

INTERNATIONAL FILM AWARD

Tuna Angling - the Art and Science of Big Game Fishing, a film produced for the Newfoundland and Labrador Tourist Development Office, has been awarded second prize in the Film Festival at LaSpezia, Italy. The Festival attracts entries from many countries for competition in the maritime sports-film class. The Newfoundland film was submitted in response to a request from the sponsors of the Festival after it had earned acclaim in a similar festival held last year in Yugoslavia.

Participation in the LaSpezia Festival was arranged by the Department of External Affairs through its embassies and consulates in Italy. The Canadian Vice-Consul in Milan attended the prize-giving ceremonies and accepted the award, a medal, on behalf of the Newfoundland and Labrador Tourist Development Office.

The film, produced by Lee Wulff, is a 25-minute, 16 mm. colour production demonstrating the technique of tuna angling. It covers the preparation of baits, leaders, and other tackle, and demonstrates the proper methods of handling the boat and "playing" the big fish. Underwater sequences were filmed in the midst of schools of giant tuna, which provide the highly successful big-game fishing enjoyed by visitors to Newfoundland waters.

In recent years, the sport of tuna fishing has been spreading from its original proving ground in Conception Bay, and one of the purposes of the film is to provide instruction and orientation for both crews and anglers in areas where there are no resident sportsmen with the necessary background and experience.

HYDRAULIC ARMS HELP CHILDREN

Mechanical designers at the Northern Electric Company laboratories in Ottawa have just completed the design of the world's first set of fully-powered hydraulic artificial arms to be worn by a young patient. The arms were formally turned over to the Rehabilitation Institute in Montreal last month.

The new artificial arms took almost a year to develop, and are the latest product of a co-operative agreement between government, industry and medical agencies to provide the most advanced devices for children and young adults in Canada. Northern Electric began this study in 1965 by designing a miniature set of electro-mechanical arms for children aged five to seven. The firm's mechanical staff began by making exhaustive studies of human movements, which included calculations of the many angles through which a hand could move, the degree of this movement, closing pressures, and so on. Mechanisms of joints that could duplicate such movements were designed and built, and gear trains created to simulate the correct speed. In this way the various design criteria were gradually established.

DESCRIPTION

The first pair of electro-mechanical arms, which weighed about seven pounds, were turned over to the Montreal Institute in June 1966. This was the design shown in the theme pavilion, Man and his Health, at Expo 67.

The new hydraulic arms weigh less, are more powerful, have fewer parts and a much longer life-expectancy than the first electro-mechanical set. They are quieter and almost impervious to damage from dirt because of their sealed characteristics.

The "heart" of the new hydraulic arms is a miniature high-speed pump that sends fluid through a network of plastic tubing. Control valves direct the fluid to drive pistons in tiny cylinders and provide

power for whatever arm function is desired.

The new hand has a powered two-finger grasp to allow easy manipulation of such things as crayons and toys. For safety reasons, the grip pressure is limited to about two pounds. The thumb can be folded manually for easy entry into pockets. The wrist rotates in either direction, while the elbow bends in normally. The shoulder is powered to move forward and backward and can be manually actuated to open the arms and raise the elbow away from the body.

Power is supplied by miniature rechargeable batteries. These must be recharged once a day, and should last for several years.

CONFERENCE TO REVIEW THE CONSTITUTION OF CANADA

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passed more than 100 years ago should be adequate for all the needs or aspirations of Canadians today and for the future.

That is why my colleagues and I recommend that we now agree to begin a systematic and balanced process of constitutional review. It is impossible for me, or for anyone else, to forecast in advance what the ultimate and agreed results of this are likely to be. But as an indication of the scope of the review that we recommend, we would want to include in it the institutions of federalism, such as the composition and functions of the Supreme Court of Canada and the Senate. Certainly a most important part of any such review would be the division of powers and jurisdiction between the Federal and provincial governments....

In our initial discussions, this week, the representatives of the Federal Government will, of course, be receptive to the wishes and open-minded to the