## Originally published in Macleans Magazine, Jan 13, 1997. Freelance reporter June Callwood recalls her days of Avro and Orenda. Reprinted with permission, June Callwood. Also included is Junes' 1958 article,

## "The Day The Iroquois Flew" Thank you Macleans Magazine for the assistance.

## BY JUNE CALLWOOD

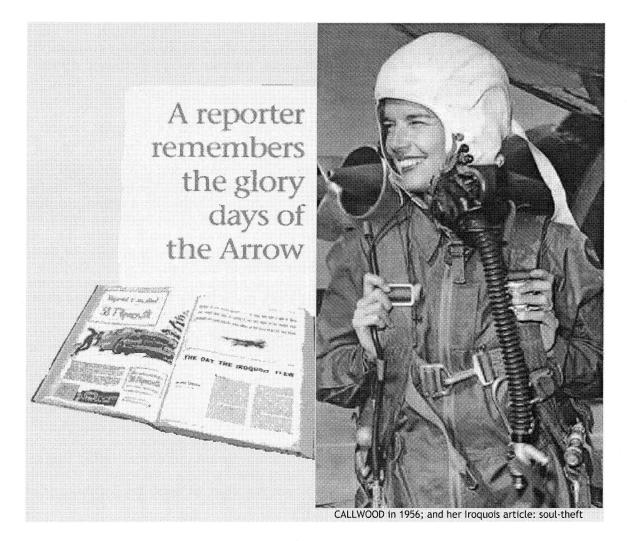
In the space of one week, early in December, I had two odd encounters. In the first, an elderly man approached me as I was having a coffee with a friend. He said it was a terrible shame that the Arrow-the supersonic fighter jet designed and built by Canadians in the '50s-was gone. No, he hadn't worked on the Arrow, as 14,500 did, and he hadn't even seen one, except in pictures. But it was a shame, he said again, and suddenly tears came to his eyes.

A few days later, I bought a newspaper from a homeless man on a street corner. He gave me a sharp look and said: "Do you think there is still one Arrow they didn't get?" I said yes. He thought that over and then said fervently: "I hope you are right."

The sense of personal loss inspired by an elegant, all Canadian warplane-in its time the most powerful in the world-has to be more than chauvinism. I used to think that grief for the Arrow was confined to people who knew it, as I did slightly, or to those who are pilots, as I am, also slightly. But the Arrow seems to have touched a dream of perfection that enthralls many, and its destruction is a kind of soul-theft.

I don't recall that in the'50s anyone imagined that the Arrow would carry such symbolic freight. It's not that we weren't proud of Canada's audacity in building the world's best combat airplane, superior to anything developed in the United States or the U.S.S.R. My point is that the Arrow didn't seem a fluke. We thought it natural that Canadians would be among the best, if not the best, at anything we really tried to do.

That cocky ebullience was a curious blip in the normally dolorous psyche of Canadians, but most of the young adults of the 50s had reason to feel invincible. After living through the Depression of the Thirties, during which almost all of us had known poverty's various humiliations, we were eating three times a day in houses with bay windows, a maple sapling in the front yard, and a car in the driveway. Our generation fought gallantly in the Second World War, Canadian infantry, sailors and airmen always getting the dirtiest end of the stick. We had put our casualties and horrors behind us and were raising children who went to orthodontists.



In 1957, just two years before the Arrow was scrapped, Canada was the fifth-largest industrial nation in the world, with the second-or third-highest standard of living. Lester B. Pearson had just won Canada's first, and only, Nobel Peace Prize for taking the starch out of the Suez crisis, which almost became the Third World War. Canada's brilliant diplomatic corps, acknowledged to be the world's finest, invented the idea of international peace forces and sold it to the United Nations. Canada's world status had gone swiftly from "small nation" to "middle power."

Having recently freed ourselves from most of our colonial ties to Britain, Canadians were growing indignant that the country was losing its economic sovereignty to the United States. James M. Minifie, in *Peace maker* or *Powder-Monkey*, described U.S.-Canada relations grumpily as a "horse-rabbit pie with one horse and one rabbit." When the Arrow production line began to roll, we thought it would be a two-horse pie.

In the fall of 1956, Pierre Berton; then managing editor of Maclean's, called to assign me to write about the phenomenal Iroquois engine that Orenda Engines Ltd., a subsidiary of A. V Roe Canada Ltd., was building for the Arrow. It now seems odd that Maclean's wanted a story about the engine rather than one featuring the showy Arrow, but the assignment didn't strike me as notable otherwise-though some people, particularly aeronautical engineers and bomber pilots, later showed pained astonishment that a woman was interviewing them.

I learned immediately that the Iroquois engine was seriously behind schedule. It would be a long time before it powered anything, and longer before it was ready to be installed in the Arrow. Aircraft design normally is evolutionary, each new model bearing strong resemblances to its parent, but the Arrow team brazenly had jumped several generations. The result was a Frankenstein that was almost beyond the capacity of its scientists to control. When the six-metre Iroquois was lit for the first time in its test bed, it not only sucked out the cell's asbestos insulation, turning the interior into a winter wonderland, but it also created a roar so thunderous it could permanently deafen the ground crew-and some believed the noise would kill a person even 30 m behind it. Burt Avery chief design engineer, working in his garden 16 km away, could hear the Iroquois running in its test bed despite an advanced sound-smothering system.

Certainly the Iroquois would never power the Arrow full-throttle, not with a human at the controls, because the heat from friction would roast the pilot. The Iroquois, in truth, was not so much an engine for a superior high-altitude aircraft as it was a rocket booster for moon exploration.

Such an engine needed to be mounted in a huge plane for its preliminary air tests. The Royal Canadian Air Force therefore borrowed a six-engine B-47 bomber from the U.S. Strategic Air Command and then, with Washington's agreement, turned it over to Orenda. The next step was wacky from a design point of view. Canadair, near Montreal, mounted a pod for the Iroquois offside in the tail of the B-47, because it would have shaken the plane to pieces

if it had been placed farther forward. The huge appendage looked like an obscene goitre, and was balanced off with tons of ballast.

I dutifully went to an SAC base in Wichita, Kan., and flew in a B47 to get the hang of the problems the Iroquois test pilots would be facing. The B-47 was then an obsolescent medium bomber, undergoing displacement by the larger B-52 as America's nuclear bomber and Cold War deterrent. The cockpit was tiny, I discovered, the fuel-monitoring so delicate that pre-computer pilots carried slide rules, and the tips of the flexible wings flapped a full five metres in flight.

Two Orenda test pilots, Michael Cooper-Slipper and Leonard Hobbs, both former RAF fighter pilots decorated for courage, gingerly flew the weird thing from Montreal to Toronto. An Iroquois engine was installed in the pod, and around noon on an overcast Nov.

13, 1957, the B-47, its SAC insignia still faintly visible through a coat of paint and its six engines streaming heavy black smoke like a coaldriven train, climbed laboriously into the sky. It was followed by an RCAF CF-100, which looked like a barn swallow darting around a bear. The chase plane's function was to notify the test pilots if the Iroquois caught fire, a fair likelihood since it had been leaking oil.

At an appropriate air speed, enough to wake up the slothful Iroquois which otherwise needed a starter engine, the pilots opened the B-47's bright-red seventh throttle, and the Iroquois caught. A historic moment.

The Arrow, temporarily outfitted with lesser American-built engines, also was being air-tested. It was the most beautiful plane I will ever see. Even parked on its stilt legs on the tarmac, it made your heart ache. When it lifted straight up into the sky, a slim white arrowhead, it was poetry. I never saw it take off without my eyes stinging, and I wasn't the only one.

My story about the Iroquois appeared in Maclean's in February, 1958, under the title "The day the Iroquois flew." Almost exactly a year later, the country was shocked to hear that the Arrow was being cancelled. Some time after, people from Orenda called me with horrifying news: the Arrow and the Iroquois were being chopped into small pieces. My security passes had always been date specific, so I knew it would be impossible for me to gain admission to the carnage.

I spent the day in grief and outrage and went to bed in a state of misery. .

Our house is in Toronto's west end but distant enough from the airport that we rarely hear planes. The next morning, I was wakened

before dawn by the loudest airplane engine sound I have ever heard. Its shattering roar filled the sky for a long moment and then suddenly was gone.

"The Arrow!" I thought in amazement. Nothing else could make such a racket. Someone has flown an Arrow to safety.

Maybe so. Maybe somewhere, perhaps packed in straw in a barn, one poignant Arrow remains. Dreams aren't mortal.