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September–October 1980

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# The China Business Review



The Magazine of the National Council for US-China Trade  
September–October 1980 Volume 7, Number 5

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Front Cover: Hubei village on the Yangzi River near Badong.

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## Guangdong Provincial Administrative Committee

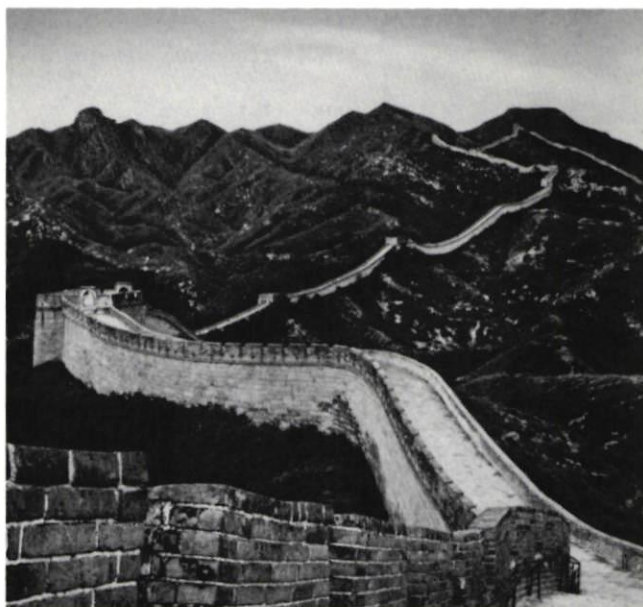
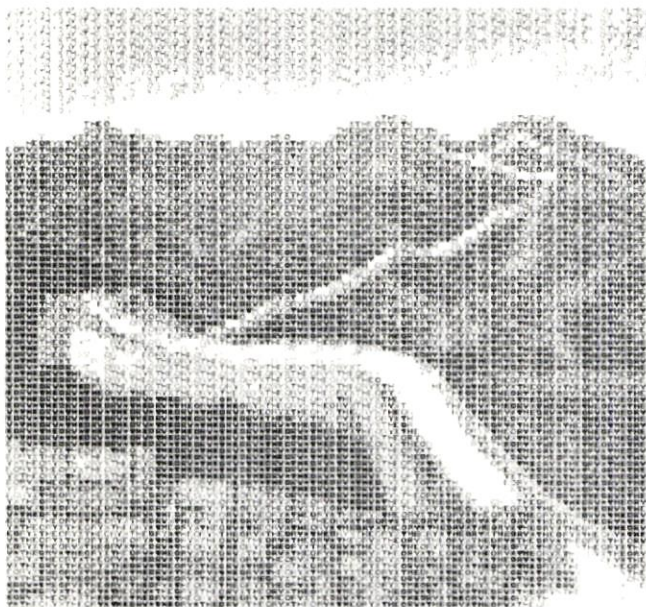
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THE CHINA BUSINESS REVIEW is published bimonthly by the National Council for US-China Trade, 1050 17th Street, NW, Suite 350, Washington, DC 20036 USA. The National Council is a nonprofit organization incorporated under the laws of the District of Columbia. THE CHINA BUSINESS REVIEW is published principally for members of the National Council. Controlled circulation postage paid at Washington, DC. The magazine is available for subscription in the US and Canada at \$60 per year; elsewhere at \$75 per year including airmail postage. © The National Council for US-China Trade 1980. All rights reserved. Reproduction in whole or part without permission is prohibited. Articles in the REVIEW do not reflect Council policy, unless indicated.

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# China Wire

## Blueprint for the 21st Century

China's 1981-90 Ten-Year Plan, due to be inaugurated next April 1, has already been formulated. Its goals, when released, are expected to be conservative, but the government's plans to restructure the entire Chinese economy during this decade amount to a colossal managerial revolution:

**Vertical to horizontal control.** The PRC's centralized industrial hierarchy will be gradually replaced by a layered horizontal system in which new corporations will take over actual management of the economy under the supervision of provinces, municipalities, and commissions. The central government still will exercise policy guidance over these corporations and regional planning bodies through top-level planning commissions, such as those that already supervise the energy and machine-building sectors.

**Ministries to be abolished.** The vertical bureaucracy linking top with bottom—the ministries—are to be gradually transformed into corporations, a high-ranking Chinese official has announced.

**Commissions to become super planning bodies.** China's existing agricultural, energy, machine building, and import-export commissions will oversee the transformation of ministries, and assume greater responsibility for long-term planning.

**Decentralization of foreign trade.** January 1 is the target date set for all 21 provinces, three municipalities, and five autonomous regions to establish their own foreign trade corporations, import-export commissions (under the national Foreign Investment Control and Import-Export Commission), and to begin dealing directly with foreign entities.

Simultaneously, China's myriad of branch foreign trade corporations (FTCs), located in all major cities and ports, will come under the control of new provincial and municipal foreign trade corporations. Hence, the parent bodies of these local FTCs—the national foreign trade corporation in Bei-

jing under the Ministry of Foreign Trade—will cease to exist sometime in 1981, Chinese officials have said.

**The new corporations.** These will take over the operational duties formerly conducted by ministries. They will oversee individual industries, deal directly with foreign importers and exporters, and take responsibility for their own profits and losses.

**Greater competition.** China's State Council intends to allow market forces to play a greater role in the economy, and will shut down unprofitable enterprises. An August Xinhua dispatch from Anshan said that 'a sense of crisis' had developed recently at China's largest iron and steel works. The company felt that "if it failed to improve production it would face the danger of defeat in competition. This is a cheering portent appearing on the horizon of our country's industrial production... this shows again that competition is a powerful motivator... Only by putting enterprises in competition to face the world and brave the storm, to compare quality and compete for superiority shall we be able to enable them to catch up with the advanced and become advanced...."

## 1981 Targets Announced

The vice-premier and head of China's State Planning Commission, Yao Yilin, told the third session of the Fifth National People's Congress (NPC) on August 30 that output targets in 1981 would be much lower than in previous years. Industrial output value would rise by only 6.0 percent, compared with increases of 8.5 percent in 1979, and more than 6.0 percent in 1980. Agricultural output would rise by 4.0 percent, less than half of the 1978-79 growth.

Significantly, coal output will fall by 4 percent in 1980 to 610 million tons, from 1979's 635 million tons; in 1981 the target is a modest 620 million tons. Other key targets (in metric million tons unless otherwise indicated):

Output	1981 Target	Percentage Change over 1980
Petroleum	106	0.0

Electricity (billion kwh)	312	4.0
Steel	35	1.5
Cement	78	5.5
Chemical fertilizer	12.3	15.4
Grain	342.5	3.1
Cotton	2.55	10.9
Timber (million cubic meters)	49.1	-9.7
Bicycles (million units)	14.84	17.8
Cotton yarn	2.865	45.8
Sugar	2.6	4.0

## Huge Budget Deficit

Minister of Finance Wang Bingqian confirmed August 30 that projected state revenues in 1980 will be ¥106.29 billion (\$70.9 billion), expenditures ¥114.29 billion (\$76.2 billion), and that the central government will suffer a deficit of \$8 billion equivalent to 7 percent of budgeted expenditures. Despite the 10 percent increase in investment by all levels of government, he noted that capital construction by the central government would fall by 27.4 percent next year to only ¥37.35 billion (\$24.9 billion). Since 1979 the central government's share of total investment has fallen from 79 percent to 68 percent.

## Features of New Joint Venture Tax Law

A 33 percent corporate income tax, including a 3 percent local surtax, was levied on production and management income. China will sign a tax treaty with the US to avoid double taxation. But petroleum, natural gas, and other resource joint ventures are subject to separate legislation. Other provisions:

- 10 percent profit remittance tax;
- 20 percent tax on royalties, interest, dividends, bonuses, lease of property, and income from personal services and other sources;
- 100 percent tax exemption in the first year for newly established joint ventures scheduled to operate at least ten years, with 50 percent exemptions in the second and third year.

China's personal income tax rate is from 5 to 45 percent of income above a basic ¥800 month level (¥9600 per year, or \$6,630). —NHL 克

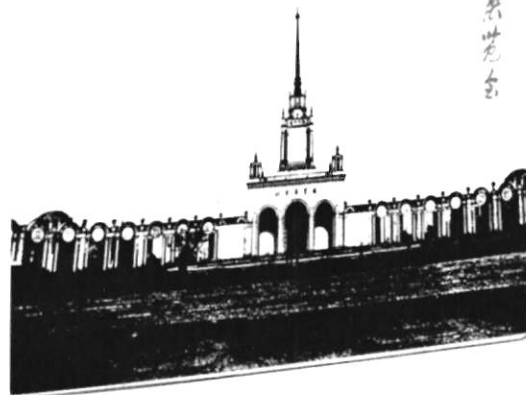


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# China Calendar

## October

□ **Washington, DC.** Ancient Chinese jade—100 objects dating from the third millennium B.C. to the third century A.D.—are on indefinite display at The Freer Gallery of Art, 12th St. and Jefferson Dr., SW.

□ **College Park, Maryland, October 23.** Dr. Ross Terrill, research associate at the John K. Fairbank Center for Asian Studies at Harvard University, will speak in the University of Maryland's Marie Mount Lecture Hall on "Mao's Legacy to China, Current and Future Problems." The lecture is sponsored by the East Asian Studies Committee of the University of Maryland. For information, call Kenneth Folsom, (202) 454-2843.

□ **Washington, DC, October–November.** Three film documentaries on the cities of Xian (Oct. 21), Suzhou (Oct. 28), and Beijing (Nov. 4) will be shown at 8:00 P.M. in the Smithsonian Institution's Baird Auditorium at the Museum of Natural History, 10th and Constitution Ave., NW. The films were recently completed by Sue Yung and Shirley Sun, the first Americans invited to film in China since normalization. For information, call (202) 357-3030.

□ **Baltimore, October 25.** A Chinese calligraphy demonstration will be given by Chin B. Chang at the Walters Art Gallery. For information, call (301) 547-9000, ext. 25.

□ **Baltimore, October 26.** The Yeh Yu Chinese Opera Association of New York will perform scenes from the Peking Opera at the Walters Art Gallery, 600 North Charles St. For information, call (301) 547-9000.

## November

□ **New York, November 5.** A lecture by Sherman Cochran entitled "Mass Advertising in Early 20th-Century China: The Experience of the British-American Tobacco Company," will be given at the Asia House. For information, write Mrs. Greco, coordinator of events, 112 East 64th St., New York, NY

10021; or call (212) 751-3210.

□ **Cleveland, Houston, Boston, and Minneapolis.** The International Trade Administration's East-West trade group, in cooperation with district offices of the Commerce Department and local cosponsors, is planning to hold seminars in Cleveland (Nov. 5), Houston (Nov. 6), Boston (Nov. 6) and Minneapolis (Nov. 12). The Boston seminar is entitled "Countertrade: Options for the Exporter." The other seminars will address the subject of doing business in China and Eastern Europe. For information, contact the Commerce Department's district offices in the cities mentioned above, or write to East-West Trade Office, Room 4829, Department of Commerce, Washington, DC 20230; or call (202) 377-2460.

□ **New York, November 19.** Sheldon Segal will present a lecture entitled, "One Billion People? Population Policy in the PRC" at the Asia House. Write Mrs. Greco, coordinator of events, 112 East 64th St., New York, NY 10021, or call (212) 751-3210.

## Exhibitions in China

□ **Tianjin, fall 1980.** Fujitsu, Ltd., will stage a large exhibition of computers and data processing systems, featuring machines and systems operated in the Chinese language.

□ **Beijing, November 11–18.** Matsushita Electric Industrial Company, Japan's largest electric appliance manufacturer, will hold an exhibition in Beijing featuring 300 products including integrated circuits, microwave ovens, and communications equipment.

□ **Beijing, November 17–28.** Two hundred American industrial companies will take part in product and equipment exhibitions and technical seminars organized by the US Department of Commerce. Participating companies are divided into five areas: petroleum exploration and extraction equipment; transportation equipment; textile machinery and equipment for production of

consumer goods; power generation and distribution equipment; and agricultural machinery and farm equipment. The event will mark the first US economic and trade exhibition to be held in China. For information, write Mr. Steven Sind, China Exhibit, Room 4815, Department of Commerce, Washington, DC 20230; or call (202) 377-5186.

□ **Shanghai, December 1–10.** France will stage a scientific instruments exhibition.

□ **Beijing, January 16–25.** The US Electronics Exhibition, organized by New York-based Clapp & Poliak, Inc., will be setting up again in Beijing after its late summer exhibition in Guangdong.

□ **Guangzhou, January 9–18.** China's first international motor show welcomes all pertinent manufacturers to a comprehensive exposition of transportation-related products and technology. For information, contact Mr. John Pricher or Ms. Jan Parker of Mike Rossell & Associates, Suite 408, 119 Merchant St., Honolulu, HI 96831; (808) 523-7755.

□ **Guangzhou, March 12–19.** The China Packaging Import and Export Corporation is sponsoring an international exhibition on packaging equipment and materials. For information, write Mr. Stanley Chu, director, The Adsale People, Room 301-2, 57-59 Lockart Rd., Hong Kong; or call 5-283088 (Telex: 63109 ADSAPHX).

□ **Shanghai, 17–26 March.** The China Council for the Promotion of International Trade (CCPIT) is mounting a British Scientific Instruments Exhibition. For information, contact The Scientific Instrument Manufacturer's Association of Great Britain, Leicester House, 8 Leicester St., London WC2H 7BN.

□ **Shenyang, August.** A Sydney-based Australian company, Michael J. Samuel Exhibitions Abroad, Ltd., signed a contract with China to stage a mining exhibition in the north China city of Shenyang. 完



# The Way Ahead

The signing of four long-awaited agreements—including the controversial textiles accords—marks the beginning of a new stage in US-China relations.

The "normalization of relations between the United States and the People's Republic of China is at last complete."

With those words and a flourish of the pen, President Carter on September 17 initialed four long-awaited agreements with visiting Vice-Premier Bo Yibo, to formalize cooperation in textiles, civil aviation, maritime, and consular affairs. Bo attended the signing ceremony during the first session of the Sino-US Joint Economic Committee, which met in Washington to discuss a host of trade-related issues.

## Textiles

The initialing of the bilateral textile agreement brought to a close months of difficult, uncertain negotiations between the two sides, by providing fixed quotas for six categories of Chinese textile products during the period of January 1, 1980, to December 31, 1982. The new levels, which supersede unilateral quotas imposed by the US last spring, cover:

Category 331: cotton gloves. First year limits: 3,213,600 dozen pair; 11,247,600 SYE (square yard equivalent). Second year: 3,310,008 dozen; 11,585,028 SYE. Third year: 3,409,308 dozen; 11,932,578 SYE.

Category 339: knitted women's, girls', and infants' shirts and blouses. First year: 720,000 dozen; 5,184,000 SYE. Second year: 912,000 dozen; 6,566,400 SYE. Third year: 865,280 dozen; 6,230,016 SYE.

Category 340: Men's and boys' shirts, not knit. First year: 540,000 dozen; 12,960,000 SYE. Second year: 561,600 dozen; 13,478,400 SYE. Third year: 584,064 dozen; 14,017,536 SYE.

Category 341: women's, girls', and infants' blouses, not knit. First year: 381,300 dozen; 5,528,850 SYE. Second year: 445,100 dozen; 6,598,950 SYE. Third year: 443,456 dozen; 6,430,112 SYE.

Categories 347/348: trousers. First year: 1,440,000 dozen; 25,632,000

SYE. Second year: 1,824,000 dozen; 32,467,200 SYE. Third year: 1,730,560 dozen; 30,803,968 SYE.

The agreement provides the most flexibility for the Chinese in its carry over and carry forward provisions, permitting the transfer of unused quota between categories and between years. (The combination of carry over and carry forward may not exceed 11 percent of the receiving agreement year's applicable limit in any agreement year, however.) To ensure accurate record-keeping and entry, the agreement establishes an export visa system. Further, it sets forth a consultation mechanism to cover categories not currently subject to quotas, but which may require fixed levels to prevent future market disruption.

## Civil Aviation

The three-year civil aviation agreement scheduled for the first time in 30 years regular airline service between the US and China. (American charter flights have been operating for some time.)

What appears to have been the stickiest point in the talks—the question of how many US airlines could regularly service China—was cleverly split down the middle. China's insistence that only one airline be designated will be met for the first two years; then the parties will consult on permitting service from a second airline, to meet the United States' desire for more competition. At present, each side may operate two round-trip flights per week on a route to and from New York, San Francisco, Los Angeles, Honolulu, Tokyo (or another point in Japan), Shanghai, and Beijing.

All US airline applications for the China route were filed with the Civil Aeronautics Board in early September; CAB plans to name the chosen airline before the year's end. Industry talk has it, however, that Pan Am is apt to be awarded the designation, since it was both the first airline to service pre-1949

China and the first to operate a charter flight in 1972—by taking Richard Nixon to the PRC.

## Shipping

The oft-discussed questions of port access and cargo-sharing were resolved with the initialing of the maritime agreement in the Rose Garden, which also took place September 17.

National flag vessels from both countries are guaranteed a share of at least one-third of bilateral cargo, according to the agreement, and either party is entitled to an increased amount if the other carries more than one-third. With regard to port access, Chinese flag vessels may enter 55 specified US ports with a four-day notice (other US ports may be opened upon submission of seven-day advance information to authorities here), while US flag vessels may enter 20 specified Chinese ports with a seven-day notice. Varying policies for most favored nation treatment account for the time and access differences, a US official explained.

## Consular Convention

The fourth signed agreement—the US-PRC Consular Convention—holds a dual significance by not only establishing a comprehensive framework for consular relations, but by marking the first treaty signed between the US and China. The 42 articles spell out the rights and duties of consular officers first outlined in the general agreement signed by the two countries in January 1979. These include the parties' mutual obligation to notify consular officers of the arrest of one of their nationals; the right of consular officers to communicate with their nationals; and their right to attend trials and other legal procedures.

The agreement also provides for the opening of three new consulates in each country. China already has expressed its desire to open offices in Honolulu, Chicago, and New York, adding to its



current San Francisco and Houston consulates. US officials have not yet designated additions to the American consulates in Guangzhou and Shanghai, saying they prefer to watch trade developments to determine the most useful sites.

Vice-Premier Bo Yibo and Treasury Secretary G. William Miller served as cochairmen of the Joint Economic Committee, which covered the gamut of trade and financial questions still unanswered in US-China trade. Essentially, the three-day session was broken into three working-level groups, on business facilitation/major projects; overall trade policies; and finance and investment. Members took up such topics as terms and conditions of Exim financing, countertrade, tax laws, joint ventures, duties, dumping, and any possible ramifications of new National People's Congress policies on Sino-US trade.

Further talk on the Overseas Private Investment Corporation was left to an OPIC delegation, which left for China September 21 for what is hoped to be a "t-crossing and i-dotting" session on the final agreement. Details on China's

representation in the World Bank and International Monetary Fund were held over for the organizations' annual meeting September 30-October 3, where the election of China's executive directors should take place.

#### Capitol Hill: Support for US Trading Companies

The first of a long list of bills promoting the expansion of export trading companies passed the Senate by a 77-0 vote. The legislation would allow US banks to invest up to 5 percent of their capital in export trading companies without approval by federal banking agencies (unless the investment exceeds \$10 million or gives the bank a controlling interest of 20 percent of the company's stock). The bill also would reduce antitrust restrictions, provide assistance from the Small Business and the Economic Development administrations, and expand a program of Exim Bank commercial loans to exporters.

At press time a companion piece of legislation in the House, which has come under some criticism for the bank equity provision, was awaiting action in the Rules Committee. —CG 光

#### RMB: Dollar Rates

Date of Rate Change	RMB/US\$	US\$/RMB
July 8		
Bid	1.4516	68.8895
Offer	1.4444	69.2329
Median	1.4478	69.0703
July 29		
Bid	1.4588	68.5495
Offer	1.4516	68.8895
Median	1.4552	68.7191
July 30		
Bid	1.4676	68.1385
Offer	1.4602	68.4838
Median	1.4639	68.3107
July 31		
Bid	1.4749	67.8012
Offer	1.4765	68.1431
Median	1.4712	67.9717
August 19		
Bid	1.4807	67.5356
Offer	1.4733	67.8748
Median	1.4770	67.7048
September 19		
Bid	1.4718	67.9440
Offer	1.4644	68.2874
Median	1.4681	68.1153

SOURCE: Standard Chartered Bank, Ltd., New York

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# Council Activities

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The Council's first major West Coast conference coincided with the start of another important Council activity: the US tour of Vice-Premier Bo Yibo, which climaxed in mid-September at the newly established US-China Joint Economic Committee meetings in Washington, DC.

Bo, who was touring the US under Council auspices, attended the first JEC meeting September 16-18, along with the cochairman, Treasury Secretary William Miller. The meetings brought together US cabinet-level department officials and their counterparts in Chinese ministries and foreign trade corporations to discuss general issues and possible problem areas in Sino-US economic relations (*see p. 9*).

## Upcoming Delegations

In October the National Council and the Department of Commerce jointly hosted a group headed by minister of building materials and vice-chairman of the State Capital Construction Committee, Song Yangchu. The group, whose visit was arranged by the Delegations Department, focused on technical cooperation in the production of building materials.

A group headed by Li Kaixin, director of the State Supplies Bureau and vice-chairman of the State Planning Commission, arrived in October for a three-week study of US management experience in the distribution of materials and production.

Petroleum-related Council delegations this October and November include two Chinese groups, an offshore oil survey delegation, and a petroleum machinery and engineering study delegation. An American petroleum production group has also gone to China.

An export packaging survey delegation arrived in mid-October to attend the PackExpo Exhibition in Chicago and to visit US manufacturers of packaging materials.

The Council's Importer Services Department is hosting an EQUIPEX oil pump export group and a Chinese

herbs and health products group.

## Coast Conference

"The China Market—Update and Reassessment" was the theme of the Council's West Coast meeting and seminar, which took place at San Francisco's St. Francis Hotel September 12, one day prior to the ribbon-cutting ceremony for the China National Exhibition. The morning half of the event brought nearly 90 members and prospective members up to date on such current US-China trade topics as joint ventures, new trade zones, and the implications of the changes announced at the third session of the Fifth National People's Congress, which opened in Beijing August 28. A membership meeting on Council activities took place that afternoon. David Tappan, vice-chairman of Fluor Corporation and chairman of the National Council's Board of Directors, and Council President Christopher Phillips, spoke at the meeting, designed to promote greater Council involvement in facilitating trade between West Coast companies and China.

## Committee Meetings

The Legal Committee and its many subcommittees met in Washington at the International Club on September 29. Committee meetings were scheduled in San Francisco and Chicago to coincide with the Chinese Exhibition in these cities. The Transportation Committee meeting in San Francisco September 25 gave members a chance to visit the ports of Oakland and San Francisco as well as to handle committee business and take in the Exhibition. The Banking and Finance Committee (October 23) and the Mining & Metallurgy Committee (October 30) are meeting in Chicago. On October 9 the Telecommunications and Electronics Committee will conclude its meeting with a reception and dinner for a delegation from the newly formed China Electronics Import-Export Corpora-

tion. The Petroleum Production Committee and the Petroleum Processing Committee will meet separately but lunch jointly in Houston on November 19.

Phillips will join 17 other economic and investment experts, including former President Gerald Ford, in addressing an audience of 250 at "Update '80: Investment Concepts and Strategies Conference." The series of seminars, discussions, and workshops will take place November 20-23 at The Greenbrier in White Sulphur Springs, West Virginia. Phillips' address is scheduled for November 22. For details, call (212) 244-3355, or write, The Money Show—Update '80, 875 Avenue of the Americas, New York, NY 10001.

## Staff Changes

Edith Terry, associate editor of the *CBR*, has just accepted a position as Asia representative for Altman, Inc., a New York- and Beijing-based consulting firm specializing in China trade. Since joining the Council in 1977, Ms. Terry has contributed numerous articles on China's US and international trade, including decentralization of the trade system, exhibitions, advertising, tourism, and a forthcoming handbook on organizing business trips to China. The Council wishes her every success in her future with Altman, a Council member company.

Scott Seligman, currently assistant director for the Council's Delegations Department, will leave for Beijing in January to become the new representative in the National Council's China office. Seligman will be replacing Richard Glover, who will be returning to the US at that time.

The Council welcomes Ohio State University PhD Christopher Clarke as a new research associate to the Publications and Research Department. Clarke brings expertise on China's economic organization—the State Council in particular—to the Council's research resources.

—KE 完

# Agencies Directly Subordinate to China's State Council



SOURCES: CIA, *Directory of Chinese Officials: National-Level Organizations*, July 1980; and National Council biographic files.

Chart prepared by Christopher M. Clarke and Kathryn L. Dewenter.



*Does Fujian Province have the infrastructure to support major foreign investment? And why has Fujian lagged behind Guangdong Province in the creation of Special Economic Zones? Indeed, in the year since Fujian was kaifangde—or "let loose"—to sign foreign contracts, what have the results been?*

*The CBR's Associate Editor Edith Terry visited Fujian in May 1980 in search of answers to these questions. As guest of the Fujian Economic Commission, she interviewed foreign trade and planning officials in Fuzhou, Xiamen (Amoy), and in other major Fujian ports on the Taiwan Strait. Her report:*

Of five areas chosen to lead China in experiments with trade decentralization (including Fujian, Beijing, Shanghai, Tianjin, and Guangdong Province), Fujian is by far the poorest. It has

none of the established industrial wealth of the cities chosen, and none of the natural linkage with the West that Guangdong Province has in Hong Kong. Virtually locked away from the world until January 1979, Fujian's total trade with the world by the end of that year, estimated to be at least \$264 million,<sup>1</sup> represented only 0.89 percent of the trade turnover of China as a whole. Its total trade represented even a smaller share of the two-way trade of \$30.9 billion generated by Taiwan in 1979.

To increase its foreign exchange earnings in the 1980s, Fujian now looks to worldwide tourism (until April 1980, only overseas Chinese tourists were permitted access), and to export processing in three planned special economic zones, located at Huli, Xinglin, and Langqi (see p. 20).

At a glance, Fujian's principal balance-of-payments credit items in 1979 were:

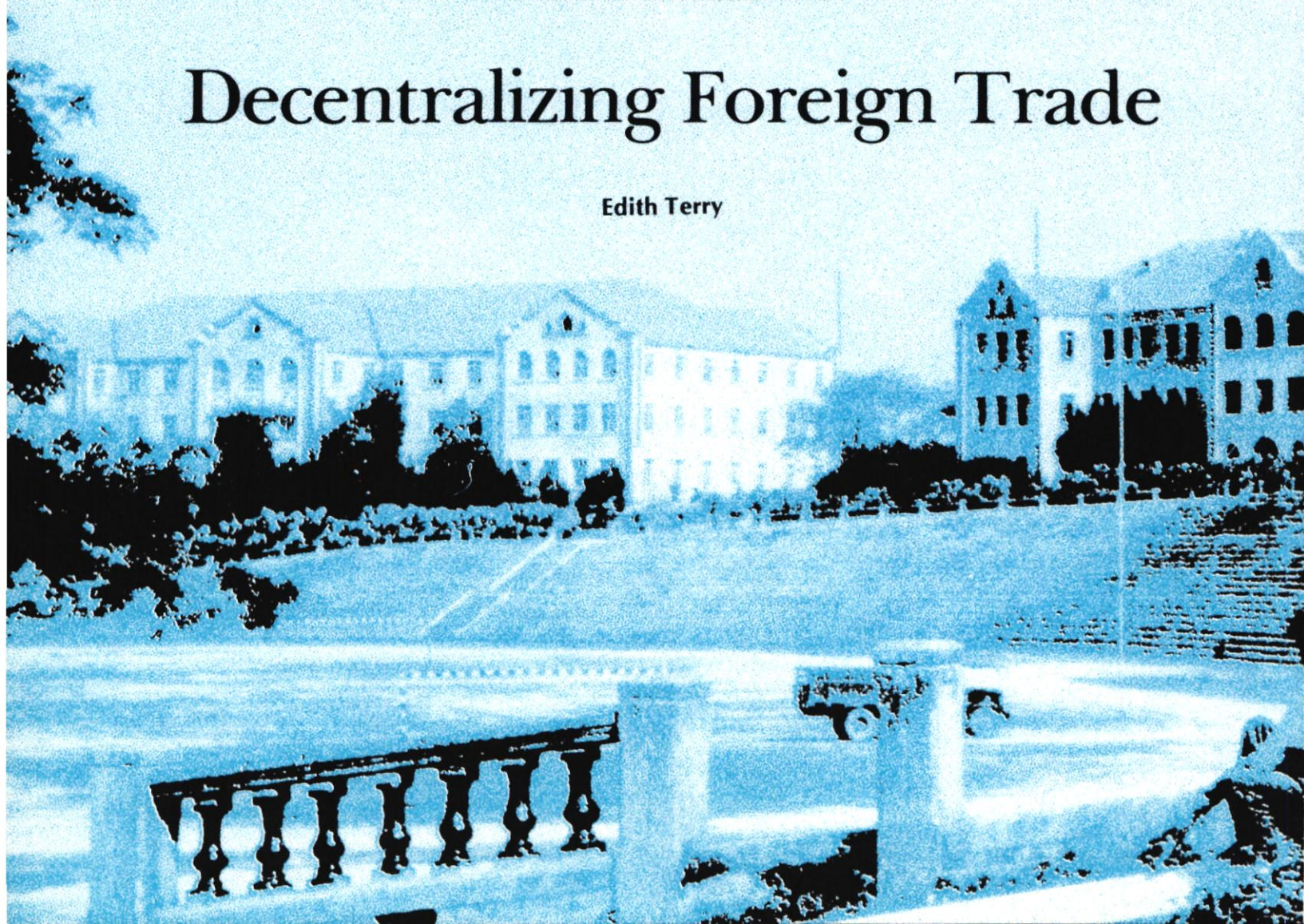
	Amount (million US\$)
Exports	\$244.0
Processing fees and tourism	\$82.7
Loan drawings and direct investment	\$86.8
Overseas Chinese remittances <sup>2</sup>	\$98.0
<b>Total</b>	<b>\$511.5</b>

Nearly half of Fujian's exports consist of mushrooms, rice, plastic slippers, gum rosin, tungsten ore, cotton shoes, chinaware, Oolong tea, jasmine tea, and green tea, worth \$114.68 million in 1979. The province hopes to increase exports substantially in the next five years, from at least \$300 million in the current year to \$800 million by 1985.

## Fujian Province

# Decentralizing Foreign Trade

Edith Terry





### Foreign Exchange Retention Policy

Two different means are used for calculating allowable foreign exchange retention at the provincial and lower levels. As explained by Fujian provincial authorities, the provincial government will be allowed to retain all export earnings above a fixed level. In 1979 this level was simply based on the value of trade in the previous year, or approximately \$200 million. For organizations below the provincial level, 20 percent of above-target foreign currency revenues could be retained by the seven prefectures and two municipalities which are under direct provincial jurisdiction—Fuzhou and Xiamen.

In addition, eligible enterprises are also allowed to retain a share of the foreign currency they earn. Eligibility is based on total output volume, and the percentage of output for export. Even cottage-type industries producing for export are reportedly qualified under the liberal criteria.

This is not dissimilar in broad outline from the system for retaining foreign exchange income used in other provinces. But there are some discrepancies between national policy and local practices. One problem involves the distinction between export revenues derived from centrally controlled goods, and

revenues from locally controlled export items. According to Ji Chongwei, a board member of the powerful Foreign Investment Control Commission in Beijing, local agencies may retain 20 percent of the earnings from centrally controlled commodities, and 40 percent from exports controlled by the locality.

In Fujian, however, a clear distinction is not made between centrally controlled goods and those under local jurisdiction. For example, provincial officials listed steel products among items which the province controlled directly in 1979, despite the fact that steel is on the roster of products under Beijing's control.

### Opening the Door

The pace of change has been so rapid it would perhaps be helpful to briefly

chronicle Fujian's recent trade renaissance. The major events to date:

*December 31, 1978:* The Standing Committee of the National People's Congress called for economic ties with Taiwan and an end to daily bombardments of Quemoy Island (Taiwanese territory adjacent to Xiamen Municipality in Fujian).

*January 1979:* The State Council approved the establishment of Huafu Corporation as a channel for foreign investment.

*January 11, 1979:* The Ministry of Foreign Trade eliminated China-Taiwan customs duties.

*May 1979:* The Huafu Corporation signed an \$8 million loan for ship purchases with the First National Bank of Chicago (FNBC).

Xiamen University campus.





*October 1979:* Huafu signed two more loans with US banks — \$20 million from FNBC, and \$10 million from the First City Bank of Houston.

*October 15, 1979:* The freighter Mawei left on its first trip to Hong Kong, inaugurating a regular Hong Kong-Fuzhou cargo service.

*December 29, 1979:* Fujian announced the imminent establishment of two special economic zones in Fujian, on Langqi Island, near Fuzhou, and at Xinglin, in Xiamen Municipality.

*January 1, 1980:* The inaugural voyage of the Gulangu, a passenger vessel serving Hong Kong and Xiamen.

*January, 1980:* Fujian opened 20 coastal ports (mostly fishing ports, but including the important South China ports of Fuzhou and Xiamen) to international shipping. This was two months before ports on the Yangzi River in the interior followed suit.

*February 1980:* Fujian Import-Export Office was established. This was timed in conjunction with similar offices established by Beijing and Shanghai, but well before Guangdong or Tianjin took action.

*April, 1980:* Large parts of the province were opened to tourism, and the first group of foreign journalists was invited to Fujian.

*May 1980:* The State Council assigned top priority to the development of a third special economic zone, at Huli in Xiamen Municipality, and simultaneously postponed development of Xinglin and Langqi.

*July 1, 1980:* FUJIANTRACO is established.

#### Fujian's Trade Quartet

New foreign trade bodies have been created in Fujian as they have been in other provinces to give institutional support to Beijing's emphasis on foreign trade. The functions of the four main trade organizations are reviewed below:

*Fujian Import-Export Office.* Established in February 1980 with a working staff of fewer than 20 persons, the Import-Export Office is headed by Fujian Deputy Governor Guo Chao. Deputy directors include Guo Liangru, who appears to be in charge of many executive functions, and Fujian Deputy Governor Zhang Yi (concurrently president of the Huafu Corporation).

The Import-Export Office is the major provincial link in a chain that extends from district and municipal level

import-export offices to its ultimate supervisory body, the Foreign Investment Control and Import-Export Commission in Beijing. Like import-export commissions established elsewhere, the Fujian Import-Export Office has the primary role of planning overall trade policy. It has authority in policy matters over the Fujian Foreign Trade Bureau, the Fujian Investment Enterprise Corporation, the Huafu Corporation (discussed below), the three Fujian branches of the Bank of China (located in Fuzhou, Quanzhou, and Xiamen), and the Fujian representative office in Hong Kong, the Huamin Corporation.

The Import-Export Office operates at the same rank as Fujian's commissions in charge of planning and capital construction which, like the former, have broad authorities cutting across industrial and administrative institutions. The Import-Export Office reports directly to the provincial government on administrative matters, and refers to the National Import-Export Commission on policy questions.

A major administrative task of the Import-Export Office is planning, developing, and implementing foreign exchange allocations. It does this in concert with the Fujian Planning Commission, which is in charge of general budgetary allocations for all provincial entities. Foreign exchange is allocated quarterly; the portions — allocated to prefectural and municipal import-export offices — are then distributed to agencies and factories under their jurisdiction.

The approval process depends on the size of individual projects. Those costing more than \$3 million<sup>3</sup> must be sent up to the national Import-Export Commission for approval. But under the \$3 million benchmark — the same per-project level established for other provinces and municipalities — the Import-Export Office and its counterpart offices are in charge of approvals in each of Fujian's seven prefectures and two municipalities.

The Fujian Import-Export Office makes sure that the total value of imports needed for major projects in the province do not exceed the foreign exchange allocated by the central government — \$20 million in 1979. Purchases beyond the allocation are possible if initial capital costs can be avoided, through joint ventures, for example.

For information on the national Import-Export Commission, which is charged with setting national trade pol-

**Fujian's Export Markets (1979)**

Areas/ countries	Value (million US \$)	Percent- age of Total
Hong Kong and Macao	\$86.4	35.4
Japan	\$30.4	12.5
Rest of Asia	\$40.1	16.4
EEC	\$43.3	17.7
Europe excluding the EEC	\$15.6	6.4
Africa	\$12.8	5.3
US	\$7.1	2.9
North America excluding the US	\$5.1	2.1
Pacific Region	\$2.0	0.8
Latin America	\$0.7	0.3
Unaccounted for	\$0.5	0.2
<b>Total</b>	<b>\$244.0</b>	<b>100.0</b>

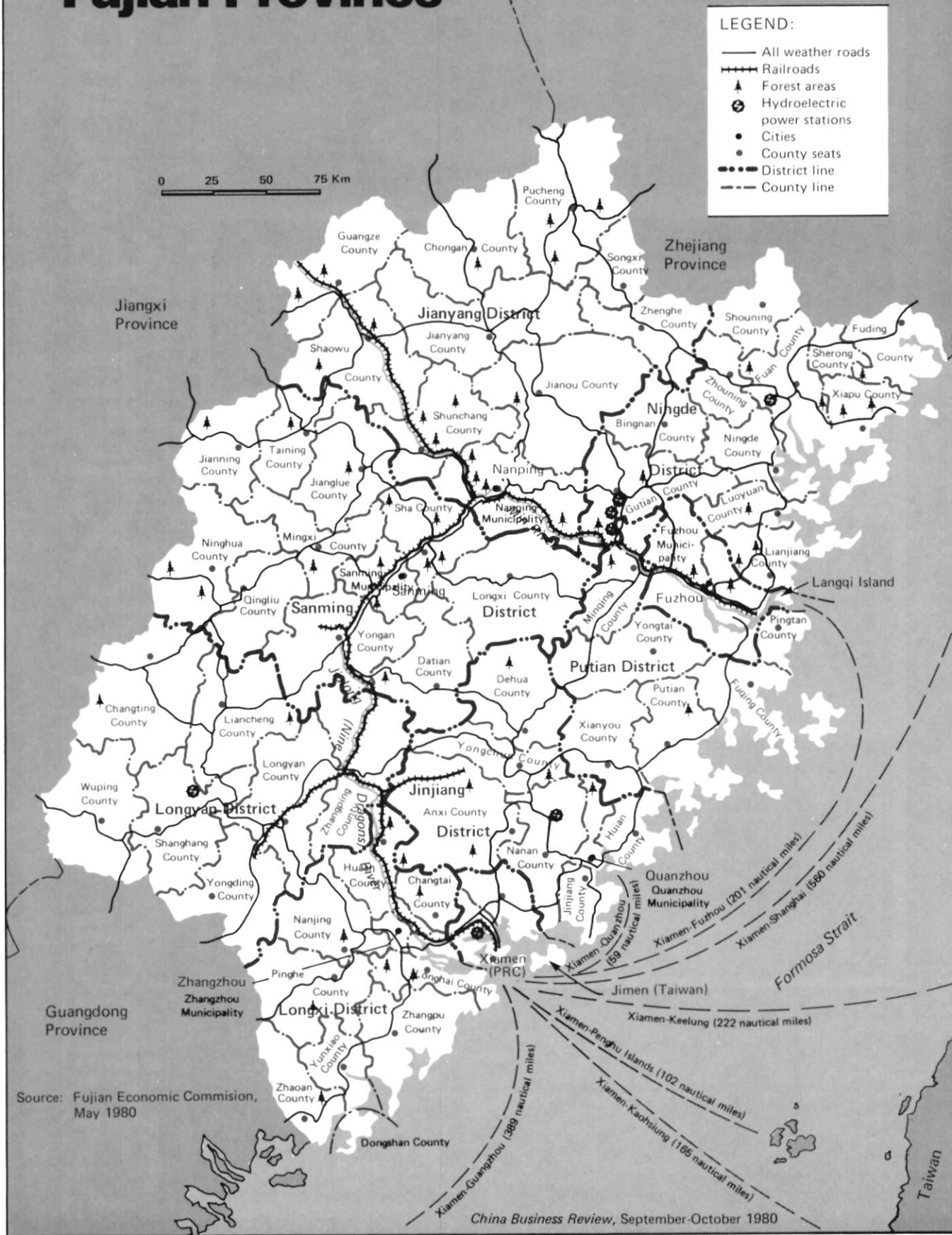
SOURCE: Fujian Import-Export Office, Fuzhou, May 1980.

**Xiamen's Foreign Export Markets (1979)**

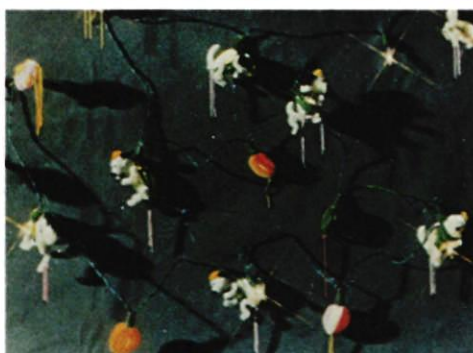
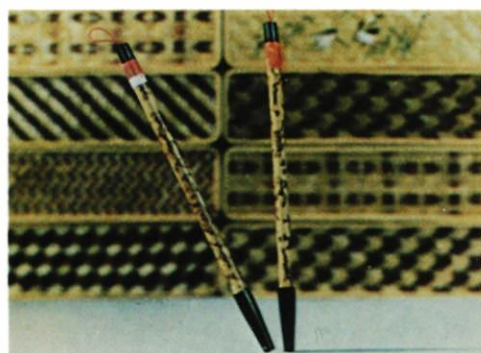
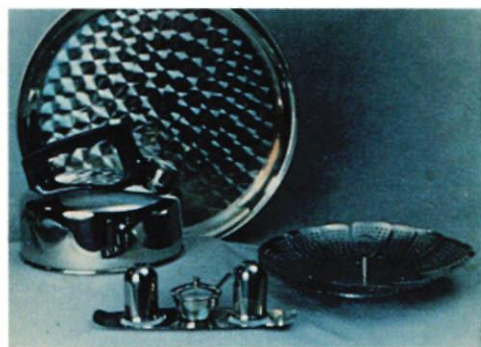
Areas/ Countries	Value (million US \$)	Percent- age of Total
Asia	\$108.5	73.5
Of which:		
Hong Kong and Macao	\$59.1	40.0
Singapore and Malaysia	\$36.9	25.0
Japan	\$9.7	6.6
Other	\$2.8	1.9
Europe	\$28.9	19.6
Of which:		
West Germany	\$14.5	9.8
Sweden	\$3.8	2.6
Switzerland	\$3.0	2.0
England	\$1.8	1.2
Italy	\$1.6	1.1
France	\$1.0	0.7
Other	\$3.2	2.2
America and Australia	\$5.3	3.6
Of which:		
Canada	\$3.1	2.1
United States	\$1.6	1.1
Other	\$0.6	0.4
Africa	\$4.6	3.1
Of which:		
Guinea	\$3.0	2.0
Other	\$1.6	1.1
Latin America	\$0.3	0.2
<b>Totals</b>	<b>\$147.6</b>	<b>100.0</b>

SOURCE: Xiamen Import-Export Office, May 1980.

# Fujian Province







Our Corporation is a leading supplier of light industrial products in China. The products handled by our Corporation are General Merchandise, Stationery, Sports Goods, Household Electric Appliances and Building Materials. Buyers' brands, designs and materials are also accepted.

For further details, please contact: China National Light Industrial Products Import & Export Corporation, Shanghai Branch. Address: 128 Huqiu Road, Shanghai, China. Cable: INDUSTRY, SHANGHAI. Telex: 33054 INDUS CN.

# China: The Modern Source

icy, see *CBR*, Mar.-Apr., 1980, p. 12.

*Fujian Foreign Trade Bureau.* Until recently, this was the most important foreign trade entity in Fujian. The bureau still comes under the direct control of the Ministry of Foreign Trade in Beijing, but the policy and planning functions it once performed are now in the hands of the Import-Export Office. Moreover, the control it once exercised over branch foreign trade corporations (FTCs) in the province was recently weakened by the creation of the Fujian General Foreign Trade Corporation.

The Fujian Foreign Trade Bureau is now subordinate to the Fujian Import-Export Office, and on a par with the Fujian Enterprise Investment Corporation and the Fujian General Foreign Trade Corporation.

Officials interviewed in Fuzhou in May 1980 emphasized the importance of the Foreign Trade Bureau as a think-tank type organization for foreign market research and forecasting. The Foreign Trade Bureau is now charged with formulating a strategy for raising export volume and market penetration, particularly with respect to the U.S.

The delicate business of shifting power from the Foreign Trade Bureau to the new provincial trade organizations is clearly taking precedence over efforts to demarcate their functions. For the time being, all of them may have their hands in each other's affairs. Overlap authority exists to such an extent between the Foreign Trade Bureau and its new rivals that a provincial spokesman confessed, "It is the provincial authorities that decide who gets what."

*Fujian General Foreign Trade Corporation.* Officially established on July 1, 1980, FUJIANTRACO (so dubbed from its cable address) is now the primary agency "managing Fujian's foreign trade affairs, and undertaking the responsibility of leading each of the province's specialized import and export corporations, as well as the branch corporations of municipalities and prefectures.<sup>4</sup> What umbrella role the Foreign Trade Bureau formerly possessed with respect to the province's ten branch FTCs now belongs to FUJIANTRACO. The branch FTCs now report directly to FUJIANTRACO on most export business; the exceptions are sales of strategic and staple commodities and government-to-government trade. Import business is channeled through FUJIANTRACO, the Fujian Enter-

prise Investment Corporation, or local Import-Export Offices depending on the nature of the product as well as such a practical matter as whom the foreign company first approaches.

With the creation of FUJIANTRACO, the ties between FTC branches and their head offices in Beijing have become attenuated, but not entirely lost. The head offices continue to exercise a degree of control over pricing of commodities handled by FTC branches which are still responsible for signing contracts in commodity areas of specific national interest. But for most products, initial marketing, negotiating, and contract drafting can be done on the FTC branches' own authority, under the supervision of FUJIANTRACO.

FUJIANTRACO is not merely the old Foreign Trade Bureau with a changed name. Officials set FUJIANTRACO and the Foreign Trade Bureau apart by describing them as an "enterprise" and a "government organization," respectively. "Enterprises," in Chinese economic parlance, are usually responsible for their own profit and loss. FUJIANTRACO's main duties, according to mass release issued when it was established, said that FUJIANTRACO would be taking on commission business, representation of foreign companies in the province, sales on consignment, mounting of exhibitions, and "entrusting and maintenance," presumably of equipment lent or leased to the province under terms of contract manufacturing deals.

As of May 1980 no general manager of FUJIANTRACO had yet been appointed; Deputy General Manager Liu Shouming was then the top executive organizing affairs prior to FUJIANTRACO's official inauguration.

*Fujian Enterprise Investment Corporation.* In many ways the most dynamic and powerful of Fujian's new trade agencies, this agency recruits investment funds from overseas Chinese and other sources, and engages in negotiations on loans, turnkey import projects, and the range of business which the Chinese lump together under the heading of *linghuo maoyi*, or 'flexible trade.' It also has developed a capability in marketing Fujian labor and technical forces for overseas aid and commercial construction projects. Fujianese commonly refer to the corporation as the 'Huafu' Corporation, short for *huaqiao fuli touzhi gongse*, or 'Overseas Chinese Welfare

and Investment Corporation.'

One of the first such organizations in China, Huafu Corporation was set up in late 1978 under the Fujian Foreign Trade Bureau. By May 1979 Huafu was a fully-fledged independent organization. It advertised itself as an advisor, go-between, and possible investor in joint ventures, coordinator of compensation trade contracts, negotiating agency for projects in special economic zones in Fujian, and manpower contractor. As of May 1980 Huafu had a staff of about 60, with subbranches in various parts of the province (including Xiamen Municipality) to handle its growing business. The president of Huafu is Fujian Deputy Governor Zhang Yi.

The Huafu Corporation resembles the China International Trust and Investment Corporation (CITIC), which was established separately in Beijing last July 8. Both were set up to help foreign companies invest in China, establish joint ventures, and arrange compensation trade deals.

Despite its delay in issuing bonds, Huafu had received commitments from buyers for \$1.3 million worth of provincial bonds as of July 1980. Provincial officials have indicated that the initial offering will be worth \$67 million, in RMB-denominated bonds with face values of ¥500, ¥5,000, and ¥50,000.

With regard to its offer to negotiate labor exports, first advertised in May 1979, Huafu apparently has no takers. More recently, the corporation has widened its approach by offering manpower assistance as aid to developing countries, making Fujian the first Chinese province to mount its own foreign aid program.

Real estate is another area in which the Huafu Corporation has begun to make an impact, at least on the Hong Kong market. Huafu and the Hengguang Development Company of Hong Kong are constructing a four-tower apartment complex in Fuzhou. The Hong Kong firm is supplying capital for the project, while Huafu is providing labor and construction materials in exchange for leasing rights on 35 percent of the rooms. The completed complex will belong to Hengguang, which plans to rent the remaining 65 percent of rooms to overseas Chinese.

#### Compensation Trade

Fujian has signed about 300 compensation trade deals as of May 1980.



**FUJIAN AND XIAMEN (AMOY):  
KEY ECONOMIC INDICATORS, 1976-1979**

Key Indicators	Fujian Province				Average annual percentage change	Fujian data as percentage of national total				Xiamen (Amoy)				Xiamen data as percentage of Fujian total			
	1976	1977	1978	1979		1976	1977	1978	1979	1976	1977	1978	1979	1976	1977	1978	1979
Area (thousand sq. km.)				121.3					1.26				1.466				1.2
Population (year-end, millions)	21.4*	22.5*	23.7*	24.87*	5.13 <sup>1</sup>	2.2	2.4	2.5	2.6	.652*	.745*	.835*	.92	3.1	3.3	3.5	3.7
Total gross industrial and agricultural output value (billion yuan) <sup>2</sup>	¥7.09 \$3.68	¥9.36 \$5.05	¥9.59 \$5.70	¥10.57 \$8.82	14.87	1.5	1.8	1.7	1.7	NA	NA	¥0.88 \$0.52	¥0.959 \$0.619	NA	NA	9.2	9.1
Total gross industrial and agricultural output per capita	¥331.3 \$171.9	¥416.0 \$224.6	¥404.6 \$240.5	¥425.0 \$274.4	9.2	68.8	77.7	68.1	66.8	NA	NA	¥1055 \$627	¥1043 \$673	NA	NA	261	245
Gross value of industrial output (billion yuan) <sup>2</sup> Of which:	¥4.2* \$2.2	¥4.9* \$2.7	¥5.8 \$3.4	¥6.75* \$4.36	17.0	NA	1.3	1.4	1.5	NA	NA	¥0.72 \$0.43	¥0.79 \$0.51	NA	NA	12.5	11.8
Heavy industry	NA	NA	¥2.2 \$1.3	¥2.7 \$1.7	25.0	NA	NA	0.9	1.0	NA	NA	NA	NA	NA	NA	NA	NA
Light industry	NA	NA	¥3.6 \$2.1	¥4.1 \$2.6	12.5	NA	NA	1.9	2.1	NA	NA	NA	NA	NA	NA	NA	NA
Gross value of agricultural output (billion yuan) <sup>2</sup>	¥2.87 \$1.49	¥3.15 \$1.70	¥3.47 \$2.06	¥3.82 \$2.47	10.0 <sup>3</sup>	2.1	2.4	2.4	2.4	NA	NA	¥0.16 \$0.10	¥0.16 \$0.10	NA	NA	4.64	4.21
Total foreign trade (million yuan) <sup>4</sup>	¥348 \$181	NA	NA	¥409 \$264	5.7	1.4 <sup>5</sup>	NA	NA	0.9	NA	NA	NA	NA	NA	NA	NA	NA
Exports (million yuan)	¥315 \$163	NA	NA	¥378 \$244	6.2 <sup>6</sup>	2.2 <sup>5</sup>	NA	NA	1.8	¥89 \$46	¥107 \$58	¥138 \$82	¥229 \$148	28.3	NA	NA	60.6
Of which: Farm and sideline products	NA	NA	NA	¥243 \$157	NA	NA	NA	NA	5.0	NA	NA	NA	¥134 \$87	NA	NA	NA	55.1
Other exports	NA	NA	NA	¥135 \$87	NA	NA	NA	NA	0.8	NA	NA	NA	¥97 \$61	NA <sup>1</sup>	NA	NA	70.4
Imports under direct provincial control (million yuan)	¥33 \$17	NA	NA	¥31 \$20	-2.0	NA	NA	NA	0.1	NA	NA	NA	NA	NA	NA	NA	NA

\*Figures are extrapolated. See footnotes 1 and 3.

<sup>1</sup>This population growth rate is derived by calculating the annual growth rate between 1972, when the official publication *Provincial Atlas of the People's Republic of China* (1974) listed Fujian's population as 16.76 million, and the 1979 figure of 24.87 million, which was provided to the author in May 1980 by the Fujian Economic Commission.

<sup>2</sup>Fujian Economic Commission officials, who provided the value data (in yuan) for this series, did not state whether it was in 1970 prices. See *China Business Review*, May-June, 1980.

<sup>3</sup>Growth rate reported by Fujian Economic Commission officials in May 1980.

<sup>4</sup>Total trade figures include provincially controlled imports only; the 1976 figure for total trade is based on the export value figure plus a ratio of 12.2:1 (of exports to imports), which is the reported 1979 ratio.

<sup>5</sup>1976 national figures are based on CIA estimates as follows: total trade in 1976 of \$13.3 billion, of which exports were 7.3 billion.

<sup>6</sup>Fujian provincial authorities provided two apparently conflicting versions of export growth rates. It was stated that between 1976 and 1979, export growth in individual years had reached as much as 30 percent; however, officials also stated that 1979 exports were only 1.2 times the value of exports in 1976. Assuming that the ratio of 1.2 is correct, the annual average growth rate of exports during 1977-79 was 6.2 percent.

NOTE: exchange rates used are \$1 = ¥1.9277 in 1976; \$1 = ¥1.852 in 1977; \$1 = ¥1.682 in 1978; and \$1 = ¥1.549 in 1979.

SOURCES: Fujian Provincial Economic Commission, May 1980; Xiamen Municipal Import-Export Office, May 1980; China: Major Economic Indicators (National Foreign Assessment Center, February 1, 1980); "Official PRC Statistics, 1977-1978," and "Official PRC Statistics, 1978-1979," in *C BR*, July-Aug., 1979, and May-June, 1980.

Table prepared by Edith Terry.

Known in Chinese as *lailao jiagong*, or "processing of imported (raw) materials," these deals normally involve equipment and materials contributed by foreigners, which the Chinese client pays for in reduced manufacturing fees. In Fuzhou, the provincial capital, authorities reported 120 processing arrangements as of late December 1979. In Xiamen, Fujian's second largest city and a major port and trade center, 30 such deals had been arranged by May 1980, worth \$4.75 million in eventual processing fees.

In south-central Fujian's Jinjiang Prefecture, overseas Chinese and Japanese firms are engaged in some 130 processing arrangements, including one in which Quanzhou stonemasons will carve stone lion ornaments to order for the Japanese market. Other deals in Jinjiang Prefecture include processing of garments and down-filled sports clothes.

### Major Foreign Investments

Fujian is reportedly negotiating deals with Carnation Company, Bechtel, Washington Iron Works, Westinghouse Electric (WE), General Electric (GE), and Parsons. Talks are well under way in the case of Carnation Company's bid to build a \$20 million feed mill in Fuzhou, and Washington Iron Works' plan to supply a 50,000 ton per year, \$11.45 million medium-density fiber board plant. Other negotiations noted in media reports include an airport renovation project in Xiamen, by Parsons; a feasibility study for a tungsten mine and concentrator plant, by Bechtel; and discussions on erecting power plants by WE and GE.

In Fujian's southern port of Xiamen, foreign firms are involved in a massive project at the Dongdu Harbor (see p. 23), for which Bechtel has been asked to prepare a feasibility study for the latter stages; a 3,000-units-per-year bulldozer factory, for which Caterpillar was asked to present a contract proposal; a hotel project with a Hong Kong firm in which the foreign company is absorbing all up-front capital costs of the project in exchange for 12 years' worth of hotel revenues (the firm will return a percentage of profits to the province, as well as pay business and income taxes); a plate-glass factory to produce glass by the floating process (Nippon Glass, so far, has been the chief contender); and a contract manufacturing/coproduction deal with Reynolds Tobacco Corporation of the US.

### The Reynolds Experience

Following nearly a year-and-a-half of talks with China's Ministry of Light Industry, Reynolds Tobacco of Winston-Salem, North Carolina, signed a general agreement in February and a detailed agreement in April 1980. Reynolds has already shipped \$1 million in cigarette production equipment to Xiamen's Amoy Cigarette Factory, which once installed, will process Camel cigarettes for the foreign tourist market in the PRC.

The Amoy Cigarette Factory is building a new, three-story workshop to house equipment which the factory's General Manager Liu Weican claims will add 3 billion cigarettes and \$2 million a year to the plant's output and revenues. In 1979, the factory produced 60 billion cigarettes, packaged in such brands as Youyi, Amoy, Egret, and Kulangyu. Sales to the Miscellaneous Foodstuffs Corporation of the Ministry of Commerce totalled ¥65 million (about \$41.9 million).

The equipment, though one generation behind machines employed in Reynolds Tobacco facilities in the US, will go to the Amoy Cigarette Company rent-free, at least for the initially contracted phase of the agreement. The equipment includes the Molins Mark 8 cigarette-making machine (2,000-2,500 cigarettes per minute), filter-rod assembler, filter-rod-making machine, four AMF American-made packing machines (wrapping, stamping, polypropylene wrapping, and cartoning), and quality control instruments including machines for testing moisture, size, weight, circumference, draft, furnace, and sealing of cigarettes.

In addition to equipment, technical assistance, and raw materials, Reynolds Tobacco will be paying the Amoy Cigarette Company a processing fee of \$30 per box of 10,000 cigarettes. Under the terms of a second contract, being negotiated now, Reynolds and the Amoy Cigarette Factory will jointly produce a new brand of cigarette for export.

### Financing

Fujian is relying on foreign credit to help finance many of these projects with foreign companies. It has signed a total of \$38 million in loans from US banks, two from First National Bank of Chicago totaling \$28 million, and a \$10 million loan from the First City National Bank of Houston. Both FNBC

loans had one-time management fees, a practice which China has generally balked at in the past, and guarantees from a Fujian branch of the Bank of China (both Bank of China branches in Fujian and the provincial government may serve as loan guarantors). The second FNBC loan, a five-year untied line of credit, and the First City loan (both extended in October 1979), featured low (LIBOR + 0.5 percent) interest rates which previously had been offered by foreign banks only to Chinese borrowers at the national level.

Of the FNBC loans, "most of both have been disbursed," according to an FNBC spokesman. The \$8 million FNBC credit was used to purchase ships, while a large portion of the \$20 million loan may be used in connection with Carnation Company's proposed feed mill in Fuzhou.

### Trading with Taiwan

Fujian and Taiwan have had very close ties historically. Indeed, in the 18th and 19th centuries, Taiwan was a tax-paying, if pirate-ridden prefecture of Fujian. Today, the idea that Taiwan could be as deeply intertwined with Fujian's development as Hong Kong is with Guangdong Province's is gospel to some Fujianese.

Taiwan business, too, insofar as one can tell from Taiwan's growing trade with the PRC via Hong Kong, is also looking ahead to the time when trade constraints with the mainland are eased. Since early 1979 when the PRC's Ministry of Foreign Trade eliminated all custom duties on trade to and from Taiwan, the indirect trade between them has increased dramatically. In mid-1980, Taiwan's *Business Times* reported a 340 percent increase in indirect Taiwan exports to China, from \$4.84 million in 1978 to \$21.3 million in 1979. China's exports to Taiwan in the same period increased 32 percent over the 1978 value to \$57.8 million, according to a January 9 Xinhua report.

In Xiamen, officials boast openly of purchases of capital goods from across the Taiwan Straits. "Xiamen has already had some successes in this area," a municipal spokesman told the *CBR* in May 1980. "We have bought some equipment from Taiwan, and we plan to continue to do so. We are only 170 kilometers from Taiwan, a very short distance. And we are even closer to Jinmen (Quemoy)."

Is this bravado or the words of a pragmatic businessman? Laundered



through Hong Kong, goods from Taiwan already line the shelves of shops in Xiamen's commercial district. Imports include Taiwan-made textile goods, watches, TV sets, chemicals, and other light industrial products. The Xiamen Cannery recently received a set of canning equipment valued at "several tens of thousands" of dollars, made in Tai-

wan. Xiamen's exports to Taiwan are mainly herbal medicines, also shipped via Hong Kong.

To encourage these developments, the Huaifu Corporation has established a separate department to manage Taiwan trade affairs. The provincial government also undertakes public relations efforts such as rescuing ship-

wrecked Taiwanese fishermen, and issuing periodic calls for restoring shipping and postal links with Taiwan.

A people-to-people approach is part of the strategy. Radio broadcasts of testimonials are constantly beamed toward Taiwan, such as the following "voice of the masses" from a "Taiwan Compatriot" in Fujian who coincidentally is chief of the transport section of the Fujian Foreign Trade Bureau:

"The situation now exists for Taiwan and the mainland to exchange more supplies. Taiwan needs to import industrial raw materials which are available on the mainland for export in large quantities; on the other hand, Taiwan has some slow-selling goods which are needed on the mainland. Trade between Taiwan and the mainland would be mutually beneficial, with each supplying what the other lacks."

And, from a staff member of the Fujian Provincial Shipping Administrative Bureau: "I wish I could sail a ship from the motherland to Taiwan and have a family reunion."<sup>5</sup>

There is a neat complementarity between the foodstuffs needs of Taiwan (68.5 percent of total imports in 1978), and Fujian's agricultural exports (which comprised 64.5 percent of the province's total exports in 1979). Timber, coal, pharmaceuticals, and potentially oil, are other products high on Taiwan's import list which Fujian might supply. In the years ahead, the level of mutual trade, or at least the need for each other's goods, can only be expected to gather momentum. 完

#### Fujian Province: Industrial and Agricultural Statistics, 1979

	1979 Output	Percentage of National Total	Percentage of Taiwan Total <sup>1</sup>
<b>Industrial Production</b> (million metric tons unless otherwise indicated)			
Steel	0.208	1.6	6.5
Iron ore	0.89	NA	NA
Pig iron	0.31	0.8	111.9
"Selected irons" <sup>2</sup>	0.203	NA	NA
Coal	4.79	0.8	175.5
Cement	1.39	1.9	11.0
Machine-made paper	0.22	4.5	30.1
Electricity (billion kilowatt hrs.)	4.4	1.6	11.3
Plastic manufactured goods	0.046	NA	NA
Sulphuric acid	0.11	1.6	NA
Soda ash	0.048	3.2	62.1
Calcium carbide	0.066	4.7	NA
Chemical fertilizer	1.0	9.4	48.8
Jute bags (million units)	11.0	NA	NA
Chemical fibers	0.011	3.4	1.8
Canned goods	0.047	NA	NA
Sugar	0.32	12.8	51.7
<b>Agricultural Production</b> (million metric tons unless otherwise indicated)			
Grain	7.6	2.3	198.9 <sup>3</sup>
Sugar cane	3.1	14.4	432.9
Tea	0.023	8.3	88.4
Fruit	0.12	NA	14.9 <sup>4</sup>
Timber	3.93	7.2	612.1
Aquatic products	0.4022	9.3	44.6
<b>Agricultural Capital</b> (million head)			
Stock of pigs	7.0	2.2	156.0
Stock of cattle	1.0	1.4	680.2
Stock of sheep and goats	0.7	0.38	348.2

#### NOTES

<sup>1</sup> Based on estimates of 1979 production obtained by projecting 1978 data from *Taiwan Statistical Data Book*, 1979, by 1969-78 average annual growth rate for each type of commodity.

<sup>2</sup> (sic). Fujian officials did not clarify the meaning of this phrase (phrase given in English).

<sup>3</sup> Aggregate production of rice, sweet potatoes, wheat, and soybeans, from *Taiwan Statistical Data Book*, 1979.

<sup>4</sup> Aggregate production of bananas, pineapple, and citrus fruit from *Taiwan Statistical Data Book*, 1979.

SOURCES: Fujian Provincial Economic Commission, May 1980; "Official PRC Statistics," *CBR*, May-June 1980, pp. 54-56; Council for Economic Planning and Development, Executive Yuan, Government of Taiwan, *Taiwan Statistical Data Book*, 1979.

<sup>1</sup>This figure represents exports plus only those imports actually controlled by the province in 1979. Imports channeled through national FTCs are not counted into the total.

<sup>2</sup>Figure cited in "Ties Abroad Help Chinese Province Woo Businessmen," by Frank Ching, *Asian Wall Street Journal*, July 31, 1980.

<sup>3</sup>In November 1979, Chinese officials quoted a figure of ¥3 million as the upper limit on investment decisions made by local authorities in Beijing, Shanghai, Tianjin, Guangdong Province, and Fujian. Subsequently, and apparently related to a policy to quote all foreign exchange transactions in US dollars, the threshold was changed to \$3 million. *CBR's* earlier report (Mar.-Apr., 1980, p. 14) is thus superseded.

<sup>4</sup>"Fujian Liaoning Fenbie Xuanbu Chengli Waimao Zong Gongse," *Ta Kung Pao*, July 7, 1980.

<sup>5</sup>"Taiwan 'Compatriots' in Fujian Hope for Improved Relations," Beijing Xinhua Domestic Service in Chinese 1541 GMT, January 7, 1980 (*PRC Daily Report*, January 9, 1980, p. 1).

## Fujian Trade Directory

### Fujian Province Import-Export Office.

Function: sets foreign trade policy for the province, manages foreign exchange allocations to provincial entities, coordinates with its parent body (the Foreign Investment Control and Import-Export Commission in Beijing) with regard to major projects requiring foreign exchange, and coordinates the foreign trade policies and activities of nine prefectural and municipal import-export offices. Director: Guo Chao. Deputy directors: Zhang Yi, Guo Liangru.

Address: Fujian Provincial People's Government, Fuzhou, Fujian Province. Telephone: main switchboard, 32914, 32915, 32936.

### Fujian Foreign Trade Bureau.

Function: coordinates between Ministry of Foreign Trade and provincial branches of FTCs, conducts market forecasting and research on behalf of FTC branches. Director: unknown. Deputy director: Huang Changlin.

Address: 1 Jian Bing Lu, Fuzhou, Fujian Province. Cable: 6319 FUZHOU. Telephone: duty office, 34018; political, 34067; administration, 34037; executive, 34116; capital construction, 34478; business, 34068; finance (operations), 34086; finance (planning), 34085.

### Fujian Enterprise Investment Corporation/Overseas Chinese Welfare Investment Corporation (Huaifu).

Function: serves as a go-between for provincial investment projects, (and sometimes invests its own capital in joint ventures with foreign companies), offers manpower for foreign aid and construction projects, and has indicated that it will issue provincial shares or bonds. President: Zang Yi. Deputy managing director: Chen Mutian. Manager (transport and power): Jin Tong.<sup>1</sup> Manager (light industry): Zhang Dechao.<sup>1</sup> Manager (mining and metallurgy): Sheng Fuyuan.<sup>1</sup>

Address: 185 North August 17 Road, Fuzhou, Fujian Province. Cable 8199 FUZHOU. Telephone: 33093.

### Fujian General Foreign Trade Corporation (FUJIANTRACO).

Function: manages operations of certain branch FTCs in Fujian Province, undertakes commission business, representation, consignment sales, mounting exhibitions, and "entrusting and maintenance" of property on behalf of foreign clients. Deputy general manager: Liu Shouming.

Address: 1 Jian Bing Lu, Fuzhou, Fujian Province. Cable: FUJIANTRACO FUZHOU. Telephone: 34018, 34246.

### FTC exporting branches subordinate to FUJIANTRACO:

1. CEROILS, Fujian branch. General manager: Zou Dezhi. Deputy general manager: Zhou Huizhang.

Address: Foreign Trade Building, 94 Dong Jie Kuo, Fuzhou, Fujian Province. Cable: FOODCO FUZHOU. Telephone: manager's office, 31422; political work, 32811; secretariat, 33253; finance and accounting, 33280; general affairs, 33584; packing, 31316; aquatic products, 31411; meat and eggs, 31415; cereals and vegetables, 31458; canned goods and sundry products, 33552; general business, 34711, 31405.

2. INDUSTRY, Fujian branch. General manager: Zhang Shou-chong. Deputy general manager: Hou Hongyi.

Address: Foreign Trade Building, 94 Dong Jie Kuo, Fuzhou, Fujian Province. Cable: INDUSTRY FUZHOU. Telephone: finance, 31307; planning, 33863; department store products, 31305, 31632; shoe and leather products, 31289, 32266; drawnwork, 33885; general business, 33953, 31905, 31858.

3. CHINATUHSU, Fujian branch. Deputy general managers: Liu Futang, Zhao Hengge.

Address: Foreign Trade Building, 94 Dong Jie Kuo, Fuzhou, Fujian Province. Cable: PROFUKIEN

BYPRODUCTS FUZHOU. Telephone: manager's office, 33812; political work, 33668; finance, 33686; capital construction, 31591, general affairs, 33787, 33584; animal by-products, 31518; mountain products, 31442; rosin and spices, 31271; packing, 31328; laboratory, 33551.

4. CHINATUHSU, Fujian tea branch. General manager: Cheng Ren.

Address: Foreign Trade Building, 94 Dong Jie Kuo, Fuzhou, Fujian Province. Cable: NATION-TEA FUZHOU. Telephone: 31507.

5. ARTCHINA, Fujian branch. Deputy general managers: Liu Rutan, Hou Ying.

Address: Foreign Trade Building, 94 Dong Jie Kuo, Fuzhou, Fujian Province. Cable: ART-CRAFT FUZHOU. Telephone: 31632, 33504, 32719.

6. EQUIMPEX, Fujian branch. Deputy general manager: Xiao Yongzhen.

Address: 1 Jian Bing Lu, Fuzhou, Fujian Province. Cable: MACHIMPEX FUZHOU. Telephone: 34088, 34471, 34448.

7. SINOCHEM, Fujian branch. Deputy general manager: Sun Bingheng.

Address: 1 Jian Bing Lu, Fuzhou, Fujian Province. Cable: SINOCHEM FUZHOU. Telephone: 34177, 34088, 36088.

8. MINMETALS, Fujian branch. General manager: Wang Zhiqiu.

Address: 1 Jian Bing Lu, Fuzhou, Fujian Province. Telephone: 34087, 34470, 31230.

9. CHINATEX, Fujian branch. Deputy general managers: Chen Bagui, Shi Zenghua.

Address: Foreign Trade Building, 94 Dong Jie Kuo, Fuzhou, Fujian Province. Cable: CHINATEX FUZHOU. Telephone: 33957.

### Hong Kong: Hua Min Corporation.

Function: represents provincial trade interests in Hong Kong, reporting directly to the Fujian Import-Export Office. Director: Zhang Xuyang.

Address: 152-155 Connaught Road, Central, 12th floor, Hong Kong. Telephone: 5-430570.



# Fujian's Special Economic Zones

## HULI: READY IN 1982

Huli is presently a grassy green field within Xiamen Municipality located about four kilometers north of the city's center, and two kilometers from the Dongdu Harbor Development Project (see map, p. 23). The entire area encompasses some seven square kilometers; yet, in the initial phase of development the zone will cover just one square kilometer, probably in an area fronting an as-yet unpaved truck road.

Planning for Huli is being carried out by the Xiamen Municipal Construction and Development Corporation. Under this is the Xiamen Economic Zone Preparatory Office, which may eventually become a separate zone development corporation.

When phase one of Dongdu Harbor is completed in 1982 the export zone will have access to two berths accommodating 50,000 dwt ships. At least one of the berths will handle containers. At present only ships of 6,000 dwt may berth at Xiamen's existing Yuangdang Harbor, which encompasses only 2,245 meters of dock area.

The State Council approved establishment of the Huli Special Economic Zone in May 1980, and decided it will be built prior to the Xinglin and Langqi zones, owing to Huli's proximity to a major port. Xiamen offers harbor facilities, road and rail connections with the mainland, a recently completed ¥40 million (\$27 million) pipeline project which brought water from the Jinlong River, a power station on Xiamen Island which is also tied to the Southwest Min Grid, and the superior technical education facilities of the municipality.

Moreover, work at Huli has already begun on housing for workers, new highways, telephone services, a connecting station for power lines, and a new railway line leading from Gaoji Station in Xiamen to the warehouse area of the docks in the immediate vicinity of Huli. Phase two of the Dongdu Harbor Project will provide wharves literally at

the foot of Huli.

Xiamen's industrial base represents another asset to Huli. The city's gross value of industrial production is expected to reach ¥880 (\$600 million) in 1980, about 12 percent of the provincial total. More than half of the province's foreign trade passes through Xiamen, and its population of about 920,000 ranks second in the province after Fuzhou's 1.56 million.

*Terms and conditions.* The rules governing foreign enterprises in Huli "will not exceed" those of Shekou in nearby Guangdong Province, which already have been published by the PRC-owned China Merchant Steamship Navigation Company in Hong Kong. Officials noted that the terms being drawn up follow the guidelines outlined in Guangdong's 30-point "Draft Trial Regulations on Setting Up Special Economic Zones in Guangdong," was promulgated in December 1979. (See "The Regulations on Special Economic Zones in Guangdong Province," issued by Guangdong on August 26, 1980, p. 54). Below are some of the tentative guidelines settled upon as of May 1980:

- The Xiamen Construction and Development Corporation will serve as contract signatory in the zone.

- Minimum equity of 25 percent will be required of foreign companies (the same share required under Article 4 of China's July 8, 1979, Joint Venture Law).

- Materials imported for processing or construction will be given tax-exempt status; exports will also be tax-exempt. For taxable items, special low rates will be considered.

- A three- to five-year tax holiday will be granted to enterprises located in the zone, particularly those offering "advanced technology."

- Xiamen will supply all utilities free of cost to the factory door, including roads, water, electricity, and telephone lines. The China Construction Corporation, a national manpower service

corporation, will erect buildings to house equipment and workers at international rates (utility rates were not specified).

- The zone administrators will take a "flexible position" in all matters relating to the workforce, its wages, and standard of living. The zone will allocate residences to foreign staff living in the zone, and to their families.

- Within the limits of Chinese law and policy, foreign managers will have total control in those factories which are 100 percent owned by foreign investors.

- The Huli zone will offer leases up to 30 years. Rates "will not be higher than those of Shenzhen's Shekou District" (HK \$2 to \$4 per square foot per year).

- The zone will establish a vocational school to train in basic technologies workers employed by the factories located there.

## LANGQI

The decision to postpone development of Langqi, located 30 kilometers downriver of Fuzhou at the mouth of the Min River, was based on the high cost of infrastructure development. The island is only 20 minutes from Fuzhou by road, but is connected with the mainland only by ferry service. It has minimal power and water supply facilities to serve the existing population of 57,000, made up mainly of fishermen and peanut farmers (see CBR, Mar.-Apr., 1980, p. 35).

With the cost of developing Langqi conservatively estimated at \$350 million, Fujian has decided to put off the project despite offers of would-be developers to supply the necessary capital. Millie's Group, the Hong Kong firm which pioneered development of Shenzhen and which has been engaged over the last year in assembling a development package for Langqi, has been allowed to maintain its office in the Fuzhou Overseas Chinese Hotel and continue drafting plans—but in the words of Fujian officials, on their own time, not Fujian's.

## XINGLIN

The Xinglin Export Zone is still a viable proposal, according to local officials, and may be developed after Huli is under way. Located 25 kilometers from urban Xiamen, the zone will be constructed at the Maman Industrial District. Industry has been in the area since 1958, and rail, road, water, and electric connections are already in place.

—ET 完

## Fujian's Economic Reforms

A local proverb has it that Fujian is eight parts mountain to one part sea and one part fields. This meager agricultural endowment (10.8 percent of Fujian's 121.3 square kilometers, according to official statistics) has long forced the population to work the sea, engage in trade, or emigrate.

Fujian is one of China's ten poorest provinces. A 1978 CIA study indicates that in 18 years (1957-75), the value of industrial output in Fujian rose just 4.9 times—well below the national average. The level of industrial output in 1975, estimated at ¥4.72 billion, was comparable to that of the landlocked, nearly inaccessible province of Guizhou. Over the period for which the study was carried out, Fujian's small contribution to the national income actually declined, from 1.56 percent in 1957 to 1.26 percent in 1975.<sup>1</sup>

In recent years, however, Fujian has experienced an industrial boom that its planners hope to continue in the 1980s. Between 1976 and 1979, industrial output grew by 17 percent annually. A more modest 10 percent increase is expected in 1980, although state-owned enterprises in the province have been assigned a 1980 profits target of 20 percent.

**Management reforms.** At least 50 of Fujian's 8,600 state-owned and collective enterprises have been designated "key-point" or "trial-point" enterprises. While subject to higher performance standards, they nevertheless have the freedom to retain a portion of their profits, experiment with new (state-approved) wage and bonus policies, and directly negotiate their own foreign trade contracts.

As early as January 1979, the province's three major coal-producing agencies (Longyan Mining Bureau, Shaowu Mines, Zhangping Mines), for instance, were brought under an incentive program in which they were allowed to retain from profits an amount equivalent to five percent of their total annual wage bill. Profit re-

tention terms were written into contracts between the mines and the Provincial Coal Industry Bureau.

In Xiamen, four "trial-point" factories—the city's Leather Company, Forging Factory, Plastics Factory, and an Electric Battery Factory, together produced ¥77.76 million (about \$50.2 million) in 1979; 12.4 percent over their combined output value in 1978. During the same period, according to Xiamen municipal spokesmen, profits of the four companies increased by a resounding 68.76 percent.

Illustrating how the profit performance of the "key-point" enterprise may be used to good effect, the four Xiamen factories described above disposed of their 1979 retained profits of ¥1.954 million (\$1.26 million) as follows: factory improvements—¥601,000; welfare funds—¥698,000; incentive program—¥598,000.

**Transport Investment.** Fujian's major transport difficulty is the lack of adequate land connections along its north-south axis. Roads throughout the province appear to be marginally useful for heavy transport, while poor rail links impede trade with Fujian's rich neighboring provinces of Zhejiang and Guangdong. Not until October 1979 was cargo service between the northern port of Fuzhou and Hong Kong restored after a long hiatus. But the berthing capacity of Fujian's two major ports of Fuzhou and Xiamen, currently only 10,000 dwt, limits the degree to which international shipping can take advantage of the province's new accessibility.

The figure given for road mileage by provincial authorities, 30,000 kilometers, probably represents far more dirt than paved-road surface. Fujian's 1,090-kilometers railway mainly includes a line from Xiamen and a line from Fuzhou that meet at Waiyang to merge and form a single line heading northwest toward Nanchang, Jiangxi Province. Such a roundabout passage out of the province means that freight and passenger traffic to Shanghai, Guangzhou, and other major cities is severely delayed.

The rail problem will be addressed by renovating the line from Xiamen to Yingran, and by building three new lines: Anxi (Hutou-Quanzhou); Mawei to Ningde; and Longyan-Guangzhou. The problem of upgrading the provincial road system is not, apparently, of interest to provincial planners at the moment; hence potential foreign inves-

### XIAMEN'S FOREIGN TRADE

Category/ Selected items	Exports (1979)	
	Value (million US \$)	Percent- age of Total
<i>Light Industry</i>	\$48.3	32.7
Batteries		
Boots and shoes		
Candles		
Feather goods		
Furniture		
Gunny sacks		
Paper		
Plastic slippers		
Porcelain ware		
Work gloves		
<i>Foodstuffs</i>	\$47.6	32.3
Canned goods		
Medicinal wine		
Sauces		
Pasta		
<i>Agricultural products</i>	\$38.8	26.3
Chinese herbs		
Dried fruits		
Eggs		
Fruits and vegetables		
Honey		
Sea products		
Tea		
<i>Handicrafts</i>	\$4.6	3.1
Drawings for porcelain applique		
Fans		
Wood carvings		
Toys		
<i>Chemical Products</i>	\$4.1	2.8
Bicycle tires		
Pharmaceuticals		
<i>Minerals</i>	\$4.0	2.7
Granite		
Stone goods		
Wolfram		
<i>Machinery</i>	\$0.2	0.1
25-ton forging presses		
<b>Totals</b>	\$147.6	100.0



tors should investigate potential sites carefully with respect to the status of the local highway system.

The province is mainly relying upon improved port facilities to solve its traffic and transport problems. Coastal shipping in the past was Fujian's most important means of transport, and the fact that ships of all flags once plied up and down the coast accounts to some extent for the lack of attention to overland transport and the province's present inadequacies in that sector. Since 1978, Fuzhou has completed four berths accommodating vessels of 5,000 to 10,111 dwt, according to a February 1980 Xinhua report. As a result of these improvements, the port handled a record of 380,000 tons in 1979. Quanzhou, Xiuyu, Saiqi, Xiazhai, and Xiamen are engaged in harbor construction projects as well; Xiamen's Dongdu Harbor, when completed, will have a 12 million ton annual cargo handling capacity, with at least 20,000 tons per year in containers. The current capacity of Xiamen's Yuandang Harbor is 640,000 tons, almost twice that of Fuzhou's.

**Electric Power Development.** Fujian's hydro resources, though rich, are dependent on a subtropical cycle from wet to dry. The dry season supply of water is chronically short. Total installed hydroelectric capacity in 1979 was 800,000 kilowatts, with an annual production of just 4.4 billion kilowatt hours (less than 12 percent of Taiwan's, for an area three times the size).

To improve power supply, Fujian currently plans to build several large and medium-sized hydroelectric and thermal power stations in the 1980s, among them a project currently under way to build a 100,000 kilowatt station at Chitan. When completed in 1981, the Chitan plant will add 500 million kilowatt hours per year to existing output.

Strict energy conservation measures have also been introduced in Fujian: economic authorities have threatened energy-wasting plants with shutdown, especially small-scale chemical fertilizer and iron-smelting factories which are notorious power wasters. Authorities have also indicated that first priority will be given to energy efficient types of industry in Fujian's planned Special Economic Zones (see p. 20).

**Industrial Investment Priorities.** In heavy industry, the province intends to give preference to cement production and tungsten fabricating plants, according to a January 1980 Xinhua

broadcast which outlined a report by Deputy Governor Bi Jichang on Fujian's industrial priorities. The deputy governor also promised that Fujian would build a "number of" 2,000-ton-per-day sugar mills, "expand several modern canning factories," and inaugurate an electronics and television industry in Fujian in the 1980s. Sugar is already a major interprovincial export

item for Fujian, and a principal foreign export is canned goods. These projects would build on an industrial base in which light industry already accounts for 60 percent of Fujian's total industrial output value. 完

<sup>1</sup> China: Gross Value of Industrial Output, 1965-1977. National Foreign Assessment Center, CIA, ER78-10355, June 1978.

## XIAMEN TRADE DIRECTORY

*Xiamen was one of five treaty ports opened to the West in 1842, and by 1858 a shipbuilding factory and a dock for Western ships were completed. Today Xiamen is Fujian's busiest port, and construction is under way on two special economic zones and a large cargo port (capable of handling 12 million tons per year) at Dongdu Harbor.*

*Xiamen has restructured its foreign trade institutions as have all of Fujian's nine provincial administrative regions (seven prefectures and two municipalities) which were so authorized, although Xiamen was perhaps the first to carry out its institutional transformation. Following is a description of the city's new trade organizations as outlined by the Xiamen Municipal Import-Export Office in May 1980.*

**Xiamen Import-Export Office.** Together with Fuzhou Municipality and Fujian Province's seven prefectures or districts (*dichu*), Xiamen established in July 1979 a local counterpart to the Foreign Investment Control and Import-Export Commission in Beijing. Charged with planning and coordinating all municipal foreign trade activities, it has immediate responsibility for reviewing contract proposals submitted to it by the Xiamen Construction and Development Corporation. The office's deputy director is Xie Chongyong, who is also deputy general manager of the Construction and Development Corporation (see below).

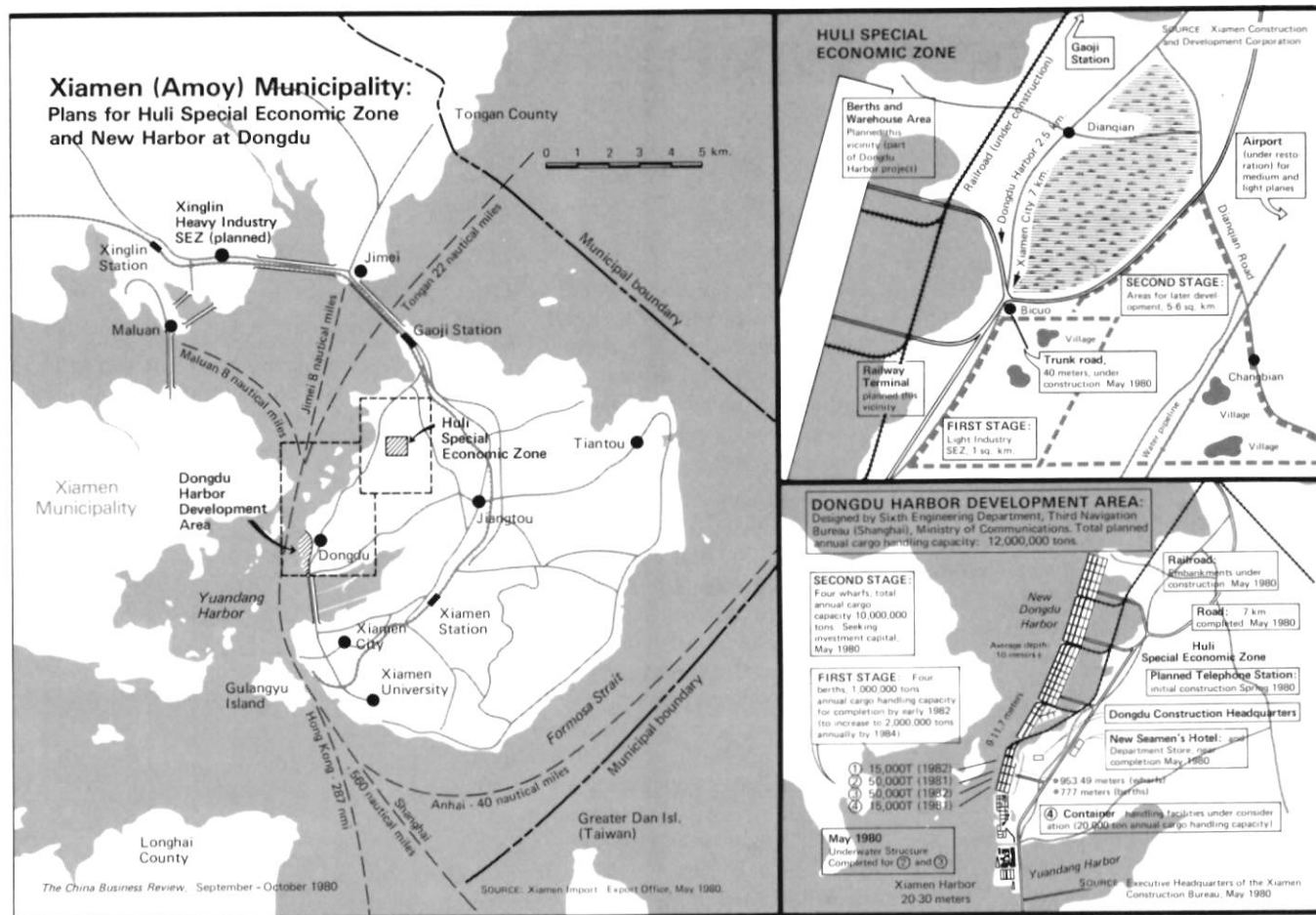
**Xiamen Foreign Trade Bureau.** The bureau administers the city's seven foreign trade corporations (FTCs) on behalf of the Ministry of Foreign Trade, although these corporations operate semi-independently in trade and countertrade in the case of certain indigenous commodities. The Foreign Trade Bureau is sometimes called upon to authorize trade in locally controlled commodities, and contract manufacturing deals (*lailiao jiagong*).

**Xiamen Construction and Development Corporation.** This is the key body for negotiating all investment, turnkey plant, and special economic zone proposals in Xiamen which are under Beijing's limit of \$3 million, and therefore do not require central government approval. The corporation answers to Xiamen vice-mayor (and general manager of the corporation), Zhang Ketong, and to deputy general manager, Xie Chongyong. Besides negotiating contracts with foreign investors and manufacturers, the corporation handles trusts, advertising, ship dismantling and repairs, and is responsible for supplying materials to investment projects with foreign firms. The Xiamen Special Economic Zone Preparatory Office, eventually to spin off as the administrative agency for Huli and Zinglin Zones, currently reports to the corporation. Address: 18 Huyuan Lu, Xiamen, PO Box 26. Telephone: 4204.

**Branch FTCs.** Seven FTC branches are based in Xiamen: INDUSTRY, CEROILS, a tea branch of CHINATUHSU, a combined branch of SINO-CHEM and EQUIMPEX, MINMETALS, and the Foreign Trade Transportation Corporation. Many of these are housed in the Foreign Trade Building on Dong Feng Lu in Xiamen.

**Huafu Branch.** The Fujian Enterprise Investment Corporation (Huafu) has established a branch in Xiamen, one of several in the province; it is headed by Vice-Mayor Zhang Ketong.

**Amoy (Xiamen) Advertising Corporation.** According to the corporation's literature, it undertakes "various kinds of advertising business such as street nameplates, neon lights, broadcast, cinema, screens, lamp cases, shop windows, newspapers and magazines, trains, steamers, etc." Address: 18 Huyuan Lu, second floor, Xiamen. Telephone: 4024. Cable: 7325. —ET



## Dongdu Harbor, Xiamen

*The following brief overview was released by the executive headquarters of the Xiamen Construction Bureau in May 1980. The translation is by Edith Terry.*

Xiamen Harbor is an excellent natural harbor. With an average depth of more than ten meters, ships of 10,000 dwt can come and go without having to wait for the tide. In 1974 the State Council approved construction of a new harbor district in the vicinity of Dongdu.

The new harbor district at Dongdu is located at a convenient distance of 3 kilometers north of Xiamen City. From Dongdu north as far as Shichao (Stone Tide) Mountain, a five-kilometer area of natural coastline may be developed by stages.

According to the national plan, the first stage of the engineering program covers construction of a general cargo pier. This will have four deepwater

berths (all will be over 10,000 dwt; two will be able to berth ships of 50,000 dwt) and the corresponding facilities. Annual cargo handling capacity will be 1,000,000 tons, to rise to 2,000,000 tons after completion of the entire facility.

The pier will follow the coastline, with structural forms of the concrete gravity type. The total length of the pier will be 953.49 meters. The length of the four deepwater berths will be a total of 777 meters; the depth of the water will be between 9 and 11.7 meters. (There will be additional sections at the far ends of the pier).

Preparations for construction of the first phase of the Dongdu Harbor District project began in 1976. In the second half of 1977, formal work began on the principal part of the project. Up until the spring of this year, 41.45 percent of the total investment had been carried out.

At present, pier construction has entered into the final stage, with the un-

derwater foundations being largely completed. Installation of the underwater concrete forms of the first 50,000 dwt berth is finished, and installation of underwater forms for the second 50,000 dwt berth is more than two-thirds done. Installation of the far ends of the pier is now being accelerated.

Rear backfill, the harbor basin, and blasting to clear ship passages, as well as housing construction, have all begun. Water and electric supply, communications, and so forth, have been opened one by one.

The factory for making prefabricated concrete pier forms has been finished in large part; some production lines have already started. Output to date is 2,257 units of prefabricated cubic forms and platform blocks (four sides and more).

The first stage of the engineering program will be completed and facilities will begin operating in the latter half of 1982.



# Electronics/China 80

Leo G. B. Welt

Electronics/China 80, the first exclusively American exhibition ever held in China, has sparked enormous interest in US computer technology.

Chinese engineers, scientists, plant managers, and economic planners from major cities throughout the country attended the Guangzhou exhibition August 15-24, eager to meet US manufacturers directly and acquire the means to modernize China's electronics industry. Contrary to what many American participants at the fair expected, the Chinese were not interested in small-capacity production equipment of electronic components, but in high-speed, large-capacity equipment offering state-of-the-art sophistication.

Present at the fair were representatives from the China National Machinery Import and Export Corporation (MACHIMPEX), and the newly formed China Electronic Technology Import and Export Corporation of the Fourth Ministry of Machine Building. Jiang Chongjing, vice-minister of the Fourth Ministry, also attended the fair's technical seminars.

The demand for electronics goods so greatly exceeded available supplies that virtually everything was bought up as quickly as it was displayed. The China Electronic Technology Import and Export Corporation assisted these sales by issuing questionnaires to all participants asking them to list display equipment which they hoped to sell by the close of the fair. This expedited many deals, and by the time the fair ended, equipment sales totalled \$0.8 to \$1 million.

Excellon Industries of Torrance, California, for example, sold two drills that make printed circuit boards for \$450,000. One will be installed in the No. 20 Electronics Radio and Television Plant in Shanghai, and the other in the Guangzhou Electronics Society. Other sales included an Endevco LPD 4501 loose particle detection device; Thermotron Industries test chambers (sold to the Great Wall Corporation); and inserting equipment manufactured by Universal Instruments Corporation and the Dyna/Pert Division of

Emhart Corporation. Great interest was also shown in printed circuit boards, hybrid circuits, and integrated circuits (ICs)—equipment which is essential for meeting Beijing's production goals.

## Exhibition Tips

What makes a successful exhibition in China? The first and most important factor is the selection of a company representative. Fluency in Chinese, and the necessary technical vocabulary, are very important. But it is even more essential that the representative be a first-rate salesperson, who can competently present the firm's products in a manner that enhances its image and credibility.

Business cards should be printed in both Chinese and English. Most Chinese do not carry business cards, and even fewer have them in English. And this makes it difficult to identify the real Chinese decision-makers.

To overcome this problem, many US exhibitors distributed query cards in Chinese requesting an individual's name, title, address, and the information of interest. Since almost every participant filled out a card, it became a monumental task to sort out the potential buyers from the curious onlookers. But this method, albeit cumbersome, seems to be the best available solution.

Finally, exhibiting companies should put as much equipment on display as possible. Like any prospective buyers, the Chinese want to see how the equipment works, and product presentations are more effective than brochures and literature.

Exhibiting in the heat of August was an ordeal for many, but it did not diminish the fair's success. Many companies were pleased to receive invitations to hold future technical seminars and to participate in other exhibitions in China. 完

*Leo G. B. Welt is president of Welt International Corporation in Washington, D.C., which specializes in assisting and representing US companies in China.*

## US EXHIBITORS AT GUANGZHOU ELECTRONICS EXHIBITION (August 15-24, 1980)

1. Advanced Semiconductor Materials Asia, Ltd.
2. Analog Devices, Inc.
3. Apple Computer, Inc.
4. Bausch & Lomb, Inc. (Scientific Optical Products Division)
5. Bishop Graphics, Inc.
6. Burr-Brown Research Corp.
7. California Computer Products
8. Celanese Plastics and Specialties Company (Division of Celanese Corp.)
9. Computervision Asia Ltd.
10. Dow Corning
11. E. I. du Pont de Nemours & Co. (Inc.)
12. EG&G Instruments
13. Emhart Corp., Dyna/Pert Division
14. EMR Data Systems
15. Endevco
16. Excellon Industries
17. Exttech International Corp.
18. Fairchild Test Systems Group
19. Hudson Tool & Die Co., Inc.
20. Hysol Division, The Dexter Corp.
21. Information Handling Services
22. James B. Lansing Sound, Inc. (JBL)
23. Kan Electronics Co., Ltd.
24. Kras Asia, Ltd.
25. Kulicke & Soffa Industries, Inc.
26. Lou Rauscher Associates
27. Molex, Inc.
28. National Semiconductor HK, Ltd.
29. Nemic-Lambda K.K.
30. Norplex Pacific Division of UOP (HK), Ltd.
31. Pace, Inc.
32. Pasadena Hydraulic, Inc. (PHI)
33. PCK Technology Division, Kollmorgen Corp.
34. Polaroid Far East, Ltd.
35. Rank Xerox (Overseas), Ltd.
36. Shipley Co., Inc.
37. Sprague World Trade Corp.
38. Standard Pneumatic Motor Co.
39. Superior Teaching Systems
40. Tempres
41. Thermotron Industries
42. Union Carbide Corp.-Electronics Division
43. Universal Instruments Corp., Subsidiary of Dover Corp.
44. Vaponics, Inc.
45. Welt International Corp., representing: AMI, Inc.; Argus International; Cermalloy Corp.; Buehler, Ltd.; MTI Corp.

# Computer Sales to China

## American Firms Win Sizable Contracts

Karen Berney

IBM will have no trouble securing an export license for its powerful "number-crunching" 4300 models for use in China's 1981 census. SILTEC, a California-based company, reports positive feedback on its license application to sell silicon chip manufacturing equipment to China—an export category previously represented by petty-sum sales on the part of US companies. But Electronics Associates, Inc., which has been waiting nearly three years for an okay to ship its Series 700 hybrid computer to China, recently was told by the Pentagon that there would be no export license until the system's components are downgraded by 40 percent.

These case examples illustrate the government's new export-controls policy governing computer sales to China. The new policy has three main points:

- An export license will not be approved if the equipment's performance

Changzhou semiconductor factory in Jiangsu.





characteristics exceed what it is required to do in China.

- Evidence that the Chinese end-user is in the military sector is neither a sufficient nor an adequate reason for denying a license; but

- manufacturing and design equipment for making defense-related items that are still prohibited for sale to the PRC will not be licensed for export.

#### Numbers Are Irrelevant

The US government's primary concern is no longer the computer's storage capacity, speed of data transfer, or number of peripherals, but rather, whether or not its design "is appropriate for satisfying the end-user's specific needs," says Dave Ruther, chief PRC science and technology officer at the State Department.

This emphasis on "appropriateness" has cleared the path for the export of the IBM hardware configuration (see p.34) for the 1981 population census, and will result in the licensing of such products as Computer Vision's computer graphics processor—even though its accompanying 300-megabyte hard disk exceeds the pre-export liberalization ceiling of 100 megabytes.

But the appropriateness guideline also can thwart a company's selling effort. Electronics Associate's hybrid computer, which is considered too sophisticated for its intended uses at the Harbin Engineering Institute, is a case in point.

Ruther offered advice to US firms seeking an export license in the dual-use technology area: make sure the item's technical specifications conform with its intended application in China. Under these circumstances the US government will permit sales of dual-use and military support equipment to China.

But the US government does not actively promote American commercial interests in China, at least to the same extent as certain other governments—a sore point for many companies. Competition is fierce now. Foreign firms are aggressively marketing tactical air and ground microwave communications, avionics, and other high technology items to China. Marconi Avionics of Great Britain (see *CBR*, July-Aug., 1980, p. 25), just received a \$94.8 million order from the Chinese Aero-Technology Import-Export Corporation to equip China's F-6 and F-7 attack aircraft with new head-up display gear for navigation and avionics for improved flight controls. The contract is backed

by the British government's Export Credits Guarantee Department.

#### China's Import Market for Computers

With greater selling opportunities than ever before, where should US

**The US government does not actively promote American commercial interests in China, at least to the same extent as certain other countries—a sore point for many companies.**

computer manufacturers direct their marketing efforts? Beijing has not yet unveiled a master plan for the development of computers—though the newly

established State Administration of Computer Industry is believed to be formulating one. Its recent identification of "three weak links" in the computer industry suggests a variety of business possibilities for American companies. These problem areas include:

- a lack of manufacturing technology, quality control, and testing techniques, especially for the production of LSI circuits;
- no production capacity for manufacturing external peripheral devices, and limited capability to produce magnetic tape or magnetic disk packs;
- a shortage of trained personnel to develop software programs for existing and new Chinese computers.

An example of China's need for foreign expertise was observed last year at the Nanjing Telecommunications Fac-

Known PRC Computers, 1958-80

Year	Model	Design Location	Word Length (bits)	Memory Size* (words)	Rated Operations per second
1958	August 1	NA	NA	NA	2,000
1962	DJS-1	Beijing Wire Factory (BWF)	NA	2K	1,800
1963	DJS-2	BWF	NA	2K-4K	10,000
1964	Model 103	NA	21	16K	50,000
1965	DJS-7	NA	21	32K	3,000
	X-2	NA	32	8K	52,000
	C-2	NA	32	8K	25,000
1966	DJS-6	BWF	48	16K-32K	100,000
	DJS-21	NA	NA	4K	65,000
	TQ-1	NA	NA	NA	25,000
1967	Model 109	Beijing Inst. of Computing Technology (BICT)	48	22K	115,000
	Model 665	Nanjing Univ.	NA	NA	1,000,000
1968	Model C-2	Shanghai Inst. of Computing Technology	32	8K	25,000
	Model 441 B3	NA	24	32K	180,000
1970	Model 111	BICT	48	32K	180,000
1971	TQ-3	NA	24	8K	100,000
	TQ-11	Shanghai Radio Factory #13 (SRF #13)	36	18K	25,000
	TQ-16	SRF #13	48	32K	110,000
	TQ-31	SRF #13	24	16K	100,000
1972-73	TQ-6 or Model 655	SRF #13	48	130K	820,000
	Model 719	Fudan Univ.	24	8K	125,000
	Model 150	Beijing (same as Model 655)	NA	NA	1,000,000
1974	DJS-11	NA	48	128K	1,000,000
	DJS-18	Beijing Univ.	48	64K	150,000
	Model 702	NA	24	32K	100,000
	Model 7756	NA	NA	NA	920,000
1976	Model 013	BICT	48	128K	2,000,000
	DJS-120	Wuxi Radio Factory	16	32K	200,000
	DJS-130	Qinghua Univ.	16	64K	500,000
	DJS-183	North China Computer Technology Research Inst. (NCCTRI)	16	32K	200,000



tory, where 4,000 employees have been manufacturing computer designs for the past 15 years. In a dimly lit, unkempt room, Chinese workers were seen assembling eight-level printed circuit boards by a hand soldering method. Wave soldering has been used in the US for 20 years and is superior in reliability, dependability, and cost-efficiency.

However, wave soldering is only economical in the context of mass production. Under past policies in which the government emphasized local self-sufficiency, electronics plants like the one in Nanjing developed one-of-a-kind products and components. The result: excessive duplication in research, development, and design, at the expense of advances in manufacturing. As an editorial in the March 17 *Beijing Ribao* lamented, "quite a number of computers developed in China are an only child."

### Big Computer Market Drying Up

Since the mid-1970s, US hardware manufacturers have signed contracts to supply China with more than \$90 million worth of data processing equipment for geophysical purposes (see

### While a slowdown is expected in large mainframe orders from the PRC, a thriving export business is seen for medium-sized, compact, and minicomputer suppliers.

chart, p.29). "But this market's heyday is over," claims an official at Geometrics, one of the firms recently awarded a contract for mineral exploration. Why?

First, China has a limited manpower pool of skilled programmers, operators, and systems analysts to maintain big computers. Second, it can only afford to use large scientific computers, for example in the oil industry, to the point that commercially viable oil deposits are actually discovered. Finally, Beijing's import policy on computers can be summed up as: "That which can be developed domestically need not be introduced from abroad." And constructing modest mainframes, although still by hand, is what the Chinese industry does best.

The current DJS-200 series, for example, is a family of general-purpose computers for batch computation, whose architecture and performance corresponds to IBM machines of the mid-1960s. The DJS-220 is comparable to, though not a copy of, the IBM 360/50; the DJS-240 is similar to the 360/65, and the DJS-260 to the 360/75. Unfortunately, these computers are not designed to utilize the wealth of software programs which have been developed in the West. Since Chinese factories seldom manufacture identical hardware, even the PRC's domestic software programs are not interchangeable.

### Minicomputers in Demand

While a slowdown is expected in large mainframe orders from the PRC, a thriving export business is seen for medium-sized, compact, and minicomputer suppliers. In addition to being well-suited to the day-to-day needs of most industrial enterprises and small businesses, minicomputers like Digital Equipment Corporation's top-of-the-line PDP-11/70, can be purchased for as little as \$63,000, whereas large computers tend to be priced over \$1.0 million.

Chinese enterprises earning foreign exchange appear to be the first in line for minicomputer imports. The China Ocean Shipping Company (COSCO), has requested competitive bids from at least three Japanese companies—Fujitsu, Hitachi, and IBM Machine—for a medium-sized computer system to handle its accounting and payroll operations in Beijing. Later, COSCO will order additional peripheral equipment to link Beijing with ports in Tianjin, Shanghai, and Guangzhou, and to perform other aspects of port management such as container control, warehouse, and freight distribution and vessel turnaround, according to members of the Port of Seattle delegation that visited Chinese container terminals last

1977	TQ-5A	SRF #13	48	32K	160,000
	DJS-131	SRF #13	16	64K	500,000
	DJS-050 (micro)	Anhui Radio Works, Qinghua Univ.	8	NA	NA
1978	DJS-154	BWF	16	16K-32K	200,000
	HDS-9**	East China Inst. of Computer Technology	42	512K	5,000,000
	DJS-210 #1 and DJS-210 #2	Wuxi Computer Factory, Nanjing Univ.	16	64K	100,000
	DJS-220	NCCTRI	16	32K	100,000
	DJS-240	NCCTRI	32	32K-64K	200,000
	DJS-260	NCCTRI	64	128K	400,000
	DJS-260	NCCTRI	64	32K-256K	1,000,000
1979	Model 77 (microprocessor)	Beijing Semi-Conductor Plant #11	NA	NA	NA
1980	061-series minicomputer (prototype)	#1447 Inst., Shenyang	NA	NA	NA
Future [models]	DJS-220-1***	BWF	NA	NA	NA
	DJS-184 (modeled on PDP-11/60)	NCCTRI	16	128K	1,000,000
	DJS-185 (modeled on PDP-11/70)	NCCTRI	32	128K	3,000,000

\*The storage capacity of a computer's memory is expressed in blocks of 1,024 bytes (8 bits = 1 byte; 3 bytes = 1 word), abbreviated by the letter "K." a computer having 16K is capable of handling 16,384 bytes of memory in its CPU. Chinese computers are described in terms of their operations per second, a method used to express US computer performance in the 1960s. Today, the most important computer parameters are: 1) the rate (bytes per second) at which information stored on the disk memory can be transferred to the CPU, 2) the number of milliseconds needed to access any piece of data on the disk, and 3) the computer's internal and external memory capacity.

\*\*This is China's most powerful computer. It has two CPU's, two I/O controllers, and a virtual memory. Three magnetic disks, which were manufactured at the Shanghai Machine Tool Works, are connected to the computer. Each disk drive has 17 megabytes of memory. The system is being used to design printed circuit boards.

\*\*\*This represents the standardization of the DJS-220 model which will allow for mass production and time-sharing.

SOURCES: Harvey L. Garner, "Computing in China," in *Computer*, vol. 12, no. 3, 1979; Isaac L. Auërbach, *Computing in China: Apr.-May 1979, Trip Report*, issued June 1979. Information from these two trip reports was updated and supplemented by official Chinese reports.



fall. For other Chinese ports far removed from major cities, small decentralized computer systems are more appropriate.

Breadbox-sized microcomputers, which are increasingly competitive (in terms of price and performance) with their mini-cousins, appear to be of particular interest to the cost-conscious Chinese—who set up their first micro research and development program in 1974. The US company Ohio Scientific could be assembling microcomputers for industrial process control at the Yangzi River Factory if its current joint venture talks are successful. The Zhejiang provincial government, with \$10 million to invest in its electronic industry, has asked a Hong Kong consultant to help woo overseas partners for “any kind of arrangement,” to manufacture “integrated circuits and microcomputers,” according to a report in the July *Asian Computer Monthly*.

#### Peripherals and Software

Though capable of building large CPUs for national defense, China has not mastered the capital-intensive ability to mass-produce the peripheral equipment that optimizes a computer's performance. A few magnetic disks have been seen in operation on the 013 and TQ-6 models, but the primary mass storage device remains the fixed-head drum. According to one Chinese report, the DJS-131 minicomputer is widely installed throughout China, but it operates inefficiently because of the shortage of peripheral magnetic disk storage.

In addition to the storage problem, China is very badly constrained in terms of modern I/O (input-output) technology. With no punched-card production facilities and reading equipment available, most input equipment reportedly has been copied from Swiss machinery and is limited to paper tape, which is standard IC 8 bit code. But this may be just as well, since the country lacks sufficient communication lines to support both data input by teleprocessing and time-sharing between computers.

Limited prototypes of CRT terminals and graphic display screens exist, but Chinese line printers are all of antiquated design. Still, Chinese engineers appear to be making rapid progress in this field. Most recently, Beijing announced development of a computerized Chinese character editing and laser typesetting system capable of outputting

Value of US Export Licenses Approved for Sales to the PRC		
For all of 1979 the value of US-approved export licenses for sales to the PRC within these categories was approximately \$274.28 million. (For details see the <i>CBR</i> , Nov.–Dec., 1979, p. 56.) A total of 636 licenses worth \$265,522,802 were approved between January and September of this year.		
Export Category	4th Quarter 1979	1st Quarter 1980
	(in million US \$)	
Electronic computing equipment and parts	9.18 <sup>1</sup>	12.02 <sup>2</sup>
Electronic testing equipment and parts	10.98	6.47 <sup>3</sup>
Aircraft		8.30
Parts and accessories	0.53	5.40
Magnetic recording equipment and parts	2.6	0.51
Communications equipment	1.22	0.42
Semiconductor mfg. equipment and integrated circuits	0.84	0.18
Other electronic instruments <sup>4</sup>	0.37	0.18
Total	25.72	157.18
Reexport Licenses <sup>5</sup>	0.64	1.19

#### NOTES

<sup>1</sup> This includes Sperry Univac's sale of two 1100/11 computer systems worth about \$6 million.

<sup>2</sup> According to US trade statistics compiled by the Department of Commerce, the US exported a \$4.4 million seismic data processing unit, \$2.7 million in high-speed printers, and \$2.0 million worth of remote entry terminals to the PRC during the first quarter of 1980. Other export licenses were for computer spare parts and software items.

<sup>3</sup> Nearly all of this equipment was specified for use in analyzing seismic survey, oceanographic, or environmental data.

<sup>4</sup> Primarily referring to oscilloscopes, gravity meters, and electronic measuring instruments.

<sup>5</sup> Refers to the value of US exports that were reshipped from their original destination to an end-user in the PRC. The bulk of reexport licenses are for sales origination in Great Britain.

55 Chinese characters a second. A new method for inputting Chinese characters by classifying the numerical annotations of their strokes should greatly increase the use of Chinese computers for data processing applications.

According to one tentative estimate, total US exports of various peripheral devices to China could reach \$60 million by 1981.\* These sales will occur with total systems orders or on an OEM (other equipment manufacturer) basis whereby US companies such as DEC, CDC, and Texas Instruments, supply peripherals to an OEM dealer. The dealer then combines it with software to form a complete data processing package.

Since software eventually may account for 80 percent of a computer's development cost, Beijing recognizes that it no longer can afford to emphasize hardware over software as it has in the past. The State Administration for

Computer Industry (SACI) currently is seeking partners for joint ventures in which the foreign vendor would develop software programs for both Chinese needs and the export market.

Sperry Univac is the first US company to explore this market, having recently concluded an agreement first to train SACI personnel to service Sperry's systems in China and later to form a joint software development company with the China International Trust and Investment Company (CITIC).

Although it is harder for small, independent software houses to justify such costs, the giant hardware firms may find that responding to China's immediate software needs is the best strategy for promoting long-term sales of computer equipment. 完

\**Chinese and Russian Computer Markets*, 1979, available from International Resource Development, New Canaan, Connecticut.

### Major Worldwide Computer Exports to the PRC

China currently is using 2,615 computers, compared to 903,800 in operation in the US, of which 318 came from abroad, according to a Xinhua report. About one-third of the computer imports are being used for process control in connection with the sale of 100 turnkey plants between 1972-78. The rest have applications in seismic oil exploration, industry, or banking. The table was prepared by Karen Berney.

Company/Product	Application	Installation	Value (Thousand US\$)	Status of Deal
<b>United States</b>				
<i>Aydin Corp.</i> Two model 5216 color display systems	For research on process control	Beijing Inst. of Physics	\$275	contract announced 5/80
<i>Burroughs Corp.</i> 1. Two B3950, one B876 with 35 MT600 data entry systems and three small-scale computers 2. One B6800 with 16 display terminals (procured through the UNDP)	Train students in basic accounting, handling of import-export contract management Assist China in setting up UNDP Information Processing and Training Center for International Economic Cooperation	Beijing Inst. of Foreign Trade Beijing Computing Ctr.	\$2,200 \$2,300	contract signed 9/79, installed 9/80 order received 10/79, license approved 9/80
<i>Computervision</i> Three Designer IV systems	Computer-aided engineering and design work	Three petrochemical plants	\$1,500	export license pending
<i>Control Data Corp.</i> 1. Two Cyber 172s upgraded to 720s 2. Ten 720s, one 730, and one 750; software and training (about 15% contract value) provided by Compagnie Générale de Géophysique	Geophysical exploration Geophysical exploration	Zhouxian, southwest of Beijing Two 720s in Beijing, Tianjin, Urumqi, Zhouxian, and Guanxi Province; 750 in Beijing; and 730 in Daqing oilfield	\$6,000 \$69,000	ordered 1/75, export license approved 9/76 contract signed 12/78, export license approved for 720s 9/80; license pending for 730 and 750
3. OMEs (peripherals)	For attachment to Chinese computers	NA	\$200	NA
4. One Cyber 18 minicomputer with CRT terminals	To assist four-month enterprise management program run by Commerce Department	National Ctr. for Industrial Science and Technology, Dalian, Liaoning Province	\$200	export license pending
<i>Cromemco</i> 1,000 System microcomputers	Educational, scientific, and business	NA	\$1,000 (estimate)	orders placed and fulfilled over the year
<i>Daedalus</i> Infrared, multispectral image sensing units	Airborne oil exploration	NA	\$2,000	contract signed 1976, export license approved 6/78
<i>Data General</i> Nova 1200 (through its Japanese licensing)	Used as model for the hardware design of China's DJS-100 series computers	600 DJS-100 series computers now operate throughout China	NA	delivered in 1976
<i>Digital Resources Corp.</i> Software with six DEC PDP-11/45 computers	Oil exploration	Six locations	software: \$1,000 hardware: \$4,000	contract signed 9/76, export license granted 5/80
<i>Electronic Assoc., Inc.</i> 1. One series 700 hybrid system	Dynamic Systems research	Harbin Engineering Inst.	\$4,500	contract signed 9/77, Pentagon required 40% reduction in components as condition for license, 7/80
2. Two series 700 hybrid systems	Aircraft simulation and modeling	China Precision Machinery Corp., Beijing	\$10,500	order placed by INSTRIMPEX in 7/80; export license pending
<i>Hewlett-Packard</i> Five 3000 Series III minicomputers with 50 remote terminals (procured through the UNDP)	For Information Processing and Training Ctr. for International Cooperation	Beijing and four other nearby locations	\$1,800	order received 3/80; export license pending



Company/Product	Application	Installation	Value (Thousand US\$)	Status of Deal
<i>Information Handling Systems</i> Computerized information access unit	Provide data on 10 million products of 15,000 US corporations	Ministry of Foreign Trade	\$20	delivered 5/79
<i>IBM</i> <sup>1</sup>				
1. One 370/138	Factory process control	Shenyang Blower Works	\$2,000 (estimate)	ordered 12/78; export license approved 5/78
2. One 370/138J with 25 peripherals (procured by Comets, Inc., on behalf of O.P.M. Leasing Services, Inc.)	Scientific research	Beijing Inst. of Physics of Chinese Academy of Sciences	\$1,000 (estimate)	ordered 4/80
3. One 3033 (procured by Western Geophysical Co.)	To be owned and operated by Western Geophysical for processing seismic survey data; eventual Chinese ownership	Beijing facility being built by China National Oil and Gas Exploration and Development Co.	\$8,000 (estimate)	export license pending since 3/79
4. Twenty 4331s, one 4341 mainframe (procured by the UNDP)	Software, training, and equipment for 1981 census and other population studies	CPU in Beijing and 20 provincial ctrs.	\$15,600	order received 3/80; export license pending
<i>Perkin-Elmer</i>				
1. Two model 5/16 minicomputers (procured through Geometrics)	Processing of uranium exploration data in the field	Two remote areas in west China	NA	export license pending
2. One XL40 (procured through UNDP)	For UNDP Technical Information and Training Project for Economic Development	Beijing computing ctr.		export license approved 4/80
<i>Prime Computer, Inc.</i>				
1. Prime 550 (procured through Geometrics)	Uranium exploration activities on behalf of Petroleum Ministry and Bureau of Uranium Geology, 2nd Ministry of Machine Building	Shijiazhuang, Hubei Province	Part of \$2,300 contract	order announced 2/80; export license pending
2. Prime 650 hybrid computer	Scientific research and engineering design	Beijing Inst. of Aeronautics and Astronautics	\$400	order placed 5/80; export license pending
<i>Sperry Univac</i>				
1. Technical cooperation agreement with State Administration of Computer Industry and China International Trust & Investment Corp.	Provision of software, education, and training to Chinese engineers for servicing Sperry and Chinese-made computers	Training ctr. in Birmingham, UK	No cash involved; may become joint venture to develop software products	agreement signed 2/28/80; export license pending
2. One 1100/11 unit processor	Education and research	Univ. of Science and Technology, Beijing Division, Academy of Sciences	\$1,800	ordered 2/79; export license pending
One 1100/11 multiprocessor	Development and implementation of a Central Information Retrieval System	Beijing Document Service	\$4,200	NA
3. One 1100/12 multiprocessor	Aid in design of new petrochemical plants	Research Inst. of Petroleum Processing, Beijing	\$4,200	ordered 2/79; export license pending
4. Four V-77 minicomputers	Education and research	Beijing; Research Inst. of Petroleum Processing, Inst. of Linguistics, Inst. of Acoustics, Inst. of Geology	\$1,000	export license pending
<i>Stanford Technical Corp.</i> Model 70 Image computer	Processing of images from satellites, aircraft, and generating maps by the ministries of geology and petroleum	Chengdu, Sichuan Province; Beijing	\$2,000	export license granted 12/79

Company/Product	Application	Installation	Value (Thousand US\$)	Status of Deal
Wang Corp. Eight VS-2200/E16 medium-sized computers and at least seven others	Processing of statistical data for 1981 census	Eight provincial ctrs. including Beijing, Shanghai, and Xian	\$4,500 (estimate)	order received 3/80; installed 5/80
Xytel Corp. 16 computer controlled ARC pilot plan systems	Factory process control	NA	\$1,700	contract announced 3/80
<b>Total estimated value of US computer sales:</b>				<b>\$152,895</b>
<b>Japan</b>				
Ai Electronics Two AICOM C5 minicomputers	Agricultural research	Nankai Fishery Inst., Guangzhou; Tokai Fishery Inst., Shanghai	\$1,000	delivered 8/79
Fujitsu and Nippon Electric 1. 25 business machines and 2,000 calculators	Finance and management	NA	\$2,000	sold 1975
2. Technical cooperation agreement	Setting up software centers to instruct programmers; systems engineers in several Chinese cities	NA	May become joint ventures to develop software	basic agreement announced 1/80
Hitachi <sup>2</sup> 1. One M-170 system	Meteorological observation system	Beijing	\$10,400	contract signed 5/78; delivered 12/79
Two M-160 systems	Geological research system	NA	\$2,900	delivered 12/79
2. 11 Hita M-150, 21 Hitac L-320 office computers	Finance, import-export trade settlement and freight insurance work	Beijing, Shanghai, Guangzhou, Xian, Nanjing, Dalian, Harbin	\$4,600	ordered 7/79; COCOM license approved 3/80
3. Two Hidic 80-Es	Used by Ministry of Electric Power Industry to monitor power supply lines, accidents, and to generate plant performance data	Beijing Power Supply Ctr.	\$2,300	ordered 2/80; COCOM approval pending
Four Hidic 80-Es with 2 Hidic 08-Es	Used by Ministry of Railways to schedule trains, provide passenger information for an 85- mile stretch between Beijing and Tenshing	Ministry of Railways, Beijing office	\$6,000	ordered 2/80; COCOM approval pending
Hitachi, Yokakawa, Panatacom, Oki 16 computer systems	Factory process control	Baoshan Steel Mill	\$46,100	COCOM approval 12/28/78
Maruzen Engineering	Automatic control system for the maintenance of the calorific level of fuel gas	Petrochemical plant	NA	contract signed 8/22/79
Nippon Electric System 300	Inventory control and merchandise distribution	Shanghai	NA	contract signed 5/78
Sord Computer Systems, Inc. Microcomputers used in measuring equipment and business machines	Assembly contract for China to produce microcomputers with Sord components for export and domestic distribution	Three factories under Tianjin municipal government and 2nd Ministry of Machine Building	Payment based on sales	basic agreement reached 2/80
Unicom Automation Co. Microprocessors	Licensing agreement to produce microprocessors leading to joint venture with Unicom providing training and know-how	Tianjin Computer and Scientific Instrument Co.	Payment based on yearly output	agreement reached 3/18/80
<b>Total estimated Japanese sales:</b>				<b>\$75,300</b>



Company/Product	Application	Installation	Value (Thousand US\$)	Status of Deal
<b>France</b>				
<i>Compagnie Internationale</i> IRIS 50 system	Petrochemical research	NA	\$1,600	order placed 1974
<i>Honeywell-Bull</i> One HIS 61/60 system	Teleprocessing	People's Bank of China	NA	order placed 7/74
<b>Hong Kong</b>				
<i>Automated Systems, Ltd.</i> Two DEC PDP-11/70 minicomputer systems, 20 other DEC minicomputers	NA	Beijing, other major cities	\$1,000	contract signed 12/78; two installed 2/80
<i>Microdata Systems</i> 30 Radio Shack TRS-80 microsystems	Research in electronic and electrical engineering	Chinese Academy of Sciences	\$100	installed 5/80
<b>Hungary</b>				
<i>Videoton</i> VT-60 medium-sized computers	NA	NA	\$760	ordered 7/78; delivered 1979
<b>Italy</b>				
<i>Olivetti</i> Two minicomputers with 30 terminals	Train traffic-scheduling	Beijing	\$500	ordered and delivered 1978
<b>West Germany</b>				
<i>Siemens</i> One 4004 system	Process control	Hangzhou Turbine Works producing Siemens's turbines under license	\$700	order placed 7/78, COCOM approval 12/78
<b>UK<sup>1</sup></b>				
<i>Abacus Computers</i> Two medium-sized computers with microprocessors, display units and floppy disks	Business and finance	NA	NA	contract signed 2/79
<i>Babcock-Bristol, Ltd.</i> One series IV electronic analog control system	Process control	Chinese coal mill	\$3,933	order placed this year
<i>Interdata (Perkin-Elmer)</i>	NA	NA	\$250	ordered 1977
<i>Smith Industries</i>	Research on navigation systems and flight controls	NA	\$1,000	ordered 3/77
<i>Taylor Instrument</i> 1300 micro-based controllers, 1300T transmitters	Petroleum process control	Oxo alcohol plant at Daqing oilfield and in Shandong	\$1,400	announced 2/80

Total value of foreign sales, excluding the US and Japan: \$11,243

Total worldwide sales: \$239,438

\*This table lists major sales publicly disclosed since 1974; trade statistics before then show only a negligible amount of Western shipments of computers to China. See Bohdan O. Szuprowicz, "Electronics in China," *The China Business Review*, May-June, 1976, pp. 21-43.

<sup>1</sup> Not including the 1978 sale of an IBM 3032 computer system sold to the Bank of China in Hong Kong. The communications network linking the bank's headquarters with its branches went into effect in August.

<sup>2</sup> Since 1973 Hitachi has received orders for more than 40 digital control computers valued at about \$30 million. Most of them have been installed at the Shanghai petrochemical works and Baoshan Steel Mill.

<sup>3</sup> Many European sales have not been reported in the press. The 1978 IEEE delegation to China, for example, saw a French SETI PALLAS 28-bit word, 32K computer tied to a British tape unit, French-made line printer, IBM terminal and two Chinese paper readers in operation at Nanjing University. European computer firms, like Britain's ICL, are competing hard for a share of the Chinese market but are not believed to be as strong as Japanese and American contenders.

SOURCES: *The China Business Review*, 1978-79 sales and negotiations tables. Library files of the National Council for US-China Trade.

# U.N. Aid for China's Computer Modernization

The first internationally funded development program to be welcomed by Beijing after a 30-year hiatus will give thousands of Chinese technicians, planners, and administrators access to US-made electronic data processing facilities for economic research and decision-making.

The United Nations Development Project (UNDP) is helping China establish an Information Processing and Training Center with \$6.7 million of an initial donation of \$15 million for the 1979-81 period. Based on its population and per capita income, China is entitled to a further UNDP allocation of \$150 million during 1982-86, although UNDP officials doubt that Beijing will request access to its full share.

Matching funds equivalent to \$7.8 million have been allocated to the five-year project by China's Ministry of Economic Relations with Foreign Countries. The ministry's sixth department oversees China's cooperative programs with agencies of the UN. The ministry also administers China's oncesizable foreign aid program, which was cut back and centered on the PRC's relations with Romania and Yugoslavia.

Located in a new five-story building in Beijing will be a \$2.3 million Burroughs 6800 mainframe computer procured by the UNDP through international competitive bidding last October. The system, which has been licensed for export, has a semiconductor memory of 2 million bytes and a "processing data rate" (PDR) of between 48 and 50 million bits per second.\* This is significantly higher than the PDR ceiling of 32, set prior to President Carter's relaxation of export controls on the transfer of dual-use technology to the PRC (*CBR*, July-Aug., pp. 54-56). Consequently, the Burroughs case has set new ground rules for future US computer sales to China.

In addition to the B6800, the UNDP has ordered 16 of Burroughs' TDA-30 display terminals to be linked on-line within the center, and five Hewlett-Packard 3000 Series III minicomputers

worth \$1.8 million. One of these will be placed in the center while the other four will be housed nearby and connected to the main system via hard-wired links. The advanced nature of the linkage technology is stalling the Commerce Department's approval of Hewlett-Packard's license application, which had been submitted in May.

Apart from the five minicomputers, Hewlett-Packard is supplying 50 remote terminals, 20 disk drives, five 400-line-per-minute printers, 15 hard-copy terminals, and some related software. The final component of the system is a \$155,000 Pertec XL40 data-entry system, which already has been approved for export. The UNDP will own all of the equipment until completion of the project in March 1984, at which time legal title will be transferred to China.

## Multiple Applications and Users

The computer system has been designed to meet a wide array of needs, from flood control to investment planning (*see box*). The Ministry of Economic Relations with Foreign Countries, for example, will be using the system to maintain data on its foreign aid project schedules and overseas expenditures and to store textual material from international agreements. It will also expedite the transfer of information to China by storing 28 worldwide scientific and technological data indices. One of these, the World Patent Index (WPI), will enable Chinese economic officials to locate and reproduce documents containing the patent specifications issued by major offices throughout the industrialized world.

The newly established Beijing Institute of Computing Technology will train a staff of application-oriented engineers and computer specialists to update the new center. The first class of the Institute reportedly will have 400 students. It is scheduled to begin in 1980.

When fully operational in 1984, the computer center "will produce a timely

and catalytic effect on China's economic and technological development," a UNDP official noted.

The Beijing computing project could become the model for building a complete nationwide network for scientific and technological research. In that case, China would have to set up regional computing centers supporting hundreds of remote-entry terminals in the local branch offices of ministries and state bureaus. Future orders could be financed by funds from China's quota at the UNDP.

Actual implementation of the UNDP project is in the hands of Phoenix Associates, a Washington-based consulting firm specializing in the implementation of development projects in Third World countries. Phoenix entered the China scene in December 1978, when the UNDP selected it from among a group of consulting firms invited to bid on a contract to manage each phase of the Beijing computer center project, which includes:

- establishing a detailed project budget and timetable;
- acting as liaison between UNDP, Chinese, and company personnel;
- converting Chinese needs into purchase inquiries;
- devising a strategy to obtain validated US export licenses;
- supervising China's contribution to the project; i.e., procuring the materials and labor to build the center; and
- insuring the successful operation and maintenance of the equipment.

In contrast to a straightforward equipment order in which the vendor has minimal contact with the recipient government, a project management contract has been signed between Phoenix and the UNDP, which calls for step-by-step cooperation between the consultant and local officials. —KAB 完

\*Special instructions for calculating a computer's PDR are contained in section 376.10 of the Commerce Department's *Export Administration Regulations*.



## Bidding on International Development Contracts

American equipment and consulting service companies aware of China's recent access to UN aid and eligibility for future World Bank loans should familiarize themselves with the procedures governing procurement under internationally financed development projects. Business opportunities, primarily relating to infrastructure projects, are published in *Development Forum Business Edition*, available from The Johns Hopkins University Press, Journals Division, Baltimore, MD 21218. (301) 338-7809. —KAB

## IBM Computers to Tabulate Chinese Census

Under another UN program, 21 of the PRC's provincial capitals (except Lhasa, Tibet) are awaiting the arrival of IBM's technology and equipment to help with China's June-July, 1981, population census—the country's first since 1964. The program is being supported by a four-year, \$50 million grant from the UN Fund for Population Activities and \$143.21 million from Beijing.

The \$15.6 million IBM order was originally part of a package of 29 computers, eight of which were domestically produced DJS-200s, a 32-bit computer of Chinese design. When Beijing discovered that it could not produce the five computers by the 1981 census deadline, it was too late to procure additional UN funds. Therefore in the spring of 1980 China installed eight Wang VS-80 medium-sized computers.

IBM already has received a US export license and now needs Cocom's approval to make the delivery of one 4341 mainframe computer, 20 4331 minicomputers, and 170 system 52-80 data-entry machines. The company's software quality and spare parts package proved to be decisive in the final competition with 19 companies representing British, Japanese, East German, French, and Hungarian suppliers.

Following the census, the computer network will be used to process data from 6,000 key industrial enterprises that send reports to China's State Statistical Bureau every day. —KAB

## CORRECTIONS, CBR

### March-April, 1980:

The *CBR* regrets any misunderstanding that may have resulted from the p. 51 phrase that "... *China Trader* ... (is) done on behalf of Hong Kong agencies which sell goods imported from China." *China Trader* is not pub-

lished on behalf of any person or organization. It is an independent publication.

### May-June, 1980:

Within the chart "48 US Banks with Full Correspondent Relations with the Bank of China," p. 36, Commerce

Union Bank should be listed under Nashville instead of Memphis, Tennessee.

### July-August, 1980:

Carl Walter photographed the Bank of China building in Beijing which appeared on pages 9 and 65.

## End-Users of Beijing's New Information Processing and Training Center

User Organization	Purpose
National Organizations:	
1. Ministry of Water Conservancy, Ministry of Electric Power	Operation, planning, and maintenance of power transmission and distribution in Beijing. Development of users' paycheck-processing system. Analysis and prediction of storms for scheduling and dispatching flood control teams. Cost-analysis of power station engineering, statistical analysis, and allotment of materials and equipment.
2. First Ministry of Machine Building	Distribution of products and spare parts, fiscal control of enterprises.
3. Ministry of Commerce	Food supply prediction and distribution.
4. State Bureau of Geology	Storage and retrieval of geological information, analysis of stratum, engineering control, compilation and generation of maps.
5. Institute of Industrial Economic Research of the Academy of Social Sciences	Construction of a micro- and macro-economic model for entire economy.
6. Information Institute, Ministry of Communications	Information storage and retrieval.
7. Information Institute, Ministry of Power	Information storage and retrieval.
8. Information Institute, Ministry of Water Conservancy	Information storage and retrieval.
9. The Library and Information Institute of the State Bureau of Geology	Information storage and retrieval.
10. Chinese Mechanical Engineering Society	Information storage and retrieval.
11. People's University, Department of Economic Information Management	Training of more than 2,000 specialists in systems analysis, data-base design, information management, and mathematical modeling.
12. Beijing University, Department of Computer Science and Technology	Education and training of students.
Beijing Municipal Government Organizations:	
13. Bureau of Food	Allocation of food in all provision stores, shops, and processing plants.
14. First Commercial Bureau	Statistical analysis for management and inventory control.
15. Construction Commission	Budgeting and cost analysis for scheduling and assigning materials and manpower for projects.
16. Bureau of Transportation	Urban traffic-flow analysis.
17. Bureau of Statistics	Modeling of economic sectors for investment purposes.
18. Bureau of Public Health	Automatic diagnosis of patients; handling and management of hospital records.
19. Beijing Municipal Computing Center	Operation and maintenance of system.

SOURCE: This partial listing of Chinese end-users was provided by UNDP officials.

## United Nations Technical Cooperation Projects in China

Since 1973 the PRC has contributed in the neighborhood of \$8 million to the United Nations Development Program (UNDP) to help underwrite programs in which Chinese methods of truck maintenance and acupuncture, for instance, have been transferred to Third World nations. As of late last year the development program became a two-way street, with Beijing accepting UNDP support for projects ranging from airport modernization to export industries development.

### Approved UNDP Projects in China

Project Title	UN executing agency	PRC implementing agency	UNDP Input (thousand US \$)
Information Processing and Training Center for International Economic Cooperation	OPE	Ministry of Economic Relations with Foreign Countries	6,718
Pilot Demonstration Center for Intensive Pasture, Fodder, and Livestock Production	FAO	Ministry of Agriculture	1,124
Health Manpower & Research Development	WHO	Ministry of Public Health	1,000
Modernization of Educational Methods	UNESCO	Ministry of Education	999
Strong Motion Radio Telemetry Network	UNESCO	Ministry of Posts and Telecommunications	587
Machinery Building Industry Assistance	UNIDO	NA	588
Geological Interpretation of Satellite Photos	UNIDO	NA	500
Prevention of Marine Pollution Caused by Oil	IMCO	General Administration of Aquatic Products	383
Modernization of the New Passenger Terminal & Apron of Beijing Airport	ICAO	General Administration of Civil Aviation	302
Improvement of Training Ability in Beijing Institute of Posts & Telecommunications and Provision of Expert Service for Data Communication System	ITU	Ministry of Posts & Telecommunications	285
Transfer of Know-How through Expatriate Nationals (TOKTEN)	OPE	Ministry of Economic Relations with Foreign Countries	150
Fellowships and Study Tours for Professionals in the Food Processing and Steel Drum Mfg. Industries	UNIDO	Ministry of Light Industry	108
Fellowships and Study Tours for Professionals in Light Industry	UNIDO	Ministry of Light Industry	108
Fellowships and Foreign Advisors for the Materials Building Industry	UNIDO	Ministry of Building Materials	107
Study Tours and Training in Fisheries	FAO	General Administration of Aquatic Products	100
Study Tours in Forestry	FAO	Ministry of Forestry	100
Fellowships and Foreign Advisors for Land Reclamation	FAO	Ministry of State Farms and Land Reclamation	100
Applications of Computer Software	UNIDO	NA	100
Fellowships and Study Tours for Professionals in the Textile Industry	UNIDO	Ministry of Textiles	96
Experimental Wind Power Station	UN	—	93
Improvement of Meteorological Services to Agriculture, Aviation, and Navigation	WMO	State Standardization and Meteorology Bureau	80
Strengthening of the Foreign Language Institute	UNESCO	Beijing Institute of Foreign Languages	60
Export Promotion Lecture Series	ITC	Ministry of Foreign Trade	50
Training Program for Exporters	ITC	Ministry of Foreign Trade	50
Mechanized Sorting and Handling of Mail	UPU	Ministry of Posts and Telecommunications	35
TOTAL UNDP ASSISTANCE			13,823



### Select List of UNDP Projects Pending Approval

Project Title	UN executing agency	PRC implementing agency	UNDP Input (thousand US\$)
Experimental Research in Use of Tractors & Other Farm Machinery	FAO	Ministry of Agricultural Machinery	700
Pest and Experiment Section of Tropical Crops Research Institute of South China	FAO	Ministry of Agriculture	500
Chemical Engineering Research Laboratory, Phase One	UNIDO	Ministry of Chemical Industry	500
Research Center on Comprehensive Use of Timber	FAO	Ministry of Forestry	500
Research Center on Plastic Technology	UNIDO	Ministry of Light Industry	450
Higher Institute on International Economy, Phase One	OPE	Foreign Investment Commission	400
Strengthen Long-Distance Communications and Improve Quality of Circuits	ITU	Ministry of Posts and Telecommunications	400
Research in Metallurgy	NA	Ministry of Metallurgy	500
Improvement of Building Materials: Concrete, Sheet Glass, Cement, Glass Filament, Nonmetal Mining & Dressing	UNIDO	Ministry of Building Materials	300
Fish Catch Preservation	FAO	General Administration of Aquatic Products	300
Training Center for Enterprise Managers	OPE, UNIDO	State Economic Commission	300
Research Center of Vegetables in Beijing	FAO	Beijing Municipality	250
National Reference Center for Hydrological Data	WMO	Ministry of Water Conservancy	250
TOTAL UNDP PROJECTS PENDING APPROVAL			5,350

### Projects financed by UN Fund for Population Activities (UNFPA)

Project Title	UN executing agency	PRC implementing agency	UNFPA Input (thousand US \$)
Provision of Personnel, Training, and Computer Equipment for Population Census	UN	State Statistical Bureau	15,600
Establishment of a Modern Publicity and Education Network for Family Planning	UNFPA	Family Planning Leading Group of the State Council	8,827
Improvement and Expansion of Contraception and Establishment of New Facilities for Injectibles and Oral Contraceptives	PIACT	State Pharmaceutical Department	7,204
Strengthening Family Planning Program and Maternal and Infant Care	WHO	Ministry of Public Health/ Family Planning Leading Group	6,682
Establish 11 Institutes for Research and Training and a Population Information Center	UNFPA	Ministry of Education/ Chinese Academy of Sciences/Family Planning Leading Group	4,729
Establishment of a National Institute for Family Planning and an Institute of Developmental Biology	WHO, Rockefeller Foundation	Family Planning Leading Group/Chinese Academy of Medical Sciences/Chinese Academy of Sciences	4,216
TOTAL UNFPA ASSISTANCE			47,258

SOURCE: United Nations Development Program, New York

# China's Current Science and Technology Serial Publications

## Agriculture

Agriculture Economic Issues M  
Agricultural Forestry M  
Agricultural Machinery M  
Agricultural Machinery Q  
Agricultural Science and Experiment MA  
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Chemical Fertilizer Industry Digest B  
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Grasslands M  
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Guizhou Agricultural Science and Technology B  
Heilongjiang Agricultural Science B  
Heilongjiang Forestry M  
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Journal of Agricultural Machinery Q  
Journal of Agricultural Sciences QAE  
Journal of Animal Husbandry B  
Journal of Animal Husbandry and Veterinary Medicine Q  
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Journal of Crops Q  
Journal of Beijing Agricultural University Q  
Journal of Forestry QA  
Journal of Nanjing Forestry Products College Q  
Journal of Northeast College of Forestry Q  
Journal of Soil Science QA  
Journal of Veterinary Science and Technology B  
Journal of Water Conservancy B  
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Rural Scientific Experiments M  
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Shanghai Agricultural Science and Technology B  
Shanxi Agricultural Sciences M  
Soils and Fertilizers B  
World Agriculture M  
Yunnan Agricultural Science and Technology B

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Electrical Power, Electrical Engineering, and Atomic Energy Q  
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Electrical World M  
Electronic World M  
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Electronics Bulletin AQ  
Journal of Automation QA  
Journal of Catalysts QA  
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Journal of Mechanics QA  
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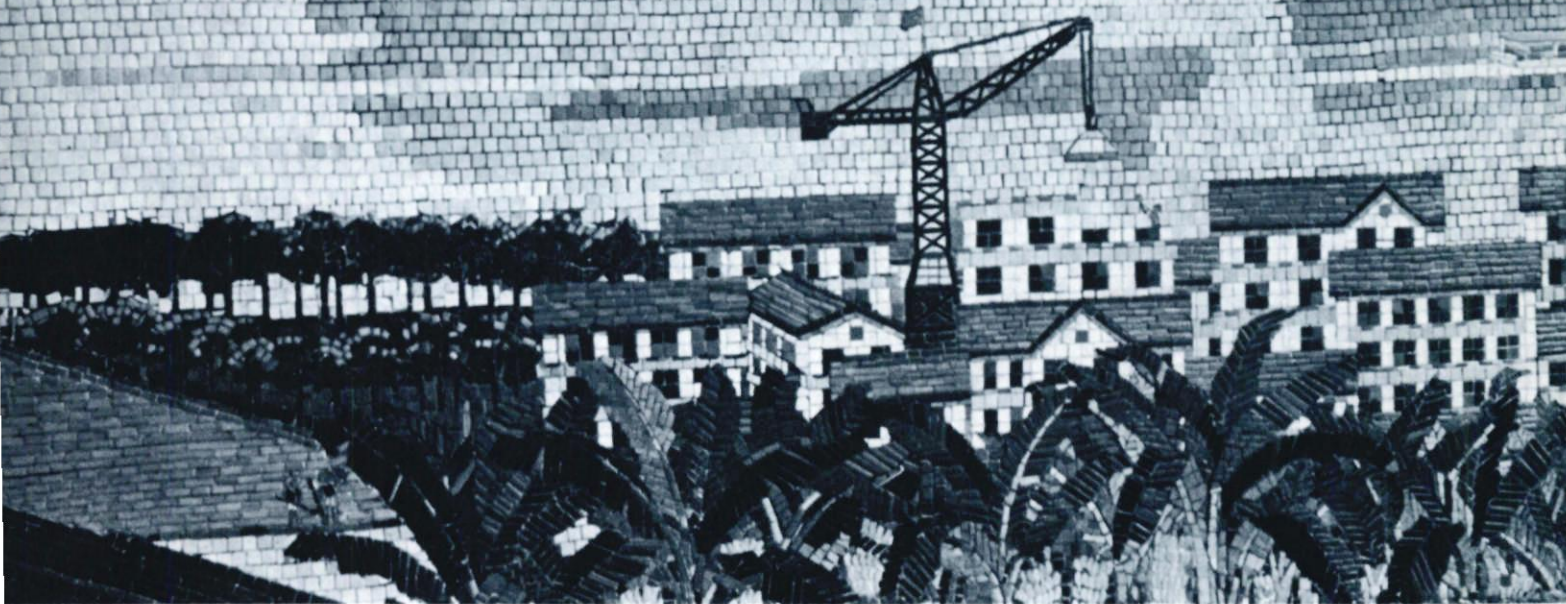
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<sup>1</sup>This magazine is published in Berkeley, California, printed in Hong Kong, and distributed in China. Its editorial board comprises Chinese-American scientists. It contains Chinese-language articles in the fields of science and engineering, management, economics, and the humanities. The January inaugural issue featured a profile on the growth of the Sears Roebuck Co.

SOURCES: A list of nearly 800 Chinese literary, cultural, scientific, and technical serial periodicals was released by the Beijing Post Office, January 1980. The Joint Publications and Research Service translated the titles into English and published them in *JPRS Reference Aid*, no. 5, 75007 and 76055. The list above includes the scientific and technical titles which were released, in addition to others mentioned in the Chinese press since January 1980.



# Hubei: Anatomy of a Province



*The resurgence of decentralization in China has prompted many readers to raise questions about the new ground rules of doing business with China, particularly in provinces and cities. In March and April of this year, CBR's Nicholas H. Ludlow and James B. Stepanek, on a trip hosted by the State Economic Commission's Chinese Enterprise Management Association (CEMA), obtained information about the operation and management of industry and trade in the central province of Hubei, China's ninth largest.*

*The following organizational data about Hubei Province resembles that of most provinces of the PRC, since many local departments and bureaus were originally established by Beijing ministries, commissions, or other central government organs. Anyone wishing to know whom to contact in a province, prefecture, or municipality should bear in mind that local departments listed in this article probably exist in other provinces of China. The similarity in structure between Hubei and other provinces also extends to new foreign trade organizations—particularly the powerful import-export commissions—set up throughout the nation in late 1979.*

Hubei, meaning "north of the lake," had few direct contacts with foreigners until recently. In the 1970s some for-

eign companies built new plants in the province, such as Pullman Kellogg's ammonia plants, and Schloeman-Siemag, Nippon Steel, and Mitsubishi's steel processing equipment at Wuhan. Their engineers lived in special accommodations. But the projects were arranged via Beijing ministries, rather than by the province itself.

Only since April 1980 has Hubei province enjoyed the right to conduct direct foreign trade on its own initiative. In that month Wuhan, Hubei's major port city on the Yangzi, opened for international trade (CBR, Mar.-Apr., 1980, p. 13). At approximately the same time, the province established a provincial import-export commission and received an allocation of foreign exchange from the central government.

Hubei's new contacts with the outside world also have come at a time when the local economic and political ballgame is changing. Under the governorship of Han Ningfu, Hubei's 46 million people have lived under a new financial system since January 1980. To quote one official statement, that system rests on the principle of "differentiating between revenue and expenditure, assigning different responsibilities to different levels, and making no changes for five years. . . . Financial self-man-

agement rights will be expanded at all levels." Experimental reforms in 153 state factories have been carried out in order to raise worker motivation, productivity, and profits.

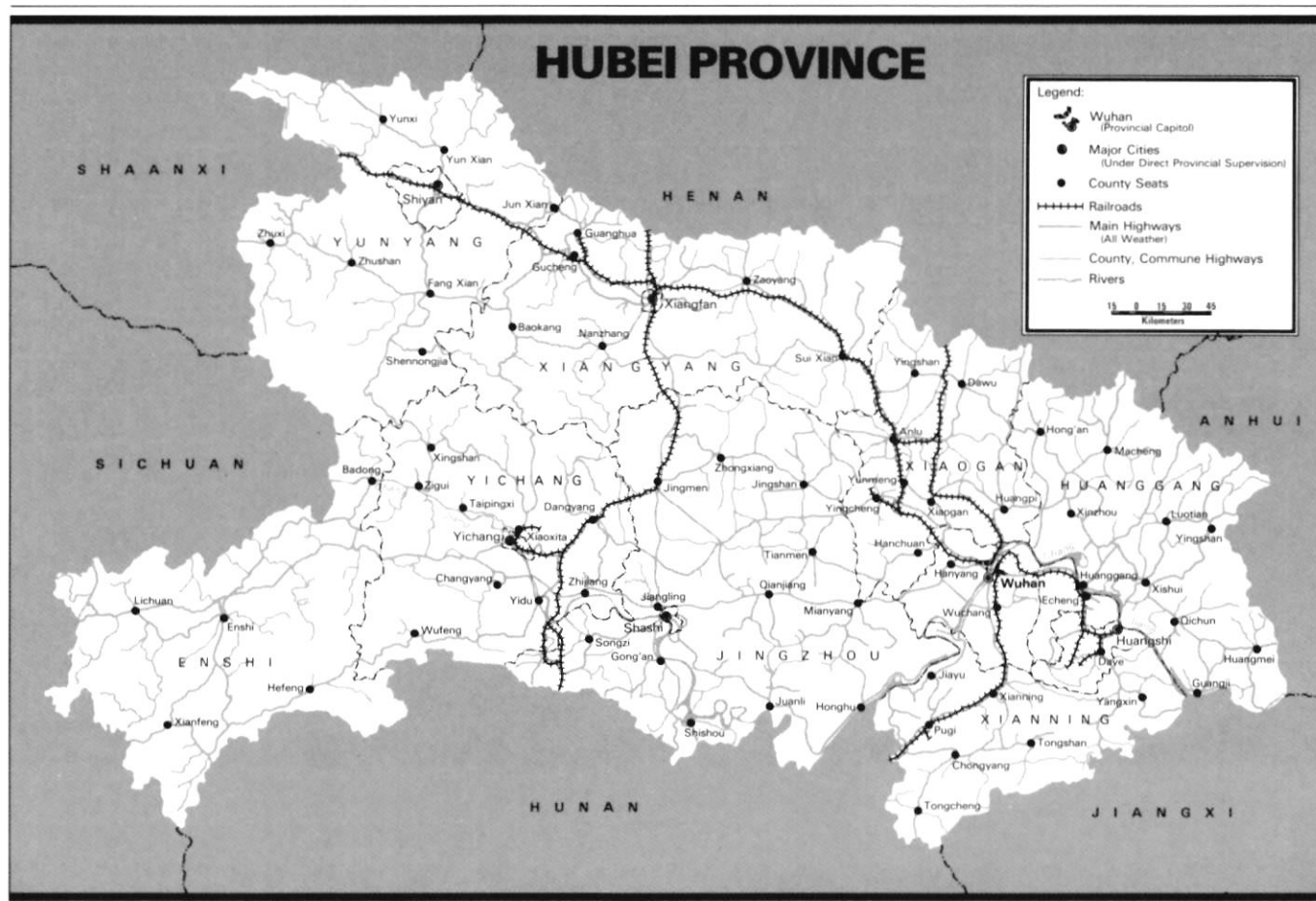
Hubei is currently in the midst of drafting its five-year plan in coordination with the national 1981-85 plan still being prepared by the State Planning Commission (SPC) in Beijing. Its tentative ten-year (1981-85 and 1986-90) targets were passed up for review to the SPC in March and April. By September of this year, these targets must be fine-tuned and again sent to Beijing for scrutiny. In December, China's State Council and other senior officials will put their stamp of approval on the entire country's plans. (See Table 1.)

## Hubei's Economy

The impact of China's recent changes in economic and budget priorities is graphically indicated in the data made available by provincial officials, reproduced in the accompanying table (see box).

The main policy changes made at the national level during the past two years have included new priority given to light industry and consumer goods, de-emphasis on heavy industry, a reduction in heavy construction projects and funding, and a move away from invest-





ment in agricultural mechanization toward other agricultural inputs. This is what happened in Hubei when Beijing launched its "readjustment" program:

**Industrial Output** Industrial growth slowed in Hubei from 20.8 percent in 1978, to 17.9 percent in 1979. But its 1980 target of 9.9 percent is well above the national industrial growth target of 8.5 percent. The province has set a conservative growth target of 8 percent per year for 1981 through 1985, in keeping with the government's new emphasis on realism in economic planning. As one official stated, "the plan is less than capacity, so that we can reach more than that figure."

**Heavy Industry** The national de-emphasis on heavy industry has taken its toll in Hubei. The province's steel production, which is almost 10 percent of the nation's output, will increase only 2.4 percent this year following a planned decline in steel targets nationwide. The Wuhan Iron and Steel Works, full of new Japanese and German hot- and cold-rolling mills, is operating at only 75 percent capacity.

The small increase in steel production in 1979 and 1980, and the decrease

in pig iron production in 1979, was due to "more electric power going to light industry and agriculture," according to an official in Hubei's Industry and Transportation office. Meanwhile, electric power output is targeted to increase by 3.6 percent in 1980. At 11.1 billion kwh in 1979, electricity output in the province, equivalent to only 3.9 percent of China's total, was well below Hubei's share of the country's steel output (9.7 percent) and gross value of industrial output (4.2 percent).

Coal production, down by 30.3 percent in 1979 to 4.49 million tons, was allowed to decline because coal inventories of 2 million tons located at small mines in mountainous areas of the province, could not be transported away from the mines during 1978. Nationally, coal production rose by 2.8 percent in 1979.

**Light Industry** The national pre-occupation with consumer goods manifested itself in Hubei with some astonishing figures. In 1979, production of bicycles jumped 39.5 percent, twice the national increase; sewing machine production increased 76.4 percent (almost four times the national increase). Simi-

larly, the output of wristwatches and television sets (black and white) increased by 122.1 and 161.2 percent, respectively. The mass production of color television sets will begin once trial production is concluded, possibly in 1980.

A commitment of resources to consumer goods production is needed if the province is to catch up with the rest of the nation (*see chart*). Hubei produces less than 2 percent of China's bicycles, watches, and televisions, but has 4.7 percent of the country's population.

Another effect of the fall-off in construction was a decline in rail freight in 1979, and a dramatic decline of 45.9 percent in projected highway freight in 1980.

The reduction in construction activity also resulted in less work for the provinces' 239,000 construction workers, some of whom may enter export-related industries.

On the bright side, however, motor vehicle output almost tripled in Hubei in 1979, with the opening of Hubei's No. 2 Auto Plant in 1978 for production of jeeps, and 2.5- and 5-ton trucks. The plant's capacity currently is 25,000

units per year; in 1981 the capacity should increase to 35,000. It is interesting that Hubei's target for 1980 is 24,900 vehicles, but the central government's plan for the province calls for the production of only 22,000 vehicles. With the aid of foreign technology, the plant's output is projected to reach 120,000 units per year by 1985.

**Agricultural Mechanization** In no sector is the effect of a national policy so sharply reflected as in the de-emphasis of agricultural mechanization in Hubei. In 1980, large- and medium-size tractor and hand (or walking) tractor production in Hubei is scheduled to fall by more than 50 percent. The output of transplanting machines plummeted by 68.4 percent in 1979, and is also expected to decline by 8.7 percent this year.

Hubei officials note that the cost of tractors is too high for farmers, who find little use for tractors except for transportation, after plowing is done. Hubei's farmers would prefer multipurpose tractors. Tractor manufacturers in the provinces have tried unsuccessfully to reduce prices, but the high cost of supplies has prevented this. Apparently, local farmers have also complained about the price and quality of transplanting machines.

### Provincial Organization

How are Hubei's industry, agriculture, construction, and trade organized?

Under the Hubei People's Congress, the province's highest political body, is the People's Government, charged with administering the province's eight prefectures, six municipalities (including Wuhan, whose 3.83 million citizens produce 45 percent of Hubei's industrial output as of late 1979), and 76 counties and small cities. Chen Pixian is chairman of the Standing Committee of the Hubei Provincial People's Congress, and Han Ningfu is governor of the Hubei People's Government.

Under the People's Government of the province there are eight commissions. Each is supervised by the province as well as by its parent commission in Beijing, as follows:

### Hubei Commissions

(supervisory commissions in parentheses)

1. Hubei Planning Commission (State Planning Commission)
2. Hubei Capital Construction Commission (State Capital Construction Commission)

3. Hubei Science Commission (State Scientific Technological Commission)
4. Hubei Physical Education Commission (State Physical Culture and Sports Commission)
5. Hubei Industry and Communications Office (State Economic Commission)
6. Hubei Office of Agriculture (State Agricultural Commission)
7. Hubei Finance and Trade Commission (State Financial and Economic Commission)

8. Hubei Import-Export Commission (Foreign Investment Control and Import-Export Commission)

The commissions are charged with disseminating and implementing national policies at the local level, as well as with coordinating the 48 bureaus under the provincial government (*see chart*).

The most important commission is the Hubei Planning Commission (HPC), which develops plans in all sectors of life in the province, according to central government guidelines. Until recently, the province's plans were primarily under national control; now Hubei is "using the market economy to speed up economic development, by combining both state planning and local initiative," according to one HPC official. The offices of the HPC, staffed by about 130 people, are as follows:

### Hubei Planning Commission Departments

1. Administration
2. Agriculture
3. Capital construction
4. Comprehensive planning
5. Culture, education, and labor force
6. Industry
7. Light industry and finance (including foreign and domestic trade)
8. Materials
9. Military industry

The HPC's plans and planning process encompass all provincial industrial enterprises including those in municipalities and prefectures. The HPC has offices in all eight prefectures, six municipalities, and 76 counties and smaller cities in Hubei.

From the point of view of an individual factory, planning generally involves two outside authorities. This is known as the system of "dual leadership." One authority is usually the provincial or city government, and the other is a much more specialized body that handles enterprises in the same sector. For example, when the annual plan is drawn up for the Wuhan Iron and Steel Company, which is one of 127 enterprises in Hubei controlled directly by central government ministries, approval must come from both the Ministry of Metallurgical Industry (MMI) in Beijing, and the HPC. The plan is then discussed by MMI and the Hubei planners, and the agreed-upon targets become part of the state plan. The HPC

### HUBEI PROVINCE VITAL STATISTICS

Total land area (sq. km.)	187,400
Of which:	
Mountainous land	131,180
Water	18,740
Cultivated agricultural land	37,480
Gross value of industrial output in 1979 (billion yuan, 1970 prices)	¥19.1
Enterprises in Hubei as of year end 1979	16,072
Labor force (year-end 1979)	
Of which:	
Workers in research institutes	29,000
Construction workers	238,580
Foreign trade officials	5,500
Population (mid-1979, million)	46
Of which:	
Population engaged in agriculture	39
Nonagricultural population	7
Population density (persons per sq. km. in 1979)	245.5
National average	101.5
Population of provincial capital, Wuhan (mid-1979, million)	3.83
Of which:	
City proper	2.40
Suburban counties (two)	1.43
Districts (prefectures)	8
Counties	73
Annual rainfall (mm)	800-1,000
Annual average temperature	15-17°C

SOURCE: Hubei Province Planning Commission, Wuhan, March 27, 1980.



Table I

**HUBEI ECONOMIC GROWTH AND PROVISIONAL PLANS, 1977-85**  
(billion yuan)

Item	1977	1978	1979	1980	1981	1982	1983	1984	1985
Industrial output (GVIO in 1970 prices)	13.4	16.2	19.1	21.0	22.7	24.5	26.5	28.6	30.8
GVIO change (%)	21.5	20.8	17.9	9.9	8	8	8	8	8
Agricultural output (GVAO in 1970 prices)	8.2	8.5	9.4	10.0	10.5	11.0	11.6	12.2	12.8
GVAO change (%)	NA	3.7	10.6	6.4	5	5	5	5	5
Capital construction	NA	3.31	3.08	1.32	—	—	—	—	—
Capital construction change	NA	NA	-6.9	-57.1	—	—	—	—	—
Foreign trade (exports only, fob, million US\$)	NA	159.0	225.5	250.0	280	314	352	394	441
Foreign trade change (%)	NA	NA	41.8	10.9	12.0	12.0	12.0	12.0	12.0

NOTE: 1980-85 figures include 1980 annual plan targets, and 1981-85 planned growth targets. The targets tend to be conservative because the central government has instructed local planning agencies throughout China to set realistic growth targets as part of the readjustment program.

SOURCE: Hubei Province Planning Commission; Hubei Office of Industry and Transportation; Hubei Province Capital Construction Commission, and Hubei Province Foreign Trade Bureau; March-April 1980.

intends to utilize imported computers in the near future as part of the government's plans to establish a computerized national planning network.

### Industry and Communications

The Hubei Industry and Communications Office (HICO), staffed by 87, is responsible for taking the annual plan drawn up by the HPC and seeing that it is divided into quarterly and monthly plans, and properly implemented by individual enterprises. The relationship between HICO and the HPC is the same as that between the State Economic Commission (SEC) and the State Planning Commission (SPC) in Beijing, in that the former carries out the annual and long-term plans drawn up by the latter.

HICO supervises 13 bureaus charged with operating local industries. Both HICO and the bureaus also are under "dual leadership," in that the HICO operates under the SEC and the province, while the Coal Bureau, for example, answers to both the Ministry of Coal and the province.

The HICO, via branches in all prefectures, municipalities, counties, and small cities, oversees the development of the province's 16,072 industrial enterprises consisting of 127 national,

4,569 provincial, and 11,376 collective enterprises.

Industrial development in Hubei is supported by 124 design research institutes, four of which stand directly under the State Council (*see box*). Eleven institutes are under dual control of the central and provincial governments, nine are solely under provincial control, 89 are under the provinces and local governments, and another 11 are connected with various enterprises. In addition, six institutes answer directly to the Hubei Industry and Communications Office.

The role of these institutes, staffed by 29,000 people, is to provide the R&D base for new technology and products to be developed at factories in the province.

### Construction

Construction in the province comes under the aegis of the Hubei Capital Construction Commission (HCCC). Its staff of 108 (as of April 1980) work in seven departments: political, comprehensive planning, design, production, urban construction and development, science and technology, and administration.

Hubei's total planned investment of ¥1,320 million (\$880 million) in 1980

comes from four sources: the central government (63.6 percent), the province (23.5 percent), funds accumulated by the Hubei Finance Bureau (8.7 percent), and loans from the People's Construction Bank of China (4.2 percent). The accumulated funds represent part of a foreign exchange allocation, equivalent to ¥2 billion, from the central government. Loans to the province from the Construction Bank carry an interest rate of 3.0 percent per annum, while the People's Bank of China normally charges Hubei 5.0 percent.

Funds from the 1980 Construction Bank loan of ¥55 million (\$36.5 million) will be allocated by the HCCC to the following sectors:

Sector	Amount (million ¥)
Chemicals	13.7
Light industry	8.7
Textiles	6.0
Electric power generation	5.0
Water conservation	1.0
Aquatic products	0.8
Agriculture	0.2
Other	19.6
TOTAL	55.0

SOURCE: Hubei Capital Construction Commission, March 30, 1980

## AGENCIES UNDER THE YICHANG PREFECTURE

Every city, prefecture, and county in Hubei has a parallel administrative structure—created by the needs of a centrally planned economy—which links together ministries at the top with counterpart offices at the local level. Yichang municipality in western Hubei shows how this structure mirrors that of the province as a whole.

### March 1980

#### Main Offices

Agricultural	Planning Com-
Finance and	mission
Trade	Science Com-
General Office	mission
Industry and	
Communications	

### Bureaus

Agricultural	Health
Broadcasting	Industry
Commerce	Light Industry
Commune-run	Local Products
Enterprises	People's Bank
Culture	Post and Tele-
Education	communications
Electric Power	Office of Supply
Fuel and	Transportation
Chemicals	Water
Finance	Conservancy
Foreign Trade	
Forestry	

Once a project receives HCCC approval, actual construction is carried out by 238,580 workers organized into the following 151 construction companies:

### Hubei Construction Companies 1980

Supervisory body	Number of Construction companies	Workers
State Council and Ministries	10	96,580
Ministries and province	2	40,000
Province	28	76,000
Collectives (including municipal, regional, and prefectural)	111	26,000
TOTAL	151	238,580

SOURCE: Hubei Capital Construction Commission, March 30, 1980

The major projects in the province are undertaken by the ten companies under Beijing ministries and the People's Liberation Army (PLA), the two units under dual administration by ministries and the province, and by the 28 provincial units.

### Agriculture

Hubei's Office of Agriculture is responsible for agricultural development in the province, a task it carries out by supervising the provincial bureaus of agriculture, farmland cultivation, farm machinery, aquatic products, forestry, and commune-run enterprises.

Hubei's major agriculture policies in the 1980s are to: (a) increase electric power in rural areas; (b) process all kinds of agriculture and sideline products locally in order to reduce the amount of raw agricultural produce sent out of the province; and (c) develop the transport network in mountainous areas. In the past two years, 75 outlying communes have been connected by road, while 12 more remain to be connected.

In Hubei's 1981–85 plan for agriculture, big increases are projected in the development of jute, cocoa, lacquer, black fungus, and tung oil. Grain, oil, and cotton will also make substantial gains if the program goes according to plan.

Of the four major agricultural activities of concern to the Office of Agriculture (staples, the cultivation of economic crops, husbandry, and fisheries), the two singled out for special attention in the next ten years are animal husbandry

## HUBEI'S 48 PROVINCIAL BUREAUS, 1980

### Hubei Capital Construction Commission

Staff: 108

Coordinates Bureaus of:

1. Construction
2. Construction Materials
3. Environmental Protection
4. Surveying

### Hubei Finance and Trade Commission

Staff: unknown

Coordinates Bureaus of:

1. Commerce
2. Finance
3. Grain
4. Materials
5. People's Bank
6. Supplies
7. Trade

### Hubei Import-Export Commission

1. Foreign Trade Bureau

### Hubei Industry and Communications Office

Staff: 87

Coordinates Bureaus of:

1. Coal
2. Electric Power
3. Electrical Industry
4. Geology
5. Metallurgy
6. No. 1 Light Industry
7. No. 2 Light Industry
8. Oil and Chemical Industry
9. Pharmaceuticals
10. Post and Telecommunications
11. Standards
12. Textiles
13. Transportation and Highways

### Hubei Office of Agriculture

Staff: unknown

Coordinates Bureaus of:

1. Agriculture
2. Aquatic Products
3. Commune-run Enterprises
4. Farm Machinery
5. Farmland Cultivation
6. Forestry

### Hubei Planning Commissions

Staff: 130

Coordinates Bureaus of:

1. Complete Plants
2. Foreign Aid
3. Labor
4. Materials
5. Materials Storage
6. Material Prices
7. Statistics

### Other Bureaus

1. Broadcasting
2. Civil Administration
3. Construction Bank
4. Culture
5. Education
6. Health
7. Meteorology
8. Metrology
9. Public Security
10. Tourism

SOURCES: Hubei Planning Commission and Hubei Industry and Communications Office, March 27 and March 30, 1980



and fisheries, both now considered agricultural weak points. The 1979 fish catch of 120,000 metric tons is projected to reach 300,000 tons by 1990. And animal husbandry, which will probably represent 12 percent of Hubei's gross value of agricultural output in 1980, is to be pushed to 16 percent by 1990.

### Foreign Trade

The Hubei Foreign Trade Bureau, (FTB) is under the provincial People's Government, and answers to the Ministry of Foreign Trade in Beijing. Its staff of almost 100 is organized into seven departments, as follows:

1. Administrative
2. Business
3. Commercial information
4. Financial
5. Planning
6. Political
7. Scientific and technology matters

Under the guidance of the Hubei FTB are approximately 4,900 workers in six branches of national foreign trade corporations (FTCs) which handle the export business for CEROILFOODS, CHINATUHSU, CHINATEX, INDUSTRY, and MIN-METALS. The FTB maintains its own branches at the prefectural, county, and lower levels.

The principal job of the FTB is to coordinate Hubei's exports, all of which prior to April 1980 had to be shipped via Shanghai and other port cities. The FTB's responsibilities over imports are not as clear, perhaps because the im-

ports tend to be capital goods (such as the Pullman Kellogg and Nippon Steel plants), which tend to be handled by central government ministries. Enterprises importing the products must pay the duty on them.

Export targets are set through discussions between the Hubei Planning Commission, the Ministry of Foreign Trade, and the State Planning Commission.

The 1981-85 plan calls for a 12 percent annual increase in exports, but if machinery can be increased as a proportion of exports, the FTB expects to surpass the 12 percent growth rate. Presently cereals, cotton yarn, greige goods, and various types of native produce including tea, dominate Hubei's exports (*see table*).

### Decentralization in Practice

Beijing's policy of decentralization may ultimately transform the organization of foreign trade in Hubei province. The key changes:

- Direct Foreign Trade via the Yangzi River. The Chinese Customs service opened its doors in Wuhan in April to allow direct foreign trade to the province for the first time in 30 years. (*CBR*, Mar.-Apr., 1980, p. 13). Vessels of up to 5,000 dwt (in flood seasons) can now dock in Wuhan to accelerate the movement of goods into and out of the province. (In the dry season, only 3,000 dwt vessels can reach Wuhan). This new access to the interior may have an important effect on income, since the difference between import and export

prices, and China's domestic prices, was accumulated previously by port corporations such as Shanghai. Although these profits were taken over by the central government, they were seldom given back to the provinces which generated the trade revenues.

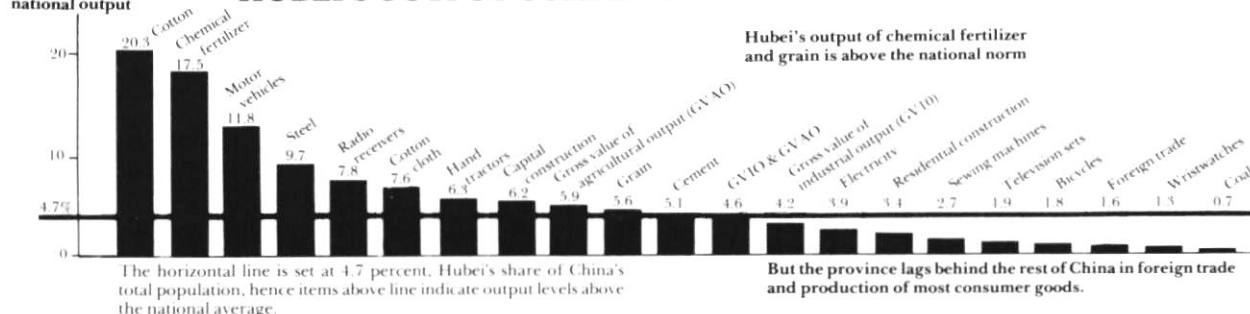
- Establishment of Hubei Import-Export Commission. In late 1979 the Hubei Province Import and Export Administration Commission (HPIEAC) was established directly under the Hubei People's Government. Under its director, Tian Ying, deputy governor of the province, are two deputy directors, and a staff of 20 that will expand during the year.

HPIEAC answers to the State Council's Import-Export Commission, headed by Gu Mu (*CBR*, Mar.-Apr., 1980, pp. 12-13). It is responsible for (1) supervising the existing foreign trade structure in Hubei, including the Hubei Foreign Trade Bureau, and (2) developing direct trade relations with foreign countries and firms.

The new commission is authorized to sign contracts, but its main business is to develop and facilitate business. On its mission to Ohio earlier this year, for example, it was empowered to discuss and negotiate a joint venture with Parker Hannifin; technical cooperation in dyestuffs; the expansion of a cement factory; the purchase of equipment for the Wuhan No. 2 printing and dyeing factory; various cooperation arrangements for production of cotton textiles, shoes, medicines, beer, and plastics; compensation trade of various kinds;

Percentage of 1979 national output

### HUBEI'S OUTPUT COMPARED WITH THE REST OF CHINA



#### Per Capita Data

	10 <sup>a</sup>	40 <sup>a</sup>	2097 <sup>b</sup>	73 <sup>c</sup>	43 <sup>d</sup>	20 <sup>e</sup>	2288 <sup>b</sup>	67 <sup>e</sup>	204 <sup>e</sup>	401 <sup>a</sup>	82 <sup>a</sup>	620 <sup>e</sup>	415 <sup>e</sup>	241 <sup>1</sup>	09 <sup>h</sup>	294 <sup>b</sup>	859 <sup>b</sup>	251 <sup>b</sup>	5 <sup>b</sup>	206 <sup>b</sup>	98 <sup>a</sup>
Hubei	2	11	5220	36	70	13	3053	52	163	342	76	636	473	290	12	165	731	96	14.1	57	654

<sup>a</sup> Kilos output per capita

<sup>b</sup> Number of persons per unit output

<sup>c</sup> Linear meters per capita

<sup>d</sup> Units output per capita

<sup>e</sup> Yuan per capita

<sup>1</sup> Kwh per capita

<sup>h</sup> Square meters per capita of new residential construction

<sup>b</sup> US dollars of exports, f.o.b., per capita.

SOURCES: Accompanying table, "Hubei Province: Economic Data, 1978-80," and *CBR*, May-June, 1980, pp. 54-56.

and several deals involving "processing of imported raw materials" (*lailiao jiagong*).

Through HPIEAC's intervention, for example, Hubei's textile industry bureau has been able to buy equipment directly from Hong Kong without having to go through the China National Machinery Import and Export Corporation (MACHIMPEX). Needless to say, it will take some time for HPIEAC to gain experience in all aspects of trade, and determine its exact relationship with the Ministry of Foreign Trade.

• **New Availability of Foreign Exchange.** A key incentive for Hubei to stand on its own feet in foreign trade is Beijing's policy to make foreign exchange available to provinces. This foreign exchange is available in two ways.

1. About ¥115 million (\$76.4 million) in foreign exchange, as was noted previously, is available to Hubei enterprises this year from a national ¥2 billion projects fund (*CBR*, Mar.-Apr., 1980, p. 5). To obtain the funds, projects must be justified on a case-by-case basis, and the funds obtained from the local branch of the Bank of China, and specifically through its Credit Department.

2. A portion of a province's export earnings may be retained. Prior to 1979, Hubei's foreign exchange earnings were retained by the state. A new system was inaugurated in 1979 under which a certain percentage (about 40 percent) of export earnings above target could be retained by a province for its own use. In 1979 the export target of \$155 million (all trade figures are denominated in US dollars by government decree), was surpassed by \$70 million, reaching a total of \$225 million. Thus some \$30 million, or 43 percent of the amount above target, was retained by the province.

How the newly accrued foreign exchange is used is entirely up to the province. Last year, by mutual discussions, it was agreed that a third should go to provincial organizations, including prefectures; a third to municipalities, including Wuhan; and a third to "important enterprises." Generally speaking, the more a municipality, prefecture, or enterprise exports, the more foreign exchange it is able to retain. No foreign exchange is available to those prefectures exporting nothing.

The percentage of export earnings that industrial enterprises may retain seems to depend largely on whether they are under ministerial or provincial control.

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## HUBEI PROVINCE RESEARCH AND DESIGN INSTITUTES

### Institutes under State Council and ministries (staff: 15,700):

1. Changjiang (Yangzi) River Valley Planning Office
2. Fourth Survey Design Institute of the Ministry of Railroads
3. Second Highway Survey Design Institute of the Ministry of Communications
4. Huazhong Survey Corp of the Survey Company of the First Machinery Ministry

### Institutes under both central and provincial governments (staff: 5,800):

1. Wuhan Steel Design Research Institute of the Ministry of Metallurgy
2. Wuhan Reconnaissance Company of the Ministry of Metallurgy
3. Fourth Design Institute of the Ministry of Chemical Engineering
4. Mid-South Electric Power Design Institute of the Ministry of Electric Power
5. Wuhan Coal Mining Design Research Institute of the Ministry of Coal
6. Wuhan Water Supply and Drainage Design Institute of the State Urban Construction General Company
7. Wuhan Design Institute for the Cement Products Industry of the Ministry of Construction Materials
8. Wuhan Design Institute of the Ministry of Light Industry

9. Hubei Textiles Design Institute of the Ministry of Textiles
10. Construction Design Research Institute of the Huazhong Engineering College
11. Design Office of the Wuhan College of Construction Materials Industry

### Institutes under Hubei provincial government (staff: 2,400):

1. Hubei Design Institute of Industrial Construction
2. Hubei Multiple Reconnaissance Institute
3. Hubei Water Conservancy Survey Design Institute
4. Hubei Forestry Survey Design Institute
5. Hubei Metallurgical Design Office
6. Survey Design Department of the Hubei Transportation and Highways Bureau
7. Routing Survey Design Corp of the Hubei Transportation Bureau
8. The Research Institute of Construction Materials of Hubei
9. The Design Office of Machinery Research Institute of Hubei

### Institutes under regional, municipal, and prefectural governments. Total number: 89. Staff: 1,570.

### Institutes under factory, mining, business, and construction units. Total number: 11. Staff 3,700.

SOURCE: Hubei provincial officials, March 1980.

## HUBEI CONSTRUCTION COMPANIES, 1980

Companies directly under the State Council and ministries:

1. Third Bureau of the State Construction Works General Bureau
2. 19th Metallurgical Construction Company of the Ministry of Metallurgy
3. 81st Detachment of the Engineer Corp. of the PLA
4. 801st Troop of the Engineer Corp. of the PLA
5. First Department of the Second Navigational Bureau of the Ministry of Communication
6. Second Installation Company of the First Machinery Ministry
7. Chemical Mining Company of the Ministry of Petroleum
8. 6th Construction Company of the Ministry of Chemical Engineering
9. 330th Engineering Bureau of the Ministry of Water Conservancy
10. General Construction Corp. of the Changjiang River Valley Planning Office

Companies under dual control by ministries and the province:

1. No. 1 Metallurgical Construction Company of the Ministry of Metallurgical Industry
2. No. 15 Metallurgical Construction Company of the Ministry of Metallurgical Industry

Provincial Companies:

Enterprises directly under the Provincial Construction Works Bureau. Number: 8.

Enterprises directly under regional and municipal construction works bureaus. Number: 13.

Enterprises transferred from the central government to the provincial First Bureau of Construction Works. Number: 1.

Enterprises under various bureaus of the provincial and municipal governments. Number: 8.



**HUBEI PROVINCE**  
**Economic Data, 1978-80**

	1978	1979	Percentage change	1980 Targets	Percentage change	1979 provincial total as percent of national total
<b>KEY INDICATORS</b>						
Total gross industrial and agricul- tural output value (billion yuan, 1970 prices)	¥ 24.7 \$14.7	¥ 28.5 \$18.4	15.4 25.2	¥ 31.0 \$20.6	8.8 12.0	4.6 4.6
Gross value of industrial output (billion yuan, 1970 prices) <sup>1</sup>	¥ 16.2 \$9.6	¥ 19.1 \$12.3	17.9 28.4	¥ 21.0 \$14.0	9.9 13.8	4.2 4.2
Gross value of industrial output (billion yuan, 1970 prices) <sup>1</sup>	¥ 8.5 \$5.1	¥ 9.4 \$6.1	10.6 20.2	¥ 10.0 \$6.6	6.4 8.2	5.9 5.9
<b>FOREIGN TRADE</b>						
Exports (million \$, fob)	159	225.5	41.8	250	10.9	1.6
Of which:						
Cereals, foodstuffs	NA	68.7	—	—	—	—
Textiles	NA	62.7	—	—	—	—
Native produce	NA	43.1	—	—	—	—
Animal by-products	NA	19.7	—	—	—	—
Light industry	NA	12.4	—	—	—	—
Tea	NA	9.84	—	—	—	—
Minerals and metals	NA	8.71	—	—	—	—
Chemicals and medical	NA	0.31	—	—	—	—
Imports	NA	NA	—	NA	—	—
<b>INDUSTRIAL PRODUCTION</b> (million metric tons unless otherwise indicated)						
Steel	3.07	3.34	8.8	3.42	2.4	9.7
Of which:						
Wuhan Iron and Steel Co. <sup>3</sup>	2.3	3.0	30.4	3.0	0.0	8.7
Pig iron	3.47	3.40	-2.0	3.54	4.1	9.3
Of which:						
Wuhan Iron and Steel Co. <sup>3</sup>	3.19	3.10	-2.8	3.2	3.2	8.7
Coal	6.44	4.49	-30.3	4.50	0.2	0.7
Electricity (billion kwh)	9.1	11.1	22.0	11.5	3.6	3.9
Cement	3.28	3.75	14.3	3.62	-3.5	5.1
Equipment						
Installed power generation capacity (year-end, million kw) <sup>4</sup>	2.1	2.4	14.3	2.4	—	4.2
Metal cutting machine tools (units)	7,411	6,437	-13.1	NA	—	4.6
Motor vehicles (total truck, car, and jeep units) <sup>5</sup>	8,043	21,939	172.8	24,900	13.5	11.8
<b>Consumer Goods</b> (Units unless otherwise indicated)						
Bicycles	131,231	183,017	39.5	225,000	22.9	1.8
Sewing machines	88,780	156,593	76.4	215,000	37.3	2.7
Wristwatches <sup>6</sup>	100,400	223,000	122.1	250,000	12.1	1.3
Television sets <sup>7</sup>	9,471	24,741	161.2	40,000	61.7	1.9
Radio sets	918,200	1,070,690	16.6	1,340,000	25.2	7.8
Cotton yarn (thousand tons)	145.2	192.4	32.5	205.1	6.6	7.3
Cotton "griege" cloth (million meters)	670	917.4	36.9	900	-1.9	7.6
Printed cotton cloth (million meters)	380	500	31.6	510	2.0	NA
<b>AGRICULTURAL PRODUCTION</b> (million metric tons unless otherwise indicated)						
Grain <sup>8</sup>	17.85	18.45	3.4	19.0	3.0	5.6
Cotton	.367	.447	22.0	.460	2.9	20.3
Oil-bearing crops	0.237	0.320	35.0	NA	—	11.3
Soybeans	NA	0.275	—	NA	—	NA
<b>Agricultural Inputs</b>						
Chemical fertilizer (million metric tons)	1.38	1.86	34.8	2.31	24.2	17.5

Tractors (large and medium size units)	3,932	5,021	27.7	2,300	-54.2	3.9
Hand tractors (units)	16,902	20,103	18.9	10,000	-50.3	6.3
Transplanting machines (units)	6,920	2,190	-68.4	2,000	-8.7	NA

#### CAPITAL CONSTRUCTION

Total investment (billion yuan, 1970 prices)	¥ 3.31 \$1.97	¥ 3.08 \$1.99	-6.9 1.0	¥ 1.32 \$0.88	-57.1 -55.8	6.2 6.2
Of which:						
Investment by sector						
Industry	¥ 2.45 \$1.46	¥ 1.95 \$1.26	-20.4 -13.7	¥ 0.94 \$0.62	-51.8 -50.8	— —
Residential	¥ 0.269 \$0.160	¥ 0.440 \$0.284	63.0 77.5	¥ 0.10 <sup>9</sup> \$0.07	— —	— —
Other	¥ 0.591 \$0.351	¥ 0.690 \$0.445	16.8 26.8	¥ 0.28 \$0.19	-59.4 -57.3	— —
Investment by level of government and from grants and loans						
Of which:						
Central government	¥ 2.3 <sup>10</sup> \$1.4	¥ 1.88 <sup>10</sup> \$1.21	-18.3 -13.6	¥ 0.84 \$0.56	— —	— —
Province	—	—	—	¥ 0.31 \$0.21	— —	— —
Accumulated funds <sup>11</sup>	—	—	—	¥ 0.115	—	—
Loans from Construction Bank <sup>12</sup>	—	—	—	¥ 0.055 \$0.037	— —	— —
Residential construction completed by year end (million square meters)	2.75	4.1	49.1	1.14 <sup>9</sup>	—	3.4
<b>TRANSPORTATION</b>						
Cargo (million metric tons)						
Rail	34.88	33.15	-5.0	— <sup>13</sup>	—	—
Water <sup>14</sup>	8.62	9.15	6.1	19.7	115.3	—
Highways <sup>15</sup>	42.41	42.50	0.2	23.0	-45.9	—
Lengths (km, year-end)						
Rail	1,442	1,442	0.00	NA	—	—
Water <sup>16</sup>	8,952	8,952	0.0	NA	—	—
Highways <sup>17</sup>	—	45,508	8.311	NA	—	—
Cargo Traffic <sup>18</sup> (billion metric ton-km)						
Rail	54.1	47.8	-11.6	NA	—	8.6
Water	77.2	81.9	6.1	NA	—	17.9
Highways	—	1,934.1	-10.0	NA	—	—

<sup>1</sup> Hubei's GVIO was ¥4.45 billion in 1949, ¥11.04 billion in 1976, and ¥13.413 billion in 1977

<sup>2</sup> Hubei's GVAO was ¥3.51 billion in 1949, and ¥8.2 billion in 1977

<sup>3</sup> The Wuhan Iron and Steel Company is currently operating at 75 percent capacity, according to company officials interviewed on March 28, 1980. The company's No. 1 Plant was built in 1959 and has 8 open hearth furnaces. Two are 250-ton, and 6 are 500-ton furnaces (of which 2 are oxygen blown). With a design capacity of 2.5 million metric tons, it produced 2 million tons of steel in 1979. The company's No. 2 Plant was built in 1970. It has 3 converters of 500 tons each and a design capacity of 1.5 million tons of steel, but produced only 1 million tons in 1979.

<sup>4</sup> Excludes small plants below 500 kw

<sup>5</sup> Excludes buses. Hubei does not produce locomotives

<sup>6</sup> Digital watches not produced in Hubei

<sup>7</sup> All black and white, however, the trial production of color television sets has begun

<sup>8</sup> Approximately two-thirds of this is rice, while the remainder is winter wheat, corn, potatoes, and soybeans

<sup>9</sup> Urban residential only

<sup>10</sup> Sum includes both central government and provincial investments during 1978-79

<sup>11</sup> These funds from a national ¥2 billion foreign exchange allocation controlled by the State Capital Construction Commission, and channeled through the Financial Bureau of Hubei Province

<sup>12</sup> Loans carry a 3% per annum interest rate

<sup>13</sup> Target not established as of late March 1980

<sup>14</sup> Including Yangzi River traffic

<sup>15</sup> Includes all highway freight as well as transport by state-owned vehicles. Hence, the figures are not comparable to the national data released by the State Statistical Bureau on April 30, 1980, which include the latter form of transport only

<sup>16</sup> Includes 1,053 km of Yangzi River

<sup>17</sup> Probably between 42-45.5 thousand km, inasmuch as the highway length in 1977 was 42,000 km

<sup>18</sup> Gross freight volume in China is calculated by multiplying freight volume (total weight of cargo in metric tons) by the freight distance (km) in order to obtain gross freight volume or turnover (in ton-km). See Nicholas R. Lardy, *Chinese Economic Studies*, spring 1977, pp. 42-49.

NOTES: For comparable national figures see *CBR*, May-June, 1980, pp. 54-56. Values in yuan are accompanied by dollar equivalents based on 12-month average exchange rates of ¥1.682 per US dollar in 1978, and ¥1.549 in 1979. The 1980 rate is based on the January-June monthly average of ¥1.505 per US dollar.

SOURCES: Hubei Office of Industry and Transportation; Hubei Province Planning Commission; Hubei Province Capital Construction Commission; Hubei Province Foreign Trade Bureau; March-April, 1980.



# Hebei Preserved and Dried Fruits



Hebei preserved and dried fruits include: Dried Pear, Dried Apple, Dried Apricot, Preserved Pear, Preserved Apple, Preserved Peach, Preserved Apricot, Preserved Dates, Preserved Cherry-Apple and Haw Flakes. All are prepared from the fruits produced in Hebei Province.

With just the right degree of sweetness and sourness, and distinctive flavours, Hebei Preserved and Dried Fruits are delicacies at tea-time or dinner party and top quality materials for all kinds of confectioneries.

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## Onshore Oil Development

# Enticing Foreigners Inland

**Dori Jones**

Talks with the major oil companies on onshore oil development have ground to a halt, but the Chinese are beginning to implement contracts for onshore geophysical surveying and oil-related services.

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Faced with a slowdown in the growth of oil output, China has turned to foreign firms for help in onshore, as well as offshore, oil exploration and production.

Beginning in August 1979, China invited 20 major oil companies from eight countries to discuss the exploration and development (through risk contracts) of several onshore oilfields. These included the Junggar and Tarim basins in Xinjiang; the Qaidam Basin in Qinghai; Erdos in the Shaanxi-Gansu-Ningxia-Inner Mongolia region; the Sichuan Basin; the Nanpan River area in Guangxi, Guizhou, and Yunnan; northern Jiangsu Province; Dagang; and other smaller fields.

After visiting the oilfields many companies submitted outline proposals for cooperation, according to Tang Peiji, deputy director of the Cooperation Department of the China National Oil and Gas Exploration and Development Corporation. Tang told the *CBR* that the Ministry of Petroleum has been studying these proposals but cannot act until it receives "principles and guidelines" from the State Council, which recently sacked Petroleum Minister Song Zhenming because of the ministry's poor handling of the "Bohai II incident," in which an imported jack-up rig capsized. After receiving the guidelines, the ministry will conduct "further studies" on the proposals for



cooperation in onshore oil development, Tang said.

Occidental Petroleum Corporation is known to be one company actively pursuing such a project. The Japanese have also shown considerable interest. A survey team from Japan National Oil Corporation and from three private Japanese oil firms visited Dagang for three weeks beginning June 20, following a request by Chinese Vice-Premier Yü Qiuli for joint Sino-Japanese development of the oilfield. The Japanese also agreed in principle in April to devote part of the funds promised by the Japan Export-Import Bank to joint development of onshore oil.

Several US oil companies have been less enthusiastic, however. They point to the paucity and the poor quality of geophysical data available for western oilfields, the lack of adequate transportation, the tremendous cost of onshore geophysical work in relatively unexplored areas, and even the political instability in certain areas bordering on the Soviet Union or containing ethnic minorities.

To obtain the necessary geophysical data, the Chinese have chosen two foreign companies—Compagnie Générale de Géophysique (CGG) of France, and Geosource of Houston—to conduct seismic surveys in China's provinces of Xinjiang and Qinghai. Once these surveys are completed and analyzed—several years from now—other major oil companies may become interested in cooperating with the Chinese on oil development there.

#### Seismic Surveying

Geosource's contract, worth about \$34.2 million, calls for the US firm to provide and operate three completely equipped seismic crews and a data processing center, and to supervise and train teams from the Chinese Petroleum Corporation in the central part of the Qaidam Basin, Qinghai Province. The three-year contract, signed July 18, is subject to US government export approval. Geosource expects to use mainly its own equipment, and will begin the survey in mid-1981. The size of the survey area in the Qaidam Basin will depend on the progress of the work and the preferences of the Chinese.

The contract was signed with China National Technical Import Corporation (TECHIMPORT) on behalf of the end-user, China Petroleum Corporation (CPC). Because CPC itself signed contracts for offshore seismic surveying last year, TECHIMPORT's participa-

tion in this onshore contract suggests that the foreign trade corporation is attempting to enlarge its role in major oil negotiations.

The contract signed by Compagnie Générale de Géophysique in late 1979 involves the training of Chinese crews over the three-year contract period, and surveying by three seismic crews from the French company in the northern section of the Tian Mountains in the central part of the Junggar Basin.

#### Other Contracts

For China's first onshore drilling contract with a foreign company, China's Oil and Gas Exploration and Development Corporation chose Parker Drilling Company of Tulsa, Oklahoma. Parker agreed on June 5 to provide "specialized drilling services and well-control expertise," using Chinese equipment, according to the company. It is understood that Parker will conduct directional drilling in the western part of Karamay oilfield to try to clean up three blowouts the Chinese have been grappling with for several years. Three crews from Parker will spend at least six months in Xinjiang.

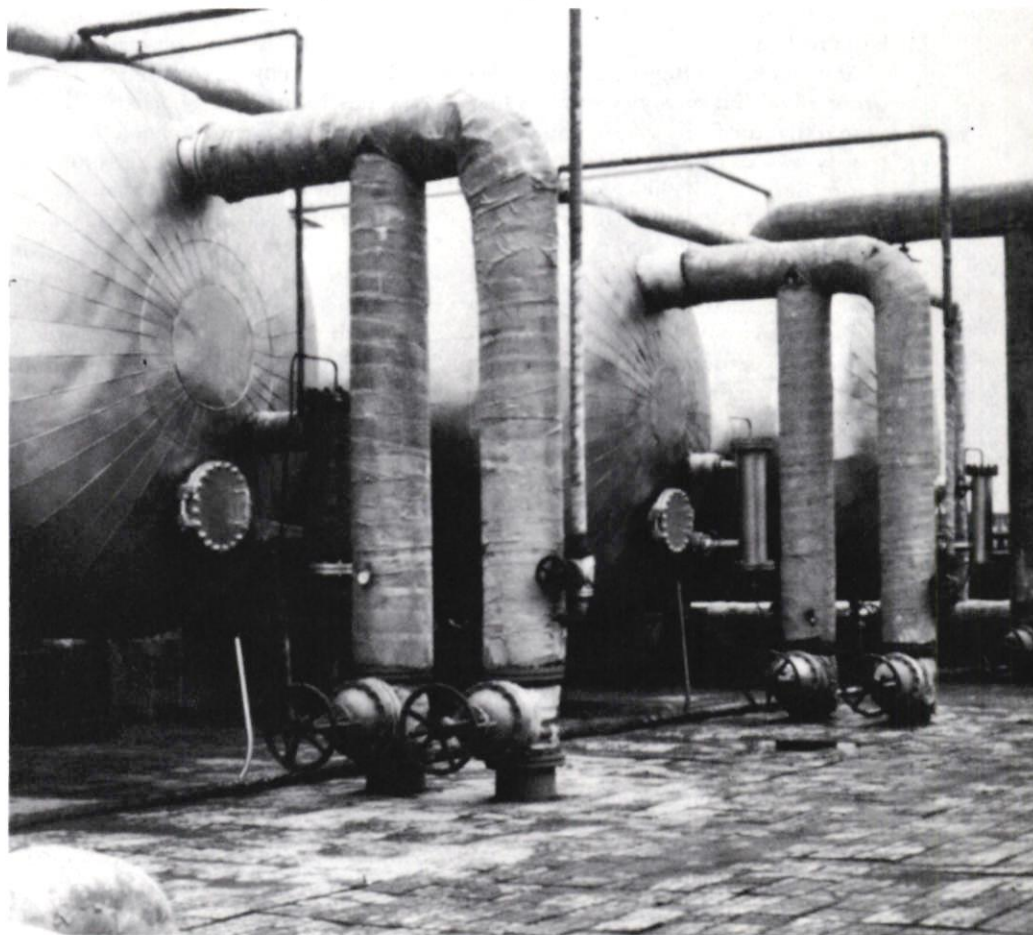
"It was specifically noted in the agreement that both sides foresee future contractual relations," a Parker representative said. "We hope to earn contracts on a long-term basis, using our own equipment."

Earlier in the year, Schlumberger, a highly regarded French logging firm, announced a contract to set up wireline service units for two wells in Dagang oilfield, near Bohai Bay. Schlumberger will also provide this service in Renqiu oilfield, one of five in the "North China" district. The company announced it will lease to China two Schlumberger Cyber Service Units, which are computerized field labs that acquire data from oil and gas wells during wireline logging operations. Logging involves taking electronic measurements during exploratory drilling or from producing wells. Schlumberger also will supply computerized well logging trucks and two complete sets of open-hole tools.

The size of the contract was not disclosed.

The company originally had expected to begin operations in July, but the group of Schlumberger engineers at Renqiu had not yet begun their work

Dehydration tanks, Renqiu oilfield.





by late August because of unspecified delays on the Chinese side. Six engineers from the French company are to operate the units, analyze the data, and train Chinese technicians to use the equipment.

The Chinese, who produce their own wireline service units, would like to buy sophisticated logging equipment from abroad. Since Schlumberger has a policy of not selling its equipment, the Chinese are negotiating with other logging companies—including at least one US firm. The Chinese may have chosen Dagang for advanced logging tech-

niques because of their plans to drill deeper wells there. Dagang oilfield has been developed to a depth of 2,000 meters and these strata are showing signs of depletion. The Chinese want to drill to 3,000 or 4,000 meters, where the oil may be of a lighter quality but where geological formations make the oil more difficult to tap. Renqiu's oil also requires wells of about 3,500 meters.

China's commitment to use advanced computers in oil exploration is also evident in an agreement signed with Western Geophysical of Houston on July 28. Under this five-year contract, sub-

ject to US government export approval, Western Geophysical would establish a computer center in Beijing to process geophysical data from oil surveys. If the deal is approved, the US company will install and operate an IBM 3033, the largest and fastest of IBM's computers, beginning early next year (*see p.29*).

The Chinese oil ministry also is talking with US companies about other types of onshore oilfield services, such as providing an equipment and parts warehouse in China from which the Chinese could buy equipment freely as needed. —DJ 完

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### Recent Developments in China's Major Onshore Oilfields

#### **Tarim Basin, southern Xinjiang.**

The Chinese hope to produce 12 million tons of crude oil per year from the Tarim Basin, according to Japanese sources. Three wells already have been drilled in this area since 1977. All are high-yield, with high underground pressure and stable output, producing hundreds of tons of oil and nearly a million cubic meters of natural gas each day, according to the Ministry of Petroleum Industry.

At a meeting in Beijing in late 1979 a group of oil and geology specialists suggested that the Chinese government intensify overall prospecting work in the Tarim Basin, a 560,000-square kilometer area that is believed to be China's most extensive sedimentary rock basin. The Chinese have already carried out geological surveys and prospecting there for many years, but much work remains to be done. Tarim Basin is located in a sparsely populated and remote area with a harsh desert climate.

**Qaidam Basin, Qinghai.** The Chinese have drilled "a number of wells" in the 120,000-square kilometer Qaidam Basin, and daily production at some has reached 600 tons of crude and 32,000 cubic meters of gas, according to Xinhua. So far this year, Chinese geologists have discovered three high-yield wells in eastern Qaidam. Trial production began at the third on May 23, with a daily output of more than 300 tons. Earlier, the Chinese announced a new oilfield in the southwestern part of Qaidam Basin. Out of 26 such wells so far in that area, 20 have produced oil and natural gas. Two test wells have pro-

duced more than 100 tons of crude and 10,000 cubic meters of gas per day.

Overall, China expects to produce 8 million tons of oil per year from the Qaidam field, according to Japanese reports.

**Northern Jiangsu (Beisu).** The Chinese announced a new oil discovery at Zhentong in northern Jiangsu Province late last year. Earlier, oil wells with promising production prospects were drilled at Taizhou and Gaoyou. Since 1970, geological departments have discovered high-yield, self-erupting oil and gas currents in four other Jiangsu counties as well. A February Xinhua report on the Zhenwu oilfield in Jiangsu noted that crude oil production there is increasing at a rate of 17 percent per year. Zhenwu crude is said to be rich in light oil and is used in the production of gasoline, diesel oil, and kerosene.

British Petroleum (BP) reportedly has been discussing onshore development in Jiangsu Province, which lies just inland from the Yellow Sea zone where BP recently completed seismic surveys. The Chinese reportedly offered to sell data obtained from exploratory wells in Jiangsu to participants in BP's blocks.

**Daqing, Heilongjiang Province.** The Chinese announced in April the discovery of six small- and medium-sized oil deposits around Daqing, China's largest oilfield; the discoveries have increased Daqing's known oil reserves by 13.3 percent. Once developed into satellite oilfields, these are expected to add 3 million tons of oil per year to Daqing's production, which has stagnated at 50 million tons per year since 1976. So far

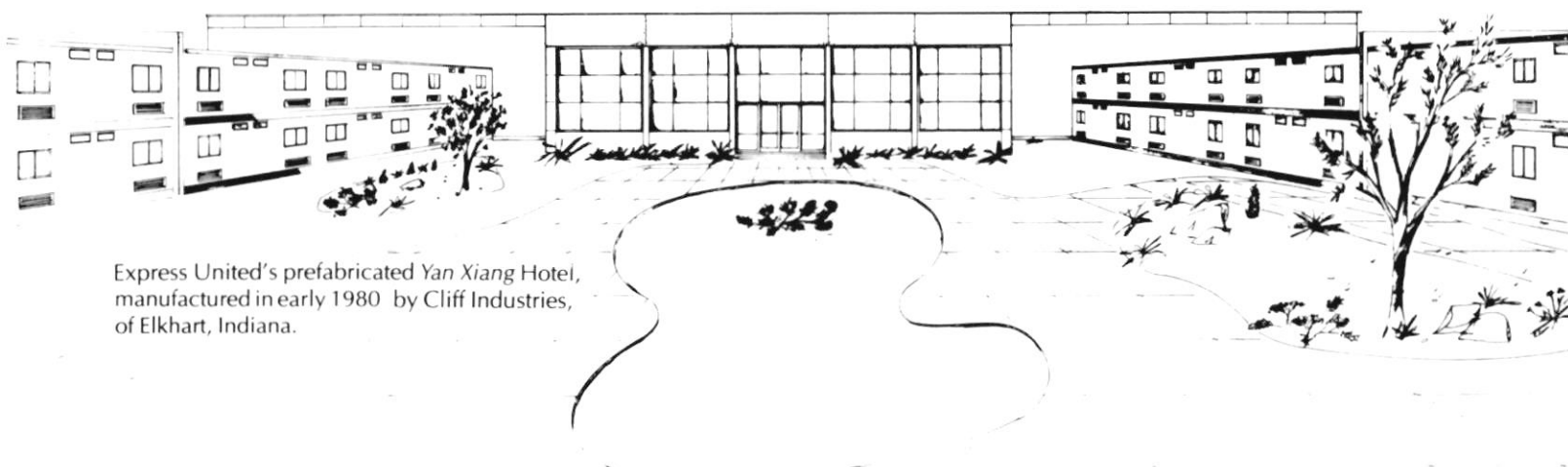
only 20 percent of Daqing's reserves have been tapped; Chinese technicians expect to be able to tap 45 percent of Daqing's oil.

In mid-June the Chinese began operations at a new oilfield, Putachua, at Daqing. Under construction since April 1979, this field has an annual capacity of 1.3 million tons per year.

**Liaohe, Liaoning Province.** Another major, recently completed oilfield, Liaohe, reportedly has abundant reserves of oil and gas and produces 5 million tons of crude and 1,700 cubic meters of gas per year. Liaohe consists of eight oil-extracting centers, with a total of 1,800 wells. It is located between Shenyang, Yingkou, and Jinzhou in Liaoning Province, a major industrial base.

**Dongpu, Shandong and Henan Provinces.** This new oilfield, which stretches across nine counties along the Yellow River in Shandong and Henan provinces, was announced in late February. No production figures were given, but Dongpu is said to have more than 200 producing wells, water injection wells, and exploratory wells. The new field, situated near three major railways, has "abundant reserves of light low-sulfur oil."

**Sanshui, Guangdong Province.** According to unofficial reports in March, the Chinese have discovered natural gas or oil near Sanshui, not far from the offshore oil strike in the Pearl River Delta. Strata Energy of Houston, a division of Armco Steel, reportedly has conducted initial discussions with the Chinese about onshore exploration in Guangdong Province.



Express United's prefabricated Yan Xiang Hotel, manufactured in early 1980 by Cliff Industries, of Elkhart, Indiana.

## Beijing's New Hotels

Construction of tourist hotels in Beijing is currently limited to six projects, according to Song Rufen, chairman of the Beijing Municipal Capital Construction Commission (interviewed in July by Scott Seligman of the National Council's Delegations Department).

Song indicated that these six hotels, all of which are expected to be completed by the end of 1981, will add 2,000 rooms to Beijing's current 1,300. Seven hundred new rooms should be ready by the end of this year. Eighteen additional hotels are

now on the drawing board and are expected to increase the total by another 9,000 rooms.

Financing for these new projects has been arranged through joint ventures in which foreign ownership is limited to 49 percent; foreign loans (employing foreign capital and Chinese labor); and domestic loans from central government grants to the municipality or from Beijing's own funds.

The following table summarizes basic data on the six projects for which ground has already been broken.

—Scott Seligman

Hotel	Location	Number of Rooms	Floors	Total Area	Ground Broken	Expected Completion	Estimated Cost	Method of Financing	Additional Information
Fuxingmen Wai	Fuxingmen Wai	570	20	40,000 meters	late 1978	late 1980	¥ 40 million	Funded by Beijing Municipality.	Hotel was originally planned for occupancy by Chinese, but now is slated for foreigners due to increased tourism.
Yanxiang	Northeast district on airport road	144	3	less than 10,000 meters	late 1979	late 1980	¥ 4 million†	Joint venture with Express United, Inc., a New York travel agency.	Express United, Inc. will receive a commission on a total of 20,000 guests.
Xiangshan	Xiangshan, northwest of city	300	4	more than 20,000 meters	June 1980	late 1981	*	Funds borrowed from Esquel Enterprises, Ltd., a Hong Kong-based company.	
Jianguo	Jianguomen Wai	more than 500	4 to 5; 10**	less than 40,000 meters	June 1980	late 1981	\$20-\$30 million	Joint venture with Zhong Mei Hotel Development, Ltd., a Hong Kong-based company.	Zhong Mei will receive 80% of the hotel's profits each year for a period of 10 years.
Minzu (addition)	Fuxingmen Nei	100	5-6	1,000 meters	May 1980	late 1981	*	Funds borrowed from Esquel Enterprises, Ltd.	Project includes renovation of existing Minzu Hotel.
Huaqiao	Zuojiashuang (Dongzhimen Wai)	400	5	14,000 meters	May 1980	late 1981	¥ 30 million	Central government funds granted to Beijing Municipality.	

†Cost to the Chinese. Cost to Express United, Inc., estimated to be at least \$2 million.

\*A total of \$40 million has been borrowed from Esquel Enterprises, Ltd., for construction of three hotels: the Xiangshan, Minzu addition, and the Xiyuan, the construction of which has not yet begun.

\*\*One section of the hotel will be ten stories; the other will be four or five floors tall.



# New Regulations for Guangdong SEZs

Following is the Xinhua translation of "The Regulations on Special Economic Zones in Guangdong Province," which were adopted by the Guangdong Provincial People's Congress and by the 15th session of the Fifth National People's Congress Standing Committee on August 26.

## Chapter One: General Principles

*Article 1:* In order to develop economic cooperation and technical exchange with foreign countries and promote socialist modernization, specific areas in Shenzhen, Zhuhai, and Shantou municipalities of Guangdong Province will be designated as special economic zones (to be called "special zones" in subsequent paragraphs for brevity). Citizens of foreign countries, Chinese residing abroad, and Chinese compatriots in Hong Kong and Macao and their companies and enterprises (to be called "traders" in subsequent paragraphs) will be encouraged to set up plants, enterprises, or other business undertakings with their own investment or to run joint ventures with China. Their assets, profits, and other legitimate rights and interests will be protected under law.

*Article 2:* The enterprises and individuals operating in the special zones must observe the laws, decrees, and related regulations of the People's Republic of China, with the exception of special provisions as stipulated in these regulations.

*Article 3:* The Guangdong Provincial Administrative Committee in Charge of the Special Economic Zones will be set up to exercise the power of unified management over all special zones on behalf of the Guangdong Provincial People's Government.

*Article 4:* The special zones will provide a wide scope of business operation for traders, create favorable conditions for their business operations, and guarantee the stability of their operational sites. The traders may invest, or run joint ventures with China, in all undertakings which have a positive meaning in international economic cooperation and technical exchange, including the fields of industry, agriculture, animal husbandry, breeding, tourism, housing, and other construction work and advanced technological research and manufacturing work. They may also engage in other business which is of interest to both sides.

*Article 5:* The Guangdong Provincial Administrative Committee in Charge of the Special Economic Zones will be responsible for the leveling and other land preparation work and construction work for water supply, drainage, electric power, roads, docks, communications, warehouses, and other public facilities. If necessary, foreign capital may be used in the above-mentioned construction work.

*Article 6:* Chinese and foreign experts and people who are enthusiastic in promoting modernization in our country will be invited by various special zones to form advisory committees and give advice to the respective special zones.

## Chapter Two: Registration and Operation

*Article 7:* The traders should submit applications to the Guangdong Provincial Administration Committee in Charge of the Special Economic Zones for their investment in setting up plants or other economic undertakings. After review and approval by the committee, the traders will be given registration certi-

cates and land-use certificates.

*Article 8:* The traders may open up accounts and deal with foreign exchange matters at Bank of China branches set up in the special zones, or at other banks set up in the special zones with the approval of our government. The traders may purchase insurance for various matters at the Chinese People's Insurance Company or other insurance companies set up in the special zones with the approval of our government.

*Article 9:* The commodities produced by enterprises in the special zones are to be sold on the international market. If an enterprise wants to sell its products on the Chinese market, it must obtain approval from the Guangdong Provincial Administrative Committee in Charge of the Special Economic Zones and pay customs duty.

*Article 10:* The traders may independently operate their own enterprises and hire foreign personnel for technical and management work.

*Article 11:* If the traders want to cease operating their enterprises, they should give their reasons to the Guangdong Provincial Administrative Committee in Charge of the Special Economic Zones, carry out procedures for the closure of business and clean up loans and debts. After close of business, traders may transfer their assets to other parties and may remit their investment money out of China.

## Chapter Three: Preferential Treatment

*Article 12:* The land in the special zones remains the property of the People's Republic of China. Land will be furnished to traders according to their actual needs. Favorable consideration will be given to traders in such matters as length of tenure, land rent, and method of payment according to their trade and purpose. Specific regulations governing the use of land will be published separately.

*Article 13:* Machinery equipment, spare parts, raw materials, transport vehicles, and other items needed by the enterprises in the special zones for production will be exempted from import duty. Consumer goods needed by traders shall be subject to full or lower import duties, or exempted, depending on the merits of each case. The import of the above-mentioned items and the export of commodities from the special zones should go through the customs declaration procedures.

*Article 14:* The rate of income tax to be paid by enterprises in the special zones



# China's Major Exhibition Halls

Many US firms have begun to recognize the business potential of exhibiting their products in China at both the national and provincial levels. The increased number of local exhibitions, in particular, has been made possible by the central government's policy of decentralization.

Companies interested in exhibiting in China may write directly to the PRC's centers for literature on foreign products and major exhibition halls listed below (many of which were visited by the National Council's exhibitions delegation in April). They may also be contacted by writing directly to their supervisory bodies for more specific information about their facilities.

## Beijing

### *Beijing Agricultural Exhibition Center*

Address: Beijing Agricultural Exhibition Center, Beijing.  
Size: 16,140m<sup>2</sup> inside  
30,000m<sup>2</sup> outside

### *Beijing Display Center* (literature and samples of new foreign products)

Address: Palace of Culture, Beijing  
Supervisory Body: Beijing Municipality and CCPIT  
Manager: Zhu Yixin

### *Beijing Exhibition Center*

Address: Beijing Exhibition Center, Beijing  
Supervisory Body: Beijing Municipality  
Manager: Mr. Wang  
Size: 14,400m<sup>2</sup> inside  
7,600m<sup>2</sup> outside

### *Beijing Science & Technology Exchange Center*

Address: Yongan Lu, Beijing  
Size: 2-3,000m<sup>2</sup> total

### *CCPIT Center for Introducing Literature & Samples of New Foreign Products*

Address: PO Box 1420, Beijing  
Supervisory Body: CCPIT  
Head of Distribution and Publications: Li De

Function: Accepts films, videotapes, slides, samples, and models for foreign products as well as scientific and industrial publications; provides assistance to foreign companies that

need literature and film soundtracks translated.

### *CCPIT Exhibition Center* (still in planning stage)

Projected Size: 50,000m<sup>2</sup> inside  
Size: 200,000m<sup>2</sup> total

## Guangdong Province

### *Guangdong Province Exhibition Hall*

Address: Guangdong Province Exhibition Hall, Guangzhou  
Size: 23,000m<sup>2</sup> inside  
4,000m<sup>2</sup> outside

### *Guangzhou Municipal Scientific and Technical Exchange Center* (formerly Guangzhou Industrial Technology and Innovative Technology Exhibition Hall)

Address: Hai Chu Square, Guangzhou

### *Guangzhou Foreign Trade Center* (formerly New Guangzhou Export Commodities Fair Complex)

Address: Guangzhou Foreign Trade Center, Guangzhou  
Cable: 0070, or CECA/GUANGZHOU  
Telephone: 30849  
Manager: Zhang Zhizhong  
Size: 66,000m<sup>2</sup> inside  
14,000m<sup>2</sup> outside

## Hubei Province

### *Wuhan Exhibition Hall*

Address: Wuhan Exhibition Hall, Wuhan  
Telephone: 53917, 53531  
Supervisory Body: Wuhan Municipality  
Size: 7,000m<sup>2</sup> inside  
18,000m<sup>2</sup> outside

## Jiangsu Province

The CCPIT is building an exhibition center in Nanjing.

## Sichuan Province

### *Chengdu (Sichuan) Technical Exchange Center*

Address: PO Box 333, Chengdu, Sichuan Province  
Cable: 1563 CHENGDU  
Probable Supervisory Body: Chengdu Municipality  
Vice-Manager: Zhang Xingda

## Shanghai Municipality

### *Shanghai Exhibition Center*

Address: 1000 Central Yanan Lu, Shanghai  
Probable Supervisory Body: Shanghai Municipality  
Managers: Shao Mungrong, Zhang Huiliang  
Size: 20,451m<sup>2</sup> inside  
20,000m<sup>2</sup> (approximately) outside

### *Shanghai Center for Scientific and Technical Exchanges with Foreign Countries*

Address: 370 Huashan Lu, Shanghai  
Cable: TEXTCENTRE SHANGHAI  
Telephone: 371876  
Functions: Organizes seminars associated with foreign exhibitions; organizes and participates in international conferences; arranges film shows; organizes training courses for Chinese technicians on the use of foreign products.

### *Shanghai Arts & Crafts Trade Fair*

Held at the Shanghai Exhibition Center  
Telephone: 563037

## Tianjin

### *Tianjin Exhibition Center*

Address: Tianjin Exhibition Center, Tianjin  
Supervisory Body: CCPIT, Beijing  
Manager: Mr. Zhang  
Size: 10,000m<sup>2</sup> inside  
5,000m<sup>2</sup> outside  
7,600m<sup>2</sup> new hall

### *Tianjin Historical Museum*

Address: Ho Dong District, Tianjin  
Supervisory Body: Tianjin Cultural Bureau  
Manager: Mr. Liu  
Size: 7,000m<sup>2</sup> total

### *Chinese International Trust and Investment Corporation, Tianjin Branch (TCITIC)*

The TCITIC plans to construct a new exhibition center covering 50,000m<sup>2</sup>.

SOURCE: Trip report of National Council exhibition delegation to PRC, April 1980.

—Compiled by Kathryn Dewenter



**GUANGDONG PROVINCIAL  
ADMINISTRATIVE COMMITTEE  
IN CHARGE OF SPECIAL  
ECONOMIC ZONES**

Main office: Liberation Road,  
Shenzhen, Guangdong Province  
Telephone: 2358  
Cable: 1579 SHENZHEN

Director (mayor of Shenzhen):  
Wu Nansheng  
Secretary: Qin Wenjin

Zhuhai branch office: c/o Zhuhai  
External Economic Committee,  
Longzhouting, Xiangzhou, Zhu-  
hai, Guangdong Province  
Telephone: 570  
Cable: 4842 ZHUHAI

Director: Wu Jianmin  
Deputy director: Li Changqing

Shantou branch office: c/o Shan-  
tou External Economic Commit-  
tee, 132 Wei Ma Lu, Shantou (or)  
Shantou PO Box 55  
Telephone: 4184  
Cable: 6210 SHANTOU

Director (mayor of Shantou): Lin  
Heng  
Deputy director (vice-mayor of  
Shantou): Zheng Xuchu

SOURCE: Anita Li, American  
Chamber of Commerce, Hong  
Kong.

is to be 15 percent. Preferential treat-  
ment will be given to enterprises estab-  
lished within two years of the promul-  
gation of the regulations, enterprises  
with an investment of at least five mil-  
lion US dollars, and enterprises involv-  
ing higher technologies or having a  
longer cycle of capital turnover.

**Article 15:** After paying income tax,  
traders' legitimate profits and wages  
and other normal income of foreign  
employees, overseas Chinese em-  
ployees and employees hired from  
Hong Kong and Macao may be re-  
mitted out of China through the Bank  
of China or other banks in the special  
zones in accordance with the regula-  
tions governing foreign exchange con-  
trol in the special zones.

**Article 16:** If the traders use their profits  
for reinvestment in the special zones  
for a period of at least five years, they  
may request the authorities concerned

to reduce or exempt income tax on  
profits thus reinvested.

**Article 17:** Enterprises in the special  
zones will be encouraged to use ma-  
chinery, equipment, raw materials, and  
other supplies produced in China.  
They will be given favorable treatment,  
paying export prices for the same kind  
of commodities at the time of purchase.  
The prices will be paid in foreign ex-  
change. The commodities and supplies  
may be shipped to the special zones di-  
rectly from the selling units, based on  
vouchers.

**Article 18:** Entry and exit procedures  
will be simplified for foreigners, Chi-  
nese residing abroad, and Chinese  
compatriots from Hong Kong and Ma-  
cao coming into and leaving the special  
zones.

**Chapter Four: Labor Management**

**Article 19:** Labor service companies will  
be established in various special zones.  
The enterprises in the special zone may  
hire Chinese staff members and  
workers through the introduction of  
the local labor service companies or  
hire them directly with the concurrence  
of the Guangdong Provincial Adminis-  
trative Committee in Charge of the  
Special Economic Zones. They will be  
tested or evaluated for employment by  
the enterprises. Employment contracts  
will be signed by the enterprises and the  
Chinese staff members and workers.

**Article 20:** The staff members and  
workers hired by the enterprises in the  
special zones will be administered by  
the enterprises according to their op-  
erational requirements. If necessary, they  
may be dismissed according to the stip-  
ulations of the employment contract.

Staff members and workers hired by  
enterprises in the special zones may also  
resign according to the stipulations of  
the employment contracts.

**Article 21:** The wage level, wage struc-  
ture, and methods of reward for Chi-  
nese staff members and workers em-  
ployed by the enterprises in the special  
zones, as well as labor insurance and  
state subsidies to staff members and  
workers are all to be included in con-  
tracts signed by the enterprises and  
staff members and workers in accord-  
ance with the regulations prescribed  
by the Guangdong Provincial Adminis-  
trative Committee in Charge of Special  
Economic Zones.

**Article 22:** Enterprises in the special  
zones should adopt necessary labor  
protection measures to ensure that staff  
members and workers work under safe  
and sanitary conditions.

**Chapter Five: Organization and Manage-  
ment**

**Article 23:** The Guangdong Provincial  
Administrative Committee in Charge  
of the Special Economic Zones under-  
takes the following duties:

1. It is to draft, organize, and imple-  
ment development projects in the spe-  
cial zones.

2. It is to review and approve the  
traders' investment projects in the spe-  
cial zones.

3. It is to handle industrial and com-  
mercial registration work and land allo-  
cation in the special zones.

4. It is to coordinate working rela-  
tions for banks, insurance companies,  
tax units, customs, border inspection  
units, and posts and telecommunica-  
tions in the special zones.

5. It is to find sources of staff mem-  
bers and workers for the enterprises in  
the special zones and to safeguard the  
just rights of staff members and  
workers.

6. It is to run educational, cultural,  
public health, and other public welfare  
work in the special zones.

7. It is to safeguard security in the  
special zones and protect the inviolabil-  
ity of person and property.

**Article 24:** The Shenzhen Special Eco-  
nomic Zone will be directly operated  
and administered by the Guangdong  
Provincial Administrative Committee  
in Charge of the Special Economic  
Zones. Necessary organizations will be  
established in the Zhuhai and Shantou  
Special Economic Zones to handle mat-  
ters there.

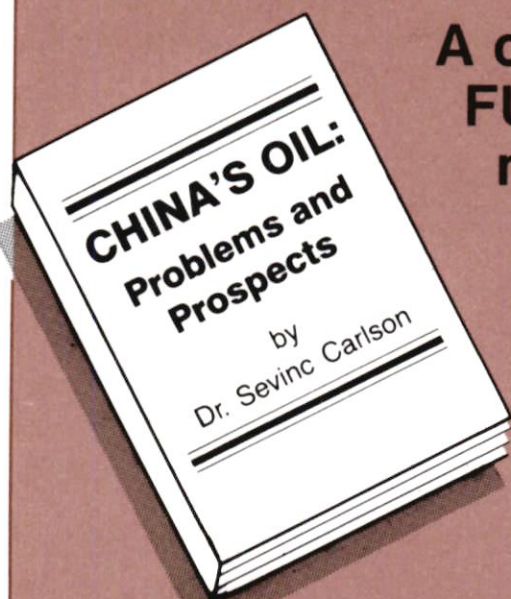
**Article 25:** To meet the need of develop-  
ing economic activities in the special  
economic zones, the Guangdong Prov-  
incial Special Economic Zones Develop-  
ment Company will be established.

The scope of operation of the com-  
pany is as follows: It is to handle the  
accumulation of funds and trust and  
investment work, operate enterprises  
or cooperate with traders in the special  
zones in setting up joint ventures, act as  
an agent for traders in the special zones  
in dealing with procurement and mar-  
keting work with units in China, and  
offer consultative services.

**Chapter Six: Supplementary Article**

**Article 26:** The regulations will be put  
into practice after being adopted by the  
Guangdong Provincial People's Con-  
gress and approved by the Standing  
Committee of the National People's  
Congress of the People's Republic of  
China. 完

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## CHINA: 1980 SALES AND NEGOTIATIONS THROUGH AUGUST 15

The following chart contains recent reports of sales and negotiations exclusive of those listed in previous issues. The total value figure for sales includes only those deals which are listed as contracts or deals signed/won/secured/concluded. All others are counted as negotiations. The tables are prepared by the Council's assistant librarian, Catherine Yelloz.

Company/Country	Product/Plant/Technology	Value Million US \$ (local currency if known)	Status Date Announced
<b>Agricultural Commodities</b>			
(US)	100,000 metric tons of wheat for delivery in 1980-81	NVG	sale announced 7/14/80
(US)	100,000 metric tons of corn	NVG	sale announced 7/14/80
(New Zealand)	Joint venture to produce wood pulp	\$198 million	joint venture proposed 6/13/80
(Canada)	1.4 m tons of wheat	NVG	sale announced 6/6/80
The California Almond Growers Exchange (US)	First direct sale of Blue Diamond almonds	NVG	sale announced 6/14/80
The British Livestock Co. (UK)	200 large white British hogs to be delivered this fall	NVG	sold 6/14/80
(Malaysia)	Timber and timber products	NVG	will negotiate 7/30/80
CSR Ltd. (Australia)	Three-year contract to buy 750,000 metric tons of sugar	NVG	contract signed 8/1/80
<b>Agricultural Technology</b>			
Seiyu Store Co. (Japan)	Beef-cattle breeding plant	NVG	contract signed 7/14/80
(Japan)	Collaboration in mechanization of rice growing process	NVG	announced 6/6/80
Far East Flour Mills (Hong Kong)	Will build 250,000-ton capacity flour mill in Guangdong Province	\$20 million	agreement signed 6/80
Itoman & Co. (Japan)	Will build eel-raising pond with 100-ton capacity	NVG	announced 4/80
Sand Livestock Systems, Inc. (US)	Large modern hog-confinement complex in Guangdong Province	NVG	announced 7/10/80
<b>Chemicals</b>			
Anic (Italy)	Agreement to trade chemical products as well as to research and develop rubber synthetics and pharmaceuticals	NVG	agreement signed 4/8/80
Iraqi Public Corp. (Iraq)	Fertilizers	\$46 million	contract concluded 7/9/80
<b>Chemical Plants</b>			
Air Products and Chemicals (US)	Supply of its Houdry Litol process to be used in a benzene plant to be built at Baoshan	NVG	agreement signed 5/23/80
Newman Electric Motors Ltd. (US)	Special flameproof motors for chemical processing plant in China	NVG	contract won 3/80
Klockner Belge (West Germany) and Coppee-Rust (Belgium)	Equipment to produce melamine	NVG	contract signed 7/9/80
<b>Coal, Other Mineral Mining Development and Technology</b>			
(France)	Agreement to help China develop mineral ore and geological exploration	NVG	agreement signed 7/14/80

Company/Country	Product/Plant/Technology	Value	Status Date Announced
Adaro (Spain)	To provide China with coal mining technology in exchange for steam coal imports	NVG	announced 7/80
<b>Construction Equipment</b> Pan American World Engineering, Inc., and China Trade Corp. (US)	Joint venture with the China Shipbuilding Corporation to produce road building equipment	NVG	announced 4/28/80
Toyo Umpanki Co. (Japan)	Agreement reached to construct a forklift parts supplying center in the suburbs of Beijing	NVG	agreement reached 7/8/80
<b>Consumer Goods</b> Matsushita Electric Ind. Co. (Japan)	Contract to supply 27,000 washing machine kits	NVG	contract signed 6/80
<b>Electronics</b> Xerox (US)	Negotiations for an unspecified joint venture	NVG	announced 5/26/80
Yashica (Japan)	10,000 single-lens reflex cameras and 5,000 double-lens reflex cameras	\$910,000	contract concluded 7/23/80
Philips NV (Singapore)	Negotiations to supply audio products as well as planning in the form of assembly techniques	NVG	negotiations announced 7/2/80
IBM (US)	Contract to install 16 Series 4300 computers in Beijing and 15 provincial centers for use in census work	\$10 million	contract won 7/9/80
Sanyo (Japan)	Manufacturing plant for flyback transformers used in color TVs	NVG	contract signed 6/80
Herdis Group (Philippines)	Construction of a photocopier plant	NVG	agreement signed 7/23/80
Konishiroku Photo Industry Co. (Japan)	Will export 170,000 cameras this year	NVG	agreement signed 7/23/80
Ohio Scientific (US)	Joint venture for the manufacture of microcomputers	NVG	negotiations announced 8/80
<b>Food Processing and Packaging</b> Beatrice Foods (US)	a) Joint venture for food processing and canning, ice cream and milk products, soft drinks, food packaging, leather goods, home furnishings, and refrigerated warehousing b) Agreement to help China develop water treatment, food service, equipment, and low temperature storage containers	NVG	agreement reached 7/31/80
Herdis Group (Philippines)	Giant food processing complex to be put up in Changchun	\$500 million	agreement signed 7/29/80
<b>Machinery</b> Cooper Energy Services (US)	Three compression packages for air testing and evacuation of pipelines	NVG	sale announced 5/26/80
Holyhead Engineering Co. (UK)	50 heating and cooling coils	NVG	sale announced 5/80
W. Canning Engineering (UK)	Two automatic electroplating lines	NVG	order received 5/80
The British Federal Welder and Machine Co. (UK)	a) One fully automatic drum forming machine and seam welder b) A range of special purpose spot and three-phase seam welding machines for welding nimonics and other heat-resisting alloys used in aeroengine manufacture	\$292,400 (£127,000) \$700,000 (£300,000)	order announced 6/12/80 contract announced 6/12/80



Company/Country	Product/Plant/Technology	Value	Status Date Announced
Hotwork Development (UK)	A 1.5M btu/h recuperative burner fired on heavy oil and the ancillary combustion control system, together with an order for nozzle mix burners and controls suitable for gas firing	NVG	order received 6/80
<b>Metal Mining and Processing</b> McPhar Geophysics (Canada)	Computerized RD-500 logging systems for uranium assaying	NVG	contract announced 4/4/80
Mitsubishi Heavy Ind. (Japan)	Delivery of a 600-ton per day quicklime and dolomite calcination plant at the Baoshan steel complex	\$17-21 million (¥4.5 billion)	contract signed 5/26/80
Ipsen Industries (US)	Order for a vacuum oil-quench furnace	NVG	order received 7/80
<b>Military Equipment</b> Marconi Avionics (UK)	Modernization of communications gear and fire control systems of Chinese jet fighters	\$92 million (£40 million)	contract signed 7/9/80
<b>Mining Equipment</b> Alluvial Dredges (UK)	Negotiation for sale of newly developed technology for alluvial mining	NVG	negotiations announced 5/20/80
<b>Petroleum and Natural Gas Development and Refining</b> Aker Shipbuilding (Norway)	Cooperation agreement for construction of offshore drilling units	NVG	agreement signed 5/23/80
Samifi Babcock (Italy)	Gas dehydration unit	NVG	sale announced 4/1/80
Geosource Inc. (US)	Three-year geophysical service contract with PRC	\$34.2 million	contract signed 7/22/80
British Petroleum (UK)	Drill stratigraphic test wells in the Yellow Sea to start fall of 1980	NVG	announced 7/80
<b>Pharmaceuticals</b> Otsuka Pharmaceutical Co. (Japan)	Joint venture to produce medicine in China	NVG	agreement reached 8/6/80
<b>Power</b> Babcock Bristol, Ltd. (UK)	Contract won for supply and commission of control instrumentation to two Chinese power stations	\$394,000 (£171,000)	contract won 6/5/80
<b>Scientific Instruments</b> Oxford Medical System (UK)	An ambulatory ECG monitoring system for use in the Institute of Sports Medicine in Beijing	\$50,650 (£22,000)	sale announced 6/11/80
Tellurometer (UK)	Six CA 1000 distance-measuring systems to the Chinese government for geodetic survey work	NVG	sale announced 7/9/80
<b>Shipping</b> Liebherr-Werk Nenzing GmbH (West Germany)	Contract signed with China Corp. of Shipbuilding Industry for joint production of marine cranes	NVG	contract signed 7/15/80
Hong Kong Regent Shipping, Ltd. (Hong Kong)	27,000 mtdw bulk carrier to be built by the China Corp. of Shipbuilding Industry	NVG	contract signed 6/9/80
British Shipbuilders (UK)	Two SD14 general cargo ships of 15,000 tons dw	NVG	order placed 6/3/80
Uddevallavarvet AB (Sweden)	Two <i>Viking Eagle</i> , "Aframax" tankers	NVG	sold 5/29/80
Nippon Kaiji Kyokai (Japan)	Negotiation for agreement to certify all Chinese ships being built in Japan	NVG	announced 5/7/80
Burns, Philp & Co. (Australia)	Joint venture shipping agency to handle all Chinese vessels trading in Australia and South Pacific ports	NVG	signed 5/7/80

Company/Country	Product/Plant/Technology	Value	Status Date Announced
Aegean Sun, Inc. (Greece)	Shelterdecker "Aloha," 16,214 dwt on 9.5m, built 1976	\$8.5 million	sale announced 4/28/80
Sudan Shipping Line, Ltd. (Sudan)	a) Shelterdecker "Maridi," 7,771 dwt on 7.792m, built 1960 b) Shelterdecker "Shendi," 7,723 dwt on 7.792m, built 1961	\$1.73 million (for both)	sale announced 4/28/80
(Pakistan)	Two ships 4,500 dwt each, to be delivered by end 1981	NVG	agreement concluded 4/80
Consolidated Gold Fields, Ltd. (UK)	a) Bulk carrier "Devonbrook," 31,200 dwt on 10.655m, built 1979 b) Bulk carrier "Durhambrook," 31,200 dwt on 10.655m, built in 1978	\$36 million (£15.75 million for both)	sale announced 4/11/80
Haven Automation Pte., Ltd. (Singapore)	Joint venture to service ships in Chinese ports	NVG	agreed in principle 7/18/80
Hitachi Shipbuilding & Engineering Co. (Japan)	Contract to design with China a 100,000 dwt iron ore bulk carrier	NVG	contract signed 8/12/80
<b>Steel Plants and Equipment</b>			
Siemens AG (West Germany)	Electrical equipment for a cold-rolling steel mill in Shanghai	\$70 million	contract received 7/14/80
Nippon Steel (Japan)	Training and software services for operation of Baoshan steel complex	NVG	announced 6/28/80
<b>Telecommunications</b>			
Nippon Electric Co. (Japan)	Satellite ground station	\$8.7 million (¥2 billion)	contract awarded 6/11/80
<b>Textile Plants and Equipment</b>			
Birla Group (India)	Supply of a complete rayon plant	\$54 million	negotiation announced 7/5/80
Toyobo Co. Sumitomo Corp. (Japan)	Polyester fiber plant capable of producing 30,000 tons of undrawn yarn for staple per year	\$9.3 million	agreed to purchase 7/7/80
<b>Textiles Products</b>			
Mitsui & Co. (Japan)	Dehaired cashmere from Inner Mongolia, 100 metric tons a year	NVG	arrangements completed 7/3/80
<b>Tourism</b>			
Yick Ho Ltd. (Hong Kong)	Joint venture to finance, build, and manage 1,500-room Palace Hotel in Beijing	NVG	announced 7/80
Clement Chen (US)	Joint venture to build 500-room hotel	NVG	announced 7/80
ACI Fibreglass Ltd. (Australia)	Acoustiboard and ACI Pink Batts for motel project	\$120,000	shipped 5/6/80
Carrian Group (Hong Kong) and Herdis Group (Philippines)	Joint venture for construction of three hotels in Beijing, Shanghai, and Hangzhou	NVG	announced 7/29/80
Golf Shinko Development (Japan)	Joint venture for golf course of international standard in Beijing suburbs, to be completed in about a year	\$4 million	announced 6/14/80
<b>Transportation Equipment</b>			
Volvo (Sweden)	Barter deal for trucks and machinery	NVG	announced 7/15/80
Renault Industrial Vehicles (France)	Bilateral economic and technical cooperation	NVG	talks announced 7/15/80
Ing C. Olivetti & Co. (Italy)	Computerized traffic management equipment and technical assistance for China's railways	\$1 million	contract signed 7/80
Citroën (France)	Negotiations for two projects to make Citroën cars in China	NVG	talks announced 7/8/80



Company/Country	Product/Plant/Technology	Value	Status Date Announced
Nichimen Co. Tokyu Car Corp. Tokyo Sakudo Co. (Japan)	Construction of Mt. Tai Shan ropeway in Shandong Province	NVG	contract won 5/28/80
Angloco Ltd. (UK)	Road rescue tender on Land Rover chassis	NVG	delivered 4/29/80
McDonnell Douglas (US)	Contract for China to manufacture and supply 200 landing gear doors	\$2 million	contract signed 7/9/80
Dowty Group (UK)	Modernization of marshalling yard in Guangzhou	NVG	negotiations announced 6/12/80
Chua Heng Industries Pte., Ltd. (Singapore)	30 air-conditioned buses for Motor Transport Co. of Guangdong (joint venture between Inchcape Enterprises, Hong Kong, China Merchant Steam Navigation Co., and the Guangdong Province Traffic Dept.) and Hong Kong, Ltd.	\$1.1 million	contract won 8/6/80
<b>Miscellaneous</b>			
Federal Paper Board Co. (US)	Contract to supply Chinese government with recycled paperboard and pulp	\$20 million	contract received 7/2/80
Bremen Melchers & Co. (W. Germany)	China Jewelry Co., Ltd., jointly-financed company to be set up in Bremen	NVG	protocol signed 7/1/80
TSP Sports (UK)	Contract signed for China's national teams to wear TSP clothes when competing in tournaments or exhibitions throughout the world	NVG	contract signed 5/22/80
Sri Lanka State Gem Corp. (Sri Lanka)	Blue sapphires, cat's eyes, rubies, and star sapphires	\$1.5 million (£650,000)	sold 5/15/80
(UK)	The Whicker's World program on San Francisco policewomen	NVG	sold 5/20/80
JPD Enterprises (US)	a) Written approvals to produce TV special on location in PRC for 20th Century Fox Television b) Agreement negotiated to develop US clients for commercial TV advertising in PRC c) Agreement to represent sale of airline terminal billboards in Beijing, Canton (Guangzhou), and Shanghai to US companies and agencies d) Sale of advertising space in the in-flight magazine aboard CAAC airlines, serving domestic and international routes for the PRC	NVG	agreements announced 5/12/80
BBC (UK)	Agreement allowing for exchange of TV and radio programs and information	NVG	agreement signed 6/3/80
China Contemporary Artists, Inc. (US)	Joint agreement signed with Guozi Shidian to market original paintings, reproductions, and art books by Han Meilin	NVG	agreement signed 6/80
L'Oréal (France)	Will open Western beauty salon for men and women at Guangzhou's Dongfang Hotel	NVG	announced 6/11/80
American International Group (US)	Joint venture to form China-America Insurance Co.	NVG	announced 7/15/80
(Hong Kong)	Hope to build marina and luxury resort facilities on southern Guangdong coast	NVG	announced 7/80
Daiwa Securities Co., Ltd. (Japan)	Business agreement to modernize Chinese capital and develop industry and tourism	NVG	agreement signed 7/4/80
(Hong Kong)	Contract signed to demolish and rebuild a stretch of Yuan Jiang Road Two along the Pearl River in Guangzhou. A housing estate comprising 14 buildings is to be built on site.	NVG	contract signed 6/27/80

Company/Country	Product/Plant/Technology	Value	Status Date Announced
Silver River Investment, Ltd. (Hong Kong)	A residential development in Guangdong Province	\$3.7 million loan arranged by Bank of China	announced 6/27/80
Sun Su Tung, Ltd. (Hong Kong)	Agreement with Guangdong authorities to build a housing project about 50 miles south of Guangzhou	NVG	agreement announced 6/27/80
Black Clawson International (US)	Order to equip a paper mill in Beijing	\$2.3 million (£1 million)	order won 4/24/80
Burns and Roe, Inc. (US)	Ten-year cooperative agreement with PRC to provide engineering services in environmental control field	NVG	agreement signed 7/24/80
March & McLennan Companies (US)	Will act as broker in placing insurance coverage for their clients' operations in China with People's Insurance Company	NVG	letter of understanding signed 7/23/80
Time-Life, Inc. (US)	Publishing agreement to improve delivery and distribution of the newsweekly	NVG	agreement signed 6/3/80
Seiko Co. (Japan)	Technical assistance agreement with two Chinese watch plants on production of stainless steel watchcases	NVG	agreement concluded 6/11/80
Nippon A.V. Productions (Japan)	Joint production of a documentary film about three national minorities in southwest China	NVG	agreement signed 5/6/80
International Research Associates (US)	Agreement on research exchange	NVG	agreement reached 7/24/80
(Japan)	Will build with China a 1,000-bed hospital combining traditional Chinese medicine and modern methods. The hospital is to include teaching, research, clinical practice, nursery school and rehabilitation center	"Gratis aid"	announced 8/1/80
<b>Licensing</b>			
The Singer Co. (US)	Order for 2,200 industrial sewing machines, and negotiation for a licensing agreement to produce its industrial and consumer sewing machines in China	NVG	announced 7/7/80
Pilkington Brothers, Ltd. (UK)	Preliminary agreement to supply under license the technology for a glass plant to be built in China	NVG	preliminary agreement reached 7/19/80
Thomson-CSF Informatique (France)	Licensing agreement for minicomputer production	NVG	agreement announced 7/10/80
Société Nationale Industrielle Aérospatiale and Société Turbomeca (France)	Contract under which China will build 50 Dauphin II helicopters under license	\$98.4 million	contract signed 7/3/80
Crane Packing (UK)	Ten-year deal to have mechanical seals produced in China under license	NVG	agreement signed 6/11/80
Du Pont de Nemours (US)	Technology to manufacture water gel explosives to go into a plant of 6,000 metric tons per year in the Anhui coal mining region	NVG	sale announced 6/23/80
<b>Total Value of 1980 Sales Listed Through August 15</b>			<b>\$ 3.3 billion+</b>
<b>Total Value of 1980 Negotiations Listed Through August 15</b>			<b>\$ 2.3 billion+</b>
<b>Cumulative Value of Sales From January 1, 1979, Through August 15, 1980</b>			<b>\$10.7 billion+</b>
<b>Cumulative Value of Negotiations From January 1, 1979, Through August 15, 1980</b>			<b>\$ 4.2 billion+</b>

NVG = No Value Given

NOTES: Contracts denominated in foreign currencies are converted into US dollars at the most recent monthly average rate quoted in *International Financial Statistics* (IMF).

Contracts concluded over two months ago are also included if they were not reported in the last issue of the CBR.



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 我不知道你的公司  
 I don't know your company.  
 我不知道你的公司的产品  
 I don't know your company's product.  
 我不知道你的公司代表什么  
 I don't know what your company stands for.  
 我不知道你的公司有那些顾客  
 I don't know your company's customers.  
 我不知道你的公司办得怎样  
 I don't know your company's record.  
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