Canadian Position

In 1993, Canada's space industry employed an estimated 4000 people and generated sales of over $650 million. Seven companies had space-related annual revenues in excess of $15 million, and accounted for over 85 percent of total industry sales. Spar Aerospace represents over half of total industry sales and employment. The majority of companies in the space industry are Canadian-owned.

The Canadian space industry is comparable to that of most other industrialized countries in terms of per capita sales and employment. However, it exports a larger proportion of its total production than any other major space-faring country. Exports have grown from about $10 million in 1977 (17 percent of sales) to an estimated $270 million in 1993 (40 percent of sales).

Canadian companies focus on technology and market niches, with specialized areas of expertise. Examples include:

- COM DEV's multiplexers/switches;
- SED/Calian's telemetry, tracking and control equipment;
- MPR Teltech's ground station network technology;
- MPB Technologies' expertise and unique capabilities in space photonics;
- Canadian Marconi Company's and CAL Corporation's mobile satellite terminals;
- MacDonald, Dettwiler and Associates' (MDA) earth-receiving facilities;
- Intera's aerial radar mapping;
- Telesat's engineering, spacecraft procurement management and launch operations expertise;
- CAE's space simulation capabilities.

As a result of their niche strategies, many Canadian companies dominate the world market for the products or services they provide.

Spar Aerospace, as the prime contractor for the Canadian space program, has developed systems integration skills and payload capability. As well, Spar produces and exports satellite subsystems such as antennas and electronic systems. It is also pursuing new opportunities in small satellites and remote-sensing instruments.

Over 150 Canadian companies currently sell some space-related products and/or services. More of these companies, particularly in the remote-sensing, value-added area, are expected to enter the international market.

In communications, the challenge for the industry is how to exploit the space and ground segments of fixed satellite-based, overseas telephony markets, and how to market both hardware (space and ground) and service segments of the new global mobile networks. Canada's lead role in developing the Mobile Communications Satellite (MSAT) has positioned industry to pursue the rapidly growing market in mobile satellite communications products and services.

Market opportunities in the remote-sensing area are related to ground equipment, software and value-added services for both radar and optical data. Canadian firms are already established world leaders in ground-station and processing-system design. In fact, MDA has provided systems for 80 percent of the installed base of remote-sensing reception facilities worldwide. In the area of value-added products and services, Canadian companies also play a leading role, currently supplying about 10 percent of the world market, with sales of approximately $85 million in 1993. Sales are expected to increase to $240 million by 1998.

Although all remote-sensing data is currently provided by satellites belonging to other countries, Canada will operate its own remote-sensing satellite in 1995, when RADARSAT is launched. RADARSAT data will be internationally marketed exclusively by RADARSAT International of Richmond, B.C., which is negotiating reception agreements with ground-station operators, usually government-funded national facilities. This will be complemented by a concerted effort to promote global awareness and sales of RADARSAT data and related Canadian goods and services. Canada is