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CENTRAL INTELLIGENCE AGENCY - STRATEGIC BRANCH  
WASHINGTON, D.C. 20505

15 May 1981

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MEMORANDUM FOR: J. H. Rixse  
The Special Assistant  
Office of the Secretary of Defense

SUBJECT : Prospects for US Sales of Defense Related  
Equipment to China

REFERENCE : Department of Defense Memorandum X13803,  
Potential Munitions and Commodity Export  
Cases with China, April 10, 1981

1. NFAC analysts have reviewed the papers you provided on prospective transfers of materiel to China and have prepared the attached memorandum in keeping with your conversation with [REDACTED]. To provide a more orderly analysis, they grouped the items on the Department of Defense lists into eight general categories and then reviewed, in order: China's needs for the equipment, China's ability to pay, and anticipated Soviet reactions to the transfer.

2. Our response is tailored to your request and is being provided only to the Department of Defense. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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Sec Def Cont Nr. X-14365

CENTRAL INTELLIGENCE AGENCY  
National Foreign Assessment Center  
12 May 1981

MEMORANDUM

Prospects For US Sales of Defense-Related Equipment to China

The central goals of China's leadership are stabilization of the economy and pursuit of the "Four Modernizations," and stabilization demands an austerity that appears to rule out large purchases of military equipment and technology over the next few years. Moreover, because the military has the lowest priority within the modernization program, we expect that purchases of military-related items will be few and highly selective during the early 1980s. Those items that China actually buys from the United States will be only a tiny fraction of her "shopping list" and of the lists of items proposed for sale by US companies. [REDACTED]

China's Limited Objectives for Acquiring Military Technology

China's strategy for developing a science and technology base for military applications continues to emphasize indigenous efforts, supplemented by selected application of Western design features and engineering practices and by judicious acquisition of critical Western technologies for specific applications. This approach has been dictated by constraints in China's financial, technical, and resource bases, and by the leadership's desire to avoid recreating that dependency upon outside powers that bound China in the 1950s. [REDACTED]

[REDACTED]

[REDACTED]

The most recent phase of China's quest for modernization began following the fall of the Gang of Four in 1976 with ambitious plans for rapid growth in industry and agriculture. By late 1978, it became apparent that such plans exceeded the physical and economic resources available, and many programs were cut back or cancelled. In 1979, China entered a "Period of Readjustment"--originally to last three, but now lengthened to five or more years--intended to provide the basis upon which a more measured modernization program could succeed. The goal of the readjustment is to increase production of electric power, expand the number of competent technicians, and limit spending of foreign exchange so that critical technologies from abroad can be more readily absorbed and production put on a more cost-efficient basis by the mid-1980s.

Finances always have been one of China's weakest links. Even before the readjustment period, deals under negotiation with the West often were delayed or broken off by Chinese inability to pay. The economists in China's top leadership realized in 1979 that even the relatively limited purchases from abroad could not be absorbed successfully within the economy and were depleting the PRC's modest foreign exchange assets. For these reasons, the leadership has tightened its control over economic activities previously decentralized and has cancelled long-term projects and expensive deals that will not contribute to China's ability to produce exportable items. Moreover, the leadership has cut the State Budget by nearly 14 percent and probably has reduced the military's budget for 1981 by a similar or higher percentage.

We do not yet know whether the PLA's share of the budget cut will affect personnel, operations and maintenance, training, construction, procurement, or RDT&E. If the cuts fall most heavily in the last category, we can expect defense modernization to assume a very slow pace indeed. China's leaders probably intend to invest as much as possible in their industrial and technical base over the next three to five years with the hope that, by the late 1980s, Chinese industry will be able to supply some pieces of new equipment to the PLA.

Despite China's continuing budgetary and financial problems, the PRC will maintain interest in advanced foreign technology that meets its highest priority military needs. Chinese "interest," however, does not necessarily indicate a willingness to buy. As a general framework for understanding PRC needs and ability to pay for military items, we note that China generally prefers:

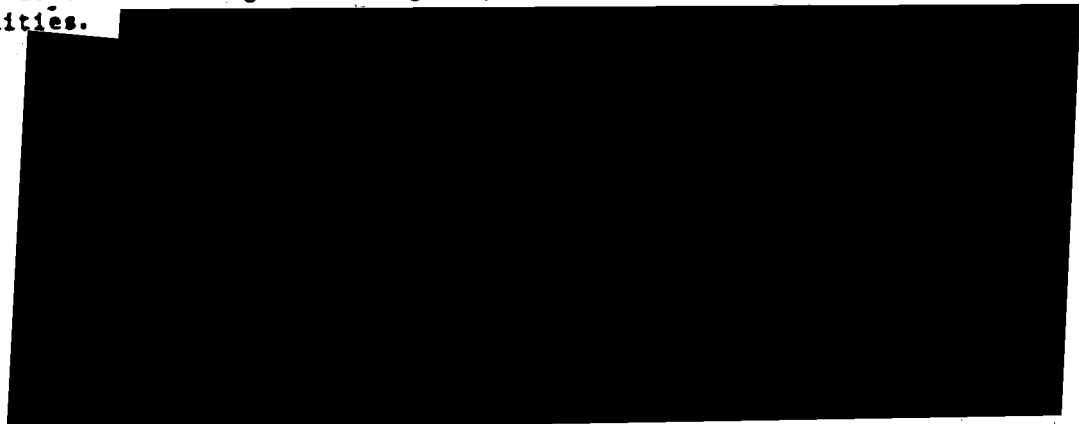
- Acquiring technology rather than end-items.
- Purchasing items that have civilian as well as military use.
- Gaining an ability to produce items that can be exported to earn hard currency or reduce dependence on imports.

The Chinese will not buy items of solely military value unless they:

- Help fill one of China's major defense gaps.
- Far exceed China's ability to manufacture or develop, or
- Can be used as prototypes for later serial production.

Priority of Chinese Needs And Potential Soviet Responses


China's military deficiencies are many and its need for new and improved equipment is great, but civilian economists in China's top leadership emphasize the need for belt-tightening in the procurement of weapons and equipment to achieve a more balanced economy. Accordingly, the Chinese high command is concentrating on filling only the most serious gaps in PLA capabilities.



The Soviets would engage in "worst case" analysis of any military-related sales to China and would interpret any US move, however modest, to help China strengthen its defense as further "proof" of a de facto "alliance" between Washington and Beijing. The degree of outrage in the Kremlin would depend on several factors:

- The size of the sale.
  - The nature of the equipment or technology to be transferred, and
- 

Soviet options in response to transfers are, however, limited so long as US-Soviet relations remain strained and the Soviets consider military action against China unacceptable under any but the most pressing circumstances.



The sale of any equipment that--to the Soviet mind--could be used by the Chinese to upgrade their strategic forces would be of the greatest concern to the Kremlin. Examples range from components that could conceivably be used in

an ICBM guidance system to equipment that might enhance Chinese ASW capabilities and thus allow China to better protect its SSBNs. To attempt to forestall US sales to China, the Soviets will warn of "dire consequences" and encourage media coverage characterizing such sales as destabilizing. The intent will be to induce US allies--some of whom are uneasy about the budding Sino-US security relationship--to dissuade us from engaging in such transactions. Moscow also will claim that the United States has much more to gain by cooperating with the USSR than by selling arms and defense-related technology to China. [REDACTED]

If any major sale occurs, the Soviets will choose one of two broad options: to redouble their initiatives for arms control talks with the West, or to increase their defense efforts and militancy on the assumption that a Sino-US "alliance" is unavoidable. The USSR might well adopt a more truculent attitude toward the Chinese while pressing harder for arms control agreements with the West, hoping that such initiatives would complicate US efforts to work out a closer relationship with China and make Beijing unhappy with the limited results of its opening to the West. The Soviets presumably would hesitate to close out options for bargaining on arms control, particularly in view of their strained economy and present preoccupation with events in Poland and Afghanistan. In any event, the Kremlin's primary interest will be to prevent the Sino-US relationship from deepening into a significant military collaboration directed against the USSR but to avoid, if possible, a rupture in relations with the West. [REDACTED]

The Soviets are most likely to take strong negative action--rather than merely to protest--if they believe that the US is assisting in China's strategic weapons development. The most likely response in this case would be a harder line in strategic arms negotiations--claiming that Soviet considerations are now greater due to the enhanced Chinese threat--accompanied by a further buildup of the USSR's strategic forces facing both East and West. A more extreme action would be to threaten to break off existing arms control negotiations with the US, including an unwillingness to resume SALT negotiations. Though somewhat less likely, the Soviets could declare previous US-Soviet agreements on arms control issues--for example, the ABM treaty signed in 1972--null and void under the present circumstances. Then, too, the Soviets might conclude that they now had less reason to avoid direct conflict with the United States, and step up their aid to revolutionary forces--especially in Central America. [REDACTED]

Second on the list of Soviet concerns would be US sales of any material that the Chinese could use to significantly offset the USSR's advantages gained through strengthening its conventional forces opposite China over the past 15 years. Many of the items being considered--if not already approved--come under this heading. The most ominous examples from the Soviet point of

view are among ground forces equipment--such as an infantry fighting vehicle and armored personnel carrier--but the USSR probably would be almost as upset over the sale of radars, communications gear for improving China's battlefield management capabilities, or materiel that enhanced its ability to collect intelligence by technical means. Moscow would vehemently protest the sale of such major items to China, and it probably would both take enhanced Chinese military capability into account in future force deployments in Siberia and seek to strengthen its military relationship with Hanoi. The Kremlin also would redouble its efforts to convince China, Japan, and other interested parties to adopt the Soviet proposal on confidence-building measures for the Far East, though the Soviets would not want to be seen as bargaining from a weakened position on this issue. [REDACTED]

The Soviets would be less concerned about other sales--of general industrial items or equipment that, while having some indirect military value, would have no immediate, direct impact on the Sino-Soviet military balance. Nonetheless, Moscow would be apprehensive about the cumulative effect of such sales, particularly those that eroded its technological edge over Beijing, and about how general modernization might add to the threat that China could pose by the year 2000. Consequently, the Soviets would protest even sales of general dual-use items, if only to dissuade other Western countries from proceeding with similar transactions. The Soviets also might invoke trade sanctions against US companies--provided that the USSR had access to alternate sources of supply and markets elsewhere in the world--to make the US more aware of the economic and political cost of selling arms and defense-related technology to China. Finally, Moscow probably would be more upset by grants or sales or liberal credits than by cash transactions. [REDACTED]

#### Analysis of Export Cases on Lists "A" [REDACTED] and "B" [REDACTED]

We have grouped the items on the Department of Defense lists "A" and "B" into eight general categories. These are, in order, aircraft and avionics, computers, radars, communications gear, ground forces equipment, earth data collection equipment, space technology, and general industrial items. Where appropriate, we distinguished between items on the "B" list [REDACTED] from those on the "A" list [REDACTED]. We did not consider items that had been disapproved, though in some cases we examined items that have been voluntarily withdrawn from consideration. [REDACTED]

The costs of items and extent of Chinese interest appear to differ widely among the several categories. Aside from the industrial items-- [REDACTED]

[REDACTED]--the two costliest categories are aircraft and computers. [REDACTED]

[REDACTED] The largest single deal, coproduction of the DC-9/80, is estimated at more than \$300 million. Computer sales, [REDACTED] were notable for their number and variety. Radars and communications gear comprise the next largest block of potential exports, though the costs are unclear. China's interest in purchasing listed ground force equipment seems relatively small, and we believe that sales will be few. We judge that China's interest in purchasing US space technology also is slight. [REDACTED]

#### Aircraft and Avionics

From the "B" list. From China's perspective, the most advantageous deal is McDonnell's offer to coproduce the DC-9/80. In addition to developing an ability to produce a modern and urgently needed transport aircraft for domestic use, China would acquire an FAA-certified production facility and much new technical and managerial expertise in the production of aircraft. The deal evidently has been approved by the highest officials in China but is being held in abeyance due to lack of funds. If and when the necessary \$300 million becomes available, we believe that China will proceed with this program. [REDACTED]

Other deals in the "approved" column include technical data, specifications, and turboshaft engines for use in helicopters. China needs turbine-engine helicopters--it can produce only the piston-engine Soviet MI-4--for both commercial and military purposes. [REDACTED]

[REDACTED] Helicopters are not as urgently needed as are fixed-wing transport aircraft, so we believe that the DC-9/80 will take precedence. [REDACTED]

From the "A" list. This list includes additional helicopter and transport aircraft, as well as proposals for simulators, doppler navigation systems, and light aircraft. [REDACTED]

[REDACTED] we believe that the Chinese have little interest in Boeing's CH-47 Chinook or Hughes' 500MD helicopters. Lockheed probably is eager to sell its C-130 transport, and such an aircraft would be useful to the Chinese. As we understand the proposal, however, Lockheed is

offering finished aircraft but not production technology. If so, China probably will not buy. [REDACTED]

[REDACTED]

Moscow would be upset about sales of most of the aircraft and avionics items. It would worry about the long-term impact of the DC-9/80 deal but would be even more apprehensive about the implications of a few of the other items in this category, such as helicopter engines, C-130 aircraft, and CH-47 or 500MD helicopters, because of their potential contribution to China's military capabilities against the USSR. [REDACTED]

[REDACTED]

In contrast, the Soviets probably would have a relatively mild reaction to the sale of flight training simulators, which would contribute only to a long-term improvement in pilot skills. [REDACTED]

#### Computers

The Chinese appear to have an insatiable appetite--arising from a great need--for US computers and computer technology. Many US manufacturers have sold China computer hardware and associated software packages. [REDACTED]

[REDACTED] Additionally, because most of the proposed deals are valued at less than \$1 million, the Chinese could readily pay for the equipment. China already has a line of domestic computers based on the PDP-11/20, the PDP-11/60, and the PDP-11/70. [REDACTED]

[REDACTED]



[REDACTED]

China has a high priority for acquiring turnkey plants, equipment, and processes for producing integrated circuits (ICs). The low yields of Chinese-made ICs hinder progress in the computer field and adversely affect China's ability to mass produce critical, military-related microelectronics items. [REDACTED]

Chinese computer designers regard acquisition of disk technology as a high priority. [REDACTED]

[REDACTED] Chinese scientific institutes have been importing disk systems for reverse engineering and would like to import 30 MB to 75 MB disks. [REDACTED]

Moscow almost certainly suspects that China will use some of the computers obtained from the United States to improve the command and control of its strategic missile force and other elements of the military arsenal. Soviet "worst case" analysis presumably would not allow the Kremlin to be "misled" by the relatively small size of the deals under consideration or by US references to the limited capabilities of the items in question. Even if the Soviets accept such statements, they will worry that China will find a way to upgrade the computers and use them to support the strategic weapons program. [REDACTED]

#### Radars

Provision of radars to the Chinese would help to improve their air defense capabilities, which now are seriously deficient. Low altitude air surveillance within China is spotty, and coverage beyond the northern border is weak. The PLA's tracking radars are inaccurate, and its data handling systems are mostly manual and slow. [REDACTED]

[REDACTED] The Chinese would like to acquire the technology to produce such radars, but they probably realize that sales of finished [REDACTED]

[REDACTED]

products are as much as can be hoped for now. If Beijing purchased in quantity both radars and data handling systems to process information acquired by the radars and speed it to weapons controllers, China's weak air defenses would be improved markedly. Needed quantities could cost up to several billion dollars, however, and would be prohibitively expensive at this time.

[REDACTED]

Also on the "offered" list were several sets of ground surveillance radars (GSRs). The Chinese do possess an early model Soviet GSR--the PORK TROUGH--which can detect vehicles at several thousand meters and is used mainly as a spotting device for artillery units. The PORK TROUGH is only sparsely deployed,

[REDACTED]

Although the cost of a limited number of GSRs probably would be moderate (no prices were given), the Chinese might look upon such equipment as "luxury items" and pass them up.

[REDACTED]

[REDACTED]

US sales of radars to China would provoke an intense protest from Moscow, because the Soviets know that such equipment will offset some of the progress that the Soviets have made over the past 15 years in improving their ability to strike China from the air. Ground surveillance radars might draw a more subdued response, although the Soviets will be concerned that such equipment would help improve China's readiness against a conventional ground attack. The Soviets will protest vehemently if the US sells China any EW equipment, because the Soviets would perceive such equipment as enhancing China's overall military capability.

[REDACTED]

#### Communications Gear

We see strong prospects for a PRC attempt to arrange a licensing or coproduction deal in communications equipment.

[REDACTED]

[REDACTED]

Moscow would be very unhappy about the sale of military communications gear to China because such sales would help the PLA improve its battle management capabilities significantly. Although such sales might not, by themselves, make the Soviets more apprehensive about the danger of a Chinese attack in the Soviet Far East, they would add to concern about a second Chinese attack on Vietnam, which could--in turn--involve the USSR in an unwelcome war. [REDACTED]

Ground Forces Equipment

Serious Chinese attempts to purchase--at least in quantity--items listed in this category seem unlikely. We note that the only approved ("B" list) items for China include infrared detection equipment and presumably some technology, [REDACTED]

[REDACTED] On the "A" list are a number of items that we believe are of little interest to the Chinese, except possibly as prototypes. [REDACTED]

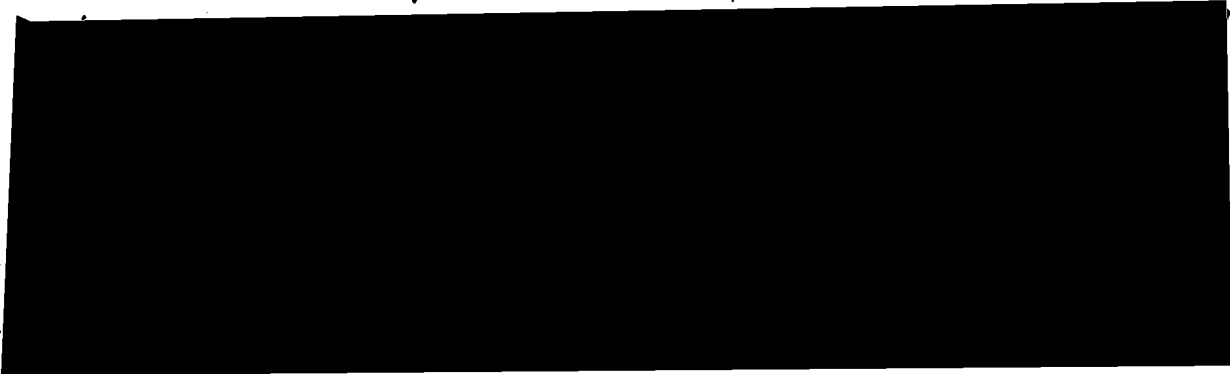
[REDACTED] Chilled by the prohibitive expense of significantly mechanizing its huge (3.5 million) ground forces, China almost certainly will show greater interest in heavy trucks--for moving troops, ammunition, supplies, and casualties--than in tracked carriers. [REDACTED]

[REDACTED] We know of no Chinese need for US small arms or ammunition. [REDACTED]

The Chinese may seek to buy some affordable, specialized or dual-use equipment that could support the ground forces. [REDACTED]

Most of the ground forces equipment of the type China appears interested in buying probably would draw only moderate protests, [REDACTED]

[REDACTED] Upgrading the tank force would help offset a key Chinese weakness--the PLA's inability to adequately counter superior Soviet armored units. The Soviets might respond by further strengthening their military forces in Siberia and the Soviet Far East.  
[REDACTED]



Space Technology and General Industrial Items

China's interest in, and ability to pay for, these two categories of items are mixed. Although the Chinese may have a genuine interest in advanced space technology for applications beyond communications or intelligence collection, Beijing recently announced that China's manned space program will have to wait until the 1990s. [REDACTED]

Despite the recently-announced cancellations of whole-plant purchases and related tilt away from heavy industries and metallurgy toward light industries and export activities, we see most items on the General Industrial list as remaining attractive to the Chinese. [REDACTED]



Major Soviet concern will stem from Moscow's view that any sales involving space technology probably will help China develop a reconnaissance satellite system. General industrial items, however, will be viewed as having no direct impact on the present military balance in East Asia and thus probably draw only mild complaints. However, even sales of general items will cause some apprehension in Moscow, mainly concerning the cumulative contribution to helping China develop its economy so that it eventually could support a thorough modernization of the armed forces. Moreover, Moscow's eagerness to dissuade other-countries from following the US lead in sales to China probably will motivate it to threaten trade sanctions against US companies. [REDACTED]