AN AGREEMENT
between
The Seismological Center of the Faculty of Engineering, Kabul University
and
The Geological Survey of the United States Department of the Interior

The Seismological Center and the Geological Survey enter into this agreement in order to strengthen present cooperative efforts in seismology. The agreement will benefit Kabul University and other concerned institutes of the Republic of Afghanistan by enhancing studies of local and regional earthquake hazards and will also support the goal of the Geological Survey to improve the Worldwide Data Base for Research in Seismology and Global Tectonics.

Specifically, the following cooperative activities are agreed upon:

The Geological Survey agrees to:

1. Upgrade existing station facilities and instrumentation. This will include the provision of funds sufficient for design and construction of a five by ten meter building close to the existing vault to house the recording equipment and serve as a work area, and provide new instrumentation which will consist of a backup power supply, a digital tape recording system, visual recorders, replacements for outmoded components of the present long-period seismograph system, and test equipment. Title to the seismic instruments in the new system will be given to the Seismological Center. These improvements will bring the station up to current WWNSS standards.

2. Install the new instrumentation and provide operating supplies, replacement parts, and on-site technical assistance as needed.

3. Provide scientific training of at least six months' duration for each of two of the Seismological Center staff. Practical training will cover data analysis and elementary topics in seismicity, earthquake mechanisms, and earthquake hazards evaluation, and will take place at the Geological Survey Branch of Seismicity and Risk Analysis headquarters in Golden, Colorado.

4. Provide technical training of twelve weeks' duration for each of two of the Seismological Center staff. The training will cover the operation and maintenance of the WWNSS system, the upgraded long-period system, and general instrumentation, and will take place at the Albuquerque Seismological Laboratory in Albuquerque, New Mexico.

5. Assist in updating and improving the Kabul University Faculty of Engineering technical library in the areas of seismology and seismic instrumentation.
The Seismological Center agrees to:

1. Provide space for the new building and equipment, power needed to operate the equipment, and telephone service between the vault and campus.

2. Employ Architects and Engineers for design of the building in accordance with environmental criteria provided by the Geological Survey. Contract with a local construction company for erection of the building. Funds for design and construction of the building will be provided by the Geological Survey through the Nebraska Team.

3. Provide the personnel trained under this agreement to operate and service the seismic instrumentation.

4. Continue to read the seismograms daily and transmit the readings to the Geological Survey National Earthquake Information Service via communications established by the Geological Survey, in accordance with the present procedure.

5. Provide seismograms and digital tapes to the Geological Survey on a regular basis so they may be copied for use by other research scientists. Original seismograms and true copies of the digital tapes will be returned to the Seismological Center.

This agreement is in eight original copies, four of which are in English, and two in Dari and two in Pashto. All three texts have the same value. The agreement remains in effect until such time as either party cancels it with at least six months advance notice.
The content of the above two pages are agreed upon and approved by:

**Hashim Salem**
Chairman, Seismic Committee
Faculty of Engineering
Kabul University

**J. D. Maloney**
For the
U.S. Geological Survey
Acting Director

**Zargar Baha**
Dean
Faculty of Engineering
Kabul University

**F. F. Muwafaq**
President
Kabul University

17 MAR 1976
Date

29.76
Date

*The above signature and acceptance of this basic agreement by the U.S. Geological Survey is contingent upon the acceptance and signature of the Chairman, Seismic Committee, Faculty of Engineering, Kabul University; Dean, Faculty of Engineering, Kabul University; and President, Kabul University.

In the event of inconsistencies between the basic agreement and Amendment No. 1, the order of precedence shall be as follows:

1. Amendment No. 1, dated **9 FEB 1976**
2. Basic agreement.
AMENDMENT NUMBER ONE (1)

TO

AN AGREEMENT

BETWEEN

THE SEISMOLOGICAL CENTER OF THE FACULTY OF ENGINEERING,
KABUL UNIVERSITY

AND

THE U.S. GEOLOGICAL SURVEY

OF THE UNITED STATES DEPARTMENT OF THE INTERIOR

This Amendment No. One (1) to the basic agreement dated __________ is entered into this __________ day of ______.

1. Item 1, Page 1, under the heading "The Geological Survey agreed to:" is deleted in its entirety and the following is substituted in lieu thereof:

"Upgrade existing station facilities and instrumentation. This will include (a) the provision of funds not to exceed $25,000 (U.S.), for design and construction of a five by ten meter building close to the existing vault to house the recording equipment and serve as a work area; and (b) providing new instrumentation which will consist of a backup power supply, a digital tape recording system, visual recorders, replacements for outmoded components of the present long-period seismograph system, and test equipment. Title to the seismic instruments in the new system will be given to the Seismological Center. These improvements will bring the station up to current WNNSS standards.

2. A new paragraph is added to the bottom of page 2 as follows:

"No changes in or modification of this agreement shall be made except by mutual agreement in writing between the Kabul University and the Geological Survey."
Abdul S. Galli
Chairman, Seismic Committee
Faculty of Engineering
Kabul University

Zeyan Bahri
Dean
Faculty of Engineering
Kabul University

F. C. Myruden
President
Kabul University

April 10, 1976

17 MAR 1976

Date

Date