

ticipation in the project is under negotiation with members of the Consortium.

Historically, Canadian companies have contributed to the large commercial aircraft market as sub-contractors in support of the major foreign prime contractors. With the departure of Lockheed from the field (it announced that the production of L-1011 will cease in 1984) and with the sharp reduction in sales of McDonnell-Douglas, Boeing and Airbus are likely to dominate the market in the future.

Should the current discussions with Airbus Industries be successful, participation as a partner by a prime Canadian contractor will create opportunities for Canadian sub-contractors in the industry.

2. Defence Products

International co-operation in this sector has become essential for the French because of the high costs of new technology development and because buyers are essentially national defence ministries. Since the establishment of a Franco-Canadian armament committee for research, development and production (RDP), only one worthwhile co-operation project has been created: France undertook the development of the Infra-Red Line Scan Sensor for the CL-289 surveillance drone — a Canada/German development program. Since Canada/France have compatible defence industries, additional co-operative projects could be pursued by Canada by proposing reactivation of RDP steering committee meetings to review possible military requirements that could lead to co-operative RDP projects.

Two major Canadian projects for which the French have shown a definite interest are on the drawing boards i.e. the Canadian Patrol Frigate Program (CPF) and the SeaKing helicopters replacement.

The CPF is for the procurement of six fully-equipped warships to be procured from Canadian industry within the assigned funding ceiling of \$2.6 billion. The successful Canadian contractor will be responsible for selecting equipment and systems for the ships as part of his overall responsibility for managing the program. A number of French firms have submitted bids for systems such as missiles, switchboards and underwater telephones.

There is also the possibility of a Canadian Armed Forces procurement to replace the aging SeaKing helicopters. Although no decision is expected before late 1983 and no procurement, if any, until the latter part of this decade, the contract should offer a large potential for industrial benefits as well as important possibilities for research and development programs.

3. Industrial Sector

There are at least three primary areas where Canadian companies could benefit from the know-how of the French: industrial robots, mining equipment (mainly for coal), and automotive. In addition, a more concrete project, that of Pechiney-Ugine-Kuhlmann, offers an important medium-term potential investment.

i) Robotics

France ranks fourth in the development of robotics technology behind Japan, the U.S. and Sweden. At present, Canadian capabilities are low in this area and have only recently begun limited production of industrial robots. The area represents substantial growth potential: it is predicted that by 1990 industrial robots will be a \$3-billion a year business in the U.S., a \$2-billion business in Japan and a \$1-billion business in Europe.

Although the major users of industrial robots include the automotive and heavy electrical equipment industries, it is expected that other areas such as resource processing, assembly operations, metal working and consumer electronic industries, as well as other assembly-type operations will also become major users. The increasing use of industrial robots and other forms of automation will be an important factor in ensuring that we remain competitive in a number of manufacturing industries. Canadian companies could benefit tremendously through licensing agreements or joint venture arrangements with French firms.

ii) Mining Equipment

Given extensive coal developments being planned and Canada's intent to encourage industrial and regional benefits spin-offs from such major projects, a promising area for industrial co-operation is underground coal extraction machinery and equipment. Of particular interest to Canadian companies are new manufacturing opportunities for the production of machinery and equipment related to long wall mining methods, especially road headers, coal shearers/loaders, universal plows and shuttle cars.

iii) Automotive

The French auto parts industry is very strong and is investing heavily in research and development. The potential for industrial co-operation in automotive parts has never looked so promising since the acquisition of 46 per cent of AMC shares by Renault. The latter has undertaken a program of encouraging transfer of technology from its current French suppliers to Canadian firms. This effort has had modest results to date, but indications of continuing progress have been provided by Renault.

An emphasis is placed on transfer of technology through 1) licensing agreements, 2) joint ventures and 3) direct investments. French companies wishing to enter the North American market are encouraged to consider Canada for investment opportunities because of the benefits they could derive from the Auto Pact, the Duty Remission Program and the duty-free arrangement if they establish manufacturing facilities in Canada.

iv) Aluminum Smelter

Pechiney-Ugine-Kuhlmann (PUK), which was recently nationalized, is one of France's leading industrial groups involved in mining, metallurgy, chemicals and nuclear fuels. It is the largest aluminum producer in France and the fourth largest in the world. Pechiney has been seeking suitable new smelter sites, mainly because energy costs and environmental concerns