

# Canada's Aerospace Industry

by Roger Beebe

## Beginnings

Much of Canada's aerospace manufacturing had its beginnings in the industrial efforts associated with the 20th century's two world wars and the 44-year Cold War. The manufacturing and maintenance work carried out during the war years created an industrial base that later supported civilian aviation operations. The Cold War's need for aircraft led to the manufacture of F-86 Sabres and CF-100 aircraft in Canada. This need still remained even after the cancellation of the Arrow project in 1959. The decision to purchase aircraft from the USA (the CF-104 and later the CF-5) and assemble them in the Montreal area has enabled this city to become the major centre for aerospace manufacturing it is today. The expansion of Montreal's aero-engine manufacturing and research capability also added to its strength.

Toronto became a strong aerospace centre through the expansion of manufacturing capabilities developed during the Second World War, mainly in components and electronics. Toronto also had a strong airframe assembly component, which later became Avro and then McDonald-Douglas. Orenda's engine facilities also continued even after the demise of the Avro Arrow.

## Major and minor aerospace centres

The strong political interest in keeping the Montreal and Toronto aerospace workforce employed meant more and more government developmental money spent in these two areas. While creating a strong domestic industry there, such largesse didn't go unnoticed in the rest of Canada, where the economic benefits of highly paid, skilled aerospace work were also desired. Some notable pockets of aerospace success can now be found across the country: in Halifax, Winnipeg, Kelowna and the lower mainland of British Columbia. The Maritimes' aerospace strength has developed in aircraft conversions, and helicopter repair and overhaul. Winnipeg has blossomed with engine maintenance and large-component manufacturing. Kelowna has developed capacity in aircraft repair and overhaul, and airframe conversions.

## Aerospace Policy Considerations

Most developed countries have seen aerospace as a national- and economic-security matter. The military benefits are obvious: the capacity to create modern aircraft and weapon systems gives a nation immediate access. Modern aerospace manufacturing and overhaul facilities underpin a strong transportation sector as well. In addition,

aerospace employs highly skilled scientists, pilots, engineers and technicians in many disciplines. The jobs are well paid and provide a good tax base for local governments. Who would not want such facilities in their community? Significant investment in the Montreal area over many years has enabled it to become Canada's aerospace leader. The addition in the 1980s of Bell Helicopter Textron to its mix of aerospace companies has certainly cemented its claim to be the aerospace centre of Canada.

## Today's Industry

Today Canada is one of the top five aerospace nations in the world, no mean feat. Innovative pioneers, skilled labour, and wise private and public investment have all played a part in this achievement.

Now retired as Regional Director, Prairie and Northern Region, Transport Canada after 10 years in the position, Roger Beebe also held other positions in his Transport Canada career, including Director, Airworthiness Western region, and positions at Ottawa HQ and in Ontario Region. His civil aviation experience includes Air Canada and Wardair. He also served six years in the Royal Canadian Air Force, mostly in Europe at 1 Wing Marvell, France, and Lahr, Germany. His aircraft experience includes B747, L1011, DC-8 series, DC-9 series, B707, B727, Twin Otter, Single Otter, Bristol 170, Viscount, and many 1960s military Fighter Aircraft, especially the CF-104.

He holds an AME licence in the categories M1 and E, and CAMC certification as both an Avionics Maintenance Technician and an Aircraft Maintenance Technician. Roger now lives in Manitoba where he is President of Plane Talk Consulting: 204-232-8819.