Remarks for Albert D. Wheelon Memorial Service
All Saints by the Sea Episcopal Church
Santa Barbara, CA
October 19, 2013
by
Richard L. Garwin

Bud Wheelon was a great man who accomplished great things. We first met in November 1958 in Washington as members of the U.S. government team for a 10-nation Conference on Prevention of Surprise Attack to take place in Geneva, Switzerland, beginning mid-November. In fact, the Conference met for six weeks without agreement on an agenda, but did agree on the title for the discussions. Herbert "Pete" Scoville was on the team, or maybe on the simultaneous discussions of Comprehensive Test Ban Treaty in Geneva. At CIA, Pete was Director of the Office of Scientific Intelligence.

Bud was a pleasure to work with, and we became quite close during our six weeks in Geneva, bootlegging time on the primitive Ferranti "Mercury" computer at the nascent CERN Lab in Geneva to calculate the probability that of a number of airfields in the Soviet Union, how many would be missed because of cloud cover in an open-skies observation campaign of aerial reconnaissance.

When Bud agreed to move to CIA in 1962 it was at a time of great turmoil. John McCone then created the Directorate of Science and Technology so that Bud was the first DDS&T of CIA. It was in that role that I first saw not only his analytical strength but his effort to understand problems and opportunities and to move people and effort decisively to capitalize on them. This was not exactly to be expected from an excellent theoretical physicist! In the last decade of his life he returned to the ardors and pleasures of theoretical physics, writing three books on "Electromagnetic Scintillation" a major feat.

In the Fall of 1962, with the ability to read all of the reports on Russian activities in Cuba, Bud became convinced that the Soviets were putting nuclear weapons there. He chaired the Guided Missiles and Astronautics Intelligence Committee but was "hooted down" when he expressed this view. Following the missile crisis, Bud was visited by a fellow from the Inspector General's (IG) staff, who chastised him, "How come you broke ranks with the DDI and the Office of National Estimates? How come you went against the grain?" Bud replied "You ought to be glad that somebody around here is yelling fire when there is a fire going on. You've got a nerve coming into my office and trying to brace me with an organizational loyalty issue. Where do you get off?" Bud goes on "He was stunned, and left. There was the fraternal, go-along, get-along attitude in many parts of CIA."

Bud's major contributions were in creating technical programs for both imagery from "photographic" satellites, and in gathering electronic intelligence—ELINT. Much of the

11/25/2013

<sup>&</sup>lt;sup>1</sup> "Charting a Technical Revolution—An Interview with Former DDS&T Albert Wheelon," of 17 October 1998, released in redacted form 21-Jul-2008, http://www.foia.cia.gov/sites/default/files/document conversions/49/an interview.pdf

imagery satellite story has been told in recent declassified histories from CIA and the National Reconnaissance Office, NRO. These programs would never have happened without the imagination and drive of Bud Wheelon and his determination to have a technically competitive program in the U.S. government, which for organizational neatness would have assigned the execution of these programs to the Air Force, nominally under the NRO.

Bud inherited the CORONA film-return satellite program that by its very nature produced images weeks after they would have been most interesting. He supplemented that with the HEXAGON broad-area search program (1971-1986), still returning film by a parachute to Earth—an activity headed by Jackson Maxey. And the current near-real-time imagery capability with high-resolution images radioed to Earth after the satellite passes over the point of interest was achieved with urgency and skill in 1977 according to the program conceived by Bud Wheelon and led by Leslie C. Dirks.

Less can be said about the ELINT satellites, where Bud recognized a new capability when he saw it proposed, and went immediately to John McCone to gain his support.

But moral support is not enough, even when backed by the willingness to appropriate money. I worked closely with Bud during his time at CIA, as a member of the "Land Panel" under Edwin Land, which reported to the President's Science Advisor, who was a member of an Executive Committee (ExCom) consisting of the Science Advisor, the Deputy Secretary of Defense, and the Director of the CIA.

Bud was properly proud of his work in the development of the Mach-3 A-12/SR-71 reconnaissance aircraft. He incurred John McCone's wrath for risking his life in flying on one of the A-12 development flights at a time when things weren't going well. But Bud judged that his personal involvement was necessary in order to get the best from the government and Lockheed team.

Bud's legacy from his government work is a large part of the astonishing capabilities operated even now by the U.S. government 50 years after he set them in motion.

He closed the interview in 1998 by saying, "I was really spoiled by the Agency. Spoiled by its integrity. I had a good deal of trouble adjusting when I left the Agency. Not being able to depend on people. Always having to recalibrate. My time at CIA was just the best four years of my life. It was the highlight of my life. Not before or since have I had that kind of feeling of commitment or bonding or confidence in my colleagues. I simply never worked with such a fine group of men and women."

He was the best example of those of whom he spoke.