The Aircraft Manufacturing Industry - Overview

International aircraft manufacturing operates within a three-tiered capability hierarchy. Only a few firms have developed the design and systems integration competencies and marketing expertise which are necessary to compete successfully in the first tier of the industry as prime manufacturers. Accordingly, the world market for large civil aircraft is principally served by Airbus, Boeing, and McDonnell Douglas. These prime manufacturers rely on a larger network of international second tier suppliers of proprietary aircraft subsystems and major structural components. In turn, the first and second tiers utilize a vast network of third tier suppliers of parts and services. This study is directed at Canada's second and third tiers in their efforts to market systems, products and services to the Airbus Consortium.

The world market for large civil aircraft is directly impacted by economic cycles, world security issues, and government policy and regulatory decisions. Primary customers such as airlines and leasing companies are sophisticated purchasers, which demand rigorous safety, quality, performance, and support requirements. The major carriers also exert considerable buyer power and, therefore, tend to demand price and financing concessions. Successful suppliers are sensitive to the pressures placed on aircraft manufacturers by carriers. The aircraft manufacturing industry is also characterized by its high financial and market risk, steep learning curves, substantive economies of scale and scope, first mover advantages, and high technical and financial barriers to entry.

Governments have played critical roles in providing direct and indirect support due to the sector's global scope and importance in the economic and military dimensions of national security. Aircraft manufacturing can also be a significant generator of trade surpluses, provides highly paid skilled employment, and a facilitator of advanced manufacturing techniques and materials technology which can support other industries. In 1979, major aircraft-producing nations signed the GATT Agreement on Trade in Civil Aircraft to eliminate tariffs on civil aircraft, engines, and parts to facilitate an expanded globalization of the industry. In July 82, the US and EEC signed a bilateral agreement setting guidelines restricting the levels of direct and indirect government support, yet international markets and manufacturing activities remain distorted to this end.

The Canadian Aerospace Sector

The Canadian industry is unique among major international competitors to the extent that it does not rely on domestic military procurement and to the extent that it is owned or controlled by foreign interests. The Canadian sector's focus has been on civil markets (75%) and on export opportunities (64%).