

(ANNEX)

MEMORANDUM OF UNDERSTANDING BETWEEN THE CANADIAN DEFENCE RESEARCH BOARD AND THE UNITED STATES NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

1. The Canadian Defence Research Board (DRB) and the United States National Aeronautics and Space Administration (NASA) affirm a mutual desire to undertake a joint program of ionospheric research by means of satellites. The objectives are to conduct comprehensive studies of the ionosphere from the approaching minimum through the next maximum of the present solar cycle and to make the resulting scientific data freely available.

2. This joint ionospheric monitoring program is planned to consist of a series of four satellites to be launched at appropriate intervals between 1965 and 1970.

(a) The first of these, to be known as ALOUETTE II, will consist of the spare ALOUETTE flight unit with such agreed modifications to the sounder, telemetry, and electronics as engineering feasibility and schedule permit. In order to perform coordinated direct measurements, NASA will launch a satellite of its Explorer series in conjunction with ALOUETTE II.

(b) The remaining three satellites will bear the name ISIS (International Satellite for Ionospheric Studies). It is expected that two of the ISIS series will carry as the principal experiment a topside sounder of the swept frequency type (or a combination of swept and fixed frequency sounders) and such supporting experiments as may be determined in the manner described in paragraph 3(c) of this memorandum. It is understood that these two spacecraft and ALOUETTE II will be launched into orbits with apogees of at least 2000 kilometers and with inclinations high enough to obtain auroral zone data. A decision on the character and orbit of the third ISIS will be made during the course of the program. Sounding rocket flights may be necessary to test components and experiments and to conduct correlated experiments.

3. It is intended that this project proceed by mutual agreement between DRB and NASA.

(a) The body responsible for implementing the agreed program will be a Joint (DRB/NASA) Working Group. The Chairman of the Working Group will be appointed by NASA and will have overall responsibility for the success of the project. It is intended that other parties sharing in data acquisition and reduction or participating as supporting experimenters may, as appropriate, attend meetings of the Joint Working Group.

(b) DRB and NASA will name project managers to serve as contacts for technical coordination.

(c) It is the desire of DRB and NASA to give other investigators the opportunity to compete for the space assigned to supporting experiments. Accordingly, DRB will solicit proposals in Canada, and NASA will solicit them in the United States and other countries in conformance with its current practices. When the proposals have been received, DRB and NASA will exchange them so that each agency can review and evaluate all proposals. A Joint