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In a Fortnight

By L.C. Russell Hsiao

PLAN OFFICERS TO TRAIN ON BRAZILIAN AIRCRAFT CARRIER

In a May 9 interview with Brazilian defense, strategy and intelligence news website Defasanet, Brazilian Defense Minister Nelson Jobim stated that Brazil and China had reached an agreement to train personnel from the People's Liberation Army Navy (PLAN) in Brazil. In the interview (available in Portuguese), Jobim announced that the two sides reached a training agreement to stage PLAN officers aboard the NAE Sao Paulo, Brazil's Clemenceau-class aircraft carrier (Defasanet, May 13). There has been no reported official confirmation from the Chinese government concerning this agreement, however, on May 19 the official Xinhua News Agency released a news report in its Spanish portal (no equivalent has been found in the news agency's Chinese or English portal), which cites remarks that Jobim made to the media about the nature of the plan in question. The Xinhua report cited Jobim as saying that the agreement was reached in April during Navy Admiral Carlos Soares de Moura Neto's official visit to Qingdao to attend the PLAN's 60th Anniversary Naval Review (Xinhua News Agency [Spanish], May 20). The defense minister noted that the Chinese wanted aircraft carriers for power projection, and that he hopes naval cooperation between Brazil and China can serve as the gateway for defense cooperation in other areas (Defasanet, May 13, Xinhua News Agency [Spanish], May 20). Jobim is planning a visit to China in September or October, which analysts say is likely to finalize the training agreement.

Although the details of this alleged agreement are still unknown, given the chronic lack of funding for the NAE Sao Paulo within Brazil's national budget, some observers speculate that a part of the deal may involve the Chinese paying for some of the

restoration of the aircraft carrier in return for some real on-deck operational experience for its carrier officers. An article that appeared in a Chinese naval university's website, "Why did China Choose Brazil to Train its Carrier Pilots?" referenced an unspecified source as saying that the Chinese will provide technical support to Brazil for constructing its nuclear submarines (Haijun.xaut.edu.cn, June 1). Western and Chinese analysts believe that at a minimum this agreement will allow the Chinese access to Brazilian naval aviation expertise in addition to the carrier itself. In any event, training of PLAN officers on NAe Sao Paulo would accelerate the development of Chinese capacity in naval aviation, which has been a major weakness in China's efforts to operationalize an aircraft carrier.

There are currently nine navies with aircraft carriers in active service, and the United States, France, Russia and Brazil are the only four naval forces that have operational aircraft carriers capable of launching and recovering conventional aircraft. Reports that appeared in the Chinese press in the past have suggested that the PLAN is planning to employ the CATOBAR (Catapult Assisted Take Off But Arrested Recovery) launch and recovery system for its carriers. This may explain why Chinese leaders have selected the NAe Sao Paulo as the operational carrier for training its future star carrier officers. Moreover, France is restricted from participating in any technical training that may lead to a possible transfer of sensitive technology to China due to the current EU embargo on China. On the other hand, Russian—and the British navy, which will launch its Queen Elizabeth class carriers from 2014 to 2018—operates STOVL (Short Take-Off and Vertical Landing) system, thus Brazil appears to be the only viable candidate for the PLAN if they intend to adopt the CATOBAR system. In addition, China's turn to Brazil may be the result of the standstill in Sino-Russian defense cooperation, Russia recently suspended negotiations to sell China—its number one client—the Su-33 fighter jet due to allegations that the Chinese are illegally copying the Su-27SK and other Russian military hardware and technology (*Defense News*, May 4; Haijun.xaut.edu.cn, June 1).

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Beijing Mulling Tougher Tactics Against Pyongyang

By Willy Lam

Beijing's reaction to the recent North Korean nuclear test may not seem significantly harsher than its response to the DPRK's October 2006 detonation of a similar device.

The Chinese Communist Party (CCP) administration is still calling on concerned countries to conduct "negotiations and dialogue" with the Kim Jong Il government to settle the issue. Yet there is evidence galore that the Chinese leadership under President Hu Jintao is considering tougher tactics against Pyongyang due to new perceptions within China that the DPRK is intent upon becoming a "nuclear state"—not merely playing poker with the United States or South Korea so as to extract concessions such as economic or energy aid—and that a nuclearized DPRK could threaten China as much as it does South Korea, Japan or the United States.

Immediately after the May 25 nuclear test, Beijing's Ministry of Foreign Affairs (MOFA) expressed the Chinese government's "resolute opposition," adding that Pyongyang had failed to heed the "international community's general opposition" to nuclearization of the Korean Peninsula. Yet, the MOFA also called upon all parties to use "cool-headed and appropriate means" such as "consultation and dialogue" with the DPRK so as to resolve the question in a peaceful manner. Moreover, Beijing did not employ the highly charged word *hanran*, or "brazen," that it had used in October 2006 to condemn Pyongyang's first nuclear test after the start of the Six Party Talks. In a statement on June 2, MOFA spokesman Qin Gang further appealed to relevant countries to "remain calm and restrained, and not to take actions that will further escalate the situation" (Foreign Ministry Spokesman, June 2).

Yet it is evident that the Hu leadership is undertaking a thorough reevaluation of China's relationship with its "ally." This sea-change in Chinese opinion has apparently been brought about by Beijing's realization that Pyongyang is really serious about building a full-fledged nuclear arsenal. Beijing's harsher stance on the Kim dynasty has been expressed by one of China's foremost North Korean experts, Zhang Liangui, a Central Party School (CPS) professor who advises the leadership on Korean issues. In interviews that Zhang has given to foreign as well as domestic media such as CCTV, *China Daily* and the *Global Times* newspaper, the Korea specialist said Beijing knew that the Kim regime was genuinely committed to "turning the DPRK into a truly nuclear state"—and is not just playing games with the United States, Japan or South Korea. "The DPRK was not simply bluffing; it has actually been developing nuclear weapons," Zhang said. He added that producing nuclear-tipped long-range missiles was "part of the current leadership's effort to fulfill its 'historic mission'" of constructing a strong Korea that could withstand the threats of perceived imperialists (CCTV news, May 31; *China Daily*, June 1; *Joong Ang Daily* [Seoul], May 26).

For the first time, China's Korea experts are publicly warning that Pyongyang's nuclear gambit constitutes a grave national security threat to China. Professor Zhang indicated that Pyongyang's nuclear program would endanger China's industrialized northeastern provinces. Referring to the fact that the nuclear test site was a mere 85 kilometers from the Chinese border and 150 kilometers from the city of Dandong, home to an estimated 2.4 million people, Zhang disclosed that a number of schools near the China-DPRK border had taken emergency measures to shelter their students because of the tremor caused by the test. The CPS professor said a nuclear mishap could mean that "China's reviving northeast will burst like a bubble." He warned that "this is an unprecedented threat that China has never faced in thousands of years" (CCTV News May 31; *Global Times*, June 2; Reuters, June 2).

Equally significantly, several prominent academics have advocated punitive measures against China's former "lips-and-teeth ally." *Global Times* published on May 26 a rare survey of 20 top Chinese foreign policy experts: ten advocated heavy punishment for North Korea, ten opposed. "There is no need for China to maintain its past policy toward its trouble-making neighbor any longer," Sun Zhe, an international relations professor at Tsinghua University, was quoted as telling the paper. "The Chinese government should teach [the DPRK] a lesson." Some experts think Beijing should issue a warning to Pyongyang by cutting aid and trade. "If the situation continues to deteriorate, I think China should reduce trade with North Korea," said Shi Yinhong of Renmin University, a liberal scholar who, a few years ago, called on Beijing to abrogate the mutual-defense treaty between China and the DPRK. Zhan Debin, a Korea specialist at Fudan University, also indicated that Beijing could soon lose its patience with Pyongyang. If Pyongyang were to continue its provocative behavior, Zhan added, war could not be ruled out, and North Korea would "either continue trapped in a Cold War or will swiftly disappear" (*Global Times*, May 26 & June 2; Reuters, June 2).

Reactions from China's increasingly vocal Netizens have also been clearly anti-North Korean. One posting in a popular military chatroom said simply that "the North Koreans have gone mad." "Since North Korea is no longer giving face to China, Beijing has no need to cover up the differences and contradictions between the two countries," the posting added (Chinamil.com.cn, May 30). While so far, officials with ministerial status or higher have refrained from making statements on North Korea, it is all but certain that such "anti-Pyongyang" views cannot be expressed in China's tightly controlled media without approval from the top. Until recently, the CCP leaderships had given standing orders to the media to steer clear of controversial stories or

articles on the DPRK. In late 2004, the respected journal *Strategy and Management* was closed down after having published an article critical of North Korean authorities (RSF.org, January 12, 2005).

Despite the apparent reticence of senior Chinese officials, Beijing has sent unmistakable signals to the Kim regime about its disapproval of Pyongyang's nuclear and missile game plans. A day after the nuclear test, top cadres including Vice-President Xi Jinping and Defense Minister Liang Guanglie received visiting South Korean Defense Minister Lee Sang-hee. Xi, who is tipped to succeed Hu in 2012, told Lee that Beijing looked forward to "boosting friendship and cooperation [with Seoul], which will be beneficial to peace, stability and development in this region" (*People's Daily*, May 29; *Liberation Army Daily*, May 27). Even more significant is the telephone conversation between President Hu and President Obama on June 3. In a brief dispatch, Xinhua News Agency disclosed that both leaders had "exchanged views on the current situation of the Korean Peninsula." The not-so-subtle message that Beijing is sending to Pyongyang through consultations with a host of the latter's "enemies" seems to be that the CCP leadership is fed up with Kim's waywardness. Indeed, in the MOFA's press briefing on June 2, spokesman Qin Gang referred to North Korea as a mere "neighbor," and China-DPRK ties as "normal relations between states" (Xinhua News Agency, June 2 & June 3). This is despite the fact that 2009 is being designated "China-DPRK Friendship Year," Chinese officials had usually talked about their close ally in much more effusive terms.

Apart from anger at Pyongyang's disobedience—and fears that its nuke program could endanger China—Beijing is worried that the latest development would hand a pretext to countries including South Korea and Japan to procure or produce more sophisticated weapons. Former Senior Director of the U.S. National Security Council Dennis Wilder pointed out that Kim's nuclearization gambit could be "a game-changer in northeast Asia security dynamics." "Some South Korean politicians have already begun to question whether they should continue to abide by restrictions on their missile capabilities agreed to with the United States in 1999," Wilder indicated. "Pyongyang's actions might also force others in North-east Asia to consider their own nuclear options" (*Financial Times*, June 4). It is understood that Beijing is particularly anxious about the "rearmament" of Japan, whose Liberal Democratic Party has been lobbying for a constitutional revision to allow for a leap forward in the country's weapon systems.

It is unclear, however, whether the CCP's Leading Group on Foreign Affairs—China's highest-level diplomatic decision-making body headed by Hu—has made the

decision on what kind of penalties should be meted out to the North Koreans. So far the only concrete action taken by Beijing is to postpone the North Korean tour of Vice-Chairman of the National People's Congress Chen Zhili, which was originally scheduled for early June (AFP, June 2; Caijing.com.cn, June 2). While the five permanent members of the U.N. Security Council, in addition to Japan and South Korea, are still deliberating on the right response to the North Korean challenge, it is not clear whether Beijing would recommend or acquiesce to new forms of punishments. This is despite reports that soon after Pyongyang's October 2006 nuclear test, Beijing did curtail its petroleum supply to the DPRK. Beijing's worries remain that excessively harsh measures would destabilize the Kim regime at a time when Dear Leader Kim is making preparations to hand over power to his third son, Kim Jong Un, in the near future. Indeed, one interpretation of Pyongyang's recent nuclear and missiles tests is precisely that Kim, who is in ill health, wants to give assurance to the generals that the Kims will always support the military and underwrite an ambitious defense policy (*Ming Pao* [Hong Kong], May 27; *Washington Post*, May 29).

In the final analysis, it is up to Beijing to use the "opportunity" provided by North Korean intransigence to show the world that it is a responsible stakeholder in the global community. The Hu leadership has to strike the right balance between preventing utter chaos in the DPRK on the one hand, and taking effective measures to halt Kim's nuclearization gambit. As Kenneth Quinones, a former State Department Korea expert put it, "Beijing must recognize that North Korea's generals have pushed North Korea's 'defense' policy to an extreme." "Now that President Bush has left office, no nation is threatening North Korea's sovereignty," Quinones added. "But North Korea's pursuit of an arsenal of weapons of mass destruction does threaten the peace, sovereignty and security of its neighbors, including China." Now a Japan-based professor, Quinones called upon China to "make effective use of its considerable economic leverage with Pyongyang" to plod Kim toward returning to the Six Party Talks [1]. Beijing's decision could well determine the extent to which it is successful in convincing the world that its readiness to play a constructive role in global politics is commensurate with the country's fast-growing economic and military prowess.

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New Challenges." Lam is an Adjunct Professor of China studies at Akita International University, Japan, and at the Chinese University of Hong Kong.

NOTES

1. Author's interview with Professor Kenneth Quinones.

Sea of Blood, Year of Friendship: China-North Korean Relations in 2009

By John J. Tkacik, Jr.

Considerable circumstantial evidence points to the fact that North Korea was preparing for the May 25 nuclear weapons test since late last year, a test which came after the U.S. presidential election and while North Korea's "Dear Leader" Kim Jong Il was recuperating from a debilitating stroke suffered last summer (*Xin Lang Wang*, [New Wave Net], May 27). Moreover it seems that the Chinese leadership was well aware of the internal political dynamics propelling Pyongyang toward a nuclear test.

The timeframe is crucial when one considers the news, particularly page one of the January 24 *People's Daily* featuring "Sino-Korean Friendship Year." "Friendship Year" was launched with a personal letter from (in protocol order) "Communist Party General Secretary, State Chairman and Chairman of the Central Military Commission" Hu Jintao to his equally tutelary-endowed North Korean comrade Kim Jong Il. The letter was hand-delivered in Pyongyang by Comrade Wang Jiarui, director of the Chinese Communist Party Central Committee's International Liaison Department and China's most senior point-man on North Korean policy since February 2001.

"I have deputized comrade Wang Jiarui to convey my personal highest regards and best wishes to Secretary Kim Jong Il, and" (the letter continued with typical socialist reverence for priority ranking) "on behalf of the Chinese Party, Government and People, I wish the Korean Party, Government and People a happy new spring." In the most fulsome terms, Hu suggested that in this 60th year of Sino-Korean diplomatic ties—which have "withstood the test of time" and have been "carefully nurtured by the older generation of Chinese and Korean revolutionary leaders"—the two nations join hands to deepen their ties in all areas of endeavor, and invited Kim once again to visit China.

According to *People's Daily*, Kim responded with appropriate ebullience and Comrade Wang followed up with what must have been the real message: “China hoped, through strengthened contacts and common efforts, to overcome obstacles and encourage the Six Party Talks in the ceaseless achievement of progress.” In reciprocal good humor, Kim responded that he appreciated China’s leading role in the Six Party Talks, and affirmed that North Korea would “exert every effort for the denuclearization of the Korean Peninsula.” Kim, too, wanted to strengthen coordination with China for the success of the talks.

Wang’s visit to Pyongyang, however, jolted the attention of the international news media for another reason. He was the first foreign visitor to be received by the “Dear Leader” since his August 2008 stroke. Presumably, “Dear Leader” would not have shot himself up with cortisone (his left hand was visibly swollen in photos of the event) for anyone except the personal emissary of the Chinese leader, and Wang’s pilgrimage would be a media event that had to be tightly stage-managed by both Beijing and Pyongyang.

“Friendship Year” continued into February, when Kim considered the test launch of an ICBM over Japanese airspace. Chinese Vice Foreign Minister Wu Dawei—China’s top Japan expert—arrived in Pyongyang with another warm personal letter from the fourth-ranking Politburo chieftain declaring, *inter alia*, that it was the “unshakable strategic policy of the Chinese party and government to steadily develop the traditional Sino-DPRK relations of friendship” (KCNA, February 28). A few days later, another Politburo member, Liu Yandong, reassured a visiting Korean delegation that “Sino-DPRK friendship is a blood-sealed unbreakable friendship as it was provided by the leaders of the two countries” (KCNA, February 27). March saw North Korean Premier Kim Yong-Il’s (no relation to “Dear Leader”) “Friendship Year” extravaganza journey to Beijing (more on this below).

On April 5, North Korea launched a three-stage Taepodong-2 missile that supposedly lifted a warhead-sized payload well over Japanese airspace and 3,846 kilometers out into the Pacific Ocean toward Hawaii (*Spaceflight Now*, April 10). Three days later, the Chinese foreign ministry said that North Korea had the right to peaceful use of space and refused to condemn the April 5 missile launch (Foreign Ministry Spokesman, April 7). South Korean aerospace analysts said video images of the Taepodong lift-off broadcast from North Korea were convincing evidence that the North Korean rocket was built with Chinese Long-March 1 technology (*Chosun Ilbo*, April 9). The missile seems to have been fitted with attitude control thrusters at the second and third stages, advances that would enhance its deployment as a silo-based ballistic missile [1]. China,

of course, called on “all parties” to remain calm. Shortly after, despite Chinese misgivings, the United Nations Security Council issued a watered-down “presidential statement” condemning the North Korean action [2], while the Chinese Foreign Ministry explained (the following day) that to “ensure the overall interests of peace and stability” in Northeast Asia, “China disagrees of a Security Council resolution on the launch, let alone new sanctions against the DPRK” [3]. Moreover, China was still not convinced that the North Korean missile launch violated any U.N. rules—it was a civilian satellite launch, not military, and at least some kind of prior notice was given (*The Washington Post*, April 6). Where was the problem?

On April 15, reacting to the UNSC presidential statement, North Korea announced its formal withdrawal from the “Six Party Talks.” China continued to call for “calm” from all “relevant parties.”

Also in April, according to veteran China-watcher Willy Lam, “Dear Leader” was anxious to secure Chinese backing for the succession of his third son, Kim Jong-Un, to the North Korean throne. The Chinese had certainly been aware of young Jong-Un’s succession since mid-January; which is probably where South Korean intelligence first heard of it (Reuters, January 15). There is ample reason to suspect that it was a Chinese “diplomatic source” who informed the international media on June 3 that “foreign embassies” had been informed of young Kim Jong Un’s formal enrollment as successor to the “Dear Leader.” Were any embassies, other than the Chinese, so informed?

SEA OF BLOOD

Evidence of a persistent robust Trans-Yalu relationship between China and North Korea was buttressed when *People's Daily* reported quite lavishly between March 18 and March 23 that North Korean Premier Kim Yong-Il was enjoying a fruitful sojourn in Beijing and—at China’s invitation—had brought along with him North Korea’s “Sea of Blood Song and Dance Troupe” (*Xuehai Gewutuan*)—to deepen Sino-Korean friendly cultural exchanges (*Renmin Ribao*, March 20). No irony there.

The “Sea of Blood” performance in Beijing on March 18 marking the opening of “Sino-Korea Friendship Year” must have been a real treat. They sang a “major chorale work” entitled “Dream of the Red Chamber” for a Beijing audience of over 2,000 Chinese and Koreans including both China’s and North Korea’s premiers. According to *People's Daily*, North Korea’s “Dear Leader” rehearsed “Dream of the Red Chamber” with the Sea of Blood troupe just a few days before their departure for Beijing (*Renmin Ribao*, March 23, 2009). Kim Jong Il’s thoughtful gesture

was a delightful reminder of how deeply Kim cherishes this “Sino-Korean Friendship Year” of 2009.

Despite all evidence, however, most Western media, after a thorough working over by “confidential” Chinese “sources”, now appear convinced that Pyongyang has finally pushed Beijing over the line; the “line” being North Korea’s second nuclear weapons test on May 25 [4].

China’s propaganda department is indeed permitting a bit more leeway in Chinese-language news reporting on North Korea. *Huanqiu Ribao* editors, for example, observed that the Chinese policy analysts interviewed were evenly divided (ten against ten) over whether the “international community” (not necessarily China) should “more tightly sanction” North Korea or “oppose the international community’s attempt to do this” (*Huanqiu Shibao*, May 26). Yet, the more prominent Chinese scholars seem more inclined to make excuses for North Korea. Zhang Liangui of the CCP Party School sees Pyongyang’s quest for a nuclear weapon as driven by internal politics. “They want to establish a strong and powerful nation” in order to deal with the United States and a “nuclear weapon is part of their comprehensive strength” [5]. PLA Major General Peng Guangqian comments that North Korea has had a “long-term quest” for nuclear weapons to assert North Korea’s “international posture” so that it “need not fear” dealing with other countries (China Central Television [CCTV], May 28). Peng also believes that a nuclear weapon could guarantee North Korea’s “short- and mid-term security,” but not its long-term survivability, a view that suggests China could live with a North Korean nuclear weapon for the short and mid-term, at least.

In the United States, analysts predict that China is now at the breaking point with North Korea. But in reaching this conclusion, they are inclined to conflate views like Zhang’s and Peng’s with what they judged to be unusually tough language from the Chinese foreign ministry (MFA) to the effect that China “resolutely opposes this.” The “this” in the MFA statement, however, was North Korea’s nuclear test—not North Korea’s possession of nuclear weapons. Further, alas, the PRC Foreign Ministry’s language was *not* unusually tough. In fact, it was even a little milder than it was in October 2006, when the MFA called Pyongyang’s first test “brazen” (*hanran*), an adjective omitted from its May 2009 statement [6].

The fact is that the Chinese-North Korean alliance is as strong as ever in 2009. This 60th anniversary year of Beijing-Pyongyang diplomatic relations is, after all, “China-Korea Friendship Year” and on May 27, two days after the North Korean nuclear blast, a Chinese emissary, Song Enlei conveyed the message that “the traditional

China-DPRK friendship, which has steadily developed, standing all trials of history, is being further strengthened under the deep care of President Hu Jintao and General Secretary Kim Jong Il” (KCNA, May 27). On Friday June 5, China’s ambassador in Pyongyang, Liu Xiaoming and staff members of the Chinese embassy “gave helping hands to the DPRK-China Friendship Thaekam Co-op Farm” to show that there are no hard feelings (KCNA, June 5).

CONFLICTING SIGNALS FROM BEIJING

It is understandably difficult to put all this into context if one concentrates on what is said in English but does not thoroughly absorb the Chinese media. Professor Zhu Feng of Beijing University blogs in English that North Korea’s May 25 nuclear weapons test was a “slap in the face” to China’s leaders [7]. Yet, to a Chinese audience, he eschews the “slap” metaphor and instead dispassionately explains that North Korea’s test is a “well-plotted” step in gaining *de facto* “nuclear weapons state” status as part of Kim Jong Il’s “legacy” in Pyongyang’s succession process [8].

The professor was just one of a large number of experts interviewed by Chinese television and print media to elucidate the North Korean situation to Chinese audiences after the nuclear test (*Huanqiu Ribao* web, May 25), but he was one of the few who filed a blog in English on an influential U.S. foreign policy website. So, the difference in the tone of his two commentaries was striking. The discrepancy reflects precisely the conflicting messages about North Korea that the Chinese leadership has crafted for its separate target audiences. A careful review of CCP propaganda suggests that one should always watch what the Party leadership “does” more intently than what it “says”—or permits to be said—to foreigners, particularly foreigners from non-socialist, fraternal states.

Perhaps in no case is this rule as clearly in focus as in China’s relationship with long-time “lips and teeth” ally, the Democratic People’s Republic of Korea—especially in light of Professor Zhu Feng’s assertion that North Korea had been preparing its nuclear weapons test since last November’s presidential election in the United States. Without mentioning North Korean “Dear Leader” Kim Jong Il’s debilitating stroke, Professor Zhu believes that Kim has been extremely anxious to “speed up domestic power arrangements” and to bequeath to his successor the legacy of North Korea’s “nuclear weapons state” status. It was, Professor Zhu opined, a “minutely planned” process—not a “reactive” one; one that would allow Pyongyang to take advantage of President Obama’s “diplomatic adjustment” and gain leverage with an even more “hardline” stance [9]. All perfectly plausible; and suggestive that if Professor Zhu was aware of it, China’s intelligence services were even

more clued-in.

LIPS AND TEETH

That Beijing routinely and actively strategizes with Pyongyang on how to manage international alarm over North Korea's nuclear weapons ambitions is amply documented [10]. North Korea's top general, Jo Myong-rok, consulted with China's top military leaders in Beijing for five days just before the Beijing-sponsored "Three Party Talks" in April 2003. Less than a week before the first round of "Six Party Talks" in August 2003, General Xu Caihou, director of the PLA's powerful General Political Department, conferred with North Korean counterparts in Pyongyang for four days.

Over the past six years, North Korea's "brazenness" has been enabled by a series of high-level leadership visits (including by Hu Jintao and Kim Jong Il), military exchanges (which seems no longer publicized), grandiloquent praise of North Korea in the *People's Daily*, and dramatic growth in Chinese exports to North Korea indicating tremendously high levels of economic aid (how else does North Korea pay its bills?) (*Chosun Ilbo*, February 24). Chinese exports to the North continued to increase through the first quarter of 2009, while South Korean and Japanese trade dropped off (*The New York Times*, April 3).

In any event, the past six years of China's diplomatic cover for North Korea are a prologue to the 2009 "China-Korea Friendship Year," a year that provides renewed evidence of the ongoing strong patron-client relationship across the Yalu River.

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NOTES

1. Craig Covault, "North Korean rocket flew further than earlier thought," *Spaceflight Now*, April 10, 2009, at <http://spaceflightnow.com/news/n0904/10northkorea/>.
2. United Nations Security Council Presidential Statement S/PRST/2009/7, April 13, 2009.
3. "Foreign Ministry Spokesperson Jiang Yu's Remarks on the Presidential Statement adopted by the Security Council on the DPRK launch," April 14, 2009, at <http://www.fmprc.gov.cn/eng/xwfw/s2510/t557298.htm>.
4. American analysts similarly misunderstood China's "anger" at North Korea's October 2006 nuclear weapons test, citing the Chinese foreign ministry's description of the test as a "brazen" (*hanran*) violation of its international commitments and China's "resolute opposition"—to the test (*The New York Times*, October 10, 2006).
5. See interview: "Zhu Feng: Chaoxian Tuichu Tingzhan

Xieding Yi zai Queli Youhe Guojia Diwei," [Zhu Feng: North Korea's withdrawal from Armistice is to bolster its claim to nuclear weapon state status", *Xin Lang Wang*, [New Wave Net], May 27, 2009, at <http://news.sina.com.cn/w/sd/2009-05-27/183917902355.shtml>.

6. *The Washington Post* reported that "unusually critical statements and harsh coverage in China's state media" reflect the "anger" of China's leaders. The *Wall Street Journal* sees China as "More Open to Tougher Restrictions Against Reclusive Regime." Reuters noted on June 3 that the website of the Chinese Embassy in Pyongyang posted, as its top item, the Chinese foreign ministry's criticism of the nuclear test – though, by June 3 Washington D.C. time, the top item on the site was instead a "Sino-Korean Friendship Year" children's art and calligraphy exhibit (Chinese Embassy in Pyongyang, June 1). The *Financial Times*, a bit more circumspect, pointed to evidence of Chinese government exasperation with North Korea contained in a collection of short essays and interviews of Chinese scholars – most critical of the U.S., although some were indeed also uncharacteristically irate at North Korea (*Huanqiu Ribao* internet edition, May 26). But the preponderance of the evidence was in the opposite direction.

7. Zhu Feng, "North Korea Nuclear Test and Cornered China," Asia Security Initiative, MacArthur Foundation, May 27, 2009, at http://asiasecurity.macfound.org/blog/entry/north_korea_nuclear_test_and_cornered_china/

8. Zhu Feng interview.

9. Zhu Feng interview.

10. John J. Tkacik, Jr. "Getting China to Support a Denuclearized North Korea," Heritage Foundation Backgrounder #1678, August 25, 2003, at <http://www.heritage.org/Research/AsiaandthePacific/bg1678.cfm>; and John J. Tkacik, Jr., "Does Beijing Approve of North Korea's Nuclear Ambitions?" Heritage Foundation Backgrounder #1832 March 15, 2005, at <http://www.heritage.org/Research/AsiaandthePacific/bg1832.cfm>.

Sri Lanka: Beijing's Growing Foothold in the Indian Ocean

By Vijay Sakhuja

The Sri Lankan President Mahinda Rajapaksa and his government have received praise and accolades from several quarters after their triumph last month over the LTTE (Liberation Tigers of Tamil Eelam). The total annihilation of this separatist group brought an end to a civil war that has lasted over two decades. The long civil war resulted in the deaths of 80,000 to 100,000 people and over 300,000 displaced (Indian Express, May 30; Internal-displacement.org, June 4). The Sri Lankan victory over the LTTE was

made possible by military support from a number of countries who supplied weapons and platforms, training, intelligence and guidance to the Sri Lankan armed forces. In addition to providing military support, contributing countries also urged Colombo to seek a political solution to the Tamil problem. Of particular interest is Chinese political and military support to Sri Lanka in its fight against the LTTE.

The Sri Lankan national government's military success was celebrated with a victory parade on June 3 "to show off the military's prowess" and also to instill confidence among the Sinhala, Tamil and Muslim community in the government's ability to safeguard the nation's sovereignty and protect its people. The victory parade was a spectacular event with columns of military troops belonging to the Sri Lankan army, navy and the air force, police forces, civil defense personnel and the National Cadet Corps marching along the Galle Face Green, a seaside promenade in central Colombo. Also on display were Chinese-made armored vehicles and artillery guns, Czech-made multiple rocket launchers, and Indian-made mobile radars and anti-aircraft guns. Naval vessels and gunboats were stationed close by on the waterfront (U.S., Indian, Chinese origin) and airpower was displayed in the form of fighters (Ukrainian MiG 27s, Chinese F-7 and Israeli Kfir C7) and helicopters (Russian MI-24 and U.S. Bell) (Wsws.org, June 5; Slsecurityforces.blogspot.com, June 5).

In fact, both Colombo and Beijing have been discussing Sri Lanka's security problem since the early 1980s. As early as 1983, the Chinese government has conveyed to Colombo through Harry Jayawardene, the special envoy of President Junius Richard Jayewardene, that the ethnic problem was Sri Lanka's own internal affair and it was important to seek a political solution. In 1986, Colombo sought assistance to 'install defense manufacturing capacity for light arms and supply additional patrol boats,' but was declined. Apparently the Chinese refused because of the thaw in Sino-Indian relations. In 1987, Ranil Wikramasinghe of the United National Party, who later became the Prime Minister of Sri Lanka, visited China to marshal Chinese support but Beijing preferred a political solution to the ethnic problem.

President Jayawardene had sought extensive military support from China but Beijing only agreed to send a military team to assess the military requirements of the country in 1986 [1]. President Jayawardene summed up China's relationship with Sri Lanka by saying: "They were good friends and gave us military equipment, guns etc at reasonable terms. But what could they do? I could not ask them to start a war in the North to keep the Indian's busy. Even if I had, I doubt if they would have done it?"

obviously referring to India's support to the Tamils in Sri Lanka [2].

China continued to provide political and more recently enormous military support to Sri Lanka in its war against the LTTE. Its initiatives to block attempts by certain countries to place the issue of ethnic war in Sri Lanka on the United Nations Security Council discussions, and its regular arms supply were critical for Sri Lanka particularly after its new offensive against the LTTE since 2007. This was a clear indicator of a newfound understanding between Colombo and Beijing.

The LTTE air raid over Colombo in 2007 that witnessed Zlin-143 bombers dropping bombs over the airport with impunity came as a big shock to the Sri Lankan government. The rise of LTTE airpower was indeed a turning point in the Sri Lankan military strategy. Also, the LTTE had been successful in thwarting Sri Lankan military attempts to capture territory in the North. These developments had prompted the Sri Lankan government to increase military spending by nearly 20 percent from \$1.23 billion in 2007 to nearly \$1.47 billion in 2008.

Meanwhile, China was quick to deny that it supplied heavy weapons to the Sri Lankan military. Reportedly, the Chinese ambassador Dabo Ye met the Tamil MP and rights activist Mano Ganesan in March 2008 and conveyed to him that China's actions should not be interpreted as 'anti-Tamil' and according to Ganesan, "The ambassador made it clear that China did not want to take sides in the ethnic conflict, and that it did not favor any particular political party or community in its dealings in Sri Lanka" (ThaiIndia News, March 20, 2008).

Although Beijing may have conveyed to Colombo its oft-stated position that Sri Lanka must seek a political solution to the ethnic problem, it did not waste the opportunity to sell military hardware to Sri Lanka after the Indian government declined to provide military equipment, citing concerns over the use of force against the Tamils. The Sri Lankan Army chief Sarath Fonseka has noted that "India had told us they were not in a position to sell or send offensive weapons or even equipment like radars and basic communication equipment to meet our requirements" (Indian Express, May 25). The United States also suspended military aid to Sri Lanka over human rights issues.

During Sri Lankan President Mahinda Rajapaksa's visit to China in 2007 (February 26 to March 4), the joint communiqué had indirectly referred to the ethnic violence in Sri Lanka and noted that "The two sides resolved to fight tirelessly against the three evil forces of terrorism, separatism and extremism, and would step up consultation and coordination on regional and international counter-

terrorism action.” In April 2007, China and Sri Lanka reached a \$37.6 million deal for supply of artillery guns, armored personnel carriers (APCs) and infantry weapons. China also agreed to supply other systems to counter LTTE ambushes. Beijing also agreed to sell six F-7 jet fighters, considered critical to destroying the LTTE’s fledgling air force and also demolish other military infrastructure such as command posts, underground bunkers, ammunition storages, boatbuilding yards and above all the airstrips (Thaindian, May 2).

Interestingly, Beijing encouraged Islamabad to meet Colombo’s military requirements and help fight the LTTE (Thaindian, May 2), it also encouraged Pakistan to train Sri Lankan pilots. Some Indian defence and military experts maintain that Chinese and Pakistani air force advisors were in Colombo for the last year helping the Sri Lankan military plan combat missions against the LTTE strongholds. China also supplied the Sri Lankan Army the HJ-8 anti-tank missiles that were used against the LTTE hardened structures and pill boxes (China-defense-mashup.com). The Sri Lankan army is also known to possess the Baktar Shikan, a variant of HJ-8 being manufactured under license in Pakistan. Following the LTTE air strikes, Sri Lanka had planned to upgrade its air defense capability. In 2007, it ordered JY-11 radar from China but the order was held in abeyance due to objections from India over air coverage that could overlap with Indian air space.

In Sri Lanka, Lanka Logistics & Technologies, a state-owned enterprise, is the primary agency responsible for the procurement of hardware for the military establishment. Interestingly, China established the Bonded Warehouse of China North Industries Corporation (NORINCO), a renowned international conglomerate, in the port city of Galle as far back as 1994. As part of an agreement that is renewed every two years, the warehouse stores military equipment and ordnance for the Sri Lankan military and the supplies are made on payments; whatever is not available is sourced back to China and supplied. In a very interesting move, in 2004, NORINCO donated 1 million Renminbi to Sri Lanka’s Tsunami relief fund. Mr. Zhang Guoqing, President of NORINCO expressed his grief over the devastation caused by the Tsunami and hoped that they could actively participate in the rebuilding process (Norinco.com, December 31, 2004).

Reportedly, Sri Lanka owes nearly \$200 million for the military purchases from NORINCO and has not renewed its contract, instead opting for Poly Technologies, a PLA military enterprise. Poly Technologies has supplied a variety of military equipment including ordnance to the Sri Lankan forces. The Sri Lankan Army has purchased 120 mm mortar shells valued at \$10.4 million, 152 mm artillery

shells for \$20 million, and 81 mm high-explosive mortar bombs for \$3.7 million. Similarly, the Sri Lankan Navy has acquired ammunition and guns at \$2.7 million including naval guns, heavy machine guns, multipurpose machine guns, and submachine guns. Interestingly, Chinese origin weapons including automatic rifles, anti-tank weapons and grenade launchers have been found in the inventory of the LTTE too (Express Buzz, May 29). These are believed to be sourced from Myanmar.

Besides military assistance, China increased its aid to Sri Lanka from a few million dollars in 2005 to about \$1 billion in 2008 while the United States approved only \$7.4 million and the U.K. £1.25 million in humanitarian aid. In fact, China has displaced Japan as the major aid donor to Sri Lanka (Timesonline, May 16).

China has not only backed Sri Lanka with military assistance and enormous economic aid, it has invested in development of infrastructure. In May 2007 China and Sri Lanka signed the “establishment of friendship city relationship” relating to the Hambantota district for development of infrastructure. Designated as the Hambantota Development Zone (HDZ), the project envisages building a harbour facility, bunkering facilities and a tank farm. The HDZ is estimated to cost \$1 billion and would be completed in fifteen years. The first phase of construction commenced in October 2007 and is estimated to cost \$450 million (Timesonline, May 16).

The HDZ is being developed in the form of dual use infrastructure similar to Gwadar in Pakistan and serves China in a number of strategic ways. First, because it is a deep water natural harbor it provides facilities for Chinese flagged merchant ships, container vessels, oil and gas tankers, and military vessels including nuclear submarines operating in the Indian Ocean or transiting through the western approaches of the Straits of Malacca. Second, China would be able to establish electronic systems and networks for monitoring Indian Ocean military and civilian traffic, electronic transmissions from the U.S. base at Diego Garcia and the Indian nuclear facility that is likely to come up at Rambilli in the Bay of Bengal. Third, Hambantota offers a strategic location for China to set up its space monitoring systems, considered critical for its ballistic missiles, which can challenge U.S. forces particularly the aircraft carriers who may threaten Chinese shipping in the Indian Ocean. Fourth, the Chinese fleet of fishing vessels that are also deployed for intelligence gathering duties can be staged from Hambantota. In essence, Hambantota fits well into the Chinese ‘strings of pearls’ strategy and has the potential to provide Beijing the critical ‘leverage to play the Great Game in the Indian Ocean.’

After the military decimation of the LTTE, Sri Lanka is full of confidence and has the potential to exercise some amount of ‘strategic autonomy.’ It acknowledges the Chinese diplomatic and military support in its fight against the LTTE and could resist pressures from its big neighbour India and the West. China’s politico-economic initiatives and unrestrained supply of military equipment to Sri Lanka has made New Delhi nervous, finding itself robustly encircled by China. Sri Lanka will be under tremendous pressure from India and may find itself sandwiched between the two rising powers of Asia and cornered to ‘choose’ between the two powers.

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NOTES

1. Urmila Phadnis and Rajat Ganguly, *Ethnicity and nation-building in South Asia* (Sage publications, 2001), p.331.
2. S.D. Muni, *Pangs of Proximity: India and Sri Lanka’s Ethnic Crisis*, (Sage Publications, 1993), p.100, cited in Swaran Singh “Sino-South Asian Ties: Problems & Prospects”, *Strategic Analysis* Volume XXIV No 1, April 2000.

China’s SSBN Forces: Transitioning to the Next Generation

By Andrew Erickson and Michael Chase

China’s undersea deterrent is undergoing a generational change with the emergence of the Type-094, or *Jin*-class, which represents a substantial improvement over China’s first-generation Type-092, or *Xia*-class, nuclear-powered ballistic missile submarine (SSBN). Launched in the early 1980s, the People’s Liberation Army Navy’s (PLAN) single *Xia*-class SSBN (hereafter *Xia*) has never conducted a deterrent patrol and is equipped with relatively short-range (1,770 km) JL-1 SLBMs (submarine-launched ballistic missiles). In contrast, China may build five Type-094 SSBNs, which will enable the PLAN to conduct near-continuous deterrent patrols, and each of these second-generation SSBNs will be outfitted with 12 developmental JL-2 SLBMs that have an estimated range of at least 7,200 km and are equipped with penetration aids. Although the transition to the new SSBN is ongoing, recent Internet photos depicting at least two *Jin*-class SSBNs (hereafter *Jin*) suggest that the PLAN has reached an unprecedented level of confidence in the sea-based leg of its strategic nuclear forces. Indeed, China’s 2008 *Defense White Paper* states that the People’s Liberation Army Navy (PLAN) is

enhancing its “nuclear counterattack” capability [1]. With the anticipated introduction of the JL-2 missiles on the *Jin* and the deployment of DF-31 and DF-31A road-mobile intercontinental ballistic missiles (ICBMs), China is on the verge of attaining a credible nuclear deterrent based on a ‘survivable’ second-strike capability.

RECENT DEVELOPMENTS

The U.S. Office of Naval Intelligence (ONI) assesses that China will build a “fleet of probably five Type-094 SSBNs . . . to provide more redundancy and capacity for a near-continuous at-sea presence” [2]. A variety of Chinese publications suggest that the SSBN forces of France and Britain—which have four vessels each, with one at sea at all times, two in refit, and one under maintenance—may serve as models for China and hence reinforce the aforementioned indications of its plans. One Chinese source, however, suggests that China will field six Type-094 SSBNs, divided into patrolling, deploying and refitting groups [3], with another assessment suggesting that these groups will comprise two SSBNs each [4].

It is clear that at least two different hulls have already been launched, based on unusually high-resolution internet and commercial satellite images that have emerged of one *Jin* in port at Xiaopingdao base, south of Dalian, two *Jins* in the water and perhaps one emerging from production at Huludao base east of Beijing, and one at a newly-constructed submarine facility at Yalong Bay near Sanya on Hainan Island. The images of the facility on Hainan Island provided some hints as to the PLAN’s SSBN basing plans. Indeed, the photo of the *Jin* at Yalong Bay suggests that the facility may be the base for China’s future SSBN forces.

DEVELOPMENT MOTIVES

Many Western analysts have focused on the ‘survivability’ issue to explain China’s decision to proceed with the development of the *Jin* and the JL-2. Given the potential vulnerability of Chinese SSBNs to detection by adversary attack submarines and the challenges of locating dispersed road-mobile missiles, however, it would certainly seem that Chinese decision-makers must also have been considering other factors, including missile defense, international prestige and inter-service politics.

Chinese strategists appear to calculate that a nuclear dyad, composed of land-based strategic missiles and SLBMs, or possibly a triad incorporating nuclear-armed PLAAF bombers as well, is required to enhance the credibility of China’s nuclear deterrent in line with the requirements of the “effective counter-nuclear deterrence” posture

discussed in recent Chinese publications. Chinese analysts assert that an SSBN is “the most survivable type of (nuclear) weapon” [5], and hint that it may allow China to deter third party intervention in a regional conflict. Citing the development of the *Jin*, one Chinese source states, “If a war erupts across the Taiwan Strait one day, facing the danger of China waging nuclear war, it will be very difficult for America to intervene in the cross-strait military crisis” [6]. The authors interpret the Chinese comments here to mean not that China would be likely to launch nuclear weapons first in response to U.S. intervention in a China-Taiwan conflict, but rather that Chinese analysts believe strong SSBN capabilities would enhance its deterrence posture by causing Washington to think twice about intervening in a conflict in which escalation control might be difficult.

Another potential explanation for the investment in the development of the *Jin* is that Chinese planners believe SLBMs launched from certain patrol areas might complicate U.S. missile-defense interception efforts. A Chinese analysis states that SSBNs “are more capable of penetrating [missile] defenses” [7].

Yet another plausible explanation for the decision to deploy the *Jin* is that Chinese leaders may view the ships as symbols of China’s emerging great-power status. The other permanent members of the U.N. Security Council—France, Britain, Russia, and the United States—all have modern SSBNs in their fleets, and Beijing may see the deployment of its own as a way to enhance its international prestige. This certainly appears to be true of nuclear-powered submarines in general. Indeed, former PLAN Commander Admiral Liu Huaqing and others have stated that nuclear submarines represent one of China’s clearest claims to great power status [8].

Still another possible explanation is inter-service politics. Although the politics of China’s defense budget process are opaque to outsiders, it seems reasonable to speculate that the PLAN leadership may have pushed for the development of the *Jin* to ensure that the navy would have a role to play in the strategic nuclear-deterrence mission.

OPERATIONAL CHALLENGES

Notwithstanding the considerable progress reflected by the launching of at least two *Jin* SSBNs, the PLAN still faces at least three key challenges before it realizes a secure seaborne second-strike capability: reducing the probability of detection; at-sea training of commanders and crew members; and coping with the nuclear command-and-control issues associated with the operation of SSBNs.

Chinese observers are well aware of the challenges of

avoiding detection, as reflected by their analysis of capabilities allegedly demonstrated during the Cold War vis-à-vis Soviet submarines. Subsequent-generation submarines are generally significantly quieter than those of earlier generations, so it may be expected that China has made progress in quieting its submarines as well. Nevertheless, the *Jin* is still a second generation SSBN, and those of other nations have faced significant acoustic difficulties.

Training is another potential challenge for China’s emerging SSBN force. Although digital training and simulations can be useful, the only way other nations have become proficient at submarine operations is by taking their boats to sea. Chinese naval exercises have increased in sophistication in recent years and currently encompass such categories as command and control, navigation, electronic countermeasures, and weapon testing. Moreover, Chinese submarine patrols have increased in recent years—the PLAN conducted 12 patrols in 2008, twice as many as in 2007 [9]. This increase in patrols and the overall priority accorded to China’s submarine force development suggest that the PLAN’s submarines are now able to range farther afield on a more frequent basis. Indeed, the evolving missions and growing capabilities of the Chinese submarine force “create the conditions for Beijing to opt for an increased submarine presence in the Western Pacific east of the Ryukyu Island chain” [10].

While the trajectory of training specifically relevant to deterrent patrols remains opaque, the PLAN is striving to improve the rigor and realism of education and training across the board. Within this context, submarines have clearly been an area of emphasis and the PLAN is using a variety of methods to prepare its sailors for future wars. Official Chinese publications note, for example, that various types of simulators have been used to improve submarine training.

Establishing and maintaining secure and reliable communications with SSBNs constitutes another major challenge for any country that desires a sea-based deterrent. Chinese military publications emphasize that the central leadership must maintain strict, highly-centralized command and control of nuclear forces. China’s submarine force has reportedly employed high-frequency (HF), low-frequency (LF), and very-low-frequency (VLF) communications, and researchers are working on a number of technologies that could be useful for secure communications with submarines, as reflected by recent publications discussing the prevention of enemy detection of transmissions between submarines and shore-based headquarters units. Ensuring the ability to communicate with SSBNs in an environment in which an adversary may attempt to disrupt its command and

control system could be a critical challenge for the PLAN. It remains unclear, however, to what extent centralized SSBN command, control, and communication is possible for China across the range of conflict scenarios.

Beyond the problem of ensuring secure and reliable communications, the deployment of SSBNs also entails use-control challenges. Given the strong emphasis on centralized control of nuclear forces that is evident in official Chinese military and defense policy publications, it seems highly unlikely that the PLAN would conduct deterrent patrols without effective use controls. Presumably, China will strive not only to develop a communications capability that is robust enough to ensure at least one-way wartime connectivity between Beijing and the *Jin*-class SSBNs, but also to minimize the possibility of an accidental or unauthorized launch by implementing some combination of technical and procedural controls.

CONCLUSION

Notwithstanding the recent series of revelations about China's emerging SSBN force, at least four questions that have major implications for the future of China's sea-based deterrent remain unanswered. First, there is the issue of how many SSBNs China will ultimately build, which will influence China's ability to conduct continuous or near-continuous deterrent patrols. Second, it remains unclear whether China will attempt to create bastions for its SSBNs in areas close to the mainland or deploy them to more distant patrol areas—a decision which will no doubt be informed in part by the capabilities of the JL-2 SLBM, which remains under development. Third, little is known about China's plans for coping with the command and control challenges associated with the deployment of a sea-based deterrent force, which could influence crisis stability. Fourth, authoritative Chinese sources refer to "joint nuclear counter-attack campaigns" in which the Second Artillery's nuclear missile force, PLAN SSBNs, and nuclear-capable Chinese air force bomber units would all participate, but it remains unclear to what extent China will actually integrate its emerging SSBN force into a joint strategic nuclear deterrence capability [11]. While these uncertainties remain, the investment already made in SSBN hulls and shore facilities indicates that the program represents a major effort to move beyond the ill-fated *Xia* and take China's nuclear deterrent to sea. In addition, the emergence of photos showcasing at least two Type-094 submarines—which reflects Beijing's apparent willingness to allow Western analysts to see them—may signal a new level of confidence on Beijing's part, and perhaps even a nascent recognition that modest increases in transparency could actually support rather than undermine China's strategic interests.

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NOTES

1. "China's National Defense in 2008" (Beijing: State Council Information Office, January 2009), http://merln.ndu.edu/whitepapers/China_English2008.pdf.
2. Office of Naval Intelligence (ONI), "Seapower Questions on the Chinese Submarine Force," 20 December 2006, <http://www.fas.org/nuke/guide/china/ONI2006.pdf>.
3. Jian Jie, "The Legend of the Virtuous Twins," *World Outlook*, no. 448 (August 2002), p. 23.
4. Lin Changsheng, "The Combat Power of China's Nuclear Submarines," *World Aerospace Digest*, no. 103 (September 2004), p. 33.
5. Zhang Feng, "Nuclear Submarines and China's Navy," *Naval & Merchant Ships* (March 2005), p. 12.
6. "China's at Sea Deterrent," *Military Overview*, no. 101, p. 53.
7. Wang Yifeng and Ye Jing, "What the Nuclear Submarine Incident Between China and Japan Tells Us About the Ability of China's Nuclear Submarines to Penetrate Defenses, Part 1," *Shipborne Weapons* (January 2005), pp. 27–31.
8. Liu Huaqing, *The Memoirs of Liu Huaqing* (Beijing: People's Liberation Army Press, 2004), p. 476.
9. Hans Kristensen, "Chinese Submarine Patrols Doubled in 2008," *Strategic Security Blog*, February 3, 2009, <http://www.fas.org/blog/ssp/2009/02/patrols.php>.
10. Office of Naval Intelligence, "Seapower Questions on the Chinese Submarine Force."
11. Yu Jixun, chief ed. et al., People's Liberation Army Second Artillery Corps, *The Science of Second Artillery Campaigns* (Beijing: PLA Press, 2004), pp. 297–298.
