**RESPONSES TO US HEGEMONY** 

# Hoping for the Best, Preparing for the Worst: China's Response to US Hegemony

# ANDREW ERICKSON AND LYLE GOLDSTEIN<sup>1</sup>

#### US Naval War College

ABSTRACT In the post-Cold War strategic environment, Beijing could plausibly have opted for Soviet-style geostrategic competition with Washington, but it has not. Chinese leaders have not thus far, and almost certainly will never, amass thousands of nuclear weapons on hair-trigger alert or deploy significant forces to a network of bases spanning the globe. Nevertheless, the below assessment of China's increasing hard and soft power yields the conclusion that a Chinese challenge to US hegemony cannot be ruled out. The United States must prudently maintain military forces appropriate to facing a potential peer competitor. At the same time, however, Washington must engage in a process of creative diplomacy that simultaneously matches China's soft power and engages seriously with Beijing to create areas of consensus and cooperation.

KEY WORDS: Chinese military, US defense policy, hegemony, US-China relations

After the 9/11 terrorist attacks, a new optimism emerged in US-China relations with the hope that the great powers would join to combat the terrorist menace that threatened them all.<sup>2</sup> There was the expectation that this common threat could overcome the tendencies toward rivalry that had been building during the 1990s and reached a new apex during the EP-3 air crisis in April 2001. Unfortunately, these grand hopes have been scaled back considerably. It is quite apparent now that

<sup>&</sup>lt;sup>1</sup>The opinions expressed in this article are those of the authors and do not represent the official policies or assessments of the US Navy or any other agency within the US Government.

<sup>&</sup>lt;sup>2</sup>See, for example, Jonathan D. Pollack (ed.), *Strategic Surprise? US-China Relations in the Early Twenty-First Century* (Newport, RI: Naval War College Press 2003).

Beijing is prepared to work with Washington to achieve pragmatic ends. Thus, China has offered support in various phases of the War on Terror.

But it is also clear that Beijing intends to increase its soft and hard power in ways that could pose a challenge to US hegemony, which it fears threatens its core national interests. China not only wields increasing commercial clout in all regions of the globe, but is also willing to deliberately ignore human rights issues in order to achieve diplomatic advantage with respect to the United States. Concerning military development, Beijing's rapid, deep, and wide-ranging modernization in capabilities ranging from diesel submarines to microsatellites will enable it to increasingly dominate the East Asian littoral as well as its massive continental flanks.

The continuous development of rivalry between the United States and China is natural to some extent, of course, but it also can be mitigated and managed if flawed policies on both sides of the Pacific are reformed. This essay will assess China's possible challenge to US hegemony by surveying a wide variety of recent diplomatic, commercial, and military developments.

# **Collision Course**

On 1 April 2001, US-China relations reached their nadir after a decade of turbulence. A Chinese F-8 fighter collided with a US EP-3 reconnaissance aircraft on a routine mission in international airspace 70 nautical miles southeast of China's Hainan Island. The F-8 and its pilot, Wang Wei, plunged into the South China Sea, never to be seen again. The EP-3's 24 crew members managed to land at Hainan's Lingshui military airbase. Beijing detained the American crew for 12 days until Washington expressed 'regret' over the incident. The plane was returned three months later in pieces, presumably after its sophisticated systems had been thoroughly examined. Where Washington saw erroneous interpretations of international law and government-sponsored nationalism as motivating Chinese activity, Beijing saw the incident as the culmination of repeated American infringements upon Chinese sovereignty.<sup>3</sup>

Throughout the 1990s, repeated incidents that took place against a background of ideological hostility fueled by human rights and trade issues had created a climate of tension for US-China relations. President William J. Clinton entered office in January 1993 vowing to link

<sup>&</sup>lt;sup>3</sup>See, for example, 李兵 [Li Bing], 海军英豪: 人民海军英模荟萃 [Naval Heroes: An Assembly of Heroic Models from the People's Navy] (Beijing: Sea Tide Press 2003), 253-5.

US-China trade to human rights reforms. Clinton's policy failed, but not before generating significant mutual frustration. Meanwhile, Lee Deng-hui was preparing Taiwan for its first direct presidential election. In 1995, he gave a speech at his alma mater, Cornell University, in which he was deeply critical of China's government. Incensed, China initiated a series of military exercises. To Beijing's frustration, the latter set of exercises, held in March 1996, prompted the Clinton administration to send two carrier battle groups toward the Strait. Later, in a 1999 interview with Germany's *Deutche Welle*, Lee suggested that Taiwan should be treated as an independent state.

In the late 1990s, President Clinton made a concerted effort to engage China. During a visit to Shanghai on 30 June 1998, he stated the so-called three no's: 'We don't support independence for Taiwan, or two Chinas or one Taiwan, one China, (and) we don't believe that Taiwan should have a membership in any organization for which statehood is a requirement.'<sup>4</sup> Clinton also vetoed Congress's Taiwan Security Enhancement Act, and even floated ideas of a 'strategic partnership'.

These measures were viewed quite positively in Beijing but with lingering suspicion in Washington. China's rapid economic growth was raising concern in the US Congress. Fears of nuclear espionage and militarily relevant technology transfer emerged as well. In May 1999, Congress issued the Cox Report, which charged that China had stolen some of the most secret warhead designs from US nuclear laboratories and had illicitly acquired technology from American satellite manufacturers that would improve Chinese intercontinental ballistic missiles (ICBMs). The timing could not have been worse for US-China relations. On 12 May, the North Atlantic Treaty Organization (NATO) had by accident bombed the Chinese embassy in Belgrade as part of its war in Kosovo. Three Chinese died and China's leaders were certain that the attack had been deliberate. They were already deeply disturbed by the Kosovo War, which demonstrated that NATO might intervene in sovereign states without United Nations (UN) approval to prevent human rights violations. Moreover, Chen Shuibian's election as President of Taiwan in 2000, and the ensuing rise of his Democratic Progressive Party to power, would ignite new sovereignty concerns in Beijing.

The near simultaneous election of Presidents Chen Shuibian and George W. Bush seemed to herald a new level of difficulty in US-China relations. By the time of the EP-3 crisis, therefore, the US and

<sup>&</sup>lt;sup>4</sup>Alan M. Wachman, 'Challenges And Opportunities In The Taiwan Strait: Defining America's Role', National Council on US-China Relations, China Policy Series, No. 17, Jan. 2001, 9, <www.ncuscr.org/Publications/Cross-Strait%20Report.pdf>.

China eyed each other with deep suspicion. Beijing and Washington seemed destined for conflict based on diverging national interests and incompatible political systems. Bush assumed the presidency in January 2001 having described China as a 'strategic competitor'. There was considerable speculation that the Bush administration intended to make 'containment' of China a foreign policy priority. And then on September 11, 2001, the deaths of many innocent people, including over 3,000 Americans, dramatically altered these tendencies.

## 9/11 as a Turning Point

If there was a silver lining to the horrendous destruction of the 9/11 attacks, it was that the truly heinous nature of the crime engendered, albeit briefly, a very broad coalition of states that were not only willing to overtly condemn this act as barbarism, but were willing to take concrete steps to support the United States during a challenging time. China's participation in this coalition was not only operationally significant for US-led combat operations in Afghanistan during 2001–2002, but also substantially reversed the negative trends in the Sino-American relationship described above.

It has been widely observed that China's anti-American disposition was revealed in some of the laudatory Internet chatter that crossed the busy blogosphere in the immediate aftermath of the attacks. There is undeniably a current of this nationalist sentiment in Chinese public opinion. Nevertheless, the Chinese Communist Party (CCP) very quickly clamped down on this activity, following the lead of President Jiang Zemin in condemning the attacks in the strongest terms, while conveying sympathy to the American people. Indeed, the new tenor of Sino-American relations was revealed when President Bush went forward with an October 2001 Asia-Pacific Economic Cooperation (APEC) summit in Shanghai just a few weeks after the unprecedented attacks on the US homeland. Bush and other American leaders were no doubt grateful that Jiang allowed the Shanghai economic summit to spontaneously be transformed into a major anti-terrorism summit of world leaders.<sup>5</sup>

Assistance of a more concrete nature also seems to have been rendered by Beijing. Indeed, there is some evidence that China played a crucial role in lobbying Pakistan to accept the presence of extensive US

<sup>&</sup>lt;sup>5</sup>For an analysis that emphasizes the importance of both bilateral and multilateral cooperation in combating terrorism to China's national security see 张洁 [Zhang Jie], '中国的反恐政策:原则, 内容与措施' [China's Anti-Terrorism Policy: Principle, Substance, and Measures], 当代亚太 [Contemporary Asia-Pacific Studies], No. 11 (2005), 31–7.

forces as Operation 'Enduring Freedom' unfolded.<sup>6</sup> Lacking alternative routes of ingress, military operations wholly depended on the cooperation of Islamabad. Yet the United States had rather severely strained relations with Pakistan in the period immediately before 9/11, because of the 1998 nuclear tests and President Pervez Musharraf's suspension of democracy, among other issues. During the crucial weeks after 9/11, as planning for military operations unfolded, Musharraf did not come to Washington as one might have expected, but rather traveled to Beijing to consult with Islamabad's most durable ally. Although the Pakistani President might have been inclined to lean toward Washington in any case, it is still significant that Beijing did not act to counter what amounted to a substantial growth of US influence in China's backvard. Indeed, it became immediately clear that Chinese and US interests overlap very substantially in South Asia. Above all, both powers share a vital interest in ensuring that Pakistan neither becomes a failed state, nor falls into the hands of radical Islamists.

Further underlining this new rapprochement was an equally potent convergence of interests with respect to Central Asia, and Afghanistan in particular. Although China had some limited dealings with the Taliban, Beijing also had very concrete reasons to hope for a new order in Kabul. In particular, Chinese allegations that the Taliban were actively supporting Uighur separatists with arms and training appear to be supported to some extent by post-war revelations. Thus, some Chinese nationals were actually captured by US forces during the fighting and were subsequently held prisoner at Guantanamo Bay.<sup>7</sup> Chinese actions in support of Operation 'Enduring Freedom' included: support for US military action in the UN Security Council, permission for port visits by US warships on station in the Arabian Sea to Hong Kong (thereby reversing a ban on such visits), and also support for the Bonn Accord and the resulting Karzai government in Kabul.<sup>8</sup>

A broader, more active counterterrorism agenda emerged in US-China relations. This involved the establishment of counterterrorist intelligence sharing and joint financial monitoring working groups. These cooperative law enforcement activities led to arrests as early as 2003.<sup>9</sup> In a related development, mainland China and Hong Kong have

<sup>&</sup>lt;sup>6</sup>Charles Hutzler, 'China's Economic, Diplomatic Aid to Pakistan Has Played Key Role in US's War on Terror', *Wall Street Journal*, 17 Dec. 2001, W1.

<sup>&</sup>lt;sup>7</sup>See, for example, Tim Luard, 'China's Changing Views of Terrorism', *BBC News Online*, 25 Dec. 2003, <http://news.bbc.co.uk/2/hi/asia-pacific/3320347.stm>.

<sup>&</sup>lt;sup>8</sup>'Jiang Zemin Announces PRC Aid to Afghanistan,' *Xinhua*, 20 Dec. 2001, FBIS# CPP 20011220000178.

<sup>&</sup>lt;sup>9</sup>Keith Bradsher, '3 in Hong Kong Agree to Face Charges in US,' *New York Times*, 7 Jan. 2003, A2.

been leaders in cooperating to develop the Container Security Initiative, an effort to ensure that shipping containers entering US ports are carefully tracked.

To be sure, many critics have suggested that China has been exploiting the Global War on Terror for its own ends. The coincidence of Washington's listing of the East Turkestan Islamic Movement (ETIM) as a terrorist organization in late August 2002 with the need to secure China's support for the 2003 Iraq War does suggest the possibility that a tacit deal might have been struck. Indeed, Beijing supported all major resolutions in the UN Security Council relating to Operation 'Iraqi Freedom'. Given Beijing's robust relationship with Tehran, by contrast, it is not at all clear that American diplomats will be able to secure a similarly strong Chinese stand against Iranian nuclear development.

The centerpiece of US-China relations since 9/11, however, concerns the future of the Korean Peninsula. Under the guiding principle that China should police its own neighborhood, Washington has quietly let China take the lead in developing the Six-Party Talks on Korean denuclearization. Although there has been halting progress in this effort, and encouraging signs that some Chinese scholars recognize that North Korea is in need of comprehensive economic reform,<sup>10</sup> major tangible gains have thus far remained elusive. Moreover, Beijing could very well opt to maintain North Korea's regime despite its avowed nuclear test of 9 October 2006, as a point of leverage vis-à-vis Washington. In doing so, China would further consolidate its position as East Asia's ultimate power broker. This issue, which is of vital interest to both powers, is symbolic of the overall question concerning China's approach to US hegemony. Will Beijing work in concert with Washington to achieve their common interests, or will mistrust, fear and jealousy drive Beijing to adopt a zero-sum approach to world order? There is no more important question for 21st century global security and yet it defies any simple answer.

Over the last two centuries, China has been a weak and insular state, in contrast to the storied heritage of earlier dynasties. Therefore, it is quite reasonable to expect that a more powerful state would undertake more active policies in the arenas of foreign relations and defense. This is a natural process, to a large extent—a simple byproduct of modernization. It is somewhat reassuring, for example, that China's road and rail infrastructure appear to be a greater priority than many military programs. In this sense, China is very different from the USSR, which radically neglected internal (commercial) infrastructure and so retarded its overall development.

<sup>&</sup>lt;sup>10</sup>Authors' interview, Beijing, June 2006.

On the other hand, the 'strategic' (versus modernization) imperatives in Chinese national security policy are already relatively clear. Certain weapons programs (e.g. the present focus on undersea warfare) appear to be aimed at preparing for potential conflict with the United States. The neo-mercantilist aspects of China's foreign energy acquisitions suggest at least the possibility of a zero-sum approach to attaining global resources for the country's future development. The outlines of a hedging strategy are evident in the recent writings of Chinese strategists. One People's Liberation Army (PLA) theorist, writing in China's most prestigious military journal in 2006, concludes that core national interests (security and development) are subsumed by the imperative of territorial integrity (survival). At the conclusion of the article, the author squarely blames America's hegemonic impulses that have led to a 'new buildup of American forces based in Asia' and 'blocked the realization of unification'.<sup>11</sup> Many Chinese strategists hold that Washington's 'status quo' policy toward Taiwan actually amounts to support for Taiwan independence.<sup>12</sup> Another Chinese strategist views Washington's 'unilateral striving for global hegemony...[in order to] build an "American empire" as a fundamental characteristic of the current international situation. According to this analysis, America's 'wild ambition is extremely great, [but its] power is insufficient'.13

Despite these evidently intense concerns relating to US policies, China's current leadership is focused primarily on the thorny issue of internal stability. Indeed, Chinese leaders are likely far from making up their minds concerning the best approach in national security policy. What is clear already is that just as Washington has created a hedging strategy versus Beijing,<sup>14</sup> so Beijing is pursuing a similar strategy

<sup>&</sup>lt;sup>11</sup>Although this rendering of China's strategic interests is somewhat confrontational, it should be noted that the author suggests that political means will often be more appropriate than the use of force for pursuing China's strategic interests. 王桂芳 [Wang Guifang], '国家利益与中国安全战略选择' [National Interests and the Choice of Chinese Security Strategies], 中国军事科学 [*China Military Science*] 19/1, 76–83.

<sup>&</sup>lt;sup>12</sup>刘红 [Liu Hong], '过去四年台美火交易的特点影响' [Reviewing the Last Four Years of Heated US-Taiwan Relations and Their Influence], essay in 郝雨凡, 赵全胜 [Hao Yufan and Zhao Quansheng (eds.)], 布什的困境-海内外专家透视美国外交政策走向 [Bush's Predicament—Domestic and Overseas Experts' Perspectives on Trends in US Foreign Policy] (Beijing: 时事出版社 [Current Affairs Press] 2005), 260.

<sup>&</sup>lt;sup>13</sup>丁原洪 [Ding Yuanhong],'国际形势发展的特点和趋势' [Characteristics and Trends of the International System's Development], 国际问题研究 [*International Studies*], No. 1 (2006), 20.

<sup>&</sup>lt;sup>14</sup>Office of the Secretary of Defense, *Annual Report to Congress: Military Power of the People's Republic of China*, p. I, <www.dod.mil/pubs/pdfs/China%20Report%202006.pdf>.

vis-à-vis Washington. China's hedging strategy is comprised of both diplomatic 'carrots,' as well as potent military 'sticks'.<sup>15</sup>

# China's Agile Soft Power Diplomacy

Beijing's diplomatic profile has expanded rapidly over the last decade. Its role in the diplomacy of contiguous regions such as Central Asia, South Asia, and Southeast Asia has risen appreciably. One scholar even posits that powerful 'geogravitational centers' such as China can attract and transform 'geopolitical sunk areas,' or underdeveloped regions, which would otherwise cause instability.<sup>16</sup> Moreover, China now also has robust and active diplomacy with non-contiguous regions, especially with Europe, Africa, the Middle East, and the Americas. In support of these expanded efforts, China Foreign Affairs University, Beijing's diplomatic school, will triple enrollment from 2,500 to 7,500 by 2008.<sup>17</sup> To date, the defining characteristics of China's diplomacy are resource and technology acquisition, on the one hand, and a 'principled' non-interventionist stand with respect to human rights issues on the other. Whether China has a truly global strategy - a 'grand plan' - or is just reacting to political and commercial deals opportunistically remains unclear. However, there is ample reason to consider how China's expanded global influence might or might not represent a challenge to US hegemony.

Chinese analysts refer to their nations' northern and western periphery as the 战略后方 [strategic rear flank] – an area where Beijing must achieve 'stability and tranquility' to concentrate resources toward the main strategic direction.<sup>18</sup> In practice, this has meant active diplomacy to smooth out difficulties in the complex relationships with the primary anchoring states in this area: Russia and India. China's relationship with Russia has formed a strategic counterweight to US hegemony for more than a decade. Moscow and Beijing have found common ground in jointly opposing US interventionism, alliance

<sup>&</sup>lt;sup>15</sup>For a discussion of China's hedging strategy, see Evan S. Medeiros, 'Strategic Hedging and the Future of Asia-Pacific Stability,' *Washington Quarterly* 28/4 (Winter 2005–06), 145–67.

<sup>&</sup>lt;sup>16</sup>苏浩 [Su Hao], '地缘重心与世界政治的支点' [Geogravitational Centers and World Political Fulcrums], 现代国际关系 [Contemporary International Relations], No. 4 (2004), 60.

<sup>&</sup>lt;sup>17</sup>Discussion between Chinese official and author, Beijing, June 2006.

<sup>&</sup>lt;sup>18</sup>Zhao Huasheng, 'Can China, Russia, and the United States Cooperate in Central Asia?' *Zhanlue yu Guanli*, March 2004, FBIS# CPP20040420000264, 3. See also 姜毅 [Jiang Yi], '中国的多边外交与上海合作组织' [China's Multilateral Diplomacy and the Shanghai Cooperation Organization], 俄罗斯中亚东欧研究 [*Russia, Central Asia, and East European Research*] (Oct. 2003), 84.

networks such as NATO, ballistic missile defense, and the broader human rights agenda. Although arms sales have probably peaked, and the energy relationship remains problematic, the relatively large scale bilateral military exercise of September 2005 nevertheless reveals the relatively cozy nature of the current relationship.

India is a more formidable challenge for Chinese diplomats, because it is to some extent a natural competitor to China. However, confidence building measures dating from 1996, combined with a sensitive approach to the Kashmir issue, together with a host of economic cooperation initiatives, appear to have gradually reduced any residual hostility and jealousy in New Delhi to manageable levels. During Premier Wen Jiabao's visit in April 2004, both sides described their relationship as a 'strategic partnership oriented towards peace and prosperity'.<sup>19</sup> From China's point of view, the absolute imperative is to prevent India from solidifying any kind of firm military alliance with the United States.

In appraising China's activities in the Greater Middle East, Africa and Latin America, China's alternative approach to human rights policy is firmly on display. In Central Asia, Beijing has succeeded in 'flipping' what is arguably the most important state on the chess board, Uzbekistan. During 2005, Washington's reaction to an alleged massacre in the city of Andijon precipitated a request from President Islam Karimov that US forces vacate a base established after 9/11, while Karimov flew off on his first state visit to Beijing and Sino-Uzbek relations have blossomed accordingly. If China wants to tap into Turkmenistan's vast natural gas reserves, transit through Uzbekistan will be critical.

But Kazakhstan has been the major focus of Beijing's attention in Central Asia. This is the site of Beijing's most ambitious pipeline project to date, as well as its grandest foreign acquisition—*PetroKazakhstan* for US\$4.18 billion during the fall of 2005. Chinese analyst Zhang Wenmu offers a rationale for this ambitious course of action: 'Energy is the driving force behind economic growth. Growing imbalance between worldwide supply and demand for oil is threatening China's oil security.'<sup>20</sup> This expensive purchase may have occurred because 'China is increasingly dependent on Middle East oil and it wants a supply that would be blockade-proof in case of a conflict over

<sup>&</sup>lt;sup>19</sup>马加力 [Ma Jiali], '中俄印三角关系的新发展' [New Developments of the China-Russia-India Triangle], 现代国际关系 [Contemporary International Relations], No. 7 (2005), 60-1.

<sup>&</sup>lt;sup>20</sup>Zhang Wenmu, 'China's Energy Security and Policy Choices', *Shijie Jingji Yu Zhengzhi* [World Economics & International Politics], No. 5 (May 2003), 11–16, FBIS# CPP20030528000169.

Taiwan.<sup>21</sup> Indeed, in May 2006 oil began to flow from Kazakhstan to China. Beijing projects that the pipeline will 'transmit 20 million tons of oil a year, 15 percent of China's total crude oil imports for 2005'.<sup>22</sup>

In the Middle East, Iran is quite clearly the keystone of China's strategy. In October 2004, Sinopec signed a contract to import \$70 billion of Iranian natural gas over the next 30 years. Beijing may add another \$100 billion in investment into Iran's oil production.<sup>23</sup> Another major breakthrough occurred in January 2006 when King Abdullah of Saudi Arabia made the kingdom's first ever state visit to China. Indeed, Iran is perhaps not the only Middle Eastern state that will look favorably on Beijing's relaxed approach to human rights and democracy.

Meanwhile, China is already receiving significant energy supplies from Africa. Beijing has facilitated this process by providing advantageous loans and assisting with infrastructure development. Beijing's close ties with Sudan have all but stymied decisive UN intervention in the Darfur region. Robust links with oil-rich Nigeria increasingly involve national security. According to a recent report, 'Nigerian security sources said China was becoming one of Nigeria's main suppliers of military hardware. They said new supplies would include dozens of patrol boats... A senior Nigerian naval official said Nigeria had "felt let down" by the reluctance of the US military to offer more support and that the Chinese boats were a "very welcome development."<sup>24</sup> China also has an excellent relationship with southern Africa's pariah state, Zimbabwe. Harare is said to have placed an order for \$240 million in Chinese weapons in June 2004.<sup>25</sup> Overall, Chinese foreign development investment in Africa has grown steadily and exceeded \$35 billion in 2003.<sup>26</sup>

A similar trend is visible in Latin America. Here, China uses trade and resource diplomacy to co-opt the region's increasingly left-leaning leaders. Sino-Brazilian trade is at the center of China's strategy for

 <sup>&</sup>lt;sup>21</sup>Christopher Pala, 'China Pays Dearly for Kazakhstan Oil', *New York Times*,
 17 March 2006, <www.nytimes.com/2006/03/17/business/wrldbusiness/17kazakh.</li>
 html>.

<sup>&</sup>lt;sup>22</sup>Pliny Han, 'Kazakhstan Oil Pours into China Through Crossborder Pipeline,' Xinhua, 25 May 2006, <a href="http://news.xinhuanet.com/english/2006-05/25/content\_4600061.htm">http://news.xinhuanet.com/english/2006-05/25/content\_4600061.htm</a>>.

<sup>&</sup>lt;sup>23</sup>Kent Calder, 'East Asia and the Middle East: Together Again', *SAISPHERE* (Winter 2005), 19.

<sup>&</sup>lt;sup>24</sup>Dino Mahtani, 'Nigeria Shifts to China Arms', Financial Times, 28 Feb. 2006, 1.

<sup>&</sup>lt;sup>25</sup>Joshua Eisenman, 'Zimbabwe: China's African Ally', *China Brief* 5/15 (5 July 2005) on the website of the Jamestown Foundation at <http://jamestown.org>.

<sup>&</sup>lt;sup>26</sup>Clifford A. Shelton, 'Dragon Ascending: China's Growing Economic Relationship with Africa', *The Africa Journal* (May/June 2005), 11.

Latin America.<sup>27</sup> China's 2003 importing of 2.4 million tons of Brazilian steel, worth \$730 million, made the Asian state one of Brazil's top three export destinations.<sup>28</sup> This bilateral relationship also has a major technology transfer component as the Chinese exchange rocketry expertise and remote sensing technology for commercial aviation manufacturing cooperation. While small scale at present, the recent purchase by Venezuela of Chinese air defense radars may signal gradually increasing Chinese military engagement in Latin America, a development that would no doubt unnerve Washington.<sup>29</sup>

Europe has rapidly emerged as a major Chinese trading partner and source of technology – some with significant military applications. The European Union (EU) is China's largest trading partner.<sup>30</sup> Sino-EU trade is already even greater than that with Japan and the US, respectively, and three times of that of Sino-Russian trade. This massive commercial cooperation has facilitated significant technology transfer. Indeed, the 'EU is also the largest technologies exporter to China so far....From January [to] October, 2004, China bought 1728 technologies from [the] EU with contracts [valued at a total of] US \$4.6 billion.<sup>31</sup> China has imported over \$75 billion in technology from Europe, more than from any other source. Despite an arms embargo implemented in 1989, European firms have sold China numerous militarily relevant systems, including German Motoren und Turbinen-Union Friedrichshafen GmbH (MTU) diesel engines for China's Songclass submarines. China has exerted considerable pressure on Europe to lift the embargo, and suggested that European firms would benefit significantly. Doing so in the future could improve China's military capabilities. Emerging Sino-European cooperation has significant geopolitical implications as well. For example, the two increasingly work together in international institutions such as the UN.

Politically, the US and China now compete for influence in regional alliances and institutions. This is particularly true in Southeast Asia. The US is well represented in such organizations as APEC. But although

<sup>&</sup>lt;sup>27</sup>Humphrey Hawksley, 'Chinese Influence in Brazil Worries US', *BBC News*, 3 April 2006, <http://news.bbc.co.uk/go/pr/fr/-/2/hi/americas/4872522.stm>.

<sup>&</sup>lt;sup>28</sup>Todd Benson, 'China Fuels Brazil's Dream of Being a Steel Power', New York Times, 21 May 2004.

<sup>&</sup>lt;sup>29</sup> Venezuela Buys Military Goods from China, Blasts US', *Taipei Times*, 6 Aug. 2005, <www.taipeitimes.com/News/world/archives/2005/08/06/2003266653>.

<sup>&</sup>lt;sup>30</sup>Xian Wu, 'The Economic Incentives in the China-EU Partnership', essay in Zhou Hong and Wu Baiyi (eds.), *China-EU Partnership: Possibilities and Limits* (Beijing: China Social Sciences Publishing House 2004), 294.

<sup>&</sup>lt;sup>31</sup>'EU Becomes China's Largest Trading Partner,' *People's Daily Online*, http://www.chinadaily.com.cn/english/doc/2005-01/07/content\_406961.htm.

China is a member of the Association of Southeast Nations (ASEAN) + 3, the US is not.<sup>32</sup> The 2002 Sino-ASEAN code of conduct agreement on South China Sea claims shows the considerable diplomatic lengths to which Beijing is willing to go in order to improve its relations and allav the concerns of its neighbors to the south. It has been widely noted that Washington's focus on the Global War on Terror may resonate less powerfully than the commercial carrots that Beijing has been dangling.<sup>33</sup> One Chinese source judges that a strengthened US military presence in Southeast Asia to further global anti-terrorism initiatives since the mid-1990s has destabilized the region and intensified the South China Sea disputes.<sup>34</sup> Already, China's soft power has considerable appeal in Southeast Asia. Trade is growing and Chinese language and culture are in vogue. Ethnic Chinese throughout Southeast Asia are rebuilding ties to their homeland to celebrate their heritage and exploit business opportunities. Even Canberra's policy towards Beijing has begun to diverge from that of the US as China purchases increasing amounts of raw materials from Australia.

Turning to Northeast Asia, China's economic and political leverage is pulling Seoul further from Washington and closer to Beijing in a geopolitical shift with tremendous ramifications. This transformation is supported by the '386' generation, which came of age under Washington-backed authoritarian governments and tends not to share Washington's concerns regarding North Korea. Since relations were normalized in 1992, trade between China and South Korea has risen dramatically. By 2000, bilateral trade had reached \$31.3 billion, making China South Korea's largest trading partner. Large numbers of South Koreans are choosing to study Chinese as a second language, even over English.

For historical and territorial reasons, Japan has been the great exception to China's methodical deployment of soft power. China's leadership and population alike tend to suspect Japanese motives strongly, and fear that 'remilitarization' will somehow return Japan to the aggressor that it was before and during World War II. This is a significant failure of Chinese soft power because it would be in Beijing's strategic interest to divide the US and Japan. Washington greatly values

<sup>&</sup>lt;sup>32</sup> (ASEAN + 3 (China, Japan, and South Korea),' US-ASEAN Business Council, <www.us-asean.org/ASEANOverview/asean + 3.asp >.

<sup>&</sup>lt;sup>33</sup>See, for example, Robert M. Hathaway, 'George Bush's Unfinished Asian Agenda', 13 May 2005, Foreign Policy Research Council, < www.fpri.org/enotes/20050513. asia.hathaway.bushasia.html>.

<sup>&</sup>lt;sup>34</sup>郑一省 [Zheng Yisheng], '从军事演习看美国 东南亚政策的新变化' [A New Change in America's Policy Toward Southeast Asia as Viewed Through Military Exercises], *Contemporary Asia-Pacific Studies*, No. 8 (2005), 50-6.

its alliance with Tokyo. Japan's contribution of peacekeeping forces to Iraq, for instance, has been of profound symbolic significance.

China is concerned about the prospect of future security competition involving Japan's Self-Defense Force (SDF), which enjoys what by most estimates is the second or third largest annual defense budget in the world, at \$44 billion.<sup>35</sup> Already the SDF has modern equipment and well-trained personnel. In cooperation with US forces, Japan's SDF has assumed increasing responsibility for its national security, now patrolling waters up to 1,000 miles from the island nation's extensive coasts. In 1995, the Nye Initiative 'proposed new guidelines for security-related aspects of the US-Japan relationship' and 'inadvertently created new ambiguities about Japanese involvement in US military operations, while feeding Chinese fears of Japanese logistical support for US forces in a Taiwan contingency<sup>36</sup> In Beijing's view, this threat materialized in a February 2005 joint statement between US and Japanese leaders which declared a peaceful Taiwan Strait to be among their 'common strategic objectives'.<sup>37</sup> Noted Chinese scholar Shi Yinhong stated that this 'important development' would reduce Chinese motivation to 'push North Korea aggressively to resume negotiations over its nuclear program<sup>38</sup>

A series of problems have plagued Sino-Japanese relations in recent years. These include disputes over maritime boundaries, such as those involving the Senkaku/Diaoyu Islands, and the Shirakaba/Chunxiao gas fields in the East China Sea. In sum, contends one Chinese analyst, Japan's evolving maritime strategy 'poses a challenge to China's peaceful rise and transition to becoming a maritime great power'.<sup>39</sup> Historical disputes, such as those surrounding the publication of controversial textbooks and the visit of Prime Minister Junichiro Koizumi to Yasukuni Shrine, have triggered anti-Japanese riots in China. The latest, in spring 2005, caused considerable damage to the Japanese consulate in Shanghai.

China's rise has quite clearly prompted significant concern among its neighbors. But except for the Sino-Japanese relationship, Beijing's soft

<sup>&</sup>lt;sup>35</sup>'Japan', CIA World Factbook 2006, <www.cia.gov/cia/publications/factbook/geos/ ja.html#Military>.

<sup>&</sup>lt;sup>36</sup>Evan A. Feigenbaum, 'China's Challenge to *Pax Americana*', Washington Quarterly 24/3 (Summer 2001), 36.

<sup>&</sup>lt;sup>37</sup> Joint Statement of the US-Japan Security Consultative Committee', 19 Feb. 2005, <www.state.gov/r/pa/prs/ps/2005/42490.htm>.

<sup>&</sup>lt;sup>38</sup>Jim Yardley and Keith Bradsher, 'China Accuses US and Japan of Interfering on Taiwan', *New York Times*, 21 Feb. 2005.

<sup>&</sup>lt;sup>39</sup>张景全 [Zhang Jingquan], '日本的海权观及海洋战略初探' [A Preliminary Probe of Japan's Maritime Rights Outlook and Maritime Strategy], 当代亚太 [Contemporary Asia-Pacific Studies] 5 (2005), 35.

power diplomacy has skillfully neutralized and contained many of these geopolitical concerns. It will be a challenge amid the 'Long War' against terror for Washington to compete effectively for the hearts and minds of elites and populations in various regions of the world, especially given China's new commercial power and its non-interventionist ethos. Of course, the impressive growth trajectory of such global economic and political influence need not necessarily threaten US national security. In a view that mirrors official People's Republic of China (PRC) pronouncements, two Chinese analysts claim that their country's rise is different from that of previous powers because it is merely a peaceful restoration of former capabilities and is also part of Asia's larger rise. The analysts further emphasize that 'China's rise confronts many challenges, primarily internal problems.'40 Moreover, it is possible to overstate PRC soft power. Beijing's policy of ignoring human rights may attract Third World elites, but its aggressive commercial policies may also precipitate anti-Chinese sentiment, as has already occurred in both Nigeria<sup>41</sup> and Pakistan.<sup>42</sup>

However, when coupled with the accelerating pace of Chinese military modernization, the potential for a genuine challenge to American global hegemony becomes conceivable. Indeed, the need to prepare for strategic competition with Japan, the US, or possibly a combination of the two motivates China to develop robust military capabilities in the maritime and aerospace realms.

# China Returns to the Sea

One hundred years before Columbus crossed the Atlantic, Chinese trading fleets in massive hulls up to 300 feet in length regularly transited the Indian Ocean. Is it any wonder that Admiral Zheng He, leader of these massive, bold Ming dynasty fleets, is increasingly celebrated as the symbol of contemporary China's 开放 [opening up] to the world? China's resurgent maritime development directly challenges traditional US military and commercial dominance in the waters of East Asia. As one source emphasizes,

Contradictions and contention for maritime rights and interests are increasingly violent. The 21st century is a maritime century.

<sup>&</sup>lt;sup>40</sup>刘艺, 王晓玲 [Liu Yi and Wang Xiaoling], '对中国崛起的思考' [Reflections on China's Rise], 当代亚太 [Contemporary Asia-Pacific Studies] 2 (2005), 19–23.

<sup>&</sup>lt;sup>41</sup>Craig Timberg, 'Militants Warn China Over Oil in Niger Delta', Washington Post, 1 May 2006, A15.

<sup>&</sup>lt;sup>42</sup> Pakistan Arrests 13 in Car Bomb Attack on Chinese', *Xinhua*, 5 May 2004, <www.china.org.cn/english/2004/May/94666.htm>.

Facing the maritime century's call, the Chinese nation's desire for resurgence has never been as strong, and its maritime connection has never been more inseparable.<sup>43</sup>

The heart of China's naval development is its submarine force. In submarines, the PLA Navy (PLAN) has found a weapon system that provides a cost-effective instrument for deterrence, or if necessary to engage in combat against a superior foe. According to one credible report, the PLAN launched 13 submarines between 2002 and 2004.<sup>44</sup> This impressive rate of production, when added to the eight very quiet 'Kilo'-diesel submarines that will be delivered from Russia by end of 2006, signifies a major effort by the PLAN in undersea warfare. Moreover, US intelligence may have been surprised by the advent of the brand new *Yuan*-class diesel submarine,<sup>45</sup> which many analysts assess to represent a Chinese-built 'Kilo'. This submarine could conceivably field the new and revolutionary air independent propulsion (AIP) technology that allows diesel submarines to operate underwater without snorkeling on the surface for much longer periods.

As more modern diesel submarines are added to the fleet, China's second generation of nuclear submarines is also making its debut. Two 093 class nuclear-propelled attack submarines (SSNs) were launched in 2002–03. A third is reportedly nearing completion.<sup>46</sup> A single 094 nuclear-propelled ballistic-missile firing submarine (SSBN) was launched in 2004. Moreover, a nuclear submarine base to support these new vessels is now apparently under construction on Hainan Island.<sup>47</sup> One Chinese naval strategist suggests that if Chinese nuclear submarines can 'break through the island chain blockade' [突破岛链封锁], 'they can conduct long-distance operations without hindrance from the enemy's airborne ASW [anti-submarine warfare]'.<sup>48</sup> Given Chinese naval strategists' view that 'China is hemmed in by multiple island chains'<sup>49</sup> fortified by formidable land-based ASW patrol aircraft forces,

<sup>&</sup>lt;sup>43</sup>李兵 [Li Bing] 海军英豪: 人民海军英模荟萃 [Naval Heroes: An Assembly of Heroic Models from the People's Navy], 3.

<sup>&</sup>lt;sup>44</sup>Jim Yardley and Thom Shanker, 'Chinese Navy Buildup Gives Pentagon New Worries', *New York Times*, 8 April 2005.

<sup>&</sup>lt;sup>45</sup>Bill Gertz, 'Chinese Produce New Type of Sub', *Washington Times*, 16 July 2004, <www.washtimes.com/national/20040716-123134-8152r.htm>.

<sup>&</sup>lt;sup>46</sup>Richard D. Fisher, Jr., 'Trouble Below: China's Submarines Pose Regional, Strategic Challenges', *Armed Forces Journal* (March 2006), 34.

<sup>&</sup>lt;sup>47</sup>Ibid., 34.

<sup>&</sup>lt;sup>48</sup>长风 [Zhang Feng], 核潜艇与中国海军 [Nuclear Submarines and China's Navy], 舰船知识 [Naval & Merchant Ships] (March 2005), 12.

<sup>&</sup>lt;sup>49</sup>Authors' interview, Beijing, Dec. 2005.

the notion of developing platforms to break through these geographic constraints needs to be taken seriously.

PLAN undersea weaponry is also a major priority. The new submarines described above are equipped with a lethal mix of Russian and indigenous torpedoes and anti-ship cruise missiles. With wakehoming torpedoes it takes much less skill to strike the target as fire control is vastly simplified. Some of the cruise missiles that China has imported are supersonic with terminal homing maneuvers that seriously complicate intercept. Mine warfare is another arena of undersea warfare that the PLAN has prioritized. China has a robust program of research concerning rocket-rising mines,<sup>50</sup> which can be laid in deeper waters, thereby making them less susceptible to standard mine countermeasures operations. China likely also possesses an inventory of submarine-launched mobile mines (SLMMs)<sup>51</sup> and is developing a variety of other cutting-edge offensive mine warfare technology.<sup>52</sup>

The platforms and weaponry described above suggest an 'accessdenial' strategy that is wholly consistent with Beijing's focus on the Taiwan issue. However, such an interpretation does not capture the full range and potential ambition of China's naval development. An impressive array of PLAN frigates and destroyers has appeared over the last five years. These sleek vessels incorporate modern features, including: stealthy superstructure designs, vertical-launch air defense systems (in 4 of 6 new destroyers), close-in weapon systems, and in the case of two of these new vessels, Aegis-type phased array radars. To be sure, there are elements of the PLAN surface fleet that clearly comport with an access-denial Taiwan-centric naval strategy, including the world's first missile catamaran, the Mach 3 'Moskit' anti-ship cruise missiles wielded by China's three Sovremeny-class destroyers, and the improved air defense capabilities described above. Moreover, there is impressive activity in the realm of amphibious warfare with China building seven Yuting III large landing ships since 2003, adding to significant amphibious vessel construction from the previous decade.

<sup>&</sup>lt;sup>50</sup>See, for example, 刘检,黄文斌 [Liu Jian and Huang Wenbin], '一种自航水雷布概率的计算方法' [A Method of Calculating the Dispersion Probability of Self-Propelled Mines], 鱼雷技术 [Torpedo Technology], 13/3 (Sept. 2005), 43–45.

<sup>&</sup>lt;sup>51</sup>US Dept. of Defense, Annual Report on the Military Power of the People's Republic of China, June 2000, 16, <www.defenselink.mil/news/Jun2000/china06222000. htm>.

<sup>&</sup>lt;sup>52</sup>See, for example, the discussion of a potential PLA Navy anti-helicopter mine program in 林长盛 [Lin Changsheng], '潜龙在渊: 解放军水雷兵器的现状与发展' [The Hidden Dragon in the Deep: The Present Situation and Development of PLA Mine Weaponry], 国际展望 [World Outlook], No. 9, (May 2005), 28.

But these surface forces could well support missions beyond Taiwan. Indeed, much of China's amphibious craft are based at Zhanjiang in the South Sea Fleet—rather distant from the Taiwan Strait. Increasing air defense capabilities may suggest genuine blue water ambitions, since land based aircraft have sufficient range to cover most missions associated with Taiwan contingencies. After all, PLAN ships could benefit from land-based air cover when operating near the Chinese coast. In a similar vein, rumors of Chinese aircraft carrier development have intensified and even reached quasi-official status with the March 2006 comment by deputy director of the PLA Science and Technology Commission Lieutenant General Wang Zhiyuan that China would 'develop its own carrier fleet'. According to Wang, 'As China is such a large country with such a long coastline and we want to protect our maritime interests, aircraft carriers are an absolute necessity.'<sup>53</sup>

As with so many other areas of China's development, Chinese analysts view their nation's actions as inherently defensive. Naval forces, for instance, are envisioned as providing a deterrent function independent of their actual combat role: 'The challenge that China's maritime sovereignty faces is not a problem of actual combat strength between "Number Two" and "Number One". It is rather a problem of effectively deterring the enemy from carrying out provocations.'<sup>54</sup> With respect to Taiwan, a senior Chinese official said, 'We can win a war with the US without nuclear weapons [because the] US is coming to us.'<sup>55</sup>

With a shipbuilding industry and maritime commercial sector that is growing by leaps and bounds, not to mention an intensifying dependence on foreign sources of natural resources, PLAN admirals seem to have less and less difficulty in persuading the Chinese leadership of the importance of developing into a major sea power. The evolving contest for East Asia's seas will no doubt loom large on the Asia-Pacific security agenda for the foreseeable future.

<sup>&</sup>lt;sup>53</sup>'Senior Military Officer: China to Develop Its Own Aircraft Carrier Fleet,' *Wen Wei Po*, 10 March 2006, FBIS# CPP20060310508004. This statement corresponds to authors' interviews with naval Chinese naval strategists in 2005, and a senior Chinese official in 2006, that suggest the PLAN has wanted to pursue aircraft carriers for a long time, but has been constrained by the political leadership.

<sup>&</sup>lt;sup>54</sup>杜岗 [Du Gang], '论中国和平发展中的军事力量需求' [A Discussion of Military Force Requirements During China's Peaceful Development], 战略与管理 [*Strategy & Management*] 3 (2004), 55.

<sup>&</sup>lt;sup>55</sup>Authors interview, Beijing, June 2006.

## China Seizes the High Ground

An increase in Chinese naval capability from access denial to blue water operations and power projection will hinge in part on improvements in aerospace: air/space-based platforms and Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR). Despite major imbalances in its development, by the end of the Cold War China had become the first developing country to achieve comprehensive aerospace capabilities.<sup>56</sup> While China still suffers from some challenges, particularly in its aviation sector, it appears to be making rapid progress across the board in producing advanced aerospace platforms. This in turn offers China an increasing range of military operational possibilities.

Beijing has the world's premier sub-strategic mobile missile force, based on solid-fueled, mobile DF-15 short-range ballistic missiles (SRBMs). It is fielding a variety of new strategic nuclear systems as well that may finally give Chinese leaders confidence that PLA nuclear forces are survivable. Moreover, China's first generation of land attack cruise missiles will shortly become operational, thereby significantly increasing the PRC's power projection capabilities.<sup>57</sup> These missiles have long been identified as a potential threat to US forces, but there is considerable dynamism in the air and space spheres, as well.

China's air force is finally beginning to recover from the grave setbacks it suffered in the Cultural Revolution era. Here China still relies on massive imports of Russian planes and their components, particularly aerial refueling tankers and jet engines, but is struggling to achieve comprehensive domestic production capabilities. For example, a 2005 RAND study concludes that 'China's aviation industry... has made more progress in improving quality and the technological sophistication of aircraft in recent years than in previous decades.'<sup>58</sup> According to *China Defense Today*, the PLA accepted shipments of Sukhoi Su-27s in 1992 (26 aircraft), 1996 (22) and 2002 (28). Batches of the Su-30, currently China's most capable aircraft, were received in 2000 (10 aircraft), 2001 (28), 2003 (38), and 2004 (24). The same source estimates that 90–100 J-11s (Su-27 kits assembled at Shenyang) were completed by 2004. Thus, the grand total might have equaled 266

<sup>&</sup>lt;sup>56</sup> Introduction', *China's Aerospace Industry—The Industry and its Products Assessed* (Coulsden, UK:, Jane's Information Group, 2 April 1997).

<sup>&</sup>lt;sup>57</sup>'Land-Attack Cruise Missile (LACM),' *China Defence Today*, <www.sinodefence. com/strategic/missile/cruisemissile.asp >.

<sup>&</sup>lt;sup>58</sup>Unless otherwise specified, data in this paragraph is derived from Evan Medeiros *et al., A New Direction for China's Defense Industry* (Santa Monica, CA: RAND 2005), 199, 165, 160, 180.

fourth generation aircraft by 2004.<sup>59</sup> China's JH-7 is assessed to have achieved the overall performance level of Western fighters introduced in the 1960s–1980s, and even in some performance areas to be superior to Northrop's F-5 Tiger, Panavia's Tornado, the F-4 Phantom II, and the Su-24. China's new indigenous J-10 'is expected to be comparable in performance to the US F-16'. If China is able to achieve serial production of the J-10, which apparently still relies on Israeli 'avionics, radar, and other technologies', then its inventory of fourth generation aircraft will continue to rise appreciably. This growing stable of modern aircraft increases China's chances of achieving air superiority over the Taiwan Strait.

To support the effective use of its air force, China is attempting to improve its airborne intelligence, surveillance, and reconnaissance (ISR) capabilities. Since 2000, following cancellation of Israel's Phalcon sale amid mounting US pressure, China has reportedly been developing the KJ-2000 indigenous Airborne Warning and Control System (AWACS) aircraft.<sup>60</sup> 'While the larger, more advanced' KJ-2000 is envisioned to conduct 'long-range, comprehensive aerial patrolling and control roles', China's smaller KJ-200/Y-8 'Balance Beam' airborne early warning (AEW) aircraft, with its electronically steered phased-array, offers 'a less expensive platform for tactical airborne early warning and electronic intelligence missions'.<sup>61</sup> Various sources report that a KJ-200 aircraft crashed on 4 June 2006, killing 40 people and possibly causing a setback for the program.<sup>62</sup> If successfully developed, however, these platforms could give China important aerial battlemanagement capacity.

China has observed the US military's extensive use of unmanned aerial vehicles in recent years, and is developing indigenous variants. China also obtained 100 Harpy anti-radar drones from Israel in 2001.<sup>63</sup> China may have reverse-engineered and indigenously produced additional Harpys. These small, stealthy, autonomous flying bombs could help China to destroy Taiwanese air defense radars.

<sup>&</sup>lt;sup>59</sup> Fighter Aircraft', *China Defence Today*, <www.sinodefence.com/airforce/fighter/ default.asp>.

<sup>&</sup>lt;sup>60</sup>·KJ-2000 Airborne Warning & Control System', <www.sinodefence.com/airforce/ specialaircraft/kj2000.asp>. China purchased Russian A-50 AWACS aircraft in 2000. <sup>61</sup>·Y-8 'Balance Beam' Airborne Early Warning Aircraft', <//www.sinodefence. com/airforce/specialaircraft/y8balancebeam.asp>.

<sup>&</sup>lt;sup>62</sup>See, for example, 'Observation Post of Military Situation', HK Phoenix TV, *Military News*, FBIS# CPP20060626715001, 21 June 2006.

<sup>&</sup>lt;sup>63</sup>Yitzhak Shichor, 'The US Factor In Israel's Military Relations With China', *China Brief* 5/12, The Jamestown Foundation, , 24 May 2005, <www.jamestown.org/publications>.

Helicopters have traditionally been an area of weakness for the PLA. Most platforms in the PLA's disproportionately small fleet (roughly 300 in the PLA and 40 in the PLAN) are either imports (e.g., Super Frelons) or copies of foreign models (e.g., the Z-8 Super Frelon derivative). China is now attempting to remedy this by developing joint ventures with foreign manufacturers such as Eurocopter. Reportedly, an indigenous WZ-10 attack helicopter is also in development.<sup>64</sup> Improvements in rotary wing aviation would help the PLAN address one aspect of its overall weakness in anti-submarine warfare.

Perhaps some of China's greatest recent progress has occurred in space. China produces increasingly sophisticated microsatellites. Microsatellites (satellites weighing 10-100 kilograms, or far less than the average satellite) are significant for several reasons. They potentially reduce the cost of access to space. They permit the use of satellite constellations to decrease cost and increase reliability, particularly of communications (as opposed to reconnaissance) missions. In the event of space-based assets being threatened, their potentially larger numbers would make them harder to target and easier to replenish. At 25 kg, Naxing-1 made China the fourth country after Russia, the US, and the U.K. to launch a satellite approaching the nanosatellite designation of 10 kilograms or less.<sup>65</sup> China's other satellites have been similarly impressive. Launched in May 2002, Haiyang-1 is designed to end China's reliance on foreign satellites for maritime observation. The marine remote-sensing satellite is the prototype for a series of Chinese maritime monitoring satellites.<sup>66</sup> In 2001, RAND reported that 'China has recently developed remote sensing satellites capable of transmitting images of the earth's surface in near-real time.<sup>67</sup> Such a capability

<sup>&</sup>lt;sup>64</sup> WZ-10 Attack Helicopter', *China Defense Today*, <www.sinodefence.com/air force/helicopter/wz10.asp>.

<sup>&</sup>lt;sup>65</sup>Naxing-1 was designed to conduct high-technology experiments. See '小卫星研制获突破' [Small Satellite Development Attains Breakthroughs], 航天与航空 [Spaceflight & Aviation], 军民两用技术与产品2004年第12期 [Armed Forces Dual Use Technology and Products 5 (2004)], <http://www.space.cetin.net.cn/docs/mp0405/ mp0405hthk.htm>; '我国一箭双星成功发射两稞科学实验小卫星' [Our Country Successfully Launches Two Scientific Experiment Small Satellites], 中国航天2004年第5期 [Aerospace China 5 (2004)], <www.space.cetin.net.cn/docs/ht0405/ht0405zgbd01. htm>.

<sup>&</sup>lt;sup>66</sup>See, for example, 左赛春 [Zuo Saiqun], "天眼'天眼'瞰视万里海疆— 记我国第一颗海洋卫星' ['Sea Eye' Looks Down on 10,000 Miles of Sea Dominion— Recording Our Country's First Ocean Satellite], 人民网 [*People's Net*], 16May 2002, <www.people.com.cn/GB/kejiao/42/155/20020516/729817.

html >.

<sup>&</sup>lt;sup>67</sup>Roger Cliff, *The Military Potential of China's Commercial Technology* (Arlington, VA: RAND 2001), 29.

could greatly improve China's ability to monitor force deployments on its periphery.

In a development that mirrors Western efforts to reduce costs and enhance reliability, satellite buses, or standardized platforms, will quite literally constitute the backbone of China's future microsatellite efforts. The People's Republic appears to be currently developing at least five variants of three major small satellite buses: CAST968A, B, and C;68 CAST2000;<sup>69</sup> and CASTMINI (for true microsatellites). According to Taiwanese Air Force Reserve Colonel Ying Shaoji, CAST968 has been extremely successful. Its design characteristics include a very high subsystem integration rate, good performance, and high efficiency. CAST968 has had a great impact on PRC small satellite development time, cost, and quality. Total development time has been reduced to two years, approaching world standards. Ying sees small satellites as a focus of the PRC leadership, and argues that - given the potential for satellite attrition in future space warfare - replenishment of space assets in the form of microsatellites represents the key to space power.<sup>70</sup> By analyzing China's small satellite buses, it will be possible to see for what combination of capabilities and missions the new generation of microsatellites has been optimized.

Satellite navigation has revolutionized military operations in every sphere of combat. Chinese missiles may use the US Global Positioning Satellite (GPS) system as well as Russia's Global Orbiting Navigation Satellite System (GLONASS) for navigation. China is also developing its own rudimentary<sup>71</sup> *Beidou* satellite navigation system in order to minimize its reliance on foreign systems. *Beidou* satellites 1A, 1B, and 2A were launched between 2000 and 2003. China is seeking to employ *Beidou* extensively for both civilian<sup>72</sup> and military

<sup>&</sup>lt;sup>68</sup> 100到1000公斤 我国小卫星研制正在走向系列化', [From 100 to 1000 kilograms, Our Country is Moving Toward Small Satellite Manufacturing Seriation], 24 Nov. 2003, <www.spacechina.com/index.asp?modelname=nr&recno=6574>.

<sup>&</sup>lt;sup>69</sup>胡璋 [Hu Zhang], "长二丙'— 年转战三地, '造星'技术跨上新台阶' [The Long March 2-C Takes Flight From Three Locations within One Year-A New Benchmark in the Progress of Satellite Construction Technology], 中国航天工程咨询中心 [Chinese Aerospace Project Consultation Center], 24 Nov. 2004, <www.spacechina.com/ index.asp?modelname=nr&recno=14842>.

<sup>&</sup>lt;sup>70</sup>備役上校 應紹基 [Res. Col. Ying Shaoji], "談中共小衛星科技的發展趨勢" [A Discussion of Chinese Communist Party Small Satellite Science and Technology Trends', 空軍學術月刊 [*Air Force Science Monthly*], Taiwan, retrieved from <www.mnd.gov.tw/division/~defense/mil/mnd/mhtb/空軍學術月刊/565/565-6.htm>.

<sup>&</sup>lt;sup>71</sup>The geostationary orbit of the *Beidou* constellation minimizes the need for a large number of satellites but limits their coverage.

<sup>&</sup>lt;sup>72</sup>See '北斗卫星为神州导航' [Beidou Satellites and the Shenzhou (Manned Spacecraft's) Navigation], China Surveying and Mapping, No. 4 (2003);

applications.<sup>73</sup> Beijing has simultaneously sought substantial access to Europe's nascent *Galileo* system.<sup>74</sup> Chinese analysts follow *Galileo*'s progress carefully.<sup>75</sup> While Europe does not plan to give China access to the military component of its system, there is concern that China might be able to penetrate *Galileo*'s PRS [Public Regulated Service] receivers.<sup>76</sup> Improvements in access to foreign and domestic positioning systems will increase the accuracy of Chinese missiles and other position-dependent equipment.

China's aerospace development has profound implications for the US military. Chinese strategists envision aerospace assets playing a vital role in any future Taiwan scenario. For instance, ballistic and cruise missiles guided by Beidou satellites might be used to target US aircraft carriers. The most fundamental question is whether the PLA will be able to master the developments in air- and space-based platforms and C4ISR needed to support a PLA strategy beyond the East Asian littoral. Such a strategic requirement would necessitate the continued transformation of the PLA, as China's current submarine-focused navy and still limited air force can only support the more modest strategy of access denial at present. But just as China was not dissuaded from submarine development in the recent past by American dominance in that area, Beijing also seems unwilling to cede aerospace dominance. As China's overall national power continues to rise, its aerospace capacities are likely to rise with it, with significant implications for Beijing's ability to influence its maritime periphery and challenge US hegemony.

# Limitations in US Policy

Coping with the challenge of a rising China will pose a series of difficult dilemmas for Washington, especially with respect to defense outlays as it simultaneously confronts the complex demands of the global war on terror. Given this uncertainty, and Beijing's continuing lack of

<sup>&</sup>quot;北斗卫星通信功能在水文自动测报系统中的应用' [Beidou Satellites' Communication Capacity for Use in an Automatic Hydrological Survey System], *Hydrology*, No. 5 (2003). <sup>73</sup>See '有'中国特色"的GPS系统—'北斗'卫星系统的战略运用' [There is a GPS System with 'Chinese Characteristics'—The Beidou Satellite System's Strategic Use], 国际展望

<sup>[</sup>World Outlook], No. 8 (2004).

<sup>&</sup>lt;sup>74</sup>Gustav Lindstrom and Giovanni Gasparini, *The Galileo Satellite System and its Security Implications*, Occasional Paper No. 44 (Paris: EU Institute for Security Studies 2003), 29, <www.iss-eu.org/occasion/occ44.pdf>.

<sup>&</sup>lt;sup>75</sup>See, for example, 雨相 [Yu Xiang], '欧盟 '伽利略' 计划的实施进入下一阶段' [Implementation of the EU's 'Galileo' Project Enters the Next Stage], 航天电子对抗 [Aerospace Electronic Warfare], No. 2 (2005).

<sup>&</sup>lt;sup>76</sup>Lindstrom and Gasparini, The Galileo Satellite System and its Security Implications, 2.

transparency – particularly concerning its rapid military buildup – safeguarding American interests will necessitate agile diplomacy, as well as deliberate efforts to maintain superiority over a challenger that is less than a superpower, but already decidedly more than a regional power. Such measures include reinforcing Guam and funding advanced systems such as *Virginia*-class nuclear-powered attack submarines. On the other hand, particularly with the extant challenge of the Long War against global terrorism,<sup>77</sup> US policy must not fall into the trap of creating an enemy by pursuing Cold War era dogmas. This section will address three important areas of concern: Taiwan's status, military to military relations, and also global peacekeeping responsibilities.

Since 1949, Beijing has emphasized strongly, in diverse fora, the vital importance of reunifying with Taiwan as a central tenet of national policy. One has only to consider India and Pakistan's conflict over Kashmir and Russia's efforts to reassert control over Chechnya to realize that territorial integrity is a foundational principle in a nation's policy, one that can be used to rally significant national will even in the face of terrible costs. The inability of Beijing and Washington to reach an understanding concerning Taiwan's status has long been the principal obstacle to improvements in US-China relations. Substantial progress was made in 1972 with the Shanghai Communiqué, in which Washington officially embraced a one China policy.

Since then, however, Taiwan's democratization and the mainland's bloody suppression of reform-minded students in 1989 have made the US Congress unwilling to consider further support of Chinese reunification. An unfortunate consequence of American revulsion at Beijing's refusal to transcend its destructive past has been the embolding of advocates of outright Taiwanese independence.<sup>78</sup> Taiwan's current president, Chen Shuibian, repeatedly provokes Beijing with symbolic measures to further this quest, apparently with little consideration for the national interests of the US, Taiwan's last major supporter. In doing so, he has created an extremely dangerous situation for his island's 23 million citizens.

Amid growing Chinese military strength, politicians in the Guomindang and allied parties have for over a year blocked a major US arms package, reportedly because they fear further emboldening Chen.<sup>79</sup> This is not to say that the package's ASW aircraft, missile defenses and diesel submarines would be an adequate defense. A far better

<sup>&</sup>lt;sup>77</sup>Dept. of Defense, 2006 *Quadrennial Defense Review*, <www.defenselink.mil/qdr/>; 'The National Security Strategy of the United States of America', March 2006.

<sup>&</sup>lt;sup>78</sup>For an argument that this movement has run its course, see Robert S. Ross, 'Taiwan's Fading Independence Movement', *Foreign Affairs* 85/2 (March/April 2006).

<sup>&</sup>lt;sup>79</sup>Authors interviews, Taipei, Nov. 2004.

investment for Taiwan would be in weapons for 'porcupine' defense: short-range anti-air missiles, coastal artillery, sea mines, and hardening of key facilities. By failing to make adequate preparations for its defense, Taipei has left even some of its previous supporters 'wondering if American blood should be spilled for Taiwan if the island isn't serious about its own defense'.<sup>80</sup>

Washington must continue to honor its commitment not to support Taiwan independence, while also thinking seriously about Taiwan's future. Rising Chinese military strength and economic integration arguably make the island increasingly indefensible. In order to avoid provoking Beijing into exploiting this situation - a risky and costly proposition, to be sure – Washington must use its considerable leverage with Taipei to make it clear that movement toward independence will constitute a breach of their current relationship. If President Chen provokes a war with China, he will be on his own. No doubt Chen will seek to test the credibility of US resolve in this area. Concrete actions, previously avoided, may be critical to demonstrating that the US is serious. 'Chen's decision to do away with the National Reunification Council last February was seen by many Taiwanese, particularly Nationalists, as a rash and unnecessary provocation of China', the Washington Post reports. 'It also angered the Bush administration, diplomatic sources said, and led US officials to refuse Chen's request for a stopover in the United States during a flight to Latin America.<sup>81</sup>

It will be essential for Washington to prevent Chen from embarking on a last-ditch effort at constitutional revision or referendum to shift voters' attention from his plummeting approval ratings (which stood at 20 percent as of mid-2006) and the corruption scandals engulfing his family members and associates. Abetting independence advocates in Taipei is simply not in America's national interest, which is to gradually extricate itself from China's civil war without compromising Taiwan's self-governing autonomy. As Rear Admiral (Ret.) Michael McDevitt observes, 'Shared democratic values...do not bestow on Taipei the privilege of ignoring the national security interests of democratic partners.'<sup>82</sup>

A second major reform of current US policy concerns US-PRC military contacts, which could over time significantly reduce chances for escalation during bilateral crises. As the EP-3 incident

<sup>&</sup>lt;sup>80</sup> Taiwan Politician Has Explaining to Do,' *New York Times*, 17 March 2006, <www.nytimes.com/aponline/international/AP-Taiwan-Weapon-Woes.html>.

<sup>&</sup>lt;sup>81</sup>Edward Cody, 'Taiwan's President on Shaky Ground: Missteps, Scandal Erode Leadership', Washington Post, 2 June 2006, A13.

<sup>&</sup>lt;sup>82</sup>Michael McDevitt, 'Taiwan: The Tail that Wags Dogs', Asia Policy, No. 1 (Jan. 2006), 92.

demonstrated, bilateral crisis contacts between the two nations are underdeveloped, and the resulting lack of communication could threaten the security of both nations. In addition to enhancing communication, the building of bilateral contacts would give both sides a healthy respect for each other's capabilities, thereby reducing the chance of dangerous miscalculations.<sup>83</sup>

Encouraging greater Chinese participation in UN peacekeeping missions could also help to signify recognition of a growing security role for Beijing while reassuring US taxpayers, who currently contribute 22 percent of UN funds, ten times that of their Chinese counterparts at 2.053 percent.<sup>84</sup> Already, Beijing has increased its UN peacekeeping forces to over 1,000 and is training military and civilian cadres at Beijing and Nanjing bases.<sup>85</sup> Why should not China, increasingly a major beneficiary of Middle Eastern oil, bear some of the related security burden? Until progress is made concerning the Taiwan issue, however, such cooperation may not be feasible.<sup>86</sup> This is true of other important potential areas of cooperation as well.

## **China's Flawed Policies**

Policy reforms in Beijing – often of a relatively limited nature – could go a long way toward reassuring Washington that China is not actively attempting to undermine US hegemony. The good news is that China already has a variety of initiatives in the relevant spheres that seek to mollify US concerns. But these initiatives must go much further if they are to counter tendencies toward strategic competition.

Internal political reforms do impact the bilateral relationship. Hu Jintao has not turned out to be a 'Chinese Gorbachev', as some initially hoped – quite the opposite, he has reintensified censorship, for example. But anyone who has been to a Chinese bookstore recently knows that a civil society still flourishes, despite the occasionally aggressive governmental actions. Moreover, China's government is aware that it faces massive corruption and especially environmental (and land use) troubles – problems that might be ameliorated to some extent by political reforms. One can hope, anyway, that as the fourth generation

<sup>&</sup>lt;sup>83</sup>For related analysis by the former Naval Attaché at the PRC Embassy in Washington (1995–2000), see 杨毅 [Yang Yi], '军方往来能否助推中美关系' [Can Military Contacts Further US-China Relations?], 环球 [Globe], 1 June 2006, 22–4.

<sup>&</sup>lt;sup>84</sup>Permanent Mission of Switzerland to the United Nations, 'Contribution to the UN Budgets', <www.eda.admin.ch/newyork\_miss/e/home/unbudg.html>.

<sup>&</sup>lt;sup>85</sup>Authors interviews, Beijing, June 2006.

<sup>&</sup>lt;sup>86</sup>Authors interviews, Bejing, Dec. 2005.

leadership matures and feels more confident it might attempt bolder action in the domestic political sphere.

More liberal policies at home, and in the sensitive arena of Hong Kong politics, would in turn positively impact the difficult Taiwan issue. Quite naturally, the people of Taiwan keep a close eve on such developments, wondering how Beijing's formula 一国两制 [one country, two systems] might someday affect their lives. The terms that the PRC has offered are actually rather flexible (e.g. Taiwan would keep its army, no CCP or PLA personnel would be posted to the island after reunification), at least in theory. Still, Beijing would do well to further explore the *confederation* concept, which specialists widely agree is the best form of compromise between the two sides. Chinese leaders would also be wise to welcome active US diplomatic engagement in the gradual process of reconciliation. Efforts to shut Washington out of a 'domestic issue' create intense anxiety in Taipei and also ignore the fundamental reality of the vital and potentially constructive American role. Indeed, successful resolution of Taiwan's status will require substantial efforts on Beijing's part to credibly address US concerns about the welfare of the Taiwanese people, their democratic future, and Washington's regional position.

Most importantly, China will earn immense good will in Washington if it can produce a viable solution to the North Korean issue. Quite probably, there is a faction in the PRC leadership that sees the status quo (stalemate) in the Six Party talks as beneficial to Beijing, but frustration with this process has been building for some time in Washington particularly in light of Pyongyang's provocative and dangerous missile tests of July 2006 and avowed nuclear test on 9 October 2006. It is widely recognized that only Beijing has the tools to bring Pyongyang to heel. While China's action on the North Korean issue is pivotal, its cooperation in dealing with Iran could also be beneficial to US-China relations. No policymaker in Washington would dare to say it overtly, but Chinese cooperation on these major proliferation crises could substantially alter Washington's approach to the Taiwan issue. A Chinese scholar states that both 'America's approach and US-China relations have become a decisive variable [in determining] whether the 6 party talks become a multilateral cooperation mechanism'.<sup>87</sup>

Finally, there is the major problem of transparency in military development. There have been some positive initiatives, for example, the PLA's publication of a series of white papers in recent years. The amount of military literature written in China, somewhat contrary to

<sup>&</sup>lt;sup>87</sup>李正男 [Li Zhengnan], '中国多边外交在东北亚和平构想中的地位及其局限性' [The Position and Limitations of the Peaceful Conception of China's Multilateral Diplomacy in Northeast Asia], 当代亚太 [Contemporary Asia-Pacific Studies] 6 (2005), 12.

conventional wisdom on the transparency issue, is actually huge. But vital issues still remain unresolved, not least the way in which the Chinese calculate their defense budget, which differs markedly from Western norms, and which many experts – even in China<sup>88</sup>– believe vastly understates true spending. So long as the PLA continues to surprise the global defense analytical community, for example with the reportedly unanticipated *Yuan*-class hunter killer submarines in 2004, the 'China threat theory' (as the discussion surrounding the security implications of China's rise is termed there) will persist.

The US will continue to pursue its own hedging strategy vis-à-vis China, engaging with Beijing in areas of consensus but maintaining the military capacity to defend against threats to its national interests, especially in East Asia. China needs to inform the world about the true scope of its myriad new military programs in order to ease suspicion.

#### Conclusion

No doubt China's leadership currently faces a set of enormous challenges, not least of which concerns to what extent resources should be allocated to military development versus social and economic priorities. With regular riots in the Chinese countryside (even in China's relatively wealthy eastern coastal provinces), this dilemma is likely extremely acute. One can imagine a variety of other scenarios that might describe different choices concerning this classic dilemma between 'guns and butter'.

Beijing could have opted for Soviet-style geostrategic competition with the United States. But Chinese strategists have drawn historical lessons from Soviet militarist exhaustion during the Cold War and have little appetite for attempting to directly match US military might.<sup>89</sup> A simple comparison of Beijing's emerging nuclear posture with Moscow's nuclear arsenal at its apex (tens of thousands of warheads) illustrates the point, but there are many such examples. Nevertheless, China is hardly adhering to the path that most developing states have pursued in so far as it is actively pursuing a full spectrum of advanced, 'indigenous weapons platforms. Brazil, for example, is no doubt an aspiring world power, but it has neither its own fourth-generation fighter aircraft, nor a ballistic missile program to speak of, not to mention a

<sup>&</sup>lt;sup>88</sup>Authors' interviews, China, Dec. 2006.

<sup>&</sup>lt;sup>89</sup>王辑思 [Wang Jisi], '苏美争霸的历史教训和美中国的崛起新道路' [The Historic Lesson of the US-Soviet Contest for Hegemony and China's Peaceful Rise], essay in 中国和平崛起新道路 *China's Peaceful Rise: The New Path* (Beijing: 中共中央党校国际战略研究所 [Party School International Strategy Research Institute], April 2004.

second-generation ballistic missile submarine in development. Chinese strategists have a keen sense for the imperative of balance, not only with respect to civilian-military resource tradeoffs, but also within the military itself. In pursuing rapid, yet balanced military development, China can still pose a considerable challenge to American hegemony.

In one of the more optimistic assessments of American preponderance, William Wohlforth argues that a global rival will not emerge to end America's unipolar hegemony for the foreseeable future.<sup>90</sup> 'No other major power is...likely to take any step that might invite the focused enmity of the United States', he asserts. 'For many decades, no state is likely to be in a position to take on the United States in any of the underlying elements of power.'<sup>91</sup>

Based on this assessment of China's increasing hard and soft power, however, a Chinese challenge to US hegemony cannot be ruled out. The Asian giant's challenge to various aspects of US hegemony might even increase as the US continues to be burdened and extended by the Long War against global terror. Furthermore, as a senior Chinese official emphasized to one of the authors, 'irrational nationalism will grow with PRC power'.<sup>92</sup> In order to meet this possible challenge, Washington must by all means keep its powder dry, maintaining forces appropriate to facing a peer competitor. At the same time, however, the United States must engage in a process of creative diplomacy that simultaneously matches China's soft power and engages seriously with Beijing to create areas of consensus and cooperation.

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<sup>&</sup>lt;sup>90</sup>William C. Wohlforth, 'The Stability of a Unipolar World', *International Security* 24/ 1 (Summer 1999), 5–41.

<sup>&</sup>lt;sup>91</sup>Ibid., 7–8.

<sup>&</sup>lt;sup>92</sup>Authors interview, Beijing, June 2006. It is important to note that this same official emphasized his personal efforts to reign in this tendency.

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