

No. 7572

**UNITED STATES OF AMERICA
and
CANADA**

**Exchange of notes (with Memorandum of Understanding)
constituting an agreement relating to ionospheric re-
search by means of satellites. Ottawa, 6 May 1964**

Official text: English.

Registered by the United States of America on 3 February 1965.

**ÉTATS-UNIS D'AMÉRIQUE
et
CANADA**

**Échange de notes (avec Mémorandum d'accord) constituant
un accord relatif aux recherches par satellites sur
l'ionosphère. Ottawa, 6 mai 1964**

Texte officiel anglais.

Enregistré par les États-Unis d'Amérique le 3 février 1965.

No. 7572. EXCHANGE OF NOTES CONSTITUTING AN AGREEMENT¹ BETWEEN THE UNITED STATES OF AMERICA AND CANADA RELATING TO IONOSPHERIC RESEARCH BY MEANS OF SATELLITES. OTTAWA, 6 MAY 1964

I

The Ambassador of the United States of America to the Canadian Secretary of State for External Affairs

EMBASSY OF THE UNITED STATES OF AMERICA

No. 324

Ottawa, May 6, 1964

Sir :

I have the honor to refer to discussions between representatives of the United States National Aeronautics and Space Administration and the Canadian Defence Research Board regarding proposals for cooperation in a joint program of ionospheric research by means of satellites. The objectives of the proposed joint program are the conduct of 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 to the world scientific community.

The program agreed upon and the details for its proposed implementation have been incorporated in the attached Memorandum of Understanding² between the United States National Aeronautics and Space Administration and the Canadian Defence Research Board which was signed on December 23, 1963. The Memorandum of Understanding has been approved by the Government of the United States of America. It is understood that implementation and direction of the United States participation in the proposed program shall be the responsibility of the United States National Aeronautics and Space Administration and that implementation and direction of Canadian participation shall be the responsibility of the Canadian Defence Research Board.

If the foregoing meets with the approval of the Canadian Government, I have the honor to propose that this Note together with the attached Memo-

¹ Came into force on 6 May 1964 by the exchange of the said notes.

² See p. 176 of this volume.

random of Understanding and your reply, shall constitute an Agreement between our two Governments for cooperation in a joint program of ionospheric research by means of satellites to be effective from the date of your reply. This agreement may be terminated by agreement between the two governments prior to 1970 and thereafter, by either government upon six months notice.

Accept, Sir, the renewed assurances of my highest consideration.

W. W. BUTTERWORTH

Enclosure :

Memorandum of Understanding

The Honorable Paul Martin
Secretary of State for External Affairs
Ottawa

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.