James Charles (Jim) Floyd

(b. 1914)

"His outstanding accomplishments as an aeronautical engineer, manager and leader, and his superb organizational skills in the field of aeronautical engineering, have been of lasting benefit to Canadian aviation."

-Induction citation, 1993 TO CANADA'S AVIATION HALL OF FAME

James Charles (Jim) Floyd was born in Manchester, England on October 20, 1914, and graduated from Manchester College of Technology in 1934. During his early career he was privileged to work under the guidance of two great British designers, Sir Sydney Camm of Hawker Aircraft, designer of the famous Hurricane Fighter and the Harrier "jump jet", and Roy Chadwick, designer of the Lancaster Bomber. At Avro Manchester, Floyd was a design engineer on many notable aircraft types, including the Anson, Manchester, Lancaster, York, Lincoln and Tudor projects. He was part of a small team that turned the twin-engined Manchester into the four-engined Lancaster bomber, which would become one of the most famous and vital aircraft of World War II. He was later appointed Chief Project Engineer at the Avro design office in Yorkshire, working on the application of jet technology to transport aircraft.

In early 1946 Floyd came to Canada as Chief Design Engineer at A.V. Roe Canada Ltd., the newly established Avro subsidiary set up at the former Victory Aircraft Ltd. plant at Malton Airport, Toronto, Ontario. He immediately set to work to build a technical team to design a jet-powered transport around specifications established by Trans Canada Airlines (TCA). Under his leadership, the Avro C-102 Jetliner was flying by August 1949, a little over two years from the release of the first drawings, a record time for a major transport project. Its first flight on August 10th was just days after the British-designed de Havilland Comet became the world's first commercial jet to fly.

The Jetliner, the first jet passenger airplane to fly in North America, established an impressive record in ramp-to-ramp trials for high speed, low maintenance, and reliability. Those trials also assisted the Federal Aviation Administration (FAA) in the United States in establishing certification and operational requirements for jet passenger aircraft many years before such an aircraft went into service in that country. Ironically, at the start of the Korean War, the Canadian government ordered absolute priority to the CF-100 fighter project and the Jetliner was never put into production despite the declared interest of several American airlines and the United States Air Force. Even though the Jetliner project was cancelled, it brought international recognition and respect for Canada's engineering capabilities.

His work in the area of jet-powered passenger aircraft earned him the Wright Brothers Medal in 1950, the first time that award was ever given to a non-American. In 1952, he

was made Chief Engineer and set up a team to bring the lagging CF-100 program to completion as a fully operational fighter. It served the Royal Canadian Air Force (RCAF) for almost 30 years. This aircraft was also chosen by the Belgian Air Force as its front line jet interceptor.

Under Floyd's direction as Vice-President of Engineering, the Avro CF-105 Arrow supersonic interceptor was designed and developed. Its first test flight took place on March 25, 1958, with Jan Zurakowski (Hall of Fame 1974) at the controls. Canada was again leading the world in aviation technology. In 1958 Floyd was presented the McCurdy Award by the Canadian Aeronautical Institute for his leadership, organizational and engineering skills on both the CF-100 and CF-105 projects, two outstanding first-line fighters, designed and built in Canada. In the same year he was invited by the Royal Aeronautical Society to give the Fourteenth British Commonwealth Lecture in London, England, where he presented a paper on the design and development of the Arrow.

Following the cancellation of the Arrow project in February, 1959, Floyd went to England and was appointed Chief Engineer of an elite group of British and ex-Avro Canada engineers to undertake studies in state-of-the-art aeronautical and space projects at Hawker-Siddeley Aviation's Advanced Project Group in England. One of these studies led to the British government's funding of the Concorde project. For his work, and papers on the problems of designing supersonic passenger aircraft, he was awarded the Royal Aeronautical Society's George Taylor Gold Medal in 1961.

In 1962 he formed his own aviation consulting firm of J.C. Floyd and Associates, serving international aviation interests, including a number of major Canadian companies. He was retained by the British government as a consultant on the Concorde project during the eight years of its development from 1965 to 1972.

After his retirement in 1980, he and his family returned to Canada. Since that time he has dedicated himself to encouraging young Canadians to re-light the flame of technological enthusiasm which will once again put Canada among the leading nations in aerospace technology.

For many years Floyd was Patron of the Aerospace Heritage Foundation of Canada and a director of the International Hypersonic Research Institute in the United States. In 1988 he was presented with a Lifetime of Achievement Award by the Aerospace Industries Association of Canada. Other awards include Fellowships in the Royal Aeronautical Society, the Canadian Aeronautics and Space Institute, and the American Institute of Aeronautics and Astronautics.

James Charles (Jim) Floyd was inducted as a Member of Canada's Aviation Hall of Fame in 1993.

In side box:

Following cancellation of the Avro Arrow in 1959, many of Floyd's leading engineers were immediately hired by U.S. aerospace companies. One engineer, Jim Chamberlin, became head of engineering on the U.S. Gemini spacecraft program. He and other ex-Avro engineers took leading roles in the Apollo moon program. Floyd himself left Canada to head up an aeronautical and space research organization in the work on the Concorde project.