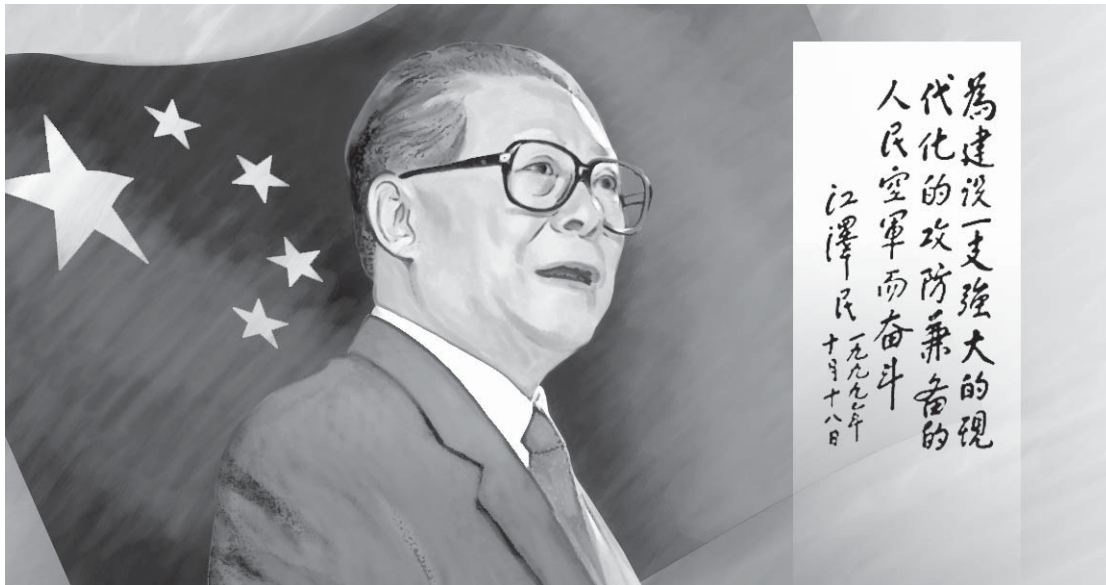


Offensive Airpower with Chinese Characteristics

Development, Capabilities, and Intentions

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Editorial Abstract: Although China has traditionally employed its airpower in largely defensive air operations, this doctrine appears to be undergoing a significant shift. The author contends that China is developing limited capabilities in offensive airpower as a deterrent against its neighbors and American forces in the Pacific. Rather than implement a strategic airpower doctrine, China will develop “offensive airpower with Chinese characteristics,” a doctrine that uses traditionally tactical platforms to carry out strategic operations in China’s periphery.



ON THE 50th anniversary of the People’s Liberation Army Air Force (PLAAF) in November 1999, Chinese president Jiang Zemin announced that China would “strive to build a powerful, modernized People’s Air Force that

is capable of both attacking and defending.”¹ This marked a major shift in Chinese strategy. Since its establishment, the PLAAF intended its aircraft acquisitions, personnel training, and doctrine for defensive air operations.² To carry out the offensive operations described

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by Jiang Zemin, the PLAAF needed to modernize its aircraft inventory; revise strategic, operational, and tactical doctrine; and revamp training programs. In recent years, the Chinese military has undergone rapid modernization to develop air-warfare capabilities.

This article examines the PLAAF's air-warfare capabilities and explains the nature of offensive Chinese airpower. In recent years, the PLAAF has acquired new combat platforms and increased joint and combined training but has yet to develop strategic capabilities that allow it to strike targets outside the Pacific region.³ (According to Air Force Doctrine Document [AFDD] 1, *Air Force Basic Doctrine*, strategic operations consist of "offensive action[s] . . . that most directly achieve our national security objectives by affecting the adversary's leadership, conflict-sustaining resources, and strategy.")⁴ China's lack of such capabilities leads to questions about its intentions regarding the use of offensive airpower. The PLAAF's paucity of effective long-range offensive airpower stems from multiple factors, primarily insufficient offensive weapons systems, excessive command centralization, and China's inexperience in offensive air operations. Geopolitical factors have also limited that country's desire to develop more significant strategic capabilities.

Additionally, the article posits that China is developing limited offensive-airpower capabilities as a deterrent against actions by its neighbors and American forces in the Pacific. Rather than implement a doctrine of strategic airpower, China will develop "offensive airpower with Chinese characteristics," a doctrine that uses traditionally tactical platforms to carry out strategic operations in the country's periphery. The article begins by examining historical factors that contributed to the stagnation of the growth of offensive air warfare and then analyzes the PLAAF's development and possible intentions for its offensive air force. Lastly, it considers the implications that Chinese airpower has for the United States and the means by which the latter can counter its development in order to maintain regional stability in Asia.

History of the Development of Chinese Offensive Airpower

Certain events in the history of the PLAAF caused its modern capabilities in offensive air warfare to lag significantly behind those of other world powers. The incompatibility of offensive airpower with Mao Tse-tung's doctrine of "People's War" and the withdrawal of Soviet military aid in 1960 during the Sino-Soviet rift hampered the growth of strategic Chinese airpower by preventing the acquisition of new technologies and the development of a doctrine of offensive air warfare.

Prior to a series of doctrinal changes in the 1980s and 1990s, the People's Liberation Army (PLA), seeking guidance on confronting a more technologically advanced enemy, looked to Mao's concept of People's War. That concept would defend China from attack by using large numbers of troops armed with low-tech weapons to overwhelm an adversary through quantity rather than quality of personnel and weaponry.⁵ In such a war, the army, along with paramilitary forces, would work with the populace to engage in both conventional and guerrilla operations to overextend adversary forces. Once this occurred, conventional troops would attack and destroy isolated groups of enemy soldiers.⁶

The development of offensive airpower proved inherently incompatible with People's War. Since Mao based his war-fighting doctrine on defense of the Chinese mainland, the PLAAF primarily had responsibility for guarding the nation's airspace.⁷ From its formative years during the Korean War, the PLAAF armed and trained its personnel to fly air-superiority missions, focusing only limited attention on development of strategic capabilities. After suffering high casualties during its first bombing mission against a South Korean intelligence facility in November 1951, the PLAAF withdrew from regular service the bombers it had acquired to fly missions against targets in South Korea.⁸ After this incident, China focused on air superiority.

A nation hoping to effectively employ strategic airpower requires technologically ad-

vanced aircraft; command, control, intelligence, surveillance, and reconnaissance (C2ISR) systems; and significant pilot training, none of which conformed to the low-tech nature of People's War. PLA troops would overwhelm enemy forces using low-tech weapons—not high-tech systems such as strategic bombers. Thus, rather than develop modern weapons systems for long-range offensive missions, Mao's air force acquired Soviet tactical aircraft of Korean War vintage. The Soviet Union's military aid to China in the form of aircraft and training initially helped the fledgling PLAAF establish combat capabilities, but Chinese dependence on Soviet assistance limited the development of indigenous aircraft and doctrine. Soviet aid to the PLAAF began during the Korean War and continued until the Sino-Soviet rift in 1960. Termination of this material aid and the withdrawal of Soviet advisers left China with an antiquated air force and limited resources for modernization. The PLAAF supplemented and replaced Soviet-supplied aircraft with Chinese-produced copies. Through the 1970s, China's fleet included various platforms, including Chinese versions of the MiG-17 Fresco (J-5) and MiG-19 Farmer (J-6) interceptors as well as the Tu-16 Badger (H-6) intermediate-range bomber.⁹ Many H-6s remain in service today.

The PLAAF made no significant progress in developing aircraft capable of carrying out offensive air operations until the 1970s. Early in that decade, China attempted to develop an indigenous strategic bomber using British-made Rolls-Royce Spey turbofans.¹⁰ After abandoning this project due to technical and financial difficulties, the Chinese launched a program to reengineer their H-6 bombers with the Rolls-Royce turbofans but cancelled this project as well for financial reasons.¹¹ Although China upgraded the avionics and electronic-countermeasures systems of its 1950s-era H-6 bombers, the PLAAF did not acquire a long-range strategic bomber capable of projecting airpower beyond the Chinese mainland during this period.¹² Concurrently, the United States developed the B-52 Stratofortress, B-1 Lancer, and F-111 Aardvark, all of which it has employed strategically. The low-tech nature of

People's War and China's reliance on the Soviet Union for military assistance ensured that China would build a fleet of antiquated aircraft rather than a modern air force capable of carrying out offensive operations.

China's Quest for Offensive Airpower

After an extended period of minimally developing equipment and doctrine, the PLAAF began to modernize rapidly. This process started in the early 1990s after the first Gulf War demonstrated that US airpower could easily defeat militaries based on the Soviet model, such as those of Iraq and China. The use of strategic airpower by the United States and its allies to strike leadership and military infrastructure in Iraq—and later in the Balkans—forced PLAAF analysts to recognize China's inability to defeat a modern military.¹³ To address deficiencies in waging a modern war, the PLA launched a revolution in military affairs to enhance capabilities by acquiring new equipment, improving command and control (C2) infrastructure, and increasing military training.¹⁴ A significant portion of this development focused on improving the offensive capabilities of the PLAAF.

Acquiring New Equipment

After a period of limited programs designed to develop indigenous aircraft, the PLAAF has increased its acquisition of both domestic and Russian aircraft. The procurement of advanced strike, refueling, and Airborne Warning and Control System (AWACS) aircraft represents the most visible component of China's air force modernization. Specifically, it has acquired advanced multirole combat aircraft, including the Russian Sukhoi Su-27 and Su-30, Chinese J-8 and J-10 fighters, Ilyushin transports, and indigenously produced AWACS platforms.¹⁵ These aircraft provide China with tactical air-to-air and air-to-ground capabilities, but the lack of a long-range bomber prevents it from projecting airpower beyond the Pacific.

The backbone of the current Chinese bomber fleet consists of approximately 120 H-6 intermediate-range bombers, supplemented by Q-5 and JH-7 fighter-bombers. The H-6, the largest of China's bombers, has a weapons payload of 20,000 pounds compared to the American B-52's 60,000. The operational range of the H-6 is also significantly smaller than that of the B-52, restricting the aircraft's operations to the Pacific. The Q-5 and JH-7 have even smaller payloads and ranges, limiting their reach to nations in China's periphery. In January 2007, Internet reports indicated that China had begun producing upgraded variants of the H-6 capable of carrying cruise missiles and precision-guided munitions up to 3,000 nautical miles.¹⁶ New H-6K aircraft enable China to operate further beyond its borders, but the lack of forward operating bases prevents it from projecting airpower globally.

A second component of China's equipment-modernization program involves the acquisition of aerial-refueling platforms. The PLAAF considers the ability to extend the range of its combat fleet critical to carrying out operations beyond the Chinese periphery.¹⁷ J-8 and J-7 fighters, which comprise most of the PLAAF fleet, have the range to reach potential conflict zones such as the Paracel and Macclesfield Islands, but without aerial refueling, they cannot loiter or engage adversary aircraft. Having too few forward operating bases also limits the PLAAF's ability to carry out long-range offensive operations. Unlike the United States, which can launch operations from strategically located air bases throughout the world, China has no major air bases outside its mainland. Without aerial refueling, China cannot carry out effective offensive operations, let alone adequately protect what that country considers its territorial airspace.

To address its need for aerial-refueling capabilities, China converted a few H-6 bombers into refueling aircraft in the 1990s and in 2005 ordered eight Russian Il-78 tankers.¹⁸ Although China's aerial refueling has improved, its effectiveness in an operational environment remains questionable. The PLAAF's and People's Liberation Army Navy Air Force's

(PLANAF) current refueling fleet represents only a small fraction of the 585 aerial tankers operated by the US Air Force.¹⁹ China's pilots also have limited air-refueling experience. Despite acquiring tankers nearly two decades ago, the PLAAF did not conduct overwater refueling until 2005.²⁰ Furthermore, because most of its combat aircraft cannot be aerially refueled, China needs an extensive upgrade program to remedy this deficiency.

Advancements in Command and Control

Operations that depend on the synergistic effect of aerial tankers, strike aircraft, tactical fighters, and other airborne platforms require significant coordination that can be achieved only through comprehensive and flexible C2. Current Chinese C2 relies on outdated communication systems, delaying the dissemination of orders and directives.²¹ Development of indigenous airborne C2ISR platforms such as the KJ-2000 and KJ-200 AWACS—a major component of improving C2 technology in the PLAAF—has enabled China to carry out airborne surveillance, C2, and battle management. The crash of a PLAAF KJ-200 during a test flight in June 2006 that killed all 40 people on board set back the Chinese AWACS program since the victims were key technical staff in designing and testing the KJ-200.²² Despite the mishap, China has continued to develop AWACS aircraft for operational use. Indeed, it is likely that the KJ-2000 has recently entered operational service with the PLAAF.²³

Although one can improve technology through the acquisition of modern equipment, the PLAAF will need time to alter its C2 philosophy. The Chinese military has not traditionally delegated authority to junior personnel, a situation that leads to a highly centralized C2 infrastructure in which senior officers make tactical decisions.²⁴ Thus, the PLAAF's intentions with regard to operating its new airborne C2 platforms remain unclear. Typically, junior- and midgrade officers serve as air-battle managers on most non-Chinese C2ISR platforms, but the PLAAF uses senior officers in control towers. To employ its airborne C2ISR technology effectively in offen-

sive operations, the PLAAF must first change its approach to command by delegating authority to junior personnel—something Chinese military leaders may prove reluctant to do.

Improved Training

In recent years, the PLAAF has revamped its training program to improve the quality of personnel and enhance combat effectiveness. It has established training exercises that allow Chinese pilots to fly realistic missions in a variety of flying conditions. Moreover, the PLAAF has introduced tactical training that focuses on potential combat confrontations with Taiwan and the United States, enabling pilots to practice both air-to-air and air-to-ground tactics designed to improve China's precision-strike capabilities.²⁵ During aggressor training (recently added), Chinese Su-27s and J-8s simulate the tactics of Taiwan's Mirage 2000 and F-16 fighters.²⁶

China has also increased joint and combined training to improve its ability to operate with foreign militaries outside the mainland. The Chinese integrated joint operations plan of 2002 led to an increase in the PLAAF's joint training.²⁷ Future military operations will likely include more joint operations, meaning that other components of the PLA—primarily the PLANAF—will support the PLAAF in carrying out offensive operations. A Sino-Russian exercise in 2005 emphasized the PLAAF's precision-attack capabilities, employing aerial tankers, bombers, tactical aircraft, and airborne forces.²⁸ An exercise held with the Tajik military in 2006 demonstrated China's airlift capabilities.²⁹ Both exercises reflect the country's ongoing attempts to improve offensive capabilities but also reveal the limitation of current capabilities to nations along China's periphery.

Offensive Airpower with Chinese Characteristics

China's pattern of aircraft acquisitions suggests that a doctrinal shift has occurred in the PLAAF. Following the first Gulf War, China's

unsuccessful attempt to purchase Tu-22 long-range bombers from the Russian government likely represented an effort to develop strategic aerial capabilities similar to those of the United States. Despite this failure, the Chinese continued to develop air-warfare capabilities through the 1990s. NATO air operations during Operation Allied Force in 1999 further influenced PLAAF modernization, reflected in the fact that Chinese strategists focused on the role of airpower and long-range strike in diminishing the use of ground forces.³⁰ Following the Balkan war, China accelerated its acquisition of platforms that the US Air Force had employed in Allied Force, such as multirole fighter aircraft and aerial tankers.³¹ This acquisition program continues today.

Although offensive airpower can be either tactical or strategic, the US government classifies China's quest for offensive airpower as strategic.³² The Department of Defense believes that PLAAF modernization will result in a Chinese air force with strategic capabilities, but China's current aircraft acquisition and development tell a different story. Most of the PLAAF's new Russian and indigenous aircraft are air-superiority fighters and fighter-bombers, both characteristic of tactical operations. Even with the support of C2 aircraft and tankers, the PLAAF's short-range tactical aircraft would have difficulty traveling far beyond the Chinese periphery. In 2005 Russia offered to sell China long-range Tu-22 and Tu-95 bombers, the same aircraft the Chinese attempted to obtain in the mid-1990s; however, China has yet to purchase those platforms.³³ China's decision to acquire short-range aircraft rather than strategic bombers indicates the current limitation of its airpower projection to the Pacific.

The acquisition of multirole fighters and AWACS aircraft, along with China's deficit in long-range strategic bombers, forces outsiders to question how Chinese military leaders define offensive airpower, which currently appears to combine tactical platforms with tactical and strategic doctrine—referred to in this article as offensive airpower with Chinese characteristics. This doctrine uses tactical multirole fighters to attack traditionally strategic targets, including C2, industrial, and leader-

ship infrastructure; additionally, they carry out tactical missions such as close air support and air superiority.

The nature of China's development of offensive airpower indicates that the country limits its view of potential threats to nations along its periphery and does not currently seek to project airpower beyond the region. Despite the restricted nature of its capabilities, China will likely continue to modernize its air force and may eventually develop global power projection.

Implications and Responses for the United States

The possibility of China's ever employing offensive air capabilities against its neighbors or American forces in the region remains questionable. The country's white paper on national defense of 2004 states that PLAAF doctrine has shifted from air defense to both defensive and offensive missions; it also indicates, however, that China adheres to a national policy of a defensive nature and "will never go for expansion."³⁴ Although this policy implies a mission of purely territorial defense, development of the PLAAF's offensive capabilities appears to contradict this assertion. Recently acquired platforms such as the H-6K, supported by AWACS aircraft and aerial refuelers, enable China to project its power regionally into hot spots such as Taiwan and the Spratly Islands, over which China and Vietnam clashed in 1988. If China is indeed committed to building a defensive military, offensive airpower with Chinese characteristics would find use only as a deterrent.

As part of its "peaceful rise," China ostensibly hopes to improve relations with other Pacific nations. Military conflict in the Pacific would impede trade in the region, hurting China's export-dependent economy. Japan and Taiwan, the nations that Chinese defense analysts consider the most threatening, are among China's top trade partners.³⁵ Relying on exports and foreign investment for domestic modernization, the Chinese probably would not attack their neighbors since a war instigated by Beijing

could result in sanctions and jeopardize foreign investment, thereby devastating China's growing economy.³⁶ In addition to causing economic harm, an unprovoked attack on Taiwan or other key US regional allies could possibly lead to an American-led military response. The potential economic harm and military repercussions of such conflict have led Beijing to rely on diplomacy rather than force. In recent years, China has increased cooperation with regional economic and security organizations such as the Association of South East Asian Nations. In 2002 the Chinese demonstrated their commitment to diplomacy by signing the Declaration on the Conduct of Parties in the South China Sea, a document intended to prevent conflict over the Spratly Islands and other disputed islands.³⁷

Even though the likelihood of China's initiating a war in the Pacific region remains small, offensive development of the PLAAF still poses a threat to regional stability. The ability of China to project military power throughout the Pacific jeopardizes American influence in the region. The United States has maintained military dominance in the Pacific since the end of World War II, but recent Chinese military development has the potential to shift the balance of power there. Even with China's promise of a peaceful rise, its acquisition of platforms such as the J-10 and Su-27 fighters may lead the PLAAF to become a regional, technological peer competitor to the United States and other Pacific nations. Chinese militarization may lead neighboring states such as Japan and Korea, which recently expressed concern over the lack of transparency in China's military buildup, to develop more aggressive military postures.³⁸ China might respond by increasing its own military capabilities, resulting in a spiral process that could lead to intense diplomatic or military confrontations.³⁹ It might also use airpower to project power to Central Asian states, such as Kazakhstan, that supply China's burgeoning energy demand.⁴⁰ Any form of PLAAF involvement in these nations could produce tension with the United States and Russia, both of which wish to gain influence in the geostrategically important region.⁴¹

To maintain the current balance of power in the Pacific, the United States must limit the PLAAF's ability to wage offensive air operations. Adm Dennis C. Blair, former commander of US Pacific Command, declared, "We respect the authority of the People's Liberation Army in their mainland. Yet we must make them understand that the ocean and sky [are] ours."⁴² The Chinese have an inherent right to defend their sovereignty, but the United States must work with its global allies to limit the development of China's offensive air capabilities.

Limiting the Transfer of Military Technology

China depends heavily on foreign nations for the PLAAF's modernization, looking to Russia, Israel, France, and Germany for the preponderance of its military technology. Outsourcing the development of the Chinese air force to foreign nations allows the United States to influence many of China's weapons suppliers through incentives or punitive measures. Legally, the United States can block the transfer of weapons systems containing American technology. In recent years, however, it has even stopped the sale of advanced military hardware that does not contain American equipment.

The fact that Israel, China's second-largest supplier, relies heavily on US military aid gives the United States significant leverage over Israel's program of weapons sales. In 2000 pressure from the United States prevented Israel from selling its Phalcon AWACS to China. The Israeli cancellation, which followed a US threat to withhold \$2.8 billion in military aid, delayed the introduction of an AWACS platform into the PLAAF until 2006.⁴³ In late 2004, Israel attempted to upgrade spare parts for Harpy unmanned aircraft, which Israel Aircraft Industries had sold to China in 1994. Although Israel did not send the upgraded parts to China, the United States froze Israeli participation in the US-led development of the F-35 Joint Strike Fighter due to security concerns—a decision in line with recommendations made by the US-China Commission in 2004.⁴⁴ The commission suggested that Con-

gress restrict foreign defense contractors who sell military-use technology to China from participating in research and development by the US defense community.

The commission also urged Congress to press for continuation of the European Union's (EU) arms embargo on China, believing that lifting the embargo, imposed after the Tiananmen Square Massacre of 1989, would accelerate modernization of the PLA.⁴⁵ Even with the embargo in place, EU sales of military equipment to China increased from 54 million euros in 2001 to 416 million in 2003.⁴⁶ Equipment sold to the Chinese military includes British-manufactured propellers used on the Chinese Y-8 Airborne Early Warning System, Italian Aspide air-to-air missiles, components of the French AS-365 Dauphin military helicopters, and advanced British and Italian avionics for the F-7 fighter aircraft.⁴⁷ The export of military technology to China continues despite the embargo because the EU left interpretation and enforcement of that action to member states.⁴⁸ Although some EU nations prohibit the sale of all military items to China, others, such as the United Kingdom, limit their embargoes to lethal weapons and military equipment that could be used for internal repression; those countries continue to export nonlethal military technology, such as avionics, radars, and aircraft-propulsion systems.⁴⁹

To limit the development of China's offensive capabilities, the United States must continue to pressure the EU to continue its ban on weapons sales. In addition, it should urge EU nations to standardize the guidelines regarding technologies that can be sold to China. States that abide by these guidelines and halt the transfer of military technology to China should receive incentives such as military aid and the right to participate in US-led joint weapons-development programs (e.g., the Joint Strike Fighter project). States that choose to continue to sell advanced military hardware to China should face restrictions similar to those imposed on Israel in 2004.

Limited Engagement

To discourage the offensive development of the PLAAF, the United States must couple military deterrence and embargoes with limited cooperation with the Chinese military. Some Americans fear that cooperatively engaging with China's armed forces would allow the Chinese to learn doctrine and tactics that could improve their ability to wage war against the United States.⁵⁰ Although these concerns are justified, engagement promotes greater transparency in military affairs, improves mutual understanding between the United States and China, and helps establish lines of communication among senior leaders that can reduce the possibility of accidents between US and Chinese forces.⁵¹

Primarily, the US Navy has carried out current US military engagement with China. That service has successfully monopolized recent Sino-US engagement efforts because a Navy admiral traditionally heads US Pacific Command and because naval forces conduct a significant portion of US military operations in the region. Developing ties between naval forces remains important, but the Chinese consider both the navy and the air force priorities in PLA modernization. Given China's emphasis on strengthening its air force, the US Air Force should play a role equal to that of the Navy in engaging the Chinese military. Interaction between the US Air Force and the PLAAF should avoid exposing US military capabilities in areas such as force projection and C2ISR operations. Instead, it should focus on conducting professional exchanges and developing capabilities that enable China and the United States to respond collectively to regional humanitarian and security issues.

Promoting transparency and mutual understanding between the PLAAF's and US Air Force's leadership is fundamental to building trust between China and the United States. High-level meetings between senior officers and defense ministers can further this objective, provide an environment where senior leaders can establish lines of communications to reduce chances of misunderstanding in the event of a crisis, and plan future exercises as

well as professional-development exchanges, the latter allowing personnel from both the PLAAF and US Air Force to learn about the other's operations and leadership systems. The US Air Force should invite PLAAF personnel to participate in professional military education programs at all levels, on the condition that China reciprocate by providing Americans similar access to PLAAF training programs. Bilateral exchanges should occur throughout the spectrum of leadership, from enlisted schools and officer accession programs through senior education institutions such as the National Defense University. These programs allow for the direct interaction of military personnel without political interference. Direct military-exchange programs at all levels contribute to mutual trust and understanding.⁵²

Recognizing China as a critical global actor, the United States is encouraging that nation to act as an international stakeholder.⁵³ The US Air Force can help China achieve this status through combined training in humanitarian relief. Since its creation, the US Air Force has provided airlift support to relief operations following disasters. These missions offer vital assistance and improve the image of the nation that carries them out.⁵⁴ The US Air Force should initiate exercises with the PLAAF that allow Chinese and American airmen to work together while responding to simulated large-scale humanitarian crises. This direct interaction will increase mutual understanding and respect between the air forces and may encourage China to participate as a responsible actor in the Pacific region. A Chinese decision to employ military aircraft in humanitarian operations would increase the legitimacy of China's peaceful rise.

Critics may argue that combined exercises will strengthen China's military capabilities by increasing the PLAAF's ability to deploy personnel and equipment rapidly. The PLAAF already possesses airlift capabilities, as demonstrated by recent Sino-Tajik and Sino-Russian military exercises. Instead of providing the Chinese with additional military capabilities, combined relief exercises with the United States would serve as a catalyst for China to

play a more active role in assisting its neighbors during humanitarian crises. The increased transparency and understanding that will result from interaction between American and Chinese airmen greatly outweigh the minimal national-security risks of limited combined training with the PLAAF.

Combined training should be supplemented by high-visibility exchanges such as participation of the US Air Force's aerial-demonstration teams in Chinese air shows. The Thunderbirds, which performed in Beijing in September 1987, continue to appear in numerous international air shows.⁵⁵ Prominent events such as air shows and port visits by naval vessels demonstrate to both the Chinese and American publics the enhanced relationship between the two militaries without revealing advanced capabilities. All instances of the US Air Force and the PLAAF's working together should be publicized in both the United States and China to demonstrate increasing cooperation and friendship between the two countries.

Military Readiness

China ostensibly seeks to avoid using offensive military force, but the element of surprise remains a pillar of Chinese doctrine.⁵⁶ Thus, the US military must prepare itself to respond to any offensive action taken by China. The US Air Force currently forward-deploys B-1, B-2, and B-52 bombers to Andersen AFB in Guam, 1,800 miles southeast of China. These aircraft, along with others in Japan, Korea, and Hawaii, serve as a powerful deterrent to offensive action by the Chinese.

In addition to deploying advanced aircraft to the Pacific, the United States must maintain a qualitative advantage over Chinese weapons systems and doctrine. Although US Air Force equipment currently is technologically superior to that of the PLAAF, recent modernization of Chinese equipment may lead the PLAAF to become a peer competitor to its US counterpart. Thus, the US Air Force must develop tactics that enable effective employment of its weapons against China in a potential conflict. Chinese military leaders

question the effectiveness of current American tactics because, since the end of the Cold War, the United States has lacked a peer competitor to guide the development of tactics. Lt Gen Liu Yazhou of the PLAAF described the US Air Force's tactical development as "crossing a river by feeling the stones in it," referring to a phrase coined by Chinese leader Deng Xiaoping that describes modernization through cautious experimentation.⁵⁷ Yazhou may have a valid point about US Air Force tactics, given that its aggressor training is still largely based on fighting the no-longer-extant Soviet Air Force.⁵⁸ To ensure continued military superiority in the Pacific, the United States must couple the acquisition of new war-fighting platforms with tactical development that prepares American forces for a potential military conflict with China.

Conclusion

The PLAAF's increasing offensive capabilities, combined with the uncertainty of China's military intentions, create a potential threat to the United States and its regional allies. After an extended period of stagnation in the development of offensive airpower, the PLAAF has entered a period of rapid modernization that includes the acquisition of platforms such as Su-27 and J-10 fighters, modernized H-6 bombers, aerial-refueling aircraft, and AWACS platforms. It could use these systems to carry out both strategic and tactical missions in a manner this article has referred to as offensive airpower with Chinese characteristics.

Although China's offensive capabilities are currently limited to regional operations, the PLAAF likely will attempt to develop global strategic capabilities. The acquisition of platforms such as aerial tankers and the upgraded H-6 bomber suggests that China hopes to increase its long-range offensive capabilities. A key component of such development would involve acquisition of a long-range bomber. Development of such an aircraft may find help in China's growing aviation industry, which hopes to produce a large commercial jet by 2020.⁵⁹ Since technology and research from

the civilian project could be applied to developing a long-range bomber, production of an indigenous bomber would likely begin in the same time frame as its civilian counterpart. Refining aerial refueling and C2 today may become part of a larger plan to strengthen the support infrastructure required for long-range projection of airpower in the future.

Even if used only as a strategic deterrent, China's ability to project airpower globally in the form of long-range bombers capable of striking North America would pose a significant threat to the United States. Increased power-projection capabilities could also enhance China's influence in geostrategically important regions of the world such as Africa

and Latin America, where China has a growing interest. Because future intentions of the Chinese military remain largely unknown, the United States must limit China's offensive development and encourage development of a responsible Chinese air force by restricting the PLAAF's access to offensive weapons systems while promoting mutual understanding between the US Air Force and the PLAAF through bilateral engagement. Given China's potential to change the balance of global airpower, the United States must act decisively to limit and contain China's offensive-airpower capabilities before the PLAAF can project airpower globally. □

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AIRPOWER - Values derived from multiple sources. Total Aircraft Strength value includes both fixed-wing and rotorcraft platforms from all branches of service (at this time UAVs are not included in the total). 'Attack' value constitutes purpose-built attack types. 'Transports' value includes only fixed-wing aircraft while all rotorcraft are represented under the 'Helicopters' value. 'Special-Mission' value no longer includes aerial tankers which are now covered in their own listing. For an in-depth look into the current air powers of the world, consider & In some respects Chinese airpower follows a similar dictum. Ideas from beyond China are considered, i.e.,... Other Peoples' Air modified and adapted to meet Chinese needs. For winning informationized local wars, the White Paper directed that military operations should be based on active defence concepts that integrated defensive and offensive means. 3/5 11/28/2017 Other Peoples' Air Power: Air Power With Chinese Characteristics Peter Layton The Central Blue Lastly, Chinese airpower is an integral element of joint-repower warfare. Under this rubric, coordinated manned aircraft, ballistic rocket, cruise missile and information (EW and cyber) attacks would be undertaken in a closely timed sequence that overwhelms the defences. According to Chinese military writings, the evolution in airpower theories is ongoing: Local wars experiment with new ideas, and, with each new conflict, air force theories change. Chinese military publications also note that there have been several changes in the operational methods employed by the air forces of leading airpower states. The final characteristic of air offensive operations is that operations are intense, consume a lot of resources, and require extensive support. Air offensive campaigns take place over a wide theater, and missions are difficult. Targets are dispersed, and there are many of them. 27. Eric Lin-Greenberg, 'Offensive Airpower with Chinese Characteristics: Development, Capabilities, and Intentions,' Air & Space Power Journal 21, no. 3 (Fall 2007): 67-77. 28. Despite its focus on how China develops offensive airpower with Chinese characteristics, almost half of the article considers the implications that Chinese airpower has for the United States and the means by which the latter can counter its development to maintain regional stability in Asia. Ibid., 72-75. 59. Chinese airpower advocates internally argue that any efforts to continue emphasis on the air force defensive role may cause the PLAAF to lose another opportunity to become an independent striking force. One hundred years ago, China had no air force, was in the grips of unrest and civil war, and was in total economic, social, and political chaos. Today, China is a superpower, and the second biggest military spender behind the United States. Though it still lags far behind, \$716 billion to \$224 billion as of 2019. Even so, China's considerable military spending has made it a force to be reckoned with, including the PLAAF. The story of the People's Liberation Army Air Force also parallels that of Chinese industry and self-sufficiency. Over the decades, China has moved from purchasing Soviet and