per year increased from one in 1976 to seven in 1980, and is estimated to be about 20 today. The growing demands of the large users, nearly all of whom are involved in computer and telecommunications and related business, have led to a wave of acquisitions. Large companies are buying up chip manufacturers to assure a source of supply and to ensure that the acquired design capabilities can be integrated with the other products made by the company.

Since the demise of Microsystems International Ltd in 1975, no Canadian firm has manufactured a broad line of general purpose chips. A division of opinion exists within the industry as to the need for a manufacturing capability for such chips. Nevertheless, Canadian industry does require access to a domestic custom-chip manufacturing capability. The sales figures for integrated circuits understate their importance to the electronics industry and to the future of Canadian manufacturing. The majority of chips are used by vertically integrated companies for their own use, especially in Canada. Thus they are embodied in the final product, or in the service rendered.

In 1981 the Ontario Government began financing a microelectronics development centre, which will have a limited chip manufacturing capability and will be aimed at specialized or custom applications, especially for small users. Meanwhile, the Canadian Government is examining the possibility of developing a broadly-based chip manufacturing capability to serve a variety of users. This will ensure that the Canadian electronics industry will not be dependent solely on foreign sources for chips.

EN BREF

LIEN CANADIEN AVEC AIRBUS

Le 21 juillet dernier le Canada s'est engagé à négocier une participation canadienne au programme de construction de l'avion A-320 d'Airbus Industrie. Cette décision est le résultat d'une année de discussions exploratoires entre le Canada, les sociétés aéronautiques canadiennes, les gouvernements français, allemand, britannique et espagnol, et les sociétés industrielles qui appartiennent au consortium d'Airbus Industrie. En annonçant la décision, le Ministre canadien de l'Industrie, l'Honorable Herb Gray, s'est dit convaincu que cette nouvelle association pour le Canada durera de nombreuses années, d'abord avec l'appareil A-320, puis avec d'autres avions qui viendront s'ajouter à la famille Airbus.

FOCUS ON OCEANS

Canada's growing reliance on marine resources and related activities will push federal science expenditures on oceans to nearly \$79 million in 1982, more than a 20% increase over last year. The diversified oceans spending ranges from hydrographic surveys to the application of space technology in the remote sensing of icebergs and sea conditions. Other research includes work on improving the detection and cleaning up of oil spills, seabed mapping, environmental impact studies and Arctic transportation.