

Composites Atlantique gears up to meet growing demand for space-age materials

Composites Atlantique, a Canadian subsidiary of France's Aérospatiale, is investing \$1.2 million to install new machinery and transfer technology in its advanced-materials manufacturing plant in Lunenburg, Nova Scotia.

The expansion will accommodate the firm's growing business in the North American and European markets.

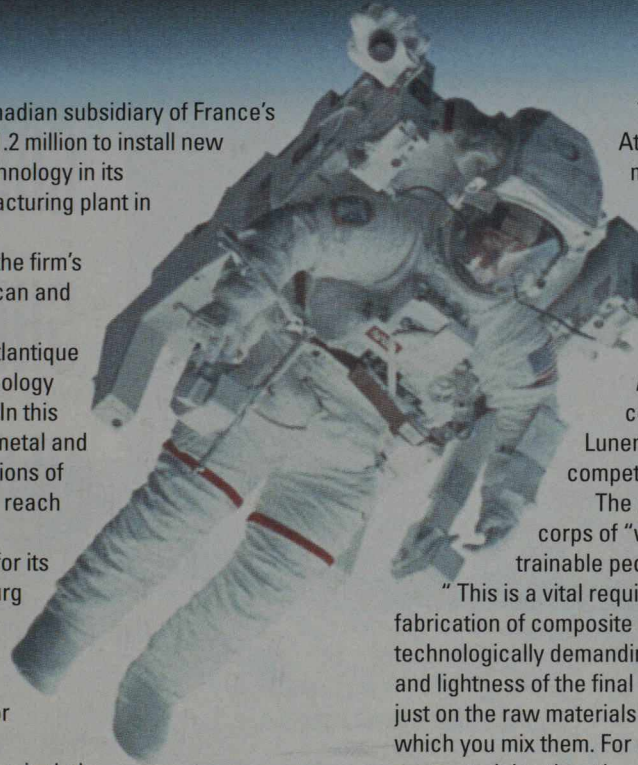
As its name implies, Composites Atlantique is involved in the relatively new technology of composite materials manufacture. In this field, scientists and engineers blend metal and fibre ingredients to achieve combinations of strength and lightness far beyond the reach of conventional materials.

Located in a coastal town famous for its picture-postcard beauty, the Lunenburg plant uses a highly-advanced computer-integrated manufacturing system to produce both composite materials and finished components for the world's aerospace, defence and transportation industries. Its customers include NASA, Rockwell, General Dynamics, Aérospatiale and Allied Signal. In the aerospace sector the company produces components ranging from structural panels for the Airbus and the Dassault Falcon to the helium tanks that fuel activator devices on the space shuttle.

Blended strengths

Composites Atlantique's products also find their way into such heavy-duty hardware as helicopter skids for military helicopters, missile nose cones and satellite panels.

The common requirement in all these cases is that the products not only be lightweight, but rugged enough to withstand immensely high pressures without cracking or corroding.



To achieve this resilience, Composites Atlantique interweaves a complex mix of raw materials into its products. The recipe includes metals such as titanium and aluminium, resins, and long fibres of carbon, quartz, balsa, kevlar and boron.

Maurice Guitton, Executive Vice-President of Composites Atlantique and original founder of the company, told *Canada Investment News* that, in addition to excellent connections to the U.S. and European markets, Lunenburg's Atlantic coast location offers many competitive advantages.

The most important, he says, is a strong local corps of "well-educated, hard-working and highly-trainable people."

"This is a vital requirement for us," says Guitton "because the fabrication of composite materials is a technologically demanding process. The strength and lightness of the final product depends not just on the raw materials but the manner in which you mix them. For example, the ratio of one material to the other is important. So is the angle at which the fibres are applied.

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Autoclave:
a high-temperature curing chamber for simultaneous curing, pressurization and vacuuming of parts

