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DIRECTORATE OF
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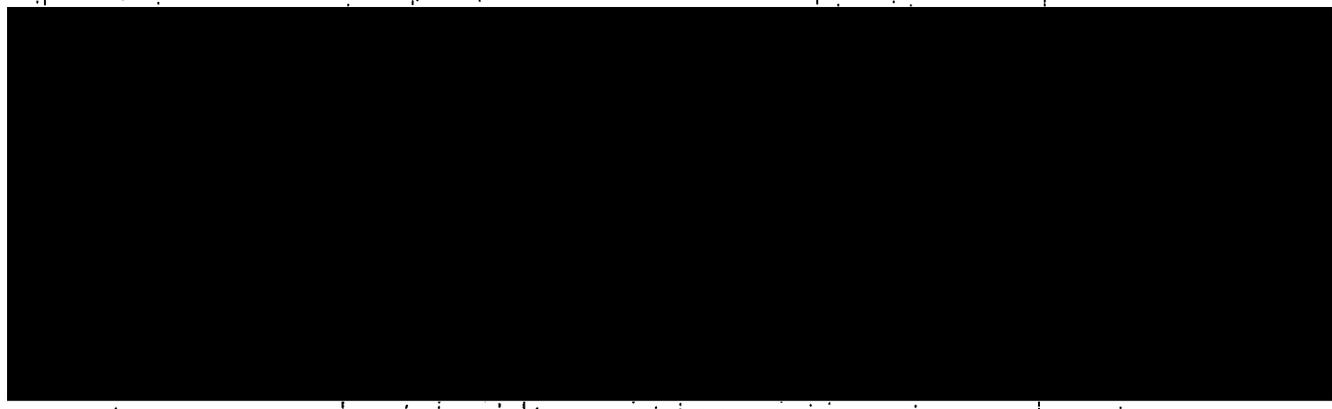
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**COMMUNIST CHINESE ATTEMPTS TO OBTAIN MAPS
AND RELATED INFORMATION**

[REDACTED]
OSI/CIA

SUMMARY AND CONCLUSIONS

For the past 2 years the Chinese have been conducting a partially successful, accelerated collection program for foreign maps and related geodetic information. Their main areas of interest have been the USSR and the US and its possessions, although some orders also have included maps of East, South, and Southeast Asia, the Middle East, Norway, Western Europe, Africa, and several Pacific Ocean islands.

Since the reporting of acquisitions by the Chinese is undoubtedly incomplete, it is difficult to determine the extent of their map holdings and existing gaps. They could have acquired maps of virtually all of the US and Canada from open sources. This would not preclude further attempted acquisitions of more accurate, up-to-date maps of these countries, including those containing geodetic, gravity, or other special information. The Chinese apparently have not succeeded in obtaining detailed maps of the areas near their southern border, especially of Laos, Thailand, Burma, and India but they could make their own for some limited areas to which they have access.

The Chinese have acquired small-scale maps of the USSR but they still lack more detailed,

[REDACTED]

large-scale maps and geodetic data for that country. The small-scale maps are generally of poor quality but could be useful as basic references for use in intelligence analysis, cartography, general planning for military operations, and possibly photointerpretation. They would not contain the detail necessary for artillery and missile targeting. Good quality large-scale maps of the western USSR and World Air Operational Navigation Charts (1:1,000,000) for the entire country are available in many places, but it is not known if the Chinese have acquired these maps.

The high Chinese priority for maps of the USSR is evidenced by their willingness to pay extremely high prices and commissions for any maps of the Soviet Union and indicates their lack of accurate, dependable maps of that country. Unclassified Soviet-published maps of the USSR have been intentionally distorted for several years. Although these distortions are evident from map comparisons, determination of correct location can be made only from

[REDACTED]
accurate maps. China's lack of a satellite to provide geodetic data greatly handicaps its ability to locate most military targets accurately in the USSR, especially those considered missile targets.

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DISCUSSION

Most countries routinely collect maps and related information on foreign countries. Prior to early 1969, however, few Chinese attempts to obtain foreign maps were noted even though they probably had a routine map collection requirement. Map information would be necessary to the Chinese for planning any military operation, including troop movements, artillery support, and location of bombing targets. However, the maps also could provide the Chinese information for special military map compilations, espionage, and possibly for plotting target locations and missile trajectories for strategic missiles. Gravity maps could be useful in a future ICBM targeting program.

The main areas of interest to the Chinese are the USSR and the US. (See table for known recent Chinese attempts to purchase maps.) Although the Chinese had expressed earlier interest in other areas, they have demonstrated the above emphasis since early 1969 and also have been showing more interest in bordering countries.

Chinese attempts have been aimed at many types of maps but particularly at those which are most accurate and/or contain geodetic information such as survey point locations, elevations, and reference markers. Map types requested include topographic, hydrographic, geologic, gravimetric, aeromagnetic, radioactivity, harbor and coastal charts and general index, reference, and atlas compilations. Maps generally have been of large scale (1:5,000 to 1:80,000) but smaller-scale (1:100,000 to 1:1,000,000) maps also have been ordered and in some cases substituted for unavailable large scale maps.

During the past 1½ years, a strong Chinese requirement for maps of the USSR has been

evident and the Chinese have offered high prices plus commissions for them. These actions indicate the Chinese probably have never received Soviet maps other than those available to the general public which are known to be intentionally distorted. The distortions include displacements of up to 25 miles in the locations of some cities, towns, and roads, etc. Other Soviet maps are classified and even East European Communist countries have not received accurate Soviet maps. The correct location of the distorted features can be determined only from [REDACTED] accurate, classified maps [REDACTED]. Since the Chinese lack a satellite useful in geodetic and cartographic applications they would be severely restricted in their ability to locate most military targets accurately within the USSR.

The specific reason for their collection of maps on the US and other non-Soviet areas is unknown but the gravity maps could be useful in a future ICBM targeting program since gravity data are essential for accurately predicting missile trajectories. The other maps could provide basic information for special military map compilations, for checking scales and accuracy of the Chinese map data base, and possibly for target location in a future ICBM program.

In addition to the attempts by the Chinese to purchase the maps shown in the table, they have also purchased or attempted to purchase related equipment and charts. For example, a representative from the Chinese ship *Tung-feng*, while docked in Kobe, Japan, in mid-1970 purchased navigational and radio signal charts and a large quantity of VHF communications equipment, ostensibly for better ship-to-shore communications. The purchase included US and [REDACTED] catalogs of nautical charts, LORAN tables for

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extensive areas, and an assortment of maritime, meteorological, and current charts of the Pacific and Indian Oceans. Although this material may be expressly for supporting Chinese merchant vessels in those areas, such as the voyage of the *Tung-feng* to Canada in August, the same charts also would be useful for Chinese ships conducting gravity or missile range surveys.

For the past two years, the Chinese have been placing periodic orders with a cartographic company in Vienna for maps from a cartographic catalog produced by the US Geological Survey. It is also possible that they ordered maps and charts produced by the US Coast and Geodetic Survey. In addition, they have ordered charts outlining US mapping data. These charts were referred to as the trigonometric tables used in arriving at horizontal control data.

In addition to the above publications, the Chinese have attempted to buy various geographic and geological publications. For example, in March 1969, a representative of the Chinese Embassy in Stockholm requested publications of the London Royal Geographic Society, Japan Geological Society and Geological Survey Institute, and the Australian Geological Survey.

The Chinese are using intermediaries throughout the world in attempts to obtain maps and related information of many foreign countries. These intermediaries include book and map

dealers, subscription services, trading companies and individuals in Bern, Paris, Dacca, Hong Kong, London, Vienna, and West Germany.

Furthermore, the Chinese have advised their map purchasers to go outside the normal channels of map dealers and book stores and to try libraries and antique and used book dealers. In at least two cases, the Chinese suggested the University of California at Los Angeles (UCLA) as a good source. In one instance, the suggestion was coupled with a statement indicating Chinese awareness of the security problems in obtaining geodetic data on the USSR.

Due to the strong Chinese interest in such maps, the firm purchased 34 British charts which were based on US-published maps and sent them to China. They also included a complete list of US maps with their British equivalents along with comments on their availability for the Chinese to order from. The firm also was to continue to try for those maps with no British equivalents or with poorer detail than required by the Chinese.

The USAF Aeronautical Chart and Information Center has for several years issued unclassified, accurate World Air Operational Navigation charts (1:1,000,000) for many parts of the world which might be used by the Chinese.

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TABLE
Recent Known Chinese Attempts to Purchase Maps

Country or Area	Location of Attempted Purchase	Date	Type of Map Requested	Scale*	Success	Remarks
US	West Germany	Jul 69	advers, coastal and harbor charts	various	yes	Sent, Sep 69
US	Stockholm	Mar 69	gravimetric, astro-magnetic radioactivity, geologic, astro-photo, topographic	various	yes	
US Continental Coasts	West Germany	Feb 70	US CAGS maps	1:5,000 to 1:40,000	n.a.	
US Continental Harbors & Coasts	West Germany	Nov 70	US CAGS nautical charts	1:6,000 to 1:40,000	yes	
US Coastal Areas	West Germany	Aug 70	US CAGS nautical charts	1:7,500 to 1:1,625,000	no	
Eastern US	West Germany	Jul 69	harbor & coastal charts	1:5,000 to 1:80,000	yes	
19 Unspecified US Cities	Switzerland	Dec 69	topographic	1:24,000	yes	
US Cities	Paris	May 70	topographic	1:24,000	no	
San Francisco	West Germany	Jul 69	street maps	1:~101,370	yes	
Chicago	West Germany	Jul 69	street maps	1:~42,450	yes	

*See footnote at end of table.

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TABLE (Continued)

Country or Area	Location of Attempted Purchase	Date	Type of Map Requested	Scale*	Success	Remarks
Alaska	West Germany	Feb 70	US CAGS maps	1:5,000 to 1:40,000,000	n.a.	
Alaska	West Germany	Nov 70	US CAGS nautical charts	1:6,000 to 1:40,000	yes	
Hawaii	West Germany	Feb 70	US CAGS maps	1:5,000 to 1:40,000	n.a.	
Hawaii	Paris	Early 70	geodetic data incl triangulation stations	n.a.	n.a.	
Hawaii	West Germany	Nov 70	US CAGS nautical charts	1:6,000 to 1:40,000	yes	
Samoa & other US Pacific Islands	Paris	Early 70	geodetic data incl triangulation stations	n.a.	n.a.	
Barbados	West Germany	Jul 69	topographic, base, geologic	n.a.	yes	Sent, Sep 69
Canada	West Germany	Jul 69	atlases	n.a.	yes	Sent, Sep 69
USSR	USSR					
	Switzerland	Jul 68	topographic	1:25,000 1:50,000 1:100,000	no	Chinese wished the Swiss to order from the West German Army, when the maps were unobtainable in Switzerland, but the Swiss refused
	Switzerland	Jun 69	topographic	1:1,000,000	yes	

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USSR chart for S. border

*See footnote at end of table.

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TABLE (Continued)

Country or Area	Location of Attempted Purchase	Date	Type of Map Requested	Scale*	Success	Remarks
Eastern Sino-Sov border	Western Europe	Mar 69	n.a.	1:25,000 1:50,000	n.a.	
Sino-Sov border	West Germany	Mar 70	n.a.	n.a.	n.a.	Chinese were willing to pay up to \$5,000 per sheet.
Atlantic USSR	Switzerland	May 70	topographic	1:500,000 or larger	no	
USSR and USSR city plans	Paris	Early 70	n.a.	n.a.	n.a.	Chinese suggested UCLA Embassy as source.
USSR	Switzerland	May 70	triangular & geodetic survey	n.a.?	n.a.	Chinese suggested University of California as source; specific branch of University not specified
USSR	West Germany	Aug 70	n.a.	1:50,000 or 1:100,000	n.a. (see next entry)	Chinese willing to pay trading firm's charge plus \$5,000 commission even though possibly 25,000 map sheets involved.
USSR	West Germany	Sep 70	n.a.	1:500,000	yes	
EUROPE						
Greece	Switzerland	Jul 66	topographic	1:200,000 & 1:500,000	yes	Originally requested larger scale (1:100,000) than received.
Hungary	Switzerland	Jul 66	topographic	1:600,000 & 1:500,000	yes	Originally requested larger scale (1:50,000 and 1:100,000) than received.

*See footnotes at end of table.

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TABLE (Continued)

Country or Area	Location of Attempted Purchase	Date	Type of Map Requested	Scale	Success	Remarks
Norway	Sweden	Mar 70	N.A.	1:50,000	yes	
Unspecified W. European Countries	Vienna	1969-70	N.A.	N.A.	N.A.	
FAR EAST AND ASIA						
Assam	East Pakistan	Mar 70	N.A.	1:50,000	N.A.	Would accept 1:150,000 or 1:200,000 scale maps.
Australia	Switzerland	Jan 69	topographic	1:1,000,000	yes	
Bhutan	Western Europe	Jul 69	topographic, base, geologic	1:253,440	yes	
Burma	Switzerland	May 70	topographic	1:500,000	no	
Ceylon	Western Europe	Jul 69	topographic, base, geologic	1:175,000	yes	
North China	Switzerland	Jan 69	topographic	1:1,000,000	yes	
East Pakistan	East Pakistan	Mar 70	N.A.	1:50,000	N.A.	Would accept 1:150,000 or 1:200,000 scale maps.
India	Switzerland	Oct & Dec 69	N.A.	1:1,000,000	no	
Indonesia	Switzerland	Jan 69	topographic	1:1,000,000	yes	
Japan	Switzerland	Jan 69	topographic	1:1,000,000	yes	
Laos	Switzerland	1968-69(?)	N.A.	1:50,000	no	

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*See footnote at end of table.

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TABLE (Continued)

Country or Area	Location of Attempted Purchase	Date	Type of Map Requested	Scale*	Success	Remarks
Laos	London	May 70	any kind	n.a.	n.a.	UCLA suggested by the Chinese.
Malaysia	Switzerland	1968-69(7)	topographic	1:63,360	yes	Originally requested smaller scale (1:126,720) than received.
Mongolia	Paris, France	Early 70	maps & city plans	n.a.	n.a.	
Solomon Islands	Switzerland	Jan 69	topographic	1:1,000,000	yes	
Solomon Islands	Western Europe	Jul 69	topographic, base, geologic	n.a.	yes	
Northeastern Thailand	Western Europe	Jul 69	ground water availability	1:750,000	n.a.	
Northern Thailand	London	May 70	n.a.	n.a.	n.a.	
West Bengal	East Pakistan	Mar 70	n.a.	1:50,000	n.a.	Would accept 1:150,000 or 1:200,000 scale maps.
MIDDLE EAST AND AFRICA						
Aden	Western Europe	Jul 69	topographic, base, geologic	1:100,000	yes	
Kabul, Afghanistan	Western Europe	Jul 69	tourist	1:17,500A 1:20,000	yes	
Rashtahand	West Germany	Jul 69	topographic, base, geologic	n.a.	yes	Sent, Sep 69

*In the scale: 63,360.1" = about 1 mile, in 1:500,000.1" = about 8 miles.
N.A. - not available.

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