



C-801 / C-802

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# THE CHINESE MILITARY

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## AN EMERGING MARITIME CHALLENGE



# EXECUTIVE SUMMARY

Official American attitudes toward China in recent years have varied from benevolent to suspicious to guardedly hopeful. Some of the variance is due to a lack of knowledge: much of China's decision-making process remains hidden to the outside world. Even current statistics on such basic issues as population and health, military size and spending and economic performance are unreliable, if not misleading.

But much of the reason for the lack of a clear vision of the American relationship with China is the very recognition of the looming importance of that relationship — the very positive implications of cooperation, and the potentially disastrous implications of an aggressive competition. There is a natural reluctance to focus on the negative in fear of making it come true.

Nevertheless, the essential elements of American and Chinese national interests in the East Asia and Pacific region, now and even more so in the future, make competition of some sort inevitable. It is a paradox that for China, with the third largest land mass among the world's nations and with a military dominated by the army, the primary strategic interests are maritime. With the exception of India, confrontation with any of China's rivals would take place in the South China Sea or Straits of Taiwan, through which flows the oil and gas it is increasingly dependent upon. Consequently, China has increasingly turned its military attention toward developing a robust coastal defense and littoral power-projection capability designed to keep others out of areas it claims as exclusive zones, including the waters around Taiwan.

Today, China's naval and air capabilities are limited by American standards. They lack integrated information and command and control networks, have limited modern electronic-warfare capabilities, and exhibit significant weaknesses in logistics and sustainment ability. However, with a determination to purchase advanced technology from Russia and an emphasis on asymmetric warfare, China is positioning itself to challenge the continuation of the American role in the East Asia and Pacific region in the future.

If Taiwan does not take action to improve its defenses against a surprise missile attack within the next few years, the threat from mainland China to annex Taiwan by force will be compelling. And while the United States has several key initiatives underway to bolster capabilities in the East Asia-Pacific — such as Aegis missile defense, the Littoral Combat Ship and Virginia-class submarines — a long-term commitment to counter the emerging Chinese anti-access strategy is essential.

The initial draft of this report was written by Myra S. McKittrick. All members of the Naval Strike Forum had an opportunity to review and modify the final report.

## U.S. INTERESTS IN THE EAST-ASIAN LITTORAL AND NORTHEAST ASIA

As a global economic power and a democracy committed to the rights and freedoms of individuals everywhere, the United States has a natural interest in every corner of the world. Nevertheless, a few regions have a strategic value to this country which places them at the forefront of U.S. national security priorities. Perhaps topping this list at the beginning of the 21st Century is the region known generally as East Asia-Pacific.

Within this region, the Department of Defense has identified Northeast Asia (Japan and Korea) and the East-Asian Littoral — defined as the area stretching from the south of Japan through Australia into the Bay of Bengal — as critical to the United States. Keeping these areas free of hostile domination is an “enduring national interest.”<sup>1</sup>



There are five primary elements of this national interest: protecting the right of Taiwan to self-determination; maintaining peace on the Korean Peninsula; ensuring the continued freedom of navigation in the South China Sea; containing the spread of weapons of mass destruction; and fighting the war on terror. The actions and intentions of China are key to each of these interests:

### *Taiwan*

Even though the United States transferred official diplomatic ties from the island to the mainland in 1979, the American defense commitment to Taiwan has remained legally and politically firm. In 2003 Taiwan was placed on a list of Major Non-NATO Allies, making it eligible for special defense procurement consideration.<sup>2</sup>

## *Korea*

For 50 years the United States has pledged to defend South Korea from attack. Over time the military situation on the Peninsula has evolved significantly, while the threat from the North has remained vivid. Even as the U.S. Army's 2nd Infantry Division makes plans to re-deploy back from the demilitarized zone in recognition of the decreased likelihood of a massive ground invasion from the North,<sup>3</sup> the possibility of nuclear war has loomed. Within a few short months in late 2002 and early 2003, North Korea reopened its sealed nuclear production facilities, withdrew from the Nuclear Non-Proliferation Treaty, acknowledged possession of nuclear weapons and threatened to build more.

## *Freedom of Navigation*

The region is vast and volatile, with long-standing border disputes, conflicting claims over various islands and reefs and their potential oil and gas reserves, and competition for fishing resources. Ambiguous international law has encouraged overlapping and conflicting claims among the region's nations to Territorial Waters (12 nautical miles out from shore) and Exclusive Economic Zones (200 nautical miles out from shore). There have been numerous cases of armed confrontation over the past 25 years, exacerbated by rising incidents of piracy.<sup>4</sup>



*An American EP-3 collided with a Chinese fighter over international waters in 2001.*

Within this mix the United States seeks to ensure the security of the shipping lanes and open access to key markets and strategic resources. The South China Sea hosts more than half of the world's annual shipping traffic, with over 100,000 merchant vessels transiting its key straits each year. This includes 80 percent of the oil imports for Japan, South Korea and Taiwan.<sup>5</sup>

### *Weapons of Mass Destruction*

In addition to the nuclear program already discussed, North Korea has an established chemical and biological weapons program and likely stockpiles. They have extensive ballistic-missile programs underway, the centerpiece of which is a multiple-stage missile which will be capable of reaching the United States with a nuclear warhead. Equally troubling, North Korea has demonstrated a willingness to sell components and even complete missile systems as a source of hard currency to support further research and development. In addition, Korea has privately threatened to export nuclear weapons.

### *The War on Terror*

Since September 11, 2001, the United States has actively sought the support of nations throughout the East Asia-Pacific in the fight against terrorism. This support has taken the form of allowing increased military presence through over-flight rights and basing agreements, political support in the United Nations and other fora, sharing of intelligence, and identification and arrest of suspected terrorists. The Philippines, Malaysia, Singapore and Indonesia have all proven to be helpful partners. They are also home to Islamic populations targeted by the radical Islamic group and terrorist organization Jemaah Islamiah, based in Indonesia.<sup>6</sup>



*PLA Digitized Soldier*

## CHINA'S EVOLVING ROLE IN THE REGION

The United States has long been the dominant power in the East Asia-Pacific despite its physical location one-third of the way around the globe. Within the region itself, Japan has the dominant economy, but is limited by its Constitution to a defensively oriented military presence. Due to their strategic location and size, India and China have been likened by one regional official to “an aircraft in which China is one wing and India the other,” with Southeast Asia in between.<sup>7</sup> But clearly it is China who is emerging as the region’s most important country measured by what the Chinese call “comprehensive national power.” This uniquely Chinese approach to assessing the relative strengths

and weaknesses of competitors attempts to quantify a combination of factors including economic output, military strength, strategy, population, territory and international influence.<sup>8</sup>

There is considerable debate within Western academic circles about China's medium and long-term objectives as a regional power. Official Chinese policy establishes a goal of a balance of power among the chief four or five countries of the world, first regionally and then globally.<sup>9</sup> The only question within China seems to be over how long it will take for relative American power to decline sufficiently for a balance to emerge.<sup>10</sup>

In the meantime, China needs investment and technology from the United States to achieve its objective of becoming a major power. Similarly, peace and stability within the East Asia-Pacific region are crucial elements of the environment China requires to strengthen its economy and armed forces in anticipation of the day when it can challenge America.

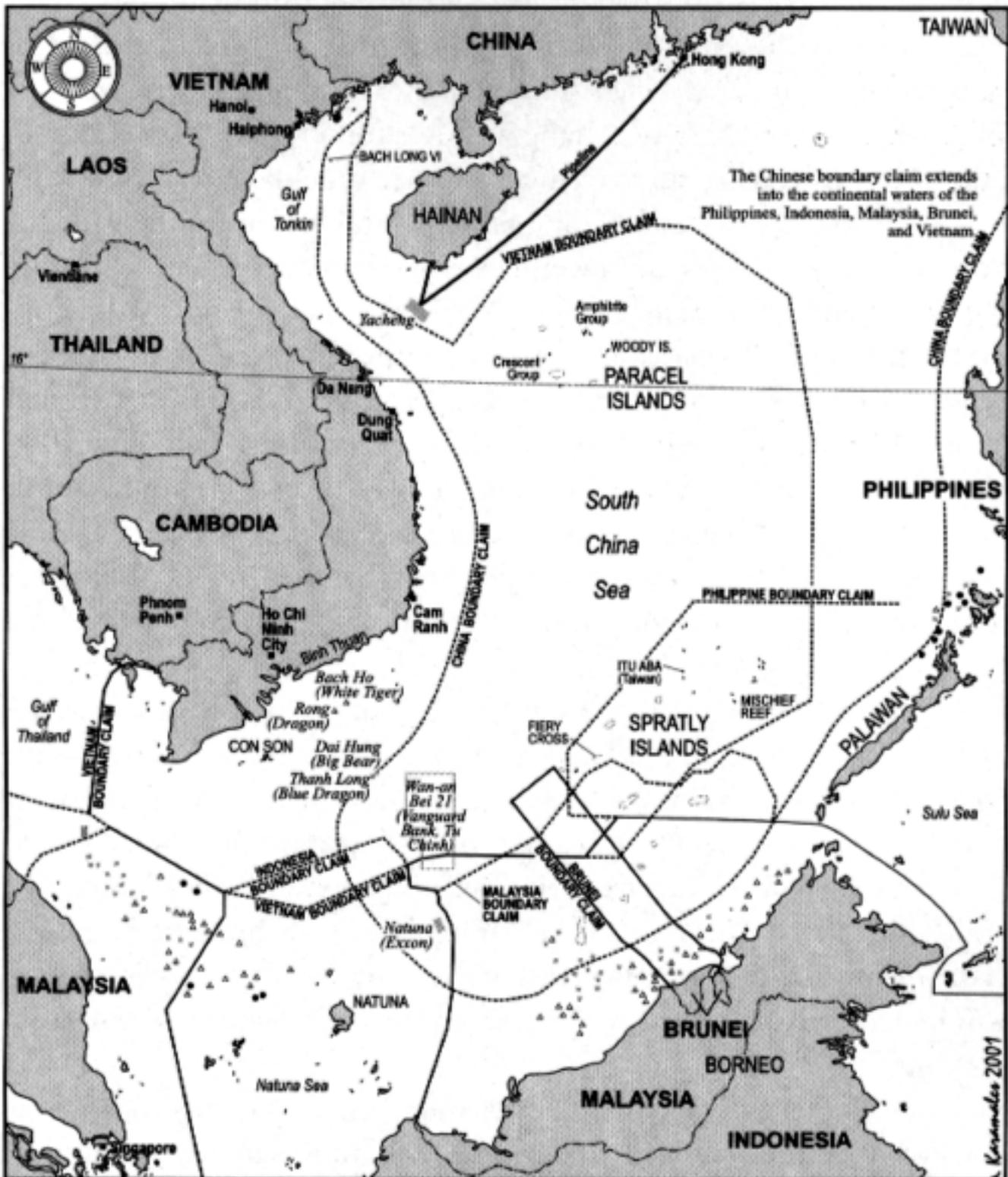
*“Deng’s often quoted advice was...hide our capabilities and bide our time... Deng’s advice is followed today...leaders counsel patience and tolerating whatever the United States does to China, in order to allow China to grow for the next 20 years.”*

U.S.-China Review Commission, Report to Congress, July 2002

Toward this end, China has engaged in a series of diplomatic initiatives to strengthen its relations with the United States, most notably in support of the U.S. war on terror. China responded immediately to the September 11, 2001 terrorist attacks with both concrete and rhetorical expressions of support and has continued to share intelligence with the United States.<sup>11</sup> Building on this cooperation, China invited a resumption of bilateral military exchanges that had been shut down in the wake of the collision between American and Chinese military aircraft in April 2001.

China has taken an active role in the North Korean nuclear crisis, clearly hoping (as does the U.S.) to avoid actual armed conflict. As the leading supplier of food and fuel aid to North Korea, China has some leverage over the North Korean government, and has been able to encourage them to participate in three-party talks. Nevertheless, China's diplomatic approach is the opposite of America's, and it has opposed attempts to censure North Korea in the United Nations.<sup>12</sup>

China has been a persistent and troubling source of technology to countries of proliferation concern to the United States. Director of Central Intelligence George Tenet has reported that Chinese activities not only “continue to be inimical not just to our interests, but [also] stimulate secondary activities that only complicate the threat that we face.”<sup>13</sup> Of particular note is Iran, which has chemical and biological warfare programs and, with foreign assistance, could have a nuclear weapon within a few years. Since early 2002, the U.S. has imposed two dozen different sanctions naming Iran



**CONFLICTING BOUNDARY CLAIMS  
in the  
SOUTH CHINA SEA**

- Gas Field
- Oil Field
- ▲ Oil and Gas Field

- Uncontested Boundary Claim
- - - - Contested Boundary Claim



Map courtesy of: Dr. Henry J. Kenny, *Shadow of the Dragon: Vietnam's Continuing Struggle with China and the Implications for U.S. Foreign Policy*, (Washington D.C., Brassey's, 2002), p. 58.

against Chinese companies for violating the technology transfer terms of such agreements as the Iran Non-Proliferation Act of 2000, and the Missile Technology Control Regime.

### *The South China Sea*

While recent initiatives have improved ties somewhat between China and its regional neighbors on issues such as trade and disputes over maritime zones and territories, China's proprietary attitude toward the South China Sea concerns its neighbors as well as the United States.<sup>14</sup> For years China has claimed all the territory within an extensive boundary drawn in the South China Sea that includes significant sections of the continental waters of the Philippines, Indonesia, Malaysia, Brunei and Vietnam. Many of the "territories" within this area are hardly more than reefs or uninhabitable rock, but could prove valuable in establishing future claims to undersea oil and gas reserves.

Notwithstanding the legitimacy of alternate claims and the potential economic stakes involved, the small nations bordering or within the South China Sea are vulnerable to quiet pressure and intimidation from China. Seemingly in keeping with a policy of peaceful resolution of maritime conflict, in 2000 China negotiated a sea boundary with Vietnam. This agreement demarcated the Gulf of Tonkin in a way that ceded to China a major portion of the Gulf — granting it far more of these waters than had the existing 113-year-old agreement. Chinese appetite for the Gulf was stimulated in part by the discovery and exploitation of gas in the nearby Yacheng Field.

More broadly, China has expanded its claims to territorial waters from a baseline that it claimed along its coast in 1996. The baseline, in many parts, goes well beyond established international norms, even when extended in places where there are offshore islands. Within this area, China plans to enforce "maritime surveillance and control rights" by requiring advance permission to "explore" the waters, including military survey and mapping.<sup>15</sup> This policy puts China on a clear collision course with the United States, which has long held that military and other non-commercial vessels are not subject to any restrictions within the 200-nautical-mile zone, which was established for purposes of economic development only. Consistent with their view of the issue, the Chinese have continued to harass unarmed U.S. oceanographic ships and reconnaissance aircraft over and in international waters.<sup>16</sup> Perhaps most importantly, this Chinese claim to a 200-nautical-mile control zone covers the entire Taiwan Strait.

### *Taiwan*

The most persistent and potentially explosive regional issue for China (and America) is the status of Taiwan. Throughout a long and complicated diplomatic dance, the United States has maintained a commitment to self-determination by the people of Taiwan while China maintains the right to "reunify" the country, by force if necessary. Meanwhile, Taiwan has evolved into a lively democracy with a political debate increasingly irritating to Beijing. Fearing the possibility of a future referendum in Taiwan declaring its permanent independence, China has stepped up both its diplomatic pressure and military build-up against the island. Beijing has also made clear that such a declaration would justify the use of force against Taiwan.

## THE CHINESE MILITARY BUILD-UP

The Chinese have been officially modernizing their military for two-and-a-half decades.<sup>17</sup> By the end of the 1980's this modernization had begun to take on a real seriousness with annual defense budget increases of around 15 percent, according to China's own accounts. Actually, this figure may be at least twice as large due to the Chinese practice of excluding military research and development and foreign purchase expenditures from its official budget numbers.

By the mid-1990's, modernization efforts had expanded to include reforms to professionalize the force. This included better training and education at all levels, transferring internal security and business operations to other state entities and expansion of the non-commissioned officer ranks.<sup>18</sup> As a consequence, the size of the People's Liberation Army (PLA — unlike the United States, the Chinese air force and navy are subsumed within the Army) has shrunk in recent years from three million to approximately 2.2 million today.<sup>19</sup>

### *Major Modernization Initiatives*

Modernization and reform are continuing at a steady pace. Impressed by the power and promise of precision-guided weapons and the rapid, effective use of information technology demonstrated by the United States in the 1991 Gulf War, the Chinese have emphasized technology and doctrine to counter American military superiority with asymmetric capabilities such as air defenses and long-range tactical missiles. This approach is encapsulated in “The Three Attacks and Three Defenses” plan: “air defense training that concentrates on attacking stealth aircraft, cruise missiles, and helicopters, while defending against precision strikes, electronic warfare, and enemy reconnaissance.”<sup>20</sup>



*People's Liberation Army (Navy) sailors stand in formation.*

Of course, this is not something that can be accomplished quickly, even with the massive infusions of foreign technology the Chinese have experienced in the last few years. Instead, it is a 10-20 year objective that coincides — in the Chinese view — with the relative decline of the United States over the same period. The exception is the military environment around Taiwan, which has been the focus of more intense activity. This is discussed in more detail below.

## Space

The Chinese space program has received recent attention with the launch of an astronaut into space in October 2003. China joins only the United States and the former Soviet Union in this achievement, which is understandably a source of great pride. The strategic implications for the United States, however, are ominous. The spacecraft left behind an orbital module, or satellite, with equipment capable of monitoring American military movements.

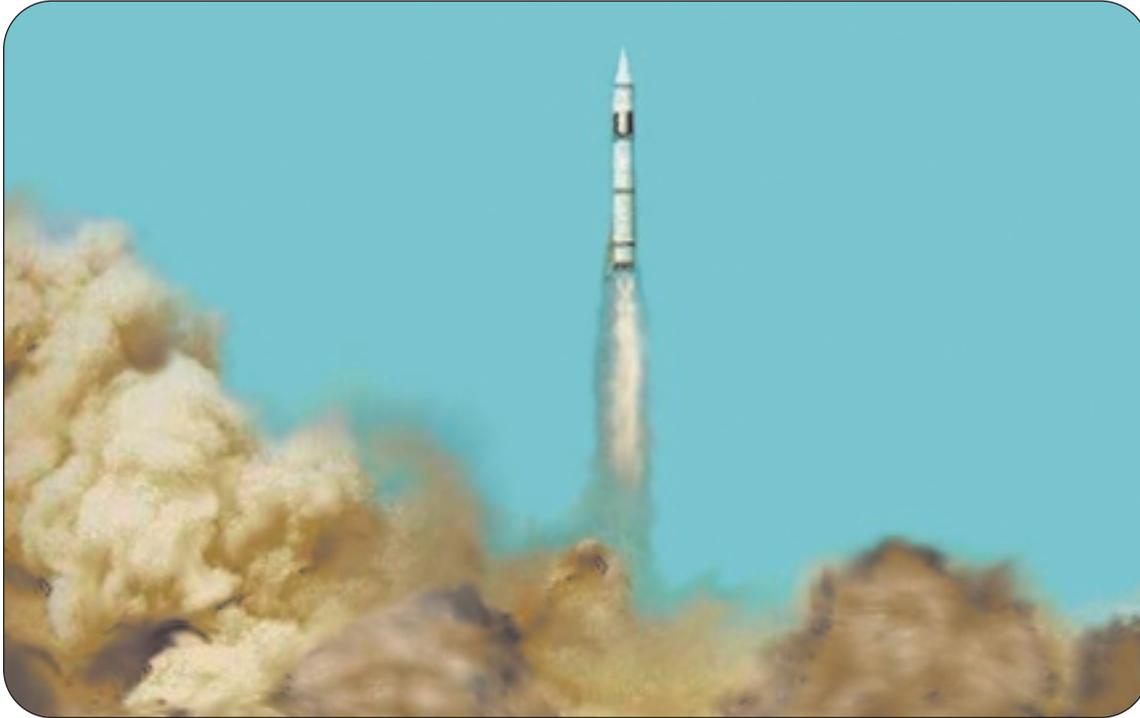
China has been launching satellites since 1970, and by the end of 2001 had put over 50 satellites into orbit, including one American satellite. These craft have included payloads for remote sensing, weather and communications; many with military missions. In 2000, China launched its first high-resolution electro-optical imaging satellite that relays state-of-the-art digital pictures back to earth. Billed as a civilian earth-monitoring satellite, many believe its real mission is military. The Department of Defense expects China to continue deploying sophisticated satellites designed to improve space-based reconnaissance and surveillance to provide a “robust and versatile” regional capability.

On the other side of the space equation, China has an active research and development program aimed at anti-satellite warfare. With foreign technical assistance, Chinese researchers are working on a variety of technologies, such as laser radars to track satellites, jammers to negate global positioning satellites (GPS), and space interceptors to destroy satellites in orbit. This last capability may be available within the next five years.

## Ballistic Missiles

Today, China has a small force of about 20 intercontinental ballistic missiles (ICBMs), armed with a single nuclear warhead, capable of reaching the United States. Because these missiles must be launched from fixed silos using liquid fuel which takes hours to prepare, they are vulnerable to attack and thus are not a particularly effective deterrent. However, this situation is expected to change significantly within the next 10 years. By 2015, the Chinese ICBM force will be mobile and fueled with solid propellant, meaning they can be launched within minutes of an order.

Three of these types of systems are under development, one of which will be fired from submarines. One program, the DF-31, is already in flight testing and could be deployed within a few years. Overall, by 2015 the Chinese will have 75-100 nuclear warheads on missiles that could reach any location in the United States, and a few dozen more shorter-range ICBMs that could reach portions of the United States.<sup>21</sup> This flexible and survivable nuclear force will pro-



*DF-5 Intercontinental Ballistic Missile*

vide the Chinese with something they don't currently have — a credible threat to attack America with nuclear weapons in the case of a confrontation, for example, over Taiwan.

In addition to nuclear missile modernization, the Chinese continue to deploy a new generation of short-range ballistic missiles (SRBMs) armed with conventional warheads. This survivable and effective force is deployed exclusively opposite Taiwan. About 500 SRBMs are now deployed; this number is expected to increase by 75 each year.

*Beijing's growing SRBM force provides China with a military capability that avoids the political and practical constraints associated with the use of nuclear-armed missiles.*

National Intelligence Estimate, December 2001<sup>22</sup>

### **Air**

The PLA Air Force's (PLAAF) inventory of combat aircraft is large, but less than five percent of it is modern by Western standards. China continues to purchase the new, advanced SU 30 multi-mission fighter aircraft from Russia, and to produce under license the front-line SU 27

air defense fighter, but its modernization emphasis appears to be on quality, not quantity. New fighter aircraft have been joined by laser, TV and radar guided air-to-air missiles purchased from Russia, and indigenously-developed electronic warfare capabilities deployed on various types of aircraft, including unmanned aerial vehicles (UAVs).



*Su-27 Aircraft Series of PLA Air Force*

Similar improvements are underway in naval air combat. A new version of the FB-7 medium-range anti-ship fighter-bomber is under development. Already an all-weather aircraft, the new version will have night attack capabilities. In addition, the PLA Navy (PLAN) will receive a naval strike version of the SU 30, armed with anti-ship precision guided munitions.

Using this equipment in an effective manner will require a level of sophisticated training and air combat doctrine that are new to the Chinese. Recognizing these weaknesses, the Chinese plan to deploy several airborne warning and control aircraft (again, purchased from the Russians) to help integrate air operations, and to conduct more realistic exercises and training opposite a sophisticated adversary. With these efforts, the Department of Defense predicts a “robust” air combat fleet by 2010.<sup>23</sup>

## **Land**

One of the chief missions of the PLA is keeping stability in the separatist regions of Xinjiang (next to the Central Asian states) and Tibet, and guarding China’s long borders with its many neighbors. Modernization of land forces is oriented toward developing more mobility, especially for rapid response within the country. Recent purchases of medium-attack helicopters from Russia, development of integrated special forces units, and continuing re-organization

provide evidence of the PLA's commitment to improving the mobility, lethality and survivability of the ground forces over time.

### Sea

Like the PLA Air Force, the PLA Navy is modernizing to enhance regional power projection, anticipating operations against a technologically sophisticated adversary. The newest surface combatants are equipped with local air defenses and sophisticated anti-ship missile systems. Four modern Sovremenny-class destroyers were purchased from the Russians, immediately boosting the capability of the Chinese fleet to operate further out in the South China Sea, away from land-based air defenses. A new class of indigenously developed stealthy destroyers, a follow-on to the LUHAI-Class, was launched in 2002. These ships have an even greater air-defense capability, with a new phased-array radar similar to the U.S. Aegis system. They appear to be designed for area-wide, long-range defense against aircraft, and may be effective against missiles in the future.



*Shen Zhen Destroyer - 167*

Submarines play an important role in the PLA's concept of asymmetric warfare. Their job is to interdict surface ships using mines and torpedoes, and increasingly cruise missiles. The Chinese produce two classes of diesel-electric submarines (Ming and Song). In an important advancement, they reached agreement with Russia in 2002 for eight new Kilo-class submarines, considered one of the most advanced diesel-electric submarines in the world, complete with wire-guided and wake-homing torpedoes. China is expected to incorporate this new technology into its own designs.

The current inventory of five older nuclear powered submarines is being replaced with a new generation beginning in the next several years. A total of four new boats are expected to be operational by 2010, with an anti-aircraft carrier mission.



*Han-class SSN*

Similar to submarines, mines offer the PLAN an effective counter to a sophisticated naval adversary. Consequently, the Chinese deploy a variety of types, both offensive and defensive. These include bottom and moored mines, mobile and remotely controlled mines. Propelled warhead mines can operate in deep waters, potentially denying an adversary large operational areas.

### *The Military Threat to Taiwan*

There is widespread agreement among military analysts that China is now developing capabilities for a rapid, decisive, surprise attack designed to pre-empt any U.S. intervention in support of Taiwan. Taipei's own analysis of growing Chinese military capabilities is that the PLA will surpass the Taiwan military by 2005-2006, and could be confident of success in an attack on Taiwan by early in the next decade.<sup>24</sup> Possible operations by China against Taiwan include alternatives short of invasion, such as information operations, blockade, missile strikes, or taking various smaller islands in the Taiwan Straits. Whatever action they may take, the Chinese intend to make American intervention prohibitively costly, if not irrelevant.

As a result of the many improvements in Chinese equipment, training, surveillance and reconnaissance discussed in this paper, Taiwan is increasingly vulnerable to a surprise attack. A combined missile and air strike on Taiwan would "damage severely most of Taiwan's air bases, significantly

degrading its land-based air defenses...”<sup>25</sup> Thus, China would render useless Taiwan’s long-standing advantage in advanced fighter aircraft. Combined with an attack on Taiwan’s surface combatants in the Straits, China could create the opportunity for an amphibious assault large enough to create panic on the island. China’s stated objective is to achieve the ability to launch a cross-Strait amphibious invasion by 2005, and U.S. Navy planners are taking this intention seriously.

### *Maritime Capabilities*

Chinese officials claim they do not plan to acquire an ability to project power outside of their immediate region. In fact, they are not buying the long-range bombers, aircraft carriers, transport aircraft and other equipment needed for military operations at an extended distance. Instead, the focus is on strengthening their military presence within the 200-nautical-mile zone to the point of denying access to anyone else, especially the American Navy.

Capabilities to project power within this zone have been steadily improving. Within the last several years, the PLAAF has demonstrated its ability to refuel combat aircraft in flight using modified bombers as tanker aircraft, and recently launched a fourth replenishment ship. Amphibious assault capabilities have also received attention and resources. Both ground forces training and naval training have emphasized amphibious operations in recent years, including a large scale exercise in the South China Sea at the end of 2002 which combined submarines, surface combatants and amphibious assets.

### *Anti-Access Strategy*

The anti-access strategy builds on the concept of asymmetric capabilities. In order to counter the advanced, modern and unique capabilities the United States enjoys with long-range bombers, aircraft carriers, and a large and sophisticated fleet of surface combatants, submarines, and large-deck amphibious vessels, China is deploying a formidable array of defensive missiles. These systems, combined with the offensive missiles discussed above, are creating an effective buffer along the Chinese coastline.

The most recent additions to Chinese air defenses are the newest generation of Russian surface-to-air missiles, the SA-10,12 and 20. Fast-flying and jam resistant, these air-defense systems are significantly more sophisticated than any faced by the U.S. Air Force in actual combat.

According to Chinese military analysts, several other systems could be combined to create a “trump card” or “assassin’s mace” strong enough to destroy a U.S. aircraft carrier — including fighter-bombers, submarines, mines, anti-ship missiles and torpedoes. These are all areas of recent and ongoing modernization initiatives.

Finally, there is some evidence the PLA considers nuclear weapons to be a useful element of an anti-access strategy. In addition to the nuclear-capable missiles discussed above, China has

nuclear bombs and aircraft to carry them, and is reported to have nuclear mines for use at sea and nuclear anti-ship missiles.<sup>26</sup> At the very least, China would expect the presence of these weapons and the threat to use them to be a significant deterrent to American action.

## IMPLICATIONS FOR THE UNITED STATES

The strategic interests of the United States in the East Asia-Pacific region demand a long-term investment in countering the Chinese anti-access maritime strategy. The American commitment to key regional allies such as Japan, South Korea, the Philippines and Taiwan, and to ensuring freedom of navigation through the critical sea lanes of the South China Sea are essential to the continued vitality of the global economy. But the Chinese strategy seeks to weaken the American presence in the region and simultaneously extend Chinese influence through an ever-expanding military capability in international waters off China's coast.

### *The Importance of Missile Defense*

The most immediate requirement for the United States is to mount an effective theater ballistic-missile defense to counter the growing numbers of Chinese offensive missiles. This will reassure allies and neutralize the threat of nuclear blackmail. In the particular case of Taiwan this need is urgent. The United States must ensure that Taiwan has the essential elements of self-defense against an air attack. An effective early warning and air and missile-defense capability deployed by Taiwan would send a signal to China that its emerging strategy of a decisive pre-emptive strike against the island cannot succeed. This serves American interests as clearly as it does Taiwan's.

Taiwan has deployed a version of the Patriot land-based missile defense system to defend Taipei, but the newest Chinese missiles aimed at Taiwan were developed with this challenge in mind. The most advanced version of the Patriot has been approved for sale to Taiwan, but has not been purchased. Overcoming the political and budgetary obstacles to this acquisition should be a priority for both Taipei and Washington.



*A Standard Missile-3, designed to intercept short to medium-ranged ballistic missiles, is launched from an Aegis cruiser.*

Ships armed with the Aegis combat system would give Taiwan a significant boost toward self-defense against air, surface and sub-surface threats. Aegis would address one of the principle weaknesses of the Taiwan navy — the ability to conduct multiple missions (such as attack and defend) at the same time. In addition, they would provide a valuable link to the American Navy's Aegis-based theater missile-defense system.<sup>27</sup>

### **Coalition Ballistic Missile Defense**

Such a link could be extended via Aegis to other close allies in the region, creating the opportunity for coalition ballistic-missile defense. The United States is continuing to build and deploy Aegis destroyers, which are already the majority of the Navy's surface combatant capability and will remain so for the next 20 years. Upgrades to the Aegis air-defense system on board these American ships will create an initial theater ballistic-missile defense capability within the next year.

A number of other nations have deployed the Aegis air-defense system in recent years, or have plans to do so. Japan has four operational Aegis destroyers and more under construction. South Korea has initiated an Aegis construction program and Australia is rapidly moving in that direction. Both Japan and Australia have plans to upgrade their air defense destroyers with ballistic missile-defense capability, as the United States is doing. Even without the missile defense upgrades, however, allied ships can contribute to a missile defense network using their baseline Aegis air-defense capabilities. By 2015 there will be at least 15-20 operational non-U.S. Navy international Aegis ships that could contribute significantly to a coalition defense with the development of appropriate operational concepts and protocols. Successfully exercising such a capability would go a long way toward solidifying the long-term role of American power in the East Asia-Pacific region.

The United States Navy must also closely track the evolving threat to aircraft carrier battle groups, since these will remain for the foreseeable future its most potent method of projecting offensive conventional force in the Western Pacific. China has emphasized anti-carrier operations in both its doctrine and investment plans since the U.S. sent two carrier battle groups to the area during the 1996 missile crisis in the Taiwan Strait. Intelligence estimates indicate that China will deploy improved antiship cruise missiles and maneuvering ballistic warheads in the next decade, which could present a formidable danger if linked to overhead targeting sensors and a suitable battle management network.

U.S. aircraft carriers are very difficult to attack given the vast expanses of ocean in which they can maneuver, the increasing range of their aircraft (which eliminates the need to operate near land), their layered defenses and their inherent resilience. Nonetheless, steps must be taken to assure that carriers remain as survivable and useful in the future as they are today, regardless

of the investments China may make in new military technology. The most important near-term steps that the Navy can take in this regard are to fund deployment of high-altitude, long-endurance surveillance vehicles such as the Global Hawk, continue expanding the Cooperative Engagement Capability for defense against air-breathing threats, complete sensor upgrades to the E-2C Hawkeye for tracking of cruise missiles over land, and assure timely connectivity enhancements, most notably in the form of Forcenet. Modernization of carrier air wings with the longer range, more survivable F/A-18 E/F Super Hornet and subsequent introduction of the stealthy, very-long-range F-35 Joint Strike Fighter will also greatly improve the survivability and versatility of carriers operating in the Western Pacific.



*Global Hawk*

The new Virginia-class nuclear attack submarine will be a powerful component of the carrier battle group's self-defense. It has been designed specifically to address threats such as the Chinese diesel-electric submarines and mines, and to operate in the shallower waters found

around the reefs and islands of the South China Sea. Armed with torpedoes and cruise missiles, the Virginia-class also has an impressive offensive capability. However, its much larger cousin — the converted Ohio-class ballistic-missile submarine — could be the key to the suppression of a Chinese attack on American or allied forces, including Taiwan.<sup>28</sup> With enough warning (minutes, not hours), just one of these giant submarines lurking undetected within the South China Sea could launch 154 cruise missiles against ballistic missile launchers, command and control facilities, air defense sites and air fields. A surprise pre-emption of this sort — or even the possibility of one — could quickly curtail any Chinese plans for aggressive military action.

*“We have the ability to deal with an aircraft carrier that dares to get into our range of fire.”*

Maj. Gen. Huang Bin, a professor at the PLA National Defense University, quoted by Hong Kong’s Ta Kung Pao daily newspaper May 13, 2003.

Finally, the American Navy’s latest addition to the fleet, the Littoral Combat Ship (LCS), will provide a much-needed mine-countermeasures capability within the South China Sea. These small, agile ships will navigate the shallower waters of the coastline looking not only for mines, but also for submarines and smaller adversary combat vessels. The LCS represents an entirely new way to pre-empt asymmetric capabilities before they can seriously threaten high-value targets, such as American aircraft carriers or even commercial ships.



*Off the coast of Kyushu Island, Japan the fast attack submarine, USS La Jolla, with the Deep Submergence Rescue Vehicle Mystic attached.*

# CONCLUSION

China appears to be embarked on a long-term program to recreate itself as a peer competitor to the United States, in all aspects of national power. It continues to delay serious moves towards democratic openness, but longstanding American values, as well as national policy, applaud and encourage the Chinese desire to strengthen its economy, invest in science and technology, and expand its middle class. At the same time, American security and economic interests in the East Asia-Pacific region are also longstanding and fundamental. A growing Chinese military assertiveness to accompany its economic development could create a serious strategic challenge to the United States in the future. Even now the elements of an anti-access strategy are clear, as China positions its economic, political and military resources to keep the United States out of its backyard, including the South China Sea and Straits of Taiwan.



*F/A-18 Hornet strike fighters*

This means that even as American military planners address the near and mid-term requirements of maritime security in East Asia-Pacific, such as deploying missile defenses and ensuring the survivability of carrier battle groups, they must also be mindful of what the trends suggest for 2020 and beyond. This is the time-frame in which China expects to challenge the United States militarily; if America is to be ready, it must lay the foundation today.

- <sup>1</sup> Department of Defense, Quadrennial Defense Review Report, September 30, 2001; p.2.
- <sup>2</sup> Other countries in the East-Asia Pacific to be so-designated include the Philippines, Thailand and New Zealand.
- <sup>3</sup> The Division plans to re-deploy one brigade about 70 miles south to Osan, and the other brigade to the south-eastern tip of Korean near Pusan. The target date is 2006.
- <sup>4</sup> See Carolyn W. Pumphrey, ed., The Rise of China in Asia: Security Implications, Strategic Studies Institute, U.S. Army War College, January 2002; pp.229-251.
- <sup>5</sup> Ibid., p.245.
- <sup>6</sup> Rosemary Foot, Human Rights and Counter-terrorism in America's Asia Policy, Adelphi Paper 363, International Institute for Strategic Studies: London, February 2004; p.45.
- <sup>7</sup> Teo Chee Hean, Singaporean Defense Minister, in Defense News, February 16, 2004, p.38.
- <sup>8</sup> See Michael Pillsbury, China Debates the Future Security Environment, National Defense University Press: Washington, D.C., 2000; Chapter Five: "Geopolitical Power Calculations."
- <sup>9</sup> In its July 2002 Report to Congress, the U.S.-China Security Review Commission concluded: "China aspires to be a major international power and the dominant power in Asia. To that end, China is actively pursuing a multi-polar world where it could align with other rising powers...in order to check or challenge U.S. power." U.S. - China Security Review Commission, "The National Security Implications of the Economic Relationship Between the United States and China," Report to Congress, July 2002, p.2.
- <sup>10</sup> This is in contrast to what the Chinese see as the American objective, "to contain China and prevent its emergence as a great power." Adam Ward, "China and America: Trouble Ahead?" in *Survival*, Vol 45, No. 3, Autumn 2003, p.37. See also Michael Pillsbury, op. cit., especially "Chapter 2: America's Declining Role."
- <sup>11</sup> Chinese actions include: Support to UN Resolution 1638 condemning the attacks on the United States; regular meetings between U.S. and Chinese counter-terrorism units in finance and law enforcement; establishment of an FBI attaché office in Beijing; allowing U.S. customs inspectors at Chinese ports.
- <sup>12</sup> China reportedly cut off fuel to North Korea (claiming a pipeline accident) in order to pressure their participation in the Chinese-sponsored talks of April 2003. Ward, op.cit., pp.48-50.
- <sup>13</sup> George Tenet, Director, Central Intelligence Agency, testimony in hearing, "Worldwide Threat to U.S. Interests," Committee on Armed Services, U.S. Senate, March 19, 2002.
- <sup>14</sup> Pumphrey, op. cit., pp.253-254.
- <sup>15</sup> In a law passed in 1992, China expressed its claim to the 200 nautical mile zone, despite the fact that it has signed the UN Convention on Law of the Sea which established territorial waters at 12 nautical miles and limits control within the 200 nautical mile zone to natural resources.
- <sup>16</sup> John J. Tkacik, Jr., "Time for Washington to Take a Realistic Look at China Policy," Heritage Foundation Backgrounder #1717, December 22, 2003.
- <sup>17</sup> The military became one of the Four Modernizations in 1978 when Deng Xiaoping came to power.
- <sup>18</sup> John Hill, "China's Military Modernisation Takes Shape," Jane's Intelligence Review, February 1, 2004.
- <sup>19</sup> The International Institute for Strategic Studies, The Military Balance, 2003-2004, Oxford University Press, 2003. This compares to the United States with an armed force of 1.4 million.
- <sup>20</sup> Department of Defense, Annual Report on the Military Power of the People's Republic of China, July 28, 2003, p.5.
- <sup>21</sup> Foreign Missile Development and the Ballistic Missile Threat to the United States Through 2015, National Intelligence Estimate, National Intelligence Council, December 2001.
- <sup>22</sup> Ibid.
- <sup>23</sup> Ibid., pp.22-24.
- <sup>24</sup> Lin Chong-ping, Deputy Minister of Defense for Taiwan, January 9, 2004; Hill, op. cit.
- <sup>25</sup> Department of Defense, op.cit., p.48.
- <sup>26</sup> Thomas M. Kane, "Dragon or Dinosaur? Nuclear Weapons in a Modernizing China," Parameters, Winter 2003-04, p.109.
- <sup>27</sup> Taiwan has a five-year old standing request for up to four of these ships, which the United States has failed to fulfill due to Chinese objections. Recently U.S. officials have signaled a willingness to reconsider.
- <sup>28</sup> These submarines are designated SSGNs, to differentiate them from the ballistic missile submarine SSBN. Four SSBNs are being converted to the SSGN type, as the United States reduces its inventory of sea-based ballistic nuclear missiles in accordance with the START treaties negotiated with the former Soviet Union. The SSGNs will be tailored for land attack and SEAL-delivery missions.

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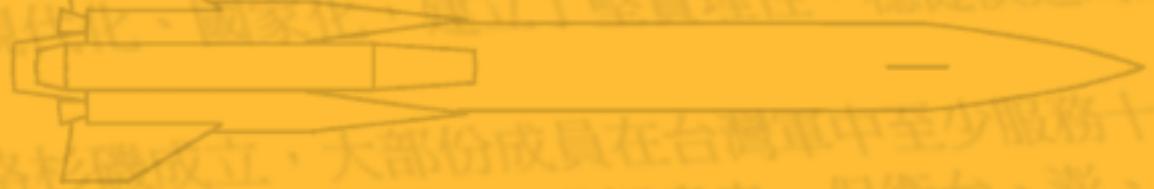
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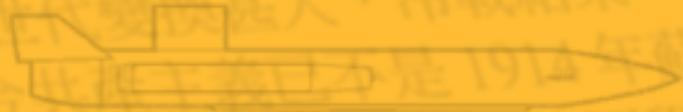
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