hammers, heat treating furnaces, full machine shop and complete non-destructive testing facilities.

Canada Forgings employs a mature quality control system meeting military, nuclear and aerospace requirements and a number of qualified and experienced personnel to handle customers metallurgical, NDE and quality requests.

Our management information services are fully computerized and extend into all areas of the operation including estimating, inventory control, order processing, accounting and cost controls.

AVERAGE WORK FORCE: 160 People

GROSS SALES: Not Listed

PLANT SIZE: 177,000 Sq Ft

EQUIPMENT: See discussion under CAPABILITY above.

EXPERIENCE: Canada Forgings produces high quality, specialty forgings for the most demanding and sophisticated engineering applications – jet engines, nuclear reactors, power generation, energy exploration, pipeline, off-road transportation, mass transit and ground defence. A list of our customers features such companies as Pratt & Whitney, General Dynamics, Garrett, Avco Lycoming, Bell Helicopter, General Electric, Westinghouse, South West Engineering, Marine Industries, Linimar Machine Ltd, etc.

KEYWORDS: Forgings; Specialty Forgings; Machining; Non-Destructive Testing.

REVISED: February 88

CANADAIR Inc

ADDRESS: 1800 Laurentien Blvd
St Laurent, Quebec, Canada
H4R 1K2

Mailing Address
P. O. Box 6087, Station A
Montreal, Quebec, Canada
H3C 3G9

CONTACT: Mr John McKenzie, Vice President, Corporate Development (514) 744-1511

HISTORY: Canadair was originally incorporated in late 1944 and is a wholly owned subsidiary of Bombardier Inc. The company has a fully-owned subsidiary, Canadair Challenger Inc, in Windsor, CT, and a Challenger Service Center in Hartford, CT. Mr Doug Marshall, Vice President for Government Relations is in charge of a Government Liaison Office in Ottawa, Ontario, (613) 233-9366.

CAPABILITY: Canadair has a high technology R&D capability specializing in aerodynamics, flutter analysis, composite materials, remotely piloted vehicles, fracture analysis, and computational design techniques. Their product line includes:

- Challenger business jet aircraft
- CL-215 multi-purpose amphibious aircraft
- CL-89, CL-227 and CL-289 unmanned airborne surveillance systems

They have active subcontract work on the Boeing 767, Lockheed C-5B, CP-140 and P-3C, McDonnell Douglas F/A-18A, F-15, and Northrop F-5, CF-5, and T-38. They specialize in machining to close tolerances (0.001 inch) with a high degree of repeatability. They have an integrated heat treating and stretch-forming system capable of treating and forming aluminum alloy sheets 40 ft x 8 ft x 0.375 in.

Their CL-89 (AN/USD-501) Airborne Surveillance System (unmanned) was designed for use at the Army Division level. It is fitted with either a photographic or infrared line scanning sensor and is reusable. It is launched from a mobile zero-length launcher and recovered with a two-stage parachute system employing inflatable air bags to absorb landing shocks. This drone is stocked in the arsenals of the UK, West Germany, France, and Italy.

The CL-289 (AN/USD-502) is a longer range updated version being developed jointly with Dornier GmbH of West Germany. This new vehicle carries both a photographic sensor and an infrared line scan (IRLS) sensor and covers a 150 kilometer range at speeds in excess of 700 kph. A real-time data transmission link is associated with the IRLS System. Onboard computers carry the flight instructions for both the CL-89 and CL-289. Production of the CL-289 for the armies of West Germany and France is underway.

The third model, CL-227, is an hourglass shaped, remotely piloted vehicle, and is now in the full scale engineering development stage. It is designed as a highly survivable surveillance and target acquisition system for use at medium range. It has VTOL capability and is launched and recovered from a mobile two-meter diameter platform. It can transmit real-time data.

AVERAGE WORK FORCE: 5565 Total

GROSS SALES: 1987 – $624M (Aerospace Products)

PLANT SIZE: – 2,700,000 Sq Ft (under cover)

EQUIPMENT: Their special equipment includes:

- Two Cincinnati profilers; numerically-controlled; 5-axis: Each bed 212 ft long, 13 ft 4 in wide. Each bed has 3 gantries with 3 spindles each.
- One Ingersoll profiler; numerically-controlled; 3 axis: Bed 96 ft long, 17 ft 5 in wide. Single gantry with 3 spindles.
- Nine Wilson profilers; tracer-controlled; 3 axis: Some 6 spindle, some 4 spindle.
- Several Kearney and Trecker 3 and 5 axis profilers; numerically- controlled.
- Two Autoclaves; one 15 ft dia, one 12 ft dia, for metal-to-metal, honeycomb and composite bonding.
- Heat-treat, stretch forming system. Electrically-heated furnace takes sheets 40 ft by 8 ft. 1000-ton stretch press takes sheets 50 ft by 8 ft and 1/2 in thick.

EXPERIENCE: The Canadair experience over the past two years include subcontracts for vertical stabilizers for the EF-111A, components for the Lockheed P-3C and CP-140, rear fuselage sections for Boeing 747SP and 767, components for the McDonnell Douglas F-15 and F/A-18A, and shipsets of components for the Lockheed C-5B. Current products include Challenger business jet, CL-215 multi-purpose amphibian, three surveillance systems and subcontracts.

KEYWORDS: Aerodynamics; Aircraft; Airframe Components; Airframe Structures; Castings; Coatings; Components (Airframe); Composite Components; Computational Design; Extended Length Machining; Flutter Analysis; Forgings; Fracture Analysis; Heat Treating; Machining; Metalworking; RPV; Software Services; Testing/ Test Equipment.

REVISED: January 88

CANADIAN AIRCRAFT PRODUCTS Ltd

ADDRESS: 2611 Viscount Way
Richmond, British Columbia, Canada
V6V 1M9

CONTACT: Mr J A Cameron, President – (604) 278-9821

HISTORY: Canadian Aircraft Products Ltd was founded in 1955 to design and produce aircraft floats. The company is Canadian owned and has no other Canadian locations or US subsidiaries.