

**法規名稱：**(AD.1991.02.21) IMPLEMENTING AGREEMENT NO.1 TO THE AGREEMENT BETWEEN THE COOPERATION COUNCIL FOR NORTH AMERICAN AFFAIRS AND THE AMERICAN INSTITUTE IN TAIWAN FOR TECHNICAL COOPERATION IN GEODETIC RESEARCH AND USE OF ADVANCED GEODETIC TECHNOLOGY FOR A PROJ

**簽訂日期：**民國 80 年 02 月 21 日

**生效日期：**民國 80 年 02 月 21 日

ARTICLE I - SCOPE

This Implementing Arrangement describes the cooperative scientific and technical activities to be undertaken by the American Institute in Taiwan (AIT) and its designated representative, the Charting and Geodetic Services (C&GS) of the National Ocean Service (NOS) of the National Oceanic and Atmospheric Administration (NOAA), to undertake a joint absolute gravity measurement campaign in Taiwan with the Chung Cheng Institute of Technology (CCIT), the designated representative of the Coordination Council for North American Affairs (CCNAA). The purpose of the campaign is to begin monitoring vertical crustal motion, which is a major concern for NOS in providing vertical reference for absolute sea level measurements for a globally distributed network of tide gauges, under an international and NOAA program on Climate and Global Change. Vertical crustal deformation is particularly severe over subducting oceanic plates, such as the margins of the Pacific Ocean, where reference for several tide gauges will have to be provided. In addition, CCIT is interested in the monitoring and prediction of destructive earthquakes and volcanic phenomena, both of which are corollary activities over subductive plate margins. Periodic high-precision gravity observations are one of the important tools to use in studying these phenomena as well.

The monitoring of vertical crustal motions will require repeat absolute gravity observations at selected sites at approximately three-four year intervals. This Implementation Arrangement covers only the first, initial set of absolute gravity observations, anticipated to last approximately three weeks of observations in

Taiwan.

#### ARTICLE II - AUTHORIZATION

The activities described in this Implementing Arrangement will be carried out under the general terms and conditions established by the Agreement between AIT and CCNAA for Technical Cooperation in Geodetic Research and Use of Advanced Geodetic Technology. This Implementing Arrangement is hereby attached to that Agreement and becomes part of that Agreement .

#### ARTICLE III - SERVICES

AIT's designated representative, NOAA/C&GS, will consult with CCNAA's designated representative, CCIT to 1) define criteria for the establishment of suitable sites for high-precision absolute gravity observations, 2) review the candidate sites and select three sites for occupation with the NOAA/C&GS absolute gravimeter, and 3) determine a mutually agreeable schedule to take the NOAA/C&GS absolute gravimeter to Taiwan for the field observations.

The phases of the absolute gravity project involving NOAA/C&GS and CCIT personnel will include:

- A. Instrument set up, establishment of vacuum, and thermal stabilization, adjustments (three sites);
- B. Absolute gravity observations (three sites);
- C. Collection of environmental data, such as temperature, atmospheric pressure, seasonal precipitation, soilsamples for moisture determinations (three sites);
- D. Relative gravity observations to determine vertical gradient and transfer values to floor reference marks (three sites);
- E. Final processing of gravity data, including corrections for environmental effects;
- F. Preparations of final report and exchange of all data;
- G. Scientific seminars and consultations on high-precision gravimetry, including instrumentation, environmental corrections, and geophysical applications.

#### ARTICLE IV - ARRANGEMENTS

- A. In accordance with the Agreement, CCNAA will reimburse AIT f-

or all costs incurred by AIT, and its designated representative, NOAA/C&GS, in association with this Implementing Arrangement.

- B. The reimbursable funding required by AIT, and @ its designated representative, NOAA, for the activities described in this Implementing Arrangement is mutually agreed not to exceed US \$15,000, transferred in advance to the initiation of the field observations representative, NOAA, for activities described in in Taiwan.
- C. Per further mutual agreement, additional funding for and provision of transportation for NOAA/C&GS equipment and personnel in Taiwan will be provided by CCNAA to AIT, without any charge to AIT.

#### ARTICLE V - INTELLECTUAL PROPERTY CONSIDERATIONS

- A. NOAA/C&GS, the designated representative of AIT, and CCIT, the designated representative of CCNAA, mutually support the widest possible dissemination of information provided, exchanged, or arising under this Implementation Arrangement, subject to the need to protect pre-existing proprietary information, patent, and copyright restrictions.
- B. All raw and processed data collected, information developed, and interpretive documentation prepared by either participants will be available on request from NOAA/C&GS, the designated representative of AIT, and CCIT, the designated representative of CCNAA.
- C. Further distribution of data and information will be in the open scientific literature, under joint authorship by the representatives of NOAA/C&GS, the designated representative of AIT, and CCIT, the designated representative of CCNAA.
- D. Liabilities for the accuracy of data and information released by NOAA/C&GS, the designated representative of AIT, and CCIT, the designated representative of CCNAA, and for their suitability for any use are subject to the conditions stated in the Agreement.

#### ARTICLE VI - EFFECTIVE DATE, AMENDMENT AND TERMINATION

This Implementing Arrangement is effective on the date of the last signature hereafter.

This Implementing Arrangement may be amended and/or terminated in accordance with the Agreement.

The execution of the absolute gravity observations in Taiwan is estimated to take place in the February 1, 1991 and March 31, 1991 time window; all data processing and reporting will be completed no later than six months following the termination of the field work.

FOR THE AMERICAN INSTITUTE  
IN TAIWAN

(Signed)

Clarke N. Ellis

Deputy Managing Director

Date: January 11, 1991

FOR THE COORDINATION  
COUNCIL

FOR NORTH AMERICAN AFFAIRS

(Signed)

Stephen S.F. Chen

Deputy Representative

Date: Feb. 21, 1991