

RECOMMENDATIONS

China's "Area Control Military Strategy"

The Commission recommends that:

- The relevant Congressional committees investigate the adequacy of security for the Department of Defense's logistics data system, the time-phased force deployment data system, to ensure that the data therein are secure from a cyberattack.
- Congress assess the adequacy of Department of Defense capabilities to conduct major operations in a degraded command, control, communications, computer, intelligence, surveillance, and reconnaissance environment for an extended period of time.
- Congress direct the Government Accountability Office to evaluate the Department of Defense's early warning systems to ensure that the department will have sufficient timely warning of a PLA attack in the event of a conflict.
- Congress require that the Department of Defense conduct periodic peaceful naval and air exercises in the East Asian maritime region to demonstrate the U.S. commitment to freedom of navigation.
- Congress assess the adequacy of funding for Department of Defense programs that ensure the military's ability to operate effectively against China's Area Control Strategy measures. Such programs could include, at a minimum, robust theater ballistic missile defense, antisubmarine warfare, advanced air-to-air combat, command and control, and electronic warfare capabilities.
- Congress encourage the administration to continue to work diplomatically and militarily with regional allies and friends to improve their capacity to resist China's Area Control Strategy capabilities.

The Implications of China's Civil and Military Space Activities

The Commission recommends that:

- Congress mandate that the Department of Defense (and other government space operators, as appropriate) assess and report upon their preparedness for potential Chinese counterspace activities. To the extent that commercial entities provide essential services, assessments should also cover their systems.

- Congress assess the adequacy and regularity of U.S. military exercises and training activities that simulate the destruction, denial, degradation, or manipulation of U.S. space assets. In addition, Congress should periodically evaluate whether the Department of Defense is taking sufficient measures to diversify its traditionally space-oriented capabilities, such as in navigation, communications, intelligence, surveillance, and reconnaissance.

ENDNOTES FOR CHAPTER 2

1. Jeremy Page, "Test Flight Signals Jet Has Reached New Stage," *Wall Street Journal*, January 11, 2011. <http://online.wsj.com/article/SB10001424052748704515904576075852091744070.html>.
2. U.S.-China Economic and Security Review Commission, *2010 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2010), pp. 95–96.
3. Office of the Secretary of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2011* (Washington, DC: Department of Defense, 2011), p. 32. See also Tai Ming Cheung, "What the J–20 Says About China's Defense Sector," *Wall Street Journal*, January 13, 2011. http://blogs.wsj.com/chinarealtime/2011/01/13/what-the-j-20-says-about-chinas-defense-sector/?mod=rss_WSJBlog&mod=chinablog.
4. Nathan Hodge, "China's J–20 Fighter: Stealthy or Just Stealthy-Looking?" *Wall Street Journal*, January 19, 2011. <http://blogs.wsj.com/washwire/2011/01/19/chinas-j-20-fighter-stealthy-or-just-stealthy-looking/>; and Emmanuelle Tzeng and Bear Lee, "Experts doubt 'stealth' capability of Chinese fighters," Central News Agency, December 4, 2011. http://focustaiwan.tw/ShowNews/WebNews_Detail.aspx?Type=ALL&ID=201101040034. For an alternate take on the J–20's design weaknesses, see Carlo Kopp, "An Initial Assessment of China's J–20 Stealth Fighter," *China Brief* 11:8 (May 6, 2011). http://www.jamestown.org/uploads/media/cb_11_8_04.pdf.
5. GE Aviation, "GE and AVIC [Aviation Industry Corporation of China] Sign Agreement for Integrated Avionics Joint Venture," Press Release, January 21, 2011. http://www.geae.com/aboutgeae/presscenter/systems/systems_20110121.html.
6. GE Aviation, "GE and AVIC [Aviation Industry Corporation of China] Sign Agreement for Integrated Avionics Joint Venture," Press Release, January 21, 2011. http://www.geae.com/aboutgeae/presscenter/systems/systems_20110121.html.
7. U.S.-China Economic and Security Review Commission, *2010 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2010), p. 96.
8. Roger Cliff, Chad J.R. Ohlandt, and David Yang, *Ready for Takeoff: China's Advancing Aerospace Industry* (Arlington, VA: RAND Corporation, 2011), p. 39. This report was sponsored by the U.S.-China Economic and Security Review Commission.
9. Boeing, "Boeing and AVIC [Aviation Industry Corporation of China] to Open Manufacturing Innovation Center in China; Boeing Awards 737 Rudder Contract to AVIC's CCAC [Chengfei Commercial Aircraft Co.]," Press Release, June 20, 2011. <http://boeing.mediaroom.com/index.php?s=43&item=1795>.
10. Boeing, "Boeing Celebrates Opening of New Factory in China," Press Release, April 18, 2011. <http://boeing.mediaroom.com/index.php?s=43&item=1708>.
11. Boeing, "Boeing Celebrates Opening of New Factory in China," Press Release, April 18, 2011. <http://boeing.mediaroom.com/index.php?s=43&item=1708>.
12. Carlo Kopp, "PLA–AF [People's Liberation Army Air Force] and PLA–N [People's Liberation Army Navy] Legacy Fighters," AirPowerAustralia.net, updated June 2011. <http://www.ausairpower.net/APA-PLA-Fighters.html#mozTocId441599>; and Carlo Kopp, "XAC (Xian) H–6 Badger," AirPowerAustralia.net, updated January, 2011. <http://www.ausairpower.net/APA-Badger.html>.
13. Hu Yinan, Li Xiaokun, and Cui Haipei, "Official confirms China building aircraft carrier," *China Daily*, July 12, 2011. http://www.chinadaily.com.cn/china/2011-07/12/content_12881089.htm.
14. Michael Wines, "China Begins Sea Trials of its First Aircraft Carrier," *New York Times*, August 10, 2011. http://www.nytimes.com/2011/08/11/world/asia/11china.html?_r=1; and Jeremy Page, "China Says Carrier Won't Alter Naval Strategy," *Wall Street Journal*, July 28, 2011. <http://online.wsj.com/article/SB10001424053111903635604576472014072981554.html>.
15. BBC, "China's first aircraft carrier 'starts sea trials,'" August 10, 2011. <http://www.bbc.co.uk/news/world-asia-pacific-14470882>; and Ian Story and You Ji, "China's Aircraft Carrier Ambitions: Seeking Truth from Rumors," *Naval War College Review* LVII: 1 (Winter 2004): 82–83.
16. Ian Story and You Ji, "China's Aircraft Carrier Ambitions: Seeking Truth from Rumors," *Naval War College Review* LVII: 1 (Winter 2004): 83.
17. Michael Wines, "China Begins Sea Trials of its First Aircraft Carrier," *New York Times*, August 10, 2011. http://www.nytimes.com/2011/08/11/world/asia/11china.html?_r=1.
18. Agence France-Presse, "China's first aircraft carrier to begin sea trials," June 21, 2011. <http://www.defensenews.com/story.php?i=6877585&c=ASI>.
19. Kathrine Hille and Mure Dickie, "China reveals new aircraft carrier plans," *Financial Times*, December 17, 2010. <http://www.ft.com/intl/cms/s/0/fa7f5e6a-09cc->

11e0-8b29-00144feabdc0.html#axzz1XNytDPPd; Bill Gertz, "China begins to build its own aircraft carrier," *Washington Times*, August 1, 2011. <http://www.washingtontimes.com/news/2011/aug/1/china-begins-to-build-its-own-aircraft-carrier/?page=1>; and Michael Wines, "China Begins Sea Trials of its First Aircraft Carrier," *New York Times*, August 10, 2011. http://www.nytimes.com/2011/08/11/world/asia/11china.html?_r=1.

20. Gabe Collins and Andrew Erickson, "China's J-15 No Game Changer," *Diplomat* (Tokyo, Japan), June 23, 2011. <http://the-diplomat.com/flashpoints-blog/2011/06/23/china%E2%80%99s-j-15-no-game-changer/>; and Associated Press, "China's first aircraft carrier begins sea trials amid concerns over Asian giant's ambitions," August 10, 2011. http://www.washingtonpost.com/world/asia-pacific/chinas-first-aircraft-carrier-starts-sea-trial-as-rebuilding-and-test-work-continue/2011/08/09/gIQA6tBV5I_story.html.

21. David A. Fulghum, "New Chinese Ship-Based Fighter Progresses," *Aviation Week*, April 28, 2011. <http://www.aviationweek.com/aw/generic/story.jsp?id=news/asd/2011/04/27/02.xml&channel=defense>.

22. J. Michael Cole, "China Unveils Carrier Trainer on State TV," *Jane's Defence Weekly*, 48: 26 (June 29, 2011): 15.

23. *Kanwa Intelligence Review*, "PLA Navy's Grander Carrier Development Program," September 20, 2010; and *Kanwa Intelligence Review*, "PLA Navy Building Flight Training Base at Yanliang," August 20, 2010. <http://www.kanwa.com/cindex.html>.

24. Hu Yinan, Li Xiaokun, and Cui Haipei, "Official confirms China building aircraft carrier," *China Daily*, July 12, 2011. http://www.chinadaily.com.cn/china/2011-07/12/content_12881089.htm; and Bill Gertz, "China begins to build its own aircraft carrier," *Washington Times*, August 1, 2011. <http://www.washingtontimes.com/news/2011/aug/1/china-begins-to-build-its-own-aircraft-carrier/?page=1>.

25. Office of the Secretary of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2011* (Washington, DC: Department of Defense, 2011), p. 3.

26. Jeremy Page, "China Says Carrier Won't Alter Naval Strategy," *Wall Street Journal*, July 28, 2011. <http://online.wsj.com/article/SB10001424053111903635604576472014072981554.html>.

27. Meng Na and Zhang Chunxiao, "Aircraft carrier will not change defensive nature of China's policies," *Xinhua*, August 10, 2011. http://news.xinhuanet.com/english2010/indepth/2011-08/10/c_131041116.htm.

28. Jonathan Watts, "China admits 'secret' aircraft carrier is nearly ready for launch," *Guardian* (United Kingdom), June 8, 2011. <http://www.guardian.co.uk/world/2011/jun/08/china-aircraft-carrier-near-launch>.

29. Meng Na and Zhang Chunxiao, "Aircraft carrier will not change defensive nature of China's policies," *Xinhua*, August 10, 2011. http://news.xinhuanet.com/english2010/indepth/2011-08/10/c_131041116.htm.

30. Michael Wines, "China Begins Sea Trials of its First Aircraft Carrier," *New York Times*, August 10, 2011. http://www.nytimes.com/2011/08/11/world/asia/11china.html?_r=1.

31. Michael McDevitt (rear admiral in the U.S. Navy (Retired)), e-mail correspondence with Commission staff, September 20, 2011.

32. Nan Li and Christopher Weuve, "China's Aircraft Carrier Ambitions," *U.S. Naval War College Review* 63: 1 (Winter 2010): 25. <http://www.usnwc.edu/Research—Gaming/China-Maritime-Studies-Institute/Publications/documents/China-s-Aircraft-Carrier-Ambitions—An-Update1.pdf>.

33. Nan Li and Christopher Weuve, "China's Aircraft Carrier Ambitions," *U.S. Naval War College Review* 63: 1 (Winter 2010): 25. <http://www.usnwc.edu/Research—Gaming/China-Maritime-Studies-Institute/Publications/documents/China-s-Aircraft-Carrier-Ambitions—An-Update1.pdf>.

34. Yoichi Kato, "U.S. commander says China aims to be a 'global military' power," *Asahi Shimbun* (Japan), December 28, 2010. <http://www.asahi.com/english/TKY201012270241.html>.

35. Hu Yinan, Li Xiaokun, and Cui Haipei, "Official confirms China building aircraft carrier," *China Daily*, July 12, 2011. http://www.chinadaily.com.cn/china/2011-07/12/content_12881089.htm.

36. Office of the Secretary of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2011* (Washington, DC: Department of Defense, 2011), p. 3.

37. Matthew M. Gula (congressional liaison at the U.S. Department of Defense), e-mail correspondence with Commission staff, September 20, 2011.

38. Xinhua, "China's defense budget to grow 12.7 pct in 2011: spokesman," March 4, 2011. http://news.xinhuanet.com/english2010/china/2011-03/04/c_13761030.htm.
39. Office of the Secretary of Defense, *Military and Security Developments Involving the People's Republic of China 2011* (Washington, DC: Department of Defense, 2011), p. 41.
40. Andrew S. Erickson and Adam P. Liff, "Understanding China's Defense Budget: What it Means, and Why it Matters," *PacNet* 16 (Honolulu, HI: March 9, 2011).
41. U.S.-China Economic and Security Review Commission, *Hearing on China's Narratives Regarding National Security Policy*, written testimony of Mark Stokes, March 10, 2011.
42. Office of the Secretary of Defense, *Military and Security Developments Involving the People's Republic of China 2011* (Washington, DC: Department of Defense, 2011), p. 41.
43. U.S.-China Economic and Security Review Commission, *Hearing on China's Narratives Regarding National Security Policy*, written testimony of Abraham Denmark, March 10, 2011.
44. Office of the Secretary of Defense, *Military and Security Developments Involving the People's Republic of China 2011* (Washington, DC: Department of Defense, 2011), p. 41.
45. Information Office of the State Council, *China's National Defense in 2010* (Beijing, China: March 2011).
46. J. Michael Cole, "China hints at capability improvements," *Jane's Defence Weekly* 48:15 (April 13, 2011): 15; and Michael S. Chase, "China's 2010 National Defense White Paper: An Assessment," *China Brief* XI: 7 (April 22, 2011): 10.
47. Michael S. Chase, "China's 2010 National Defense White Paper: An Assessment," *China Brief* XI: 7 (April 22, 2011): 10.
48. Shirley A. Kan, "China's Defense White Paper," *Memorandum to Representative Randy Forbes* (Washington, DC: Congressional Research Service, April 5, 2011), p. 1.
49. CNA China Studies Center, "PRC [People's Republic of China] White Paper 'Themes,' 1998–2010," March 2011.
50. Phillip C. Saunders and Ross Rustici, "Chinese Military Transparency: Evaluating the 2010 Defense White Paper," *Strategic Forum* 269 (July 2011); J. Michael Cole, "China hints at capability improvements," *Jane's Defence Weekly* 48:15 (April 13, 2011): 15; Dean Cheng, "The Limits of Transparency: China Releases 2010 Defense White Paper," *The Heritage Foundation Web Memo*, 3215 (April 7, 2011); Michael S. Chase, "China's 2010 National Defense White Paper: An Assessment," *China Brief* XI: 7 (April 22, 2011); and Shirley A. Kan, "China's Defense White Paper," *Memorandum to Representative Randy Forbes* (Washington, DC: Congressional Research Service, April 5, 2011), p. 2.
51. Phillip C. Saunders and Ross Rustici, "Chinese Military Transparency: Evaluating the 2010 Defense White Paper," *Strategic Forum* 269 (July 2011): 1.
52. Michael S. Chase, "China's 2010 National Defense White Paper: An Assessment," *China Brief* XI: 7 (April 22, 2011): 11.
53. Shirley A. Kan, "China's Defense White Paper," *Memorandum to Representative Randy Forbes* (Washington, DC: Congressional Research Service, April 5, 2011), p. 2.
54. Xinhua, "Chinese navy sends escort fleet to Gulf of Aden," July 3, 2011. http://www.china.org.cn/world/2011-07/03/content_22911950.htm; and DefenceWeb (South Africa), "Chinese naval escort returns from pirate patrol," August 30, 2011. http://www.defenceweb.co.za/index.php?option=com_content&view=article&id=18487:chinese-naval-escort-returns-from-pirate-patrol&catid=51:Sea&Itemid=106.
55. U.S.-China Economic and Security Review Commission, *2009 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2009), pp. 118–119.
56. Xinhua, "Chinese navy sends escort fleet to Gulf of Aden," July 3, 2011. http://www.china.org.cn/world/2011-07/03/content_22911950.htm.
57. Open Source Center, "OSC Interactive Map: Chinese PLA Navy Escort Mission Port Calls," *OSC Summary* (May 2, 2011). OSC ID: FEA20110503017394. <http://www.opensource.gov>.
58. Lauren Ploch et al., "Piracy off the Horn of Africa" (Washington, DC: Congressional Research Service, April 27, 2011), pp. 24–25. <http://www.fas.org/sgp/crs/row/R40528.pdf>.
59. Greg Torode, "Hit pirates on land, says top China general," *South China Morning Post*, May 20, 2011. <http://topics.scmp.com/news/china-news-watch/article/Hit-pirates-on-land-says-top-China-general>.

60. Xinhua, "35,860 Chinese evacuated from unrest-torn Libya," March 3, 2011. http://news.xinhuanet.com/english2010/china/2011-03/03/c_13759456.htm.
61. Adam Rawnsley, "Chinese Missile Ship Races to Libya," February 25, 2011. <http://www.wired.com/dangerroom/2011/02/chinese-missile-ship-races-to-libya-for-rescue-duty/>; and Josh Chin, "China Vows to Protect Chinese in Libya," *Wall Street Journal*, February 25, 2011. <http://online.wsj.com/article/SB10001424052748703905404576164321645905718.html>.
62. Xinhua, "35,860 Chinese evacuated from Libya all back home," March 6, 2011. http://www.china.org.cn/world/2011-03/06/content_22066694.htm.
63. Gabe Collins and Andrew Erickson, "China dispatches warship to protect Libya evacuation mission: Marks the PRC's first use of frontline military assets to protect an evacuation mission," *China SignPost* 25 (February 24, 2011). <http://www.chinasingpost.com/2011/02/china-dispatches-warship-to-protect-libya-evacuation-mission-marks-the-prc%E2%80%99s-first-use-of-frontline-military-assets-to-protect-an-evacuation-mission/>.
64. Tanjie, "PLA Air Force transporters evacuate compatriots from Libya," *PLA Daily*, March 2, 2011. http://eng.mod.gov.cn/DefenseNews/2011-03/02/content_4228001.htm.
65. Daniel Dombey, "Gates struggles to deepen ties with China," *Financial Times*, January 10, 2011. <http://www.ft.com/intl/cms/s/0/9cd104d4-1c97-11e0-a106-00144feab49a.html#axzzLXOUJ8VNX>.
66. Daniel Dombey, "Gates struggles to deepen ties with China," *Financial Times*, January 10, 2011. <http://www.ft.com/intl/cms/s/0/9cd104d4-1c97-11e0-a106-00144feab49a.html#axzzLXOUJ8VNX>.
67. Daniel Dombey, "Gates struggles to deepen ties with China," *Financial Times*, January 10, 2011. <http://www.ft.com/intl/cms/s/0/9cd104d4-1c97-11e0-a106-00144feab49a.html#axzzLXOUJ8VNX>.
68. John Pomfret, "China tests stealth fighter jet just before Gates, Hu visit," *Washington Post*, January 11, 2011. http://www.washingtonpost.com/wp-dyn/content/article/2011/01/11/AR20110111101338_pf.html.
69. Elizabeth Bumiller and Michael Wines, "Gates Warns of North Korea Missile Threat to U.S.," *New York Times*, January 11, 2011. <http://www.nytimes.com/2011/01/12/world/asia/12military.html>.
70. Julian E. Barnes, "Gates, China Discuss Nuclear Strategy," *Wall Street Journal*, January 12, 2011. <http://online.wsj.com/article/SB10001424052748703947404576076941991898836.html>.
71. U.S.-China Economic and Security Review Commission, *Hearing on China's Narratives Regarding National Security Policy*, written testimony of Andrew Scobell, March 10, 2011; and U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense Strategy and its Regional Impacts*, written testimony of Cortez A. Cooper, January 27, 2011.
72. Yuhua Hayishi and Julian E. Barnes, "Gates Leaves Beijing, Will Press Japan to Expand Its Defense Role," *Wall Street Journal*, January 13, 2011. <http://online.wsj.com/article/SB10001424052748704803604576077412162707724.html>.
73. U.S.-China Economic and Security Review Commission, *Hearing on China's Narratives Regarding National Security Policy*, written testimony of Andrew Scobell, March 10, 2011.
74. Agence France-Presse, "U.S. Rolls Out Red Carpet for China Military Chief," May 14, 2011. <http://www.defensenews.com/story.php?i=6502345>.
75. Yang Liming and Ju Hui, "Three Points of Consensus Reached, Six Specific Achievements in China-US Military Exchanges," *Zhongguo Qingnian Bao [China Youth Daily]*, May 20, 2011, OSC ID: CPP20110520787016.
76. U.S. Department of Defense, "Joint Press Conference with Adm. Mullen and Gen. Chen from the Pentagon" (Washington, DC: May 18, 2011).
77. Bill Gertz, "Chinese to view sensitive U.S. sites," *Washington Times*, May 18, 2011. <http://www.washingtontimes.com/news/2011/may/17/chinese-to-view-sensitive-us-sites/>.
78. Jeremy Page, "China Gives Mullen Rare Look at Jet, Sub," *Wall Street Journal*, July 14, 2011. <http://online.wsj.com/article/SB10001424052702304223804576443932225547482.html>; Li Xiaokun and Li Lianxing, "Warm welcome awaits Mullen," *China Daily*, July 8, 2011.
79. Michael Wines, "Bumps Remain as Military Leaders of U.S. and China Meet," *New York Times*, July 11, 2011. <http://www.nytimes.com/2011/07/12/world/asia/12china.html>.
80. Michael Wines, "Bumps Remain as Military Leaders of U.S. and China Meet," *New York Times*, July 11, 2011. <http://www.nytimes.com/2011/07/12/world/asia/12china.html>.

81. Agence France-Presse, "Mullen Asks China for Help on North Korea," July 10, 2011. <http://www.defensenews.com/story.php?i=7057993>.
82. Tom Cook, "Rising Tensions in the South China Sea: An Interview with Ian Storey" (Seattle, WA: The National Bureau of Asian Research, June 17, 2011). <http://www.nbr.org/research/activity.aspx?id=151>.
83. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense Strategy and its Regional Impacts*, written testimony of Stacy A. Pedrozo, January 27, 2011.
84. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense Strategy and its Regional Impacts*, written testimonies of Balbina Hwang, Stacy A. Pedrozo, and Jim Thomas, January 27, 2011.
85. Ian Storey, "China and the Philippines: Implications of the Reed Bank Incident," *China Brief* (May 16, 2011). [http://www.jamestown.org/single?no_cache=1&tx_ttnews\[tt_news\]=37902](http://www.jamestown.org/single?no_cache=1&tx_ttnews[tt_news]=37902).
86. Agence France-Presse, "Philippines wants UN body to broker China dispute," July 11, 2011. <http://www.asiaone.com/News/Latest+News/Asia/Story/A1Story20110711-288603.html>.
87. *Defense News*, "Philippine-U.S. Navies Unite Amid China Tensions," June 27, 2011. <http://www.defensenews.com/story.php?c=ASI&s=TOP&i=6938404>; Amanda Doronila, "Analysis: On sending Philippine Navy's biggest warship to the Spratlys," *Philippine Daily Inquirer*, June 20, 2011. <http://ph.news.yahoo.com/analysis-sending-philippine-navys-biggest-warship-spratlys-033002016.html>; and Lachlan Carmichael and Shaun Tandon, "U.S. Says it Will Provide Hardware to Philippines," *Defense News*, June 23, 2011. <http://www.defensenews.com/story.php?i=6906530>.
88. Agence France-Presse, "Philippines Ups Spending to Guard South China Sea," September 7, 2011. <http://www.defensenews.com/story.php?i=7610902&c=ASI&s=TOP>; Reuters, "China to set up South China Sea stations," September 8, 2011. <http://www.chinapost.com.tw/asia/philippines/2011/09/08/315998/Philippines-to.htm>.
89. *Defense News*, "Philippine-U.S. Navies Unite Amid China Tensions," June 27, 2011. <http://www.defensenews.com/story.php?c=ASI&s=TOP&i=6938404>.
90. Ben Bland and Kathrin Hill, "Vietnam and China oil clashes intensify," *Financial Times*, May 27, 2011. <http://www.ft.com/cms/s/0/4d3badc0-8867-11e0-a1c3-00144feabdc0.html?ftcamp=rss#axzz1QmAioYo3>.
91. BBC, "China accuses Vietnam in South China Sea row," June 10, 2011. <http://www.bbc.co.uk/news/world-asia-pacific-13723443>.
92. Dang Dinh Quy, "One Axis and Two Wings: An Update" (Diplomatic Academy of Vietnam briefing for USCC Commissioners, Washington, DC, June 26, 2011).
93. Michael Swaine and M. Taylor Fravel, "China's Assertive Behavior, Part Two: The Maritime Periphery," *China Leadership Monitor* 35 (Summer 2011): 6.
94. Andrew Higgins, "In South China Sea, a dispute over energy," *Washington Post*, September 17, 2011. http://www.washingtonpost.com/world/asia-pacific/in-south-china-sea-a-dispute-over-energy/2011/09/07/gIQA0PrQaK_story.html.
95. Cecil Morela, "Philippines protests to China over oil rig plan," Agence France-Presse, June 1, 2011. http://old.news.yahoo.com/s/afp/20110601/wl_asia_afp/philippineschinadiplomacyspratlys_20110601160852.
96. Michael D. Swaine and M. Taylor Fravel, "China's Assertive Behavior Part Two: The Maritime Periphery," *China Leadership Monitor* 35 (Summer 2011): 6. http://web.mit.edu/ssp/people/fravel/Swaine_Fravel_CLM_35_0624111.pdf; and Ben Bland, "Vietnamese fishermen on front line in China clash," *Financial Times*, June 20, 2011. <http://www.ft.com/intl/cms/s/0/0b4e8380-9b52-11e0-bbc6-00144feabdc0.html#axzz1WdFprBsj>.
97. Associated Press, "China to strengthen fisheries management in 'sensitive' waters," December 23, 2011. http://www.breitbart.com/article.php?id=D9K9I9Q80&show_article=1; and Michael D. Swaine and M. Taylor Fravel, "China's Assertive Behavior Part Two: The Maritime Periphery," *China Leadership Monitor* 35 (Summer 2011): 6. http://web.mit.edu/ssp/people/fravel/Swaine_Fravel_CLM_35_0624111.pdf.
98. VietnamNet Bridge, "Chinese military ships bully Vietnam's fishing boats," June 3, 2011. <http://www.lookatvietnam.com/2011/06/chinese-military-ships-bully-vietnams-fishing-boats.html>.
99. Associated Press, "Chinese navy confiscated fish from fishermen, Vietnamese claims," July 16, 2011. <http://www.manilastandardtoday.com/insideNews.htm?f=2011/july/16/news7.isx&d=2011/july/16>.
100. Margie Mason, "Vietnamese protest China for 3rd week," Associated Press, June 20, 2011. <http://www.chinapost.com.tw/china/national-news/2011/06/20/306846/Vietnamese-protest.htm>; and Associated Press, "Vietnamese Police Squash Anti-China Protest," August 21, 2011. <http://www.npr.org/2011/08/21/139827365/vietnamese-police-squash-anti-china-protest>.

101. Matthew Pennington, "Amid South China Sea Tensions US Says Committed to Protect Philippines," Associated Press, June 23, 2011. <http://www.660news.com/news/world/article/245086—amid-south-china-sea-tensions-us-says-it-is-committed-to-defence-of-the-philippines>.

102. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense Strategy and its Regional Impacts*, written testimony of Stacy A. Pedrozo, January 27, 2011.

103. Michael D. Swaine and M. Taylor Fravel, "China's Assertive Behavior Part Two: The Maritime Periphery," *China Leadership Monitor* 35 (Summer 2011): 6. http://web.mit.edu/ssp/people/fravel/Swaine_Fravel_CLM_35_0624111.pdf.

104. *Kyodo News* (Japan), "Chinese fishery vessel sets sail for disputed waters," September 2, 2011. <http://english.kyodonews.jp/news/2011/09/112598.html>.

105. Shi Jiangtao, "China charts course to project marine power," *South China Morning Post*, June 9, 2011.

106. *People's Daily*, "China to beef up maritime forces amid disputes," June 17, 2011. <http://english.people.com.cn/90001/90776/90883/7412388.html#>; Grace Ng, "China Beefs Up Maritime Patrol Force," *Straits Times Indonesia*, May 3, 2011. <http://www.thejakartaglobe.com/asia/china-beefs-up-maritime-patrol-force/438869>.

107. Grace Ng, "China Beefs Up Maritime Patrol Force," *Straits Times Indonesia*, May 3, 2011. <http://www.thejakartaglobe.com/asia/china-beefs-up-maritime-patrol-force/438869>.

108. Open Source Center Graphic, "Military-Related Events in South China Sea, 13 to 21 June 2011," June 21, 2011. CPP20110622017001. www.opensource.gov.

109. BBC, "Singapore urges China to clarify South China Sea claim," June 20, 2011. <http://www.bbc.co.uk/news/world-asia-pacific-13838462>.

110. Ben Bland and Girija Shivakumar, "China confronts Indian vessel," August 31, 2011. <http://www.ft.com/cms/s/0/883003ec-d3f6-11e0-b7eb-00144feab49a.html#axzz1WdFprBsj>.

111. James Rupert and Daniel Ten Kate, "China Pushing for Binding S. China Sea Code, Aquino Says," Bloomberg News, September 1, 2011. <http://www.bloomberg.com/news/2011-08-31/china-wants-binding-conduct-code-in-s-china-sea-aquino-says.html>.

112. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense Strategy and its Regional Impacts*, written testimonies of Stacy A. Pedrozo and Jim Thomas, January 27, 2011.

113. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense Strategy and its Regional Impacts*, written testimonies of Stacy A. Pedrozo and Jim Thomas, January 27, 2011.

114. Agence France-Presse, "China Stages Military Drills in South China Sea," June 17, 2011. http://www.straitstimes.com/BreakingNews/Asia/Story/STIStory_680861.html.

115. Xinhua, "PLA's Operation in S China routine drill: Ministry," August 9, 2011. http://www.chinadaily.com.cn/china/2011-08/09/content_13080729.htm.

116. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense Strategy and its Regional Impact*, written testimony of Jim Thomas, January 27, 2011.

117. *Philippine Star*, "Manila Protests Presence of Chinese Navy Vessels in Philippine Waters," June 2, 2011.

118. Philippines Department of Foreign Affairs, "Statement of the Department of Foreign Affairs on Developments in the West Philippine Sea (South China Sea)" (Pasay City, Philippines: June 1, 2011). <http://www.dfa.gov.ph/main/index.php/office-of-the-undersecretary-for-policy/3111-statement-of-the-department-of-foreign-affairs-on-developments-in-the-west-philippine-sea-south-china-sea>.

119. Association of Southeast Asian Nations, *Declaration on the Conduct of Parties in the South China Sea*, 2002. <http://www.aseansec.org/13163.htm>.

120. Ian Storey, "Recent Developments in the South China Sea" (Center for Strategic and International Studies conference, "Maritime Security in the South China Sea," Washington, DC, June 20–21, 2011).

121. Representatives of the Singaporean Ministry of Foreign Affairs, and Singaporean academics, meetings with Commissioners, Singapore, December 13, 2010; Representatives of the Indonesian Ministry of Foreign Affairs, meetings with Commissioners, Jakarta, Indonesia, December 15, 2010.

122. Representatives of the Singaporean government, meetings with Commissioners, Singapore, December 13, 2010; Representatives of the Indonesian government, meetings with Commissioners, Jakarta, Indonesia, December 15, 2010; U.S.-China Economic and Security Review Commission, *2010 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, 2010), p. 139.

123. Representatives of the Singaporean government, meeting with Commissioners, Singapore, December 13, 2010; Ian Storey, "China's Missteps in Southeast Asia: Less Charm, More Offensive" *China Brief* 10:25 (December 17, 2010). [http://www.jamestown.org/single/?no_cache=1&tx_ttnews\[tt_news\]=37294](http://www.jamestown.org/single/?no_cache=1&tx_ttnews[tt_news]=37294).

124. Representatives of the Singaporean government, meeting with Commissioners, Singapore, December 13, 2010.

125. Jim Gomez, "SE Asia risks China's ire to discuss sea dispute," Associated Press, September 22, 2011. <http://my.news.yahoo.com/se-asia-risks-chinas-ire-discuss-sea-dispute-062157276.html>; Xinhua, "China opposes attempts to internationalize South China Sea disputes," September 28, 2011. http://news.xinhuanet.com/english2010/china/2011-09/28/c_131165615.htm.

126. Long Tao, "Time to teach those around the South China Sea a lesson," *Global Times*, September 29, 2011. <http://www.globaltimes.cn/NEWS/tabid/99/ID/677717/Time-to-teach-those-around-South-China-Sea-a-lesson.aspx>.

127. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense Strategy and its Regional Impacts*, written testimonies of Jim Thomas, January 27, 2011.

128. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense Strategy and its Regional Impacts*, written testimonies of Stacy A. Pedrozo, January 27, 2011.

129. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense Strategy and its Regional Impacts*, written testimonies of Balbina Hwang, January 27, 2011.

130. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense Strategy and its Regional Impacts*, written testimonies of Stacy A. Pedrozo, January 27, 2011.

131. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense Strategy and its Regional Impacts*, written testimonies of Stacy A. Pedrozo, January 27, 2011; *People's Daily*, "China to strengthen maritime forces amid dispute," June 17, 2011. <http://english.people.com.cn/90001/90776/90883/7412388.html#>.

132. Elinor Mills, "China linked to new breaches tied to RSA," *CNET News Security Complex*, June 6, 2011. http://news.cnet.com/8301-27080_3-20068836-245/china-linked-to-new-breaches-tied-to-rsa/#ixzz1WY7QASTd; and Christopher Drew, "Stolen Data Is Tracked to Hacking at Lockheed," *New York Times*, June 3, 2011. <http://www.nytimes.com/2011/06/04/technology/04security.html>.

133. For example, the "Shadows in the Cloud" case study documented 131 compromised information systems in 31 countries. Information Warfare Monitor and Shadowserver Foundation, "Shadows in the Cloud: Investigating Cyber Espionage 2.0." April 6, 2010, p. 27. <http://shadows-in-the-cloud.net>.

134. Dmitri Alperovitch, *Revealed: Operation Shady RAT* (Santa Clara, CA: McAfee, August 2011), p. 4. <http://www.mcafee.com/us/resources/white-papers/operation-shady-rat.pdf>.

135. Dmitri Alperovitch, *Revealed: Operation Shady RAT* (Santa Clara, CA: McAfee, August 2011), p. 6. <http://www.mcafee.com/us/resources/white-papers/operation-shady-rat.pdf>.

136. Zhao Huanxin, "China names key industries for absolute state control," *China Daily*, December 19, 2006. http://www.chinadaily.com.cn/china/2006-12/19/content_762056.htm.

137. McAfee Foundstone Professional Services/McAfee Labs, *Global Energy Cyberattacks: 'Night Dragon'* (Santa Clara, CA: McAfee, February 10, 2011). <http://www.mcafee.com/us/resources/white-papers/wp-global-energy-cyberattacks-night-dragon.pdf>.

138. McAfee Foundstone Professional Services/McAfee Labs, *Global Energy Cyberattacks: 'Night Dragon'* (Santa Clara, CA: McAfee, February 10, 2011). <http://www.mcafee.com/us/resources/white-papers/wp-global-energy-cyberattacks-night-dragon.pdf>.

139. *The Official Google Blog*, "Ensuring your information is safe online," June 1, 2011. <http://googleblog.blogspot.com/2011/06/ensuring-your-information-is-safe.html>.

140. U.S.-China Economic and Security Review Commission, *2009 Annual Report to Congress* (Washington, D.C.: U.S. Government Printing Office, November 2009), p. 172. <http://www.uscc.gov/annual/report/2009/annual/report/full/09.pdf>; and Northrop Grumman Corporation, "Capability of the People's Republic of China to Conduct Cyber Warfare and Computer Network Exploitation" (contracted research paper for the U.S.-China Economic and Security Review Commission, June 2009), p. 32. <http://www.uscc.gov/researchpapers/2009/NorthropGrumman/PRC/Cyber/Paper/FINAL/Approved%20Report/16Oct2009.pdf>.

141. John Markoff and David Barboza, “2 China Schools Said to Be Tied to Online Attacks,” *New York Times*, February 18, 2010. <http://www.nytimes.com/2010/02/19/technology/19china.html>.

142. By comparison, 12 percent of the respondents (the next highest group) viewed the U.S. government as the greatest concern. Stewart Baker et al., *In the Dark: Crucial Industries Confront Cyberattacks* (Santa Clara, CA: McAfee/Center for Strategic and International Studies, April 2011), pp. 20–22. <http://www.mcafee.com/us/resources/reports/rp-critical-infrastructure-protection.pdf>.

143. Matthew Robertson and Helena Zhu, “Slip-Up in Chinese Military TV Show Reveals More Than Intended,” *Epoch Times*, updated August 28, 2011. <http://www.theepochtimes.com/n2/china-news/slip-up-in-chinese-military-tv-show-reveals-more-than-intended-60619.html>; and Edward Wong, “China State TV Deletes Video Implying Hacking of Western Sites,” *New York Times*, August 26, 2011. <http://www.nytimes.com/2011/08/27/world/asia/27china.html>.

144. Andrew Erickson and Gabe Collins, “A Smoking Cursor? New Window Opens on China’s Potential Cyberwarfare Development: CCTV 7 program raises new questions about Beijing’s support for hacking,” *China SignPost*, August 24, 2011. <http://www.chinasignpost.com/2011/08/a-smoking-cursor-new-window-opens-on-china%E2%80%99s-potential-cyberwarfare-development-cctv-7-program-raises-new-questions-about-beijing%E2%80%99s-support-for-hacking/>.

145. Office of the Secretary of Defense, *Annual Report to Congress: Military and Security Developments Involving the People’s Republic of China 2011* (Washington, DC: U.S. Department of Defense, 2011), p. 5.

146. U.S.-China Economic and Security Review Commission, *Hearing on China’s Active Defense Strategy and its Regional Impact*, written testimony of David A. Deptula, January 27, 2011.

147. U.S.-China Economic and Security Review Commission, *Hearing on China’s Active Defense Strategy and its Regional Impact*, written testimony of David A. Deptula, January 27, 2011.

148. U.S.-China Economic and Security Review Commission, *Hearing on China’s Active Defense Strategy and its Regional Impact*, written testimony of Martin C. Libicki, January 27, 2011.

149. U.S.-China Economic and Security Review Commission, *Hearing on China’s Active Defense Strategy and its Regional Impact*, written testimony of Martin C. Libicki, January 27, 2011.

150. Michael Wines, “China Creates New Agency for Patrolling the Internet,” *New York Times*, May 4, 2011. <http://www.nytimes.com/2011/05/05/world/asia/05china.html>.

151. Josh Chin, “Following Jiang Death Rumors, China’s Rivers Go Missing,” *Wall Street Journal China Real Time Report*, July 6, 2011. <http://blogs.wsj.com/chinarealtime/2011/07/06/following-jiang-death-rumors-chinas-rivers-go-missing/>.

152. *Financial Times*, “Why China fears the Arab spring,” February 28, 2011. <http://www.ft.com/cms/s/0/3442a77c-4377-11e0-8f0d-00144feabdc0.html#ixzz1XIOaqqYu>; Joe McDonald, “China Cracks Down On Internet Content,” *Associated Press*, August 24, 2011.

153. Fang Yunyu, “China’s Great Firewall Father Speaks Out,” *Global Times*, February 18, 2011. <http://special.globaltimes.cn/2011-02/624290.html>. The original source is no longer available. A copy is preserved at <http://cryptome.org/0003/gwf-father.htm>.

154. Richard Lai, “China tightens grip on VPN [virtual private networks] access amid pro-democracy protests, Gmail users also affected,” *Engadget*, March 16, 2011. <http://www.engadget.com/2011/03/16/china-tightens-grip-on-vpn-access-amid-pro-democracy-protests-g>; and Oiwan Lam, “China: Cracking down circumvention tools,” *Global Voices Online*, May 13, 2011. <http://advocacy.globalvoicesonline.org/2011/05/13/china-cracking-down-circumvention-tools/>.

155. BBC News, “China: 1.3 million websites shut in 2010,” July 13, 2011. <http://www.bbc.co.uk/news/world-asia-pacific-14138267>.

156. BGPmon.net, Untitled, March 26, 2011. <http://bgpmon.net/blog/?p=499>; and Fahmida Y. Rashid, “Facebook Traffic Diverted to China Raising Privacy Concerns,” *eWeek.com*, March 25, 2011. <http://www.eweek.com/cia/Security/Facebook-Traffic-Diverted-to-China-Raising-Privacy-Concerns-130825/>.

157. See for example, Roger Cliff et al., *Entering the Dragon’s Lair: Chinese Antiaccess Strategies and Their Implications for the United States* (Arlington, VA: RAND Corporation, 2007); Thomas G. Mahnken, “China’s Anti-Access Strategy in Historical and Theoretical Perspective,” *Journal of Strategic Studies* 34:3 (June 2011): 299–323; Office of the Secretary of Defense, *Annual Report to Congress: Military and Security Developments Involving the People’s Republic of China 2011* (Washington, DC: U.S. Department of Defense, 2011); and Bill Gertz, “China ‘A2/

AD' [Anti-Access/Area Denial] Threat," *Washington Times*, December 15, 2010. <http://www.washingtontimes.com/news/2010/dec/15/inside-the-ring-251245374/>.

158. U.S.-China Economic and Security Review Commission, *2009 Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2009), pp. 113–127.

159. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Robert J. Wittman, January 27, 2011.

160. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Daniel K. Inouye, January 27, 2011.

161. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Oriana Skylar Mastro, January 27, 2011; U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Roger Cliff, January 27, 2011; and U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Cortez A. Cooper, January 27, 2011.

162. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Roger Cliff, January 27, 2011.

163. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Cortez A. Cooper, January 27, 2011.

164. Peng Guangqian and Yao Youzhi, eds., *The Science of Military Strategy* (Beijing, China: Military Science Publishing House, 2005), p. 452.

165. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Cortez A. Cooper, January 27, 2011.

166. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Oriana Skylar Mastro, January 27, 2011.

167. Mao Zedong, *Problems of Strategy in China's Revolutionary War* (Peking [Beijing], China: Foreign Languages Press, 1965).

168. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Roger Cliff, January 27, 2011; U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of David A. Deptula, January 27, 2011; and U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Oriana Skylar Mastro, January 27, 2011.

169. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Oriana Skylar Mastro, January 27, 2011.

170. Peng Guangqian and Yao Youzhi, eds., *The Science of Military Strategy* (Beijing, China: Military Science Publishing House, 2005), p. 463.

171. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Roger Cliff, January 27, 2011.

172. Zhang Yuliang, ed., *Zhanyi Xue [The Science of Campaigns]* (Beijing: Guofang Daxue Chubanshe, 2006), p. 89. USCC staff translation.

173. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Roger Cliff, January 27, 2011.

174. Information Office of the State Council, *China's National Defense in 2010* (Beijing, China: March 2011).

175. Information Office of the State Council, *China's National Defense in 2008* (Beijing, China: January 2009).

176. Office of the Secretary of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2010* (Washington, DC: U.S. Department of Defense, 2010), p. 24.

177. Henry Kissinger, *On China* (New York: Penguin Press, 2011), p. 368.

178. Office of the Secretary of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2010* (Washington, DC: U.S. Department of Defense, 2010), p. 24.

179. Andrew Scobell, *China's Use of Military Force: Beyond the Great Wall and the Long March* (New York, New York: Cambridge University Press, 2003), p. 15.

180. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of David A. Deptula, January 27, 2011.

181. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Roger Cliff, January 27, 2011; U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of David A. Deptula, January 27, 2011; and U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Martin C. Libicki, January 27, 2011.

182. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Roger Cliff, January 27, 2011.

183. Roger Cliff (nonresident senior fellow at the Project 2049 Institute), e-mail correspondence with Commission staff, August 8, 2011.

184. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Roger Cliff, January 27, 2011; and U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of David A. Deptula, January 27, 2011.

185. Peng Guangqian and Yao Youzhi, eds., *The Science of Military Strategy* (Beijing, China: Military Science Publishing House, 2005), p. 461.

186. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Roger Cliff, January 27, 2011.

187. Zhang Yuliang, ed., *Zhanyi Xue [The Science of Campaigns]* (Beijing, China: Guofang Daxue Chubanshe, 2006), p. 96. USCC staff translation.

188. Office of the Secretary of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2010* (Washington, DC: U.S. Department of Defense, 2010), pp. 22–23; U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Oriana Skylar Mastro, January 27, 2011; U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Cortez A. Cooper, January 27, 2011; U.S.-China Economic and Security Review Commission, *2009 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2009), pp. 130–34; and Michael J. McDevitt, “The PLA Navy Anti-Access Role in a Taiwan Contingency” (paper presented at the 2010 Pacific Symposium, June 16, 2010, p. 16).

189. Michael J. McDevitt, “The Strategic and Operational Context Driving PLA Navy Building,” in *Right-Sizing the People's Liberation Army: Exploring the Contours of China's Military*, eds. Roy Kamphausen and Andrew Scobell (Carlisle, PA: U.S. Army War College, 2007), pp. 485–486; U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense Strategy and Its Regional Impact*, written testimony of Cortez A. Cooper, January 27, 2011; and Dean Cheng, “Sea Power and the Chinese State: China's Maritime Ambitions,” *Heritage Background* 2576 (July 11, 2011). <http://www.heritage.org/research/reports/2011/07/sea-power-and-the-chinese-state-chinas-maritime-ambitions>;

190. Peng Guangqian and Yao Youzhi, eds., *The Science of Military Strategy* (Beijing, China: Military Science Publishing House, 2005), p. 461.

191. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Oriana Skylar Mastro, January 27, 2011; U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Cortez A. Cooper, January 27, 2011; and U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of David A. Deptula, January 27, 2011. See also U.S.-China Economic and Security Review Commission, *2009 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2009), p. 144.

192. Officials of the Singaporean government, meeting with Commissioners, Singapore, December 13, 2010.

193. U.S.-China Economic and Security Review Commission, *2009 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2009), p. 147; and U.S.-China Economic and Security Review Commission, *2010 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2010), p. 91.

194. Information Office of the State Council, *China's National Defense in 2010* (Beijing, China: March 2011); and Information Office of the State Council, *China's National Defense in 2008* (Beijing, China: January 2009).

195. Office of the Secretary of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2011* (Washington, DC: U.S. Department of Defense, 2011), p. 32.
196. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Stacy A. Pedrozo, January 27, 2011.
197. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of David A. Deptula, January 27, 2011.
198. U.S.-China Economic and Security Review Commission, *2009 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2009), p. 136.
199. Ronald O'Rourke, *China Naval Modernization: Implications for U.S. Navy Capabilities—Background and Issues for Congress* (Washington, DC: Congressional Research Service, June 8, 2011), pp. 16–22.
200. U.S.-China Economic and Security Review Commission, *2010 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2010), pp. 85–87. The Department of Defense's recent report on China's military power similarly lists between 1,000 and 1,200 short-range ballistic missiles. Office of the Secretary of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2011* (Washington, DC: U.S. Department of Defense, 2011), p. 78.
201. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of David A. Deptula, January 27, 2011.
202. Office of the Secretary of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2011* (Washington, DC: U.S. Department of Defense, 2011), p. 3.
203. Jan Van Tol et al., *AirSea Battle: A Point of Departure Operational Concept* (Washington, DC: Center for Strategic and Budgetary Assessments, 2010), p. 18.
204. Office of the Secretary of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2011* (Washington, DC: U.S. Department of Defense, 2011), p. 78.
205. U.S.-China Economic and Security Review Commission, *2009 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2009), p. 138.
206. Ronald O'Rourke, *China Naval Modernization: Implications for U.S. Navy Capabilities—Background and Issues for Congress* (Washington, DC: Congressional Research Service, June 8, 2011), p. 42.
207. Andrew S. Erickson, Lyle J. Goldstein, and William S. Murray, "Chinese Mine Warfare: A PLA Navy 'Assassin's Mace' Capability," *China Maritime Studies* 3 (Newport, RI: U.S. Naval War College, June 2009): 25.
208. U.S.-China Economic and Security Review Commission, *2010 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2010), pp. 73–91.
209. U.S.-China Economic and Security Review Commission, *2010 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2010), p. 80.
210. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of David A. Deptula, January 27, 2011.
211. Office of the Secretary of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2011* (Washington, DC: U.S. Department of Defense, 2011), p. 28.
212. U.S.-China Economic and Security Review Commission, *2010 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2010), pp. 82–83.
213. Information Office of the State Council, *China's National Defense in 2010* (Beijing, China: March 2011).
214. Jan Van Tol et al., *AirSea Battle: A Point of Departure Operational Concept* (Washington, DC: Center for Strategic and Budgetary Assessments, 2010), pp. 19 and 21.
215. David D. Chen, "2011 PLA Military Training: Toward Greater Interoperability," *China Brief* 11:2 (January 21, 2011): 10–11.
216. Bryan Krekel, with George Bakos and Christopher Barnett, *Capability of the People's Republic of China to Conduct Cyber Warfare and Computer Network Exploitation* (McLean, VA: Northrup Grumman Corporation, October 9, 2009). [http://www.uscc.gov/researchpapers/2009/NorthropGrumman _ PRC _ Cyber _ Paper](http://www.uscc.gov/researchpapers/2009/NorthropGrumman_-_PRC_-_Cyber_-_Paper)

FINAL Approved%20Report 16Oct2009.pdf. See also U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of David A. Deptula, January 27, 2011.

217. Jan Van Tol et al., *AirSea Battle: A Point of Departure Operational Concept* (Washington, DC: Center for Strategic and Budgetary Assessments, 2010), p. 20.

218. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of David A. Deptula, January 27, 2011.

219. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Cortez A. Cooper, January 27, 2011.

220. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of David A. Deptula, January 27, 2011.

221. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Cortez A. Cooper, January 27, 2011.

222. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Dean Cheng, January 27, 2011. See also U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of David A. Deptula, January 27, 2011.

223. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Dean Cheng, January 27, 2011.

224. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Oriana Skylar Mastro, January 27, 2011.

225. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Cortez A. Cooper, January 27, 2011.

226. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Jim Thomas, January 27, 2011.

227. U.S.-China Economic and Security Review Commission, *2010 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2010), pp. 89–90.

228. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of David A. Deptula, January 27, 2011.

229. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Martin C. Libicki, January 27, 2011.

230. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of Martin C. Libicki, January 27, 2011.

231. Leo Pigaty and James C. Workman, "Testing the Survivability of Logistics Information Systems," *Army Logistician* (November-December 2004). <http://www.almc.army.mil/alog/issues/novdec04/testing.html>.

232. Bryan Krekel, with George Bakos and Christopher Barnett, *Capability of the People's Republic of China to Conduct Cyber Warfare and Computer Network Exploitation* (McLean, VA: Northrup Grumman Corporation, October 9, 2009), p. 25. http://www.uscc.gov/researchpapers/2009/NorthropGrumman_PRC_Cyber_Paper_FINAL_Approved%20Report_16Oct2009.pdf.

233. Denny Roy (senior fellow, East-West Center), meeting with Commissioners, Honolulu, HI, May 17, 2011.

234. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of David A. Deptula, January 27, 2011.

235. Yoichi Kato, "U.S. Commander says China Aims to be a 'Global Military' Power," *Asahi Shimbun* (Tokyo), December 28, 2010. <http://www.asahi.com/english/TKY201012270241.html>.

236. Thomas C. Schelling, *The Strategy of Conflict* (Cambridge, MA: Harvard University Press, 1960), p. 9.

237. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense and its Regional Impact*, written testimony of David A. Deptula, January 27, 2011.

238. Alan B. Romberg, *Rein In at the Brink of the Precipice: American Policy Toward Taiwan and U.S.-PRC Relations* (Washington, DC: Stimson Center, 2003), pp. 171–76; Andrew Scobell, *China's Use of Military Force: Beyond the Great Wall and the Long March* (New York, NY: Cambridge University Press, 2003), pp. 171–191; and Arthur S. Ding, “The Lessons of the 1995–1996 Military Taiwan Strait Crisis: Developing a New Strategy Toward the United States and Taiwan,” in *The Lessons of History: The Chinese People's Liberation Army at 75* (Carlisle, PA: Strategic Studies Institute, July 2003), pp. 379–402.

239. Dean Cheng and Peter Cugley, *The PRC [People's Republic of China] Space Program: An Open Source Examination* (Alexandria, VA: CNA, September 2008), pp. 24–27.

240. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Clay Moltz, May 11, 2011.

241. Roger Cliff, Chad J. R. Ohlandt, and David Yang, “Ready for Takeoff: China's Advancing Aerospace Industry” (contracted research paper for the U.S.-China Economic and Security Review Commission, 2011), p. 90. http://www.uscc.gov/researchpapers/2011/RAND_Aerospace_Report%5B1%5D.pdf.

242. Roger Cliff, Chad J.R. Ohlandt, and David Yang, “Ready for Takeoff: China's Advancing Aerospace Industry” (contracted research paper for the U.S.-China Economic and Security Review Commission, Washington, DC, 2011), p. 93. http://www.uscc.gov/researchpapers/2011/RAND_Aerospace_Report%5B1%5D.pdf.

243. Union of Concerned Scientists, “UCS Satellite Database (through 4/30/11)” (Cambridge, MA: 2011). http://www.ucsusa.org/nuclear_weapons_and_global_security/space_weapons/technical_issues/ucs-satellite-database.html.

244. Roger Cliff, Chad J.R. Ohlandt, and David Yang, “Ready for Takeoff: China's Advancing Aerospace Industry” (contracted research paper for the U.S.-China Economic and Security Review Commission, 2011), pp. 107–108. http://www.uscc.gov/researchpapers/2011/RAND_Aerospace_Report%5B1%5D.pdf.

245. Roger Cliff, Chad J.R. Ohlandt, and David Yang, “Ready for Takeoff: China's Advancing Aerospace Industry” (contracted research paper for the U.S.-China Economic and Security Review Commission, 2011), p. 102. http://www.uscc.gov/researchpapers/2011/RAND_Aerospace_Report%5B1%5D.pdf.

246. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Barry Watts, May 11, 2011.

247. U.S. Department of Defense, *Annual Report on the Military Power of the People's Republic of China* (Washington, DC: July 28, 2003), p. 10. <http://www.defense.gov/pubs/2003chinaex.pdf>.

248. Information Office of the State Council, *China's Space Activities in 2006* (Beijing, China: October 2006), p. 2. http://news.xinhuanet.com/english/2006-10/12/content_5193446.htm.

249. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Clay Moltz, May 11, 2011.

250. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Scott Pace, May 11, 2011.

251. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Alanna Krolikowski, May 11, 2011.

252. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Alanna Krolikowski, May 11, 2011.

253. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Alanna Krolikowski, May 11, 2011.

254. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Scott Pace, May 11, 2011.

255. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Alanna Krolikowski, May 11, 2011.

256. Information Office of the State Council, *China's National Defense in 2010* (Beijing, China: 2010), p. 28. http://merln.ndu.edu/whitepapers/China_English_2010.pdf.

257. Roger Cliff, Chad J.R. Ohlandt, and David Yang, “Ready for Takeoff: China's Advancing Aerospace Industry” (contracted research paper for the U.S.-China Eco-

omic and Security Review Commission, 2011), pp. 97–98. http://www.uscc.gov/researchpapers/2011/RAND_Aerospace_Report%5B1%5D.pdf.

258. For example, see Cheng Guangjin, “China, Russia shake hands in outer space,” *China Daily*, December 25, 2009. http://www.chinadaily.com.cn/china/2009-12/25/content_9227208.htm; Agence France-Presse, “China to explore Mars with Russia this year,” January 1, 2011. http://www.straitstimes.com/BreakingNews/TechandScience/Story/STISStory_619866.html; C. Wang et al., “A brief introduction to the SMESE mission [SMall Explorer for Solar Eruptions],” NASA.gov, 2006. http://cdaw.gsfc.nasa.gov/publications/ilws_goa2006/211_Wang.pdf; Globalsecurity.org, “Sinosat,” undated. <http://www.globalsecurity.org/space/world/china/sinostat.htm>; and Jonathan Amos, “China and UK strike space deal,” BBC, June 29, 2011. <http://www.bbc.co.uk/news/science-environment-13946179>.

259. The White House, Office of the Press Secretary, “U.S.-China Joint Statement” (Washington, DC: November 17, 2009). <http://www.whitehouse.gov/the-press-office/us-china-joint-statement>; David Weaver, “NASA [National Aeronautics and Space Administration] Administrator Statement on China Visit (10–270)” (Washington, DC: NASA Headquarters, October 25, 2010). http://www.nasa.gov/home/hqnews/2010/oct/HQ_10-270_Bolden_China.html; and The White House, Office of the Press Secretary, “U.S.-China Joint Statement” (Washington, DC: January 19, 2011). <http://www.whitehouse.gov/the-press-office/2011/01/19/us-china-joint-statement>.

260. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China’s Military and Civil Space Programs*, written testimony of Scott Pace, May 11, 2011.

261. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China’s Military and Civil Space Programs*, written testimony of Clay Moltz, May 11, 2011.

262. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China’s Military and Civil Space Programs*, written testimony of Alanna Krolikowski, May 11, 2011.

263. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China’s Military and Civil Space Programs*, written testimony of Clay Moltz, May 11, 2011.

264. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China’s Military and Civil Space Programs*, written testimony of Alanna Krolikowski, May 11, 2011.

265. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China’s Military and Civil Space Programs*, written testimony of Clay Moltz, May 11, 2011.

266. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China’s Military and Civil Space Programs*, written testimony of Clay Moltz, May 11, 2011.

267. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China’s Military and Civil Space Programs*, written testimony of Mark Stokes, May 11, 2011.

268. James Mulvenon and Rebecca Samm Tyroler-Cooper, “China’s Defense Industry on the Path to Reform” (prepared by Defense Group Incorporated for the U.S.-China Economic and Security Review Commission, October 2009), p. 19. http://www.uscc.gov/researchpapers/2009/DGI%20Report%20on%20PRC%20Defense%20Industry%20%20Final%20Version%20with%20USCC%20seal_%2002Nov2009%20_2_.pdf.

269. Micah Springut, Stephen Schlaikjer, and David Chen, “China’s Program for Science and Technology Modernization: Implications for American Competitiveness” (prepared by CENTRA, Inc., for the U.S.-China Economic and Security Review Commission, 2011), p. 57. http://www.uscc.gov/researchpapers/2011/USCC_REPORT_China%27s_Program_forScience_and_Technology_Modernization.pdf.

270. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China’s Military and Civil Space Programs*, written testimony of Alanna Krolikowski, May 11, 2011.

271. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China’s Military and Civil Space Programs*, written testimony of Alanna Krolikowski, May 11, 2011.

272. Mark Stokes, “China’s Evolving Conventional Strategic Strike Capability” (Arlington, VA: Project 2049 Institute, September 14, 2009), p. 20. http://project2049.net/documents/chinese_anti_ship_ballistic_missile_asbm.pdf.

273. U.S.-China Economic and Security Review Commission, *2010 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2010), p. 98.

274. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Alanna Krolikowski, May 11, 2011; for additional background, see Dean Cheng and Peter Cugley, *The PRC [People's Republic of China] Space Program: An Open Source Examination* (Arlington, VA: CNA, September 2008), pp. 18–20.

275. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Scott Pace, May 11, 2011.

276. Michael Sheehan, "Tiangong-1 launch betrays China's earthly ambitions," BBC News, September 29, 2011. <http://www.bbc.co.uk/news/world-asia-pacific-15089720>.

277. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Alanna Krolikowski, May 11, 2011.

278. U.S. Department of Defense, *Military and Security Developments Involving the People's Republic of China* (Washington, DC: 2010), p. 36. http://www.defense.gov/pubs/pdfs/2010_CMPR_Final.pdf.

279. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Alanna Krolikowski, May 11, 2011.

280. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Clay Moltz, May 11, 2011.

281. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Clay Moltz, May 11, 2011.

282. Eric Hagt, "Emerging Grand Strategy for China's Defense Industry Reform," in Roy Kamphausen, David Lai, and Andrew Scobell, eds., *The PLA at Home and Abroad: Assessing The Operational Capabilities Of China's Military* (Carlisle, PA: U.S. Army War College Strategic Studies Institute, June 2010), p. 522. Cited in U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Clay Moltz, May 11, 2011.

283. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Clay Moltz, May 11, 2011.

284. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Alanna Krolikowski, May 11, 2011.

285. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Alanna Krolikowski, May 11, 2011.

286. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Alanna Krolikowski, May 11, 2011.

287. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Clay Moltz, May 11, 2011.

288. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Clay Moltz, May 11, 2011.

289. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Bruce MacDonald, May 11, 2011.

290. U.S.-China Economic and Security Review Commission, *2009 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, 2009), p. 115.

291. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense Strategy and its Regional Impact*, written testimony of Dean Cheng, January 27, 2011.

292. Chang Xianqi, *Military Astronautics*, 2nd ed. (Beijing, China: National Defense Industries Press, 2005). OSC ID: CPP20091231572001.

293. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense Strategy and its Regional Impact*, written testimony of Dean Cheng, January 27, 2011.

294. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Mark Stokes, May 11, 2011.

295. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Alanna Krolikowski, May 11, 2011.
296. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Mark Stokes, May 11, 2011.
297. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Mark Stokes, May 11, 2011.
298. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Alanna Krolikowski, May 11, 2011.
299. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Mark Stokes, May 11, 2011.
300. U.S.-China Economic and Security Review Commission, *Hearing on China's Emergent Military Aerospace and Commercial Aviation Capabilities*, testimony of Roger Cliff, March 20, 2010.
301. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, testimony of Frank Wolf, May 11, 2011.
302. U.S.-China Economic and Security Review Commission, *Hearing on China's Emergent Military Aerospace and Commercial Aviation Capabilities*, testimony of Wayne Ulman, March 20, 2010.
303. Mark Stokes, "China's Evolving Conventional Strategic Strike Capability" (Arlington, VA: Project 2049 Institute, September 14, 2009), p. 14. http://project2049.net/documents/chinese_anti_ship_ballistic_missile_asbm.pdf.
304. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Barry D. Watts, May 11, 2011.
305. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense Strategy and its Regional Impact*, written testimony of David A. Deptula, January 27, 2011.
306. *Washington Times*, "U.S. deploys warfare unit to jam enemy satellites," September 21, 2005. <http://www.washingtontimes.com/news/2005/sep/21/20050921-102706-1524r/>.
307. *Economist*, "Endangered birds," December 9, 2010. <http://www.economist.com/node/17647639>.
308. Matt Peckham, "Astronauts Safe From Space Debris Threat to International Space Station," *Time.com*, April 5, 2011. <http://techland.time.com/2011/04/05/crew-seeks-cover-as-space-debris-threatens-international-space-station/#ixzz1SfxcMKgv>.
309. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Bruce MacDonald, May 11, 2011.
310. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Dean Cheng, May 11, 2011.
311. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense Strategy and its Regional Impact*, written testimony of David A. Deptula, January 27, 2011.
312. For example, see U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Dean Cheng, May 11, 2011.
313. Chang Xianqi, *Military Astronautics*, 2nd ed. (Beijing, China: National Defense Industries Press, 2005), pp. 68–71. OSC ID: CPP20091231572001.
314. Chang Xianqi, *Military Astronautics*, 2nd ed. (Beijing, China: National Defense Industries Press, 2005), p. 70. OSC ID: CPP20091231572001.
315. Chang Xianqi, *Military Astronautics*, 2nd ed. (Beijing, China: National Defense Industries Press, 2005), p. 59. OSC ID: CPP20091231572001.
316. Chang Xianqi, *Military Astronautics*, 2nd ed. (Beijing, China: National Defense Industries Press, 2005), p. 68. OSC ID: CPP20091231572001.
317. Chang Xianqi, *Military Astronautics* 2nd ed. (Beijing, China: National Defense Industries Press, 2005), pp. 59, 69. OSC ID: CPP20091231572001.
318. Chang Xianqi, *Military Astronautics*, 2nd ed. (Beijing, China: National Defense Industries Press, 2005), p. 68. OSC ID: CPP20091231572001.
319. Chang Xianqi, *Military Astronautics*, 2nd ed. (Beijing, China: National Defense Industries Press, 2005), pp. 69–70. OSC ID: CPP20091231572001.

320. Chang Xianqi, *Military Astronautics*, 2nd ed. (Beijing, China: National Defense Industries Press, 2005), p. 68. OSC ID: CPP20091231572001.
321. Chang Xianqi, *Military Astronautics*, 2nd ed. (Beijing, China: National Defense Industries Press, 2005), p. 59. OSC ID: CPP20091231572001.
322. Roger Cliff, Chad J.R. Ohlandt, and David Yang, "Ready for Takeoff: China's Advancing Aerospace Industry" (contracted research paper for the U.S.-China Economic and Security Review Commission, 2011), pp. 107–11. http://www.uscc.gov/researchpapers/2011/RAND_Aerospace_Report%5B1%5D.pdf.
323. Roger Cliff, Chad J.R. Ohlandt, and David Yang, "Ready for Takeoff: China's Advancing Aerospace Industry" (contracted research paper for the U.S.-China Economic and Security Review Commission, 2011), p. 111. http://www.uscc.gov/researchpapers/2011/RAND_Aerospace_Report%5B1%5D.pdf.
324. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Gregory L. Schulte, May 11, 2011; Office of the Director of National Intelligence, *National Security Space Strategy Unclassified Summary* (Washington, DC: U.S. Department of Defense, January 2011.)
325. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Gregory L. Schulte, May 11, 2011.
326. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Dean Cheng, May 11, 2011.
327. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Mark Stokes, May 11, 2011.
328. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, testimony of Gregory L. Schulte, May 11, 2011.
329. U.S.-China Economic and Security Review Commission, *Hearing on China's Active Defense Strategy and its Regional Impact*, written testimony of David A. Deptula, January 27, 2011.
330. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Gregory L. Schulte, May 11, 2011.
331. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Scott Pace, May 11, 2011.
332. U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Clay Moltz, May 11, 2011.

