THE MAGAZINE OF THE NATIONAL COUNCIL FOR US-CHINA TRADE MAY-JUN 1977

The China Business Review

VOL. 4 NO. 3

NEW FROM THE NATIONAL COUNCIL

DIRECTORY

of Research Institutes in the People's Republic of China

The emphasis on China's scientific research is on "Uniting theory with practice", applying science to the needs of changing economic priorities. In the past seven years China's scientific and technical interaction with the world's scientific and industrial community has increased enormously. The need to know the state of China's scientific research has become important.

The *Directory of Research Institutes in the People's Republic of China* is an up-to-date reference that any organization or individual concerned with China's scientific development will find indispensable.

The *Directory* will be a standard reference for the following—

- Members of scientific and technical missions to the PRC.
- Companies giving technical presentations in China, and participating in exhibitions in China.
- Institutions and firms hosting scientific and technical delegations from China.
- Scientific and technical research institutes studying research in China, overall or in individual categories.
- Companies analyzing the market for scientific instruments and other laboratory equipment in the PRC.
- Companies analyzing China's scientific development in the short-to-long range as it relates to their own product area.
- Individuals interested in learning about the state of science in the PRC.

About the Directory

In 1977, the National Council is publishing a three-volume *Directory of Research Institutes in the People's Republic of China*. The 300-plus page volumes will describe research in the categories listed and will provide comprehensive information about the organization and work of all known industrial research institutes in China through 1976. The *Directory* has been prepared by Susan Swannack Nunn.

The *Directory* contains the following data where known · name and addresses of the institute, in English and Chinese · date of establishment · organization · staffing · research divisions · subsidiary facilities · affiliates · biographical information of staff · present and past research and publications · recent research and activities (including abstracts of work published) and known equipment installed.

The cost of the 3 volume *Directory* is $300. Individual volumes are $125 each. Airmail postage overseas is $20.00 per set or $7.00 per volume.

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SPECIAL DISCOUNT for Academic and Other Non-Profit Institutions

The *Directory of Research Institutes in the People's Republic of China* is available at a discount of 33 percent to academic and other non-profit institutions. The reduced price of $200 applies only to purchase of the set of 3 volumes. Postage overseas is additional.

Volume 4—Number 3—May-June 1977

The China Business Review

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Front Cover: At a Foshan ceramics factory near Canton, a worker produces porcelain tigers, traditionally symbolic of military prowess. For details on China's China, see page 26.

The CHINA BUSINESS REVIEW is published bimonthly by the National Council for US-China Trade, 1050 17th Street, N.W., Suite 350, Washington, D.C. 20036 USA. The National Council is a non-profit organization incorporated under the laws of the District of Columbia. The CHINA BUSINESS REVIEW is published principally for members of the National Council. Application to mail at controlled circulation rates is pending at Washington, D.C. The magazine is available for subscription in the US and Canada at $60 per year; elsewhere at $75 a year including airmail postage.

The National Council for United States-China Trade is grateful to His Excellency Huang Chen, Chief of the Liaison Office of The People's Republic of China in Washington, for the calligraphy on the front cover of the China Business Review.

(Formerly U.S.-China Business Review)

CHINA TRADE EVENTS

MILWAUKEE, WISCONSIN, May 13-14

The Institute of World Affairs of the University of Wisconsin at Milwaukee and the China Council of the Asia Society held a "Wisconsin Conference on China," which featured an afternoon roundtable on "Sino-US Trade: Prospects and Problems." Nicholas Ludlow, Director of Publications and Research at the National Council spoke on the status and realities of the US trade relationship with the PRC, followed by William Clarke, Director of the Division of PRC Affairs, US Department of Commerce, who spoke on the nuts-and-bolts of doing business with the PRC. For further details, write P.O. Box 413, Milwaukee, Wisconsin, 53201, or call (414) 963-4251.

NEW YORK, May 20

The Sales Executive Club of New York sponsored a panel discussion on the normalization of relations with the PRC. Chaired by Charles Abrams, chairman of China Trade Corporation, the luncheon meeting was held at the Waldorf-Astoria.

NEW YORK CITY, May 25

Julian Sobin of Sobin Chemicals will speak at Asia House on "The Changing Role of Foreign Trade in US-China Relations." The lecture will be given at 6 p.m. on 112 East 64th Street in New York. For details contact Barbara Suomi, (212) 751-4210.

FORT LAUDERDALE, FLORIDA, May 28

Speaking at the annual Governor's Conference will be Council President Christopher H. Phillips on "Sino-US Trade in the Post-Mao Era."

SAN FRANCISCO, June 4

A conference on "China and Global Issues" will be sponsored by the World Affairs Council of Northern California, the Stanford US-China Relations Program, and the China Council of Asia Society. With a speech by the China Council's Robert Oxnam, other participants will include Richard Baum of UCLA on "Politics and Policy since Mao: China's Development Strategy under New Leadership," Victor Li of Stanford University on "Self-Reliance and Sovereignty: China's Posture towards International Issues and Organizations," and Peter Van Ness of the University of Denver on "China's Relationship to Third World Development." The conference will begin at 9:00 am at the Chinese Culture Center in the Holiday Inn at 750 Kearny Street, San Francisco. For details contact Douglas Murray, (415) 497-3150.

CHINA, June 5-20

The National Council's Food Processing and Packaging Equipment Committee will be sending its first delegation to China for two weeks in June.

WASHINGTON, D.C., June 16

The Annual Meeting of the National Council will be held at the Madison Hotel, 15th and M Streets, N.W., beginning at 12:00 noon with a pre-luncheon reception and luncheon at which Senator Charles Percy will be the key-note speaker. The meeting will be in session from 2:00 to 5:00, and will conclude with an evening reception from 5:30 until 7:00. For details, contact Pat Caperones at the National Council, (202) 331-0290.

CHINA, June

The National Academy of Science will be sending two delegations into China through its Committee on Scholarly Communications (CSC) with the People's Republic of China. The first delegation, arriving in China on June 6, will investigate Chinese vegetable farming systems, and the second delegation, scheduled to arrive on June 13, will be a CSC committee delegation. For details contact Halsey Beamer (202) 389-6136.

UNITED STATES, Late June

The National Committee for US-China Relations will host a Chinese delegation from the Chinese People's Institute of Foreign Affairs in late June and early July for three weeks. The group will tour New York, Washington, and other American cities. On May 17, the Committee sent a delegation of Young American Leaders into China for two weeks. That group included Thomas P. O'Neill III, Lieutenant Governor of Massachusetts; Paul Sullivan, Executive Director of the Democratic National Committee; Donald Sundquist, former Chairman of the Young Republican National Committee; and Winthrop Rockefeller. For details contact Arne J. de Keijzer (212) 682-6848.

NATIONAL, September

The China Council for the Promotion of International Trade has accepted the invitation of the National Council to send its second official delegation to the U.S.

WASHINGTON, November 17

The National Council will hold a conference on technology licensing and transfer to the PRC. For details contact Eric Kalkhurst (202) 331-0290.

YOUR MEN IN PEKING

When in Peking, US Commercial Staff at the US Liaison Office will be happy to assist you. Please feel free to call them if you are in China's capital.

Commercial Staff:	William W. Thomas, Jr. (Chief) Richard Mueller Frank P. Wardlaw
Agricultural Representative:	Koy L. Neeley (FAS/USDA)
Telephone:	522033 Ext. 215 or 216
Address:	17 Guanghua Road Peking
Cables:	United States Liaison Office Peking
Telex:	None.

STARTING SMALL–

How a ton of China tea may go a long way for a Washington, D.C. importer

What should two enthusiastic tea drinkers—one a systems analyst with an expertise in marketing, the other an ardent student of Chinese culture fluent in Mandarin—do with their spare time? Start a tea import business from China, of course.

Steve Watson, the Chinese student, and Jana Roten, the systems analyst, are the founders of Watson-Roten Imports of Chevy-Chase, Maryland, one of the smallest member firms of the National Council. Established barely a year ago, the company has just imported and distributed its first metric ton of tea from the People's Republic of China and is about to purchase 5-10 tons more. For all those who harbor secret dreams of importing fragrant teas and spices, bolts of silk brocade, or any of the new commodities China has to offer, this tiny company's story offers a classic example of how to start importing from China.

As long-time devotees of exotic teas, the young husband and wife team had no trouble deciding what commodity to begin importing from the PRC. They think the time is right for selling specialty teas on the US market. Comments Watson, "We feel that the American public has come of age as far as high-quality tea is concerned. In the past, such teas have been hard to come by: you could get blends, or more ordinary teas with a strong perfume." That appears to be changing now. "The response to our product has been very enthusiastic."

But nothing sells itself. The two set out carefully and cautiously to pick a blend they felt would have the best chance in the American market, and to learn about the best way to buy from China and market their purchases in the United States. Along the way, they touched base with the National Council for US-China Trade; tea associations, traders and other connoisseurs; the Small Business Administration; container manufacturers; gourmet magazines, and, of course, the Chinese—at the liaison office and in the China National Native Produce and Animal By-Products Import and Export Corporation.

They learned, among other things, that it was not necessary to attend the Canton Fair in order to sign their first contract, that it would be best to do their own packaging, and that with the Chinese, a lot depends on luck and timing. And Watson-Roten Imports has been lucky: communications have been smooth, requested samples have come promptly, contract negotiation hassles have been non-existent, and distribution in the US is proceeding well.

DRINKING QIMEN AT GRANDMA'S KNEE

Watson and Roten first began thinking of establishing a tea import outfit back in 1971, right after the US lifted the ban on trade with the PRC. They had been tasting tea together for a while and Chinese teas were their favorite. Watson had been weened on tea from the age of five, when his grandmother often served the well-known Keemun variety. Later, he lived in Taiwan for five years while a teenager, and experimented with all the teas he could find.

In December 1975, when the two finally decided to take the first steps toward establishing their company, it was the Keemun (known in the PRC as Qimen) tea that they thought about importing. But that was still several steps in the future.

First, they contacted everyone they knew who knew anything about tea or China. One of their first sources of information was an extensive article in the *US China Business Review* entitled "China Tea." They met with the National Council's Coordinator of Import Activities, Suzanne Reynolds, who told them about the procedures for contacting the Chinese and supplied them with all the crucial basic information. It was she who informed them of a vital fact for a brand

Top left, Jana Roten opens first shipment of tea received from the PRC; bottom left, Steve Watson unloads newly-arrived tea crates; right, the finished product: Watson-Roten tea tin after being hand-filled with Qimen.

new company with limited financial reserves: it would not be necessary to pay a visit to the Canton Fair in order to get started. A combination of letters to China and introductions to liaison office representatives in Washington, D.C. would do the job just as well.

COUNCIL MEMBERSHIP

Watson-Roten Imports joined the National Council in January, 1976, as an importer affiliate member. Contacting the Chinese and planning market strategy were the next two simultaneous steps. Given their limited money and time (both have continued their full-time jobs, Roten with a computer firm and Watson with the Library of Congress), they settled on a mail-order business as the most practical approach.

Believing that emphasis of the Chinese origin of the tea is an asset, they nevertheless have concluded that Chinese tea packaging is not the most effective for attracting American consumers, and so began to investigate a design for their own personalized containers. They contacted container manufacturers and tea retailers, and also attended Small Business Administration seminars on starting businesses and found out about Federal, state and county regulations and taxation policies.

In March of 1976, the National Council arranged for them to meet with PRC Liaison Office officials dealing with native produce products. The officials, very enthusiastic, advised them to go ahead and place an order with the Peking headquarters of the Native Produce Corporation.

Before doing so, they sent a letter to CHINATUHSU in Peking requesting tea samples, so that they could corroborate whether Qimen was really the variety they desired. In response, they were sent retail samples. Since they had decided to do their own packaging, they were not interested in retail goods, instead cabling for bulk samples. Over the next month, they received between 20 and 30 samples, which dribbled in from different branches of the corporation, mostly Shanghai and Fukien.

Several months were spent delving into the savory mysteries of different kinds of tea—Pingshui, Qingwo, Panyung and many more. When they settled on Qimen, they still had to decide between five or six varieties of that type of tea. The tea-tasting orgy finally ended in May, and in June, after receiving what they felt was a very fair quotation on price, they cabled Peking to purchase a trial order of one metric ton of Qimen tea.

The Chinese immediately dispatched a sales con-

firmation, which the company signed and returned. The terms were CIF New York, with delivery promised during the August-September period. They opened an irrevocable L/C with their local bank in Chevy Chase, but found that they had to tutor their uninitiated local banker in how to deal with faraway China. The L/C went through their local bank, a Maryland state bank, and the National Bank of Canada before hooking up with the Bank of China.

DESIGNING THE PACKAGE

With the order placed, the two new entrepreneurs moved quickly to organize the packaging and distribution aspects of their operation. For the design, they searched through old tea packaging and Chinese designs at the Library of Congress, having decided to use traditional patterns as their design base. They called upon an artist friend to incorporate the traditional design into an attractive package which would catch the eye of the often-jaded American consumer.

The end result is a remarkably attractive canister in cream and brown featuring a reproduction of a delicate wood-block print on two sides, a finely-drawn map of China and old-style Chinese characters on another, and their Watson-Roten Imports logo on the fourth. The trade name, trademarks and designs were then registered with the US government. (The actual name of the tea, Qimen, is in the public domain).

At the same time, they contracted with the Philadelphia Can Company for 4,500 half-pound containers designed to specification, and then went on to investigate the mail-order magazine possibilities. They first placed an ad with *Gourmet* Magazine to catch the Christmas business and just recently placed another with *Yankee* Magazine. Both have a large rural readership.

A CHRISTMAS RUSH!

The next stage was the most agonizing: waiting for the ship to come in. The Chinese had promised a delivery date of sometime in August or September, but when the shipment had not arrived by the beginning of October, the two asked their broker (whom they had picked at random out of the New York phone book) to try to locate it. He had no success. With a rising sense of dismay, they contacted the National Council for help.

The Council tracked their tea to a Chinese-chartered, Greek-registered vessel, the *Atlantis*, which finally docked in New York on November 22. Watson and Roten rushed the tea by truck to Washington, where they quickly sent the Christmas orders which had been piling up, taking a loss on postage by sending the tea canisters first class in order to assure their receipt before the holidays.

When a company has only two people, they have to do everything from the negotiations to the manual labor themselves. From November until February, husband and wife spent all of their free time meticulously measuring out half-pounds of tea, packing the canisters, and affixing labels with ribbons to the tops of each canister. The labels contained instructions for brewing the tea.

DEVELOPING DISTRIBUTION

Besides placing ads in *Gourmet* and *Yankee* magazines, they have been making contacts to distribute the tea throughout the Washington area." Distribution takes a long time to develop," comments Watson. "It depends a lot on personal contact and demands a great deal of effort." They realize they have a long way to go before they have built a really efficient distribution network. Thus far, the Washington, D.C. buyer can find Watson-Roten Qimen tea at a variety of specialty shops such as Swing and Co. and the Old World Market, and in Magruder's Grocery, where it is retailing for from $4.50 to $4.75 a can. A number of area department stores are currently considering stocking it.

Watson and Roten have filled about 300 mail-orders at $4.75 each and have already begun to realize a profit. But they have decided to re-invest it all in another purchase of 5-10 metric tons of tea. This time, they will purchase other types in addition to Qimen. They are gearing up for another round of tea-tasting and for an all-around expansion.

"The Chinese should look to people like ourselves to help them build a market in this country," says Watson.—SRG

NEW FROM THE NATIONAL COUNCIL

DIRECTORY

of Foreign Trade Exhibitions in the People's Republic of China (1971-1976)

China's Technology Preferences in the 1970s

- What is the real China market?
- What specific types of foreign technology are of interest to the People's Republic of China?
- What exact products and technology has your competition displayed in China in the past six years? And sold to China?
- How have China's foreign technology preferences changed during the 1970's and what opportunities do these represent for your firm?
- What happens at a foreign exhibition in Peking?

In providing the answers to these questions, the National Council's *Directory of Foreign Trade Exhibitions in China (1971-1976)* represents an essential market research tool for companies involved in doing business with the PRC, with cross-referenced details of over 10,000 models and products displayed—and, in most cases, sold—by over 2,200 foreign companies in China since 1970. As a tool for analysis of the present and future China market, this 500-plus page Directory is unique and vital for your PRC strategy.

About the Directory

There have been over forty industrial exhibitions in the People's Republic of China by foreign countries during the past six years. Twenty-six of these trade fairs were by western nations, including nearly all European countries and Japan. These exhibitions are showcases of the types of foreign technology China is interested in.

- The *Directory* is an essential reference guide to what other companies have displayed in the PRC
- the products and technologies exhibited in the PRC, 1971-1976, by model number and/or type
- how exhibitions are organized in China—and where China exhibits abroad · floorplans of major exhibits in the PRC · China's technology preferences, and how these preferences have changed · what happens at an exhibition in China
- what technical seminars in the PRC accomplish and how they work.

The *Directory* has been prepared by Molly Bruce Jacobs, a Chinese-speaking specialist in the subject of trade shows in China. The 500-plus page volume will be available in early 1977.

Countries included in the Directory are Australia, Austria, Belgium, Britain, Canada, Denmark, France, Germany, Italy, Japan, Mexico, Netherlands, Sweden and Switzerland.

The Directory costs $200.
Outside North America, add $7.00 for airmail postage.
Copies may be ordered from the National Council in Washington, D.C.

THE PRC'S TECHNICAL TRAINING PROGRAM OVERSEAS

Chinese Technicians in Japan

Alistair Wrightman

In three recent issues, this magazine has looked at foreign technicians in the PRC, including Pullman Kellogg's story, the Japanese experience, and the experiences of US firms. China's purchase of plant and equipment from abroad in the past five years has necessitated the stationing of some three thousand or so foreign technicians and their families in the PRC, well over four hundred of these from the US alone. But China has had its own training program abroad, training its own technicians how to use the plant and equipment purchased from other nations. In the past few years more than two thousand Chinese technical personnel have been training in Japan, Germany, Britain, France, Italy, the US and other countries. The following story, on China's technicians in Japan, by CBR's Tokyo correspondent, is fascinating, with many pointers for any company involved in training the Chinese. Among the interesting features of this piece—Chinese technicians work "exceptionally hard," Peking seems not to want to import plant beyond the professional capacity of its engineers, lack of spontaneous individual questions from the Chinese tends to slow down instruction, the Chinese sometimes insist on their right to have "something for nothing"—more data than the contract calls for, and a Chinese technician's daily hotel expense in Japan may correspond to his entire monthly salary in China.

Groups of eager Chinese technicians frequently travel to Japan these days to study modern manufacturing techniques under contracts with Japanese companies currently exporting industrial plants to China. One major company, Nippon Steel Corporation, has trained more than four hundred Chinese engineers in Japan over the past two years, although the number of trainees from China per company is usually much smaller. Chinese technicians training in Japan, however, are expected to increase substantially in number under the administration headed by Chairman Hua Kuo-feng.

Nevertheless, during the past year, trade between China and Japan slowed down considerably and negotiations involving Chinese imports of Japanese industrial plants and facilities were virtually suspended for a time. This was apparently due to domestic Chinese political developments. As a result, the number of Chinese trainees also clearly declined during this period.

Japanese companies, which tend to remain highly secretive concerning such programs, are extremely reluctant to disclose just how many Chinese technicians they are currently training in Japan. Security reasons, they explain, require such precautionary measures to protect these Chinese technicians from possible harassment by local extreme nationalists or radical left-wing elements. Chinese technicians themselves always move about Japan in groups or at the very least in pairs, obviously for this reason, among others.

Moving in Groups

When a Japanese company recently offered a group of Chinese technicians a choice of lodging either in a Western-style hotel or in the firm's own Japanese-style guest house, the leader of the group, without hesitation, selected the guest house. He explained he favored it because it had a large hall where all members of the group could live and sleep close together on Japanese-style straw mats. Chinese technicians, in fact, never go out alone while in Japan. Even the leader of a team of Chinese experts, when he not long ago wanted to visit the Chinese Embassy in Tokyo to report on the group's activities, asked a member of the Japanese trading firm which had arranged the visit in the first place to accompany him, although the hour was relatively late at night.

Another probable reason why Chinese technicians insist on moving in groups is that very few of them can speak either Japanese or English. They clearly find it very difficult to move about without an interpreter. A Chinese interpreter is usually attached to each team and the Japanese company which plays host to the group also often supplies interpreters. The number, however, is obviously much too small to meet their requirements.

Contract terms involving Japanese companies train-

ing Chinese technicians are usually simple, a Japanese petrochemical company official revealed. No payments are called for by either side in most cases. The Japanese company involved and China's Technical Import Corporation (TECHIMPORT) normally negotiate such contracts. The fee for training is considered part of the price of obtaining the technical knowhow, mainly because the term "knowhow" is taken to include not only the technical knowledge itself but also its actual transfer to the recipient. The Chinese themselves almost always pay in yen for all their costs of lodging, food and other daily necessaries.

General Principles Only

The training contracts thus form a part of the overall financial arrangement for construction of industrial plant facilities in China and the supply for necessary technical knowhow. They also provide for the exact number of technicians who should be trained, for how long and even what type of techniques should be involved. Technical cooperation contracts with the Chinese are usually somewhat similar to those concluded with the Soviet Union.

But, whereas the Russians like to provide for all the minute details, the Chinese prefer only to agree upon the general principles alone and to leave the minute details to later negotiations to be conducted if and when necessary. This is a welcome attitude in negotiating such contracts, according to the Japanese, because it is sometimes difficult at an early stage to foresee exactly what may happen in the course of the upcoming training sessions.

On the other hand, however, such a loose arrangement sometimes causes difficulties when consultations are actually held to work out these details. For instance, a team of Chinese technicians who were being trained in the operation of a Japanese petrochemical plant recently complained they were not satisfied with just watching and learning while Japanese engineers actually operated it. They insisted that they should be allowed to operate the plant equipment on their own, pushing the control buttons and turning valves, making the key decisions. The Japanese engineers, however, feared that such operations by inexperienced trainees might cause serious troubles. Finally, after negotiations, it was arranged for the Chinese technicians to directly operate the plant equipment only after meticulous instructions and precautions had been taken to avoid the likelihood of difficult problems.

The same company noted one important difference between China and other developing countries in Asia, the Middle East and Africa which are seeking to import Japanese industrial plants and facilities plus the necessary technical knowhow. China always seeks to improve only new facilities and techniques which Chinese engineers feel they are confident they can handle. Peking clearly does not want to import any plant which might be beyond the professional capacity of the nation's engineers. This would seem to indicate that the Chinese are very realistic about their country's plans for economic development and gradual modernization.

Nippon Steel Corporation, which is now building a hot strip rolling mill and a silicon steel plate mill at Wuhan in Central China, reports its training of Chinese engineers for operation of these mills has recently been completed. The firm built special hotel-like guest houses at its plants at Oita in Western Japan and at Kimitsu, near Tokyo, to house them. Special cooks were employed at these places, because the Chinese always insist on eating only their traditional Chinese cuisine. The technical standards of the team were high and they absorbed the Japanese steel mill techniques fairly easily, according to Nippon Steel Corporation executives.

Speaking through a Leader

Chinese technicians who travel to Japan for training are mainly young engineers, but often included are men in their 40s and 50s. Some of them are from remote provincial areas. Therefore, many of the things they see or experience daily in Japan are completely new to them. A Japanese petrochemical company recently took a Chinese team it was training to the seashore on a sightseeing trip, for example. Several members of the team saw the open sea for the first time and eargerly rushed to taste the ocean water to confirm it was salty.

However, the principal purpose of the Chinese team always is to study and learn new industrial techniques as rapidly as possible and return to China as soon as possible. They work exceptionally hard. They work closely together and after each day's schedule is finished they usually hold meetings in the hotels or guest houses where they are staying. Apparently their purpose is to go over whatever they have learned during the day and to prepare for the next day's work.

When they ask Japanese instructors questions it seems they speak through their leaders every time, not individually. This appears to indicate that they decide, after each day's work is over, just what questions they should ask the following day. Questions are thus often a full day old and not really very convenient for Japanese instructors. The Japanese sometimes suggest that the Chinese teams should ask their questions immediately after each day's teaching operations. But the Chinese technicians insist otherwise.

A Japanese petrochemical company, one which trained about sixty Chinese technicians altogether, has disclosed it lodged them at ordinary hotels near two of its plants. As usual, the terms of training were included in the overall contract. Again, the cost of training was considered part of the payment for the

A Toyo ammonia/urea fertilizer plant in Chengtu: Chinese endusers have been trained in Japan to operate plant.

knowhow, and it was quite a job to handle the sixty technicians. They ate nothing but Chinese dishes.

Precautionary measures had to be taken to protect them against possible Japanese extremists. And again they always held meetings at their hotels after each day's work. Apparently they used these occasions for what they themselves called "self-criticism"—which seems to mean some sort of political indoctrination. But they also made use of the time to sum up what they had learned during the day.

Cultural Differences—But no Personal Friendship

In explaining the operations of the chemical or other types of plants, the fact that both the Chinese and Japanese use almost the same written characters has assisted instructors and the trainees. But mistakes sometime occur because the same characters frequently mean quite different things in the two languages. For instance, recently a Japanese instructor wrote three characters on a blackboard which meant "alright" in Japanese. Chinese engineering students were immediately perplexed because the characters merely meant "a big fellow" in their own written language. Instructors and trainees thus cannot always communicate very well without interpreters.

Leaders of the Chinese trainee teams are usually relatively well trained in dealing in a diplomatic way with their Japanese hosts. On one occasion last year (1976), a Japanese company took a group of Chinese technicians to its own reception center for a party where Japanese food and drink was served. The Chinese technicians refused to even taste sashimi (raw fish), because they said they had never before eaten any raw meat. But the hosts insisted, in a soft way, that since they were now in Japan, they should do as the Japanese do, adding that many Westerners visiting or staying in Japan often soon found they liked sashimi very much.

Finally, the leader of the team gave in, picked up a small piece of raw fish with his chopsticks and gulped it down quickly, declaring that this would indeed be a unique experience which he would be able to cherish and tell his friends at home about for the rest of his life. But this was the only raw fish the Chinese group touched that night.

One Japanese company official revealed that their own engineers who are sent to the developing countries or who train technicians from abroad in Japan often make personal friendships, exchanging invitations to homes and visits with families. Yet this never happens with the Chinese engineers, who almost never act individually in this area either. They simply won't accept such invitations.

An official of a Japanese engineering company, a firm which had only recently erected a petrochemical plant in China, reported that Chinese engineers who travel to Japan to be trained "certainly must be among the best that country has." The company received about thirty of them for training. The first group of ten arrived in Tokyo to study plant operations similar to the requirements of the one which would be built in China. The second group of ten inspected the machinery and equipment which China was actually importing for the projected plant. The last ten were given training at factories in Japan for about two months to prepare them to operate the plant in China. They were extremely diligent and capable engineers.

A Japanese firm that receives visitors or trainees from China has to give Japanese government author-

ities a full guarantee of their good conduct while in Japan. Each company is thus obliged to supply daily schedules of the activities of their Chinese visitors to the Japanese authorities—who accordingly take steps to protect them. It is evident that the Chinese themselves do not want to change this arrangement in any respect.

A Chinese technician's daily hotel expenses roughly corresponds to his entire monthly salary in China. Since, as already noted, the training fee is usually included in the contract's overall payment for knowhow, the Japanese company each time must estimate the cost of the future training and add it to the total price of the knowhow in computing the amount of overall payment to be charged under the contract. This is somewhat different from the way in which payments are provided to cover the cost of sending Japanese technicians to China to assist and to supervise construction of plants exported from Japan. In the latter case, a breakdown of item-by-item estimates of the total cost are stipulated separately in the contract.

Something for Nothing

Another point that not infrequently gives rise to some trouble during implementation of the contracts is the fact that Chinese technicians sometimes ask to be given more technical information than the contract actually provides for. This may be due to the fact that the Chinese have considerably different ideas about patents and knowhow from those held by Westerners and Japanese. On occasion, they have absolutely insisted that they must receive certain information, because otherwise it would become difficult for them to carry out the whole project for which the contract originally was concluded. They are thus terribly disappointed and even disgruntled when told that the particular information they seek is part of another type of knowhow which clearly was not covered by the specific contract.

On some occasions a Japanese company has had to supply specific additional information definitely not covered by the contract—just to satisfy the Chinese, who apparently think more in broader terms of friendly assistance than in capitalistic terms involving patents and detailed knowhow arrangements. The Chinese attitude is understandable, at least to some extent, because during the period in which the Chinese laid very great stress upon self-help, they sometimes imported two sets of the same type of machinery and disassembled one unit to find out just how it was built. Then they copied it if possible.

However, the Chinese are coming at last to realize the value of the western point of view covering patents and knowhow. This probably means that they now know they cannot automatically expect to receive from a Japanese company more than the firm can afford to supply under a particular contract.

Generally speaking, the technical level of Chinese engineers is somewhat lower than that of the Japanese engineers. This is because China only seriously started to train technical experts after the Communist Revolution in 1949, whereas Japan has been educating and training its engineers since the 19th Century. The Chinese clearly are trying extremely hard to catch up.

New Plant Purchases Likely

Most Japanese company executives interviewed in recent weeks disclosed that China now would most probably gradually seek to expand its trade with non-Communist countries and would strenuously try to import much more advanced technology from the outside world to boost the speed of modernization of her industries. It would, quite naturally, be terribly expensive and probably take many, many years for China to develop those industrial techniques on her own that now can be bought overseas. At the moment, the only question seems to be what the tempo of introducing those new techniques will be under the changing circumstances since the death of Chairman Mao.

A new contract for export of Japanese industrial plant facilities in China was concluded this past November in Peking. It was the first contract of this type since early 1976 when China began to slow down the import of foreign plants and industrial technique. It was in the first quarter of 1976 that a contract was signed by the Japan Synthetic Rubber Company, Ltd. and the Japan Gasoline Company, Ltd. providing for sale of a plant for manufacturing raw materials for polyester fibers.

Teijin, Ltd. also contracted for sale of a plant in that same quarter for the manufacture of polyester fibers. Since then, however, no contracts of this type had been concluded until this past November. It was then that Japan's Toyo Engineering Company and three other Japanese firms signed a deal for the export of a plant to pelletize 300,000 tons of pyrites annually. The contract provides for export of plant and ancillary facilities worth about $15 million. The contract is yen-denominated, with the price to be paid over a five-year period following shipment of the plant. Construction in China is expected to be completed by 1980.

This will mean that new groups of Japanese engineers soon will be sent to China and additional teams of Chinese technicians will travel to Japan to be trained. Japanese industrial and engineering companies are hoping more contracts of this type will be concluded before the end of 1977. Japanese corporations are counting on advantages of geographical proximity of their country to China and their ethnic and racial affinity with the Chinese in competing with the big Western companies in the future. Undoubtedly these advantages have been emphasized again and again as the training in Japan of Chinese engineering teams has continued over the past few years. 完

US TECHNICAL DATA AND PRODUCTS

Licensed for Export to China

Totals 1971 through First Quarter 1977

Item	*Value ($)*
Products Licensed for Export to China	268,360,155+
Products Licensed for Re-Export to China	7,510,702+
Products Licensed for Temporary Export or Re-Export to China	83,263,037+
Technical Data Approvals for China	399,617,000+
TOTAL	**$758,750,894+**

US Productions Licensed for Export to China
Third Quarter—1976

Date	*Item*	*Value ($)*
7/2	Magnetic Tape	268,003
7/9	Aircraft Parts and Accessories (Maintenance of Aircraft)	1,200,000
7/9	Integrated Circuits	50,000
7/27	Magnetic Recorder and Parts (Maintenance)—six products	152,313
7/30	Communications Equipment (Maintenance)—seven products	45,787
8/2	Testing Equipment	855
8/27	Aircraft Parts and Accessories (Parts for Nonmilitary Aircraft)	62,000
9/1	Electronic Computing Equipment (Spare Parts)	147,124
9/3	Magnetic Recorder and Parts (Maintenance)	61,600
9/20	Aircraft Engines (Support and Maintenance)	275,000
	Subtotal	**$ 2,262,592**

Fourth Quarter—1976

10/16	Bacteria (Research)	10
11/4	Electronic Computing Equipment (Data Process Oil Industry)	97,235
11/4	Electronic Computing Equipment (Data Process Oil Industry)	912,095
11/4	Magnetic Tape (Data Process Oil Industry)	99,000
11/10	Magnetic Tape (Broadcasting)	164,675
11/15	Aircraft Parts and Accessories NEC (Maintenance of Aircraft)—two	6,000
12/1	Communications Equipment Parts (Maintenance)	32,774
11/29	Magnetic Recorder and Parts (Telecasting)	356,230
11/29	Magnetic Recorder and Parts (Telecasting)	133,050
11/29	Magnetic Recorder and Parts (Telecasting)	14,520
12/1	Communications Equipment Parts (Maintenance)	439
12/15	Electronic Computing Equipment (Seismic Data Processing)	519,579
	Subtotal	**$ 2,335,607**

First Quarter—1977

1/3	Electronic Computing Equipment (University Research)	52,455
1/3	Communications Equipment (Peking Earth Station)	100,196
1/10	Electronic Computing Equipment (Petroleum Research and Development)	21,965
1/14	Chemical Preparations (Sample for Testing)	63
2/18	Electronic Computing Equipment (Seismic Forecasting)—two	118,202
2/18	Magnetic Tape (Truck Production)	40,040
2/18	Electronic Computing Equipment (Truck Production)—two	50,587
3/4	Magnetic Recorder and Parts (Broadcasting)	416,284
3/21	Electric Furnace	10,245
3/31	Magnetic Recording Equipment and Parts (TV Broadcasting)	29,331
	Subtotal	**$ 839,368**

US Production Licensed for Re-Export to China
Third Quarter—1976

8/23	Plastic Articles (Re-export from China)	50 (Re-exported through China)

Fourth Quarter—1976

12/15	Electronic Computing Equipment (Seismic Data Processing)	5,160,851 (Re-exported through France)

First Quarter—1977

1/7	Electric Computing Equipment	17,623 (Re-exported through Japan)

Temporary Export Licenses to China
Third Quarter—1976

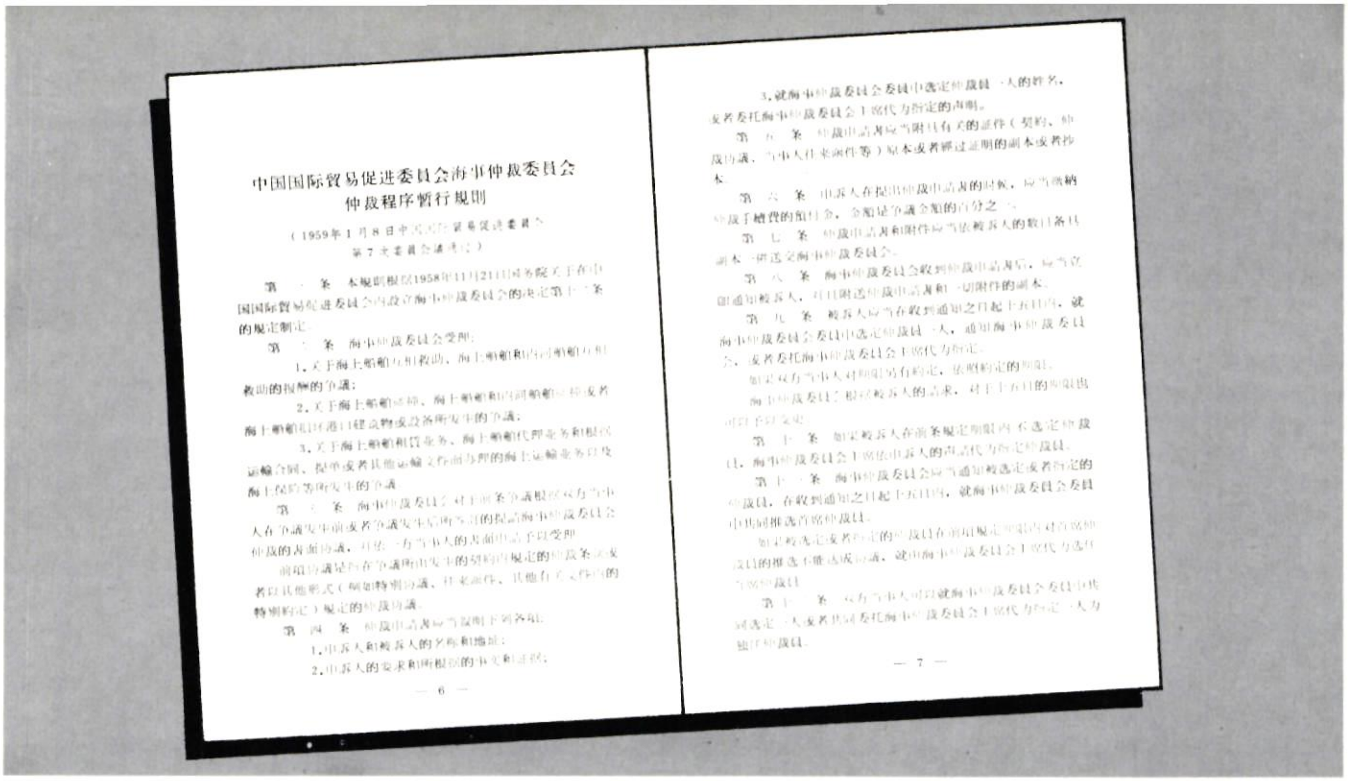
9/22	Magnetic Tape (Demonstrated and Returned to US)	200
9/22	Electronic Computing Equipment (Demonstrated and Returned to US)	21,775
9/22	Electronic Computing Equipment (Demonstrated and returned to West Germany)	4,905
	Subtotal	**$ 26,880**

Fourth Quarter—1976

10/5	Electronic Computing Equipment (Demonstration of Process Control)	25,000
11/29	Magnetic Tape (For demonstration and return to United Kingdom)	2,000
11/29	Magnetic Recorder and Parts (For demonstration and return United Kingdom)	190,000
	Subtotal	**$ 217,000**

Technical Data Exports to China
Third Quarter—1976

7/13	Technical Data (Production of wire)—two	NVG


中国国际贸易促进委员会海事仲裁委员会
仲裁程序暂行规则

PRC regulations on arbitration from Chinese publication.

Arbitration in the People's Republic of China

Case Examples Described

Liu Yiu-chu, Esq.

Dispute settlement and arbitration in trade with the PRC is of fundamental interest to every company involved in the China trade, if only because firms have had disputes to resolve in the course of their day-to-day trade with the Chinese. To many firms, frustrated by the vagaries of communications with the Chinese, delayed shipments, poor packaging and other problems encountered with few other nations, the waste of time and money involved in settling China trade problems is sometimes very discouraging. In addition, there is almost complete ignorance of the specifics of cases of arbitration in China. This article, by a Hong Kong solicitor who has had an unusual opportunity, in 1976, to inspect documents relating to arbitration proceedings in Peking, describes four case examples, sheds light as to what happens in these cases, states that these hearings are open to any interested parties, and dispels some of the mystery about this long shrouded subject.

Some knowledge of arbitration in the PRC is essential to every merchant who participates in China trade and every shipowner or captain whose vessels may from time to time enter a Chinese port or become involved with Chinese vessels on the high sea. His legal adviser should likewise attain basic professional competence in this area. This is because in all business contracts with organs or corporations of the PRC, there is some reference to arbitration. Chinese arbitration clauses consist of three varieties: (a) arbitration in China, (b) arbitration in the country of the defendant, and (c) arbitration in a third country. Both

the first and the second variants of the clause involves arbitration in the PRC, because if the foreign party is the plaintiff, the country of the defendant is China.

Procedure of Last Resort

Chinese arbitration is provided by the PRC as a procedure of last resort for the settlement in China of any disputes that may arise in relation to her foreign trade and in relation to salvage, collisions, chartering of vessels, shipping documents and marine insurance. It does not apply to arbitration outside of China. It is "a procedure of last resort" because the arbitration clause almost invariably stipulates that disputes shall be settled through friendly negotiations.

The question as to at what point friendly negotiations are properly considered to have broken down or to have failed to bring about settlement, thereby justifying the use of arbitration, is a preliminary one. The answer to it requires some knowledge of Chinese arbitration, both in itself and in the context of Sino-US relations.

Friendly Negotiations

Friendly negotiations in China and arbitration form a continuous process: neither should be considered in isolation without reference to the other. Even after a formal written reference to arbitration has been made to the relevant Chinese Arbitration Commission, the initial approach of the Commission is still through friendly negotiations. There are two such Commissions, both under the aegis of the China Council for the Promotion of International Trade (CCPIT). They are the Foreign Trade Arbitration Commission (FTAC) and the Maritime Arbitration Commission. (MAC).

At this stage, the Commission plays a more active role. It not only assists in the friendly negotiations, but also analyzes the issues, conducts independent investigation into the facts of the case, and explores possible avenues and formulae of conciliation.

Very often, it is possible to find a solution satisfactory to both parties. This solution need not be restricted to settling the issues originally raised. As is true in real life, the points which the parties at first think to be the issues in dispute very often prove not to be the real issues at all. A similar process of sorting out the real issues takes place in pleadings in the Anglo-American system. This process usually takes considerable time and requires as much expertise as the actual hearing itself. Its importance is obvious. Sometimes the parties manage to reach conciliation through friendly negotiations with the assistance of the Arbitration Commission. This is similar to a settlement after commencement of proceedings or a judgment by consent in Western litigation, with the main difference being that the Arbitration Commissions in China show more initiative in helping with friendly negotiations, conducting independent investigation into the facts of the case, and exploring possible avenues and formulae of conciliation than a Western court or a Western arbitral tribunal.

To sum up the Chinese procedure for dispute resolution in foreign trade and maritime matters: it invariably starts with friendly negotiations; if friendly negotiations fail to bring about a settlement, either party may apply to the relevant Arbitration Commission for arbitration.

Arbitration Encouraged and Open

Contrary to common belief, China is not reluctant to go to arbitration, and does not consider it unfriendly on the part of foreign trading partners to ask for arbitration, in this writer's opinion. In fact, China encourages the use of its arbitration procedure. It is less complicated than involving a third country and it is on the whole less costly than other means of dispute resolution.

China sincerely believes that this system offers a greater guarantee of justice and satisfaction to both parties. There is also an awareness that the West has not developed the necessary confidence to feel secure with Chinese arbitration. Lack of knowledge always breeds distrust. In order to encourage the development of knowledge and to dispel this distrust, China welcomes more interest in this field. China's arbitration hearings are held in open sessions, unless otherwise requested by the parties.

Subject to any objection the parties may have, persons with a genuine interest in the case or in the work of the Arbitration Commission generally (for instance, representatives from the Embassy of the country of the foreign party) are welcome to attend these open sessions and to judge for themselves whether it is a fair hearing.

Policy of Arbitration: Independence and Initiative

The basic policy that guides the arbitration work is "independence and initiative." In carrying out this policy, the principle of "equality and mutual benefit" is applied, with due consideration for existing international practice. Arbitration hearings in China are held at the seat of the Arbitration Commission, which is in Peking. Where necessary, hearings may be held at other places within the Chinese territory. Therefore, there is no reason why a plaintiff should not request arbitration at Kwangchow or in any other part of China.

Records are taken at every session of the proceedings, and these records are signed by the umpire or the sole arbitrator as the case may be. The Arbitration Tribunal may require the parties or their attorneys, witnesses or other persons to sign their names on the records for authentication.

The procedure of the hearing is informal and consideration is given to the wishes of the party in

deciding the procedure. Usually, it is in the form of a conference. A party will never have his case struck out or his claim defeated due to ignorance of the rules of procedure.

Three Parts

An arbitration award in China consists of three parts: the facts of the case, the determination of liability, and the principal part of the award. It is a reasoned award in that it consists of a summary of the findings on the facts and an analysis of the factors which determine liability.

The principal part of the award is read to the parties at the closing session of the hearing. The full award together with the reasons for the decision is made in writing within 15 days from the date of the reading of the principal part.

Awards are final and no appeal for revision before a court of law or any other organization is possible. However, an explanation of the award or reasons of the award may be made if clarification is sought and is found to be necessary or desirable. If the award is not satisfied within the time specified, it will be enforced by the People's Court of the People's Republic of China by motion of the party in whose favour the award has been made.

So far China has no formal arrangement for reciprocal enforcement of arbitral awards with any foreign state in the form of a treaty or convention. Informal arrangements may exist with some states. When the dispute is settled before an award is made, a record of the agreement called a "Conciliatory Statement" is kept by the Arbitration Commission which may also decide what costs are due to it for work done.

Examples of a wide variety of cases were related to me during my discussions in 1976 with legal experts in Peking. These include cases in Foreign Trade and Maritime arbitration. In some of them a foreign party is the plaintiff, in others the plaintiff is a Chinese company. Some reach the award stage, some are recorded as Conciliatory Statements. In the cases discussed, blatant disregard for contract terms was extremely rare. Most disputes have arisen from unforeseen circumstances not provided for in the contract.

CASE EXAMPLES

FTC Doesn't Deliver; Award to Foreign Buyer of Agricultural Produce

In one example of foreign trade arbitration, the plaintiff was a foreign limited company which had contracted to buy, CIF, 3,000 tons of a certain agricultural produce from a Chinese company. Delivery was by three installments of 1,000 tons each. The bill of lading for the first 1,000 tons was to be sent to the foreign buyer between November and December 1973. The Chinese company failed to do so. In January 1974 the Chinese company cabled to the foreign buyer to request an extension of time. There was negotiation by several exchanges, but no definite agreement to extend the date of delivery was reached.

In February 1974 the foreign company requested arbitration, claiming damages for failure to deliver according to contract. The Arbitration Commission sent a notice to the Chinese seller company. The seller company submitted a defense. An Arbitration Tribunal was appointed according to the rules. The Tribunal studied the material. The plaintiff did not appear. The case was held in the latter part of October 1974, and an award was delivered in early November. Negotiations for arbitration took about nine months, from January to October.

The facts of the case showed that there was a reasonable excuse for the non-delivery. However, due to the fact that the reason for failure to deliver, although valid, was not communicated to the plaintiff/buyer by the defendant/seller within the time stipulated for delivery in the contract, but was only raised with the buyer after the expiry of the time for delivery, the buyer was justified in refusing to extend the time. The seller should bear the total responsibility for non-delivery.

The amount of damages was assessed at the difference between the international market price and the contract price of the produce at the time specified for delivery in the contract. The cost of the arbitration was also to be borne by the defendant. The principal part of the award was read out at the last session of the hearing. The whole award, together with a summary of the facts of the case and the reasons of the award, was delivered about ten days thereafter. The foreign company was paid the full amount of the damages. Its deposit on account of the costs of the arbitration was also returned without any deduction. There was no need for enforcement by the People's Court.

FTC is plaintiff in Metal Sales Case

In another example, a Chinese company was the plaintiff which had contracted to buy a certain metal, FOB, from a foreign company. Delivery was by monthly installments. The port of loading was to be one of three agreed alternatives to be decided by the seller. The seller failed to appoint a port for loading in spite of written request from buyer.

Buyer then issued an L/C and sent a total of seven cables pressing for appointment of a port for loading. Sellers replied four times, each time apologizing for the delay and requested rise in price to cover the devaluation of sterling. The Chinese buyer refused to raise the contract price. The seller proposed new arrangements for delivery and again requested a rise in price.

Buyer agreed to the new arrangements for delivery but refused to raise the price. Buyer called for shipment five more times in writing. Seller did not send

any reply. Buyer notified seller of intention to apply for arbitration, giving 45 days' notice. Seller then replied that due to the fact that the original L/C had lapsed and no other L/C had been issued, there was no obligation on its part to deliver.

The sellers' solicitors submitted a defence on behalf of the seller/defendant. The main line of its argument was that the buyer was in default for failure to issue a valid L/C. It was couched in very legalistic terms and presented an attractive argument technically. The tribunal considered it in the light of existing international practice, the terms of the contract, and the surrounding circumstances of the case.

The contract provided that the L/C was to be issued after receipt of notice of shipment. The Tribunal therefore found that buyer had no duty to issue L/C ahead of time and before receipt of notice of the appointment of a port of loading. The first L/C which was issued before receiving such notice was issued entirely voluntarily and the buyer suffered loss as a result of such voluntary act. It was natural that it should refrain from issuing another L/C before receipt of notice of appointment of a port for loading.

In the sellers defence, it was also claimed that all dates and quantity for shipment had been agreed by subsequent agreement. The tribunal found that this claim was not substantiated, because the subsequent agreement only consisted of a proposed general plan for extension of time for shipment to certain specified months, but no definite date for any shipment was given. The real reason for failure to deliver was the devaluation of the pound.

The sellers also admitted in their written defense that they had difficulties with delivery. Other facts also revealed that during the material times the sellers did not have the necessary merchandise ready for delivery. The Tribunal found the defendant in default and liable to pay damages as assessed as well as the plaintiff's costs and costs of the arbitration proceedings. The award was not challenged by the defendant.

Maritime Case: Foreign Charter Firm Found Liable

In a maritime case, the plaintiff was a foreign company which was owner of a vessel chartered to a Chinese company. The dispute was in respect of chartering fees. The plaintiff did not appear and did not send any representative. The arbitration proceeded according to the rules. The charter-party specified the total loading capacity. A subsequent exchange of cables brought an agreement of 3,000 tons to be loaded at a certain loading port, and two other ports were agreed for loading the remainder.

After loading less than 3,000 tons at the first loading port, the Master refused to load any more. The Chinese side insisted, but to no avail. The vessel was moved to the next loading port where loading continued. Subsequently the Chinese side made certain deductions in the chartering fees because of the Master's refusal to allow loading of the full quantity of

Salvage has been subject to arbitration. Here, a Chinese salvage contract, along with publications of the Chinese Maritime Arbitration Commission.

FOREIGN TRADE ARBITRATION PROCEDURE IN CHINA

The procedure for Arbitration in the PRC is set out in the respective Provisional Rules of Procedure of the two Arbitration Commissions, both of which have been issued in the National Council's special report on *Dispute Settlement and Arbitration in the People's Republic of China*. An application for arbitration need not be of any prescribed form, but it must be in writing stating the name and address of the plaintiff and of the defendant, the claim of the plaintiff, the facts and evidence upon which the claim is based, the name of an arbitrator chosen by the plaintiff from among the members of the relevant Arbitration Commission or a statement authorizing the Chairman of the Arbitration Commission to appoint the arbitrator for the plaintiff.

Original documents relevant to the application, or certified duplicates or copies thereof, must accompany the application as also a deposit equivalent to 0.5 per cent of the amount of the claim in the case of foreign trade arbitration, and one per cent in the case of maritime arbitration as payment on account of costs of the arbitration.

The maximum actual costs of arbitration for foreign trade disputes is one per cent of the amount of the claim, and for maritime disputes 2 per cent. This is borne either entirely by the losing party or proportionally by both parties according to the actual circumstances of the case. The losing party may also be required to pay the winning party's costs as a compensation. These party-and-party costs will not in any case exceed five per cent of the award.

As many duplicate sets of application and documents as there are defendants should also accompany the original application. These should be sent to the relevant Arbitration Commission in Peking. Upon receipt of the application, the Arbitration Commission will notify the defendant forthwith and forward to him a duplicate set of the documents.

Within fifteen days from the date of receipt of the notice the defendant must notify the Arbitration Commission either of his choice of an arbitrator or of his authorization to its Chairman to appoint one on his behalf. Should the defendant fail to do so within the specified time, the Chairman of the Arbitration Commission shall, upon the request of the plaintiff, appoint the arbitrator for the dependant.

The two arbitrators so chosen or appointed shall appoint an umpire. These will form the arbitral tribunal. The parties may also elect to have a sole arbitrator by mutual consent. These procedures are more or less standard in international arbitration.

Parties may be represented by Chinese nationals or citizens of other nations. Foreign nationals who intend to appear at the hearing may have their visa applications expedited with the assistance of the Arbitration Commission. It is therefore advisable to put in a request in this respect along with their application for arbitration.—LY-C.

3,000 tons at the first loading port as agreed. The foreign company applied for arbitration, claiming the full chartering fees.

The Master's refusal to load any more was due to his belief that the vessel's maximum loaded draught had been reached at 26′4″, at that particular loading port. The records show that other vessels at that port during the same time had reached a loaded draught of 27′ 1″. Apparently there was discrepancy in the measurement.

Furthermore the official records of that port confirmed that the mud on the seabed moved constantly, and the discrepancy was therefore quite possible. The parties had not measured together. It was too late to measure again. It was impossible to decide the reasonable maximum loaded draught of the vessel at the first loading port under the circumstances. And the charter-party failed to specify any maximum loaded draught.

However, the facts of the case also revealed that the vessel's constants at the material time exceeded the reasonable weight. It was found that, supposing the vessel should not have exceeded the maximum loaded draft of 26′4″ at the time as claimed by the plaintiff, the vessel could still have taken the full 3,000 tons of cargo if the constants had not exceeded the reasonable weight.

The plaintiff admitted that if the constants had not exceeded the reasonable weight, another 600 tons of cargo could have been loaded at the first loading port. The plaintiff was found liable for damages to this extent. However, as an extra 400 tons was loaded at the next port, the amount of damages was adjusted accordingly.

In another maritime case, the plaintiff was a Chinese agency which had rendered salvage services to a foreign vessel. There was a guarantee by a third party, also a foreign company. The salvage fees plus the costs of the arbitration exceeded the amount guaranteed. The guarantee stipulated that the guarantor would pay the amount awarded immediately upon receiving notice of an award. The award ordered the guarantor to pay the guaranteed amount, the defendant was ordered to pay the balance. There was not real dispute. It appears that the award was necessary only for the purposes of satisfying the terms of the guarantee.

Chinese Arbitration Rules Are Provisional

Although there are rules of procedure for the two Chinese arbitration commissions, they are expressly stated to be provisional and are subject to change at any time. China has pledged to bring about reform of the old law for international trade and the old international maritime law.

The Chinese approach to dispute resolution is admittedly different from the Western approach, but it has its own merits. 完

NEW FROM THE NATIONAL COUNCIL

China's Agriculture

The People's Republic of China as a market for agricultural products—including commodities, chemicals, livestock and equipment.

Two Invaluable References Now Available

- **Speeches at the National Council's Conference on China's Agriculture and Prospects for US Sales, November 18, 1976—seven hours of presentations.**
- **The 236-page workbook for the Conference, titled *China's Agriculture*, a definitive reference.**

The two together are available as a package at $75. The workbook is available separately at $25. (Add $7 for the package or workbook for airmail outside of North America). Copies may be ordered from the National Council in Washington, D.C.

China's Agriculture puts Peking's present and future agricultural demands in perspective, and provides the raw data for any market assessment of the PRC relating to agricultural products. Among the key sections of this report—

- Production acreage and yield data for seventeen of China's most important crops, and livestock inventory for eight types of animals, 1949 through 1975.
- China's agricultural exports and imports, 1970 through 1975, with market shares and dollar volumes, including China's imports of livestock, fertilizer, pesticides, agricultural machinery etc. Sino-US agriculturally-related trade. Major PRC grain contracts and terms 1973-1976.
- Agricultural products and equipment exhibited in China (1972-1975): over 250 European, Japanese and Australian companies with model numbers and/or descriptions of products displayed including food processing and refrigeration equipment, agricultural chemicals, tractors, irrigation equipment, packaging equipment, livestock etc.
- A comprehensive list of known Chinese manufacturing plants related to agricultural chemicals, agricultural machinery and food processing.
- Agricultural equipment made in China with known specifications, plus specifications of Chinese farm equipment on the international market including implements, water pumps, well drilling equipment, meat and noodle making machines, oil expellers, shellers, chemical sprayers, threshers, tractors, tractor attachments, and transplanters.
- Agricultural research institutes in the PRC, including a summary of known recent research work.
- Agricultural trade missions to and from China by category and date, 1971-1976.
- Analyses of China's agricultural system, agricultural techniques (including a listing of pesticides in use), and agricultural mechanization, plus a compendium of China's statements about agricultural policy.
- Maps and charts of China's agricultural zones and crop seasons.
- A bibliography of works on Chinese agriculture.

Speeches for the Conference on China's Agriculture

The eleven speeches given at the National Council's St. Louis Conference focus on the practicalities and prospects of selling agricultural products to the PRC. The seven-hours of talks are highlighted by a Speech by Richard E. Bell, Assistant US Secretary of Agriculture. The Speeches are as follows—

US-China Trade and the National Council—Christopher H. Phillips, President, National Council for US-China Trade.

China's Political Scene—Michel Oksenberg, Professor of Political Science, University of Michigan.

Agriculture and China's Economic Development—Benedict Stavis, Professor of Economics, Cornell University.

China's Agricultural Trade—Harold C. Champeau, Agricultural Officer, US Department of Agriculture, Foreign Agriculture Service.

Who's Sold What to China—Melvin W. Searls, Vice President, National Council for US-China Trade.

Current US-China Relations—Richard E. Bell, Assistant Secretary for International Affairs and Commodity Program, US Department of Agriculture.

Selling Grain and Cotton to China—Dr. Carrol Brunthaver, Vice President, Cook Industries.

Fertilizer Sales to China—Julian Sobin, Senior Vice President, International Minerals and Chemicals Corporation (IMC).

Animal Husbandry Products in China—Dr. Herbert T. Peeler, Division Vice-President, Animal Health and Nutrition, International Minerals and Chemicals Corporation (IMC).

Agricultural Chemicals in China—Ching C. Tung, Research and Development Department, Monsanto Company.

Agricultural Mechanization in China—Roy E. Harrington, Product Planning Department, Deere and Company.

Gan bei! **Li Chuan, CCPIT vice-president and George Krieger, leader of Council's Importers Steering Committee delegation to China, and William W. Thomas, Jr., Chief of US Liaison Office Commercial Section, at dinner in Peking.**

COUNCIL ACTIVITIES

The Council's Importers Steering Committee took the spotlight on its visit to Peking, where it had constructive and fruitful talks with the CCPIT and FTCs: There is nothing like meeting face-to-face to come to practical resolutions. At home, the Council's meeting with Secretary of State Vance hit the front page of the *New York Times*. And in early May, the first of three 450-page volumes of the Council's *Directory of Scientific Research Institutes in the PRC*, authored by Susan Swannack-Nunn was published.

SECRETARY VANCE MEETS WITH NATIONAL COUNCIL LEADERS

Secretary of State Cyrus Vance met on April 11 with William A. Hewitt, Chairman of Deere & Company and of the Board of Directors of the National Council, and Christopher H. Phillips, the Council's President. Secretary Vance expressed full support for the Council and hoped that it would continue its efforts to promote US-China trade.

He also reported on steps being taken by the Administration to seek a resolution of the frozen assets/private claims problem.

Though the Carter Administration has not yet decided how and when to normalize ties with Peking, it has reiterated its intention to seek normalization with the PRC in keeping with the principles of the Shanghai Communique.

COUNCIL'S IMPORTERS DELEGATION TO CHINA HAS SUCCESSFUL TRIP

- The Chinese will test and label pharmaceuticals for sale to the US according to USP standards.
- Chinese low-acid foodstuffs producers for the US market will start registering with the FDA.
- MINMETALS will consider using D/Ps.
- US-bound textiles will be inspected by the CCIB and by factories, subject to appropriate contract clauses.

These were the understandings reached by the first delegation from the National Council's Importers Steering Committee on its ten-day visit to China in April. The ten-person mission, which represented chemicals, foodstuffs, native produce, metals and minerals, and textiles, held meetings with the China Council for the Promotion of International Trade and FTC

officials in Peking, Shanghai and Canton, and attended the opening of the 41st CECF in Canton.

Members of the delegation were: George Krieger, Vice President, ACLI International (leader); Melvin W. Searls, Vice President, National Council for US-China Trade; David Cookson, Vice President, ICD Group; Arthur Cummings, International Buying, J.C. Penney; Charles Haffey, Vice President, Pfizer, Inc.; Eric Ho, Director, AMAX; Roland Hsu, President, China Native Products; Herbert Roskind, Jr., President, Holtrachem; William Rudolph, Group Vice President, Engelhard Minerals and Chemicals Corporation and Veronica Yhap, President, Dragon Lady Traders.

Chemicals—Chinese Agree in Principle to Pharmaceutical Standards

During meetings with the Chinese Chemical Corporation (SINOCHEM), members of the delegation reviewed the chemicals and pharmaceuticals markets situation in the US, highlighting specifications and quality; purity; screen analysis; safety data sheets; customs tariffs; packing measurements; containerization; trade practices; bulk pharmaceuticals; pharmaceutical compendia specifications (U.S.P. vs. B.P. 1968); and a general description of both industrial and pharmaceutical industries.

The most significant result of the meetings was the Chinese agreement in principle to test and label pharmaceuticals according to US-mandated standards. This will not happen overnight however: the Chinese indicated that although it is reasonable to change labelling and packing to meet US requirements it would not be easy to accomplish quickly due to their own internal system.

The Council's subcommittee also suggested that SINOCHEM concentrate on commodities whose Column II duty rates are similar to their Column I rates, and said they hoped the chemical corporation would send a delegation to the US.

Chinese officials representing SINOCHEM were willing to discuss additional topics, during the Kwangchow Fair, such as medical and therapeutic apparatus, medicines and chemicals.

Foodstuffs and Native Produce—Movement on Low-Acid Foods

The Council's meetings with the China National Native Produce and Animal By-Products Import and Export Corporation; the China National Cereals, Oils and Foodstuffs Corporation and China Commodity Inspection Bureau were cordial and had concrete results.

The Chinese will seriously consider sending responsible persons to the US to study quality controls and other subjects relating to foodstuffs imports into the US.

Officials concerned with foodstuffs and native produce said, that as a result of friendly discussions, the

THE COUNCIL'S INDUSTRY COMMITTEES

Exhibitions—Chairman: Saul Poliak, Clapp and Poliak, Inc.

Legal Affairs—Chairman: Walter S. Surrey, Surrey, Karasik, and Morse.

Exports

Agricultural Chemicals—Chairman: Earl Morgan, FMC Corporation.

Agricultural Machinery—Chairman: Hans Becherer, Deere & Company.

Construction Machinery and Equipment—Chairman: Andrew Burali-Forti, FMC Corporation.

Food Processing and Packaging Machinery—Chairman: Robert Coughlin, Pneumatic Scale Corporation.

Mining Machinery and Equipment—Chairman: William MacDonald, Gardner-Denver Company.

Petroleum Equipment—Chairman: R. N. Winship, Cameron Iron Works, Inc.

Imports

Importers Steering Committee—Chairman: George Krieger, ACLI, Inc.

Textiles—Chairman, Textiles and Fibers: Veronica Yhap, Dragon Lady Traders; Co-Chairman, Garments: Robert Boulogne, J. C. Penney.

Foodstuffs, Native Produce and Animal By-Products—Chairman, Foodstuffs: David Cookson, ICD; Co-Chairman. Native Produce and Animal By-Products: Julius Klugmann, Julius Klugmann International Corporation.

Light Industry—Chairman: Mrs. Lee Sobin, IMC Chemicals; Co-Chairman: Robert Tsai, Boxer and Ashfield.

Metals, Minerals and Chemicals—Chairman: Herbert Roskind, Holtrachem; Co-Chairman: Eric Ho, AMAX.

A LEGAL GUIDE TO US RECOGNITION OF PEKING

For companies wanting to know and understand the legal complexities involved in recognizing Peking, a study soon to be published by the Carnegie Endowment for International Peace supplies most of the answers. What does recognition entail? What will be the effects on various US government programs such as Ex-Im Bank and OPIC, and arms transfer Acts? And how will US treaties be affected? Professor Victor Li of Stanford University concludes that there are legal answers to all these questions in the study entitled "De-recognizing Taiwan: The Legal Problems," available in May from the Carnegie Endowment offices in New York (345 E. 46th Street 10017) and Washington, D.C. (11 Dupont Circle 20036). Price: $1.50 per copy; $1.00 for 10 or more.

decision had been made by some of the branch corpotions to start registering their low-acid canned goods factories according to US requirements. Procedures are already underway. Chinese acceptance of the principle of registration opens the door to other large-scale trade opportunities.

Members of the US delegation noted a better overall understanding on the part of the Chinese of the FDA and the USDA. There seemed to be a sincere desire to try to smooth the way for increased business. The Chinese emphasized that recent natural disasters in China combined with political upheaval have restricted supply capabilities. Noticeable improvements will probably not be evidenced until late 1977 or early 1978.

Minerals and Metals—Chinese Will Try to Supply Additional Commodities, Lists Those Available Now

In addition to reviewing the US market situation and prospects, the US delegation members focused on the advantages which could accrue to the China National Minerals and Metals Import and Export Corporation (MINMETALS) by concentrating on those commodities whose Column II duty rates were the same or roughly the same as their Column I rates. The delegation presented a list of fifteen such commodities as a possible means for MINMETALS to increase US sales. Recognizing that the duty disadvantage is very important, the Chinese indicated that if they could supply those commodities, they would.

Secondly, the delegation recommended that the corporation investigate the possibilities of exporting materials which, when further processed by the importer, enjoyed certain tariff benefits e.g. the refunding of duty to the importer.

It was also suggested that the corporation conclude more business on D/P terms rather than through irrevocable L/Cs as the latter method resulted in a number of inconveniences to the importer. The Chinese responded that although they had not used the D/P method in the past, they would study its possible use in the future.

Regarding specific minerals and metals for export, corporation officials listed mercury, tungsten, tin, antimony, coke, coal and cement as "available regularly" although tungsten and tin quantities were down this year due to their own needs. Not regularly available due to insufficient history are "young" commodities such as zinc, bismuth, high purity metals, rare earth metals, rare earth oxides, gallium and columbite. Minerals listed as being exported are barytes, bauxite, fluorspar, granite and marble.

The Chinese indicted that with regard to antimony trioxide, they will change the packing from 50-kilo to 25-kilo bags sometime during the second half of 1977. They plan to deliver 50/50 in 3rd/4th quarters and in 1978 all in 25-kilo bags.

There was also discussion concerning the possibility of sending a delegation to the United States, if the corporation does not send a representative to accompany the CCPIT delegation in the fall of 1977.

On April 28, Sen. Dole (R-Kan.) submitted a bill to offer Commodity Corporation Credits to non-market countries, including China, in certain cases.

95TH CONGRESS
1ST SESSION

S. 1415

IN THE SENATE OF THE UNITED STATES

APRIL 28, 1977

MR. DOLE introduced the following bill; which was read twice and referred to the Committee on Finance

A BILL

To amend the Trade Act of 1974 to authorize certain credits or credit guarantees for the sale of agricultural products to nonmarket economy countries.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 402(a) of the Trade Act of 1974 is amended to read as follows:

"(a) To assure the continued dedication of the United States to fundamental human rights, and notwithstanding any other provision of law, on or after the date of the enact-

Textiles—New Era of Inspection

Highlight of the trip for textiles was the discussion with the China Commodity Inspection Bureau (CCIB) regarding inspection of garments. An understanding was reached with the CCIB to inspect garments (a commodity not listed in the body's manifest of legally-binding inspection) subject to inclusion of an inspection clause in the contract signed and agreed to by both parties. If necessary, factories will also inspect garments. Comprehensive details in next issue.

RECEPTION FOR NEW MEMBERS OF THE COMMERCIAL SECTION OF THE CHINESE LIAISON OFFICE

The National Council hosted a cocktail reception to introduce several new members of the Commercial Section of the Chinese Liaison Office to members in the Washington area.

The reception was held March 31 at the International Club in Washington, D.C.

Ten of the 13 officials from the Commercial Section attended. Of the National Council's 125 Washington representatives, 70 were present with spouses. 完

A TOUCH OF EUPHORIA . . .

Report on the Spring 1977 CECF

John Kamm

The Spring has sprung in China. The business atmosphere has blossomed as never before at the Canton Fair. FTCs are handing name cards of their exclusive agents to prospective buyers, sharing data on production capabilities, revealing statistics in unprecedented openness. Along with the big business for US firms— $70 million—came a cordiality which can only bode well for future Sino-US trade. The report on the fair from the National Council's Hong Kong representative John Kamm follows.

American traders have grown accustomed to disappointing Chinese Export Commodities Fairs in recent years—"plenty of high prices and mei-you" in the words of one veteran—and in late March there was little evidence to suggest that the spring 1977 version of the event would be any different. Press reports emanating from China in the three weeks prior to the traditional April 15 opening concentrated chiefly on the severity of a nationwide drought unprecedented since the founding of the People's Republic of China. The drought had the dual effect of dampening prospects for both purchases and sales by China's seven FTC's. On the one hand, grain imports of 5.2 million tons (concluded a mere 10 days before the announcement of the drought) had resulted in a massive and unexpected erosion of the country's foreign exchange position; foreign sales prospects for industrial products and technology were not, therefore, especially heartening. On the other hand, the drought sharply reduced the quantities of agricultural and side-line commodities available for export, and many US companies fretted over a future replete with lower allocations and stiffer prices. After all, it was argued, China was obligated to satisfy traditional markets first, and even Hong Kong buyers were concerned over availability.

The pessimism of US companies melted quickly in the blistering, humid heat of Kwangchow. American companies were determined to do business, and they found their Chinese hosts generally up to the task. In the first ten days of trading, US firms contracted for a record $20 million of export goods; Chinese buying had not yet commenced, but requests for firm and detailed offers were flying thick and fast.

When the dust finally settled and the National Council got down to a final tally, the results justified the four long weeks of cut-throat competition, heat rashes and mosquito attacks, malfunctioning elevators, grumpy service and boozy nights at the "Top of the Fang": $40 million in purchases, $30 million in sales (of which $20 million was sourced from US facilities). Chinese interest was especially high in industrial chemicals, synthetic fibres and pulp. These figures, up from last autumn's totals by healthy margins and fully double the turn-over of last spring's 39th CECF, were culled from innumerable interviews with US firms. The general impression: satisfaction and a touch of euphoria at a time when Sino-US trade is sorely in need of an uplift.

The $60 million volume achieved by the US at the 41st CECF fits a trend of increased dollar value of sales and purchases recorded at the event. (In view of the sharp price hikes for many of China's export goods and the devaluation of the dollar against RMB yuan, real growth in business since the autumn was marginal.) According to an NCNA report filed from Kwangchow on May 16, "the amount involved in trade transactions surpassed that of all previous spring fairs in both exports and imports." Japanese officials confided that business was "not bad" with a total volume of approximately $200 million—down $20–40 million on autumn's total but roughly equal to the previous spring fair. European purchases were mostly down, but sales of chemicals and steel in the closing week boosted turnovers. Hong Kong buyers found slight declines in availability (notably in canned foodstuffs) and higher prices (for fresh fish and livestock), but the territory breathed a sigh of relief that future foodstuffs supplies were guaranteed.

Storming the Halls

Although there are important economic and political reasons behind the US successful performance in Kwangchow, the principal determinants of bigger business were strictly commercial. US chemical firms—principal beneficiaries of buying sprees by SINOCHEM and CHINATEX—stormed the import halls with attractive offers for high-quality merchandise at very competitive prices. On the buying side, US firms offered top dollar and plenty of hints on how to develop the market for China's export produce. Traders found the corporations more flexible and receptive: long-standing claims were cleared up, more exclusives were granted and, most significantly, greater compliance with US regulations and commercial practices was promised.

Speaking to the National Council's Importer's Steering Committee delegation on April 16, Chin Jin-San, Deputy Secretary General of the CECF and Director of the Ministry of Foreign Trade's Third Bureau, stated, "With regard to rules and regulations, it is necessary to exchange materials and views. Members of our delegations here will be pleased to discuss more specific points."

In a series of follow-up meetings with the various delegations, the National Council was informed that:

- CEROILS has decided to register branches handling sales of low-acid canned foodstuffs with the Food and Drug Administration;
- SINOCHEM agrees, in principle, to the testing and labelling of US-bound bulk pharmaceuticals according to USP standards; and
- CHINATEX supports improved inspection procedures of garments and is willing to insert clauses calling for either CCIB or factory inspection in standard contracts. A number of FTCs showed greater interest in trademark registration procedures and indicated willingness to step up US registration through their Hong Kong agents.

More Selective Invitations, Sharing Production Figures

Two other shifts in trade policy became evident during the fair, and both are likely to have a positive impact on future growth. Firstly, corporations have become more selective in issuing invitations, concentrating their energies on US firms with long-term commitments and proven track records. This selectivity was largely responsible for the third

Table I

ESTIMATES OF US BUSINESS CONCLUDED AT 39TH, 40TH AND 41ST CECFs : TOTALS BY FTC*

(Current US$ Million)

	39th		40th		41st	
	Sales	Purchases	Sales	Purchases	Sales	Purchases
CEROILFOOD	1.8	—	1.5	—	2.0	—
SINOCHEM	2.0	0.5	1.5	6.5	1.9	15.0
INDUSTRY	4.8	—	6.0	—	6.5	0.6
MACHIMPEX	0.2	—	0.6	—	0.5	1.5
MINMETALS	7.5	—	8.5	—	7.3	0.5
CHINATUHSU	6.0	—	14.0	—	15.5	—
CHINATEX	5.7	—	5.5	10.0	7.0	12.0
TOTAL	28.0	0.5	37.6	16.5	40.7	29.6

* includes sales by US firms, their affiliates and agents, including sales made by US companies sourced from abroad.

successive drop in US attendance: approximately 280 US firms showed up for the fair, down from 320 companies registered in the autumn. (For the first time, the fair's First Liaison Office released an exact count of US businessmen to the National Council Representative. As of May 15, 630 American traders had registerd with the LO; this figure was down by "50–100" over the autumn level.)

Chinese FTCs actively support their exclusive distributors in the US—to the extent of handing out the company's name card to prospective customers. Such support, coupled with promotional discounts and improved accessibility, greatly enhances China's sales position in the US at a time when, in the words of one FTC official, "the US is our last major source of untapped foreign currency."

Secondly, China FTCs are increasingly willing to share useful information on production capacities and requirements with foreign firms. Increased openness was particularly in evidence as the fair drew to a close and National Council representatives were provided with statistical data—hitherto unavailable—which proved vital to an accurate assessment of Sino-US trade at the biannual event.

Estimates of sales and purchases realized by FTCs with US firms at the 41st CECF—together with similar estimates for the 39th and 40th versions of the event—are provided in Table I. These estimates, generated by the National Council and USLO and refined by leading members of the various delegations, are elaborated upon in the corporation-by-corporation breakdown which follows.

CEROILS—Progress on Low Acid Foods

Chinese sales to US firms reached nearly $2.0 million during the four-week session, thereby meeting the cereals, oils and foodstuffs corporation's target of surpassing 1976's spring and autumn totals. The top three exchange-earners in the US trade were listed as frozen shrimp, dried ginger and canned foods, principally mandarin oranges.

Frozen shrimp has faded rapidly from the days when the item accounted for a sizable chunk of China's total export earnings. The principal US buyer walked away with several dozen tons; others were forced to be content with quantities under 10 tons. CEROILS complained of a very poor shrimp harvest in 1976; US buyers griped over poor allocations and high prices.

Dried ginger and condiments (mainly soy sauce) accounted for approximately $500,000 of business; principal buyers were Chinese restaurants in New York and California. Mandarin oranges were especially favoured by frequenters of the Canned Goods Department, and several sales in excess of $50,000 were reported.

Dried fruits and vegetables were generally available. Sales of alcoholic beverages were made, but CEROILS believes there is room for big improvement. As with canned foodstuffs, the key to bigger exports in this line is likely to be the corporation's compliance with federal regulations, typified by one cadre as "very strict."

The heartening decision to comply with FDA low-acid foodstuffs regulations was announced at the April 19 meeting between representatives of the National Council and CEROILS. "We have adopted an active attitude and our mind is clear regarding the requirements," stated the FTC representative. "Some of our branch corporations have already made up their minds and they are now preparing to register." Procedures are likely to be completed prior to the autumn fair, and traders can expect improved prospects at that time. In an earlier conversation with representatives of the Kwangtung Foodstuffs Branch, CEROILS requested additional materials on other FDA/US government regulations. Where compliance is feasible, the corporation is likely to move quickly.

CEROILS suggested that US firms take two steps in order to improve business ties in the foodstuffs field. First, companies should not tie themselves down to only a few items, but should rather branch out and start securing allocations in less popular lines (e.g. beverages, frozen rabbit and frozen vegetables). Second, correspondence would be greatly facilitated if firms addressed their enquiries to the appropriate

corporation, care of the department concerned. (CEROILS is divided into six export departments: Cereals and Oils Department, Meat and Egg Department, Aquatic Products Departments, Fruits and Vegetables Department, Canned Goods Department and Groceries Department. Imports are handled by the Import Department, which is not represented at the CECF.)

INDUSTRY—Export Drive for Leather Goods Expected

According to a well-placed source in the light industrial products corporation, US purchases of general merchandise at the 41st CECF stayed level with the amount concluded at the previous autumn session. The value of transactions involving arts and crafts rose moderately, resulting in corporate sales to the US of "more than $6.0 million."

Despite fears on the part of buyers that the US market is suffering from a glut of straw and bamboo ware, INDUSTRY signed contracts worth an estimated $2.5 million with US firms dealing in these lines. Especially popular were straw and seagrass table and floor mats. The corporation has become increasingly aware of the volatile shifts in public taste which characterize marketing patterns in the US interior furnishings trade. "Last fair, hanging baskets were a big item; this time we hardly sold any," remarked one official.

At least two antiques purchases in excess of $100,000 were concluded by US firms in Kwangchow. Business was conducted at both the exhibition hall and inner-city outlets. Jewelry, lacquer and cloisonne sales were termed "sluggish," with totals dropping below both spring and autumn 1976 levels.

The top exchange-earner for the corporation's General Merchandise Section was leather goods, particularly gloves and jackets. Prices in this area dropped 20-30 percent; European and American buyers hailed this development and look forward to increase competitiveness for these products in their respective markets. With a confirmed sale of leather machinery and large Chinese purchases of sodium bichromate—an agent used in tanning, companies can expect a major export drive in leather goods to take shape in the near future.

INDUSTRY's Import Department was present, and at least one US firm sold pulp (approximately 1,000 tons sourced from Canada). This moderate transaction followed hard on news of major US pulp sales (involving several million dollars) concluded in Peking immediately prior to the fair. Informed sources state that the material is destined for use in Chinese export packaging, an area receiving increased attention by foreign trade planners.

INDUSTRY has decided to hold two arts and crafts mini-fairs in Peking and Shanghai during July-August. Conflicting reports circulated regarding the corporation's plans for a straw goods fair, but the consensus among "old friends" is that such an event will be held in late summer.

CHINATUHSU—Skyhigh Prices, Bottomless Demand

The native produce and animal by-products corporation has emerged as China's top salesman to the US for transactions concluded at the trade fairs. Total export contracts topped $15.0 million at the 41st CECF: although quantities declined, price hikes were frequent and consequently the spring figure was $1.5 million higher than the previous autumn's record volume.

An estimated 40 companies visited the corporation's third-floor discussion rooms in search of the fair's top export commodity for the US market: feather and down (including raw materials and finished goods). Sales in this line continued to be characterized by sky-rocketing prices brought on by a seemingly bottomless demand. "Prices rose 32 percent for raw feather and down from January 15 to April 15, and the end is nowhere in sight," moaned one buyer. "The Chinese have cornered world-wide supply—the stuff is like gold."

US buyers were lucky to secure 20 percent of requirements, but Chinese feather and down allocations for the US—an estimated 400-500 tons—were relatively high. A number of major users posted brokers outside the discussion rooms and offers for re-sale made to lucky procurers were frequently 'cost plus 30 percent'. CHINATUHSU continues to tie US purchases of raw feather and down to the individual firm's willingness to import finished products. At least two major deals in excess of $1.0 million were reported; ski jackets and comforters sold particularly well. "Feather fever" prompted one European buyer to make a sizable pillow order with the intention of ripping open the merchandise for the goods inside!

CHINATUHSU's Feather and Wool Department made record sales of approximately $8.0 million—a full 20 percent of total US purchases made at the 41st CECF. In the words of a senior official, "It doesn't seem to matter how much we raise the price, the buyers shout 'more, more'; if we raise it 50 percent or even 100 percent, it's still 'more, more'."

Fine hairs enjoyed brisk sales, with total volume of approximately $1.8 million. As with most animal by-products, a decline in China's supply capacities resulted in sharply higher prices. Exports of essential oils, garlic and other native produce (notably rosin) were modest.

Another area characterized by high prices and soaring demand was tea and coffee. A number of prominent tea buyers attended the fair in search of black and green teas to quench America's booming switch from coffee. Price hikes for fine black varieties exceeded 100 percent over autumn levels; jasmine shot up 40 percent. Sales by the Tea Department topped $2.0 million, included 50 tons of "blending" coffee at $6,000 a ton.

Herbal medicines and ginseng—as well as popular fruit and seed-based health foods—are gaining increasing acceptance in the US market. Dried apple and orange peels offer promising prospects, and several exploratory purchases were made in this area. Once again, high prices were the order of the day with cashew nuts up from .90 a pound to a staggering 2.40 a pound. And in a first-ever occurence, a Chinese FTC granted an exclusive (on imports of patent medicines to treat common colds) to a US firm with whom no business had yet been concluded.

In contrast to previous fairs, sales of carpets at the fair fell as more and more US firms do their carpet buying at mini-fairs and on individual trips to Peking and Shanghai. (Tientsin is still closed due to earthquake damage, and corporation officials recommend increased use of Hong Kong distributors for buyers wishing to place orders for super-woolen carpets.)

US importers complain that the Carpet Department is making sales to European buyers at lower per-square-foot prices than those offered to US firms, with the result that the overseas firm re-exports the goods to the US and reaps a handsome profit. The department acknowledged that such practices may occur for sub-standard goods, and promised to study the matter. "We wish to develop the US market through US firms."

According to informed sources, CHINATUHSU is planning to step up imports in 1977 and has drawn up a comprehensive list of requirements. Topping the list are livestock and, for Ceroils, feeding stuffs.

CHINATUHSU remains strongly committed to the mini-fair concept, and buyers of bamboo ware and native produce can expect a fair in these lines to occur sometime in August. Proposed venue: Kwangchow.

JEWELRY MINI-FAIR IN PEKING

The China National Light Industrial Products Import and Export Corporation will hold a mini-fair for jewelry, laquerware, antiques and precious stones in Peking from July 5 to 20. The Chinese liaison office in Washington will be sending out invitations to American companies during June, and any individuals wishing further information should contact Suzanne Reynolds, the National Council's Director of Import Activities, at 1050 17th Street, NW, Washington, D.C. 20036. Telephone: (202) 331-0290.

CHINATEX—Solid Gains, Fibre Sales by US

The textiles corporation's sales performance during the 1976 spring and autumn trade fairs was poor: the 39th CECF's sales total of $5.7 million and the 40th CECF's total of $5.5 million (both figures for US transactions) were down sharply on previous levels. Speaking of these fairs, a CHINATEX representative stated: "The interference of the Gang of Four and the bad climatic conditions resulted in our inability to supply all our customers' needs. . . . These shortfalls are only temporary and in the foreseeable future we will see big improvements."

Indeed, sales of both piece goods and garments to the US market registered solid gains at the 41st CECF, and the total value of CHINATEX export contracts jumped to $7.0 million. This performance is very respectable in light of visits to CHINATEX branches made by US firms immediately prior to the fair (at which 1977 and 1978 bookings were made) and the CHINATEX delegation's presence in the US during the first three weeks of the fair.

Despite these two developments, which undoubtedly cut into the corporation's fair volume, major garment sales to such companies as JC Penney's, Sears and Alexander's were registered. Moreover, cotton greige goods witnessed a revival of activity (with one firm booking yardage valued in excess of $1.2 million) and substantial transactions involving corduroy and silk piece goods were chalked up. CHINATEX made several small sales of textile accessories, including embroidery, bedspreads and handbags.

Prices for piece goods were up slightly (silk yardage rose 4 percent over autumn levels); garment prices rose more sharply, with hikes of 20-30 percent commonplace for several items. Quantities and delivery dates showed marked improvements.

At least two US companies completed big sales of polyester fibre during and immediately prior to the fair. CHINATEX is looking to US sources for increasingly large quantities of synthetics, and these products now constitute China's principal import from the US. Japanese suppliers have been displaced and CHINATEX cites attractive prices as the major cause behind the shift to US suppliers. Unfortunately, prospects for US cotton sales remain slim; according to a corporation spokesman, China's demand for high-quality cotton will grow as production shifts from "65 percent polyester-35 percent cotton" to "50 percent polyester-50 percent cotton" for export garments, but US cotton prices are still prohibitive.

CHINATEX has noted a welcome decline in the number of contract cancellations by US firms. Acknowledging that some of these cancellations stemmed from faulty inspection procedures in China, a senior cadre stated: "Textile production and inspection work were greatly affected by the Gang of Four. It was usual practice for factories to issue inspection documents after finishing orders but during these few years regulations were abolished and normal practices were not followed. Now Chairman Hua has issued new regulations. Socialism depends on the workers' enthusiasm and their willingness to work conscientiously, but we still need reasonable regulations."

Following the general trend noted at recent fairs, CHINATEX stated that fewer US customers turned up for business, but that per capita orders were considerably larger. This development was cited as evidence of increased concentration on "old friends" and the corporation clearly intends to pursue this strategy in the future.

MACHIMPEX—Reluctant to Commit

At least a dozen major US suppliers trekked to Kwangchow prepared to discuss a wide range of advanced capital goods. They found their hosts willing to listen but reluctant to commit, and, for the third consecutive CECF, US firms left town without making a single sale to MACHIMPEX.

European agents had better luck, and two US manufacturers used this route to sell sets of equipment. The two deals involved Chinese orders for leather processing and food packaging machinery, but neither transaction involved amounts in excess of $1.0 million. Another European agent arranged the fair's only technical exchange for a US firm—a symposium for COSCO personnel on communications equipment.

Although companies took heart that trade negotiations between MACHIMPEX and US suppliers of mining equipment had begun in Peking, they were clearly frustrated by the lack of response from cadres in Kwangchow. When asked to explain the dearth of corporation purchases from the US, a senior MACHIMPEX official in the Import Department cited three reasons:

- Chinese end-users are still not familiar with US machinery, and prefer, for the most part, to order equipment from suppliers with whom they have dealt previously;
- The absence of diplomatic relations places restraints on the corporation's choice of suppliers; and
- US firms continue to gear their presentations to the 'big sale', thereby ignoring the principal function of the Import Department at the fair. According to the spokesman, major transactions (for vessels, complete plants, earth satellites and the like) can only be discussed meaningfully in Peking. In Kwangchow, MACHIMPEX buys less sophisticated and less expensive machinery for immediate installation in existing plant.

A glance at a table providing the breakdown of

NATIONAL COUNCIL REPORT ON CHINESE MARITIME AGREEMENTS

The National Council is about to publish a special reports on China's maritime agreements with foreign nations. Prepared by Irwin Millard Heine, a leading expert on martime and international trade affairs, the study will include the texts of more than a dozen agreements. This special report is available free of charge upon request to National Council members. The price for all others is $20.00 a copy. Contact the National Council, 1050 17th Street, N.W., Washington, D.C. 20036. Telephone: (202) 331-0290.

import responsibilities for various rooms of MACHIMPEX's negotiation hall, indicates the type of products for which demand existed at the 41st CECF. No rooms were set aside for large-scale transactions involving complete plants; similarly, representatives of TECHIMPORT were not present. CHINAPACK personnel were on hand "to receive comments and criticisms on the state of our export packaging" but this body has not yet been authorized to make purchases by itself.

Oriental Machinery, the sole distributor of Chinese machine tools in Hong Kong, recently established an office in Los Angeles through which MACHIMPEX intends to increase penetration of the US market. The firm placed its first orders for the US office at the 41st CECF, and while no figures were available, a leading member of the trade fair's executive office stated that the amount involved was substantial.

MINMETALS—No Hurry to Sell

The metals and minerals corporation signed sales contracts worth an estimated $7.3 million with US firms attending the 41st CECF. In addition, MINMETALS concluded small purchases of aluminum from US sources, thereby lifting corporate turnover to approximately $8.0 million—approximately the same level recorded at the previous autumn fair.

Buyers reported unusually high prices for the corporation's traditional export commodities, with offers ranging 10-15 percent above LMB quotations. This was cause for much bewilderment as MINMETALS is widely respected for its ability in tracking world levels. "The Chinese won't budge over price," grumbled a representative from one major firm. "They're in no hurry to sell, even at these prices . . . they say there's an upward trend and we can expect even higher quotes later."

In an unusually frank discussion with senior MINMETALS representatives, the National Council was told that the spring fair sales volume to the US was lower than had been expected, and that the corporation recognized that high prices discouraged US purchases of antimony, tin and tungsten. Total sales of these three items amounted to 30 tons of antimony (worth $140,000), 150 tons of tin (equal to $1.45 million) and 180 tons of tungsten (the corporation's top exchange earner, weighing in at $1.8 million).

A major sale of $1.0 million of graphite to a US buyer was recorded at the fair, and MINMETALS sold "several hundred tons" of antimony trioxide with a total value in excess of $500,000. Small transactions in mercury and magnesite were concluded; gallium and other high-purity metals were once again available—"in limited quantities."

US companies were reluctant to sell large quantities of aluminum (due to their perceptions of upward price trends), and activity here was limited to minor deals through metal brokers. As is normally the case with spring fairs, trading was extended for several days beyond May 15 in order to accommodate Chinese purchases of pig-iron and steel. European and Japanese steel firms reportedly concluded very large deals; US companies have yet to show any interest in pursuing opportunities here, a matter of considerable curiosity to Chinese traders—and considerable joy to potential competitors.

As opposed to SINOCHEM's stance on sales of crude oil to the US, MINMETALS is willing to export coal—"subject to concrete negotiations." Recalling that previous negotiations with a US firm interested in buying coking coal had broken down over lack of information on loading rates and schedules, MINMETALS stated that such data could now be supplied in specific discussions between the two parties.

SINOCHEM—Chinese Buy Big

US companies and their overseas affiliates sold approximately $15 million worth of industrial chemicals to SINOCHEM during the latter half of the trading session. Of this amount, $6 million was sourced directly from US plants while the remaining $9 million originated from European and Australian facilities.

At least 12 major chemical firms made sales, including Dow Chemical, Allied Chemical, Diamond Shamrock, Uniroyal, IMC, ACLI, ICD, Monsanto, Stauffer Chemicals, Calgon and Fallek Chemicals. Hong Kong-based agents, Jardine-Matheson and Califas, also made substantial sales for American principals.

Plasticizers and intermediates were high on SINOCHEM's list of high-priority imports, and the corporation placed orders in excess of $2.0 million for phenol, phthalic anhydride and sodium bichromate. The latter chemical has a wide variety of applications as an intermediate in such industrial processes as fertilizer production and leather tanning. A total of 3,500 tons of sodium bichromate was ordered by SINOCHEM with numerous deliveries spread over the latter half of 1977. Other purchases from US firms suggest continued interest in compounds with applications in the petrochemical industry.

With the exception of a small order for insecticides, SINOCHEM shopped for agricultural chemicals elsewhere. This proved to be a major disappointment to US companies, as several had received detailed enquiries for their products immediately prior to the fair. On arrival, the firms invariably found themselves competing with Italian and other European traders offering high-toxic stocks at rock-bottom "distress prices." SINOCHEM, confronted with US complaints of European "dumping," acknowledged the wide disparity between the respective price quotations, and stated that high-toxic agricultural insecticides would continue to be purchased "as we have our own methods of application which minimize toxicity."

On the export side, SINOCHEM had another low-volume fair with total sales to the US barely topping last autumn's figure of $1.8 million. Major purchase for a US firm was a $130,000 order for barium chloride; several US-based outfits placed small pharmaceutical orders for their European offices.

SINOCHEM officials agreed, in principle, that testing and labelling according to USP standards could be called for in standard sales contracts following concrete discussions between the parties. "We are very conservative and slow to make such decisions, but labelling and testing according to US standards is possible if specific study justifies it."

All in all, the fair proved remarkably fruitful for US firms who have now established themselves as keen competitors of the Japanese zaibatsu (estimated sales of $40 million) and the European trading houses (approximately $30 million in sales). More and more American companies are discovering the importance of stationing personnel "on the floor" for the entire fair; in the words of one trader who signed 60 sales contracts with SINOCHEM during the last two weeks, "when the wave breaks, you've got to be there to catch it."

Although SINOCHEM has softened its position on the question of crude oil sales to the US, corporate spokesmen see little possibility of exports in the near future. At the Learn from Tachai Conference, Chairman Hua proposed that "we should develop crude oil production in a big way and strive to create another ten oilfields before the end of the century. As production increases, we can increase exports. At that time, we can consider sales to the US if conditions are favorable." 完

The porcelain tradition: elongated mei-ping, Tz'u Chou stoneware, from the Sung dynasty (960-1126 A.D.).

CHINA'S CHINA

Hope Harmeling

Chinaware: Every porcelain bowl or plate or vase betrays its origins. Indeed, few products more clearly define where they were first made. The Chinese ceramic tradition has produced such durable and distinctive items that museums throughout the world testify to their craftsmanship. In the US, with the reopening of trade with the PRC, China's china has been making a dent in the American ceramics market. Due to high column II tariffs, and other reasons this dent is still small. But, with the reemergence of an old tradition, chinaware from the PRC is slowly making itself known again. This article, by a specialist in the subject and a ceramic artist, takes a look at the state of chinaware today, and examines some of the needs of US importers.

The Chinese ceramic tradition spans thousands of years. It includes a wide range of objects, from plain, earthenware funerary vessels to elegant, ornate porcelains, many of which have become treasures today. While every era has its own criteria for judging the aesthetic value of art, it is generally thought that, over the centuries, Chinese pottery has been consistently the best in the world.

China's china has been sought after for centuries. Caliphs and sultans of Moslem empires dispatched tradesmen to purchase it. European monarchs from Louis XV to Francisco I de Medici collected it. Ivan the Terrible and Catherine the Great sought it. Japanese shoguns imported it in the days of the Tokugawa Dynasty. And colonial Americans built ships and risked fortunes to obtain sets of dinnerware from China.

While pottery was being made in China for thousands of years, the foreign demand for China's china stemmed from recognition of the perfection and excellence of porcelain, first discovered and made during the seventh century AD. Chinese potters invented a chamber kiln which would fire at high enough temperatures to turn the fine clay, kaolin, into thin translucent porcelain.

In addition to inventing the technology for making porcelain, the Chinese understood how to effectively mass produce it. Their assembly-line approach, well-developed by the 17th century, enabled them to produce great quantities necessary to supply international markets. The increased availability created even wider markets.

China's china was popular for a certain artistic vitality and variety it possessed which defied analysis. No other country produced wares which ranged from the delightful and spontaneous to the elegant and ornate. Factories in many provinces of China created distinctive variations of forms and glazes. These variations ranged from happy-go-lucky folk designs to refined, classical styles. To understand the reputation China's china has today, it is useful to understand some of the tradition from which the acclaim derives.

A Continuous Tradition

China has the longest unbroken ceramic tradition in the world. Even though the Chinese were not the first to develop pottery *per se,* their ceramic tradition is remarkable for its continuity.

Most of the pottery surviving from ancient China has been preserved in tombs. In 4000 BC, potters in

SYMBOLISM IN CHINESE PORCELAIN DESIGNS

Just as the West has numerous symbols, such as the butterfly as a symbol of fragility and the rock as a symbol of strength, the Chinese have numerous symbols in their art. The following symbols are seen in the pottery designs of China: *Bats*, Happiness; *Pomegranate*, Fertility; *Pine Tree*, Longevity; *Peach*, Longevity; *Bamboo*, Longevity; *Tortoise*, Longevity.

Flowers and animals abound in porcelain designs. Among the most popular animals are:

Dogs of Fu	Buddhist Temple Guardians
The Tiger (Hu)	Regarded as the lord of land animals, the tiger symbolizes military prowess and is used to scare off evil spirits.
The Dragon	The five-clawed Dragon represents the Emperor, while dragons with three or four claws represent lesser members of the Imperial household.
Phoenix	A symbol of the Empress

The twelve animals of the zodiac are: the dragon, hare, tiger, fox, rat, pig, dog, cock, monkey, goat, horse and snake. Each year, month, day and hour is associated with one of these animals.

The flowers of the seasons are the peony symbolizing Spring; the lotus, Summer; the chrysanthemum, Autumn; and the prunus, Winter.

Certain flowers typify the months of the year, according to the month in which they bloom. They are: *January*, Plum; *February*, Peach; *March*, Tree-peony; *April*, Cherry Blossom; *May*, Magnolia; *June*, Pomegranate; *July*, Lotus; *August*, Quince; *September*, Mallow; *October*, Chrysanthemum; *November*, Gardenia; and *December*, Poppy.

Religious Symbols

There are also many religious symbols used in Chinese art. Some of these depicted are the leaders of the three principal religious sects of China, K'ung-tzu (Latinized as Confucius), Lao-tzu, and Buddha. Sometimes one will see the prunus, pine and bamboo which represent K'ung-tzu, Lao-tzu and Buddha—the Three Friends.

Taoist gods are numerous. Perhaps the most well-known are the Eight Immortals (Pa Hsien). They each have a symbol or emblem:

Chun-li Chuan	—a fat man holding a feather-fan and the peach of longevity
Lu Tung-pin	—skilled in fencing and carries a sabre
Li T'ieh-kuai	—a lame beggar with a stick or crutch and a gourd
Ts'ao Kuo-ch'iu	—carries tablets of admission to the Sung Court
Lan Ts'ai-ho	—supposed to have been a hermaphrodite and is represented as a gardener with a flower-basket and a spade
Chang Kao	—seated on a mule carrying a peach, a feather or bamboo
Han Hsiang Tzu	—carries a flute
Ho Hsien Ku	—a maiden immortal who holds either a peach or a lotus

These eight were extremely popular subjects for decoration on porcelain and also modeled as sets of figurines.

The eight Buddhist Emblems are: *Lun*, a flaming wheel; *Lo*, a conch shell; *San*, an umbrella; *Kai*, a canopy; *Hua*, the lotus (the most frequent of all Buddhist symbols, an emblem of purity); *P'ing*, the vase; *Yu*, a pair of fishes; and *Ch'ang*, the endless knot.

Happiness, Long Life, Prosperity

Often the Chinese will use characters decoratively. Fine calligraphy plays an important part in Chinese porcelain design. Some of the characters seen most often are:

Happiness
Long Life
Prosperity

Poets and sages are frequently depicted amidst mountain scenery often crossing bridges over mountain streams. Legends and stories also are subjects for decoration. The Hundred Antiques (among them musical instruments, implements, brushes for writing) and the Eight Precious Things (rhinoceros horn cups, coins, a musical stone of jade) also appear on porcelain.

Symbols with cosmological allusions include the Yin-Yang symbol, a circle divided into two equal parts by an S-curving line, the two parts symbolizing male and female and the duality of nature. The Pa Kua, the Eight Trigrams, are often associated with the Yin-Yang. They are eight groups of lines, each group consisting of combinations of broken and unbroken lines arranged in three ranks. They form an ancient system of philosophy and divination.

Symbolism in today's pottery designs has a deep significance for Chinese people. Designs of flourishing activity in oil fields on communes and in frontier militia camps show a struggling, revolutionary society striving to develop, to produce and to defend itself. Ceramic sculpture figures are often of workers and soldiers and barefoot doctors in heroic poses.

Mao Tse Tung's advice to "Develop what is good in the past and create something new for the future" is being followed in ceramic design, for there are many designs with traditional themes such as landscapes, birds, flowers, and animals. There are rice fields, orange groves and lotus blossoms. One worker at Foshan told a visitor "We don't consider everything old bad. What we've stopped making are the superstitious and feudalist designs like figures of gods and emperors."

the Yellow River basin made funerary vessels by hand to honor their ancestors and their gods. The vessels became sacred objects to them, which explains why the Chinese people have always attached great importance to pottery and bronze.

The early Chinese pots were red or brown earthenware with geometric designs, some impressed with the mat-markings of coarse textiles. Others had motifs representing birds, frogs or human beings. In the early centuries, Chinese potters imitated the shapes of bronze vessels.

By the Han Dynasty (206 BC–220 AD), the potter's wheel was commonly used in China and clay molds were developed. Han ware was almost exclusively of a funerary nature, including many kinds of ceramic animals, among them dogs, oxen and hens. High-fired stoneware was discovered and made in China by this time, more dense and impervious to liquid than the earlier earthenware. While potters in the Near East were the first to discover and control complex earthenware glazes, it was the Chinese who invented kilns for firing stoneware and porcelain at the higher temperatures required.

The First Porcelain—Resembling Jade

The world's first genuine porcelain was produced during the Tang Dynasty (618–906 AD). Following a series of improvements and refinements over many centuries, kaolin clay was fired at 1,300°C to produce the thin, translucent ware. The Chinese potter thus realized his dream of creating a substance that resembled jade.

The Tang Dynasty was also well-known for clay sculpture. People and horses of great charm were decorated in brilliant colors and shining glazes. Ladies with full faces and buxom figures conforming to the standards of beauty of the time, horse riders, polo players, barbarian soldiers, and foreign musicians have been found in tombs of the period.

During the Sung Dynasty (960–1260 AD) innovations in clays, glazes, and designs made almost all forms and colors possible. Sung wares still command greater admiration among collectors than any others. Their classical beauty—expressive shapes, deep, rich glazes and refined decorations—has distinguished them as perhaps the loveliest pots ever made. Of all Sung porcelains, the blue-green celadons are the most widely appreciated.

Later, "Blue and White" was produced in great quantities during the Ming Dynasty (1368-1643). It is now believed that the technique of using cobalt blue as an underglaze came to China from Persia in the 12th century. The Ming Dynasty was known as the Baroque Period of Chinese porcelain, as much of it was elegant and flamboyant with ornate and elaborate designs and colors. Potters achieved proficiency in enamel decoration, and monochrome colors were perfected, including yellows, reds, blues and blacks.

The wares known as famille rose, famille verte, famille noire, and famille jaune flourished during the Ching Dynasty (1644-1912). They were very ornate with scenes of people on terraces overlooking lakes or illustrations of romances or fables, birds, flowers, and dragons.

The hundred years between 1715 and 1815 marked the height of the period of export porcelain sales by the Chinese to European and American buyers. During this time the Chinese produced huge quantities of hand-painted, special order wares for their clients. Among the designs selected by Europeans were family coats-of-arms, paintings of Greek gods and legends, landscapes, and religious designs such as Jesuit china which depicted the Crucifixion and the Resurrection.

Among the decorations American buyers selected were marine subjects, and designs commemorative of important events in American history such as Washington's crossing the Delaware. The Great Seal of the United States and seals of the individual states were also reproduced on ceramic wares made in China.

Today—Solid Growth Potential

The demand for ceramic goods from China is great again today and the potential for Chinese exports, after many decades of unavailability, is excellent. According to Chinese sources, production of pottery in China doubled in the ten years from 1964 to 1974 and is now over 600 million pieces annually. Some experts estimate that China's production may double again to over a billion pieces in the next five years, through 1982, with new factories and modern automatic equipment. But, at the moment, there appears

POTTERY AND PORCELAIN PRODUCTS Available from China Light Industrial Products Import and Export Corporation, Spring 1977

- Bowls
- Plates
- Tureens
- Spoons
- Cups
- Soup sets
- Cups & saucers
- Tea pots
- Tea sets
- Coffee sets
- Chinese dinner sets
- Dinner services
- Soap holders
- Flower vases
- Flower pots, planters, fish bowls
- Jars
- Figures
- Birds & animals
- Garden seats
- Umbrella stands
- Brush barrels
- Hanging dishes
- Flower receptacles
- Wall planters
- Brush wash, lotus & duck design
- Paper weights
- Lamp stands
- Antique porcelain ware

THE POTTERS OF FOSHAN

Clockwise from top, at Foshan Pottery Factory: worker about to break open a mold; assembly line making molds; workers using potter's wheels; skilled designers at work; stacks of saggers in which pieces are placed for firing in the kiln.

to be insufficient Chinese production capacity to meet foreign demand.

Exports appear to account for 60% to 80% of the total PRC ceramics output, 5% from fine arts factories. These exports go to ninety countries around the world.

The trend in this source of earnings for China is up. China's exports to Western European countries, Japan, Canada, and the US rose from $3 million in 1970 to $10 million in 1975. (In 1975 the US import market for household, hotel and ornamental pottery was worth $253 million.) But much of China's ceramics exports go to Asia and other third world countries.

Interestingly, Japan, the major chinaware supplier to the US, purchased most of China's industrialized world exports in the five years through 1975, with France and Italy following. Chinese exports of porcelain householdware dominated exports of less expensive earthenware.

Pottery Manufacture in the PRC

The manufacture of pottery and porcelain in the PRC today is carried out in factories located in nearly every province. It is a decentralized industry which typifies the government's emphasis on local production with the use of updated traditional technology. There are hundreds of small establishments making ceramic goods for local consumption, and four major porcelain centers which have vast production complexes and modern equipment.

Most of the pottery works of China were closed down from the 1930's until 1949. Since then, many have been rebuilt and modernized on the same sites as the old ones. A number of them are being installed with automatic production lines, modernized kilns, and electric equipment, such as automatic and semi-automatic jiggering machines.

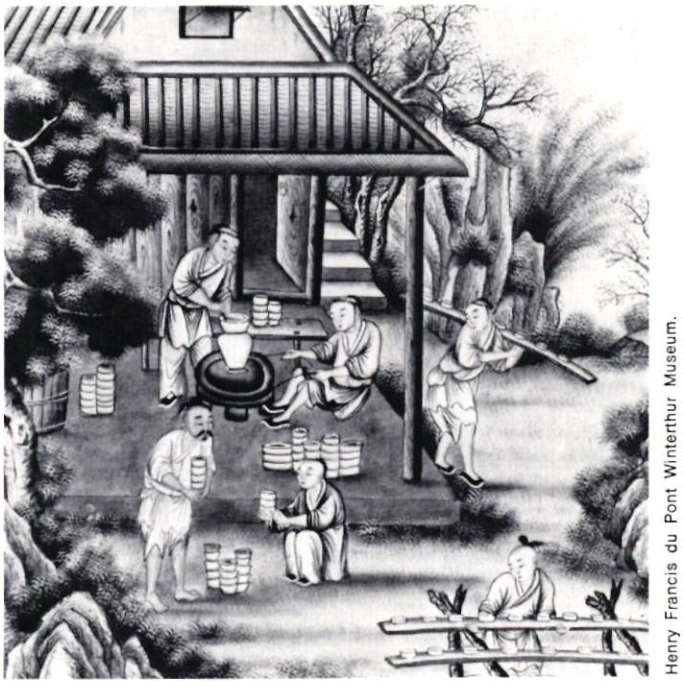
A brief description of the four major porcelain centers follows.

Ching-Te-Chen, Kiangsi Province

Ching-Te-Chen is the most famous. It has twenty porcelain factories which employ 25,000 people. Production was 230,000,000 pieces in 1974. The emphasis of production is on tablewares for domestic use and for export, and on very fine wares for export. Kilns in Ching-Te-Chen are all coal-fired.

Tangshan, Hopeh Province

Tangshan has fifteen porcelain factories which employ 11,500 workers. Production in 1974 was 120,000,000 pieces, double that of 1964. The emphasis of production is on tablewares—60% for domestic use and 40% for export. The volume of production is high: huge ball mills mix tons of clay; dozens of workers operate semi-automatic jiggering machines; kilns burn day and night. However, production has been severely affected by the July 1976 earthquake.



Henry Francis du Pont Winterthur Museum.

Watercolor of potters at work in early 19th-century China.

Foshan, Kwangtung Province

Foshan has fourteen ceramic factories which employ 20,000 workers. Sixty percent of the production is for export. The center, well-known to Canton fairgoers, specializes in ornamental pottery, rather than dinnerware. Designs are pressed on with decalcomanias. The Fine Arts Factory, where the best porcelain is made, is staffed by some of the most talented artists in China.

LiLing, Hunan Province

There are twelve enterprises in LiLing. Production doubled between the years 1964 and 1974. LiLing is famous for its underglaze decoration technique. Potters have specialized in making various kinds of underglaze colors which require three firings before the objects are finished.

Smaller Centers

Three smaller pottery centers on the eastern coast of China typify a kind of intermediate scale enterprise. Tzupao in Shantung Province dates back to 200 BC. It is famous for black pottery which is a bluish-black color known as "crow's feather."

It is also famous for "rain-drop glaze." Black porcelain is coated with a glaze which produces crystals, giving off a glittering, lustrous finish. The Chinese say "When a rain-drop glazed cup is filled with tea, the cup glitters like gold, but when the cup is filled with water, it shines with a silvery sheen."

Swatow in Kwangtung Province is known for open-work vases and lamp bases, and is also a center of production for household wares and ornamental pottery. Lungchuan in the western part of Chekiang Province, near Shanghai, is famous for a simple, classical celadon pottery.

CHING-TE-CHEN—CHINA'S PORCELAIN CAPITAL

Ching-Te-Chen, China's porcelain capital for centuries, has a long and distinguished history. Although the city is virtually unknown to most foreigners, it was there that porcelain for the Imperial Court was made and there that Chinese export wares were produced for foreign markets during the 17th and 18th centuries. All of the vitality of the city and all of its efforts have centered around the making of porcelain.

Located in the remote agricultural province of Kiangsi, Ching-Te-Chen was long considered a mysterious place, with its flames from hundreds of burning kilns and its single-minded dedication in producing porcelain. Father d'Entrecolles, a Jesuit missionary who visited the city in 1712, wrote that it "stands in a Plain surrounded with high Mountains. The sight with which one is greeted on entering consists of volumes of smoke and flames, rising in different places, so as to define the outlines of the town. Approaching at nightfall, the scene reminds one of a burning city in flames."

Father d'Entrecolles noted the system of mass production that prevailed at Ching-Te-Chen: "It is surprising to see with what Swiftness these vessels run through so many Hands. Some affirm that a Piece of China, by the time it is baked, passes the Hands of seventy Workmen; which I can easily believe after what I have seen myself."

The vitality of the city and the beauty of the porcelain produced there prompted Henry Wadsworth Longfellow to write in his poem *Keromos* around 1850:

> O'er desert sands, o'er gulf and by
> O'er the Ganges and o'er Himalay
> Bird-like I fly, and flying sing
> To flowery kingdoms of Cathay,
> And bird-like poise on balanced wing
> Above the town of King-Te-Ching
> A burning town, or seeming so,—
> Three thousand furnaces that glow
> Incessantly, and fill the air
> With smoke uprising, gyre on gyre,
> And painted by the lurid glare
>
> Of jets and flashes of red fire.
> As leaves that in the Autumn fall,
> Spotted and veined with various hues,
> Are swept along the avenues,
> And lie in heaps by hedge and wall,
> So from this grove of chimneys whirled
> To all the markets of the world.

Ching-Te-Chen, favorably located near the materials needed for porcelain, was also on a network of inland waterways. It was on a hill to the east of the city where the Chinese first found abundant deposits of kaolin, the clay of fine texture and white color used to make porcelain. The earth in the region is a bright red clay.

Origins in Han Dynasty

Ching-Te-Chen's ceramic industry began in the Han Dynasty (206 BC-220 AD) with earthenware and stoneware objects, and later during the Sung Dynasty (1127-1279 AD) it became known as the Porcelain Capital. During the Ming Dynasty, wares were made for the Emperor at Peking and also for export.

During the hight of the export porcelain trade, when China was exporting to Europe and the United States, there were approximately five hundred independent kilns in operation, and three-to-four thousand factories. Work was divided into many separate processes and the assembly-line method was used. Each factory was devoted to producing one type of ware. Products were shipped to Canton for export.

Modern-day Ching-Te-Chen is still China's most important ceramic center. There are presently 230,000 people in the urban area. It is still an isolated city which does most of its shipping by boat, just as in ancient times. The Nan River, which flows through the center of town, joins the Chang River on the outskirts. There are no paved roads from Nanchang, the provincial capital of Kiangsi, to Ching-Te-Chen.

The twenty porcelain factories in the city employ 25,000 people. All clays are from within the province. Most of the twenty porcelain factories have been rebuilt since 1949 on the same sites as the old ones. Kilns are coal-fired and heat to approximately 1,290°C or 2,354°F.

Many Different Techniques

Production at Ching-Te-Chen today is classified according to the different decorative techniques and patterns. Among them are: Blue and White, Blue and White Rice Pattern, Famille Rose (bright colors, vivid designs), Antique-Colored Decoration (vivid contrasting colors, folk arty style), and Polychrome Decoration (metallic oxides and other natural ore pigments with colorful glazes). Ornamental pottery, as well as dinnerware and kitchenware, are produced.

On the subject of the aims of work at Ching-Te-Chen, Frank Cosentino, who visited China from Boehm Porcelain Studios, found that efficiency and production are emphasized. Freedom of expression for the individual artist is a secondary priority, although Ching-Te-Chen does have one Fine Arts Factory where the best quality work is produced. All of the production at this factory is for export, as it is too costly to be sold in the home market. The workers at this factory engage in hand-painting and firing. Weeks are spent on individual pieces. Porcelain paintings are made along with the usual tablewares, vases, urns and planters. Thus, Ching-Te-Chen continues its destiny as China's porcelain capital.

A BOOK ABOUT CHING-TE-CHEN

Anyone wanting to have an inside look at China's pottery should read *The Boehm Journey to Ching-Te-Chen*, an engaging 161 page account published in 1976 by the Boehms. This fascinating book provides meticulous details of an historic trip made to China in November 1974 by Mrs. Helen Boehm and her traveling companions, the first Americans permitted to visit China's porcelain capital since long before World War II.

Based on a trip diary kept by Mr. Frank Cosentino, now President of Boehm Porcelain Studios, this well-illustrated volume fills a conspicuous void in the literature in English on the subject. The group visited ceramic centers at Tangshan and Foshan as well as Ching-Te-Chen. Comprehensive details of production and equipment at each of the factories as well as techniques of colors and designs are included.

Gangyaoling, with five factories, in Haicheng County, Liaoning Province, is one of the main ceramics centers of northeast China. It produces utility ware and artistic porcelain using a variety of decorative methods including neopolychrome, transfer-painting, spraying, etched-guilding, underglaze, and high temperature fired colored glaze. The works have roller links, a wet grinding mill with automatic vacuum feeder, and liquid slip feed pipe.

Pottery and Porcelain Research Institutes

Pioneering for China's ceramics industry are the research institutes located in the cities which specialize in porcelain production. It is in these institutes that ancient skills are kept alive and innovations are made.

The most important is Ching-Te-Chen Research and Design Institute in Kiangsi Province. Its 222 employees work on the chemical analysis of clays and glazes, the creation of new designs, and studies of techniques of production and technical services. According to reports, the technology is quite modern with spectrographic equipment, chemical analysis equipment and thermal equipment from the US, Germany, Japan and Switzerland.

In other research institutes, located in Tangshan, LiLing and Foshan, studies are carried out for making different kinds of clay bodies, glazes, and designs. Investigations into decorations include studies of spray decorating (aerographing), decal designs (decalcomanias) and hand painting techniques.

Ordering from the PRC—Start with Peking

Orders for ceramic goods from China are initially placed through the head office of the China Light Industrial Products Import and Export Corporation (LIGHT INDUSTRY) in Peking. Later business may be conducted via a branch of the trade corporation. These branches handle the goods of individual production centers. For example the Kwangtung Ceramics, Arts and Crafts Branch handles LiLing and Shihwan (Foshan) pottery; the Shanghai Ceramics Branch is agent for Lungchuan Celadon; and the Shantung Arts and Crafts Branch handles Shantung Porcelain Snuff Bottles. The production centers, which appear to be under provincial rather than central authorities, do not distribute their own products.

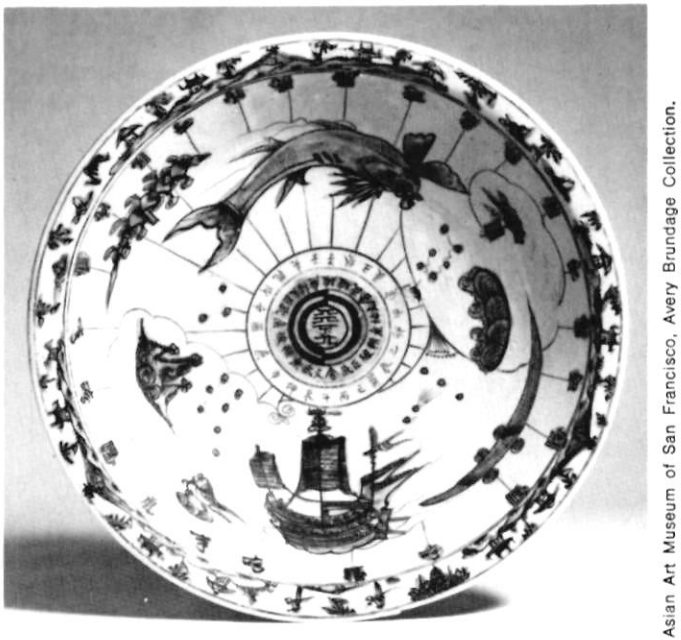
A typical catalogue has article numbers, descriptions in English, sizes and numbers of pieces, packing and color photos of wares for each item for sale. Prices are not listed but subject to negotiation. Generally shipments have conformed closely to sample products shown.

Demand in the US

Until World War II the output of the few American establishments was relatively small, and the bulk of household dinnerware and pottery used by the American people was imported. During World War II production increased but leveled off afterwards. Presently, over half of the wares consumed in the dinnerware and ornamental pottery industry are domestically produced, and somewhat less than half imported. In 1973, at the last US industrial census, the total value of US production was approximately $334 million against US imports of $202 million. These imports are thus of considerable importance in the US ceramics market.

At present, Japan, Britain, West Germany and Italy sell the major share of imported ceramic goods to American buyers. Goods from Korea and Brazil have recently become popular. In the future, however, there could be a demand for Chinese dinnerware and

Polychrome platter of the Swatow type, late Ming dynasty, 17th century A.D.



Asian Art Museum of San Francisco, Avery Brundage Collection.

WHERE TO SEE CHINAWARE IN THE US

The following museums across the country have outstanding collections of Chinese porcelain:

The Boston Museum of Fine Arts
Boston, Massachusetts

The Museum of American-China Trade
Milton, Massachusetts

Peabody Museum of Salem
Salem, Massachusetts

Metropolitan Museum of Art
New York City

The Brooklyn Museum
Brooklyn, New York

The Winterthur Museum
The Helen Woolworth McCann Collection
Winterthur, Delaware

The Freer Gallery of Art
Washington, D.C.

The William Rockhill Nelson Gallery and
Atkins Museum of Fine Arts
Kansas City, Missouri

The Art Institute of Chicago
Chicago, Illinois

The Asian Art Museum of San Francisco
The Avery Brundage Collection
San Francisco, California

Seatle Art Museum
Eugene Fuller Memorial Collection
Seattle, Washington

pottery based on a desire to own wares not available for many years. In addition, sales of ornamental pottery in general have increased rapidly over the past several years, especially for garden pottery, and this trend could continue.

US imports of dinnerware and ornamental pottery from the PRC have more than doubled in the past three years, from $767,149 in 1973 to $1,670,942 in 1976. Particular items which have increased most are medium-priced dinnerware sets ($10-$56 factory value) which shot up from 4,856 dozen pieces shipped to the US in 1973 to 197,000 dozen pieces in 1976, and medium-priced miscellaneous pieces such as bowls, dishes, cups, saucers, and mugs which zoomed from 73,348 dp in 1973 to 372,668 dp in 1976.

Hotel and restaurant wares have increased too, from none in 1973 to 16,228 dozen pieces in 1976. PRC ceramic products account for more than half of the dinnerware and pottery coming into the US under Column II tariff schedules.

The US Market

The types of dinnerware presently imported from the leading European sellers are similar to these PRC imports. In 1975, the most popular import categories by value were finegrained stoneware and earthenware sets priced over $12, as well as cups, saucers and plates of the same material. Also selling well were nonbone chinaware or subporcelain sets for household sets from $24 up.

Figures on US consumption and most popular categories are hard to come by, since the industry is a relatively small one. In 1973 of the total value of domestically-produced dinnerware and pottery, household chinaware accounted for $62 million, restaurant wares for $101 million, and ornamental pottery for $107 million. According to an industry representative, the past few years has seen an upsurge in purchases of higher quality casual dinnerware, both domestic and imported made of stoneware and earthenware, where the price tag is $175-300 for a 45-piece set, as well as guaranteed durable casual dinnerware which can be put in the oven, freezer, or dishwasher.

Some of the leading producers of chinaware in the US are Lenox, Inc., Trenton, N.J.; Gotham, Providence, R.I.; Pickard, Inc., Antioch, Ill.; and Franciscan-Interpace, Los Angeles. Among the leading manufacturers of restaurant wares are Homer Laughlin, Newell, W. Va.; Syracuse China, Syracuse, N.Y.; Shenango-Interpace, New Castle, Pa.; and Hall China Co., E. Liverpool, Ohio.

Marketing Chinese Ceramic Products in the US

Until the present time, dinnerware and pottery from China have not been purchased in sufficient quantities to mass market them in the US. Advertising and promotional campaigns have been conducted on a limited basis in catalogues such as American Heritage, American Express and the Horchow Collection. Discouraged by high tariffs, US importers and retailers are waiting until the rates drop and better communications with China are instituted before beginning comprehensive, long-term marketing efforts.

The problems encountered by importers of other Chinese products, in particular uncertain delivery schedules, have tended to hinder longer term market development. Since chinaware is a relatively basic household item with fairly inelastic demand, it should be possible for PRC products to gain a much larger share of the US market than they have now.

The role assumed by importers in the marketing effort varies. Those that believe it is their responsibility to help market take an active part in acquainting retailers with China's china at gift shows held during the year around the United States.

The best idea for marketing ceramic wares may be the one-item-from-one-area approach, such as rice-pattern dinnerware from Ching-Te-Chen, figurines from Foshan or Swatow open-work vases. As time progresses and as communications with the Chinese improve, it will be easier to do this. Chinese items will be more widely known and exclusives will be granted.

A few large retail stores have begun to market pottery from China in boutique-like shops in special sections of their stores. Isolating the items from other products in the store gives them the attention which attracts buyers. Newspaper ads emphasize the uniqueness of Chinese wares and the quality of the craftsmanship.

One exclusive has been given for restaurant ware to Mrs. Rose Lum of Royal Cathay Trading Company of San Francisco. Mrs. Lum signed the contract for restaurant ware supply for the western United States at the Fall 1975 Canton Fair.

The problem, to an extent, has been involved with the promoting of expensive Chinese antique procelain rather than the more well-known types of ordinary Chinese dinnerware. It might well behoove the PRC to make its famous potteries better known in the US so that the average customer can identify with, say, Ching-Te-Chen or LiLing in the same way Royal Doulton or Wedgewood is known by the American public.

Antique Porcelains

Several importers have been importing porcelain antiques to the US. Antiques are duty free if authentication papers can be provided by the government of origin certifying that the date of manufacture is one hundred years or more. They have been one of the most consistent, high volume US imports from the PRC, but are a high value market with relatively low unit volume.

Antiques are being sold in retail stores on a special limited sales basis on the east and west coasts at such stores as Bloomingdale's, B. Altman's, Woodward and Lothrop, and Gumps. Antique sales of this kind have been very popular, and goods have sold rapidly.

Designs—Heroic Beauty?

Ideally, designs on household ceramic wares should go with any decor. That is, if a design blends in with a variety of decors, it is likely to be popular. Since the Chinese have traditionally preferred simple, subtle, uncluttered designs, their pottery has been prized for its versatility. However, designs on some recent Chinese wares have not measured up to traditional standards, and importers in the US say they would greatly appreciate a chance for more exchange of ideas on designs and colors.

Articles in Chinese magazines provide insight into the reasons why the Chinese people are creating romanticized designs. An article in *China's Foreign Trade,* January 1976, states "Attention is required to convey the spirit of the different personalities of the heroes. For instance, the determination of the Chinese workers and peasants in fighting against nature and building socialism, the whole-hearted enthusiasm of the working staff in all trades to serve the people, and the noble qualities of the PLA men and women in loving the motherland and the people—all these should be translated into the sculpture."

New designs are created in Chinese pottery factories or in research institutes by a designated group of workers. Another committee of workers then selects which of these new designs to use.

American importers feel that there is room for more flexibility and more variety to suit current fashion trends. Among the designs presently imported, the rice pattern and the fish (carp) pattern have sold well. Dinnerware sets in blue and white and flowered and classical patterns have the potential to become popular.

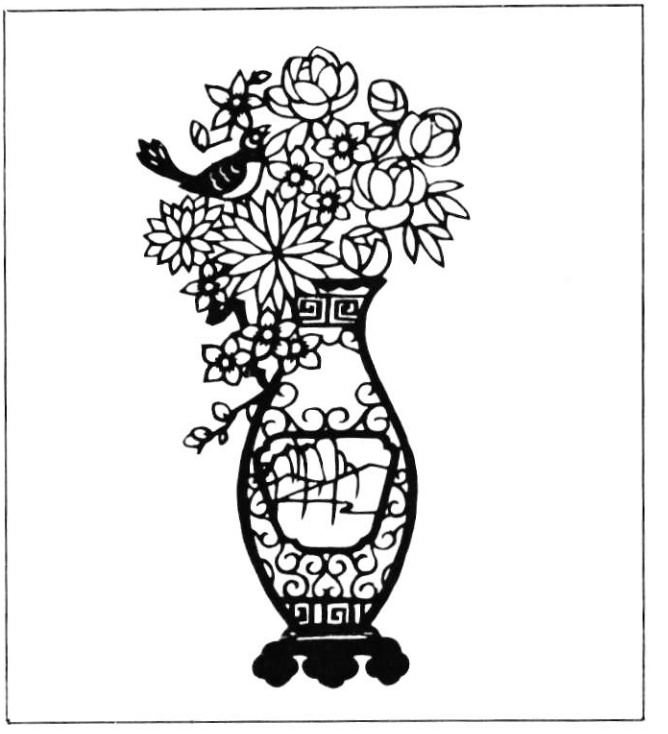
Packaging—Generally Good, but Sometimes Inadequate

Importers of ceramic goods have found that packaging has been generally good. *China's Foreign Trade* stated that "packing designers of the foreign trade corporations working with representatives from the porcelain factories have made over one hundred kinds of folding cartons for porcelains of different specifications.

"Professionally and scientifically designed, these new cartons use modern light-weight materials and are functional for storing, shipping and display. There is foam plastic packing material which prevents crushing and damage. There are also deluxe gift boxes covered with Chinese brocades or leather."

Despite this, some American importers report high percentages of breakages due to inadequate packaging. Some suggest that the thin cardboard, excelsior and straw, which are commonly used, could be replaced by more cushioning such as air bubble wrap, loose-fill

Papercut reproduction in "Shihwan Art Pottery" catalog from the Spring 1975 Canton Fair.



styrofoam, or polyurethane foam. One importer suggests that a delegation should come from China to watch how roughly US drayage people handle packages; another suggests that LIGHT INDUSTRY or CHINAPACK visit US packaging companies to study this particular matter.

Entry into the US

For the US importer, packaging and design are, however, lesser considerations compared to those of FDA regulations and Column II tariffs.

After the packaging and design for an item have been chosen, it is first subject to classification for entry into the US by US Customs for tariff purposes. The US Customs classifies dinnerware and pottery into three categories: porcelain, stoneware or earthenware. Importers can send samples to the Customs laboratory for an analysis before a tariff decision is made. At the laboratory, chemists will apply for ASTM tests for water absorption. (Earthenware may absorb over 3% of its weight, stoneware will absorb not more than 3% and porcelain will absorb not over 0.5%.)

Some shipments of dinnerware from China have been detained and rejected by Customs officials in New Orleans, San Francisco, Baltimore and Seattle for excessive lead content. Importers and importer representatives have discussed this problem with Chinese trade officials in Peking and have been told that efforts will be made to guarantee that dinnerware be lead-free or contain acceptable levels of lead.

Ceramic wares entering the US are subject to FDA checks for lead and cadmium content. If the clay or glazes used in making dinnerware exceed established levels of lead and cadmium, eating from the wares could cause poisoning or toxic reactions.

The chemical test for determination of lead and cadmium content in dinnerware is carried out by washing selected samples of the ware and putting a 4% solution of acetic acid into the vessel for 24 hours. A spectrometric analysis determines the number of atoms of lead or cadmium absorbed in the solution, a sample considered violative if 7.0 ug of lead/ml shows in the solution, or if 0.5 ug of cadmium/ml shows.

There are a number of reasons for violative lead levels: kilns may not reach high enough temperatures to fire overglaze decal patterns; glazes or decals themselves may contain excessive lead; or firing in tunnel kilns may not be even enough or at high enough temperatures. Importers would like to visit production centers in China to discuss these matters.

In the US, atomic absorption spectrometers check dinnerware for lead content. Some of the largest dinnerware manufacturers possess their own spectrometers. Another way to make glazes and decorations chemically durable to prevent leachable lead is by modification of the chemical content: chemists in the US are currently researching new glaze formulas which will retain the rich color but will be lead free.

Tariffs—Another Hurdle

If they pass the lead and cadmium tests, imported ceramic products, like many other goods from China, are then subject to Column II tariffs four or five times higher than those from most other countries. Depending on the category, US duties for ceramics are 5-10¢ per dozen plus 2.5-55.0% ad valorem in Column I whereas Column II rate run from 10¢ per dozen plus 15-70% ad valorem. The ratio between the columns varies from 1.3 for household non-bone Chinaware,

Porcelain display at the Spring 1974 Canton Fair.

CERAMIC PRODUCTS—A SELECTED GLOSSARY

While there is much agreement as to the practicality and beauty of pottery and porcelain, there is controversy among the experts as to terminology. Names for different materials are used interchangeably, and imprecise copy in catalogue descriptions and advertisements adds to the confusion. Here is a glossary of the main terms:

Ceramics—the art and science of making products from clay and firing them. Ceramics includes the making of functional objects such as dinnerware, vases, and planters as well as aesthetic objects such as ceramic sculpture and ceramic painting. It also includes industrial ceramics such as bricks, tiles, abrasives, refractories, and dentures.

China or Chinaware—Porcelain was called china, or chinaware, by British tradesmen because China was the country of its origin and the place where it was first made. In the science of linguistics, it is common for people to name foreign goods according to their place of origin. Other examples: millinery (Milan), Tabasco (Mexican State), damask (Damascus), coffee (Kaffa, Ethiopia), lumber (Lombardy).

Clay—From a chemical point of view, clay is an inorganic, mineral substance, a hydrous aluminum silicate. The formula is: $Al_2O_3 \cdot 2SiO_2 \cdot 2\,H_2O$. There are usually impurities in it such as potassium oxide, iron oxide and manganese oxide. From a geological point of view, clay is weathered granite or feldspathic rock, composed of silicon and aluminum and an alkali such as soda, potash or lime. When the alkali is carried off by water and the rock decomposes, clay is formed.

Porcelain—ceramic ware made from kaolin, a very pure, fine white clay, fired to a temperature of 2,500°F (1,370°C). Once fired, the object becomes transluscent, white and hard. The Chinese word for porcelain "tzu" means "a substance which makes a high note when struck." Chinese porcelain is made from kaolin (from "kao" meaning high and "lin" meaning hill from the hill east of Ching-Te-Chen from where it came) and pai-tun-tzu, prepared feldspathic rock used to reinforce the kaolin. The English word for porcelain comes from a Portuguese word "pourcellana" which means cowrie shells. Portuguese tradesmen thought Chinese porcelain, with its shiny surface, resembled shells.

Stoneware—ceramic ware made from clay which is coarse in texture and buff or gray in color. When fired at 2,400°F (1,315°C) it becomes opaque and dense rather than translucent. The Chinese usually do not distinguish between stoneware and porcelain, although it is sometimes called protoporcelain in English publications from the People's Republic.

Earthenware—ceramic ware made from common clay which is often red due to high iron content, but can also be gray and brown. When fired it is water permeable. It is fired at 2,000°F (1,100°C). Most of the pottery the world over has been made of earthenware clay.

Pottery—objects, especially vessels, which are made from fired clay. The term "pottery" includes earthenware, stoneware and porcelain.

Celadon—the green, jade-like porcelain made during the Sung Dynasty. The name comes from one of two sources. It could be from Saladin, the Sultan of Egypt who, in 1171, sent forty pots of this color to the Sultan of Damascus. It could also be the name of a shepherd, Celadon, in the 17th century novel *l'Astree* who wore ribbons of pale green on his costume.

Bone China—when 25% of bone ash (calcium phosphate) is added to a porcelain clay body. It was first made by Josiah Spode.

valued at $10-24, (533.65) to 6.0 for coarse-grained earthenware (533.11), averaging 4-5.0. Thus importers' margins are affected from the start.

Conclusion—Chinaware

If one excludes antique porcelain, China's chinaware is still a small factor in the US pottery market. In 1975, PRC household and hotel pottery sold to the US accounted for only 0.34% of total imports in these categories by value, and 1.0% of imports in terms of units. But, as noted above, ceramic imports from China are rising fast in some lines, and the potential is there for a substantially larger market. The return of chinaware to its historic source may add much to its appeal in the US, traditionally a market that has proven a good customer for these pleasing ceramic items. 完

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EXPORTER'S NOTES

Briefly:

- **US Exports to China in March down.**
- **American mining shovel sale revealed.**
- **China buys American cotton and maybe American soybean oil.**
- **Japanese-Chinese mining equipment agreement signed.**
- **Shipments delays in foreign ports: eighteen months in Britain, eighteen months in Japan.**

THE SOUND OF BUSINESS

Peking, where 7,000 Chinese industrial planners recently met at a major conference and were treated to an exhibition of China's achievements, is also crowded with foreign businessmen, though not with many Americans. Much tea is being drunk, and few contracts inked as yet, while the Chinese planners, budget managers, and trade officials await final blueprints for China's future development. Germans, British, and Japanese have been crowding the Peking Hotel, and US technical teams are flying into China's capital, but stop-gap orders seem to be the main business of the day. TECHIMPORT, the Chinese buyer of complete plants, is cooling its heels for the time being. The sound of business is in the air, nevertheless.

General

March Shipments Few: The first quarter of 1977 ended with American exports to China faltering once again. With total March shipments valued at roughly $1.1 million, American exports to the PRC in the first three months of the year came to a disappointingly low $19.1 million. Should US sales continue through the year at this rate, total 1977 exports to China would be some $76 million, slightly over half of 1976's total of $135.4 million. **But reports from Peking positive:** The volume of trade activity reported from China's capital continues to point towards improved fortunes for American exporters. One export agent from Washington's WJS, Inc. revealed to the *China Business Review* that his firm had contracted for nearly $6 million of US sales plus over $1 million in US purchases during March and April. Goods representing a large part of the $6 million were almost immediately shipped out of US ports in April with the remainder to be freighted to China in late spring or early summer. Besides sales representatives, a number of US companies, in addition to the National Council's Food Processing and Packaging Equipment Delegation, have been invited during the past few months to visit China later in the year to hold technical seminars and discuss potential sales. **American Oil Man Talks with Chinese Vice-Minister, Visits Shengli Oilfield.** Howard B. Keck, the President of the Houston-based Superior Oil Company, met with Sun Hsiaofeng, the Vice-Minister of China's Petroleum and Chemicals Industries, for "friendly talks," according to an April 4th report. Superior Oil, which specializes in petroleum exploration and extraction both on-shore and off-shore, reports annual sales of roughly $330 million. Although company officials declined comment on the trip, other sources indicated that Mr. Keck visited the Shengli oilfields. Three US companies in addition to Superior participated.

PRC TRADE FALLS IN 1976

China's total two-way trade in 1976 was roughly $13.2 billion, a 9.2% decline from 1975's $14.3 billion. With PRC imports at $6.2 billion in 1976, down over 16% from $7.4 billion in 1975, exports rose from $6.9 billion in 1975 to roughly $7 billion last year. Seemingly, PRC managers have parlayed a $500 million trade deficit during 1975 into an $800 million surplus last year. These figures are preliminary estimates by US government sources and may later be revised.

US SALES

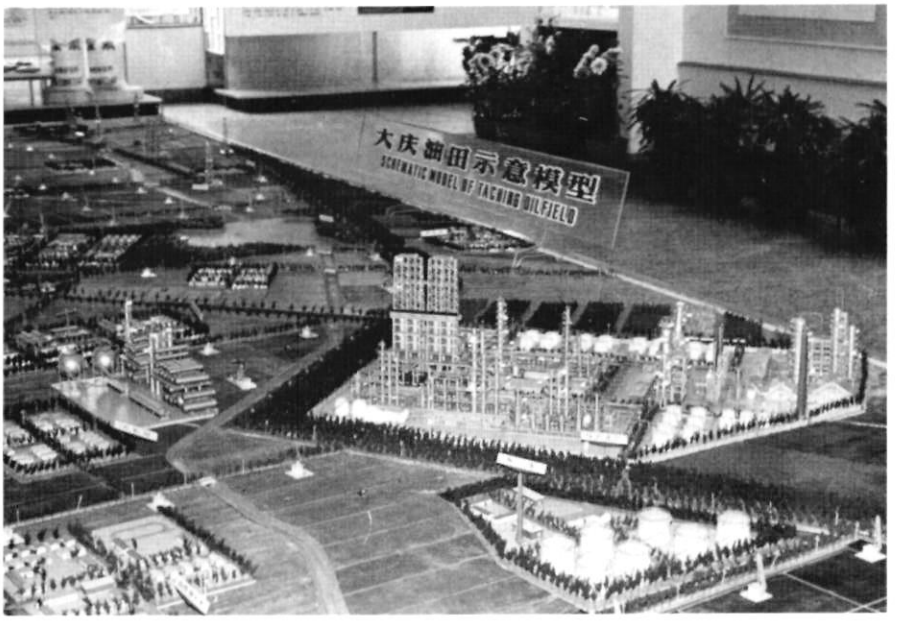
Three glass container-making production lines with a total value of about $1.3 million were shipped by Emhart Corporation's Swedish Subsidiary, Emhart Sweden AB (AB Sundsvalls Verkstader), to the China National Machinery Import and Export Corporation in Peking in September 1974. The lines are equipped to produce both narrow-neck and wide-mouth containers ranging from approximately a quart to a half-gallon in size. In more technical terms, the production lines consisted of feeders, refractories, temperature controls, 8-selection type "EF" 5½" double-gob machines with mechanical timing, conveyors, and spare parts. Machine capability, as specified by the customer, included press-and-blow for wide mouth, blow-and-blow and press-and-blow processes. Range of ware is from 300 to 750 grams. Emhart's unit in Zurich, Switzerland provided cold end inspection equipment. Negotiations were conducted by Emhart's Swedish agent, G and L Beijer Import and Export AB. The first quotation was issued in April 1973, and the order was received in December 1973. **Harnischfeger Shovels in China:** Back at the beginning of the Fourth Five-Year-Plan, Chinese foreign trade officials bought twenty P&H model 1600 electric shovels and spare parts from Kobe Industries, a licensee of Harnischfeger in Japan. Valued at over $10 million, the 6-cubic yard shovels were delivered to China in a series of shipments between February 1971 and January 1972.

AGRICULTURE

Soybean oil, possibly American, sold to China: In a mid-April report, the US Department of Agriculture announced that China has purchased 10,000 metric tons of soybean oil from an undisclosed international firm. Marked "from optional origin," the oil will be sent to China from either Brazilian or American supplies. This sale represents the second optional origin agricultural purchase the PRC has made this year. In March, US government sources revealed a 190,000-ton optional origin soybean contract between China and a foreign seller (See *CBR* IV; 2, page 44). For soybean market year 1976/77, ending on August 31, 1977, the Chinese have now signed for 70,000 metric tons of soybean oil, some 60,000 tons having been contracted in late 1976 and early 1977. With the cost of the last purchase, estimated at some $700 per ton, China could be spending as much as $50 million for soybean oil during

market year 1976/77, compared to over $550 million for grain purchase orders the Chinese have signed in the last nine months. The volume of soybean oil purchases further confirms suspicions that the PRC's 1976 soybean harvest was well below expectations. In the previous market year, 1975/76, the Chinese bought less than 10,000 metric tons of soybean oil.

China ends hiatus in US agricultural sales; buys American cotton: After avoiding American farm products since early 1975, China's foreign trade officials have contracted for 47,600 bales of US cotton to be delivered in crop year 1977–1978, between August 1, 1977 and July 31, 1978. Valued at approximately $16 million, the cotton deal was reported to the United States Department of Agriculture during the week ending May 1, and was then routinely released to the public. Industry insiders report, however, that the sale was part of a previously signed optional origin contract, but the American seller recently chose, with Chinese approval, to fulfill the order with some American supplies. In crop year 1976–1977, the PRC is thought to have ordered or purchased between 400,000 and 500,000 bales of cotton; so if the PRC's next crop year purchases remain the same, this initial US sale would account for roughly 10% of Chinese imports. Other major sources of cotton for the PRC are Central America, the Mid-east and some African nations.



A model of Taching Oil Field at Spring 1977 Canton Fair, the site of a 7,000-man industrial conference in late April.

SHIPPING

Delays Hamper Foreign Exports to China: American exporters have long bemoaned the lack of regular, convenient means to transport their goods to China. In 1976, only 17 vessels left American ports bound for Chinese berths. Since Chinese contracts normally stipulate that PRC purchases will be shipped to China by Chinese-nominated vessels, substantial delays can occur until an acceptable ship arrives at the port of embarkation. According to a Chinese official who met with the National Council's representatives in Peking, the "Gang of Four" seriously hampered transportation to the PRC. One delivery, part of the Japanese equipment for a steel rolling plant in Wuhan, sat in Yokohama for eighteen months before it could be moved to China and the plant's site. In the official's own words, "during the period of the 'Gang of Four', such similar things always happened." Once Peking decided to approve the shipment, the equipment was moved in eighteen days. Britain's Cole Cranes Ltd., which has sold some 350 cranes to China valued at £8.75 million (roughly $17.5 million) in recent years, experienced a similar delay during one of its shipments, according to the April 1 issue of *Business China*. Having been sold FOB to the Chinese, the cranes were transported to dockside when ready. Since they were low on China's priority list, however, the cranes remained exposed in the British port for eighteen months, long enough for exhaust pipes and other parts to become rusted in the salty air. When the Chinese did finally move the cranes to the PRC, Chinese inspection teams discovered corrosion, and a request was made

AMERICAN EXPORTS TO THE PEOPLE'S REPUBLIC OF CHINA, 1976, BY CATEGORY

(Millions of US dollars)

Category	Total 1976	Total 1975	Change 1976 over 1975
Food and Live Animals	0.00	0.02	−100 %
Beverages and Tobacco	0.00	0.00	—
Crude Materials, Inedible except Fuels	13.02	100.13	− 86.8%
Mineral Fuels, Lubricants and Related Products	0.11	0.20	− 45 %
Animal and Vegetable Oils and Fats	0.00	0.01	−100 %
Chemicals	10.44	5.28	+ 97.7%
Manufactured Goods by Chief Materials	43.30	73.75	− 41.3%
Machinery and Transport Equipment	65.12	118.80	− 45.2%
Miscellaneous Manufactured Articles, NEC	3.38	4.97	− 32.0%
Items and Transactions, Not Classified	0.02	0.47	− 95.7%
TOTAL	**135.39**	**303.63**	**− 55.3%**

The *Kantan 1* oil drilling ship is a Chinese catamaran in use China's offshore fields. Above, on show at Spring 1977 Canton Fair.

for compensation from the manufacturer. In later shipments Coles instituted a final inspection of units immediately prior to loading. In a further effort to satisfy their Chinese customers, Coles contracted with the Chinese to provide free on-site service in the PRC. Through this clause, the British firm sends two service engineers to China each year, who have corrected several operating problems, including an inappropriate filter's being used in desert conditions.

PRC SCIENTIFIC GROUPS TO US THIS YEAR—CHEMISTRY, IRON ORE, METROLOGY, DRILLING, POMOLOGY, TUNNEL BORING

The National Academy of Sciences' Committee on Scholarly Communication with the People's Republic of China (CSCPRC) welcomed an eleven-man Chinese delegation on April 28. This group, which came to investigate recent developments in American catalysis, polymer chemistry, and analytical chemistry, was the twenty-fifth scholarly delegation to be received by the CSCPRC since it was established in 1972. The most recent delegation is being led by Tang Ao-ching, a Professor and Vice-Chairman of the Revolutionary Committee at Kirin University; other members of the group come from the Kirin Institute of Applied Chemistry, the Lanchow Institute of Chemical Physics, the Dairen Institute of Chemical Physics, the Shanghai Institute of Organic Chemistry, the Institute of Chemistry in Peking, and the Bureau of Foreign Affairs in the Chinese Scientific and Technical Association. Their trip in America, which will last approximately one month, was scheduled to include visits to the National Bureau of Standards, Yale, the University of Massachusetts, MIT, Northeastern, Orion Research, the University of Delaware, Du Pont's Instrument Division, Princeton, Princeton Applied Research, Columbia University, NYU, Polytechnical Institute of New York, the University of Michigan, GM's Research laboratory in Warren, Dow Chemicals' facility in Midland, Northwestern, Stanford, Varian Associates, Hewlet-Packard, and the University of California at Berkeley.

FUTURE DELEGATIONS

For the Chinese delegations due to visit the United States in 1977, the main interests are principally in the area of applied technology. Because much of the scientific research in China today is oriented toward production, many of the Chinese delegations to the United States reflect this interest in technology. As with the delegations interested primarily in basic research, the CSCPRC plans itineraries based on requests received from the Chinese delegations themselves. A brief summary of th 1977 delegations' interests follows: **Hematite Ore Dressing** (June) The group will study the processes, equipment, and automatic control in 1) primary slime and fine material flotation, and 2) gravity concentration, electrostatic separation and concentration, and magnetic dressing of hematite ores. **Metrology** (June) The group desires to become familiar with metrological technology and standard measuring instruments in the U.S. For example, they are interested in 1) optical frequency scale, laser as length primary standard and its application to the measurement technique; 2) the establishment of low temperature scale, especially research on new low temperature scale; 3) the absolute electrical measurements, etc. **Drilling & Prospecting Techniques & Equipment** (July) The group's interests are in 1) core drilling; high speed drilling of deep-holes, drilling techniques in complicated geological formations, new drilling bits and declination measurement of small diameter holes: and 2) hydrologic drilling: the design, manufacture and application of drilling rigs with multipurpose use. **Pomology** (September) The group is interested in fruit trees, mainly citrus trees. They would like to investigate varieties and stocks of current cultivars and the culture technique in the high yielding fruit orchards, the breeding and multiplication system of good varieties of apple and citrus and the control of injurious disease and insect pests. **Tunnel Boring Machines** (October) The group would like to investigate the design, manufacture, and use of tunnel boring machines. 完

THE FIRST SIX YEARS
REVISED SINO-AMERICAN TRADE FIGURES 1971-1976
($ Million)

	1971	1972	1973	1974	1975	1976	Change 1976 Over 1975
US Exports	$—	$63.5	$740.2	$819.1	$303.6	$135.4	−55.3%
US Imports	$4.9	$32.4	$ 64.9	$114.7	$158.4	$201.0	+26.9%
Total	$4.9	$95.9	$805.1	$933.8	$461.9	$336.4	−27.2%

BOOKSHELF

SCIENCE IN CHINA

China's Scientific Policies: Implications for International Cooperation, by Charles P. Ridley; published by the American Enterprise Institute for Public Policy Research and the Hoover Institution on War, Revolution and Peace, 1976. 92 pages. $3.00.

The impact of the Great Proletarian Cultural Revolution is still being felt in China's scientific research policies. In this short study, Charles Ridley critiques the current state of scientific priorities in the PRC by analyzing the scope and direction of Chinese research papers published between 1972 and 1974. Besides confirming the popular notion that Chinese leaders, rhetorically and actually, support applied research over theoretical research, Mr. Ridley concludes that a large amount of trained manpower has been transferred into China's missile and space program during the past ten years. Citing the lack of published literature in related areas during the period surveyed, he infers that most qualified personnel have been diverted into these classified programs. Since China's research has attempted to combine modern and traditional scientific heritages, PRC contributions at the vanguard of international research have been slight; as for mass participation in scientific research, however, the Chinese have made impressive strides, according to the study. A research fellow at the Hoover Institute and a former graduate student at Stanford University, Ridley finds that since China's own research efforts have been so dampened by the policies of the Cultural Revolution, academic exchanges with the West will be more beneficial to China's participants than to foreign scientists. "Indeed, any scientists who would choose to engage in cooperative studies might do so more out of a desire to assist the Chinese in their national development than out of any hope to solve basic scientific problems." As a study, *China's Scientific Policies* corroborates some of the reports written by scientific groups which have toured the PRC; from the tone of recent Chinese press reports, however, a new era emphasizing theoretical research and more practical studies may be beginning under the pragmatic eye of Chairman Hua Kuo-feng.

Hydraulic Engineering and Water Resources in the People's Republic of China: A Report of the US Water Resources Delegation, prepared by James E. Nickum; published by the United States-China Relations Program, Stanford University, 1977. 122 pages.

Insect Control in the People's Republic of China: A Trip Report of the American Insect Control Delegation, submitted to and published by the Committee on Scholarly Communication with the People's Republic of China, the National Academy of Sciences, 1977. 218 pages.

The quantum leap in America's understanding and appreciation of China over the past five years is largely due to the personal exchanges that have gone on between the two countries. Such exchanges have provided the American reader with many detailed trip reports and a much fuller picture of China's problems and successes. The two reports reviewed here offer much more comprehensive and accurate portraits of two sectors of China's economy than could ever be gleaned from Chinese press accounts or intelligence group analyses. The first report, centering around water-related civil engineering in China, has been prepared by a social scientist, James Nickum, who accompanied ten water resources and water management experts into China from August 19 to September 19, 1974. The first half of *Hydraulic Engineering and Water Resources* is devoted to analyzing the general state of hydraulic construction in China along with a description of what decisions are made in this area of China's economy. The most interesting aspect of the report, though, is the third appendix which gives detailed descriptions of 18 projects visited by the delegation during the trip. Summaries of construction techniques, equipment capacities, and operational efficiencies are included in this section. Companies involved in construction machinery or technology, power generation equipment, or farm irrigation hardware will find this report of real interest. The insect control delegation's report is even more impressive. Prepared through joint efforts of nine scientists and one historian participating in the trip plus their escort officer from the CSCPRC, Halsey Beamer, the report spans all general aspects of insect control in China, but focuses on China's particular problem areas and the counter measures currently employed, such as the use of insecticides; biological control; host resistance; sex pheromones, hormones, and trappings; and integrated insect control. Hosted by the Scientific and Technical Association of the People's Republic of China, the American delegation spent over three weeks in China during August 1975. Beyond doubt the most comprehensive study yet on entomology in China, this report will prove invaluable to agricultural chemical companies with its descriptions of chemicals in use in the PRC today and table of common plant pests within China.

ENERGY—OIL AND COAL

China's Energy Politics and Resource Development: A Report of a Seminar. Prepared by Thomas Fingar with David Bachman; published by the US-China Relations Program, Stanford University, 1976. 56 pages.

Chinese Oil: Development Prospects and Potential Impact, by Randall W. Hardy; published and distributed by the Center for Strategic and International Studies, 1976. 88 pages.

Oil and the People's Republic of China: Status and Future Exploitation of China's Oil Resources, by Charles H. Riggin; published by the Air War College, 1976. 149 pages.

China's petroleum industry has been and remains the most sensational aspect of that country's economic development. More romantic than normal heavy machinery and more profitable than agrarian equipment, the Chinese oil industry has become a mythical reincarnation of an earlier era of China markets. Thus, for China's petroleum, today's executive finds many studies printed, of which few need to be chosen. Beginning with the least choice of the three listed above, Mr. Riggin's reports is largely a revamping of previously published material. With only a handful of references to primary source material, the author of this study has relied much too heavily upon the work of others to break any new ground in the analysis of China's petroleum. It is, nonetheless, an adequate summary of the condition of China's industry in the early months of 1976. More interesting, though, is Mr. Hardy's *Chinese Oil,* a monograph

cleverly set around an inquiry into the possibility of China's being able to produce 4 million barrels per day of crude by 1980 and 8 million by 1990. In pursuing these questions, Hardy compiles much of the available data on China's petroleum industry and even presents a scorecard of sorts, which plots the domestic, foreign, and oil policies of the various Peking political factions. Assuming events since the monograph's publication in 1976 have revealed that the "reform bureaucrats" have won out over the "professional military" on the right and the "militant fundamentalists" or "conservative leftists" on the left, one learns from Hardy's matrix than the PRC will expand oil production to "a) Earn foreign exchange for increased technology/equipment imports; b) Increase regional political influence; and c) Expand Sino-US/Sino-Japanese ties (and possibly enlarge PRC political leverage on specific bilateral issues)." Hardy ends his paper by concluding that China has a 25.5% chance of reaching 8 million barrel per day output by 1990 from its 1975 production of 1.6 million. Placing odds on China's future oil output certainly plays upon the gambling instincts of a Texas wildcatter. Nevertheless, Mr. Hardy should know better than to use his simple probability theorum to describe a situation that is clearly conditional and quite possibly Bayesian. Beyond the grandstanding, *Chinese Oil* is a serious work and a contribution to the study of petroleum output in the PRC. The run-away favorite of these three studies is *Stanford's China's Energy Policies and Resource Development*, an edited transcript of a seminar held at Stanford University on June 2 and 3, 1976. The key to understanding China's petroleum industry is to frame it in the context of China's total energy picture. By bringing together experts on different facets of Chinese energy production, including Jan-Olaf Willums of Norway's Saga Petroleum and K.P. Wang of the US Bureau of Mines, compiler Thomas Fingar gives the reader a broad overview of the controversy surrounding the potential of China's oil. While covering relevant previously published information, the panel of experts bring out new details on the Chinese oil industry, including a description of the pattern of water injection wells at the Taching oil fields. Mr. Fingar deserves credit for molding the proceedings of a fascinating seminar into a book, interesting in its own right.

Coal Mine Equipment: A Market Assessment of the People's Republic of China, by John Phipps, People's Republic of China Division, Bureau of East-West Trade, US Department of Commerce, 1977. 20 pages.

This latest addition to the Commerce Department's PRC market study series is a concise analysis of an industry which supplies China with nearly 70% of its energy needs. With annotated lists of Chinese coal mining equipment specifications, manufacturing facilities, and foreign purchases, Mr. Phipps concludes that there is a potential for future American sales especially if the moderate's preference for a long-term Chinese commitment to mechanized coal production in large-scale mines continues to prevail. "China's purchases of foreign coal mine machinery will include underground, open-pit, and coal preparation equipment. Underground equipment purchases will come mainly in the area of complete face extraction systems, featuring self-advancing hydraulic roof supports, shearers, conveyors, lighting and communications equipment." This is a must publication for any company trying to sell coal or other mining equipment to the People's Republic of China.

REFERENCES AND BIBLIOGRAPHIES

China Trade Quarterly, Volume One, Number One; Foreign Trade Corporations, written and compiled by Primary Sources, Hong Kong; published by Far East Publications, Hong Kong, 1977. 100 pages.

This new publication comes out of the extremely well stocked library of Hong Kong's Primary Sources. Introduced by a description of the legal and economic characteristics of China's Foreign Trade Corporations, this first issue lists the various FTC branches, what they sell, what their contracts look like, who their Hong Kong agents are, and how much responsibility they have. An unprecedented compilation of material, this series promises to be a rewarding investment for the firm committed to large volume Chinese trading in coming years. Even a comparatively small importer who wants to know exactly what China has to offer and how a company could go about getting it should consider a subscription. The volume is the first of four to be published as a series, described by its compilers as a reference guide that will be the "Standard & Poor's of the China trade."

Annotated Bibliography on Science and Technology in China; prepared for the Subcommittee on Domestic and International Scientific Planning and Analysis of the Committee on Science and Technology, US House of Representatives, Ninety-fourth Congress, Second Session, 1976. 55 pages; 214 entries.

Development in the People's Republic of China: A Selected Bibliography, by Patricia Blair with an introduction by A. Doak Barnett; published by the Overseas Development Council, 1976. 94 pages; 413 entries. $2.50.

These two bibliographies, both well researched and neatly presented, are complementary. For example, both have a section titled "Agriculture"; Ms. Blair lists forty-six references, and the congressional compiler cites fifteen. But, only six sources appear on both lists. While the congressional bibliography is particularly strong on noting articles on China that have appeared in technical journals such as *Mechanical Engineering* or *Brain Research*, it is sporadic in entering what are generally considered standard works such as Benedict Stavis's *Making Green Revolution*. On the other hand, Blair's bibliography is good with most of the standard China writers but weak in collecting the less accessible trip reports prepared by writers outside of the China field. For the newcomer to Chinese studies, *Development in the People's Republic of China* offers a general introduction to the political and social framework of modern China by longtime-China hand Doak Barnett. Beginning each subsection of entries, Ms. Blair capsulizes the current state of China's development, mentioning the best known author or work on the subject at hand. Although the Congressional bibliography foregoes introductions and essays, it does outline the contents and conclusions of each entry—a point the Blair bibliography generally omits. The range of disciplines in the *Development in the People's Republic of China* covering

"Development Strategy," "Economic and Social Performance," and "Political and Social Conditions" is broader than that of the other work. The *Annotated Bibliography* focuses solely on scientific policy and applications in industry and education. Despite the meticulous research that has clearly gone into each of these bibliographies some important works have been omitted in both compilations. For instance, Chu-yuan Cheng's *China's Petroleum Industry: Output Growth and Export Potential*, probably the best of many books published in 1976 on China's budding petroleum industry, did not appear on either bibliography. Even with occasional omissions in both, these bibliographies are extremely useful tools.

SURVEYING THE CHINA MARKET

China: Business Opportunities, A business study by Metra Consulting; published by the Financial Times Ltd., 1976, 277 pages. $140.

China: Industries Markets, Imports Competition: 1975–1985; 21st Century Research, 1976. 542 pages. $700.

The mystery of the China market has become a cliché in American business circles. How can you sell to a country that doesn't tell you what it makes, won't say what it needs, and might not even acknowledge normal business correspondences? As a crutch for the floundering marketing executive, two market surveys have been published in the last year to demystify the Chinese economy and suggest the direction of the future Chinese imports. With expensive price tags, both studies try to cover all sectors of the China's industry and, as such, fail to provide really useful analyses of any single sector. Contrary to popular wisdom, there is no longer a lack of information on the Chinese economy or China's foreign trade. Since Peking reopened its doors in the early 1970's, hundreds of foreign delegations have moved in and out of China, many of which have since published detailed reports on their visits. Moreover, thousands of Western companies have travelled into the PRC to display their wares and hold technical talks with the Chinese. America alone has had over 400 trained technical engineers working on site in China helping erect various pieces of hardware ranging from Western Union earth stations to Scientific Design petrochemical plants. Beyond China's published production statistics available through the late 1950's, international intelligence groups monitor and publish a broad sampling of Chinese radio and press accounts. Chinese textbooks on domestic and foreign industrial equipment and technologies are available to Western visitors in the bookstores of Shanghai and Peking. In its own library, the National Council has collected over 600 such publications. Information clearly is available; it just appears in disparate sources and is hitherto uncollected. In light of the almost insurmountable opportunities, the two surveys under review here are sadly overpriced and embarrassingly under-researched. For instance, Metro Consulting's *China* covers agricultural machinery in a single page. Without even a passing allusion to China's much publicized goal of "mechanization in the main by 1980," the study fails to give either a rough approximation of the volume of tractors produced in China or the size of past or potential Chinese imports in this area. In many ways, 21st Century's *China* is better. Again taking agricultural equipment as an example, compiler Szuprowicz describes the hierarchy of farm equipment production in China, notes the current mechanization campaign, and reports that over $30 million of agricultural machinery were sold to China in 1974. The section goes on to list 27 tractors produced in China and some 56 agricultural equipment plants known to exist in China today. In most other sector summaries, relevant Chinese research institutes are also catalogued. Unfortunately, all of the research mentioned is pre-1967, and therefore, almost totally out-of-date. On the other hand, each chapter in 21st Century's *China* begins with an excellent description of the current Chinese organizational hierarchy as well as a short history of its development. There are, however, two major shortcomings of the 21st Century study. First, it tends to rely on old, previously published information. Such an approach lends itself to errors. For instance, in listing tractors, "Tieh-Niu" 45-hp and 55-hp models are mentioned, although the production of 45-hp unit was phased out during the early 1970's in favor of the larger model. Furthermore, a 55-hp "Iron Oxen" tractor is also mentioned, but since "Tieh-niu" means "Iron Oxen" in Chinese, the entry is redundant. The second, and probably more serious, deficiency of the 21st Century study is a series of graphs, which appear throughout the work and purport to describe China's future production and purchases abroad. Based on very tentative assumptions, these charts map an overly optimistic future for China trade, and should be regarded with considerable suspicion. For the executive with highly diversified corporate interests, browsing through either of these studies could be enlightening. Areas in which China will almost certainly buy Western equipment—petroleum and mining equipment immediately come to mind—will probably surface, But, there is simply too much information available on the People's Republic of China to pass these two studies off as anything close to definitive.—H.J.

RESEARCH AID SERIES

US government studies on the PRC published by the CIA may be obtained by the general public on a subscription basis from

Document Expediting (DOCEX) Project
Exchange and Gift Division
Library of Congress
Washington, D.C. 20540

People's Republic of China: International Trade Handbook, October 1975.

China: Energy Balance Projections, November 1975.

China: Agricultural Performance in 1975, March 1976.

China's Minerals and Metals Position in the World Market, March 1976.

Chinese Merchant Ship Production, March 1976.

People's Republic of China: Estimated Yuan Value of Foreign Trade in Machinery and Equipment, 1951-73, April 1976.

People's Republic of China: Timber Production and End-Users, August 1976.

People's Republic of China: International Trade Handbook, October 1976.

China, the Coal Industry, November 1976. 完

CHINA ECONOMIC NOTES

From Chinese Media Reports

Briefly:

- **Major Industrial Conference gathers 7,000 to launch new economic program.**
- **North China drought alleviated slightly by spring rains.**
- **New pipeline may bring Taching crude to South China.**
- **Road construction in China fell in 1976.**

GENERAL

China's economy regroups: As Peking begins to recover from a year of political turmoil, the country has started to pull itself out of what one expert called "the closest thing they've got to a recession." Beleagured by natural disaster and internal discontent in 1976, Chinese planners are now faced with the difficult task of reprimming their economic development. **In a major national industrial conference which drew some 7,000 participants together at the end of April, Chinese leaders handed down the new line of industrial production.** At least a few western observers are predicting that this conference will mark a shift towards a more centralized and better planned economy than has been seen in post-Cultural Revolution years. A similar retrenchment took place in the early 1960's after the economy anarchy of the Great Leap Forward in the late 1950's. Despite whatever new programs may now be initiated, complete recovery is still a few years away. According to various Chinese officials, 1977 will be entirely devoted to reconstruction, and it will not be until 1980 that "great progress" can be achieved again. **Making foreign things serve China** is one of Chairman Mao's quotations which has been frequently quoted in recent literature. As one April 20 NCNA account noted, "in order to catch up to and surpass the world advanced level and quicken the tempo in developing the national economy, it is necessary to introduce a number of necessary new techniques and facilities from abroad." An example of how foreign technology can be properly incorporated into the Chinese system has been a **paraxylene fractionating tower which the Chinese purchased for installation at the Liaoyang Petrochemical Works.** A paper, released by the People's Liberation Army's Capital Construction Engineering Corp., stated "according to foreign technological requirements, it is necessary first to weld together and erect the body of the tower, and then build the external insulating layer and put up scaffoldings for installing the base inside the tower. After making careful study, calculation and testing, the construction workers of our country broke away from foreign technological requirements by welding together the body and installing the external insulating layer and pipelines before erecting the body of the tower. Afterwards the whole thing was hoisted and successfully installed."

AGRICULTURE

"A people's war against the drought" is being launched, according to NCNA accounts. However, it is still difficult to accurately assess to what extent the Chinese harvest has suffered. Experts point to recent Chinese purchases of about 5 million tons of wheat from Australia and Canada as giving credence to Chinese dire press accounts. One US official states **that the effects of the drought are "not so bad."** During February and early March, the situation was serious, but no more so than in the past four or five years. One US government observation team predicts that China's winter wheat output dropped 10% this year due to unfavorable conditions, the bulk of the loss coming from Shantung Province where winter wheat output is estimated to have declined some 60%. **April showers:** The first twenty days of April brought sufficient precipitation making for marked improvement in most areas. By the beginning of May, the southern third of the North China plain had almost recovered, but the northern two-thirds of the plain were still relatively dry, especially Shantung, Southern Hopei and Northern Hunan. Northeastern areas received above normal precipitation while Central China had almost no drought. In Southern China, only certain spots, particularly Kwangtung, reported dryness. Earlier reports this year from Kwangtung as well as travelers' accounts indicated, however, that 90% of the province's rice had already been transplanted. In comparison, last year's rice transplanting in Kwangtung was still going on as late as the end of April of that year. Thus, it is doubtful that the province is having severe problems now. **Water conservation retains high priority in Chinese efforts at stabilizing the**

Shown below is "barefoot soil testing kit" by Nanking Institute of Pedology widely used throughout the Chinese countryside.

situation. Water has been rationed in some areas to allow bucket brigades to carry as much as possible out to the fields. NCNA reports various novel water conservancy projects in Fukien Province such as estuary and beach reservoirs, wells linked up by underground waterways and ponds replenished by underground water pipes. The irrigated acreage in Fukien's coastal areas presently occupies 87% of the total farmland compared with 17% in 1974. **Agricultural mechanization remains priority:** Among new developments—the Peking Institute of Electrical Engineering and the North China Agricultural Institute have designed a lighter and more convenient insecticide sprayer. Its battery-powered micromotor rotates a nozzle for finely spraying the insecticide. The Nanking Pedological Institute has made up a soil analysis kit which has simple equipment and chemical agents with which one can analyze the soil for potassium and phosphorus content. The Lanchow Chemical Physics Institute has developed two kinds of explosives suitable for directional blasting in the countryside. The cost of the two explosives is a third that of ordinary explosives. **The People's Air Force contributes to agriculture.** As an effort to aid earthquake-striken regions, one Air Force transport regiment in Peking sprayed insecticides over 20,000 hectares of forests and 4,670 hectares of wheat during the first eleven months of 1976.

ENERGY

Chinese oil shipped South. Crude oil from China's petroleum-rich Northeast may now be being used in the Maoming refinery in Kwangtung Province, according to at least one China observer. Indications are that the 140-km pipeline, which was reported under construction between the port of Chanchiang and the Maoming refinery last June, might have been designed to move crude oil delivered to the port inland to the Chinese processing center. The pipeline, which is 39 inches in diameter, could move the highly viscous Taching crude up to the Kwangtung refinery from the coast, or the line may carry Iraqi crude, which the Chinese are known to have purchased in the past, to the Kwangtung facility. In the past few years, China's first berth for unloading 50,000-dwt tankers was complete at this South Chinese harbor in 1975, and in the final months of 1976, Chinese press accounts heralded the launching of China's first 50,000-dwt oil carrier. Moreover, foreign analysts recently visiting Kwangchow have noted a marked increase in the city's petrochemical supplies, which may now be explained by the new Maoming pipeline connection. **With the "Learn from Taching" campaign retaining its high profile in the Chinese press, NCNA reported in April that the Taching masses "supervise the oilfield's finances and run the enterprises thriftily."** The total profit delivered to the state in the past 17 years is 14.2 times the total state investment in Taching. It is claimed that the profit of 1976 alone is sufficient to build two oilfields with ancillary petrochemical complexes of Taching size. Considering the relative dearth of information regarding financial management in China readily available to westerners, the NCNA account offers some insight into the matter. Apparently, every team or shift does its own accounting and has clear-cut responsibility for everything it does. The accounting results are published monthly, thus encouraging increased production and economy. By

CHINA INSTITUTES BUSINESS MANAGEMENT

Five days into the National Conference on Learning from Taching in Industry, the Chinese press released the following eight points of personal responsibility in industry. These points reflect the new drive currently underway to improve internal discipline and safety in China's factories. Lack of adequate coordination in industrial planning and production has long hampered Chinese economic development.

1. Specific responsibilities for each person: The job and responsibilities of each worker are spelled out so that everyone knows his specific duties, every matter is covered, standards for every job are set and all work is inspected. This ensures that all the jobs and work places are under unified direction and are coordinated to ensure a smooth flow in construction and production.

2. Hand-over of duty: The outgoing shift makes a detailed report to the in-coming one on the state of the operation. The important posts, critical information on production and the major tools are handed over on a one-to-one basis. This procedure also enables the workers to check up on how the system of personal responsibility is functioning.

3. Regular inspection: Thorough-going inspection of the important sectors is conducted regularly to pinpoint and solve problems in good time and ensure operational safety. This systematizes the scientific methods of operation evolved by the workers in production.

4. Regular maintenance work: All installations are serviced regularly so that every machine in use is in good working order.

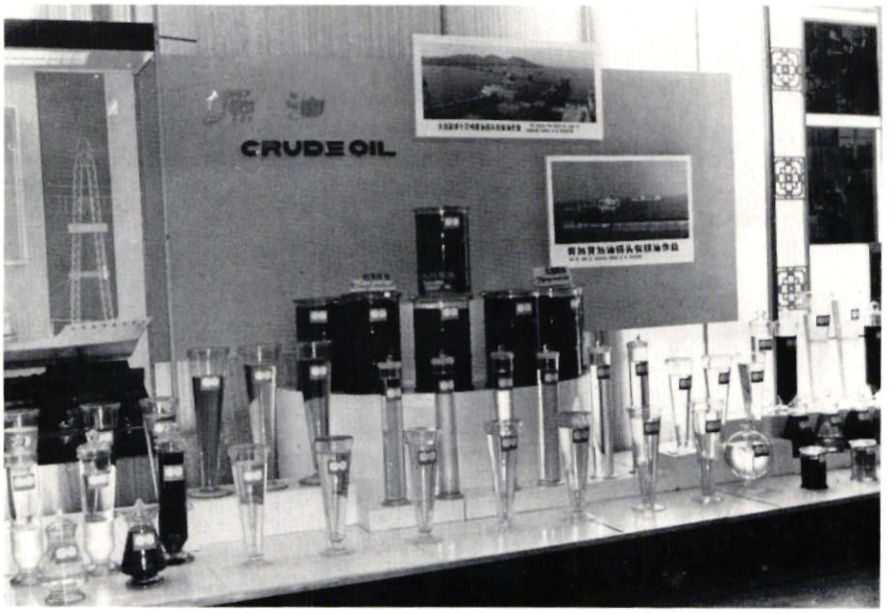
5. Responsibility for quality: Quality has top priority and the general line for building socialism with greater, faster, better and more economical results must be followed.

6. On-the-job training: All work sites are training grounds where workers can make up their lack of necessary technical knowledge. They are encouraged to study technique for the revolution and improve their skills.

7. Safety measures: Safety precautions and technical measures to protect the workers in each type of work are clearly enumerated. There are regular all-round check-ups of labor protection and exchange of experience.

8. Accounting in work groups: The workers are involved in management and cost accounting so as to ensure that the policy of running enterprises with industry and thrift is carried out at the grassroots.

Source: NCNA, April 25, 1977.



China may be ready to export 15 million tons of crude oil by 1980. Here, display of samples at Spring 1977 Canton Fair.

RMB: DOLLAR RATES AS OF APRIL 1977

Date		RMB/US$	US¢/RMB	RMB/US$ % Change
January 11	Bid	1.8944	52.7872	
	Offer	1.8850	53.0504	
	Median	1.8897	52.9185	+0.50
January 14	Bid	1.9020	52.5762	
	Offer	1.8926	52.8374	
	Median	1.8973	52.7065	+0.40
January 15	Bid	1.9097	52,3642	
	Offer	1.9001	52.6288	
	Median	1.9048	52.4965	+0.40
January 27	Bid	1.9211	52.0535	
	Offer	1.9115	52.3149	
	Median	1.9163	52.1839	+0.60
February 12	Bid	1.9154	52.2084	
	Offer	1.9058	52.4714	
	Median	1.9106	52.3396	−0.30
February 16	Bid	1.9097	52.3642	
	Offer	1.9001	52.6288	
	Median	1.9049	52.4962	−0.30
March 17	Bid	1.9020	52.5762	
	Offer	1.8926	52.8374	
	Median	1.8973	52.7065	−0.40
April 13	Bid	1.8963	52.7343	
	Offer	1.8869	52.9970	
	Median	1.8916	52.8653	−0.30
April 14	Bid	1.8887	52.9465	
	Offer	1.8793	53.2113	
	Median	1.8840	53.0786	−0.40
May 5	Bid	1.8812	53.1576	
	Offer	1.8718	53.4245	
	Median	1.8765	53.2907	−0.40

Source: Standard Chartered Bank, Ltd.

1976, the average production cost of every ton of crude oil was less than half that of 1965. **Underground oil storage systems tested in China.** The State Capital Construction Commission and the Ministry of Commerce recently met to exchange experience with a new method for storage of petroleum and petroleum related production in rock caves. Since the water pressure in the rocks is greater than the pressure of the oil, there is no leakage, provided cracks larger than 1 millimeter in diameter are cement shut. Even if a small amount of water does enter the storage area, press accounts maintain that the two fluids will not mix and can be easily separated when the oil is removed. Reports indicate that this new technique eliminates 30% of the earthwork and stonework in excavation, cuts investment and construction time in half, and saves over 200 tons of steel plate for every 10,000 cubic meters of storage area constructed.

TRANSPORTATION

Urumchi-Shanghai air service began in April. The route covers a distance of 3,600 kilometers and is presently the longest in China. Only 3 hr. 40 min. by plane, this air service is particularly significant in that it connects one of China's largest industrial cities, Shanghai, with the relatively undeveloped province of Sinkiang. **Additional activities concerning air transport:** the Peking airport underwent maintenance work on the runways from March 31 to April 10. In an effort to hasten economic development, Chinese authorities have recently paid special attention to road and rail improvement and construction. NCNA reported in February that during 1976, China built a total of 35,000 kilometers of roads in rural areas. Nearly half of them were tarmac or residue-oil surfaced. Eighty percent of the rural communes have been linked by motor roads. In 1975, US government experts estimated that China had 840,000 kilometers of roads. So the 35,000 kilometers said to be constructed in China's rural areas last year is only equivalent to a 4% increase in the total length of Chinese roads. In addition, from 1971 to 1975, roughly 40,000 kilometers of road were added to the Chinese system annually; 1976's road construction is, therefore, beneath previous levels. 完

RECENT AGRICULTURAL, MILITARY AND INDUSTRIAL CONFERENCES HELD IN CHINA

As the People's Republic enters its first full year of the post-Mao era, a new wave of meetings has engulfed the country as China's new leaders attempt to explain and gain support for their new programs. The emphasis, especially in the final National Industrial Conference held at the end of April, seems to be on improved managerial skills and centralized planning. Listed below are all major national conferences through the end of April and important local conferences through the middle of March. These almost certainly are paving the way for a revamped Fifth Five-Year Plan (1976-1980) and a program of development for the next decade or so.

AGRICULTURAL CONFERENCES

National

Second Learn-from-Tachai Conference: December 10-27; Peking, Great Hall of the People; National; Over 8,000 in attendance; Chairman Hua Kuo-feng presided.

Emergency Telephone Conference on Drought: March 19, 1977; Peking; State Council; National; Presided over by Chief (sic) Cheng-ying, Minister of Water Conservancy and Power.

National Forestry and Aquatic Production Meeting: March 12-30; Peking; Ministry of Agriculture and Forestry; Attendance: 16,000.

Regional

Ninth Anhuei Conference on Learning-From-Tachai: February 26, 1977; Hofei,* Anhuei; Provincial.

Second Chekiang Conference on Learning-From-Tachai: March 4, 1977; Hangchow, Chekiang; Provincial.

Farmland Conference: (January 18, 1977); Futing County, Fukien; County Party Committee; County; Held "to transmit and implement the spirit of the Second National Conference on Learning-From-Tachai."

Second Fukien Conference on Learning-from-Tachai: February 28-March 7, 1977; Foochow*, Fukien; Provincial; Attendance: 6,000.

Telephone Conference on Drought: (March 21, 1977); Fukien; Fukien Provincial CCP Committee; Provincial.

Telephone Agricultural Conference: March 4, 1977; Hainan Island; Hainan Administrative Regional CCP Committee; Regional.

Conference on Learning-From-Tachai: March 1-10, 1977; Harbin*, Heilungkiang; Provincial.

Telephone Conference on Wheat Farming: January 26, 1977; Honan; Honan Provincial CCP Committee; Provincial.

Telephone Agricultural Conference: February 24, 1977; Honan; Provincial CCP Committee; Provincial.

Hopei Conference on Learning-From-Tachai: February 26-March 3, 1977 (Plenary Session); Shihchiachuang, Hopei; Provincial; Attendance: 5,100.

Telephone Agriculture Conference: March 3, 1977; Hunan; Hunan Provincial CCP Committee; Provincial.

Hupeh Conference on Learning-From-Tachai: February 24-March 5, 1977 (Plenary Session); Wuhan*, Hupeh; Provincial.

Animal Husbandry Conference: (February 2, 1974); Huhehot, Inner Mongolia; Inner Mongolian Regional CCP Committee; Provincial.

Third Kiangsi Conference on Learning-From-Tachai: February 27-March 10, 1977; Nanchang, Kiangsi: Provincial; 8 million people attended or listened to rally; 4,600 attended conference.

Telephone Agricultural Conference: March 4, 1977; Kiangsu; Kiangsu Provincial Party Committee.

Kirin Conference on Learning-From-Tachai: February 6, 1977; Changchun*, Kirin; Provincial.

Telephone Conference on Drought: (March 23, 1977); Wuchou, Kwangsi; Wuchou Prefectural Revolutionary Committee; Prefectural.

Telephone Agricultural Conference: January 28, 1977; Canton; Kwangtung Provincial CCP Committee; Provincial.

Telephone Conference on Drought: March 18, 1977; Kwangtung; Kwangtung Provincial CCP Committee; Provincial.

Shansi Conference on Learning-From-Tachai: February 22, 1977 (opened); Taiyuan*, Shansi; Provincial: Attendance: approximately 3,200.

Pig Raising Conference: (February 9, 1977); Sian, Shensi; Shensi Provincial Revolutionary Committee: Provincial: CCP and Revolutionary Committee Authorities.

Cotton Production Conference: February 11, 1977); Sian, Shensi; Shensi Provincial Revolutionary Committee; Provincial.

Agriculture Bureau Directors Conference: (February 9, 1977); Wenchiang, Szechwan; Provincial; Attendance: 600.

Telephone Conference on Drought: March 21, 1977; Szechwan; Szechwan Provincial CCP Committee; Provincial.

Animal Husbandry Conference: (January 28, 1977); Sining*, Tsinghai; Animal Husbandry Bureau of Tsinghai; Provincial Revolutionary Committee; Provincial.

Telephone Conference on Drought: March 13, 1977; Tsinghai; Tsinghai Provincial CCP and Revolutionary Committees; Provincial.

Telephone Agricultural Conference: March 12, 1977; Yunnan; Yunnan Provincial CCP Committee.

CIVIL DEFENSE CONFERENCES

National

Four Conferences on Air Defense, War Materials Production, Scientific Research, and Planning Scientific Research: 1977 (early); Peking; Military Affairs Commission; Led by Chairman Hua Kuo-feng; Attendance: 800.

Regional

Civil Defense Work Conference: March 11, 1977; Changsha, Hunan; Hunan Provincial CCP Committee and Hunan Military District; Provincial.

Air Defense Work Conference: (March 18, 1977); Nanchang*, Kiangsi; Provincial.

Civil Defense Conference: (March 6-13, 1977; Canton; Provincial.

Military Preparedness Conference: March 5-10, 1977; Kweiyang, Kweichow; Kweichow Provincial CCP and Kweichow Military District CCP Committees; Provincial.

INDUSTRIAL CONFERENCES

National

Planning Conference for Major Industrial Conference to be held by May 1, 1977: December, 1976; Peking; State Council; Chairman Hua Kuo-feng attended.

Coal Industry Conference: January 10-26, 1977; Peking; Ministry of Coal*; National Chairman Hua Kuo-Feng attended; Attendance: 3,000.

Conservation Conference: (January 17, 1977); Canton; State Planning Commission; Held to "formulate plans to

conserve fuel and electricity in the future."

Building Cement Boats Conference: Late January, 1977; Shanghai; Ministry of Commerce and State Construction Material and General Supply Bureau.

National Metallurgical Industry Conference: March 23, 1977; Peking.

Power Industry Telephone Meeting: (March 23, 1977): Peking*; Ministry of Water Conservancy and Power.

National Capital Construction Conference: (March 30, 1977): Peking*.

National Finance and Banking Conference: (April 4, 1977); Taching, Heilungkiang.

National Conference on Safety in Production: (April 10, 1977); Peking; State Bureau of Labor.

National Conference on Communications Work: (April 11, 1977); Peking; Attendance: 400.

National Conference on Briquets and Coal Ovens: (April 12, 1977); Hsiaoshan County, Chekiang and Shanghai; Ministry of Commerce; Attendance 150.

National Conference for Directors of Supply and Marketing Cooperatives: (April 19, 1977); Peking.

Three Conferences on High-Energy Physics, Genetic Research, and other Subjects: (April 19, 1977); Peking; Chinese Academy of Sciences.

National Conference on Learning from Taching in Industry: April 20-24; Taching, Heilungkiang and Peking; Central Committee of the Communist Party; Chairman Hua Kuo-Feng attended; held after 18 separate provinces, municipalities, and autonomous regions had their own local Learn From Taching conferences by April 14; Attendance: 7,000.

Regional

Petrochemical Conference: January 12-24, 1977; Hopei*, Anhwei; Provincial; "Conference discussed and made plans for the development of the petrochemical industry for 1977 and for the Fifth Five-Year Plan."

Anhuei Foreign Trade Conference: (March 25, 1977); Hofei, Anhuei; Provincial.

Industrial Conference: February 24-March 6, 1977; Hangchow*, Chekiang; Provincial.

Industrial Conference: February 25-March 7, 1977; Lanchow*, Kansu; Provincial.

Industrial Conference: (March 13, 1977); Nanchang*, Kiangsi; Provincial.

Industrial Conference: March 1, 1977 (meeting announced in circular); Chengchun, Kirin; Kirin Provincial CCP Committee; Provincial.

Industrial Conference: February 21-28, 1977; Nanning*, Kwangsi; Metallurgy, Petrochemical and Light Industries with Postal and Telecommunication Services; Regional; Followed by four local meetings; Attendance: 3,000.

Aquatic Products Conference: (February 20, 1977); Canton; Provincial.

Industrial Conference: (February 14, 1977); Tuyan Municipality, Kweichow; South Kweichow Puyi—Miao Autonomous Prefectural CCP Committee; Prefectural.

Chemical Conference: (February 24, 1977); Kweiyang*, Kweichow; Kweichow Chemical Industry; Provincial.

Birth Control Conference: March 7-16, 1977; Kweiyang, Kweichow; Kweichow Provincial Revolutionary Committee, Provincial; Attendance: 330.

Telephone Industrial Conference: (March 6, 1977); Shansi; Shansi Provincial CCP Committee.

Coal Mining Conference: December 21-29, 1976; Tsinan, Shantung; Provincial.

Chemical Fertilizer Conference: (February 4, 1977); Sian, Shensi; Shensi Provincial Revolutionary Committee; Provincial.

Industrial Conference: March 6-15, 1977 (Plenary Session); Lhasa*, Tibet; Regional; Attendance: Over 500.

Industrial Conference: February 13, 1977 (closed); Sining*, Tsinghai; Tsinghai Party Organization; Provincial.

Finance and Trade Work Conference: (February 26, 1977); Kunming, Yunnan; Yunnan Provincial CCP Committee; Provincial.

Light Industrial Conference: March 10, 1977; Kungming, Yunnan; Provincial.

RAILWAY CONFERENCES

National

Railway Conference: (February 20, 1977); Peking; State Council with permission from CCP Central Committee; Leading Comrades of State Council; Attendance: Over 200.

Railway Security Conference: Mid-March; Peking*.

Regional

Railway Conference: March 1-7, 1977; Hofei, Anhwei; Anhwei Provincial CCP and Revolutionary Committees; Provincial; Attendance: Over 400.

Railway Conference: March 3, 1977; Foochow, Fukien; Fukien Provincial Party Committee; Provincial.

Railway Conference: (February 28, 1977); Harbin*, Heilungkiang; Heilungkiang Provincial CCP Committee; Provincial.

Railway Conference: February 21-26, 1977; Chengchow*, Honan; Honan Provincial CCP Committee; Provincial.

Telephone Railway Conference: February 24, 1977; Hunan; Provincial CCP Committee; Provincial.

Railway Conference: February 28-March 6, 1977; Changsha*, Hunan; Hunan Provincial CCP Committee; Provincial.

Railway Conference: February 23-March 2, 1977; Wuhan, Hupeh; Approved by Hupeh Provincial CCP Committee; Provincial.

Railway Conference: March 8, 1977; Nanchang, Kiangsi; Kiangsi Provincial Party Committee; Provincial; Responsible Provincial Authorities; Attendance: 450.

Railway Conference: (March 4, 1977); Canton; Kwangtung Provincial CCP Committee; Provincial.

Railway Rally: March 11, 1977; Shanghai; Shanghai Railway Bureau; Municipal; Described as an "oath-taking rally"; Attendance: 1,000.

Railway Conference: February 25-March 3, 1977; Taiyuan*, Shansi; Shansi Provincial CCP Committee; Provincial.

Railway Conference: (March 3, 1977); Sian*, Shensi; Provincial; Attendance: 400.

Railway Conference: February 26-March 2, 1977; Tsinan, Shantung; Shantung Provincial CCP Committee; Provincial.

Railway Subbureau Conference: January 28-February 6, 1977; Sining, Tsinghai; Sining Railway Subbureau; Provincial.

Note: Dates in parenthesis indicate date reported in NCNA accounts. Asterisks indicate probable site of conference.

Hunk of coal shown at Fair.

SHIPPING NOTES

Briefly

- **Chinese build up fleet, by 1978 could have more 1,000 DWT plus ocean going vessels than US.**
- **Vessel purchases under fire by gang of four, gang is accused of sabotage in shipbuilding.**
- **Boatbuilding conference in Shanghai pushes production.**
- **Through-container service to PRC continuing smoothly.**
- **PRC now has 20 maritime agreements.**

CHINESE FLEET AT 7.2 MILLION DWT

The Chinese fleet has reached 7.2 million DWT as of January 1977, according to the latest estimate by a Western observer. It is very likely, the source believes, that **by the end of this year the PRC could possess more oceangoing vessels of over 1,000 tons than the United States.** These figures include domestic ships large enough to navigate the Yangtze River to Wuhan, but not the approximately 900,000 tons under the flags of Panama and Hong Kong. **Recent Chinese articles and broadcasts have lauded this fleet output growth,** at the same time condemning the infamous 'gang of four'—Mao's wife, Chiang Ching, and three other radicals who were toppled from power in October 1976—for their attempts to "sabotage" the PRC's remarkable development in this sphere. Two long pieces in the March 11 issue of the ***Peking Review*** **accused the gang members of sabotaging the maritime transport sector** and praised the efforts of loyal Chinese in the building of ships and ports. The presence of these articles in the government's policy mouthpiece points up the importance of port and ship construction in the present order of industrial priorities. One of the two, entitled, "Struggle Over the Question of Developing Maritime Transport," condemned the 'gang' for its opposition to the buying of ships to supplement China's rapidly growing merchant fleet. China was forced to depend temporarily on chartered shipping, the article noted, and has also found it necessary and acceptable to buy some ocean-going vessels "in line with the principle of equality, mutual benefit, and supplying each other's needs." According to the *Review*, the 'gang' claimed that "buying ships rules out building ships," but the *Review* article denies this allegation vehemently, citing the tremendous development of China's domestic vessel construction. One of the specific examples of 'gang sabotage' pointed out in the article and also in broadcasts from Peking involved Shanghai shipbuilding, Shanghai being recognized as the radical stronghold. For example, a January 23 broadcast from the capital accused the radicals in Shanghai of undermining the "systematic and proportionate development" of shipping, and of vilifying loyal Chinese who had made purchases of foreign sea-going ships by labeling their actions "national betrayal." In particular, the **report condemned the four radicals of forbidding Shanghai shipyards to make engineering ships for harbor construction and vessels for inland shipping, thus disrupting a link in the ship construction chain.** Apparently at the behest of the four, the shipyards almost stopped making engines necessary for the building of small and medium-sized vessels; they disregarded ship repairs and the production of spare parts and accessories. The gang was further censured for saying the purchase of the *Kenghsin*, a 14,000 ton passenger-cargo vessel, was "a discarded yacht bought as if it were something precious," and that other government figures were worshipping foreign things.

PHENOMENAL GROWTH

The second *Peking Review* article heralded the phenomenal growth rate of China's port and shipbuilding industries, particularly lauding the fact that the Chinese in this industry are now "masters of their own house" completely independent of Western technological advice. A complementary article in the Peking-based *Trade and Tours* magazine noted that the total tonnage of ships built in 1975 was more than forty times that of the years immediately after the founding of the PRC in 1949. Some examples of the types of ships built are 25,000-ton cargo ships, 24-50,000-ton tankers, oil-drilling ships and floating platforms, 7,500-ton cargo-passenger ships, dredgers with 4,500-cubic meter capacity, and others. Under construction are supertankers and oceangoing tugboats. One result of the fall of the 'gang' was the **Shanghai shipyard's speedy completion of the *Tungfanghung 14,*** which will be used on the Yangtze. Assigned to the Shanghai-Wuhan run, the passenger-cargo ship made a successful maiden voyage on November 30, 1976. The steel vessel, 113 meters long and 16.4 meters wide, has double propellers and three helms, and displaces 3,700 tons of water. It is powered by two turbocharge diesel engines totalling 4,000 hp, which allow it to attain a speed of 28 kilometers per hour. The ship took five months to construct. Also completed quickly after the fall of the 'gang' were the ***Changching*** **and the *Changchun*, two 10,000-ton ships** constructed at the Chiangnan shipyard. **China has recently pulled all of its merchant fleet out of registration in Somalia** and re-registered it under the flag of Panama. A small portion of the ships have actually been transferred to PRC registration.

BOATBUILDING CONFERENCE

A boatbuilding conference was held in Shanghai in late January, focusing on the construction of concrete boats. Sponsored by the Ministry of Communications and the State Construction Material General Supply Bureau, the conference criticized the fallen radical Wang Hung-wen for his apparent blockade of efforts to build 10,000-ton floating docks. On-the-spot demonstrations of new techniques and methods were given by the Chekiang Haimen ship repair and manufacturing plant, the Kiangsu Kunshan farm machinery repair and manufacturing plant, the Shanghai Sungchiang concrete boat plant and the Chiating shipyard. **Canton's historic importance as a port was highlighted by the recent discovery of a large shipbuilding site estimated to be about 2,200 years old.** The site, used during the Chin (246 BC-207 BC) and the Western Han

(206 BC-24 AD) dynasties, was buried more than five meters underground. According to an early March report from Peking, a portion of two building berths and an adjoining carpenter's ship have been excavated. Prospecting has revealed that three parallel berths ran through the center of the shipyard, as well as a slipway over 88 meters long.

CONTAINER SERVICES

The through-container service begun by two Japanese shipping lines last year is continuing smoothly. Mitsui OSK Line, which expanded its service late last summer, is operating a full-container vessel, the *Osho Maru*, on a thrice-monthly turnaround between Tsingtao and Hsinkang, China, and Kobe, and plans no further expansion in the immediate future, according to a New York spokesman. **K Line** has been operating a semi-container ship twice-monthly from Shanghai to Kobe, and **hopes to expand shortly to a full-container service** going three times a month between the two cities. A K Line representative comments that the company cannot increase to a thrice-monthly turnaround until the Chinese agree to allow a full-container ship to travel the route. K Line sent its Tokyo office China Department Manager to the PRC in February to negotiate such an upgrade in service, and hopes to be able to institute it soon. Representatives of **the Shinwa Line, which operated the only full container service to China until China suspended it last year, met in February in Peking with officials of the China Ocean Shipping Company to discuss its resumption.** According to Mr. Kondo of Shinwa's New York office, "the shipments were on a trial basis, and the Chinese were not in a position to make them regular." The Japanese line, a tramp service which generally handles charters between the US and Japan, had carried containers from Hsinkang to Yokohama and Tokyo. It operated an average of three sailings per month; in 1974, 285 containers were moved from China to Japan in 14 voyages, and 307 from Japan to China in 12 voyages. The Shinwa mission to the PRC also asked the China Ocean Shipping Company to adopt the standard 20-foot container, instead of the 10-foot which had been in use until the suspension of the service.

CHARTERED SINO-US SHIPPING

After dropping off precipitously at the beginning of 1976, **Chinese chartered shipping continues at a very, very low level and will probably be phased out by the end of 1977.** China has reduced the amount of chartering so drastically because she is concentrating all her resources on expanding her own merchant fleet. As explained in the March 11 *Peking Review*, "In the absence of an ongoing ocean fleet, we had for a period of time to charter foreign freighters to carry export cargo and aid material going abroad . . . (but) the Party's policy has always been one of self-reliance in developing our own shipbuilding industry . . ." A survey of China's chartering of foreign vessels since the beginning of 1976 shows that utilization of this form of transportation is indeed almost at an end. Only three ships docked on the East Coast from January 1976 to the present, only six on the West Coast, eight in the Gulf, and none in the American Great Lakes ports. Only two of these, the *Atlantis* and the *Telfair Pioneer*, unloaded cargoes. These figures are in striking contrast to the 171 Chinese-chartered vessel ships which made 298 visits to American ports between 1973 and October 1975. Ships (all loading US export cargoes) from December, 1975 to February, 1977 are as follows:

EXPORT CARGOES

Ship/Registry/Tonnage	Departure Date	Port	Cargo
		WEST COAST	
Elafi/ Greece	12/27/75	Tacoma	Aluminum Ingots
	1/9/76	Bellingham	Aluminum Ingots
Nordwelle/ W. Germany	1/30/76	Los Angeles	Chemicals
	2/6/76	San Francisco	Machinery
Olympic Pioneer/ Liberia	2/19/76	Longview	Woodpulp
	3/7/76	Bellingham	Aluminum Ingots
Olympic Peace/ Liberia	3/6/76	Bellingham	Aluminum Ingots
Nanhua/ Somalia	5/15/76	Long Beach	Chemicals
Atlantis/ Greece	2/24/77	Los Angeles	Machinery
		GULF COAST	
Aegis Trade/ Greece/9025 GRT	1/20/76	New Orleans-Shanghai	Aluminum
Ionian Sea/ Somali/9165 GRT	1/25/76	Galveston-Shanghai	General Cargo
Aegean Sea/ Somali/11259 GRT	1/28/76	New Orleans	Aluminum
	2/19/76	Galveston-Shanghai	General Cargo
Nantao/ Somali/6996 GRT	3/18/76	Galveston-Shanghai	General Cargo
Coral Sea/ Somali/7651 GRT	5/19/76	Galveston-Shanghai	Synthetic Resin
Nanhua/ Somali/6987 GRT	6/19/76	Galveston-Shanghai	General Cargo
Kongsfjord/ Norway/9767 GRT	10/14/76	Galveston-Shanghai	General Cargo
Atlantis/ Greece	2/7/77	Galveston-Shanghai	General Cargo
		EAST COAST	
Alimos/ Greece	5/8/76	New York	Trucks (24)
	5/8/76	Norfolk	General Cargo
Atlantis/ Greece	11/22/76	New York	General Cargo
Telfair Pioneer/ Liberia	2/13/77	Charleston	General Cargo
	2/13/77	New York	General Cargo
		GREAT LAKES	
None			

IMPORTER'S NOTES

Briefly

- **Textiles and essential oils missions wind up selling tours of US.**
- **Three PRC trade agencies may send reps here to study quality controls.**
- **If you want letters answered from China, be detailed; separate letters for separate categories.**
- **Cashmere still scarce.**

TEXTILE DELEGATION

The second CHINATEX mission to visit this country toured the US from March 24 to May 7, at the invitation of the National Council. Heading the group was Chi Yi-kuang, Vice Manager of the Business Department. Other members included Wu Shu-tung, who has general responsibility for the US market. Mr. Wu has replaced Huang Tsien-mo, a participant in the earlier CHINATEX delegation who is now the Textiles Corporation representative in the PRC Liaison Office in Washington, D.C. Mr. Tsung Wen-tze, an old friend of many American buyers of cotton greige goods, and Mr. Li Yu-cho, who is in charge of silk piece goods, were also in the group. They spent one week each in Washington, Los Angeles and San Francisco, and three weeks in New York City. Among the topics discussed with American importers were the following: **Silk.** The Chinese expressed strong interest in the growth of American purchases of Brazilian silk. Although silk from Brazil is not yet a big factor in the US market, companies have been buying because it is almost 50% cheaper per pound than the Chinese version and immediate air delivery is possible. Importers showed the Chinese various blends of silk available in the US: cotton and tussah, Qiana and silk, silk coated with polyurethane for use in raincoats. **Cotton.** US companies praised Chinese cotton again and again for its quality, but are still requesting that reverse blends be offered. The Chinese do make 65% polyester, 35% cotton, but the duty is too high at 40%, and many of the available widths are too narrow. Importers would like wider widths in a whole variety of constructions, as well as in some kinds of silk. **Market Conditions.** US traders informed the Chinese that the cotton market is still uncertain, although some felt that business would improve by the fall. The print business is expected to make a comeback soon. **Shipping.** Deliveries continue to be too slow, especially on K Line, which has experienced severe delays in Kobe and Savannah. Sealand is felt to be the best. Its ships depart Hong Kong daily for San Francisco, Los Angeles and Seattle, from which points goods travel by landbridge to the East Coast. Importers encouraged CHINATEX to ship on Sealand. (The line is owned by American President Line, with which FARENCO is now doing some business.) **Prices.** The delegation told traders who commented on China's high prices that the price of Chinese goods would remain strong, although the world market price of cotton may go down. The delegation also mentioned: **Communications.** The CHINATEX reps cautioned that a company desiring to conduct business must first apply to the head office of the appropriate corporation. Executives who want to visit China should allow at least two months for the application to be processed and arrangements made. The Chinese also stressed that companies should deal solely with the FTC's head office in Peking before a contract has been signed. After conclusion of the contract, they should contact the branch office by letter or cable on matters concerning shipping, labelling of cartons, and the like. For instance, a trader who wants specific markings on the packages to be shipped should write to the branch of the corporation handling the order and specify how each bale should be marked. A copy of the letter should be sent to Peking. **Labelling.** Private labels, which the Chinese permitted to be sewn on garments along with the Chinese labels during 1975 but not in 1976, are now being allowed once again. According to the delegation members, it was because of the interference of the disgraced gang of four that companies had difficulty obtaining private labels last year.

NATIVE PRODUCE—LEARNING THE ESSENTIALS IN THE US

A four-person mission from the Native Produce and Animal By-products Corporation specializing in essential oils and spices recently visited American importers, brokers, compounders and manufacturers, and toured plants around the country. In the US from March 10 to April 23, the group held discussions on a large number of products including citronella, litsea cubeba, pumpkin seeds, menthol, patchuli oil, cedarwood oil, anise seed oil, cassia oil, musk oil, cumin, sasafras, camphor powder, lemon grass oil and garlic. The Chinese obtained a first-hand look at US companies and their relationships to each other, and the companies had a chance to air their concerns. The most important of these was to caution the PRC on two points: **supply and pricing.** Americans must be able to regard China as a constant supplier of essential oils and spices; if the supply or the pricing fluctuates too greatly, then the market will react negatively and will seek to develop synthetic alternatives. The Chinese responded by telling at least one company that they "will try to keep our US friends informed of the supply situation." **Americans also noted that the industry here could use more cassia oil and cassia bark than the PRC produces** although the situation has improved a great deal. The delegation was led by Feng Kuang-shun, of the Peking branch, and also included Wu Wen-an, of the Shanghai branch, an expert on essential oils except cassia; Chang Chan-hwa, of the Canton branch, an expert on cassia oil and spice; and Li

Chinese carpet design at Spring 1977 Canton Fair.

Yun-chiu, also of the Peking branch, in charge of essential oil and spice sales and shipments to the US.

FOODSTUFFS—CONTACT THE RIGHT DEPARTMENT

Importers, please note that CEROILS officials have asked that traders not inquire about a diverse range of foodstuffs, cereals, or other types of commodities all within one letter. Letters and telexes which include many separate topics are likely to be delayed. In order to expedite responses from this and other corporations, inquirers are requested to confine their inquiries to the range of subjects contained within that corporation's product range. It is quite in order to inquire about the many various products within the scope of a department's production, but it is important to use the corporation's system of departmentalization in drafting trade inquiries. The breakdown of the departments within China National Cereals, Oils and Foodstuffs Import and Export Corporation, which is listed in the corporation's COMMODITIES CATALOGUE is listed as follows:

CEREALS, OILS AND OILSEEDS
- Cereals
- Beans & Peas
- Others (Wheat bran, beet pulp, tare seed & milletspray)
- Oilseeds
- Oils
- Cakes

FOODSTUFFS
- Livestock (for food)
- Frozen Meat
- Rabbit
- Poultry
- Meat Products & Offals of Livestock & Poultry
- Frozen Game
- Eggs & Egg Products

CANNED GOODS
AQUATIC PRODUCTS
FRESH FRUITS
DRIED FRUITS & PRESERVED FRUITS, VEGETABLES
WINES, CONFECTIONERY & BISCUITS
SUGARS
DAIRY PRODUCTS
RICE MADE PRODUCTS
CONDIMENTS
OTHERS (includes noodles, chili, black beans salted, beancurd, peanut butter, sesame paste, sesame oil, salted peanuts, peanuts in shell, prawn crackers, ice cream powder, quick cooking oats, baking powder, alkaline mineral water, apple or lemon soda water and other types of soda water, salts, other types of nuts, etc.)

SHORT TAKES

The shortages of cashmere hair and cashmere sweaters on the world market will probably not be alleviated in the next year, according to Neil Norman, who returned from an April buying trip. China is expected to open a large factory in Peking for exclusive production of cashmere sweaters to replace a plant destroyed during the earthquake last year. On April 1, **President Carter rejected a rise in shoe import tariffs,** thus freeing importers of Chinese shoes from any threat of steeper duties. Instead of any official quotas, government officials are negotiating with Taiwan and South Korea, the largest sellers of shoes to the US, for informal agreements to restrict footwear shipments. **China has been promoting tourism in 1977 more than ever before.** There have been significant increases in the number of tourists visiting Canton from cruise ships. **New importers who write to Chinese FTC's** sometimes receive no reply because they don't provide enough information on their company and the products in which they are interested. The word from the Chinese is, **please be specific and detailed! India received its first official government invitation** to a Canton Fair this spring, according to the commercial attache of the Indian Embassy in Washington, D.C. Only Indians resident in other countries have been invited to the Fair thus far. **SINOCHEM's Kwangtung Branch has four sections,** handling chemical raw materials, medicines, rubber goods and petrochemicals, noted SINOCHEM representatives at the Canton Fair. The Native Produce Corporation, the CEROILS Corporation and the China Commodities Inspection Bureau (CCIB) are prepared to **consider sending responsible persons to the US to study quality controls** and related subjects, and more specifically, to participate in courses explaining methodologies. *See Council Activities.* Rumor has it that the **"gang of four" sabotaged a shipment of textiles bound for the US last year** by arranging for red dye to be poured over the material before it was freighted out of Peking. No other such incidents have come to light, however. 完

AMERICAN IMPORTS FROM THE PEOPLE'S REPUBLIC OF CHINA, 1976, BY CATEGORY

(Millions of US dollars)

Category	Total 1976	Total 1975	Change 1976 over 1975
Food and Live Animals	23.89	14.26	+ 67.5%
Beverages and Tobacco	0.35	1.77	− 80.2%
Crude Materials, Inedible except Fuels	38.42	17.59	+118.4%
Mineral Fuels, Lubricants and related Products	0.00	0.00	—
Animal and Vegetable Oils and Fats	2.43	1.91	+ 27.2%
Chemicals	18.07	15.94	+ 13.4%
Manufactured Goods by Chief Materials	67.13	79.37	− 15.4%
Machinery and Transport Equipment	1.33	0.30	+343.3%
Miscellaneous Manufactured Articles, NEC	47.69	25.67	+ 85.8%
Items and Transactions, Not Classified	1.64	1.57	+ 4.5%
TOTAL	**200.96**	**158.38**	**+ 26.9%**

CHINA INTERNATIONAL NOTES

THE SINO-JAPANESE LONG TERM AGREEMENT Will it Play?

A delegation from the Japanese Federation of Economic Organizations (Keidanren) to Peking has agreed to conclude a long-term agreement with the PRC in which China will supply oil and coal to Japan, in return for supplies of Japanese plant, equipment and iron and steel. The pending agreement has major significance: • The Chinese wanted it: Talks were initiated by Peking, suggesting that the PRC now wants to stabilize its trade with Japan, assuring Toyko of a dominant position in China's trade over the next 5-10 years. It is the first such agreement China will have signed. • The agreement will guarantee China export earnings for the next ten years, principally from oil, allowing Peking to plan for imports of technology through 1982-1987. It suggests Peking is anticipating a long period of economic stability. • China will be able to factor extended deferred payments into financial planning: The agreement calls for 7-10 year deferred payments rather than five years as at present, and refers to specific interest rates. • The agreement guarantees Japan a market for a whole range of technological products. • But this agreement, first discussed in October 1975 when 15 million tons of crude "plus alpha" (+ α: subject to variable conditions) was projected for delivery to Japan by 1981, is still unsigned and subject to uncertainty. (The original "plus alpha" concept has been dropped since the Chinese could not plan on it.) • The question remains: Can Japan rely on it? Internal confusion in China and market conditions in Japan disrupted the planning for the last proposal: Will they do so again?

Features of the Proposed Agreement—Exports to Japan

Oil China will supply Japan with 10 million tons of crude and 5 million tons of oil by 1981, a 120 percent increase from the 6.1 million ton level of 1976. This necessitates an ambitious 20.3% increase in oil movements yearly. Pricing will be flexible, not necessarily following OPEC guidelines.

Coal China will sell just under five million tons of general purpose coal yearly to the Japanese Electric Energy Company and other buyers, as of 1980. Coking coal will be available for Japan by 1984 or 1985.

Natural Gas LNG is not factored into the agreement: China does not have the facilities to liquify, store, and export LNG; however, this project is under discussion and probably has been "allocated" to Japan for future development. According to Japanese sources, despite problems of transportation costs, viscosity, waxiness, and price, Japan may be able to absorb 25-30 million tons of Chinese oil products five years from now, half of it for heavy fuel purposes and the other half for conversion into gasoline, kerosene, gas oil, and other products with smaller fuel oil yields. With 1981 production requirements in mind, several Japanese oil companies will expand their processing facilities to include the type cracking equipment necessary to handle Chinese crude. Idemitsu Kosan has already decided to construct a new plant for this purpose at its Hyogo County refinery. For a reported ¥ 60 billion (US $ 200 million), Idemitsu will increase the plant's capacity from 110,000 bb/d to 210,000 bb/d. Scheduled for completion between April 1980 and April 1981, the plan will increase Hyogo's atmospheric distillation capacity by 100,000 bb/d and will include a 70,000 bb/d residual oil cracking facility.

Exports to China

Technology Under the plan, Japan will supply China with coal drilling, coal dressing, transportation equipment, port, oil drilling, metallurgy, petrochemical and power generating equipment and knowhow as well as construction material and steel. In other words China will continue buying traditional Japanese manufactures during the 10-year period. Dollar volume is apparently not specified, except in one case. **Mining and Construction Equipment** A trade agreement which appears to be part of the larger ten-year accord was signed during December 1976 and January 1977 between the China National Machinery Import and Export Corporation and the Japan-China Machinery Trade Council. Covering "shovels, cranes, bulldozers and mining dump trucks," the pact sets the lower limit of Japanese mining equipment to be exported to China in 1977 at $15 million. **Payments** China will pay for Japan's products on long-term, 7-10 year terms at negotiated interest rates. Concrete details of this arrangement have been recently discussed between the two sides.

CHINA BUYING REPORTS

Talks between major Japanese steel corporation and a MINMETALS delegation began in Tokyo on March 23 to discuss **Japan's ordinary steel products export to China in the first half of this year.** The Japanese corporations include Nippon Steel Corporation and Nippon Kokan Kaisha. The Japanese side hopes to obtain an increase in the price of steel products and to agree on the export of about 1.6 million tons. Steel export talks with China are held twice annually. During 1976, Japan exported a total of 2.25 million tons. The PRC may purchase from Japan a **complete ammonia and urea plant similar to the world's largest** operated unit by Nihon Ammonia Co. Tokyo sources indicate that this heralds a renewal of China's program for major plant negotiations suspended in consequence of the upheavals last year. Dowa Koei Co., Ltd., of Japan, has won an order for ¥ **100,000,000 worth of desulfurization equipment** from China's TECHIMPORT. The plant is the first smoke desulfurization plant to be installed in China. Capable of processing 52,300 cubic meters of smoke per hour and able to reduce SO_x content from 2,100 ppm to 126 ppm, the equipment is scheduled to be installed near Nanking in the iron sulfide pelletizing plant ordered from Kowa Seiko and Toyo Engineering. Delivery of the desulfurization plant will occur between the end of this year and early 1978. Other **potential purchases from Japan include flat springs for trucks from NHK Spring Co. and screws.** Japanese screw makers will send a second mission to China in July or August, following the first sent there early in March, in order to increase export of screws to the Chinese

TEN LEADING US IMPORTS FROM THE PRC IN 1976

Category	Value	Percent of All Exports
Print cloth shirting, nec, white cotton, not fancy or figured, not bleached or colored	$13,591,278	6.8
Tin unwrought, other than alloys of tin*	13,195,279	6.6
Feathers, not meeting federal standards	11,033,009	5.5
Antiques other than furniture and silverware*	9,436,559	4.7
Bristles, crude or processed in any way for use in brushes or other articles	8,063,715	4.0
Plain woven fabric, not combed, not fancy or figured, having average yarn numbers in the A, B or C classes	7,157,252	3.6
Fireworks	6,565,282	3.3
Bamboo baskets and bags, lined or unlined	4,245,626	2.1
Floor covering pile, hand inserted, valued over 66.67¢ per square foot	3,694,747	1.8
Raw silk, in skeins, as reeled from the cocoon, or re-reeled, but not processed, other than wild or tussah silk*	3,682,773	1.8
TOTAL LEADING TEN IMPORTS	**$80,665,520**	**40.1**

* Tariff free categories

market. Possible Chinese purchases of flat springs are regarded by Japanese automakers as integral to China's promotion of the auto industry as one of the pillars of its Fifth Five-Year Plan. China is said to be hoping not only to boost auto production but also to improve the quality of its autos. Sources close to the Japanese auto industry indicate that China will also buy engine parts and interior fittings from Japan if its deal with NHK Spring is successful. A **urea-fertilizer export contract has been finalized** between the Japan Urea and Ammonium Sulfate Industry Association and the PRC. A total of 200,000 metric tons will be delivered to China in the April-June period. The export price is estimated at $110 per ton, about 20% more than for the same volume contracted last year. Chinese purchasing agencies have ordered 240,000 sq. m. of **Clarino, a substitute for natural leather, from Japan.** This is the first time the PRC has ordered synthetic leather for shoe manufacture. The Clarino contracted for is worth ¥ 400 million and is **enough to provide uppers for one million pairs of shoes.** China has bought **1,000 tons of sodium cyanate from Japan** for loading between June and September. It is to be exported by Japan Soda, Showa Denko and Mitsui-Toatsu Chemicals. The CIF price agreed upon, ¥ 200,000 per ton, is said to be approximately 30% higher than that agreed upon for the previous contract. A spokesman for one of the three Japanese makers indicated that the Chinese side had said that it would order 200-300 tons of sodium cyanate monthly after October this year. He hoped that an annual export of this product would reach 2,400 tons. In addition, China has concluded contracts on the purchase from Japan of about 4,000 tons of caprolactam, 3,000 tons of emulsifiers, 10,000 tons of phthalic acid anhydride, 4,000 tons of benzol, 2,000 tons of alkylbenzene, and 500 tons of agricultural chemicals. **Smiths Industries of Britain has received a contract** from the PRC, **valued at $448,800 for instruments and instrument systems for Hawker Siddeley-Trident transports,** including air date computers, rate-gyro units, vertical reference units, attitude directors, servoamplifiers and radio magnetic indicators. As part of the export agreement, Smiths Industries is **training Chinese technicians** on the operation and overhaul of Trident systems and instruments. In addition, the French company, **Thomson-C.S.F. will supply China with $36.6 million worth of navigational aids** consisting of radar equipment, equipment for processing information, screen consoles and support equipment necessary for aerial navigation control. Negotiations reportedly took several months and terms were agreed upon in late March. Details of the transaction, however, have not been released. The **Icelandic Aluminum Co.** has agreed to sell **3,000 tons of aluminum ingots** at a price of $2.9 million. The aluminum is scheduled for June delivery; the Chinese will send their own freighter to Iceland to fetch the metal. On March 10, Iraq and the PRC signed a contract under which **Iraq will export fertilizer to China;** the contract calls for monthly shipments which began in March. **The Philippines** has signed a **$12 million contract** to supply China with **40,000 tons of copper concentrates.** Delivery will take place in the next six months. Philippine government reports state that this deal will bring to some $36 million the value of copper concentrate supplied to the PRC since trade began in 1974. According to the *Australian Financial Review,* **China is likely to emerge,** after a brief absence from the market, **as a major buyer of pig iron and iron ore from Australia.** The *Review* indicates that the purchases will directly benefit two properties belonging to the huge Broken Hill Proprietary Company in eastern Australia—a blast furnace at Kwinana in the Kimberleys and the iron ore mines on Cockatoo Island. **A British expansion joint manufacturing company, Teddington Bellows,** is **looking towards China** as a future buyer. Expansion joints are used in numerous industries and are vital in aircraft fuel and air-conditioning systems, exhaust manifolds and power generating stations. **Several British scientific instrument manufacturers have received Chinese orders** over the past six months: Vickers Medical (two Dualchannel 300 blood analysis systems), Solartron Electronic Group (monitoring and data-logging instruments displayed at the 48 Group Exhibition in November, together with others ordered around the same time, totalling between £100,000 and £200,000) and Instron (four hydraulic tensile testing machines worth approximately £250,000).

CHINA SELLING REPORTS

The **China meat ban may be lifted,** according to the Japanese Agriculture-Forestry Minister. The postwar import ban on beef and other fresh meats

from China has been continued for the official reason that foot-and-mouth disease, an acute contagious disease affecting cloven-footed animals, may invade Japan via unprocessed meat. Recent reports, however, indicate that an inquiry is being made on the possibility of Japanese quarantine experts inspecting Chinese slaughter houses and raw meat processing plants. **Canada's protectionist attitude on textile trade now curbs Chinese sales of nylon fabrics.** The Canadian government announced in February that nylon fabrics from China and Hong Kong would be added to its import control list. According to informed sources, most of the **80 metric tons of gold** moved from China to Britain in December remains in Chinese possession and is stored away in London banks. Earlier reports (see *China Business Review* Vol. 4 No. 2) indicated that the 80-ton consignment, valued at $350 million, had already been disposed of. However, experts note that such a large gold transaction occurring within a short time would have sparked a noticeable market disruption. They point out that the price of gold in recent months has remained steady. The stored portion of the gold will probably be sold in the next few months. A contrary view maintains that because demand for gold is relatively strong at present, then disposal of the bulk of Chinese gold would not have caused significant market fluctuation. This view maintains that the 80 tons of gold have already been absorbed easily. **The Japan Animal Feed Industry Association** has informed the PRC that **it wants to increase the import volume of Chinese leaf meal** to 100,000 tons from last year's imports of 27,000 tons. The Chinese side has accepted the offer in principle; serious negotiation will start shortly. The **Japan-China Machinery Trade Council is studying the possibility of importing Chinese machine tools,** at the strong request of the Chinese. The Japanese machine tool industry is flooded with low-cost, universal-type machine tools from South Korea and Taiwan. If Chinese machine tools are added to them, as seems unavoidable, Japanese makers of universal-type machine tools will be dealt a crushing blow.

DELEGATIONS TO CHINA

AUSTRIA, 3/77, **Scientific** delegation led by Professor Erich Schmid, Vice President of the Austrian Academy of Sciences.

BELGIUM, 3/77, Fifteen-member delegation of the **Federation of Metallic Manufacturer Industrial Enterprises,** led by V. Urbain, Vice President of the Federation, visited Peking, Shanghai and Wuhsi.

BULGARIA, 3/13/77, **Government trade** delegation led by K. Kozmov, Deputy Minister of Foreign Trade, arrived in Peking.

BURUNDI, 3/21/77, **Press** delegation led by Ragmond Minani, Secretary General of the Ministry of Information, arrived.

CHAD, 3/30/77, **Trade** delegation led by Matroud Mabrouk Mahamad Ali, Director General of the National Society of Commerce, arrived.

EGYPT, 3/17/77, **Government trade** delegation arrived.

ETHIOPIA, 4/5/77, **Government** delegation arrived.

GREAT BRITAIN, 3/31/77, The **first British agricultural engineering** delegation to the PRC left London as guests of the China Agricultural Machinery Society of Peking. The object of the ten-person mission is to bring to China's attention the advantages of British technical know-how and the quality of British products. The delegation was led by Frank Moore, Sales Director of Howard Rotavator Co., Ltd.

GREAT BRITAIN, 4/77, **Conservative Party** Leader Margaret Thatcher visited China.

GUYANA, 4/14/77, **Head of State** Arthur Chung left for China.

IRAN, 3/77, Delegation of the Arya Mehr **Industrial University** led by its President.

JAPAN, 3/10/77, Three-member group from the Japan **Ammonium Sulphate Industry Association** left for Peking to discuss the price and amount of urea fertilizer to be exported from Japan.

JAPAN, 3/77, Reports that the Japan **Automobile Parts Manufacturers' Association** has decided to send a mission to China by the end of the next fiscal year. Meanwhile, the Japan **Automobile Manufacturers' Association** also plans to send a mission to China this year.

JAPAN, 4/77, Reports that the Japan **Electric Measuring Instruments** Manufacturers' Association plans to send a delegation to China between June and October. The mission will aim to accelerate sales of Japanese **pollution control and oil and natural gas measuring equipment,** according to the Instruments Association.

JAPAN, 4/77, Reports that the PRC has invited the Osaka chapter of the Japan Association for the Promotion of International Trade to dispatch **a textile delegation** to Peking **in June,**

CHINATEX delegation to US visits Lowenstein's in New York, April, 1977.

The Council's Importers Steering Committee delegation in Peking, April 1977.

in an effort to expand sales of Chinese textiles in Japan. The mission would visit China for two weeks and would concentrate on increasing sales, particularly of clothing, through trading firms.

JAPAN, 5/4-14/77, **Banking** delegation led by Nobuya Hagura, Vice President of DaiIchi Kangyo Bank, conferred with members of the People's Bank of China and the Bank of China on problems such as **settlement of Japan-China bank accounts.** The group also held discussions with officials of the CCPIT and the China-Japan Friendship Association.

MALI, 3/10/77, **Trade** delegation led by Oumar Coulibaly, Technical Counsellor of the Ministry of Finance and Commerce, arrived in Peking.

NEPAL, 3/21/77, **Press** delegation left for home.

NORTH KOREA, 3/9/77, **Government trade** delegation led by the Minister of Foreign Trade Kye Ung-Tae arrived in Peking to sign a long-term trade agreement.

ROMANIA, 4/77, **Military** delegation led by Colonel General Vasile Ionel, Vice Minister of National Defense.

SWEDEN, 3/77, **Geology** group led by Professor J. R. Hessland toured northeast and southern China at the invitation of the Chinese Academy of Sciences.

VIETNAM, 3/15/77, **Public health** delegation concluded its visit and left for home.

WEST GERMANY, 3/21/77, **Petroleum** delegation led by Professor D. Welte, Director of the Institute for Petroleum and Organic Geochemistry in the Jeulich nuclear research plant, began a 17-day fact-finding visit to the PRC.

WEST SAMOA, 3/77, **Parliament** delegation led by Leota Leuluaialii Itaua Ali, speaker of the Legislative Assembly of West Samoa.

YUGOSLAVIA, 3/77, Delegation of the Federation of Yugoslav **Journalists.**

ZAMBIA, 3/77, **Banking** delegation led by L. J. Mwananshiku, Governor of the Bank of Zambia.

DELEGATIONS FROM CHINA

AFGHANISTAN, 4/8/77, **Government trade** delegation led by Chai Shu-fan, Vice Minister of Foreign Trade, left Peking. Members will discuss and sign a trade and payments agreement.

CANADA, 3/29/77, **Government trade** delegation led by Sun So-chang left for home after a 9-day visit in Canada. During its visit, the delegation attended the fourth session of the Sino-Canada joint trade committee meetings from March 21-23.

ITALY, 4/1/77, Five-member **biocybernetics** study group of the Academy of Sciences led by Tsai Sui-ang, Vice-Chairman of the Revolutionary Committee of the Shanghai Institute of Physiology, left Peking.

JAPAN, 2/77, Reports that Chinese delegation will visit Tokyo in July to **purchase** additional Japanese **industrial plants and equipment,** according to Takamura Morita, leader of the Kokubosoku mission to Peking in February.

JAPAN, 3/15/77, Five-member **film** delegation led by Chien Hsiao-chang left Peking for a "Chinese Film Festival."

KUWAIT, 3/22/77, **Agricultural** delegation led by Kung Tsan-tung, Deputy Director of the Land Reclamation Bureau of the Ministry of Agriculture and Forestry, left Peking.

PAKISTAN, 3/21/77, **Military goodwill** deelgation, led by Yang Cheng-wu, Deputy Chief of General Staff, arrived in Rawalpindi.

ROMANIA, 3/18/77, Seven-member **seismology** delegation led by Wei I-ching, Deputy Director of the National Seismological Bureau, left Peking.

EXHIBITIONS

ALGERIA, 3/11-20/77, **Economic achievements** exhibition in Peking was visited by nearly 100,000 people. This was the first of the kind that an African country has held in China. Exhibits included industrial products, minerals, light industrial goods, foodstuffs, native produce, textiles, garments and artware.

BELGIUM, 3/21/77, Belgian **tapestries** exhibition, sponsored by the Chinese People's Association for Friendship with Foreign Countries, opened.

JAPAN, 5/3-22/77, The **first Chinese exhibitions since Hua Kuo-feng became premier and party chairman** held in Nagoya. At the 70,000-square-meter exposition site, light industrial products will be shown, agricultural produce sold, motion pictures screened and traditional crafts displayed.

JAPAN, 9/2-16/77, Industrial exhibition on **processed metals and construction materials** will be held in Peking.

MEXICO, 3/24/77, Chinese **arts and crafts** and propaganda pictures exhibit opened in Mexico City.

NETHERLANDS, 4/20/77, Philips Group exhibition for electronic and

analytical instruments opened in Peking. Items on display included the Edax energy dispersive system, spectographs, electronic analytical instruments and testers for use in environmental protection. The opening address was given by A.G. de Boer, Managing Director of the Science and Industry Division of N. V. Philips, who participated in the 1973 Netherlands Exhibition in Peking and was subsequently invited to return with an independent display.

SAN FRANCISCO, 3/13/77, Chinese **Han and Tang murals** exhibition closed after six weeks display at the Chinese Cultural Center.

AGREEMENTS

ALBANIA, 1/30/77, One protocol on **goods exchange and payments** and another on the utilization of the **Chinese loan** to Albania.

AUSTRIA, 4/4/77, Notes affirming an agreement on **trademark registration** were exchanged.

BULGARIA, 3/15/77, **Goods exchange and payments** agreement for 1977.

EEC, 3/30/77, Reports that the EEC has opened a new series of **exploratory talks** with the PRC at **expert and technical levels,** with a view to concluding a trade agreement. The resumption of contacts between the two sides follows a meeting in February between EEC External Relations Commissioner and China's EEC Ambassador Huan Hsiang.

EGYPT, 3/21/77, **Long-term trade agreement** and a **payment agreement,** to remain in force from January 1, 1977 to December 31, 1980, and also a **trade protocol** for 1977. Under the terms of the agreement, Egypt is to import foodstuffs, tobacco, machinery, clothes, paper and office items. In exchange, China will buy cotton, rice, peanuts, phosphates, drugs, and linen. The protocol provides for a **33% increase in trade** between the two countries, bringing the volume of trade up to about £80 million.

NORTH KOREA, 3/12/77, Agreement on **delivery of major commodities** for 1977-81 and a protocol on commodity delivery for 1977.

VIETNAM, 3/19/77, Agreement on the **mutual supply of goods** and on **payments** in 1977.

FOREIGN AID

CHAD, 3/28/77, Signing of an agreement on the building of **a stadium** in Ndjamena with Chinese assistance.

GUINEA, 3/17/77, Agricultural development scheme described as **"hydro-agricultural project repaired** with Chinese assistance" handed over. A number of Chinese aid projects in Guinea have been in the form of repairs to existing development.

MALI, 3/25/77, N'debougou **rice mill** built with Chinese assistance was handed over to Mali. Its construction lasted from June 1976 until December 1976 and the mill has capacity of processing 18,750 tons of rice annually.

MALTA, 4/3/77, Official inauguration of a **spinning and weaving** mill built with Chinese assistance.

NIGER, 2/24/77, Official inauguration of **reclaimed rice-farm** area in Niamey, undertaken with Chinese assistance under 1975 protocol.

PAKISTAN, 2/22/77, Reports that China has agreed to construct a **sheet glass plant.** The **turnkey contract** will be signed with Techimport and will include training of Pakistani personnel. The projected plant will have a capacity of 50 tons a day.

SIERRA LEONE, 3/11/77, Reports of rapid progress on the Chinese-aided construction of Kambia **highway bridge.**

SIERRA LEONE, 3/14/77, Chinese experts paid preliminary inspection visit to the site for a proposed 5,000 acre **sugar plantation** to be ready for any start-up problems. Work on the project was supposed to begin in late March.

SRI LANKA, 3/21/77, Reports that **artificial spawning** of Chinese **grass carp** is a success after joint efforts by Sri Lanka and Chinese technicians. In mid-March, they conducted three experiments and obtained one million eggs and bred 220,000 fry after nine days.

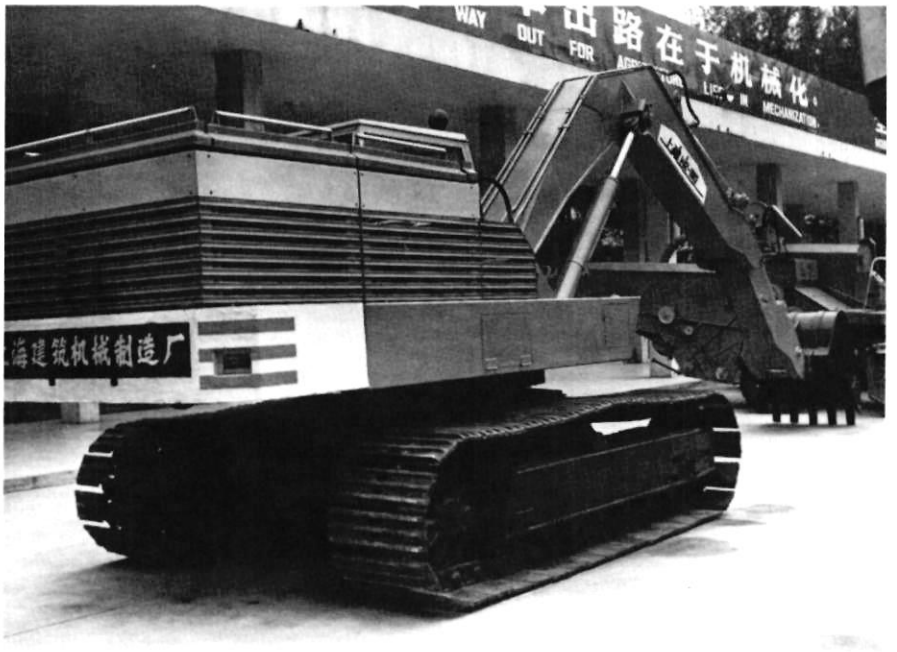
SUDAN, 3/3/77, Reports that a group of Chinese geologists has been working with Sudanese geologists since 1974, searching for **chrome ore in Blue Nile Province.**

TUNISIA, 3/77, Reports from Tunis indicate that a **second Chinese loan worth $15.7 million,** following the 1972 loan of $36 million, has been negotiated. The present loan is to be ear-marked for financing the Medjerda CapBon Canal.

YEMEN, 4/2/77, Foundations stone-laying ceremony for the **fishery company** which will be built with the aid of Chinese technicians.

ZAIRE, 3/14/77, Reports of inspections of **rice fields** cultivated with the help of Chinese technicians and of the construction site of Zairian **farm tools plant** jointly built by Zaire and the PRC. 完

Earth mover built at Shanghai Construction Equipment Factory on display at Spring 1977 Canton Fair.



The China Business Review

is Published by

The National Council for United States-China Trade
1050 Seventeenth Street, N.W., Suite 350
Washington, D.C. 20036

202/331-0290

FULL MEMBERSHIP

Membership in the National Council for United States-China Trade is open to American firms interested in doing business with the People's Republic of China. The principal categories of membership are (1) corporations or business entities with sales or gross income equal to or greater than $50 million for the fiscal year immediately preceding the date of application for membership, for whom the annual dues are $2,875; (2) those with sales or gross income of between $20 million and $50 million for the fiscal year immediately preceding the date of application for membership, for whom the annual dues are $1,150; and (3) those with sales or gross income of less than $20 million for the fiscal year immediately preceding the date of application for membership, for whom the annual dues are $575.

In a special effort to assist smaller American firms interested in importing goods from China, the National Council has a special category of affiliated membership. Companies engaged primarily in importing, and having sales or gross income of less than $10 million in the year immediately preceding the date of application for membership, may join the National Council upon payment of annual dues of $287.50.

Importers in the National Council constitute a special committee whose activities are designed not only to acquaint importers and potential importers with Chinese manufacturing, sales and trading practices, but also to aid the Chinese Foreign Trade Corporations in understanding the import regulations, consumer tastes and other market conditions in the United States.