

Ottawa shoots itself in foot with Arrow

By John Boileau

On March 25, 1958—50 years ago this week—a massive white fighter jet rocketed down the Malton, Ont., runway of aircraft manufacturer A.V. Roe Canada and leapt into the skies, climbing to an altitude of 11,000 feet. At its controls was Jan Zurakowski, the company's chief test pilot.

Thirty-five minutes later, aviation history had been made with the completion of the first successful test flight of the Avro Arrow, the fastest production aircraft in the world at the time. The delta-wing airplane was an advanced, supersonic, twin-engined, all-weather jet interceptor, designed for the Royal Canadian Air Force (RCAF).

The flight was the culmination of a dream, a vision that led to nine years of hard work by a dedicated team of designers, engineers and technicians. Less than a year later, the dream lay dead in the dust, shattered by the Progressive Conservative government of John Diefenbaker.

It was a decision from which A.V. Roe never recovered—and which devastated Canada's aircraft industry.

How did such a debacle occur?

Building on a proud tradition of Canadian aviation milestones, the Arrow was to replace another Canadian-manufactured fighter, the long-range, all-weather Avro CF-100 Canuck. The Canuck was the first military aircraft totally designed and built in Canada, and became operational in April 1953.

By the time the Canuck production line closed, 692 of the aircraft had been built. With the Canuck in service, the RCAF and A.V. Roe began to think about its replacement. The result was the Arrow—officially designated the CF-105.

In December 1953, the Liberal government of Louis St. Laurent authorized the manufacture of two prototype aircraft in anticipation of an eventual production run of 600 aircraft, costing \$1.5 million each. The aircraft had impressive design requirements, perhaps none greater than the ability to accelerate to Mach 1.5 and manoeuvre at 50,000 feet while pulling 2G—without a loss of speed or altitude.

In the Arrow, the RCAF saw a means to more effectively counter the Soviet bomber threat, as well as take better advantage of NORAD, the proposed North America integrated air defence system.

On Oct. 4, 1957, millions of person-hours of work paid off with the rollout of the first Arrow prototype at Malton. Several dignitaries were in the crowd of 12,000 spectators, including minister of defence George Pearkes, senior Canadian government officials, Canadian and American air force officers and defence industry representatives.

Also present was Nova Scotia native J.A.D. McCurdy, who in a sense started aviation history in Canada. On Feb. 23, 1909, McCurdy had piloted the Silver Dart for about 800 metres across Cape Breton's frozen Baddeck Bay, the first flight of a heavier-than-air, powered machine in Canada.

Unfortunately, another spectacular aviation event overshadowed the Arrow's history-making rollout. The Soviet launch of Sputnik, the world's first artificial satellite, pushed the Arrow from newspaper headlines.

By the summer of 1958, concerns over the escalating costs of the Arrow consumed more and more of the federal cabinet's discussions. In a departure from the original plan, Canada was being forced to develop the aircraft engine, as well as the fire-control and missile systems.

Increased costs led to fewer aircraft being considered for purchase by the RCAF, with final costs estimated at \$12.5

million for each of about 100 fighters. On Sept. 23, 1958, Diefenbaker terminated the fire-control and missile development to cut costs and indicated the entire Arrow programme would be reviewed.

Meanwhile, renewed efforts had been underway to sell the aircraft to the United States. Although the Americans had expressed an interest in the Arrow and watched its development closely, they never made a firm offer. The August 1957 launch of a Soviet intercontinental ballistic missile also cast doubts on the future of the manned interceptor, and the U.S. was pushing the Bomarc missile as the answer to this new threat.

On Feb. 20, 1959, in the House of Commons, Diefenbaker abruptly announced the cancellation of the Arrow programme. His controversial decision had far-reaching effects.

Some 14,000 employees throughout Canadian aerospace industry lost their jobs. Many moved to the United States, where some became key players in NASA's manned spaceship programme, while others went to Britain and worked on the Concorde.

The Canadian air force never again procured a Canadian-made fighter jet. Instead, a series of American aircraft-

Starfighters, Freedom Fighters, Voodoos and Hornets (the latter at \$24 million each)—were purchased.

When the project was cancelled, there were five flyable Arrows and another six at various stages of completion. The government sold all 11 aircraft, as well as all tools, jigs and dies, as salvage. Today, no complete Arrow exists, much to the regret of aviation enthusiasts and museums around the world.

Sadly, the Arrow saga is yet another example of the seemingly unerring ability of successive Canadian governments to seize defeat from the jaws of victory.

Author and historian John Boileau is a retired military officer.