



ITSU TRAINING PROGRAMME IN TSUNAMI WARNING AND MITIGATIONS SYSTEMS



Organized by
UNESCO IOC International Tsunami Information Centre (ITIC)
NOAA NWS Richard H. Hagemeyer Pacific Tsunami Warning Center
(PTWC)

23 January to 3 February 2006
Ewa Beach and Honolulu, Hawaii, USA

GOALS:

- To familiarize participants with the operations of the Pacific Tsunami Warning Center as an international warning center supporting the Pacific and Indian Oceans and parts of the Caribbean Sea, and as a local warning center for the State of Hawaii.
- To familiarize participants with the Emergency Response Operations that are carried out after receiving information, watch, or warning bulletins from the PTWC, and to learn about other mitigation efforts carried out by the State and Counties.

PARTICIPANTS:

Indonesia Meteorological and Geophysical Agency (BMG)

Dr. Fauzi, Engineering, Head, Engineering Seismology and Tsunami Division, Geophysical
System Data and Information Center

Abdul Gafur, Head, Supply Management Division

Dr. Masturyono, Head, Geophysical Instrumentation and Calibration Division

Hendra Suwarta, Head, Data Management, BMG Regional Office, Medan

Germany

Petra Köhler, Project Management GITEWS (German Contribution to the Indian Ocean
Tsunami Early Warning System)

Matthias Müller, Staff member Early Warning and Mitigation Center

Torsten Riedlinger, Project Coordination Early Warning and Mitigation Center

** Chip to be gone Week 2, Laura to be gone 28 Jan - 1 Feb

** Except for 23 Jan (Day 1), all sessions planned to start at 9 am, and end by 5 pm.

PROVISIONAL AGENDA:

Week 1

Mon, 23 Jan, at PTWC, start at 10 am

Overview of TWC operations

Tues, 24 Jan, at PTWC

Morning:

Decide on topics to discuss in detail during Week 2

IT Architecture, incl seismic, sea level, and message data communications, issues of redundancy
and backup, reliability

Message Dissemination

Afternoon:

Tsunami Exercises

- Staff exercises within PTWC
- PTWC and multi-agency Federal/State/Local/NGO exercises
Types, Partners and Coordination, role of PTWC
- Planning
- Execution

Wed, 25 Jan

Morning: at PTWC

Continuing from Days 1 and 2

Afternoon: at Oahu County Civil Defense, Diamond Head (tentative)

Briefing and Tour

The role of the State in Tsunami Emergencies, Planning, and Outreach

Dinner hosted by Chip and Laura, 6:30 - 9 pm

Venue to be announced

Thurs, 26 Jan,

Morning (9-10 am): at Hawaii State Civil Defense Agency

Briefing and Tour

The role of the County in Tsunami Emergencies, Planning, and Outreach

Afternoon: at ITIC, NWS PRH Conference Room

Capacity Building Requirements for Indonesia

USGS training course development - Walter Mooney

PTWC, ITIC

Fri, 27 Jan, at ITIC, NWS PRH Conference Room

Round Table discussion: Indonesian Tsunami Warning System

Indonesia, Germany

PTWC (Chip McCreery and Stuart Weinstein)

ITIC (Laura Kong and Brian Yanagi)

USGS (Walter Mooney)

IRIS GSN (Rhett Butler)

Sat-Sun: Free days

Week 2, 31 Jan- 3 Feb

4 days at PTWC, 1 day in Honolulu (University of Hawaii, Oahu County Civil Defense)

PTWC operations - detailed discussions

Mon, 30 Jan

UNIVERSITY OF HAWAII, MANOA – MONDAY, 9-11 am

Dr. Mark Merrifield, Chair GLOSS Group of Experts

Bernie Kilonsky, Research Associate, University of Hawaii Sea Level Center

Global Sea Level Observing System (GLOSS), as implemented by the University of Hawaii Sea Level Center in the Indian and Pacific Oceans

OAHU COUNTY CIVIL DEFENSE AGENCY – 0.5 days, day to be determined
John Cummings, Plans and Operations Officer, Public Affairs Officer
Emergency Operations Center Communications, Infrastructure, Sirens,
Evacuation, Shelters, All-Clear, Disaster Preparedness and Education, Media

PTWC OPERATIONS OVERVIEW – Week 1 Wed AM (0.5 days); Week 2 (4 days)
Dr. Stuart Weinstein, PTWC Tsunami Warning Science Officer
PTWC Staff

IT Overview, including Communications and Computer Systems – Tues, PM
Networks, Seismometry, instruments and installations (PTWC and IRIS)
Teleseismic Processing
 Computer, software, detector, picker, associator, decision tree, data
communications
Local Seismic Processing
 Computer(s), software, detector, picker, associator, decision tree, data communications
Sea-Level Processing and Tsunami Detection
Travel Time and Wave Height Forecasting
 Whitmore model
 SIFT model
Message Products and Dissemination
Sequence of Events
 Basic Alarm Procedures – Decision Flow Charts
 Integration of Seismic & Water Level data for forecast

PTWC Staff:

Dr. Charles ‘Chip’ McCreery, Geophysicist-in-Charge, PTWC, cell 1-808-392-4416
Dr. Stuart Weinstein, Science Operations Officer
Dr. Robert Cessaro, Geophysicist
Dr. Gerard Fryer, Geophysicist
Barry Hirshorn, Geophysicist
Dr. Vindell Hsu, Geophysicist
Dr. Stuart Koyanagi, Geophysicist
Dr. Victor Sardiña, Geophysicist
Brian Shiro, Oceanographer
Rich Nygard, Senior Electronics Technician
Lynn Kaisan, Electronics Technician
Marilyn Ramos, Administrative Assistant

ITIC Staff:

Dr. Laura Kong, Director, cell 1-808-392-4415
Emilio Lorca, Associate Director (Servicio Hidrográfico y Oceanográfico de la Armada de Chile)
Brian Yanagi, Deputy Director (Disaster Management)
Linda Sjogren, Tsunami Technical Information Specialist, Librarian
Tammy Kaitoku, Information Technology Specialist, Webmaster
Pauline Benjamin, Administrative Assistant