

## **Bibliography**

- Abid, Mohamed M. *Spacecraft Sensors*. Hoboken, NJ: John Wiley & Sons, 2005.
- “Agreement between the Government of Canada and the Government of the United States of America on the North American Aerospace Defense Command,” 28 April 2006. [http://www.treaty-accord.gc.ca/ViewTreaty.asp?Treaty\\_ID=105060&bPrint=True&Language=0](http://www.treaty-accord.gc.ca/ViewTreaty.asp?Treaty_ID=105060&bPrint=True&Language=0) (accessed 8 April 2008).
- Air Force Doctrine Document (AFDD) 1. *Air Force Basic Doctrine*, 17 November 2003.
- AFDD 2-2. *Space Operations*, 27 November 2006.
- AFDD 2-2.1. *Counterspace Operations*, 2 August 2004.
- Air Force Institute of Technology Center for MASINT Studies and Research. “Intelligence: Toward a Better Definition.” <http://www.afit.edu/cmsr/Intelligence2.cfm> (accessed 18 March 2008).
- Air Force Qualification Training Package (AFQTP) 2EXXX-201LB. “Communications-Electronics (C-E) Manager’s Handbook.” <http://www.armymars.net/ArmyMARS/MilInfo/cemgrs-handbook.pdf> (accessed 24 February 2008).
- Air Force Space Command (AFSPC). “Advanced Extremely High Frequency System.” Fact Sheet. <http://www.afspc.af.mil/library/factsheets/factsheet.asp?id=7758> (accessed 1 May 2009)
- . “AFSPC.” Fact Sheet. <http://www.af.mil/information/factsheets/factsheet.asp?id=155> (accessed 1 March 2008).
- . “Evolved Expendable Launch Vehicle.” Fact Sheet. <http://www.afspc.af.mil/library/factsheets/factsheet.asp?id=3643> (accessed 18 February 2008).
- . “Global Positioning System Constellation Status.” <http://gps.afspc.af.mil/gps/> (accessed 17 April 2009).
- . “MILSTAR Satellite Communications System.” Fact Sheet. <http://www.af.mil/information/factsheets/factsheet.asp?fsID=118> (accessed 12 February 2008).
- . “Space Based Infrared Systems.” Fact Sheet. <http://www.afspc.af.mil/library/factsheets/factsheet.asp?id=3675> (accessed 7 April 2008).
- . “Space Innovation and Development Center.” Fact Sheet. <http://www.afspc.af.mil/library/factsheets/factsheet.asp?id=3651> (accessed 1 March 2008).
- . *Space Surveillance Network (SSN) Site Information Handbook*, 24 October 2007.
- . “Wideband Global SATCOM Satellite.” <http://www.afspc.af.mil/library/factsheets/factsheet.asp?id=5582> (accessed 14 February 2008).
- AFSPC Pamphlet (AFSPCPAM) 15-2. *Space Environmental Impacts on DOD Operations*, 1 October 2003, certified current 7 December 2007.
- Air Force Weather Agency (AFWA). “AFWA Space Weather Flight.” <http://www.afweather.af.mil/library/factsheets/factsheet.asp?id=5090> (accessed 16 April 2009).
- Amateur Radio Satellite Corporation. “Keplerian Elements Formats.” <http://www.amsat.org/amsat/keps/formats.html> (accessed 18 April 2008).
- Arianespace. “Launch Status.” [http://www.arianespace.com/site/search/search\\_sub\\_index.html](http://www.arianespace.com/site/search/search_sub_index.html) (accessed 24 February 2008).
- Army Field Manual (FM) 3-14. *Space Support to Army Operations*, 18 May 2005.

BIBLIOGRAPHY

- Army Space and Missile Defense Command (SMDC). "About USASMDC." <http://www.smdc.army.mil/SMDC/About.html> (accessed 1 March 2008).
- Arnold, H. J. P., ed. *Man in Space: An Illustrated History of Spaceflight*. New York: CLB Smithmark Publishing, 1993.
- Associated Press. "Iran Launches Research Rocket, Unveils Space Center." *FOXNews.com*. <http://www.foxnews.com/story/0,2933,327977,00.html> (accessed 6 February 2008).
- Astronautix. "Advanced Tiros N." <http://www.astronautix.com/craft/advirosn.htm> (accessed 24 January 2008).
- . "Atlas V." <http://www.astronautix.com/lvs/atlasv.htm> (accessed 18 February 2008).
- . "DSP." <http://www.astronautix.com/craft/dsp.htm> (accessed 8 April 2008).
- . "Milstar." <http://www.astronautix.com/craft/milstar.htm> (accessed 19 February 2008).
- . "Taurus." <http://www.astronautix.com/lvs/taurus.htm> (accessed 16 February 2008).
- AtomicArchive.com. "Nuclear Radiation." <http://www.atomicarchive.com/Effects/effects14.shtml> (accessed 18 May 2009).
- Baar, James, and William E. Howard. *Polaris!* New York: Harcourt, Brace, 1960.
- Baker, David, ed. *Jane's Space Directory, 2002–2003*. Alexandria, VA: Jane's Information Group, 2002.
- . *Jane's Space Directory, 2003–2004*. Alexandria, VA: Jane's Information Group, 2003.
- Ball, Desmond. *A Base for Debate: The US Satellite Station at Nurrungar*. North Sydney, Australia: Allen & Unwin, 1987.
- . "Assessing China's ASAT Program." Austral Special Report 07-14S, 14 June 2007. <http://www.nautilus.org/~rmit/forum-reports/0714s-ball/fig1-schematic.html> (accessed 11 May 2009).
- Bergaust, Erik. *Rocket City, U.S.A.: From Huntsville, Alabama to the Moon*. New York: Macmillan, 1963.
- Bertell, Rosalie. "Background of the HAARP Project." <http://www.earthpulse.com/src/subcategory.asp?catid=1&subcatid=1> (accessed 2 April 2009).
- Beyda, William J. *Data Communications: From Basics to Broadband*. 3rd ed. Boston, MA: Pearson Custom Publishing, 2002.
- Bloomfield, Lincoln P. "The Prospects for Law and Order." In *Outer Space: New Challenge to Law and Policy*, edited by J. E. S. Fawcett. Oxford: Clarendon Press, 1984.
- Boeing. "Boeing Satellites: Milstar II." [http://www.boeing.com/defense-space/space/bss/factsheets/government/milstar\\_ii/milstar\\_ii.html](http://www.boeing.com/defense-space/space/bss/factsheets/government/milstar_ii/milstar_ii.html) (accessed 19 February 2008).
- . "Integrated Defense Systems: Boeing 702 Fleet." <http://www.boeing.com/defense-space/space/bss/factsheets/702/702fleet.html> (accessed 20 March 2008).
- . "Successful Launch Orbits the 11th Boeing-Built UHF Follow-On Naval Satellite." [http://www.boeing.com/news/releases/2003/q4/nr\\_0312170.html](http://www.boeing.com/news/releases/2003/q4/nr_0312170.html) (accessed 7 April 2008).
- . "Transformational Wideband Communication Capabilities for the Warfighter." [http://www.boeing.com/defense-space/space/bss/factsheets/702/wgs/wgs\\_factsheet.html](http://www.boeing.com/defense-space/space/bss/factsheets/702/wgs/wgs_factsheet.html) (accessed 14 February 2008).

- . “Wideband Global SATCOM Backgrounder.” [http://www.boeing.com/defense-space/space/bss/factsheets/702/wgs/docs/WGS\\_overview.pdf](http://www.boeing.com/defense-space/space/bss/factsheets/702/wgs/docs/WGS_overview.pdf) (accessed 14 February 2008).
- “Boeing Completes On-Orbit Handover of Wideband Global SATCOM Satellite to USAF,” *Space War*, [http://www.spacewar.com/reports/Boeing\\_Completes\\_On\\_Orbit\\_Handover\\_Of\\_Wideband\\_Global\\_SATCOM\\_Satellite\\_To\\_USAF\\_999.html](http://www.spacewar.com/reports/Boeing_Completes_On_Orbit_Handover_Of_Wideband_Global_SATCOM_Satellite_To_USAF_999.html) (accessed 14 February 2008).
- Bond, Peter. *The Continuing Story of the International Space Station*. Chichester, UK: Praxis Publishing, 2002.
- Briefing. 1st Space Control Squadron, 614th Space Operations Group. Subject: Welcome to the 1st Space Control Squadron, 4 June 2007.
- Brinton, Turner. “Longer Life Expected for First WGS Satellite.” *Space News*. [https://halfway.peterson.af.mil/NSSI/NSSISpaceNewsArchives/20080201\\_NSSISpaceNews.doc](https://halfway.peterson.af.mil/NSSI/NSSISpaceNewsArchives/20080201_NSSISpaceNews.doc) (accessed 14 February 2008).
- Broussely, Michel. *Industrial Applications of Batteries: From Cars to Aerospace and Energy*, edited by Gianfranco Pistoia. Cambridge, MA: Elsevier Science, 2007.
- Brown, Lt Col Kendall K., ed. *Space Power Integration: Perspectives from Space Weapons Officers*. Maxwell AFB, AL: Air University Press, 2006.
- Bush, Pres. George W. “Remarks at a Memorial Service for the STS-107 Crew of the Space Shuttle *Columbia* in Houston, Texas,” 4 February 2003. Washington, DC: Government Printing Office, 2003. <http://fdsys.gpo.gov/fdsys/pkg/WCPD-2003-02-10/pdf/WCPD-2003-02-10-Pg156.pdf> (accessed 27 March 2009).
- . “A Renewed Spirit of Discovery.” Program announcement, 14 January 2004. [http://georgewbush-whitehouse.archives.gov/space/renewed\\_spirit.html](http://georgewbush-whitehouse.archives.gov/space/renewed_spirit.html) (accessed 30 March 2009).
- Butler, Amy. “Fourth Satellite Busts Budget.” *Aviation Week*, 4 March 2008. [http://www.aviationweek.com/aw/generic/story\\_channel.jsp?channel=space&id=news/AEHF03048.xml](http://www.aviationweek.com/aw/generic/story_channel.jsp?channel=space&id=news/AEHF03048.xml) (accessed 15 March 2008).
- Buxbaum, Peter A. “Wideband Comms: Change Is in the Air.” *Defense Systems*, December 2007.
- Camp, William W., Joseph T. Mayhan, and Robert M. O’Donnell. “Wideband Radar for Ballistic Missile Defense and Range-Doppler Imaging of Satellites.” *Lincoln Laboratory Journal* 12, no. 2 (2000): 267–80.
- Chairman of the Joint Chiefs of Staff (CJCS) Instruction 6250.01. *Satellite Communications*, 30 April 2007.
- CJCS Manual 3122.03. *Joint Operation Planning and Execution System*. Vol. 2, *Planning Formats and Guidance*, 17 August 2007.
- Chaisson, Eric, and Steve McMillan. *Astronomy Today*. Englewood Cliffs, NJ: Prentice Hall, 1993.
- Chartrand, Mark R. *Satellite Communications for the Nonspecialist*. Bellingham, WA: SPIE: The International Society for Optical Engineering, 2004.
- Chilton, Gen Kevin. “AFSPC Wraps up Busy 2006 Providing Spacepower.” *Astro News*, 9 February 2007. [http://www.aerotechnews.com/Astro/Astro\\_020907.pdf](http://www.aerotechnews.com/Astro/Astro_020907.pdf) (accessed 16 April 2008).
- Chobotov, Vladimir A., ed. *Orbital Mechanics*. 3rd ed. Reston, VA: American Institute of Aeronautics and Astronautics, Inc., 2002.

BIBLIOGRAPHY

- Civil Air Patrol (CAP) Advanced Technology Group. "Satellite Tool Kit Lesson Plans: Orbital Mechanics Power Point Slides Day 2." <http://atg.cap.gov/> (accessed 23 March 2008).
- Commercial Space Act of 1998*. Public Law 105-303. HR 1702 (28 October 1998). <http://www.nasa.gov/offices/ogc/commercial/CommercialSpaceActof1998.html> (accessed 2 April 2009).
- Commission to Assess US National Security Space Management and Organization. *Report of the Commission*. 11 January 2001. [http://space.au.af.mil/space\\_commission/index.htm](http://space.au.af.mil/space_commission/index.htm) (accessed 11 May 2009).
- Communications Act of 1934 as Amended by the Telecommunications Act of 1996*. <http://www.fcc.gov/Reports/1934new.pdf> (accessed 22 May 2009).
- Congress, Office of Technology Assessment. *Global Change Research and NASA's Earth Observing System, OTA-BP-ISC-122*. Washington, DC: Government Printing Office, November 1993.
- Cooper, H. F. *Summary of SDI Programs and Plans for Theater and National Ballistic Missile Defenses*. Washington, DC: Strategic Defense Initiative Organization, 4 January 1993.
- Cooper, John Cobb. *Explorations in Aerospace Law: Selected Essays by John Cobb Cooper*, edited by Ivan Vlastic. Montreal: McGill University Press, 1968.
- Corbett, Julian S. *Some Principles of Maritime Strategy*, introduction and notes by Eric J. Grove. Annapolis, MD: Naval Institute Press, 1988.
- Defense Information Systems Agency (DISA). "Enhanced Mobile Satellite Services (EMSS)." <http://www.disa.mil/services/emss.html> (accessed 2 April 2008).
- "Defense Support Program." Federation of American Scientists. <http://www.fas.org/spp/military/program/warning/dsp.htm> (accessed 8 April 2008).
- Department of Defense (DOD). "Military Strategic and Tactical Relay (MILSTAR) Satellite System." FY99 Annual Report. <http://www.globalsecurity.org/military/library/budget/fy1999/dot-e/airforce/99milstar.html> (accessed 29 February 2008).
- . *Unmanned Aerial Vehicles Roadmap 2002–2027*. Washington, DC: Office of the Secretary of Defense, December 2002.
- DOD Directive 3100.10. *Space Policy*, 9 July 1999. <http://www.dtic.mil/whs/directives/corres/pdf/310010p.pdf> (accessed 15 May 2009).
- DOD, Office of the Undersecretary of Defense for Acquisition, Technology, and Logistics. "Moscow Treaty: Article-by-Article Analysis." [http://www.dod.mil/acq/acic/treaties/sort/sort\\_axa.htm](http://www.dod.mil/acq/acic/treaties/sort/sort_axa.htm) (accessed 18 May 2009).
- Dicerto, J. J. *Missile Base beneath the Sea: The Story of Polaris*. New York: St. Martin's Press, 1967.
- DiNunzio, Mario R. *Theodore Roosevelt: An American Mind*. New York: Penguin, 1994.
- Dolman, Everett C. *Astropolitik: Classical Geopolitics in the Space Age*. New York: Frank Cass Publishers, 2002.
- "DSCS-3." GlobalSecurity.org. [http://www.globalsecurity.org/space/systems/dscs\\_3.htm](http://www.globalsecurity.org/space/systems/dscs_3.htm) (accessed 11 February 2008).
- el-Hasan, Muhammed. "Northrop Hopes for Satellite Bid." *Daily Breeze.com*, 26 October 2007.
- el-Rabbany, Ahmed. *Introduction to GPS: The Global Positioning System*. Norwood, MA: Artech House, 2002.
- Erwin, Sandra I. "High Frequency: Navy Upbeat about Communications Spacecraft, Despite Radio Troubles." *National Defense*, July 2007.

- European Space Agency (ESA). "Aurora Exploration Programme." [http://www.esa.int/SPECIALS/Aurora/SEMZOS39ZAD\\_0.html](http://www.esa.int/SPECIALS/Aurora/SEMZOS39ZAD_0.html) (accessed 6 February 2008).
- . "Meteosat Second Generation." [http://www.esa.int/esaMI/MSG/SEM4BEULWFE\\_0.html](http://www.esa.int/esaMI/MSG/SEM4BEULWFE_0.html) (accessed 24 February 2008).
- . "MetOp: Meteorological Missions." [http://www.esa.int/esaLP/SEMN1FAATME\\_LPmetop\\_0.html](http://www.esa.int/esaLP/SEMN1FAATME_LPmetop_0.html) (accessed 19 April 2008).
- ESA Science and Technology. "Plasma Regions: The Magnetotail." <http://sci.esa.int/science-e/www/object/index.cfm?fobjectid=33272&fbodylongid=1171> (accessed 16 April 2009).
- Federici, Gary. *From the Sea to the Stars*. Naval Historical Center online publication. <http://www.history.navy.mil/books/space/Chapter4.htm> (accessed 24 February 2008).
- Fleet Numerical Meteorology and Oceanography Center (FNMOC). "Fleet Numerical Meteorology & Oceanography Center." Command brief. [https://www.fnmoc.navy.mil/public/welcome/cmd\\_brief.pdf](https://www.fnmoc.navy.mil/public/welcome/cmd_brief.pdf) (accessed 24 February 2008).
- Fought, Bonnie E. "Legal Aspects of the Commercialization of Space Transportation Systems." *Berkeley Technology Law Journal* 3, no. 2 (Spring 1988). <http://www.law.berkeley.edu/journals/btlj/articles/vol3/fought.html> (accessed 19 May 2009).
- "Ft. Detrick Base Guide: 53rd Signal Battalion." [dcmilitary.com. http://www.dcmilitary.com/special\\_sections/sw/082807\\_Detrick/ss\\_140741\\_31958.shtml](http://www.dcmilitary.com/special_sections/sw/082807_Detrick/ss_140741_31958.shtml) (accessed 13 February 2008).
- General Accounting Office (GAO). *Improvements Needed in Military Space Systems' Planning and Education*. Washington, DC: GAO, May 2000.
- . *Seasat Project*. PSAD-76-76 (Procurement and Systems Acquisition Division). Washington, DC: GAO, 25 February 1976.
- Genesis Mission. "Genesis Launch Vehicle: The Delta Rocket." [http://www.genesismission.org/educate/scimodule/LaunchPropulsion/L&P\\_PDFs/C4\\_STdeltarocket.pdf](http://www.genesismission.org/educate/scimodule/LaunchPropulsion/L&P_PDFs/C4_STdeltarocket.pdf) (accessed 10 February 2008).
- GeoEye Satellite Constellation. "IKONOS." <http://www.geoeye.com/corporate/constellation.htm#IKONOS>.
- Giancoli, Douglas C. *Physics for Scientists and Engineers with Modern Physics*. Englewood Cliffs, NJ: Prentice Hall, 1989.
- Google Lunar X Prize. Web site. <http://www.googlelunarxprize.org/lunar/competition/guidelines> (accessed 5 February 2008).
- GPS Operations Center. *NAVSTAR GPS User Equipment Introduction: Public Release Version*, September 1996. [http://gps.afspc.af.mil/gpsoc/gps\\_documentation.aspx](http://gps.afspc.af.mil/gpsoc/gps_documentation.aspx) (accessed 7 May 2009).
- Grant, August E., and Jennifer H. Meadows, eds. *Community Technology Update*. 8th ed. St. Louis, MO: Focal Press, 2002.
- Green, Constance, and Milton Lomask. *Vanguard: A History*. NASA History Series. Washington, DC: NASA, 1970.
- Gruntman, Mike. *Blazing the Trail: The Early History of Spacecraft and Rocketry*. Reston, VA: American Institute of Aeronautics and Astronautics, 2004.
- Hahn, CW2 Garth R., CW2 Anthony Kellar, and CW2 Steven Stubblefield. "Satellite Communications: Operating Together for National Defense." *Army Space Journal* 3, no. 1 (Winter/Spring 2004): 24–27.
- Hardesty, Von, and Gene Eisman. *Epic Rivalry: The Inside Story of the Soviet and American Space Race*. Washington, DC: National Geographic Society, 2007.



BIBLIOGRAPHY

- Harland, David M. *The Story of the Space Shuttle*. Chichester, UK: Praxis Publishing, 2004.
- Harvey, Brian. *Russia in Space: The Failed Frontier?* Chichester, UK: Praxis Publishing, 2001.
- Hattendorf, John B. "The Uses of Maritime History in and for the Navy." *Naval War College Review* 56, no. 2 (Spring 2003): 13–38.
- Hays, Peter L., James M. Smith, Alan R. Van Tassel, and Guy M. Walsh, eds. *Spacepower for a New Millennium: Space and U.S. National Security*. New York: McGraw-Hill, 2000.
- Hebert, Adam J. "The ICBM Makeover." *Air Force Magazine* 88, no. 10 (October 2005): 34–39.
- Hollinger, Keith. "Narrowband SATCOM Support—Current/Future." Presentation. 2006 LandWarNet Conference, 23 August 2006.
- "House Science Committee Hearing Charter: The Future of NPOESS: Results of the Nunn-McCurdy Review of NOAA's Weather Satellite Program." SpaceRef.com. <http://www.spaceref.com/news/viewsr.html?pid=20863> (accessed 19 April 2008).
- Howe, Dennis, ed. *FOLDOC: Free On-Line Dictionary of Computing*. <http://www.foldoc.org> (accessed 11 May 2009).
- Howes, Kelly King. *War of 1812*. Detroit, MI: UXL, 2002.
- "Hypersonic Cruise Vehicle Force Application and Launch from CONUS." GlobalSecurity.org. <http://www.globalsecurity.org/space/systems/hcv.htm> (accessed 21 February 2008).
- Indian Space Research Organization. Web site. <http://www.isro.org/> (accessed 6 February 2008).
- Interagency Operations Security (OPSEC) Support Staff. *Operations Security Intelligence Threat Handbook*, April 1996, revised May 1996. <http://www.fas.org/irp/nsa/ioss/threat96/part02.htm> (accessed 18 March 2008).
- . "OPSEC Glossary of Terms." <http://www.ioss.gov/docs/definitions.html> (accessed 27 April 2009).
- International Meteor Organization (IMO). "IMO Meteor Shower Calendar 2007." <http://www.imo.net/calendar/2007> (accessed 16 April 2009).
- Isaacs, R. G., and J. C. Barnes. "Intercomparison of Cloud Imagery from the DMSP OLS, NOAA AVHRR, GOES VISSR, and Landsat MSS." *Journal of Atmospheric and Oceanic Technology* 4 (December 1987): 647–667. <http://ams.allenpress.com/archive/1520-0426/4/4/pdf/i1520-0426-4-4-647.pdf> (accessed 24 February 2008).
- Japanese Meteorological Agency. "Meteorological Satellites." <http://mscweb.kishou.go.jp/general/activities/gms/index.htm> (accessed 24 February 2008).
- Jenkins, Dennis R. *Space Shuttle: The History of Developing the National Space Transportation System*. Marceline, MO: Walsworth Publishing, 1992.
- . *Space Shuttle: The History of the National Space Transportation System: The First 100 Missions*. Cape Canaveral, FL: Dennis Jenkins Publishing, 2001.
- Joint Forces Command. "Joint Forces Command Glossary." [www.jfcom.mil/about/glossary.htm](http://www.jfcom.mil/about/glossary.htm).
- Joint Interoperability Test Command. "Tactical Data Dissemination System (TDDS)." <http://jitc.fhu.disa.mil/gccsiop/interfaces/tdds.pdf> (accessed 7 April 2008).
- Joint Publication (JP) 1-02. *Department of Defense Dictionary of Military and Associated Terms*, 12 April 2001 (as amended through 17 October 2008).
- JP 2-0. *Joint Intelligence*, 22 June 2007.

- JP 3-14. *Space Operations*, 6 January 2009.
- JP 5-0. *Joint Operation Planning*, 26 December 2006.
- Joint Requirements Oversight Council. *Joint Capabilities Document for Positioning, Navigation and Timing*, Version 7.1 Draft, April 2006.
- Jussel, Judson J. *Space Power Theory: A Rising Star*. Maxwell AFB, AL: Air University Press, 1998.
- Kish, George. *A Source Book in Geography*. Cambridge, MA: Harvard University Press, 1978.
- Klein, Lt Cdr John J. "Corbett in Orbit: A Maritime Model for Strategic Space Theory." *Naval War College Review* 57, no. 1 (Winter 2004): 59–74.
- Kramer, Herbert J. *Observation of the Earth and Its Environment: Survey of Missions and Sensors*. 4th ed. New York: Springer, 2002.
- Labrador, Virgil. "Military Satellite Market: Opportunities and Challenges." *MilsatMagazine* 1, no. 1 (First Quarter 2007): 16.
- Lambakis, Steven. *On the Edge of the Earth: The Future of American Space Power*. Lexington, KY: University Press of Kentucky, 2001.
- Larson, Wiley J., and James R. Wertz, eds. *Space Mission Analysis and Design*. 3rd ed. El Segundo, CA: Microcosm Press, 1999.
- Launius, Roger D. *Frontiers of Space Exploration*. Westport, CT: Greenwood Press, 1998.
- . "The Satellite and Rocket Research Panel." NASA History Office home page. <http://www.hq.nasa.gov/office/pao/history/index.html> (accessed 16 January 2008).
- . *Space Stations: Base Camps to the Stars*. Washington, DC: Smithsonian Books, 2003.
- Launius, Roger D., and Dennis R. Jenkins. *To Reach the High Frontier: A History of U.S. Launch Vehicles*. Lexington, KY: University Press of Kentucky, 2002.
- Lazar, Steven. "Modernization and Move to GPS III." *Crosslink*, Summer 2002. <http://www.aero.org/publications/crosslink/summer2002/07.html> (accessed 12 March 2008).
- Lee, Col James G. "Counterspace Operations for Information Dominance." In *Beyond the Paths of Heaven: The Emergence of Space Power Thought*, edited by Col Bruce M. DeBlois. Maxwell AFB, AL: Air University Press, 1999.
- Leland, Joe, and Isaac Porche. *Future Army Bandwidth Needs and Capabilities*. Santa Monica, CA: RAND Corporation, 2004.
- Ley, Willy. *Rockets, Missiles, and Men in Space*. New York: Viking Press, 1968.
- Liopiros, Kostas, and Edward Lam. "Extremely High Frequency Satellites Offer Flexibility." *Signal* 44, no. 11 (July 1990): 77.
- Lockheed Martin. "MILSTAR." <http://www.lockheedmartin.com/products/Milstar/index.html> (accessed 19 February 2008).
- Lunar and Planetary Institute. "About Comets." <http://www.lpi.usra.edu/education/explore/comets/> (accessed 16 April 2009).
- Lupton, Lt Col David E. *On Space Warfare: A Space Power Doctrine*. Maxwell AFB, AL: Air University Press, 1988.
- Mahan, Alfred Thayer. *The Influence of Sea Power upon History, 1660–1783*. New York: Hill and Wang, 1963.
- Mango, Stephen A. "NPOESS/NPP Calibration/Validation/Verification Program: Its Role in Emerging Global Remote Sensing Systems and Its Potential for Improved Numerical Weather Prediction and Climate Monitoring." <http://wgcv.ceos.org/docs/plenary/wgcv24/MangoWGCV24.pdf> (accessed 19 April 2008).

BIBLIOGRAPHY

- Martin, Donald H. *Communications Satellites, 1958–1995*. El Segundo, CA: Aerospace Press, 1996.
- . “A History of U.S. Military Satellite Communication Systems.” *Crosslink* 3, no. 1 (Winter 2001/2002): 8–13.
- McClendon, Col James W. “Information Warfare: Impacts and Concerns.” In *Battlefield of the Future: 21st Century Warfare Issues*, edited by Barry R. Schneider and Lawrence E. Grinter. Maxwell AFB, AL: Air University Press, 1995.
- McDonald, Keith D. “The Modernization of GPS: Plans, New Capabilities and Future Relationship to Galileo.” *Journal of Global Positioning System* 1, no. 1 (2002): 1–17.
- McDonald, Robert A., and Sharon K. Moreno. *Raising the Periscope: Grab and Poppy: America’s Early ELINT Satellites*. Chantilly, VA: NRO, 2005.
- McLaughlin, William I. “Walter Hohmann’s Roads in Space.” *Journal of Space Mission Architecture*, issue 2 (Fall 2000): 1–14. <http://www2.jpl.nasa.gov/csmad/journal/issue2/toc.pdf> (accessed 10 January 2008).
- Mehuron, Tamar A., ed. *2002 Space Almanac*. *Air Force Magazine*, August 2002.
- “Microcosm’s Scorpius/Sprite.” GlobalSecurity.org. <http://www.globalsecurity.org/space/systems/sprite.htm> (accessed 19 February 2008).
- Moody, Maj Jay A. *Achieving Affordable Operational Requirements on the Space Based Infrared System (SBIRS) Program: A Model for Warfighter and Acquisition Success?* Maxwell AFB, AL: Air Command and Staff College, 1997.
- Moore, William K. “MASINT: New Eyes in the Battlespace.” *Military Intelligence Professional Bulletin*, January–March 2003. [http://findarticles.com/p/articles/mi\\_mOIBS/is\\_1\\_29/ai\\_97822088](http://findarticles.com/p/articles/mi_mOIBS/is_1_29/ai_97822088) (accessed 18 March 2008).
- Muolo, Maj Michael J., ed. *Space Handbook: A War Fighter’s Guide to Space*. Vol. 2, *An Analyst’s Guide*. Maxwell AFB, AL: Air University Press, 1993.
- Nadler, Mike. Space and Missile Defense Future Warfare Center. “Early Warning.” Briefing, 21 August 2007.
- National Aeronautics and Space Act*. Public Law 85-568. 72 Stat. 426 (29 July 1958). [http://www.nasa.gov/offices/ogc/about/space\\_act1.html](http://www.nasa.gov/offices/ogc/about/space_act1.html) (accessed 3 April 2009).
- National Aeronautics and Space Administration (NASA). “About NASA.” [http://www.nasa.gov/about/highlights/what\\_does\\_nasa\\_do.html](http://www.nasa.gov/about/highlights/what_does_nasa_do.html) (accessed 1 March 2008).
- . “Advances in Battery Technology for Space Application.” <http://sbir.gsfc.nasa.gov/SBIR/successes/ss/7-015text.html> (accessed 5 April 2008).
- . “Aqua.” [http://www.nasa.gov/mission\\_pages/aqua/](http://www.nasa.gov/mission_pages/aqua/) (accessed 19 April 2008).
- . “A-Train Constellation.” <http://www-calipso.larc.nasa.gov/about/atrain.php> (accessed 19 April 2008).
- . “Columbia Mission Overview.” <http://www.nasa.gov/columbia/mission/index.html> (accessed 18 February 2008).
- . “Constellation: America’s Fleet of Next-Generation Launch Vehicles.” NASA Fact Sheet. [http://www.nasa.gov/mission\\_pages/constellation/ares/aresI.html](http://www.nasa.gov/mission_pages/constellation/ares/aresI.html) (accessed 5 February 2008).
- . “Coronal Mass Ejections.” Solar Physics Web site at Marshall Space Flight Center. <http://solarscience.msfc.nasa.gov/CMEs.shtml> (accessed 16 April 2009).
- . “Data Properties.” In *Landsat 7 Science Data Users Handbook*. [http://landsathandbook.gsfc.nasa.gov/handbook/handbook\\_htmls/chapter6/chapter6.html](http://landsathandbook.gsfc.nasa.gov/handbook/handbook_htmls/chapter6/chapter6.html) (accessed 5 April 2008).



- . “Definition of Two-line Element Set Coordinate System.” Human Space Flight Web site. [http://spaceflight.nasa.gov/realdata/sightings/SSApplications/Post/JavaSSOP/SSOP\\_Help/tle\\_def.html](http://spaceflight.nasa.gov/realdata/sightings/SSApplications/Post/JavaSSOP/SSOP_Help/tle_def.html) (accessed 18 April 2008).
- . “Electromagnetic Spectrum.” Imagine the Universe Web site at Goddard Space Flight Center. [http://imagine.gsfc.nasa.gov/docs/science/know\\_11/emspectrum.html](http://imagine.gsfc.nasa.gov/docs/science/know_11/emspectrum.html) (accessed 16 April 2009).
- . “The Electromagnetic Spectrum.” <http://science.hq.nasa.gov/kids/imagers/ems/infrared.html> (accessed 9 March 2008).
- . “Explanation of Executive Branch Policy Directives.” <http://www.au.af.mil/au/awc/awcgate/explain.htm> (accessed 15 May 2009).
- . “Mitigation Approaches to Address Impacts of NPOESS Nunn-McCurdy Certification on Joint NASA-NOAA Goals.” White Paper. [http://www7.nationalacademies.org/ssb/NPOESSWorkshop\\_Cramer\\_NRC\\_06\\_19\\_07\\_final.pdf](http://www7.nationalacademies.org/ssb/NPOESSWorkshop_Cramer_NRC_06_19_07_final.pdf) (accessed 18 April 2008).
- . “NASA’s Launch of Carbon-Seeking Satellite Is Unsuccessful.” Press release, 24 February 2009. [http://www.nasa.gov/home/hqnews/2009/feb/HQ\\_09-039\\_OCO\\_failure.html](http://www.nasa.gov/home/hqnews/2009/feb/HQ_09-039_OCO_failure.html) (accessed 27 May 2009).
- . “The Shuttle: Background and Status.” <http://spaceflight.nasa.gov/shuttle/reference/shutref/sts/background.html> (accessed 18 February 2008).
- . “Shuttle-Mir: The U.S. And Russia Share History’s Highest Stage.” <http://history.nasa.gov/SP-4225/multimedia/deorbit.htm> (accessed 18 April 2008).
- . “Solar Flares.” Solar Physics Web site at Marshall Space Flight Center. <http://solarscience.msfc.nasa.gov/flares.shtml> (accessed 16 April 2009).
- . “Solar Minimum Has Arrived.” NASA Web site. [http://www.nasa.gov/vision/universe/solarsystem/06mar\\_solarminimum.html](http://www.nasa.gov/vision/universe/solarsystem/06mar_solarminimum.html) (accessed 16 April 2009).
- . “The Solar Wind.” Solar Physics Web site at Marshall Space Flight Center. <http://solarscience.msfc.nasa.gov/SolarWind.shtml> (accessed 16 April 2009).
- . “Space Shuttle Basics.” <http://www.spaceflight.nasa.gov/shuttle/reference/basics/index.html> (accessed 18 February 2008).
- . “Space Shuttle STS-44 Press Kit.” <http://science.ksc.nasa.gov/shuttle/missions/sts-44/sts-44-press-kit.txt> (accessed 7 April 2008).
- . “What Is the Magnetosphere?” Marshall Space Flight Center Space Plasma Physics Web site. <http://science.nasa.gov/ssl/pad/sppb/edu/magnetosphere/> (accessed 16 April 2009).
- . “What Is SAR, Anyway?” <http://southport.jpl.nasa.gov/polar/sar.html> (accessed 5 March 2008).
- NASA Ames Conference Center. “NASA Mission Statement.” <http://naccenter.arc.nasa.gov/NASAMission.html> (accessed 1 March 2008).
- NASA Education Working Group. *Rockets: A Teacher’s Guide with Activities in Science, Mathematics, and Technology*. <http://store.aiaa.org/kidsplace/kidsplacepdfs/Rockets.pdf> (accessed 10 January 2008).
- NASA Geostationary Operational Environmental Satellite (GOES) Project. “GEO-News around the World.” <http://goes.gsfc.nasa.gov/text/geonews.html#GMS> (accessed 24 February 2008).
- NASA Global Change Master Directory. “Ancillary Description Writer’s Guide, 2008.” <http://gcmd.nasa.gov/User/suppguide/platforms/orbit.html> (accessed 18 April 2008).
- NASA Goddard Space Flight Center. “Aqua Project Science.” <http://aqua.nasa.gov/> (accessed 19 April 2008).

BIBLIOGRAPHY

- . “Aqua Project Science: Aqua’s Instruments.” <http://aqua.nasa.gov/about/instruments.php> (accessed 19 April 2008).
- . “Earth Observing System: NPP.” [http://eospsso.gsfc.nasa.gov/eos\\_homepage/mission\\_profiles/show\\_mission.php?id=19](http://eospsso.gsfc.nasa.gov/eos_homepage/mission_profiles/show_mission.php?id=19) (accessed 19 April 2008).
- NASA Historical Staff. *Historical Sketch of NASA*. Washington, DC: NASA, 1965.
- NASA Jet Propulsion Laboratory. “Voyager Mission Operations Status Report #2009-01-02.” Week ending 2 January 2009. <http://voyager.jpl.nasa.gov/mission/weekly-reports/index.htm> (accessed 10 February 2009).
- NASA Kennedy Space Center. “Project Skylab.” <http://science.ksc.nasa.gov/history/skylab/skylab-operations.txt> (accessed 18 April 2008).
- NASA National Space Science Data Center. “DMSP 5D-3/F16.” <http://nssdc.gsfc.nasa.gov/nmc/masterCatalog.do?sc=2003-048A> (accessed 23 February 2008).
- . “Syncom 2.” <http://nssdc.gsfc.nasa.gov/nmc/masterCatalog.do?sc=1963-031A> (accessed 18 April 2008).
- NASA Science. “NPOESS Preparatory Project (NPP).” <http://nasascience.nasa.gov/missions/npoess-preparatory-project-npp> (accessed 19 April 2008).
- NASA Science Mission Directorate. “NOAA/POES.” <http://nasascience.nasa.gov/missions/noaa/#amsu> (accessed 19 April 2008).
- National Geophysical Data Center. “Definition of the Ionospheric Regions (Structures).” <http://www.ngdc.noaa.gov/stp/IONO/ionostru.html> (accessed 16 April 2009).
- . “OLS—Operational Linescan System.” <http://www.ngdc.noaa.gov/dmsp/sensors/ols.html> (accessed 23 February 2008).
- . “SSIES Ion Scintillation Monitor.” <http://www.ngdc.noaa.gov/dmsp/sensors/ssies.html> (accessed 23 February 2008).
- . “SSM/I-Microwave Imager.” <http://www.ngdc.noaa.gov/dmsp/sensors/ssmi.html> (accessed 23 February 2008).
- . “SSM/T-Atmospheric Temperature Profiler.” <http://www.ngdc.noaa.gov/dmsp/sensors/ssmt.html> (accessed 23 February 2008).
- . “SSMT/2 Atmospheric Water Vapor Profiler.” <http://www.ngdc.noaa.gov/dmsp/sensors/ssmt2.html> (accessed 23 February 2008).
- National Geospatial-Intelligence Agency (NGA). “NGA Fact Sheet.” [http://www.nga.mil/NGASiteContent/StaticFiles/OCR/nga\\_fact.pdf](http://www.nga.mil/NGASiteContent/StaticFiles/OCR/nga_fact.pdf) (accessed 1 March 2008).
- National Oceanic and Atmospheric Administration (NOAA). “About NOAA.” <http://www.noaa.gov/about-noaa.html> (accessed 1 March 2008).
- . “National Polar-Orbiting Operational Environment Satellite System (NPOESS),” updated August 2002. <http://www.publicaffairs.noaa.gov/grounders/npoess.html> (accessed 15 May 2009).
- . “NOAA-16 Environmental Satellite Successfully Completes Testing and Is Turned Over to NOAA.” <http://www.publicaffairs.noaa.gov/releases2000/nov00/noaa00r323.html> (accessed 19 April 2008).
- NOAA DMSP Sensors Directorate. “DMSP Sensors.” <http://eic.ipnoaa.gov/IPOarchive/SCI/sensors/doc88.pdf> (accessed 24 February 2008).
- NOAA National Environmental Satellite, Data, and Information Service (NESDIS). “Directorate and Agency Contributions.” <http://npoess.noaa.gov/About/agencies.html> (accessed 19 April 2008).
- . “IPO Information Center.” [http://eic.ipnoaa.gov/IPOarchive/ED/Outreach\\_Materials/program-information/CoverPagesaInserts-092507.pdf](http://eic.ipnoaa.gov/IPOarchive/ED/Outreach_Materials/program-information/CoverPagesaInserts-092507.pdf) (accessed 19 April 2008).

- . “More Information on POES Satellites.” <http://www.nesdis.noaa.gov/POES.html> (accessed 19 April 2008).
- . “National Polar-Orbiting Operational Environmental Satellite System.” [http://www.ipo.noaa.gov/Science/why\\_polarTXT.html](http://www.ipo.noaa.gov/Science/why_polarTXT.html) (accessed 19 April 2008).
- . “NPOESS: National Polar-orbiting Operational Environmental Satellite System.” [http://eic.ipo.noaa.gov/IPOarchive/ED/Outreach\\_Materials/program-information/CoverPagesaInserts-092507.pdf](http://eic.ipo.noaa.gov/IPOarchive/ED/Outreach_Materials/program-information/CoverPagesaInserts-092507.pdf) (accessed 18 April 2008).
- . “Polar Operational Environmental Satellite.” <http://www.oso.noaa.gov/poes/> (accessed 19 April 2008).
- . “Search and Rescue Satellites.” <http://www.sarsat.noaa.gov> (accessed 19 April 2008).
- NOAA Satellite and Information Service. “About NESDIS.” <http://www.nesdis.noaa.gov/About/about.html> (accessed 1 March 2008).
- . “Geostationary Satellites.” <http://www.oso.noaa.gov/goes/> (accessed 24 February 2008).
- National Park Service. “Strategic Arms Reduction Treaty and Disarmament of Minuteman II (1990s).” In *Minuteman Missile Historical Resource Study*, <http://www.nps.gov/archive/mimi/history/srs/hrs3-2a.htm> (accessed 8 May 2009).
- National Reconnaissance Organization (NRO). “Corona Facts.” <http://www.nro.gov/corona/facts.html> (accessed 1 March 2008).
- . “Corona System Information.” <http://www.nro.gov/corona/sysinfo2.html> (accessed 5 March 2008).
- . “Welcome to the NRO.” <http://www.nro.gov/index.html> (accessed 1 March 2008).
- National Security Space Architect (NSSA). “National Security Space Roadmap.” <http://www.fas.org/spp/military/program/nssrm/initiatives/usnds.htm> (accessed 18 March 2008).
- National Security Space Office (NSSO). Web site. <http://www.acq.osd.mil/nssso/index.htm> (accessed 2 April 2008).
- National Security Space Road Map. “Small Tactical Terminal.” <http://www.fas.org/spp/military/program/nssrm/initiatives/stt.htm> (accessed 24 February 2008).
- National Snow and Ice Data Center. “Defense Meteorological Satellite Program (DMSP) Satellite F13.” [http://www.nsidc.com/data/docs/daac/f13\\_platform.gd.html](http://www.nsidc.com/data/docs/daac/f13_platform.gd.html) (accessed 23 February 2008).
- National System for Geospatial Intelligence Publication 1-0. *Geospatial Intelligence (GEOINT) Basic Doctrine*, September 2006. <http://www.nga.mil/NGASiteContent/StaticFiles/OCR/geopub1.pdf> (accessed 5 March 2008).
- Naval Network Warfare Command (NETWARCOM). “Space.” <http://www.netwarcom.navy.mil/space.htm> (accessed 1 March 2008).
- Neal, Valerie. *Exploring the Universe with the Hubble Space Telescope*. Washington, DC: NASA, 1990.
- Neufeld, Jacob. *Development of Ballistic Missiles in the United States Air Force, 1945–1960*. Washington, DC: Office of Air Force History, USAF, 1990.
- Neufeld, Michael J. *Von Braun: Dreamer of Space, Engineer of War*. New York: Alfred A. Knopf, 2007.
- Nixon, Pres. Richard M. “Statement about the Future of the United States Space Program,” 7 March 1970. [http://www.nixonlibraryfoundation.org/index.php?src=gendocs&link=papers\\_1970](http://www.nixonlibraryfoundation.org/index.php?src=gendocs&link=papers_1970) (accessed 2 April 2009).

BIBLIOGRAPHY

- Northrop Grumman. "Defense Support Program." [http://www.st.northropgrumman.com/capabilities/missile\\_defense/defense\\_support.html](http://www.st.northropgrumman.com/capabilities/missile_defense/defense_support.html) (accessed 7 April 2008).
- "Northrop Grumman Demonstrates Compatibility of AEHF Satellite Interface with Terminals Using Extended-Data-Rate Waveform." *SpaceDaily*, 4 February 2008. [http://www.spacedaily.com/reports/Northrop\\_Grumman\\_Demonstrates\\_Compatibility\\_Of\\_AEHF\\_Satellite\\_Interface\\_With\\_Terminals\\_Using\\_Extended\\_Data\\_Rate\\_Waveform\\_999.html](http://www.spacedaily.com/reports/Northrop_Grumman_Demonstrates_Compatibility_Of_AEHF_Satellite_Interface_With_Terminals_Using_Extended_Data_Rate_Waveform_999.html) (accessed 2 March 2008).
- "Nuclear Weapon EMP Effects." Federation of American Scientists. <http://www.fas.org/nuke/intro/nuke/emp.htm> (accessed 11 May 2009).
- Oberg, James E. *Space Power Theory*. Washington, DC: Government Printing Office, 1999.
- . "Toward a Theory of Space Power: Defining Principles for U.S. Space Policy." Lecture. Army & Navy Club, Washington DC, 20 May 2003. [www.marshall.org/pdf/materials/140.pdf](http://www.marshall.org/pdf/materials/140.pdf) (accessed 2 June 2009).
- Olsen, Jim, and Bill Small. "NGA Transforms Dissemination While Improving CENTCOM Support." *Pathfinder: The Geospatial Intelligence Magazine* 6, no. 1 (January/February 2008). [http://www.nga.mil/NGASiteContent/StaticFiles/OCR/pdf\\_janfeb08.pdf](http://www.nga.mil/NGASiteContent/StaticFiles/OCR/pdf_janfeb08.pdf) (accessed 5 March 2008).
- "Operationally Responsive Spacelift Initiative." GlobalSecurity.org. <http://www.globalsecurity.org/space/systems/ors.htm> (accessed 19 February 2008).
- "OPLAN 1002 Defense of the Arabian Peninsula." GlobalSecurity.org. <http://www.globalsecurity.org/military/ops/oplan-1002.htm> (accessed 24 February 2008).
- Orbital Sciences Corporation. "Pegasus." <http://www.orbital.com/SpaceLaunch/Pegasus/> (accessed 14 February 2008).
- Parsons, Zoe. "Lunar Perturbations of a Supersynchronous Geo Transfer Orbit in the Early Orbit Phase." [https://dspace.lib.cranfield.ac.uk/bitstream/1826/1767/1/ZParsons\\_Thesis%20MSc.pdf](https://dspace.lib.cranfield.ac.uk/bitstream/1826/1767/1/ZParsons_Thesis%20MSc.pdf) (accessed 18 April 2008).
- Potter, E. R., and Chester W. Nimitz, eds. *Sea Power*. Englewood Cliffs, NJ: Prentice Hall, 1960.
- Prasad, K. V. *Principles of Digital Communication Systems and Computer Networks*. Boston, MA: Charles River Books, 2004.
- Presidential Commission on the Space Shuttle Challenger Accident. *Report of the Presidential Commission*. <http://history.nasa.gov/rogersrep/v1ch4.htm> (accessed 12 February 2009).
- Presidential Decision Directive/National Science and Technology Council-2. "Convergence of U.S. Polar-Orbiting Operation Environmental Satellite Systems," 10 May 1994.
- President's Science Advisory Committee. "Introduction to Outer Space." NASA Historical Reference Collection. 26 March 1958. <http://history.nasa.gov/sputnik/16.html> (accessed 3 April 2009).
- Price, Maj J. Dave. "Life in the Joint Side of Space." *Army Space Journal* 6, no. 1 (Winter 2007): 22-23.
- Prussing, John E., and Bruce A. Conway. *Orbital Mechanics*. New York: Oxford University Press, 1993.
- Ray, Justin. "Delta Rocket Puts on Late-Night Show with GPS Launch." Spaceflight Now. <http://www.spaceflightnow.com/delta/d308/> (accessed 10 February 2008).
- Reichert, Lori. "Lockheed Martin Team Passes SBIRS High System Critical Design Review." Lockheed Martin Press Release. <http://www.lockheedmartin.com/news/>



- press\_releases/2001/LockheedMartinTeamPassesSBIRSHighSy.html (accessed 7 April 2008).
- Richelson, Jeffrey. "Space-Based Early Warning: From MIDAS to DSP to SBIRS." <http://www.gwu.edu/~nsarchiv/nsaebb/nsaebb235/index.htm> (accessed on 26 May 2009).
- . *The U.S. Intelligence Community*. Boulder, CO: Westview Press, 1999.
- Rip, Michael Russell, and James M. Hasik. *The Precision Revolution*. Annapolis, MD: Naval Institute Press, 2002.
- Rosen, Milton W. *The Viking Rocket Story*. New York: Harper, 1955.
- Rosolanka, Maj James J. *Defense Support Program (DSP): A Pictorial Chronology 1970–1998*. Los Angeles AFB, CA: SBIRS System Program Office, 1998.
- RussianSpaceWeb.com. "Back to Basics: Another Apollo Clone." [http://www.russian-spaceweb.com/soyuz\\_acts\\_origin.html#2008](http://www.russian-spaceweb.com/soyuz_acts_origin.html#2008) (accessed 6 February 2008).
- Schuler, Maj Mark A. "It Isn't Space, It's Warfare!" In *Space Power Integration: Perspectives from Space Weapons Officers*, edited by Lt Col Kendall K. Brown. Maxwell AFB, AL: Air University Press, 2006.
- Secretary of the Navy (SECNAV) Instruction 5400.39c. *Department of the Navy Space Policy*, 6 April 2004.
- Sellers, Jerry Jon. *Understanding Space: An Introduction to Astronautics*. 2nd ed. Boston: McGraw Hill, 2004.
- . *Understanding Space: An Introduction to Astronautics*. 3rd ed. Boston: McGraw Hill, 2005.
- Sharma, A. K., and Tony Reale. "Updates on Operational Processing for NOAA/NESDIS [National Environmental Satellite, Data, and Information Service] Sounding Data Products and Services." [http://cimss.ssec.wisc.edu/itwg/itsc/itsc15/presentations/session11/11\\_2\\_sharma.pdf](http://cimss.ssec.wisc.edu/itwg/itsc/itsc15/presentations/session11/11_2_sharma.pdf) (accessed 16 April 2008).
- Shelton, William. *Soviet Space Exploration: The First Decade*. New York: Washington Square Press, 1968.
- Sherman, Ron. "MUOS: Milsatcom's Cutting Edge." *Avionics Magazine*, 1 June 2005. <http://www.avtoday.com/av/categories/military/936.html> (accessed 4 April 2008).
- Siddiqi, Asif A. *Challenge to Apollo: The Soviet Union and the Space Race, 1945–1974*. NASA History Series. Washington, DC: NASA, 2000.
- "SM-65 Atlas." Federation of American Scientists. <http://www.fas.org/nuke/guide/usa/icbm/sm-65.htm> (accessed 8 May 2009).
- "SM-68B Titan II." Federation of American Scientists. <http://www.fas.org/nuke/guide/usa/icbm/sm-68b.htm> (accessed 8 May 2009).
- Smith, M. V. "Ten Propositions Regarding Space Power." Thesis, Air University, Maxwell AFB, AL, June 2001.
- Smith, Marcia S. *Military Space Programs: Issues Concerning DOD's SBIRS and STSS Programs*. Congressional Research Service Report for Congress. Washington, DC: Library of Congress, January 2006.
- Smithsonian National Air and Space Museum. "Military Origins of the Space Race." <http://www.nasm.si.edu/exhibitions/gall114/spacerace/sec200/sec231.htm> (accessed 21 January 2008).
- . "Sensor, Infrared, Series III, Missile Defense Alarm System." <http://collections.nasm.si.edu/code/emuseum.asp?profile=objects&newstyle=single&quicksearch=A19700253000> (accessed 26 May 2009).

BIBLIOGRAPHY

- Smolders, Peter. *Soviets in Space*. New York: Taplinger Publishing Company, 1974.
- Snodgrass, Lt Col Roy. "Commercial SATCOM Support—Current/Future." Presentation. LandWarNet 2007, Annual Armed Forces Communications and Electronics Association Conference, Ft. Lauderdale, FL, 21 August 2007.
- Space and Missile Systems Center (SMC). *The SMC Story*. <http://www.losangeles.af.mil/shared/media/document/AFD-080606-049.pdf> (accessed 20 May 2009).
- . Web site. <http://www.losangelesafb.com/smc/smc.html> (accessed 20 May 2009).
- "Space Environment and Orbital Mechanics." Federation of American Scientists. [http://www.fas.org/spp/military/docops/army/ref\\_text/chap5im.htm](http://www.fas.org/spp/military/docops/army/ref_text/chap5im.htm) (accessed 18 April 2008).
- Space Today Online*. "China's Moon Flights." <http://www.spacetoday.org/China/ChinaMoonflight.html> (accessed 5 February 2008).
- Space.com. "Japan Announces Manned Moon Flight by 2025." [http://www.space.com/missionlaunches/ap\\_050406\\_japan\\_moon.html](http://www.space.com/missionlaunches/ap_050406_japan_moon.html) (accessed 5 February 2008).
- Spiegel, Herbert J., and Arnold Gruber. *From Weather Vanes to Satellites: An Introduction to Meteorology*. New York: John Wiley and Sons, 1983.
- Stares, Paul B. *Space and National Security*. Washington, DC: Brookings Institution Press, 1987.
- . *Space Weapons and US Strategy*. London: Croom Helm, 1985.
- Sullivan, Walter. *Assault on the Unknown: The International Geophysical Year*. New York: McGraw-Hill, 1961.
- Sweetman, Bill, and Kimberley Ebner, eds. *Jane's Space Systems and Industry: 2007–2008*. Alexandria, VA: Jane's Information Group, 2007.
- Szebehely, Victor G. *Adventures in Celestial Mechanics: A First Course in the Theory of Orbits*. Austin, TX: University of Texas Press, 1989.
- Tatum, Steve. "Lockheed Martin Delivers Key Hardware for Third Advanced EHF Military Communication Satellite." Lockheed Martin press release. 22 December 2006.
- Taylor, R., and M. Crison. "NPOESS Preparatory Project (NPP): Status Update for Interim Science Panel," 2 August 1999. [http://jointmission.gsfc.nasa.gov/documents/powerpoint/RSDO\\_ISP8-2-99.ppt](http://jointmission.gsfc.nasa.gov/documents/powerpoint/RSDO_ISP8-2-99.ppt) (accessed 19 April 2008).
- Terril, Delbert R., Jr. *Air Force Role in Developing International Outer Space Law*. Maxwell AFB, AL: Air University Press, 1999.
- "Tier One: Private Manned Space Program." Scaled Composites. Web site. <http://www.scaled.com/projects/tierone/> (accessed 5 February 2008).
- "Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies." 27 January 1967. Available in United Nations (UN) Publication ST/SPACE/11. New York: UN, 2002. <http://www.unoosa.org/oosa/SpaceLaw/outerspt.html> (accessed 2 April 2009).
- United Nations Office for Outer Space Affairs (UNOOSA). "Space Law: Frequently Asked Questions." <http://www.unoosa.org/oosa/en/FAQ/splawfaq.html> (accessed 1 April 2009).
- US Air Force. "3rd Space Operations Squadron." Fact Sheet. <http://www.schriever.af.mil/library/factsheets/factsheet.asp?id=3914> (accessed 13 February 2008).
- . "4th Space Operations Squadron." Fact Sheet. <http://www.schriever.af.mil/library/factsheets/factsheet.asp?id=3915> (accessed 29 February 2008).
- . "20th Air Force." Fact Sheet. <http://www.warren.af.mil/library/factsheets/factsheet.asp?id=4697> (accessed 1 March 2008).

- . “20th Space Control Squadron, Detachment 1.” Fact Sheet. <http://www.peterson.af.mil/library/factsheets/factsheet.asp?id=4729> (accessed 16 January 2008).
- . “Advanced Extremely High Frequency (AEHF) System.” Fact Sheet. <http://www.losangeles.af.mil/library/factsheets/factsheet.asp?id=5319> (accessed 25 November 2007).
- . “Air Force Weather Agency.” Fact Sheet. <http://www.af.mil/factsheets/factsheet.asp?fsID=157> (accessed 24 February 2008).
- . “Defense Meteorological Satellite Program.” Fact Sheet. <http://www.losangeles.af.mil/library/factsheets/factsheet.asp?id=5321> (accessed 23 February 2008).
- . “Defense Satellite Communications System.” Fact Sheet. <http://www.losangeles.af.mil/library/factsheets/factsheet.asp?id=5322> (accessed 21 January 2007).
- . “Delta II Launch Vehicle.” Fact Sheet. <http://www.af.mil/information/factsheets/factsheet.asp?fsID=97> (accessed 10 February 2008).
- . “Det 3, 21st Operations Group.” Fact Sheet. <http://www.peterson.af.mil/library/factsheets/factsheet.asp?id=4741> (accessed 24 February 2008).
- . “LGM-30 Minuteman III.” Fact Sheet. <http://www.af.mil/information/factsheets/factsheet.asp?id=113> (accessed 8 May 2009).
- . “MILSTAR.” Fact Sheet. <http://www.losangeles.af.mil/library/factsheets/factsheet.asp?id=5328> (accessed 25 November 2007).
- US Army. *Army Space Reference Text*. July 1993.
- US Centennial of Flight Commission. “Sun Synchronous Orbit.” [http://www.centennialofflight.gov/essay/Dictionary/SUN\\_SYNCH\\_ORBIT/DI155.htm](http://www.centennialofflight.gov/essay/Dictionary/SUN_SYNCH_ORBIT/DI155.htm) (accessed 18 April 2008).
- US House. *House Science Committee Hearing: The Future of NPOESS—Results of the Nunn-McCurdy Review of NOAA’s Weather Satellite Program*. 109th Cong. 2d sess., 2006.
- US Navy. “Aerographer’s Mate Non-Resident Training Course, April 1999.” [http://www.combatindex.com/store/NRTC/Sample/AEROGRAPHERS\\_MATE/Aerographers\\_Mate\\_Module\\_3.pdf](http://www.combatindex.com/store/NRTC/Sample/AEROGRAPHERS_MATE/Aerographers_Mate_Module_3.pdf) (accessed 18 April 2008).
- . “UHF Follow-On Program.” Navy Fact Sheet. <http://www.spaceflightnow.com/atlas/ac203/031211uhfprogram.html> (accessed 2 April 2008).
- US Senate. *Ambassador Goldberg: Hearings before the Committee on Foreign Relations*. 90th Cong., 1st sess., 7 March 1967.
- “U.S. Stealth Bombers to Use EHF SatCom from Northrop Grumman.” *MilsatMagazine* 1, no. 1 (First Quarter 2007): 7–8.
- US Strategic Command (USSTRATCOM). “Functional Components.” [http://www.stratcom.mil/organization-fnc\\_comp.html](http://www.stratcom.mil/organization-fnc_comp.html) (accessed 16 January 2008).
- . “Joint Functional Component Command for Space.” Fact Sheet. [http://www.stratcom.mil/fact\\_sheets/fact\\_space.html](http://www.stratcom.mil/fact_sheets/fact_space.html) (accessed 17 March 2008).
- . “Theater Ballistic Missile Warning.” Fact Sheet. [http://www.stratcom.mil/fact\\_sheets/fact\\_tbmw.html](http://www.stratcom.mil/fact_sheets/fact_tbmw.html) (accessed 8 April 2008).
- . “U.S. Strategic Command History.” <http://www.stratcom.mil/about-ch.html> (accessed 16 January 2008).
- V2ROCKET.COM. “A-4/V-2 Makeup—Tech Data & Markings.” <http://www.v2rocket.com/start/makeup/design.html> (accessed 8 May 2009).
- Wallace, Lane E. *Dreams, Hopes, Realities: NASA’s Goddard Space Flight Center: The First Forty Years*. Washington, DC: NASA History Office, 1999.
- Walters, Hellen B. *Herman Oberth: Father of Space Travel*. New York: Macmillan, 1962.

BIBLIOGRAPHY

- Watts, Barry D. "The Military Use of Space: A Diagnostic Assessment." Center for Strategic Budget Assessment. [http://www.csbaonline.org/4Publications/PubLibrary/R.20010201.The\\_Military\\_Use\\_o/R.20010201.The\\_Military\\_Use\\_o.pdf](http://www.csbaonline.org/4Publications/PubLibrary/R.20010201.The_Military_Use_o/R.20010201.The_Military_Use_o.pdf) (accessed 18 April 2008).
- Weisbrot, Robert. *Maximum Danger: Kennedy, the Missiles, and the Crisis of American Confidence*. Chicago: Ivan R. Dee, 2001.
- White, Gen Thomas D. "Air and Space Are Indivisible." *Air Force Magazine*, March 1958, 40–41.
- White House. National Security Presidential Directive (NSPD) 23. *Missile Defense Policy*, 17 December 2002.
- . *National Space Policy Directives and Executive Charter*, 2 November 1989.
- . *US Commercial Remote Sensing Policy*, 25 April 2003.
- . *US National Space Policy*, 31 August 2006.
- White, Irvin. *Decision-Making for Space: Law and Politics in Air, Sea and Outer Space*. West Lafayette, IN: Purdue University Press, 1971.
- "Wideband Gapfiller System: Satellite Design." GlobalSecurity.org. <http://www.globalsecurity.org/space/systems/wgs-satdesign.htm> (accessed 14 February 2008).
- Wilson, Tom. "Threats to United States Space Capabilities." Prepared for the Commission to Assess US National Security Space Management and Organization. <http://www.fas.org/spp/eprint/article05.html#10> (accessed 11 May 2009).
- Woodbury, David O. *Outward Bound for Space*. Boston: Little, Brown & Co., 1961.
- Wright, David, Laura Grego, and Lisbeth Gronlund. *The Physics of Space Security: A Reference Manual*. [http://www.amacad.org/publications/Physics\\_of\\_Space\\_Security.pdf](http://www.amacad.org/publications/Physics_of_Space_Security.pdf) (accessed 23 January 2008).
- X Prize Foundation. "Ansari X Prize." <http://www.xprize.org/x-prizes/ansari-x-prize> (accessed 5 February 2008).
- Xinhua News Agency. "China Launches First Manned Spacecraft." China View/View China. [http://news.xinhuanet.com/english/2003-10/15/content\\_1123817.htm](http://news.xinhuanet.com/english/2003-10/15/content_1123817.htm) (accessed 5 February 2008).