

RELIEF TO NIGERIA

On July 12, Mr. Mitchell Sharp, Secretary of State for External Affairs, received representatives of a number of Canadian voluntary relief agencies, who expressed concern about the situation in Nigeria, where the threat of starvation in areas affected by hostilities had risen sharply in recent weeks. Mr. Sharp made clear the concern of the Prime Minister and the Government with the urgency and gravity of the situation and paid tribute to the relief work of the agencies involved. The Minister said in part:

...Some weeks ago, the Canadian Government made a cash grant of \$60,000 in response to the appeal by the International Committee of the Red Cross, as a contribution to its efforts in those areas of Nigeria affected by hostilities where the need is greatest. At the suggestion of the Prime Minister, the Canadian Government has now decided to make a further substantial contribution in the form of food aid as soon as agreement is reached on the means of delivery. The Canadian Government hopes that both parties to the conflict will search urgently for agreement.

One of the most urgent requirements in the present circumstances is to secure the agreement of the authorities of Eastern Nigeria, known as Biafra, to the overland transport of relief shipments which would allow delivery of supplies in quantities

NEW ROCKET LAUNCHER

The National Research Council of Canada will boost the rocket-firing capabilities of its Churchill Research Range in Manitoba this summer when it takes delivery of an Auroral Rocket Launcher.

This new 45-foot high launcher costing \$500,000, which is based on an NRC idea, is expected to be in operation in August - in time to take some of the workload off the four existing major launching facilities at the Churchill rocket range.

The range, which is operated by the Space Research Facilities Branch of NRC in co-operation with the National Aeronautics and Space Administration of the United States, is used primarily for research of the upper atmosphere and in studies of the Aurora Borealis, magnetic fields, weather conditions and other geophysical effects. It is also used for rocket-vehicle research testing, and serves as a launching site for the World Meteorological Rocket Network.

PROGRAMME FOR 1968

SRFB officials expect 1968 to be the range's busiest year. A total of 411 rockets and balloons are scheduled for launching - more than double the 1967 figure.

Of the 339 rockets to be launched, 110 are major vehicles such as the Canadian-built *Black Brant* family of rockets, the U.S. *Javelin*, *Aerobee* and *Nike*

sufficient to meet the needs of that area. The Canadian Government hopes that the International Committee of the Red Cross, which is the most appropriate agency to co-ordinate relief to all the areas affected, will be in a position to accept and utilize Canadian contributions wherever they may be required.

AIR AND LAND TRANSPORT

The Canadian Government would be prepared to help in the airlifting of supplies if an airlift proves practical and is agreed to by both parties to the conflict. An airlift would appear to be the most effective means of providing immediate relief. Given the magnitude of the problem, however, and the limitations on the amount of supplies that could be usefully sent by air, it is hoped that those concerned will give immediate attention to some arrangement permitting an adequate volume of assistance to move forward by land transport.

The Canadian Government, through its representatives in Nigeria and elsewhere, will continue to support efforts to bring relief to those who are suffering from this tragic conflict. We are also strongly supporting the efforts of the Commonwealth Secretary-General, Mr. Arnold Smith, to help bring an end to hostilities.

series and the smaller British-built *Skua*. The remaining 229 are small meteorological sounding rockets provided by NASA as a contribution to the World Meteorological Rocket Network. The major rockets carry scientific payloads varying in weight from 60 to 500 pounds to altitudes of from 80 to 600 miles in order to study auroral events which, among other things, cause disturbances in radio and telegraphic communications.

The new auroral launcher is designed to handle rockets up to 38 feet in length and weighing up to 4,000 pounds. It is expected to bring about a significant improvement in the range's ability to react swiftly in the winter months during short duration auroral events.

Activity at the range so far this year includes the launching of 11 *Black Brant* rockets and four *Skua* rockets, all part of the 1968 Canadian Sounding Rocket Programme. A total of 27 major Canadian launchings are scheduled for 1968. There were eight launchings in 1967.

HELP FROM UNIVERSITIES

Scientists from NRC, the Defence Research Telecommunications Establishment and the universities of Western Ontario, York (Toronto), Saskatchewan and Calgary provided the scientific payloads for the 11 *Black Brants*. Four were launched in January, one in March and six in April. These carried equipment for 124 separate experiments. Scientists from