Defending Defense



China's Military Build-up: Implications for U.S. Defense Spending





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"*Current trends in China's military capabilities are a major factor in changing East Asian military balances.*" – Annual Report to Congress, Military and Security Developments Involving the People's Republic of China (2010)¹

Over the past year, actions by the People's Republic of China (PRC) have called into question its previous assertions that its rise to great-power status would be peaceful. Whether it was scolding countries around the world about the Nobel Peace Prize awarded to Chinese dissident Liu Xiabo, declaring that its "core interests" now included some 1.3 million square miles of the South China Sea, dismissing complaints of neighbors as failing to recognize that "China is a big country," ignoring North Korean acts of terror, challenging U.S. naval ships on the high seas, creating new confrontations with Japan over disputed islands, slashing its export of "rare earth" elements, continuing cyber attacks on American defense and commercial entities, or testing a new stealth fighter during the visit of the American secretary of defense, the picture that emerges is of a China that believes it can now throw its considerable economic and military weight around. It's a challenge that the U.S. has been slow to meet and, as a result, led to considerable uncertainty among friends and allies about whether the U.S. is up to that challenge – uncertainty fed in no small measure by prospects of a declining American defense budget.

But doesn't the U.S. spend significantly more than China on defense?

The U.S. does spend more than China on its military. But how much more is impossible to tell because the official Chinese defense budget substantially under-reports actual Chinese defense expenditures. Not included in the publicly-announced budget are such "off-line" expenditures as the purchase of foreign weapons (such as planes and vessels acquired from Russia), its strategic rocket forces, and the research and development costs that go into developing the People's Liberation Army's (PLA) own weapon systems.

What we do know is that, since 1989, official Chinese defense spending has increased by nearly 13% annually. This has occurred despite the fact that all major powers in the 1990s were cutting defense budgets and China itself faced no serious security threat from any of its neighbors then – or today.

Last March, the Chinese government announced a defense budget of \$78.6 billion. The Pentagon's "guesstimate" of the actual Chinese defense budget is over \$150 billion. But, of course, the cost of raising, training, and equipping a military in China is substantially less than what it costs to field an equivalent American force. For example, personnel and manufacturing costs are significantly less in China than in the West. The cost of personnel is no doubt the largest difference in the character of American and Chinese military budgets. The per-capita cost of the U.S. All-Volunteer Force is many times that of the conscripted PLA. If one uses the purchasing power parity (PPP) exchange rate, which accounts for these differences, the Chinese core military budget may well approach \$300 billion, making it the second largest in the world.²

More to the point, when comparing military expenditures, it is important to remember that American global dominance does not necessarily translate into clear military preeminence in East Asia. If the vast majority of China's military budget goes toward building up a capability for that region, then, the proper comparison is what the U.S. spends on resourcing its military *in that theater*. The fact that China may spend less overall than the United States on its military is cold comfort if the actual military balance is shifting in the Asia-Pacific region.



What has China gotten for its money?

A lot. The most significant investment has been to build an impressive ballistic and cruise missile arsenal. This is the force that is doing the most to alter the military balance in the region, and to put U.S. forces at risk. The growth in the numbers and capabilities of these missiles has been phenomenal. Little more than a decade ago, China's short-range missile force consisted of one regiment in Southeastern China. Today, it fields some 1,300 conventionally-armed missiles, making it the largest and most lethal SRBM force in the world. The Chinese are also adding extended-range conventional missile capabilities in the form of accurate, medium-range ballistic missiles and extended-range, ground-launched cruise missiles. The new MRBMs are being produced at a rate of 20 to 40 a year, while the inventory of the GLCMs grows by approximately 100 annually. With new investments in surveillance, targeting, and geo-location systems, China may sooner than expected obtain parity with the U.S. in what has always been an American advantage–precision strike.

But China's investments extend well beyond its missile fleet. Since the early 1990s, the Chinese air forces, traditional and naval, have bought or built hundreds of new 4th generation fighters – fighters generally comparable to the American-made F-16s and F-15s. The People's Liberation Army Air Force (PLAAF) has **also** acquired nearly a 1,000 Russian S-300 model surface-to-air missiles, giving it an air defense capacity that is second to none. The PLAAF's modernization efforts have included upgrading older planes with advanced electronics, precision-guided weapons, and cruise missiles, as well as the procurement of airborne early warning platforms, aerial refueling tankers, electronic warfare systems, and heavy transport aircraft.

Should a conflict arise in the Taiwan Strait, the Pentagon estimates that the PLAAF could deploy an armada of nearly 500 aircraft to conduct operations against Taiwan without need for refueling, with the potential for even greater numbers should the PLAAF deploy aircraft from bases deeper inside China closer to the coast. And, of course, as widely noted recently, the Chinese have started to test a 5th generation fighter, the J-20, which appears to have stealth characteristics.



The Chinese navy has followed a similar path. **Over the past two decades**, it has procured more than 40 new submarines: conventional and nuclear powered, attack and SSBNs. Indeed, the Chinese have added more submarines to its fleet than any other country in the world. In addition, the People's Liberation Army's Navy (PLAN) has acquired 15 guided missile destroyers (with three new types of DDGs alone since 2003), a similar number of frigates, including a new stealthy class, more than four dozen, high-speed, cruise-missile armed patrol craft, and scores of new amphibious ships. China also maintains the world's largest arsenal of mines to protect its littoral waters, including those surrounding the major new naval base on Hainan Island, which when completed, will have underground facilities to safely port perhaps up to 20 submarines. Finally, and contrary to the expectations of many, if not most, military analysts only a few years ago, the PLAN is now moving forward with an aircraft carrier program.

As for China's strategic nuclear force, the most recent Pentagon report states quite simply: "China is both qualitatively and quantitatively improving its strategic missile forces." The military is deploying or in the process of deploying three new intercontinental-range missiles: two land-based, one submarinelaunched. Although the number of new missiles might not be large, they will be solid-fuel, have increased accuracy, and when deployed on road-mobile launchers and submarines, more survivable.

In addition, the Chinese are working on a number of technologies – maneuvering and multiple independently targetable reentry vehicles, decoys, chaff, and thermal shielding – designed to defeat American and allied missile defenses.

The Chinese have also expanded the numbers and quality of the PLA elite forces: airborne, amphibious, and Special. Nor has China's military build-up been confined to upgrading conventional military capabilities. The PLA has invested in and successfully tested anti-satellite weapons, expanded its electronic warfare capabilities, created an army of cyber-warriors, and is substantially upgrading its intelligence, surveillance, and navigation systems.³



What has China's Military Build-up bought the PRC strategically?

In 1996, President Clinton sent two American aircraft carriers into the waters off of Taiwan in response to a series of missile tests and military exercises by the Chinese designed to intimidate Taiwan as its 1996 presidential election approached. He did so confident that U.S. naval power was sufficient to control any crisis and deter further Chinese attempts at military coercion. Would a U.S. president have that same confidence today? Will he or she have it in the near future?

Certainly, when it comes to the military balance between Taiwan and China, the latter has substantially increased its ability to coerce the former with its improved arsenal of missiles, cruise missiles, fighters, fighter-bombers, submarines, and surface ships should a dispute arise and conflict occur. Only a few years ago, for example, a RAND study predicted that Taiwan, with help from the US, could easily beat China in an air war over the Taiwan Strait; in 2009, an updated study concluded that "a credible case can be made that the air war for Taiwan could essentially be over before much of the Blue [the U.S. and Taiwan] air force has even fired a shot."

But it is not only Taiwan that is threatened. This same arsenal has substantially increased the potential threat to American and allied bases and forces in the so-called "first island chain"— which is typically described as extending from the Kuriles in the north through Japan's archipelago, the Ryukyus, Taiwan, the Philippines, and Borneo in the south. The PLA's build-up is complicating the U.S. Navy's long-standing freedom of action in the surrounding seas and putting the U.S. Air Force's forward bases in the region, from which the overwhelming bulk of its fighter and strike aircraft operate, at risk. As one prominent military analyst notes, "East Asian waters are gradually becoming a 'no-man's land' for American warships and forward-based aircraft."

This has all happened much more rapidly than either the Pentagon or U.S. intelligence anticipated. And there are good reasons to believe – as evidenced by



China's efforts to increase access to ports and airfields from the South China Sea through the Strait of Malacca, across the Indian Ocean, and on to the Arabian Gulf; its effort to develop an aircraft carrier capability; and its exercising of its fleet in waters increasingly distant from its home waters — that China's longer-term goal is to build-up a capability to more adequately secure access to markets and resources. In Chinese strategists' eyes, no great power can be truly great unless it controls those commons and, hence, America's command of the seas, skies and space is a problem and challenge they expect in time to address.

In sum, China is well on its way to acquiring both the means to hold U.S. and allied forces in the region at risk and to project its own power into the resulting vacuum. In essence, the capabilities the modern PLA has acquired are structured not to reinforce security in the Asia-Pacific, but to destabilize the current order maintained by the U.S. and its allies.⁴

Hedging against a Rising People's Republic

U.S. policy toward China in the past has been to "engage but hedge." Engagement, especially economic engagement, was expected to produce a slow but inevitable transformation of China – moving it from an autocratic one-party state to a regime that respects the rule of law, free markets, and civil and political rights. In some respects, precisely because of this expectation, the other half of the policy – hedging against the risks associated with an increase in Chinese military power – has been slow to keep up. If one expects China to liberalize, then, so the argument goes, why increase tensions and perhaps stimulate an arms race by matching that growing power today?

The problem is that China has not reformed as expected. Indeed, in many ways, it is less liberal today than a decade ago. And if there has been an arms race, it has largely been a one-sided affair. Complicating matters further is the fact that the leadership in Beijing appears to have read the initial Obama administration's talk of a "G-2" world and the rhetoric of decline coming from the U.S. as a signal that it could be more assertive diplomatically, politically, and militarily. Nor is deterring ambitious, autocratic rising powers (as history has shown in the case of Wilhelmine Germany and Imperial Japan) an easy task. It is especially difficult in the case of the PRC because the country's strategic literature is full of discussions about the use of deception, surprise, and asymmetric tactics and weapons. Mere calculations of force-on-force balances may not be persuasive in a time of crisis to a military leadership so educated.

As matters stand now, even close allies, like Australia and Japan, have had second thoughts about America's ability to maintain its military's dominant position in the Asia-Pacific region. To truly deter China and maintain a balance of power that favors U.S. interests in the region, the American military will need to do more, not less, than it is currently doing. Among the things required will be: the deployment of more submarines and surface combatants, more 5th generation aircraft like the F-22 Raptor and F-35 Lightning, hardened air and naval bases, enhanced anti-submarine and anti-mining capabilities, additional

missile and cruise-missile defense systems, redundant communication and reconnaissance platforms, including space-based and terrestrially-based systems, longer-range precision-strike platforms, and enhanced information warfare and cyber defense capabilities. None of which is cheap and none of which can be done with a declining defense budget. However, allowing the military balance of power to shift in China's favor in a region of the world vital to U.S. interests is a recipe for instability, diminished economic and political sway, and potential conflict—all of which comes with costs likely to be greater than the expenditures required to keep the peace.

Notes

¹ Office of the Secretary of Defense. "Military and Security Developments Involving the People's Republic of China: 2010." Annual Report to Congress. Available here: http://www.defense.gov/pubs/pdfs/2010_CMPR_Final.pdf (accessed February 15, 2011)

² Calculating defense purchase power is inherently an imprecise science. The \$300 billion figure represents the conclusion of no one study, but rather a rough average of several, including those sponsored by the U.S.-China Economic and Security Review Commission.

³ Office of the Secretary of Defense, "Military and Security Developments Involving the People's Republic of China: 2010."

³ Andrew F. Krepinevich, "China's 'Finlandinization' Strategy in the Pacific," *The Wall Street Journal*. September 11, 2010. Available here:

http://online.wsj.com/article/SB10001424052748704164904575421753851404076.html (accessed February 15, 2011)

Images

Cover Page

Top: Chengdu J-XX (J-20) Stealth Fighter Prototype. Prototype First Flight. January 11, 2011. Air Power Australia. Imagery originally from Chinese Internet. http://www.ausairpower.net/APA-J-XX-Prototype.html. Bottom, left to right: Chinese Dongfeng Short-Range Ballistic Missile (DF-15B). July 15, 2010. Photo by flickr user Digi_shot.

http://www.flickr.com/photos/mainstream/4798074186/; Chinese Kilo-class submarine. Uploaded to Wikimedia Commons by user:Liftarn on August 15, 2007. Transferred by user: Liftarn from en.Wikipedia using CommonsHelper. Original uploader was Took-ranch at en.wikipedia. Released into the public domain under the GNU Free Documentation License, accessible here: http://commons.wikimedia.org/wiki/File:Chinese_Kilo_in_service.jpg ; Chinese sailors aboard the PLAN destroyer Qingdao (DDG 113) in Pearl Harbor, Hawaii. September 6, 2006 (U.S. Navy photo by Mass Communication Specialist Joe Kane).

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Bottom, left to right: Secretary of Defense Robert M. Gates reviews the PLA Honor Guard. January 10, 2011. (DoD photo by Master Sgt. Jerry Morrison, U.S. Air Force.); PLA tank soldiers during the visit of Chairman of the Joint Chiefs of Staff Gen. Peter Pace to the Shenyang training base. March

24, 2007. (DoD photo by U.S. Air Force Staff Sgt. D. Myles Cullen.); PLAN destroyer Qingdao (DDG 113) being escorted by a patrol boat in the Pearl Harbor channel during its visit to Hawaii. September 6, 2006. (U.S. Navy photo by Mass Communication Specialist 3rd class Ben Gonzales).

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Chinese HQ-7 eight-unit SAM launcher and a Type 79A twin barrel 100 mm turret on the Chinese Type 051B Luhai-class guided missile destroyer Shenzhen. November 2007. Courtesy of Wikimedia Commons/Megapixie; 3-tube missile launchers in PRC's 60th anniversary parade. October 1, 2009. Photo by flickr user W_PeacePlusOne/Philip McMaster

http://www.flickr.com/photos/dragonpreneur/3973867321/lightbox/#/photos/dragonpreneur/3973867321/; Chinese Haifan II helicopter from the PLAN missile frigate Zhoushan leaves the deck of HMS Cornwall in the Gulf of Aden. August 11, 2009. (Royal Navy photograph by Owen King/ © Crown Copyright/MOD 2009)

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Bottom, left to right. Song-class submarine. 2005. Courtesy of Wikimedia Commons/SteKrueBe. http://commons.wikimedia.org/wiki/File:Song-class_Submarine_4.jpg; a PLA colonel identifies targets before beginning a Reinforced Armor Company team conduct deliberate training exercise. Shenyang training base, China, Mar. 24, 2007. (Defense Dept. photo by Staff Sgt. D. Myles Cullen, USAF); Chinese tanks in formation at Shenyang training base, China. March 24, 2007. (Defense Dept. photo by U.S. Air Force Staff Sgt. D. Myles Cullen)

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Bottom, left to right. Chinese TC-98 tank at Shenyang training base, China. March 24, 2007. (Defense Dept. photo by U.S. Air Force Staff Sgt. D. Myles Cullen.) ; Marines of the PLAN stand at attention as Commander, Pacific Fleet Rear Adm. Gary Roughead greets them following a demonstration of the brigade's capabilities during a visit to Zhanjiang, China. November 16, 2006. (U.S. Marine Corps photo by Lance Corporal J.J. Harper); Guided-missile destroyers USS Fitzgerald (DDG 62) and USS McCampbell (DDG 85) maneuver with the Chinese People's Liberation Army Navy (PLAN) destroyer Guangzhou off the coast of North Sulawesi, Indonesia, following an international fleet review that commemorated the 64th anniversary of Indonesian independence. Aug. 19, 2009 (U.S. Navy photo by Mass Communication Specialist 3rd Class Ian Schoeneberg)

The Defending Defense Project is a joint effort of the American Enterprise Institute, the Heritage Foundation, and the Foreign Policy Initiative to promote a sound understanding of the U.S. defense budget and the resource requirements to sustain America's preeminent military position. To learn more about the effort, contact Richard Cleary (richard.cleary@aei.org).

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