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US Arms For China—A New Look

Lieutenant Colonel Andrew R. Finlayson, US Marine Corps

If there is not sufficient equipment, supplies, and training, even the best army . . . will be wiped out by the enemy at once.

V.I. Lenin

In the fall of 1975 Michael Pillsbury, an analyst with the Rand Corporation, authored an article in *Foreign Affairs* that examined the feasibility and advisability of initiating US military assistance and arms sales to the People's Republic of China (PRC).¹ This article produced a plethora of scholarly debate and, as could be expected, a strong and negative reaction from the Soviet Union.² Since the publication of Mr. Pillsbury's article, the official US policy on this subject has been one of caution—a “go slow” approach to arms transfers to China that reflects a broad consensus among government and academic analysts who have studied the problem. Although the United States has permitted the sale of transport aircraft, helicopters, flight training systems, trucks, aerial cameras and certain types of radar, as well as Tow antitank and Hawk antiaircraft missiles, it has been reluctant to provide China with the types of sophisticated, technologically advanced systems that the People's Liberation Army (PLA) appears interested in when the subject of security is discussed by the two nations.³

This cautious policy is the product of careful analysis of the strategic implications that US arms transfers to China *might* have. Basically, the salient arguments made in defense of this policy are:

- Providing arms to the PRC would cause a shift in the balance of power in East Asia, thus posing a threat to friends and allies of the United States in the region, principally Japan and Taiwan, and could motivate the Soviet Union to launch a preemptive strike against the PRC.⁴
- Strengthening a China that does not now possess a stable leadership, or an orderly process for the transfer of power between competing factions, could result in the United States providing arms to a country that at some future date might use these weapons contrary to US interests.⁵

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- Rearming China is too costly for the United States and would place an unacceptable strain on the industrial capability of our nation.⁶ One 1980 Department of Defense study placed a price tag of between \$41 billion to \$63 billion on such a program.⁷ A 1984 estimate placed the cost as high as \$100 billion.⁸

- China's military doctrine has not advanced to the point where high technology weapons can be employed effectively.⁹

- China's industrial base is incapable of absorbing the advanced technologies associated with US weaponry.¹⁰

These arguments against providing China with US arms are cogent and valid when viewed in isolation. However, they fail to take into account that the employment of any weapon system is based on the capability of the weapon system to support a tactical or strategic scenario. The basic flaw of these contrary arguments to China's defensive needs is a purely American interpretation of how that defense ought to be achieved. It is both simplistic and dangerous to examine the question of arms transfers to China, or any other country for that matter, with the predisposition that the best solution to any country's defense problem is a transposition of American organizations, doctrines and technologies regardless of their fit.

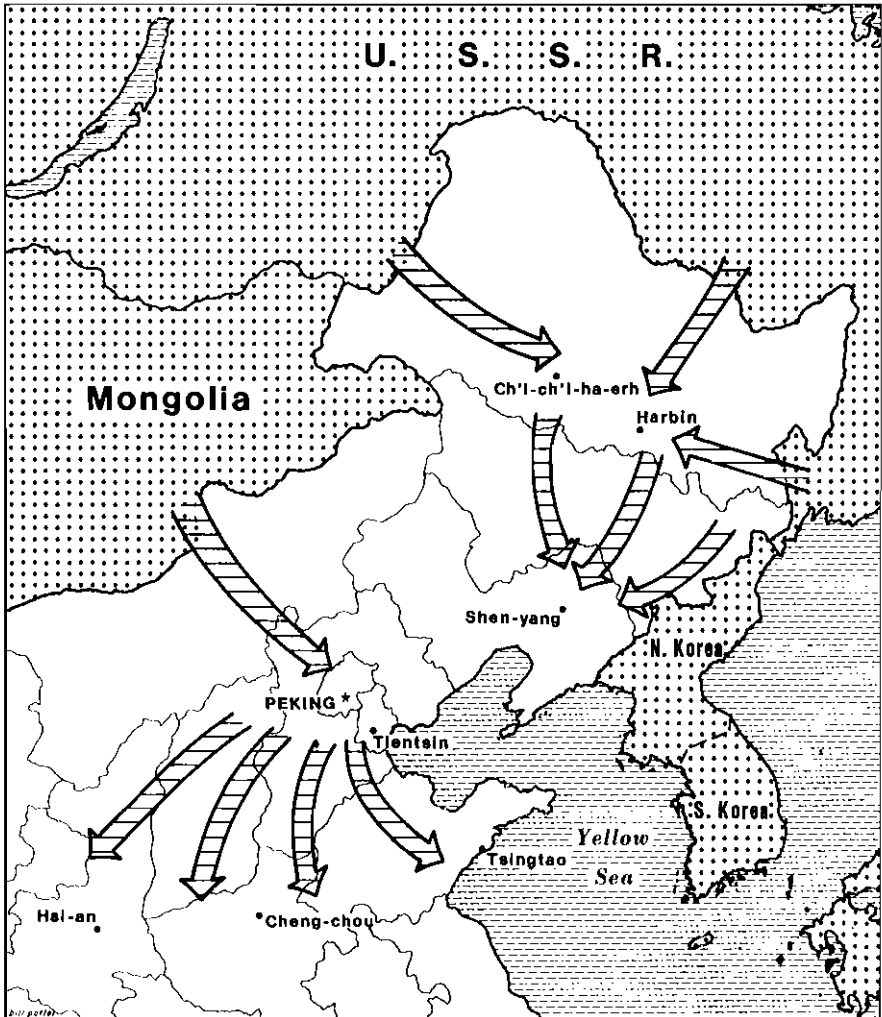
This paper will deal with the problem of arms transfers to China by addressing the most likely form of Soviet attack on the PRC and the most likely response by China. By using China's defense scheme of maneuver, it will attempt to identify a weapons mix of US arms that would greatly enhance China's ability to counter a Soviet attack and, yet, not run counter to the legitimate concerns of the United States as outlined above.

Soviet Threat Scenario

A Soviet attack on China would most likely follow the 1945 model for the destruction of the Japanese Kwangtung Army, when the entire northeast of China was conquered in ten days.¹¹ Today's Soviet troop dispositions are quite similar to those of Soviet forces prior to their attack in 1945.¹² Their planned scheme of maneuver would necessitate that the following general requirements be met in order to be successful: strategic surprise; terrain suitable for the employment of large mechanized forces; secure supply lines, especially fuel supply lines; and absolute air superiority in the area of operation.

If any of these requirements are not met by the attacking Soviet forces, the likelihood of a Soviet success would not be good. Soviet logistical constraints will necessitate a strategy of rapid annihilation, taking advantage of its superiority in firepower and mobility. The Soviets simply cannot allow a recurrence of the logistical bottlenecks that occurred during the 1945 Manchurian campaign or their 1968 occupation of Czechoslovakia, when entire brigades ran out of fuel and food and were unable to carry out their

assigned missions.¹³ In essence, the Soviet scheme of maneuver is dependent upon the massive application of supporting arms, possibly including chemical and tactical nuclear weapons; the rapid neutralization or destruction of the less mobile Chinese forces; the maintenance of an effective logistical flow to maintain heavy ammunition and fuel expenditures; and the prevention of Chinese forces from massing at close range, thus negating the effect of the Soviet supporting arms advantage.



The Soviet offensive scheme of maneuver can be divided into three distinct phases (see map).

Phase I—A three-pronged attack with one army group crossing the Amur River and advancing south through the Lesser Khingan Range onto the

Manchurian Plain to Ch'i-ch'i-ha-erh and Ha-erh-pin (Harbin), while another army group attacks west and south from the line Khabarovsk-Vladivostok, and a third army group drives east from Borzya toward Ha-erh-pin across the Greater Khingau Range. Since speed is essential in order to trap forward-deployed Chinese units, extensive use of both airborne and airmobile units will be essential. The necessity to maintain a high rate of advance may require selective tactical nuclear employment. A naval blockade would most likely be imposed during this phase and maintained during subsequent phases.

The most propitious time of the year for a Soviet attack of Manchuria would be during the winter months—there are several good reasons for this. First, the rivers in Heilungkiang and Kirin provinces are frozen for seven months out of the year, thus making it possible for trucks, infantry and some armored personnel carriers to cross these rivers without benefit of bridging equipment. Second, the Soviet Army is better equipped to fight in cold weather than the Chinese. The Soviet forces are mechanized and can use their armored vehicles as protection, while the predominantly foot-mobile Chinese infantry would find the process of digging in extremely difficult with a frostline that is several feet deep.¹⁴ Being unable to dig in quickly would make the Chinese very vulnerable if caught in the open by the mobile combined forces of the Soviet Army. Third, the stable high-pressure cell over central and northeast Asia during the winter months would make flying conditions excellent, thus facilitating close air support operations for the Russian ground forces and vital reconnaissance and interdiction missions ahead of the advancing Russian columns.¹⁵ Finally, the prevailing winter winds are to the southeast and southwest. This condition would allow the Soviet forces to more efficiently employ chemical, biological and nuclear weapons, since the downwind fallout patterns would blow away from the attacking Russians.¹⁶

Both rainfall and flooding would affect military operations in Manchuria and North China. During the winter months, precipitation in this area is light. However, with the advent of summer, rainfall becomes a serious problem to both attacker and defender alike. In Manchuria, heavy rains begin in May and continue until September, turning much of the Manchurian Plain into a muddy quagmire. The same is true from June to September for North China when heavy rains make off-road travel nearly impossible.¹⁷ The impact of heavy summer rains would most likely have a greater effect on the Soviet forces, since few roads in Manchuria or North China are hard-surfaced, all-weather roads, and the highly mechanized-motorized forces of the Soviet Army would be more dependent on road trafficability than the Chinese infantry. Consequently, it would be most advantageous to the Russians to launch their Phase I operations during the early winter months.

Phase II—Once Chinese strategic reserve units have been deployed to the Manchurian Plain, a massive strike along the Dzamin Uud-Kalgan-Peking caravan route would most likely be launched by an armored-motorized army group. Concurrent with this main attack will be an economy of force secondary attack by the three Soviet Manchurian Army groups on Shen-yang and the Liaoning Peninsula. The three Manchurian Army groups will utilize the Ch'i-ch'i-ha-erh to Hsin Li Tun, Ha-erh-pin to Shen-yang, and Kirin to Fu-shun rail routes as axes of advance for their converging attack on Shen-yang.

Phase III—Follow-on (KGB) units will consolidate and pacify the area north and northeast of Peking, while the four Soviet Army groups drive south, stopping at the Yellow River, while continued air interdiction strikes will be mounted against the remaining Chinese units south of the Yellow River. No attempt will be made to occupy any territory south of the Yellow River. A Soviet occupation of Manchuria alone will result in the loss of half of China's confirmed oil resources, a third of its steel-making capability, half of its motor vehicle industry, and nearly 70 percent of its railroad rolling stock and aircraft production.¹⁸ Such losses would have a catastrophic, if not fatal, impact on China's ability to wage any form of conventional warfare, especially if the Soviet naval blockade was effectively deployed to the China-Vietnam border.

China's Defensive Response

The Chinese would face a dilemma in dealing with the preceding offensive scheme of maneuver employed by the Russians. They could either defend forward positions and try to prevent a Soviet penetration of the Manchurian and North China Plain, or they could pursue their expressed defensive policy of "luring in deep" the Soviet Army groups, trading space for time and forcing a war of attrition on their enemy. If executed properly, both defensive schemes of maneuver could be successful; however, both courses of action also entail considerable risk for the Chinese.

To deploy valuable combined arms divisions in forward positions along the Sino-Soviet border in an attempt to block or slow down the Soviet advance in terrain favorable to the defense could invite disaster. Such action would play to the Soviet strength in the initial phase of the Soviet Manchurian offensive, by allowing them to take advantage of superior firepower and mobility to cut off and destroy forward-deployed units. Furthermore, Manchuria's terrain and transport system in the border regions does not lend itself to lateral movement, and the advantages that accrue from operating on interior lines would not be realized until the border areas had been penetrated and the area of operations shifted to the Ha-erh-pin region with its radiating road and rail net.

An “in depth” defense also carries with it severe risks for the Chinese. By allowing the Soviet Army groups to penetrate to the Manchurian and North China Plain without inflicting any appreciable attrition allows the Soviet forces to deploy in terrain favorable for the employment of their combined arms armies. Chinese units, which are relatively deficient in organic transport assets, would find themselves under severe pressure from Soviet mobile divisions while being subjected to intense air attack. Not to be overlooked is that the distance from the Soviet-occupied Outer Mongolian border to Peking is less than 400 miles. A very limited amount of space can be traded for time before the symbolic political center of the PRC is threatened.

There is strong evidence that China’s military leadership recognizes that the defensive strategy of “luring in deep” the Soviet Army groups is no longer viable. Chinese articles on defensive strategy indicate that the Chinese would like to conduct a mobile defense—one that would force the Soviets to fight in terrain that would minimize their mechanized, combined arms superiority and not allow the Soviets to occupy Manchuria and North China.¹⁹ If it is China’s intention to pursue a policy of forward, mobile defense, then it is necessary for China to develop doctrine to support such a defense and to field an appropriate weapons mix to implement it.

China has already taken the first steps in developing a doctrine for dealing with the Soviet threat and has formulated a basic conceptual framework for the integration of an appropriate synthesis of weapons and tactics.²⁰ Primary emphasis has gone to upgrading the mobility and firepower of its infantry divisions and armored units. It has also conducted several joint exercises involving the coordination of supporting arms, and naval forces and airborne units in support of rapidly moving ground forces.²¹ China has also begun to modernize and expand her railway system and to build modern, all-weather highways throughout the nation. These efforts, along with the purchase of foreign trucks, will increase the mobility of its forces.

Clearly, it is within the capability of China to increase the mobility of its forces and, with practice, to master the complexities of coordinating joint operations. However, China does not now possess the capability to overcome deficiencies in two areas vital for the success of any doctrine involving a mobile defense—air supremacy and mobile, antimechanized firepower. Without a weapons mix that would allow them to overcome these critical weaknesses, they would be unable to inflict sufficient attrition on Soviet forces before they deployed in terrain favorable to Soviet tactics and weapons. In short, if Soviet forces gain access to favorable terrain, the Chinese efforts at improving mobility and training will be of little value.

China’s Arms Requirements

As stated earlier, any Soviet attack against China requires four general requirements be met in order to be successful. The problem of *strategic surprise*

has been made much more difficult for the Soviets since the United States has made electronic intelligence available to the Chinese—this should provide the PLA with early warning of any impending Soviet attack. For the Soviets to ensure that their mechanized forces deploy in *suitable terrain*, the Soviets must now allow these forces to be significantly weakened before they have penetrated the Greater Khingan and Ch'ang-pai Shan Ranges of Manchuria or before they have taken the Kalgan Pass northwest of Peking. These geographical obstacles must be cleared and remain open if Soviet mechanized forces are to exploit the advantages that accrue to such forces operating on the North China Plain. The Red army's *secure supply lines* can only be sustained by preventing the Chinese from disrupting the Trans-Siberian railroad and destroying the fuel depots that are supporting the advancing mechanized columns. Finally, Soviet *air superiority* over Manchuria and North China is essential, without it the other three requirements cannot be met.

If these four ingredients are fundamental to the success of the Soviet attack, what weapons could the United States provide to China—either through sales or grants or a combination of both—that would provide her with the capability to mount an effective defensive scheme of maneuver? To deal with this problem we must first identify those weapons for which China needs procurement assistance in order to implement a forward defense strategy.

Of first priority is China's aviation industry. Although China is deficient in many areas of defense production, her most serious problems exist in aircraft production.²² It is unlikely that China will be able to overcome these problems in the near future without external assistance; thus, her ability to challenge Soviet air superiority is extremely limited.²³

Following close behind aircraft production is the production of precision-guided munitions. China does not possess the design technology and manufacturing base to produce the antitank precision-guided weapons (ATGM) necessary to defeat the Soviet mechanized threat. Although China is currently making a variant of the Soviet "Sagger" ATGM, it is being produced in limited numbers and is restricted in range and effectiveness.²⁴

Taking these deficiencies into account, China's two most pressing weapons needs are: a first line, air supremacy fighter capable of denying local air superiority to the Soviets; and a mobile, precision-guided, antiarmor weapon system that can be deployed rapidly in both Manchuria and North China to defeat Soviet mechanized forces before they deploy in favorable terrain.

A Proposed Weapons Mix

There are two US weapons systems that are well suited to the defensive strategy of the PRC. They provide strength where China is weak and the acquisition of these systems by the Chinese would be difficult to challenge by the proponents of the "go slow" arms transfer policy. These two systems are

Northrop's F-20 Tigershark export fighter and Bell Corporation's AH-1S antiarmor attack helicopter (see chart).

High Yield—Low Cost US Weapons Mix for the PRC

	F-20	AH-1S
Type	Air Supremacy Fighter	Antiarmor Attack Helo
Speed	2.1 Mach	170 kts
Range	345 miles	315 miles
Armament	Sidewinder Missiles 20-mm Cannon	8 Tow 20/30-mm MG
Avionics	Advanced	Simple, Lightweight
Cost	\$9.4 million	\$4.9 million

Sources: *Jane's All the World's Aircraft 1984-85*, pp. 399-400, 282; also *Military Cost Handbook 1984*, pp. 2-1, 2-2.

Chart

The F-20 is an improved version of the very capable F-5E. It is easier to maintain and less expensive than the F-15 or F-16; yet, it is an excellent air supremacy fighter fully capable of defeating the latest Soviet aircraft. It is not second-rate but represents the worldwide "state of the art" in avionics and weapons efficiency. Its relatively low cost stems from the interchangeability of many F-5E components, the ability to use existing F-5E support and training systems, and the high reliability and low maintenance associated with its General Electric F404 engine.²⁵ Two hundred F-20s stationed in China's Shen-yang and Peking Military Regions could prevent the Soviet Union from achieving air superiority over Manchuria and North China during the critical first week of a Soviet invasion. In this respect, the F-20 represents the single most important weapon system the Chinese could obtain from the United States in terms of strategy implementation.

The AH-1S is a powerful antitank attack helicopter with simple, lightweight, easily maintained avionics. Its eight Tow antitank guided missiles and 20-mm machine gun make it an efficient and extremely deadly tank killer, ideally suited for employment in the mountainous terrain of Manchuria, Inner Mongolia and the Kalgan Pass area where Soviet armored columns could be confined and exposed. With F-20s providing local superiority, these attack helicopters could exact a heavy toll upon the Soviet mechanized Army groups. Two hundred AH-1Ss would be needed by the Chinese to implement their mobile, forward defense strategy.

The cost of this weapons mix of two hundred F-20s and 200 AH-1Ss, along with 12,000 Tows for the helicopters, would come to approximately \$2.99 billion in 1984 dollars.²⁶ Although this figure is not small, it is substantially less than the Pentagon figures cited earlier and is clearly within China's means. As Lucian Pye has pointed out, it could be a test of China's sincerity about responding to the Soviet threat by offering weapons such as these that are clearly to her advantage to possess.²⁷ Coproduction agreements could be worked out that would allow China to assemble the F-20 and AH-1S in their homeland, thus reducing the cost of such a weapons mix and making it even more attractive to the Chinese leadership. The Chinese could further reduce the cost of the weapons mix by purchasing the Hughes 500MD/Tow helicopter instead of the AH-1S. It is a less capable aircraft but still a potent tank killer.

Obviously, the provision of arms to China cannot be viewed in isolation, nor can it be addressed only in terms of the dynamics of Sino-Soviet-United States relations. China is a regional power with neighbors who view any increase in China's military strength as a possible threat. The concerns of these nations are legitimate and must be considered by the United States before any attempt is made to provide weapons to the PRC. However, the weapons mix identified in this paper poses no real threat to any of the allies of the United States in East Asia. The short combat ranges of both the F-20 and AH-1S make them of limited value in any scenario involving South Korea, and Japan is clearly far beyond the combat range of these aircraft. These systems are designed primarily as defensive weapons with the only practical utility of the AH-1S being antimechanized defense. Both Japan and South Korea would find it difficult to mount effective counterarguments for China possessing such weapons.

Taiwan would be another matter. The F-20 could well pose some threat to Taiwan. Air superiority is a necessary component of any successful amphibious operation and the F-20's range could make it a potent weapon over the Taiwan Straits. But most analysts do not believe that China possesses the sea or airlift capabilities to assure the success of an amphibious invasion of Taiwan. They argue that such an undertaking would be too costly in terms of men, equipment and materiel. Should the PRC decide to move against Taiwan, the more likely form of action would be a naval blockade.²⁸ Given this rationale, the utility of the F-20 would be greatly reduced and the AH-1S would, of course, be of no use at all.

The F-20's limited range does not make it a serious threat to South Korea, even if the Chinese station these aircraft in the Shen-yang Military Region. However, should the Chinese transfer these aircraft to the North Koreans, the problems of South Korea's air defense will be significantly complicated. However, this is a moot question since North Korea could obtain an equally capable aircraft from the Soviets.

As regards the Soviets, since both the F-20 and the AH-1S are primarily defensive weapons, it would be difficult for Moscow to argue that they pose an offensive threat to them. But they do pose a significant obstacle to the offensive intentions of the Soviet Union and represent a complex planning problem for the Soviet military leadership.

There are opportunities, as well as risks, in every sale or transfer of weapons. Obviously, policymakers must carefully weigh the advantages and disadvantages of each situation before committing this nation to providing weapons to any nation. This paper, while not necessarily advocating the sale of weapons to the PRC, has sought to broaden the scope of thought in this important area by attempting to identify a weapons mix that is compatible with current Chinese military doctrine, that is technologically absorbable, that is affordable and, finally, that is benign in terms of threat to either the United States or her allies in East Asia. While not a panacea for China's defense needs, this weapons mix would provide the maximum utility to the Chinese with the minimum risk to her non-Soviet neighbors. By making this weapons mix available to the Chinese, the United States could increase stability and reduce the danger of conflict in East Asia by reducing the Soviet Union's overall military advantage. It would also add to the Soviet Union's uncertainty as to whether or not the United States would aid China in the event of a Soviet attack. At the very minimum, it would probably cause the Soviet Union to tie down an ever greater percentage of its forces on the Sino-Soviet border where the cost of maintaining these units is relatively expensive. Such a situation would surely provide a concomitant advantage to Nato, where the imbalance in conventional forces is of considerable concern to the United States and her West European allies.

Notes

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