



The Other Space Race: Eisenhower and the Quest for Aerospace Security

by Nicholas Michael Sambaluk.

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President Dwight Eisenhower's famous farewell address and less famous last State of the Union speech both prophetically stressed the dangers of too much defense spending on too many high tech programs. The immediate post-Sputnik popular belief that the United States had fallen behind the USSR in technology and security, in particular regarding missiles, satellites, and the "space race," led to doubts about Eisenhower's New Look security policy, with its emphasis on budget restrictions. Nicholas Sambaluk (Purdue Univ.), a specialist in military science and technology, has now produced a welcome study of the complexities of defense procurement at a time when Eisenhower was seeking to rein in the military-industrial-congressional complex and to promote peaceful space endeavors instead of a militarization of space. As he puts it, "two perspectives on the utilization of space were drifting on a collision course in the mid-1950s" (1).

Sambaluk examines "the other space race" through a case study of the US Air Force's Dyna-Soar¹ orbital space bomber program. This is a very apt choice because the Air Force both dominated the defense budget and challenged Eisenhower's policy preference for a peaceful space realm. "The book focuses primarily on the conflicting perspectives and initiatives of the Eisenhower administration with [sic] the outlooks and actions of the U.S. Air Force between 1954 and 1961" (5).

The Dyna-Soar originated in a fantasy of the German scientist Eugene Sanger who envisioned a hypersonic (\geq Mach 5.0) glide bomber that would skip along the edge of the atmosphere after being launched into orbit by a rocket. The newly independent US Air Force, aspiring always to go higher, faster, farther, foresaw a Mach 20.0 Dyna-Soar as the 1970s heavy bomber successor of the existing subsonic B-52 and an anticipated Mach 3.0 B-70 Valkyrie bomber. The Air Force, even while working on ICBMs, kept the Dyna-Soar project alive despite Eisenhower's wish to terminate it.

Chapter 1, "What's a Heaven For?: Setting Security Policy in Space," briefly forecasts the content of the entire book and sketches needed background on Second World War airpower concepts. Chapter 2, "Symbol of ... Longing and Hope': Dwight Eisenhower and America, 1952-1956," concerns postwar security planning, including Eisenhower's "New Look." Chapter 3, "What an Impressive Idea!': Conceptualizing the Aerospace Bomber," describes conflicts between the Air Force and Eisenhower over the militarizing of space. The president favored satellites, the Air Force orbital bombers.

The four following chapters, the heart of the book, consider the effects of the Soviet Sputnik satellite on Air Force and Administration space plans. Chapters 4, "Adjacent to the Abyss': Leveraging Crisis to Promote the Aerospace Agenda," and 5, "The First of a New Generation': Dyna-Soar spreads the Air Force Wings into Aerospace," explain how the Air Force and its political allies used the Sputnik crisis to keep the Dyna-Soar program going. They coined the term "aerospace" to coopt space as a proper realm of the Air Force.

1. Short for "dynamic soarer."

Chapter 6, “‘The Air Force Must Not Lose Dynasoar’: The Air Force Reaction to Eisenhower Policy,” shows that the Air Force knew the Dyna-Soar program was being threatened by the newly created civilian NASA agency’s successful satellite launches and manned space program. Chapter 7, “‘A Capacity ... Adequate for Our Own U.S. Purposes’: Space Security Policymaking in the Eisenhower White House,” examines the president’s post-Sputnik policy, while chapter 8, “‘Satellites Are Our Last Chance’: Pursuing the Need for Reconnaissance,” describes the increasing priority given to ICBMs and unmanned reconnaissance satellites. Unlike land-based ballistic missiles or “peaceful” satellites, a manned orbital bomber like Dyna-Soar defied the president’s wish not to militarize space.

Chapter 9, “‘Slipping Out of Control’: The Struggle to Define Security in 1960,” charts the 1960 Presidential campaign and assesses how “The Dyna-Soar vision represented a particular danger to the legacy of peace, security, and solvency Eisenhower had striven for eight years to establish” (170). Proponents of a manned orbital bomber saw an opportunity in an election campaign that featured Democrats criticizing Eisenhower’s defense policy and decrying the growing missile gap vis-à-vis the USSR.

Chapter 10, “‘A Thousand Drawing Boards’: Eisenhower’s Farewell Warning,” concerns his valedictory speech and last state of the union address against the backdrop of the president’s frustrations with the Air Force, as detailed in Sambaluk’s preceding chapters. Eisenhower’s assertions that “Every dollar uselessly spent on military mechanisms decreases our total strength and, therefore, our security” (182) and “In the councils of government, we must guard against the acquisition of unwarranted influence ... whether sought or unsought” (186) very likely reflect his anxieties about programs like Dyna-Soar.

The eleventh and final chapter, “‘Equal Attention to Both’: John F. Kennedy’s Activity in Space,” discusses the new administration’s cancellation of both Dyna-Soar and the B-70.

The author is at his best in analyzing the Air Force culture and explaining what made the service, which received the lion’s share of the defense budget, such a thorn in Eisenhower’s side. In the first place,

Air Force officers were generally committed to piloted systems as a means of exerting “combat power” [and] the Air Force is popularly assumed to have clung to bomber aircraft and to have resisted ballistic missiles and the space age. Although many resisted the idea of bomber pilots being supplanted by “silo sitters” in the missile age, the Air Force was actually highly interested in space systems—but it wanted the flexibility and potency of piloted systems. (70)

The Dynamic Soarer was a manifestation of this culture.

In the second place, in geopolitical terms, international agreements for a peaceful space and the insistence on distinctions between air and space alarmed Air Force leaders.

A defined boundary between “air” and “space” would overturn the aerospace concept and wreck the future of Dyna-Soar and follow-on systems. And in the eyes of its personnel, dedicated to defending the country by keeping the Air Force preeminent over Soviet rivals, a stunted Air Force meant an unnecessarily vulnerable nation. (122)

This explains a great deal about Air Force behavior. Another strength of the book is its exposé of one among other specific unnecessary and costly defense programs opposed by a budget-minded president (and retired five-star general) who fully understood defense matters and the nation’s security needs.

The Other Space Race is a scholarly work, grounded in documentary evidence in, among other repositories, the US Air Force archives and the Eisenhower Library. Its author is conversant, too, with

the pertinent 1950s-era secondary literature in military journals.² He also shows how alarmist, ill-informed articles in major newspapers and trade magazines³ garnered popular support for increased defense spending on Dyna-Soar and other aerospace projects. He even identifies Hollywood b-movies like *Bombers B-52*⁴ (starring Natalie Wood and Karl Malden) and TV shows like CBS's *Men into Space* (1959–60) as evidence of the close relations the Air Force cultivated with the media. The military-industrial complex was highly adept at swaying public attitudes.

Readers and researchers interested in the realities and irrationalities of defense procurement and the history of the US military during the Cold War generally will benefit from careful reflection on the arguments presented in *The Other Space Race*. Its author is particularly informative on Eisenhower's New Look defense policy⁵ and the effect of Sputnik on American public opinion. And, too, his concentration on the Dyna-Soar manned orbital bomber concept provides valuable insights into early Air Force thinking on space as a theater of operations. That said, the book is not a comprehensive history of the Air Force in the Cold War, analogous to, say, Ingo Trauschweizer's *The Cold War US Army*.⁶ It complements Curtis Peebles's study of reconnaissance over-flights of the Soviet Union during the Eisenhower years.⁷

Nicholas Sambaluk has clarified the US Air Force's attitude toward "aerospace" advances as well as the critical role of service branches, with their distinct cultures, in shaping policy and strategy. He also adds depth to our understanding of Dwight Eisenhower's forewarnings about the threat posed by the military-industrial complex.

2. E.g., *Air University Quarterly Review*.

3. E.g., *Aviation Week and Space Technology*.

4. Directed by Gordon Douglas, distributed by Warner Bros. (1957).

5. Like Fred Greenstein in *The Hidden Hand Presidency: Eisenhower As Leader* (NY: Basic Books, 1982), Sambaluk portrays a very engaged president.

6. Subtitle: *Building Deterrence for Limited War* (Lawrence: U Pr of Kansas, 2008).

7. Viz., *Shadow Flights: America's Secret Air War against the Soviet Union* (Novato, CA: Presidio Pr, 2000).