U.S. ARMS FOR CHINA--A NEW LOOK

by

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A paper submitted to the Faculty of the Naval War College for competition for the Admiral Richard G. Colbert Memorial Prize.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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Richard Megargee 6 May 85
Faculty Research Advisor Date

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U.S. ARMS FOR CHINA - A NEW LOOK

CHAPTER I

INTRODUCTION

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, wrote an article in Foreign Affairs that examined the feasibility and advisability of initiating United States military assistance and arms sales to the People's Republic of China (PRC). This article produced a plethora of scholarly debate and, as could be expected, a strong and negative reaction from the Soviet Union. Since the publication of Mr. Pillsbury's article, the official United States 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 made available 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 the People's Liberation Army (PLA) appears to be interested in when such subjects are discussed by the two nations.

This cautious policy has evolved as a result of careful analysis of the strategic implications that United States arms transfers to China might have. Basically, the salient arguments made in defense of this policy are:
1. 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.  

2. 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 might decide at some future date to use these weapons contrary to United States interests.  

3. Rearming China is too costly for the United States and would place an unacceptable strain on the industrial capability of our nation. One 1980 Department of Defense study placed a price tag of between $41 billion to $63 billion on such a program. Today, with inflation taken into account, this estimate would be as high as $100 billion.  

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

5. China's industrial base is incapable of absorbing the advanced technologies associated with United States weaponry.

All of the above arguments against providing China with United States arms are cogent and valid, especially if viewed only in isolation. However, these arguments all fail to take into account the basic logic that the employment of any weapon system is based fundamentally on the perceived utility of that weapon system to support a tactical or strategic scenario. The basic flaw of the arguments cited above is the assumption that the answer to China's
defense lies in a purely American interpretation of how that
defense ought to be achieved. Indeed, it is disastrously
simplistic to examine the question of arms transfers to China, or
any other country for that matter, in terms that presuppose the
best solution to any country's defense problem to be a complete
transposition of American organizations, doctrines and technologies
whether they fit that country's needs or not.

This paper will take a different approach to the problem of
arms transfers to China. It will address the most likely form of
Soviet attack on the PRC, the most likely response by China and,
finally, using China's defensive scheme of maneuver, it will
attempt to identify a weapons mix that the United States could sell
to China 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.
CHAPTER II

SOVIET THREAT SCENARIO

A Soviet attack on China would most likely follow the 1945 model for the destruction of the Japanese Kwangtung Army, when in ten days the entire northeast of China was conquered. Present Soviet troop dispositions are quite similar to those of Soviet forces prior to their attack in 1945. Their planned scheme of maneuver, which is best described as a form of "blitzkrieg," would necessitate that the following general requirements be met in order to be successful:

1. Strategic surprise.
2. Terrain suitable for the employment of large mechanized forces.
3. Secure supply lines, especially fuel supply lines.
4. Absolute air superiority in the area of operation.

If any of these requirements are not met by the attacking Soviet forces, it is very unlikely that Soviet prospects for success will be good. Logistical constraints will necessitate a rapid battle of annihilation, taking advantage of the Soviet superiority in firepower and mobility. Under no circumstances can the Soviet forces allow a recurrence of the logistical bottlenecks that occurred during their 1945 campaign, or their 1968 occupation of Czechoslovakia where entire brigades ran out of fuel and food and were unable to carry out their assigned missions. Nor can the Soviet forces allow the Chinese to mass at close range, thus negating the effect of the Soviet supporting arms advantage. In
The essence of 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.

The Soviet offensive scheme of maneuver can be divided into three distinct phases (See Appendix 1).

1. **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 Chi Chi Ha Erh and Ha Erh Pin, 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 Khingan 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 will 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 reasons for this. The first is that 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. Secondly, 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 infantry, foot-mobile Chinese would find the process of digging in extremely difficult with a frostline that is several feet deep. Being unable to dig in deeply and quickly would make the Chinese very vulnerable if caught in the open by the mobile combined arms forces of the Soviet Army. Thirdly, 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 providing vital reconnaissance and interdiction missions ahead of the advancing Russian columns. Finally, the prevailing winter winds are to the southeast and southwest, thus allowing the Soviet forces to more efficiently employ chemical, biological and nuclear weapons, since the downwind fallout patterns would blow away from the attacking Russians. Both rainfall and the effects of flooding will greatly affect operations in Manchuria and North China. During the winter months, precipitation is light in northeast and North China; 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 in North China when heavy rains make off-road travel nearly impossible. 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 foot-bound Chinese infantry. Consequently, it would be most advantageous to the Russians to launch their Phase I operations during the early winter months.

2. **Phase II** - Once Chinese strategic reserve units have been deployed to the Manchurian Plain, a massive strike along the caravan route, Dzamin Uud-Kalgan-Peking, will 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 Shenyang and the Liaoning Peninsula. The three Manchurian army groups will utilize the Chi Chi Ha Erh - Hsin Li Tun, Ha Erh Piu - Shenyang, and Kirin - Fushun rail routes as axes of advance for their converging attack on the Liaoning Peninsula.

3. **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 into Hopeh and Shansi, 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. Such losses would have a catastrophic, if not fatal, impact on China's ability to wage any form of warfare.
above guerrilla warfare, especially if the Soviet naval blockade was effectively deployed to the China-Vietnam border.
CHAPTER III
CHINA'S DEFENSIVE RESPONSE

The Chinese would be faced with a dilemma in the event the preceding offensive scheme of maneuver was employed by the Russians. They could either defend in 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, since it would lend itself to the objective of the initial phase of the Soviet Manchurian offensive--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 on them 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 enveloped by the far more mobile Soviet divisions while being subjected to intense air attack. It should also be pointed out that the distance from the Soviet occupied Outer Mongolian border to Peking is less than 400 miles, so 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 a viable one. Chinese articles on defensive strategy indicate that the Chinese would like to conduct a mobile defense 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.¹ 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 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.² China has placed its primary emphasis on 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, naval forces and airborne units in support of rapidly moving ground
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 presently possess the capability to overcome its deficiencies in two areas vital for the success of any doctrine involving a mobile defense--air supremacy and mobile, anti-mechanized firepower. Without a weapons mix that will allow them to overcome these critical weaknesses, they will not be able to weaken the Soviet forces sufficiently before these forces deploy in terrain favorable to Soviet tactics and weapons. If Soviet forces gain access to favorable terrain, the Chinese efforts at improving mobility and training will be of little value.
As stated earlier, any Soviet attack against China necessitates that 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 that would give at least some warning of an impending Soviet attack. For the Soviets to ensure that their mechanized forces deploy in suitable terrain they must now allow their forces to be weakened before they have penetrated the Greater Khingan and Chang Pai Shan Ranges of Manchuria or before they have taken the Kalgan Pass northwest of Peking. These geographical obstacles must be cleared successfully, and kept clear, if Soviet mechanized forces are to exploit the advantages that accrue to such forces operating on the North China Plain. Secure supply lines can only be maintained if the Chinese are prevented from disrupting the Trans-Siberian railroad and destroying the fuel depots that are supporting the advancing mechanized columns. Finally, air superiority over Manchuria and North China is essential to success for the Soviets, for without it the other three requirements can never 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 take into account China's weakest areas and, yet, contribute most significantly to her defensive scheme of maneuver?
To answer this question, we must first identify China's weakest areas relative to the implementation of a forward defense strategy.

China's weakest area is her aviation industry. Although China is deficient in many areas of defense production, her most serious problems exist in aircraft production.\textsuperscript{1} 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.\textsuperscript{2}

Following close behind aircraft production as a major problem area is the production of precision guided munitions. China does not possess the design technology and manufacturing acumen to produce the antitank precision guided weapons (ATGM) necessary to defeat the Soviet mechanized threat. Although China is currently producing a variant of the Soviet "Sagger" ATGM, it is not being produced in large numbers and it is limited in range and effectiveness.\textsuperscript{3}

Taking into account China's desired defense strategy and her two most salient weaknesses related to this defense strategy, it is logical and apparent that her two most pressing weapons needs are:

1. A first-line, air supremacy fighter capable of denying local air superiority to the Soviets, and

2. A mobile, precision-guided, anti-armor weapon system that can be deployed rapidly in both Manchuria and North China to defeat Soviet mechanized forces before they deploy in favorable terrain.

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CHAPTER V

A PROPOSED WEAPONS MIX

Two United States weapons systems are ideally suited to the defensive strategy of the PRC and both provide strength where China is weak. Additionally, the acquisition of these systems by the Chinese would be difficult to challenge using any of the arguments cited by the proponents of the "go slow" arms transfer policy. These two systems are Northrop's F-20 TIGERSHARK export lighter and Bell Corporation's AH-1S anti-armor attack helicopter (See Appendix 2).

The F-20 is an improved version of the very capable F-5E. It is easier to maintain and less expensive than such U.S. fighters as 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 results from the inter-changeability 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. Two hundred F-20's stationed in China's Shenyang 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 would be channelized and exposed. With F-20's providing local air superiority, these attack helicopters could exact a heavy toll upon the Soviet mechanized army groups. Two hundred AH-1S's would be needed by the Chinese to implement their mobile, forward defense strategy.

The cost of this weapons mix of two hundred F-20's and 200 AH-1S's, along with 12,000 TOW's for the helicopters, would come to approximately $2.99 billion in 1984 dollars. Although this figure is not small, it is substantially less than the Pentagon figures cited earlier in the paper and is clearly within China's ability to afford if they are serious about the Soviet threat. In fact, as Lucian Pye pointed out, it may be an effective 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. Coproduction agreements could be worked out that would allow China to assemble the F-20 and AH-1S in China, 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 a potent tank killer nonetheless.
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. Besides, both of these systems are designed primarily as defensive weapons with the only practical utility of the AH-1S being antimechanized defense. Unless Japan or South Korea entertain ideas of attacking China, their arguments against China possessing such weapons would be difficult to justify.

Taiwan is not so easily dismissed in our consideration, however. The F-20 could well pose some threat to Taiwan since the possibility of China launching an amphibious attack against Taiwan cannot be eliminated. 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. Most analysts, however, do not believe that China possesses the sea- or air-lift 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 and that the more likely form
of attack would be a naval blockade. If this is correct, 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 Shenyang Military Region. However, if the Chinese transfer these aircraft to the North Koreans, the problem of South Korea's air defense will be significantly complicated. This is an issue, and a risk, that must be given careful consideration before any F-20's are sold to China.

Since both the F-20 and the AH-1S are primarily defensive weapons, it would be difficult for the Soviet Union to argue that they pose an offensive threat to them. They do, however, pose a significant obstacle to the offensive intentions of the Soviet Union and represent a complex planning problem for the Soviet military leadership to overcome.
CHAPTER VI
CONCLUSIONS

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 analysis 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 solving all of China's defense needs, this weapons mix represents one that offers the maximum utility to the Chinese with the minimum risk to her non-Soviet neighbors. By providing this weapons mix to the Chinese, the United States could increase stability in East Asia by reducing the Soviet Union's overall military advantage, thus reducing the danger of conflict. It would also increase 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 very high. 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.
APPENDIX I
THE SOVIET THREAT SCENARIO

Eastern China
## APPENDIX II

### HIGH YIELD - LOW COST U.S. WEAPONS MIX FOR THE PRC

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

Chapter I


5. Ibid.


Chapter II


3. Ekman, p. 84.


Chapter III


Chapter IV


3. Jencks, p. 971; also Gregor, p. 25.
Chapter V


3. Pye, p. 3.

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