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Economic Intelligence Memorandum

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TRANSPORTATION IN THE COMMUNIST FAR EAST  
1962



CIA/RR EM 63-13

June 1963

CENTRAL INTELLIGENCE AGENCY

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Economic Intelligence Memorandum

TRANSPORTATION IN THE COMMUNIST FAR EAST  
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FOREWORD

The significant developments in transportation in the Communist Far East in 1962 are discussed in this memorandum. The transportation situation in Communist China, North Korea, and North Vietnam is examined in the light of current economic and military developments, and some tentative predictions for the future are made. The information was derived mainly from official publications and announcements

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TRANSPORTATION IN THE COMMUNIST FAR EAST\*

1962

Summary

The transportation system of Communist China during 1962 played an important role in the support of military operations. In May and June the railroad system performed very capably in the movement of additional troop reinforcements to the Fukien coastal area. In October and November, motor truck transport provided substantial support to the Chinese troops taking part in the attack on India. Water transport played a supporting role in the Fukien coastal troop movement, as it was able to carry some of the civilian traffic that could not move by rail because of floods and the military utilization of the rail system. In general, because of the low level of economic activity in the country as a whole, the transportation system supported the economy with much less difficulty than during the 1950's.

The transportation authorities of Communist China made little effort in 1962 to improve operating efficiency or to increase the size of the inventories of transportation equipment. The freight car park probably declined slightly, whereas the locomotive park may have been maintained at the level of the previous year. Because of the failure to allocate resources for producing or importing spare parts, it is believed that the size of the civilian motor truck park was reduced compared with the previous year. Only one vessel was added to the Chinese merchant fleet in 1962 compared with 9 ships added in 1961 and an average of 19 ships added during each of the 4 previous years.

The pace of new transportation construction activities in China did not increase appreciably in 1962. Little progress was made on the Trans-Sinkiang rail line or on other major lines under construction in the southern part of the country. The Chinese did devote considerable effort, however, to the construction of forestry and industrial railroads. Roadbuilding activities continued along the western and southern borders of the country and in some cases even extended across the border. On the inland waterways a rehabilitated 400-kilometer (km) section of the Grand Canal was placed in operation.

\* The estimates and conclusions in this memorandum represent the best judgment of this Office as of 15 May 1963. For the estimated freight traffic performance of modern inland transport in the Communist Far East during 1957-62, see Table 1, Appendix, p. 15, below.

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The transportation system of North Korea did not achieve the rate of growth in performance in 1962 necessary to meet the goals of the Seven Year Plan (1961-67), in spite of the fact that the railroad network was improved and the inventory of railroad rolling stock increased. The growth of the transport sector, however, kept pace with growth in other sectors of the economy because of a 5-percent underfulfillment of the over-all annual plan for the national economy. In North Vietnam the apparent stoppage of work on the new standard-gauge rail line from Hanoi to P'ing-hsiang in Communist China delayed the provision of added rail capacity for use in moving domestic and international military and economic traffic. In addition, little progress was noted on the restoration of the Ham Rong bridge over the Song Ma, a major Chinese aid project. New road construction in 1962 was concentrated in the rugged northwest section of the country and along the North Vietnam-Laos border in order to provide better support to the Communist elements in Laos and South Vietnam.

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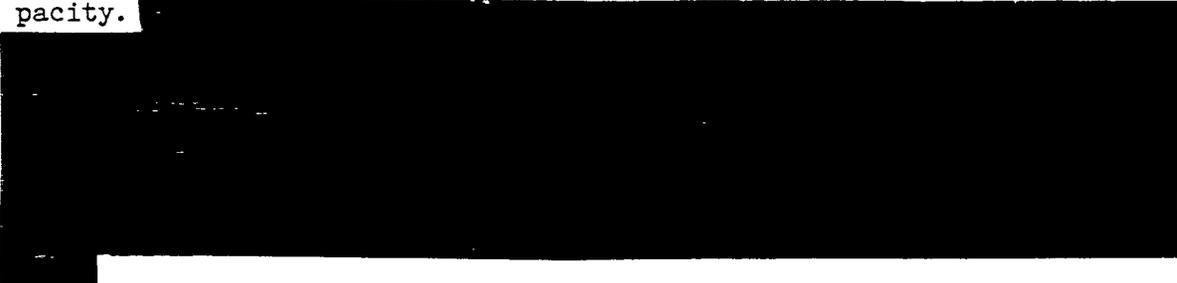
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I. Communist China\*

A. Railroads

Because of the low level of economic activity in Communist China in 1962, the railroad system supported the modern industrial economy with much less difficulty than during the 1950's. Although there have been no official announcements concerning railroad performance in 1962, it is probable that performance was somewhat below the level achieved in 1958 (see Table 2\*\*). Lack of cargo was the reason most often given for the fact that existing rail facilities were not being used to capacity.



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In spite of the fact that the railroad system was not fully utilized in 1962, the system experienced some difficulties in meeting all demands placed on it in some locations during certain time periods. Normal rail movements in southeast China, for example, were interrupted in May, June, and July by the usual seasonal floods and by what appeared to be the high-priority movement of additional troop reinforcements to the Fukien coastal area opposite the Chinese Nationalist stronghold on Taiwan. Although there were many reports of passengers being stranded and economic traffic being shunted aside, the railroad system apparently performed very capably in the purely military phases of the redeployment. Troop trains moved from various parts of the country and delivered the military units at their destinations with little interruption in a regularly scheduled sequence.

Available evidence indicates that the reduction in train speeds which was first observed in 1961 continued through 1962. Numerous press announcements related the addition of many small passenger and freight stations. These stations, which probably were not justified in terms of the volume of shipments, were ostensibly added to "support" agriculture. In terms of railroad operations, these additional stations undoubtedly resulted in a reduction in train speeds, increased turnaround time, higher costs, and generally less efficient operations.  freight cars arriving in Kowloon and numerous reports

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\* See the map, Figure 1, inside back cover.

\*\* Appendix, p. 16, below.

in the press indicate a level of maintenance somewhat lower than in previous years. It is possible, although not probable, that the freight car park may have deteriorated to the point that accidents and breakdowns may be interfering with operations. If the deterioration of the park [redacted] is allowed to continue and if production of freight cars is not resumed in the near future, the capacity of the railroad system may be reduced substantially below the peak level achieved in 1959-60.

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During 1962 the inventory of railroad freight cars in Communist China probably declined slightly to approximately 130,000 cars. [redacted] no freight cars have been produced in Communist China for internal use since mid-1961, although it is quite possible that at least some types of specialized cars were manufactured or imported. Information on the production or import of locomotives is not available, although it is possible that enough steam locomotives were completed to take care of normal replacements. In the absence of any evidence to the contrary, it seems likely that the Chinese locomotive park remained static during 1962.

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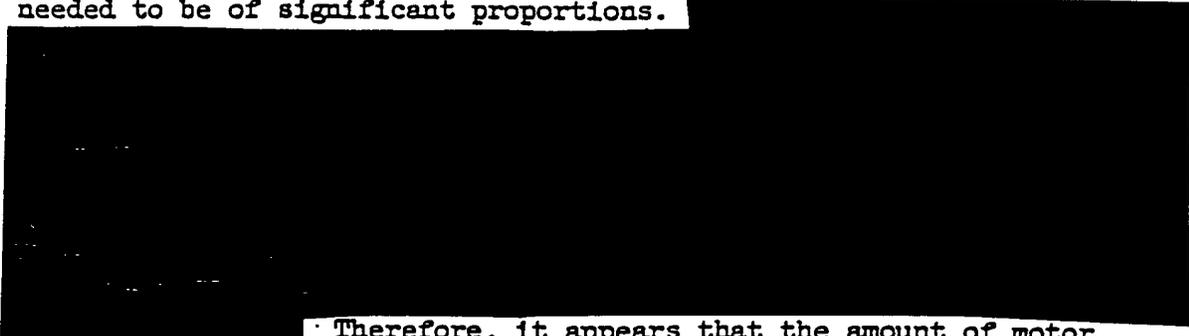
Little additional trackage was added to the main-line railroad network in 1962. Although more than enough time has elapsed for completion of the Trans-Sinkiang line to the Soviet border, about 500 kilometers (km) west of Urumchi, there is no evidence that this has occurred. Early in 1963, however, the line reportedly was open to traffic as far as Urumchi, about 60 km beyond Yen-hu, the point reached in 1959. Work possibly is proceeding on the roadbed and structures west of Urumchi so that the line can be opened to the petroleum refinery at Tu-shan-tzu, a distance of about 260 km from Urumchi. In the southwest, work on the Yunnan-Kweichow line probably has been suspended, whereas work on the Ch'eng-tu - K'un-ming line probably is continuing, although no announcements have been made concerning its progress. Reports of a planned rail line from Lan-chou to Ihasa continue, but confirmation of its alignment and firm plans for the initiation of its construction are lacking. The only announced completion of a rail line was a 40-km line in Shantung, which brought the total rail network to about 33,400 km at the end of 1962.

Although main-line railroad construction continued to be almost nonexistent in 1962, the Chinese Communists devoted considerable effort to the construction of forestry, industrial, and local railroads. On the basis of Chinese announcements it is estimated that more than 400 km of forestry railroads were completed in 1962. For the most part, these were light-duty (probably narrow-gauge) railroads located primarily in the mountainous forest regions of the provinces of Inner Mongolia and Heilungkiang. At the end of 1962, more than 1,000 km

of forestry railroads were in service in these two provinces alone. Other forestry railroads were in service in Fukien province and elsewhere. In addition to the forestry railroads, numerous industrial and local railroads were constructed. These varied from heavy-duty, standard-gauge spur lines serving major mines and industries to light, narrow-gauge lines serving communes or small industries. It is not possible to arrive at a total figure for the amount of this type of rail construction, but it may have been relatively substantial.

B. Motor Trucks

The most significant achievement in the performance of motor truck transport took place in connection with the Chinese Communist invasion of India in October and November.\* This invasion required the supplying of about 103,000 troops in Tibet and along the Sino-Indian border from railheads in the rear over distances varying from 500 to 1,800 miles (800 to 2,900 km).\*\* The total supply requirement for troops in combat and garrison units was estimated to be nearly 400 metric tons\*\*\* per day. The extreme length of the supply lines from the railheads to the areas of troop concentration on the Indian border caused both the amount of gasoline required and the number of trucks needed to be of significant proportions.



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Therefore, it appears that the amount of motor fuel required to move supplies for the troops during the invasion of India was relatively small compared with the total available. It is also possible that the Chinese had stockpiled considerable amounts of supplies during the summer in anticipation of their fall offensive against India, and the amount transported to Tibet during November therefore could have been considerably less than 400 tons per day. If, however, the fighting had continued at that level for any length of time, the requirement for road transport would eventually have reached the [redacted] level.

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3.4(b)(1)

\* Unless otherwise indicated, figures in this paragraph are based on the situation as of 19 November 1962.

\*\* See the map, Figure 2, following p. 6.

\*\*\* Unless otherwise indicated, tonnages are given in metric tons throughout this memorandum.

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The performance of motor truck transport on a nationwide basis during 1962 appears to have been at about the level of 1961, primarily because of the activity connected with the invasion of India. Otherwise, it might have been slightly below performance in 1961 because of the low level of economic activity and the poor road conditions brought on by bad weather. Much of the road net seems to have been more affected by rain, floods, and snow than during 1961.

The Chinese Communists appear to have had some difficulty in 1962 in obtaining spare parts and tires to keep all their trucks in operating condition. There are indications that this may have been due to a distribution problem, however, rather than to any actual shortage of parts and tires. Regional and national conferences on this subject were held in an attempt to solve the distribution problem. Some success seems to have been achieved by an interchange of specific parts between regions with a surplus and those with a shortage. A serious effort was also made to reduce the need for spare parts by giving more attention to preventive maintenance. A similar effort was made to reduce tire requirements by getting all the mileage possible out of each tire. There also is evidence to indicate some difficulty in obtaining sufficient gasoline and oil to keep all trucks operating. This, again, may have been due to a distribution problem as much as to an actual shortage of these products.

Because of the failure to allocate resources for producing or importing spare parts, it is believed that the size of the civilian truck park was reduced compared with the previous year. It is probable, however, that production and imports of trucks and spare parts were sufficient to maintain the combined military and civilian park at approximately 200,000 vehicles, about equally divided between the two parks. The ~~██████████~~ trucks required to supply the troops involved in the invasion of India, therefore, would represent ~~██████████~~ 1.5(c) 3.4(b)(1)

~~██████████~~ It is believed that in November 1962 there were more military trucks available in Western China than the ~~██████████~~ required, and in addition there were several thousand civilian trucks in the area which could have been diverted to supply the troops had they been needed.

The total length of the highway network of Communist China probably did not increase significantly during 1961. Road maintenance, rather than new road construction, continued to be the most important feature of highway activity throughout most of the country. From the Free World point of view, the most spectacular and significant activity took place along the western and southern borders of China. Roadbuilding in these areas since 1957 has continued at a relatively faster rate than in the rest of the country. In some cases this roadbuilding has been extended across the border, sometimes with and sometimes without

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Figure 2

# TRANSPORTATION ROUTES

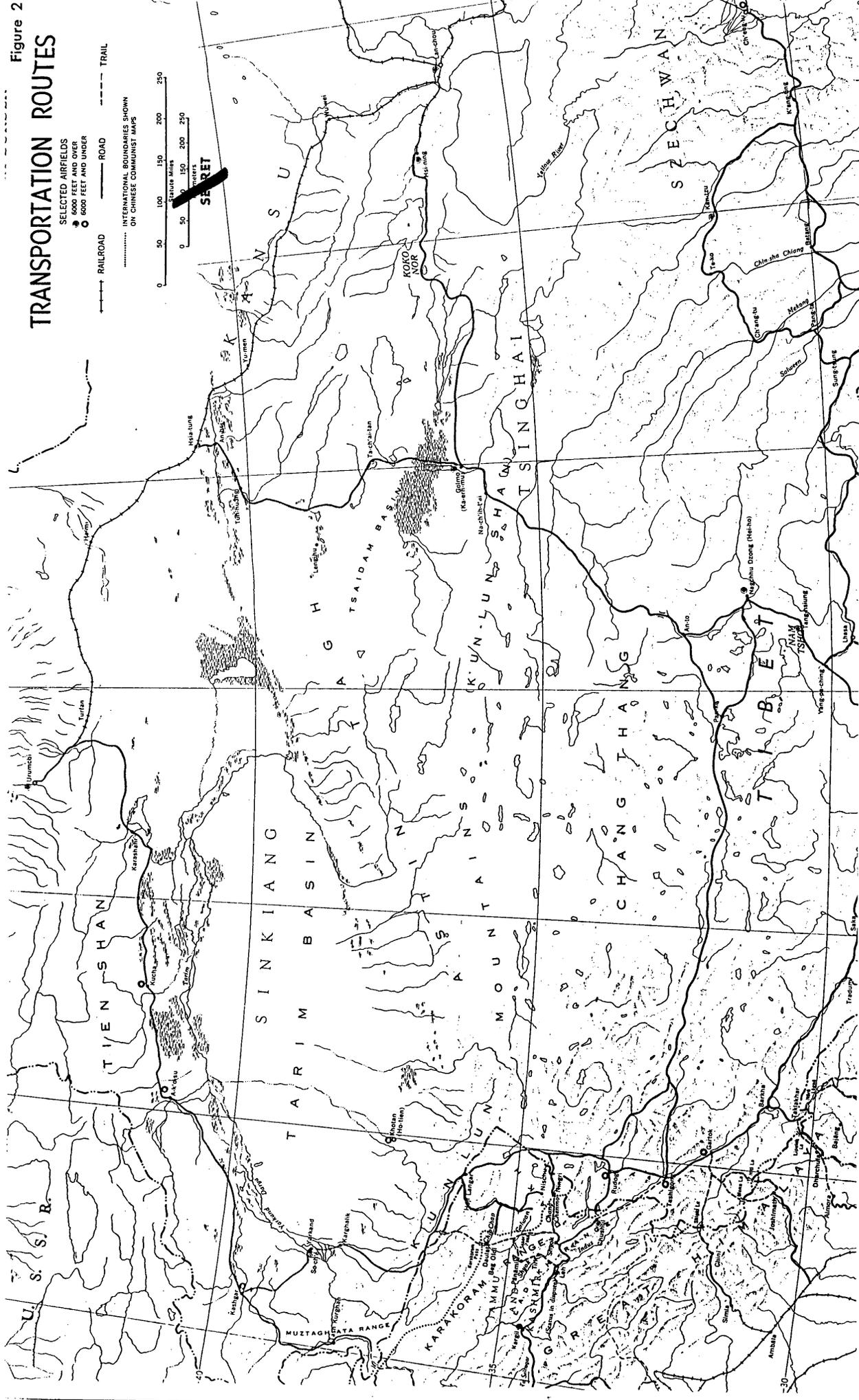
SELECTED AIRFIELDS  
● 6000 FEET AND OVER  
○ 6000 FEET AND UNDER

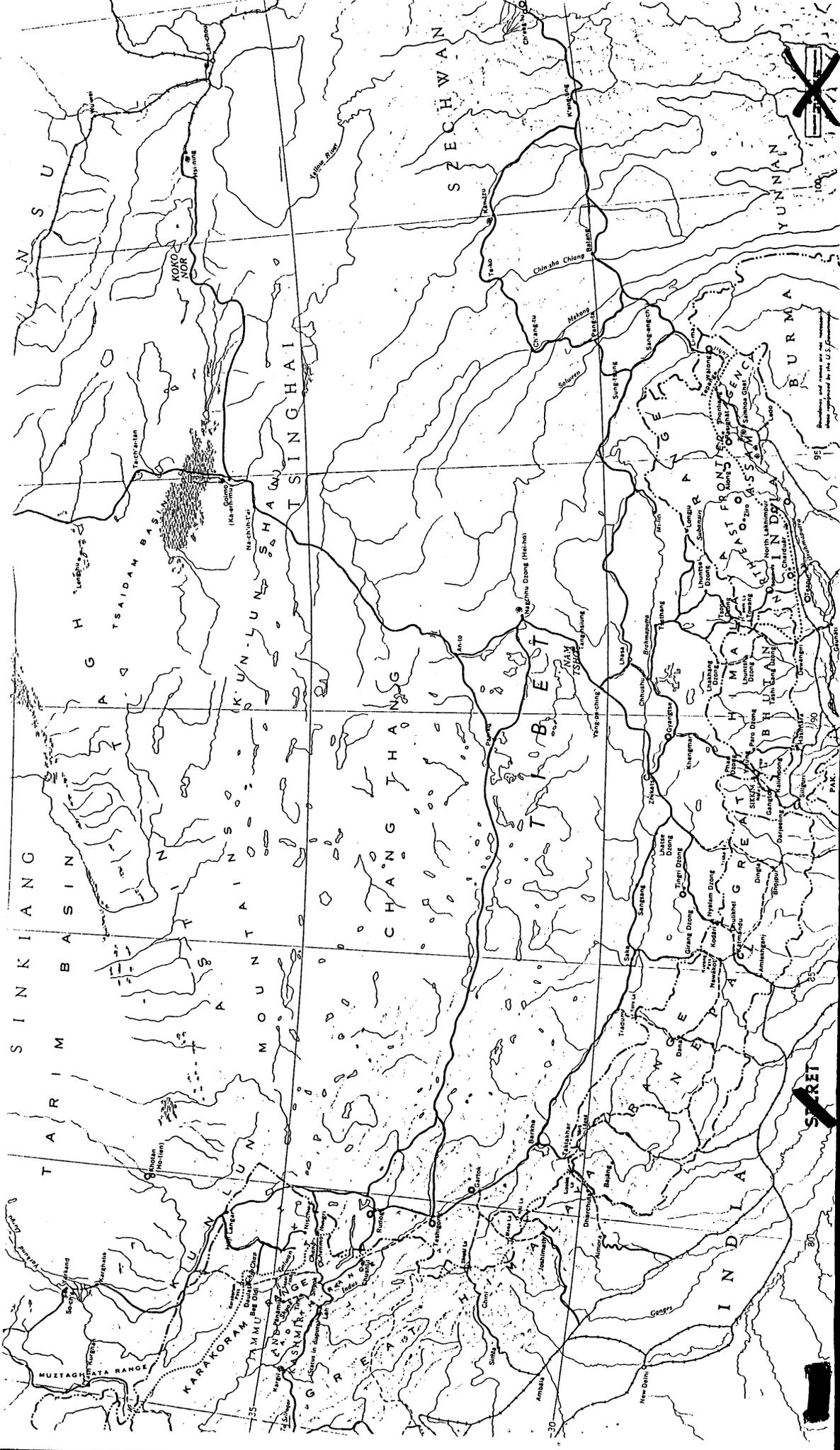
RAILROAD ——— ROAD ——— TRAIL

INTERNATIONAL BOUNDARIES SHOWN ON CHINESE COMMUNIST MAPS

0 50 100 150 200 250  
0 50 100 150 200 250  
STATUTE MILES  
KILOMETERS

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SINKIANG

TARIM BASIN

AGTSAIDAM BASIN

KUNLUN MOUNTAINS

SULAYMAN MOUNTAINS

KARAKORAM

GURKHA

YUNNAN

CHANG CHANG

TSINGHAI

TSINGHAI

CHANG CHANG

INDIA

INDIA

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the consent of the other country involved. Construction in Yunnan continued in the areas bordering on Burma and Laos. Extensive roadbuilding continued in southern Tibet along the border near Nepal, Sikkim, and Bhutan and in some cases into areas claimed by India. The achievements of this roadbuilding program contributed substantially to the success of the Chinese Communist invasion of the Towang area in the Northeast Frontier Agency (NEFA) in 1962.

C. Water Transport

Performance by inland and coastal water transport in Communist China improved considerably during the last 6 months of 1962, possibly reflecting some improvement in the economic situation at least in sectors and areas that find the use of water transport advantageous. Total annual performance by coastal water transport (including performance by chartered foreign vessels), and possibly also by inland water transport, is estimated to have returned about to the 1959 level (see Table 2\*). Although all modes of transportation were given the objective of supporting agriculture by the delivery of necessary supplies and consumer goods to rural areas, particular emphasis was placed on the use of water transport. In areas where both land and water transport were available, the authorities directed that preference be given to water transport.

The increasing use of water transport resulted in the return to service of most of the larger coastal ships and possibly some of the inland vessels that had been laid up during the previous year. Coastal ships once again began carrying goods directly between coastal ports and Yangtze River ports as far upstream as Wuhan. As a result of the improved harvest in Szechwan Province and all along the Yangtze River during the fall of 1962, the transport of agricultural products returned to the normal pattern of rice moving down the river rather than a major movement of food into Szechwan such as had occurred in the spring of 1962.

The upturn in coastal traffic began in May and June, when civilian transport by rail was curtailed because of floods and the military utilization of the rail system. Traffic in the ports between Shanghai and the Formosa Strait became unusually heavy as civilian traffic normally carried by the railroads was shifted to water transport. Although high water in the middle of the year and the unusually cold winter weather hampered water transport activities during some months, [REDACTED] the Chinese ships were very active during the rest of the year. The Shanghai Sea Transport Bureau announced that performance goals for 1962

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\* Appendix, p. 16, below.

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had been completed by mid-November and that the volume of goods transported in support of agriculture was much greater than in 1961. The major increase in traffic took place at the smaller coastal ports, particularly those in the major agricultural provinces just to the north and south of Shanghai. Foreign trade ports were congested occasionally during the year, reportedly as a result of poor coordination between the ports and rail transport involved in moving goods to and from the ports.

The use of chartered foreign ships in the Chinese coastal trade declined for the second straight year and reached a very low level. During 1959-60 the large number of foreign vessels involved in the coastal trade principally carried Hainan Island iron ore to the north coast, a movement in which Chinese ships do not participate, because the Chinese Nationalists have the ability to disrupt Chinese Communist shipping moving over this route. In 1961-62, movement of Hainan Island ore decreased considerably and probably took place principally on the railroads from South China ports. During mid-1962, when coastal traffic was unusually heavy in the Shanghai area, several chartered British ships were assigned especially to help move coal south from Shanghai.

Throughout the year, passenger traffic on both the inland and coastal waterways remained almost continuously at a high level. No explanation is available for this development except that the government was continuing to move workers who had arrived in the cities during the "leap forward" back to rural areas to help the agricultural sector.

Only 1 vessel, the Leap Forward (Yüeh-chin), was added to the Chinese merchant fleet in 1962 compared with 9 ships added in 1961 and an average of 19 ships added during each of the 4 previous years. At the end of 1962 the fleet included 157 ships totaling about 752,000 deadweight tons (DWT) (see Tables 3 and 4\*). The Leap Forward, which was hastily constructed and launched at the height of the "leap forward" movement in late 1958, cost China an amount estimated to be at least \$7.5 million. Many problems were encountered during 1958-62 while the ship was being fitted out at the Dairen shipyard. After the vessel was commissioned in October 1962, it was limited to the coastal run between Shanghai and Dairen until the start of its first international voyage on 30 April 1963. The following day the vessel ran aground and was lost in the East China Sea, probably because of faulty navigation.

During 1962 a rehabilitated 400-km section of the Grand Canal extending from the Yangtze River port of Yangchow northward nearly to

\* Appendix, pp. 17 and 19, respectively, below.

the boundary of Shantung Province was put into operation. Although this section represents only about 30 percent of the full restoration which was planned to be completed by 1962, the new portion in operation should be an economic asset of considerable importance to the area. The reconstruction is reported to have improved the canal for the most part to a depth of about 4 meters (m) and a width of 60 m compared with a previous depth of 1 or 2 m and a width of 10 to 30 m. In addition to improving navigation on the canal, the reconstruction also was reported to have improved the means for flood control throughout the area.

D. Civil Aviation

The most significant events in civil aviation in Communist China in 1962 were the upgrading of the Civil Aviation Administration of China (CAAC) to a bureau directly subordinate to the State Council, and the reports of China's continued interest in the purchase of non-Bloc aircraft. In March 1962 it was reported that the State Council had adopted a resolution to change the status of the CAAC from a subordinate of the Ministry of Communications to a bureau directly under the State Council. This change, which restored the CAAC to its original status, may indicate that renewed attention will be given to civil aviation in the near future.

In spite of current economic difficulties the Chinese Communists have apparently been interested in purchasing additional non-Bloc aircraft ever since the Vickers Viscount sale contract was negotiated in 1961. During 1962, officials of Communist China reportedly inspected such aircraft as the De Havilland Comet and Sud-Aviation's Caravelle. In early 1963 it was reported that Chinese representatives had arrived in the UK to inspect 14 turboprop Bristol Britannia aircraft offered for sale by British Overseas Airways Corporation (BOAC). Apparently the Chinese are still dissatisfied with the three Soviet Il-18 turboprop aircraft first introduced into domestic service in 1960. These aircraft, which were withdrawn from regular service in 1961, are currently used only for weekly scheduled international flights to Irkutsk, USSR, and for special VIP or nonscheduled flights on domestic routes.

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These aircraft will likely be used on domestic as well as on international routes.

Although little information concerning the performance of the civil air fleet is available, it is unlikely that civil air transport performed at a significantly higher rate in 1962 than in the previous year. In addition, there were no reports of extensive improvements

of air facilities and, as far as is known, the network of civil air routes was not expanded significantly. During 1962, Chinese Communist negotiations for air agreements were again confined to countries of the Far East. Negotiations with the "neutralist" government of Laos were concluded in January 1962, and an air agreement was signed providing for flights, scheduled or irregular, along agreed air routes. Although the Chinese also discussed air agreements with Cambodia and Indonesia in 1962, no agreements with these countries were announced, and it is unlikely that negotiations were successfully concluded.

## II. North Korea

The North Korean transportation system failed to achieve during 1962 the rate of growth necessary to meet the goals of the Seven Year Plan (see Table 5\*). In the case of the railroads, an increase of only 2.9 million tons was achieved compared with a planned increase for 1962 of 6.5 million tons. The distribution of tons carried among the various modes of transportation remained almost unchanged. Despite the failure of the transport sector to achieve planned rates of growth, the Central Statistical Board announced that "the rapidly growing transport requirements of all the branches of the national economy were satisfactorily fulfilled." This statement indicates that the growth of the transport sector kept pace with growth in other sectors of the economy and that transportation requirements proved to be smaller than expected because of a 5-percent underfulfillment of the over-all annual economic plan.

Announced increases of 8 percent in freight cars and 4 percent in locomotives indicate a park of about 11,660 freight cars and 374 locomotives at the end of 1962. Since it appears that only 14 locomotives were added to the park, the goal of producing 20 electric locomotives in 1962 apparently was not achieved. The truck park may have increased by as much as 4,000 units to a total of 27,000 units. Increases in performance in 1962 in both rail and highway transport probably were due primarily to increases in the number of freight cars, locomotives, and trucks available rather than to any significant improvements in operating efficiency.

In 1962 the North Koreans claimed that the railroad network was both expanded and improved. According to official announcements, a 42-km section of line from Kimch'aek to Tanch'on along the central section of the east coast was electrified. This achievement is substantially less than announced plans for electrification in 1962 and much less than the rate necessary to achieve the goal of the Seven Year Plan which calls for 1,500 km of main-line to be electrified. The regime also announced the conversion from narrow to standard gauge

\* Appendix, p. 20, below.

of the line extending to Sinch'on in the southwest and claimed that construction of the 78-km line from Ch'ongjin to Najin along the northeast coast near the Soviet border was successfully carried out. There is some evidence, however, to indicate that the Ch'ongjin-Najin line was not in operation as of December 1962. There were no claims of expansion of the highway or water transport networks in 1962.

### III. North Vietnam

In view of the general lack of information on transportation in North Vietnam in 1962 as well as a report that the transport sector was "encountering difficulties" as late as the end of October, it is probable that the sector did not achieve notable results during the year (see Table 6\*). Aside from poor crop years in North Vietnam, the apparent slowdown in the rate of growth of transport performance during 1961-62 may have been due in some measure to the decline of economic activity in Communist China, since China-to-China rail traffic via North Vietnam and Chinese - North Vietnamese trade constitute a large percentage of North Vietnam's rail traffic.

Of considerable significance in the transportation picture in North Vietnam in 1962 was the apparent stoppage of work on the new standard-gauge rail line from Hanoi to P'ing-hsiang, China. Some sections of the new roadbed for this line, which was being reconstructed with Chinese Communist aid, reportedly have been turned over to agricultural purposes. In 1961 it was reported that at least 4,000 workers were employed on this project, which was due to be completed in 1964. Another Chinese aid project, the reconstruction of the Ham Rong bridge over the Song Ma south of Hanoi on the east coast, which reportedly was scheduled for completion in late 1961, has progressed slowly if at all since preliminary work was reported in 1961. Most new road construction and rehabilitation in 1962 was concentrated in the rugged northwest section of the country and along the North Vietnam - Laos border in order to provide better support to the Communist elements in Laos and South Vietnam. Nearly 2,000 km of narrow earth roads or tracks, usable mainly by carts, were constructed in the northwest. Along the Laotian border, road reconstruction reportedly was underway on routes 8 and 12 leading into central Laos. In addition, it is likely that some road construction or improvement was underway in North Vietnam in the area bordering the Sam Neua region and the Phong Saly province in northern Laos. In spite of considerable investment in network rehabilitation, the primary road system of North Vietnam remains of limited capacity and subject to deterioration during the wet season.

\* Appendix, p. 21, below.

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The main effort in transportation in 1963 reportedly will be the development of inland waterway transportation. In addition, the port of Haiphong, North Vietnam's most important port, will be improved with aid from the USSR. Soviet aid in the form of equipment and technical assistance probably will also be extended to improve civil air transport.

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STATISTICAL APPENDIX

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Table 1

Communist Far East:  
 Estimated Freight Traffic Performance  
 of Modern Inland Transport a/  
 1957-62

<u>Area</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>
<u>Billion Metric Ton-Kilometers</u>						
Communist China	172.92	236.39	344.20	N.A.	N.A.	N.A.
North Korea	5.30	6.58	8.20	9.59	10.35	10.83
North Vietnam	0.19	0.37	0.65	0.90	0.94	0.95
Total <u>b/</u>	<u>178.41</u>	<u>243.34</u>	<u>353.05</u>	N.A.	N.A.	N.A.
<u>Million Metric Tons Carried</u>						
Communist China	411.70	633.75	1,009.20	N.A.	N.A.	N.A.
North Korea	36.45	47.68	66.76	75.98	76.95	86.15
North Vietnam	1.62	2.22	3.35	5.66	6.28	6.59
Total <u>b/ c/</u>	<u>449.77</u>	<u>683.65</u>	<u>1,079.31</u>	N.A.	N.A.	N.A.

a. Including the performance of railroads, motor trucks, and the inland water and merchant or coastal fleets of Communist China, North Korea, and North Vietnam. For limitations of the data presented for North Korea, see Table 5, p. 20, below.

b. Totals, as measured in both ton-kilometers and tons carried, include domestic, export, import, and transit traffic.

c. In addition to the duplication of tonnage created when traffic is carried by more than one mode of transportation, totals also include duplication of foreign trade traffic moving between Communist China, North Korea, and North Vietnam.

Table 2

Communist China:  
 Estimated Freight Traffic Performance  
 of Modern Inland Transport  
 1957-62

<u>Mode of Transportation</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>
<u>Billion Metric Ton-Kilometers</u>						
Railroads	134.59	185.52	263.40	N.A.	N.A.	N.A.
Motor trucks	3.94	6.96	12.00	N.A.	N.A.	N.A.
Inland water fleet	20.12	25.07	40.20	N.A.	N.A.	N.A.
Merchant fleet <u>a/</u>	14.27	18.84	28.60	31.50	21.60	27.90
Total <u>b/</u>	<u>172.92</u>	<u>236.39</u>	<u>344.20</u>	N.A.	N.A.	N.A.
<u>Million Metric Tons Carried</u>						
Railroads	274.20	381.09	542.00	N.A.	N.A.	N.A.
Motor trucks	83.73	176.30	344.00	N.A.	N.A.	N.A.
Inland water fleet	40.49	56.66	91.40	N.A.	N.A.	N.A.
Merchant fleet <u>a/</u>	13.28	19.70	31.80	35.00	24.00	31.00
Chinese ships	N.A.	N.A.	26.70	29.90	22.80	30.40
Foreign ships	N.A.	N.A.	5.10	5.10	1.20	0.60
Total <u>b/ c/</u>	<u>411.70</u>	<u>633.75</u>	<u>1,009.20</u>	N.A.	N.A.	N.A.

a. Coastal traffic only, carried in Chinese and chartered foreign ships. In 1961 the two Chinese cargo ships used in international trade carried a total of about 150,000 tons along a shipping line established between South China ports and the Bay of Bengal.

b. Totals, as measured in both ton-kilometers and tons carried, include domestic, export, import, and transit traffic.

c. Totals reflect duplication of tonnage when traffic is carried by more than one mode of transportation.

Table 3  
Communist China:  
Growth of the Merchant Fleet a/\*  
1957-62

	Number of Vessels	GRT	DWT
Fleet status, 31 December 1957	<u>87</u>	<u>229,836</u>	<u>298,325</u>
<u>Acquisitions in 1958</u>	22	97,042	126,154
From domestic sources	6	18,068	23,488
From Bloc countries	6	19,628	25,516
From Free World countries	10	59,346	77,150
Fleet status, 31 December 1958	<u>109</u>	<u>326,878</u>	<u>424,479</u>
<u>Acquisitions in 1959</u>	19	98,793	128,431
From domestic sources	10	35,337	45,938
From Bloc countries	2	14,626	19,014
From Free World countries	7	48,830	63,479
Fleet status, 31 December 1959	<u>128</u>	<u>425,671</u>	<u>552,910</u>
<u>Acquisitions in 1960</u>	20	97,399	136,614
From domestic sources	7	21,346	25,017
From Bloc countries	1	5,614	9,520
From Free World countries	12	70,439	102,077
<u>Sold in 1960</u>			
To Bloc country	1	6,785	8,820
Fleet status, 31 December 1960	<u>147</u>	<u>516,285</u>	<u>680,704</u>
<u>Acquisitions in 1961</u>	9	47,503	55,572
From domestic sources	4	11,408	13,617
From Bloc countries	2	22,488	21,635
From Free World countries	3	13,607	20,320

a. Data refer to vessels of 1,000 GRT or more (approximately 1,300 DWT or more).

~~S-E-C-R-E-T~~

Table 3

Communist China:  
Growth of the Merchant Fleet  
1957-62  
(Continued)

	<u>Number of Vessels</u>	<u>GRT</u>	<u>DWT</u>
Fleet status, 31 December 1961	<u>156</u>	<u>563,788</u>	<u>736,276</u>
<u>Acquisitions in 1962</u>	<u>2</u>	<u>19,160</u>	<u>25,790</u>
From domestic sources	<u>1</u>	<u>12,090</u>	<u>15,790</u>
From Bloc countries	<u>1</u>	<u>7,070</u>	<u>10,000</u>
<u>Transferred in 1962</u>			
To Bloc country	<u>1</u>	<u>7,070</u>	<u>10,000</u>
Fleet status, 31 December 1962	<u>157</u>	<u>575,878</u>	<u>752,066</u>

~~S-E-C-R-E-T~~

~~S-E-C-R-E-T~~

Table 4

Communist China:  
Type, Number, and Tonnage  
of Vessels in the Merchant Fleet a/  
1958-62

Year	Tankers <u>b/</u>			Dry Cargo and Passenger Vessels			Total		
	Number	Thou- sand GRT	Thou- sand DWT	Number	Thou- sand GRT	Thou- sand DWT	Number	Thou- sand GRT	Thou- sand DWT
1958	10	18.2	23.7	99	308.7	400.8	109	326.9	424.5
1959	10	18.2	23.7	118	407.5	529.2	128	425.7	552.9
1960	11	21.8	27.3	136	494.5	653.4	147	516.3	680.7
1961	13	40.0	55.0	143	523.8	681.3	156	563.8	736.3
1962	13	40.0	55.0	144	535.9	697.1	157	575.9	752.1

a. Data refer to vessels of 1,000 GRT or more (1,300 DWT or more).

b. In addition, the tanker fleet includes at least one and possibly two tankers of less than 1,000 GRT.

~~S-E-C-R-E-T~~

Table 5

North Korea:  
Estimated Freight Traffic Performance  
of Modern Inland Transport  
1957-62

<u>Mode of Transportation</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>
	<u>Billion Metric Ton-Kilometers</u>					
Railroads	5.07	6.30	7.80	9.12	9.85	10.25
Motor trucks	0.19	0.21	0.30	0.33	0.34	0.38
Inland water and coastal fleets <u>a/</u>	0.04	0.07	0.10	0.14	0.16	0.20
Total <u>b/</u>	<u>5.30</u>	<u>6.58</u>	<u>8.20</u>	<u>9.59</u>	<u>10.35</u>	<u>10.83</u>
	<u>Million Metric Tons Carried</u>					
Railroads	21.46	28.20	35.13	38.64	41.00	43.90
Motor trucks	13.89	17.50	28.88	34.35	32.60	38.80
Inland water and coastal fleets <u>a/</u>	1.10	1.98	2.75	2.99	3.35	3.45
Total <u>b/ c/</u>	<u>36.45</u>	<u>47.68</u>	<u>66.76</u>	<u>75.98</u>	<u>76.95</u>	<u>86.15</u>

a. Data for performance by the inland water fleet in North Korea cannot be separated from performance by the coastal fleet. Performance by the inland water fleet, however, is only a small part of the total water transport performance.

b. Totals, as measured in both ton-kilometers and tons carried, include domestic, export, import, and transit traffic.

c. Totals reflect duplication of tonnage when traffic is carried by more than one mode of transportation.

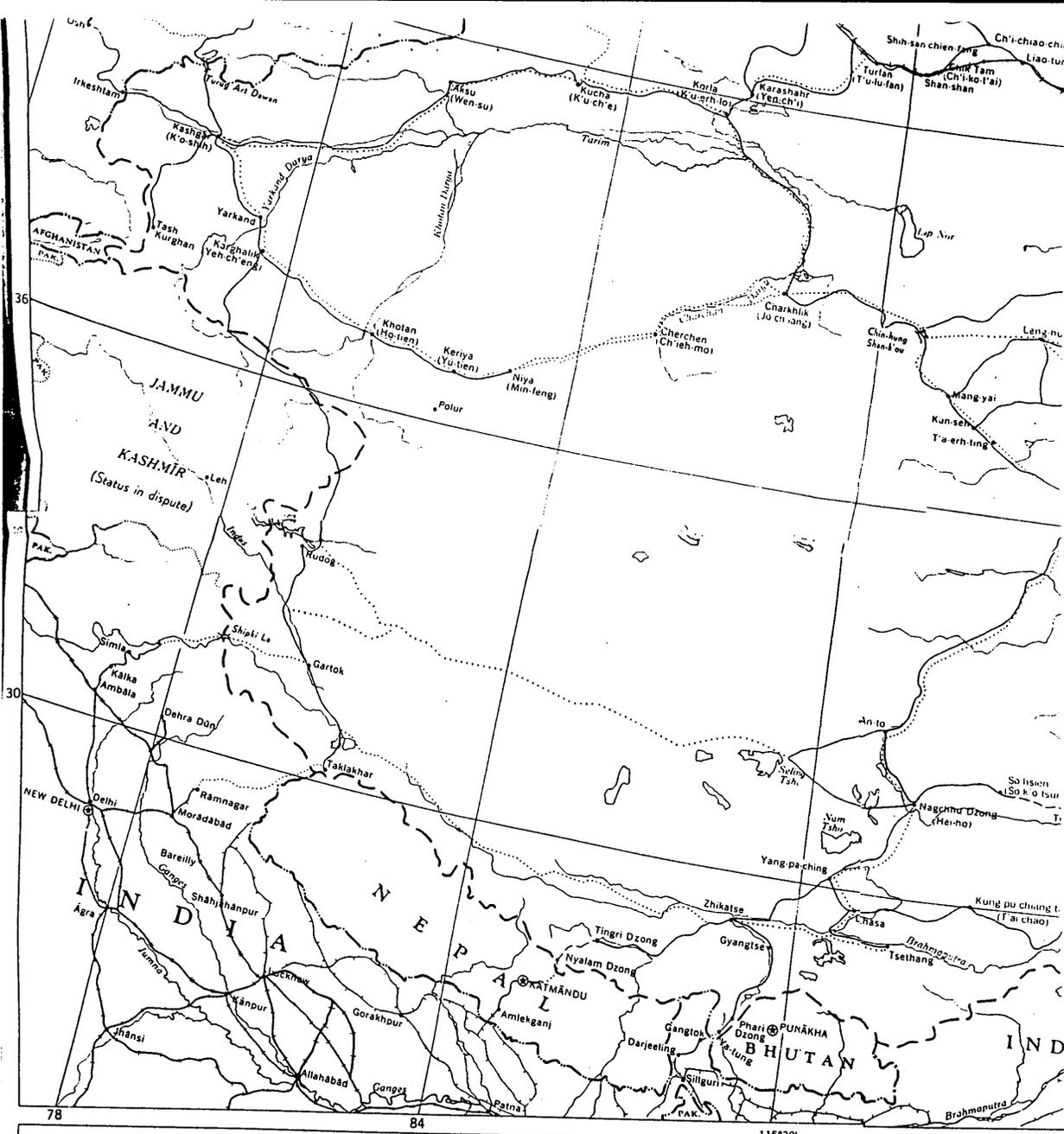
Table 6

North Vietnam:  
 Estimated Freight Traffic Performance  
 of Modern Inland Transport  
 1957-62

<u>Mode of Transportation</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>
	<u>Billion Metric Ton-Kilometers</u>					
Railroads	0.14	0.29	0.52	0.70	0.71	0.72
Motor trucks	0.01	0.02	0.03	0.06	0.07	0.07
Inland water fleet	0.02	0.03	0.04	0.08	0.08	0.08
Coastal fleet	0.02	0.03	0.06	0.06	0.08	0.08
Total <u>a/</u>	<u>0.19</u>	<u>0.37</u>	<u>0.65</u>	<u>0.90</u>	<u>0.94</u>	<u>0.95</u>
	<u>Million Metric Tons Carried</u>					
Railroads	1.02	1.43	2.23	2.92	3.09	3.25
Motor trucks	0.33	0.41	0.57	1.94	2.29	2.40
Inland water fleet	0.21	0.23	0.36	0.60	0.67	0.70
Coastal fleet	0.06	0.15	0.19	0.20	0.23	0.24
Total <u>a/ b/</u>	<u>1.62</u>	<u>2.22</u>	<u>3.35</u>	<u>5.66</u>	<u>6.28</u>	<u>6.59</u>

a. Totals, as measured in both ton-kilometers and tons carried, include domestic, export, import, and transit traffic.

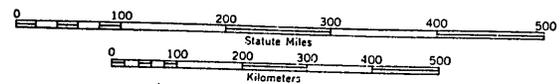
b. Totals reflect duplication of tonnage when traffic is carried by more than one mode of transportation.



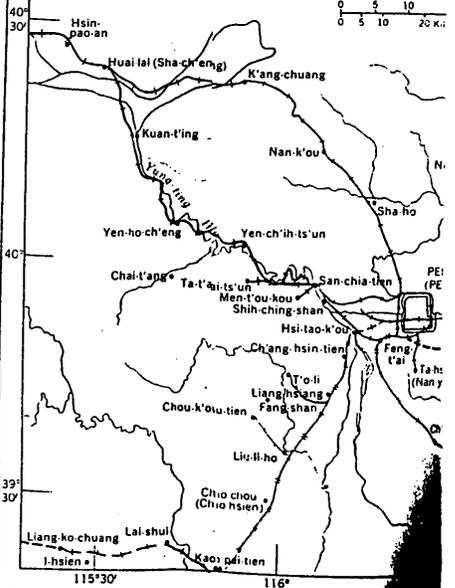
## COMMUNIST CHINA RAILROADS AND SELECTED ROADS — JULY 1962

- |   |   |
|---|---|
| <p><b>BROAD-GAUGE RAILROADS (5'6" in India, 5'0" in U.S.S.R., China, and Mongolia)</b></p> <ul style="list-style-type: none"> <li>— Double-track</li> <li>— Single-track</li> <li>- - - Under construction</li> <li>..... Projected</li> </ul> <p><b>STANDARD-GAUGE RAILROADS (4'8 1/2")</b></p> <ul style="list-style-type: none"> <li>— Operable, double-track</li> <li>— Operable, single-track</li> <li>- - - Inoperable</li> <li>- - - Under construction</li> <li>..... Projected</li> </ul> <p><b>NARROW-GAUGE RAILROADS (various widths)</b></p> <ul style="list-style-type: none"> <li>— Operable, single-track</li> <li>- - - Inoperable</li> </ul> | <p><b>SELECTED ROADS (western and southern border regions only)</b></p> <ul style="list-style-type: none"> <li>— Major road</li> <li>..... Minor road or trail</li> <li>- - - Road under construction</li> </ul> <p><b>GENERAL BASIC INFORMATION</b></p> <ul style="list-style-type: none"> <li>— International boundary, demarcated</li> <li>- - - International boundary, delimited only</li> <li>..... International boundary, indefinite</li> <li>..... Internal administrative boundary</li> <li>⊙ National capital</li> </ul> |
|---|---|

NOTE: Minor industrial, mining, and logging railroads are not shown. Alignments of all projected railroads are approximate.



### PEIPING AND ADJACENT



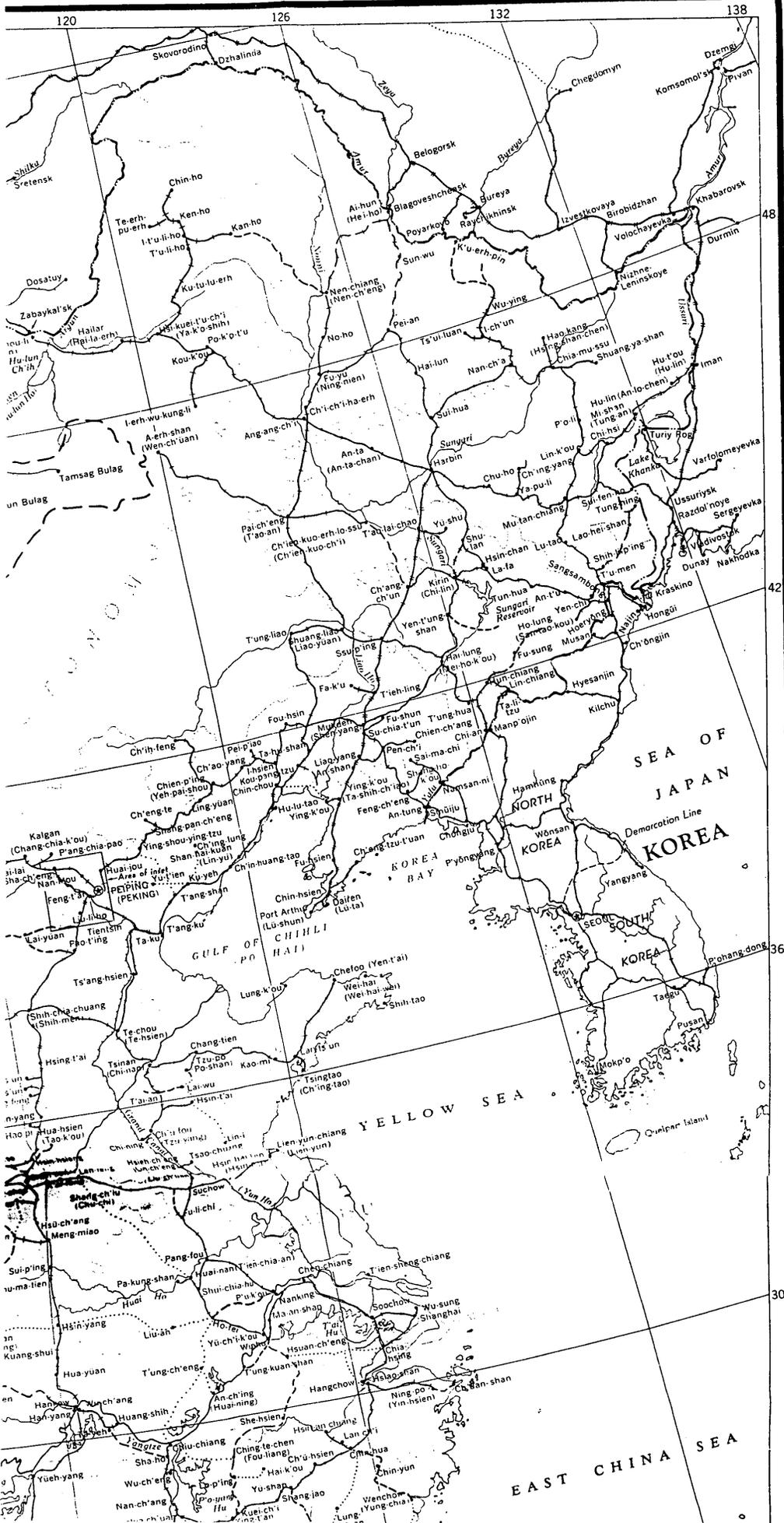
1.5(c)  
3.4(b)(1)





Boundaries and names are not necessarily those recognized by the U.S. Government.

Figure 1

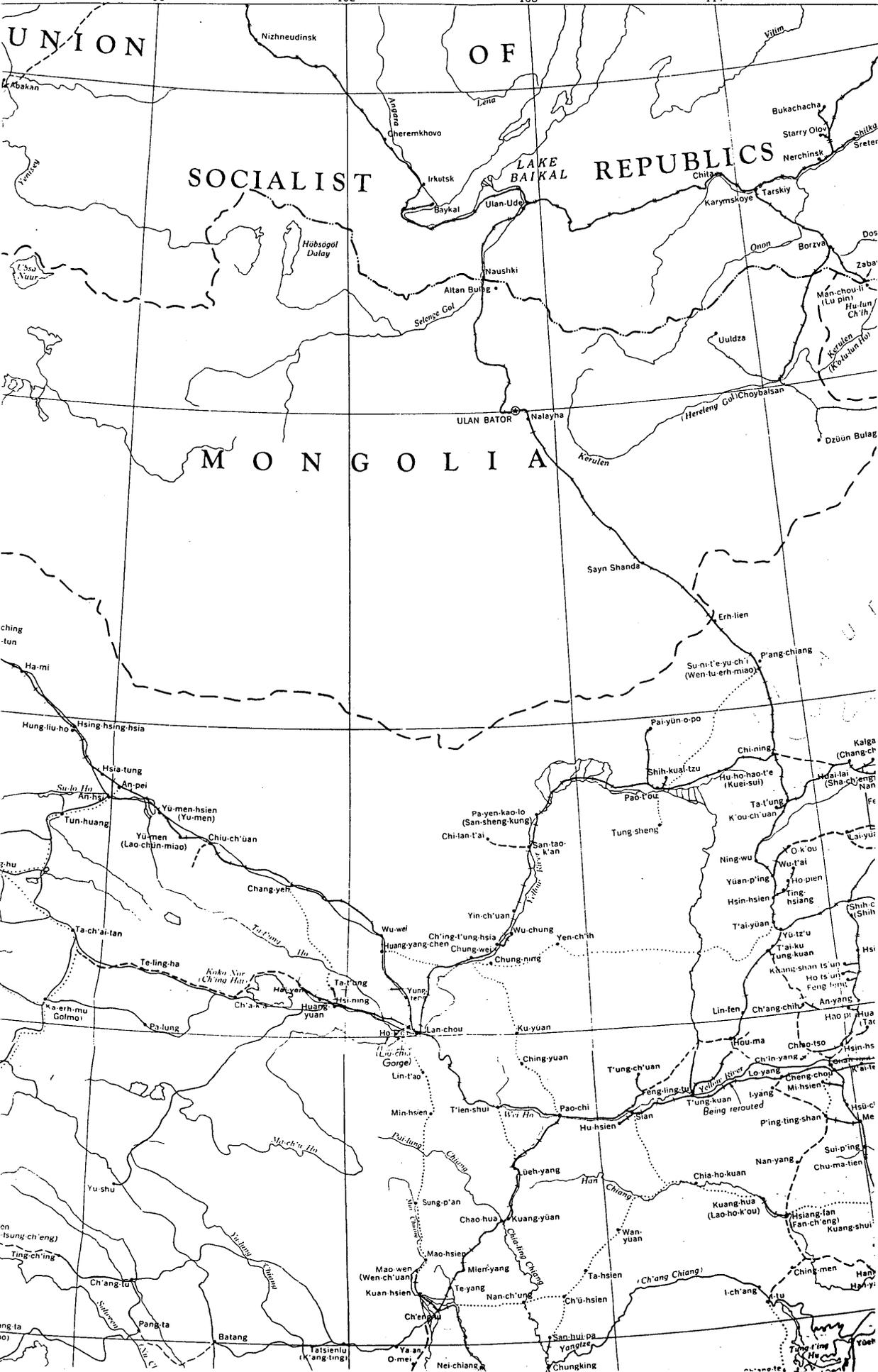


96

102

108

114





SOVIET

U

LAKE BALKHASH

JAMMU AND KASHMIR (Status in dispute)

INDIA

NEW DELHI

Salair

Kamen

Uscenka

Pavlodar

Tselinograd

Novokuznetsk

Barnaul

Kulunda

Mikhailovskiy

Temir-Tau

Karapanda

Cherdunovsk

Abaza

Novokuznetsk

Borovlyanka

Biysk

Zharyk

Moinly

Tashtagol

Abakum

Leninogorsk

Zyryanovsk

Bol'she-Narymskoye

Avagur

Uch-Aral

Sharasunpe (A-lo-fai)

Chi mu mai

Zaysan

Topolev, Mys

Chupuchak (Ta cheng)

Taldy-Kurgan (Talai)

Uch-Aral

Chi mu mai

Wu-er-ho

Ching-ho

Wu-su

Ching-ho

Ching-ho

Ching-ho

Chi mu mai

Wu-er-ho

Ching-ho

Wu-su

Ching-ho

Ching-ho

Ching-ho

Chi mu mai

Wu-er-ho

Ching-ho

Wu-su

Ching-ho

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Ching-ho

Chi mu mai

Wu-er-ho

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Chi mu mai

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Chi mu mai

Wu-er-ho

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Chi mu mai

Wu-er-ho

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Wu-su

Ching-ho

Ching-ho

Ching-ho

Chi mu mai

Wu-er-ho

Ching-ho

Wu-su

Ching-ho

Ching-ho

Ching-ho

Chi mu mai

Wu-er-ho

Ching-ho

Wu-su

Ching-ho

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Ching-ho

Chi mu mai

Wu-er-ho

Ching-ho

Wu-su

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Chi mu mai

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Wu-su

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Ching-ho

Chi mu mai

Wu-er-ho

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Chi mu mai

Wu-er-ho

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