

Mobilizing for War: China's Limited Ability to Cope with the Soviet Threat

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This essay examines the consequences of the Sino-Soviet border conflict in the light of new materials. It shows that the clashes of March 1969 made China's security situation worse. It demonstrates that China's defense industry was incapable of being mobilized to prepare for a Soviet attack, and that domestic political mobilization was also significantly hobbled by the continuing effects of the Cultural Revolution. China was roughly prepared for an American invasion in South or East China, but in the Northeast, North, and Northwest, China's troops were hundreds of miles from the border, and showed limited levels of readiness. More importantly, it appears that as late as 1969-70, China lacked a secure nuclear deterrent.

As is well known now, Mao Zedong and Zhou Enlai turned to four top military leaders to examine the international situation, and it is also well known now that they suggested China make limited contacts with the United States. However, they did not propose that a grand rapprochement should take place, nor would such a grand rapprochement have been credible or possible in the fall of 1969. U.S. policy in late 1969-70 was to avoid taking sides in the event of a Sino-Soviet conflict. Thus, China was lucky, rather than skillful, in coping with a possible Soviet invasion, an invasion that Chinese actions made more likely.

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On February 9 and 11-12, 1969, Premier Zhou Enlai (周恩來) of China convened meetings of leaders of China's armed forces and the country's defense industries, urging them to put production to rights after the winding down of the mass phase of the Cultural Revolution. "If we are to fight a war, primarily we will rely on conventional weapons," Zhou said. Zhou went on to lay out a number of the many problem areas for Chinese weapons production, demanding special attention for anti-aircraft weapons, but the list of problematic weapons systems ran the entire gamut of China's conventional weapons production lines, with electronics singled out as the worst. Zhou even held open the possibility that China could import weapons systems to meet urgent needs that the country could not provide for itself, though who might supply these weapons was not specified. In short, Zhou was trying to put the defense industry on a war footing.¹

This was not the first time that Zhou had mobilized industry for war. Indeed, a significant fraction of his time in the 1960s was spent on defense industrial issues. In 1962, he called for defense industrial mobilization to meet perceived threats from the Republic of China (ROC)/Kuomintang (KMT, 國民黨) and perhaps India. In 1964-66, he took charge of planning the Third Front (三線) program of defense industrialization designed to prepare China for war first with the United States, and later increasingly with the Soviet Union in mind. In between, he played a key role in coordinating critical defense technology and resource issues as head of the Chinese Communist Party's (CCP) Central Special Committee, charged with the nuclear weapons and other advanced defense technology develop-

¹*Zhou Enlai nianpu*, xia juan (Chronology of Zhou Enlai, volume 3) (Beijing: Zhongyang wenxian chubanshe, 1997), 279-80; and *Zhou Enlai junshi huodong jishi*, xia juan (A record of Zhou Enlai's military activities, volume 2) (Beijing: Zhongyang wenxian chubanshe, 2000), 689.

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ment programs.² Yet despite the best efforts of Zhou and others, it was unclear how successful they were. Needless to say, many of the problems of China's defense industry were intimately connected with the chaotic first years of the decade-long Cultural Revolution. More generally, they were caused by the ideology of "putting politics in command" and "never forget [ing] class struggle" (and the leading proponent of that ideology).

To be sure, the Chinese People's Liberation Army (PLA, the combined services of the Chinese military) had acquitted itself more than adequately in the 1960s, launching cross-border operations against the ROC/KMT forces in Burma in late 1960 and early 1961, aiding Laotian communists, deterring (?) an ROC invasion and defeating India in 1962, dealing with low-level ROC incursions and naval confrontations in the first half of the 1960s, deploying large numbers of troops to assist North Vietnam from 1965 until early 1969, and so on.³ However, the lessons of the battlefield were mixed, and China faced profound questions regarding its ability to defend itself when its leadership concluded that the Soviet Union now posed a greater threat to Chinese security than did the United States.⁴

Despite these weaknesses, the PRC initiated a serious border incident with the Soviet Union in March 1969. The Chinese attack shocked Soviet political and military leaders. However, over the course of 1969 and into 1970, they seriously considered a variety of military options against China, including invasion, conventional bombing of China's nuclear facilities, and

²*Zhou Enlai junshi wenxuan*, disijuan (Selected military writings of Zhou Enlai, volume 4) (Beijing: Renmin chubanshe, 1997), 428-37; and Jin Chongji, ed., *Zhou Enlai zhuan, 1949-1976*, xia (Biography of Zhou Enlai, 1949-1976, volume 2) (Beijing: Zhongyang wenxian chubanshe, 1998), chapters 24 and 25.

³Han Huaizhi and Tan Jingqiao, eds., *Dangdai Zhongguo jundui de junshi gongzuo* (The military affairs of contemporary China's military) (Beijing: Zhongguo shehui kexue chubanshe, 1989), chapters 11, 16, 17, and 20.

⁴Chinese military scientists traveled to both North and South Vietnam to learn the lessons of combat involving anti-aircraft and anti-tank weapons, areas where there were major problems with Chinese systems, according to military and industrial leaders. See Yu Yongbo, ed., *Dangdai Zhongguo de guofang keji shiye* (Defense science and technology endeavors of contemporary China), two volumes (Beijing: Dangdai Zhongguo chubanshe, 1992), 1: 111-15.

even use of nuclear weapons against China. In turn, Chinese leaders grew increasingly alarmed that the Soviets were considering full-scale war with China, and by late summer and early fall 1969, the Chinese leadership had come to expect a massive Soviet attack.

Many studies have examined the Zhenbao (珍寶島)/Damansky Island border incident of 1969, and its relationship to the emergence of the U.S.-Soviet-China strategic triangle and Sino-American rapprochement. This essay will discuss some of these issues. Its primary purpose, however, is to attempt to evaluate how well prepared China was to cope with a Soviet threat. As noted, Zhou Enlai had spent a great deal of time in the 1960s preparing China for war, but in the light of newly released materials from China and the former Soviet Union, and declassified U.S. intelligence assessments, it is clear that China lacked an effective nuclear deterrent in 1969-70, while its conventional military forces were hundreds of miles away from the Sino-Soviet border and were ill-equipped to fight the Soviet Union on a significant scale. Efforts to mobilize Chinese industry to serve urgent war needs were in a large number of cases completely unsuccessful. In short, "internal balancing" against the Soviet threat was not working.

An additional explanation of the Zhenbao incident is that Mao Zedong (毛澤東) created an external crisis in order to build or reestablish internal unity and promote political mobilization after the waning of the mass phase of the Cultural Revolution in the summer of 1968. This too did not work well.

The Border Conflict and War Scare of 1969

There is a growing consensus within the scholarly literature, in the United States, Russia, and China, that Mao Zedong initiated the March 2, 1969, battle on Zhenbao Island.⁵ While definitive documentation of Mao's

⁵Recent Western analyses of the Sino-Soviet border conflict, reflecting new materials and syntheses, include: Lyle J. Goldstein, "Return to Zhenbao Island: Who Started Shooting and Why It Matters," *The China Quarterly*, no. 168 (December 2001): 985-97; Chen Jian, *Mao's*



motives for doing this is lacking, two basic arguments are often put forward. First, Mao wanted to use a minor, controlled skirmish with the Soviets as a means to mobilize the Chinese population to support the

China and the Cold War (Chapel Hill: University of North Carolina Press, 2001), chapter 9; and Roderick MacFarquhar and Michael Schoenhals, *Mao's Last Revolution* (Cambridge, Mass.: Harvard University Press, 2006), chapter 18. Earlier major Western treatments are to be found in the work of Thomas W. Robinson, "The Sino-Soviet Border Dispute: Background, Development, and the March 1969 Clashes," *American Political Science Review* 66, no. 4 (December 1972): 1175-1202; Thomas W. Robinson, "China Confronts the Soviet Union," in *The Cambridge History of China*, ed. Roderick MacFarquhar and John K. Fairbank, vol. 15: *The People's Republic, Part 2: Revolutions within the Chinese Revolution, 1966-1982* (Cambridge: Cambridge University Press, 1991), 218-301; and Thomas W. Robinson, "The Sino-Soviet Border Conflict," in Stephen S. Kaplan et al., *Diplomacy of Power: Soviet Armed Forces as a Political Instrument* (Washington, D.C.: Brookings Institution, 1981), 265-313. See also Richard Wich, *Sino-Soviet Crisis Politics: A Study of Political Change and Communication* (Cambridge, Mass.: Harvard East Asian Monographs, 1980). Major Chinese treatments include: Xu Yan, "1969 nian Zhong-Su bianjie de wuzhuang chongtu" (The 1969 armed conflict on the Sino-Soviet border), *Dangshi yanjiu ziliao* (Party History Research Materials), 1992, no. 5:2-12 (I gratefully acknowledge Chen Jian for providing me with a copy of this essay); Zheng Qian, "Zhonggong jiuda qianhou quanguo de zhanbei gongzuo" (National preparations for war before and after the CCP's Ninth National Congress), *Dangshi ziliao* (Party History Materials), no. 41 (1992): 204-33; Xiong Xianghui, "Dakai Zhong-Mei guanxi de qianzuo" (Prelude to the opening of Sino-American relations), *ibid.*, no. 42 (1992): 56-96; Li Danhui, "1969 nian Zhong-Su bianjie chongtu: yuanqi he jieguo" (The 1969 Sino-Soviet border conflict: origins and development), *Dangdai Zhongguo shi yanjiu* (Research on the History of Contemporary China), 1996, no. 3:39-50; Niu Jun, "1969 nian Zhong-Su bianjie chongtu yu Zhongguo wajiaozhanlue de tiaozheng" (The 1969 Sino-Soviet border conflict and the readjustment of China's foreign affairs strategy), *ibid.*, 1999, no. 1:66-77; Niu Jun, "Lun 60 niandaiyou Zhongguo dui Mei zhengce zhuanbian de lishi beijing" (On the historical background of the late 1960s shift of Chinese policy toward the United States), *ibid.*, 2000, no. 1:52-65; and Xu Kui, "Lixing di renshi he sikao ershi shiji luqishi niandai de 'quanguo da beizhan'" (Rationally understanding and considering "nationwide preparation for war" in the 1960s and 1970s), *ibid.*, 2002, no. 5:111-19. In English, see Yang Kuisong, "The Sino-Soviet Border Clash of 1969," *Cold War History* 1, no. 1 (August 2000): 21-52; Li Jie, "Changes in China's Domestic Situation in the 1960s and Sino-U.S. Relations," and Gong Li, "Chinese Decision Making and the Thawing of U.S.-China Relations," both in *Re-examining the Cold War: U.S.-China Diplomacy, 1954-1973*, ed. Robert S. Ross and Jiang Changbin (Cambridge, Mass.: Harvard East Asia Monographs, 2001), 288-320 and 321-60, respectively; and Li Jie, "China's Domestic Politics and the Normalization of Sino-American Relations, 1969-1979," and Wang Zhongchun, "The Soviet Factor in Sino-American Relations, 1969-1979," both in *Normalization of U.S.-China Relations: An International History*, ed. William C. Kirby, Robert S. Ross, and Gong Li (Cambridge, Mass.: Harvard East Asia Monographs, 2005), 56-89 and 147-74, respectively. Important Russian understandings in English are Arkady N. Shevchenko, *Breaking with Moscow* (New York: Knopf, 1985); Viktor M. Goharev, "Soviet Policy Toward China: Developing Nuclear Weapons 1949-1969," *Journal of Slavic Military Studies* 12, no. 4 (December 1999): 1-53; and Vasily Kozarev, "Soviet Policy Toward the United States and China," in Kirby, Ross, and Li, *Normalization of U.S.-China Relations*, 252-86.

regime—to rally around the flag—in light of the bitter (and ongoing) factional divisions created by the Cultural Revolution. Second, Mao wanted to deter the Soviets from attacking China. This part of the argument in turn has two sub-variants: a rather traditional balance-of-power argument where Mao acted preemptively to convince the Soviet leadership that taking on China would be too costly, and a second, windows-of-vulnerability argument—the immediate balance of forces between China and the Soviet Union was not necessarily to China's huge disadvantage, but that trends were pointing in the direction of a dramatic decline in China's relative capabilities vis-à-vis the Soviet Union.⁶ This second explanation has both immediate and longer-term elements. The Soviet Union, even if deterred by a short, controlled skirmish in 1969, would have continued to pose a major threat to the security of China in the longer term. Standard international relations theory states that when confronted with a security challenge, a state can appease (or bandwagon with) a potential challenger, or it can balance against the threat through internal mobilization and/or external alliances.⁷ Whatever the motivation, it is quite clear that Mao misjudged the situation and nearly precipitated a profound disaster. This essay explores how woefully unprepared China was when Mao's decision almost literally blew up in his face.

In retrospect, the fighting in and around Zhenbao in March 1969 was limited, and newly released materials from Russian and Chinese sources suggest that the stories told by each side are less than complete. According to Soviet archives, fifty-eight Soviet troops were killed and ninety-four wounded in the battles on March 2, 15, and 17 (thirty-one were killed and fourteen wounded on March 2 alone). Chinese sources do not report casualties for the March 17 confrontation, but say that twenty-nine were

⁶For an exposition of these hypotheses, see Goldstein, "Return to Zhenbao Island" (cited in note 5 above); and Thomas J. Christensen, "Windows and War: Trend Analysis and Beijing's Use of Force," in *New Directions in the Study of Chinese Foreign Policy*, ed. Alastair Iain Johnston and Robert S. Ross (Stanford, Calif.: Stanford University Press, 2006), 50-85, esp. 69-71.

⁷Kenneth N. Waltz, *Theory of International Politics* (Reading, Mass.: Addison-Wesley, 1979), esp. 124-28.



killed and sixty-two wounded on March 2 and 15.⁸ Despite nine hours of combat on March 15, fewer were killed and injured on both sides on that day than in the one hour of fighting on March 2, despite what appears to be the use of considerably more force and troops on the later date. In contrast, Robinson's early work on the 1969 border clashes states that about sixty Soviet soldiers were killed and the Chinese lost about eight hundred on March 15.⁹

Zhenbao was not a spur of the moment decision. In early 1968, a bloody clash in another part of the Heilongjiang (黑龍江省)-Soviet border occurred at Qiliqin. On that occasion, China prepared a "counterattack," but the situation on the border cooled down until confrontations developed in and around Zhenbao in December 1968 and January 1969.¹⁰ Mao had been thinking about teaching the Soviets a lesson for a considerable length of time.

Mao and other Chinese leaders did not appear to be unduly concerned about the March border incidents, at least in the short term, which would be in keeping with their being a deliberate Chinese provocation. Moreover, given the newly available casualty figures, the PLA seems to have performed well. The Chinese leadership continued to advocate unity and mobilization in the face of what was described as a mounting Soviet threat, but acted in ways that were consistent with the lack of a sense of an im-

⁸Citing Soviet archives, Xu Yan provides the overall figures for the three days of conflict (see Xu, "1969 nian Zhong-Su bianjie de wuzhuang chongtu," 9). Gobreav provides the figures for the Soviet casualties on March 2 (see Gobreav, "Soviet Policy Toward China," 44). Chinese figures for March 2 and 15 are found in Li Ke and Hao Shengzhang, "*Wenhua da geming" zhong de renmin jiefangjun* (The People's Liberation Army during the "Great Cultural Revolution") (Beijing: Zhonggong dangshi ziliao chubanshe, 1989), 321, 323 (I added the total). Another possibility, of course, is that the Chinese sources are inaccurate. Gobreav states that the Chinese suffered "tremendous losses" at the end of the March 15 battle. Patrick Tyler, presumably citing U.S. intelligence sources, states that Zhenbao and the Chinese bank of the Ussuri River (烏蘇里江) opposite Zhenbao was turned into a "moonscape of craters" by Soviet artillery. See Patrick Tyler, *A Great Wall* (New York: Public Affairs, 1999), 60.

⁹Robinson, "The Sino-Soviet Border Dispute," 1190, based on contemporaneous Soviet sources.

¹⁰Yang, "The Sino-Soviet Border Clash of 1969," 24, 27-28.

minent Soviet attack.¹¹ However, border incidents continued throughout the spring and summer (with the CIA noting incidents on the Heilongjiang-Soviet border on May 12-15 in several locations, May 25, May 28, and July 7; and on the Xinjiang (新疆)-Soviet border on April 6, 17, 20, May 20 in several locations, June 10, and August 13)¹² culminating in an armed conflict on the Sino-Soviet border (either in what was then the Kazakh Soviet Socialist Republic or China's Xinjiang Uyghur Autonomous Region; 新疆维吾尔自治区), when a Chinese patrol was attacked by Soviet forces. According to Soviet sources, a Chinese battalion fought a Soviet regiment. Chinese sources suggest smaller levels of forces involved, with varying accounts of casualties.¹³ By the late spring and early summer Mao was apparently growing progressively more alarmed at increasing Soviet mobilization and pressure on China. On August 28, 1969, the Central Committee ordered general mobilization in border regions.¹⁴ Zhou Enlai met with Soviet premier Aleksei N. Kosygin at Beijing airport on September 11; appearing superficially to ameliorate the crisis. However, China's fear of a Soviet surprise attack was so acute that most major political leaders left Beijing on the eve of the Sino-Soviet border negotiations on

¹¹This seems consistent with the views expressed in Mao's one major available speech of the period—his address to the first plenum of the CCP's Ninth Central Committee. See *Jianguo yilai Mao Zedong wengao*, disinformation (Mao Zedong (draft) documents since the founding of the country, volume 13) (Beijing: Zhongyang wenxian chubanshe, 1998), 35-41.

¹²For the CIA material see Director of Intelligence, Central Intelligence Agency, "Sino-Soviet Border Talks: Problems and Prospects" (Intelligence Memorandum, November 10, 1969), from the maps on pp. 15 and 16, accessed via the National Security Archive. Note the maps are difficult to read, and I may be slightly off on the dates. See also *Heilongjiang shengzhi, di liushiliu juan: Junshi zhi* (Heilongjiang provincial gazetteer, vol. 66: Military affairs) (Harbin: Heilongjiang renmin chubanshe, 1994), 179-80; and *Xinjiang tongzhi, di ershiba juan: Junshi zhi* (Xinjiang gazetteer, vol. 28: Military affairs) (n.p.: Xinjiang renmin chubanshe, 1997), 71, 338-41.

¹³Xu Yan ("1969 nian Zhong-Su bianjie de wuzhuang chongtu," 10) states that a patrol of thirty Chinese was attacked by three hundred Soviet troops, with three Chinese killed and twelve wounded. Yang Kuisong ("The Sino-Soviet Border Clash of 1969") cites Xu's essay, but says that the Chinese patrol was wiped out. Gobarev ("Soviet Policy Toward China") talks of a Soviet regiment taking on a Chinese battalion and largely destroying it, with heavy casualties on the Soviet side.

¹⁴*Jianguo yilai Mao Zedong wengao*, 59-61.

October 20, and China prepared for a Soviet attack in response to orders from Mao (to disperse) and Lin Biao's (林彪) emergency order No. 1 (on war preparations).¹⁵ China's leadership thought that war with the Soviet Union was imminent.

In the final analysis, if Mao's strategy was to mobilize the country—to mobilize and perhaps more importantly to unify the country around more nationalistic themes—and to deter a Soviet attack by suggesting that the costs to the Soviets would be unacceptably high, it seems to have worked in the narrow sense that the Soviets did not go to war with China. However, in every other respect it was a major failure. Mao misinterpreted or incorrectly anticipated the reaction of others to his plans (hardly the first time this happened). He was only partially successful in mobilizing and unifying the population, but he did succeed in mobilizing the Chinese military and the defense industry in ways he did not anticipate, and in ways that neither served China nor his own interests very well. At least as critically, it appears that Mao's actions in authorizing the use of force on the border led the Soviet Union's leadership to think much more seriously about war with China than it had heretofore. Without being able to provide the definitive documentation to prove it, it appears that the weaknesses of domestic mobilization and defense industrial construction were so compelling that Mao (at Zhou Enlai's prodding perhaps) had little choice but to consider the beginnings of a rapprochement with the United States. The remainder of this essay focuses on China's attempts at war mobilization and their consequences.

¹⁵On these developments, see MacFarquhar and Schoenhals, *Mao's Last Revolution*, 316-20. They present a compelling argument that the contents of Lin's first order were entirely in keeping with Mao's thinking about the danger of a surprise attack coinciding with the Sino-Soviet border negotiations. What Mao may have objected to was Lin's failure to clear the order with him in advance. See also Li and Hao, "Wenhua da geming" zhong de renmin jiefangjun, 123-25. On Mao issuing the order to disperse, see Su Caiqing, "Wenhua da geming" shishi bianwu sanze" (Three criteria in distinguishing the incorrect in history of the "Great Cultural Revolution"), *Zhonggong dangshi yanjiu* (Research on the History of the Chinese Communist Party), 1989, no. 5:77-80.

Preparing for War: The Limits to Mobilization

As noted above, Zhou Enlai began trying to mobilize China's defense industries to face up to growing security issues in February 1969 (obviously, prior to the Zhenbao battles). What is remarkable from later Chinese sources and declassified U.S. intelligence materials is how woefully unprepared China was for conflict with the Soviet Union. China appeared to lack a secure nuclear deterrent. Its air defense forces were geared for defending South and East China, facing potential attacks via Vietnam or Taiwan. A small number of Chinese aircraft had all-weather capabilities, and most of these were of early 1950s vintage. China's land units lacked mobility and had small numbers of trucks and other vehicles. Anti-tank weapons were particularly deficient. Specialists on the Chinese military have long noted the general qualitative limitations of the PLA in 1969 compared to Soviet forces. However, recently declassified (if still redacted) U.S. intelligence reports and analysis from the late 1960s and early 1970s add significant new detail and depth to this argument, and are therefore critical sources for this discussion.

In fact, China's leaders, led by Mao, had tacitly acknowledged many of these problems when they authorized the Third Front program of defense industrialization in China's interior in 1964.¹⁶ That program certainly entailed a great deal of new construction of weapons-producing factories, and a lot of general industrialization in China's southwest, and to a much lesser extent, the northwest. However, the Cultural Revolution erased, and perhaps in some cases reversed, whatever gains were achieved by the Third Front program. Thus, as MacFarquhar and Schoenhals note, Mao's aggressive actions on the borders nearly ended up with the Chairman being hoist by his own petard.¹⁷ This section assesses China's efforts to mobilize

¹⁶The most important source for the Third Front is Barry Naughton, "The Third Front: Defense Industrialization in the Chinese Interior," *The China Quarterly*, no. 115 (September 1988): 351-86. The major Chinese source is Chen Donglin, *Sanxian jianshe: beizhan shiqi de xibu kaifa* (Third Line construction: the development of China's west during the period of preparation for war) (Beijing: Zhonggong zhongyang dangxiao chubanshe, 2003).

¹⁷MacFarquhar and Schoenhals, *Mao's Last Revolution*, 319.

its defense industries and its population in the light of a perceived imminent Soviet threat in 1969-70, or using Kenneth Waltz's term, to examine China's efforts to balance the Soviet threat internally.

While the timing is inexact, sometime in 1969, Qiu Huizuo (邱會作), head of the PLA Logistics Department and member of the Military Affairs Office in charge of defense industrial production, authorized a three-year plan (1970-72) for the ordnance industry (the branch of China's defense industries that most directly served land forces—but which also produced air-to-air missiles and other aircraft ordnance). That plan built on the Third Front, but would, within three years, build an additional 95 projects, expand another 93, and would involve construction of an additional 13 million square meters of facilities, add 150,000 new pieces of machinery to the ordnance industry, and employ 900,000 new workers. It was estimated to cost more than 12 billion *yuan*—or more than twice the amount invested in the entire ordnance industry in the previous twenty years.¹⁸ More broadly, Lin Biao (China's minister of national defense and Mao's newly designated successor) and his followers are accused of formulating the Fourth Five-Year Plan (4th FYP, 1971-75) with the following targets: to be able to produce 3,000 aircraft a year by 1975; 150,000 tons of warships; 5,000 tanks; 500,000 tons of explosives; and enough new equipment and communications gear to outfit 500 divisions. To meet these goals, the 3rd, 4th, 5th, and 6th ministries of machine building (aviation, electronics, ordnance, and shipbuilding, respectively) would need to build 748 new factories costing more than 21 billion *yuan*. By March 1972, 223 of these projects had already been started and would cost 6 billion *yuan* over the course of the 4th FYP.¹⁹

¹⁸Chen Ping et al., eds., *Xin Zhongguo de jiben jianshe—Guofang gongye juan* (New China's capital construction—Defense industry volume) (n.p.: Guofang gongye chubanshe, 1987), 11 n. 1.

¹⁹Liu Zhiqing, "Jiuyisan' shijian hou Zhongguo guofang gongye chubu zhengdun" (The preliminary rectification of China's national defense industries after the Lin Biao affair), *Danghai Zhongguo shi yanjiu*, 2002, no. 5:101-10, at 102. See also, for somewhat different figures, Liu Guoguang, ed., *Zhongguo shige wunian jihua yanjiu baogao* (Research report on China's ten five-year plans) (Beijing: Renmin chubanshe, 2006), 314-20.

The material in these sources needs to be taken with more than a grain of salt. Lin Biao's actions and those of his followers remain under a cloud in Chinese historiography. Thus, Lin's followers are blamed for these excessive plans (which nevertheless appear to significantly understate the real cost of the investment projects planned). Documents released concerning drafts of the 4th FYP show Zhou Enlai and other planners playing a major role, and seemingly emphasizing a war economy (though the documents appear to be rather selectively edited to avoid creating this impression).²⁰ It is unlikely that Lin would have authorized such increases in defense industrialization without Mao's approval. Nor is it likely that Lin and his followers had the bureaucratic experience and reach to try to institute such large-scale defense industrial construction without the cooperation of Zhou Enlai and other economic officials.²¹

While all defense industrial ministries suffered during the mass phase of the Cultural Revolution, the missile and aviation ministries were especially hard-hit. Factionalism was seen as particularly bad within the 7th Ministry of Machine Building (ballistic missiles), and Zhou Enlai and responsible military figures would spend a great deal of time trying to straighten out the leadership in this particular ministry. Indeed, the first efforts to clean up the mess in the 7th Ministry began in early 1972, but as late as early 1977, a special rectification team was still required to deal with it. This was needed even after rectification of the ministry was explicitly authorized by Mao in June 1975. In the words of the quasi-official history of Chinese defense science and technology endeavors, "The 'Great Cultural

²⁰Guanyu zhiding 'siwu' jihua de wenxian xuanzai" (Selected documents on the drafting of the 4th five-year plan), *Dang de wenxian* (Party Documents), 2000, no. 2:5-29; Tian Songnian, "Siwu' jihua shulue" (A brief account of the 4th five-year plan), *ibid.*, 30-33; and Zhao Yueqin et al., "Disige wunian jihua de bianzhi he shishi" (The drafting and implementation of the 4th five-year plan), *Dangdai Zhongguo shi yanjiu*, 1998, no. 4:13-20.

²¹This view of Lin comports with the view of his personality found in the contemporary Western literature. See MacFarquhar and Schoenhals, *Mao's Last Revolution*; Frederick C. Teiwes and Warren Sun, *The Tragedy of Lin Biao: Riding the Tiger During the Cultural Revolution* (Honolulu: University of Hawaii Press, 1996); and to a lesser extent Jin Qiu (the daughter of Wu Faxian [英法憲], one of the leading military figures associated with Lin), *The Culture of Power: The Lin Biao Incident in the Cultural Revolution* (Stanford, Calif.: Stanford University Press, 1999).



Revolution' caused great damage to the research and development and production activities of defense industrial ministries, especially to the 7th Ministry, responsible for strategic missiles, satellites, and launch vehicles."²² Lin and his followers were accused of advocating the slogan "three years to catch up, two years to exceed" for the space industry in the 4th FYP. This meant that in the first three years of the plan, China's space industry should catch up with its counterparts in the United States and the Soviet Union, and in the subsequent two years it should exceed current world standards. In this regard, they authorized the development and production of fourteen types of missiles, and ruled that China should be able to launch nine satellites a year by 1975.²³ Needless to say, this was pure fantasy. These goals simply could not be achieved.

The situation in the aviation or aerospace industry was hardly any better. In 1971, China added 275 combat aircraft to its inventory. In the first ten months of 1972, 52 of those planes crashed. Again, Lin and his followers are accused of wild plans for aircraft development. They ordered the development of 27 new kinds of aircraft in 1971 alone. They suspended modification of J-7 fighters (the Chinese version of the MiG 21) to concentrate on a new J-8 fighter, and production of the J-7 was extremely limited even though it was ready for service in 1966-67. One of the factories charged with producing the J-7, the Chengdu (成都) Aircraft Factory (aka the Emei [峨嵋] Machinery Factory, State Factory 132) was wracked by factionalism and disorder. On May 6, 1967, 48 people were killed and 127 injured in armed struggles between two factions at the factory. Again, rectification was ordered in 1972, but little seems to have happened. In 1975, Deng Xiaoping (鄧小平) grew fed up with defense industrial production problems and with the aerospace industry in particular. He is paraphrased as saying, "We must make existing defense factories capable of producing

²²Yu, *Dangdai Zhongguo de guofang keji shiye* 1:125, for the quotation, p. 97. On the earlier attempts to rectify the 7th Ministry and its national notoriety for factionalism, see Liu, "Jiuyisan' shijian hou Zhongguo guofang gongye chubu zhengdun," 103.

²³Zhang Jun, ed., *Dangdai Zhongguo de hongtian shiye* (Contemporary China's space endeavors) (Beijing: Zhongguo kexue chubanshe, 1986), 58.

products. The situation in some key-point factories is not very good because bad people are in charge, such as the Chengdu Aircraft Factory.²⁴ Further rectification was required in Chengdu in 1977. Production in the aviation ministry was so chaotic that it had to be ordered to produce spare parts and auxiliary equipment and have those items entered into the production plan.²⁵

As the cases of two critical defense production ministries suggest, defense industrial mobilization as a result of the Zhenbao incident and the war scare with the Soviet Union did almost nothing to enhance China's ability to defend itself. Production was limited; the quality of products was very low and they were often dangerous for those who used them; factionalism remained embedded in production and research units; and managerial authority and quality control could not be fully restored until after Mao's death in 1976.

The failure of defense industrialization is also encapsulated by the experience of the southwestern province of Guizhou (貴州省). Third Front defense industrialization was centered on Guizhou, Sichuan (四川省), and Shaanxi (陝西省), and by the early 1970s, these provinces had the largest number of defense industrial enterprises.²⁶ Guizhou has historically been one of China's poorest provinces. In 1953, Guizhou ranked 28th in per

²⁴On the crashes, see Liu, "Jiuyisan' shijian hou Zhongguo guofang gongye chubu zheng-dun," 102; and on rectification in the early 1970s, pp. 103-5. On Lin's plans for the aerospace industry, see Duan Zijun, ed., *Dangdai Zhongguo de hangkong gongye* (Contemporary China's aviation industry) (Beijing: Zhongguo shehui kexue chubanshe, 1988), 83-84, for the Deng paraphrase. On disorder in 1967, see *Dangdai Sichuan dashi jiyao* (Outline of major events in contemporary Sichuan) (Chengdu: Sichuan renmin chubanshe, 1991), 250.

²⁵Liu, "Jiuyisan' shijian hou Zhongguo guofang gongye chubu zhengdun," 106.

²⁶Numbers of defense enterprises per province are derived from data found in *Zhonghua renmin gongheguo 1985 nian gongye pucha ziliao* (Materials from the 1985 industrial census of the People's Republic of China), three volumes (Beijing: Zhongguo tongji chubanshe, 1987, 1988, 1989); and in the cases of the particular provinces mentioned here, see *Shaanxi shengzhi: Junshi gongye zhi* (Shaanxi provincial gazetteer: Military industry volume) (n.p., 2000); *Guizhou shengzhi: Jixie dianzi gongye zhi* (Guizhou provincial gazetteer: Machinery and electronics industry volume) (Guiyang: Guizhou renmin chubanshe, 1988), 105-43; *Sichuan nianjian 1992* (Sichuan yearbook 1992) (Chengdu: Renmin chubanshe, 1993), 282-85; and *Chongqing shizhi: Guofang keji gongye zhi* (Chongqing municipal gazetteer: National defense science, technology, and industry volume) (Chongqing, 1996).

capita income out of 28 provincial level units for which data was available. For the entire 1953-98 period, its per capita GDP would not rank higher than 23rd in any particular year, and it is the poorest province in China today in per capita terms. Prior to 1964, capital construction in Guizhou never ranked higher than 24th (again out of 28 units) and most of the time it was 27th or 28th. In 1964, there were no defense enterprises in Guizhou, and by 1965 (when its population numbered about 18 million), it had only 46 large and medium-sized industrial enterprises that had started production.²⁷ By 1985, 83 large and medium-sized defense plants had been built in Guizhou, and these constituted nearly half of the 175 large and medium-sized enterprises in Guizhou in that year. Most of these defense enterprises were part of three integrated defense production bases: one for J-7 (MiG 21) fighters (the 011 base); one for surface-to-air missiles (the 061 base); and one for defense electronics (the 083 base).²⁸ Investment in Guizhou shot up during the 1965-72 period, but income growth was limited, and in many years it was below the 1964 base line. This performance does not speak well of the ability of the Chinese state to mobilize resources for defense industrial production, though clearly in 1970 and 1971 there were significant increases in output, followed by nearly cataclysmic declines (see table 1).

No province was as deeply affected by defense industrialization as Guizhou was, though others, notably Sichuan and Shaanxi, had perhaps

²⁷GNP and GDP figures for the 1952-95 period are found in *Zhongguo guonei shengchan zongzhi hexuan lishi ziliao, 1952-1995* (Historical materials on China's domestic product accounts) (Dalian: Dongbei caijing daxue chubanshe, 1997), passim. For capital investment figures, see *Zhongguo guding zichen tonzi tongji ziliao, 1950-1985* (Statistical materials on China's fixed capital investment, 1950-1985) (Beijing: Zhongguo tongji chubanshe, 1987), passim. For the lack of defense enterprises prior to 1964, see *Guizhou gongye, 1949-1989* (Guizhou industry) (Guiyang: Guizhou renmin chubanshe, 1989), 90-91. The number of large and medium-sized enterprises in Guizhou is derived from a database compiled from *Zhonghua renmin gongheguo 1985 nian gongye pucha ziliao*, volume 2. Guizhou population figure from *Quanguo ge sheng, zizhiqu, zhixiashi lishi tongji ziliao huibian, 1949-1989* (Compendium of historical statistics for all provinces, autonomous regions, and centrally administered cities in China, 1949-1989) (Zhengzhou: Zhongguo tongji chubanshe, 1990), 721.

²⁸For defense enterprises, see *Guizhou gongye*, 97; and for the total number of large and medium-sized enterprises in the province, see *1985 nian gongye pucha ziliao* 1:8-12. For the three bases, see *Guizhou shengzhi: Jixie dianzi gongye zhi*, 105-43.

Table 1
Guizhou and Defense Industrialization

Year	Capital construction rank	Per capita GDP (<i> yuan</i>)
1964	21	114
1965	5	136
1966	6	134
1967	8	125
1968	6	108
1969	14	102
1970	7	132
1971	5	145
1972	12	129
1973	21	119
1974	23	101
1975	22	124
1976	23	110

Sources: *Zhongguo guding zichan touzi tongji ziliao, 1950-1985* (Statistical materials on China's fixed capital investment, 1950-1985) (Beijing: Zhongguo tongji chubanshe, 1987), 46-48; and *Zhongguo guonei shengchan zongzhi hesuan lishi ziliao, 1952-1995* (Historical materials on China's domestic product accounts) (Dalian: Dongbei caijing daxue chubanshe, 1997), 837.

even larger defense industrial sectors. Sichuan's per capita income fluctuated significantly (though not as frequently and wildly as Guizhou's) during the 1964-76 period, while Shaanxi's showed rather steady increases. Nonetheless, Sichuan, with probably the largest defense sector in the country in 1969, produced less overall in that year than it had in 1966.²⁹

One final item of evidence about the limitations of defense industrial mobilization concerns tank production. Data on production of weapons systems by year is hard to find, but there is material on the production of light tanks by one of China's major tank factories for the 1963-76 period. State Factory 674 (Harbin [哈爾濱] No. 1 Machinery Factory) was respon-

²⁹ Dangdai Sichuan dashi jiyao, 276-77.



sible for building light tanks, and developed China's type 62 tank (meaning the design was certified in 1962). Harbin is the capital of Heilongjiang Province, the province that constitutes most of the northeast border of China and the former Soviet Union, and the province of which Zhenbao is part. It was thus a front-line province, vulnerable to air and ground attack. Given its vulnerability, one might expect that efforts would be made in the short term to maximize output before the factory was destroyed. (China's main producer of tanks was located in Baotou [包頭], Inner Mongolia [內蒙古], and also very vulnerable to potential Soviet attacks. Moreover, China's light anti-tank weapons were not very effective in stopping Soviet tanks, and Chinese tanks were perhaps the most effective anti-tank weapon in the Chinese military.) Thus, one would have expected to see a surge in Factory 674 production, which is partially indicated: 1963, 5 tanks; 1964, 40; 1965, 70; 1966, 130; 1967, 66; 1968, 86; 1969, 141; 1970, 185; 1971, 95; 1972, 68; 1973, 110; 1974, 28; 1975, 110; and 1976, 80 tanks. The years 1969 and 1970 did represent the highest level of production achieved of this kind of tank, but the drop off in 1971 is surprising.³⁰ Whether that output surge in 1969 and 1970 met military needs is unclear, but here is one case where one might at least plausibly argue that defense industrialization worked, at least for two years.

The war scare of 1969 (and into 1970) certainly generated immense activity in China's defense industrial sector and wild plans for the further expansion of that sector. The available record of that effort sketched out here does not lead one to be sanguine about China's ability to sustain defense industrial production to meet pressing defense needs. Moreover, the huge expansion of projects diffused scarce technical manpower, financial resources, and machinery and materials. Some units were so badly factionalized by the 1966-68 phase of the Cultural Revolution that they were still dysfunctional through to the end of the Mao period in 1976. Thus, if Mao manufactured a war scare to generate domestic mobilization, he

³⁰*Harbin shizhi: Junshi, junshi gongye zhi* (Harbin municipal gazetteer: Military affairs, military industry volume) (Harbin: Heilongjiang renmin chubanshe, 1994), 274.

certainly succeeded in channeling that mobilization into defense industrial efforts. However, that effort put excessive control of resources into the hands of the defense industrial complex, a situation about which he grew quite concerned during 1970, and it appears not to have been a result of mobilization that he anticipated. It is also far from clear that industrial mobilization significantly improved China's military capabilities.

If the economic mobilization did not succeed, or at the very least, did not work as planned, what about the effects of domestic political mobilization? Here too the record is uneven, to put it mildly. Again, the record seems to support the position that domestic political mobilization was not very (or not at all) successful.

First, China prepared for a border incident at Qiliqin in early 1968, well before Mao demobilized the Red Guards in the summer of that year. There was no need for him to mobilize the population in early 1968 because it was already mobilized. Whether a border incident would have worked to unify the fractious elements of the political system in 1968 is impossible to say, but seems unlikely. Cleavages among groups in society were deep and, in many cases, highly antagonistic.

Second, Mao had to spend much of the second half of 1968 demobilizing Chinese society, youth and Red Guard organizations in particular. In the summer of 1968, he authorized "worker-soldier propaganda teams" to enter scenes of major factional conflict in China, and he argued that armed fighting between factions had to stop. Shortly thereafter, he authorized the campaign to send youth "up to the mountains and down to the countryside" (上山下鄉), which removed many young people from urban centers. To immediately mobilize society after demobilizing it makes little sense. Third, to consolidate the position of the new revolutionary committees throughout the country, he authorized the "cleansing of the class ranks" (清理階級隊伍) campaign throughout the second half of 1968 and into 1969. In the countryside alone, the Cultural Revolution caused the persecution of perhaps 36 million people, with between 750,000 and 1.5 million killed, and an equal number permanently disabled. Most of these persecutions, injuries, and deaths took place between 1968 and 1971, largely as a result of the "cleansing of the class



ranks" campaign.³¹ Again, such a campaign, coming after the mass phase of the Cultural Revolution, may have been necessary to establish control by the new local leadership bodies, but it was hardly a way to build unity and mobilize society.

Despite Mao's efforts, the sending of youth to the countryside, and the outright suppression of very large numbers of people, disorder in China did not come to an end. As one U.S. Department of State Intelligence and Research Report of late summer 1969 stated, "Factional fighting reached the highest levels since the summer of 1968, with clashes reported in about a dozen provinces." Social disorder remained widespread.³² Repeated urgent messages from the center to the localities to end factionalism and armed conflict only seemed to have some effect after August 28, 1969. Political violence wracked Shanxi (山西省), Henan (河南省), Jiangsu (江苏省), and Hubei (湖北省) in particular.³³ Inner Mongolia and Guizhou had been singled out earlier in the year in efforts to end factional fighting.³⁴ However, yet another major coercive campaign, the "yida sanfan" (一打三反, or "one hit and three antis"), was launched in early 1970 to restore economic order (in theory). Domestic mobilization in effect became suppression and, for urban youth, internal exile. Thus, one must question whether any real mobilization took place.

Finally, we are left with this question: If Mao used the border conflict to mobilize domestic support, who was charged with the mobilization of the masses? The Cultural Revolution mass phase had devastated the communist party organization. The state bureaucracy had also been smashed. So too had the mass organizations, or revolutionary transmission belts,

³¹Andrew G. Walder and Yang Su, "The Cultural Revolution in the Countryside: Scope, Timing, and Human Impact," *The China Quarterly*, no. 173 (March 2003): 74-99, esp. 96 and 98.

³²"Communist China: War Fears and Domestic Politics" (September 18, 1969). Intelligence note from George C. Denney, Jr. to the acting secretary, available via the National Security Archive, electronic briefing book No. 49, edited by William Burr, June 12, 2001 (document no. 21).

³³MacFarquhar and Schoenhals, *Mao's Last Revolution*, 316.

³⁴*Ibid.*, 313.

such as the Youth League, Trade Unions, and Women's Federation. The only legitimate (in Mao's mind anyway) organs of authority were the revolutionary committees and the PLA. Yet the revolutionary committees at all levels were bodies largely formed through negotiated compromises among different groups—revolutionary cadres, representatives of the PLA, and representatives of the revolutionary masses—or imposed on localities by local PLA leaders. As noted above, these bodies used the "cleansing of class ranks" campaigns to persecute real and potential opponents and settle scores. It was hard to see how unity and effective mobilization could occur in such a context. The effective reach of the revolutionary committees appeared limited and they were profoundly biased. There seemed little pay-off for people to comply earnestly with the committees' directives (except to avoid persecution). Mao would conclude that the revolutionary committees were less than successful and authorize the gradual rebuilding of the Chinese Communist Party. And since the PLA military district commander was in most cases the top power-holder and administrative authority, it is hard to see how the PLA would have been able to gear up for the outbreak of all-out war, despite an increase in enlistment from 5 million in 1965 to over 6 million by the early 1970s.³⁵

To be sure, some domestic mobilization took place. Large-scale underground shelters were built in many cities; youth sent to the countryside on the frontiers prepared to meet foreign aggressors. Factional violence gradually subsided and autonomous political mobilization largely ended. However, whether a manufactured political mobilization around authorized themes emanating from the center was responsible for these results is far from clear. Weak, polarizing institutions (the revolutionary committees) or strong institutions with limited grounding in society at large, particularly during a time of extreme threats to national security (the PLA), make the question of how people were mobilized to act difficult to answer.

³⁵Zheng Hui, *Wushinian guoshi jiyao: Junshi juan* (Outline of fifty years of national affairs: Military affairs volume) (Changsha: Hunan renmin chubanshe, 1999), 411-12.

Facing the Threat: The Limited Capabilities of the PLA

If the process of domestic mobilization was not leading to greatly enhanced Chinese ability to deal with potential major Soviet attacks, if not full invasion, was the PLA well equipped to handle the variety of potential contingencies that faced China? Even short of an all-out Soviet invasion, the PLA would have been hard pressed to defend China. China in 1969 may have lacked a nuclear deterrent; its air defense capabilities were limited; and its ground forces were not mobile.

China detonated its first nuclear device in October 1964. By the time of the border conflict in March 1969, it had carried out eight weapons tests and had demonstrated thermonuclear (or hydrogen bomb) capability. One of the tests involved the launching of an atomic bomb by a Chinese medium-range ballistic missile (MRBM) in October 1966.³⁶ It is unclear whether China had a survivable nuclear deterrent during the late 1960s, and while Chinese capabilities grew in the early 1970s, China's deterrent capability remained very limited.

Declassified U.S. National Intelligence Estimates (NIEs) of Chinese nuclear weapons and strategic systems during the period from 1967 to 1973 suggest that China did not deploy (or the United States did not detect the deployment of) its first medium-range missile, the DF-2 (or CSS-1), until sometime in 1971.³⁷ The U.S. intelligence community expressed considerable surprise at the slow pace of Chinese strategic missile development. It estimated that the Chinese MRBM was ready for deployment by late 1967, but there was no evidence that this had happened during

³⁶On Chinese nuclear weapons tests, see John Wilson Lewis and Litai Xue, *China Builds the Bomb* (Stanford, Calif.: Stanford University Press, 1988), 244-45.

³⁷National Intelligence Estimate (NIE) 13-8-71 (October 28, 1971), "Communist China's Weapons Programs for Strategic Attack" (available on a CD-Rom as part of a National Intelligence Council publication, *Tracking the Dragon: National Intelligence Estimates on China During the Era of Mao, 1948-1976* [n.p.: Government Printing Office, n.d.]). Also available at www.cia.gov/nic. Unless otherwise noted, all subsequent citations to various national intelligence estimates on China will be to the CD-ROM version of this source, and will be cited by the number of the estimate, the date, and title only.

1968 and 1969.³⁸ One possible reason for this slow development suggested by the intelligence community was that China was concentrating on thermonuclear weapons development, and it lacked a nuclear weapon that matched the weight and size parameters for the payload of the CSS-1.³⁹ Analysts speculated that China might have some fission weapons that could be mated to the CSS-1, but no conclusive evidence for this was adduced.

A Chinese source states, however, that during 1969 and 1970, China deployed fifty medium-range missiles.⁴⁰ U.S. intelligence estimates do not report a figure close to this number (at least in available declassified materials) until 1974, but those estimates do conclude that there was a dramatic slowdown in Chinese nuclear weapons programs after 1971 and the fall of Lin Biao, and that no new CSS-1 were deployed after 1972. These sources also concede that "there is good evidence now that a limited number of nuclear-equipped CSS-1 MRBMs ... were deployed by the end of 1966."⁴¹

Up to late 1969, the CSS-1 was China's only strategic system. China had purchased two Tu-16 (or H-6) bombers from the Soviets and the plans necessary to make them. However, China did not begin to produce them until late 1968 or early 1969, and they were produced at a slow pace throughout the period of the extreme confrontation with the Soviets, never exceeding a production rate of more than 2 planes per month during the 1969-72 period (and often less). Even in 1969, this aircraft was slow and highly vulnerable, but it was capable of carrying the nuclear weapons China had developed by that time. China also had a fairly large number of

³⁸M/H NIE 13-8/1-69, "Memo to Holders: Communist China's Strategic Weapons Program" (August 20, 1971), 7.

³⁹NIE 13-8-69, "Communist China's Strategic Weapons Program" (February 27, 1969), 6.

⁴⁰Li Shenming, "Dui xin Zhongguo chengli hou Mao Zedong zhanzheng yu heping sixiang ji shijian de jidian bianxi, gaishu he sikao" (Several analyses, outlines, and reflections on Mao Zedong's thought and practice on war and peace after the founding of new China), *Dangdai Zhongguo shi yanjiu*, 2004, no. 3:18-30, see p. 21.

⁴¹NIE 13-8-74, "China's Strategic Attack Programs" (June 13, 1974), 13. Quotation from page 9.



even older Il-28 or H-5 bombers, which some saw as being part of China's nuclear deterrent in the 1960s and into the 1970s. Nonetheless, the U.S. intelligence community noted that there seemed to be no training for units with this aircraft type and its crews that would indicate real nuclear weapons delivery capability.⁴² Moreover, interviews with former Soviet intelligence and military officials (as well as leading Chinese scholars of Sino-Soviet relations) all conclude that the Soviets did not see China as having a credible deterrent.⁴³ Thus, put more bluntly than the existing declassified (and redacted) national intelligence estimates, China did not have much, if any, ability to deliver a nuclear weapon against a potential foe. If it did not have the ability to deliver a nuclear weapon under any particular circumstance, it must therefore have lacked a survivable nuclear deterrent. The missile system was liquid-fuelled and highly vulnerable, requiring at least four hours to be operational.⁴⁴ The U.S. intelligence community also concluded that China (as late as mid-1971) lacked systems that could warn that strategic missiles had been launched against it. Lack of warning in the event of an attack, and the concomitant chaos that an actual ballistic missile attack would bring, probably meant it would take even longer for China to prepare what remained of its retaliatory capabilities.⁴⁵ Even without a Soviet attempt to destroy the Chinese national command authority, that authority appeared to be in profound disarray in 1969.⁴⁶

If China's nascent nuclear forces were highly vulnerable, and its nuclear deterrent capabilities problematic at best during the high point of

⁴²Robinson sees the Il-28 as a nuclear weapons delivery vehicle. See Robinson, "China Confronts the Soviet Union," 300 (following the International Institute for Strategic Studies). For intelligence community doubts, see NIE 13-8-71, "Communist China's Weapons Program for Strategic Attack" (October 28, 1971), 24-25.

⁴³Lyle J. Goldstein, "Do Nascent WMD Arsenals Deter? The Sino-Soviet Crisis of 1969," *Political Science Quarterly* 118, no. 1 (Spring 2003): 53-79.

⁴⁴John Wilson Lewis and Litai Xue, "China's Ballistic Missile Programs," *International Security* 17, no. 2 (Autumn 1992): 22.

⁴⁵NIE 13-8-71:35.

⁴⁶John Wilson Lewis and Litai Xue, *Imagined Enemies: China Prepares for Uncertain War* (Stanford, Calif.: Stanford University Press, 2006), chapter 3.

the Sino-Soviet confrontation of 1969-70, much of China's conventional forces were also ill-equipped to deal with a Soviet attack. In particular, China was highly vulnerable to air attack. It lacked a ballistic missile warning (radar) system, and its existing radar system did not provide good coverage for low-altitude aircraft penetration. China's air defense system lacked high-speed data communication and processing, meaning that in the event of a sophisticated, large-scale air attack using electronic counter-measures, China's air defense capabilities would be easily overwhelmed. Throughout the late 1960s and early 1970s, the pace of China's surface-to-air missile deployment was slow. There were large numbers of anti-aircraft artillery divisions, but for the most part, jet fighter forces were the mainstay of China's air defense. The vast majority of these forces were MiG 17 (J-5) and MiG 19 (J-6) fighters. Less than 20 percent of these had all-weather capability (mostly MiG 17s). MiG 19s had low sonic capabilities, and MiG 17s were sub-sonic aircraft. China had purchased some MiG 21 (J-7) fighters from the Soviets and obtained design documents, but production was extremely limited, and intelligence sources noted no increase in Chinese inventories during the late 1960s and early 1970s. This was the only truly capable Chinese fighter aircraft, but there were only about twenty-five of them.⁴⁷

China had deployed significant air defense forces to North Vietnam (with some units being sent there as late as January 1969⁴⁸), and there were not infrequent Chinese intercepts of U.S. aircraft over northern Vietnam (and perhaps southern China). Indeed, even after the March border clashes, there was no significant redistribution of air defense forces to northern China, and deployments to southern and eastern China were not reduced during the period of maximum Soviet threat. It was likely that U.S. intelligence aircraft carefully monitored Chinese air defense capabilities, and U.S. analysts had perhaps the best range and depth of data on Chinese air

⁴⁷NIE 13-3-68, "Communist China's General Purpose and Air Defense Forces" (August 1, 1968), esp. 9-10, 19-22; NIE 13-3-70, "Communist China's General Purpose and Air Defense Forces" (June 11, 1970), 11-13, 23-26; and NIE 13-3-72, "China's Military Policy and General Purpose Forces" (July 20, 1972), 5, 7.

⁴⁸See *Xinjiang tongzhi*, 71.



defense capabilities among all Chinese military capabilities. U.S. analysts noted that China's air defense in the border region with Vietnam had considerable success against isolated penetrations.⁴⁹

Many of China's first generation nuclear weapons production facilities were located in north and northwestern China—in Baotou, Inner Mongolia; in Lanzhou (蘭州市) and Jiuquan (酒泉市), Gansu (甘肅省); and Haiyan County (海晏縣) in Qinghai (青海省). All were within relatively easy flying distance of Soviet air forces, and in the case of Baotou and Jiuquan, relatively short distances for a land-based assault. Chinese leaders were well aware of the vulnerability of their nuclear weapons production bases, and began to develop alternatives in Sichuan Province (for the most part). However, they were apparently not on line by the end of 1969. Lin Biao and his followers were accused of ordering the emergency shutdown of the nuclear plants in Jiuquan and Baotou in July 1969 (so they could be moved, and perhaps of greater relevance, that the skilled manpower working to produce the uranium 235 and plutonium 239 could be saved), but Zhou Enlai had this decision countermanded.⁵⁰ Whatever the truth of the specific allegations here, it appears that Chinese defense planners realized the extreme vulnerability of their nuclear materials production sites, and were torn between emergency evacuations and producing weapons-related material up to the time of an attack. Again, Chinese nuclear weapons production facilities were highly vulnerable to preemptive attack, by missile, air, and land.

Chinese land forces were also not well prepared to stop a major Soviet ground attack. While Chinese troops were lauded for their toughness,

⁴⁹Li Ke and Hao Shengzhang detail twenty-five instances of air intercepts between 1966 and 1970 on China's southern and eastern borders. See Li and Hao, "*Hénhua da geming" zhong de renmin jiefangjun*, 346-47. Interestingly, there are no reported intercepts along the border with the Soviet Union or Mongolia. On the success of these intercepts from an American perspective, see NIE 13-3-68:9.

⁵⁰Yu, *Dangdai Zhongguo de guofang keji siye*, 90; and Li Jue et al., eds., *Dangdai Zhongguo de he gongye* (The nuclear industry of contemporary China) (Beijing: Zhongguo shehui kexue chubanshe, 1987), 74-75. Of course, Zhou could not countermand Lin's orders without Mao's approval, as the nuclear program was under military administration, and Lin outranked Zhou in the CCP hierarchy.

discipline, and small arms, their overall ability to stop a Soviet attack was poor. Chinese ground forces, which over the course of a number of U.S. NIEs in the 1968-73 period increased in number from 2.3 to 3.2 million, lacked mobility and logistical capability. Chinese divisions had relatively little armor and limited artillery. The United States had undertaken extensive aerial surveillance of the Shenyang Military Region (MR, 瀋陽軍區) since 1962, but it was only in late 1969-early 1970 that analysts were tasked with fully evaluating this material. Aerial, but not satellite, surveillance by the United States had been suspended since March 27, 1968, however.⁵¹ The Shenyang MR had responsibility for the defense of China's Northeast, and it was the command responsible for the leadership of the Zhenbao operations. Consequently, it was one of the most important in China. According to the NIE, "the great majority of units in the Shenyang MR are seriously deficient in mobility and firepower—specifically, heavy artillery, trucks, and other wheeled vehicles." Manpower and equipment levels within this region varied widely. Anti-tank weapons were rarely observed. "Major items of armor support equipment, such as fuel trucks, armored reconnaissance vehicles, and armored recovery vehicles, are so rarely observed that it is doubtful that their allocation was standard." No tank transporters were ever observed.⁵²

During the period of the Soviet military buildup in the second half of the 1960s, China did not respond. Along the entire Sino-Soviet (Mongolian) border there were only nine Chinese divisions, though another fifty were 300 to 500 miles behind them (or 1.4 million troops, out of a total of 3.2 million), with limited ability to move forward. China's defensive strategy was in this case that of the "people's war," even if it meant the sacrifice of Xinjiang, Inner Mongolia, and much of the Northeast. In contrast, in the South and East, China was prepared to pursue an active defense on the border. Moreover, given the relatively small numbers of people in

⁵¹"Memorandum to Members of the 303 Committee" (March 14, 1969), in *Foreign Relations of the United States, 1969-1972*, volume 17: *China 1969-1972*, ed. Steven E. Phillips (Washington, D.C.: Government Printing Office, 2006), 25.

⁵²See especially NIE 13-3-70:10-11, 22-23.

Xinjiang and Inner Mongolia, and given tensions between ethnic Chinese (Han, 汉族) and non-Chinese, especially Uighurs and Mongols, during the Cultural Revolution, it is far from clear that "the people" would have supported the PRC side in a people's war.⁵³ Moreover, Mao's order of October 18, 1969, calling for the leadership to leave Beijing, suggested that he felt that even the capital could not be defended.

Interview data suggest that the threat of people's war, coupled with Soviet uncertainty that it could irrevocably destroy China's nuclear capability, were the decisive factors that led the Soviet leadership not to go to war with China.⁵⁴ Available evidence on the deployment of Chinese forces and their capabilities shows great weakness on the part of the PLA to cope with a Soviet threat. Nothing done internally in China until a secure nuclear deterrent emerged sometimes in the early to mid-1970s changed that fact. Internal mobilization—political, economic, and military—failed to alter the balance of power between China and the Soviet Union. Realist international relations theory suggests that if internal mobilization fails, external balancing or bandwagoning (appeasement) are the only other options. Mao would not submit to Soviet demands, and the Chinese state sought to balance against the Soviet threat through external developments. However, the approach to the United States was far more limited and conditional, and with very unclear results, until July 1971. China remained highly vulnerable to a Soviet attack until at least July 1971, if not later.

⁵³NIE 11-23-73, "The Sino-Soviet Relationship: Military Aspects" (September 20, 1973); and NIE 11/13-69, "The USSR and China" (August 12, 1969). On the Cultural Revolution and ethnic conflict in Inner Mongolia and Xinjiang, see Wang Duo, ed., *Dangdai Zhongguo de Nei Menggu* (China today: Inner Mongolia) (Beijing: Dangdai Zhongguo chubanshe, 1992), 111-16; W. Woody [pseudo.], *The Cultural Revolution in Inner Mongolia* (Stockholm: Center for Pacific Asian Studies, Occasional Paper no. 20, 1993); and Fu Wen, ed., *Dangdai Zhongguo de Xinjiang* (China today: Xinjiang) (Beijing: Dangdai Zhongguo chubanshe, 1991), 134-49.

⁵⁴Goldstein, "Do Nascent WMD Arsenals Deter?" especially pp. 68-73.

Opening to the United States: Less than a Quick Fix

In the context of a severe Chinese fear of war with the Soviet Union, the workings of the four marshals—four of China's top-ranking military leaders who had all been attacked during the Cultural Revolution—are now well known. In early spring (and into the summer) of 1969, they were tasked by Zhou Enlai (presumably with Mao's tacit approval) to analyze the state of the international situation. The four were Chen Yi (陳毅), nominally the foreign minister, but who had been attacked extensively in the Cultural Revolution; Nie Rongzhen (聶榮臻) who had been in charge of China's nuclear weapons, missile, and nuclear submarine program until the spring of 1968; Ye Jianying (葉劍英) who had been in charge of military training and doctrine prior to the Cultural Revolution; and Xu Xiangqian (徐向前) who had taken charge of militia work.⁵⁵ These were individuals with a profound geostrategic and military understanding of China's capabilities. They were convinced that the Soviets did indeed intend to attack China, vaguely referring to several of the possible scenarios for a Soviet attack. Implicitly, they seemed to suggest that with China's limited nuclear development, with the United States involved in the war in Vietnam, and with the Cultural Revolution still under way, this might be the optimal time for the Soviet Union to attack. All that was holding the Soviets back was the political consideration of the possible attitude of the United States. The four marshals argued that the last thing the United States was willing to see was a Soviet victory over China. They noted that the United States had made several recent signals to China about improving relations, and they recommended that at an appropriate time China should respond positively to U.S. initiatives to reconvene the

⁵⁵On these four and their tasks prior to the Cultural Revolution, see *Chen Yi zhuan* (Biography of Chen Yi) (Beijing: Dangdai Zhongguo chubanshe, 1995); *Nie Rongzhen zhuan* (Biography of Nie Rongzhen) (Beijing: Dangdai Zhongguo chubanshe, 1994); *Nie Rongzhen huiyilu* (Recollections of Nie Rongzhen) (Beijing: Jiefangjun chubanshe, 1984), esp. volume 3; *Ye Jianying zhuan* (Biography of Ye Jianying) (Beijing: Dangdai Zhongguo chubanshe, 1995); and *Xu Xiangqian zhuan* (Biography of Xu Xiangqian) (Beijing: Dangdai Zhongguo chubanshe, 1995).

Warsaw ambassadorial talks.⁵⁶

While noting that the Soviets were not sure they could win the war— at least suggesting the possibility that they could—this recommendation from the four marshals is the most complete and thorough indication we have of elite calculations in Beijing in the fall of 1969, even though all four of them were, to varying extents, under a political cloud at the time. They imply that it is not the military balance between China and the Soviet Union that will determine whether the Soviets attack or not. Rather, war or peace depends on the attitude and actions of the United States. (This marks the recognition of a strategic triangle on the Chinese side.) Again implicitly, the marshals' report is at least a partial critique of all measures taken to mobilize China internally for war with the Soviet Union. By themselves, those measures were not enough. At least some tactical contacts with the United States were necessary to deter the Soviets. Ultimately, those contacts were undertaken, leading to much more than anyone on the Chinese side appears to have expected in 1969 (though of course no one would have said anything about future expectations of developments with the United States, with the possible exception of Mao). Indeed, given the political experience of the four, the legacy of Sino-American hostility, and the Cultural Revolution, the marshals undoubtedly realized that only Mao could authorize the resumption of U.S.-China contacts.

Yet this proposed strategy was an extremely risky one for several reasons. First, Chinese leaders could not be sure that the United States would necessarily see a conflict between China and the Soviet Union as a bad thing. Logically, it might only make sense for the United States to discourage a Soviet attack if Washington was convinced that the Soviets would win an easy and quick victory. Otherwise, bogging the Soviets down in China or having the Soviets destroy Chinese nuclear facilities might serve U.S. interests, as at least one high-level National Security Council

⁵⁶Xiong Xianghui, *Wode qingbao yu waijiao shengya* (My intelligence and foreign relations career) (Beijing: Zhonggong dangshi chubanshe, 1999), 185-86. Xiong served as the staffer for the four marshals.

staffer suggested.⁵⁷ Despite a September 5, 1969, statement by a leading State Department official about the United States "not fail[ing] to be deeply concerned" about a Sino-Soviet conflict, official U.S. policy, as formulated in November 1969, was to emphasize U.S. impartiality and non-involvement in the event of Sino-Soviet hostilities.⁵⁸ Second, would a U.S. shift (presumably limited in nature given the still very cold U.S.-China relationship) really be credible to the Soviet Union, especially given the U.S.'s own situation in Vietnam? What would the United States actually do in the event of Sino-Soviet hostilities? What could the United States actually do given that in 1969 there were no government-to-government contacts between the United States and China? (Without government-to-government links, and more importantly, military-to-military links, how could the United States provide military assistance to China in the event of a Sino-Soviet war, for example? Even assuming that such military aid might be proffered, would it make much difference in the short run?) Given Vietnam and the history of U.S.-China relations since 1949, it seems impossible to imagine U.S. military forces coming to the defense of the PRC. Third, given the long period of Sino-American hostility, a more than tactical opening to the United States would have raised profound questions in Chinese society and within the Chinese leadership. While the Sino-Soviet relationship was extremely confrontational in 1969, relatively few Chinese had been killed by the Soviets. That was not the case in U.S.-China relations since 1949. Moreover, the marshals hinted at problems China might face at home with a more than tactical approach to the United States. They noted that Soviet Premier Kosygin's meeting with Zhou Enlai on September 11, 1969, to try to diffuse the Sino-Soviet crisis reflected the Soviet Union's "reactionary pragmatism." A relation-

⁵⁷William Hyland, "Memorandum for Mr. Kissinger: Sino-Soviet Contingencies" (August 28, 1969), available as document No. 14 in the National Security Archive Electronic Briefing Book No. 49.

⁵⁸The official concern is quoted from Henry A. Kissinger, *White House Years* (Boston: Little, Brown, 1979), 184. Yet, behind the scenes, the official U.S. policy was to not get involved in the event of a conflict. See "Washington Special Actions Group Report" (November 10, 1969), in Phillips, *Foreign Relations of the United States* 17:118-21.

ship with the United States would make such a charge equally applicable to Chinese leaders.

All of these qualifications suggest the desperation inherent in the proposal from the four marshals. China could not confidently and self-reliantly meet a profound threat to its security. In a fundamental way, its basic national security policy had failed, and national economic, political, and military mobilization was not going to alter this fact in the short term (indeed, China would spend the next twenty years trying to straighten out the mess in its military and defense industrial systems). However, the four marshals (and Zhou Enlai, who either was persuaded by the four marshals' analysis, or had his own views reinforced by them) could only articulate a strategy of last resort. It was far from clear that the strategy would work or be enough to protect China. Nonetheless, this long-shot paid off in ways that were all but unimaginable for anyone living in China in 1969.

China may have been profoundly lucky as it was preparing for possible war with the Soviet Union. In October 1969, the United States went on nuclear alert, with some U.S. bombers within minutes of their preliminary attack positions. In 1985, Richard Nixon suggested that the alert was designed to deter the Soviets from attacking China. However, recently declassified material shows that it was a ploy by Nixon and Kissinger to put pressure on Moscow and North Vietnam to end the war there. It appears that the Soviets understood this, and basically called the U.S. bluff. Whether the U.S. alert figured into Soviet decision-making on the China issue remains unknown.⁵⁹ Whatever convinced Soviet leaders not to attack China, it had little to do with the successful mobilization of China's defense industry and its people, with its minimal, verging on nonexistent nuclear deterrent, or the very, very limited progress made on Sino-American rapprochement.

⁵⁹Scott D. Sagan and Jeremi Suri, "The Madman Nuclear Alert," *International Security* 27, no. 4 (Spring 2003): 150-83.

BIBLIOGRAPHY

- Chen, Donglin (陳東林). 2003. *Sanxian jianshe: beizhan shiqi de xibu kaiifa* (三線建設: 備戰時期的西部開發, Third Line construction: the development of China's west during the period of preparation for war). Beijing: Zhonggong zhongyang dangxiao chubanshe.
- Chen, Jian. 2001. *Mao's China and the Cold War*. Chapel Hill: University of North Carolina Press.
- Chen, Ping (陳平), et al., eds. 1987. *Xin Zhongguo de jiben jianshe—Guofang gongye juan* (新中國的基本建設: 國防工業卷, New China's capital construction—Defense industry volume). N.p.: Guofang gongye chubanshe.
- Christensen, Thomas J. 2006. "Windows and War: Trend Analysis and Beijing's Use of Force." In *New Directions in the Study of Chinese Foreign Policy*, edited by Alastair Iain Johnston and Robert S. Ross, 50-85. Stanford, Calif.: Stanford University Press.
- Duan, Zijun (段子俊), ed. 1988. *Dangdai Zhongguo de hangkong gongye* (當代中國的航空工業, Contemporary China's aviation industry). Beijing: Zhongguo shehui kexue chubanshe.
- Fu, Wen (富文), ed. 1991. *Dangdai Zhongguo de Xinjiang* (當代中國的新疆, China today: Xinjiang). Beijing: Dangdai Zhongguo chubanshe.
- Gobarev, Viktor M. 1999. "Soviet Policy Toward China: Developing Nuclear Weapons 1949-1969." *Journal of Slavic Military Studies* 12, no. 4 (December): 1-53.
- Goldstein, Lyle J. 2001. "Return to Zhenbao Island: Who Started Shooting and Why It Matters." *The China Quarterly*, no. 168 (December): 985-97.
- _____. 2003. "Do Nascent WMD Arsenal Deter? The Sino-Soviet Crisis of 1969." *Political Science Quarterly* 118, no. 1 (Spring): 53-79.
- Han, Huaizhi (韓懷智), and Tan Jingqiao (譚桂樵), eds. 1989. *Dangdai Zhongguo jundui de junshi gongzuo* (當代中國軍隊的軍事工作, The military affairs of contemporary China's military). Beijing: Zhongguo shehui kexue chubanshe.
- Jin, Chongji (金沖及), principal editor. 1998. *Zhou Enlai zhuan, 1949-1976*, xia (周恩來傳, Biography of Zhou Enlai, 1949-1976, volume 2). Beijing: Zhongyang wenxian chubanshe.
- Jin, Qiu. 1999. *The Culture of Power: The Lin Biao Incident in the Cultural Revolution*. Stanford, Calif.: Stanford University Press.

- Kissinger, Henry A. 1979. *White House Years*. Boston: Little, Brown.
- Kozarev, Vataly. 2005. "Soviet Policy Toward the United States and China." In *Normalization of U.S.-China Relations: An International History*, edited by William C. Kirby, Robert S. Ross, and Gong Li, 252-86. Cambridge, Mass.: Harvard East Asia Monographs.
- Lewis, John Wilson, and Litai Xue. 1988. *China Builds the Bomb*. Stanford, Calif.: Stanford University Press.
- _____. 1992. "China's Ballistic Missile Programs." *International Security* 17, no. 2 (Autumn): 5-40.
- _____. 2006. *Imagined Enemies: China Prepares for Uncertain War*. Stanford, Calif.: Stanford University Press.
- Li, Danhui (李丹慧). 1996. "1969 nian Zhong-Su bianjie chongtu: yuanyi he jieguo" (1969 年中蘇邊界衝突: 源起和結果, The 1969 Sino-Soviet border conflict: origins and development). *Dangdai Zhongguo shi yanjiu* (當代中國史研究, Research on the History of Contemporary China), no. 3:39-50.
- Li, Gong. 2001. "Chinese Decision Making and the Thawing of U.S.-China Relations." In *Re-examining the Cold War: U.S.-China Diplomacy, 1954-1973*, edited by Robert S. Ross and Jiang Changbin, 321-60. Cambridge, Mass.: Harvard East Asia Monographs.
- Li, Jie. 2001. "Changes in China's Domestic Situation in the 1960s and Sino-U.S. Relations." In *Re-examining the Cold War: U.S.-China Diplomacy, 1954-1973*, edited by Robert S. Ross and Jiang Changbin, 288-320. Cambridge, Mass.: Harvard East Asia Monographs.
- _____. 2005. "China's Domestic Politics and the Normalization of Sino-American Relations, 1969-1979." In *Normalization of U.S.-China Relations: An International History*, edited by William C. Kirby, Robert S. Ross, and Gong Li, 56-89. Cambridge, Mass.: Harvard East Asia Monographs.
- Li, Jue (李覺), et al., eds. 1987. *Dangdai Zhongguo de he gongye* (當代中國的核工業, The nuclear industry of contemporary China). Beijing: Zhongguo shehui kexue chubanshe.
- Li, Ke (李可), and Hao Shengzhang (郝生章). 1989. "*Wenhua da geming*" zhong de renmin jiefangjun (文化大革命中的人民解放軍, The People's Liberation Army during the "Great Cultural Revolution"). Beijing: Zhonggong dangshi ziliao chubanshe, 1989).
- Li, Shenming (李慎明). 2004. "Dui xin Zhongguo chengli hou Mao Zedong zhanzheng yu heping sixiang ji shijian de jidian bianxi, gaishu he sikao"

- (對新中國成立後毛澤東戰爭與和平思想及實踐的幾點辨析、概述和思考, Several analyses, outlines, and reflections on Mao Zedong's thought and practice on war and peace after the founding of new China). *Dangdai Zhongguo shi yanjiu*, no. 3:18-30.
- Liu, Guoguang (劉國光), ed. 2006. *Zhongguo shige wunian jihua yanjiu baogao* (中國十個五年計畫研究報告, Research report on China's ten five-year plans). Beijing: Renmin chubanshe.
- Liu, Zhiqing (劉志青). 2002. "'Jiuyisan' shijian hou Zhongguo guofang gongye chubu zhengdun" ("913"事件後中國國防工業初步整頓, The preliminary rectification of China's national defense industries after the Lin Biao affair). *Dangdai Zhongguo shi yanjiu*, no. 5:101-10.
- MacFarquhar, Roderick, and Michael Schoenhals. 2006. *Mao's Last Revolution*. Cambridge, Mass.: Harvard University Press.
- National Intelligence Council. N.d. *Tracking the Dragon: National Intelligence Estimates on China During the Era of Mao, 1948-1976*. N.p.: Government Printing Office. Also available at www.cia.gov/nic.
- Naughton, Barry. 1988. "The Third Front: Defence Industrialization in the Chinese Interior." *The China Quarterly*, no. 115 (September): 351-86.
- Niu, Jun (牛軍). 1999. "1969 nian Zhong-Su bianjie chongtu yu Zhongguo wajiao zhanlue de tiaozheng" (1969年中蘇邊界衝突與中國外交戰略的調整, The 1969 Sino-Soviet border conflict and the readjustment of China's foreign affairs strategy). *Dangdai Zhongguo shi yanjiu*, no. 1:66-77.
- _____. 2000. "Lun 60 niandai mou Zhongguo dui Mei zhengce zhuanbian de lishi beijing" (論 60 年代末中國對美政策轉變的歷史背景, On the historical background of the late 1960s shift of Chinese policy toward the United States). *Dangdai Zhongguo shi yanjiu*, no. 1:52-65.
- Phillips, Steven E., ed. 2006. *Foreign Relations of the United States, 1969-1972*, volume 17: *China 1969-1972*. Washington, D.C.: Government Printing Office.
- Robinson, Thomas W. 1972. "The Sino-Soviet Border Dispute: Background, Development, and the March 1969 Clashes." *American Political Science Review* 66, no. 4 (December): 1175-1202.
- _____. 1981. "The Sino-Soviet Border Conflict." In Stephen S. Kaplan et al., *Diplomacy of Power: Soviet Armed Forces as a Political Instrument*, 265-313. Washington, D.C.: Brookings Institution.
- _____. 1991. "China Confronts the Soviet Union." In *The Cambridge History of*

- China, edited by Roderick MacFarquhar and John K. Fairbank, vol. 15: *The People's Republic, Part 2: Revolutions within the Chinese Revolution, 1966-1982*, 218-301. Cambridge: Cambridge University Press.
- Sagan, Scott D., and Jeremi Suri. 2003. "The Madman Nuclear Alert." *International Security* 27, no. 4 (Spring): 150-83.
- Shevchenko, Arkady N. 1985. *Breaking with Moscow*. New York: Knopf.
- Su, Caiqing (蘇采青). 1989. "'Wenhua da geming' shishi bianwu sanzhe" ("文化大革命"史實辨誤三則, Three criteria in distinguishing the incorrect in history of the "Great Cultural Revolution"). *Zhonggong dangshi yanjiu* (中共黨史研究, Research on the History of the Chinese Communist Party), no. 5:77-80.
- Teiwes, Frederick C., and Warren Sun. 1996. *The Tragedy of Lin Biao: Riding the Tiger During the Cultural Revolution*. Honolulu: University of Hawaii Press.
- Tian, Songnian (田松年). 2000. "'Siwu' jihua shulue" (四五計畫速略, A brief account of the 4th five-year plan). *Dang de wenxian* (黨的文獻, Party Documents), no. 2:30-33.
- Tyler, Patrick. 1999. *A Great Wall*. New York: Public Affairs.
- Walder, Andrew G., and Yang Su. 2003. "The Cultural Revolution in the Countryside: Scope, Timing, and Human Impact." *The China Quarterly*, no. 173 (March): 74-99.
- Waltz, Kenneth N. 1979. *Theory of International Politics*. Reading, Mass.: Addison-Wesley.
- Wang, Duo (王鐸), ed. 1992. *Dangdai Zhongguo de Nei Menggu* (當代中國的內蒙古, China today: Inner Mongolia). Beijing: Dangdai Zhongguo chubanshe.
- Wang, Zhongchun. 2005. "The Soviet Factor in Sino-American Relations, 1969-1979." In *Normalization of U.S.-China Relations: An International History*, edited by William C. Kirby, Robert S. Ross, and Gong Li, 147-74. Cambridge, Mass.: Harvard East Asia Monographs.
- Wich, Richard. 1980. *Sino-Soviet Crisis Politics: A Study of Political Change and Communication*. Cambridge, Mass.: Harvard East Asian Monographs.
- Woody, W. [Pseudonym]. 1993. *The Cultural Revolution in Inner Mongolia*. Stockholm: Center for Pacific Asian Studies, Occasional Paper no. 20.
- Xiong, Xianghui (熊向暉). 1992. "Dakai Zhong-Mei guanxi de qianzou" (打開中

- 美關係的前奏, Prelude to the opening of Sino-American relations). *Dangshi ziliao* (黨史資料, Party History Materials), no. 42:56-96.
- . 1999. *Wode qingbao yu waijiao shengya* (我的情報與外交生涯, My intelligence and foreign relations career). Beijing: Zhonggong dangshi chubanshe.
- Xu, Kui (徐奎). 2002. "Lixing di renshi he sikao ershi shiji liuqishi niandai de 'quanguo da beizhan'" (理性地認識和思考 20 世紀六七十年代的"全國大備戰", Rationally understanding and considering "nationwide preparation for war" in the 1960s and 1970s). *Dangdai Zhongguo shi yanjiu*, no. 5:111-19.
- Xu, Yan (徐焰). 1992. "1969 nian Zhong-Su bianjie de wuzhuang chongtu" (1969 年中蘇邊界的武裝衝突, The 1969 armed conflict on the Sino-Soviet border). *Dangshi yanjiu ziliao* (黨史研究資料, Party History Research Materials), no. 5:2-12.
- Yang, Kuisong (楊奎松). 2000. "The Sino-Soviet Border Clash of 1969." *Cold War History* 1, no. 1 (August): 21-52.
- Yu, Yongbo (于永波), ed. 1992. *Dangdai Zhongguo de guofang keji shiye* (當代中國的國防科技事業, Defense science and technology endeavors of contemporary China), two volumes. Beijing: Dangdai Zhongguo chubanshe.
- Zhang, Jun (張鈞), ed. 1986. *Dangdai Zhongguo de hangtian shiye* (當代中國的航天事業, Contemporary China's space endeavors). Beijing: Zhongguo kexue chubanshe.
- Zhao, Yueqin (趙月琴), et al. 1998. "Disige wunian jihua de bianzhi he shishi" (第四個五年計劃的編制和實施, The drafting and implementation of the 4th five-year plan). *Dangdai Zhongguo shi yanjiu*, no. 4:13-20.
- Zheng, Hui (鄭惠), ed. 1999. *Wushinian guoshi jiyao: Junshi juan* (五十年國事紀要·軍事卷, Outline of fifty years of national affairs: Military affairs volume). Changsha: Hunan renmin chubanshe.
- Zheng, Qian (鄭謙). 1992. "Zhonggong jiuda qianhou quanguo de zhanbei gongzuo" (中共九大前後全國的戰備工作, National preparations for war before and after the CCP's Ninth National Congress). *Dangshi ziliao*, no. 41:204-33.

Other edited Chinese-language sources:

1984. *Nie Rongzhen huiyilu* (聶榮臻回憶錄, Recollections of Nie Rongzhen). Beijing: Jiefangjun chubanshe.

1987. *Zhongguo guding zichan touzi tongji ziliao, 1950-1985* (中國固定資產投資統計資料, Statistical materials on China's fixed capital investment, 1950-1985). Beijing: Zhongguo tongji chubanshe.
- 1987, 1988, 1989. *Zhonghua renmin gongheguo 1985 nian gongye pucha ziliao* (中華人民共和國1985年工業普查資料, Materials from the 1985 industrial census of the People's Republic of China), volumes 1, 2, and 3. Beijing: Zhongguo tongji chubanshe.
1988. *Guizhou shengzhi: Jixie dianzi gongye zhi* (貴州省誌: 機械電子工業誌, Guizhou provincial gazetteer: Machinery and electronics industry volume). Guizhou: Guizhou renmin chubanshe.
1989. *Guizhou gongye, 1949-1989* (貴州工業, Guizhou industry). Guiyang: Guizhou renmin chubanshe.
1990. *Quanguo ge sheng, zizhiqu, zhixiashi lishi tongji ziliao huibian, 1949-1989* (全國各省、自治區、直轄市歷史統計資料彙編, 1949-1989, Compendium of historical statistics for all provinces, autonomous regions, and centrally administered cities in China, 1949-1989). Zhengzhou: Zhongguo tongji chubanshe.
1991. *Dangdai Sichuan dashi jiyao* (當代四川大事紀要, Outline of major events in contemporary Sichuan). Chengdu: Sichuan renmin chubanshe.
1993. *Sichuan nianjian 1992* (四川年鑑, Sichuan yearbook 1992). Chengdu: Renmin chubanshe.
1994. *Harbin shizhi: Junshi, junshi gongye zhi* (哈爾濱市誌: 軍事、軍事工業誌, Harbin municipal gazetteer: Military affairs, military industry volume). Harbin: Heilongjiang renmin chubanshe.
1994. *Heilongjiang shengzhi, diliushiliu juan: Junshi zhi* (黑龍江省誌第66卷: 軍事誌, Heilongjiang provincial gazetteer, vol. 66: Military affairs). Harbin: Heilongjiang renmin chubanshe.
1994. *Nie Rongzhen zhuan* (聶榮臻傳, Biography of Nie Rongzhen). Beijing: Dangdai Zhongguo chubanshe.
1995. *Chen Yi zhuan* (陳毅傳, Biography of Chen Yi). Beijing: Dangdai Zhongguo chubanshe.
1995. *Xu Xiangqian zhuan* (徐向前傳, Biography of Xu Xiangqian). Beijing: Dangdai Zhongguo chubanshe.
1995. *Ye Jianying zhuan* (葉劍英傳, Biography of Ye Jianying). Beijing: Dangdai Zhongguo chubanshe.

1996. *Chongqing shizhi: Guofang keji gongye zhi* (重慶市誌: 國防科技工業誌, Chongqing municipal gazetteer: National defense science, technology, and industry volume). Chongqing.
1997. *Zhou Enlai junshi wenxuan* (周恩來軍事文選, Selected military writings of Zhou Enlai, four volumes). Beijing: Renmin chubanshe.
1997. *Zhou Enlai nianpu* (周恩來年譜, Chronology of Zhou Enlai, three volumes). Beijing: Zhongyang wenxian chubanshe.
1997. *Xinjiang tongzhi*, diershiba juan: *Junshi zhi* (新疆通誌第 28 卷: 軍事誌, Xinjiang gazetteer, vol. 28: Military affairs). N.p.: Xinjiang renmin chubanshe.
1997. *Zhongguo guonei shengchan zongzhi hesuan lishi ziliao, 1952-1995* (中國國內生產總值核算歷史資料, Historical materials on China's domestic product accounts). Dalian: Dongbei caijing daxue chubanshe.
1998. *Jianguo yilai Mao Zedong wengao*, dishisan ce (建國以來毛澤東文稿第 13 冊, Mao Zedong [draft] documents since the founding of the country, volume 13). Beijing: Zhongyang wenxian chubanshe.
2000. "Guanyu zhiding 'siwu' jihua de wenxian xuanzai" (關於制定"四五"計畫的文獻選載, Selected documents on the drafting of the 4th five-year plan). *Dang de wenxian* (黨的文獻, Party Documents), no. 2:5-29.
2000. *Zhou Enlai junshi huodong jishi* (周恩來軍事活動紀事, A record of Zhou Enlai's military activities, two volumes). Beijing: Zhongyang wenxian chubanshe.
2000. *Shaanxi shengzhi: Junshi gongye zhi* (陝西省誌: 軍事工業誌, Shaanxi provincial gazetteer: Military industry volume) (n.p., 2000)

