he French aeronautics industry is a market leader for Airbustype and business aircraft, helicopters, engines and equipment. This sector was adversely impacted by defence budget cuts, but has benefited from international growth. In 2000,

Agusta Westland and Fokker. This consolidates Eurocopter's position with 45% of the international market.

Finally, the launch of the A400M military transport plane is one of Europe's main defence programs.

and service activities in Canada in order to increase their presence among their North American clientele.

With regard to Canadian suppliers, Pratt & Whitney Canada is the sole manufacturer of turboprop engines for ATR 42/72 aircraft,

## A soaring market French Aeronautics

total revenues in the sector, up 2.6%, exceeded \$39 billion. Its products are mainly for the commercial market, and 76% are for export.

## A soaring market

In 2000, the European firm Airbus held 46% of the global market for sales of civil aviation aircraft. Another 1,626 aircraft must still be produced over the next four years. The rate of delivery is increasing, with an objective of 400 aircraft by 2003.

The commissioning of the Airbus A380, the largest civil aviation project, is scheduled for early 2006. Eight airlines have already expressed interest in the 400- to 550-seat A380-800 model, with orders for more than 60 aircraft, a third of which are for cargo planes. The A380 and other large carriers will be assembled in Toulouse, and the interiors will be done in Hamburg. This confirms Toulouse's role as a hub of the European aeronautics industry. The super-jumbo will create 160,000 jobs in Europe, including approximately 10,000 direct jobs in France. The A380 program will break even with sales of 250 aircraft and will cost between \$14.8 billion and \$18 billion.

On the business aircraft market, the French company Dassault has sold 90 Falcon jets, close to half of the international high-end market, for total revenues of \$8.5 billion.

As for the NH90 cargo helicopter, 196 craft will be produced through a partnership between Eurocopter, Airbus proposes replacing the C-130 Hercules and C-160 Transall aircraft of seven European countries with 225 A400M military transport planes. This program will be managed by Airbus Military Company and EADS Military Transport Division. This project provides European engine manufacturers with the opportunity to develop a new turboprop engine, and many European companies have



formed a partnership in order to submit a joint tender. The cost for France of developing and purchasing 50 aircraft is estimated at \$8.5 billion.

## **Canada-France trade relations**

France imported \$542 million of Canadian aeronautics equipment in 1999, or a quarter of Canada's total exports to that country. The increase in regional air routes is creating new openings for manufacturers. Regional companies Air Littoral and Brit'Air operate fleets of 19 and 20 CRJs respectively, and Brit'Air has firm orders for 12 CRJ700 aircraft as well as four new CRJ900 aircraft. Many French groups, including Zodiac-Intertechnique, Thales Avionics/Sextant and Liebherr Aerospace, are involved in supplying the various systems required for these aircraft. Eurocopter, Thales Avionics and Liebherr Aerospace are continuing to develop their support

while companies such as Magellan Aerospace, Messier-Dowty, GE/Honeywell Canada and BAE Systems Canada have become suppliers or subcontractors of Airbus parts and equipment. Bombardier Aérospatiale is the largest non-European supplier of A330/340 wing structures and attachments.

For its part, Air Canada is one of the largest North American Airbus operators, with 103 aircraft running the gamut of Airbus products. And it was Air Canada that launched the A340-500/600 long-range aircraft in North America with the purchase of two A340-500s and three A340-600s.

## **Openings**

Opportunities to become involved in the Airbus programs exist, but the reduction in the number of suppliers means that these firms are required to deliver complete integrated systems, including design, engineering, assembly and final inspection, for long-term contracts. Canadian manufacturers interested in new programs such as the A380 or A400M must assess any opportunities for alliances with existing partners in Europe or North America in order to meet specific requirements. The growing cost of European civil and military programs is leading manufacturers to seek international partners for joint representation, co-production or joint development agreements for hightech products.

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