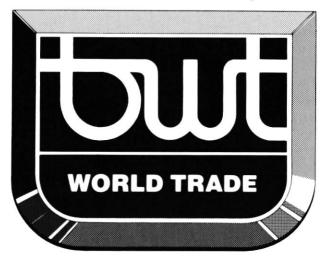


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Modern Engineering Technology gets fast response from Chinese readers — engineers and technocrats in the PRC

The first two issues of the first international technology magazine actually typeset and printed in China obtained fast response for advertisers from the United States, Europe and Japan. Only two weeks after distribution of the first issue over 1500 inquiries had been received. . .and they are coming in daily.

Sample of inquiry cards. .

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Engineer

Bureau of Capital Construction

Deputy Chief Engineer

Beijing First Machine Tool Factory

Engineer and Secretary

Electronic Society of Liaoning Province

Engineer

Beijing Municipal Design Institute Division of Bridges & Roads

Section Chief

Automation Company

Deputy Dean

Power Engineer Department Huazhung Engineering College

Engineer

Pipe Design Institute of the Ministry of Petroleum

Technician

Loyang Mining Equipment Institute

Technician

Beijing Municipal Bureau of Machinery

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There were also excellent comments on the quality of Modern Engineering Technology's Chinese. All translation is under the direction of Li May Phipps, President of the National Council for U.S.-China Trade Translation Service Inc.

Send for latest copy of Modern Engineering Technology and media information.

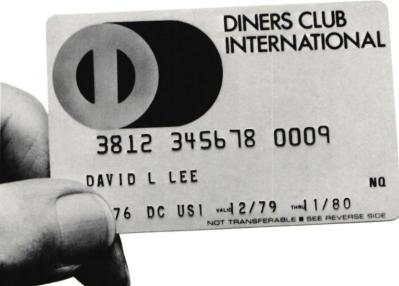
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The Magazine of the National Council for US-China Trade January-February 1980 Volume 7, Number 1





TABLE OF CONTENTS

Easing Export Controls on Dual-Use Technology	6
CHINA'S PLANS FOR INDUSTRIAL MANAGEMENT	8
The Way Ahead: Exim Expected Within a Year	14
China at the Dawn of the 1980s	20
THE DEVELOPMENT OF CHINA'S OFFSHORE OIL IN THE NEXT DECADE 2	3-36
START OF A BEAUTIFUL FRIENDSHIP: The Chinese and US Exhibitions, 1980 3	B-52
China and the IMF: An Old Member Makes Hesitant Overtures, by James B. Stepanek	55
Deficiencies in China's Energy Utilization, by Vaclav Smil	64

DEPARTMENTS		CHINA DATA	
China Calendar	4	CEMA's Responsibilities	
	5	Organization and Personnel of CEMA	10
	3	China's Offshore Oil:	
	17	Claims and Strikes	
Technical Exchange Interviews with CCPIT's Technical		Environmental Conditions	
Exchange Department	19	China's Rigs	
Exhibitions dualigation a relegit recimeles, ran	53	China's Oilfields in 1990	
RMB:Dollar Exchange Rates	66	Export Prospects and Long-Term Agreements	36
Financial Notes		Yamaha's Solo Show in Guangzhou	39
First dovernment to dovernment Education Community	66	US Exhibition in Beijing:	
Offina Degins Loan Drawings	66	Checklist	
dold bales and i roddotton	57	Equipment Categories	
Economy Enterprise Experimente run inte opposition	58	Pre-Fair Deadlines	
Agriculture Record 1979 Harvest	70	List of US Participants	
Twenty-five Point Policy	71	Extension of Credit by the BOC	56
China Bookshelf	73	China's Assets and Liabilities in Eurocurrency Banks	56
Organization		World Extension of Credit to China	57
MACHINI EX 1 CISCINICI	76	Currency Units per Chinese Yuan	58
INSTRIMPEX Personnel	76	IMF Facilities and Their Conditionality	
TECHIMPORT Personnel	77	Cost of Eurocurrency Versus World Bank Credit	60
MINMETALS Telephone Numbers in Beijing		GNP and Trade Data of the PRC and Taiwan, 1972–79	-
Banking Officials	79		
Letter from Shanghai	82	China's 1979 Trade and Production Statistics	1000000
UPDATE	86	Shanghai International Trust Service Corporation	
Front Cover: Sichuan children photographed by Stephanie Gree	n.	Sales and Negotiations Through December 31	84

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The National Council for United States-China Trade is grateful to His Excellency Huang Zhen, Minister of Culture, The People's Republic of China, for the calligraphy on the front cover of THE CHINA BUSINESS REVIEW.

China Calendar

WASHINGTON, DC, January 21-March 17

The Smithsonian Resident Associates Program will offer an eight-week series on "China's Brilliant Decorative Arts" that explores the different aspects of traditional Chinese art, including jades, lacquers, silks, ceramics, and calligraphy. Contact (202) 381-5157.

WASHINGTON, DC, March 12

National Council Vice President Stanley Young and National Council Director of Importer Services Carolyn Brehm will participate in a seminar on "Chinese-American Arts and Crafts—Specialized Production and Purchasing," sponsored by the Center for Continuing Education. Contact (202) 833-8880.

ST. LOUIS, MISSOURI, March 14

The School of Business and the School of Law at Washington University will sponsor a seminar on "Doing Business in China." Contact William C. Jones, (314) 889-6444.

ATLANTA, GEORGIA, March 18

Carolyn Brehm, Director of Importer Services at the National Council, will speak on the subject of the Chinese carpet industry and prospects for future trade at a conference on "The Carpet Industry in World Competition," sponsored by the Georgia World Congress Institute. Contact (404) 658-2950.

LONDON, ENGLAND, March 20

Business Perspectives will sponsor a one-day conference on "China 1980—The Way Ahead for Trade After the 'Reassessment.'" The conference will be opened by the Minister for Trade, Mr. Cecil Parkinson; speakers include The Rt. Hon. Edward Heath, M.B.E., M.P. Write Business Perspectives, 11 Alexander Place, London, SW7 2SG, England.

NEW YORK, NEW YORK, March 24-25

The American Management Associations will sponsor a seminar on "Legal Aspects of International Lending." Topics include "The People's Republic of China-Obstacles and Opportunities". Contact John T. Cunningham, (212) 586-8100.

BEIJING AND SHANGHAI, PRC, APRIL 1-12

WJS International and the Technical Exchange Department of the CCPIT will host leading US computer firms for technical seminars and demonstration of high technology applications. Call Janice Wise, (202) 659-9656.

NEW YORK, NEW YORK, April 10-11

National Council President Christopher H. Phillips will speak at a conference sponsored by the Graduate School of Business and the School of International Affairs, Columbia University, on "Business with China: An International Reassessment." Contact Jim Coakley (212) 280-3395.

NEW AMERICAN CONSULATE TO OPEN IN SHANGHAI

The US State Department has sent several foreign service officers to Shanghai to set up a new American consulate general at 1496 Huaihai Road. Initial officers will be:

Consul General: Donald Anderson

Deputy Principal Officers, economic and commercial affairs: Joseph Borich, Tom Lauer

Consular affairs: Tom Biddick

The Shanghai consulate will also have American support staff and eventually will add a second consular official, an administrative officer, political officer, and a representative of the International Communication Agency (ICA).

The American consulate general in Guangzhou, located on the eleventh floor of the Dongfang Hotel, has also grown. In addition to Consul General Richard Williams, it now has added Chuck Sisk as administrative officer and Richard Boucher, Ronald Cerra, and Michael Marine as consular officers. Marine is presently in Beijing, but will be moving to Guangzhou soon. The Guangzhou consulate's telephone number is: 69900, extension 1000.

No other American consulates in China are planned at present, but the consular treaty, now under negotiation, may provide for more.

CHINA WIRE

THE REASSESSMENT GOES ON

China's planners are still reassessing priorities: one analyst thinks reassessment will be a permanent feature of PRC planning. Newest changes in thinking in Beijing include—

"Ecological equilibrium" in agriculture—
What this means is a <u>de-emphasizing of agricultural mechanization</u>. Major factories increasing livestock equipment production will more than double, from 12 to 27. But major tractor plants will be cut from 65 to 35.

According to China's 25-point agricultural development plan, the new emphasis will be on diversification of non-grain activities: animal husbandry, forestry, and scientific research (see p. 70).

Transportation: Water versus land—Development of the most efficient and economical ways to transport raw materials is under study, particularly relating to coal. The SEC is bringing together the ministries of coal, rail, and communications to rationalize coal transportation. The much-touted Grand Canal renovation scheme has been stalled for some time.

Energy—Coordinating the ministries of power and irrigation and other energy-related ministries in joint projects will be a major task ahead. Conservation will be pushed. Meanwhile, a 1,500-person new energy village is to be erected near Beijing using German technology.

<u>Aerospace</u>—Scientists are debating whether China can afford to put men into space or on the moon: doesn't earth development matter more, when it comes to allocating scarce funds? Should China buy cheaper secondhand aircraft or embark on giant coproduction arrangements? What is the best long-term proposition?

<u>Defense</u>—Biggest headache for Beijing at this time may be defense purchases: how much, when, and what? Military support equipment may be supplied by the US before the end of the year.

General coordination-Striking a balance between center and provinces will be Beijing's major preoccupation in the 1980s. At present, for example, only 80 percent of China's steel production is under direct control of the Ministry of Metallurgical Industries; the other 20 percent is directed by provincial or county governments. Textiles are all under local control. About 75 percent of the chemical industry reports directly to Beijing, while 60 percent of the coal industry is centralized. The transportation sector suffers from overlapping lines of control: rail, sea, and air are controlled 100 percent by Beijing, but well over a thousand roads and waterways (other than the Yangzi) are 100 percent locally run.

SINO-US_TRADE_RELATIONS_BOOSTED BY TRADE AGREEMENT

The signing into history of the Sino-US Trade Agreement and its implementation, February 1, launched a new decade of Sino-US economic relations. What will happen in 1980?

Petroleum top in 1980 The National Council predicts that some \$300 million worth of Chinese petroleum products including crude oil and gasoline will top US imports from the PRC in 1980, more than double US imports of PRC oil products in 1979.

Expansion of craft imports MFN status may bring prices down, increasing the popularity of China's craft items, plus silks and other fashion items. Volume will rise. Light industrial products will tend to increase.

FTCs will sell more direct FTC trade reps will be joined by more, resident in the US, selling direct to US wholesalers and retailers. Already in New York—SINOCHEM at (212) 279-4273; ARTCHINA (212) 279-4271; CHINATUSHU (212) 582-2599; and MINMETALS (212) 397-9225. CEROILS will soon be here.

Exhibitions in both countries will boost trade In the fall of 1980, the new decade of Sino-US relations will get a splendid send-off with the Sino-US exhibitions (see p. 38-52).

Expect big promotions Expect bright lights and music as the PRC swings into Madison Avenue and big department stores such as Bloomingdale's, Gump's and Macy's in 1980 with spectacular promotions of various kinds.

Telecommunications The Chinese have presented NASA with specifications for a communications satellite and broadcasting system: the package deal, now in the talk stage with US firms, will cost about \$150 million (see p.7).

Other cooperation Protocols for the exchange of information and personnel in earthquake studies and earth sciences were also signed by US and Chinese government agencies in late January, and on environmental protection on February 5. More protocols are on the way in transportation, basic sciences, statistics, nuclear energy (including nuclear physics and fusion), electronics, telecommunications, construction, and urban planning.

AND ON THE CHINA SEAS

NOAA announced February 4 that the first US government vessel to visit Shanghai in more than 30 years will arrive there in June to study sediment dynamics, biology, and ocean chemistry in the Yangzi River. The \$10 million ship Oceanographer (see p. 30), will be manned by 35 American and Chinese scientists and officers.

What will be the offshore scenario in the 1980s? See p. 33. CBR predicts that China may be able to derive about 23 percent of its export earnings from oil sales by 1990, up from about 13 percent now. Those revenues will amount to \$16 billion ten years from now, following the scenario projected (see p. 36).

Hot wire from Beijing . . . Signs in factories now warn against disclosing too much information, possibly a result of the Wei Jingsheng affair.

—NL 完

Export Controls

Dual-Use in Focus

There may be far-reaching consequences for US firms as a result of the January trip of Defense Secretary Brown to the PRC. But the real messages Washington is sending to Beijing may be the data China's technical teams are gathering in the US, rather than exports of products. How the "China differential" will be spelled out remains to be seen, as this story by Karen A. Berney indicates.

Soviet actions in Afghanistan have given full play to the expansion of political, commercial, and technological cooperation between the US and China. But, as Vice Premier Deng Xiaoping recently remarked to visiting Secretary of Defense Harold Brown (January 5–13), Sino-American relations have been maintaining a momentum of their own since the early 1970s.

At the conclusion of Dr. Brown's trip, the US and China are poised to enter a new phase of strategic cooperation facilitating the transfer of "dual-use" technology and equipment previously denied to China under US export control regulations. This signals the suspension of "evenhandedness" as the underpinning of US trade policy toward Beijing and Moscow.

The new Sino-American relationship will also see broader contacts on global strategic issues such as the balance of armed forces in various parts of the world. Short of becoming partners in a military alliance, the US and China will take independent but parallel steps to counter the spread of Soviet influence.

In his farewell address in Beijing, Brown announced the future US visit of Vice Premier Geng Biao, deputy to the 78-year-old Minister of Defense, also Vice Premier, Xu Xiangqian.

An important channel of technology transfer is the exchange of scientific and technical personnel now taking place on academic, governmental, and commercial fronts. Largely through joint symposia and research, the exchange of senior scholars, and technical training programs provided by American corporations, China is upgrading its basic research and gaining access to industrial know-how.

Chinese scientists are now at Brookhaven, the Fermi Lab, and Stanford Linear Accelerator Center, spurring the national effort to build a 50-billion-electron-volt proton synchrotron at Beijing's Institute of High Energy Physics. This is the technology base for the development of high-energy particle-beam weapons.

Some defense analysts have speculated on the existence of a link between the US-China agreement on high-energy physics and China's interest in developing the neutron bomb. The thrust of a recent article in China Youth News (January 24) describing the postwar development of nuclear weapons was that China should further develop nuclear military technology with an emphasis on variety, quality, and quantity in the Chinese arsenal. The Kyodo news agency, which carried the Chinese report, pointed out that Chinese military journals have been indicating a strong interest in neutron bombs as well as other powerful nuclear weapons.

In addition to liberalizing controls on the transfer of militarily applicable technology to China, the US may be prepared to offer China's strategic planners other services. The Pentagon is now contracting with private research institutes to conduct long-range studies on Chinese military spending and priorities. The clients of these consulting firms are not limited to government agencies.

In an informal discussion with a private researcher, a Chinese military attaché alluded to the future development of defense "think tanks" in China and the possibility of securing the services of US experts to analyze and evaluate China's military requirements.

Observers of US strategic trade policy toward Communist countries do not expect a massive flow of double-edged technology and equipment to China to follow Brown's often-repeated position that the US is prepared to sell to China, on a case-by-case basis, selected items also suitable for military use. Beijing has neither the financial resources nor political inclination to engage in a full-scale program of military modernization.

Nevertheless, Secretary Brown, in a January 24 press statement, specifically mentioned trucks, communications gear, and early-warning radar as examples of dual-use items.

Other sensitive items in the categories of oil and gas exploration equipment, electronic computing devices, and integrated circuit technology are also likely to receive more favorable consideration and expeditious treatment in the export-licensing process. According to one State Department official who accompanied Brown's delegation, an important trend is underway that will manifest itself in more forthcoming licensing decisions regarding Western high technology and equipment exports to the PRC.

Bell Helicopter's application for coproducing Model 412 helicopters at the Harbin aircraft factory, for example (see *CBR* Nov.–Dec. 1979), should now receive a quick approval by the Commerce Department, while a Japanese case pending in COCOM to build a semiconductor plant is also likely to be cleared soon.

It has been reported that McDonnell Douglas is negotiating to sell its new DC-9 Super-80 jets to China. The plane is powered by Pratt & Whitney's new high-thrust JT 8D-209 engine. Its cockpit contains new

automated systems for displaying information, as well as advanced radio equipment and scanning radars.

None of these transfers constitute a direct military sale, but modern vehicle manufacturing know-how and the avionic equipment embodied in aircraft could be drawn upon to help China offset the obsolescence of its air defenses and ground forces.

The relaxation of US export-control policy toward China is having a spillover effect on the Coordinating Committee on Communist Trade (COCOM). The 15 COCOM members are now consulting in Paris on the contents of a document spelling out the formula for a "China differential" that will result in a net liberalization of high-technology exports to China by all Western countries and Japan.

On January 8, Secretary Brown gave the go-ahead for a deal that has been brewing since Sino-American normalization—the supplying of a \$10 million ground station to receive agricultural and geophysical information from the new US satellite known as Landsat D.

This sale has already stirred quite a bit of controversy. The Landsat earth station, being developed by General Electric Corporation for NASA, will contain a 4th generation digital data computer (VAX-11/780 manufactured by Digital Equipment Corp.) having an internal transfer rate of 13.3 megabytes per second (the ultimate speed for moving the data within the system) and offering an address capacity of 4.3 billion bytes (3 times the address space of IBM's 370-168).

The computer can run a nuclear reactor, do payroll checks and text editing all at the same time. Its combination of software and hardware makes it one of the most advanced computers available on the US market. There are 600 VAX systems in worldwide use, performing such functions as simulation flight training for DC-10, DC-9-80, 747 and 727 trainers.

If this sophisticated computer is installed in the earth station being exported to China, Dr. Miles Costick of the Washington-based Institute on Strategic Trade, claims that it will upgrade China's strategic and intelligence-gathering capabilities and thereby constitute a military sale.

Opposing views are expressed by US space agency officials overseeing the Chinese Communication Satellite Corporation's purchase of the ground station. So far, the corporation has not engaged in any procurement negotiations with US suppliers nor has it been determined whether China will receive the same VAX-11/780 computer slated for NASA's ground station.

However, a nongovernmental source believes that five VAX computers will be installed in the Landsat station in exchange for US access to sensitive information relayed to the Chinese station. NASA contends that the satellite will only be turned on when over China, but the US could just as easily lift the switch when it is over the USSR or Vietnam and relay the signals to China. In October 1978, the US made earth-science information gathered by Landsat over the USSR available to China at a cost of \$105,000.

Almost every type of computer can be used for nuclear weapons and antiballistic missiles calculations. But to use the VAX computers for this, the Chinese would have to strip it from the ground station, dismantle it without destroying it, master the architecture and technology and build a prototype. The sheer size of the investment required for the machinery to make a prototype, and the fact that the equipment would be ruined for Landsat's normal purposes, makes military diversion highly unlikely.

After considering the pros and cons of the sale for a year, NASA officials believe that China can be trusted to stick to the peaceful uses of the Landsat D system. They have good reason to think so.

During the 1970s, Boeing delivered ten 707 jet transports to China under the terms of a 1972 agreement. The sensitive Litton inertial navigation equipment necessary for maintaining long flights was shipped to China in sealed boxes saying "do not open." When American technicians arried to install the equipment they were pleased to find every box intact, with not so much as a string untied.

Beijing's history of honoring its agreements with foreign companies, coupled with measures to control China's access to US technology, apparently accounts for the Administration's willingness to OK technology transfers having applications in both civilian and military industry.

CHINA TO HEAR COMPANY PROPOSALS ON COMMUNICATIONS SATELLITE

China's space technology efforts are focused on building and launching an experimental communications satellite in 1981, performing transmissions experiments with other nations including France, West Germany, and Japan. But Beijing's stated intention is to purchase its first operational satellite from the US "under suitable conditions."

With the conclusion of the first meeting of the US-PRC Joint Commission on Scientific and Technological Cooperation in Beijing (January 22–24), China has edged closer toward procurement of the communications satellite, including associated ground receiving and redistribution equipment.

The president of the Chinese Academy of Space Technology, Ren Xinmin, presented NASA with a letter indicating its technical specifications for the broadcasting and communications system. These operational requirements are now being passed on to four American companies—Hughes Aircraft, Ford Aerospace, RCA, and GE—that have been invited to Beijing to deliver technical and commercial proposals. The first company is scheduled to depart in late February. Rockwell International and Comsat are competing to supply consulting services to the purchasing agent, the Chinese Communications Satellite Corporation. The package deal will cost China close to \$150 million for the purchase of three satellites.

CEMA

China's Plans for Industrial Management

"We want experts with real knowledge of management in our association. The means we are using to achieve this end is the selection of diverse management personnel, including enterprise managers, for study abroad, to learn from foreign countries and foreign companies. After they finish these tours they will return to their factories. . . ."

So stated Zhang Yanning, Secretary-General of China's first society of professional managers in an extensive interview with CBR in December 1979. Founded in March 1979 (see CBR July-Aug. 1979, p. 7), the foremost mission of the China Enterprise Management Association (CEMA) is to build a corps of managers trained in cost-accounting and cost-benefit analytic techniques for immediate application to China's lagging industries.

The following excerpts from the interview and The China Enterprise Management Association, an introductory brochure to the organization, highlight the ways in which this innovative new body intends to pursue its technology acquisition mandate: via training programs abroad, visiting lecturers/consultants, specialized management survey delegations, and through cooperation with the National Council and other foreign associations. Excerpts from the brochure, translated by Stephen Markscheid, appear in italics.

The China Enterprise Management Association (CEMA)

"CEMA is a nonprofit organization which is to achieve gradual financial independence through its own business activities. We expect our publications to cover a part of our costs; other business activities will also provide some income. Although we have no membership fees yet, eventually we will establish an equitable membership fee.

"We are now partly supported by the State Economic Commission (SEC), but hope to end this support soon.

"Consulting on a fee basis is the next stage. We hope that some of those participating in training programs will be able to stay on with foreign associations and work with them. Later, they would return to China to provide assistance to industries on a fee basis. In this, we will be aiming at service to industries, not profit. . . .

"Our publishing house was set up in June 1979. Our setup for staff and equipment has not yet been completed. We have initiated a cooperative arrangement with a printing house to print textbooks for our programs, however.

"One of the objectives of the publishing house is to issue publications reviewing our management record. It will also be an instrument of dialogue with foreign countries. We will use it to introduce efficient, progressive management techniques which we believe will be beneficial.

"CEMA, as an organization, has three main missions. The first is to train management personnel. Secondly, we will absorb the experience of foreign techniques. Lastly, we will summarize our experience and come up with a set of new ideas which we will apply to our own management system."

CEMA is divided into institutional members and individual members. It consists of those enterprises and individuals who enthusiastically strive to strengthen management, improve quality of production, and expand economic activities toward a successful result.

Since CEMA was established, members have registered in all of China's 29 provinces, cities, and autonomous regions. Many institutional members hold special positions in key enterprises in China's economy. A rather large proportion of individual members are renowned economics experts, scholars, and cadres with two or three decades' work experience in business management.

CEMA members have the right to participate in all the activities of CEMA's organizations. These organizations have priority in receiving published materials concerning the conditions of academic exchanges. They may request that CEMA help in researching and resolving any existing problems in the field of business management. They may request that CEMA's periodicals publish their articles. CEMA requests that members offer their opinions and reactions to CEMA at any time and submit academic theses and research reports.

"We have established our branch offices of CEMA

in Beijing, Tianjin, and Shanghai. In the future we wish to establish offices and associations in other provinces."

Priorities in Management Training

"CEMA is a private organization assisting the State Economic Commission (SEC) and plant enterprises to raise management standards. We are looking at management buildup across the board. Right now, our first priorities are to develop factories for producing and conserving energy, and to raise worker productivity. This includes electricity, petroleum, coal, and other plants.

"We have already carried out pilot changes in management organization and methods in textile, light industrial, metal fabricating, and other plants.

"When you talk about management, the essence is the same whether it is coal or textiles. Industrial processes have their own characteristics according to the nature of the industry; our emphasis now is on managing those processes for machinery, steel, textile, light, and energy industries.

"We need to apply what we have learned about management from foreign countries to actual conditions in China, and apply this knowledge to all levels of our management network. . . ."

Training Programs Abroad

"CEMA will soon start to send out factory management for on-the-spot training in the factory with foreign companies and associations as sponsors. We are looking at three different levels of programs—half-year, one year, and two years.

"Most of the successful candidates for the program will be experienced management personnel with the equivalent of college degrees, and outstanding college graduates. We will provide successful candidates with fundamental courses in the language of the country in which they will be stationed. The language training lasts from six months to a year. Hopefully, within six months people can communicate at least on a basic level. Some language capability is one of the criteria we use in selecting candidates in the first place.

"In organizing groups, we try to mix people of different levels of training and education. For instance, we might send two people to the same factory, one with management experience and language ability, the other with management experience only. This way, the people with greater understanding of the language can help out those with less fluency. We will not send interpreters with these missions.

"First, I want to emphasize that CEMA is operating under certain financial constraints in implementing this program. We welcome friendly suggestions from foreign companies on minimizing costs to China. If the company will pay for program expenses, CEMA can pay all transportation costs. However, we are certainly not counting out the possibility that the

CEMA'S RESPONSIBILITIES

Translate, edit, and publish books and periodicals introducing domestic and foreign business management.

A business management publishing company subordinate to the CEMA will be established in line with China's real conditions. We plan to translate, edit, and publish several books and periodicals introducing the effective experience of domestic and foreign business management so as to enthusiastically promote the improvement of business management.

Management training.

The primary purpose of CEMA is first of all to raise the skill, knowledge, and quality of professional work among cadres concerned with management.

CEMA plans to convene conferences at several industrial cities, organize academic exchanges, invite local and foreign scholars to give academic reports, and allow members to attend all these meetings.

In the future we also plan to cooperate with related ministries to convene research meetings on industrial topics, transport problems, and the responsibility of cadres and leaders at every level for capital construction work.

We invite our theorists, foreign scholars and lecturers, and those familiar with the theory and actual conditions of economic management to participate in training sessions with factory managers, institute directors, and workshop foremen in order to fully popularize quality management, economic accounting, and other fundamental management experiences and methods.

Summarize business management experience, promote management reform, and carry out experiments.

Summarizing the advanced experience of business management is the most important task of CEMA. According to the needs of its directors and members, CEMA will each year undertake to thoroughly research and investigate advanced enterprises so as to summarize ad hoc small-scale seminars, and experience exchanges will be held. CEMA will also arrange definite task forces to participate in reforming business management on an experimental basis.

Promote international exchange activities.

CEMA will endeavor as much as possible to forge relationships with all concerned business management associations in countries throughout the world. By means of mutual visits, investigations, advanced studies, supplying materials, and so forth, CEMA hopes to promote international business management exchanges to industriously popularize and utilize many effective and scientific international management measures and methods.

-From The Chinese Enterprise Management Association (translated by Stephen Markscheid)

ORGANIZATION OF THE CHINA ENTERPRISE MANAGEMENT ASSOCIATION OCTOBER 1979

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Advisor

Deng Liqun (Vice President, Chinese Academy of Social Sciences)

Vice Presidents

Ye Lin (Vice Mayor, Beijing)

Zhang Huaisan (Vice Mayor, Tianjin)

Sun Youyu (Vice Minister, First Ministry of Machine Building)

Xue Renzong (Vice Chairman, State Economic Commission)

Chen Yu (Vice Chairman, All China Labor Federation)

Deng Cunlun (Vice Minister, Railway Ministry)

Zhou Bi (Director, Shanghai Industrial Transportation Office)

Ma Hong (Vice President, Chinese Academy of Social Sciences; concurrently Director, Industrial Economics Institute)

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Zhang Yanning (Bureau Director, State Economic Commission)

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Xue Baoding (Assistant Director, Industrial Economics Institute, Chinese Academy of Social Sciences)

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Yin Chonghua (Assistant Manager, Capital Steel Company)

Li Zhanxiang (Director and Assistant Professor, Business Management Institute, Department of Industrial Economics, Chinese People's University)

Standing Members All of the above-mentioned officers and:

Fang Ming (Assistant Director, Finance and Trade Institute, Chinese Academy of Social Sciences)

Tian Fang (Assistant Director, Economics Institute, State Planning Commission)

Bai Youzhi (Director, Ministry of Coal Industries) Sun Huairen (Assistant Director, Shanghai Social Sciences Institute)

Xin Fangqun (Director, Worker's Daily Journal)

Sha Ye (Director, Beijing Internal Combustion Machinery Factory)

Du Zeduan (Vice Minister, Ministry of Light Industry) Li Hao (Assistant Secretary-General, State Capital Construction Commission)

Li Qing (Director, Transport Coordination Institute, State Economic Commission)

Zhou Gang (Vice Chairman, Liaoning State Economic Commission)

Luo Yuanjing (Assistant Director, International Economics Institute, Chinese Academy of Social Sciences)

Zhang Pu (Director, Ministry of Textile Industry) Zhao Yinhua (Bureau Director, State Economic Commission)

Zhao Dexin (Assistant Bureau Director, State Economic Commission)

Jia Qingli (Vice Minister, Ministry of Chemical Industry)

Jiang Yiwei (Assistant Editor, Economic Management, Chinese Acadamy of Social Sciences)

Liao Douyin (Vice Chairman, Tianjin State Economic Commission)

Members

Ma Bin (Vice Minister, Ministry of Metallurgical Industry)

Ma Peiwen (Leading Cadre, Theoretical Department, Guangming Daily)

Ren Wenxia (Director, Japan Research Center, Jilin University)

Lu Peijian (Vice Minister, Ministry of Finance)

Chen Bolin (Vice Director, Chinese Academy of Social Sciences Publishing Department)

Wang Haibo (Editor, People's Publishing Bureau)

Yang Da (Director, Petroleum Planning Institute) Yue Zongtai (Vice Governor, Hebei Province)

Zhang Peng (Vice Chairman, Beijing State Economic Commission)

Xu Weili (Director and Assistant Professor, Industrial Economics Department, Chinese People's University)

Xu Gongmin (Vice Director, National Labor Bureau)

Tao Li (Vice Director, National Materials Bureau)
Cui Huajing (Director, Economics Institute, Anshan
Steel Company)

Cui Yishou (Director, Daqing Oil Field Economics Institute)

Wen Houwen (Assistant Bureau Director, State Economic Commission)

Cheng Shuguang (Director, Industrial Economics Department, Beijing Economics Institute)

Sai Feng (Vice Director and Assistant Professor, Industrial Economics Department, Chinese People's University)

Pei Zhuowu (Assistant Bureau Director, State Economic Commission)

Teng Yuezong (Editor, Construction Industry Publishing Service)

Liao Jili (Assistant Bureau Director, State Planning Commission)

Pan Chenglie (Engineer, Institute of Applied Mathematics, Chinese Academy of Sciences)

company will also be willing to subsidize travel costs.

"In 1980, we will be sending out between 100 and 200 people, mostly to Japan and West Germany. The companies involved first visited China to submit proposals, which were then carefully considered prior to authorization.

"The arrangements to date have been set up in two ways. With Japan, we went through the government. We told the embassy what was needed and they agreed to find appropriate foundations to provide financing. In general, if agreements are set up via a government agency there needs to be a formal contract; for the private sector, correspondence alone is a sufficient instrument.

"The Japanese government, however, is seeking a simpler mechanism. They would like to allow companies to use memorandums—a usual practice for them—in order to cut down the paperwork. These memorandums would, of course, be addressed to CEMA alone."

Trainee Selection

"Age, education, and language background are the major criteria employed.

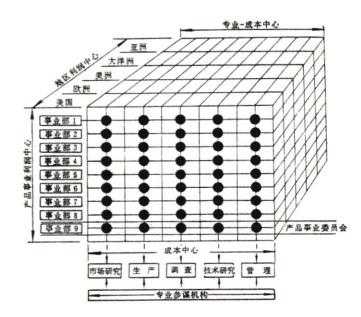
"Through tests, we will see if candidates have the educational level they claim to have. If they pass all the tests but show some deficiency in language training, we will try to give them the opportunity to improve their language abilities. Other things to check are the candidate's performance record in his factory and his willingness to travel abroad.

"Initially, candidates are recommended by branch offices of CEMA and other organizations. CEMA makes the final selection. After testing them, we group the candidates together for a short course. After its conclusion, we review the candidates and then make the definitive selection.

"These tests are not like tests in school. There are two main subjects tested—language ability, and knowledge and experience in management. But ability in management cannot be decided through tests only. We have to look at the candidate's past performance. There are some people who are highly competent managers yet who don't do well on tests. We use a combination of practical and objective criteria.

"Normally, out of three to five plant directors we would send one. We also have selected people below the factory director level who show a great deal of promise. Naturally, we assign people to substitute for them while they are abroad. Considerations are based on current need and on whether the candidate shows promise.

"We are putting the emphasis on sending factory directors because they can put their knowledge to work immediately upon return from abroad. Knowing more about the factory than anyone else, they would know what information to seek and how to put it to use better than people at a lower level. However, we are looking at long-term and interim solu-



Dow Corning's organization was a subject of study in the January 1979 issue of China's Jingji Guanli (Economic Management).

tions as well as short-term means to build up our management corps."

Longer-term Needs

"Although there is a need to send out more people who can assume teaching roles after their return to China, we have concentrated on working management personnel.

"If we sent out young college graduates now, it would be 1985 or 1990 before they would have reached the level of experience appropriate for serving as factory managers. It takes four years of education, then a period during which they can build up experience, before a younger person can be assigned such a serious responsibility. In all, for college-age candidates, we estimate a ten-year lead time prior to implementation.

"We need to raise the level of management practice within our factories now. This is the reason that we are sending directors and managers from factories in the foreign training programs established so far. They can put what they have learned to use immediately upon their return. Their ability to learn and digest new ideas should be better than that of recent college graduates.

"We will not try to obtain confidential information. For that, we will make a direct approach to the company concerned through normal trade channels.

"In the long run, management is more important than just buying equipment. Without good management techniques, we can operate our new plants at only 50 percent efficiency. This is extremely important with high cost plant imports, like steel plants which may cost us billions of dollars. If we had good managers, we could double our level of production."

Management Programs in China, Visiting Lecturers

"Training classes are sponsored by the SEC and CEMA. We are beginning our fourth class for training management people. There are over 100 people in every class, and each is for about one or two months.

"The people trained are the chairmen of economic commissions; heads of provinces, municipalities, and autonomous regions; department directors of different industrial ministries and economic commissions of big or medium cities; and the responsible members of large enterprises in China, including superintendents and managing directors.

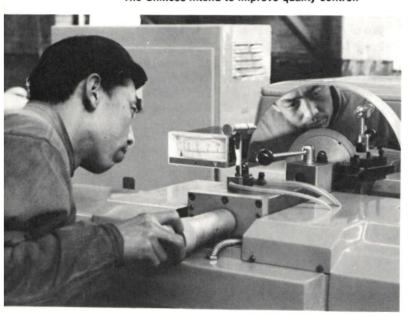
"Besides these classes, provinces, big cities, and regions have their own classes for training managers, so tens of thousands of people are attending such classes.

"We will extend invitations to scholars to give courses in China. Usually the course itself will last one month or a little longer. Then scholars will spend half a month to a month in a factory to obtain a firsthand impression of management on the factory floor. After lecture and factory tours are completed, we will ask the scholars to review their experience and give us suggestions for improvement.

"We are interested in the advice of these scholars from two points of view. One is their opinion of CEMA and the level of management techniques they have seen in action. We hope that their suggestions would not be general but based on their actual experience. We need solid, practical suggestions.

"Secondly, following their factory visit, we would like them to point out any equipment or techniques that need change or improvement. We hope that they will be able to tell us where to go for the best equipment or technology—which countries and which companies. Of course, we won't take action on these sug-





gestions as a matter of course. But depending on their cogency and reasonableness, we will use their ideas.

"Another approach would be to have the foreign scholars re-visit factories at regular intervals to assess progress in management organization, based on their suggestions." (Another official later added that China would be willing to pick up expenses, but not transportation costs, for the "scholars" in China. Room, board, and domestic travel costs would be paid for by CEMA, as well as an RMB 200–300 honorarium. CEMA would not pay salary costs.)

"Of course, every year we will continue to send and receive general intelligence delegations—some of which may be rather large. But for the most part our future delegations will be both shorter and more narrowly focused than those in the past, or the present one."

Cooperation with Foreign Publications and Associations

"We want to build up a rapport with foreign associations, especially those in the publishing field specializing in management techniques and programs. We are particularly interested in establishing close links with economic management, public administration, and magazine management associations.

"Let me give you an example. The Japan-China Association on Economy and Trade, as you know, publishes a magazine on China trade. Now they are also publishing a journal called *The Japanese Economy*, in Chinese for PRC readers. This magazine gives us a basic introduction to the Japanese economic system. China subsidizes a certain part of the costs—in China, the magazine itself is free to readers. Distribution and transportation costs are partly paid for by China. China also provides editorial input.

"The Japanese have also invited us to provide articles and economic papers for publication in their journals. They will pay for the articles. Of course, we Chinese don't care so much about the money side of it."

Cooperation with National Council

"US-China relations are improving all the time. One obstacle to further improvement is the lack of coordinating facilities at the middle and lower levels. The decision to improve relations must come from the highest levels; but lower level action is required for coordination of programs and concrete dialogue.

"In a big delegation like this one, we are seeking to gather impressions of a general nature. We realize that lack of mutual understanding has led to missed opportunities in the past, and that the problems cannot be solved just by businessmen whose primary orientation is toward profit-making. We are not aiming at political discussion on this trip, but we would like to improve our relations. The National Council should and can try to build up more opportunities for this."

China's Management Problems

PROMOTING BETTER MANAGEMENT WITH HUMOR

Though China is looking abroad for new management models, many of its problems lie closer to home in the 2,000-year-old tradition of its bureaucratic elite. The cartoons on this page show how the Chinese view some of the shortcomings of bureaucracy—from passing the buck to the "collective" system of responsibility with its grim circularity. Implied in the use of humor and jingles to promote better management is another venerable Chinese concept: to change the system, change the man who runs it; and to change the man, make him laugh. Cartoons and jingles are from issues 2, 4, 5, 7 and 8 of Jingji Guanli (Economic Management), 1979; translations by Edith Terry.

Management jingles:

"If production is to grow strong, Management must follow along."

"With leaders who can manage well, The masses' productive spirits swell."

"The door to management open wide! Find a treasure chest inside."



My...emphasis...is already...reoriented.

Captioned "Untitled," this cartoon mocks bureaucratic inertia and lethargy in the face of national programs:



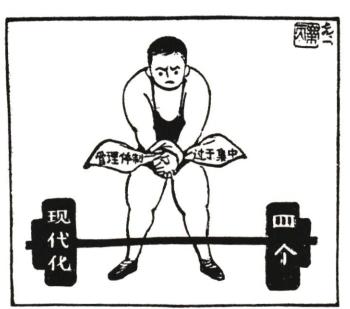
So this is the way they vigorously reorganize.

"Enterprise" is written on the body of a worker who is being pulled apart by conflicting demands of the bureaucrat and the white-smocked technician.



The workers carry applications and requests for instructions round and round a circle of unhelpful

authorities.



Hands tied without a policy.

Banner tied around wrestler's hands reads, "Management is overly centralized"; dumbbells carry slogan "Four Modernizations."

The Way Ahead

Exim and OPIC Expected Within a Year

If 1979 was the year of diplomatic normalization, 1980 will be the year of economic normalization of US-Chinese relations. The most important step in that process, the US-China Trade Agreement, is now reality. The rest of the year should see first Exim Bank financing for exports to China, then political risk insurance by the Overseas Private Investment Corporation. Aviation, maritime, and possibly textile agreements may also materialize, as well as possible discussion about extending duty-free tariff treatment to China under the Generalized System of Preferences (GSP) for developing countries. By the end of 1980, most of the impediments that have hampered US-China trade since it resumed in 1971 should be gone.

The passage and implementation of the US-China Trade Agreement were long-awaited as the pinnacle of the process of normalization of Sino-US economic relations. Yet the congressional votes on the trade agreement, which gives China most-favored-nation (MFN) tariff status, were taken before half-empty galleries, and the news of the agreement's approval was buried amid signs of worsening US-Soviet relations. Major newspapers gave it second billing under banner headlines about the House's support for the Olympic boycott and about the Defense Department's announcement that it would consider selling US military support equipment to China.

Even US importers of Chinese goods were in no mood to pop champagne corks. Months of delay since the initialing of the trade agreement last May, coupled with assurances that Congress would support it, made the passage of the agreement seem anticlimactic. Importers' biggest concern was over finding out the date of implementation—which turned out to be February 1—so they could remove their goods from bonded warehouses and take them through customs at the lower duty rates.

Most concerned were textile importers, who feared that in the rush of goods entering customs on the morning of the date of implementation, a few minutes' delay might result in a US government embargo of their imports of certain types of apparel which are subject to quotas.

The US-China Trade Agreement was approved on

January 24 by the House, with a vote of 294–88, and by the Senate, 74–8. Although the outcome of the votes was never in question, particularly given the strong anti-Soviet mood after the December invasion of Afghanistan, both houses held serious debates on the subject, and nearly 100 legislators voted against the agreement. Major reasons the opponents cited were China's record on human rights, fear of market disruption by Chinese imports, and concern over Taiwan.

The question of Chinese emigration assurances, which are required in order to waive the so-called Jackson-Vanik amendment prohibiting trade benefits to Communist countries which restrict emigration, was of special concern to the Senate Finance Committee during its hearings on the trade agreement. The committee had "extensive and confidential consultations" in December with Deputy Secretary of State Warren Christopher, who assured the senators that the Chinese had given the required assurances. The President's waiver of the Jackson-Vanik amendment for China is subject to annual reviews by Congress, which by rejecting it any given year can effectively terminate the entire trade agreement. The first review will come up this summer.

In the Pipeline: Exim Bank Financing

Now that the trade agreement has been approved and the lower tariffs are in place, Export-Import Bank financing for exports to China should be available by late spring or early summer, if all goes smoothly. Without these credits, US exporters have been at a disadvantage in competing in the China market against Japanese and European firms, which already have access to official credits.

The trade agreement opened the door for Exim Bank credits for China. Once the President has made a determination that extending Exim facilities to China is in the national interest, Exim and the Chinese must sign a bilateral operating agreement before China can become eligible. Exim plans to send a delegation to China soon to discuss this agreement.

Beyond that, Congress must increase Exim's lending authority for fiscal year 1980 to take account of credits to China. But this will probably not prove to be a stumbling block. "It's up to the Chinese," said one Exim Bank official. "If everything were settled with them, the Administration would make sure there would be enough funds." The issue of Exim's "outstanding loans" to China dating from the late 1940s has been set aside. The US still considers China responsible for them, and the PRC government does not, but the Exim Bank has agreed not to let the issue color its future program in China.

OPIC May Take Several Months

There are still several hurdles to be overcome before the Overseas Private Investment Corporation (OPIC) can offer its services to companies investing in China, but China will probably become eligible for these programs sometimes this year.

No hearings have yet been scheduled for the bill that would authorize operations by OPIC in China. That bill, H.R. 5252 in the House, S. 1916 in the Senate, was awaiting passage of the US-China Trade Agreement, but now may be further delayed because of objections raised by the US private insurance industry. In October, the National Association of Insurance Brokers (NAIB) wrote to Congressman Jonathan B. Bingham, chairman of the House Foreign Affairs subcommittee on international economic policy and

trade, who had introduced the OPIC bill in September

NAIB objected to the stipulation in the Chinese Law on Joint Ventures which states that "insurances appropriate to a joint venture shall be furnished by Chinese insurance companies." The brokers' association also recommended an amendment to the OPIC legislation that would require that American insurers be allowed to freely compete for the cargo insurance covering US-China trade.

There is no legal connection between OPIC, which provides US government-backed, long-term political risk insurance for investment in developing countries, and private insurers' right to do business with China. But there may be a political relation if the private insurance sector uses its weight to delay the OPIC legislation until the Administration talks with the Chinese about removing discrimination against US insurers in US-Chinese joint ventures.

Once the House and the Senate approve the OPIC authorization bill for China—and there is no time limit on the legislation, so it may drag on for months—two steps remain. The President must formally determine that such a move is in the national interest, and OPIC and China must conclude a bilateral agreement for OPIC operations in China. This intergov-





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ernmental agreement, which OPIC has concluded with some 90 foreign countries, has a standard format. OPIC will probably send a delegation to China sometime this spring or summer to work out the bilateral agreement.

Chances Dim for Duty-Free Treatment

Now that China has nondiscriminatory tariff treatment (MFN), will it be accorded duty-free treatment under the US Generalized System of Preferences (GSP), since it is a developing country? At present, the chances are almost nil.

By law, China must join the IMF and GATT before it becomes eligible for GSP, and after that the President would have to make a unilateral decision to include China in the duty-free program. But the legal barriers are not as significant as the political barriers. The whole program of duty-free entrance to goods from developing countries has come under increasing fire in Congress, largely because of the strong opposition from the US labor movement. GSP is in place until 1984, but at that time it will expire unless Congress votes to renew it. Since the continuation of GSP is already in question because of some congressional opposition, no administration would be likely to risk the whole program by opening it to China, the most labor-abundant country in the world.

Update on Status of Various Agreements

Maritime Agreement: A US government delegation of maritime experts should be going to China within the next three months to hold talks with Chinese counterparts on a maritime agreement. General talks were held last May on a higher, policy-making level, but this will be the first time that specialists will discuss details of the agreement. Drafts of an agreement were exchanged by telegram last year.

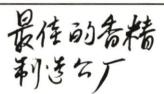
Aviation agreement: No time has yet been set for talks on a civil aviation agreement.

Textiles agreement: No time has been set for the resumption of talks on a bilateral agreement on restraint levels for imports of Chinese textile goods into the US. "It's in their court," Mark Orr of the Office of the US Trade Representative says of the Chinese. "When they want to come back to the table with reasonable proposals, we'll be ready to negotiate."

Consular Treaty: Some progress has been made toward completing a US-China consular treaty, which has been under negotiation for six to eight months. The treaty will provide protection for non-diplomatic personnel, such as consular and service staff, stationed in each country. The State Department hopes to conclude the treaty within the next four to five months.

—DJ 完

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Council Activities

NICHOLAS LUDLOW BECOMES EDITOR-IN-CHIEF

Nicholas H. Ludlow, the founder and editor of the *China Business Review*, has been named editor-in-chief of the bimonthly magazine, effective in mid-1980. Succeeding him as editor will be James B. Stepanek who, since joining the magazine staff in 1979, has served as finance editor.

In announcing the new appointments, Council President Christopher H. Phillips said that, as editor-in-chief, Mr. Ludlow would continue to exercise policy direction and general production responsibilities over the magazine and other Council publications.

"As a result of these changes," said Phillips, "Nick Ludlow will be able to devote more time to two important projects: (1) to develop an expanded flow of economic and commercial information from China for the benefit of our members, and (2) to undertake a reevaluation of the Council's future role in light of rapidly changing developments in China and the normalization of Sino-US political and economic relations."

Mr. Ludlow came to the Council from Business International in New York in 1973, shortly after the Council was established. He served first as Director of Publications and Research, and since May 1979 as Executive Director of Publications, Research, and Planning. Thus far in his career at the Council, Mr. Ludlow has been responsible for the editing and production of over fifty publications, thirty-eight of which are major reports, dealing with all facets of China's industry and trade.

In 1976, he organized and escorted the Council's first industrial delegation to China. Most recently, Mr. Ludlow organized and accompanied the National Council's Construction Equipment Delegation to China, in December 1978.

In addition to editing and regularly contributing to the China Business Review, which he launched six years ago with a staff of two, Mr. Ludlow organized the recent conference on Selling Technology to China, held in Washington during December 5–6, and has contributed invaluable direction to other Council activities, particularly the Kennedy Center gala reception for Chinese Vice Premier Deng Xiaoping last January. He has an honors degree from London University.

Mr. Stepanek has written on financial and economic management topics for the magazine. He formerly worked for Harper and Row, and the Brookings Institution, and holds degrees from the University of Colorado and Columbia University.

1980 DELEGATIONS

The Delegations Department is currently discussing with the CCPIT plans for delegations to China for 1980. Earlier the department submitted to the Chinese a tentative schedule of delegations to China, based on the over 400



Nicholas H. Ludlow will become editor-in-chief.

abstracts received from more than 100 Council member companies in various industrial areas. So far, two have been confirmed: an agricultural mechanization group of five companies to go to China in April, and a port operations group to China in late April. As soon as the Council receives concrete news of other delegations, all interested companies will be informed through the committees.

The Council will be host to at least two important delegations from China this spring: a State Economic Commission delegation interested in coal transportation, which arrived in February, and a Bank of China group, headed by BOC Chairman and President Bu Ming, to arrive in June. The Council will also arrange and escort a delegation from the People's Bank of China, hosted by the US Federal Reserve system, in late April.

COUNCIL LAUNCHES IMPORTER NEWSLETTER

The Importers' Service Department of the National Council has just mailed out the first issue of the Council's newest publication: China Importer. This 2-page monthly newsletter will appear during the first week of each month. It will contain news of special interest to importers: importer committee meeting reports, changes in import regulations, commodity market reports, Chinese selling delegations to the US, changes in Chinese foreign trade corporations, etc. The first issue of China Importer has been mailed to all Council members; subsequent issues will be sent free to all members who wish to receive it.

A similar newsletter, designed to provide information on exporter committee activities of direct interest to Council members only, is also planned.

Just returned from China is the second of two back-to-back petroleum equipment and services delegations sent to China through the Council. Both visited the Shengli oil-fields and conducted technical seminars in Beijing. The Council also plans to send an exhibitions delegation to China this spring to discuss details about US exhibitions in China over the next few years.

LAWYERS CROSS-EXAMINE CHINA

A group of some 23 attorneys, representing the Legal Committee, recently returned from a Council-sponsored tour of China which was arranged in cooperation with Middle West Trading Company. The group visited Guangzhou, Shanghai, and Beijing and held various legal discussions arranged by the Legal Affairs Department of CCPIT. The participants included attorneys both from Council member law firms and from other Council member companies.

NEW COUNCIL REPS IN HONG KONG

The National Council is arranging to be represented in Hong Kong by the American Chamber of Commerce (AMCHAM) there, following the resignation of John Kamm, who has represented the Council there for over three years. Effective April 1, Kamm will be devoting his full time to his own company, Primary Sources Ltd., as a manufacturers' representative, as well as to his publication business.

In order to allow an overlap of one month, it is expected that AMCHAM will begin on March 1 to offer the same services for National Council member companies as Kamm offered: arranging appointments in Hong Kong, providing

PHILLIPS ANNOUNCES 1980s PREDICTIONS

Describing the 1980s as a "new era for US exports to China," National Council President Christopher H. Phillips predicted that total US-China trade in 1980 should reach about \$2.5–3 billion. By 1985 the US should have 12 percent or more of the China market—"\$8 billion or so," he said. But he warned that American companies could expect these results only if they were more aggressive and took China's needs into consideration.

He also cautioned companies to be patient and not look too closely at today's bottom line. "It's vital for US firms to understand that the point of China's reassessment is to set new foundations for the next twenty years." He predicted that preparations will be be going on for the next two years before the action starts building up again. But there will be plenty of sales this year and next.

Of the total US-China trade in 1980, US exports to China should reach \$1.8–2 billion, with raw cotton and foodstuffs accounting for as much as \$1 billion, and with a higher share of manufactured goods than in the past. Total imports from China may reach \$700,000 to \$900,000 in 1980, up from \$550,000 in 1979. Once again, crude petroleum will probably be the top US import from China.

information on events in Hong Kong and South China, and submitting periodic reports on events of significant interest to Council member firms.

The Council's contact at AMCHAM will be Anita Li, who can be reached at:

Address: 10th floor, Swire House, Hong Kong

Telephone: 5-260165 Cable: AMCHAM Telex: 83664 AMCC HX

ANNUAL MEETING TO BE IN JUNE

The National Council's annual membership meeting will be held on June 4th at the Mayflower Hotel in Washington. The day before the annual meeting, a newly formed committee of the Council, consisting of members of the Importers' Steering Committee and chairmen of the 13 exporters' committees, will have its first meeting with the Council's Board of Directors.

FOCUS ON EXHIBITIONS

The Council's new assistant director of Exporter Services, Richard Gillespie, has reported aboard and is focusing on developing the Council's role in US exhibitions in China, as well as Chinese exhibitions in the US.

JANUARY IMPORTERS MEETING

Faced with an increasingly tense textile import situation, the apparel division of the Council's Textile Subcommittee met on January 11 to discuss problems caused by the quotas on US imports of certain Chinese apparel items. The group also formulated a recommendation to CHINATEX concerning Hong Kong joint venture factories, which have been eating up large percentages of the quotas on apparel coming into the US, further restricting amounts which US importers can bring in.

The Importers' Steering Committee of the Council, which also met in January, decided to hold a reception in each of the three American cities where the China National Trade Exhibition will be held this fall.

CCPIT'S LI ZHAOLI CONFERS WITH COUNCIL

The China Council for the Promotion of International Trade (CCPIT) Director of Technical Exchanges Li Zhaoli, on a visit to the US sponsored by WJS Inc., conferred with Christopher H. Phillips and Council staff, toured Council offices, and was honored guest at a dinner hosted by Stanley Young, the Council's vice president. During the discussions, delegations and communications matters were reviewed.

NEW REPORT ON ENVIRONMENTAL PROTECTION

A new, 340-page publication detailing China's new efforts to control pollution, called Environmental Protection in the People's Republic of China, was recently published by the Council. The book examines China's environmental protection priorities, and opportunities for US firms wishing to sell pollution-control technologies and equipment to China. It also provides full, up-to-date details of China's administrative structure, policies, standards, and legislation, examines important environmental problems in detail, describes key scientific research institutes, and reviews pollution problems and antipollution efforts in five of China's major cities. Copies can be ordered from the Council by mail for \$50 plus \$1 postage and handling.

Technical Exchanges

An Interview with Li Zhaoli

During the visit of the director of the CCPIT's Technical Exchange Department, Li Zhaoli, to the US in January, Li talked with CBR about China's technical exchanges with the US, the future of the exchanges, and the PRC's priorities in 1980.

Mr. Li, could I ask you first about the activities of the sections of the CCPIT Technical Exchange Department that deals with the United States?

Several dozen delegations, sponsored by our America/Oceania section, presented well over 300 technical topics last year. Some delegations were introduced by the National Council for US-China Trade. About two hundred topics were directly from American companies.

You also have other departments that take care of Europe and Japan. How does the US compare with those areas in the number of delegations and topics presented?

In 1979, delegations from Japan were fewer than those from the US. The delegations from Europe were just the same in number as those from the US.

How do you think the number of US exchanges will develop in the future?

The future will be bright. But where the number of delegations is concerned it depends on how many proposals are presented and the interest of the end-users in our country.

What are present priorities among the end-users in China?

With the evolution of our national economy now, we order it as follows: agriculture, light industry, and heavy industry. In the field of heavy industry, the priority will be laid on energy, including coal, petroleum, hydropower stations, on the building

material industry, and on transportation and accommodations.

We can expect there to be more technical exchanges in these areas?

That is true.

What advice do you have to American companies?

The purpose of technical exchanges is the promotion of mutual understanding and of friendship between our two countries, and the promotion of trade relations between our two countries. Technical exchanges represent preparatory work for the development of trade in the future. After the three years of readjustment of our national economy are over, I am sure our economy will develop fairly quickly. With the development of our economy, our foreign trade will surely develop, too.

What are the prospects for trade with the US?

The future of our trade with the US, I am sure, will be developed step by step.

What is the role of the CCPIT in the provinces and municipalities?

There are subcommittees of the CCPIT in several cities other than Beijing. The technical exchanges sponsored by CCPIT and our subcommittees will be constructive for Beijing and for the provincial authorities. The China Council for Promotion of International Trade—both its head office and its subcouncils—is a nongovernmental organization. The head office of our council merely provides professional guidance to our subcommittees.

Can companies contact the regional subcouncils of the CCPIT directly?

Yes, they may. If a delegation wants to have seminars in cities other than Beijing, after they have one in Beijing, then we will inform our subcommittees and solicit their opinion. If they agree, if they are willing to be the host of the delegation, they will work on it and accommodate the delegation to the city—after we have the seminars in Beijing.

Do they have to agree?

It depends on the conditions of their work at the time, because there are other departments in our council besides the Technical Exchange Department. If the delegations sponsored by other departments of our council have already arranged itineraries, that means that our subcommittees may have no time to host a delegation, so then nothing more will be done. It will be better to send us suggestions in advance in case your delegation wants to have the seminars in other cities in China, after they have the seminars in Beijing. You may have direct contact with our subcommittees about small matters, such as obtaining information, or detailed matters. As for the big matters such as the invitation of a delegation or exhibition, these things will be decided by the head office.

If CITIC is evaluating a joint venture and they want to know whether it's the best technology for China, will they send that to the CCPIT for an opinion?

Mainly they collect their suggestions from the end-users. Sometimes we, CCPIT, may say something.

How can US companies use the CCPIT to promote their product literature?

The center introducing literature and samples of new foreign products will distribute company literature. Generally speaking, if the foreign companies want us to distribute a small amount of their publications, it will be free of charge. On the other hand, if the distribution is a large amount they will be asked to pay for it fairly-but only the postage and the packing. If American companies want to sell more to China it will be important for them to let themselves be understood better by the Chinese end-users. They can introduce their advanced technologies by exhibitions, technical seminars, literature, and shows of samples.

When will the CCPIT be opening its new office building?

This year!



CHIMA AT THE

Resolving the "contradiction" between top-ranking national industrial output and low per capita distribution will be China's biggest challenge of the 1980s. The figures on these pages illustrate where China stands at the beginning of the new decade.

Output of an Economic Giant . . .

PRODUCT (1978)	TION					OTHER K INDICATO (1978)				
Crude steel		Grain (MMT)		Woven cotton fabrics (Million meters)		GNP (Billion US \$)		Foreign trade (Billion US \$)		
USSR	151.0	China	301	China	11,029	US	2,128.1	US	323.9	
US	123.9	US	273	USSR	6,972	USSR	1,046.6	FRG	262.7	
Japan	102.1	USSR	237	India	6,900**	Japan	980.2	Japan	176.2	
FRG	41.3	India	126	US	3,996**	FRG	638.7	USSR	102.8	
China	31.7	FRG	24	Japan	2,316	China	444.0	China	21.1	
India	9.5	Japan	12	FRG	160	India	105.0	India	14.6	
Electric power (Billion kwh)		Coal (MMT)		Lead ore (Thousand MT)		Land area (Million sq mi)		International reserves ² (Billion US \$)		
US	2,255	USSR	724	US	568.8	USSR	8.5	FRG	53.9	
USSR	1,200	China	618	USSR	510.0**	China	3.7	Japan	33.5	
Japan	495	US	593	Japan	182.4	US	3.5	US	19.6	
FRG	353	India	102	FRG	105.6	India	1.2	USSR	15.4	
China	257	FRG	84	China	100.0	Japan	.14	India	5.8	
India	101	Japan	19	India	9.1	FRG	.10	China	2.5	
Crude petroleum (Million bbl/day)		Cement (MMT)			Synthetic rubber (Thousand MT)		Arable land		Cattle (Million head)	
USSR	11.4	USSR	129.3	US	2.477	India	56.5	USSR	114.0	
US	10.3	Japan	84.9	USSR	1,795	FRG	30.2	US	110.9	
China	2.1	US	71.7	Japan	1,028	USSR	25.3	China	93.9	
India	.25	China	67.8	FRG	425	US	24.7	FRG	40.5	
FRG	.1	FRG	33.5	China	70	Japan	14.9	India	2.8	
Japan	.01	India	19.6	India	2	China	11.1	Japan	2.0	
Natural gas*		Bauxite (MMT)		Refined copper (Thousand MT)		Labor force ¹ (Million persons)		Civilian truck inventory (Thousand units)		
US	15,160	USSR	4†	US	1,811	China	430	US		
USSR	10,555	China	3***	USSR	1,460	India	300	Japan ³	28,312	
China	2,055	US	2	Japan	958	USSR	142	USSR	11,553**	
FRG	646	India	2	FRG	396	US	103	FRG	5.800†	
Japan	68	mula	2	China	150***	Japan	55		1,326	
India	42			China	150	FRG	26	China India⁴	1,155 359	
Iron ore Cotton yarn (MMT) (Thousand MT)			Primary aluminum (Thousand MT)		Armed forces manpower (Millions)		Merchant fleet inventory (Ships of 1,000 grt or more)			
USSR	244.0	China	2,380	US	4,356	China	4.4	Japan	1,890	
US	82.1	USSR	1,596**	USSR	2,150††	USSR	3.7	USSR	1.737	
China	55.0	US	1,368**	Japan	1,057	US	2.2	China	760	
India	37.9	India	911	FRG	739	India	1.1	US	590	
FRG	1.6	Japan	448	China	375***	FRG	.5	FRG	557	
Japan	0.6	FRG	163	India	205	Japan	.2	India	366	

¹ Data includes the armed forces and the unemployed.

² Includes foreign exchange and gold, except for China, in addition to Special Drawing Rights and reserve position in the IMF, where applicable.

³ Commercial vehicles.

⁴ Motorized goods vehicles as of March 31, 1976.

⁵ Does not include Taiwan Province.

^{• 1979} •• **19**77

¹⁹⁷⁷ 1976 † 1975 †† 1974

DAWN OF THE 1930s

Distributed Among a Billion People . . . Places China Among the Ranks of Less-Developed Nations

POPULATION (Mid-1978, millions) Country								
Rank	Province	Population						
1	China	958 ⁵						
2	India	638						
3	USSR	261						
4	US	219						
5	Indonesia	145						
6	Brazil	115						
7	Japan	115						
8	Sichuan	100						
9	Bangladesh	85						
10	Pakistan	77						
11	Nigeria	72						
12	Shandong	72						
13	Henan	70						
14	Mexico	67						
15	FRG	61						
16	Italy	57						
17	Jiangsu	56						
18	Guangdong	56						
19	UK	56						
20	France	53						
21	Hunan	51						
22	Hebei	48						
23	Philippines	46						
24	Anhui	46						
25	Thailand	45						
26	Hubei	45						
27	Turkey	43						
28	Egypt	40						



Sources: PRC State Statistical Bureau communiqué, June 27, 1979; IMF, International Financial Statistics, December 1979; Joint Economic Committee of Congress, and the Population Office,

PER CAPITA INDICATORS

GNP per capita		Grain output (Kilos per capita)		Foreign trade (\$ per capita)		Population density (Pop. per sq mi)		
	FRG	10,419	US	1.251	FRG	4.286	USSR	31
	US	9,740	USSR	907	Japan	1,534	US	62
	Japan	8,531	FRG	392	US	1,482	China	259
	USSR	4.001	China	314	USSR	393	India	532
	China	463	India	197	India	23	FRG	639
	India	165	Japan	106	China	22	Japan	798
	iliula	105	•		Omna		Japan	750
	Cotton y	arn output	Primary	aluminum		otton fabrics	Arable la	nd
	(Kilos per		outpu	t	(Meters pe	er capita per year)	(Acres ara	
	US	6.3**	(Kilos per	capita)	USSR	26.7	per capita)	
	USSR	6.1 * *	US	19.9	Japan	20.2	USSR	5.3
	Japan	3.9	FRG	12.1	us	18.3**	US	2.5
	FRG	2.7	Japan	9.2	China	11.5	India	.7
	China	2.5	USSR	8.9††	India	10.8**	China	.3
	India	1.4	China	.4***	FRG	2.6	FRG	.3
			India	.3			Japan	.1
	Cement		2 2 0		Trucks		Cattle	
	(Kilos per	ALL AND TO A STATE OF THE PARTY		Crude steel output		(No. persons per vehicle)		ns per head
	Japan	738.8	(Kilos per		US	8	of cattle)	no per neud
	FRG	546.5	Japan	888	Japan ³	10	FRG	1.5
	USSR	494.3	FRG	670	USSR	45	US	2.0
	US	328.1	USSR	578	FRG	46	USSR	2.3
	China	70.8	US	568	China	830	China	10.2
	India	30.7	China	32	India⁴	1,833	Japan	57.5
	Natural	gas output	India	14	Labor fa		India	228.0
	(Cu ft per		Coal out	Coal output		Labor force (% of population)		
US 69,382		(Kilos per capita)		USSR	52	Radio receivers		
	USSR	40,348	USSR	2.768	India	47		per capita)
	FRG	10,538	US	2,714	Japan	47	US	2.0**
	China	2,145	FRG	1,370	US	47	FRG	.4**
	Japan	592	China	645	FRG	46	USSR	.25**
	India	66	Japan	165	China	45	China	.07†
	maia	00	India	160	China	43	India	.02**
	Crude p	etroleum	maia	100	Armed for	orces	Telephor	
output		Refined	Refined copper		(No. civilians per 1 armed		(No. persons per phone)	
		capita per day)	outpu	t	forces per		US	1.3
	US	15.0	(Grams pe	er capita)	India	580	Japan	2.3
	USSR	12.0	Japan	8,330.5	Japan	575	FRG	2.7
	China	.6	US	8,269.4	China	218	USSR	13.3
	FRG	.6	FRG	6,491.8	FRG	123	India	284.1
	India	.12	USSR	5,593.9	US	99	China	319.4
	Japan	.03	China	156.6	USSR	71	Onina	319.4

Sources: United Nations, Monthly Bulletin of Statistics, November 1979; JEC, Soviet Economy in a New Perspective, US Government Printing Office, October 14, 1976; and National Foreign Assessment Center, China: Economic Indicators, December 1978, and Handbook of Economic Statistics, 1979, August 1979.

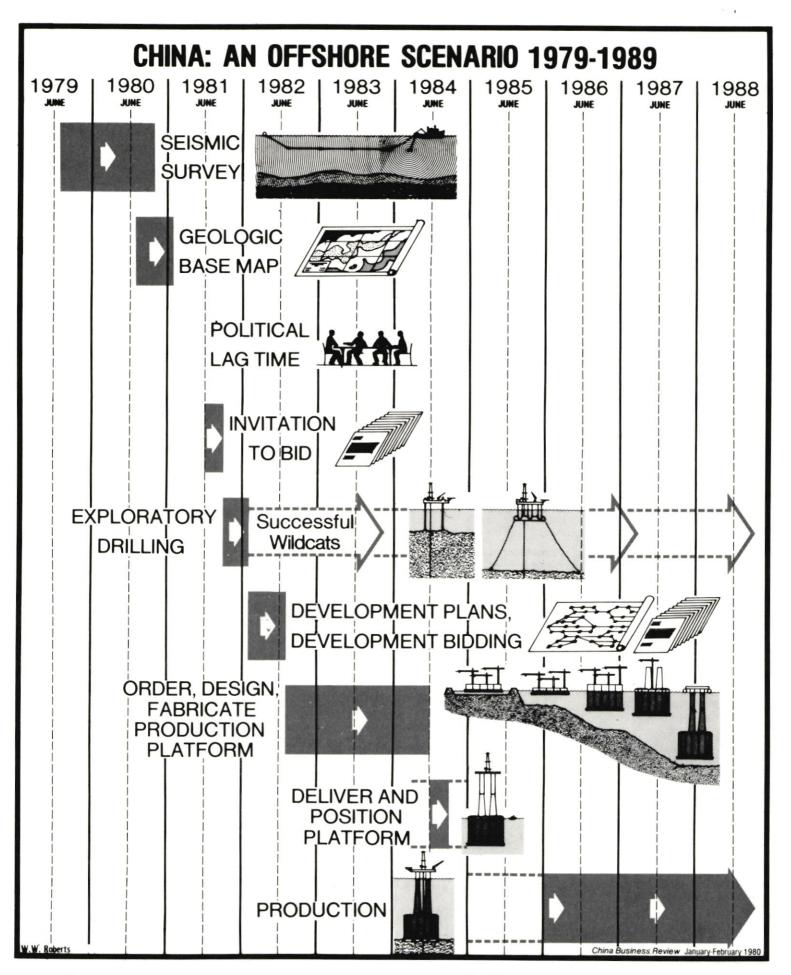
China

156.6

.03

Japan

The China Business Review January-February 1980



Prospects for the 80s

The Development of China's Offshore Oil

Kevin Fountain

There will probably be no single issue so important to China in the 1980s as the development of the PRC's offshore oil. On this the future of China's export earnings will hinge-and on these earnings China's capacity to import the technology it needs for its modernization program. China's planners must now be contemplating such critical questions as how fast do we want to get the oil out, and how much capital are we willing to risk up front? Should we develop it in stages? And when the oil is coming out, what difference will it make to export earnings? Budget planners in Beijing must be trying to assess onshore priorities as well as offshore for the next decade, not an easy decision. This detailed assessment of the realities of offshore petroleum development maps out potential scenarios-and makes predictions as to how the picture may look ten years hence, in 1990.

Few enterprises require the hazarding of such enormous sums of money on such predictably unpredictable ventures as the oil business, and rarely has the international business community responded so promptly to the advent of a new trading partner as today, to China. As a result, seldom have unfolding events been scrutinized more systematically by a broader spectrum of Western businesspeople, diplomats, military men, scholars, and soldiers of fortune than the scenario of the exploration and development of China's offshore oil.

This report sets out in detail the practical aspects and costs involved in offshore oil development. It concludes that China's offshore reserves in the Yellow and South China Seas may come on stream by 1985–86. In the Bohai Gulf, production could begin by early 1984. Development of these reserves will be achieved with the help of Western technology, expertise, and capital investment.

If exports achieve 50 million metric tons by 1990, a conservative estimate, oil revenues could pay for

nearly 23 percent of China's projected imports in 1990, as compared with only 13 percent in 1979. These revenues will represent a significant contribution to China's modernization program.

Any prediction, including the projections in this article, involves risk. Already numerous Western companies have invested senior executive time, money, equipment, and personnel for initial geological and geophysical surveys of the structures under Chinese waters. This activity is being carried out under risk contracts. The companies bear 100 percent of the cost, hoping eventually to negotiate drilling and production contracts which would earn reimbursement in crude oil when (and if) development contracts are awarded.

The gamble is very reasonable. China's offshore oil resources appear to be promising. An estimated four to seven billion tons of crude may lie in petroliferous regions off China's 2,800 miles of coastline.

China's Four-point Oil Strategy

The recent situation in Iran and Afghanistan has not only intensified concern among industrial nations over the availability of steady supplies of crude oil, but has broadened the popular reassessment of coproduction of worldwide petroleum resources. As the atmosphere in the Middle East becomes more clouded, China's role as potential partner in oil production assumes a more appealing cast.

Energy policy can become an aggressive extension of politics by other means. An article in *People's Daily* on September 12, 1979, began with the sentence, "Oil is an important strategic resource." And in China itself, the priorities given to oil have changed with the times.

During the Cutural Revolution (1966–69) China's Ministry of Petroleum was portrayed by Red Guards as a wicked "revisionist" bureaucracy. Leading officials

throughout the energy industries were "struggled against." Notably Yu Qiuli (now a vice premier and head of the State Planning Commission) and Kang Shien (also a vice premier and head of the State Economic Commission) were hounded out of office.

Since the fall of the "Gang of Four" (1976) and in the quest for Four Modernizations, the Chinese petroleum industry has come full circle. The present modernization drive will require a massive technological transplant and will mean ever-increasing levels of energy consumption. Oil stands at the center of both of these cycles of demand.

Beijing has a four-pronged strategy for financing technology transfer and raising energy production with oil, as follows:

• Holding down domestic oil consumption. The Chinese are limiting the use of oil in combustion and eliminating its use in thermal power plants. 'Energy Czar' Kang Shien reaffirmed: "Where conditions permit, all oil-burning boilers should be converted to coal-burning units this year" (1979).

- Increasing oil production. Geological and geophysical surveys both off- and onshore have stepped up their pace. Foreign help has been enlisted. (At least four Western oil companies have trekked around Xinjiang, China's westernmost province.) While, in 1974, Minister of Foreign Trade Li Qiang claimed that China "will never try to attract foreign capital or exploit domestic or foreign natural resources in conjunction with other countries," today oil companies from all over the globe are working on agreements to develop China's petroleum.
- Tapping all available energy resources to meet domestic energy demand. On August 30, 1979, Vice Premier Yu Qiuli said in Beijing that "emphasis will be placed on the development of coal utilization and hydropower plants." Already China is the second-largest coal producer in the world. The Mondale visit in August opened the door for US help for China to realize the world's greatest hydropower potential.
- **Increasing oil exports.** If domestic oil consumption can be braked as production is accelerated, petro-

WHAT KIND OF CONTRACT WILL CHINA ACCEPT?

Oil companies from all over the world have crossed the seas to search for oil off the Chinese coastline. Seismic ships are presently spider-webbing over 1,100,000 km² of ocean. Speculation on what kind of production contract the oil companies will eventually sign has been unbridled. Attention has focused upon the Brazilian, Indonesian, Algerian, and Norwegian "models" as possible ways China may contract with the international oil companies.

The "Bohai Gulf formula"—unveiled by the agreement for joint Sino-Japanese development of the Bohai Gulf signed on December 6—has provided a new paradigm for China's offshore exploration and development contracts, but will probably only apply to proven, shallow areas in which development costs are low.

The Bohai Gulf no-risk formula calls for the consortium led by Japan National Oil Company (which is reported to include Japan Arabian Oil Company, Idemitsu, Japan Petroleum Exploration Corporation, Mitsubishi, Mitsui, and Teikoku) to assume exploration costs—\$120 million—for 24,500 km² in the southern and western Bohai Gulf. The two sides will share losses if no commercial deposits are found. Development costs will also be shared; China will put up 51 percent, Japan 49 percent of an estimated \$1 billion.

The agreement is a production-sharing contract. Over a fifteen-year period, 15 percent of production will go to China and the remaining 85 percent will be divided equally. In effect, China will retain 571/2 percent of production and 421/2 percent will go to

Japan. The agreement was reached only after a year and a half of tough negotiations.

Japan's government made substantial contributions to the successful talks. Announcement of a \$1.5 billion 7-year government-to-government loan to China for modernization projects accompanied disclosure of the exploration-development formula.

The role played by the Japanese government qualifies the possibility that the same pattern will be followed in other offshore areas. Zhang Wenbin, president of the Petroleum Corporation of the PRC, told the National Council in 1979 that no concrete formula has been established for Yellow Sea and East China Sea agreements. Zhang parried direct reference to JNOC's contract in the Bohai Gulf, saying contracts will vary from area to area.

Most of the Western, non-Japanese multinational oil companies do not expect their governments to play the same positive part in negotiations as Japan. But future agreements are likely to be similarly divided into exploratory drilling and production stages.

The Western company will absorb the expense of exploratory drilling. The company may receive no rights to production at all. If China chooses other comrades for joint development, the company will be reimbursed for its exploration investment.

Production contracts will probably assume a production-sharing formula, rather than the service contract favored by the Petroleo Brasileiro S.A. (Petrobras). The Brazilian petroleum industry seeks to pay the companies in hard currency rather than crude,

leum exports can increase. Ironically, the very energy alternatives that may decrease the requirement for oil in power generation—for example, hydropower stations—and the facilities necessary for increased domestic oil production, themselves carry very heavy price tags which will also serve to divert Chinese petroleum toward the international market.

The politics of crude oil is hardly simple. Not only may China's ministries be competing among themselves for future revenues from petroleum sales, but two ministries seem to be jostling for leadership in exploration drilling. The China Oil and Natural Gas Exploration and Development Corporation, a subsidiary of the Petroleum Corporation of the PRC—which is under the Ministry of Petroleum—has been challenged by the China Geological Exploration Corporation of the newly formed Ministry of Geology.

The successful August 13 wildcat in the Pearl River estuary has received worldwide attention. But little-noticed was news of a ceremony in Guangzhou on October 10 to present awards to seven units subordi-

nate to the South China Sea Geological Survey Command of the Ministry of Geology. The teams were commended "for drilling the first high-yielding industrial oil well on the continental shelf."—411 metric tons per day.

'The Bureau of Geology was formally reinstated to ministry level only on September 5, 1979, but the rivalry between competing exploration corporations is not new. Why at this critical time would China's leaders elect to disturb the very petroleum bureaucracy that they count on to generate energy and earn hard currency? Perhaps the very centrality of oil to China's development prospects leaves some officials wary of a powerful petroleum technocracy. Governments' concern over their ability to control giant oil industries may be, in this respect, "Standard."

Troubled Waters

Two "beacons of friendship" have been installed on the tiny, uninhabited Xisha Islands in the South China Sea south of Hainan Island. Nominally, the

WHAT KIND OF CONTRACT WILL CHINA ACCEPT? (Continued)

an approach that would aggravate the very problems the Chinese are trying to solve.

The Algerian model may be of most interest to the Chinese because Algeria is a socialist nation. The dominant role of the state in arranging and directing a planned economy is orchestrated within the oil industry by the Société National pour le Transport et la Commercialization des Hydrocarbones (SONATRACH).

Foreign companies have been allowed to participate in Algerian oil ventures as "active" or "passive" participants. An active participant joins a 49/51 percent joint venture with SONATRACH. The company puts up 35 cents per barrel of purchased oil for exploration. SONATRACH pays for 51 percent of exploration expenditures.

Under the terms of a production-sharing contract, companies can claim in crude the net from their gross 49 percent of production before taxes, royalties, and duties. The passive participant pays an additional 20 cents per barrel of purchased oil for SONATRACH's exploration and development expenditures.

Norway's petroleum industry is also managed by a national oil company, Den Norske Stats Oljeselskap A/S (Statoil). Statoil has earned an international reputation for strictness in ensuring that any development of the continental shelf under the North Sea on the Norwegian side will benefit Norway. The government can also decide the rate of development of the field, an important consideration.

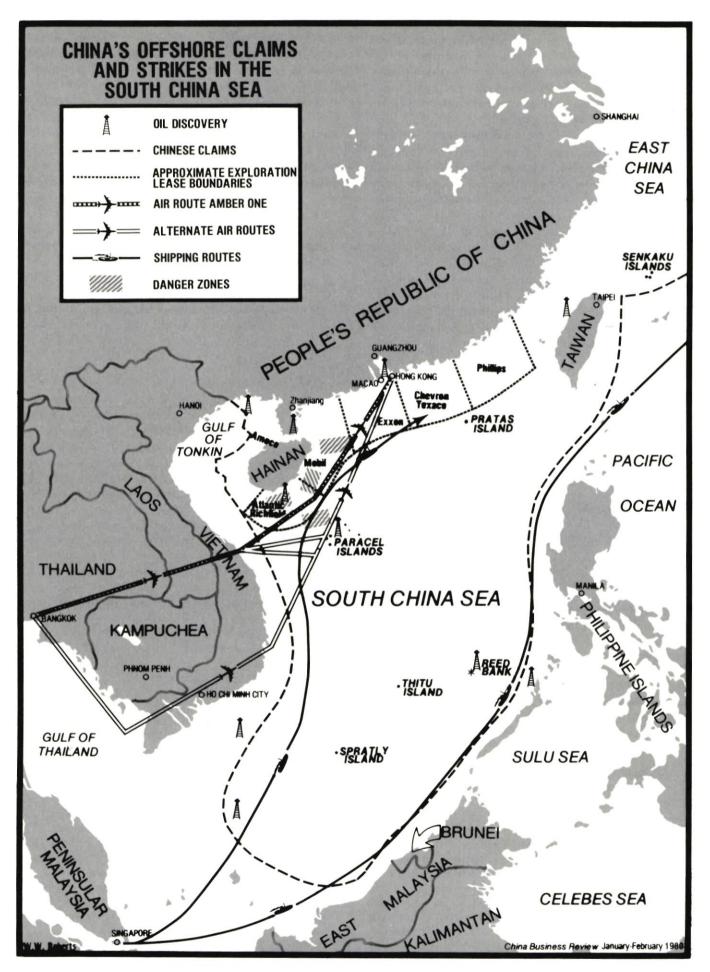
Statoil may participate directly in production under the article of "earned interest." If the state chooses instead to maintain a "net profit" interest, then Norway collects a negotiated portion of the net profits. Norway also earns revenue from taxes (corporate income, capital, and special taxes), royalties (usually 8–16 percent of the extracted oil), fees, and production bonuses.

Under terms of the production agreement for the Statfjord field, Statoil carved out a 50 percent carried interest, but has contributed its share of development costs. Royalties may be taken in kind, as is the case with the Ekofisk field.

Unlike Brazil and Norway, and like Algeria, Indonesia is a member of OPEC. Indonesia is the only Asian member outside the Middle East. The industry in that country is run by the national company, Pertamina.

"Contract of work" agreements still account for about half of Indonesia's production. The oil company as operator puts up capital, technology, managerial, and marketing expertise. Pertamina claims 25 percent of production off the top at cost plus 20 cents per barrel, plus 20 percent of the crude at "export prices" (Indonesia raised the prices for its crude at least five times in 1979), and 69 percent of the profits.

Nor is Pertamina given short shrift in its production-sharing agreements. Pertamina retains management control, while the companies shoulder exploration and development risks. These costs can be recovered up to 40 percent per year if a commercial discovery is made. After taxes, crude oil is split, rather than profits, with Pertamina's share amounting to 85 percent. Equipment becomes Pertamina's property; the companies must lease it.



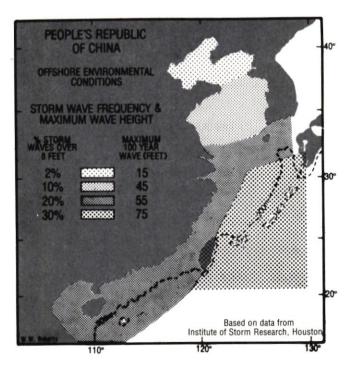
beacons were set up "to ensure the safety of Chinese and foreign ships," but the lights that alert vessels 10 nautical miles away of dangerous reefs also warn Vietnam that "the Xisha Islands, also known as the Paracels, are China's inherent territories." Now a full-fledged harbor is being constructed on "the mother-land's bright pearls on the sea."

National tempers simmer along the Sino-Vietnamese border as both sides have traded accusations of armed attacks, infiltrations, and violations of air space. Vietnam never was China's greatest friend. But the tension between the two nations has escalated to a regional level by their conflicting claims to possibly oil-rich and strategically vital waters in the Gulf of Tonkin (Beibu Wan) and South China Sea. China has invited 57 foreign oil companies to survey the different parts of the South China Sea. The foreign oil firms certainly create a presence, or buffer to Vietnam.

Vietnam has signed exploration contracts with Bow Valley (Canada), AGIP (Italy) and Deminex (West Germany) for blocks in the Gulf of Tonkin. Moreover, Hanoi has agreed with five of its new Comecon partners—Bulgaria, Czechoslovakia, Hungary, Poland, and the USSR—to cooperate in oil surveys for the decade beginning in 1981. But when China announced its agreements on seismic surveys with US companies, Vietnam shrieked that the Chinese had committed "a brazen violation of the territorial integrity of Vietnam."

The strategic value of the South China Sea may equal the dollar value of its oil. The sea lanes are a funnel (or stopper) between China's mainland and Southeast Asia. A Soviet naval presence would project considerable power into the entire region.

On October 23, Beijing issued a circular that de-



clared four "danger zones" east of Hainan Island. Flights through the busy Amber One air corridor were suspended until the end of November. Again Hanoi's reaction was vituperative, condemning China's attempt to annex the whole South China Sea.

In July of last year, two oil-rig supply vessels were attacked by a Vietnamese gunboat. Amoco's surveys west of Hainan Island were postponed by Beijing.

The tension between China and Vietnam has eclipsed the dispute among the PRC, the Guomindang (Kuomintang [KMT]) regime on Taiwan, and Japan in the East China Sea. The feud over the Diaoyutai (Senkaku) Islands may prove to be unresolvable, but diplomatic exchanges have been civil and joint exploitation of the area's resources by China and Japan is being discussed.

The Bidding Process—How US Firms Are Affected

Once China's offshore fields are delineated and blocks drawn up, some blocks will be offered for bidding. The Chinese will probably reserve other blocks for their own development and still others will be offered later. Production-sharing contracts signed for Yellow Sea and South China Sea blocks may incorporate elements of the Norwegian and Algerian models. But government-to-government talks will mean new twists in varying arrangements in nationally negotiated acreage.

For US companies, prices will not be cheap, terms will be tough, and bargaining tiresome. The Chinese press has proclaimed that the US oil companies make "staggering" profits and has reported on several of the majors by name.

The "oil price crisis" in the West is described bluntly: "The fact is that oil monopoly corporations in Western countries were the first to jack up oil prices with a view to reaping fabulous profits." The "so-called oil shortage" is explained by the Chinese less in terms of supply and demand than in terms of "plundered" resources, "windfall" profits, and the "rivalry for hegemony between the Soviet Union and United States."

The multinational oil companies' income is not that "staggering" when calculated from the perspective of return on stockholders' equity. Exxon realized a 20.1 percent return on stockholders' equity during 1979; Mobil 20.8 percent, Texaco 17.7 percent. During 1979, the average return on stockholders' equity for all US manufacturing industries was 16.7 percent.

Nevertheless, the gains of the oil companies make them prime targets for the US Internal Revenue Service. Companies must avoid "double taxation"—first by China, then by Uncle Sam—in order to make an enterprise in China cost-competitive. Since the US does not have a tax treaty with the PRC, whatever tax the companies pay to China must be determinable as "creditable" foreign taxes. Simply stated, the foreign tax must be: (1) levied on gain in the US sense; (2) directed to reach net gain; (3) levied on the receipt of

income rather than on the exercise of a privilege.

Here again, the role of the two governments in successful negotiations is crucial. American tax chauvinism, the adoption of a mirror-image standard for credibility of Chinese taxes would not only cramp the competitive position of US companies, but would inject an element of irritation into US-China relations.

"The Search for the Lost Dutchman Mine"— China's Offshore Prospects

From the Bohai Gulf in the North to the Gulf of Tonkin off Vietnam, the Chinese are committed more by virtue of their drive for modernization than by their survey agreements with oil companies—to accepting foreign help in finding and lifting their offshore oil. This is how things stand.

Bohai Gulf

In addition to the Japanese consortium which will underwrite exploration in the southern and western Bohai, French companies—the 60 percent government-owned Elf Aquitaine and the 40 percent government-owned CFP-Total—are negotiating to undertake exploration and development in the northern Bohai.

On July 21, 1979, the two companies inked a "protocol" with the Petroleum Corporation of the PRC. Chinese seismic and geological data for two concession areas of 2,000 and 2,100 km² will be processed and

CHINA'S OFFSHORE RIGS, JANUARY 1980

NANHALI JACKUP

Construction: Robin Loh, Singapore, 1976 Performance: Water depth: 300 feet

Drilling depth: 20,000 feet Work Area: South China Sea

Features: Quarters: 108; Hull: 213' x 212' x 27'; Storage: Mud and cement bulk: 5,800 cf ea; Liquid mud 1,800 bbl; Fuel: 5,088 bbl; Water for drilling: 6,948 bbl; Potable: 1,294 bbl; Drilling esuipment: Drawworks: Natl 1320 UE; Pumps: Natl 10-P-130 Triplex; Prime Movers: Five Cat. D-399 TA. Cranes: Two Natl H-65A; Derrick: Pyramid 30' x

30' base. 147', 1,392,000 lbs.

NANHAI II JACKUP

Construction: Trakuma Shipyard, Naikai Shipbuilding & Engineering Co. (Hitachi Zosen), Japan, 1976

Performance: Water depth: 300 feet Drilling depth: 25,000 feet Work Area: South China Sea

BOHALL JACKUP

Construction: PRC, Dalian, 1972 Performance: Water depth: 130 feet

Drilling depth: 18,000 feet Work Area: Bohai Gulf

BOHAI II JACKUP

Construction: Mitsubishi, Japan, 1969 Performance: Water depth: 175 feet

Drilling depth: 15,000 feet Work Area: Bohai Gulf

BOHAI IV

Construction: Hitachi Zosen, Japan/Robin Loh,

Singapore, 1977

Performance: Water depth: 300 feet

Drilling depth: 25,000 feet Work Area: Bohai Gulf Features: Formerly JU-5; Quarters: 108; Hull: 235′ x 212′; Storage: Mud and cement bulks: 6,000 cf; Liquid mud: 2,200 bbl; Fuel: 5,000 bbl; Water for drilling: 5,200 bbl; Potable: 1,200 bbl; Drilling Equipment: Drawworks: one Natl 1320 UE; Pumps: Natl 10-P-130 Triplex; Prime Movers: five Cat. D-399TA; Derrick: 147′; Pyramid; Cranes: Two Natl N-5 and one Le Tourneau PCM-80.

BAILONG SEMISUBMERSIBLE

Construction: H.K. Aker, Norway, 1974, H-3 Design

Performance: Water depth: 1,000 feet

Drilling depth: 30,000 feet

Work Area: South China Sea, Hainan Island

Features: Quarters: 78; Storage: Mud and cement bulk: 18,000 cf and 4,000 sks; Liquid mud: 1,600 bbl; Fuel 16,900 bbl; Water for drilling: 14,000 bbl; Potable: 340 bbl; Drilling Equipment: Drawworks: Emsco C-3, 3,000 hp; Pumps: Emsco FA-1600; Prime movers: four Bergen Type PVGB-12, 2,200 hp each; Derrick: 160'; 1,000,000 lb hook load capacity; Cranes: Two Aker w/128' booms; Mooring: Eight-point system 2/3" chain; 30,000 lb anchors; Seastate: Operating 35'; Survival: 100'. Formerly known as Borghny Dolphin.

KANTAN I CATAMARAN DRILL BARGE

Construction: Hudong Shipyard, Shanghai, China,

197

Performance: Water Dept: 250 feet

Work Area: Yellow Sea

Features: Built from two Chinese cargo ships joined together with drilling deck and derrick between the two hulls. On-board machinery designed and built in China.

KANTAN II JACKUP

Construction: Robin Loh, Singapore, 1976

Performance: Water depth: 300 feet

Drilling depth: 25,000 feet

interpreted by the French companies before finalization of risk contracts for exploration work. Elf and Total are not guaranteed development rights, but expect to be reimbursed if China chooses other companies or retains the rights to production for itself.

Yellow Sea

For the purpose of conducting offshore surveys the Yellow Sea has been divided into British and French spheres of responsibility. Elf will serve as operator for 60,000 km² stretching out toward Korea from the Shandong peninsula. BP will shoot 30,000 km² of the Yellow Sea north of Shanghai. Some 30 oil companies will join Elf and BP, and these companies will share

100 percent of the expenses. Participation in the surveys is no guarantee of rights in exploration or development.

South China Sea

American and other companies have signed Participation Agreements to conduct seismic surveys in six offshore areas of the South China Sea (see box). There is no guarantee under these agreements that the companies will be awarded exploration/development contracts. The results of the surveys will be given to China and made available to any interested party (approved by China) wishing later to bid. Operators conduct the actual surveys.

CHINA'S OFFSHORE RIGS, JANUARY 1980 (Continued)

Work Area: South China Sea, Pearl River Estuary
Features: Quarters: 108; Storage: Mud and cement
bulk: 5,800 cf ea; Liquid mud: 1,800 bbl; Fuel:
4,996 bbl; Water for drilling: 5,512 bbl; Potable:
2,588 bbl; Drilling equipment: Drawworks: Natl
1320 UE; Pumps: Natl 10-P-130 Triplex; Prime
Movers: Five Cat. D-399 TA; Derrick: Pyramid
30' x 30' base 147' 1,392,000 lbs.

BOHAI VI JACKUP

Construction: Bethlehem, Singapore, 1979 Performance: Water depth: 250 feet

Drilling depth: 25,000 feet Work Area: Bohai Gulf

Features: Quarters: 93; Hull: 210' x 170' x 10'; Platform: 166' x 132' x 16'; Storage: Mud and cement bulk: 6,600 cf + 3,000 sks; Liquid mud: 1,500 bbl; Fuel: 1,800 bbl; Water for drilling: 4,700 bbl; Potable: 450 bbl; Drilling equipment: Drawworks: Natl 1320 UE; Pumps Natl 10-P-130 Triplex; Derrick: 147'; 1,392,000 lb; Cranes: Two Natl OS-105; Seastate: 100 knot winds; Platform drilling slot: 50' x 50'; Mat 210' x 170' x 10' x 2' skirt.

BINHAI I DRILL BARGE

Construction: PRC
Performance: NA
Work Area: Bohai Gulf

Features: Operates as fixed platform.

BINHAI II DRILL BARGE

Construction: PRC
Performance: NA
Work Area: Bohai Gulf

Features: Operates as fixed platform.

BINHAI III DRILL BARGE

Construction: PRC
Performance: NA

Work Area: Bohai Gulf

Features: Operates as fixed platform.

UNNAMED JACKUPS

Construction: Two jackups under construction by Hitachi Zosen, Tokyo; delivery target 1980

Performance: Water depth: 300 feet

Drilling depth: 20,000

Work Area: NA

Features: Quarters: 108; Hull: 71.9m x 64.6m x 8.2m; Storage: Mud and cement bulk: 168cm x 4; Liquid mud 169cm x 4; Fuel: 885 cm; Water for drilling: 874 cm; Potable: 508 cm; Drilling Equipment: Drawworks: Natl 1320 UE, 2,000 hp; Pumps: Two Natl Triplex 10-P-130; Prime Movers: Two GM 16-645 EQ; one GM 12-645 EQ and SCR system; Rotary Table: Natl C-375; Cranes: Two Natl OS-105, 37 ton at 120′, one Le Tourneau PCM-80 AS, 25 ton at 20′.

UNNAMED JACKUPS

Construction: Two jackups under construction at Marathon Le Tourneau, Singapore; target delivery date 1980

Performance: Water depth: 250 feet Drilling depth: 25,000 feet

Work Area: NA

Features: Quarters: 90; Cranes: Three Le Tourneau PCM-120 AS w/100′ boom, 50-ton lift; Le Tourneau 82-SD self-elevating design.

UNNAMED JACKUPS

Construction: PRC, Dalian, five jackups under construction since mid-1979.

Performance: NA

Work Area: NA

Features: General Electric SER system; Continental Emsco pumps; Caterpillar motors; other US equip-

ment on all rigs.

Early participants can obtain the data on a pro-rata shared-cost basis. Companies had the opportunity to sign on as late participants before December 1979, by paying an additional premium. Participants must hand over one complete set of their respective interpretations to the Petroleum Corporation no later than eight months after receiving the last batch of processed data.

Operators for the six areas (north to south) are: Phillips, Chevron/Texaco, Exxon, Mobil, Arco, and Amoco. At least 30 companies are participating in all or most of the eight (two Yellow Sea, six South China Sea) survey areas. For example, Petro-Canada will participate in seven of the projects, while JNOC will take part in the northernmost six. In addition to the operators, American companies involved include: Cities Service, Hunt-Sedco, Murphy Oil, Occidental, Pennzoil, Shell, Texas Eastern, Union Oil of California, and Allied Chemical's Union Texas Asia Offshore.

Besides those mentioned above, oil companies based in other countries include: Ampol (Australia), AGIP (Italy), Cliff Oil (UK), Deminex (West Germany), Hispanoil (Spain), INA (Yugoslavia) and Royal Dutch.

Early and late participants are to be given access to digital tapes or provided tape copies. Operators may request cash advances from participants to meet projected expenditures for rentals, labor costs, transportation, relocation of staff, material, services including service charges or licensing fees levied by China, damages, litigation (if applicable), taxes by the operator for the joint operation, insurance, training of Chinese personnel, overhead and other expenses incurred under the agreement. Surveys were to begin in late summer of 1979 and the Chinese still hope for their completion by fall 1980.

Cost and Schedule—Seismic Surveys

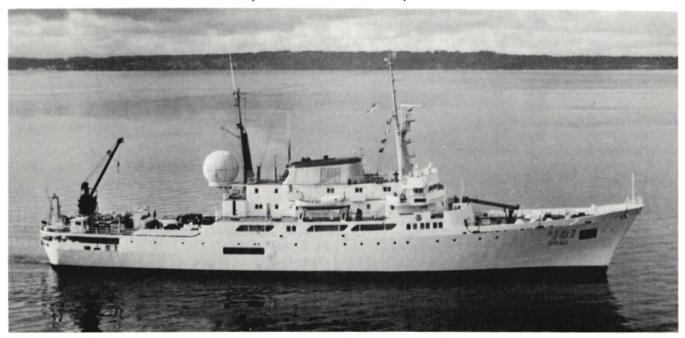
Hunting for oil is by no means cheap. Seismic surveys are usually the first step in geophysical mapping. Seismic waves are generated by an energy source, such as an array of air guns, and detected by sensitive hydrophones. Travel times, amplitudes, and changes in frequency content or wave shape are measured. Large-scale marine operations can involve ships over 50 meters in length towing a streamer two or three km long with 24 or 48 groups of hydrophones spaced along the streamer. The streamer may be towed at a depth of 10 to 15 meters, and the ship may run at six knots or so. Seismic surveys can reveal stratigraphic traps, but not whether gas or oil definitely exists.

A seismic research vessel could rent for \$15,000 per day, so that a six-month survey would cost at least \$2-3 million. The raw seismic data is processed by computers on board. At 15 seconds per record, 2 millibits per second (2,500 samples per record) and a record every 25 meters, thus 40 records per km or 100,000 samples per km, the cost of data processing could also run \$100 per km or more. Initial seismic surveys could cost \$10-20 million per area.

The seismic surveys should be completed by the autumn of 1980. Geological base maps could be given to the Chinese by the end of 1980. At this point, lag time before exploration and development stages will depend upon the dynamics of decision-making in Beijing.

By mid-1981 China should invite bidding for exploration rights, or at the earliest by late 1980. The Geological Corporation will drill some exploratory wells itself, and farm some out to drilling companies. Some operators may also drill wildcat wells.

Offshore exploration of a different kind is the focus of NOAA's Oceanographer, the first US government vessel to visit the PRC, as part of the marine sciences protocol.



The Exploration Phase—How Many Rigs and What Type?

The jackup rig will dominate exploratory drilling in China's offshore areas, but platform rigs, barges, drill ships, as well as semisubmersibles may be involved.

Barges are rather ill-suited for the East and South China Seas, if for no other reason than their hull shapes. Poor motion characteristics would be cause for upset during typhoon-watch season, May through November. The PRC already owns the active rig, the Kantan I, a catamaran built in the Shanghai Hudong Shipyard, and the Binhai II and III, active in the Bohai Gulf.

Drill ships are obviously the most mobile of rigs. They have been used to drill wildcat wells in deep waters of remote locations relatively far from shore. Drill ships may not be required for PRC waters. China is not known to have a D-ship on hand or on order.

Able to drill in deep water and still well-suited for severe weather is the semisubmersible whose massive underwater displacement hulls or caissons relocate buoyancy level below the surface and beneath wave action. Like the drill ship, the semi presents problems of positioning. Some are secured with mooring systems, others are equipped with dynamic positioning systems. Marine risers conduct the drill string from platform to well and allow for vertical and lateral play induced by wave action.

Given the depth of the waters around Hainan Island—the ocean floor slopes sharply down to 130 meters, and the seabed is soft—and the temperamental weather that guarantees typhoons, the semi may assume an important role in exploratory drilling. But semis are in short supply, and not available at discount rates. A semi can cost \$50–80 million, and rent for \$30,000 a day and up.

China has one semisubmersible rig, the *Bailong*, an H-3 design which was manufactured in Norway by Aker A.S. and bought from Dolphin International/ Fred. Olsen in 1977. The *Bailong* may be drilling step-out confirmation wells off Hainan Island. The Chinese are looking for additional semisubmersible capability.

The jackup rig will play the central role in offshore PRC exploratory drilling. Most of the areas in question—Bohai Gulf, the Yellow Sea, and East China Sea—are shallow waters, less than 300 feet deep. Jackup rigs are towed to location where their legs are extended to contact the sea floor. The platform is then jacked up above the surface. The rig itself supports storage capacity, living quarters, work and service facilities, laboratories, and helideck.

The Chinese have paid \$23 million each for two jackups scheduled to be delivered in March 1980 from the Marathon Le Tourneau shipyard in Singapore. Bethlehem (Singapore) delivered a jackup, the *Bohai VI*, in June 1979. That rig, for use in the Bohai Gulf,

has been winterized. China has requested that Japan deliver three jackups for the southern Bohai Gulf. Each will cost \$20–50 million to fabricate. Day rates from both Singapore and Japan are already reaching \$30,000 and will exceed that sum in 1981–83.

In addition to the *Bohai VI*, China owns five other jackups. Five jackups are under construction in China, all of them carrying American equipment. Two more jackups are being manufactured for China by Hitachi Zosen, and two at Marathon Le Tourneau.

A fleet of 15 jackups could maintain an impressive Chinese presence, but would not be sufficient to complete rapid and comprehensive exploration. US companies might contract three to nine rigs in 1981–84.

American drilling experts who are familiar with China's petroleum industry point out that the Chinese will need technical assistance as well as sophisticated equipment. Operation of jackups or semis and drilling technology is no simple matter. Mud engineering, for example ("mud" is a fluid composed of water or oil or various combinations of clay, chemicals, and weighting material, used to cool and lubricate the drilling bit and string, to clean cuttings from the bottom of the hole and flush them to the surface), is instrumental in pressure control and provides indispensable information about the formations encountered.

Wildcats—exploratory wells drilled in unknown or unproven territory—are expensive. Petrobras, for example, plans to spend \$5 million each for five offshore wildcats. In the North Sea, the cost of operating a drilling rig can exceed \$70,000 per day. One well can require two or three months, ringing up a bill of \$4–6 million.

This \$4–6 million figure, however, is actually only a subtotal of the real cost that the oil companies must bear for exploratory drilling. If the success ratio were one in ten, the true cost for one good well would be more like \$40–60 million.

Is it easy to guess where to drill in East Asian waters? In 1978 ten wells were drilled off Taiwan and ten off Japan—all dry. Each exploratory area will cost operators \$200–300 million, with still no payback in crude.

The Next Step-Production

From successful wildcat to production commonly requires three years. After a wildcat hit, three or four confirmation wells may be drilled. Step-out wells drilled near to a proven well in an unproven area may determine the boundaries of the producing formation. One or two months may be spent drilling each well.

The development plan must include detailed analyses of the production facilities and rates, support, transport, and storage facilities which the planners feel can optimize development of a given field.

Production platforms are not kept in stock nor are they available "off the shelf." Design, order, and fabrication of a production platform takes two or three years. Delivery, even from nearby yards in Japan will require weeks.

Once a platform is delivered, positioned, and installed, development drilling can begin. Dry wells are plugged and abandoned. Commercial wells are completed—transformed into producers of crude oil. Casing is set, cemented, and perforated. The formation may be fractured (to increase permeability) or acidized (to enlarge openings), or sand consolidated (to keep it from filling the well bore). Tubing is set and downhole safety devices such as blowout preventers are installed. The gift of crude finally passes through the Christmas tree—the assembly of valves and fittings that controls flow—to treatment equipment.

The costs for development off China—\$500 million to \$3 billion per field—are themselves "staggering." These development costs are impossible to gauge without reference to situational variables. Development costs include production facilities, pipelines, transport, and storage. Operations and drilling costs are by no means insignificant, but the enormous capital investments for facilities and equipment claim more attention from the economic forecaster.

The character of the reservoir—still an unknown variable off China—has a great impact upon the eventual expenditure for development. For example, pipelines are the most economical method of transporting crude from an offshore field if, and only if, the reservoir is large and productive enough to justify the initial outlay. Dead iron—storage tankers—may be more economical in smaller fields despite high unit costs of transport.

The investment in platforms will also depend heavily upon reservoir size and productivity. A single platform may be sufficient for a small field, whereas larger reservoirs will require a number of platforms each drilling perhaps 25 wells, and feeding a large-diameter pipeline.

The rate of flow from a reservoir is influenced both by the qualities of the oil (viscous oils are less mobile) and the permeability of the rock. A source of pressure—hydrostatic pressure from ground water, pressure from cap or dissolved gas, or even gravity pressure produced by the angle of the formation—governs the natural rate of flow. Reservoirs with lower pressure may require more wells, each of which produces less as it adds to the cost of production.

Drilling costs are a product of time and footage, both of which increase with reservoir depth. In 1977 the average cost per offshore US well was \$178.47 per foot, up from \$150.24 in the previous year. Average depth for an offshore well approaches 10,000 feet. Development wells in the 1980s offshore US will demand at least \$2 million each. In the North Sea, wells from fixed platforms already cost \$2–4 million.

The location of the reservoir also influences the cost of its development. Operating costs increase with the distance from shore. Supply links to the offshore

production facilities become costly to maintain, and equally important, the price of a pipeline grows with its length.

Environmental conditions—weather, climate, wind, and waves—affect schedules and facilities design. "Downtime"—interruptions in operations brought on by bad weather—results in a compounding of losses; not only is revenue from production halted, idle crews must still be supported, leases maintained, and maintenance crews swung into action to minimize damage from angry seas. In summer 1978, Shell's construction force of 4,000 men in the North Sea cost \$4.7 million per day to maintain. Activity must be forced through the North Sea's "weather window."

Ocean depth is the single most salient variable determining the ultimate cost and appropriate facilities for developing offshore oil. Production platforms will require \$15–300 million with installation costs also quite variable.

Shallow-water, low-production fields may be sufficiently serviced by the API self-contained drilling/production platform. This \$15 million installation offers a relatively quick return where minimizing total investment is desired. Deep-water, high-production fields may call for the North Sea Tower or Multi-Platform.

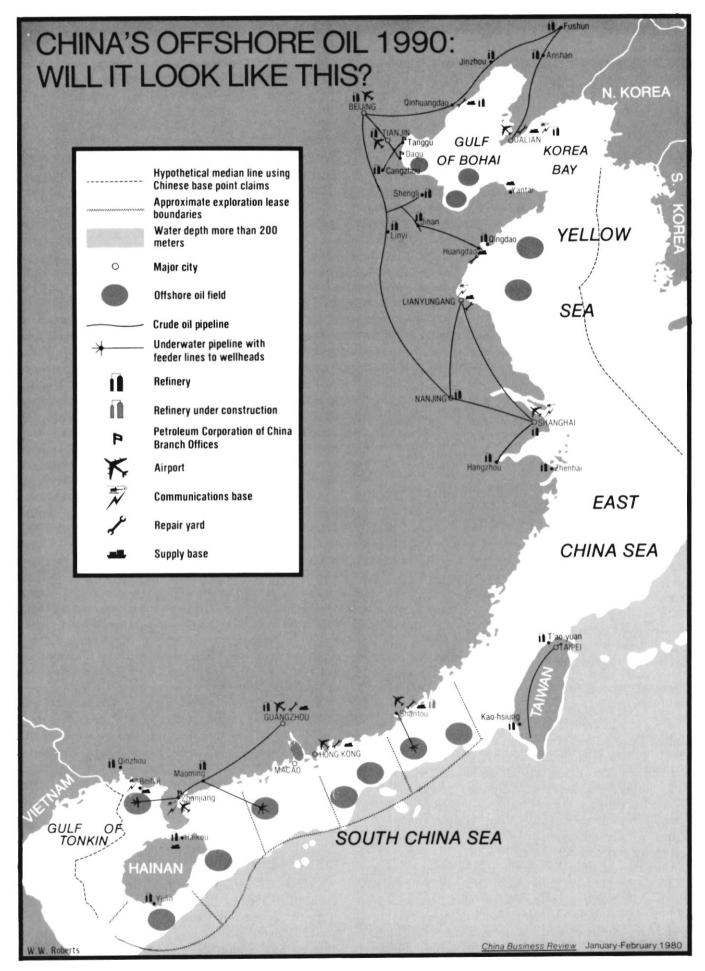
The North Sea Tower, designed for depths of 400–500 feet, may cost \$175–200 million, and requires two-and-a-half years to design, fabricate, and deliver. Chevron's spectacular central platform for the Ninian Field in the North Sea was the largest and heaviest ever moved. This and two smaller platforms, wells, pipeline, and terminal cost \$3 billion.

This multiplatform concept separates drilling and production platforms. Individual fabrication of separate platforms means that the facility is ready to begin drilling earlier than the Tower. But the Multi-Platform field is expensive—at least \$225 million.

It is easy to predict that installation costs for production platforms will be high, but impossible to nail down a figure ahead of time. Two identical platforms were installed near each other in the North Sea; one cost \$30 million to set up, but nasty weather and uncooperative equipment hiked installation costs by fifty percent to \$45 million on the second platform!

How many platforms will be needed per block depends upon the potential for commercial development in each block. If reservoirs turn out to be of low porosity and low permeability, as are many of their onshore siblings, then individual wells will not be big producers of .2–.5 million metric tons per year, but perhaps more like California wells, producing 100,000 tons.

In this situation, intensive development requires more wells, and more money. True, one platform can drill as many as 30 directional wells, kicking out from the vertical in various directions. But payout will be affected if the formation is tight (low permeability),



and if more wells and perhaps more platforms are necessary.

Transportation—the Cost of Pipeline

As noted above, there are two alternatives for transport of the crude oil from field to onshore facilities: submarine pipeline or offshore loading into tankers. Since 1973, pipeline building costs have shown what has been described as a "skyrocketing trend." But costs varied in the US from \$373,000 to \$1,433,357 per mile, with the offshore pipeline costing sometimes double that of its onshore equivalent.

The expenditure is sensitive to pipeline diameter. Offshore Louisiana: 25.1 miles of 36-inch pipeline cost \$21.9 million (including materials, \$12.1 million; installation \$7.8 million); 21.5 miles of 30-inch line cost \$12.6 million (including materials \$6.4 million; installation \$4 million). Construction costs for 8-inch pipelines usually range from \$375,000 to \$400,000 per mile compared with \$850,000 per mile for 36-inch pipeline.

The length of the pipeline is also a key factor in computing dollar outlays. For example, offshore Louisiana, 4.2 miles of 10¾-inch line cost \$1.5 million, 9.75 miles of 16-inch line cost \$5.8 million, and 15.11 miles of 20-inch line cost \$11.3 million. Cost of line pipe accounts for the highest percentage of this figure, followed by the cost of laying the pipeline. A company can charge a pipelaying barge (which might include a crew of 400!) from \$60,000 to \$120,000 per diem, depending upon the size of the pipeline, water depth, weather conditions, and a host of other factors which can affect operations. Contemporary barges can lay more than five miles of pipe per day in depths exceeding 600 feet.

Pipelines are expensive but they provide transport at lower unit cost than tankers. All of California's offshore production and 98 percent of that of the Gulf of Mexico is moved to shore by pipeline. Still, some experts have argued that the storage tanker is more suitable for Chinese conditions.

Costs—Onshore Facilities

China has no port facilities that can handle supertankers, VLCCs or ULCCs, but then neither has the United States. Supertankers require a depth of 70 to 120 feet. Hong Kong, Huangpu (near Guangzhou), Shantou, and Zhanjiang may all see business as service and supply centers for South China Sea operations. At Zhanjiang, China is already building a hotel and office complex for oil men. Hong Kong United Dockyard claims to have the capacity to supply all the backup and repair facilities necessary.

American dependence on oil imports has resulted in plans for LOOP (Louisiana Offshore Oil Port) which will consist of a marine terminal, connecting offshore and onshore pipelines, and a storage terminal. A conventional port would require massive dredging. LOOP will use three single-point moorings (SPM). The project is almost prohibitively expensive, but in some cases supertankers have cut in half costs for moving crude.

The Chinese are ever more receptive to foreign assistance with onshore development, but onshore inadequacies in transport (pipelines, storage facilities, ports) earmark offshore production for export. At present, China's deepest ports can handle vessels only up to 100,000 dwt. The bulk of domestic crude oil transportation is borne by 30,000 railroad tank cars, and 8,000 km of pipelines—the majority of oil shipments moving by rail.

Single-point mooring systems might reduce required investment in large storage facilities at coastal loading points and allow China to bypass the expense of revamping existing ports to accommodate VLCCs. It is hard to imagine China's giving export priority to oil from inland Xinjiang Province over that from the South China Sea.

Logistics—the Cost of Support

At sea, one major platform might be supported by two supply vessels and a helicopter. Neither is available in the bargain basement. Supply boats can be chartered for \$6,000–10,000 per day. A helicopter costs \$2,500 per day, and is a high-maintenance item. A large supply of parts must be kept on hand, and expert mechanics must be available. Repair personnel must have the technical ability to know which parts are likely to need repair. Oil-spill cleanup, blowout control teams and equipment—a seemingly endless list of requisite personnel and equipment hikes the total bill. Moreover, helicopters will not run well on methane and sour mash; fuel installations on shore must pump high-quality fuel.

Moving personnel among widely scattered rigs and platforms, and back and forth from onshore bases, has mothered highly inventive brainstorming. Aircraft carriers, tankers converted into aircraft carriers, floating hotel-ferries in the North Sea have all been mentioned as possible alternatives to helicopter taxi service. These projects themselves are expensive—\$20–30 million each.

The Chinese service fleet already includes tugs, utility boats, and supply vessels. Additions to the fleet are available in East Asia and Southeast Asia. Close to 50 vessels that can serve as tugs, for example, are working or ready to work in Asian waters. This figure does not include the unknown number of Chinese tugs. The *Hurui 101* towed the *Bohai VI* from Singapore to the PRC.

The Total Cost—\$3 Billion in the South China Sea

Altogether, a deep-water field in the South China Sea with reserves of 55–70 million metric tons, which at peak production from a \$200 million platform would deliver 5–7 million tons per year of crude through pipe, could cost \$3 billion to develop in the

1980s. Payback—for the US development company, 2.2–3.5 million tons per year before taxes—will not begin before 1985–86. It is not likely that the company working this field could recover its total investment before 1990. Such a field might return over \$6 billion over a 10–15 year period if 45 percent of its resources are recoverable.

The oil companies will have to pay their own way into the theatre of operations in the China Seas. Less than one-third of the sum expended on the exploration and development of Britain's North Sea oil and gas reserves has come directly from banks.

The banks, furthermore, are less likely to become involved in an unproven field. When the companies begin to see earnings from initial investments, taxation clauses make reinvestment the best option. The oil companies themselves then act as the main financiers.

Development funds come in the form of credits to an oil company, secured not against crude, but against the company's assets. But the companies are enjoying ever greater liquidity as their product becomes ever more precious.

For more risky projects advanced by smaller companies, the banks have demanded royalty payments (a percentage of their estimate of the field's reserves). Under the terms of "piggyback loans," banks have used one field as security for a loan to develop a second.

The smaller oil companies, however, are not totally at the mercy of the banker. If their organization into consortia does not provide enough assets, they may sell their share in a field to one of the majors, receiving a percentage of the oil revenue as "sleeping partner," under a "farm-out" arrangement. The majors act as bankers.

The Bank of China itself will be most affected by

the unfolding scenario of China's offshore oil. And Western assistance for China's onshore development has already entered the negotiation stage. Calculations of how much to borrow (and how much Western banks can lend) will be largely a function of how much oil China can export.

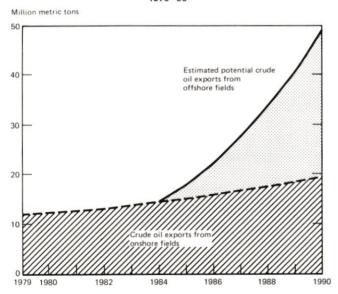
The Payoff for China

The main constraint on China's oil exports is rapidly rising domestic demand, which is expected to limit future exports to around 10–12 percent of total onshore production. With onshore production faltering due to the depletion of the Daqing oil field, and modest results to date from new fields in Hebei Province and regions further inland, the outlook is for a slow growth of oil output in the next few years.

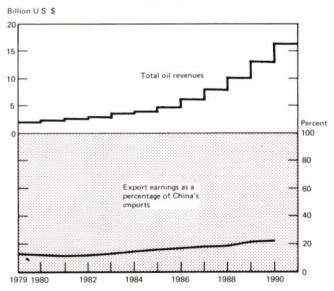
What are the prospects? And how much will China improve its export earnings as a result of its investment in offshore oil? If the export share of onshore production holds steady at 12 percent, China's onshore oil exports could achieve 15 million metric tons by 1984. Beginning in 1985, however, the startup of offshore production could significantly boost exports by approximately 20 percent per year to 50 million tons by 1990. This is based on the assumptions given in the accompanying chart, and the general opinion among US petroleum geologists that a North Sea—type bonanza is unlikely to develop.

Given these conservative estimates, China's oil revenues could approach \$16 billion in current terms by 1990, a sum equivalent to 23 percent of China's projected imports in that year. With present oil exports accounting for only 13 percent of the value of China's total imports, this increase will represent a substantial, and probably critical, contribution to China's modernization program.

CHINA'S ESTIMATED CRUDE OIL EXPORTS



CHINA'S ESTIMATED OIL EXPORT REVENUES 1979-90*



^{*} Based on data in accompanying table

CHINA'S CRUDE OIL EXPORT PROSPECTS, 1979-90

Oil	Exports	(million	metric	tons)

	on Exports (minion metric tons)							
Year	Total Onshore Crude Oil Output ¹ (MMT)	Onshore Exp Crude Oil From fro Output Onshore Offs		Total Exports	Percent Change	Export Revenues ⁴ (Billion US \$)	Exports Earnings as Percentage of total Imports 5	
1979	106.1	12.7	_	12.7	6.7	\$ 2.0	13.3	
1980	107.2	12.9	_	12.9	1.6	\$ 2.2	12.5	
1981	110.4	13.2	_	13.2	2.3	\$ 2.5	11.5	
1982	115.9	13.9	_	13.9	5.3	\$ 2.9	11.6	
1983	121.7	14.6		14.6	5.0	\$ 3.4	13.0	
1984	127.8	15.3	_	15.3	4.8	\$ 3.9	14.0	
1985	134.2	16.1	2.7	18.8	22.9	\$ 4.9	15.8	
1986	140.9	16.9	6.3	23.2	23.4	\$ 6.2	16.9	
1987	147.9	17.7	10.8	28.5	22.8	\$ 7.9	18.2	
1988	155.3	18.6	16.2	34.8	22.1	\$10.1	19.8	
1989	163.1	19.6	22.5	42.1	21.0	\$12.9	21.4	
1990	171.2	20.5	29.6	50.1	19.0	\$16.3	22.9	

¹ Crude oil production increased 1.9 percent in 1979, and is expected to increase by about the same rate in 1980-81, and by roughly 5 percent per year during the remainder of the decade.

invested in smaller fields, and \$8,000 invested in the case of large fields. It is further assumed that 100 percent of China's offshore oil is exported.

Table prepared by James B. Stepanek

CHINA'S CRUDE OIL EXPORTS UNDER MAJOR LONG-TERM AGREEMENTS, 1975–85 (Quantities in million metric tons, export values in million current US dollars, f.o.b.)

Country	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Japan ²	8.1 \$740	6.2 \$566	6.8 \$655	7.4 \$704	7.5 \$1,191	7.7 \$1,817	9.2 \$2,388	10.6 \$3,026	12.1 \$3,800	13.5 \$4,664	15.0 \$5,701
Philippines	.65 \$305	.57 \$48.1	.85 \$71.1	1.21 \$101.3	1.2 \$105.6	1.2 \$116.2	1.2 \$127.8	1.2 \$140.6	1.2 \$154.6	1.2 \$170.1	1.2 \$187.1
Thailand		.17³ \$14.7	.16 \$13.9	.50 \$36.0	.73 \$84.2	.7 \$120.9	1.1 \$208.9	1.1 \$229.8	1.1 \$252.8		
Brazil				.05 \$3.8	1.0 \$83.6	1.5 \$137.9					
Subtotal	8.75 \$1,045	6.94 \$628.8	7.81 \$740.0	9.16 \$845.1	10.43 \$1,464.4	11.1 \$2,192.0	11.5 \$2,724.7	12.9 \$3,396.4	14.4 \$4,207.4	14.7 \$4,834.1	16.2 \$5,888.
Other4	.25	1.06	.99	2.74	2.27	1.80	1.70	1.00	.20	.60	2.60
Total ⁵	9.0	8.0	8.8	11.9	12.7	12.9	13.2	13.9	14.6	15.3	18.8

3 Exports c.i.f.

Sources: Commercial sections of the Philippine, Japanese, and Brazilian embassies, Washington, DC; Mining Annual Review, 1979; Petroleum Intelligence Weekly, January 14, 1980; Ta Kung Pao, January 3, 1980; Thailand Trade Book, 1976–78; Petroleum News, August 1979; Jetro China Newsletter, December 1979; and China Business Review, September—October 1978.

² China's crude oil exports as a percentage of total onshore production fell from 13.0 percent to 12 percent during 1975-79. During 1980-90, it is assumed that the 1:8.3 ratio between exports and total onshore output will remain unchanged.

Modest recoverable reserves are assumed to exist in roughly 14 zones in the Bohai Gulf, Yellow Sea, and South China Sea for which tentative geologic data has been obtained. Potential output is assumed to be a function of investment, which could total \$23.6 billion during 1980-90 in constant 1980 dollars, yielding one million barrels per day of crude oil for every \$18,000

⁴ The price per barrel of \$22.95 is based on the year-end weighted price of Chinese oil exports in 1979 to Japan, Thailand, Brazil, and the Philippines. Crude oil prices are projected to increase by roughly 10 percent per year, the average annual rate of increase of the wholesale price index of Saudi light during 1975—79. This scenario assumes that offshore oil revenues are divided 50:50.

⁵ Based on National Council trade projections (CBR, May-June 1979, p. 12).

¹ Crude oil prices during 1980-85 are projected to increase by roughly 10 percent per year, the average annual rate of increase of the wholesale price index of Saudi Arabian light during 1975-79.

² The increase in oil exports to Japan from 7.5 million tons in 1979 to 15 million tons in 1985, mentioned in an interview with Vice Premier Gu Mu reported in a January 23 UPI dispatch, is prorated over the intervening years, 1980–84.

⁴ Exports to North Korea, Romania, Italy, the US, and other countries not contracted for under long-term agreements.

⁵ Oil export figures for the years 1975-79 are based on US government estimates, while the 1980-85 figures are based on National Council projections, using a 1:8.3 ratio of projected exports to output.
Table prepared by Helen Kauder

CHINA



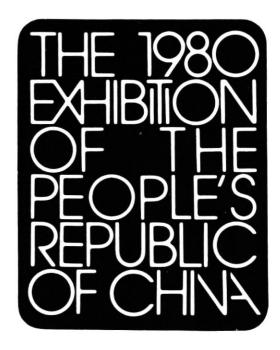
THE EXHIBITION OF THE PEOPLE'S REPUBLIC OF CHINA

EXHIBITIONS

The Chinese and US Trade Exhibitions, 1980

Edith Terry





Though not quite equal in size, the US and PRC national exhibitions to be staged in each other's countries in the fall of 1980 will be more than a match for each other as events and, promoters hope, in their lasting effect on the Chinese and US consumer. This article details what companies can expect in Beijing, San Francisco, Chicago, and New York in the fall.

The pas de deux of inaugural US-China exhibitions will begin with China's show in the US opening September 13, 1980, in San Francisco. A splashy threemonth, three-city affair, the China show will almost, but not quite, monopolize the attention of China traders and the US public at large with its heady combination of cultural and industrial attractions.

Some 800 to 1,000 US businessmen and government officials will, meanwhile, travel to Beijing in November 1980 for the US exhibition in China, midway through the course of the China exhibition in the United States. They will be in and out again in less than three weeks, mounting the largest trade show

ever staged by the US Department of Commerce (DOC) outside the US.

Despite its brief duration, the US corporate world is hoping that the long-awaited US exhibition in China will establish a major presence for US companies in the highly competitive China market. The companies represented there, plus trade promotion officials from DOC and the Department of Agriculture (USDA), and the National Council for US-China Trade, will entertain an anticipated 200,000 Chinese potential buyers with technical presentations and displays of petroleum, transportation, power generation, agricultural, and textile/light industry machinery.

Enacted simultaneously, the official Sino-US trade shows represent a joint opportunity to try out the new opportunities engendered by the US-China Trade Agreement, in force as of February 1, 1980. And both US and PRC export strategists are getting ready to see just how much image-building, inside work, and sales they can net from this initial, balanced match.

The PRC show is to run in San Francisco from September 13 to 28, in Chicago from October 25 to November 9, and in New York City from December 6 to 21. The dates for the US exhibition in China are November 17 to 28, with a special preview for VIP guests beginning the evening of November 15 and continuing through the weekend. The US show will be staged at the Beijing Exhibition Center, China's premier exposition venue. At about 28,000 square meters (including outside space currently held on option), the US event will take up exactly twice as much space as China's show in the US, the space requirements of which are estimated at 14,000 square meters (although China ends up ahead again counting all three venues—Fort Mason in San Francisco, the Navy Pier in Chicago, and the Coliseum in New York).

Though the tenor of the exhibitions will be somewhat competitive on the marketing level, underlying the competition is a lot of cooperation. The brace of national shows crowns two years of Carter Administration achievements in normalizing political and economic relations with China. They will celebrate both the beginning of a new trade relationship with China and the end of public and private grievances between the two countries.

The holding of reciprocal US and Chinese exhibitions was until recently a legal hornet's nest involving private US claims in China and frozen Chinese assets in the US. China, moreover, refused to permit a US exhibition in China until the way was clear for them in the US. "This is really the key point because politically we shall be equal with each other," Li Chuan, vice chairman of the China Council for the Promotion of International Trade (CCPIT—China's nongovernment but official business, travel, arbitration, and exhibition agency) told US businessmen in 1975.

Thus, despite the renewal of trade with the PRC in 1972, exchange of exhibitions has waited on the removal of economic constraints which limited US-China trade before 1980. With the implementation of US-China Claims Settlement and Trade Agreements in the first months of 1980, the show was on the road—and by fall 1980 when the exhibitions begin, exhibitors of both nations may well have cause to revel in the new terms of trade.

The National Council for US-China Trade will be present at both shows in members, staff, and spirit. It was the National Council that spearheaded private-sector efforts to organize exhibitions exchange, beginning in 1973. The Council's first delegation to China in November 1973 carried back home with it a verbal assurance from the Council's official counterpart organization, the China Council for the Promotion of International Trade (CCPIT), that both groups would work together on exhibitions.

CHINA '80—the US Show in China

Though CHINA '80, as the US national exhibition has been dubbed by the Department of Commerce, will be the first official US show in the PRC, it will

culminate several years in which nonofficial US exhibiting presence has been less and less low-keyed.

Since the second quarter of 1972, millions of dollars worth of US equipment and aircraft have passed through the PRC under the Export Administration's "temporary" export license category. The claims-assets issue has not interfered with sending demonstration models, or even equipment, for exhibition in China. (For an account of a recent exhibition in Guangzhou which included five US company participants, see "Guangzhou's Foreign Technology and Equipment Fair," p. 53.)

Machinery from subsidiaries of over 200 American companies has already been displayed in China, dur-

YAMAHA IN GUANGZHOU

American companies, take note: the solo exhibition by foreign firms in China is not a new idea. Many such shows have been held in the past ten years. But space in the PRC is limited and US companies must now be aggressive if they are to be sure of booking time and place in China's cities over the next few years, when other foreign companies, such as the Japanese example described here, will also be clamoring for available facilities.

A four-part exhibition by Yamaha Motor Company, Ltd., marked the inauguration of the Guangzhou Foreign Trade Center, once known as the (New) Guangzhou Export Commodities Fair Complex.

Opening on December 5, 1979, the motorcycles, sailboats, and outboard motors highlighted by the Yamaha show were appropriate symbols of the rising tide of consumerism that is pushing Guangzhou closer than ever to its near neighbor, super-Westernized Hong Kong. One of four segments and the biggest crowd-puller was a "riding school" performance in a nearby stadium. Spectators were given free lessons under the aegis of Yamaha's "Learn to Ride Safely" program.

Major products exhibited included motorcycles, FRP fishing boats, sailboats, outboard motors, multipurpose engines, and portable generators, together with photo panels showing motorcycle assembly lines and applications. In the Trade Center auditorium, Yamaha PR films were shown to customers and possibly at least a few budding drag-race fans; titles included "Road Racing," "Pole and Line Skipjack Fishing With a Yamaha FRP Boat," and "This is Yamaha."

The firm presented a range of technical seminars on production technology of FRP fishing boats and motorcycles, basic design, fishing methods, and rigging.

Hosted by the Guangzhou Branch of the China National Machinery and Equipment Export Corporation, the show ended December 15, with a reported attendance of 70,000.

WHAT TO EXPECT IN BEIJING-A CHECKLIST FOR EXHIBITORS

Split six ways, between five industrial categories and a major US Government exhibitor, participating companies should anticipate a maelstrom of activity. Based on current Commerce Department plans and past experience of US firms exhibiting through their subsidiaries, companies should prepare for the following:

- Daily turnover: Don't expect to see any but the highest-level officials more than once unless you invite them for business meetings, which DOC will help to arrange. (However, DOC encourages companies to submit names of PRC officials for the invitation list, to be handled by CCPIT although the current agenda calls for strict rationing of attendees.) Twenty thousand of the carefully screened, invitation-only Chinese end-users will be funneled through the halls each day, with 10,000 each in the morning and afternoon. Companies will have to make appointments to hold additional discussions with interested buyers.
- Expect a heavy demand on literature: Plan to bring 10,000 to 20,000 sets of information to pass out at the show (about 30 percent of total handouts; most handouts will be distributed by DOC prior to the exhibition-see "Countdown"). But don't be surprised if more is needed; one company at the agricultural machinery show in 1978 assembled 200,000 packages of promotional literature in plastic bags, all of which were passed out with help from the CCPIT. Surplus literature will be claimed by the CCPIT library—the library runs an extension service to readers all over China through the 21 CCPIT branches. Materials must also be prepared for the estimated 200 technical seminars that will take place. This will put an enormous burden on translation services.
- Develop promotional packages early: Submit materials for translation at least five, preferably seven, months ahead of time (that is, June, or better, April). The Commerce Department's agreement with exhibitors stipulates that companies hand in a "highlight condensation of the participants' sales literature" in Chinese and all other promotional materials by July. Normally, translation of promotional brochures takes one month; the better translation firms are likely to be deluged in mid-1980 and may need longer. Develop plenty of giveaway ideas.
- Bring display models, not mock-ups, and expect to sell them: According to the official CCPIT report on the 1978 agricultural machinery show, China bought 80 percent of items on display; by unofficial reports, the French sold 90 percent of their displays, and another firm's equipment was kept on

site for another two weeks for buyers' examination. However, expect demands for healthy discounts, too: "minus freight, minus 15 percent" was reported as standard at the 1978 show. But there should be no reason to sell at a loss,

- Bring backup on everything: Although DOC has sufficient power to handle all the equipment currently slated for the show, it may be advisable to bring your own generators if high power demands are anticipated. Be aware of possible problems with air compressors and waterpower in the pavilion. Single-phase 220-volt and three-phase 380-volt outlets will be available; Commerce is asking companies to supply 220-volt machines, if possible. DOC will try to provide transformers from local sources, but will not be able to provide 60 Hz-50 Hz converters, so be prepared. Bring your own transformers if your machines are not 220-volt, to be on the safe side. With a possible variation as high as 10 to 20 percent, voltage regulators are also necessary. Few basic mechanical and electrical appliances in China are standardized; DOC will, however, be responsible for supplying electrical outlets that conform with most US equipment.
- · Choose your company team carefully: Size of company teams will be based on the space subscribed to by each company, but may be limited further because of an accommodations shortage which has already caused this exhibition to be postponed (from the requested September date to November) and a planned international construction exhibition to be canceled for this year. November 1979's British energy exhibition was restricted to 700 out of a requested 900 visas. DOC anticipates about 800 to 1,000 total company representatives to be there. If technical seminars are planned, the team should include at least one senior engineer conversant with a range of company technologies, as well as a sales executive who can respond to on-the-spot purchase inquiries and a technician who can answer questions on operation and maintenance.
- Check out what happened at previous shows in China: Germany, Japan, and the UK have held the biggest shows so far at the Beijing exhibition center. Each country prepared impressive catalogs as well as many other items and superb displays.
- Start getting ready now: Book banquet rooms, back-up plane reservations, and translation services now! The demand for these services is going to be enormous—probably unprecedented in Beijing's history.

ing the 1970s (see Foreign Trade Exhibitions in the PRC, NCUSCT, March 1977).

An international agricultural machinery show in Beijing in October 1978, the CCPIT's first multinational trade show, was by some accounts dominated by its major non-participant, the United States. Prominent displays by foreign subsidiaries of Caterpillar, Clark Equipment, Deere & Co., Horstine (100 percent-owned by Union Carbide) and International Harvester, among others, highlighted US technology and products, and in some cases were even staffed by Americans.

The expected quarter million Chinese attendees of CHINA '80 will approach it with at least as much excitement as that which accompanied the agricultural machinery show—even leading to minor scuffles for company literature among the attendees that fall of 1978.

As of January 15, 1980, the doors were already closed on applications to the US exhibition. Stephen Sind, head of the Department of Commerce (DOC) exhibitions management team working on the show, and a veteran of US exhibitions in Moscow, states that all space was sold or committed by the time the deadline rolled around. Because of demand, DOC is now requesting additional space and has accordingly accepted participants on a waiting-list basis; earliest signers-on will have preference. Sind reported on February 11 that 183 participants representing 208 companies would participate, based on a counting of checks received. Of all participants firmly in the show by late January, 63, or one-third, were National Council members.

The services provided by DOC will be at cost and on the plentiful side. For a maximum fee of \$30,000 (and as little as \$5,000), companies will benefit from services including:

- complete design and construction of the display space, including carpeting, lighting, outlets, furniture, headers, railings, and mounting of graphics;
- coordination of flight plans and accommodations for participants (through a travel agent);
- moving and handling from point of delivery at the exhibition site to the mounting area; coordination of freight services for China, inland, and possibly from freight consolidation points in the US to China;
- the services of some 500 interpreters and 'explainers' from the CCPIT, at a reported rate of between ¥25 and ¥28 daily (up from ¥18 two years ago). The explainers are non–English speaking assistants to the interpreters, whose main and highly useful function it is to spot buyers and direct them to the interpreters and company people;
- shuttle buses to and from hotels and the exhibition site;
- organization of technical seminar programs, probably to be held at the Friendship Hotel (DOC will pick up the costs for space);

US INDUSTRY ON DISPLAY

Equipment Categories for US National Show, Beijing, November 1980 Agricultural Machinery and Equipment

Tilling equipment, including tractors, plows, harrows, tillers, subsoilers, and field cultivators; planting equipment, including row crop planters, grain drills, broadcast seeders, and listers; spraying equipment; harvesting equipment, including combines, hay and forage harvesting machines, mowers, hay conditioners, balers, and stack wagons; barnyard equipment, including equipment for dairy, poultry, and swine farming; grain storage and handling equipment.

Power Generation and Distribution Equipment

Fossil-fueled thermal power plants and related gear; hydroelectric systems and related gear; EHV transmission systems, all aspects; gas turbine systems for industrial drive and power generation; solar and geothermal systems for power generation.

Textile Machinery and Equipment for Production of Consumer Goods

Textile machinery, including industrial sewing machines; equipment for production of sporting goods, hardware (including hand tools), bicycles, calendar watches, thermos bottles, transistor radios, office equipment, leather goods, toys, paper, detergents, and synthetic leather.

Petroleum Exploration and Extraction Equipment

For geophysical exploration, all types; drilling and extraction; down-hole; offshore drilling; other petroleum production equipment; pumps; pipe-layers; pipeline equipment; and oilfield transport trucks.

Transportation Equipment

Railroads

Locomotives, electric; locomotives, diesel-electric; rolling stock, including specialized freight cars and those for containerized freight; hydraulic rail-laying machines, equipped with laser rail alignment devices; technology associated with long-haul, unit freight trains; and systems for automation of railway management.

Motor Vehicles

Diesel engine plants; truck plants; trucks and buses; fire engines; and motor-vehicle manufacturing technology.

Ships

Bulk carriers; production facilities for building large carriers; inland waterway vessels; geophysical survey vessels; and fishery research vessels.

Aircraft

Aerial strivey planes; wide-bodied jets for international air routes; short-haul jets for domestic commercial traffic; agricultural planes; helicopters for oildrill se vicing; and automatic air traffic control systen.

TOOL SHOW BY TECHNOVA/ADSALE

Magazines can put on exhibitions, too. Two Hong Kong-based journals, *Technova*, published by The Adsale People, and *Economic Reporter* are recruiting companies for a show of hand, pneumatic, and machine tools in August 1980. It will be held in the Arts and Crafts Building of the Guangzhou Foreign Trade Center and last about 10 days, according to organizer Stanley Chu of Adsale. Some 60 12-squaremeter booths will be available at an estimated cost of \$5,000 each.

For more information, write:

Stanley Chu, Director The Adsale People Room 301-2, 57-59 Lockhart Road Hong Kong

Cable: ADSAPE HK Telex: 63109 ADSAP HK Telephone: 283088

- printing of an official exhibitions catalog, in Chinese:
- third-party liability insurance and property damage on site;
- · promotions and hospitality services.

The companies themselves will be footing the bill for all freight to and from the exhibition and risk insurance on the equipment, with Commerce to be named as the co-insurer.

Though inflation is taking its toll in Beijing as elsewhere, China is still one of the least expensive places in the world to launch an industrial exhibition. The DOC-organized show is no exception, though the US subsidiary that paid \$18,000 for an 81-squaremeter display two years ago may find current prices may seem exorbitant. Inside, DOC has a 72-squaremeter limit—the top booking for an individual company (outside, companies can book up to 250 square meters). A "basic booth" of 3 x 4 meters will cost the exhibitor a modest \$5,000, however; a price which includes all the services detailed above. A 3 x 5 meter size, for \$6,250, and a 3 x 6 meter size, for \$7,500, are also available to exhibitors. Outside space is priced even lower at \$100 per square meter. The fee will probably not cover the full cost of construction and exhibition support services.

A Preview of the Event

Golf carts whizzing VIP's from courtyard to courtyard; the sound of moo's wafting from USDA shows on animal husbandry; US and People's congressmen rubbing shoulders and trading notes on companies and constituents: "It will be the greatest thing that ever hit American companies, never mind the Chiese!" predicts one source close to the event.

Nightly banquets will take up most restaurants in the city and will certainly leave the Friendship Hotel, where most participants will stay, booked solid. The media will be there in force, beaming back to the US live images of cabinet secretaries, vice premiers, and possibly a US president touring the show. Chief US host of the show is expected to be newly appointed Commerce Secretary Philip M. Klutznick, while PRC Minister of Foreign Trade Li Qiang may officiate on the Chinese side.

Companies will be sharing the hall with the US Department of Agriculture, whose secretary, Bob Bergland, is expected to attend. An 1,800-square-meter USDA exhibit will feature graphics and product seminars on corn, soybeans, food protein, and other key US food export items.

In a 450-square-meter area originally assigned to the International Communications Agency (which has since dropped out of the exhibition), DOC is talking with other US federal agencies about the feasibility of mounting a "Government Agency Pavilion." This would provide some needed visibility for US Government agencies whose newly established exchange programs with the PRC have created a wealth of business opporunities for US companies in power generation, pollution control, and other fields. A 1,000-seat auditorium adjacent to the proposed government exhibit might be used for film showings.

Of the 26,200 square meters left to the companies (if full options are exercised), including some 18 busi-

WHO'S WHO ON DOC EXHIBITION MANAGEMENT COMMITTEE

Stephen A. Sind, Director, US National Exhibition—Beijing

Fred C. Ott, Manager, Exhibition Administration Juergen Tooren, Administrative Assistant Fiorella Franzini, Fiscal Assistant

C. Edward Walls, Manager, Operations (Freight, Construction)

Deputy Manager (to be appointed) Gordon Thomas, Designer

William Flanagan, Manager, Promotion

Mike Frisby, Deputy Manager, Business Relations (Petroleum, Transportation, Power)

Kerry Gumas, Deputy Manager, Business Relations (Agriculture, Textile Machinery, Equipment for Consumer Goods)

Mary Von Briesen, Business Relations (in Beijing) Ursula Williams, Hospitality Functions Jeff Lee, Seminar Organization

(For more information, call the Exhibition Management Committee at (202) 377-4810, 377-5186, or 377-2614.)

ness rooms and 14,000 square meters of outside space, the petroleum industry will take the lion's share. Next in order of magnitude will be transportation, power generation, agricultural equipment, and textile and other light industrial machinery. Allocation of the theme areas in the pavilion depends in part on the type and weight of equipment submitted for display.

Representatives of the Chinese foreign trade corporations and corporations under the ministries will attend the show and be available for business discussions. Among the attendees, there will be a mix of old and new faces; the DOC is urging participating companies to submit lists of PRC officials they would like to have attend the events.

Coordinating the US exhibition for the Chinese will be the CCPIT. The Beijing-based organization has promised to provide not only support staff for the exhibitors but also to organize end-users to attend technical seminars presented by the exhibiting companies. CCPIT Technical Exchange Department Director Li Zhaoli told US business audiences in February 1980 that he expected at least 1,000 PRC endusers to participate in the seminars—the topics of which are not limited to the exhibition themes. Li's department has hosted more than 7,000 technical seminars by foreign companies since it was founded in 1974.

The National Council will maintain a small office at the exhibition site, available for Council members seeking assistance and to anyone interested in Council publications or information about the Council. The Council's Beijing representative, Richard Glover, will be on hand to assist members from his office in Room, 1105 of the Beijing Hotel.

The Organizers

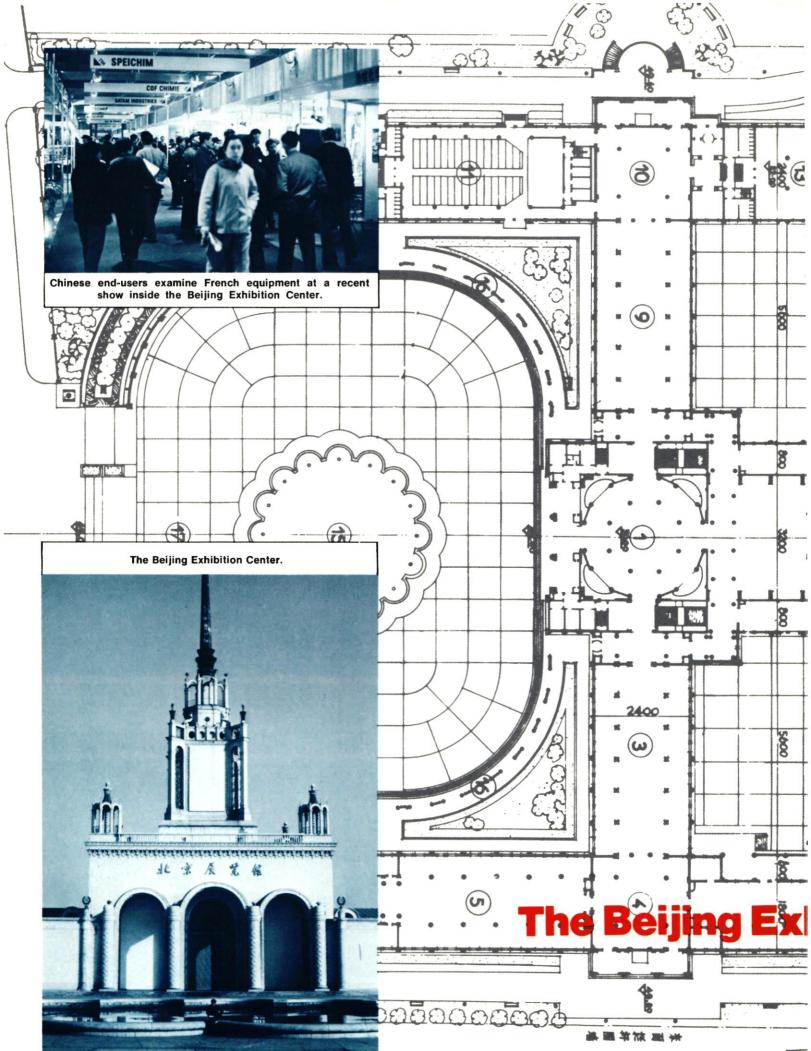
The four-man exhibitions management staff working out of Room 4815 at the Department of Commerce, Main Building, in Washington, DC, is due to expand to 12 by show-time in November. Meanwhile, Sind and company will have their hands more than full fleshing out the details.

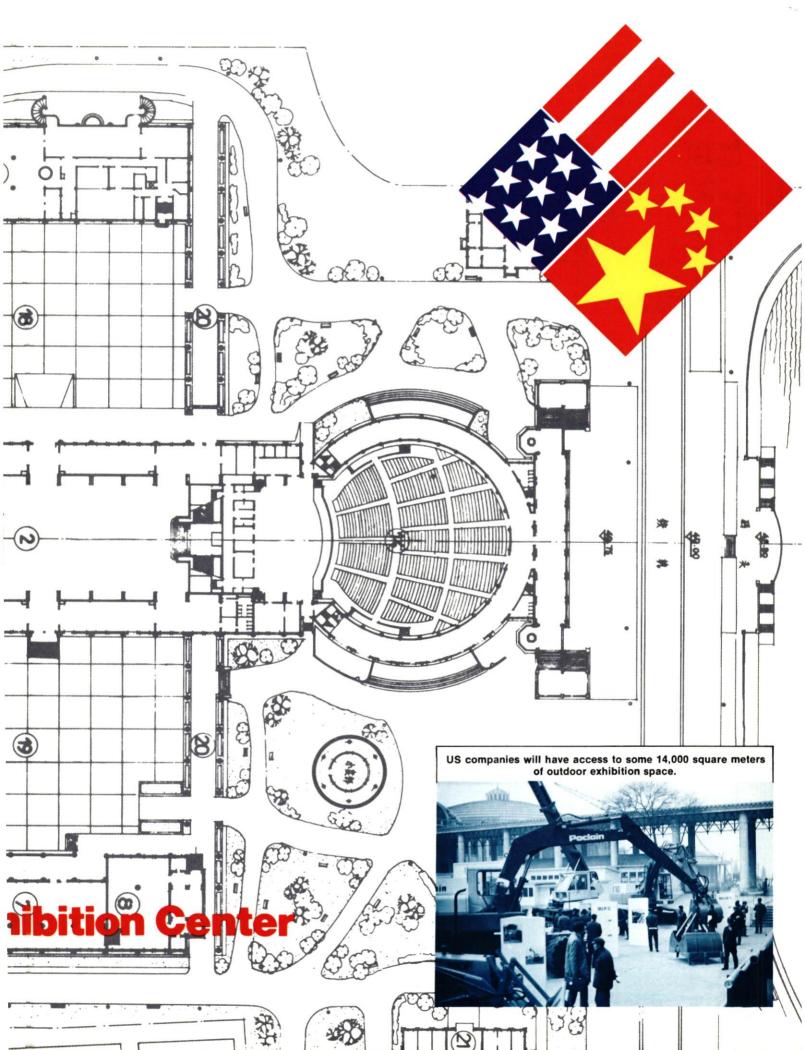
Among plans that involve commercial firms, settling on a travel agent to handle booking of flights and hotels had top priority in early January; next in line were contracts for translation and printing and freight forwarding. In mid-January 1980, Pacific Delight Tours, Inc., of New York was selected as travel agent, while translation and freight forwarding companies had until February to complete their bids.

Late in the spring, DOC will choose a design and construction contractor, to begin work on site in October 1980. Though discussion of design concepts is still underway, one possible idea for the exhibition hall interior is to build a suspended ceiling to hold light fixtures, directions to the exhibit, and company visuals. Lighting is a problem in the halls because of exceptionally lofty ceilings.

By May 1, the exhibition management committee

Date	Country	Theme	Site
March	United Kingdom	Medical technology	Beijing
March	United Kingdom	Aviation	Shanghai
April	Romania	Industry	Beijing
May	Denmark	Agricultural technology and soil improvement	Beijing
May	Japan	Automotive industry	Tianjin
June	Sweden	Electronics instruments	Shanghai
June	Italy	Packaging	Shanghai
November 17-28	United States	National exhibition	Beijing
NA	The Netherlands (Philips)	Electronics instruments	Wuhan
NA	United Kingdom	Communications	Shanghai
NA	France	Electronics instruments	Shanghai
NA	West Germany	Medical equipment	Tianjin





hopes to have all logistical matters, including freight, settled in time for a one- or two-day briefing for exhibitors. Key members of the committee itself will be off to China in August to supervise construction and mount-up preparation for Day One.

Something for Everyone: China's Exhibitions in the US

"It's a landmark in Sino-American relations, and will offer something to the entire family," says Gilbert A. Robinson, chairman of the US-China Business Development Corporation, which is managing China's exhibition in the United States.

Together with partners Arne de Keijzer, president of the China Business Development Corporation; Luiz O. Themudo, owner of Foco International (a Brazilian international exposition firm); and N. W. Ayer

ABH International as advertising agency, Robinson has set operations for the show in motion.

"On August 7, 1979, we signed the contract at the PRC embassy in Washington," Robinson told *CBR*. "Within 30 days, we had organized offices in the three cities where the exhibition was to take place. Within 60 days, three of the principals were in China negotiating specifics. And within 90 days we had our organization lined up, with a western regional manager, a Chicago coordinator, and our national coordinator. This kind of exhibition normally takes two years to put together; we are going to try to do it in one."

The show, called the Exhibition of the People's Republic of China, is designed not only to bring a piece of China to the doorstep of many Americans, but to leave it there. Three major department stores will operate retail stores on the premises, selling Chinese-

COMPANY COUNTDOWN FOR THE US SHOW IN BEIJING

In the months preceding the US National Exhibition in Beijing, participating companies face a crowded agenda. Time is short, deadlines tight; translation services, especially, will be under heavy pressure over the coming months and companies should plan accordingly. A guide to deadlines for technical materials, events, travel, and shipping is presented below, based on information as of late January 1980.

January 15 Deadline for submission of participation agreements and fees to Department of Commerce (DOC). Additional applicants are wait-listed pending availability of additional space.

Late January Pacific Delight Tours, Inc., of New York City, is designated official travel agency for the exhibition. Agency begins survey of participating companies to assess travel requirements; will arrange charter, Group Inclusive Tour (GIT), or first-class air passage depending on response to questionnaires. Early February Bids reviewed and selection made of freight forwarder for shipment from port of origin. As of mid-January, DOC still debating issue of appointing freight forwarder for coordination within US.

February DOC to select translation contractor for Chinese-language official exhibition catalog; all other translation to be provided by companies through commercial translation firms.

February Participating companies should begin translation of synopses of all technical presentations to be proposed to CCPIT; DOC must receive synopses in Chinese and English by April 1 (see below).

March 1 Participating companies' deadline for submitting completed travel questionnaires to Pacific Delight Tours.

Late Spring Appointment to be made of design and construction contractor for exhibition; contractor will

build all display booths and other temporary facilities at Beijing Exhibition Hall based on designs supplied by design specialists of Bureau of International Commerce, DOC.

April 1 Participating companies submit titles, technical synopses (in English and Chinese), and background material for proposed technical seminars to DOC; DOC to submit proposals to the China Council for the Promotion of International Trade (CCPIT).

April 1 Deadline for submitting export license applications to Office of Export Administration, DOC, if technology or product to be presented requires validated export license.

April 15 Deadline for submitting product characteristics and marketing data forms. Product characteristics form must list all equipment to be displayed and realistic export selling prices (with pro forma invoices)—buyers will probably seek 10–12 percent "friendship" discounts. On the marketing data forms, list all personnel attending the show and whether your company is seeking a PRC joint venture partner. licensee, or other representative. The data from these forms will be used by DOC for advance promotion of the show in China and to set up business meetings that will take place during the event.

April to November DOC will use its offices to set up business meetings between companies and selected PRC end-users, and establish a PRC guest list based on names and organizations submitted by participating US companies. Contact William Flanagan, promotions manager of the DOC Exhibition Management Committee, with names for guest list and desired meetings (provide list indicating who from the company will attend, which products you wish to discuss, and with whom you wish to discuss them among Chinese organizations).

manufactured products and handicrafts: the Emporium in San Francisco; Carson Pirie Scott in Chicago; and—who else?—Bloomingdale's in New York City. Private business hours will be held daily before the public openings to facilitate meetings between Chinese trade representatives and potential US buyers. And a highly reliable source indicates that China's foreign trade corporations (FTCs) are planning to send a flock of business delegations to the US for the Big Event.

Facilitated by the National Council, the China Exhibition will have promotion of trade as its main purpose, but will use public relations techniques to secure, its goal. For businessman Robinson, this show may present one of the greatest challenges of his career: to create an image for Chinese export wares that every American importer, wholesaler, and retailer

can draw upon in future marketing campaigns.

To build this image, Robinson has advised the show's Chinese sponsors, the CCPIT, to provide not only industrial exhibits and things to buy (via the US-operated retail stores at the show), but also a mélange of Chinese performing and practical arts. A troupe of Chinese acrobats, a team of artists carving jade and bamboo, paper cut artists (an ancient Chinese folk art whose delicate products are rarely seen in the west), and Chinese chefs from Beijing will put their fabled skills on display. Even a branch of the Beijing Post Office will be opened to entice the stamp collector with a special commemorative stamp.

An honorary congressional host committee has been formed to welcome the exhibition crew, cochaired by Senators Javits (New York), Percy (Illinois), and Cranston (California), representing the three states in

COMPANY COUNTDOWN FOR THE US SHOW IN BEIJING (Continued)

April to May Initiate translation by commercial firms of all company brochures, technical literature, and supplements to be distributed at exhibition. These must be ready no later than September 1; give translation firms two to three months for completion.

May 1 Submit copy (150 to 200 words) for technical product descriptions to be included in the official exhibition catalog; this copy will be translated by DOC. Deadline for submitting 8" x 10" black and white photos for incorporation in company display booths (DOC supplies mounting and graphic design). May DOC Exhibition Management Committee will stage two-day briefing for participating companies. Pacific Delight Tours, freight forwarder, design contractor, and other firms in charge of logistics for exhibition will brief companies; Pacific Delight Tours will arrange orientation banquet.

June All participating companies to receive visa application forms from Pacific Delight Tours.

July 1 Deadline for submitting completed visa application forms and passports to Pacific Delight Tours. Companies may wish to arrange duplicate passports for personnel, since the PRC embassy will need two months or more for processing (in other words, you'll be without your passport until September at the earliest).

Mid-July CCPIT committed to respond on technical seminar proposals by July 15; DOC will send answers to companies. Companies should make arrangements for translation of presentations—if desired—as soon as approval is received.

August 1 Deadline for requests for additional interpreters or explainers.

August to September Companies to submit promotional packages to DOC for transmission to CCPIT, which will distribute. Companies should prepare between 10,000 to 20,000 sets of all literature to be

distributed (preferably in Chinese); DOC's suggested guidelines are to arrange to have 30 percent of this available for distribution at the show, the other 70 percent to be distributed by DOC/CCPIT beforehand.

August to November DOC advance team arrives in Beijing in early August; full staff will include 14–20 persons (not including design contractors' personnel) during the event. DOC team in Beijing will launch promotional and marketing activities in China in the months immediately before the show.

Mid-August Companies to ship equipment and supporting materials to designated consolidation points, where DOC-appointed freight forwarder will take over (a freight forwarder may also be appointed to coordinate US domestic shipments).

September 15 Final deadline for submission of technical seminar presentation texts and supporting materials to CCPIT.

October Construction begins on display areas, under supervision of DOC team.

Early November Companies may book pre-trip tours in Hong Kong or Tokyo via Pacific Delight Tours.

November 12–13 Receptions in gateway cities arranged by Pacific Delight Tours for participants (depending on mode of transportation selected).

November 13–14 Representatives of participating companies leave for China.

November 14, p.m. Special VIP preview begins; lasts through weekend of November 15–16.

November 17, a.m. Two-hour opening ceremony, including walk-through of exhibits by VIPs.

November 17–28 Exhibition is on: daily hours from 8:30 A.M. to 12 noon and 1:00 P.M. to 4:00 P.M.

Late November to early December Post-exhibition China tours available, arranged by Pacific Delight Tours. which the show will be held. A national host committee has been formed by prominent businessmen to host black-tie dinners and show previews in each of the host cities, where the approximately 80 Chinese who will man the exhibition will be the guests.

Ceremonial receptions in each city will also be staged by importing members of the National Council under the auspices of Importer Services and the Importers Steering Committee.

A special exhibition supplement will be provided by Robinson and the *New York Times*, in cooperation with the National Council, for circulation in a dozen or more newspapers throughout the US at the time of the first exhibition.

The industrial backbone of China's show will be threefold, with displays on heavy industry, light industry, and arts and crafts themes. Heavy-industry booths will feature Chinese-made tools, petroleum samples and products, industrial chemicals, pharmaceutical products and equipment, medical equipment, electronic instruments, and metal products.

The light industry and technical section will have clocks, bicycles, leather goods, shoes, musical instruments, hardware, cosmetics, toys, cotton and woolen piece goods, silk, dried fruits, perfumes, tobacco, fireworks, teas, medicine, furs, down, velvets, wines, and more.

In the arts and crafts department, jade, stone, wood, cork, and bamboo carvings; lacquerware; hanging panels; rattan furniture; pottery; cloisonne; and antique reproductions are among items featured in the advance list.

Admission to the show will be \$4 for adults, \$2 for children under 12, and free for infants under three; a family package will be available for \$10, while show tickets (good for the duration of the exhibition at each location) will be sold for \$20 (individuals) and \$40 (families).

MFN On Trial

One of the earliest ideas about the China Exhibition was to hold it in at least three locations span-

EXHIBITIONS IN CHINA: MORE TO SHOW, MORE WAYS TO GO

CHINA '80 will be one among a rapid succession of foreign technical shows staged in Beijing in 1980 (see "Exhibitions Calendar"). The forthcoming US exhibition in China will lock yet another jigsaw puzzle piece into place in the complex process of restoring normal economic relations.

The US show will take place in a far different milieu than similar shows in the past. Until recently, only four Chinese cities were open to foreign trade participation or attendance at exhibitions—Beijing, Shanghai, Guangzhou (with the "Canton" Trade Fair), and Tianjin. Now, other cities are getting into the act, with or without the help of the China Council for the Promotion of International Trade (CCPIT), which is the official liaison organization for foreign exhibitors. Old exhibition halls are being refurbished and new ones built. Some of the recent developments include:

• New Exhibition Halls: In Guangzhou, the building used for the biannual Guangzhou Fair is being turned into the more glamorous-sounding Guangzhou Foreign Trade Center; initial reports indicated that the transformation would be accompanied by addition of a hotel, restaurants, and more exhibition space, but the proprietors seem content for now with the current scheme. Foreign shows staged already include one by Yamaha Motor Co., Ltd. (see box). A multicompany show organized by Oriental Machinery, Ltd., a Hong Kong firm, has also been staged at the old Guangzhou Export Commodities Fair building (see story, p. 53).

In Beijing, CCPIT's new officers on Chang An

Avenue in Beijing will include exhibition space. Exhibitors of equipment will be charged for rental, but CCPIT will display company brochures at no charge. The 11-story concrete building now under construction will be finished by this summer, reports CCPIT Director of Technical Exchange Li Zhaoli.

The CCPIT is also laying plans to build a new exhibition center twice the size of the existing one. With a total area of 200,000 square meters and inside space of 50,000 square meters, the planned center will have more than enough room for the multinational exhibitions that CCPIT began to mount in October 1978.

CCPIT also has its Center for New Foreign Products. Established in 1977, the Center accepts films, videotapes, slides, samples, and models of foreign products, as well as scientific and industrial publications. It provides assistance to foreign companies to have literature and film soundtracks translated.

The US government, and some US private sources (including the Houston-based Beijing Foreign Trade Development Corporation, Ltd.) have presented proposals for building exhibition areas in Beijing for hire by foreign companies.

• More One-Company, City-to-City Shows: In recent months, Kobe and Yokohama have both sponsored technical shows in their sister cities—Tianjin and Shanghai, respectively. These shows, apparently arranged through municipal organizations in cooperation with local CCPIT branches, have so far been dominated by Japanese firms but may well provide opportunities for US firms. Japanese companies have also taken the lead in organizing one-company shows.

ning the US. In July-August, 1979, a two-man team from the Exhibitions Department of CCPIT, hosted by the National Council, flew to the US to confer with exhibition specialists and to survey possible sites.

From the Chinese viewpoint, the China Exhibition will be the first important opportunity for market testing in the wake of the granting of most-favored-nation status to China; hence, the choice of cities will affect the kind and value of market response data they could expect to gather. CCPIT Exhibitions Department Chief Lu Fengchun and Deputy Liu Fuguei made selection and assessment of sites their top priority during their 1979 visit, and included Houston, Dallas, and Atlanta in their inspection, as well as the cities finally settled upon.

For two of the exhibition venues—the Navy Pier in Chicago and New York City's Coliseum—the US-China Business Development Corporation is the prime contractor, while in San Francisco (Fort Mason), the San Francisco Chamber of Commerce has the principal contract with CCPIT and has sub-

contracted to the US-China Business Development Corporation.

The Council's Exhibitions Committee assisted in the selection of the exhibition venues, and the Council, as facilitator, will provide continuing support and advice for the event. Both the Council and the DOC will maintain offices at the show.

Other backing for the show will come from a national host committee, composed of leading businessmen and cochaired by officers of three banks which are lending financial support to the show: John F. McGillicuddy, president and chairman of the board, Manufacturers Hanover Trust Co.; A. Robert Abboud, chairman of the board, First National Bank of Chicago; and Thomas R. Wilcox, chief executive officer, Crocker National Bank. An "at-large" committee of businessmen from cities other than San Francisco, Chicago, and New York will serve as a channel for national participation in the ceremonial and public activities of the exhibition. The support of a number of private corporations has also been enlisted.

EXHIBITIONS IN CHINA: MORE TO SHOW, MORE WAYS TO GO (Continued)

such as the recent shows in Guangzhou and a July 1979 exhibition of electrical appliances—TV sets, refrigerators, tape recorders, and washing machines—sponsored by Sanyo Electric Company, in Beijing.

- Local Competition for Foreign Shows: Twenty-one branches of CCPIT are contending for foreign business shows. Although the national office of CCPIT in Beijing must approve applications by foreign exhibitors, the process may begin with the branches: Beijing, Shanghai, Tianjin, Guangzhou, Jiangsu Province and Nanjing (in Nanjing), Zhejiang Province and Hangzhou (in Hangzhou), Hubei Province (in Wuhan), Liaoning Province (in Luda), Heilongjiang Province (in Harbin), Shanxi Province (in Taiyuan), Guangxi Province (in Nanning), Hebei Province (in Shijiazhuang), Shaanxi Province (in Xi'an), Shandong Province (in Qingdao), and Hunan Province (in Changsha); four more branches have been established recently.
- PRC Export Fairs Multiply: An account of a recent Shanghai municipal handicrafts exhibition published in the Hong Kong-based Wen Hui Bao portrayed the show as a smaller-scale equivalent of the Guangzhou Trade Fair. All items were for sale, and Shanghai Mayor Peng Chong unequivocally stated that in future the city would invite foreign businessmen to the event (Shanghai City Service, September 22, 1979). The foreign trade corporations have long held their own minifairs, and these are becoming more businesslike and even glamorous. In August 1979, CHINATEX invited 88 businessmen from around the world to meet in the resort town of Bei-

daihe to view the corporation's latest collection of silks and "artificial cotton fabrics"; the corporation simultaneously held its "Fall Trade Fair for Exports to Hong Kong and Macao" in Hangzhou.

- Simultaneous and Back-to-Back Shows: The first American show to open in six Chinese cities (Beijing, Shanghai, Fuzhou, Changsha, Hefei, and Chongqing, with a subsequent display in Wuhan) opened on December 4, 1979. The exhibition arranged by John Wiley and Sons with the China National Publications Import Corporation (PUBLIMCO) was the largest ever staged by the company outside the US, with 1,000 titles at the Beijing show alone. Subject areas covered included life sciences, physics and applied sciences, engineering and technology, social sciences, business, fine arts, humanities, technical and vocational education, and endyclopedias. The Association of American Publishers plans to hold a similar, even larger multi-city show in the fall of 1980.
- More Price Hikes: In early January, PRC officials announced a price increase on the basic cost of renting exhibition space, until recently pegged at ¥1.00 per square meter inside and ¥0.36 per square meter outside (Beijing Exhibition Hall). Cost inflation for tourist-oriented services has been so serious in the last two years, since China recognized the profitability of tourism, that PRC officials moved recently to chastise those charging "unduly high prices" to their foreign guests. Even with recriminations, prices continue to increase and will take their toll of government and private exhibitors.

The Biggest Show in 20 Years

"The US has not seen an exhibition of this kind in more than 20 years, since the first exchange of exhibitions with the USSR," says Robinson, "and you can quote me on that." In 1959, as coordinator of the American National Exhibition in Moscow, Robinson played a similar role in an exhibition that he describes as "far less extensive than the Chinese Exhibitions." He adds, "It is already producing more inquiries from the press than the exhibition in Moscow."

Robinson finds it significant that the reciprocal US exhibition staged by the USSR in the first US-Soviet round of exhibitions was mounted in one city only, New York, while the China exhibition will be accessible to viewers in three of six major US regions. What Robinson does not mention are the formidable logistical problems of setting up parallel promotional campaigns, local support organizations, storing and transporting the displays, and coordinating a three-city, four-month-long show that is expected to be a major media event as well as a trade promotion happening.

Meanwhile, members of Robinson's team are working on more and better cultural sideshows from China, which they consider necessary in order to make the show stand out to an American public perhaps less than eager to attend just another trade show.

As of mid-January, the latest flash from the Robinson headquarters was that China had agreed to let more than 20 ancient treasures, some 2,000 years old, out of the country to accompany the show. The old-China-to-new-America formula, which proved unbeatable in China's archeological exhibition in the US in 1975, this time will launch Chinese products on the world's largest consumer market.

Beyond the Exhibitions . . . Looking into the 1980s

A number of other individuals and organizations have been attracted to the exhibitions game even before the holding of the formal, national US-China shows. In their wake, it is highly likely that giving exhibitions in China and sponsoring them here will become a lucrative, and highly competitive, business.

DOC plans to hold another exhibition in China in 1981, covering two or more industrial themes, though probably not on the scale of the 1980 show. US Government officials are now seeking permission to open an American Trade Promotion Office in Beijing, to include a small amount of exhibition space, which could become a permanent venue for US Government and possibly US company–sponsored shows as well. This center would be patterned after the existing one in Moscow, which has approximately 500 square meters of space and is used for offices, technical trade seminars, and mini-exhibitions. Commerce has already lined up technical sales seminars in food processing and pollution controls for 1980, sans center.

Several major trade associations, among them the Society of Petroleum Engineers, the National Machine Tool Builders Association, the Association of American Publishers, and the Electronic Industries Association, are already negotiating with their Chinese counterparts to hold industry shows in 1981.

Other groups are already off and running with mini-shows and symposia-with-equipment. An example of the latter, the Dallas-based China Consulting Group, assembled American makers of solar energy equipment to show after the first Chinese national solar energy conference, in Xian in August–September, 1979. John Wiley and Sons has put on a publications show in China, in December 1979, and both a state, Illinois, and a city, New York, have agreements in principle to exchange exhibitions with Chinese entities. Time-Life Books has shown all over China.

In 1980, the China Consulting Group plans to hold two more mini-exhibitions timed to coincide with PRC conferences, one, with Miller Freeman Publications, on coal mining, to be held in Beidaihe in September, and another on geothermal energy exploitation, sponsored by the City of Tianjin in October 1980.

In the US, possibly the biggest splash to date was made by Two Winds, USA, with a show of Chinese arts and crafts that visited Washington, New York, San Francisco, and Los Angeles, between September 1979 and January 1980. The show featured a collection of contemporary "national treasures" produced by master craftsmen of the Beijing Special Arts and Crafts Corporation, the craftsmen themselves, and a retail operation with PRC arts and crafts (though not the national treasures, which were returned to China) up for sale.

Sponsored by Congressman Bill Alexander of Arkansas, and bankrolled by popular Hong Kong actress K. H. Leung and retired Arkansan banker Sam Manatt, the displays arrived in the first Chinese plane not inhabited by a state guest nor inhibited by the claims/assets problem to touch down in the US, a CAAC Boeing 707 that arrived at Dulles Airport on September 18, 1979.

Although the show was accorded trade-exhibit status by the Department of Commerce, whether it was truly the first Chinese commercial exhibition to visit the US is a moot point, due to the financial role of Two Winds. But, accompanied by an extensive, and apparently costly, advertising campaign from Tamar Productions, a Washington firm, it attracted crowds like the pied piper.

The future is uncertain, but two predictions for the 1980s can be made. To compete in the China exhibitions bonanza will result in more imaginative schemes yet, by those who dare to go where none have gone before. And, as a first expression of full economic normalization, the exhibitions should launch China and the United States, at the beginning of the 1980s, on the way to a beautiful friendship.



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List of Participants in the US National Exhibition in Beijing

November 17-28, 1980

ABEX Corporation (D)
AMF, Inc. (B,D)
All American Engineering Co. (D)
Allis-Chalmers Corp. (A,C,D)
American Coldset Corp. (E)
American Textile Machinery
Association (B)
Amtech (E)

B & W Inc. (E)
BWT-Basic, Inc. (E)
BWT-Technology, Inc. (E)
Baker Trading Company (E)
Barber-Colman Company (B)
Bell Helicopter Textron (D)
Bently Nevada Corporation (C)
Blue Bird Body Company (E)
Boeing Commercial Airplane Co. (D)
Boeing Vertol Company (D)
Borg-Warner Corporation (E)
Burroughs Corporation (E)

C-E Power Systems Combustion Engineering, Inc.) (C) CEA-Carter International, Inc. (A) Camco, Inc. (E) Cameron Iron Works (E) Capital Machines International Corporation (B) J.I. Case Company (A) Caterpillar Tractor Company (A,C,E) Centrilift, Inc. (E) Cessna Aircraft Company (D) Chemtex, Inc. (B) Chromalloy Natural Resources Co. (E) Cincinnati Milacron (D) Clark Equipment Company (D) Clayton Manufacturing Co. (C) Clemco International Sales Co. (E) Condec Corporation (E) Continental EMSCO Company (B.E) Control Data Corporation (E) Cooper Energy Services (E) Cummins Engine Company, Inc. (D)

John Deere International Ltd. (A) DeKalb Agresearch, Inc. (A) Detector Electronics Corp. (E) Dickirson Group (E) Donaldson Company, Inc. (A) Douglas Aircraft Company (D) Dow Corning Corporation (C) Dravo Corporation (C) Dresser Industries, Inc. (E)

EG & G Instruments (E)
Eastman Kodak Company (E)
Eastman Whipstock, Inc. (E)
Eaton Corporation (D.A)
Emerson Electric Company (C.E)

FMC Corporation (A,E) Finnigan Corporation (E) Fisher Controls Company (C) Ford Tractor Operations (A) Friskem, Inc. (D)

GRS International (D)
G & W Electric Specialty (C)
General Electric Company (B,C,D,E)
General Motors Corporation (D)
Georgia-Bonded Fibers, Inc. (B)
Geosource Inc. (E)
Geo Space Corporation (E)
Gould-Brown Boveri (C)
Goulds Pumps, Inc. (E)
Graco, Inc. (D)
Grumman International, Inc. (D)
Gulf & Western (D,E)
Gulfstream American Corporation (D)

H–B Instrument Company (C) The Herman Corporation (D) Hughes Trading Company (E) Huntington Alloys, Inc. (C) Hydril Company (E)

Inductotherm International Corp. (C) Information Handling Services (E) Ingersoll-Rand Company (B) International Equipment & Sales (E) International Harvester Company (A,D,E) International Livestock (A)

JLG Industries, Inc. (E) Johnston-Dowell (E) Joy Manufacturing Company (E)

Kearney & Trecker Corp. (D) Kingsbury Machine Tool Corp. (B) Klenk and Miller (B) Kobe, Inc. (E) Kohler, Inc. (E) Kohler Company (C) Koomey, Inc. (E)

Lab-volt Systems, Inc. (C) Lindsay International Sales Co. (A) Lockheed Corporation (D) Lubbock Manufacturing Company (D) Lummus Industries, Inc. (A)

3M (C)
Mack Trucks, Inc. (D)
Magnavox Government & Industrial (E)
Measurements Group (D)
Merek International (A)
Mid-Pac International (D)
Minster Machine Company (B)
Monitor Manufacturing (A)

NL Petroleum Services (E) Nash International Company (C) National Machinery Company (D) National Supply Company (E) New York Air Brake Company (D)

OK Machine & Tool Corporation (B) OMC (Outboard Marine Corporation) (D) OPI, Inc. (E) Old West Regional Commission (A,E) Optronics International Sales Corp. (E) Orion Research, Inc. (A,C)

P A International (E)
Pan American World Services (Pan
American World Airways, Inc.) (D)
Parks-Cramer Company (B)
Pengo Industries, Inc. (E)
Perkin-Elmer Corporation (E)
Pincor International, Ltd. (C)
Plasser American Corporation (D)
Platt Saco Lowell (B)
Pullman Kellogg (D)
Pullman Standard (D)

Rain Bird International, Inc. (A)
Raychem Corporation (C)
Reliance Electric Company (C)
The Ridge Tool Company (E)
Rockwell International Corporation
(B,D,E)

Schramm, Inc. (E)
Scientific Drilling Controls (E)
Siemens-Allis (C)
The Singer Company (B)
A.O. Smith Harvestore (A)
Smith International, Inc. (E)
Snap-On Tools International, Ltd. (D)
Southwide, Inc. (C)
Stone & Webster Engineering Corp. (C)
Sundstrand Corporation (A,D,E)

TOTCO (E) TRW, Inc. (A,D,E) Texas Instruments (B,D,E) Tosco Corporation (E) Transamerica Delaval Inc. (E)

USM Corporation (B) Union Special Corporation (B) Uniroyal, Inc. (A) United Technologies Corporation (C,D)

Vanguard Supreme Machine Corp. (B) Varian (E) Vetco Services, Inc. (E)

WABCO-Westinghouse Air Brake Co. (D) WJS, Inc. (A)
Wang Laboratories, Inc. (B)
Washington State International (TBD)*
Weatherford International, Inc. (E)
Welt International Corporation (A)
Westinghouse Electric Corporation (C)
White Motor Corporation (D)
Whiting Corporation (D)

Paul Yang & Associates, Inc. (A)

* To Be Discussed Letters in parentheses indicate exhibition area as follows: A. Agriculture Equipment; B. Textile Equipment or Equipment to Produce Consumer Goods; C. Power Generation and Distribution Equipment; D. Transportation Equipment; E. Petroleum Exploration and Extraction Equipment.

Guangzhou's Foreign Technology and Equipment Fair

The first Guangzhou Foreign Advanced Technology and Equipment Fair was held at the old Trade Fair Building on Hai Chu Square in Guangzhou from November 21 to December 4, 1979. It was jointly sponsored by the Guangzhou Municipal Scientific and Technical Exchange Center and Oriental Machinery Ltd. of Hong Kong. Twenty companies from nine countries exhibited automatic and precision machinery, electronic and computing systems, scientific and medical equipment, offshore and marine equipment, and audiovisual and educational equipment to an audience estimated at 80,000.

"Some 2,600 end-user delegations representing units in every province and region of China—with the exception of Taiwan—attended the exhibition. Fifteen hundred delegations came from outside Guangdong Province, the remaining 1,100 coming from Guangzhou Municipality and all prefectures and counties of the province," related W. H. Choi, managing director of Oriental Machinery. The exhibits were arranged on the sixth floor of the old Trade Fair complex and covered an area of approximately 3,000 square meters.

Technical seminars were conducted on the seventh floor, with 42 sessions attended by 3,500 individuals from factories, bureaus, research societies, foreign trade corporations, and other enterprises. Visits to six factories in Guangzhou were also arranged.

Five US companies participated—Rockwell-Collins (Far East) Ltd.; Data 100 (HK) Ltd.; Monsanto Co.; 3M Far East Ltd.; and USM Corporation (Farrell Machinery Group).

By and large, US company representatives were satisfied with the results of the Fair. One American participant reported receiving 1,500 inquiries, and others commonly got up to several hundred.

Several firms stayed behind after the December 4 closing to talk business, but there was at least one fly in the ointment—scarcity of foreign exchange. Many an end-user, after extended discourse on the unit's desire to purchase, promised to apply for a foreign currency allocation—a process which unfortunately takes up to one or two years to successfully complete.

Last-Minute Problems

An inordinate number of last-minute problems and organizational wrinkles were encountered, reflecting, to some extent, the lack of experience on the part of Guangzhou in organizing foreign, as opposed to domestic, exhibitions. Some 15 executives journeyed to

Guangzhou on a specially chartered hydrofoil without having secured visas to enter China; last minute interventions by influential officials and businessmen persuaded the Municipal Public Security Bureau to send representatives to Huangpu (Whampoa) pier, where the foreigners received their visas on the spot. In a few companies' collective opinion, the quality of the workmanship on the booths left much to be desired.

All in all, however, the show was a success, if only because of the level of interest and product awareness achieved. Tremendous quantities of brochures and technical literature were "devoured" by Chinese endusers, and solid contracts were made with key decision-makers in the province. While plans have been announced by Oriental Machinery to assist in organizing similar exhibitions in the near future, companies should be on the lookout for more and more opportunities to participate in locally organized exhibitions in Guangzhou, Shanghai, and Tianjin.

Role of Center

The Chinese co-host, representing the municipal government, was the Guangzhou Municipal Scientific and Technical Exchange Center—formerly the Guangzhou Industrial Technology and Innovative Technology Exhibition Hall established in 1960. The Center, with an exhibition area of about 10,000 square meters, is conveniently located in Hai Chu Square, the heart of the Guangzhou city.

For many years, the Center has played a significant role in technical exchange within China—introducing advanced technology from other parts of the country into Guangzhou and promoting technical innovations in various industries in the city. Since 1974, some 30 specialized technical teams have been organized by the Center among teachers, researchers, technicians, and workers to facilitate exchange and cooperation of various sectors. These teams have been in such fields as electroplating, thermal treatment, machinery, metal, electronics, hydraulic pressure, numerical control, adhesive technology, agricultural machinery, and medical technology.

In 1975, the Center expanded its scope of activities to include technical exchange with foreign countries. Since August 1979, the Center has cosponsored various exhibitions and seminars in electronics, optics, household electrical appliances, industrial and laboratory equipment with several Hong Kong companies.

—John Kamm 完

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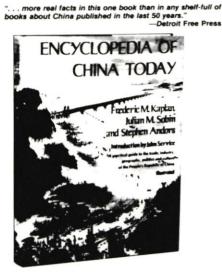
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China, the IMF, and the World Bank

An Old Member Makes Hesitant Overtures

James B. Stepanek

"China . . . is ready to join the United Nations monetary organizations and accept loans from the World Bank and other international monetary organizations."

—Vice Premier Gu Mu September 28, 1979

The repercussions of the PRC's joining the IMF will be felt up and down the Fund's present voting structure, possibly resulting in a complete realignment of the present constituency of the Fund. Membership in the Fund will open the door to the World Bank and its affiliated organizations. This article by CBR's financial editor reviews the issues surrounding the China quota in the IMF—now paid up in New Taiwan dollars—and whether Taiwan could remain in the IMF if the PRC joined, and the economic consequences should Taiwan lose its IMF seat.

As the world's leading repository of cheap credit, the International Monetary Fund and World Bank have understandably fired the imagination of PRC policymakers. But unlike its presence in other UN agencies, where the PRC prefers to maintain a low profile, its large quota in the Fund and Bank would catapult it from its accustomed unobtrusive position on the sidelines right into the cockpit of international finance. In the process, the voting power of the Fund's 138 member countries would diminish 2–3 percent.

For a country that was virtually closed to the outside world and evinced painful ideological misgivings about receiving any foreign loan just 18 months ago, the idea of a front-row seat on the firing line of world inflation, monetary reform, and fight against global hunger must arouse apprehension even among Vice Premier Deng Xiaoping's most internationalist-minded stalwarts.

Unseating Taiwan

The PRC has been trying unsuccessfully to expel Taiwan from the Fund since August 1950, when the first of several cables began to arrive in Washington pillorying the Fund and Bank for allowing the "Chiang Kai-shek clique" to occupy the China seat. Actually, the PRC could probably have realized its objective anytime after October 25, 1971, when it successfully unseated Taiwan in the UN. What prevented this from occurring was Beijing's candid admission that it only wanted Taiwan out but did not itself seek membership in either institution.

In a reversal of policy, the PRC is now seriously considering Fund membership, although expelling Taiwan is still a parallel objective. The change was first announced by Feng Tianshun, general manager of the People's Insurance Company of China, and then the acting general manager of the Bank of China. Feng told a US Congressional delegation in January 1979 that he had "officially recommended" to the Foreign Ministry that the PRC "rejoin" the IMF, according to a *Journal of Commerce* report of January 17, 1979. A month later, Vice Premier Deng told newsmen that Chinese membership in the IMF "will not be difficult if the Taiwan question is solved," Kyodo News Agency announced.

Similar messages were conveyed to a 21-member unofficial World Bank delegation led by David L. Gordon, then the director of the Bank's Industrial Development and Finance Department, and to former Treasury Secretary W. Michael Blumenthal, who also visited Beijing in February. Further confirmation that IMF membership was "under consideration" came from former Finance Minister Zhang Jingfu in July, and from Vice Premier Gu Mu in September.

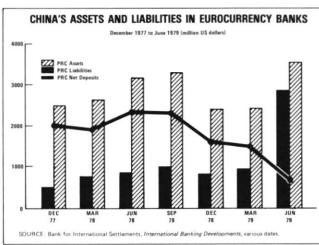
Meanwhile, the PRC has stepped up its quest for information about the Fund. International bankers in New York and Washington have been buttonholed by PRC embassy officials, and Beijing recently sent a mission to Romania to learn about that country's experience in the Fund. Romania entered the Fund in December 1972, becoming one of five Communist countries to do so, joining Vietnam, Kampuchea, the People's Republic of Yemen, and Yugoslavia.

A PRC observer, Chao Mingde, also attended the joint meeting of the Fund and Bank which met in Belgrade, Yugoslavia, during October 2–5, 1979. Chao is special assistant to Bi Jilong, UN undersecretary-general in charge of the Department of Technical Cooperation for Development. But no official meetings occurred, nor was the issue of Taiwan raised.

At two previous Fund-Bank meetings in Nairobi in 1973 and Manila in 1976, the PRC sent telegrams alleging that the Fund and Bank were not complying with the UN General Assembly resolution of October 1971, which decided to recognize the PRC "... as the only legitimate representatives of China in the United Nations, and to expel forthwith the representatives of Chiang Kai-shek from the place which they unlawfully occupy at the United Nations and in all the organizations related to it."

Under its Articles of Agreement, however, the Fund is entitled to make its own determination as to who may be a member. And only when a country is in the Fund may it join the World Bank, and a country must be in the World Bank to join the International Finance Corporation (IFC), or the International Development Association (IDA). These affiliated Bank agencies greatly interest PRC officials, since they specialize in joint equity investments and in fixed-rate concessionary loans to developing countries.

Ultimately, the PRC's decision to enter the Fund must take into account the country's future reserve needs. Between June 1978 and June 1979, China's net deposit position in the Eurocurrency and Asian dollar markets, where a major portion of the PRC's total reserves are maintained, fell dramatically from \$2,314 million to only \$670 million, according to the following Bank for International Settlements statistics:



The China Business Review

WORLD EXTENSION OF CREDIT BY THE BANK OF CHINA

As of February 1, 1980

LOAN RECIPIENT Syndication Leaders	Date	AMOUNT and Terms (Million US \$)
BEAM SHIPPING CO (Philippines) Bank of China Paribas Asia Ltd.	12/79*	\$145 10 yrs; 3½ yr grace period; LIBOR + 0.875
AFRICAN DEVELOPMENT BANK Chase Manhattan Ltd. (London)	10/79	\$150 12 yrs; LIBOR + 0.625 for 4 yrs; LIBOR + 0.750 for last 8 yrs
SUN HUNG KAI (Hong Kong) Banque de Paris et des Pays Bas (French)	10/79	\$42 Terms NA; to build Hong Kong office complex
CHINA CEMENT CO (Hong Kong) Bank of China Chase Manhattan Asia Ltd. Hongkong and Shanghai Banking Corporation	1/80	\$123 10 yrs; 4-yr grace period
TOTAL		\$460

Source: National Council financial files available upon request.

* Date of loan announcement, but syndication has reportedly not been organized as yet.

In the long run, the large Eurocurrency loans and Exim Bank credits that Beijing has recently signed (see charts) will boost the PRC's debt service payments, and may increase the country's need for balance of payments relief.

An Old Member

The Republic of China was one of the 37 original charter members of the IMF. Therefore, if the PRC formally applies to the Fund, the issue is likely to be one of recognition of a successor government, not membership. It is probable, too, that the Fund would follow the lead of the UN General Assembly by revoking Taiwan's credentials and recognizing the PRC, provided that Beijing agrees to send its representatives to Washington and honor the Fund's Articles of Agreement.

Article 8, Section 5, of the Fund's Articles once

represented a major stumbling block to the PRC's entry. It requires Fund members to furnish information on their holdings of foreign exchange reserves, balance of payments and trade figures, national income, domestic price indices, and an explanation of the country's exchange-rate policies.

In a surprise move, the deputy general manager of the Bank of China, Lin Jixin, informed the National Council on September 18 that "China will of course conform to the IMF Articles of Agreement and provide the information required." (See CBR Nov.–Dec. 1979, p. 36). But he noted that ". . . the IMF Articles of Agreement also mention that the IMF should consider the differences in ability by member countries to provide information, and member coun-

WORLD EXTENSION OF CREDIT TO CHINA

As of February 1, 1980

Exim Bank Credits and Government-Guaranteed Loans

Country	Date	(Mi	Amount Ilion US \$
UK	12/78	\$	1,200
Australia	4/79	\$	56
France	5/79	\$	7,140*
Italy	5/79	\$	1,000
Japan	5/79	\$	3,625**
Sweden	5/79	\$	350*
Canada	8/79	\$	1,720*
FRG	10/79	\$	1,100*
Belgium	11/79	\$	173*
Subtotal		\$	16,364
С	ommercial Bank Buye Credits to China	ers'	
UK	3/79-4/79	\$	675
France	4/79	\$	500
Canada	4/79	\$	100
Luxembourg	4/79	\$	50
Chile	4/79	\$	10
US	6/79-10/79	\$	28
Japan	8/79	\$	8,004.6
FRG	10/79	\$	450
Subtotal		\$	9,817.6
TOTAL		\$2	26.181.6

Source: National Council financial files available upon request. Note: The above Exim Bank credits carry an interest rate of 7.25 percent per year for loans under five years, and 7.5 percent for credit of five years or more. The only credit not to conform with these OECD guidelines is Japan's \$1,900 million loan to China in May, which carried an interest rate of 6.25–6.5 percent.

Interest rates on the above commercial bank loans vary according to the length of maturity; however, the interest rate on the loans of 1–5 years duration is 0.5 percent per year above LIBOR, the London Inter-bank Offer Rate. LIBOR stood at 14.25 percent per annum for six-month Eurocurrency credit as of February 1, 1980.

- Loans are denominated in local currency, hence their dollar values may change over time.
- ** Includes a 10-year Exim Bank credit for ¥420 billion (\$1,900 million), and a 30-year Overseas Economic Cooperation Fund credit for ¥50 billion (\$225 million) in fiscal 1979, and an additional \$1.5 billion to be disbursed during fiscal years 1980-86.

tries have no obligation to provide information so detailed as to reveal related confidential information." While countries may ask the Fund to keep the data they provide secret, as does Romania, few countries impose such a restriction.

Exchange-rate policy is another thorny topic that once posed problems to Beijing's participation in the Fund. But as a result of the 1973 oil crisis, when managed floating became the norm, the Fund became hospitable to the type of exchange-rate system used by the PRC.

The Fund presently carries out surveillance of exchange practices to prevent members from ". . . manipulating exchange rates . . . in order to prevent effective balance of payments adjustment, or to gain an unfair competitive advantage over other members," according to Article 4, Section 1, of the Fund's Articles. Under this authority, the Fund asks members to explain the system they choose to use, and then to consistently follow the method they have adopted without surreptitiously injuring other countries.

Many systems are in use: 13 Fund members have pegged their currencies to the SDR (Special Drawing Rights), 42 are pegged to the US dollar, 39 are pegged to the French franc, pound sterling, and currency baskets other than the SDR, and the remaining 44, including Taiwan, use heterogeneous arrangements, as of September 30, 1979. All are permissible exchange regimes under Article 4, Section 2b, of the Fund's Articles.

Big Quota, Big Problems

China's entry into the Fund is awaited with mixed emotions. On the one hand, the PRC's well-known conservative philosophy on financial matters is heartily welcomed. On the other hand, if it were to join, the PRC is currently eligible for a quota of \$2.3–3.5 billion, depending on the data and formula used,¹ a sum which would give the PRC approximately 20,000–30,000 votes.² This could shatter the Fund's carefully balanced voting structure, and the PRC could displace Japan as a member of the "big five."

The Fund's day-to-day operations are presently governed by twenty-one executive directors, of whom five are appointed by the five countries with the largest quotas; namely, the US (\$10.964 billion), UK (\$3.816 billion), West Germany (\$2.813 billion), France (\$2.503 billion), and Japan (\$2.164 billion), based on the current exchange rate of 1.30451 US dollars per SDR, the reserve currency used to denominate quotas. Another executive director is appointed by Saudi Arabia, a right conferred upon a maximum of two countries with the largest credit positions in the Fund, while the remaining 15 executive directors are elected by groups of countries that vote as blocks based on the pooled voting power of the constituent member states, according to Article 12, Section 3.

Taiwan is currently not a member of any con-

stituency, since its representatives have declined to participate in the biennial elections of executive directors in both the Fund and Bank since 1972. Furthermore, Taiwan has not participated in the four general increases in quota which have occurred since 1959; hence, its quota remains unchanged at SDR 550, or \$717.5 million at current exchange rates, and has declined in rank from the fifth largest in 1945 to the seventeenth largest today.

Quotas are scheduled to increase by 50 percent in the latter part of 1980, from SDR 39.0 billion, their present level overall, to SDR 58.6 billion, an increase approved by the Fund's Board of Governors on December 11, 1978. Since the China quota was exempt from this Seventh General Review of quotas, it will then rank twenty-first.

Not only could an increase in the China quota dislodge the Japanese executive director from the Board, but other repercussions might follow. For example, the Fund recently decided to double the voting power of major oil-exporting countries, and also promised developing countries that their collective voting power would not be allowed to decrease. Hence, a large quota for the PRC would reduce the voting power of the industrialized West.

To thwart such a development, West Germany, Japan, and the US might call for quota increases. Most industrialized countries, with the exception of the UK, have smaller quotas than they are eligible for, while the quotas of developing countries tend to be substantially larger than their national income data and trade figures would justify, based on the Fund's formulae.

As a result, the PRC's participation in the Fund could set off an entire realignment in the Fund's voting structure. The repercussions would be felt right down the line, inasmuch as World Bank quotes are normally set at 81.69 percent of a country's quota in the Fund, and quotas in the IFC and IDA are set at 0.55 percent ³ and 5.04 percent,⁴ respectively, of a country's quota in the World Bank. Voting power in these in-

stitutions is also closely tied to the size of a country's quota.

The reason quotas and, in turn, voting shares, are of vital importance is because the Fund is not just a bank, but is also a powerful legislative body that rules on such matters as how countries manage their exchange rates and pay their trade deficits. For countries with serious balance of payments problems, the Fund may set spending ceilings—with a government's consent—over virtually every aspect of a country's fiscal activity.

Votes on significant policy issues usually require an 80 percent majority; changes in quota require an 85 percent majority. This bestows an effective veto power upon the countries with the five largest quotas, who collectively wield 40.49 percent of the Fund's total votes. Almost half of this block of votes is cast by the US.

The US share of total votes has declined from about 30 percent of the total in 1945, to 19.85 percent today, a share that would undoubtedly be diminished further by Beijing's membership, and perhaps someday by the membership of the USSR, a country which would command a quota about 2.5 times larger than China's, based on statistics of the Joint Economic Committee of Congress.

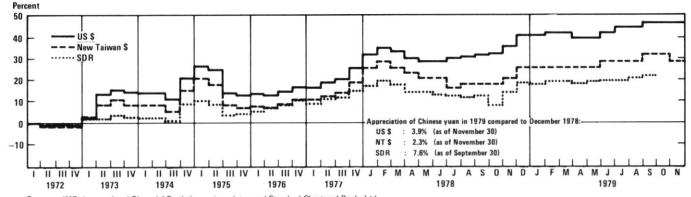
To avoid triggering a quota scramble, the PRC may decide to hold in abeyance any discussion of a change in quota. Because China is already a member of the Fund, the PRC could enter under the current China quota. And then, under Article 3, Section 2, it could ask for a quota increase at any time without having to wait for a General Review of quotas, which takes place at least once every five years. Its present quota of only \$717.5 million would permit the PRC to avoid the limelight until it became more familiar with the Fund's operations.

Use of Fund Resources

Unlike the World Bank, which borrows on international capital markets, and then lends to member

CURRENCY UNITS PER CHINESE YUAN

(Percent change of period averages compared to January-March, 1972)



Sources: IMF, International Financial Statistics, various dates; and Standard Chartered Bank, Ltd

The China Business Review

countriès, the Fund's resources come mainly from member quotas, plus a new reserve asset first issued on January 1, 1970, called Special Drawing Rights, or SDRs. Twenty-five percent of Fund quotas are presently paid in hard currency, and 75 percent in the country's own currency, while SDRs come into being by administrative fiat and are distributed by the Fund to members according to the size of their quotas.

Thus far, the use of SDRs is restricted to the Fund and the Bank of International Settlements (BIS). The advantage of SDRs to Fund members is that they pay an interest to their holders equal to 80 percent of the interest paid on a basket of UK, French, Japanese, West German, and US money market instruments calculated quarterly. SDRs are also subject to minimal "conditionality," or strings attached on their use; moreover, they are owned by members, not the Fund, and are kept separate from the Fund's normal operations in a Special Drawing Rights account.

The Fund will allocate 12 billion new SDRs during 1979–81 in three equal installments on January 1 of each year. Taiwan received SDR 57.2 million in 1979. If the PRC entered the Fund in 1980, it would be eligible to receive the final installment, equal to 10.4 percent of quota. This would represent a windfall gain in reserve assets worth \$240–360 million, assuming a quota of \$2.3–3.5 billion at the time. SDRs already constitute 5 percent of the world's official reserves; the only Fund member not receiving SDRs is Kuwait.

A significant feature of Fund quotas is that, once they are paid in, the sum becomes the property of the IMF (minus SDR allocations). The concept is totally different from a savings bank, in which depositors own what they put in. Therefore, when a country "borrows" \$100 million from the Fund, a two-way flow of funds occurs. The act of borrowing the \$100 million in, say, US dollars, is called a "drawing," in exchange for which the country simultaneously hands over to the Fund the equivalent of \$100 million in its own currency.

To obtain the \$100 million for the country, the Fund may take it out of America's quota, at least 75 percent of which was originally paid in domestic currency, or US dollars. The US position in the Fund is thereby strengthened, even though it did not directly participate in the transaction. The system encourages countries to maintain strong, freely convertible currencies that everybody wants to use. The Chinese yuan is strong in the sense that it has appreciated against the US dollar and SDR by 46 percent and 22 percent, respectively, since the Shanghai Communiqué was signed in February 1972 (see chart). But it is certainly not a "freely usable" international currency as defined by the Fund.

When the country repays the \$100 million, which is normally required within 3-5 years, it must "repur-

chase" the \$100 million of its own currency with \$100 million in hard currency.

In summary, if the country in our example has a quota of \$400 million, then the above transaction is a "reserve tranche" drawing, equivalent to 25 percent of quota, provided no earlier transactions have occurred. "Reserve" tranches replaced the old "gold" tranches on April 1, 1978, when members were no longer required to pay 25 percent of their quotas in gold. A country may also make 4 additional "credit" tranche drawings, each equal to 25 percent of quota.

Apart from these five regular tranches, the Fund also offers its members three permanent and two major temporary "facilities" for countries with special problems (see chart). Since these may be used in conjunction with the regular tranches, a country's total allowable drawings are somewhat less than the sum of these various tranches and facilities; in fact, only about 4.8 times larger than a country's quota. Therefore, if the PRC's quota were \$2.5 billion, it could draw \$625 million, its reserve tranche, with minimal questions asked. Using its credit tranches, it could draw another \$2.5 billion.

But most countries avoid the higher credit tranches, despite interest charges of only 0.5–6.375 percent on tranches 2 through 5, because, as a country's drawings increase, the country is subject to progressively more stringent conditions.

Taiwan's outstanding drawings, as of September 1979, stand at SDR 59.9 million, or \$78.1 million. Because this equals its reserve tranche, 100 percent of Taiwan's IMF quota is now paid up in New Taiwan dollars. If the PRC were to enter the Fund, three-way negotiations between the PRC, the Fund, and Taiwan may be required to arrange a currency exchange. The cross-rate between the Chinese yuan and NT dollar is currently ¥0.043 per NT dollar.

Overall Lending

Total lending by the Fund and Bank is actually quite modest. Fund drawings and World Bank disbursements in 1978 came to \$4.7 and \$4.8 billion, respectively, a combined amount approximately equal to the total 1978 worldwide lending by Chemical Bank of New York.

The World Bank, or International Bank for Reconstruction and Development (IBRD), its formal title, makes long-term loans, usually in dollars, at fixed rates of interest (see chart). Repayment begins after a five-year grace period, and may extend over twenty years. Unlike the Fund, where 72.5 percent of its 1978 drawings went to industrialized countries, the main recipients of IBRD loans tend to be medium-income countries. Brazil and Mexico have received 16.2 percent of the Bank's total lending since 1945.

The IDA, or International Development Association, disbursed far less in 1978 than the IBRD, but its loans have ten-year grace periods and fifty-year

FINANCIAL FACILITIES OF THE IMF AND THEIR CONDITIONALITY

Tranche Policies

Reserve tranche

Conditionality: a member must explain its balance of payments needs. Since the Second Amendment to the Articles of Agreement on April 1, 1978, reserve tranche drawings need not be repurchased. 25 percent of quota.

First credit tranche

A member must present a program demonstrating reasonable efforts to overcome balance of payments difficulties; criteria and installments not used. 25 percent of quota. Repayment in 3-5 years.

Higher credit tranches

A member must give substantial justification of efforts to overcome balance of payments difficulties; Fund resources normally provided in the form of standby arrangements which include performance criteria and drawings in installments. Each tranche 25 percent of quota. Repayment in 3-5 years.

Permanent Facilities

Extended facility

A medium-term program, established in 1974, to overcome structural balance of payments maladjustments; member must present detailed statement of policies and measures for first and subsequent 12month periods. 140 percent of quota. Repayment in 4-8 years.

Compensatory financing facility

Program established in 1963 to finance temporary export shortfalls, as in coffee, sugar, or other cyclically prone export item, for reasons beyond the member's control; member must cooperate with the Fund to find appropriate solutions. 100 percent of quota. Repayment in 3-5 years.

Buffer stock financing facility

Established in 1969 as a financial backup to international buffer stock arrangements; member is expected to cooperate with Fund as in the case of compensatory financing. 50 percent of quota. Repayment in 3-5 years.

Temporary Facilities

Supplementary financing facility

For larger amounts and for longer periods in order to support economic programs under standby arrangements reaching into the upper credit tranches or under extended arrangements; members are subject to relevant policies on conditionality, phasing, and performance criteria. 102.5-140.0 percent of quota. Repayment in 3.5-7 years.

Trust Fund

Administered by the Fund as Trustee, the Trust Fund was established in 1976 to provide balance of payments assistance to developing member countries on very concessionary terms, capitalized by the Fund's sale during 1976-79 of one-third of its gold holdings of 150 million ounces. Repayment in 5.5-10 years.

Sources: IMF, IMF Survey, September 1979, pages 6-16; and IMF Treasurer's Department.

maturities. They carry a service fee of 0.75 percent per year on the disbursed portion of each credit, but no interest charges. Since the IDA was established in 1960, 40.3 percent of its credits have gone to India. Fifty member countries qualify for IDA assistance, having per capita GNPs under \$581, calculated in constant 1977 US dollars.

The IFC, or International Finance Corporation, also directs its investments mainly toward countries with annual per capita incomes under \$581, a figure well above the PRC's 1978 estimated per capita GNP of \$405.

Established in 1956, the IFC specializes in commercial loans and equity investments. Its budget for such activities in fiscal 1979 was \$425.4 million. Its loans have fixed interest rates, currently around 11.5 percent, with 7-12 year maturities.

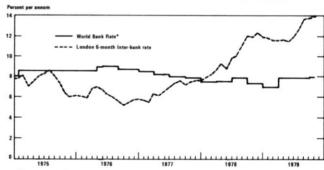
Worldwide, the IFC owns equity shares in 177 joint ventures in 66 countries, according to the IFC's 1979 Annual Report. In Yugoslavia, it owns 15-20 percent equity shares in seven joint ventures including the large-scale Fap Famos motor vehicle and accessories plant. Seldom does the IFC actively participate in the management of these enterprises, IFC officials have noted. Beginning in 1979, the IFC shifted its emphasis to the development of the fuel and mineral resources in its member countries.

Taiwan received seven IBRD loans during 1963-71, of which \$229.3 million is outstanding and \$80.5 million remains undisbursed. All were long-term loans calling for final payment in 1995. The IDA made four loans totaling \$15.3 million to Taiwan in 1961, while the IFC has \$5.8 million in outstanding loans and \$1.9 million in outstanding equity in two Taiwan companies made during 1970-71.

Unlike the Fund, a country's eligibility to receive IBRD, IDA, and IFC assistance is not limited by the size of its quota. Taiwan's quota is \$750 million in the IBRD, \$31.4 million in the IDA, and \$4.2 million in the IFC; only its subscription to the IFC has been paid in full.

It is noteworthy that the former general manager

WORLD BANK INTEREST RATES COMPARED WITH THE COST OF EUROCURRENCY CREDIT



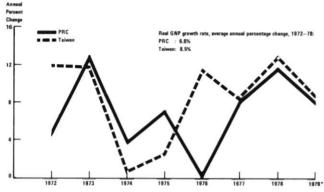
Rates are normally reviewed quarterly, and any changes that are carried out become effective on the first of the month.

Sources: IBRD Financial Operations Division; International Finance Corporation

Annual Report, 1979; and IMF, International Financial Statistics,

November 1979.

REAL GNP GROWTH RATES OF THE PRC AND TAIWAN, 1972-79



na Business Review

and now the chairman of the Bank of China, Bu Ming, reportedly told Takeshi Watanabe, chairman of the Trilateral Commission, that his government wanted to be "reinstated" in the IBRD, IDA, and IFC, and, furthermore, that the PRC would take over Taiwan's liabilities in these institutions after Taiwan and the mainland were reunited, according to a Kyodo News Service report of June 7, 1979.

Bu Ming's use of the word "reinstated" is curious. since membership in the IDA and IFC was secured by Taiwan in 1960 and 1969, not by the pre-1949 government of the Republic of China which originally obtained China's membership in the IMF and IBRD. Hence, the PRC is acknowledging these membership initiatives by Taiwan as being in its interests as well.

Taiwan Left Adrift

If the PRC entered the Fund and Bank, Taiwan could maintain ties with these institutions under special circumstances. Though purely hypothetical, these possibilities are worth exploring since the PRC and Taiwan already have extensive trade with each other via Hong Kong, and are showing signs of opening a public dialogue.

Article 4 of the Fund's Articles permits the Fund to conduct consultations with territories of member countries with separate currencies. An example is the Netherlands Antilles, which became independent in 1954 from the kingdom of the Netherlands with regard to the management of its monetary unit, the Antilles Guilder, and in other domestic matters. The Fund has close ties with the Netherlands Antilles, and two full pages on the Netherlands Antilles appear in the Fund's International Financial Statistics, which is devoted to economic data on member countries.

The similarity with the PRC and Taiwan situation breaks down, however, since it is unlikely that Taiwan would accept designation by the PRC as a subordinate territory, a necessary precondition for Article 4-type arrangements.

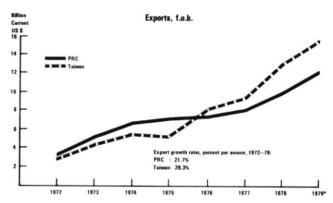
Another option is that Taiwan might stay in the

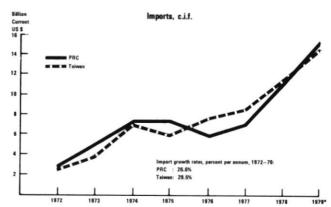
Fund, and the PRC would enter the World Bank. No precedent exists for dual representation by the same member; nevertheless such a unique arrangement is legally feasible, according to officials in the Fund's Legal Department. Apart from these arrangements, it is unlikely that the PRC and Taiwan could coexist in the Fund and Bank simultaneously as representatives of the same country.

If Taiwan lost its position in the Fund to the PRC, however, it would still be protected indirectly by the Articles of Agreement. Article 11, Section 2, stipulates that no Fund member may carry out discriminatory trade practices, or trade wars, against a nonmember if the practices also harm other Fund members.

FOREIGN TRADE OF THE PRC AND TAIWAN, 1972-79







ernational Financial Statistics, November 1979; and Na ional Trade Quarterly Review, ER CIT 79-001, September 1979

PRC trade projections are based on official 1979 data released July 13, 1979, by Xinhua News Service, nuary—June exports of 149.5 billion, and imports of \$11.8 billion. These totals were doubled, and di nuary—September period average yuan/dollar exchange rate of 1.55. The same methodology was und livan's 1979 exports and imports, based on January—August totals appearing in IMF, International Fina the second second

Hostile trade policies toward Taiwan, for example would affect the US, which accounts for about 30 percent of Taiwan's foreign trade.

Taiwan has been expelled from about a dozen UN Specialized Agencies since 1971 (see *CBR* May–June 1979, pp. 28–36). The Fund and Bank offer Taiwan its last source of balance of payment and development financing apart from the Asian Development Bank to which Taiwan still belongs. Although it has not bor-

rowed from the Fund or Bank for many years, owing to the remarkable strength of its economy (see chart), Taiwan's foreign exchange reserves have been falling steadily from 37.8 percent of imports in 1972 to only 12.4 percent of imports in 1978. The PRC surely understands that by denying access to the Fund, it is injuring Taiwan's economic interests, a fact which undoubtedly accounts for Beijing's cautious approach to the Fund and Bank.

Sector	Year-End Total (Target)	As of	Percent Increase Over 1978 Same Period (Target)	Percent Increase 1978 Over 1977
Trade		•		
Total trade	¥ 42.97 billion (¥ 44 billion)	12/22	29.8 (23.9)	30.3
Exports	¥ 20.14 billion (¥ 19.2 billion)	12/22	26.7 (14.7)	20
Imports	¥ 22.83 billion (¥ 24.8 billion)	12/22	32.7 (32.4)	41.1
Industrial Production				
Total gross value of industrial output (GV10) Of which:	\$295.0 billion ¥ 456.9 billion	12/31	over 8 (8)	13.5
Light industry	NA	12/31	9 (8.3)	9.7
Heavy industry	NA	12/31	7.4 (7.6)	NA
Steel	34.43 MMT (32 MMT)	12/31	8.3 (0.7)	33.9
Rolled steel	24.76 MMT	12/31	12.1	35.2
Nonferrous metals	over 1 MMT	12/31	12.8	NA
Coal	620 MMT (620 MMT)	12/25	0.3 (0.3)	12.4
Crude oil	106.1 MMT	12/31	1.9 (1.9)	11.1
Natural gas	NA	12/31	1.7 (1.7)	NA
Gasoline, kerosene, diesel oil, lubricating oil	NA	12/31	5.4 (5.4)	
Pig iron	34.95 MMT	12/14	5	38.9
Chemical fertilizer (100% effectiveness)	9.57 MMT (9.57 MMT)	11/28	21.4 (10.1)	20.1
Synthetic fiber	300,000 tons* (299,700 tons)	12/31	5.4 (5.3)	49.9
Mixed and synthetic fabrics	3.3 billion meters*	12/31	65	NA
Farm machinery total output value	¥ 9.2 billion	12/31	NA	NA
Electric power	275 billion kwh	12/27	9.7	NA

 The Fund adopted a multiformula procedure for calculating quotas after 1963. The first step involves calculating an initial quota, using the following

equation: Q =
$$(.01Y + .025R + .05M + .2276V) \left(1 + \frac{X}{Y}\right)$$
, where Q = quota, Y = national income, R = foreign exchange reserves, M =

Q = quota, Y = national income, R = foreign exchange reserves, M = annual average imports over a 5-year period, V = one standard deviation around a 5-year average of exports over a 13-year period, and X = annual average exports over a 5-year period.

The calculation of the variables M, V, and X is based on "Set I" data, or figures from the merchandise trade account of a country's balance of payments. A second calculation is then made using "Set II" data, defined as current account receipts and payments.

To obtain the final calculated quota, additional calculations using Set I and Set II data are made, using four modified formulas with different co-

efficients. The results of the ten calculations, derived from the five formulas and two sets of data, are then averaged using adjustment factors to obtain both an average quota and range of quotas. The calculated quota(s) are then presented to the Executive Board for consideration. (See Michael E. Edo, "Multiformula Method Adds Flexibility in the Calculation of Member Quotas," IMF Survey, June 5, 1978, pages 166–168.)

- 2. According to Article 12, Section 5a, "Each member shall have 250 votes plus one additional vote for each part of its quota equivalent to 100,000 Special Drawing Rights."
- 3. Payable in full in US dollars.
- 4. Ten percent of a country's IDA quota, or "subscription," as it is called, must be paid in US dollars, while 90 percent may be paid in the country's own currency or central bank notes.

			Percent Increase Over 1978	
Sector	Year-End Total (Target)	As of	Same Period (Target)	Percent Increase 1978 Over 1977
Electric power	278 billion kwh* (275 billion kwh)	12/31	8.4 (7.2)	14.8
Television sets	1.16 million	11/30	150 (100+)	NA
Radio sets	10.45 million	10/31	15.8	NA
Bicycles	NA	12/31	23 (10.8)	14.9
Sewing machines	NA	12/31	20 (8.6)	14.7
Wristwatches	NA	12/31	22 (12.7)	22.4
New urban housing (floorspace)	40 million sq. meters*	12/31	28.5	NA
Agriculture				
Grain production of which:	315 MMT	12/31	3.3 (2.5)	7.8
rice	140.0 MMT	NA	NA	NA
wheat	57.0 MMT	1/3	NA	NA
corn	54.0 MMT	NA	NA	NA
coarse grain and pulses	64.0 MMT	NA	NA	NA
Agricultural investment	14% of total state investment	12/31	3.3	NA
Transportation				
Rail freight	1,080 MMT	12/26	1.89	30.5
Rail passengers	822 million	12/26	5	NA
Volume cargo handled at ports	NA	12/16	6.7	NA
Naterway freight transport	NA	12/16	7.4	NA
Total air cargo, passenger transport, and income	NA	12/10	over 30	NA
Tourists	800,000	12/31	NA	NA
Average annual income, urban dwellers	¥ 700	12/31	5.74	NA
Average income, peasants	¥ 80	12/31	8.11	NA

Energy

Deep Structural Deficiencies

Vaclav Smil

At the forefront of China's reassessment priorities is the need to improve energy output, efficiency, and systems in the PRC. Without a substantial improvement in energy supplies, the progress of China's modernization will be impeded. In this short article, energy expert Vaclav Smil catalogs some of the areas China must improve upon if headway is to be made in energy.

Not surprisingly, the release of China's first official industrial and agricultural output statistics in 20 years resulted in a great deal of foreign attention and occasioned a variety of quick economic appraisals and comments. However, most of the outside estimates available before the release of the State Statistical Bureau communiqué on June 27, 1979, were not far from the new official figures (the most notable exception: power generation, 60 percent higher than the Western estimates), and the new data served largely to strengthen the impression of the Chinese economy created by critical Western researchers during the past five years on the basis of unsystematic and predominantly semiofficial information.

Consequently, it can be argued that the most important figures to emerge from China during 1979 (in fact, the trend had started in the latter half of 1978) have been scores of numbers scattered, as usual, in a variety of printed and broadcast materials that are revealing the country's deep-seated economic problems and essential structural deficiencies much better than a simple output value can ever do. This article highlights those candid quantitative admissions regarding the state of China's energetics and, where appropriate, puts them in international context.

The new revelations about the state of energy production and conversion are indicative of pervasive inefficiences. Aggregate nationwide conversion efficiency of primary energy (fossil fuels and hydroelectricity) in China's economy in 1978 was just 28 percent; that is, 72 percent of all energy consumed was wasted. In contrast, the United States average is currently about 51 percent, the Japanese efficiency is even higher at 57 percent, and all West European nations convert their energy with overall mean efficiencies exceeding 40 percent.

Poor Chinese performance is largely due to very

low efficiencies in coal combustion: a mere 40–50 percent in large industrial boilers (70–80 percent is the average Western level), 15–18 percent in household stoves (modern natural gas or fuel oil-fired furnaces have efficiencies 50–80 percent) and 6–9 percent in the still dominant steam locomotives (diesel engines on Western railways are at least 20–25 percent efficient).

Coal—Productivity and Mechanization

Coal extraction, exceeding 600 million metric tons annually, is approaching the total US output, but the industry's low mechanization, and the resulting low productivity and poor output quality, would need a staggering investment to modernize. Shigejie coal mine in Shanxi now holds the national record in labor productivity with 2.70 metric tons of coal extracted daily per underground miner (2.35 tons when administration and service workers are included); this in a coal basin which has one of the world's thickest and least inclined bituminous coal seams. In contrast, the average productivity of a US underground miner is now around 12 metric tons per shift with the best mines exceeding 20 tons a day.

And while the tunneling, coal extraction, loading, and conveying are more than 95 percent mechanized in any Western or Communist European nation, the degree of mechanization in tunneling and mining in the 16 mines in Datong, now the largest coal-producing basin in China, was just 45 percent in 1978; Kailuan, before the 1976 earthquake China's most modernized mining center, was about 50 percent mechanized.

Electric Power—An Overtaxed System

Owing to the chronic shortages of electricity, 20 percent of China's productive capacity lies idle—yet until very recently some of the generating equipment was unbelievably underutilized. China's largest power plant, Qinghe in Liaoning, has a rated capacity of 1,100 megawatts, but only 300 Mw were in operation due to appalling mismanagement. On the other hand, as stated by Liu Lanbo, minister of Electric Power, most of the generating equipment is overtaxed because the average load factor of China's thermal stations is the highest in the world: there are practically no reserves and facilities are in bad repair as there is little

possibility to schedule regular maintenance outages.

Liu Lanbo also revealed two important figures which illustrate the backwardness of China's power industry. Average 1978 coal consumption by large thermal power plants under the ministry was 433 grams of standard coal (or 3,031 kilocalories) per kilowatt-hour: this compares with the current US average of about 360 and the Soviet mean of 330 grams of standard coal per kilowatt-hour and puts China some 15 to 20 years behind the advanced world performance.

Even more surprising is the level of transmission losses: while during nine years in the 1950s it was reduced from 18 to 8 percent of the total power generation, the nationwide average was 16–17 percent in 1978, and the losses in rural areas are much over 20 percent.

Iron and steel industry has been known to be both insufficient (hence the planned massive production increases) and inefficient (hence constant conservation campaigns), but the new admissions show that specific electricity consumption per ton of steel had actually risen from 665 kilowatt-hours in 1965 to 1,102 kilowatt-hours in 1977. In the industrialized nations this value is now between 300 and 500 kilowatt-hours. The US average is close to 400.

The PRC's nationwide average of coke consumption in iron smelting in large plants was 615 kilograms per metric ton of pig iron at the beginning of 1978 and then it fell sharply to 529 kilograms per ton in early 1979—but this is still some 20 percent behind the world's top levels. And while the total energy needed to produce a metric ton of steel is equal to less than one metric ton of standard coal (that is, coal with 7,000 kilocalories per kilogram) in the West and just 800 kilograms in Japan, China's average usage is two to three times higher. Naturally, performance of numerous small iron and steel plants, which accounted for 11 percent of total output in 1977, is even worse.

Contrary to the expected trend, specific electricity consumption has risen since the mid-1960s in other key industries besides iron and steel industry. In 1965 major coal mines consumed 21.4 kilowatt-hours per metric ton of coal, while in 1977 the consumption rose to 31.9 kilowatt-hours. During the same period, electricity consumption per 10,000 yuan of chemical products climbed from 5,378 to 8,453 kilowatt-hours.

The staggering magnitude and extent of inefficiencies and structural weaknesses in Chinese energetics has, of course, its positive side: unlike in the advanced industrialized nations, there is truly huge potential for energy conservation through introduction of new technologies, fuel substitution, rational management and long-range planning. All of these changes will, naturally, require sizable investment, but they would provide much additional energy at a substantially lower cost than the exploration and development of new fuel deposits.

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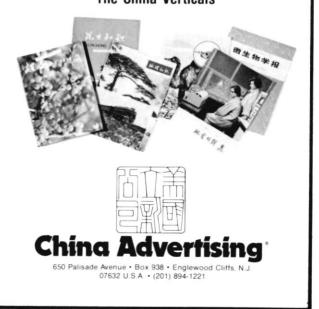
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Financial Notes

First Government-to-Government Loan to China

Japan has agreed to extend a long-term, low-interest \\$50 billion (\\$225 million) loan to China during the current 1979 fiscal year which ends in March 1980. Additional loans totaling as much as \\$1.5 billion will be negotiated each year through fiscal 1986, according to a December 7 Xinhua announcement. The funds will be used to build six port, railway, and hydro projects, the largest being a \\$530 million, 100-meter-high hydroelectric dam in Hunan Province (see chart).

Untied Credit

The Bank of China will administer the loan, which is not tied to Japanese exports. In theory, China could enlist the help of firms in any country to build these projects, but in practice Japanese companies have a considerable lead. Apart from possessing exact information about the projects, Japanese firms helped select projects in areas in which Japan enjoys strong industrial expertise.

But US assistance could be recruited to help China build the Longtan

RMB:DOLLAR RATES AS OF JANUARY 15, 1980

	RMB/US\$	US¢/RMB
Decembe	r 8	
Bid	1.5227	65.6728
Offer	1.5151	66.0022
Median	1.5189	65.8371
Decembe	r 29	
Bid	1.4999	66.6711
Offer	1.4925	67.0017
Median	1.4962	66.8360
January	3	
Bid	1.4939	66.9389
Offer	1.4865	67.2721
Median	1.4902	67.1051
January	15	
Bid	1.4999	66.6711
Offer	1.4925	67.0017
Median	1.4962	66.8360
Source: Sta	andard Chartered	Bank, Ltd.

hydropower station in Guangxi Province, and the Shuikou power plant in Fujian Province, the two projects in the original package of eight projects which China presented for Japan's consideration, but which Japan declined to fund. The overseas procurement component of these two hydro projects is estimated at \$2 billion, JETRO sources have revealed.

The credit package carries an annual interest rate of only 3 percent with repayment over 30 years after a 10-year grace period. The credit is expected to reduce China's use of the Eurocurrency and Exim Bank credits signed in the past year, totaling \$26 billion as of February 1, 1980, which generally offer China interest rates and other terms far less advantageous than Japan's recent government-to-government soft loan.

It is unlikely that the US will extend a similar loan to China very soon. Such a concessionary credit would fall under the category of foreign aid, and China is not qualified to receive such aid until the president determines that China is not "dominated or controlled by the international Communist movement," as stipulated in Section 620b of the 1961 Foreign Assistance Act.

Meanwhile, the passage of the US-China Trade Agreement on January 24 has opened the way for Exim Bank credits for China, probably in 1981, but Exim Bank credits normally carry a much higher interest rate of at least 7.25 percent. Unlike Japan's Overseas Economic Cooperation Fund, the government's soft loan window which extended the recent loan to China, the US Exim Bank is a self-sustaining institution that does not receive federal appropriations.

China Begins Loan Drawings

China has made its first drawing on its \$1.2 billion UK facility. The loan was extended to China on December 6, 1978, by seven British banking groups with government guarantees provided by the Export Credit Guar-

antee Department (ECGD). China only had another 4 months to utilize the credit, owing to the expiration in May of the 18-month period within which the first drawdown must occur in order to activate the 6-year facility. The recent \$6.5 million drawing is reportedly for the supply and installation of a British-built spark-plug factory in China.

The Bank of China's lines of credit now total \$26.2 billion worldwide (see page 57). Of this, \$16.4 billion represents Exim Bank credit, or commercial loans with Exim Bank guarantees. With the exception of the ¥420 billion (\$1,900 million) Japanese Exim Bank credit which carried an interest rate of only 6.25 percent fixed, all of the other Exim Bank loans and guaranteed credit observe the Gentlemen's Agreement annual interest rate of 7.25 percent fixed on loans of under five year's maturity to developing countries such as China.

Another \$9.8 billion represents commercial bank loans, all of which carry interest rates on medium-term credits of 0.5 percent over LIBOR, the London Inter-Bank Offer Rate, which is the spot rate banks charge each other for loans on the London Eurocurrency market. At least \$100 million of China's commercial bank loans have reportedly been drawn down as of February 1, 1980, according to US bankers contacted by the Council.

Several factors account for China's hesitancy to draw down the staggering \$26 billion it has obtained. Some of the commercial loan syndications were announced prematurely, and have only recently become available to China. An example is the Bank of Tokyo's 31-bank syndication for \$2 billion which was extended to China in May, then renegotiated over the summer months, and officially announced in August 1979.

Another reason is that the prospect of additional government-to-government soft loans and the possibility of World Bank credit (see page 55) have caused Beijing's financial planners to reevaluate their need for loans which were negotiated over a year ago in many cases and under different market conditions, but which now carry much higher interest rates.

The main reason, however, relates to China's overall balance of payments position, which has eroded but is still strong. China's 1979 trade deficit was \$1.8 billion, according to Foreign Trade Ministry data released by Xinhua on December 27. Despite the 32.7 percent growth of China's exports in 1979, to \$15.1 billion, the defiicit was kept down by a 26.7 percent growth in exports, to \$13.3 billion. Normally, a deficit of such a magnitude would have triggered cuts in imports the following year to correct the imbalance, or alternatively forced the government to increasing borrowing to cover the trade deficit.

But loans were perhaps less necessary in 1979 for balance-of-payments purposes than in 1978, when China's official trade deficit was only \$796 million. This is because new forms of financing emerged in 1979 which were not available before, at least not to the same extent; namely, compensation trade arrangements, a booming tourist industry, larger remittances from PRC-owned businesses in Hong Kong and from overseas Chinese, and increased gold sales.

Apart from actively seeking loans, the Bank of China has recently begun to extend foreign loans. Since October 1979, the bank has joined four syndications, in two of which it is a lead manager, extending credit worth \$460 million to two Hong Kong businesses, a Philippine shipping company, and the African Development Bank (see page 56).

Gold Sales and Output Up

China recently issued 50,500 gold coins to commemorate the United Nation's International Year of the Child. The recent sales followed last fall's offering by the People's Bank of China of 70,000 sets of gold coins commemorating the 30th anniversary of the PRC. Thirty thousand sets were picked up by Hong Kong merchants and sold for HK\$7,800 (\$1,625) per set. Sales revenues from both offerings are believed to have exceeded \$100 million.

China has clearly stepped up gold production in response to soaring world gold prices. Annual gold output is estimated to be 25 metric tons, based on scattered press reports, equivalent to approximately \$500 million at current market prices.

China's principal mining areas mentioned in recent Chinese radio broadcasts are located in western Henan Province, southern Zhejiang Province, Heilongjiang Province, and northeastern Shandong Province. The large-scale Huanan and Wulaga mines in

eastern Heilongjiang Province reportedly increased their outputs in 1978 by 16 percent and 75 percent.

China's gold reserves are estimated to be between 250 and 500 metric tons, according to the research department of one US bank. At the market price of \$660 per troy ounce, as of February 1, 1980, these reserves would currently be worth \$4.4-8.7 billion. —JS %

Six Sino-Japanese Joint Projects



- Qinhuangdao Port New wharf and extension of coal terminal with capacity to export 20 million tons of coal annually.
- **Beijing-Qinhuangdao Railway** New electrified double line to facilitate coal exports from the Kailuan coalfield in northern Shanxi and Hebei.
- 3 Shijiusuo Port Extension of deep-water wharf to accommodate 100,000-ton-class vessels, including a berth to handle 10 million tons of coal exports per year, and another to handle 5 million tons of iron ore imports per year.
- Yanzhou-Shijiusuo Railway 300-kilometer line to transport coal between Shijiusuo Port and Yanzhou, a coal transshipment point on the trunk railway between Tianjin and Shanghai.
- Wuqiangxi Hydro Project Power, flood control, and navigation project on the lower reaches of the Yuan Shui River, Hunan. Generating capacity: 1.5 million kilowatts.
- **6** Hengyang-Guangzhou Railway Parallel line along existing railway to facilitate north-south commerce.

Source: New China News Agency, December 7, 1979

Economy

China's Economic Experiments Meet Stiff Opposition

China's new economic experiments, which should pave the way for large-scale reforms, have brought many aspects of the PRC's economic system into focus: in particular, prices and pricing, and relationships between authorities and between authorities and enterprises. Companies considering joint ventures and other business arrangements should review these developments closely, for they have a direct impact on the progress and implementation of China's foreign business regulations.

A chorus of protest from government supply departments may abort the management reforms recently implemented by the Ministry of Finance and State Economic Commission, China's highest-level production planning body. At the root of the controversy are roughly 1,200 state enterprises selected in 1979 by the State Economic Commission as a proving ground for self-management reforms.

The reforms have already undermined the monopoly position of state-run commercial agencies, as efficiency-conscious factory directors have begun to sell products directly to end-users under the freer management regulations (CBR Sept.—Oct. 1979, p. 53). Until the furor subsides and a cohesive body of law governing domestic industry takes shape, China has understandably delayed issuing a definitive set of laws governing foreign joint-equity ventures.

Five-Point Reform Charter

The reforms were issued in mid-1979 in five State Council directives which granted selected state-owned enterprises the right to:

- retain 5 percent of their profits, and 20 percent of their profits after state quotas are fulfilled;
- negotiate directly with foreign companies, and retain a share of their foreign exchange earnings;
- promote workers according to the principle of "more pay for more work," and control their own welfare and bonus funds, which are normally around 5 percent of a factory's total wage bill:
- draw up their own production plans, and sell above-quota output directly to other factories;
- receive bank loans, the purpose being to avoid the red tape involved in requisitioning funds, and to increase the role of the People's Bank of China and Construction Bank in monitoring factory budgets.

These reforms parallel those carried out last year in the foreign trade sector, where selected provinces and cities received permission to bypass the Ministry of Foreign Trade and deal directly with foreign firms (CBR Sept .-Oct. 1979, p. 3). These developments have apparently aroused deep-seated apprehension throughout China's commercial establishment, "Some comrades fear that after the expansion of the decision-making power of enterprises, local governments and departments concerned will have nothing else to do . . .," the Communist party journal Hong Qi (Red Flag) acknowledged on October 2.

Bureaucratic Resistance Mounts

The backlash was first felt by an initial group of 100 experimental enterprises selected in Sichuan Province last January. Local commercial depart-

ments there prohibited the enterprises from selling their own output on the market because some of the goods were listed among the 804 items, called Category I commodities, exclusively distributed by the Ministry of Material Allocation. First set up in 1964 under the man who is the current vice chairman of the State Economic Commission, Yuan Baohua, the Ministry of Material Allocation has apparently been reestablished in recent months to coordinate the supply of top priority goods between ministries.

Category II commodities, by comparison, are handled by provincial supply departments, while most Category III commodities, beginning November 1, 1979, may be sold in local free markets. Since most state enterprises produce only high priority first-category commodities, the reforms represent a radical departure from previous policy by allowing a portion of these goods to be sold without government approval. "At present," Xinhua reported on September 14. "a prominent contradiction is that both factories and commercial departments are contending with each other for the right to sell popular products."

Eight factories under the management experiment in Beijing, Shanghai, and Tianjin have run into similar conflicts with local officials who discouraged innovation and cut off funds earmarked for the experimental enterprises. So far, only one-third of one percent of China's 350,000 state-owned enterprises are under the freer regulations. So vehement is the opposition to the small experiment that the noted economist, Xue Muqiao, has lamented that "If restructuring on a small and experimental scale is not possible at this moment, how can we ever hope to conduct such an experiment on a broader scale in the future," according to his long commentary on the reforms in the October 10 People's Daily.

A campaign to win support for the reforms claims that the 1,200 enterprises under the experiment turned over ¥1,050 million in increased profits to the state in 1979, while retained profits amounted to ¥250 million, Xinhua announced on October 26. By contrast, 24 percent of China's state enterprises normally run at a loss, Chairman Hua's report to the June National People's Congress revealed.

The achievement is not surprising, inasmuch as radio broadcasts from around the nation indicate that the

368 enterprises taking part in the experiment in Beijing, as well as the 50 in Hubei, 34 in Jiangxi, 400 in Guangdong, 224 in Sichuan, and 124 in Fujian, Yunnan, and Inner Mongolia were mainly profitable "Daqing-type" industrial leaders to begin with.

Ironically, the large profits made by these enterprises have fueled criticism. Opponents argue that since prices are irrational in China, the rate of profit does not measure "economic efficiency," the new catchword that the State Economic Commission hopes will eradicate the policy of "egalitarianism" which prevailed in the Maoist era.

Debates on this topic in Jingji Guanli (Economic Management) and Hong Qi have pointed out that it is quite possible for an enterprise in China to be well managed but make no profit if the state has set the price of its output below cost.

As a consequence of the reforms, processing industries in the consumergoods sector are making windfall profits because state trading monopolies have set the prices of their goods very high, while coal mines and other extractive industries barely cover their costs. In 1978, for example, the average rate of profit was 40 percent for petroleum industries, 31 percent for power, 13 percent for metallurgy, and only 1 percent for coal enterprises, Ma Hong noted in an October 2 Hong Qi article. Thus, coal is being mined for ¥20.8 (\$13.4) per metric ton and only marked up the equivalent of 15 US cents per ton. The right to keep 5 percent of such meager profits, allowed under the reforms, cannot be expected to fire the miner's enthusiasm.

Due to such "irrational price fixing," the author noted that the 33,000 workers at Beijing's Yanshan Petrochemical Corporation turned over ¥1 billion in profits to the state in 1978, more than the total profit remittances contribued by China's two million coal miners.

The price levels of major industrial products in China are due in part to historical accident; namely, the levels at which prices of producer goods were frozen in place during the Korean War, according to Sinologist Dwight Perkins. Since then the government has kept the prices of industrial goods high, thereby increasing factory earnings, in order to minimize the number of enterprises requiring subsidies. A National Price Commission is respon-

sible for setting prices, although little is known about its checkered history since it was last reestablished under Xue Muqiao in mid-1963.

Because the levels of reinvestment, bonuses, and worker fringe benefits are now linked directly or indirectly to profits under the new management reforms, they are perceived as being blatantly unfair. For example, the Daqing oilfied makes a profit of ¥67 on every metric ton of crude oil production (one ton is worth ¥100 at current domestic prices, or 28 US cents per gallon), while the Yumen oilfield in western Gansu Province makes a profit of only ¥20 per ton, owing to the region's poorer oil endowment. Hence, the reforms are bestowing the fattest profits upon enterprises which enjoy arbitrarily high fixed prices, or are favored by abundant natural resources, and not necessarily upon enterprises that are well managed.

Reforming the Reforms

To salvage the self-management experiment, a series of three new reforms is under discussion, according to September and October issues of *Hong Qi*. Their purpose is to equalize the profit rate of enterprises with different material endowments. The new rulings will require well-endowed enterprises (1) to pay higher taxes, (2) to readjust their prices, and (3) to buy all their fixed assets with interest-bearing bank loans.

The last reform has already been issued in the form of the State Council's Trial Regulations for Granting Capital Construction Loans, announced by Xinhua on November 16. It stipulates that beginning in 1980, light industries and tourist enterprises in Beijing, Shanghai, and Guangdong Province must obtain loans from the Construction Bank in order to buy such items as tourist buses or ships. The duration of loans may not exceed 10 years for all enterprises except heavy industries, which get 15 years, and the interest rate is doubled for late repayment.

The trial policy is clearly meant to cut the umbilical cord that binds state enterprises to China's Ministry of Finance. The Ministry is still required to allocate capital to most state enterprises in the form of budgetary grants, a policy it would cease forthwith if it had its way.

Significantly, the newest reform package does not mention rent. Thus, state-owned restaurants and stores with the best locations will continue to make higher profits, in the absence of a rent differential, than equally wellmanaged businesses on out-of-the-way streets. The use of rent in this manner has historically been in disfavor in Communist societies, even in post-Mao China, apparently.

The opposition to this second round of management reforms may prove to be just as strident as the earlier criticism. The main reason is that provincial and local governments in manufacturing regions, which get most of their revenues from enterprise profits and taxes on light industry, have a vested interest in China's "irrational" price structure. For example, if the prices on processed goods were lowered and the price of coal raised, then Shanxi Province, which alone accounts for 14 percent of China's output and 40 percent of the country's coal reserves, would benefit at the expense of manufacturing centers such as Shang-

Local Revenues Increased

To appease the opposition, the Ministry of Finance recently issued a circular that allows provinces and cities to keep a fixed portion of the profits and taxes of state-owned enterprises in their areas, according to a December 31 Xinhua bulletin. The measure aims to win the political support of local cadres who have hitherto opposed the management reforms. It grants local governments a substantial slice of enterprise profits.

While placating old foes, the plan has nevertheless alienated China's poorer regions. In particular, the western provinces view the measure with mounting alarm, since they are still on the threshold of economic development and are the recipients of aid from China's surplus revenue regions such as Shanghai, Tianjin, and Liaoning Province. In 1972, for instance, over 90 percent of Shanghai's revenues were reportedly remitted to the central government for projects in other parts of the country. Such a reform would allow more funds to be retained locally, and leave less for redistribution to poorer areas. "On the whole," Hong Qi observed in August, "industrially advanced regions want greater decision-making power, whereas the industrially backward regions want unified management and allocation by central authorities." —IS 完

Agriculture

A Record Harvest

While China may not be a large market for US grain this year, agricultural experts are reeling at the phenomenal quantity of China's purchases of US raw cotton for 1979/80. China is now the biggest market for American cotton.

To provide more textiles and apparel for its population, and meet a domestic consumption rate running at an estimated 12.4 million bales a year, the PRC has so far contracted for 2.1 million bales of US cotton, representing a 69 percent jump over 1978/79 purchases. Still outstanding are sales of 1.7 million bales which will constitute over \$500 million in the balance of US exports to China this year.

According to PRC year-end statistics, cotton yield showed a slight improvement over the 1978 crop of 9.9 million bales although the area devoted to the crop was reduced by an estimated 5 percent.

At a recent national conference on cotton production (December 15-21), attended by Chairman Hua Guofeng and Vice Premiers Deng Xiaoping and Li Xiannian, new measures were announced to spur cotton output, including the raising of state purchase prices in 1980 and 1981, on top of the 24.8 percent increase last year.

Apparently, this message came too

US Agricultural Exports to the PRC, 1979

Com- modity	Value (\$US millions)	Quantity (metric tons)
Wheat	214.0	1,557,000
Corn*	269.0**	2,611,000
Cotton	357.0	1,600,300
Soybean Soybean	114.0**	(bales) 480,500
Oil	36.0	60,600
Total	990.0	
Total US		
Exports	1.7 billio	on

*692.900 bales were shipped in 1979 as part of the 79/80 2.1-million-bale purchase. **Estimated values.

late to affect China's 200 million cotton growers and the outcome of the 1979 cotton harvest. Production teams, now enjoying more local autonomy, decided it was more profitable to plant grain instead of cotton. This resulted in the underfulfillment of state targets for cotton output throughout China.

Coupled with domestic needs is Beijing's desire to gain a larger share of US textile and apparel imports. China has for the first time surpassed both Japan and South Korea as a customer for US cotton. These countries will import 1.3 million bales and 1.2 million bales, respectively, in the current marketing year.

Zhang Pinghua, First Vice Minister in charge of the State Agricultural Commission, is confident that China will meet its grain target of 400 million tons by 1985. Speaking at a press conference (September 26), Zhang said his optimism was based on a field investigation conducted in China's 29 provinces, municipalities, and autonomous regions showing that 18 of the areas could fulfill their quotas while another 8 would exceed their goals.

USDA officials, pointing to the law of diminishing returns, the effects of weather, and plans to increase the planted acreage of cash crops over grain, are skeptical about China's ability to reach its ambitious grain target.

A USDA field report said late planting and dryness could reduce wheat yields in 1980, but there is insufficient evidence to conclude that wheat output will be lower than the 57 million tons estimated for 1979.

Meanwhile, the significant gain in the volume of the PRC's 1979 grain harvest has caused analysts to revise estimates of China's 1980 foreign grain purchases to between 8 and 10 million tons, down from an earlier forecast of between 10 and 13 million tons. Grain imports will account for about 15 percent of total state grain purchases.

With the new stress on livestock production, however, and the diversion of domestic grain from human consumption to animal feed, China may well be snapping up more US grain later in the crop year. -KAB 完

China's Agricultural **Achievements**

Over the past 30 years the PRC has trodden an arduous and uneven course toward agricultural modernization. But despite setbacks due to periods of political and social instability, agriculture stands out as one of the greatest achievements under the Chinese Communist regime. As Zhang Pinghua said in his press con-(9/26/79),"These ference achievements now constitute the base for further development." In particular, he cited the following:

Conservancy-80,000 Water reservoirs, 2 million wells, 65 million horsepower of irrigation and drainage equipment, accounting for threefold increase in the area under irrigation.

Agricultural Machinery—560,-000 tractors, 1.4 million handoperated tractors.

Agricultural Chemicals-annual output of chemical fertilizers, computed on the basis of 100 percent effectiveness, is 8.7 million tons, and farm insecticide output has reached over 500,000 tons a year.

Infrastructure-90,000 small hydropower stations generate 6.3 million kilowatts and supply electricity to 80 percent of the communes and 50 percent of the production teams.

Natural Resource Potential-33 million hectares of reclaimable wasteland, of which 4 million have been reclaimed for 2,500 state farms; over 200 million hectares of grazing land; nearly 66 million hectares of grass hills and slopes; and over 500 million kilowatts of hydropower.

Human Welfare—the provision of an assured supply of basic necessities to all people along with a growing system of welfare and social security.

China Lays a Bold New Foundation for Agricultural Development

China's farmers commemorated the thirtieth anniversary of the PRC by harvesting a record 315 million tons of grain, exceeding the state's targeted increase of 7.75 million tons over the 1978 figure of 304.75 million tons and nearly tripling 1949's production level. The success of the 1979 grain harvest, as well as good results in oil-bearing crops-up 15 percent over 1978 to 6 million tons-and silkworm cocoons reaching a record 210,000 tons, is being attributed to the implementation of the explicit policies of a grand design for the acceleration of agricultural development.

The programmatic blueprint, stressing the modernization and diversification of China's agricultural economy, was adopted for trial use nine months ago in the wake of Beijing's reassessment and reordering of its developmental priorities. Since then, the 4th plenary session of the 11th Central Committee has hailed the document's policies as "effective measures for arousing the enthusiasm of the hundreds of millions of peasants." On September 28 it was officially endorsed as national policy and issued to implementing organizations throughout the country.

The detailed, 18-page document, recently made public, is divided into four major sections. The first part is a frank discussion of the causes for China's backwardness in agriculture. The Cultural Revolution, with its accompanying policies of neglecting scientific R&D and equalizing the incomes of all communal members, is held responsible for delaying progress and dampening the enthusiasm of peasants for hard work. But politics is not singled out as the sole cause. Natural calamities, the withdrawal of Soviet experts from the PRC (1959), and an inadequate amount of state support for agricultural sectors are also unveiled as reasons for setbacks and slow, lopsided development.

In the party's view, the provision of

tangible incentives to China's peasants is the key to achieving sizable increases in agricultural output. The decision-making power and material resources of production teams are now protected from encroachment by law. Egalitarianism has been discarded and income payment is now in accordance with the amount and quality of work done.

The other related concept underlying the new approach to rural development is "ecological balance." Raising the level of human welfare and social security is linked to the promotion of a five-tiered agricultural structure of grain, forestry, animal husbandry, fishery, and industrial crops.

Until recently, China's policies and methods for agricultural production were confined to the framework of a single-product economy. For years, "taking grain as the key link" was the rallying call giving rise to action. As a result, the annual average increase in grain was 7 percent during the first eight years of the PRC, for example, but only to the detriment of advancing other sectors of the agricultural economy.

Repeatedly, the document calls for the "simultaneous development" of agricultural sectors, arguing that the problems of feeding one billion people hinges on "changing the situation that emphasizes only the growing of cereal crops and not of economic crops, forestry, sideline occupations, and fishery."

Of China's total 1978 agricultural output value of \$94.7 billion, the contribution of different components, showing the preoccupation with grain production, were:

Crops	67.8%
Forestry	3.0%
Animal Husbandry	13.2%
Sideline Activities	14.6%
Fishery	1.4%

Over the next 2-3 years, a rational agricultural structure based on spe-

cialization and balanced growth of food crops is to be firmly established. Among the most innovative and important policies:

—State investment in agricultural capital construction projects will climb to 18 percent of total expenditures for capital construction by 1985.

—The Agricultural Bank of China and credit cooperatives will more than double their lending funds from now to 1985. For the first 11 months of 1979 this amounted to \$10.7 billion.

—Discrepancies between the prices of industrial and agricultural goods will be reduced to narrow the income gap between urban and rural dwellers. Last year saw a 25 percent increase in state purchase prices for 18 farm products.

-Food consumption will be upgraded by reducing yearly state grain purchases to about 17 percent of total production (people's communes and state farms delivered and sold 50.1 million tons in 1979) and vigorously promoting the cultivation of nonstaple crops and livestock. The goal is to double per capita meat consumption (today extraordinarily low by Western standards) by 1985. With an inventory of little over 3 million hogs, of which 37.5 percent were slaughtered last year, each Chinese consumes an average of 8.5 kg. of meat a year compared to 110-120 kg. per capita in the US. Fish, the second most important source of protein in China, was consumed at a rate of 4.5 kg. in 1978, less than onethird the global average.

—Environmental protection and ecological equilibrium, with afforestation and the expansion of grasslands and fishery bases as the focal point, is to underwrite Beijing's plans to improve and diversify the national diet.

During the month of November a story was circulating in many US business journals about a frenzied Chinese farmer who drove a tractor into an irrigation canal after unsuccessful attempts to turn off its roaring engine.

While the story may be meant as hyperbole, it illustrates the fundamental problem plaguing China's efforts to mechanize agriculture. There is a lack not only of modern farm equipment needed to increase output, but also of skilled personnel to operate, repair, and grasp the technical aspects of agricultural machinery. Currently, there are 72 agricultural colleges in China from which a total of 270,000 students have graduated over

the past three decades. Nearly 300,000 scientists work in China's 4,000 agricultural institutes, but there is hardly enough trained manpower to tackle the tasks recently outlined at a policy conference of the Ministry of Agricultural Machinery (November 26, 1979).

Despite a great number of agricultural enterprises in the PRC (4,300), their foundation is weak, with a total employment of only 1.5 million administrative staff and workers. And while machinery output has been increasing at an annual rate of 13.1 percent, product quality is poor, the supply of spare parts and auxiliary equipment is low and uneven, and there is virtually no production of machines for activities other than grain harvesting.

The Central Committee document minces no words in stating that it is "necessary to import, manufacture, and popularize advanced agricultural machinery." American agricultural machinery has already made a favorable impression in China. In addition to deals for setting up tractor and truck assembly plants, now being negotiated with a number of foreign firms, the Chinese are also looking beyond their borders for breeding stock and for

technology for rearing livestock, making swine and poultry feed, establishing dairy milk production, and developing pasture irrigation systems. Over the long haul, China's shopping list will also include technology to build more fertilizer plants, which holds the promise of hefty construction and equipment sales for American companies.

Foreign technology will be imported, not haphazardly, but in accordance with a plan to construct "agricultural zones" divided into specialized areas for crop production, livestock raising, forestry, and fishery. In light of foreign exchange constraints, up-to-date farm machines will be used first in areas where infrastructure conditions can give full play to economic efficiency.

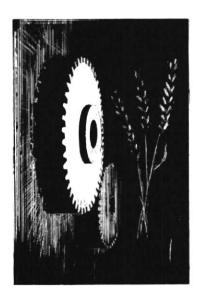
The state foresees that mechanization will displace some of China's rural work force of 300 million. Planning for this, the last measure for agricultural modernization calls for the construction of "satellite" cities and towns on the outskirts of big cities to support rural industries in transportation and communications.

Beijing's extensive and long-range program, derived from the results of countless investigations and work conferences held at all political levels, can only be as effective as the leaders and managers who will ultimately direct and implement it. The fourth and final section of the document spells out a clear division of labor and responsibility between central and local party and state organizations.

Essentially, the State Agricultural Commission, under Vice Premier Wang Renzhong, has emerged as the most powerful body with sole authority for policy-making in each specialized area, setting agricultural output targets, distributing investment funds, and coordinating the work among various central and local departments.

In this sense, the current campaign is a pragmatic synthesis of China's 30 years of agricultural experience. It embraces the spirit of determination and self-reliance practiced by the Dazhai (Tachai) production brigade to compensate for the fact that state support for agriculture is still low. But the new twist is that the best of the Dazhai concept is integrated with a scientific and rational approach to guarantee greater advances in production.

—KAB %



Alexander Eckstein and Robert Dernberger

Quantitative Measures of China's Economic Output

Sponsored by the Subcommittee on Research on the Chinese Economy of the Social Science Research Council

Recognized as dean of scholars in the field of Chinese economics, Alexander Eckstein organized and coordinated the papers which comprise this volume so as to clarify the issues surrounding China's major macroeconomic indicators, such as agricultural and industrial production, capital formation, and national product. After Eckstein's death in 1976, Robert Dernberger took over the editorship to prepare the volume for publication. The result is a rich legacy of Alexander Eckstein's scholarship and public service.

Topics covered in this study

Agricultural Statistics in the People's Republic of China China's Industrial Performance, 1949-73 Real Capital Formation in the People's Republic of China, 1952-73 Issues in the Estimation of China's National Product

\$26.50

THE UNIVERSITY OF MICHIGAN PRESS

P.O. Box 1104 Ann Arbor, Michigan

China Bookshelf

Compiled by Marianna Graham

GENERAL

The People's Republic of China: A Handbook, edited by Harold C. Hinton. Boulder, Colorado: Westview Press, 1979. 443 pages. \$25. A collection of essays on such topics as China's economy, society, politics, and military affairs.

The People's Republic of China: A Basic Handbook, compiled by James R. Townsend. Council on International and Public Affairs in cooperation with the China Council of the Asia Society, 1979. 96 pages. \$3.50. Distributed by Learning Resources in International Studies, Suite 1231, 60 East 42nd Street, New York, NY 10017. A basic guide covering history, politics, economics, culture, and society, with maps and charts.

The China Difference, edited by Ross Terrill. New York: Harper & Row, 1979. 335 pages. \$12.95. A collection of sixteen essays in which American experts examine contemporary values in China.

Japan, Korea, and China: American Perceptions and Policies, by William Watts, George R. Packard, Ralph N. Clough, and Robert B. Oxnam. Lexington, Massachusetts: D. C. Heath, 1979. 154 pages. \$15.95. Analysis of various US foreign policy alternatives based on assessment of public opinion polls.

China Facts & Figures Annual, Volume 1 (1978), edited by John L. Scherer. Gulf Breeze, Florida: Academic International Press (PO Box 555, 32561), 1978. 256 pages. \$31.50. A convenient reference handbook of statistics compiled from varied, predominantly US government, sources.

ECONOMY AND TRADE

China's Economy: A Basic Guide, by Christopher Howe. New York: Basic Books, 1978. 248 pages. \$16. An analysis of China's agriculture, industry, foreign trade, population, incomes and standards of living, and economic organization and planning for the nonspecialist reader.

China: A Statistical Compendium. ER 79-10374. National Foreign Assessment Center, (NFAC), July 1979. 13 pages. 1 Chinese economic statistics announced in the June 27 communiqué from the State Statistical Bureau are compared with NFAC estimates of economic performance in benchmark years in the 1950s and 1960s.

China: Economic Indicators. ER 78-10750. NFAC, December 1978. 50 pages. A handbook of estimates of economic performance in the People's Republic of China. The latest statistics presented are for 1977.

Handbook of Economic Statistics 1979. ER 79-10274. NFAC, August 1979. 261 pages. A very useful compilation of statistics for selected non-Communist and all Communist countries for the years 1960, 1965, and 1973–78. Indexed.

China's Economy and Foreign Trade, 1978–79. Washington, DC: US Department of Commerce, Industry and Trade Administration, Office of East-West Country Affairs, September 1979. 27 pages.² The third in a series of annual reviews in which major events and factors affecting China's economy and foreign trade are analyzed.

China: International Trade 1977–78. ER 78-10721. NFAC, December 1978.¹ An assessment of Chinese trade during 1977 with preliminary estimates of trade during 1978. An appendix contains tables on trade trends, trading partners, commodity composition, and financial activity.

China: International Trade Quarterly Review, First Quarter, 1979. ER CIT 70-001. NFAC, September 1979. First in a series of quarterly reports that will replace the annual China: International Trade in order to provide more upto-date assessment of China's foreign economic relations.

Sales to China and Negotiations for Sales, 1978. Washington, DC: National Council for US-China Trade, April 1979. 36 pages. \$10.* A listing, by industrial categories, of the commodities, equipment, and technology that China contracted or negotiated for in 1978, the size and value of the sale, and the company involved.

Prospects for PRC Hard Currency Trade Through 1985, prepared by Gary R. Teske, Hedija H. Kravalis, and Allen J. Lenz. US Department of Commerce, Office of East-West Policy and Planning, February 8, 1979. Staff Research Note. Discusses factors affecting China's trade with non-Communist countries and outlines possible growth patterns through 1985. Analyzes key elements in US-China trade relations and the US position vis-a-vis China's other trading partners.

China Trade Potential: Implications for India, by V. Vithal Babu. New Delhi: Indian Institute of Foreign Trade, 1979. 93 pages plus tables. A thorough survey of China's trade policy and trade statistics focusing on areas in which the PRC and India compete in UK and Japanese markets. Includes projections on China's foreign trade prospects through 1985.

INDUSTRY

The Health Care Market in the People's Republic of China, by Jeffrey S. Muir and Tom Gorman. Hong Kong: China Consultants International Ltd. (Suite 500 Dominion Centre, 43–59 Queen's Road East), 1979. 64 pages. An overview of China's health-care system focusing on current medical product import priorities and opportunities for foreign countries. Includes tips on promotion.



Secretary of Defense Brown reviewing the troops at a Chinese military academy.

Dissemination of Technology Information in China: An Investigation in Publishing in Electronics and Metallurgy, by Erik Baark. Lund, Sweden: Research Policy Institute, April 1979. Discussion paper No. 127. 82 pages. A research study undertaken jointly with the National Council for US-China Trade, analyzing the processes involved in the dissemination of technical information in the PRC. The author draws on a sample of 282 technical manuals on electronics and metallurgy to indicate trends in the dissemination process.

Chemistry and Chemical Engineering in the People's Republic of China, edited by John D. Baldeschweiler. Washington, DC: American Chemical Society, 1979. 266 pages. \$15. An excellent, up-to-date review of science and its administration in China as observed by the US delegation in pure and applied chemistry. A firsthand account of the status of research, development, and teaching programs in chemistry and chemical engineering in the PRC.

China: The Steel Industry in the 1970s and 1980s. ER 79-10245. NFAC, May 1979. Report suggesting that China will cut back on its goals of doubling steel output by 1985, citing production and import statistics and the high cost of modernizing the steel industry.

SCIENCE AND TECHNOLOGY

The Organization and Planning of Scientific Research in China Today, by Boel Berner. Lund, Sweden: Research Policy Institute, 1979. Discussion Paper Series 134. 113 pages. An analysis of how Beijing's new line on science and technology has been translated into practices toward scientific institutes and personnel. Drawing on examples in the agricultural and life sciences, the author explores cooperation and coordination within and among institutes and presents an overview of the national planning process.

Professional Societies in the People's Republic of China, by Robert Boorstin. Washington, DC: National Council for US-China Trade, 1979. 501 pages. \$80 (\$60 to members).* A guide to China's professional and industrial societies, their functions, development, role in foreign trade, relations to ministries. Details of over 65 societies.

Chinese Scientific and Technical Journals 1979, compiled by Ola Svensson. Stockholm: Sveriges Teknisk Vetenskapliga Attacheverskamhet (Box 5073, 10242), 1979. Utlandsrapport Kina 7809. Basic information on China's research and publishing organization introduces lists of selected-scientific and technical journals. Tables of contents or abstracts in English are noted and subscription prices are provided. Publications are described and tables of contents are illustrated.

Biophysics in the People's Republic of China: A Report of the Swedish Biophysics Delegation, September, 1978. Stockholm: The Royal Swedish Academy of Engineering Sciences, 1978. 117 pages. A compilation of the findings and impressions of the delegation visit to fifteen Chinese institutes and universities in the fields of biophysics, physics, chemistry, biochemistry, biology, physiology, and pharmacology.

Botany in China: Report of the Botanical Society of America Delegation to the People's Republic, May 20–June 18, 1978. Stanford, California: US-China Relations Program (Building 160, Room 162-J, Stanford University), 1978. 154 pages. Observations, comments, and technical data on the organization and research foci of China's botanical institutions.

Environmental Protection in the People's Republic of China, by Susan Swannack-Nunn, with Kenneth Bowman and Patrick Heffernan. Washington, DC: National Council for US-China Trade, 1979. 293 pages. \$50.* Describes all aspects of China's intensified drive for environmental legislation. Important environmental problems are examined. Includes standards and regulations.

Insect Pest Management in China, A Swedish Delegation Report, edited by Professor Per Brinck. Stockholm: The Royal Swedish Academy of Engineering Sciences, 1979. IVA-rapport 158. 88 pages. Detailed reports on China's research programs in integrated pest management, and biological pest control in particular.

The Organization and Economy of Pest Control in China, by Boel Berner. Lund, Sweden: Research Policy Institute, 1979. Discussion paper No. 128. 66 pages. An overview of agricultural research and extension in the PRC, plant protection organization, and policy and practice of pest control.

DOING BUSINESS WITH CHINA

Doing Business with China. Washington, DC: US Department of Commerce, Industry and Trade Administration, 1979. 44 pages. \$1.80.2 An important handbook of basic information on how to start doing business with China.

Trading with China: A Practical Guide, edited by Colina MacDougall. London: McGraw-Hill, 1980. 263 pages. £12. A collection of essays by international experts on market-

ing information, selling to China, receiving a delegation, law, financing, shipping, insurance, importing, and setting up a joint venture.

JAL Executive Business Guide to China, edited by Fredric M. Kaplan and Mary Lou Teel. Fair Lawn, NJ: Eurasia Press, 1979. Distributed by Japan Air Lines, Literature Distribution Center, PO Box 10618, Long Island City, NY 11101. 128 pages. \$4. Basic information on China trade is supplemented by tips on negotiating an agreement, banking and finance, advertising, and arranging a business trip to China. Includes travel sections on Beijing, Shanghai, and Guangzhou. Pocket size.

China: A Business Guide—The Japanese Perspective of China's Opening Economy. Tokyo: Japan External Trade Organization and Press International, 1979. 216 pages. \$28. Distributed by Stechert-Macmillan, Inc. 7250 Westfield Avenue, Pennsauken, NJ 08110. Phone (609) 622-7730. Provides a general frame of reference for China trade with background on the economy and industrial sectors as well as practical guidelines.

How to Reach the China Market. New York: McGraw-Hill, 1979. 284 pages. \$87. Papers presented at a conference for the mining, construction, and metals industries in March 1979.

China's Foreign Trade and Its Management. Hong Kong: Economic Information & Agency, 1978. 157 pages. HK\$30. Lectures given at a seminar sponsored by the Ministry of Foreign Trade of the PRC and UNCTAD, held in China in October 1978. A newer edition is available from China Translation and Printing Service in Hong Kong.

Pocket Guide to China's Foreign Trade Organizations, Domestic Corporations and Ministries. Washington, DC: National Council for US-China Trade, 1979. 68 pages. \$5.* Booklet presents street and cable addresses, telex numbers, branch addresses, and scope of business operations for each FTC.

China's Foreign Trade Corporations . . . Organization and Personnel, by Jeffrey Schultz. Washington, DC: National Council for US-China Trade, 1979. 339 pages. \$100 (\$75 to members).* Comprehensive guide to the structure, affiliates, products, and personnel of China's FTCs. Over 1,800 officials with biographical data listed.

The China Phone Book & Address Directory, 1980 ed. Hong Kong: The China Phone Book Co. Ltd. (GPO Box 11581), 1979. 192 pages. \$25. An essential source for street and cable addresses, telex and phone numbers in China. Organized by type of organization within each city. Indexed.

Selling Technology to China: A Workbook for the Conference on Selling Technology to China. Washington, DC: National Council for US-China Trade, December 1979. 354 pages. \$200 (\$150 to members).* A comprehensive, state-of-the-art reference handbook on countertrade, barter, licensing, design engineering, and joint ventures as well as the organization of China's technology purchase process. Focus on contract clauses, case examples, contracts.

Special Report on How to License Technologies to the People's Republic of China. Tokyo: Nihon Brain Corporation (Sankei Annex 901, 1-7-2 Otemachi, Chiyoda-ku), 1979. 307 pages. \$215. A description of the dos and don'ts of negotiating a licensing agreement with the PRC. Contract examples illustrate the clauses and terms of an agreement.

Trademark Registration in the PRC, compiled by Nicholas H. Ludlow. Washington, DC: National Council for US-China Trade, 1978. 51 pages. \$20.* Complete PRC regulations, procedures for registration, registration forms, articles on PRC trademark law.

United States Representatives in the China Trade, compiled by Karen Berney. Washington, DC: National Council for US-China Trade, 1979. 21 pages. \$10.* Comprehensive directory of major US companies acting as China trade representatives in the PRC.

TRAVEL

American's Tourist Manual: People's Republic of China. Newark, NJ: International Intertrade (PO Box 636), 1980. 224 pages. \$7.95. The newest edition of the tourist manual includes a large map of China and a sightseeing map of Beijing with the locations and specialties of 50 restaurants.

Fodor's People's Republic of China. New York: David McKay, 1979. 435 pages. \$10.95. A new title in the well-known travel series provides extensive background material on China as well as travel tips. A restaurant guide to Peking includes sample menus.

The China Guidebook, by Arne J. de Keijzer and Frederic Kaplan. Fair Lawn, NJ: Eurasia Press, 1979. 304 pages. \$8.95. A current guidebook designed for the traveler on a group tour. Cities and sites are those included in general tours; each city is placed in a dual context—its importance in traditional China and in contemporary life.

WALL CHARTS

Academies of Sciences and Social Sciences of the People's Republic of China, CR 79-12497 (NTIS UBE 282010), February 1979. \$6.50.

Politburo of the 11th Chinese Communist Party Central Committee, CR 79–10564 (NTIS UBE 282008). March 1979. \$6.50.

Chinese Communist Party Organizations, CR 79-14074 (NTIS UBE 282012), July 1979. \$6.50.

Chinese Ministry of Foreign Affairs, CR 79-11830 (NTIS UBE 282014). September 1979. \$6.50.

^{*} Prices shown for National Council for US-China Trade publications do not include postage and handling. For prepaid orders, please add \$1 to cover those costs.

¹ National Foreign Assessment Center publications dated after February 1, 1979, can be ordered from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161. NTIS Order Desk (703) 557-4650. Requests for items with dates before February 1, 1979, should be directed to the Photoduplication Service, Library of Congress, Washington, DC 20540. (202) 287-5640.

² Available from the Superintendent of Documents, US Government Printing Office, Washington, DC 20402.

Organizations

MACHIMPEX

China	National	Machinery	Import	and	Ex-
port C	orporatio	n			

General Manager: Cheng Jixian 程继贤 Deputy General Managers: Wang Ye 王 野

Wu Xiaolan 吴小兰 Yue Jixian 岳继先

Cui Peigui 崔培桂

Department No. 1-General Business

Manager: Huang Qingtang 黄庆堂
Deputy Manager: Zhang Baoqin 张宝勤
Staff Member: Hao Shaoxian 郝绍先

Department No. 2-Ships, Aircraft

Manager: Zhou Chuanru 周传儒
Deputy Managers: Zheng Shunhua 郑顺华
Zhang Hao 张 浩
Bai Huiquan 白惠全

Staff Member: Wu Jingyan 吴 经 延

Department No. 3—Metallurgy, Mining, Petroleum, and Power

Manager: Zhu Mingjiu 朱铭玖 Deputy Manager: Gu Yongjiang 谷永江 Staff Member: Huang Zhichao 黄志超

Department No. 4—Motor Vehicles, Agricultural Machinery, and Railway Transportation

Manager: Wang Liyan 王立言
Deputy Managers: Bai Enhui 白恩奎
Huang Huixi 黄惠喜
Li Dianyuan 李殿元

Department No. 5-Machine Tools

Manager: Li Guangyuan 李广元 Deputy Managers: Wang Yixuan 王宜轩

Wang Zunqing 王俊卿 Chen Yingwen 陈英文

Department No. 6—Light Industrial Equipment (food processing, textiles, packaging, etc.) and Construction Equipment

Manager: Zhang Ju

R 举

Deputy Managers: Zhu Zhifei

Fong Fang

Tong Fang

Tong Fang

苏玉民

Wang Guojun

E 国君

INSTRIMPEX

China National Instruments Import and Export Corporation

General Manager:Wang Zhongyan王钟严Deputy General Managers:Chen Jianbang Wang Baoxuan陈建邦Wang Baoxuan Cui Juebin在玩彬

Department No. 1—Telecommunications (including semiconductors and large-scale integrated circuits)

Manager: Xu Bin 徐 彬

Department No. 2—Computers and Microprocessors (including mainframe, software, and peripherals)

Deputy Managers: Three Deputy Managers

韩 例 孚 Han Lifu—handles US affairs for this department's relations with US companies.

Department No. 3—Optical Instruments and Lenses

Manager: Wang Dexin 王 德 馨

Department No. 4—Physical and Chemical Instrumentation

Manager: Zhang Shukuan 张 书 宽

Department	No. 5	-Impor	ts under	bilateral	trade
agreements	(with	USSR, F	łungary,	etç.)	

Manager: (A name was not given since they said this department has no relations with US companies.)

General Business Affairs Department

NOTE: On their name cards the INSTRIMPEX officials have this translated "General Import Department" but "Business Affairs Department" is the usual translation at other companies.

Manager: Tie Ying 铁 英

TECHIMPORT

China National Technical Import and Export Corporation

Main number: 89-0931

Manager: Peng Runmin 彭润民
Deputy managers: Fang Yin 方 印
Zhang Li
Liu Xinghua 刘兴华

Depart- ment	Exten- sion	Managers, Areas of Responsibility
#1		Petrochemicals, including petro- leum, chemical fertilizer, and chemical plants
	206	Manager: Guan Yi 关 毅 Deputy managers:
		Kang Zhiwei 康志伟
		Wang Shucheng 王树成
	207	Petrochemicals
	203	Refinery
#2		Metallurgical plants and tech- nology, coal mining, ferrous and nonferrous mining, steel plants
	216	Mgr: Wang Yaxiang 王亚祥
		Deputy managers:
		Zhang Xuming 张旭明
		Li Jianmin 李建民
	226	General business
	224	Coal mining
	225, 646	Metals
#3		Electric power, gas turbines, transportation equipment

	212 640 211, 227 209	Mgr: Lu Liancheng 卢连成 Deputy manager: Zhao Zhongtang 赵忠堂 Machinery 1 Machinery 2 Hydropower
#4	213	Light industry, including cement, building materials, textile machinery, etc. Manager: Cui Wei 崔 巍 Deputy managers: Hu Jisheng 胡继生 Li Yuanzhang 李元章
	214	Light industry
	241	Textiles
	Dial	Building materials
	direct: 89-3829	
#5		Responsible for sending Chinese technical personnel abroad and engaging foreign experts to come to China
	248	Manager: Li Xiaodong 李晓东
	243, 249	Dep. mgr: Zhu Yulan 诸玉兰 General business
#6		Spare parts imported in conjunction with complete plants and technology
	247	Manager: Hu Wanjie 胡完杰
		Dep. mgr: Sun Shiwei 孙世伟
	242	Spare parts
General business	803	Manager: Feng Yujun 冯玉俊
г.	004	
Foreign affairs	204 or dial	Foreign affairs

roreign	404 OF	roreign anairs	
affairs	dial		
	direct:		
	89-2116		
Price and			
contract			

terms NA Manager: Cheng Gong

NOTE: Four recent TECHIMPORT Deputy General Managers are on assignment to other organizations but apparently are representing TECHIMPORT interests in their present jobs. They are:

陈 扬 Chen Yang—at the China International Trust and Investment Corporation.

郭 际 Guo Ji—at the Chinese embassy in the US.

许德恩 Xu Deen—at the Chinese embassy in Japan.

杨友德 Yang Youde—at the embassy in France.

Source: US embassy in Beijing; Richard Glover

MINMETALS BEIJING TELEPHONE LIST

Main Number: 890931

Department	Extension	Areas of Responsibility	Managers*	
Foreign Affairs	441 (or dial direct 892376)	Foreign affairs	NA	
#1	408	Imports of steel sections	Zhou Mingchen,	周明臣
	759	Imports of steel plate, sheets, and strip	Zheng Rui,	郑 锐
			Liang Shilin	梁士林
#2	404	Imports of nonferrous metals and ore	Li Xinde,	李信德
			Wang Huayi,	王化一
			Sun Baiyu	孙百王
#3	423	Imports of welded pipes, boiler pipes, alloy	Tian Songyao,	田颂尧
		pipes, stainless steel tubes, drilling pipes, oil pipelines, etc.	Fu Huilin	付惠霖
	424	Imports of carbon seamless steel tubes		
#4	409, 833	Imports of carbide-formed steel, stainless steel,	Li Yihao,	李一豪
		high-speed tool steel, carbon tool steel, structural alloy steel	Yin Wenhai	尹文海
	823	Imports of wire, specialty steel strips, wire ropes		
#5	415, 416	Imports and exports of coal, coke, and cement	Sun Yaofu,	孙耀甫
			Shang Xueren,	尚学仁
			Zhang Rusong	张如松
#6	426, 642	Exports of pig iron and steel products	Liu Xingye,	刘兴业
			Zou Baichun	邹百川
#7	638	Exports of hardware, nails, wire, and nonferrous	Ye Lei,	叶重
		metal products	Xie Fuxu,	谢福煦
			Shi Guangsheng	石广生
#8	427	Exports of nonferrous metals (raw materials)	Zhao Hongyu,	赵红王
			Cheng Zhonglin	承仲林
#9	495	Exports of nonmetallic minerals	Gao Lixing,	高立兴
			Chang Gaiming,	常改铭
			Li Xiushan	李秀山
Transportation	741	Import transportation	Li Xinmin,	李信鸣
	410	Export transportation	Jia Li	贾立
STORY - I HE SHE IS TORKED		s; others are deputy managers.		

Organiza	tions		Zhuang Shiping	庄世平	Delegate, National People's Congress; Chairman,
Banking As of Septemb		ficials	Sun Xiaocun	孙晓村	Nanyang Commercial Bank, Hong Kong Member, Standing Committee of the Chinese People's Political Consultative Conference
BANK OF CHIN	A BOARD	OF DIRECTORS	Li Chaoying	李超英	Deputy General Manager, Bank of China
Positions and Names		Concurrent Posts	Sha Qianli	沙千里	Member, Standing Committee of the National People's Congress
Chairman 名名 Qiao Peixin	誉董事长 乔培新	Vice President, People's Bank of China	Lin Jixin	林基鑫	Deputy General Manager, Bank of China
Chairman 董 Bu Ming	事长り明	President,	Jin Deqin	金德琴	Deputy General Manager, Bank of China
0	1 -71	Bank of China; Vice President, People's Bank of China	Zhao Bingde	赵秉德	Deputy General Manager, Bank of China
Vice Chairman il	羊 車 上	or China	Rong Yiren	荣毅仁	Board Chairman,
Vice Chairmen 副 Chang Yanqing Chen Kedong	東 事 常 彦 卿 陈 克 东	Vice President, Bank of China Vice President,			China Interna- tional Trust and Investment Cor- poration (CITIC);
Cun Yanxu	崔延绪	Bank of China Vice President, Bank of China			Member, Standing Committee of the National People's
Cui Ping	崔平	Vice President, Bank of China	Xu Ren	徐仁	Congress Deputy General Manager, Bank of
Xiang Kefang	项克方	Vice President, Bank of China			China
Wang Weicai	王伟才	Vice President and Manager of Bank of China, London	Zi Yaohua	资紙华	Chief Counselor's Office of the People's Bank of China
Li Pinzhou	李聘周	Inspector General, Bank of China	Guo Dihou	郭棣活	Delegate, National People's Congress;
Managing 常 Directors*	务董事				Vice Chairman, Chinese People's
Ma Yinchu	马寅初	Member, Standing Committee of the Chinese People's Political Consul-			Political Consul- tative Conference of Guangdong Province
Feng Tianshun	冯天顺	General Manager, People's Insurance Company of China	Cao Juru	曹菊如	Member, Standing Committee of the National People's Congress

				+ 11 11-	
Cheng Muhao Jiang Wengui	程慕灏 将文程	Advisor, Bank of China, Hong Kong Deputy General	Mai Zuoheng	麦佐衡	Member, Chinese People's Political Consultative Conference of Guangdong
Lou Fuqing	楼福卿	Manager, Bank of China Member, Chinese			Province; Advisor, China State Bank,
Loa raqing	15 IM / 1	People's Political Consultative Con- ference; Advisor, Bank of China	Lin Fengbao	林凤苞	Hong Kong Former Commissioner, Bank of China
Pan Jingan	潘静安	Deputy Inspector General, Bank of China	Zhou Jizhi	周济之	Advisor, Agricultural Bank of China
Xue Wenlin	薛文林	Manager, Bank of China, Singapore	Zhang Jiaao	张嘉璈	Director, Bank of China
Directors*	董事		He Yangxian	贺仰先	Advisor, Bank of
Fang Shangui	方善桂	Delegate, National People's Congress;			Communications, Hong Kong
		Deputy Manager, Bank of China, Hong Kong	Yu Mingyue	俞明岳	Deputy Manager, Chung Hwa Pub- lishing Company
Niu Zhizhong	牛致中	General Manager, Bank of China, Tianjin	Xu Guomao	徐国懋	Member of the Shanghai Chinese
Liu Lixin	刘礼欣	Vice President, People's Con- struction Bank of China			People's Political Consultative Conference; Managing Director, Kincheng Banking
Xing Gangming	邢刚明	General Manager, Bank of China, Guangzhou			Corporation, Hong Kong
Sun Ruihuang	孙瑞璜	Advisor, People's Bank of China, Shanghai	Xu Zhanxing	徐湛星	Delegate, Guangdong Provincial People's Congress; Man-
Li Yumin	李裕民	Manager, Bank of China, Luxembourg			ager, Sin Hua Trust, Savings & Commercial Bank
Chen Hong	陈纮	Delegate, Guangdong Provincial People's Congress; Deputy Manager, Bank of China, Hong Kong	Guo Ruiren	郭瑞人	Ltd., Hong Kong Delegate, National People's Congress; Manager, Investment Company of Fujian Province
Chen Boliu	陈伯流	Member, Chinese People's Political Consultative Conference of	Qi Ming	戚 铭	General Manager, Bank of China, Shanghai
		Guangdong Province; Man- ager, Kincheng	Zhang Wenzhong	章又中	Acting Manager, Bank of China, Hong Kong
		Banking Corpo- ration, Hong Kong	Huang Xianru	黄宪儒	Advisor, Bank of China, Hong Kong

Head Supervisor	席监事	
Li Fei	李飞	Vice President, People's Bank of China
Supervisors*	监事	
Liu Jiwu	刘及武	Deputy Director, Political Depart- ment, People's Bank of China
Zhuang Mingli	庄明理	Delegate, National People's Congress
Sun Haoxuan	孙浩煊	Professor, Institute of Foreign Trade
Li Shizhang	李世璋	Delegate, National People's Congress
Li Huizhong	李慧中	Deputy Director, Budget Depart- ment, Ministry of Finance
Shen Rixin	沈日新	Deputy Chief, Counselor's Office, People's Bank of China
Sung Xiying	宋钖英	Deputy General Manager, Bank of China
Zhang Yi	张 一	Deputy General Manager, Bank of China
Hong Zuoyao	洪佐尧	Member, Standing Committee of the Shanghai Chinese People's Political Consultative Conference
Pan Shilun	潘世纶	Advisor, Bank of China

PEOPLE'S BANK OF CHINA OFFICERS

Pres	ident	
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coluciii		
Li Baohua	李葆华	Full member, Chinese Commu- nist Party Central Committee
Vice Presidents		
Chen Xiyu	陈希愈	Vice Minister, Ministry of Finance
Hu Jingyun	胡景沄	No other known position
Li Fei	李 飞	No other known

position

Qiao Peixin	乔培新	Honorary Chair- man, Bank of China
Bu Ming	ト明	Chairman and President, Bank of China
Fang Gao	方 皋	No other known position
Geng Daoming	耿道明	No other known position
Ding Dongfang	丁冬放	No other known position
Yuan Ziyang	袁子扬	No other known position
Li Shaoyu	李绍禹	No other known position

^{*} Listed in order of the number of strokes in their Chinese surnames.

PAN AM/CAAC CHARTERS MEET LUKEWARM DEMAND

Four of the six charter flights to China scheduled this winter by Pan American Airways and China's airline, CAAC, were canceled due to lack of demand. The charters were planned last summer under a "wet lease" agreement between Pan Am and the General Administration of Civil Aviation of China (CAAC) whereby Pan Am would operate three of the six flights for CAAC.

In that agreement, CAAC had aimed to gain experience handling Boeing 747-SP long-range jets, of which it has ordered three. The Chinese airline had also hoped to gain experience in the US travel market and to increase tourism during the slow winter season. Clearly, these goals were only partly met.

To market its three flights, the Chinese relied on a small, newly formed tour operator, China Horizons, but the agency was not able to attract enough tourists to fill any of the three CAAC flights. China Horizons cited a short lead-time as the major reason—the Civil Aeronautics Board approved the charter arrangement in mid-September, leaving less than three months to promote the flights. The time of year was also a factor in the low demand for the flights, and the tour operator's inexperience may also have affected the poor outcome. Those tourists who did sign up for the CAAC charters were placed on regularly scheduled flights.

Since the tour operators for two of Pan Am's three charters were able to fill their flights, Pan Am operated one of them (January 28 departure) for CAAC under the "wet lease" agreement, with CAAC signs in the cabin and Chinese observers on board.

A Pan Am spokesman said that at present Pan Am has "no concrete plans" for further charter arrangements with CAAC.

Letter from Shanghai

December 1979—When I arrived in Shanghai in March of this year, it looked completely unchanged since my first visit in 1975. Who could have predicted that slightly over half a year later I'd be writing a letter on the investment climate for foreign businessmen in that same city?

The first literal signs of change appeared in early spring when huge painted billboards advertising Chinese and foreign products began sprouting up in several locations around town. Although primarily promoting consumer items, there were also ads for trucks, medical equipment, and other goods unlikely to be high on the shopping list of most Chinese. The tenor of the ads changed in late summer as Sony electronic equipment and Bulova watch billboards went up. Although these items are not as yet available for commercial import, these firms and others have now gone so far as to rent out strategic display windows in the city's major department stores to further whet the appetites of Shanghai's consumers.

It is now de rigueur for visiting relatives to carry along color televisions and tape recorders—ironically, often on shoulder poles—for their cousins in China; brand-name identification is already so strong that bringing a shortwave stereo tape recorder combination that is not a Sanyo is more likely to elicit a frown than a grin.

Shanghai's clogged sidewalks are even more impassable now, due to the presence of hundreds of persons peddling an enormous variety of goods. Any boat, bus, or train heading toward Shanghai is permeated by the quacking, oinking, and cackling of live animals, plus fresh produce and handicrafts destined for the sidewalks as well as the legitimate free markets. There are also colorful silk embroidered pillowcases, rock-and-roll tapes from Hong Kong, watchbands and do-it-yourself guides on everything from dressmaking to palm-reading. Police have turned a blind eye to most of this activity—except when they are also doing the shopping. To get a piece of the sidewalk action and give shoppers the thrill of thinking they're doing something slightly illegal, retail outlets are setting up stands and also displaying a selection of wares right out on the streets.

Along with the appearance of advertisements on bill-boards, in the newspapers, on radio and TV, and in a new commercial tabloid called "Market," Shanghai's major buildings found themselves covered with scaffolding as part of a major cleanup effort. Although by no means radically altering the city's appearance, the fresh coats of paint, new signs, clean glass and bricks have contributed significantly to alleviating the gray, rundown atmosphere that used to hang over the city. Some stores are getting a complete overhaul and, along with an architectural facelift, the attitude, of the service personnel has gone from cold surliness to warm helpfulness in recent months.

A large number of new restaurants have been opened, and many of the city's famous snack shops have been upgraded to full-scale eateries. Foreigners are welcome in all restaurants now. As a rule, the upper floors have overpriced amenities and banquet-style food; but if you are willing to fight for space, you can enjoy an excellent meal at a fraction of the price with the masses downstairs.

What prompted this concerted effort at a cleanup? First, the city just looked awful, and with the stepped-up tourist business and influx of foreign businessmen and experts, the overall gestalt of Shanghai had to be brightened up. Shanghai residents are considered a superficial tribe by people in other parts of the country, caring more about appearance than substance, clothes and food than politics, so it is only natural that they would be sensitive to the impression their metropolis makes on outsiders and want to do something about it.

Second, it was the People's Republic's thirtieth anniversary, so a sprucing-up was in order.

Third, Shanghai suffers from terrible unemployment. Consider the fact that 92,000 members of the high school graduating class of 1978 received job notices only in late November 1979, and those of 1979 have not yet been given their job assignments. They are unable to seek employment on their own, as there is no free job market. Although some engage in peddling and black-marketing, most just sponge off their parents and bide their time till they receive a job notice. They have created a serious social problem. Juvenile delinquency and crime in general have soared in the past months, fueled by these hundreds of thousands of undirected youth. Added to these kids are the older youths who have returned from farms in rural Shanghai and distant provinces and are also awaiting jobs.

Jobs for Youthful Entrepreneurs

Clearly, drastic measures were needed to sop up some of this reserve army of the unemployed. One solution has been the establishment of labor service companies by each of the city's ten districts. The tasks of these companies include cleaning up buildings, contracting short-term labor for factories, sanitation jobs, and various services around their neighborhoods. So the sudden spurt in urban renewal and Shanghai's youth unemployment problem are hardly unrelated phenomena.

Small-scale private enterprises such as bicycle servicing, shoe repair, and carpentry are also absorbing unplaced young people of Shanghai. Another major avenue for unemployed youth leads to neighborhood collective enterprises. Engaged in everything from folding boxes to assembling refrigerators, these units were first set up during the Great Leap Forward of the late 1950s as a way of involving housewives in productive labor.

Now they have been targeted as the key means, not only of employing youth, but also for driving the entire economy forward. For the first three quarters of 1979, their growth rate of 12.6 percent far outstripped the 7.7 percent chalked up by the city as a whole. Now, in more and more

cases offering the same benefits as state-owned factories plus higher wages and more bonus opportunities, they have come a long way from the voluntary quilting-bee style of the past.

China's leaders have issued a call for "socialist entrepreneurs" and the collective enterprises provide the most fertile ground for cultivating this new breed. Whereas state-owned firms are sinking under the weight of the top-heavy bureaucracy they must support, and are hamstrung by myriad regulations, collectives have the flexibility to make quick decisions, retool and diversify into new lines, and take responsibility for their own profits and losses.

The papers are urging bureaucrats to take their hands off the collectives. But the problem doesn't just lie with officials trying to run everything—"The leaders of enterprises themselves often just sit on their hands and do nothing and thus sacrifice their independence." So says the business manager of an 80-man firm that began in 1972 by doing repair work for other enterprises under the neighborhood committee, but now produces auto parts, fans, floor lamps, and refrigerators. He has earned his salary several times over in bonuses for his aggressive approach to new product development. He does market research to see what items are in big demand and short supply in the stores. Then, in conference with the employees of the firm, and the neighborhood committee, he decides on the feasibility of developing new product lines.

This past year he went so far as to attract a foreign investor to his factory, basically a jumble of converted houses and garages down a back alley. He contracted to produce parts for export and offshore assembly. He's happy to be in a collective enterprise where he can give relatively free rein to his entrepreneurial instincts. His hope for the future is to take the firm onto the road of specialization, working as subcontract supplier to state firms and/or foreign investors.

This creative approach to increasing earnings by diversifying sources of income stands in marked contrast to the typical means of reaching this goal—familiar to frequent China visitors—namely, continually raising prices.

The relatively free rein given to these enterprises signals an attempt to use the aggressiveness, creativity, and competitiveness of capitalism in the service of a socialist collective economy. Given widespread adherence to state policies, the successful and sustained ignition of the nervous energy of the Chinese people, and a long period of political stability—and Shanghai has been remarkably quiet on that front—Shanghai could quite rapidly recapture its previous position as one of the world's most dynamic economic centers.

Shanghai's SITSC-Plugging Up Some Cracks

An example of a more original means of tapping potential sources of revenue is the brand new Shanghai International Trust Service Corporation (SITSC). It is not to be confused with Rong Yiren's China International Trust and Investment Corporation: that Beijing-based body has yet to set up a branch in Shanghai. Rather, SITSC is a 100 percent state-owned enterprise created to plug up some cracks in China's overall import-export and international services structure.

It takes on tasks that the large state trading corporations won't touch, being too small or unprofitable. For instance, say an individual desires to purchase a few items of various categories, such as processed food, clothes, and chemical raw materials. The specialized state corporations deal only with companies, not individuals, and would also not be interested in such small orders.

This is where SITSC comes in: it will handle purchasing anywhere in China and shipping of any size lot of any exportable goods.

SITSC can also help a foreign firm locate a local processor or assembler and channel Overseas Chinese funds into construction and industrial projects. All transactions must be in foreign currency and SITSC takes no responsibility for financing. It is a new firm just feeling its way and in future may expand into joint investments. Its staff of 30 or so includes several people familiar with foreigners and their business practices dating from before liberation.

The eagerness of the SITSC staff and the business manager coincides with the official call to go all out to increase production to improve the people's livelihood. They are, unfortunately, still a minority, and the backlog of unresolved problems in industrial commercial circles is staggering.

—Tom Gold 我

SHANGHAI INTERNATIONAL TRUST SERVICE CORPORATION (SITSC)

In order to better serve overseas Chinese, compatriots from Hong Kong, Macao, and Taiwan Province, and international friends, we offer the following services, effective immediately:

- 1. International mail order services;
- 2. All types of material contributions by overseas Chinese who wish to support and assist their hometowns and the motherland's Four Modernizations;
- 3. In order to assist the various foreign trade import and export corporations, we will act as an intermediary for foreign companies to make arrangements for processing with imported materials, processing according to specification, and assembly, as required.

We welcome overseas friends to contact us directly by mail or telex if you would like us to handle the above matters for you. You can also appoint a friend or relative within the country to handle the procedures for you.

Whether you handle these matters by mail or in person, we are quick and reliable and provide convenient procedures and impeccable service.

Address: 521 Henan Central Road, 2nd Floor, Shanghai.

Telephone: Dial direct: 226650, or dial our main number at 221025 and we will transfer your call to the department concerned.

Cable: SINTRUST SHANGHAI or (0256).

P.O. Box: 3066 Shanghai.

Please deposit foreign remittances directly in the corporation's account in the Shanghai branch of the Bank of China. Upon receipt of a money order or letter of credit, we can proceed immediately.

—Shanghai International Trust Service Corporation, September 1, 1979

CHINA: 1979 SALES AND NEGOTIATIONS THROUGH DECEMBER 31

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.

Company/Country	Product/Plant/Technology	Value Million US \$ (Local Currency if Known**)	Status Date Announced
Agricultural Commodities			
Australian Wheat Board (Australia)	Wheat (1.5 million tons)	\$200+	Agreement signed 10/26/79
State of North Carolina (US)	Agreement for selling of tobacco and estab- lishing joint ventures for tobacco manufacturing	NVG	China has agreed 11/7/79
(US)	Corn (100,000 MT)	NVG	Has sold 12/7/79
(Australia)	Sugar (130,000 tons)	\$48	Sold 12/20/79
Agricultural Technology			
Australian Overseas Projects Corporation (Australia)	Pasture and livestock development for Shan State Farm (15,000 hectares), Hunan Province	NVG	Contract signed 11/79*
Chemicals			
Israel Chemicals (Israel)	Bromine compounds	\$2+	Has sold 10/31/79
Construction Equipment			
Grove Manufacuturing Co. (US)	Grove Mobile Hydraulic Cranes and 5 Grove 25-ton (RT 265) capacity rough-terrain cranes	\$2.3+	Contracts signed 12/13/79
Electronics			
Cromemco (US)	Advanced microcomputers; mostly systems-3 computers with advanced Z-80 micro- processors	NVG	Selling 11/1/79
Victor Company, Nissho- Iwai (Japan)	Color TV assembly plant in Tianjin (150,000 14- and 20-inch sets/year)	\$4.48-\$8.96 (¥1,000- ¥2,000 million)	Provisional con- tract 11/79*
AEG Telefunken (W. Germany)	Electrical equipment for 3 chemical factories	Approximately \$22	Contract received 11/20/79
Yokogawa Electric Works (Japan)	10-year agreement for production of indus- trial measuring instruments in Xian, Shaanxi Province	NVG	Agreement reached 12/15/79
Matsushita Electric Industrial Co. (Japan)	Color TV receiver assembly plant in Beijing (150,000 14-inch sets/year); printed-circuit plate factory in Shanghai	\$4.2	Contracts re- ceived 12/17/79
Computer Systems Advisors (Pte.) Ltd. (Singapore)	Supply and installation of computers and training of local staff in China	\$2	Contracts signed 12/19/79
Hitachi Ltd. (Japan)	Color TV assembly plant in Shanghai (200,000 14- and 22-inch sets/year) production scheduled to begin in 1981	\$12.5	Contract signed 12/26/79
Machine Tools	-		
Newall Group Sales (UK)	3 Vertex 200 machining centers for manufacture of metalworking gauges	\$0.73 (£350,000)	Order placed 10/25/79
Mining Equipment			
Frome Engineering Co. (UK)	Coal mining equipment	\$0.1 (£50,000)	Contract won 10/11/79

Company/Country	Product/Plant/Technology	Value Million US \$ (Local Currency if Known**)	Status Date Announced
Petroleum and Natural Gas D	Development and Refining		
Cluff Oil (UK)	Geophysical survey of northern Yellow Sea	NVG	Formal permission given by PRC 10/28/79
(W. Germany)	Joint prospecting for hydrocarbons in eastern China and joint surveying of oil and gas reserves on east coast at Linyi Basin	NVG	Agreement signed 11/22/79
(Japan)	Joint development of oil deposits in Bohai Bay	Total cost (\$1,200)	Basic agreement signed 12/6/79*
Shipping			
British Hovercraft Corporation (UK)	Joint venture for production of Super 4 hovercraft	NVG	Will present proposals 11/21/79
Dravo Corp. (US)	Construction of four 6,000-h.p. river towboats and 30 barges; delivery for mid-1981	NVG	Contract signed 12/11/79
Steel Plants and Equipment			
Mannesmann Demag AG (W. Germany)	Seamless-steel pipe plant for Baoshan (550,000 tons of 0.8-inch to 5.5-inch- diameter pipes/year); production scheduled to begin end of 1982	\$250	Order won 12/12/79
Steel and Steel Products			
(Japan)	Steel products (950,000 tons) for Jan-June 1980	NVG	Contract con- cluded 11/26/79*
Textile Plants and Equipment	ı		
Savio (division of ENI) (Italy)	2,000 yarn preparation machines	NVG	Order placed 10/79
Selincourt (UK)	Establishment of factories to manufacture pile fabrics and curtain nets	NVG	Negotiation 11/7/79
Toyo Boshi Kogyo Co., Peninsula Knitting Co. (Japan, Hong Kong)	Joint venture to set up cashmere spinning and knitting plant in Xinjiang Uygur	NVG	Agreement in principle 12/26/79
Tourism			
(Australia)	Remodelling and designing for 9 leading tourist hotels; will provide all the material	NVG	Contract won 11/14/79
Transportation Equipment			
Toyota Motor Sales Co. (Japan)	Setting up of automotive repair factory in Beijing	NVG	Agreement signed 11/6/79
Isuzu Motor (Japan)	Auto parts depot in Nanjing	NVG	Contract signed 12/27/79
Hino Motor (Japan)	Auto parts depot near Beijing	NVG	Agreement signed 12/27/79
Mitsubishi Auto Indus- try, Nissan Motor (Japan)	Building of parts centers and service factories	NVG	Negotiation 12/27/79
Cumulative Total Value of 197	ed through December 31: ons listed through December 31: 79 Sales listed through December 31: 79 Negotiations listed through December 31:		\$245.1 million+ \$255.21 million+ \$7.4 billion+ \$1.9 billion+

^{*}Date contract signed. All other dates are when sale or negotiation was announced.

**Dollar conversions at month-end rates quoted in *International Financial Statistics* (IMF).

†In the Jan-Feb issue of CBR, there was a \$1 billion entry for a negotiation concerning the development of an underwater oilfield near Hong Kong. Since there have been no further reports on this negotiation, the \$1 billion has been deleted from the total cumulative value figure for 1979.

Update

CHINA'S ELECTIONS

The "revolutionary committees" which have administered China since the Cultural Revolution are being replaced by "people's governments" under revisions to the Constitution approved in July 1979 by the Fifth National People's Congress.

According to the revisions, governments will be elected by "people's congresses" at corresponding levels. People's congresses at the county level and below will themselves be directly elected, while deputies to people's congresses of provinces, municipalities directly under the central government, and cities divided into districts will be elected by people's congresses at the next lower level.

Although January 1, 1980, was the nominal date for implementation of the new system, elections actually began late last year. On the provincial level, returns indicate a desire to divorce government administration from Party leadership. With the exceptions of Beijing, Shanghai, and Guangdong, the new mayors and governors are not the first secretaries of their respective Party committees.

In three cases, top administrators have been given posts as second secretaries in municipal and provincial Party committees in apparent anticipation of wider roles for the first secretaries. Zhang Jingfu, former Minister of Finance and deputy secretary-general of the new Financial and Economic Commission (CBR Sept.-Oct. 1979, p. 71) is the new governor of Anhui Province, but is only second secretary of the provincial Party committee. Wan Li, the first secretary of the Party committee, may be slated for a vice-premiership.

NEW MACHINE BUILDING COMMISSION

In mid-February a new Machine Building Commission was established, headed by Vice Premier BoYibo. The new commission has responsibilities for coordinating China's machine building industries.

NEW ENERGY MANAGEMENT BODY PLANNED

At a week-long conference on energy held in Beijing in early January, Vice Chairman of the State Economic Commission Xu Liangtu said that China is to establish a national administration charged with encouraging fuel conservation. Efficiency in the use of fuel was also a topic at the conference, which was attended by 120 scientists.

NEW FOREIGN TRADE CORPORATION

The <u>China National Metallurgical Products</u>
<u>Import and Export Corporation</u> has been set up in Beijing, according to a January 11 Xinhua dispatch. The new FTC will negotiate and sign contracts for compensatory trade and joint ventures involving the metallurgical industry,

and handle the import and export of metallurgical technology, equipment, and products. It will also arrange for construction of metallurgical projects for foreign countries.

NEW ADDRESS FOR CHINA INTERNATIONAL TRUST AND INVESTMENT CORPORATION

The <u>China International Trust and Investment</u> <u>Corporation</u>, which facilitates joint ventures between Chinese entities and foreign firms, has a new address:

No. 2, Dong Da Jie Beijing People's Republic of China

EVOLUTION OF BEIJING'S TRADE STRUCTURE

Moves aimed at decentralizing and streamlining China's foreign trade structure are creating new opportunities for foreign businessmen. In Beijing, Shanghai, Tianjin, Guangzhou, and Fujian, new organizations are being set up to "give unified leadership" over foreign trade and other external activities.

In Beijing, <u>four municipal commissions</u> now coordinate industrial planning and operations: the Beijing Municipal Planning Commission, with a staff of about 70; the Municipal Economic Commission, headed by Zhang Peng, with a staff of about 160; the Municipal Basic Construction Commission, with a staff of about 170; and the Municipal Import-Export Management Commission, which began operation in October and currently operates with a staff of 10. Ye Lin, vice mayor of Beijing, is chairman of the Beijing Import-Export Management Commission.

The Municipal Import-Export Management
Commission has under it two subsidiary corporations: an Economic Construction Corporation,
which handles major projects and loans; and
an Import-Export Corporation, which handles
trade.

As in the past, municipal industrial bureaus report to both the Municipal Economic Commission and their respective ministries. But now a company under an industrial bureau wishing to deal with a foreign firm must apply to both the Municipal Economic Commission and the Municipal Import-Export Management Commission. For projects under ¥3 million, the city can grant approval; above this benchmark, it must apply for authorization from the State Economic Commission.

The municipal import-export management commissions now being formed will handle foreign trade within their respective municipalities up to a certain level, but major projects will still be routed through the centralized Foreign Trade Corporations.

In a companion move, the <u>Beijing Municipal</u> <u>Youyi (Friendship) General Commercial Service</u> <u>Company</u> has been set up to help businesmen from abroad. It is responsible for business

negotiations with overseas Chinese and Hong Kong and Macao firms, as well as for joint commercial enterprises with foreign firms both in China and abroad. It will dispatch service personnel for joint ventures abroad and recruit personnel for foreign commercial firms in Beijing. The state-run company is financially independent, assuming sole responsibility for its profits and losses. A similar organization, the International Trust Service Corporation, has been set up in Shanghai (see p. 83).

OTHER CORPORATIONS

The Agricultural Mechanization Service Corporation was established in October to supply, maintain, and rent farm machinery, machine parts, and agricultural chemicals. It will also provide advisory services. The new corporation is headed by Wu Shaowen, a vice minister of the Ministry of Agricultural Machinery, which in late November sponsored a national meeting on the agricultural machinery industry. It was reported at the meeting that China has almost 2,000 agricultural machinery manufacturing plants run by central, provincial, and prefectural governments. It was decided at the national meeting to increase the number of major factories making machinery for livestock production from 12 to 27, and the number of harvesting machinery factories from 15 to 17. The number of tractor plants will be cut from 65 to 35.

A specialized corporation for the sale and production of rare earths has been set up at Baotou, a rapidly developing steel center in Inner Mongolia. It is expected to help accelerate development of China's rare earth industry and provide products for domestic and international markets.

The <u>Beijing Advertising Corporation</u> is now open for business, accepting advertisements from foreign corporations as well as from local firms. Its ads will appear in newspapers and journals published in Beijing and elsewhere in north China; television and radio commercials will also be accepted. Xinhua reports that "billboards, posters, neon lights, and photographs will be put up in business centers, and advertisements will be displayed in theaters, cinemas, department stores, airports, and large hotels in all the major cities" in northern China. Deputy director of the new corporation is Guo Shaowang. The address:

Beijing Advertising Corporation 190 Chao Nei Street Beijing, People's Republic of China

INSURANCE

The <u>People's Insurance Company of China</u>—which has more than 300 overseas agents—<u>has resumed domestic activity</u> after a hiatus of more than two decades.

Following approval by the State Council, the PICOC has begun accepting applications for insurance against property damage and transportation risks from those units inside China that import complete sets of equipment, establish joint ventures with foreign countries, and engage in compensatory trade or in the processing of raw materials supplied by foreign customers. In particular, the insurance is



Council President Phillips and Vice President Young with CCPIT Technical Exchange Director Li Zhaoli and Xie Qichang, head of CCPIT's US technical exchange section.

Li was hosted by WJS, Inc.

intended to cover equipment and projects imported with the use of Bank of China foreign exchange loans. Coverage will include construction, installation, and capital goods insurance, as well as insurance for exports.

MORE SOCIETIES

The <u>Chinese Seismological Society</u> ended its first meeting on November 22 in Dalian. At the meeting it was reported that an estimated 242,000 people were killed and 165,000 seriously injured in the July 1976 Tangshan earthquake.

The first congress of the China Light Industry Society, which took place in Beijing from December 4 to December 10, elected Liang Lingguang—Minister of Light Industry—as president, with Huang Yiqi as secretary-general. The society will organize academic interchange among organizations within China and between China and foreign countries. Emphasis at the congress was on introduction of new technology.

The <u>Chinese Statistical Society</u> was set up in mid-November to promote the study of statistics and improve statistical work throughout China. <u>Its president is Professor Xue Muqiao</u>, a noted economist and first director of the State Statistical Bureau.

The Chinese Society of Foreign Economic
Theories has been formed to study both classic and contemporary economic theories. Chen
Daisun, director of Beijing University's economics department, is president. And the Beijing
Business Management Association has been set up to study theories and methods of business management in China and in foreign countries.
Chairman of the new association is Zhang Peng.
who heads the Beijing Municipal Economic
Commission.

KIB *E

Correction:

The photograph captions on pp. 38 and 40 of the Nov.-Dec. CBR should have referred to a "thermal power plant," not a "thermal nuclear power plant." On page 24 of the Nov.-Dec. CBR, the Committee for Scholarly Communication with the PRC (CSCPRC) is incorrectly shown as a government agency administering the Sino-American student exchange program. The CSCPRC is a private organization administering one aspect of the program pertaining to the selection of American students to study in China, The Memorandum on Educational Exchange is the sole responsibility of the US Department of Education.

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