CHAPTER 2

CHINA'S IMPACT ON U.S. SECURITY INTERESTS

SECTION 1: MILITARY AND SECURITY YEAR IN REVIEW

Introduction

This section—based on a Commission hearing, discussions with outside experts and U.S. Department of Defense (DoD) officials, and independent research—examines China's late 2012 national and military leadership transition, China's 2012 defense white paper, China's 2013 defense budget, China's military modernization, security developments involving China, and the U.S.-China security relationship. The section concludes with a discussion of China's impact on U.S. security interests. See chapter 2, section 2 and chapter 2, section 3, for coverage of China's cyber activities and China's maritime disputes, respectively.

Leadership Transition

President Xi Jinping Assumes Central Military Commission Chairmanship

China's late 2012 leadership transition brought the largest turnover to the Central Military Commission (CMC)* in a decade. Xi Jinping assumed the position of both CMC chairman and Chinese Communist Party (CCP) general secretary at the CCP's 18th Party Congress on November 15, 2012. President Xi then completed his accession as China's senior leader by becoming the People's Republic of China (PRC) president on March 14, 2013. Although President Xi was widely expected to eventually assume all three of China's top leadership posts, many observers were surprised by the speed of his elevation to CMC chairman. Official Chinese press described President Xi's early promotion as an "unusual twist to China's leadership transition" and praised outgoing CMC Chairman Hu Jintao for his decision to step down. Mr. Hu broke with the pattern established by his two predecessors, who retained the CMC chairmanship for two years after finishing their terms as CCP general secretary.

Cheng Li, director of research and a senior fellow at the Brookings Institution's John L. Thornton China Center, testified to the

^{*}The CMC is China's highest military decision-making body. Its main responsibilities are to set military policy and strategy, interpret Chinese Communist Party guidance for the military, and oversee the People's Liberation Army's senior staff and service arms.

Commission that Mr. Hu's decision to fully cede power signals a strengthening of CCP succession procedures.² In addition, James Mulvenon, vice president of Defense Group Inc.'s Intelligence Division, told the Commission that President Xi's strong and enduring ties with senior military leaders likely contributed to his rapid promotion. President Xi served as an aide to former Defense Minister Geng Biao from 1979 to 1982. He also is the son of Xi Zhongxun, a former Politburo member and revolutionary leader.³

Factional Imbalance Emerges in China's Senior Leadership

During China's 2012 leadership transition, the "elitist coalition" of the CCP prevailed over the "populist coalition" in personnel selections to China's highest decision-making body, securing six of seven seats on the Politburo Standing Committee (PSC).* The elitist coalition, which had been headed by former President Jiang Zemin and is now led by President Xi, mainly consists of the children of Chinese revolutionary leaders and former high-level officials. The populist coalition, which had been headed by Mr. Hu and now is led by current Chinese Premier Li Keqiang, primarily consists of former Chinese Communist Youth League leaders.

Dr. Li testified to the Commission, "Although the CCP monopolizes power in China ... these two coalitions have been competing for power, influence, and control over policy initiatives since the late 1990s ... This dynamic structure of 'one Party, two coalitions' ... has created something approximating a mechanism of checks and balances in the decision making process." ⁴ Dr. Li then explained the "landside victory" by Mr. Jiang and President Xi's camp upsets the "roughly equal balance of power between these two coalitions" and signals a "profound change in the power equation." He speculated scandals during the runup to the leadership transition involving two prominent populists—then Chinese Premier Wen Jiabao and then Secretary of the CCP Central Secretariat Ling Jihua—bolstered the elitist coalition's leverage in the PSC personnel negotiations.⁵

The concentration of elitists on the PSC probably strengthens President Xi's ability to pursue his policy agenda and allows Mr. Jiang and his allies to continue to compete for influence. However, Dr. Li stressed, "This does not mean ... the winner now takes all in Chinese elite politics." He explained the "balance between the two camps in the 25-member Politburo, the Secretariat (the organization that handles daily administrative affairs), and the CMC have largely remained intact." Furthermore, prominent populist coalition leaders are well-positioned for seats on the next PSC in 2017, as five of the seven current PSC members can serve only one term before reaching mandatory retirement age.

^{*}The PSC consists of the CCP's top-ranking leaders and is China's highest decision-making body. The PSC guides and oversees the work of the Politburo.

Since becoming CMC chairman, President Xi has used public speeches and visits to People's Liberation Army (PLA) units to reaffirm China's long-term military modernization goals; emphasize the importance of a strong military to the fulfillment of the "China Dream," his new political slogan and party campaign; and signal his intent to focus on increasing combat readiness and reducing corruption in the PLA.

"China Dream": In November 2012, President Xi introduced the "China Dream" concept, which envisions the "great renewal of the Chinese nation" and the advancement of an international system in which China's successful rise provides an attractive alternate political model to Western ones. Achieving the dream means building a "moderately prosperous society" by 2021 and a "modern socialist society that is strong, democratic, cultured, and harmonious" by 2049. Although President Xi has emphasized that "peaceful development" and a stable regional environment are essential to create the conditions for this vision, he linked its fulfillment to a strong military in a December 2012 speech while aboard a PLA Navy destroyer.8 In June 2013, official PLA media explained, "To the armed forces, the China dream is the strong-army dream, the China dream leads the strong-army dream, and the strong-army dream supports the China dream." According to Daniel Hartnett, research scientist at the CNA Center for Naval Analyses, the PLA's role in the China Dream is a significant and "potentially worrisome development." Mr. Hartnett explained:

[The policy] reflects Xi's attempt to exert his control over the military and establish a break between himself and his predecessors. It also provides further justification for resources for PLA modernization in any internal 'guns versus butter' debate among China's leadership ... It may also signify a harder turn in China's military policy under Xi. If the PLA is being required to improve its combat capabilities in response to changes in China's security environment, it could indicate that the Chinese leadership increasingly feels that it may have to resort to force to counter what it sees as growing national security concerns. ¹⁰

Combat readiness: During his first reported visit to a PLA base as CMC chairman in December 2012, President Xi called for the PLA to increase "combat readiness" through "realistic training." ¹¹ Combat readiness has been a central theme of subsequent speeches to the military by President Xi and now features prominently in official PLA statements and documents. For example, official PLA media in January 2013 said the military needs to prevent and overcome the "harmful" practice of training "for show." ¹² Furthermore, describing the PLA's 2013 training priorities, Xiao Yunhong, deputy director of the PLA's General Staff Department Military Training Department, said: "The 'scent of gunpowder' in the 'fighting' will be stronger. The entire military will make 'training like real war' . . . the main theme of the entire year's training, powerfully strengthening training of mission topics, ensuring that as soon as there is a situation, the military will be able to go forward and fight to victory." ¹³

As part of its effort to strengthen realism in training, the PLA in January 2013 announced it had designated a mechanized infantry brigade in the Beijing Military Region as its first dedicated "blue force" unit. The brigade is charged with simulating the "combat methods and tactics" of foreign forces during PLA training and exercises, according to official PLA media.¹⁴ The PLA has used "blue force" units in training since the 1980s,* but previously these units served on only a temporary basis and so did not have sufficient time to learn foreign combat methods and tactics. This new brigade is headquartered in northern China at Zhurihe Training Base, the PLA's largest training center and experimental site for joint operations and "informationized" † warfare. Official Chinese media explained the blue force brigade has "carefully selected classic cases of local warfare around the world in recent years, devoted itself to studying the advanced operational styles of foreign armed forces, and even [simulated] the armed forces ... exactly in terms of personnel organization and issuance of oral commands." 15

Corruption: In a meeting shortly after becoming the CMC chairman, President Xi urged senior PLA officers "to take a firm stand against corruption" and to maintain a "strict work style" and "iron discipline." ¹⁶ Since then, reducing corruption and waste in the PLA has been one of President Xi's most consistent messages in his public speeches to the military. In addition to rhetoric, President Xi has announced stronger anticorruption regulations for the PLA, including restrictions on military personnel holding banquets, drink-

ing excessive alcohol, and using luxury hotels.

President Xi's focus on combating corruption in the PLA is part of the CCP's larger national effort to boost its image to mitigate growing public disillusionment with politics and governance in China.¹⁷ He also is attempting to end practices such as paying for promotion and graft, which some observers have suggested reduces the quality of officers, perpetuates opposition to reforms, threatens PLA modernization and readiness, and undermines loyalty to the CCP. In an unusually candid December 2011 speech, PLA Logistics Department Political Commissar General Liu Yuan, son of former Chinese President Liu Shaoqi (1959–1968) and potential friend of President Xi Jinping, 18 reportedly said, "No country can defeat China ... Only our corruption can destroy us and cause our armed forces to be defeated without fighting." ¹⁹ General Liu in a later speech reportedly explained, "Certain individuals exchange public money, public goods, public office, and public affairs for personal gain, flouting the law and party codes of conduct, even resorting to verbal abuse and threats, clandestine plots and set ups ... They deploy all of the tricks of the mafia trade within the army itself." 20

Nevertheless, empirical evidence of PLA corruption remains limited. Only two high-profile PLA corruption cases have become

† In Chinese military doctrine, "informationization" refers to the application of advanced information technology to military operations. The PLA views informationization as a required enabler of its goal to be able to win "local wars under informationized conditions."

^{*}Official PLA press frequently refer to the U.S. National Training Center at Fort Irwin, California, in discussions about PLA "blue force" training, suggesting U.S. practices may have influenced the PLA's development and implementation of the concept. PLA officers have visited Fort Irwin to observe U.S. training on at least four occasions (1985, 1994, 1997, and 2011). Shirley Kan, U.S.-China Military Contacts, Issues for Congress (Washington, DC: Congressional Research Service, July 30, 2013).

known since 2005. Admiral Wang Shouye was sentenced to life in prison in 2006 for embezzling approximately \$20 million. General Gu Junshan was removed from his post in 2012, and the investigation apparently is ongoing. ²¹ Both Admiral Wang and General Gu had served as the deputy director of the PLA General Logistics Department, suggesting officers in logistics positions may be more susceptible to corruption, or corruption charges, due to their involvement in infrastructure and natural resources.

Uniformed Members of the Central Military Commission

In the weeks prior to the CCP's 18th Party Congress, seven new uniformed PLA officers were appointed to the CMC. In his testimony to the Commission, Dr. Mulvenon speculated that "some of the choices were short-term compromises," as five of the seven appointees can serve only one term on the CMC before reaching mandatory retirement age. Dr. Mulvenon also noted the elevation of two vice chairmen with strictly operational backgrounds allows China observers to dispense with the popular misconception that one of the positions is set aside for a political officer. Roy Kamphausen, senior advisor for political and security affairs at the National Bureau of Asian Research, stressed to the Commission that the PLA remains a "party army"* even without the presence of a political officer in one of the CMC's top positions, because all PLA officers interact extensively with CCP leaders and eventually serve on the CCP Central Committee after joining the CMC.²³

The new uniformed CMC members likely are more professional than previous CMC officers due to their more diverse careers, advanced education, more sophisticated training, and increased exposure to foreign militaries. Their predecessors tended to have specialized careers, less education and training, and limited interactions with foreign militaries outside the Soviet Union. However, because China has not fought a major war since the Sino-Vietnam War in 1979, the new uniformed CMC members have limited combat experience. In contrast, most of their predecessors participated in long and large-scale campaigns during the Chinese Civil War (1946 to 1949) and Korean War (1950 to 1953).²⁴

Figure 1: Members of the 18th Central Military Commission †

CMC Member	Position			
Xi Jinping	Chairman			
General Fan Changlong*‡	Vice Chairman			

^{*}The PLA is the armed branch of the CCP, not the military force of the PRC.

[†]CMC members are listed according to official protocol order. An asterisk indicates the officer is a new CMC member.

[‡]General Fan Changlong's promotion to CMC vice chairman surprised many observers. Not only did General Fan have a relatively low public profile until 2012, but also he was promoted from Military Region commander to CMC vice chairman without first serving as a CMC member. General Fan will reach mandatory retirement age at the CCP's 19th Party Congress, so will serve only one term. U.S.-China Economic and Security Review Commission, Hearing on China's New Leadership and Implications for the United States, written testimony of James C. Mulvenon, February 7, 2013.

Figure 1: Members of the 18th Central Military Commission †—Continued

CMC Member	Position				
General Xu Qiliang	Vice Chairman				
General Chang Wanquan	Minister of National Defense				
General Fang Fenghui*	General Staff Department Chief				
General Zhang Yang*	General Political Department Director				
General Zhao Keshi*	General Logistics Department Director				
General Zhang Youxia*	General Armament Department Director				
Admiral Wu Shengli §	PLA Navy Commander				
General Ma Xiaotian*	PLA Air Force Commander				
General Wei Fenghe*	Second Artillery Corps Commander				

Source: Open Source Center, OSC Graphic: Organizational Chart of China's Military Leadership 2013 (Washington, DC: May 22, 2013). OSC ID: CPF2013 0521017002. http://www.open source.gov.

Defense White Paper

In April 2013, China released the latest version of its biennial defense white paper. ¶ 25 This is the first defense white paper published since President Xi became CMC chairman. Although Chinese military leaders likely began to draft the document before President Xi assumed the position, official Chinese press suggests it contains strategic priorities specific to him.²⁶

Unlike previous iterations, which provided a comprehensive overview of Chinese military and security issues, the 2012 defense white paper focuses on a theme—the PLA's growing role in military missions other than war. The current version also is shorter and less formal and ideological than previous ones. Major General Chen Zhou, a senior fellow at the PLA Academy of Military Science and the document's coordinating author, said China in the future plans to alternate between "subject-specific" defense white papers, such as the 2012 iteration, and the traditional "comprehensive" for $mat.^{27}$

Official Chinese media hailed the 2012 defense white paper as a milestone in transparency, citing the "declassification" of military details.²⁸ However, most of this was widely-known information that Beijing had never officially acknowledged, such as the designations of Group Armies under the Military Regions and the breakdown of how the PLA distributes personnel among its service arms. Furthermore, as in previous iterations, the 2012 defense white paper offers no substantive information on important defense issues, in-

[§] Admiral Wu Shengli, who has served as PLA Navy Commander since 2006 and was a mem-§ Admiral Wu Shengli, who has served as PLA Navy Commander since 2006 and was a member of the 17th CMC, was widely expected to be elevated to CMC vice chairman or minister of defense. Dr. Mulvenon in his testimony to the Commission speculated Beijing may have considered Admiral Wu's role in leading the PLA Navy's modernization program—a top priority for Beijing—too critical to move him into a different position. U.S.-China Economic and Security Review Commission, Hearing on China's New Leadership and Implications for the United States, written testimony of James C. Mulvenon, February 7, 2013.

¶ Defense white papers—China's most authoritative statements on national security—are published by the State Council's Information Office and approved by the CMC, Ministry of National Defense, and State Council. Beijing primarily uses these documents as a public relations tool to help ease deepening international concern over China's military modernization and answer calls for greater transparency.

cluding the defense budget; nuclear weapons; and the types and numbers of weapon systems already fielded, being developed, or under consideration for acquisition.

Defense Budget

In March 2013, China announced its official defense budget for 2013 rose 10.7 percent in nominal terms to 720.168 billion RMB (approximately \$117.39 billion), signaling the new leadership's support for the PLA's ongoing modernization efforts. This figure represents 5.3 percent of total government outlays 29 and approximately 1.3 percent of estimated gross domestic product (GDP).30 China's official annual defense budget now has increased for 22 consecutive years and more than doubled since 2006. Most Western analysts agree Beijing likely will retain the ability—even with slower growth rates of its GDP and government revenue—to fund its ongoing military modernization for at least the near term. 31

It is difficult to estimate China's actual defense spending due to a number of reasons, including (1) the uncertainty involved in determining how China's purchasing power parity affects the cost of China's foreign military purchases and domestic goods and services and (2) Beijing's omission of major defense-related expendituressuch as purchases of advanced weapons, research and development programs, domestic security spending, and local government support to the PLA-from its official figures. The Institute of International Strategic Studies assesses China's actual defense spending is 40 to 50 percent higher than the official figure.³² DoD estimated China's actual defense spending in 2012 fell between \$135 billion and \$215 billion, which was approximately 20 to 90 percent higher than China's announced defense budget.³³

Military Modernization

Aircraft Carrier Developments

In September 2012, China commissioned its first aircraft carrier, the *Liaoning*, after approximately six years of renovation work on the former Soviet hull and one year of sea trials. China continues to develop a fixed-wing carrier aviation capability, which is necessary for the carrier to perform air defense and offensive strike missions. The PLA Navy conducted its first successful carrier-based takeoff and landing with the Jian-15 (J-15) in November 2012, certified its first group of aircraft carrier pilots and landing signal officers on the carrier's first operational deployment from June to July 2013, and verified the flight deck operations process in September 2013.34 The PLA Navy will continue to conduct short deployments and shipboard aviation training until 2015 to 2016, when China's first J-15 regiment is expected to become operational.

China plans to follow the *Liaoning* with at least two indigenously built aircraft carriers. The first likely will enter service by 2020 and the second by 2025. As China's aircraft carrier force expands and matures, Beijing will improve its ability to project air power, particularly in the South China Sea, and to perform a range of other missions, such as airborne early warning, antisubmarine warfare, helicopter support to ground forces, humanitarian assist-

ance, search and rescue, and naval presence operations.³⁵

Sea-based Nuclear Deterrent Nears Initial Operational Capability

China's Julang-2 (JL-2) submarine-launched ballistic missile (SLBM) is expected to reach initial operational capability by late 2013.36 The JL-2, when mated with the PLA Navy's JIN-class nuclear ballistic missile submarine (SSBN), will give China its first credible* sea-based nuclear deterrent. The JIN SSBN/JL-2 weapon system will have a range of approximately 4,000 nautical miles (nm), allowing the PLA Navy to target the continental United States from China's littoral waters.³⁷ China has deployed three JIN SSBNs and probably will field two additional units by 2020.³⁸ China also is developing its next generation SSBN, the Type 096,³⁹ which likely will improve the range, mobility, stealth, and lethality of the PLA Navy's nuclear deterrent.

Submarine and Surface Fleets Modernizing and Expanding

The PLA Navy continues to steadily increase its inventory of modern submarines and surface combatants. China is known to be building seven classes of ships simultaneously but may be constructing additional classes. 40 See figures 2-5 below for more information on PLA Navy orders of battle from 1990 to 2020.

- In 2012, China began building four improved variants of its SHANG-class nuclear attack submarine (SSN). China also continues production of the YUAN-class conventional submarine (SS), some of which include an air-independent propulsion † system that allows for extended duration operations, and the JIN SSBN. Furthermore, China is pursuing two new classes of nuclear submarines—the Type 095 guided-missile attack submarine (SSGN) and the Type 096 SSBN—and may jointly develop four advanced conventional submarines with Russia.41 The PLA Navy's growing inventory of modern nuclear and conventional submarines will significantly enhance China's ability to strike opposing surface ships throughout the Western Pacific and allow it to protect future sea-based nuclear deterrent patrollers and aircraft carrier task groups. 42
- In 2012, China launched two new surface combatants—the LUYANG III-class guided-missile destroyer (DDG) and the JIANGDAO-class corvette-and resumed construction of the LUYANG II-class DDG after a brief hiatus. China also continues serial production of the JIANGKAI II-class guided-missile frigate. Most of these units likely will be operational by 2015. The expanding and modernizing surface force will improve Beijing's ability to project power in the East and South China Seas and the Western Pacific. It also will help the PLA

^{*}The PLA Navy operates one SSBN/SLBM weapon system with the XIA-class SSBN and the JL-1 SLBM. However, the status of this weapon system is unclear, and DoD does not consider it to be a credible threat. U.S. Department of Defense, Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2013 (Washington, DC: May 2013), p. 6; U.S. Office of Naval Intelligence, The People's Liberation Army Navy: A Modern Navy with Chinese Characteristics (Suitland, MD: 2009), p. 23.

†Air-independent propulsion (AIP) is a method of generating electrical power in a conventional submarine while it operates submerged. The use of an AIP system reduces the need for a submarine to surface or come to periscope depth—where it is easier to detect—to recharge its hatteries.

Navy fulfill its growing set of nontraditional missions beyond China's immediate periphery. These missions include defense of distant maritime trade routes, humanitarian assistance, and counterpiracy.⁴³

- In 2012, the PLA Navy commissioned two YUZHAO-class amphibious transport docks (LPD), bringing its LPD inventory to three. The YUZHAO LPD can carry a mix of air-cushion landing craft, amphibious armored vehicles, helicopters, and marines. This will provide the PLA Navy with additional flexibility while performing missions such as amphibious assault, humanitarian assistance, and counterpiracy and improve China's ability to seize and hold Taiwan's offshore islands. China may build additional YUZHAO LPDs and probably will field a new landing helicopter assault ship, called the Type 081, by 2018.⁴⁴
- In 2013, China added two upgraded FUCHI-class auxiliary replenishment oilers (AOR) to its fleet, raising its number of AORs from five to seven. The increased number of naval support ships better equips the PLA Navy's surface fleet, including future aircraft carrier task groups and expeditionary forces, to sustain high-tempo operations at longer ranges.⁴⁵

According to Chinese military experts Andrew Erickson and Gabe Collins, "by 2015, China will likely be second globally in numbers of large warships built and commissioned since the Cold War's end ... by 2020, barring a U.S. naval renaissance, it is possible that China will become the world's leading military shipbuilder in terms of numbers of submarines, surface combatants and other naval surface vessels produced per year." ⁴⁶ The Office of Naval Intelligence projects China will have between 313 and 342 submarines and surface combatants by 2020, including approximately 60 submarines that are able to employ submarine-launched intercontinental ballistic missiles or antiship cruise missiles and approximately 75 surface combatants that are able to conduct multiple missions or that have been extensively upgraded since 1992. ⁴⁷

1995 2000 2005 2010 2015 2020 Type 1990 **Diesel Attack** 88 51 54 57 - 6259-64 **Nuclear Attack** 5 5 6 6 6 - 86-9 4 **Nuclear Ballistic** 2 3 3-51 1 1 4-5Total 93 49 66 59 63 66-75 69-78

Figure 2: PLA Navy Submarine Orders-of-Battle 1990-2020

Sources: Numbers from 1990 to 1995 are based on information from various editions of the International Institute for Strategic Studies' The Military Balance series, reprinted in Anthony H. Cordesman et al., Chinese Military Modernization and Force Development: A Western Perspective (Washington, DC: Center for Strategic and International Studies, 2013), pp. 157–163. Numbers from 2000 to 2010 and projections for 2015 and 2020 were provided by the U.S. Office of Naval Intelligence. U.S. Office of Naval Intelligence, PLA Navy Orders of Battle 2000–2020, written response to request for information provided to the U.S.-China Economic and Security Review Commission, Suitland, MD, June 24, 2013.

Figure 3: PLA Navy Submarine Orders-of-Battle 1990-2020, Approximate Percent Modern*

Type	1990	1995	2000	2005	2010	2015	2020
Diesel Attack	0%	0%	7%	40%	50%	70%	75%
Nuclear Attack	0%	0%	0%	33%	33%	70%	100%

Sources: Approximate percentages from 1990 to 1995 are based on information from various editions of the International Institute for Strategic Studies' The Military Balance series, reprinted in Anthony H. Cordesman et al., Chinese Military Modernization and Force Development: A Western Perspective (Washington, DC: Center for Strategic and International Studies, 1991). 2013), pp. 157–163. Approximate percentages from 2000 to 2010 and projections for 2015 and 2020 were provided by the U.S. Office of Naval Intelligence. U.S. Office of Naval Intelligence, PLA Navy Orders of Battle 2000–2020, written response to request for information provided to the U.S.-China Economic and Security Review Commission, Suitland, MD, June 24, 2013.

Figure 4: PLA Navy Surface Orders-of-Battle 1990-2020†

Туре	1990	1995	2000	2005	2010	2015	2020
Aircraft Carriers	0	0	0	0	0	1	1–2
Destroyers	19	18	21	21	25	28-32	30–34
Frigates	37	37	37	43	49	52–56	54–58
Corvettes	0	0	0	0	0	20–25	24-30
Amphibious Ships	58	50	60	43	55	53–55	50-55
Coastal Patrol (Missile)	215	217	100	51	85	85	85
Total	329	322	218	158	214	239-254	244-264

Sources: Numbers from 1990 to 1995 are based on information from various editions of the International Institute for Strategic Studies' The Military Balance series, reprinted in Anthony H. Cordesman et al., Chinese Military Modernization and Force Development: A Western Perspective (Washington, D.C: Center for Strategic and International Studies, 2013), pp. 157–163. Numbers from 2000 to 2010 and projections for 2015 and 2020 were provided by the U.S. Office of Naval Intelligence. U.S. Office of Naval Intelligence, PLA Navy Orders of Battle 2000–2020, written response to request for information provided to the U.S.-China Economic and Security Review Commission, Suitland, MD, June 24, 2013.

Figure 5: PLA Navy Surface Orders-of-Battle 1990-2020, Approximate Percent Modern #

Туре	1990	1995	2000	2005	2010	2015	2020
Destroyers	0%	5%	20%	40%	50%	70%	85%
Frigates	0%	8%	25%	35%	45%	70%	85%

Sources: Approximate percentages from 1990 to 1995 are based on information from various editions of the International Institute for Strategic Studies' The Military Balance series, reprinted in Anthony H. Cordesman et al., Chinese Military Modernization and Force Development: A Western Perspective (Washington, D.C: Center for Strategic and International Studies, 2013), pp. 157–163. Approximate percentages from 2000 to 2010 and projections for 2015 and 2020 were provided by the U.S. Office of Naval Intelligence. U.S. Office of Naval Intelligence, PLA Navy Orders of Battle 2000–2020, written response to request for information provided to the U.S.-China Economic and Security Review Commission, Suitland, MD, June 24, 2013.

^{*}Modern submarines are those able to employ submarine-launched intercontinental ballistic missiles or antiship cruise missiles. U.S. Office of Naval Intelligence, *PLA Navy Orders of Battle 2000–2020*, written response to request for information provided to the U.S.-China Economic and Security Review Commission, Suitland, MD, June 24, 2013.

[†]Totals do not include all types and sizes of surface ships, such as mine warfare and auxiliary

[†]Modern surface ships are those able to conduct multiple missions or that have been extensively upgraded since 1992. U.S. Office of Naval Intelligence, *PLA Navy Orders of Battle 2000–2020*, written response to request for information provided to the U.S.-China Economic and Security Review Commission, Suitland, MD, June 24, 2013.

Sustaining the U.S. Military's "Rebalance" to Asia

In June 2010, then U.S. Secretary of Defense Robert Gates announced the "U.S. defense posture in Asia is shifting to one that is more geographically distributed, operationally resilient, and politically sustainable." ⁴⁸ In January 2012, DoD's *Defense Strategic Guidance* declared the U.S. military will "of necessity rebalance toward the Asia" by emphasizing existing alliances, expanding its networks of cooperation with "emerging" partners, and investing in military capabilities to ensure access to and freedom to maneuver within the region. ⁴⁹ The rebalance is a whole-of-government effort that also includes diplomacy, trade, and development.

However, there is growing concern in the United States and among U.S. allies and partners that DoD will be unable to follow through on its commitment to the rebalance due to declining defense budgets and emerging crises elsewhere in the world. U.S. Defense Secretary Chuck Hagel in July 2013 said Washington would have to choose between a smaller, modern military and a larger, older one if sequester-level funding continues.

In the first approach, we would trade away size for highend capability. This would further shrink the active Army [from 570,000]⁵⁰ to between 380,000 to 450,000 troops, reduce the number of carrier strike groups from 11 to 8 or 9, draw down the Marine Corps from 182,000 to between 150,000 and 175,000, and retire older Air Force bombers. We would protect investments to counter anti-access and area denial threats, such as the long-range strike family of systems, submarine cruise missile upgrades, and the Joint Strike Fighter, and we would continue to make cyber capabilities and special operations forces a high priority. This strategic choice would result in a force that would be technologically dominant, but would be much smaller and able to go fewer places and do fewer things, especially if crisis occurred at the same time in different regions of the world.

The second approach would trade away high-end capability for size. We would look to sustain our capacity for regional power projection and presence by making more limited cuts to ground forces, ships, and aircraft. But we would cancel or curtail many modernization programs, slow the growth of cyber enhancements, and reduce special operations forces. Cuts on this scale would, in effect, be a decade-long modernization holiday. The military could find its equipment and weapons systems—many of which are already near the end of their service lives—less effective against more technologically advanced adversaries. ⁵¹

U.S. Chief of Naval Operations Admiral Jonathan Greenert explained the U.S. Navy's role in the rebalance: "as directed by the 2012 *Defense Strategic Guidance* ... the [U.S.] Navy formulated and implemented a plan to rebalance our forces, their homeports, our capabilities, and our intellectual capital and partnerships toward the Asia Pacific." ⁵² Specifically, the U.S. Navy

Sustaining the U.S. Military's "Rebalance" to Asia— Continued

aims to increase its presence in the Asia Pacific from about 50 ships in 2013 to 60 ships by 2020 and "rebalance homeports to 60 percent" in the region by 2020.⁵³ However, Admiral Greenert has warned constraints in the current budget environment could delay or prevent the U.S. Navy from achieving these objectives. In a September 2013 hearing held by the U.S. House Committee on Armed Services, Admiral Greenert testified:

... If fiscally constrained to the revised discretionary caps, over the long term (2013–2023), the Navy of 2020 would not be able to execute the missions described in the [Defense Strategic Guidance] ... One potential fiscal and programmatic scenario would result in a '2020 Fleet' of about 255–260 ships, about 30 less than today, and about 40 less than the [U.S. Navy's 2014 budget] submission. It would include 1–2 fewer [carrier strike groups], and 1–2 fewer [amphibious readiness groups] than today. With regard to the [Defense Strategic Guidance] and presence, in this particular scenario the '2020 Fleet' would not increase presence in the Asia-Pacific, which would stay at about 50 ships in 2020. This would largely negate the ship force structure portion of [the U.S.] plan to rebalance to the Asia Pacific region directed by the [Defense Strategic Guidance] ... Overall, in this scenario, development of our capabilities to project power would not stay ahead of potential adversaries' [anti-access/area denial] capabilities.⁵⁴

Developing Sea-based Land Attack Capability

China currently does not have the ability to strike land targets with sea-based cruise missiles. However, the PLA Navy likely is developing a land attack capability for its Type-095 SSGN and LUYANG III DDG. Modern submarines and surface combatants equipped with land attack cruise missiles (LACMs) will complement the PLA's growing inventory of air- and ground-based LACMs and ballistic missiles, enhancing Beijing's flexibility for attacking land targets throughout the Western Pacific, including U.S. facilities in Guam.⁵⁵

Antiship Ballistic Missile Update

In 2010, China deployed the Dong Feng-21D (DF–21D) antiship ballistic missile (ASBM). The DF–21D, which has a range exceeding 810 nm, provides Beijing with the ability to threaten large surface ships, such as U.S. Navy aircraft carriers, throughout the Western Pacific. China is fielding additional DF–21D missiles and may be developing a longer-range variant. 56

Possible Test of New Antisatellite Capability

On May 13, 2013, China fired a missile into space from the Xichang Satellite Launch Center in western China.* The missile "appeared to be on a ballistic trajectory to nearly geosynchronous Earth orbit," according to DoD.† Geosynchronous Earth orbit can be achieved at about 22,000 to 23,000 miles above the Earth's equator.‡ This launch is the world's highest known suborbital launch since the U.S. Gravity Probe A in 1976 and China's highest known suborbital launch to date, according to Jonathan McDowell, a scientist at the Harvard-Smithsonian Center for Astrophysics.⁵⁷

U.S. defense agencies reportedly assess the launch was the first test of a new antisatellite (ASAT) capability, according to two U.S. press reports citing unnamed U.S. officials.⁵⁸ Beijing, however, claims the launch was part of a high-altitude scientific experiment for China's National Space Science Center. A Chinese Ministry of Foreign Affairs spokesperson said he was "not aware" of an AŠAT test and then reiterated China's "longstanding stance to make peaceful use of the outer space and oppose weaponization and arms race in the outer space." 59 DoD did not comment on the U.S. press reports or provide information on its assessment of the relationship between the May missile launch and China's ASAT program.

Although it is difficult to draw a definitive conclusion about the nature of the missile launch without more information from China or DoD, available data suggest it was intended to test at least the launch vehicle component of a new high-altitude ASAT capability. 60 If the launch is part of China's ASAT program, Beijing's attempt to disguise it as a scientific experiment would demonstrate a lack of transparency about its objectives and activities in space. Furthermore, such a test would signal China's intent to develop an ASAT capability to target satellites in an altitude range that includes U.S. Global Positioning System (GPS) and many U.S. military and intelligence satellites.§ In a potential conflict, this capability could allow China to threaten the U.S. military's ability to detect foreign missiles and provide secure communications, naviga-

^{*}China's Academy of Sciences National Space Science Center issued the following statement regarding China's May missile launch: "This test used a high altitude space probe rocket, which carried a payload of multiple scientific detectors such as Langmuir probes, high energy particle

carried a payload of multiple scientific detectors such as Langmuir probes, high energy particle detectors, magnetometers, and barium powder release test devices, etc. to perform original state detection of high energy particles and electromagnetic field strength in the ionosphere and near earth space." Xinhua, "China Successfully Carries out a High Altitude Scientific Measurement Test," May 14, 2013. OSC ID: CPP20130514003004.

†DoD issued the following statement regarding China's May missile launch: "We detected a launch on May 13 from within China. The launch appeared to be on a ballistic trajectory nearly to geosynchronous Earth orbit. We tracked several objects during the flight but did not observe the insertion of any objects into orbit and no objects associated with this launch remain in space. Based upon observations, we assess that the objects reentered the atmosphere above the Indian Based upon observations, we assess that the objects reentered the atmosphere above the Indian Ocean. We defer any further questions to the government of China." Jonathan McDowell, "Kunpeng-7." Space Report, May 21, 2013. http://www.planet4589.org/pipermail/jsr/2013-May/

 $[\]ddagger$ For an overview of the different classes of orbit, see NASA Earth Observatory, "Three Classes of Orbit." http://earthobservatory.nasa.gov/Features/OrbitsCatalog/page2.php.

s it is not clear from U.S. press reports which type of attack mechanism the potential new ASAT capability would employ. For example, it could use a "kinetic kill vehicle" to disable or destroy a satellite through the force of a direct collision. The new ASAT capability also could destroy a satellite through the force of a direct coinsion. The new ASAI capability also could employ electronic warfare or directed energy weapons to temporarily degrade a satellite's capabilities without permanently destroying or damaging it. For an overview of the different types of ASAI attack methods and technologies, see David Wright, Laura Grego, and Lisbeth Gronland, The Physics of Space Security: A Reference Manual (Cambridge, MA: American Academy of Arts and Sciences and Union of Concerned Scientists, 2005). http://www.ucsusa.org/assets/document/www.fusca.org/assets/document/fusca.org/assets/document/fusca.org/assets/document/fusca.org/assets/document/fusca.org/assets/document/fusca.org/assets/document/fusca.org/assets/document/fusca.org/assets/document/fusca.org/assets/document/fusca.org/assets/document/fusca.org/assets/doc documents/nwgs/physics-space-security.pdf.

tion, and precision missile guidance. Beijing's January 2007 destruction of an aging Chinese FY-1C weather satellite demonstrated it has the capability to target satellites in low Earth orbit (an altitude between about 100 to 1,200 miles), such as remote sensing satellites.

Developing Operationally Responsive Space Capability

On September 25, 2013, China launched a satellite into space from the Jiuquan Satellite Launch Center in western China. Official Chinese press claims the satellite, carried on a missile called the "Kuaizhou," will "monitor natural disasters and provide disaster relief information" for China's National Remote Sensing Center. However, Gregory Kulacki, China project manager and senior analyst at the Union of Concerned Scientists, explains that, in addition to orbiting a weather satellite, the launch served to test a new solid-fueled launch vehicle. Solid-fueled rockets are simpler to operate, cheaper, and have fewer logistical requirements than liquid-fueled rockets, making them ideal for quick launches with minimal preparation. According to Dr. Kulacki, "This capability would allow [the PLA] to rapidly replace satellites that might be damaged or destroyed in an anti-satellite attack with small but 'good enough' satellites able to restore at least some of the functions of the satellites lost." The U.S. military has been developing a similar capability, which it refers to as "Operationally Responsive Space," since at least 2006.*

Beidou Regional Satellite Navigation System Complete

On December 27, 2012, China's Beidou regional satellite navigation system† became fully operational and available for commercial use. Using 16 satellites and a network of ground stations, Beidou provides subscribers in Asia with 24-hour precision, navigation, and timing services, as well as the ability to send and receive text messages up to 120 Chinese characters. China plans to expand Beidou into a global satellite navigation system by 2020.

China's Satellite Navigation Office emphasized Beidou's importance to the PLA and Chinese commercial interests, stating the system meets the "demands of China's national security, economic development, technological advances and social progress ... safeguard[s] national interests ... enhance[s] the comprehensive national strength ... promote[s] the development of satellite navigation industry ... make[s] contributions to human civilization and social development ... [and] serve[s] the world and benefit[s] mankind." 65

^{*}DoD's Operationally Responsive Space Office, established in 2007, is charged with planning and preparing "for the rapid development of highly responsive space capabilities that enable delivery of timely warfighting effects and, when directed, develop and support deployment and operations of these capabilities to enhance and assure support to Joint Force Commanders' and other users' needs for on-demand space support, augmentation, and reconstitution." U.S. Operationally Responsive Space Office, Mission Statement. http://ors.csd.disa.mil/mission/.

other users' needs for on-demand space support, augmentation, and reconstitution." U.S. Operationally Responsive Space Office, Mission Statement. http://ors.csd.disa.mil/mission/.
†The regional Beidou system, which China refers to as Beidou-2, grew out of an earlier satellite constellation, known as Beidou-1. Beidou-1 provided limited precision, navigation, and timing services in China and a small portion of East Asia but served primarily as a developmental platform for future projects. For more information on China's civilian and military space activities, see U.S.-China Economic and Security Review Commission, 2011 Annual Report to Congress (Washington, DC: U.S. Government Printing Office, November 2011), pp. 198–222.

- Beidou is a critical part of China's stated goal to prepare for fighting wars under "informationized conditions," which includes an emphasis on developing the PLA's C4ISR* and electronic warfare capabilities. The PLA is integrating Beidou into its systems to improve its command and control and long-range precision strike capabilities and to reduce the PLA's reliance on foreign precision, navigation, and timing services, such as GPS.66
- Beijing seeks to use Beidou to gain 15–20 percent of China's domestic satellite navigation market share by 2015 and 70–80 percent by 2020. GPS currently has about 95 percent of China's market.⁶⁷
- Beijing is marketing Beidou's services to countries throughout Asia and has already reached agreements with Thailand, Laos, Brunei, and Pakistan to provide precision, navigation, and timing services for government and military customers at heavily subsidized costs.⁶⁸ These agreements include provisions allowing Beijing to build satellite ground stations outside of China, which will be used to increase Beidou's range and signal strength.⁶⁹

Manned Space Program Reaches Milestone

In mid-June 2013, three astronauts aboard China's Shenzhou-10 space shuttle docked with the Tiangong-1, which is a small orbiting experimental space lab that China launched in 2011. Shenzhou-10 was China's fifth manned spaceflight, second manned mission to the Tiangong-1, and longest human spaceflight to date. Over the 15-day mission, the crew conducted both automatic and manual dockings, as well as medical, technological, and scientific experiments while aboard the Tiangong-1.70 China's second-ever female astronaut, Wang Yaping, gave a physics lesson from the space lab to more than 60 million Chinese students via live broadcast.71 President Xi attended the Shenzhou-10 launch and later told the crew in a video conference: "The space dream is a crucial part of our nation-building dream. With the rapid development of China's space industry, a great step forward will be made by the Chinese people in the exploration of space." 72

According to Vice Premier Zhang Gaoli, Shenzhou-10's multiple successful dockings with the Tiangong-1 mark the achievement of the second phase of China's three-phase manned space program. In phase one, China launched several unmanned missions to develop technologies necessary for its first manned spaceflight in 2003. In phase two, China honed its spacecraft rendezvous and docking capabilities. In phase three, scheduled for completion by 2023, China plans to launch a permanent manned space station into orbit.⁷³

Official Chinese statements emphasize the civilian aspects of China's space program and only implicitly refer to the PLA's role in China's space strategy. Beijing's 2011 Space White Paper states China's objectives in space are the following:

^{*} C4ISR refers to command, control, communications, computers, intelligence, surveillance, and reconnaissance.

to explore outer space and to enhance understanding of the Earth and the cosmos; to utilize outer space for peaceful purposes, promote human civilization and social progress, and to benefit the whole of mankind; to meet the demands of economic development, scientific and technological development, national security and social progress; and to improve the scientific and cultural knowledge of the Chinese people, protect China's national rights and interests, and build up its national comprehensive strength.⁷⁴

However, the PLA has a significant role in most aspects of China's space activities. Scott Pace, director of the Space Policy Institute at George Washington University's Elliott School of International Affairs, testified to the Commission: "China's human space flight efforts are managed by elements of the PLA and require industrial capabilities that are the same as those used for military programs. Thus it might be more accurate to say that China has civil space activities, such as science and exploration, but does not have a civil space program." This suggests even ostensibly civilian projects, such as the Shenzhou missions and the Tiangong-series space labs, support the development of PLA space, counterspace, and conventional capabilities.

Indigenous Large Transport Aircraft Conducts First Flight Test

In late January 2013, China conducted the first test flight of its indigenously developed cargo transport aircraft, the Yun-20 (Y–20). China previously was unable to build heavy transports, so it has relied on a handful of Russian Ilyushin-76 (Il-76) aircraft for strategic airlift since the 1990s. Following the exposure of key shortcomings in the PLA's ability to conduct disaster relief after China's 2008 Sichuan earthquake, official Chinese media highlighted the PLA's lack of strategic airlift is an "obvious insufficiency" that "affects the overall elevation of [China's] core military capability." ⁷⁶ Aircraft specifications provided by official Chinese media indicate

Aircraft specifications provided by official Chinese media indicate the Y–20 can carry about twice the cargo load of the PLA's only operational transport, the IL–76, and about three times the cargo load of the U.S. C–130. Although the Y–20 currently uses Russian engines, the plane's chief designer said China ultimately plans to replace these with Chinese engines that feature better fuel efficiency and thrust-weight ratio.⁷⁷ China also may produce variants of the Y–20 aircraft for specialized missions, such as airborne refueling, airborne early warning, command and control, and electronic warfare.⁷⁸

Once large-scale deliveries of the new plane begin, the Y–20 aircraft will be able to support a variety of domestic and international military operations. The Y–20 will enhance the PLA's ability to respond to internal security crises and border contingencies, support international peacekeeping and humanitarian assistance operations, and project power in a regional conflict.⁷⁹

New Bomber Deployed

In June 2013, the PLA Air Force began to receive new Hongzha-6K (H–6K) bomber aircraft.⁸⁰ The H–6K—an improved variant of

the H–6 (originally adapted from a late-1950s Soviet design)—has extended range and can carry China's new long-range LACM. The bomber/LACM weapon system provides the PLA Air Force with the ability to conduct conventional strikes against regional targets throughout the Western Pacific, including U.S. facilities in Guam.⁸¹ Although the H–6K airframe could be modified to carry a nuclear-tipped air-launched LACM, and China's LACMs likely have the ability to carry a nuclear warhead, there is no evidence to confirm China is deploying nuclear warheads on any of its air-launched LACMs.⁸²

Marketing New Armed Unmanned Aerial Vehicle

At China's major biennial airshow in November 2012, the Chengdu Aircraft Design Institute, which falls under the state-owned Aviation Industry Corporation of China, presented for the first time a static display of the Wing Loong armed unmanned aerial vehicle (UAV).⁸³ The Wing Loong appeared again at the Paris Air Show in June 2013, marking China's first display of an armed UAV at an international defense exhibition.⁸⁴ A representative of China's largest defense aviation exporter at the air show revealed that as many as six countries in Africa and Asia are negotiating with China to purchase the Wing Loong.⁸⁵

Press observers noted the Wing Loong's close resemblance to the MQ-9 Reaper, one of the U.S.'s chief attack UAVs, leading some analysts to speculate Chinese espionage may have contributed to the Wing Loong's development.⁸⁶ Furthermore, U.S. cybersecurity company FireEye in September 2013 exposed an extensive PLA cyber espionage campaign targeting top aerospace and defense firms for information on U.S. drone technology.⁸⁷ FireEye attributed the campaign to a cyber threat group known as "Comment Group," which U.S. cybersecurity company Mandiant has linked to the 2nd Bureau of the PLA General Staff Department's Third Department.⁸⁸ This suggests cyber espionage may have played a role in the new UAV's design. For more information on China's cyber actors and operations, see chapter 2, section 2, of this Report, "China's Cyber Activities."

Security Developments

Expanding Military Operations in Foreign Exclusive Economic Zones

In 2012, the PLA Navy for the first time began to conduct maritime intelligence collection operations in foreign exclusive economic zones (EEZs)* without providing advance notification.⁸⁹ In one instance, the PLA Navy operated near Hawaii during a major U.S.-led multilateral exercise.⁹⁰ This activity runs counter to Beijing's insistence that foreign militaries provide notification and receive approval prior to operating in China's claimed EEZ. In June 2013,

^{*}According to the United Nations Convention on the Law of the Sea, a coastal state is entitled to an EEZ, a 200 nautical mile zone extending from its coastline within which that state can exercise jurisdiction to explore and exploit natural resources, but not full sovereignty.

a senior PLA official confirmed China's naval deployments to foreign EEZs and said China is "sort of reciprocating America's reconnaissance in our EEZ by sending our ships to America's EEZ for reconnaissance." The PLA official added China has done so only "a few times," in contrast to the U.S. and Japan's "almost daily reconnaissance" of China. $^{\rm 91}$

Although the United States and China agree on the basic role and right of a coastal state to explore, exploit, conserve, and manage natural resources within its EEZ, the two countries have conflicting views on a coastal state's right to regulate foreign military activity in its EEZ, whether they are exercises, military surveys, reconnaissance, or other military operations. 92 Differences on this issue emerged in the 1970s during United Nations Convention on the Law of the Sea (UNCLOS) negotiations,⁹³ reflecting the contrast in priorities between coastal states with interests in the control and security of their coastal waters and seagoing states with interests in the freedom of the seas. When UNCLOS negotiations concluded in 1982, China was a coastal nation with a littoral navy, whereas the United States was a global maritime power with a blue water navy that operated regularly outside its coastal waters.*

Today, China continues to assert its right to regulate foreign military activities in its claimed EEZ, a minority practice among the world's nations.† China's position is based largely on its view that it has the right to prevent any activity that directly or indirectly threatens its security or economic interests. The United States, maintaining military vessels have high seas freedoms in EEZs, contends China must have due regard for the rights and duties of other states exercising those freedoms in a manner compatible with UNCLOS.94 Viewing its own position as one based on international norms, the United States "encourage[s]" similar operations by China, according to U.S. Pacific Command Commander Admiral Samuel Locklear. 95

China also asserts jurisdiction of its domestic laws in its claimed EEZ. The 1998 Law of the People's Republic of China on the Exclusive Economic Zone and Continental Shelf requires foreign entities to obtain Chinese government approval prior to conducting fishing, natural resource exploitation, and marine scientific research in China's claimed EEZ.96 China classifies U.S. military and hydrographic surveys as marine scientific research falling under the jurisdiction of this law.‡ The United States considers both types of survey high seas freedoms.

The different interpretations of maritime rights and freedoms in the past decade have led to bilateral tensions and occasionally incidents between U.S. and Chinese maritime and air forces.

^{*}China ratified UNCLOS in 1996. Although the United States has not ratified UNCLOS, it contends the binding principles of UNCLOS conform to customary international law.
†According to the U.S. Navy, only 27 countries share this view, including China, Bangladesh, Burma, Cambodia, India, Malaysia, Maldives, North Korea, Pakistan, Sri Lanka, Thailand, and Vietnam. Ronald O'Rourke, Maritime Territorial and Exclusive Economic Zone (EEZ) Disputes Involving China: Issues for Congress (Washington, DC: Congressional Research Service, April 2013) p. 4

^{2013),} p. 4. ± UNCLOS also addresses marine scientific research in the EEZ and continental shelf. United Atorocco's also addresses and marked scheduler less and continents shell. Online Nations Convention on the Law of the Sea, "Article 246: Marine scientific research in the exclusive economic zone and on the continental shelf." http://www.un.org/depts/los/convention_agreements/texts/unclos/part13.htm; U.S.-China Economic and Security Review Commission, 2008 Annual Report to Congress (Washington, DC: U.S. Government Printing Office, November 142) 147 2008), pp. 143-147.

One Chinese scholar has suggested the PLA's acknowledgement of its foreign EEZ operations demonstrates that Beijing's "changing concept of maritime affairs" is "moving [China] towards international norms." ⁹⁷ Nevertheless, it is unlikely China will completely abandon its existing policy on military activities in EEZs, as doing so would undermine the legal foundation it has sought to build over time as an objector to the international norm. Therefore, in order to avoid being accused of holding contradictory positions, as well as to manage regional perception of its expanding naval activity, Beijing probably will seek to justify its activities using some of the following approaches:

- Continue to rely on domestic law to legitimize a coastal state's authority to regulate foreign military activities in its EEZ. Under this view, which is at odds with state practice by an overwhelming majority of the world's nations, the PLA could justify operating in foreign EEZs absent a coastal state's legislation addressing this matter.
- Seek to distinguish U.S. activity from its own by continuing to classify U.S. operations as marine scientific research that requires coastal state approval.
- Differentiate between U.S. activity off the coast of the Chinese mainland and Chinese operations along the outer reaches of the U.S. geographic periphery.
- Portray such Chinese operations as mere reciprocation of similar U.S. activities.
- Contrast China's less frequent operations with what it describes as the U.S.'s "almost daily reconnaissance." 98

First Deployment of Infantry to Support UN Peacekeeping Operation

In July 2013, the PLA began to deploy its first peacekeepers to the UN Multidimensional Integrated Stabilization Mission in Mali (MINUSMA).* 99 The PLA contingent, which together consists of nearly 400 troops that were dispatched in two groups, includes what Beijing calls a "security force" from the PLA's 16th Group Army. 100 This marks the first time Beijing has deployed infantry to support a peacekeeping operation since it began participating in UN missions in 1990. 101 The PLA's security force in Mali is responsible for providing force protection for "MINUSMA headquarters and the living areas of peacekeeping forces." 102 China previously had limited the PLA's participation † in peacekeeping operations to noncombat troops—mainly military observers; staff officers; and engineering, medical, and transportation personnel. For example, China in January 2012 deployed a "guard" unit—consisting of

^{*}MINUSMA took over peacekeeping responsibilities from the African-led International Support Mission in Mali (AFISMA) on July 1, 2013. AFISMA had been providing security since January 2013 when Islamic rebels were ousted from the country. United Nations, MINUSMA: United Nations Stabilization Mission in Mali. http://www.un.org/en/peacekeeping/missions/minusma/background.shtml.

[†]Since 2004, China has been contributing police units to UN missions. However, these police units consist of civilians—usually drawn from provincial-level border police units—and are not under the command of the PLA. Bates Gill and Chin-Hao Huang, China's Expanding Role in Peacekeeping: Prospects and Policy Implications (Stockholm, Sweden: Stockholm International Peace Research Institute, November 2009), p. 8.

about 50 PLA troops—to the UN Mission in South Sudan. ¹⁰³ However, the unit's mission was limited to protecting China's own noncombat troops. Beijing explained the guards were needed because the United Nations was not providing protection for Chinese peace-keepers. ¹⁰⁴

Official Chinese statements have downplayed the PLA's deployment of infantry to Mali, likely to avoid raising international concerns about Beijing's intentions and the PLA's growing military capabilities. These statements also have emphasized that China's participation in MINUSMA is consistent with its long-espoused non-interference policy, because Mali requested military assistance. Beijing distinguishes between international action requested by a sovereign state and international action it perceives as designed to overthrow a sovereign state. Beijing fears the latter could legitimize regime change and external intervention and thus threaten China's own core interests of sovereignty and territorial integrity.

China and Russia Hold Large Naval Exercise

In early July, the PLA Navy and the Russian Federation Navy held "Joint Sea-2013" in the Sea of Japan, outside of Vladivostok, Russia. Seven PLA Navy ships—six modern surface combatants and a replenishment ship—participated in the exercise, which included training for antisubmarine operations, antisurface operations, air defense, replenishment at sea, counterpiracy, and search and rescue and concluded with a maritime parade. Official Chinese media highlighted Joint Sea-2013 as the largest deployment of Chinese forces in any joint foreign exercise and the first time the PLA Navy has participated in an "overseas joint exercise far away from [a] naval base and without [a] support system." 105

China and Russia have conducted military drills bilaterally or under the auspices of the Shanghai Cooperation Organization since 2005, but this was only the second naval exercise between the two countries. The first exercise occurred in April 2012 in the Yellow Sea. According to a PLA Navy official, "From now on, the friendly cooperation between Chinese and Russian navies will be further developed, and the exercise will gradually develop towards normalization and institutionalization." Furthermore, during an interview with an official Chinese television station, a Chinese commentator noted, "The antisubmarine subject should be said to be an important subject of this China-Russia joint exercise because antisubmarine exercise has always been a top-secret exercise of various countries ... this shows the military cooperation between the two countries has reached a certain high level of mutual trust." 107

Most Western observers maintain China and Russia are not entering a new stage in security cooperation. Jeffrey Mankoff, a fellow and deputy director of the Russia and Eurasia Program at the Center for Strategic and International Studies, said, "Sporadic cooperation between the Russian and Chinese militaries [does not] alter the fact that China's assertiveness worries Russia at least as much as it worries the United States. Russian military commanders acknowledge that they see China as a potential foe, even as official statements continue to focus on the alleged threat from the United States and [the North Atlantic Treaty Organization]." ¹⁰⁸ Furthermore, two of Russia's largest military exercises

since the Soviet era, held in July 2010 and July 2013, focused on its Far East region and were indicative of training for a conflict

scenario involving China. 109

Nevertheless, most U.S. observers agree the United States should carefully monitor the status of the China-Russia relationship. Dean Cheng and Ariel Cohen, both senior research fellows at the Heritage Foundation, warned, "If a close Sino–Russian strategic relationship develops, it could limit the capacity of the U.S. to act abroad and undermine economic freedom, democracy, and human rights in Greater Eurasia." ¹¹⁰

China-India Border Tensions Flare

Border tensions between China and India flared after New Delhi claimed a contingent of 30 to 50 PLA soldiers crossed about 12 miles beyond the Line of Actual Control* between the two countries on April 15 and stayed there for three weeks. According to New Delhi, PLA soldiers frequently conduct border incursions (more than 600 times over the last three years) but do not usually cross more than a few miles over the Line of Actual Control nor stay there longer than several hours.¹¹¹

Beijing denied Chinese troops had crossed into Indian territory. A Chinese Ministry of Foreign Affairs spokesperson said, "China has always acted in strict compliance with relevant agreements and protocols between the two countries on maintaining peace and tranquility in the Line of Actual Control area along the border ... Chinese patrol troops have never crossed the line." ¹¹² Chinese Premier Li Keqiang attempted to downplay the incident and the risk of conflict. During a state visit to India, he insisted that "a few clouds in the sky cannot shut out the brilliant rays of our friend-ship." Premier Li did not directly address the alleged Chinese incursion, though he said "both sides believe we need to improve various border-related mechanisms that we have put into place and make them more efficient, and we need to appropriately manage and resolve our differences." ¹¹³

Beijing and New Delhi resolved the April border impasse in May after a series of talks and agreed to pursue a formal agreement to build trust and confidence between the border troops. The two sides signed the agreement during the Indian prime minister's trip to China in October $2013.^{114}$

Nevertheless, the potential for periodic low-level confrontations between border patrols to escalate likely will persist. Indian media have reported several additional albeit briefer incursions by Chinese troops since the April standoff. Furthermore, both China and India continue to boost their militaries' capabilities on the border, adding to mutual suspicion. This has left both sides sensitive to each other's border activities and disposed toward worst-case perceptions of the other sides' intentions and activities. Ely Ratner and Alexander Sullivan of the Center for a New American Security, warn: "more intense strategic competition between India and China would reverberate throughout the continent, exacerbating tensions

^{*}The Line of Actual Control is the effective border between China and India. The 2,400 milelong Line of Actual Control traverses the Aksai Chin, the northern part of the Sikkim State, and crosses the McMahon Line in Arunachal Pradesh State.

in Central Asia, the Indian Ocean, and Southeast Asia. Disruptions to the Asian engine of economic growth caused by these tensions could debilitate the global economy." ¹¹⁵

"Subtle Shift" in China's North Korea Policy?

As has been discussed in previous Commission reports, China for decades has provided North Korea with economic and political support and shielded Pyongyang from harsh punishment by the international community for its destabilizing rhetoric and activities. 116 However, North Korea's recent provocations—including its December 2012 long-range rocket launch and February 2013 nuclear test—have led to a "subtle shift" in China's policy toward North Korea, according to former U.S. Assistant Secretary of State for East Asian and Pacific Affairs Kurt Campbell. 117 Observable manifestations of this "subtle shift" are Beijing's stronger and higherlevel public signals of its frustration with Pyongyang. Most notably, President Xi indirectly criticized North Korea in an April speech when he said, "No one should be allowed to throw a region and even the whole world into chaos for selfish gains." 118 This appears to be the first time a Chinese president has publicly reproached North Korea.

Nevertheless, most U.S. analysts agree China has not fundamentally altered its North Korea strategy. Beijing's recent diplomatic moves have been temporary, limited, easily reversible, and more symbolic than substantive.

- In September 2013, several Chinese government ministries jointly issued a new 236-page list of technologies and materials to be banned from export to North Korea. 119 The proscription list focuses on dual-use items that could be used to produce weapons of mass destruction or ballistic missiles. However, according to the Nautilus Institute, "nothing indicates that by issuing tighter controls, China is fundamentally changing its policy toward North Korea, let alone abandoning it... The degree to which China enforces the prohibition of trade in items on this list will mostly determine the success of the program." 120
- Although China in March 2013 voted to approve new and strengthened UN Security Council sanctions on North Korea,¹²¹ Stephanie Kleine-Ahlbrandt, then North East Asia project director and China adviser for the International Crisis Group, in July noted that China's implementation of the sanctions had been "underwhelming." ¹²²
- In May 2013, state-owned Bank of China Ltd. closed its account with North Korea's Foreign Trade Bank. However, Ms. Kleine-Ahlbrant explains, "It is unclear whether there was any money in the Foreign Trade Bank's accounts when they were closed. For months already, North Koreans had been limiting their use of major Chinese banks to avoid scrutiny. Third countries are often used for such transactions, as well as provincial Chinese banks, which operate with considerably more autonomy than the larger state-owned banks. Furthermore, most of North Korean trade with China skirts the banking sys-

tem altogether by engaging in cash transactions via trading companies in China, processing payments in the form of gold or gemstones, or even bartering." 123

Joel Wuthnow, analyst at the CNA Center for Naval Analyses, warns: "this refrain is familiar. For instance, China's harsh rhetoric and vote in favor of UN sanctions after North Korea's 2006 nuclear test was followed in 2007 by a push for dialogue; a similar pattern developed after China's approval of sanctions in response to [North Korean] provocations in 2009, with a more conciliatory approach in 2010." ¹²⁴

United States-China Security Relationship

China Seeking "New Type of Major-Country Relationship" with the United States

Throughout 2013, Beijing called for a "new type of major-country relationship"* with the United States. Official Chinese statements claim the "new type" relationship is intended to promote more stable relations between the two countries and avoid or, if necessary, manage tensions that history suggests could occur as China rises. The concept, which was formulated by Beijing in 2011, has been referenced increasingly in official Chinese statements and press since February 2012, when then presumptive Chinese President Xi evoked it during a visit to the United States. The "new type" relationship was a central theme of the June 2013 summit between President Obama and President Xi in Sunnylands, California.

The "new type" concept, like many Chinese policy slogans, is vaguely defined in order to provide Chinese officials with the flexibility to frame it in different ways for different circumstances and audiences. Chinese officials likely will attempt to use the concept to serve a number of Beijing's strategic objectives, including the following:

- Develop deeper and more frequent military communication to improve the two countries' abilities to manage crises if and when they arise.
- Pressure the United States to respect China's "core interests," which are to preserve China's political system and national security, protect Chinese sovereignty and territorial integrity, and sustain economic and social development.
- Promote an image of China as a constructive actor seeking common solutions to regional and global issues.
- Convince the United States that China is proactively seeking to build a peaceful and cooperative bilateral relationship.
- Pressure the United States to cease its military reconnaissance and survey operations in China's claimed EEZ, reduce U.S. arms sales to Taiwan, and relax restrictions on the militaryto-military relationship, particularly those imposed in the 2000 National Defense Authorization Act.† 127

^{*}Chinese statements also use the term "new type of great power relationship." Both phrases refer to the same concept.

[†]Section 1201 of the 2000 National Defense Authorization Act prohibits DoD from authorizing any military-to-military exchange or contact with representatives of the PLA if that exchange

Select Military-to-Military Engagements

DoD is seeking to expand and deepen its engagement with the Chinese military in nonsensitive areas of mutual interest. DoD contends a strong military-to-military relationship develops familiarity at the operational level, which reduces the risk of conflict through accidents and miscalculations; builds lines of communication at the strategic level that could be important during a crisis; contributes to better overall bilateral relations; and creates opportunities to obtain greater contributions from China to international security.

From 2012 to 2013, the number of U.S.-China military-to-military contacts—including high-level visits, recurrent exchanges, academic exchanges, functional exchanges, and joint exercises—more than doubled from approximately 20 to 40.¹²⁸ In particular, contact between the U.S. Navy and PLA Navy increased significantly during this timeframe. In July 2013, U.S. Pacific Commander Admiral Locklear said, "I think that the progress that we're making between our two militaries is quite commendable ... because we are able to have very good dialogue on areas where we converge, and there are a lot of places where we converge as two nations, and we're also able to directly address in a matter-of-fact way where we diverge." ¹²⁹ Key military-to-military contacts in 2013 include the following:

- In April, U.S. Chairman of the Joint Chiefs of Staff General Martin Dempsey traveled to Beijing to meet with senior Chinese leaders, including President Xi, CMC Vice Chairman General Fan Changlong, and Defense Minister General Chang Wanquan. General Dempsey raised U.S. concerns about Chinese cyber espionage, reiterated U.S. treaty obligations to Japan encompass the Senkaku Islands, and explained the U.S. rebalance to Asia. After the trip, General Dempsey announced both militaries had agreed to a set of joint recommendations for their respective governments, including more frequent and regular military engagements at every level and the development of a code of conduct for interactions in the air, sea, and cyber domains. 130
- In May, the *USS Shiloh*, a guided-missile cruiser based in Japan, called at Zhanjiang, China, to visit the PLA Navy's South Sea Fleet headquarters. This marked the first port visit by a U.S. Navy ship to China since 2009. 132
- In May, then U.S. Pacific Fleet Commander Admiral Cecil Haney visited Beijing for talks with PLA Deputy Chief of General Staff General Qi Jianguo and PLA Navy Commander Admiral Wu Shengli.¹³³ Admiral Haney then traveled to Zhanjiang to participate in the USS Shiloh's port visit.¹³⁴
- In August, a group of two PLA Navy surface ships and a replenishment ship called at Pearl Harbor, Hawaii. This marked the first port visit by a Chinese ship to the United States since 2006.¹³⁵ The PLA Navy ships then participated in a search and

or contact would create a national security risk for the United States. United States Congress, "National Defense Authorization Act for Fiscal Year 2000," Public Law 106–65, October 5, 1999. http://www.gpo.gov/fdsys/pkg/PLAW-106publ65/pdf/PLAW-106publ65.pdf.

rescue exercise with ships from the U.S. Pacific Fleet. According to U.S. Navy Region Hawaii and Naval Surface Group Middle Pacific Commander Rear Admiral Rick Williams, the exercise included "helicopters working together [for] airspace deconfliction ... small boat operations back and forth ... [and] communication drills." ¹³⁶

- In August, the U.S. Fifth Fleet and the PLA Navy conducted the second ever U.S.-China counterpiracy exercise. 137 A U.S. guided-missile destroyer, a Chinese destroyer, and a Chinese replenishment ship participated in the two-day exercise in the Gulf of Aden. According to DoD press, the drill included "simulated medical emergencies and hostage scenarios ... a live-fire proficiency exercise ... [and the] landing of a helicopter from each country aboard the deck of each other's ships." Paraphrasing a U.S. Fifth Fleet official, the DoD press report said the exercise marked a "big step forward" from the first U.S.-China counterpiracy exercise in 2012, which "lasted only about six hours and was limited to a basic visit, board, search, and seizure and secure exercise, follow-on discussion, and crew lunch." 138
- In August 2013, China's Defense Minister General Chang Wanquan traveled to the United States, where he visited the U.S. Pacific Command, the U.S. Northern Command, the North American Aerospace Defense Command, and the Pentagon. Defense Minister Chang met with U.S. Secretary of Defense Chuck Hagel at the Pentagon to discuss Asian security, U.S.-China cyber issues, and opportunities to enhance U.S-China military cooperation. During a joint press conference, Secretary Hagel and Defense Minster Chang gave an overview of recent and planned bilateral exercises; announced plans to establish a dialogue between the U.S. Strategic Plans and Policy directorate of the Joint Chiefs of Staff and the PLA's new Strategic Planning Department; and said the two sides continue to develop a notification mechanism for major military activities and rules of behavior for military air and naval activities. 139
- In September, PLA Navy Commander Admiral Wu Shengli and Senior Captain Zhang Shen, the commanding officer of China's first aircraft carrier, traveled to San Diego, California, and Washington, DC. In San Diego, the PLA Navy delegation met with U.S. Chief of Naval Operations Admiral Jonathan Greenert; toured a NIMITZ-class aircraft carrier and a LOS ANGELES-class attack submarine; embarked on a Littoral Combat Ship at sea; and visited U.S. Marine Corps Base Camp Pendleton. In Washington, DC, the delegation had a series of talks with U.S. Navy leadership at the Pentagon and visited Walter Reed National Military Medical Center. 140

Additionally, China in March accepted the U.S. invitation, first extended by then U.S. Secretary of Defense Leon Panetta in September 2012, to participate in the U.S.-led multilateral Rim of the Pacific (RIMPAC) Exercise near Hawaii in 2014.¹⁴¹ According to U.S. Pacific Command Commander Admiral Samuel Locklear, this

is "a big step for the Chinese military ... [the] Chinese navy [will] be entering a multinational three-week-long exercise that's basically run by the U.S. from the 3rd Fleet headquarters." 142

Implications for the United States

China's military modernization presents significant challenges to U.S. security interests in Asia. First and foremost, major elements of this program—such as the DF-21D antiship ballistic missile and increasing numbers of advanced submarines armed with antiship cruise missiles—are designed to restrict U.S. freedom of action throughout the Western Pacific. As the PLA's anti-access/area denial * capabilities mature, the costs and risks to the United States for intervention in a potential regional conflict involving China will increase

Furthermore, the PLA's rapidly advancing regional power projection capabilities enhance Beijing's ability to use force against Taiwan, Japan, and rival claimants in the South China Sea. This could embolden China to respond militarily to a perceived provocation or to consider preemptive attacks in a crisis involving Taiwan or China's maritime sovereignty claims. Many of these scenarios could require the U.S. military to protect U.S. regional allies and partners as well as to maintain open and secure access to the air and maritime commons in the Western Pacific.

At the same time, rising unease over both China's expanding capabilities and increasing assertiveness is driving U.S. allies and partners in Asia to improve their own military forces and strengthen their security relationships with each other. These trends could support U.S. interests by lightening Washington's operational responsibilities in the region.

Most Asian countries welcomed the U.S. rebalance to Asia when it was announced by the Obama Administration in 2011. The Philippines, for example, is considering granting the United States access to Subic Bay—a former U.S. naval base.† The Philippines Department of Foreign Affairs Visiting Forces Agreement Director said, "As the [United States] begins to implement [the rebalance to Asia], Subic will play an important role because it is one of the important facilities that can service its presence in the Pacific." ¹⁴³ However, there is growing concern among U.S. allies and partners that the United States will be unable to follow through on its commitment to the rebalance due to declining defense budgets and continuing security challenges elsewhere. Furthermore, some regional countries almost certainly began to question the willingness of the United States to restrain China's increasing assertiveness after China in 2012 gained de facto control of Scarborough Reef, territory also claimed by the Philippines, a U.S. treaty ally. This perception could lead some regional countries to increasingly accom-

^{*&}quot;Anti-access" (A2) actions are those intended to slow deployment of an adversary's forces into a theater or cause the forces to operate from distances farther from the conflict than they would otherwise prefer. A2 affects movement into theater. "Area denial" (AD) actions are those intended to impede an adversary's operations within areas where friendly forces cannot or will not prevent access. AD affects movement within theater. U.S. Air-Sea Battle Office, Air Sea Battle: Service Collaboration to Address Anti-Access & Area Denial Challenges (Arlington, VA: May 2013), pp. 2–4.

[†]Subic Bay—a natural harbor that is about 50 miles north of Manila—served as a major U.S. naval base until the early 1990s.

modate China or pursue military capabilities that could be used offensively or preemptively. Either scenario could undermine U.S. interests in the region.

Conclusions

- PLA modernization is altering the security balance in the Asia Pacific, challenging decades of U.S. military preeminence in the region.
- The PLA Navy is in the midst of an impressive modernization program. China's acquisition of naval platforms, weapons, and systems has emphasized qualitative improvements, not quantitative growth, and is centered on improving its ability to strike opposing ships at sea and operate at greater distances from the Chinese mainland. Today, the PLA Navy is able to conduct high-intensity operations in China's immediate periphery as well as low-intensity operations beyond the region. Trends in China's defense spending, research and development, and shipbuilding suggest the PLA Navy will continue to modernize. By 2020, China could have approximately 60 submarines that are able to employ submarine-launched intercontinental ballistic missiles or antiship cruise missiles and approximately 75 surface combatants that are able to conduct multiple missions or that have been extensively upgraded since 1992.
- The PLA is rapidly expanding and diversifying its ability to strike U.S. bases, ships, and aircraft throughout the Asia Pacific region, including those that it previously could not reach, such as U.S. military facilities on Guam.
- The PLA's expanding involvement in real world missions allows it to field-test equipment and obtain hands-on experience in areas such as addressing unconventional threats in harsh and potentially hostile environments, satisfying expeditionary logistics requirements, and integrating into multilateral operations.
- The PLA is improving its day-to-day readiness levels and conducting longer-range and more frequent, robust, and realistic training. As these reforms continue, the PLA will become more proficient and confident operating its advanced platforms and weapon systems and better able to rapidly respond to regional contingencies.
- The PLA Navy's growing presence in foreign EEZs contradicts its longstanding policy on military activities in its own EEZ. Rather than resolve this inconsistency between its actions and policy, Beijing likely will continue to assert its authority to regulate U.S. military activities in its EEZ.

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