## Aerospace

Leading edge engineering skills have enabled Canadian companies to develop unique products such as the DASH 8 aircraft which has captured significant niche markets. The EC industry is well aware of the technological abilities of Canadian aerospace companies and is actively seeking new Canadian partners.

The Canadian aerospace industry is highly export-oriented. Exports to the EC consist largely of sales of Pratt & Whitney (now owned by United Technologies) engines, Boeing Canada aircraft and some proprietary products to original equipment manufacturers. Total exports will be boosted by Canadair's increasing sales of components to the European consortia, Airbus. Canadair is owned by Bombardier. Another Canadian success story is Spar Aerospace which developed the Canadarm and which is a leader in space station research and satellite communications.

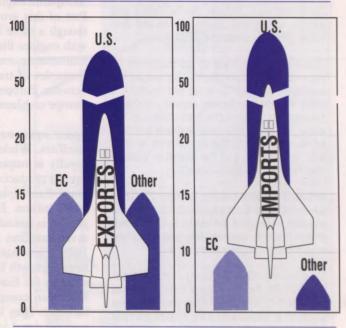
The European aerospace industry is the second largest in the world after the U.S. and still far ahead of Japan. Traditionally, military aeronautics accounted for a majority of EC sales in the sector, but this sub-sector is now decreasing in importance. On the other hand, the expanding product range of EC civil aeronautics has enabled EC industry to take advantage of a surge in sales. In the medium-term, growth in the European aerospace sector will come mainly from civil aeronautics.

The European aerospace industry has had a large impact on the formation of the EC Single Market. Such programs as Airbus Industrie, Panavia, Arianespace and the European Space Agency have played an important role in initiating the economic integration of Europe. The elimination of barriers to aerospace trade within the EC predates similar Single Market initiatives in other sectors.

## Structure

European aerospace companies tend to be smaller and less profitable than their American counterparts. This difference in size has been a strong motivating factor behind cooperative action among them. R&D alliances have enabled EC aerospace firms to address their high fixed development costs. Alliances have also helped to solve another problem. Perceptions of national self-interest had led to an overcapacity of aerospace production in Europe. The formation of international alliances in the EC led to the opening up of the competitive market. EC industries are now competing in global markets, while their internal market is now a pan-European one. Strategic alliances have made the EC industry much more competitive, and Canadian and American companies are playing important roles in these alliances.

## Aerospace Exports and Imports, 1985-89 (in percentage)



Source: Ernst & Young, ISTC and AIAC.

## Markets

There are five categories of products in the civil aerospace industry:

*Commercial jets:* Fifteen years ago, the European industry accounted for only 4% of world orders in the industry. In the late 1980's, it accounted for 25% of world orders and deliveries should remain at the same level for years to come. The Airbus line has had a major impact on this increase in production, but the production of aircraft with less than 100 seats such as the British Aerospace BAe 146 and the Fokker 100, has also been expanding rapidly. Europeans are also involved in the growth of the American civil aircraft. For example, companies in the Italian, Spanish and British industries have close associations with Boeing and McDonnell Douglas.

**Commuters:** Small commuting planes equipped with turboprop engines for regional connections are a very high growth segment. This area is dominated by European industry, which supplied 65% of the world market in 1988. In terms of orders, from 1987 to 1988, the world market grew by 36%, to 18,323 seats, while deliveries increased by 23% in 1988 to 11,050.