Colonel Thomas O. Haig
Inducted 2000

Born in Ypsilanti, Michigan, in 1921, Thomas O. Haig volunteered for military service in World War II. After a year's meteorological training at the University of California, Los Angeles (UCLA), Haig attended the Meteorology Instrumentation School at Fort Monmouth, New Jersey. Thereafter, he operated "sferics" stations, which located storms by using radio direction finders to track lightning, on Bermuda and Saipan. During the early 1950s, Haig directed the "Moby Dick" program to develop the equipment and techniques required to send high-altitude balloons carrying reconnaissance cameras across Russia in Project GENETRIX. By the late 1950s, he was working in the Air Ballistic Missile Division on the West Coast as chief of the requirements office for satellite ground support. In this position, he oversaw the design and development of many parts of the tracking stations as well as the control center for CORONA, MIDAS, SAMOS, and related programs. He gained a reputation for getting things done, even if it meant cutting through some red tape.

The first CORONA photos in August 1960 convinced authorities that knowledge of cloud cover over Russia was necessary and could be obtained only via satellite. Since the civilian TIROS program could not yet meet the requirement, the Director, National Reconnaissance Office (DNRO) authorized an interim program. Launched by "Blue-Scout" boosters, the system would operate for one year until TIROS could take over. Program II began officially on 1 August 1961. Haig accepted the program director's position on three conditions: that he could use fixed-price, firm-schedule contracts; that he could select the personnel for his program office; and, that he did not have to use a civilian system engineering and technical direction (SE&TD) contractor. When TIROS delays persisted, Program II continued as Program 35. Confronted by problems of operating the meteorological satellites within the ground system designed for CORONA, Haig proposed two dedicated ground stations and a separate control center operated solely by Air

Force personnel—no contractors. Ten months later the nation's first operational satellite program manned entirely by Air Force military personnel became a reality.

After the "Blue Scout" booster proved inadequate, Haig proposed refurbishing Thor intermediate-range ballistic missiles (IRBMs) and adding a second stage plus parts from other boosters to create a new launch vehicle. The latter, dubbed "Burner I," solved the booster problems and simultaneously provided a convenient way to dispose of an embarrassing excess of Thors returned from Europe. No longer an "interim" effort, the military weather satellite received yet another name—Program 417. Its use was expanded to provide information on cloud cover for aircraft flights during the Cuban missile crisis, the evacuation of civilians from the Congo, and air operations in Vietnam. Haig and his "blue-suit" crew were deeply involved in engineering and development aspects of the program. They designed essential parts for the Burner boosters, invented magnetic spin-rate control of the satellite, conceived and introduced innovations, which greatly reduced the cost of ground stations, and developed simplified tracking software. The precedents established and attitudes generated in Haig's program office persisted long after the military meteorological satellite program was declassified and dubbed the Defense Meteorological Satellite Program (DMSP).

After serving as NRO Assistant Director of Research and Development, Haig retired from active duty in 1968 to become Manager of Simulation and Crew Training for the Manned Orbiting Laboratory (MOL) program at General Electric. Cancellation of the MOL program a year later moved Haig into a new position as GE's Manager of Advanced Manned Space Programs. In 1970, Haig became Executive Director of the Space Science and Engineering Center (SSEC) at the University of Wisconsin, where he led development of hardware and software for the Man-Computer Interactive Data Access System (McIDAS). That system, combined with the concepts and software developed in a four-year Innovative Video Applications in Meteorology (IVAM) program, which he initiated, turned images from the geosynchronous spin-scan satellite, also conceived and developed at the SSEC, into the world's first truly global meteorological system.