

## Avro Canada

Avro Aircraft Canada was a Canadian aircraft manufacturing company, known for their innovative designs, including the famed Avro Arrow fighter.

A.V. Roe Canada was set up in 1945 as a wholly-owned subsidiary of the UK-based Avro. Avro Aircraft, their first (and at the time, only) division, started operations in the former Victory Aircraft factories in Malton (now embedded in a much larger Toronto). During WWII, Victory had been one of a number of shadow factories set up in Canada to produce British designs in safety. Victory had built 3,197 Ansons, 430 Lancasters, 6 Lincolns and a single York.

With wartime construction ended, Avro turned to the repair and servicing of a number of WWII-era aircraft, including Sea Furies, B-25s and (of course) Lancasters. However, they also started looking for new designs to produce, and settled on jet-powered aircraft for the RCAF and Trans-Canada Airlines.

A.V. Roe Canada's first design started in 1946 as the Avro CF-100, a large jet-powered all-weather interceptor in an era of propeller-driven aircraft. Although the design was largely complete by the next year, the factory was not tooled until late in 1948 due to the ongoing repair work. The CF-100 would have a long gestation period before finally entering RCAF service in 1952, although it remained in service in small numbers until 1981.

Work was also underway on a civilian short-haul transport known as the Avro C-102 Jetliner. It just lost becoming the first jet transport in the world when it first flew in August 1949, losing to the deHavilland Comet by a mere two weeks. However, the company was still attempting to get the CF-100 into production at the time, and the government eventually forbade any further work on the project as the Cold War heated up with the Korean War. The project was eventually cancelled, and the only prototype was broken up in 1956.

During this time, A.V. Roe also purchased Turbo Research. Originally a small firm involved in cold-weather testing of jet engines for the RCAF, the company had started work on a number of their own engine designs. When they were purchased by A.V. Roe they were about mid-way through their TR.4 design, which was renamed the Chinook. The company would eventually be renamed in honour of their later TR.5 design, known as the Orenda.

Need for a newer and much more powerful interceptor was clear even before the CF-100 entered service, and a number of design studies on swept-wing versions started as early as 1952. A switch to the even more "modern" delta wing was studied as the CF-103, and this led directly to the larger CF-105 Avro Arrow.

By this time, A.V. Roe Canada also held a number of other large divisions, include Canadian Car & Foundry (1957) and Canadian Steel Improvement. However, the company was still primarily an aviation firm, and the cancellation of the Arrow in 1959 led to a massive downsizing and an attempt to diversify. Avro engineers who remained worked on marine, truck and automobile projects.

In 1962, Avro in the UK was purchased by Hawker-Siddeley, in one of a number of ongoing mergers in the UK aviation industry. The newly-formed Hawker-Siddeley Group then sold off much of its Canadian operations, and closed the Malton Avro plant. Today, the factories are used by Boeing aircraft, and are located on the north end of Pearson International Airport. Hawker-Siddeley Canada has since dissolved after divesting itself of almost everything other than the pension fund by the late 1990s.

Orenda Engines is the only remaining original company from the A.V. Roe empire, although largely in name only.