

Colonel Richard S. Leghorn
Inducted 2006



Colonel Richard S. Leghorn was born on 7 February 1919 in Brookline, Massachusetts. He graduated from the Massachusetts Institute of Technology (MIT) in 1939 with a Bachelor of Science degree in physics and a reserve commission as an Army second lieutenant. He began working for Eastman Kodak Company in Rochester, New York, but soon accepted an active-duty assignment at Wright Field's Aeronautical Photographic Laboratory. Arriving there in March 1941, he worked with such topnotch experts as James Baker, Amrom Katz, Richard Philbrick, and Duncan MacDonald. He commanded the 30th Photographic Reconnaissance Squadron during 1943-45 and shot film over Normandy in preparation for the D-Day invasion.

As he prepared to rejoin Eastman Kodak at war's end, then reserve Lieutenant Colonel Leghorn was persuaded to return temporarily to active duty as deputy commander of Task Unit 1.52, with the assignment of photographing the July 1946 Project Crossroads atomic tests on Bikini Atoll. While en route to the Pacific, he read a summary of the *United States Strategic Bombing Survey (Europe)*. Based on that report, consideration of atomic weapons' destructive power, and his personal experience with collection of "pre-D-Day photography," Leghorn became acutely aware of the need for a new reconnaissance philosophy—one focused on warning indicators, force levels, and an enemy's capability to launch an attack rather than on traditional targeting and damage assessment. Speaking at the dedication of the Boston University Optical Research Laboratory (BUORL) in December 1946, he enunciated the need for an extremely high-altitude strategic reconnaissance capability.

Recalled to active duty once again during the Korean War, he headed the Reconnaissance Systems Branch at Wright Air Development Center before being assigned in early 1952 to the development-planning staff of Colonel Bernard A. Schriever in the Pentagon. In the latter position, Colonel Leghorn contributed extensively to MIT's Air Force-funded Project Lincoln,

which issued the June 1952 *Beacon Hill Report* that identified extremely high-altitude vehicles—balloons, sounding rockets, air-breathing missiles, and aircraft—that could carry improved sensors near or over Soviet territory. This laid the groundwork for the U-2. Although Leghorn and other members of the Beacon Hill Group considered the possibility of observation satellites, it took the launch of *Sputnik* to garner their active support for immediate development of such platforms.

During the 1950s and 1960s, Leghorn became deeply involved with public policy related to national security, arms control, and disarmament. He said in the 5 August 1955 issue of *U.S. News & World Report*, “And we might announce a start on construction of a reconnaissance earth satellite, the transmitted results from which we would be willing to turn over to a U.N. inspection agency.” As a consultant to President Eisenhower’s Assistant for Disarmament Affairs during 1955-56, Leghorn was instrumental in formulating the “Open Skies” doctrine.

Leghorn established strong credentials in industry as a manager of innovative technology. He founded Itek, a high-tech “document retrieval” company that legally incorporated in Lexington, Massachusetts, on 10 October 1957. Itek Corporation developed the high-resolution photographic system for Corona reconnaissance satellites during 1960-72. In 1963, he became president of Dasa Corporation, a manufacturer of communications equipment. During 1966-85, he owned and operated nine cable television systems in five states. He created Cable Television Laboratories (CableLabs) in 1988 to apply systems engineering to manage technological change in the cable industry. In addition, during 1987-88, he founded Eidak Corporation to provide copy protection for video and television programming; with Jerome Wiesner, co-founded Magnascreen Corporation to develop large, flat-panel television displays; and, from the latter company, spun off Mirror Systems, Inc., to develop liquid-crystal mirrors for trucks and automobiles. In 1994, Leghorn formed OKTV, Inc., to create an alternative parental control system for managing television’s impact on children.

In addition, his previously mentioned intellectual and government advisory contributions, Leghorn participated in early Pugwash Conferences on Science and World Affairs and, in 1959-60, served as technology deputy on the President’s Joint Disarmament Study Commission in preparation for the ten-nation Geneva Conference. He became a fellow of the American Academy of Arts and Sciences and a long-term member of the Council on Foreign Relations. In 1989, MIT honored him by establishing the Richard S. Leghorn Professorship in Management of Technological Innovation.