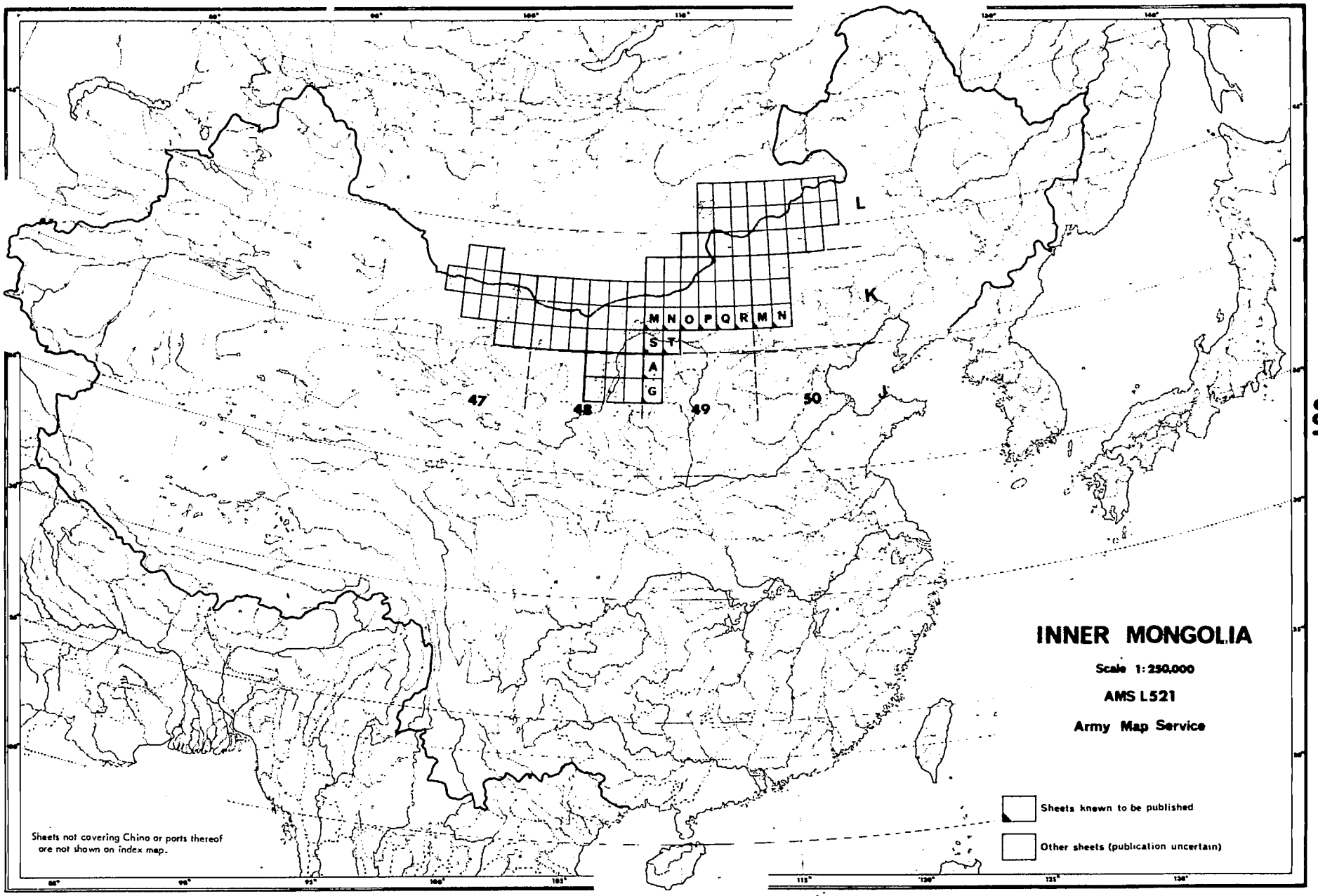
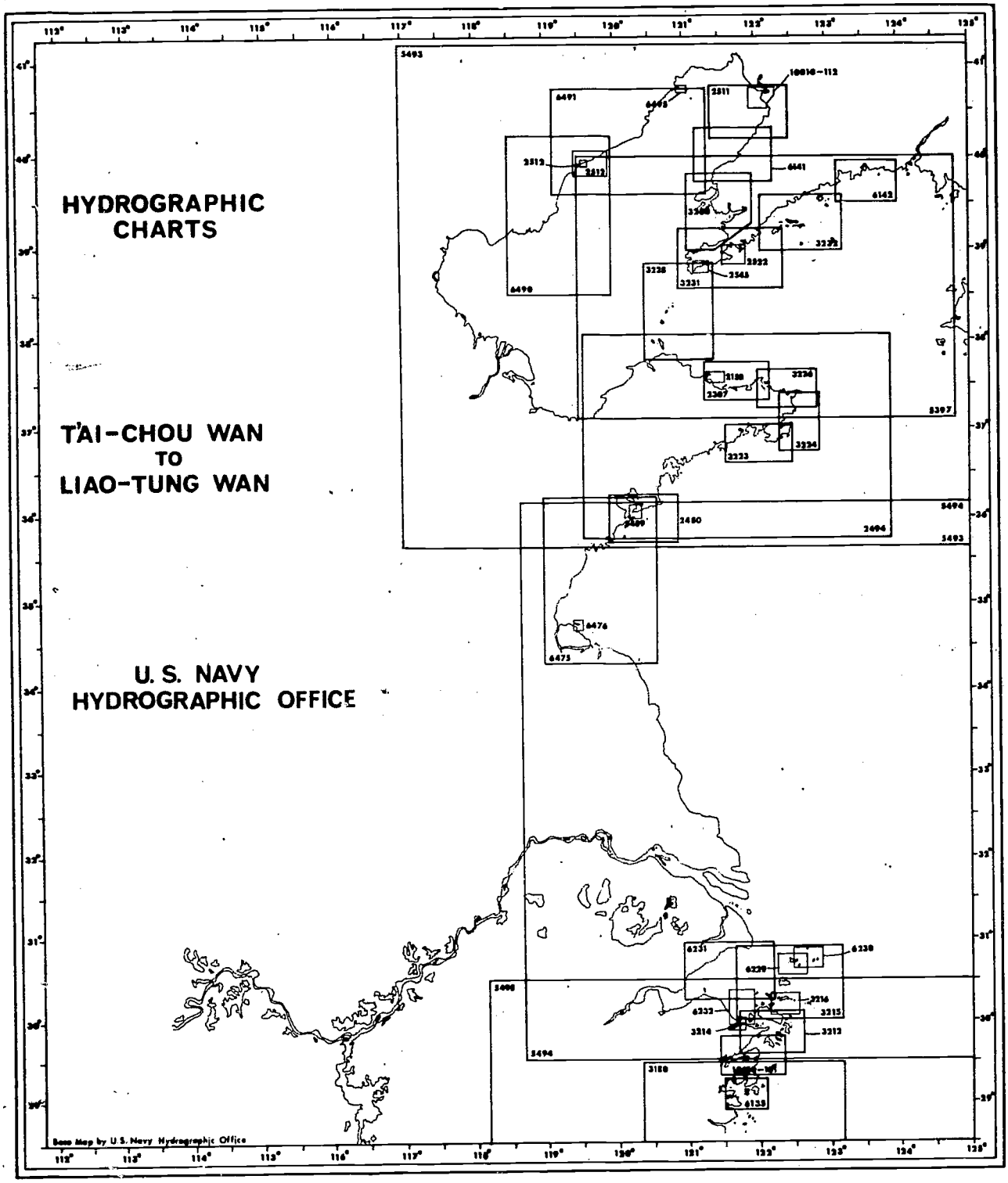
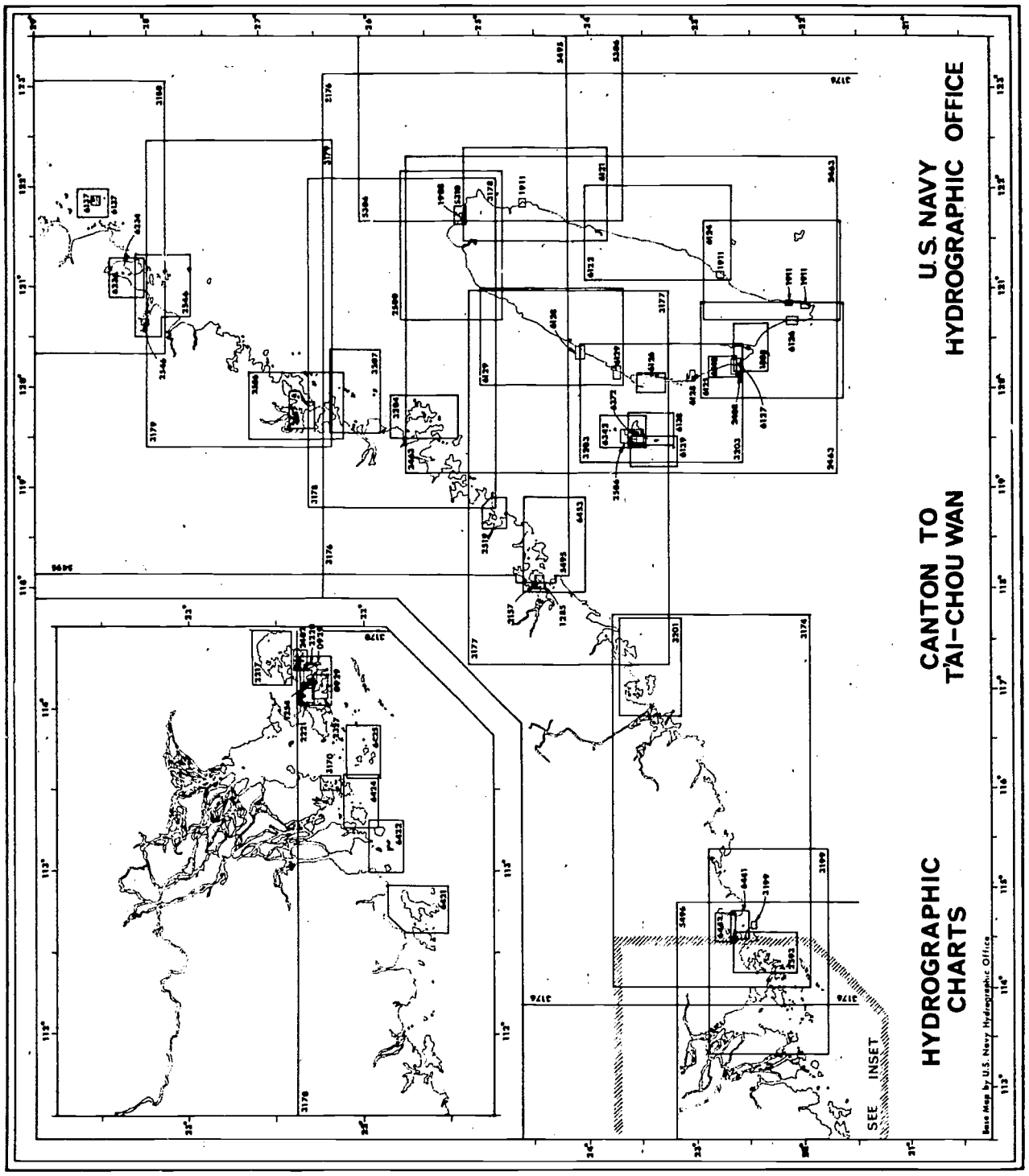
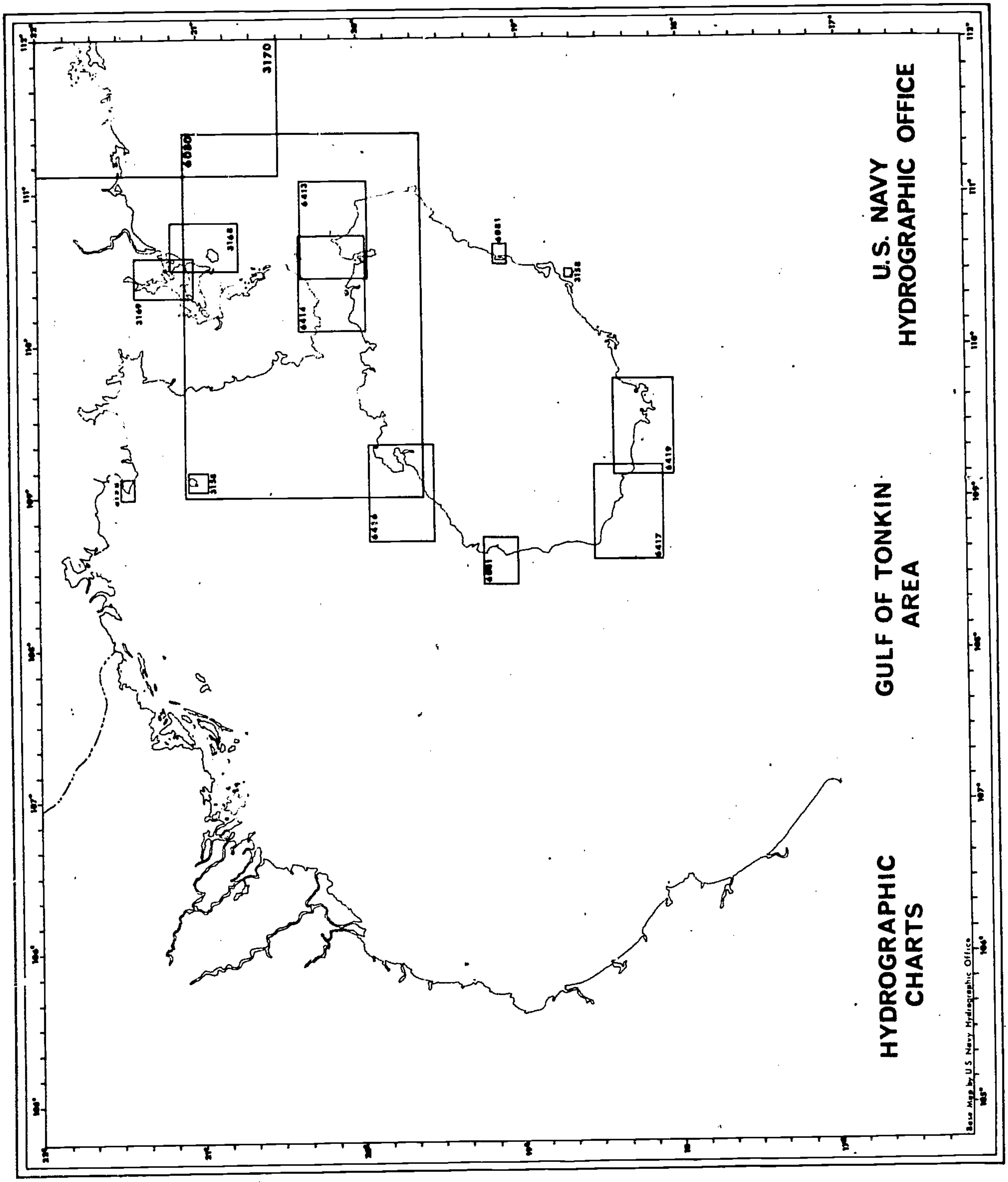
16


TAIWAN
Scale 1:250,000
AMS L594
Army Map Service
Sheets known to be published
Other sheets (publication uncertain)
NG 51-10
NG 51-13
NF 50-4
NF 50-1
NF 51-5
NF 51-9
120°
121°
122°
25°
24°
23°
22°


L
K
M N O P Q R M N
S T
A
G
47
48
49
50
J
INNER MONGOLIA
Scale 1:250,000
AMS L521
Army Map Service
Sheets known to be published
Other sheets (publication uncertain)
Sheets not covering China or ports thereof are not shown on index map.
Base Map By Henry M. Leppard, University of Chicago, 1963


HYDROGRAPHIC CHARTS
T'AI-CHOU WAN TO LIAO-TUNG WAN
U. S. NAVY HYDROGRAPHIC OFFICE
Base Map by U.S. Navy Hydrographic Office


U.S. NAVY
HYDROGRAPHIC OFFICE
CANTON TO
T'AI-CHOU WAN
HYDROGRAPHIC
CHARTS
SEE INSET
Base Map by U.S. Navy Hydrographic Office


U.S. NAVY
HYDROGRAPHIC OFFICE
GULF OF TONKIN
AREA
HYDROGRAPHIC
CHARTS
Base Map by U.S. Navy Hydrographic Office
3170
6050
6413
6414
3168
3169
6419
6417
6416

APPENDIX A

MAP COLLECTIONS ON CHINA &

MAP LIBRARIES VISITED

The following list includes almost all the map libraries in the United States and Canada known to contain collections of maps on China, as determined from questionnaires used in this study. Only those map libraries reporting collections of at least one hundred sheets or more on China are included.

Those libraries visited personally in the course of this study are starred thus (*).

The entries are arranged alphabetically, by state. Each entry consists of the name and address of the map library, followed by the following information, if applicable or known:

AMS -- Indicates the library is an Army Map Service depository

Reprod. -- Indicates reproduction facilities are available for making copies of maps, where allowed

Loan -- Indicates maps may be borrowed on inter-library loan

As library policies are subject to change, it is best to check with individual libraries for immediately current policies.

Arizona

Map Division, University of Arizona Library
Tucson, Arizona
AMS; Reprod.; Loan

California

Fresno State College Library
Fresno 26, California
AMS

Map library
Scripps Institution of Oceanography
University of California, San Diego
La Jolla, California
Reprod.

Map Collection, General Library
University of California, Berkeley
Berkeley, California
AMS; Reprod.

Colorado

Map Library, Department of Geography
University of Colorado
Boulder, Colorado
AMS; Reprod.

Connecticut

Olin Library
Wesleyan University
Middletown, Connecticut
AMS; Loan

District of Columbia

*Army Map Service
Washington 25, D.C.
(Note: The AMS map library is *not* open to the public)

*Library of Congress
Washington 25, D.C.
AMS; Reprod.; Loan

*National Archives and Records Service
Washington 25, D.C.

*National Geographic Society
Washington, D.C.

*Department of the Interior
Geological Survey
Washington 25, D.C.

U.S. Naval Oceanographic Office
Nautical Chart Library, Maritime Safety Division
Washington 25, D.C.
AMS; Reprod.; Loan

U.S. Naval Oceanographic Office
Cartographic Library, Aeronautical Division
Washington 25, D.C.
AMS; Reprod.; Loan

Map Library
U.S. Weather Bureau
Washington 25, D.C.

Hawaii

Gregg M. Sinclair Library
University of Hawaii,
Honolulu 14, Hawaii
AMS; Reprod.

Illinois

Map Library
Wheaton College
Wheaton, Illinois
AMS; Loan

Iowa

Library
State University of Iowa
Iowa City, Iowa
AMS; Reprod.

Massachusetts

Map Room, Harvard College Library
Harvard College
Cambridge 38, Massachusetts
AMS; Reprod.; Loan

Chinese-Japanese Library
2 Divinity Avenue
Cambridge 38, Massachusetts

Science Library
Massachusetts Institute of Technology
Cambridge 39, Massachusetts
AMS; Reprod.

Michigan

Detroit Public Library
5201 Woodward
Detroit 2, Michigan
AMS; Reprod.; Loan

Michigan State University Library
East Lansing, Michigan
AMS; Reprod.; Loan

Map Room, General Library
University of Michigan
Ann Arbor, Michigan
AMS; Reprod.

Missouri

St. Louis Public Library
1301 Olive Street
St. Louis 3, Missouri
AMS; Reprod.

New Hampshire

Dartmouth College Library
Hanover, New Hampshire
AMS; Reprod.; Loan

New York

American Geographical Society
Broadway at 156th St.
New York 32, N.Y.
AMS; Reprod.; Loan

Geology Library, University Map Room
601 Schermerhorn
Columbia University
New York 27, N.Y.
AMS; Reprod.; Loan

John M. Olin Research Library
Cornell University
Ithaca, N.Y.
AMS; Reprod.

New York Public Library Map Division
Fifth Avenue & 42nd Street
New York 18, N.Y.
AMS; Reprod.

Ohio

Map Library
Main Library Building
Ohio State University
Columbus 10, Ohio
AMS; Reprod.; Loan

Oklahoma

University Library
Oklahoma State University
Stillwater, Oklahoma
AMS; Reprod.

Pennsylvania

The Free Library of Philadelphia
Map Collection, Social Science & History Department
Logan Square
Philadelphia 3, Pennsylvania
AMS; Reprod.

Map Library
University of Pittsburgh
Pittsburgh 13, Pennsylvania
AMS; Reprod.

Puerto Rico

General Library
University of Puerto Rico
Rio Piedras, Puerto Rico
AMS; Reprod.

Washington

*Map Library, Geography Department
University of Washington
Seattle 5, Washington
AMS; Reprod.; Loan

Wisconsin

Map-Air Photo Library
Department of Geography
University of Wisconsin
Madison 6, Wisconsin
AMS; Loan

Canada

Map Research Unit
Geographical Branch
Department of Mines & Technical Surveys
601 Booth Street
Ottawa 4, Ontario
AMS; Reprod.; Loan

APPENDIX B

UNITED STATES FEDERAL MAPPING AGENCIES AND

FOREIGN MAPPING AGENCIES

Listed below are the names and addresses of all United States federal mapping agencies and foreign mapping agencies known to be *currently* publishing maps on China and whose publications are available for sale to the public. Information is included with each entry regarding purchase of maps, if known. Since policies are subject to change, it is best to check with the individual agency regarding immediately current policies.

UNITED STATES

Aeronautical Chart & Information Center

Sale of ACIC aeronautical charts and publications to the public is handled by the U.S. Coast and Geodetic Survey. Charts may be procured from regional offices, U.S.C. & G.S., or directly from the head office.

Regional Offices:

Mid-Continent Field Director
Coast and Geodetic Survey
Environmental Science Services Administration
324 U.S. Courthouse
811 Grand Avenue
Kansas City, Missouri 64106

New York Field Officer
Coast and Geodetic Survey
Environmental Science Services Administration
Room 1407, Federal Office Building
90 Church Street
New York, N.Y.

West Coast Field Director
Coast and Geodetic Survey
Environmental Science Services Administration
Room 121, Customhouse
San Francisco, California 94126

Head Office:

Director, Coast and Geodetic Survey
Washington Science Center
Rockville, Maryland 20852

Army Map Service

A very limited number of maps and map series, none larger than 1:500,000 scale, may be purchased by the public by writing to the following address:

Commanding Officer, Army Map Service
6500 Brooks Lane
Washington 25, D.C.

U.S. Navy Hydrographic Office

All U.S. hydrographic charts and U.S. Navy aeronautical charts are available through authorized Hydrographic Office Sales Agents. Whenever possible, charts and publications should be purchased through the local Sales Agent. In the event there is no Sales Agent in the area, or the desired items are not available from the Sales Agent, H.O. charts and publications may be purchased from the local Branch Hydrographic Office (over-the-counter) or by mail from the U.S. Navy Hydrographic Office, Washington 25, D.C., or from either of the Hydrographic Office Distribution Offices. These are, for persons located west of the Mississippi River:

U.S. Navy Hydrographic Distribution Office
Clearfield Annex
Ogden, Utah

or from all other localities:

Hydrographic Distribution Office
U.S. Naval Supply Depot
5801 Tabor Avenue
Philadelphia 20, Pennsylvania

JAPAN

Hydrographic Office

Hydrographic charts may be purchased by writing to:

Hydrographic Office
5-Chome, Tsukiji
Chuo-Ku
Tokyo, Japan

CHINA (Taiwan)

Naval Hydrographic Office of China

Hydrographic charts may be purchased by writing to:

Naval Hydrographic Office of China
Tso-Ying, Kaohsiung
Taiwan (Formosa)
China

GREAT BRITAIN

Geographical Section, General Staff (Directorate of Military Survey)

Applications for maps should not be made direct to the War Office. Maps and catalogs published by the GSGS can be obtained from the following agents:

Edward Stanford, Ltd.
12-14 Long Acre
London, W.C.2.

Sifton Praed & Co.
67 St. Jame's Street
London, S.W.1.

Philip, Son & Nephew, Ltd.
7, Whitechapel
Liverpool, 1.

Hydrographic Department of the Admiralty

Purchase of hydrographic charts and publications may be made from the following Admiralty Chart Agents:

Maryland Nautical Sales, Inc.
406 Water Street
Baltimore 2, Maryland

Baker Lyman & Co., Inc.
308 Magazine Street
New Orleans, Louisiana

T.S. & J.D. Negus
69 Pearl Street
New York, N.Y.

N.Y. Nautical Instrument & Service Corp.
40 Water St.
New York, N.Y.

Henry Eagleton Co.
430 Boush St.
Norfolk, Virginia

Victor Auguste Gustin
105 S. Second St.
Philadelphia 6, Pennsylvania

Riggs & Brother
310 Market St.
Philadelphia 6, Pennsylvania

G.E. Butler Co.
356 Calif. St.
San Francisco, California

San Francisco Instr. Co.
840 Battery St.
San Francisco, California

C.J. Hendry Co.
111-121 South Front Street
San Pedro, California

Southwest Instr. Co.
235 West Seventh Street
San Pedro, California

Max Kuner Co.
1324 Second Ave.
Seattle, Washington

FRANCE

Service Hydrographique de la Marine

French hydrographic charts may be purchased by writing to:

Service Central Hydrographique (Service de Vente)
13, Rue de l'Université
Paris (7e).

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Government Publications

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China Proper, Vol. I. Geographical Handbook Series. London: British Naval Intelligence Division, July, 1944.

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Map Analysis of Manchuria. R. & A. No. 3042. Washington: U.S. Department of State, Office of Intelligence, Research & Analysis, 1946.

Map Intelligence, Edition 2. AMS Training Aid No. 6. Washington: Corps of Engineers, U.S. Army, Army Map Service, 1954.

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The following publications of the Army Map Service, as well as AMS publications listed elsewhere in this bibliography, may be obtained from the following place:

Commanding Officer, Army Map Service
6500 Brooks Lane
Washington 25, D.C.
ATTN: Chief, Map Distribution Division

Requests for publications should specify the title of the item(s) desired, plus the Technical Manual number and/or Key number, if any. It should be noted that some of these may no longer be in print.

Title	*Technical Manual No.*	*Key No.*
Chinese Military Dictionary	TM-30-533	
French Military Dictionary	TM 30-502	
German Military Dictionary	TM 30-506	
Glossary of Cartographic Terms	TM 28	204717
Glossary of Russian Map Terms 1st Ed., 1946.	TM 12	204323
Glossary of Soviet Military Terminology	TM 30-544	
Glossary of Selected Map Terms Relative to Authorities, Dates, Scales, Editions...		
Glossary of Terms of Maps of Japan, 1944		201106
Grids and Grid References	TM 36	204839

Title	*Technical Manual No.*	*Key No.*
Guide to Geographical Names in the Japanese Empire, 1944		201239
Japanese Military Dictionary	TM 30-541	
Key to Wade-Giles Romanization of Chinese Characters, 1944.		
Map Identifications and Other Marginal Information, 1951	TM 22	200653
Preparation of Maps of Foreign Areas of Standard Scales of 1:100,000 and Larger, 1956	TM 45	
(Russian Map Symbols) Conventional Symbols, Illustrated by Examples: 1:25,000, 1:50,000, 1:100,000 1:200,000.	(Translated, redrafted, and reproduced facsimile by AMS, 194[illegible])	
Russian Map Symbols, 1946	TM 17	204388
Soviet Topographic Map Symbols 1958	TM 30-548	
Symbols Appearing on Original Japanese Maps, 1944		201542
Symbols for Large-Scale Maps, 1951	TM 23	202499
Symbols for Medium-Scale Maps	TM 33	204902
Symbols for Small-Scale Maps	TM 43	209038

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(By Place Name and Topic)

THE ASIAN STUDIES CENTER OCCASIONAL PAPERS

SOUTH ASIA SERIES

Numbers 1, 2, 3, 4, 5, and 7 are out of print.

No. 6	"Bengal: Literature and History," Edward C. Dimock, Editor, Fall 1967.	$2.00
No. 8	"Community and Agricultural Development in Pakistan: Speeches of Akhter Hameed Khan" (three speeches made at Michigan State University in the fall of 1966), Winter 1969.	$1.00
No. 9	"Bengal Regional Identity," David Kopf, Editor, Spring 1969.	$2.50
No. 10	"The Punjab in Nineteenth Century Tracts: An Introduction to the Pamphlet Collections in the British Museum and India Office," by N. Gerald Barrier, Summer 1969.	$2.50
No. 11	"International Organization: A Classified Bibliography," by Harold S. Johnson and Baljit Singh, Fall 1969.	$3.00
No. 12	"Urban Bengal," Richard L. Park, Editor, Winter 1970.	$3.00
No. 13	"Bengal: East and West," Alexander Lipski, Editor, Winter 1970.	$3.00
No. 14	"The Punjab Press, 1880-1905," by N. Gerald Barrier and Paul Wallace, Summer 1970.	$3.00
No. 15	"Introduction to Oriya" and "The Oriya Writing System," by Dan M. Matson, Summer 1971.	$3.00
No. 16	"Bengal: Change and Continuity," Robert and Mary Jane Beech, Editors, Summer 1971.	$3.50
No. 17	"Sir Sayyid Ahmad Khan's History of the Bijnor Rebellion," translated by Hafeez Malik and Morris Dembo, Summer 1972.	$3.50
No. 18	"Prelude to Crisis: Bengal and Bengal Studies in 1970," Peter Bertocci, Editor, Summer 1972.	$3.50
No. 19	"Political Stability and Continuity in the Indian States during the Nehru Era, 1947-1964: A Statistical Analysis," by Baljit Singh and Dhirendra K. Vajpeyi, Spring 1973.	$3.00
No. 20	"Three Essays by Akhter Hameed Khan: Land Reform, Rural Works, and the Food Problem in Pakistan," Spring 1973.	$1.50
No. 21	"West Bengal and Bangladesh: Perspectives from 1972," Barbara Thomas and Spencer Lavan, Editors, Summer 1973.	$4.00
No. 22	"Bangladesh History, Society and Culture: An Introductory Bibliography of Secondary Materials," by Peter J. Bertocci, Fall 1973.	$1.00
No. 23	"Marxist Influences and South Asian Literature," Volume I and Volume II, Winter 1974.	$6.00

EAST ASIA SERIES

No. 1	"Modern Chinese Authors: A List of Pseudonyms," by Austin C. W. Shu, Spring 1969.	$2.00
No. 2	"On Mao Tse-Tung: A Bibliographic Guide," by Austin C. W. Shu, Summer 1972.	$3.50
No. 3	"An Index to Chinese Archaeological Works Published in the Peoples Republic of China, 1949-1965," by C.M. Chen and Richard B. Stamps, Winter 1973.	$3.50
No. 4	"China in Maps 1890-1960: A Selective and Annotated Cartobibliography, Jack F. Williams, Fall 1974.	$5.00