The Bobtex Corporation consists of a staff of 40 engineers and technicians headed by 67-year-old Emilian Bobkowicz and his 35-year-old son, Andrew. The company is held 25 per cent by the Aluminum Company of Canada and about 60 per cent by the Bobkowicz interests.

The corporation is currently in its pre-commercial period, a stage devoted to ironing out bugs in the system, according to the elder Bobkowicz who started initial research in his basement in 1957. Mr. Bobkowicz, a graduate of the Warsaw Academy of Political and Economic Science, established his own textile firm in Poland. Before the Second Warld War he was one of the founders of the Gydnia Cotton Exchange. He came to Canada in 1949 with his family, obtaining Canadian citizenship in 1955.

That the company was able to get this far without faltering or falling under foreign ownership, Mr. Bobkowicz attributes in large part to the IRAP engineers at NRC.

"Without the effective moral, financial and technological support of NRC during the most difficult period for any invention (from the idea to the hardware stage), Bobtex would have had to 'Nolens volens' sell the rights to its patents to foreign interests . . .," Mr. Bobkowicz says.

The IRAP funding over the last seven years has paid the salaries of approximately two-thirds of the research staff. It has provided additional expertise by support for the participation of university personnel in selected fields on a continuing basis. This has involved professors from McGill University in Montreal, the Ecole Polytechnique de Montréal and St. Hyacinthe Textile Institute in Quebec. In addition assistance on technological problems was also provided by personnel from NRC's divisions of Mechanical Engineering and Chemistry.

Bobtex recently qualified for assistance under the Federal Department of Industry, Trade and Commerce's Program for the Advancement of Industrial Technology. Funding from PAIT for an 18-month period calls for a 50-50 cost sharing arrangement covering machine development. This includes the setting up in Montreal of the world's first Bobtex spinning plant. The machines will be used to evaluate and improve production of semi-commercial quantities of a wide range of "Bobyarns".

Dr. Andrew Bobkowicz, a chemical engineer who graduated from McGill University and went directly to work with his father, expects this research and development prototype plant to become ultimately the showcase of the Bobtex process in action on Bobtex equipment under mill conditions. He expects it should result in substantial export orders since Bobtex is export oriented because of the fact that the Canadian textile industry represents less than one per cent of the world textile industry.

Bobtex's immediate problems and considerations, according to Dr. Bobkowicz are to decide whether and to what extent:

- To manufacture the Bobtex machinery in Canada, possibly in partnership with an established Canadian light machinery manufacturing company;
- To licence on a royalty basis within the framework of the PAIT and IRAP programs the construction of Bobtex



Above — Bobtex staff at the drawing boards in their Montreal plant.

• Ci-dessus: Les dessinateurs de Bobtex au travail dans l'usine de Montréal.

Below: Technologists display three stages of manufacture: Roll of Bobyarn; full production loom run of canvas; and finished tote bag.

• Ci-dessous: Mise en évidence des trois étapes de fabrication: un rouleau de Bobyarn, un rouleau de tissus et un sac fabriqué par Bobtex.

equipment to leading foreign textile machine manufacturers in order to achieve faster penetration in selected markets;

- To partly licence machine construction in some markets and partly manufacture the Bobtex equipment in Canada, to stimulate production by licencees to optimize world market penetration;
- To enter joint ventures with leading firms in selected countries in which this would ensure a greater share of their huge market capacity.

However, due to the shortening life cycles of new technologies, Dr. Bobkowicz believes it will probably be more advantageous for Canada "to create a strong and efficient machine manufacturing base in Canada, controlled by Bobtex, while exploiting, if and when advisable, any of the above alternatives. The success of a Canadian manufacturing enterprise in serving many large export markets will depend on proper and timely tax and other government incentives as well as long-term financing to offset the disadvantage of the very small Canadian market as a viable production base for world-wide supply."