

## BIBLIOGRAPHIC ESSAY

Jeffrey A. Larsen

Arms control is a field rich with material, but not much has been written specifically about the United States Air Force and its relationship with arms control issues. One has to look closely in books and articles on arms control for nuggets of information on the Air Force. The ability to read between the lines is exceptionally important. Alternatively, one must conduct original primary research, and it is not easy finding either the right people to interview or the right staff papers to read. The most recent period, in particular (since the START treaties were signed in the early 1990s), is problematic precisely because of its recency—there simply has not been time for serious analysis or writing about arms control in this period, and much of the source material remains classified. Nor is the level of public interest over arms control as high as it once was. With the end of the Cold War and a new relationship between the United States and Russia, people simply don't think about strategic issues in the same way. This has also affected the volume of material in recent years. Finally, many of the archives and files on more recent arms control issues in which the Air Force took an interest were put at risk by the attack on the Pentagon on 11 September 2001, when the offices of the National Security Policy Division (AF/XONP), where these files were stored, suffered significant damage.

Nevertheless, we can suggest a number of recommended works on arms control. For complete texts of all treaties ratified before 1991, as well as some analysis of the negotiating history, see Josef Goldblat, *Arms Control: A Guide to Negotiations and Agreements* (London: Sage Publications, 1994). A superb source for general information, analytical essays, and treaty highlights is the three-volume set by Richard Dean Burns, ed., *Encyclopedia of Arms Control and Disarmament* (New York: Charles Scribner's Sons, 1993). Updated references can be found in Jeffrey A. Larsen and Gregory J. Ratttray, eds., *Arms Control Toward the 21<sup>st</sup> Century* (Boulder, CO: Lynne Rienner Publishers, 1996), and a forthcoming edition from the same publisher, also edited by Jeffrey A. Larsen, *Arms Control: Cooperative Security in a Changing Environment* (2002). An annual publication that provides excellent up-to-date material is *SIPRI Yearbook* (Stockholm International Research Institute, published by Oxford University Press and also found at [www.sipri.org](http://www.sipri.org)). The Institute for Defense and Disarmament Studies, Cambridge, MA, publishes monthly editions of *The Arms Control Reporter*; archived editions can be found on their web site at [www.idds.org](http://www.idds.org). The best monthly journals that follow arms control topics and related issues

are *Arms Control Today*, published by the Arms Control Association, Washington, DC, also found at [www.armscontrol.org](http://www.armscontrol.org); *The Bulletin of the Atomic Scientists*, published by the Educational Foundation for Nuclear Science, Chicago, and found at [www.thebulletin.org](http://www.thebulletin.org); and the irregular but frequent *Documents on Disarmament* series put out by the U.S. State Department (which, along with treaty summaries, can be found at [www.state.gov](http://www.state.gov)). Other good databases for basic treaty and arms control negotiations information are found at the web sites of the Federation of American Scientists ([www.fas.org](http://www.fas.org)), Physicians for Social Responsibility ([www.psr.org](http://www.psr.org)), the University of Illinois program in Arms Control, Disarmament, and International Security ([www.acdis.uiuc.edu](http://www.acdis.uiuc.edu)), and the Center for International Security and Cooperation at Stanford University ([www.cisac.stanford.edu](http://www.cisac.stanford.edu)). A forthcoming publication that will provide in-depth background and reference material on this subject that is being written by two of this book's authors: Jeffrey A. Larsen and James M. Smith, *Historical Dictionary of Arms Control and Disarmament* (Lanham, MD: Scarecrow Press, 2002).

Specific information on the role of the US Air Force in arms control deliberations and negotiations, as well as compliance issues, is hard to find. Some can be gleaned from the Secretary of Defense's *Annual Report to the President and the Congress* (Washington, DC: US Government Printing Office); some can be found in the sections on arms control in *American Defense Annual*, edited from 1985-1993 by Joseph Kruzal and in 1994 by Charles Hermann (Cambridge, MA: Lexington Books); and in the US Arms Control and Disarmament Agency's regular publication *Arms Control and Disarmament Agreements* (Washington, DC: US Government Printing Office, latest edition 1996), although whether the State Department will continue to publish this valuable reference guide now that ACDA has been dissolved is yet to be seen. Good sources of current topics are the published papers of the annual International Arms Control Conference held at Sandia National Laboratories, Albuquerque, NM (since 1991) and the findings of the annual International Conference on Controlling Arms hosted by the Defense Nuclear Agency (which became the Defense Special Weapons Agency, which then became the Defense Threat Reduction Agency) from 1992-2000.

The remainder of this bibliographic essay will provide some key works in each of the four historical periods addressed in this book: the early post-World War Two era, the SALT era of the 1970s, the Reagan era of the 1980s, and the START era of the 1990s and beyond. Within each section we have attempted to find and list some of the best sources used by the authors of those chapters.

## THE EARLY POST-WORLD WAR ERA

The period 1945-1968 could be called the “pre-arms control” period, as the United States and the Soviet Union aggressively sought strategic superiority in terms of numbers of weapons and delivery vehicles. The concept of containment led the push for advanced military capabilities, rather than a serious effort towards cooperative security, arms control, or disarmament. To be sure, there had been a considerable body of literature prior to the nuclear age devoted to questions of the legality of aerial bombardment, the role and purpose of air power, and the like. But not until the early 1960s was the theory of arms control writ large properly developed. A number of books came out in 1961, however, that set the stage and laid the foundation for all the arms control successes of the following decades.

The US Air Force in this era was concerned with achieving superiority using the manned bomber and the intercontinental ballistic missile. Both of these were controlled by Strategic Air Command, the preeminent organizational element within the Air Force. As arms control measures began being considered toward the end of this period, the concept of national technical means of verification arose. This, too, fell under SAC’s control, as satellites and high-altitude manned spy planes began looking at the USSR and its proxies. But neither SAC nor the corporate Air Force had any desire to get involved in arms control, nor did they see any advantage to be accrued from doing so. A telling point about the Air Force’s view of arms control during this period—or the lack thereof—can be seen by omission: in the 665 pages of *Ideas, Concepts, Doctrine, Volume I: Basic Thinking in the United States Air Force 1907-1960*, by Robert Frank Futrell (Maxwell AFB, AL: Air University Press, 1989), there is not one single mention of the words “arms control” or “disarmament.”

What arms control did occur took place in multilateral forums, primarily the United Nations, and led to vague agreements couched in disarmament terms. None of these directly affected the Air Force; none of these was affected in any way by inputs from the Air Force.

### ***Suggested Reading***

*Air Doctrine: Strategic Air Operations*, AFM 1-8 (Washington, DC: US Air Force, 1 May 1954).

Bechhoefer, Bernhard, *Postwar Negotiations for Arms Control* (Washington, DC: Brookings Institution, 1961).

Bernstein, Barton J., “The Quest for Security: American Foreign Policy and International Control of Atomic Energy, 1942-1946,” *The Journal of American History*, March 1974, 1003-1044.

- Biddle, Tami Davis, "Air Power," Chapter 9 in Michael Howard, George J. Andreopoulos, and Mark R. Schulman, eds., *The Laws of War: Constraints on Warfare in the Western World* (New Haven, CT: Yale University Press, 1994).
- Bowie, Robert P. and Richard H. Immerman, *Waging Peace: How Eisenhower Shaped an Enduring Cold War Strategy* (Oxford, UK: Oxford University Press, 1998).
- Bundy, McGeorge, *Danger and Survival: Choices About the Bomb in the First Fifty Years* (New York: Random House, 1988), especially Chapter 4.
- Carnesale, Albert and Richard Haas, *Superpower Arms Control: Setting the Record Straight* (Cambridge, MA: Ballinger, 1987).
- Crum, Norman, *Arms Control Guide: An Annotated Bibliography* (Santa Barbara, CA: Tempo, 1963).
- Dean, Arthur H., *Test Ban and Disarmament: The Path of Negotiation* (New York: Harper & Row, 1966).
- DeWeerd, H.A., *Disarmament Failure and Weapons Limitations* (Santa Monica, CA: The RAND Corporation, 1956).
- De Weerd, H.A., *United States Policies on Disarmament 1946-1955 – A Critique* (Santa Monica, CA: The RAND Corporation, 1956).
- Disarmament: A Bibliographic Record* (Washington, DC : Army Library, 1960).
- Emme, Eugene, *Thought on Air Power as a Political Weapon* (Maxwell AFB, AL: Air University Press, 1953).
- Foreign Relations of the United States* (Washington, DC: US State Department, latest edition 1968).
- Freedman, Lawrence, *The Evolution of Nuclear Strategy*, 2<sup>nd</sup> edition (New York: St. Martin's Press, 1989).
- Frye, Alton, *Space Arms Control: Trends, Concepts, Prospects* Santa Monica, CA: The RAND Corporation, 1964).
- Gaddis, John Lewis, *Strategies of Containment: A Critical Appraisal of Postwar American National Security Policy* (New York: Oxford University Press, 1982).
- Gaddis, John Lewis, et al, *Cold War Statesmen Confront the Bomb: Nuclear Diplomacy Since 1945* (Oxford, UK: Oxford University Press, 1999).
- Kaplan, Fred, *The Wizards of Armageddon* (Stanford, CA: Stanford University Press, 1983).
- Kunsman, David and Douglas Lawson, *A Primer on U.S. Nuclear Strategy* (Albuquerque, NM: Sandia National Laboratories, 2001).

- LeMay, Curtis, *America Is In Danger* (New York: Funk and Wagnalls, 1968).
- Nalty, Bernard, *Winged Shield, Winged Sword: A History of the United States Air Force* (Washington, DC: Air Force History and Museum Programs, 1997).
- Peacock, Lindsay, *Strategic Air Command* (London: Arms and Armour Press, 1988).
- “The Process of Long-Range Planning,” presentation to The RAND Corporation by Captain Wesley Posvar, 17 May 1955 (College Park, MD: National Archives and Records Administration, Record Group 341).
- Singer, J. David, *Deterrence, Arms Control, and Disarmament* (New York: Lanham, 1984).
- Smoke, Richard, *National Security and the Nuclear Dilemma*, 3<sup>rd</sup> edition (New York: McGraw-Hill, 1993).
- United States Senate, Committee on Foreign Relations, *Test Ban Negotiations and Disarmament* (Washington, DC: US Government Printing Office, 11 March 1963).
- Watt, Donald Cameron, “Restraints on War in the Air Before 1945,” Chapter 4 in Michael Howard, ed., *Restraints on War: Studies in the Limitation of Armed Conflict* (Oxford, UK: Oxford University Press, 1979).
- Wheeler, Michael, “The Air Force and Arms Control: The Past Fifty Years,” unpublished paper written by Science Applications International Corporation for the Air Force National Security Policy Division, Washington, DC.
- Worden, Mike, *Rise of the Fighter Generals: The Problems of Air Force Leadership, 1945-1982* (Maxwell AFB, AL: Air University Press, 1998).
- York, Herbert, *Making Weapons, Talking Peace* (Santa Monica, CA: The RAND Corporation, 1961).

***Suggested readings on basic arms control theory***

- Averch, Harvey, *Strategic Ambiguity, Asymmetry and Arms Control: Some Basic Considerations* (Santa Monica, CA: The RAND Corporation, 1963).
- Schelling, Thomas and Morton Halperin, *Strategy and Arms Control* (New York: Twentieth Century Fund, 1961).
- Bull, Hedley, *The Control of the Arms Race: Disarmament and Arms Control in the Missile Age* (New York: Frederick A. Praeger, Publishers, 1961).

## THE SALT ERA

The period 1969-1980 was a golden era for arms control. During this period the United States and the Soviet Union entered a phase of their relationship known as *détente*, a relaxation of relations whereby both sides began taking tentative steps away from the nuclear brink that had epitomized their relationship for the previous 15 years. Part of this change involved direct bilateral negotiations between the superpowers that proved quite successful. During the 1970s barely any years passed without at least one, and usually several, new arms control treaties or agreements between the two. In part this reflected unilateral political decisions on both sides to further the arms control agenda despite conservative arguments to the contrary.

The Air Force was caught off guard by the new centrality of arms control in inter-agency negotiations and decision-making. It had been so busy building up its forces that it entered this vibrant period without any bureaucratic apparatus in place to deal with arms control issues. As a result, the Air Force did not play a major role in the early agreements (such as the ABM Treaty and Interim Agreement of SALT I). But by the latter part of the period it had created a small and tightly controlled advisory group within the Air Staff to provide the Chief of Staff with inputs as he developed the Air Force's official position on negotiations.

There is scant direct evidence in print about how the Air Force went about creating this network. Between the close-hold nature of the business and the fact that this was but one policy development aspect of a major government agency, there has been very little written about the inner workings of the Air Force. Again, one must read the books on the era carefully to glean Air Force-specific items from the prose. Some of the best material comes from stories about the strategic procurement programs of the era, and the effect on those programs generated by distant arms control negotiations that seemed to be permanently in the background, but which were becoming increasingly annoying—like the droning sound of a distant cloud of mosquitoes that was slowly drawing ever closer. Other anecdotal evidence can be found in the memoirs and autobiographies written by participants in the era.

### ***Suggested Reading***

*Arms Control and the Arms Race: Readings from Scientific American*  
(New York: W.H. Freeman and Company, 1985).

*Arms Control Today*, *Air Force Magazine*, and *Bulletin of the Atomic Scientists* articles from the 1970s.

- Brzezinski, Zbigniew, *Power and Principle* (New York: Farrar, Straus, Giroux, 1983).
- Foundation for the Future: The ABM Treaty and National Security* (Washington: The Arms Control Association, 1990).
- Garthoff, Raymond, *Détente and Confrontation: American-Soviet Relations from Nixon to Reagan* (Washington, DC: The Brookings Institution, 1994).
- Garthoff, Raymond, *Policy versus the Law: The Reinterpretation of the ABM Treaty* (Washington: Brookings Institution, 1987).
- Halperin, Morton, *Bureaucratic Politics and Foreign Policy* (Washington: Brookings Institution, 1974).
- Hampson, Fen, *Unguided Missiles: How American Buys its Weapons* (New York: W.W. Norton & Company, 1989).
- Kissinger, Henry, *The White House Years* (New York: Little, Brown and Company, 1979).
- Kotz, Nick, *Wild Blue Yonder: Money, Politics, and the B-1 Bomber* (Princeton, NJ: Princeton University Press, 1988).
- Lozell, Mark and Hugh Levaux, "The 1960s and 1970s: Acquisition Reform, Doctrinal Ferment," Chapter 4 in *The Cutting Edge: A Half Century of U.S. Fighter Aircraft R&D* (Santa Monica, CA: The RAND Corporation, 1998).
- Newhouse, John, *Cold Dawn: The Story of SALT* (New York: Holt, Rinehart & Winston, 1973).
- Nixon, Richard M., *The Real War* (New York: Warner Books, 1980).
- Rowney, Edward L., *It Takes One to Tango* (London: Brassey's, 1992).
- Smith, Gerard, *Doubletalk: The Story of SALT I* (New York: Harper & Row, 1985).
- Smith, Gerard C., *Disarming Diplomat: The Memoirs of Gerard C. Smith, Arms Control Negotiator* (Lanham, MD: Madison Books, 1996).
- Talbott, Strobe, *Endgame: The Inside Story of SALT II* (New York: 1979).
- Wolfe, Thomas W., *The SALT Experience* (Cambridge, MA: Ballinger Publishing Company, 1979).

## **THE REAGAN ERA**

From 1981 to 1988 the United States and the USSR expanded their strategic systems and capabilities through a series of innovations, and moved the confrontation into new realms (such as outer space and information operations). This was the era of the Reagan defense build-up, and strategic

forces (both offensive and, after 1983, defensive) were a major winner in the budgetary largesse of this presidency. After a rocky start, during which time it appeared as though arms control might have been cast aside in the interest of military power, both sides were back at the negotiating table by the middle of the decade. This renewed vitality, enhanced perhaps by the realization during the early 1980s that neither side could win a nuclear war, led to a second period of pronounced success in arms control. This period included agreements on a myriad of issues, from theater and strategic weapons to chemical and conventional forces. It carried over into the early 1990s, its momentum unaffected by the end of the Soviet Union, the dissolution of the Warsaw Pact, and the final stages of the Cold War.

The US Air Force during this period had achieved a central role in the bureaucratic political maneuvering of the interagency process when it came to arms control. True, most of the central strategic weapons systems were controlled by the Air Force, but its influence extended beyond simple management of those systems.

As researchers seeking insight into the Air Force and arms control we run into the same problem in this era as in the previous one: lack of direct sources to verify what went on behind the scenes during the arms control negotiations of the START period. There have been several key works written about the Reagan years, but much of that literature deals with NATO, Europe, Euromissiles, and the Strategic Defense Initiative rather than strategic arms control. This was a transition period between the SALT successes and the START deals still to come.

### ***Suggested Readings***

*Congressional Record* from the period.

Kartchner, Kerry M., *Negotiating START: Strategic Arms Reduction Talks and the Quest for Strategic Stability* (New Brunswick, NJ: Transaction Publishers, 1992).

Shultz, George P., *Turmoil and Triumph: My Years as Secretary of State*, (New York: Scribner's Sons, 1993).

Skinner, Kiron, Annelise Anderson, and Martin Anderson, *Reagan: In His Own Hand* (New York: The Free Press, 2001).

Spanier, John, *American Foreign Policy Since World War II*, (Washington D.C., Congressional Quarterly Press, 1992).

Talbott, Strobe, *Deadly Gambits: The Reagan Administration and the Stalemate in Nuclear Arms Control* (New York: Alfred A. Knopf, 1984).

Talbott, Strobe, *Master of the Game: Paul Nitze and the Nuclear Peace* (New York: Alfred A. Knopf, 1988).

Thompson, W. Scott, *et al*, *National Security in the 1980s: From Weakness to Strength*, (San Francisco, CA: Institute for Contemporary Studies, 1980).

### **START AND THE TRANSITION TO THE FUTURE**

Our final period begins with 1989 and continues through today. It was an era that witnessed the culmination of the negotiations and understandings reached between the superpowers toward the end of the Reagan administration, reflecting a renewed sense of common destiny between the superpowers, as well as the rise to power of one key individual in the Soviet Union: Mikhail Gorbachev. Gorbachev's term of office witnessed (indeed, in many ways predicated) the end of the Soviet state, the fall of the Berlin Wall, the dissolution of the Warsaw Pact, and the Western victory in the Cold War. Throughout the early years of this period, as the world tried to sort out the strange and exhilarating news, the United States and the USSR, then Russia, continued to negotiate new arms control deals, to ratify old treaties that had lain on the sideboard for many years, and to set up organizational constructs to help bring the world peacefully and uneventfully into the new era.

By later in the decade the bloom was off the arms control rose. The George W. Bush administration came to power in 2001 with unilateralist tendencies and a decided dislike for arms control of any stripe, and it began overturning many of the fundamental agreements of past years. At the same time, however, the United States made valid points that the world had outlived the usefulness of treaties made in a different era, that some of these treaties had, in fact, outlasted the problems they were created to solve in the first place. Therefore, it was argued, perhaps the international strategic setting could be better served through unilateral force level decisions and less formal agreements than in the past.

For the United States Air Force, this period was truly one of transition. In the early 1990s the Air Force had a large and robust organizational commitment to arms control negotiations and implementation, and it foresaw years of work bringing all the new treaties to fruition. Yet by the end of the decade many of these agreements, and the sometimes burdensome implementation and compliance requirements, seemed old-fashioned if not outright unnecessary. The Air Force was attempting to make the transition to a non-nuclear, strategic conventional force with global reach, and arms control restraints on its less important strategic arsenal seemed less and less relevant.

The literature for this period is, by nature of its recency, scanty when it comes to illuminating internal Air Force decision making. The sources listed below deal primarily with national-strategic level issues, rather than bureaucratic ones. This reflects the continuing theme we have seen in each of these periods: that the Air Force has been constantly caught in the tug and haul of strategic and policy alternatives, and has never been in complete control of its own destiny. This has certainly been true for the Air Force's strategic weapons, and may ultimately extend to its force in space, information operations, and possibly the strategic conventional realm, as well.

***Suggested Reading***

- Bothe, Michael, Natalino Ronzitti, and Allan Rosas, eds, *The New Chemical Weapons Convention –Implementation and Prospects* (The Hague: Kluwer Law International, 1988).
- Brown, James, ed, *Arms Control in a Multi-polar World*. (Amsterdam: VU University Press, 1996).
- Dando, Malcolm, Graham S. Pearson, and Tibor Tóth, eds., *Verification of the Biological and Toxin Weapons Convention* (Dordrecht, Netherlands: Kluwer Academic Publishers, 2000).
- Drell, Sidney D., Abraham D. Sofaer, and George D. Wilson, eds., *The New Terror: Facing the Threat of Biological and Chemical Weapons* (Stanford: Hoover Institution Press, 1999).
- Fischer, David and Harald Müller, *United Divided: The European at the NPT Extension Conference* (Frankfurt, Ger: Peace Research Institute Frankfurt, 1995).
- Florini, Ann, ed., *The Third Force: The Rise of Transnational Civil Society* (Tokyo: Japan Center for International Exchange, 2000)
- Gallagher, Nancy W., ed., *Arms Control: New Approaches to Theory and Policy* (London: Frank Cass, 1998).
- Gertz, Bill, *Betrayal: How the Clinton Administration Undermined American Security* (Washington: Regnery Publishing, Inc., 1999).
- Goldblat, Jozef and Thomas Bernauer, *The Third Review of the Biological Weapons Convention: Issues and Proposals* (New York: United Nations, 1991).
- Kartchner, Kerry M., *Negotiating START: Strategic Arms Reduction Talks and the Quest for Strategic Stability* (New Brunswick, NJ: Transaction Publishers, 1992).
- Larsen, Jeffrey A., and Gregory J. Rattray, eds., *Arms Control Toward the 21<sup>st</sup> Century* (Boulder, CO: Lynne Rienner Publishers, 1996).

- Larsen, Jeffrey A. and Thomas D. Miller, eds., *Arms Control in the Asia-Pacific Region* (US Air Force Academy, CO: USAF Institute for National Security Studies, 1999).
- Larsen, Jeffrey A. and Kurt J. Klingenberger, eds., *Controlling Non-Strategic Nuclear Weapons: Obstacles and Opportunities* (US Air Force Academy, CO: USAF Institute for National Security Studies, 2001).
- Morel, Benoit, and Kyle Olson, eds., *Shadows and Substance: The Chemical Weapons Convention* (Boulder, CO: Westview Press, 1993).
- Paulsen, Richard A., *The Role of Nuclear Weapons in the Post-Cold War Era* (Maxwell AFB, AL: Air University Press, September 1994).
- Pilat, Joseph F., and Robert E. Pendley, eds., *1995: A New Beginning for the NPT?* (New York: Plenum Press, 1995).
- Report of the Annual International Arms Control Conference* (Albuquerque, NM: International Security Center, Sandia National Laboratories, since 1991).
- Report of the Annual International Conference on Controlling Arms* (Washington, DC: Defense Nuclear Agency/Defense Special Weapons Agency/Defense Threat Reduction Agency, 1992-2000).
- Roberts, Brad, ed., *Ratifying the Chemical Weapons Convention* (Washington, DC: Center for Strategic & International Studies, 1994).
- Thompson, Kenneth W., ed., *Presidents and Arms Control: Process, Procedures, and Problems* (Lanham, MD: University Press of America, 1997).
- U.S. Nuclear Policy in the 21<sup>st</sup> Century; A Fresh Look at National Strategy and Requirements* (Washington, DC: Center for Counterproliferation Research, National Defense University, 1998).
- Van Leeuwen, Marianne, ed., *The Future of the International Nuclear Non-proliferation Regime* (Dordrecht, Netherlands: Martinus Nijhoff Publishers, 1995).

