## **Hunting Arrows**

## The search for a lost flight into aviation history

BY DANYLO HAWALESHKA

ill Scott loved airplanes almost from Day 1. As a five-year-old living near the airstrip at Canadian Forces Base Trenton, Scott learned to identify airplanes simply by listening to the noise of their engines. At 17, his passion for flight led him to join the armed forces, where he became an airframe technician who inspected planes for structural soundness. That background, friends say, makes him an ideal person to lead the search for a coveted piece of Canada's aviation history: four models of the fabled Avro Arrow fighter that Scott believes lie still intact in Lake Ontario.

The aircraft, which travelled almost twice the speed of sound, was Canada's Cold War attempt at building the world's best supersonic jet. Between 1954 and 1956, the Avro Aircraft division of A. V. Roe Canada Ltd. launched nine scale models of the Arrow across Lake Ontario to test aerodynamics. The models weighed up to 225 kg, measured two metres wide at the wings, and the fuselage was three metres long. At the end of their test flights, as intended, they plunged into the lake. Now, Scott-working from his London, Ont., townhouse with help from some 50 volunteers—wants to salvage them. "What," he asks, "are we doing with a national treasure on the bottom of a lake?"

One answer can be found in the fate of the entire Arrow program. On Feb. 20, 1959, a day that came to be known as Black Friday, prime minister John Diefenbaker dumped the Arrow, citing its high cost of production. Then, in a move never adequately explained, Diefenbaker ordered all 11 Arrows destroyed—five of which had been completed and flown—as well as plans, models and dies. The models submerged in Lake Ontario were considered safely out of reach from interlopers. But in 1963, Scott learned about them from an Avro employee. He decided that if the chance came, he would rescue them. "I believe the Avro Arrow speaks to our spirit as Canadians," Scott says. "We are forthright, steadfast, looking ahead."

For Scott, the project is a labor of love, as well as an opportunity to give solace to disillusioned Avro employees. He understands frustration firsthand: Scott was forced to quit his Canadian Forces job after he was diagnosed with arthritis at age 24. Today, he lives on a modest disability pension.

Although Scott makes no complaints, the effort to recover the models has been exhausting. For the past four months, Scott has often worked seven days a week, either plotting model trajectories to narrow the search area or talking on the phone to volunteers. He and other volunteers with Arrow Canada Recovery 1998, as the team calls itself, have also paid a financial price. Scott estimates he spends up to \$150 a week on phone calls alone. Once dive operations begin, boat and other equipment costs are expected to reach \$4,000 a day. For now, the

Even if the team finds the models, other problems await. Jurisdiction over Lake Ontario's floor bed, up to the border with the United States, rests with the province, which issues search licences at its own discretion. "We would have to make a determination on a case-by-case basis," says Bernice Field, the archeological licence officer with the ministry of citizenship, culture and recreation. And in the event they are found, the question of who owns the models might have to be settled in court. The Avro recovery volunteers range from

what speed you throw it at the water," he says. Based on radar data and declassified flight-test results, Scott estimates the mod-

els are in Canadian waters about 16 km offshore (he will not divulge the exact distance), resting in about 60 m of water. He says he has narrowed his search area down to under one square kilometre, within which

he believes up to three models lie.



Scott with a miniature of the Avro Arrow: a piece of history that a government almost erased

team is being helped by Canada Trust, which is accepting donations at its branches across the country.

But the potential prize—even in model form—is a piece of aeronautical history that would be a tangible reminder of the days when Canada ranked near the top of the hitech world. The wings of the last four Arrow models were made of a high-grade magnesium alloy; the fuselage out of aluminum. The models were mounted on American-made Nike booster rockets and launched from Point Petre, 140 km southwest of Kingston, Ont. They climbed to about 4,200 m, hitting speeds of Mach 1.9—or about 1,400 km/h. Scott estimates the wedge-shaped planes slowed to about 500 km/h by the time they fell into the lake—and is convinced that their high-quality materials ensured their survival. "Pretty hard to hurt a steel knife no matter entrepreneurs to computer experts to engineers. One member is Lucan, Ont., resident Marlyn Smith, a 41-year-old full-time hairdresser who is also an experienced deepwater diver—and knows the potential difficulties ahead. At that depth, she says, the water will be only a few degrees above freezing, and divers will be easily exhausted.

But Smith, like Scott, is undaunted by challenges, and says her involvement stems from the patriotism the project arouses. "Everybody's working really hard to do this right for Canada," she says. "It's been a pretty moving experience." Scott, for his part, remains as enthusiastic as he has been from the outset. "If we can build the Avro Arrow," he says, "we sure as hell can bring up these models." And, in doing so, bring other Canadians a piece of history that their government once tried so hard to deny them.  $\Box$