"Introduction to the Workshop"

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Cold regions have held a fascination for adventurers and explorers throughout history. As technology has provided improved and, in some cases, softer lifestyles for those resident in temperate climates, the cold regions of the world have increased their magnetic attraction. Operations and developments that are routine in warmer regions require all of the expertise and resourcefulness available when performed in the cold, isolated spaces that make up the Arctic and Antarctic regions of this planet.

Countries that have operated in cold environments have developed expertise and organizational structures that may be of interest in other cold regions. Anticipated natural resource projects in the Soviet Arctic and the continued probing of the Antarctic will provide fruitful opportunities for continuing development. The same talents and skills that are required for success in the polar regions can also be used in other environments that are characterized by isolation or by extreme environmental factors. The difficult communications and high pressures faced in underwater operations or the remoteness and extreme temperatures faced in space offer opportunities to use existing technologies for the benefit of the countries involved.

France has long been a leader in ocean operations. Underwater exploration, shipbuilding and modern submarine construction are just some of the fields in which French industrial concerns have carved out leading positions. France also leads in the European approach to space. Her expertise in the field of aeronautics has been applied to a number of space related projects.

Canada, on the other hand, has had a long history of operations in the Arctic. The Beaufort Sea environment, for example, is characterized by massive ice features creating pressures several thousand times those encountered in normal construction situations. In addition, temperatures in these regions are typically well below those encountered in the populated areas of the world and the design temperatures may range as low as -50° C. Under these conditions, steel may behave like glass and even simple operations require the wisdom of Solomon and the patience of Job.

In makes great sense, then, for Canada and France to engage in this joint workshop on Cold Regions Technology. An examination of the prospects for development in both the Arctic and Antarctic will provide a feel for projects that may evolve over the next decade. A review of the research capabilities resident in the two countries will focus efforts on filling the "technological gaps" that remain; a review of existing cooperative projects will provide a base from which to work together on future programs.