Transportation Electronics

Aviation

With the world's fifth largest aerospace industry, Canada has become a fertile ground for the development of aviation electronics. Canadian firms produce equipment for air traffic control (ATC), navigation, avionics, aircraft control, maintenance, simulation and passenger support.

A driving force behind present and future industrial developments is the Canadian Airspace Systems Plan (CASP) of the Canadian Department of Transport. This series of modernization programs is scheduled to be completed by the year 2000 at a cost of $3,500 million (1984 Cdn. dollars). CASP initiatives such as the Radar Modernization Program (RAMP) and the Microwave Landing Systems (MLS) program provide the workbench for Canadian firms to move to the forefront of modern aviation technology. As prime contractor on two RAMP projects, Raytheon Canada is becoming a world leader in primary radars, displays and related data processing equipment.

Among the many Canadian suppliers of navigation aids, Canadian Marconi Company is breaking new ground with its airborne MLS and global positioning satellite receivers. In the aircraft instrumentation field, Litton Systems Canada is gaining acclaim with its revolutionary flat panel multifunction cockpit displays. In a similar way, Leigh Instruments is making significant inroads abroad with its flight data recorders and crash position indicators.

One of Canada's best-known companies in aviation electronics, CAE Electronics, has captured a substantial share of the world market for flight training simulators. Another successful firm in the simulator business, Atlantis Flight Research, is expert in maintenance/procedural training systems for such specialties as flight control and hydraulics.

Other notable Canadian accomplishments include passenger information systems by Ferranti Packard Electronics and the unique advances made in gas turbine fuel controls and temperature control systems by Bendix Avelex and Garrett Canada.

Engineer at Leigh Instruments Ltd. places solid-state modules into a flight data recorder (FDR) which will then be fitted into a deployable airfoil. Leigh's FDRs are installed aboard a variety of commercial and military aircraft in Canada, the United States and Europe.