

No. 16839

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**UNITED STATES OF AMERICA  
and  
THAILAND**

**Memorandum of understanding relating to the Chiang Mai  
Seismic Research Station (with annexes). Signed at  
Bangkok on 29 December 1976**

*Authentic text: English.*

*Registered by the United States of America on 10 July 1978.*

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**ÉTATS-UNIS D'AMÉRIQUE  
et  
THAÏLANDE**

**Mémoire d'accord relatif à la station de recherches  
sismiques de Chiang Mai (avec annexes). Signé à  
Bangkok le 29 décembre 1976**

*Texte authentique: anglais.*

*Enregistré par les États-Unis d'Amérique le 10 juillet 1978*

## CHIANG MAI SEISMIC RESEARCH STATION MEMORANDUM<sup>1</sup> OF UNDERSTANDING

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The purpose of the Seismic Station at Chiang Mai is to gather seismic data for scientific purposes and as a contribution to monitoring agreed limitations on nuclear testing. Seismic data from this station, when combined with data from other Thai stations, will provide useful information on the geology of Thailand. Such information can be used for the study of earthquakes and for other scientific purposes. In pursuit of the mutual interests of the Kingdom of Thailand and the United States of America, the Royal Thai Navy Hydrographics Department and the United States Air Force enter into the following understanding regarding the Seismic Research Station at Chiang Mai.

The United States Air Force turns over to the Royal Thai Navy Hydrographics Department all real property which constitutes the facility now known as the Chiang Mai Seismic Research Station which was formerly operated by the United States Air Force. The United States Air Force bails over to the Royal Thai Navy Hydrographics Department the seismic instruments and equipment currently in Thailand which are necessary to operate the station. A list of the real property, and of major items of equipment which will be transferred or bailed, will be provided to the Royal Thai Navy Hydrographics Department.

The Royal Thai Navy Hydrographics Department undertakes to operate the seismic station with its own personnel.

The United States Air Force will provide the necessary training of Thai personnel to enable them fully to operate the station. Except under extraordinary circumstances, the personnel selected by the Royal Thai Navy Hydrographics Department for training will be assigned to the station for a minimum of three years.

Recognizing the value of the data produced by the station to the two countries, the Royal Thai Navy Hydrographics Department agrees to share with the United States Air Force all data produced by the station, as received, on a 24-hour daily basis.

In consideration of the benefits to the two countries derived from operation of the station, and in consideration of Thailand's willingness to share the product with the United States, the United States Air Force agrees, subject to the availability of appropriated funds, to pay all reasonable costs of operation of the station, including training of the Thai personnel and maintenance and repair of the equipment and facilities with the exception of the 24-hour daily electrical communications capability, which will be provided by the Royal Thai Government at no cost to the United States. Equipment, parts, supplies and materials of any kind required to be brought to Thailand by the United States to assist the Royal Thai Navy Hydrographics Department in operation, repair and maintenance of the station will not be subject to import duties or other taxes, duties or imposts.

United States personnel will be permitted to visit the station as mutually agreed by the Royal Thai Navy Hydrographics Department and the United States Air Force Technical Applications Center for the purpose of staff visits and to

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<sup>1</sup> Came into force on 29 December 1976 by signature.

provide training, to assist the Royal Thai Navy Hydrographics Department in repair and maintenance of the equipment, or to provide other technical assistance. Visiting U.S. personnel will be assigned to the U.S. Defense Attaché Office while in Thailand.

The Royal Thai Navy Hydrographics Department and the United States Air Force Technical Applications Center will be the executive agents of their respective services for carrying out this understanding. They will jointly prepare necessary implementing measures and will exercise and implement the terms and conditions of this memorandum. The Chief, Air Force Division, Joint United States Military Advisory Group will represent the United States Air Force and the Air Force Technical Applications Center in Thailand on all matters concerning this understanding until arrival of the United States Air Attaché who will then assume the representational position on all future matters of this understanding.

This Memorandum of Understanding shall enter into force on the date of signature by both parties. After this Memorandum of Understanding has been in force for three years, it may be terminated by either party on one year's written notice.

SIGNED at Bangkok, Thailand, this 29 day of December 1976.

For the Government  
of the United States of America:

[Signed]

CHARLES K. ROSE III  
Colonel, USAF

For the Royal Thai Government:

[Signed]

BANCHONG SUBSANDEE  
Captain, RTN

#### ANNEX A

#### PERSONNEL

1. The RTNHD and AFTAC have mutually agreed that the personnel component will consist of 28 personnel as follows:

- a. Twelve RTN Personnel who will work as operators/analysts.
- b. Four RTN personnel who will work as maintenance technicians.
- c. One RTN station commander.
- d. Four RTN personnel to provide administrative and other support.
- e. Seven Thai civilian personnel who will be utilized as guards and general laborers.

2. As stipulated in paragraph III, A, 2, the RTN will pay the salaries of RTN personnel. AFTAC will reimburse the RTNHD for salaries of the seven Thai civilian personnel. Any increase in the number of Thai military or civilian personnel will be by mutual agreement of the RTNHD and AFTAC.

#### ANNEX B

#### TRAINING PLAN SUMMARY

1. Training will be divided into two programs, operator/analyst and maintenance training. Each program will consist of a formal training segment and a follow-on segment of on-the-job (OJT) training.

2. A total of twelve RTN personnel will be trained as operator/analysts. Four RTN personnel will be trained in three successive classes of fourteen weeks' duration for each class. This formal training will be followed by nine months of OJT.

3. Four RTN personnel will be trained as maintenance technicians in one 24-week class at Lowry AFB, Colorado. This formal training will be followed by nine months of OJT at the station.

4. The station equipment will be operated as a training device for eight hours per day during the initial fourteen weeks of operator/analyst training. The station will operate unattended the remaining sixteen hours per day to generate data for training purposes. After the first component of RTN personnel complete their formal operator/analyst training and begin OJT, routine data reports will be submitted to AFTAC as required.

## ANNEX C

### REAL PROPERTY

1. Central Recording Building including air conditioning system attached thereto.
2. Generator, warehouse, vehicle maintenance building.
3. Data line poles, long period instrument vault, short period instrument tank vaults and fencing around instrument sites.
4. Electrical distribution system.
5. Water supply system.
6. Sanitary disposal system.
7. Security fence surrounding the compound.

## ANNEX D

### BAILED EQUIPMENT LIST

1. The following major items of equipment necessary to the normal operation of the Seismic Station will be bailed over to the RTNHD for their use so long as this agreement is in effect:

- a. One seismic station set including amplification, signal conditioning, timing, power, calibration and recording subsystems, a film viewer, the data lines to the seismic transducers and three long-period and twelve short-period transducers.
- b. One radio receiver/transmitter base station with two portable station sets.
- c. One 60 kW diesel powered generator set with load bank.
- d. One aerial cable chair.
- e. One power switching unit.
- f. One magnetic tape degausser.
- g. Eighteen separate items of assorted test equipment.

2. Additions or deletions to this list may be made by mutual agreement between the RTNHD and AFTAC.

## ANNEX E

### REIMBURSABLE OPERATIONS COSTS

1. AFTAC agrees to reimburse the RTNHD for the following categories of costs for operation of the station:

- a. Electricity for the central recording building.
- b. Salaries of seven Thai civilian personnel employed as guards and laborers at an annual cost of not more than 75,000 baht.
- c. Gasoline, diesel fuel and other petroleum oils and lubricants (POL) for power generator and vehicles up to 10,000 liters of gas and 10,000 liters of diesel fuel per annum.
- d. Miscellaneous maintenance expenses, such as, for the air conditioning and water supply systems, up to 6,000 baht per annum.

2. Recognizing that the RTNHD has not budgeted funds to pay for transition costs attendant to assuming responsibility for operating this Seismic Station, AFTAC agrees to reimburse the RTNHD on a one-time non-recurring basis for transition costs in the amount of 840,000 baht.

3. Amounts or categories of reimbursable costs listed in paragraph 1 may be increased or reduced by mutual agreement between the RTNHD and AFTAC.

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