

No. 14739

**UNITED STATES OF AMERICA
and
CANADA**

**Exchange of notes constituting an agreement relating to a
seismographic station near Kluane Lake, Yukon Terri-
tory. Ottawa, 2 April and 9 May 1974**

**Extension until 30 September 1976 of the above-mentioned
Agreement**

Authentic text of the Exchange of notes: English.

*The Exchange of notes and certified statement were registered by the United
States of America on 7 May 1976.*

**ÉTATS-UNIS D'AMÉRIQUE
et
CANADA**

**Échange de notes constituant un accord concernant une
station de séismographie près du lac Kluane dans le
territoire du Yukon. Ottawa, 2 avril et 9 mai 1974**

Prorogation au 30 septembre 1976 de l'Accord susmentionné

Texte authentique de l'Échange de notes : anglais.

*L'Échange de notes et la déclaration certifiée ont été enregistrés par les États-
Unis d'Amérique le 7 mai 1976.*

EXCHANGE OF NOTES CONSTITUTING AN AGREEMENT¹ BETWEEN
THE UNITED STATES OF AMERICA AND CANADA RELATING TO A
SEISMOGRAPHIC STATION NEAR KLUANE LAKE, YUKON
TERRITORY

I

The American Embassy to the Canadian Department of External Affairs

No. 50

The Embassy of the United States of America presents its compliments to the Department of External Affairs and has the honor to refer to the mutual interest of our two governments and scientific communities in achieving a better understanding of the seismic and tectonic processes as well as earthquake prediction in the active seismic belt which roughly parallels the western coast of our two countries.

Authorities of the United States Geological Survey (USGS) of the Department of the Interior have been in communication with officials of the Seismology Division of the Department of Energy, Mines & Resources for a number of years. Last May, officials of the USGS contacted officials of the Seismology Division (principally, Dr. Kenneth Whitham, who was then head of that Division and has since moved to the position of Director of the Earth Sciences Branch of the Department of Energy, Mines & Resources) concerning the desirability of improving the scientific and technological capability to locate small (Richter magnitude 3 and less) earthquakes in the Yakutat region between 139° and 142° west longitude. At that time, officials of the Seismology Division indicated that they had a continuing interest in this problem but that they unfortunately felt that their priorities precluded their installing a seismological station in the area.

The USGS operates a network of 32 seismological stations extending from Katmai National Monument on the Alaskan Peninsula to Yakutat in southeast Alaska. Subsequent to the discussions referred to in the preceding paragraph, the USGS found that it was possible for them to fund an additional station which could be utilized on the small earthquake location problem. Recent discussions with officials of the Earth Sciences Branch of the Department of Energy, Mines & Resources have reaffirmed their continuing interest in the small earthquake problem in the Yakutat area.

An important element in these seismic studies is a thorough investigation of current earthquake activity in coastal Alaska between 139° and 142° west longitude. This area, unlike adjacent coastal areas in southeast and south-central Alaska, has not experienced a major earthquake in this century. The area is referred to as a seismic gap, a temporary hole in the otherwise continuous distribution of major earthquake zones that have ruptured in this century. This seismic gap has been identified as a likely site for the next major (Richter magnitude greater than 7.0) earthquake in coastal Alaska and the Aleutian Islands. For this reason, the USGS is particularly interested in defining the current state of seismicity in this area and in conducting possible experiments to look for premonitory earthquake phenomena.

The existing distribution of seismographic stations in south-central Alaska is inadequate to locate earthquakes smaller than about Richter magnitude 4.0 in the eastern part of the seismic gap. A seismograph operating in the Kluane Lake region in the Yukon Territory would greatly strengthen the geometry of the existing seismic network with respect to shocks in the Yakutat region at the eastern end of the gap.

¹ Came into force on 9 May 1974 by the exchange of the said notes.

Accordingly, the Embassy has the honor to request the approval of the Government of Canada for the USGS to install, operate and maintain a short-period seismograph station near Kluane Lake in the Yukon Territory for a 15-month period beginning in June 1974 and extending through September 1975. Details are as follows:

- (1) The specific station site would be selected by field personnel of the USGS after a field examination of the Kluane Lake area.
- (2) The station would consist of a vertical short-period seismometer with a natural frequency of 1.0 second, an electronic amplifier, a helical drum recorder (Geotech Helicorder, Kinometrics VR-1 or equivalent visual recorder), a crystal-regulated chronometer and a radio time-standard receiver.
- (3) The station would be constructed in a manner which would make it possible to add one short-period horizontal component to the station later if that should become programmatically desirable.
- (4) The instruments would be installed and maintained by USGS personnel. The records would be changed and the daily station maintenance would be undertaken by a Canadian resident of Kluane Lake with compensation from the USGS under arrangements worked out directly between the USGS project chief and the Canadian resident.
- (5) Original records would be mailed to the USGS biweekly for analysis.
- (6) Copies of the records and pertinent calibration data would be forwarded to the Earth Physics Branch of the Department of Energy, Mines & Resources in Ottawa for retention approximately four to six weeks after being recorded.

Officials of the Department of Energy, Mines & Resources would be fully informed of the results obtained from the study and would be welcome to participate as intimately in the work as their funding and interests permit.

The Embassy of the United States of America renews to the Department of External Affairs the assurances of its highest consideration.

Ottawa, April 2, 1974.

The Embassy of the United States of America

II

DEPARTMENT OF EXTERNAL AFFAIRS
MINISTÈRE DES AFFAIRES EXTÉRIEURES
CANADA

ECS No. 707

The Department of External Affairs presents its compliments to the Embassy of the United States of America and has the honour to refer to the Embassy's Note No. 50 of April 2, 1974, requesting approval for the United States Geological Survey to install, operate and maintain a short-period seismograph station near Kluane Lake in the Yukon Territory from June 1974 to September 1975.

The Department of External Affairs confirms that the details in Note No. 50 regarding the construction, installation and maintenance of the station and equipment and access to data are acceptable to the Canadian authorities concerned. With regard to selection of a site, the field team should be apprised of the location of the boundaries of Kluane National Park and if a site cannot be found outside the Park permission to locate and install the station on Park lands should be sought from the Park Superintendent, Kluane National Park, at Haines Junction, Yukon Territory.

The Department of External Affairs avails itself of this opportunity to renew to the Embassy of the United States of America the assurances of its highest consideration.
Ottawa, May 9, 1974.

EXTENSION OF THE AGREEMENT OF 2 APRIL AND 9 MAY 1974¹ BETWEEN THE UNITED STATES OF AMERICA AND CANADA RELATING TO A SEISMOGRAPHIC STATION NEAR KLUANE LAKE, YUKON TERRITORY

By an agreement in the form of an exchange of notes dated at Ottawa on 15 July and 13 August 1975, which came into force on 13 August 1975 by the exchange of the said notes, the above-mentioned Agreement was extended until 30 September 1976.

¹ See p. 50 of this volume.