MEDALIST FOR 1946

For pioneering the development of turbojet propulsion of aircraft.

SIR FRANK WHITTLE

One day in July 1942, during World War II, a slightly-built young Englishman arrived in Washington on a highly confidential mission. So important was the equipment that accompanied him, so vital its secret, that he traveled under an assumed name and many who met him knew him only as "Frank."

He was in fact Frank Whittle, then a Wing Commander in the Royal Air Force; pioneer of the turbojet engine which was destined to make one of the most pro-found changes in aircraft propulsion since the beginning of powered flight. Born in Coventry, England, on June 1, 1907, Whittle entered Leamington College at the age of 11 on a scholarship won in elementary school. At the age of 16 he entered the Royal Air Force as an aircraft apprentice in the trade of metal rigger. At the final examination he was granted a cadetship at the Royal Air Force College, Cranwell.

During 1928 and 1929, as a pilot officer, he spent fifteen months in the lllth Fighter Squadron and was then assigned to a flying instructors' course at the Central Flying School, Wittering. It was during this course that the idea of using the turbine for jet propulsion first occurred to him. His patent application was filed in January, 1930.

After one year as flying instructor and eighteen months as a floatplane and catapult testpilot, he was sent to Henlow in 1932 to take the Officers Engineering Course. The summer of 1934 saw him at Cambridge University (Peterhouse). At the end of two years he was graduated as a Bachelor of Arts with First Class Honours in the Mechanical Science tripos.

With the aid of two former officers of the Royal Air Force, R. D. Williams and J. C. B. Tinling, a company named Power Jets Ltd. was formed in March 1936, and an order was placed with the British Thomson-Houston Company at Rugby for the manufacture of an experimental jet propulsion turbine. In 1936 the Air Ministry arranged for Whittle to remain at Cambridge for a post-graduate year, enabling him to continue work on the engine. Later, after the Whittle

engine had successfully passed its first test run, the Ministry permitted him to work full time on it by assigning him to the Special Duty List, on which he remained until 1946.

In May 1941 the Gloster-Whittle E-28, powered by the W-2 engine, flew successfully. In October 1941 an experimental edition of the engine and drawings were sent to the General Electric Company in the United States. Nine months later Whittle himself made his secret visit.

He became a Fellow of the Royal Society in 1947 and was made a Knight Commander of the Order of the British Empire in July 1948. Whittle retired from the Royal Air Force with the rank of Air Commodore later the same year. After four years as technical advisor to BOAC he turned his attention to the design and development of a turbodrill for oil wells, first in association with Shell, and later with Bristol Siddeley Engines.

After emigrating to the U.S. in 1976 he accepted the position of NAVAIR Research Professor at the United States Naval Academy from 1977–1979. In 1980 Whittle was given the Wings Club's Distinguished Achievement Award.

In August 1996, Whittle died of lung cancer at his home in Columbia, Maryland.