

Distribution limited

IOC/VI-14
Paris, November 1968
Original: English

UNITED NATIONS EDUCATIONAL,
SCIENTIFIC AND CULTURAL ORGANISATION
INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION

Sixth Session

(Unesco, Paris, September 1969)

SUMMARY REPORT

First Meeting of the International Co-ordination
Group for the Tsunami Warning System in the Pacific

Honolulu, Hawaii, USA - 25 to 28 March 1968

The First Meeting of the International Co-ordination Group for the Tsunami Warning System in the Pacific was convened by the USA Delegation Chairman, Mr. J. M. Klaasse. The Group was welcomed to Honolulu on behalf of the host country by ESSA, USC&GS, Senator Fong (US Senator from Hawaii), General Webster (Director, Hawaii Department of Defense), and President Hamilton (University of Hawaii).

Dr. Takenouti, representing UNESCO and IOC, took the chair pending organisation. Mr. Klaasse was elected Chairman; Professor G. L. Pickard, Vice-Chairman, and Dr. D. C. Cox was appointed as rapporteur. The Chairman and Vice-Chairman will function in a permanent capacity.

Official delegates present were: from Canada - G. L. Pickard and G. C. Dohler; from Chile (acting on behalf of the head of the Chilean Navy Hydrographic Service) - R. McIntyre; from Japan (acting on behalf of K. Kimura) - S. Suyehiro; from USA - J. M. Klaasse, L. M. Murphy, and B. D. Zetler; from USSR - T. V. Tarbeev; no delegate was present to represent N. C. Grover, official representative from the United Kingdom. Other official representation, besides that of UNESCO/IOC, was provided from WMO - Mr. Murphy; IUGG - Mr. Zetler; PSA and CIG - Dr. Cox. The names of these and other participants are listed as Annex III.

The agenda, as adopted, appears as Annex I.

Cdr. Robert Munson, Director of ITIC, reported that the International Tsunami Information Center was established in accordance with the USA offer, which had been accepted by IOC, to designate as the ITIC the Honolulu Tsunami Warning Facilities of the USC&GS. The ITIC functions are:

1. To ensure dissemination of tsunami warnings
2. To collect tsunami information on a real-time basis
3. To encourage tsunami research
4. To promote the exchange of scientific and technical personnel and data among the participating nations.

National reports presented by the five countries represented at the meeting indicated that significant advances have been made in the tsunami warning system instrumentation but that delays in communications are still evident in some areas, particularly in the southeast and northwest Pacific. The need for continuing public education in regard to the nature of tsunamis and how to react to warnings is also evident.

Significant improvements were also noted along the lines indicated by the Recommendations of the 1965 Working Group.

It was decided to recommend that the next meeting of the International Co-ordination Group be held in about two years, preferably in May 1970.

The text of the Recommendations adopted by the Group appears as Annex II.

AGENDA

1. Opening of the meeting
2. Election of the Chairman and Vice-Chairman
3. Adoption of the Agenda
4. Report of the Director of the International Tsunami Information Center and discussion of the Center
5. National reports on the development of the Tsunami Warning System and other related scientific and technical achievements since the 1965 meeting of the IOC Working Group on the Tsunami Warning System
6. Discussion of progress made in respect to the Recommendations adopted at the 1965 meeting
7. Communications for the Tsunami Warning System
8. Review of, and future plans for, the existing observational networks
9. Exchange of information relating to tsunamis
10. Co-operative efforts for tsunami research
11. Date and place of next meeting and arrangements for co-ordination of ICG activities during the interim period
12. Other business
13. Adoption of report of meeting
14. Closure of meeting

RECOMMENDATIONS OF THE FIRST MEETING OF THE INTERNATIONAL
CO-ORDINATION GROUP FOR THE TSUNAMI WARNING SYSTEM IN THE PACIFIC

(Honolulu, 25 - 28 March, 1968)

1. RECOMMENDATION ON COMMUNICATION FREQUENCIES

The International Tsunami Information Center should be in a position to collect and interpret on a real-time basis seismic and sea level data from ocean and coastal stations by satellite communication system and/or by high frequency radio channels which have been designated for oceanographic data collection by the WARC-Maritime Mobile, Geneva 1967.

The Group recommends that the IOC Working Committee on IGOS, which will meet from 2-5 April 1968 to plan the use of these frequencies in accordance with WARC Resolution MAR 20, consider the feasibility of utilizing a portion of these channels for the transmission of seismic and sea level data within the guard bands of 250 c/s widths at both margins of the frequency bands.

2. RECOMMENDATION OF EQUIPMENT

To improve considerably detection and communication in the event of tsunami generation, the Group recommends that certain key seismic and sea level recording stations (location could be submitted at a later stage) be equipped for telemetry and/or direct interrogation by the Honolulu Observatory and other participating nations.

The IOC should approach member nations having such equipment available or developed and encourage them to arrange for the availability of this equipment to other countries as recommended by the Group in order to improve the efficiency of the network of key stations in sensors and communication. Due consideration must be given to the recipient's willingness of acceptance, maintenance and safe keeping of the equipment for the benefit of the Tsunami Warning System.

3. RECOMMENDATION ON WDC RELOCATION

The World Data Centers A and B for seismology presently have responsibility for the international collection of tsunami data. It is recommended that the Branch for tsunamis in World Data Center A be relocated to the ITIC in Honolulu. It is further recommended that a note to this effect be included in the International Oceanographic Commission technical series 4, Manual on International Oceanographic Data Exchange, under Specialised Centres.

4. RECOMMENDATION ON ICG MEMBERSHIP AND OBSERVERS

It was noted that the present membership of the ICG reflects desires as to inclusion expressed by member states to the IOC at its fourth session. It is recommended that the ICG remain open to membership from additional IOC member states, and to the attendance of observers from states of the UN family.

5. RESOLUTION ON ITIC ESTABLISHMENT AND VISITATION

RESOLVED: That this Group recognises the importance of the establishment of the ITIC by the United States, acknowledges gratefully the offer by the US authorities to accept visiting scientists at the ITIC for the purpose of carrying out studies related to tsunamis, and notes appreciatingly the remarks of IOC representatives as to the availability of Unesco funding to support the travel of scientists visiting the ITIC.

LIST OF PARTICIPANTS

CANADA

Dr. G.L. Pickard
(National Co-ordinator)
Director, Institute of
Oceanography
University of British
Columbia
Vancouver 8, B.C.
Canada

Mr. G.C. Dohler
Head, Tides and Water
Levels
Department of Energy,
Mines and Resources
No. 8 Temp. Bldg.
Ottawa, Ontario
Canada

CHILE

Cdr. Ronald McIntyre M.
Chilean Navy
Assistant Naval Attache
Chilean Embassy, Washington
2154 Florida Avenue, N.W.
Washington, D.C.
USA 20008

JAPAN

Dr. Shigeji Suyehiro
Japan Meteorological Agency
Otemachi, Chiyoda-ku
Tokyo
Japan

U.K.

Not represented

USA

Mr. James M. Klaasse
(National Co-ordinator)
Associate Director
Coast and Geodetic Survey
ESSA, Rockville, Maryland
20852
USA

USA continued

Mr. Leonard M. Murphy
Chief, Seismology Division
Coast and Geodetic Survey
ESSA, Rockville, Maryland
20852
USA

Mr. Bernard D. Zetler
Atlantic Oceanographic
Laboratories, ESSA
901 South Miami Avenue
Miami, Florida 33130
USA

USSR

Dr. U. V. Tarbeev
Head, Hydrometeorological
Office
Pavlik Morosov Street 12
Moscow
USSR

IOC REPRESENTATIVE

IOC/UNESCO

Dr. A. Y. Takenouti
Assistant Secretary
Intergovernmental Oceanographic
Commission
UNESCO
Place de Fontenoy
Paris VII
France

INTERNATIONAL ORGANISATION OBSERVERS

CIG

Dr. Doak C. Cox
Director, Water Resources
Research Center
University of Hawaii
2525 Correa Road
Honolulu, Hawaii 96822
USA

PSA Dr. Doak C. Cox
(Also represented CIG, above)

WMO Mr. Leonard M. Murphy
(Also represented USA, above)

IUGG Mr. Bernard D. Zetler
(Also represented USA, above)

OBSERVERS FROM MEMBER STATES

FRANCE Dr. I. D. Raoux
Geophysical Laboratory
B.P. 640 Papeete
Tahiti
French Polynesia

USA Dr. William M. Adams
Geophysical Institute
University of Hawaii
Honolulu, Hawaii 96822
USA

Lt. Cdr. R.E. Alderman
Office of International
Affairs, ESSA
Rockville, Maryland
20852
USA

Mr. Joel B. Campbell
Office of Seismology and
Geomagnetism
Coast and Geodetic Survey, ESSA
Rockville, Maryland 20852
USA

Capt. Howard S. Cole
Alaska Field Director
Coast and Geodetic Survey
ESSA, Anchorage, Alaska 99501
USA

Mr. Robert A. Eppley
Office of Seismology and
Geomagnetism
Coast and Geodetic Survey
ESSA, Rockville, Maryland 20852
USA

continued

Dr. Thomas H. Hamilton
President, University of
Hawaii
Honolulu, Hawaii 96822
USA

Mr. G. R. Howard
American Red Cross
Honolulu, Hawaii
USA

Mr. John C. Marr
Bureau of Commerical
Fisheries
US Department of the Interior
Honolulu, Hawaii 96822
USA

Dr. Gaylord R. Miller
Joint Tsunami Research Effort
ESSA, University of Hawaii
Geophysical Institute
Honolulu, Hawaii 96822
USA

Cdr. Robert C. Munson
Pacific Field Director
Coast and Geodetic Survey
ESSA, P. O. Box 3887
Honolulu, Hawaii 96812
USA
(Also Director of ITIC)

Mr. George Pararas-Carayannis
Coast and Geodetic Survey, ESSA
P.O. Box 3887
Honolulu, Hawaii 96812
USA

Maj. Gen. Benjamin J. Webster
Director, State Department of
Defense
Honolulu, Hawaii
USA

Mr. Herman J. Wirz
Chief, Honolulu Observatory
91-270 Ft. Weaver Road
Ewa Beach, Hawaii 96706
USA