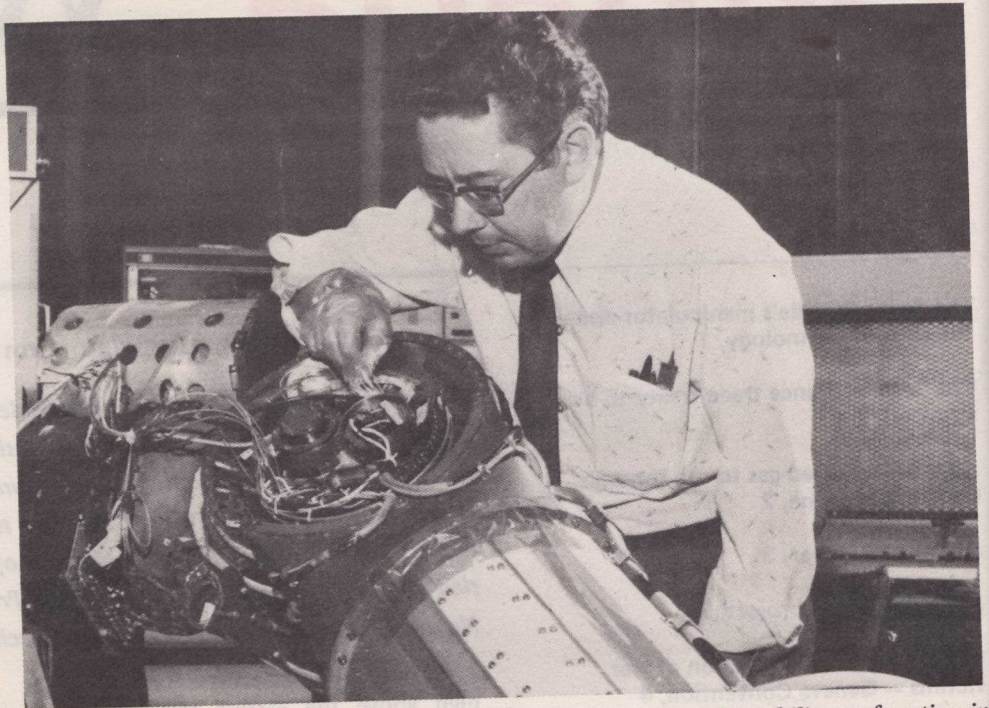


Most of the arm's hardware now exists as engineering models — full-size performance tested prototypes. Their ability to withstand severe vibration, low pressure and extreme temperatures is being evaluated in the Department of Communications' spacecraft testing laboratory in Ottawa, where the environment of space can be simulated in special chambers.

Test co-ordinator Geoff Garside of Spar explains: "We're trying to get a feel for the kind of beast we've built. Even though we have a lot of aerospace experience to guide us, no one has ever built or used anything quite like this before, and before we send it up we want some "hands-on" sense of how it's going to behave in space. We're down the line a fair way, and don't expect problems that surface in these tests to have severe impact on fundamental design, but you always run into unknowns when you're playing at the edge of technology."

*The foregoing article by Séan McCutcheon is reprinted from Science Dimension, Vol. 9, No. 6, 1977.*



*Geoff Garside prepares a prototype shoulder joint for tests of its ability to function in the hostile environment of space.*

## Old Canada/France trade treaty to be scrapped

Secretary of State for External Affairs Don Jamieson recently announced Canada's decision to terminate the Canada/France Trade Agreement signed in 1933.

The pact, no longer effective in governing Canada's economic relations with France, has been superseded by the two countries' common membership in GATT, French membership in the EEC and Canada's developing relations with the Community as a whole. Only Article 11, providing for the mutual protection of appellations of origin for goods produced in either country, continues to have significance.

However, in recent years this article has become increasingly contentious in Canada/France relations as a result of a series of court actions undertaken in the late 1960s by French industry concerning the use of the champagne appellation by Canadian producers.

In Canada's view the agreement no longer provides for a balanced exchange of advantages and has come to discriminate unfairly against Canadian industry in favour of foreign producers.

New legislation which is being prepared by the Minister of Consumer and Corporate Affairs in conjunction with the revi-

sion of the Trade Marks Act will include provisions for protection of many of the appellations of origin now registered under the Canada/France Trade Agreement but not of champagne and other terms commonly used as the names of Canadian products. This legislation will, among other things, protect appellations of origin in order to avoid deception of consumers.

As provided for in the agreement, termination will take effect three months from the date of notification.

## Algerian liquefied gas to run through Canadian pipeline

The National Energy Board recently granted licences to the United States company Tenneco LNG Inc. of Houston, Texas allowing liquefied natural gas (LNG) from Algeria to be imported by tanker at Lorneville, New Brunswick and exported by pipeline to the U.S. The gas is to be sold to Tennessee Gas Pipeline Company, a division of Tenneco Inc.

The Board held a joint public hearing to consider five applications related to the LNG project. They were submitted by Tenneco LNG Inc., Canadian Lowell Gas Ltd., Lorneterm LGN Ltd. and TransCanada PipeLines (New Brunswick) Ltd.

Licences granted by the Board allow Tenneco LNG to import for delivery to the U.S. up to 100 billion thermies of liquefied natural gas a year (equivalent to 376 billion cubic feet a year) for a 20-year period expected to start in 1983.

Maximum volume for the 20-year term will be 7.5 trillion cubic feet of gas (or 2,000 billion thermies). Tenneco has a 20-year supply contract with the Société Nationale Sonatrach of Algeria.

TransCanada (New Brunswick) and Lorneterm will construct, over four years, at a cost of \$636 million, terminal and pipeline facilities that include unloading, storage and vaporization facilities at Lorneville, New Brunswick. The pipeline, 36 inches in diameter, will extend some 66 miles from the vaporization plant to the Canada-U.S. border at St. Stephen, New Brunswick. A connecting pipeline, about 500 miles long, to be built in the U.S. by Tenneco Atlantic Pipeline Company, will provide the final link to American markets. The Canadian portion of the pipeline is expected to be completed in 1981 at an estimated cost of \$68 million.

The Board has asked that some quantity of gas, not exceeding 5 per cent of the LNG imported from Algeria, be available for sale in Canada if terms and conditions are economically feasible.