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Assessments of China's Military: A Resource Guide

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Biographical Statement

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Introduction

The April 2001 incident in the South China Sea involving a collision between a U.S. Navy EP-3 reconnaissance plane and two Chinese fighters resulted in the death of a Chinese fighter pilot, the emergency landing of the U.S. plane on China's Hainan Island, and the detention of the U.S. crew for eleven days until they were released following complex diplomatic negotiations[1]. This incident demonstrated an increasing international assertiveness by China's military, known collectively as the People's Liberation Army (PLA), in its willingness to defend what it sees as China's national security interests. In addition, this incident provides ample incentive for examining the increasingly complex and multifaceted national security relationship between the United States and China. This relationship is likely to become an increasingly important issue in international politics and global security for the foreseeable future.

The naval plane incident also provides the opportunity to examine the steadily increasing literature on China's military and its current and possible future roles in the international political arena. Before examining this literature, however, it is instructive to look at key historical and current policy developments concerning the PLA since the 1949 creation of the

People's Republic of China (PRC).

America's first direct exposure to the Chinese military came with the 1950 intervention of Chinese forces into the Korean War and the ensuing struggle of U.S. and allied forces to retain South Korean sovereignty[2].

Another important event influencing American attitudes and policies towards the Chinese military was China's 1964 test of an atomic bomb and its 1967 test of a hydrogen bomb which prompted the U.S. to seriously consider a preemptive military strike against China's nascent nuclear arsenal[3].

President Nixon's visit to China in 1972 began a process of reestablishing Sino-U.S. diplomatic contact and would eventually result in the beginning of a relationship between the U.S. and Chinese militaries. This relationship would produce increasing collaboration between these two countries against the Soviet Union, resulted in \$210 million of U.S. arms sales to China between 1985-1989, and continues to produce periodic official Sino-U.S. military contact despite the temporary suspension of such contact following the 1989 massacre of pro-democracy demonstrators in Beijing's Tiananmen Square[4].

China's military modernization is derived from its increased economic wealth starting when China began moving to a more market oriented

economy in 1978. China's Gross Domestic Product (GDP) doubled during the 1980s and had doubled again by the mid-1990s while China's international trade volume over this same period skyrocketed from \$38.2 billion to over \$250 billion[5]. Throughout the 1980s, revenues from this increased economic growth were primarily devoted to domestic economic development. Since 1989, however, China has been devoting steadily increasing resources to military spending[6].

A recent study of China's military modernization estimated a 54% real increase in China's military spending between 1991-1998[7]. These enhanced defense appropriations have enabled the PLA to develop strategic strengths in its sizeable military forces which at 2.8 million personnel are twice as many as the U.S.' 1.4 million, its strategic nuclear forces including twenty intercontinental ballistic missiles (ICBM's) which can reach most continental U.S. targets, chemical and biological weapons, surface-to-surface missiles, geographic extent, and casualty tolerance. Strategic weaknesses of China's military include obsolete equipment, poor logistics support, command, control, and communications deficiencies, and poor quality personnel and training[8].

This increased military spending and favorable international political events during the 1990s such as the return of Hong Kong and Macao to

Chinese sovereignty has resulted in a growing Chinese nationalism and increased assertiveness by China's military. In late October 1994, a U.S. naval task force headed by the aircraft carrier *USS Kitty Hawk* was making a show of force in the Yellow Sea against North Korea's refusal to permit international inspection of its nuclear facilities. China responded by having one of its nuclear submarines shadow the carrier task force getting within twenty-one nautical miles of the *Kitty Hawk* and scrambling its F-6 fighter planes to follow the U.S. naval force[9].

The most vivid demonstration of increased Chinese military assertiveness, prior to the EP-3 plane incident, occurred in the waters of the Taiwan Strait in early 1996. Dismayed by Taiwan's first genuinely democratic presidential election and a recent unofficial visit by Taiwanese President Lee Teng-hui to the U.S., Chinese military forces conducted a series of military exercises in the Taiwan Strait in February and March 1996 including live fire missile tests. The U.S. responded by ordering two aircraft carrier battle groups headed by the carriers *USS Independence* and *USS Independence* to position themselves off Taiwan's east coast as a warning to the Chinese against turning their maneuvers into an invasion of Taiwan[10].

Such increased Chinese assertiveness and revelations of Chinese

espionage at U.S. Department of Energy (DOE) laboratories[11] has produced acute concern among U.S. policymakers and others about the long-term intentions of China and its military toward the U.S. and toward China's neighbors. This concern has been manifested in several congressionally passed laws focusing on China's military since 1996. That year congress enacted legislation prohibiting federal funding of nuclear weapons program activities with China and required the secretaries of energy and defense to prepare a report documenting all Sino-U.S discussions and activities involving nuclear weapons[12].

1998 witnessed enactment of two additional statutes pertaining to China's military. One law required the Secretary of Defense to determine what individuals and corporations operating in the U.S. are Chinese military companies and mandating that a list of these is to be published in the *Federal Register*[13]. A second statute prohibited the U.S. military from entering in or renewing contracts with companies owned or partially owned by the PLA[14].

Further demonstration of increasing congressional disapproval of Chinese military policies occurred during 1999 with the introduction of a proposed "Taiwan Security Enhancement Act." This bill called for training Taiwanese military officers in the U.S., ensuring that Taiwan had complete and timely

access to available U.S. weapons, and establishing direct and secure communication links between U.S. and Taiwanese military forces[15]. Even though this legislation was not enacted into law, its introduction and approval by a congressional committee demonstrates the increasing suspicion held toward the Chinese military by many members of Congress.

The 2000 defense spending law saw Congress enact several additional measures pertaining to China's military. These included increasing knowledge about the PLA by establishing a Center for the Study of Chinese Military Affairs within the National Defense University's Institute for National Strategic Studies and prohibiting Sino-US military exchanges if such contact would create a national security risk of PLA personnel being exposed to sensitive U.S. military information. Additional provisions of this statute included requiring the Secretary of Defense to prepare an annual report to Congress on the PLA's current and future strategies and a declaration that the U.S. should reexamine its policy permitting Chinese launching of commercial U.S. satellites[16].

Additional legislation pertaining to China's military occurred in the 2001 National Defense Authorization Act approved October 30, 2000. A section within this act established a United States-China Security Review Commission to review possible national security implications of trade and

economic ties between the U.S. and China and the submission of a report to Congress on this subject by March 1, 2002[17].

The role of China's military and its overall foreign and national security policies are likely to be subjects of increasing concern for U.S. and international policymakers and scholars and the general public. This annotated bibliography is presented to introduce readers to the burgeoning and diverse body of monographic literature on China's military and its possible immediate, intermediate, and long-term impact on the U.S. and international community.

The individuals and organizations contributing to this literature and to the debate over China's military represent a variety of viewpoints. Some believe that China's military modernization is the natural result of a rapidly developing country and that the PLA does not threaten the strategic interests of the U.S. or its east Asian allies. Others argue that increasing Chinese nationalism and assertiveness will result in it using military force or the threat of military force to achieve its hegemonic aspirations such as reuniting Taiwan with the PRC and removing U.S. influence from East Asia.

This literature is produced by U.S. government agencies such as the U.S. Department of Defense, National Defense University, U.S. Army War College, the Library of Congress' Congressional Research Service,

and congressional oversight committees. It is also produced by national security policy research institutes such as the Rand Corporation and by a variety of U.S. and foreign scholars. Examples of topics discussed within this literature include the PLA's organizational structure, prospects for a successful invasion of Taiwan[18], naval implications of increasing Chinese military power[19], the PLA's commercial activities, its interest in using information warfare against technologically superior adversaries, China's ballistic missile arsenal and reaction to possible U.S. ballistic missile defense system development and deployment, how U.S. operations in the Persian Gulf War and North Atlantic Treaty Organization (NATO) operations in Kosovo influenced Chinese military thinking, and a variety of other issues.

The materials presented have been published since 1995 and represent a variety of monographic materials and numerous websites reflecting the abundant diversity of viewpoints on this increasingly important subject.

Notes

[1]Official military information on this incident can be found on the U.S. Department of Defense website *Defenselink*, <<http://www.defenselink.mil/>> and the U.S. Pacific Command website <<http://www.pacom.mil/>>.

[2]See U.S. Army, Center of Military History, *Korea 1950*, (Washington, (8)

DC: Department of the Army, Center of Military History, 1997), 227-37; and Billy C. Mossman, *Ebb and Flow: November 1950-July 1951*, (Washington, DC: United States Army, Center of Military History, 1990), 52-60 for two descriptions of the Korean War confrontation between Chinese and U.S. military forces.

[3]See Richard S. Norris, Andrew S. Burrows, and Richard W. Fieldhouse, *Nuclear Weapons Databook Volume V: British, French, and Chinese Nuclear Weapons*, (Boulder, CO: Westview Press, 1994), 333-34 for a chronological listing of key dates in Chinese nuclear weapons development. For additional background on China's nuclear weapons program see Avery Goldstein, *Deterrence and Security in the 21st Century: China, Britain, and the Enduring Legacy of the Nuclear Revolution*, (Stanford, CA: Stanford University Press, 2000), 111-38. See also U.S. Department of State, *Foreign Relations of the United States 1964-1968: Volume XXX China*, Harriet Dashiell Schwar, ed., (Washington, DC: GPO, 1998): 39, 58; for coverage of U.S. national security policymakers considering a preemptive military strike against the emerging Chinese nuclear arsenal.

[4]See James Mann, *About Face: A History of America's Curious Relationship with China from Nixon to Clinton*, (New York: Alfred A. Knopf, 1999), 50-77, 255-58 on growing Sino-US military cooperation.

See also U.S. Arms Control and Disarmament Agency, *World Military Expenditures and Arms Transfers 1990*, (Washington, DC: GPO, 1991): 132, for U.S. military sales to China between 1985-1989.

[5]Avery Goldstein, "Great Expectations: Interpreting China's Arrival," *International Security*, 22 no. 3 (Winter 1997/98): 40-41.

[6]Ibid., 42.

[7]Zalmay M. Khalilzad et. al, *The United States and a Rising China: Strategic and Military Implications*, (Santa Monica, CA: Rand Corporation, 1999), 38.

[8]Ibid., 39-47.

[9]Richard Bernstein and Ross H. Munro, *The Coming Conflict With China*, (New York: Alfred A. Knopf, 1997), 27.

[10]See John W. Garver, *Face Off: China, the United States, and Taiwan's Democratization*, (Seattle: University of Washington Press, 1997), 96-110 for a detailed synopsis of this confrontation.

[11]U.S. Congress, House Committee On Military/Commercial Concerns With the People's Republic of China, *Report*, House Report 105-851, (Washington, DC: GPO, 1999), and U.S. President's Foreign Intelligence Advisory Board, *Science at its Best Security at its Worst: A Report on the Security Problems at the U.S. Department of Energy*, (Washington, DC:

President's Foreign Intelligence Advisory Board, 1999), are the two most authoritative examinations of Chinese espionage and DOE internal security deficiencies.

[12]"To Authorize Appropriations for Fiscal Year 1997 for Military Activities of the Department of Defense, for Military Construction, and for Defense Activities of the Department of Energy, to Prescribe Personnel Strengths, for Such Fiscal Year for the Armed Forces, and for Other Purposes," Public Law 104-201, 110 *U.S. Statutes at Large*, 2422, 2831.

[13]"To Authorize Appropriations for Fiscal Year 1999 for Military Activities of the Department of Defense, for Military Construction, and for Defense Activities of the Department of Energy, to Prescribe Personnel Strengths for Such Fiscal Year for the Armed Forces, and for Other Purposes, " Public Law 105-261, 112 *U.S. Statutes at Large*, 1920, 2160-61.

[14]"An Act Making Appropriations for the Department of Defense for the Fiscal Year Ending September 30, 1999 and For Other Purposes," Public Law 105-262, 112 *U.S. Statutes at Large*, 2279, 2332.

[15]U.S. Congress, House Committee on International Relations, *Taiwan Security Enhancement Act: Report to Accompany H.R. 1838*, (House Report 106-423 PT. 1), (Washington, DC: GPO, 1999): 3-4.

[16]"An Act to Authorize Appropriations for Fiscal Year 2000 for

Military Activities of the Department of Defense, for Military Construction, and for Defense Activities of the Department of Energy, to Prescribe Personnel Strengths for Such Fiscal Year for the Armed Forces, and for Other Purposes," Public Law 106-65, 113 *U.S. Statutes at Large*, 512, 721, 779-82.

[17]"An Act to Authorize Appropriations for Fiscal Year 2001 for Military Activities of the Department of Defense, for Military Construction, and for Defense Activities of the Department of Energy, to Prescribe Personnel Strengths for Such Fiscal Year for the Armed Forces, and for Other Purposes," Public Law 106-398, 114 *U.S. Statutes at Large*, 1654, 1654A-334-338. The website for the U.S.-China Security Review Commission can be accessed at <www.uscc.gov/>.

[18]This subject alone produces a variety of research and assessments with conflicting opinions. Examples include Douglas Porch, "The Taiwan Strait Crisis of 1996: Strategic Implications for the United States Navy," *Naval War College Review*, 52, no. 3 (Summer 1999): 15-48; and Michael Hanlon, "Can China Conquer Taiwan," *International Security*, 25, no. 2 (Fall 2000): 51-86; and Robert S. Ross, "The 1995-96 Taiwan Strait Confrontation: Coercion, Credibility, and the Use of Force," *International Security*, 25, no. 2 (Fall 2000): 87-123.

[19]For analyses within this genre, see A. James Gregor, "Qualified Engagement: U.S. China Policy and Security Concerns," *Naval War College Review*, 52, no. 2 (Spring 1999): 70-73; and James E. Auer and Robyn Lim, "The Maritime Basis of American Security in East Asia," *Naval War College Review*, 54, no. 1 (Winter 2001): 39-58.

Books

Daniel Byman and Roger Cliff. *China's Arms Sales: Motivations and Impact*. Santa Monica, CA: The Rand Corporation, 1999. ISBN: 0-8330-2776-X. 60p. Internet Access: <www.rand.org/publications/MR/MR1119/>

This study determines that strategic and commercial reasons are the key motivating reasons for China's external arms sales and that such sales are a moderate threat to U.S. interests (x, vii.). Introductory chapters provide historical background on Chinese arms sales since creation of the People's Republic of China (PRC) in 1949. Later chapters provide explanation of Chinese arms transfers with emphasis on its sales to countries such as Pakistan, Iran, Iraq, North Korea, Myanmar, and Thailand and how these exports have gone from being focused on conventional weapons to materials needed for biological, chemical, and nuclear weapons programs.

Other subjects addressed include China's ability to control its arms transfers, its contradictory attitudes towards international weapons sales and

proliferation, and policy implications of such weapons sales for the U.S.

China's Military in Transition. David Shambaugh and Richard H. Yang, eds. Studies on Contemporary China. New York: Oxford University Press, 1997. 366p. ISBN: 0-19-8292-619.

Compilation of scholarly essays addressing the status of China's military as the 21st century approaches. An introductory essays stresses that continuity and change mark the PLA in this period of transition toward a more professional and technologically proficient force. Subsequent essays are grouped around overall themes focusing on PLA management, the defense economy, doctrinal training and capabilities, and China's external security environment. Specific chapter topics covered within these parameters include the nature of the relationship between the PLA and ruling Communist Party, professional and demographic characteristics of the PLA officer corps, current and future challenges confronting Chinese defense industries, military training, doctrinal warfighting changes during the preceding decade, the security role played by the People's Armed Policy under the communist regime, prospects for nuclear force modernization, the military balance in the Taiwan Straits, and PLA views of potential security threats to China including Japan and the U.S.

Roger Cliff. *The Military Potential of China's Commercial Technology*.

Santa Monica, CA: Rand Corporation, 2001. ISBN: 0-8330-2939-8.

94p. Internet Access: <www.rand.org/publications/MR/MR1292/

This report examines the ability of China's civilian industries to supply China's military with advanced technology. Following an introductory overview, the report analyzes current Chinese civilian industrial technology. It places particular emphasis on Chinese technologies in the following areas: microelectronics, computers, telecommunications equipment, nuclear power, biotechnology, chemicals, aviation, and space which the author sees as China's most promising areas.

A later chapter discusses the potential for further progress by making improvements in its capabilities, efforts, incentives, and institutions. Specific recommendations for enhancements within these areas include personnel enhancement, developing new technologies, improving the macroeconomic environment and competitive marketplace, and improving China's legal system with particular emphasis on strengthening intellectual property right protections.

David M. Finkelstein, David R. Tanks, Zhenqiang Pan, and Ming Zhang.

Theater Missile Defense and U.S. Foreign Policy Interests in Asia.

Washington, DC: Woodrow Wilson International Center for Scholars, 2000.

28p.

The possibility of the U.S. building a ballistic missile defense system to counter China's growing ballistic missile arsenal and sharing such a system with Asian allies like Japan is an issue of acute political and military importance. This compilation of four essays provides divergent perspectives on the propriety of U.S. establishment of such a system in East Asia.

The initial essay provides background on theater ballistic missile (TBM) defenses and how such defenses have become associated with U.S. national security interests in this region. A second essay lists how individual east Asian countries have sought to enhance their missile arsenals, enumerates core U.S. security interests in this region, provides an update on the status of U.S. theater missile developments, and lists East Asian missile defense requirements.

Later chapters, one written by a Chinese general, seek to demonstrate their belief that TBM is an incorrect approach to East Asian regional security, that Russia's reaction needs to TBM deployment must be taken into consideration, and that discussion over this subject needs to look at what will happen to regional security once a TBM system is implemented and how surrounding nations will respond to its deployment.

You Ji. *In Quest of High Tech Power: The Modernisation of China's*

Military. Canberra: Australian Defence Studies Centre, 1996. ISBN: 0-

7317-0-3510. 123p.

This work describes how China is transforming its military from one devoted to the idea of "peoples war" emphasizing China's demographic superiority as a means of defeating enemy attacks to a military dedicated to using the most sophisticated technologies to deter and defeat national enemies. An introduction describes the incorporation of this new mindset into Chinese strategic thinking and planning.

Other chapters emphasize how China is using technology to address strategic and tactical military issues as part of its overall national defense strategy, the modernization of its strategic missile force, its efforts to develop an offensively oriented air force, and modernizing its naval forces so they can defend China's interests behind immediate maritime waters. Concluding chapters emphasize the PLA's role in the context of regional Chinese foreign policy and military strategy. Areas covered here include China's relations with Russia, the Association of Southeast Asian Nations (ASEAN), Chinese views on regional collective security, the potential for armed conflict in the South China Sea, and China's efforts to maintain the regional security status quo.

Alistair Iain Johnston. *Cultural Realism: Strategic Culture and Grand Strategy in Chinese History*. (Princeton Studies in International History and
(17)

Politics). Princeton: Princeton University Press, 1995. ISBN: 0-691-00239-8 (pbk). 307p.

This theoretical treatise seeks to look at the history of Chinese strategic thought with particular emphasis on the Ming dynasty's grand strategy against the Mongols between 1368-1644. Johnston opens with a disciplinary critique of strategic culture as a research field. He proceeds to provide methodological definitions of strategic culture focusing on objects and methods of analysis and stressing the importance of empirical analysis within this disciplinary specialty.

Later chapters address theoretical concepts such as "righteous war" and subduing enemies without fighting within Chinese strategic thought, how the Ming dynasty dealt with security problems on its northern border, and the roles played by offense, static defense, and accommodation in Ming strategic preferences. Johnston concludes by arguing that a tradition of being prepared for war as opposed to pursuing naturally pacific policies is the dominant historical trend in Chinese strategic thought during this historical period (pp. 249-50).

Appendices include a glossary of Chinese military terms used during this period as well as a map of the northern border regions discussed in this work.

Robert A. Manning, Ronald Montaperto, and Brad Roberts. *China, Nuclear Weapons, and Arms Control: A Preliminary Assessment*. New York: Council on Foreign Relations Press, 2000. ISBN: 0-87609-272-5. 91p.

This report stresses the increasing importance of China's nuclear weapons policy choices and how their importance to the U.S. may equal or surpass the importance of Russian nuclear weapons in U.S. strategic and foreign policy planning. It opens with an executive summary of what it considers to be salient issues as well as a contextual introduction. Subsequent discussion covers China's strategic posture, key issues facing China's nuclear policymakers, how U.S. interests may be affected by China's nuclear arsenal, China's attitudes towards arms control and international arms control agreements, possible U.S. responses to Chinese nuclear force modernization, obstacles to greater Sino-U.S. cooperation on nuclear issues, and key findings and recommendations from individuals compiling this report.

An appendix lists contributors and their institutional affiliations.

The People's Liberation Army in the Information Age. James C. Mulverson and Richard H. Yang, eds. Santa Monica, CA: The Rand Corporation, 1999. ISBN: 0-8330-2716-6. 288p. Internet Access: <<http://www.rand.org/publications/CF/CF145/>>

Compilation of essays providing a detailed overview of China's People's Liberation Army (PLA) trends and developments at the beginning of the new millenium. An opening chapter discusses the current state of PLA studies listing U.S. and foreign specialists, source materials accessibility, and avenues for future scholarly study. Subsequent essays address topics such as the military and China's new politics, the PLA's rapid reaction forces, restructuring within China's defense scientific and technological sector, air force logistics and maintenance, China's national military strategy, evolving PLA campaign doctrine and strategies, and information warfare. Concluding chapters address historical, contemporary, and possible future trends for Chinese defense industries, systems integration within the PLA, the PLA's interactions with China's telecommunications industry, and a possible new PLA force structure.

Issues receiving further scrutiny in these chapters include the relationship between the Chinese Communist Party and the PLA, storage and maintenance practices for old air force aircraft, the PLA gaining the strategic initiative in future conflicts by striking first, a scenario for using information warfare against Taiwan and the United States, technology transfer issues, military telecommunications, and adjustments in the military's command and control structure.

David A. Shlapak, David T. Orletsky, and Barry A. Wilson. *Dire Strait?: Military Aspects of the China-Taiwan Confrontation and Options for U.S. Policy*. Santa Monica, CA: The Rand Corporation, 2000. ISBN: 0-8330-2897-9. 87p. Internet Access: <www.rand.org/publications/MR/MR1217/

The Taiwan Strait separating Taiwan and China is an increasingly dangerous international flashpoint and an area of acute U.S. national interest. This study seeks to examine what a military confrontation between these two countries might look like from now until 2005 given the present order of battle for both military forces.

An introduction sets the stage for such a conflict while hypothesizing about possible military roles the U.S. might play. Study coverage proceeds to examine what a Chinese invasion of Taiwan might look like and how air and maritime superiority will be particularly important in determining such a conflict's final outcome. An assessment chapter stresses that U.S. support is essential for Taiwanese security and presents a futuristic assessment of military trends between these two countries after 2005.

Appendices look at China's ballistic missile threat against Taiwan and the role played by the Rand Corporation's Joint Integrated Contingency Model (JICM) used to prepare the scenarios and variables used in making this assessment of a China-Taiwan military confrontation.

Abram N. Shulsky. *Deterrence Theory and Chinese Behavior*. Santa Monica, CA: The Rand Corporation, 2000. ISBN: 0-8330-2883-7. 85p. Internet Access: <<http://www.rand.org/publications/MR/MR1161/>>

Shulsky seeks to focus on the extent that deterrence will influence China's national security behavior. He believes it's a mistake to conclude that China's interest in economic and technological development negates the possibility of conflict with the U.S. (p. viii.). Issues receiving coverage in this monograph include the role of deterrence in the U.S.' China policy, a look at historic U.S. and Soviet efforts to deter China, deterrence and its overall context within Sino-U.S. relations, weaknesses in current U.S. deterrence toward China, and ways of deterring China in the future.

An appendix lists various Chinese failures and successes in deterring aggressive action against China or its allies. Examples of failures include increasing security ties between the U.S. and Taiwan during the 1950's following Chinese attacks against Taiwanese islands and being unable to stop Vietnam's invasion and conquest of China's Cambodian ally during 1978-1979. Shulsky asserts that successful demonstrations of Chinese deterrence include keeping U.S. ground forces out of North Vietnam during the Vietnam War, preventing large-scale Soviet attacks against China, and

(22)

limiting Taiwan's attempts to increase its international diplomatic status during the 1990's.

Richard Sokolsky, Angel Rabasa, and C.R. Neu. *The Role of Southeast Asia in U.S. Strategy Toward China*. Santa Monica, CA: The Rand Corporation, 2000. ISBN: 0-8330-2893-6. 112p. Internet Access: <www.rand.org/publications/MR/MR1170/>

Study examining the implications of increasing Chinese power on U.S. security strategy and defense planning in Southeast Asia. It begins with an overview of U.S. objectives and interests in this area. Later chapters address China's potential military threat to this region, how Association of Southeast Asian Nations (ASEAN) such as Singapore, the Philippines, Indonesia, and Vietnam view increasing Chinese power, and ASEAN defense policies and expenditures.

Coverage of regional approaches to security cooperation are presented, along with the balancing role played by the U.S. on regional security as applied to Taiwan, and implications for U.S. strategic and defense planning of rising Chinese regional power.

Michael D. Swaine and Ashley J. Tellis. *Interpreting China's Grand Strategy: Past, Present, and Future*. Santa Monica, CA: The Rand Corporation, 2000. ISBN: 0-8330-2767-0. 283p. Internet Access: <www.rand.org/publications/MR/MR1170/>

rand.org/publications/MR/MR1121/>

Presents a historical and conceptual overview of how China's governments have viewed their national security interests and acted on their assessments. It opens with an overview of China's emergence as an international security concern in the present and a theoretical overview of Chinese national security perceptions. Intermediate chapters focus on the historical context of Chinese security thought and features of contemporary Chinese thinking in this discipline.

Themes stressed in the historical appraisal include the roles played by border defense, the uses of both force and noncoercive strategies, and the influence of domestic leadership politics in shaping China's national security interactions with surrounding nations. The chapter on current Chinese security strategies grapples with the changing national security capabilities and orientations of nations adjacent to China, growing domestic social and political challenges within China, the emergence of more pragmatic military modernization, and China's attitudes towards international governmental regimes as diverse as the United Nations (UN) and World Trade Organization (WTO).

A concluding chapter looks at possible long-term Chinese national security policies. It focuses on three possible scenarios for Chinese

security that include a chaotic China being tormented by internal problems with serious global implications, a cooperative China that works with the international community, and an assertive China that adopts confrontational stances towards international political and security issues.

U.S. Government Documents

The Chinese Armed Forces in the 21st Century. Larry M. Wortzel, ed. Carlisle, PA: U.S. Army War College, Strategic Studies Institute, 1999. ISBN: 1-58487-007-9. 344p. Internet Access: <<http://carlisle-www.army.mil/usassi/ssipubs/pubs99/chinese/chinese.pdf>>

This work consists of papers prepared for and delivered at a 1999 Army War College conference at Wye Plantation, MD on developments concerning the PLA. Topics covered include discussion and analysis of geographic factors influencing Chinese security attitudes and policies, the nature of current and emerging security relationships between China's military and the militaries of neighboring countries, and how China determines its future security requirements.

Conference participants also discuss possible advanced military technology priorities the PLA may seek to obtain, U.S.-Chinese military relations in the 21st century, how Taiwan's military is redefining and reorganizing itself to cope with future Chinese

threats, and developments in the relationship between the PLA and China's Communist Party.

Chinese Views of Future Warfare, rev. ed. Michael Pillsbury, ed.

Washington, DC: National Defense University Press, 1998. 421p.

SuDocs no: D 5.402:C 44/2/998. Item: 0378-H-01. Internet Access:

<www.ndu.edu/inss/books/chinview/chinacont.html>

This collection of essays by Chinese military officials chronicles Chinese views on future military issues. An initial section covers the strategic thought of former Chinese leader Deng Xiaoping. Subjects receiving coverage here include his perspectives on defense modernization and what constitutes China's national interest.

A subsequent section addresses future security trends and how they might affect Sino-U.S. military ties, future security trends in the Asian-Pacific region, and managing future security crises China may confront. Part three examines defensive modernization with essays on logistics, strategic nuclear modernization, reforming defense science, technology, and industry, and artillery development undergoing scrutiny.

The concluding section explores the revolution in military affairs and its effect on 21st century warfare. Potential air, land, and naval warfare developments are targeted in this category as are trends in information

warfare, stealth weapons, and military applications in nanotechnology .

Crisis in the Taiwan Strait. James R. Lilley and Chuck Downs, eds.

Washington, DC: National Defense University Press and American

Enterprise Institute, 1997. 348p. SuDocs no: D 5.402:T 13. Item: 0378-H-01. ISBN: 1-57906-000-5.

This collection of scholarly essays examines the significance of the 1996 Chinese military maneuvers in the Taiwan Strait that included live fire missile exercises and the intervention of two U.S. aircraft carrier battle groups. Contributors address topics such as a history of cross-strait interaction between Taiwan and China, possible Chinese military preparations against Taiwan over the following decade, and Taiwanese and Chinese military spending and foreign military acquisitions.

Later chapters discuss Chinese military hardware and acquisitions of concern to Taiwan, speculative discussion of the cross-straits military balance, political and military assessment of Chinese missiles, an appraisal of China's air force modernization, a naval evaluation of Chinese exercises, doctrine, and tactics as applied to Taiwan, and Taiwanese views of the existing military balance with China. Concluding essays stress Korean views on Taiwan-PRC relations and Japan's regional security role and U.S. perspectives on Taiwan-PRC relations.

Russell D. Howard. *The Chinese People's Liberation Army: "Short Arms and Slow Legs."* Colorado Springs: US Air Force Institute for National Security Studies, US Air Force Academy, 1999. INSS Occasional Paper 28. 19p. Internet Access: <www.usafa.af.mil/inss/ocp28.htm>

This analysis of China's military stresses that its new military doctrine emphasizes fighting limited wars with high technology. It covers the role of defense spending in shaping Chinese military doctrine, provides historical perspective on such thinking before and after the 1949 revolution, how the influence of the Persian Gulf War and the success of the U.S.' high-tech weapons forced China to transform its military strategy to accommodate this new technological dominance over battlefield operations, and the condition of China's military forces.

Coverage is given to China's attempts to compensate for its technological inferiority by building technological skill in selected military areas and through weapons purchases from Russia. The author concludes that despite some improvements in its technological capabilities, China's military is a long way away from being able to rival U.S. military power.

Shirley A. Kan. *China's Proliferation of Weapons of Mass Destruction and Missiles: Current Policy Issues.* Washington, DC: Library of Congress, Congressional Research Service, 2001. 16p. Internet Access: <www.house.

gov/htbin/crsprodget?/ib/IB92056>.

China's arms sales, including the proliferation of weapons of mass destruction and the means of using these weapons such as ballistic missiles, to countries as diverse as Pakistan, Iran, and North Korea are a major problem in Sino-US relations. This report opens by covering China's ambiguous adherence to the Missile Technology Control Regime (MTCR), Nuclear Nonproliferation Treaty (NPT), and other international agreements on the proliferation of weapons of mass destruction. It proceeds to describe how China has sold nuclear technology such as ring magnets, diagnostic equipment, and missile technology to Pakistan, provided Iran with uranium enrichment technology and anti-ship cruise missiles, and other related weapons technology sales to North Korea, Libya, and Syria.

A second section presents policy issues and options for the U.S. covering areas such as trade controls including U.S. import and export controls along with multilateral export controls, strengthening international nonproliferation agreements, and linking international financial loans to China to that nation's nonproliferation record.

Evan S. Medeiros and Bates Gill. *Chinese Arms Exports: Policy, Players, and Process*. Carlisle, PA: U.S. Army War College, Strategic Studies

Institute, 2000. 102p. ISBN: 1-58487-029-X. Internet Access: <<http://>

carlisle-www.army.mil/usassi/ssipubs/pubs2000/chinarms/chinarms.pdf>

China's arms exports involving both conventional and mass destruction weapons technology are a key irritant in Sino-U.S. relations. This study provides a detailed analysis of weapons China exports to other countries and its rationales for exporting arms.

The initial chapter focuses on background trends in Chinese arms exports. These trends include a shift from communist ideology to pragmatism in Chinese foreign policy during the 1970's and 1980's, recent quantitative trends in Chinese arms sales, the growth of Asian markets as a source for Chinese arms sales, and possible recipients of future Chinese arms sales representing countries as diverse as Croatia and Kuwait.

A second chapter focuses on the roles played in Chinese arms sales by export control regulations, international arms control agreements such as the Missile Technology Control Regime (MTCR), and Chinese government agencies involved in arms exports. Following a brief conclusion, appendices feature a glossary of relevant acronyms, Chinese export regulations on military items, listings of Chinese arms control and nonproliferation organizations, and the websites for Chinese organizations involved in military exports and exports controls such as

the Chinese National Aero-Technology Import-Export Corporation.

Michael Pillsbury. *China Debates the Future Security Environment*.

Washington, DC: National Defense University Press, 2000. 382p. SuDoc

no: D 5.402:C 44/5. Item: 0378-H-01. ISBN: 1-57906-024-2. Internet

Access: <www.ndu.edu/inss/books/pills2.htm>

This study provides translations of over 200 writings on Chinese military strategic thought by Chinese military personnel. Topics covered in these writings focus on broad themes such as China's role in a multipolar international security environment, America's declining role in global affairs, the emergence of Japan and India as "dangerous democracies," the future of a weak Russia, geopolitical power calculations, forecasting future wars, and concluding assessments. Other subjects receiving coverage within these parameters include debates on how the Kosovo war may impact international security, the U.S.' failure to implement the revolution in military affairs, U.S. aircraft carrier vulnerabilities, historical rivalry between India and China, American "subversion" contributing to the Soviet Union's collapse, calculating the importance of high-technology warfare, the kind of wars that could affect China, using nanotechnology weapons against American targets, and the desirability of a military partnership with Russia to counteract what it regards as rising Japanese

militarism.

Appendixes feature a bibliography of relevant Chinese language works, U.S. and Chinese definitions of strategic assessment, and descriptions of Chinese institutions conducting national security policy research.

People's Liberation Army After Next. Susan M. Puska, ed. Carlisle, PA: U.S. Army War College Strategic Studies Institute, 2000. ISBN: 1-58487-027-3. 352p. Internet Access: <<http://carlisle-www.army.mil/usassi/ssipubs/pubs2000/planext/planext.pdf>>

This work contains the transcript of papers delivered at a September 10-12, 1999 conference on the PLA sponsored by the American Enterprise Institute and the U.S. Army War College's Strategic Studies Institute in Carlisle Barracks, PA. An overview of paper contents is presented by former U.S. Ambassador to China James Lilley. Topics covered in these papers include China's efforts to develop advanced technologies for military use, ongoing and future PLA logistical and doctrinal reforms, the potential for PLA information warfare assets to be applied against an adversary's critical infrastructures such as computer networks, and implications for Taiwan Strait Security stemming from China's military space and conventional theater missile development. Issues also receiving attention include PLA air force operations and modernization, the implications of NATO's

Kosovo War for possible Chinese assaults against Taiwan, and China's maritime strategy as applied to areas such as the South China Sea.

Andrew Scobell. *Chinese Army Building in the Era of Jiang Zemin*. Carlisle, PA: U.S. Army War College, Strategic Studies Institute, 2000. ISBN: 1-58487-030-3. 45p. Internet Access: <<http://carlisle-www.army.mil/usassi/ssipubs/pubs2000/Chinarmy/chinarmy.pdf>>

This study seeks to examine and analyze the growth of China's defense establishment under the leadership of current Chinese premier Jiang Zemin. Particular emphasis is placed on China's efforts to modernize its armed forces. Topics addressed within the parameters of armed forces modernization include focusing on possible policy options for China's military to pursue such as emulating U.S. military forces and developing weapons systems and technologies such as acquiring U.S. nuclear missile technology that play to Chinese military strengths. Other possible Chinese military policy options include viewing national defense requirements in conjunction with other Chinese domestic political and economic development goals or developing military capabilities in areas such as information warfare to neutralize the strategic technological advantages held by perceived hostile powers such as the U.S.

Scobell also covers Chinese military doctrine and war fighting scenarios, the impact of governmental corruption on military modernization, how China's political elite perceives the international security environment, and Chinese perceptions of Taiwan's security policies. Additional coverage is given to possible implications for the U.S. defense community of current Chinese military policies and measures to improve security dialogue between the U.S. and Chinese national security communities such as integrating China into international multilateral defense forums, recognizing Chinese concerns about Taiwanese ballistic missile defense, and allowing Chinese observance of U.S. military exercises if China grants the U.S. reciprocal permission to observe its military exercises.

Scott Snyder. *North Korea's Decline and China's Strategic Dilemmas*. Washington, DC: United States Institute of Peace, 1997. United States Institute of Peace Special Report, 12p. Internet Access: <www.usip.org/sr/snyder/China-NK-pt1.html>

Discusses how North Korea's deteriorating political and economic conditions can affect Chinese national security policies. Contents presented include Chinese views of North Korea's food and economic crisis, the implications of North Korea's problems for northeastern China, how

growing Chinese-South Korean economic and political ties will affect China's response and aid to North Korea, how China's military sees the Korean War's legacy as influencing both Chinese and U.S. perceptions of Korean peninsula developments, and how China's military would see the collapse of North Korea as a psychological defeat.

A highlight of the report's conclusion is the author's belief that the maintaining the Korean peninsula balance of power requires more discussion and policy coordination between the U.S., China, Japan, and South Korea than presently exists.

Mark A. Stokes. *China's Strategic Modernization: Implications for the United States*. Carlisle, PA: U.S. Army War College Strategic Studies Institute, 1999. ISBN: 1-58487-004-4. 229p. Internet Access: <<http://carlisle-www.army.mil/usassi/ssipubs/pubs99/chinamod/chinamod.pdf>>

This study stresses how China's military modernization in areas such as telecommunications infrastructure, its space, air, and ground-based sensor network, and emphasis on electronic attack systems may enable the PLA to achieve information dominance in future military conflicts. Stokes looks at the foundations of China's strategic modernization, its quest for information superiority, its long-range precision strike capabilities, and its aerospace defense capabilities.

Appendixes cover Chinese aerospace industrial organization, a biographical portrait of Qian Xuesen who is regarded as the founder of China's space and missile industries, the role space support plays in China's strategic modernization, China's use of directed energy weapons such as particle beams and high powered lasers, and the roles played by the Commission of Science, Technology, and Industry for National Defense (COSTIND) and the Ministry of Electronics Industry in China's ongoing defense modernization programs.

Timothy L. Thomas. *Behind the Great Firewall of China: A Look at RMA/IW Theory From 1996-1998*. Fort Leavenworth, KS: Center for Army Lessons Learned, 1998. 22p. Internet Access: <<http://call.army.mil/fmso/fmsopubs/issues/chinarma.htm>>

This paper examines Chinese writings on the revolution in military affairs and information warfare between 1996-1998. It begins by stressing the appearance of a revolution in military affairs due to the advent of technologically advanced weapons and most vividly personified by the success of U.S. weapons during the 1991 Persian Gulf War. This revolution's impact on Chinese military thinking is reflected by an emphasis on gaining information dominance over adversaries in future wars.

Further subjects addressed in this analysis include the influence wielded

by the information warfare writings of Shen Wuiguang on Chinese military thought, how information warfare is becoming a more essential component of Chinese military doctrine, how training for such warfare is being incorporated into Chinese military training, and the belief of Chinese information warfare advocates that technologically advanced countries such as the U.S. are particularly vulnerable to attacks on their information infrastructures due to their heavy reliance on technology.

Timothy L. Thomas. *Like Adding Wings to the Tiger: Chinese Information War Theory and Practice*. Fort Leavenworth, KS: Center for Army Lessons Learned, Foreign Military Studies Office, 2000. 24p. Internet Access: <<http://call.army.mil/fmso/fmsopubs/issues/chinaiw.htm>>

A followup effort to *Behind the Great Firewall of China*, this work stresses that China feels an acute need to develop a theory of information warfare consistent with China's history, culture, military philosophy, and perceived national security situation. An example of this desire to develop an indigenous information warfare theory is China's attempt to develop a "net force" branch of the PLA to supplement its naval, army, and air force.

Paper contents go on to emphasize that China views information warfare as a means of achieving military objectives it's unable to achieve through its conventional or nuclear forces. An example of this is a Chinese belief that

military strength calculations must now include computing and communications capabilities plus systems reliability as well as traditional military force correlates such as the number of armored divisions, air force wings, and aircraft carrier battle groups.

Additional topics receiving consideration include a focus on knowledge warfare (a battle of brains between competing military decisionmakers) in future military operations, attacking cyberspace targets to disrupt enemy defenses, surveillance and reconnaissance uses of information warfare, the use of digital forces and battlefields in combat operations, institutes training Chinese forces in these areas, how China viewed information warfare aspects of NATO operations in Kosovo, and descriptions of hacking operations by U.S. and Chinese forces following the accidental U.S. bombing of the Chinese embassy in Belgrade during the Kosovo War. Concluding remarks see the author give his appraisal of the strengths and weaknesses in Chinese information warfare strategy and possible implications for U.S. military thinking on this subject.

U.S. Congress. House Committee on International Relations. Subcommittee on Asia and the Pacific. *Taiwan, the PRC, and the Taiwan Security Enhancement Act*. Washington, DC: GPO, 1999. SuDoc: Y 4.IN 8/16:T 13/5. Item: 1017-A-01. ISBN: 0-16-059878-8. 76p.

This September 15, 1999 hearing sought to examine legislation designed to strengthen Taiwan's national security in light of congressional concerns about increasingly belligerent Chinese rhetoric toward Taiwan. Rep. Doug Bereuter (R-NE) and Senator Craig Thomas (R-WY) were the principal congressional participants. Witnesses testifying before the committee to present their views on this subject include Assistant Secretary of State for East Asian and Pacific Affairs Susan Shirk, the Defense Department's Deputy Assistant Secretary for International Security Affairs/Asian and Pacific Affairs Kurt Campbell, former Secretary of Defense Caspar Weinberger, former Central Intelligence Agency Director James Woolsey, and David Lampton, the Director of Chinese Studies at Johns Hopkins University's School of Advanced International Studies.

U.S. Congress. House Committees on National Security and International Relations. *United States Policy Regarding the Export of Satellites to China*. Washington, DC: GPO, 1999. SuDoc: Y 4.SE 2/1A:997-98/50. Item: 1012-A-03. ISBN: 0-16-058445-0. 408p.

Series of joint hearings by the House National Security and International Relations Committees during June 1998 on whether it is in the U.S.' national security interest to allow Chinese space launchers to place American satellites in orbit. Key committee members presiding over this

hearing include National Security Committee Chair Rep. Floyd Spence (R-SC) and ranking member Rep. Ike Skelton (D-MO) along with International Relations Committee Chair Rep. Benjamin Gilman (R-NY) and ranking member Lee Hamilton (D-IN).

Witnesses testifying at these hearings include Air War College International Security Studies Professor Joan Johnson-Freese, Congressional Research Service Analyst Shirley Kan, Executive Director of the Defense Department's Nonproliferation Policy Center Henry Sokolski, Deputy Assistant Secretary of State for Export Controls John Barker, and Under Secretary of Commerce for Export Administration William Reinsch.

Materials submitted into the hearings transcript include Clinton Administration defenses of its satellite export control policies, a chronological chart of U.S. satellite transfers to China, Congressional Research Service reports on possible missile technology transfers to China from U.S. satellite technology exports, and a U.S. National Security Agency damage assessment of the encryption technology lost from the February 14, 1996 crash of a Loral satellite in China.

U.S. Congress. House Select Committee on U.S. National Security and Military/Commercial Concerns with the People's Republic of China. *Report of the Select Committee on U.S. National Security and Military/Commercial*

Concerns With the People's Republic of China. Washington, DC: GPO, 1999. SuDoc: Y 1.1/8:105-851/V. 1-3. Item: 1004-E. 866p Internet Access: <<http://www.house.gov/coxreport/>>

This three volume report documents how Chinese espionage succeeded in obtaining sensitive military technology from U.S. Department of Energy (DOE) laboratories. The first volume covers how China acquired such technology through various commercial and intelligence operations and how these operations results included the theft of U.S. thermonuclear weapons design information, high-performance computer data, and enhanced China's missile and space forces.

Contents of volumes two and three stress the role of the U.S.' Hughes and Loral corporations in transferring satellite launch technology to China, the effect of the U.S.' statutory and regulatory controls on the export of militarily sensitive technology, Chinese efforts to acquire machine tool and jet engine technologies, and committee recommendations to rectify these national security problems.

U.S. Congress. Senate Committee on Armed Services. *Review of Alleged Chinese Espionage at Department of Energy Laboratories.* (Washington, DC: GPO, 2000). 195p. SuDoc: Y 4.AR 5/3:S.HRG. 106-460. Item: 1034-A. ISBN: 0-16-060513-X.

These open session April 12 and June 23, 1999 hearings examined the potential compromise of sensitive nuclear secrets from the Los Alamos National Laboratory to Chinese espionage. The hearing was presided over by committee chair Senator John Warner (R-VA). Transcript testimony also includes the contributions of Senators Pete Domenici (R-NM) and John Kyl (R-AZ) who are not Armed Services committee members. Witnesses testifying before the committee at the April hearing included the Energy Department's Office of Counterintelligence Director Edward J. Curran, Acting Deputy Director of DOE's Office of Intelligence Notra Trulock, former Deputy Secretaries of Energy Elizabeth Moler and Charles Curtis, former DOE Office of Intelligence Deputy Director John Bloodsworth, and former Senior Advisor to the Secretary of Energy Paul Richanbach.

Those testifying at the June 23 hearing included Secretary of Energy Bill Richardson and his security expert General Eugene Habiger, the former Commander in Chief of United States Strategic Command Admiral Henry G. Giles (Ret.), and President's Foreign Intelligence Board (PFIAB) member Dr. Sidney Drell.

U.S. Congress. Senate Committee on Armed Services. *Statement of Admiral Dennis C. Blair, U.S. Navy Commander in Chief U.S. Pacific Command Before the Senate Armed Services Committee on Fiscal Year 2002 Posture*

Statement 27 March 2001. Washington, DC: Senate Committee on Armed Services, 2001. 64p. Internet Access: <http://www.senate.gov/~armed_services/statemnt/2001/010327db.pdf>

This document is the opening statement made by Admiral Blair before the Senate Armed Services committee's March 27, 2001 hearing on the Fiscal Year (FY) 2002 Defense Department budget request. Blair provides an overview of national security trends in the Asian-Pacific region. Where the Chinese military is concerned he refers to PLA force modernization efforts in order to expand China's regional influence and support its sovereignty claims concerning Taiwan and the South China Sea. Other items receiving coverage in this statement include recent military contacts between China and the U.S. and Taiwanese armed forces developments including increases in their surveillance capabilities and purchase of modernized air-to-air, air-to-ground, and air-to-surface weapons from the U.S.

U.S. Congress. Senate Committee on Commerce, Science, and Transportation. *Transfer of Satellite Technology to China.* Washington, DC: GPO, 1999. SuDoc: Y 4.C 73/7:S.HRG. 105-1053. Item: 1041-A. ISBN: 0-16-060272-6. 83p.

This September 17, 1998 hearing examines the transfer of satellite

technology to China and the effect such transfers may have had in strengthening China's military power. Committee chair Senator John McCain (R-AZ) presided over the hearing. Witnesses testifying include Acting Under Secretary of State for Arms Control and International Security Affairs John D. Holum, Deputy Assistant Secretary of Defense for Strategy and Threat Reduction Franklin C. Miller, the Commerce Department's Undersecretary for Export Administration William A. Reinsch, U.S. General Accounting Office Associate Director of Defense Acquisition Issues Katherine V. Schinasi, Rep. Dave Weldon (R-FL), and Paul Wolfowitz, the dean of the Nitze School of Advanced International Studies at Johns Hopkins University.

U.S. Congress. Senate Committee on Governmental Affairs. International Security, Proliferation, and Federal Services Subcommittee. *An Examination of the Report of the House Select Committee on U.S. National Security and Military/Commercial Concerns With the People's Republic of China*. Washington, DC: GPO, 2000. SuDoc: Y 4.G 74/9:S.HRG. 106-323. Item: 1037-B. 89p.

This May 26, 1999 hearing examined the just-released House of Representative committee report on Chinese espionage at DOE laboratories.

Senators participating included Subcommittee Chair Senators Thad Cochran

(R-MS), Joe Lieberman (D-CT), and Governmental Affairs Committee Chair Fred Thompson (R-TN). Witnesses testifying include House Select Committee leader Rep. Chris Cox (R-CA) and ranking member Norman Dicks (D-WA). Appendices include an overview of the select committee's report, newspaper stories on the report in the *New York Times*, *Wall Street Journal*, and *Washington Post*, and a list of General Accounting Office (GAO) reports on DOE security issues.

U.S. Congress. Senate Select Committee on Intelligence. *Investigation of Impacts to U.S. National Security From Advanced Satellite Technology Exports to China and Chinese Efforts to Influence U.S. Policy*. Washington, DC: GPO, 2000. SuDoc: Y 4.IN 8/19:S.HRG. 105-1057. Item: 1009-B-07. ISBN: 0-16-060365-X. 147p.

These June 10 and July 15, 1998 hearings examine whether U.S. national security was compromised by transfers of sensitive satellite technology to China with particular emphasis on transfers made by Loral and Hughes corporations. Witnesses testifying include the General Accounting Office's Associate Director of Defense Acquisition Issues Katherine V. Schinasi and the Defense Department's Director of the Defense Technology Security Administration David Tarbell. A supplemental document included in the transcript is a January 1997 GAO report *Export Controls: Change in Export*

Licensing Jurisdiction for Two Sensitive Dual-Use Items.

U.S. Congress. Senate Select Committee on Intelligence. *People's Republic of China*. Washington, DC: GPO, 1998. SuDoc: Y 4.IN 8/19:S.HRG. 105-276. Item: 1009-B-07. ISBN: 0-16-055960-X. 46p.

This open session of a September 18, 1997 hearing examined how China is becoming a more important priority for U.S. military and intelligence operations. The hearing was presided over by committee chair Senator Richard Shelby (R-AL) who was joined in questioning by committee members Senators Max Baucus (D-MT), Robert Kerrey (D-NE), and Pat Roberts (R-KS).

Witnesses testifying include James R. Lilley of the American Enterprise Institute and a former U.S. ambassador to China, Wisconsin Project on Nuclear Arms Control Director Gary Milhollin, National Defense University Associate Fellow Michael Pillsbury, Nixon Center for Peace and Freedom National Security Programs Director Peter Rodman, and Hoover Institution Research Fellow Harry Wu who is also a noted Chinese dissident.

U.S. Department of Commerce. Bureau of Export Administration. *BXA Annual Report-FY 1999*. Washington, DC: Bureau of Export Administration, 2000. 135p. Internet Access: <www.bxa.doc.gov/press/Publications/99AnnReport/Ann99TOC.html>

The Bureau of Export Administration is the U.S. Government agency responsible for seeing that U.S. exports do not contribute to nuclear proliferation and that U.S. technology exports to China and other countries do not jeopardize national security. This annual report provides an overview of agency activities for the federal fiscal year from October 1, 1998-September 30, 1999. It includes the reports of specific departments within the bureau such as the offices of strategic trade and foreign policy controls, nuclear and missile technology controls, export enforcement, and nonproliferation and export control cooperation.

U.S. Department of Defense. *Annual Report on the Military Power of the People's Republic of China*. (Washington, DC: U.S. Department of Defense, 2000). 22p. Internet Access: <<http://www.defenselink.mil/news/June2000/china06222000.htm>>.

This congressionally mandated report is submitted to Congress by the Secretary of Defense in adherence to Section 1202 of the National Defense Authorization Act. It presents a Defense Department analysis of China's current and potential future military strategies. It opens with an appraisal of Chinese grand strategy which includes how the PRC interprets national power, Chinese security strategy with prominent emphasis on Taiwan and Tibet, and Chinese military strategy emphasizing the importance of creating

a better-educated and technologically skilled military force in officer and enlisted ranks.

A second section stresses developments in Chinese military doctrine. These include working to incorporate attributes of the "revolution in military affairs" which focus on developing technologies and tactics necessary to conduct high speed and technology warfare. Other areas of emphasis include Chinese attempts to obtain self-sufficiency in defense technology and production, achieving improvements in China's automated command, control, and information systems technologies, enhancing electronic warfare capabilities, and augmenting space launch resources.

The third and final section looks at the Taiwan Strait security situation. Issues receiving coverage here include Chinese missile forces, air, naval, and ground forces, China's capacity for preemptive strikes against Taiwan, Taiwan's capability of sustaining military operations against integrated Chinese assaults, and an overall assessment of the balance of forces between these two sides.

U.S. General Accounting Office. *China: U.S. and European Union Arms Sales Since the 1989 Embargoes: Statement of Harold J. Johnston, Associate Director, International Relations and Trade Issues, National Security and International Relations Division*. Washington, DC: GAO,

1998. SuDoc: GA 1.5/2:T-NSIAD-98-171. Item: 0546-D-01. 17p.

Opening statement of testimony before the congressional Joint Economic Committee on U.S. and European Union (EU) arms sales to China since the 1989 massacre of demonstrators in Beijing's Tiananmen Square. Document contents begin by explaining differences in U.S. and EU statutes prohibiting arms sales to China following Tiananmen and how loopholes in these laws permit some weapons exports. Other topics covered include itemized listings of EU weapon sales to China between 1990-1997 broken down by country, a similar listing for U.S. government weapons exports to China over this same period, and listings of governmentally approved exports of commercial U.S. export applications for munitions equipment to China. Additional contents include Chinese use of EU and U.S. military items, that Russia and Israel have provided China its most modern military items, and China's difficulties in incorporating modern weapons into its military forces due to problems with its command, control, and communications systems and training weaknesses.

U.S. General Accounting Office. *National Security: Impact of China's Military Modernization in the Pacific Region*. Washington, DC: GAO, 1995. SuDoc: GA 1.13:NSIAD-95-84. Item: 0546-D. 50p.

Study providing information on Chinese military modernization efforts

and how they compare with similar programs in other Asian nations.

Report findings demonstrate that China began modernizing its military forces around 1989 and that this modernization is driven by China's desire to be Asia's leading regional power, a similar desire to learn the lessons of modern warfare they see the Persian Gulf War providing, China's determination to protect its economic/territorial interests, and by a need to maintain internal stability.

Noteworthy sections of this report cover the U.S.' military relations with China, the slowness and limited results achieved from PLA force modernization efforts, China's large arsenal of mass destruction weapons, increased defense spending by other Asian nations, the concerns these nations have about China, and steps the U.S. is taking to engage China on national security issues.

Appendixes include comments from the Defense and State Departments. U.S. National Defense University. Institute for National Strategic Studies. The Center for the Study of Chinese Military Affairs. Internet Access: <http://www.ndu.edu/inss/China_Center/Chinaframe.htm>

This organization was created by Congress in the 2000 Defense Department appropriations act to study China's military. Its site contains conference information, the text of reports on China's military, and links to

related resources. Examples of reports featured on this site include *China's Aviation Capabilities, PLA Strategy and Doctrine: Recommendations for a Future Research Agenda*, *Dragons in Orbit?: Analyzing the Chinese Approach to Space, Procurement and the Defense Industrial Base*, and *Thoughts and Questions About the PLA Ground Forces*.

Internet Resources

Thomas J. Christensen. *Posing Problems Without Catching Up: China's Rise and the Challenge for American Security*. SAIS Policy Forum Series Report Number 14. Baltimore: Paul H. Nitze School for Advanced International Studies, Johns Hopkins University, 2000. 31p. <<http://www.sais-jhu.edu/pubs/policyforum/Christensen14.html>>

Christensen contends that China could pose major problems for Taiwan and U.S. security interests with strategic equipment acquisition and adoption of new security strategies without reaching the overall military power of the U.S. (p. 2). He goes on to discuss the ongoing strategic debate between those who believe that China will become a peer competitor to U.S. military power and those who believe China's military power will never equal the U.S.'

Christenson also discusses factors that might prompt a militarily inferior China to use force against the U.S. such as a belief that the U.S. is

intolerant of high casualties among its forces as evidenced by its Somalian peacekeeping experience in 1992-1993, how China could challenge Taiwan's air superiority and threaten U.S. military bases, Chinese uses of information and electronic warfare, strategies for blockading Taiwan, and exploiting weaknesses in U.S. alliances with regional countries such as Japan. He proceeds to discuss how the U.S. can change Chinese misconceptions of its willingness to absorb military casualties by inviting Chinese policymakers to visit war memorials such as Gettysburg or local community war memorials (p. 21).

Anthony H. Cordesman. *China and the US: National Missile Defenses and Chinese Nuclear Modernization: A Background Paper*. Washington, DC: Center for Strategic and International Studies, 2001. 17p. <http://www.csis.org/burke/mb/asia_neac_nmdchina.pdf>

This draft working paper discusses policy issues facing the US in light of its possible deployment of a ballistic missile defense system against the perceived threat of Chinese ballistic missiles and its nuclear force modernization efforts. Contents include coverage of Chinese strategic force deployments, listing potential sources of Sino-US military confrontation, Chinese and Russian attitudes on a U.S. ballistic missile defense system including cooperating in their opposition to U.S. ballistic missile defense activities,

the impact of Chinese nuclear modernization on U.S. nuclear force planning, and assessing possible Chinese reaction to a U.S. ballistic missile defense system.

Additional contents include charts of Chinese deployed nuclear capable weapons systems, an estimate of Chinese nuclear force demographics, and data on Chinese missile programs and developments.

Ralph A. Cossa. *Security Implications of Conflict in the South China Sea: Exploring Potential Triggers of Conflict*, Honolulu: Pacific Forum, Conference on Strategic and International Studies, 2000? 56p. <www.csis.org/Pacfor/opSChinaSea.pdf>

The South China Sea is likely to become an increasingly important strategic choke point in the 21st century due to its mineral resources and the interest of numerous regional powers in these resources. This paper examines how countries as diverse as Brunei, China, Malaysia, the Philippines, Taiwan, and Vietnam have interests in this region. It goes on to describe scenarios for possible conflict over this region including conflict between China and the Association of Southeast Asian Nations (ASEAN), conflicts between these individual countries or ASEAN, and the broader consequences of such conflict with particular emphasis on its impact on international freedom of navigation.

Other issues examined include potential conflict triggers such as oil exploration or exploitation, creeping occupation of territories by interested powers, accident, miscalculation, broader external regional tensions, and other matters. Various confidence-building measures are proposed to reduce tensions such as enhanced openness and transparency by interested powers, multilateral efforts, and identifying respective "lines in the sand." Additional recommendations include the need for continuing U.S. interest in and commitment to the South China Sea such as maintaining a military presence and serving as a mediator.

Hua Di. *China's Security Dilemma to the Year 2010*. Stanford, CA: Center for International Security and Arms Control, Stanford University, 1997. 22p. <<http://cisac.stanford.edu/docs/hua.pdf>>

This report describes how Chinese leaders see 2010 as a pivotal year in China's efforts to achieve national modernization and reunification. Its principal thesis is that in 2010 China will be a friendly part of the international community and a key player in Asia and that it will only become a threat to U.S. interests if U.S. policies toward China and East Asia threaten China.

Additional report suppositions assert that China faces greater threats to survival from internal instead of external threats, that China will be

more willing to compel Taiwan's reunification from 2010 on, and its belief that Taiwanese President Lee Teng-hui wants to pursue a two China policy. It goes on to stress that the PLA does not have the ability or intention to launch an amphibious invasion against Taiwan, criticizes the 1996 U.S. deployment of two aircraft carriers to monitor Chinese missile exercises, and describes the modernization of China's conventional and nuclear forces.

Concluding observations include speculations on China's role in the emerging northeast Asian security environment, whether this northeast Asian security environment is balanced, whether there will be a U.S. military presence in northeast Asia after 2010, Chinese positions on regional security issues such as dividing jurisdictional zones in the Gulf of Tonkin with Vietnam and the Spratly Islands, East Asia's growing international economic power, and the authors personal prescriptions for desirable U.S. policies in East Asia including military withdrawal.

June Teufel Dreyer. *State of the Field Report: Research on the Chinese Military*. Access Asia Review. Seattle: National Bureau of Asian Research, 1997. 22p. <<http://www.nbr.org/publications/review/vol1no1/essay1.html>>

Essay reviewing recent literature on various aspects of PLA operations
(55)

and theory. It begins by reviewing organizations studying the Chinese military such as the Rand Corporation, and the National Defense University's Institute for National Strategic Studies. It proceeds to cover scholarship on determining and interpreting Chinese defense budget figures, military strategy, organization and training, and weapons acquisition.

Further coverage is given to the PLA's economic role including its involvement in numerous business enterprises as well as the commercial roles played by the Commission on Science, Technology, and Industry for National Defense (COSTIND) within China's economy.

Dreyer also reviews scholarly output on the PLA's domestic and foreign policymaking influence and suggests areas for future research such as the details of technology transfer agreements between the PLA and its foreign suppliers, precise information on military leaders interaction with comparable civilian policymakers, PLA weapons sales to other countries, and the influence of regional factors in military promotion.

Evan A. Feigenbaum. *China's Military Posture and the New Economic Geopolitics*. Houston: James A. Baker III Institute for Public Policy, 1999.

16p. <<http://www.rice.edu/projects/baker/Pubs/workingpapers/claes/cmp.htm>>

This study is part of a larger overall study focusing on Chinese and Asian

energy security. Its contents include examinations of China's use of force and resource constraints on its military force deployment, the numerous motives involved in China's security attitudes toward the South China Sea, whether China's security policies will produce cooperation or conflict with the international community, technological modernization and military capability in Chinese security planning, and how Chinese security policy reflects a new economic geopolitics combining international rivalry and competition.

Jonathan D. Pollack. *Chinese Military Power and American Security Interests*. SAIS Policy Forum Series Report Number 11. Baltimore: Paul H. Nitze School of Advanced International Studies, Johns Hopkins University, 2000. 39p. <<http://www.sais-jhu.edu/pubs/policyforum/pollack.pdf>>

Pollack seeks to explore major aspects of China's ongoing military modernization and then assess potential implications of this development on the U.S.' long-range national security interests. Within this framework, report contents discuss long-term implications of Chinese economic growth, Chinese power and American defense strategy, and interpreting China's defense planning assumptions. Pollack proceeds to discuss ten vital security issues for China including the U.S.' long-term strategic orientation toward China, Japan's longer-term strategic role, Taiwanese nationalism, ensuring

Chinese nuclear force credibility, U.S. information dominance, and possible reactions from the Korean peninsula, Russia, India, central Asia, and within China's interior to external assertions of Chinese military power.

Concluding assessments posit that China is unlikely to achieve consensus on its defense strategy and include an assessment of how China might respond to various regional security scenarios in the future.

Xiangli Sun. *Implications of a Comprehensive Test Ban For China's Security Policy*. Stanford, CA: Center for International Security and Arms Control, Stanford University, 1997. 16p. <<http://cisac.stanford.edu/docs/sun.pdf>>

This analysis examines the impact a comprehensive nuclear test ban treaty would have on Chinese nuclear programs and overall national security policy. Sun opens with an overview of international nuclear weapons testing and a summary of Chinese nuclear weapons development strategy. Subsequent sections cover the benefits that can be derived from nuclear weapons testing, a chronological enumeration of Chinese nuclear tests between 1964-1996, and the preparedness of existing nuclear weapons states for a comprehensive test ban treaty.

Implications also covers factors China must examine in deciding to adhere to such a treaty. Advantages the author sees China gaining from

adhering to this pact include promoting international nuclear nonproliferation, creating favorable economic development conditions, and encouraging further nuclear disarmament. Disadvantages of Chinese participation in this pact include being unable to develop new nuclear delivery systems to fit current warhead designs, not having the technological capabilities of the U.S.' Stockpile Stewardship Program to test the reliability of its nuclear weapons deterrent, and concern that the U.S. might develop and deploy a ballistic missile defense system that could reduce China's retaliatory options.

The author concludes by recognizing the symbolic value of a comprehensive test ban treaty while emphasizing that it would place more restrictions on China's limited strategic nuclear forces.