

**UNESCO/IOC – NOAA International Tsunami Information Center**  
**ITIC TRAINING PROGRAMME (ITP) – HAWAII**  
**30 August- 10 September 2010**

The 2010 ITIC Training Programme (ITP-Hawaii) will be held 30 August to 10 September 2010 in Honolulu, Hawaii, USA. The Programme, under the direction of the International Tsunami Information Center (ITIC), provides participants with an overview of the history and operation of the Pacific Tsunami Warning and Mitigation System. Specific focus is given to the important role of regional and national tsunami warning centers in monitoring and evaluating the tsunamigenic potential of earthquakes, and in issuing timely tsunami warning messages to government emergency officials who can then act to save lives and reduce damage to coastal communities. The Programme provides training and familiarization with the Pacific Tsunami Warning System, Sub-regional and National Warning Systems, and Civil Defense concepts of operations and standard operation procedures. The ITP-Hawaii uses Hawaii as a working example of an end-to-end tsunami warning and mitigation system demonstrating close stakeholder coordination and partnership for operational warnings and in preparedness activities.

Participants will engage in a series of informational presentations and discussions at ITIC and the Pacific Tsunami Warning Center, and visits to Emergency Operations Centers, to seismic or water level station field sites, and to the University of Hawaii. A 2.5-day off-island field trip to visit the Hawaii County Civil Defense Agency, the Pacific Tsunami Museum, tsunami memorials, and the USGS Hawaiian Volcano Observatory, is included. Additional topics covered by the Training Programme will be based on the needs of each participant. A Provisional Agenda is attached.

This year, the focus will be on Standard Operating Procedures (SOPs) for tsunami warning and tsunami emergency response, and the testing of SOPs through Drills and Exercises. Special emphasis will also be given to telecommunications and methods for receiving and disseminating timely alerts. Participants will be asked to create, modify, and discuss their country SOPs using guidance and template examples provided during the Training, and will be introduced to the different tsunami warning decision support tools and software available for use in their centers.

On Day 1 of the Programme, participants should be prepared to make a 15-20 min presentation on the status of tsunami warning and mitigation measures in their respective countries.

Within one month after returning to their countries, ITP participants are asked to submit a Written Trip Report in English describing the activities they participated in, what they learned, and how they will use their training to improve tsunami warnings and/or awareness in their countries. Trip Report summaries will be published in the ITIC's Tsunami Newsletter.

**PROVISIONAL AGENDA, ITP-Hawaii 2010**

<b>Sun, 29 Aug 2019</b>	Arrival, hotel check-in, orientation
<b>Mon, 30 Aug</b> ITIC	<b>Morning:</b> Programme Logistics, telephone, internet, printing, library ITP-Hawaii Participant – Country Presentations <b>Afternoon:</b> Science Overview: Earthquakes, Tsunamis – generation, propagation, impact Tsunami Awareness Materials TsunamiTeacher Resource Toolkit, ITIC materials
<b>Tues, 31 Aug</b> ITIC	<b>Morning:</b> PTWS, ITIC, and PTWC: Organization & Operations International and National Tsunami Warning and Mitigation Systems Regional and Local Tsunami Warning Systems End-to-end Tsunami Warning Stakeholders & Their Needs, Roles & Responsibilities ITP-Hawaii Participant – Country Presentations <b>Afternoon:</b> Hazard Assessment and Risk Evaluation overview Tsunami modeling and inundation mapping Tsunami Warning Decision Support Tools – demonstration, installation WDC/NGDC tools, Global Tsunami Databases (TsuDIG)
<b>Wed, 1 Sept</b> ITIC PTWC	<b>Morning:</b> Lessons Learned from Past Tsunamis PTWC Standard Concept of Operation and Standard Operating Procedures Earthquake & Tsunami Monitoring, Detection and Evaluation – Instruments and Methods (seismic, water level, communications) Creating TWC Standard Operating Procedures (SOP) and Checklists Templates and examples of SOP best practices. Assignment - Participant creation of SOPs and Checklists (Discussion/Sharing on 10 September) <b>Afternoon:</b> ITP-Hawaii Participant – Country Presentations Visit Pacific Tsunami Warning Center and HON Seismic station Seismic Monitoring (source location and magnitude estimation) Sea Level Monitoring (Coastal and DART stations) Monitoring (Tide Tool), Wave forecasting (SIFT)
<b>Thurs, 2 Sept</b> ITIC Hawaii SCD	<b>Morning:</b> Tsunami Warning Decision Support Tools – demonstration, installation CISN, Tide Tool, IOC SL Monitoring Facility Communication technologies for the transmission of tsunami warnings to local governments and communities – robustness, reliability, redundancy criteria for emergency communications – WMO GTS, EMWIN, Fax, Email, RANET, FM, Mobile/Cell phones, SMS, etc <b>Afternoon:</b> Tsunami Warning Decision Support Tools – demonstration, installation RANET SMS, PAGER, Tsunami Bulletin Board, IOC Public List Serve Visit State Civil Defense Emergency Operations Center State Emergency Agency Responses to PTWC Tsunami Messages

**Fri, 3 Sept**  
ITIC

**Morning:**

RANET communications technologies for multi-hazard emergency alerting

**Afternoon:**

Successful End-to-End Tsunami Emergency Response

Plans and Concept of Operations

Understanding and interpreting PTWC Bulletins - "Upstream" Process

Conducting public coastal evacuations - "Downstream" Process

Communications Process

Distinguishing the roles of government jurisdictions, non-government organizations (NGO's), private sector

Distinguishing the roles of individual response agencies

Tsunami Stakeholder Coordination Concept

Using Civil Air Patrol for Tsunami Warning alert dissemination

Creating TER Standard Operating Procedures (SOP) and Checklists

Templates and examples of SOP best practices.

Assignment - Participant creation of SOP's and Checklists

(Discussion/Sharing on 10 September)

**Sat & Sun**  
**4-5 Sept**

**Free days**

**Mon, 6 Sept**  
ITIC

**Morning:**

Planning a Tsunami Exercise

Example: Exercise Pacific Wave '08 Manual and Concepts

Information Flow SOPs - the Role of Media in Tsunami Warning

Awareness and Educational Materials

Tsunami Warning Decision Support Tools (continuing as needed)

South Pacific (29 September 2009) and Chile Tsunamis (27 February 2010)

Review, Summary and other new topics

**Afternoon:**

Picnic: Kapiolani Park

**Tues, 7 Sept**  
Big Island

**Check-out hotel, Waikiki, Oahu**

Depart for Hawaii island (Big Island), Hawaiian Airlines

Hawaii County Civil Defense Emergency Operations Center

Pacific Tsunami Museum

Tsunami memorials

**Check-in hotel, Hilo, Hawaii**

**Wed, 8 Sept**  
Big Island

**Check-out hotel, Hilo, Hawaii**

USGS Hawaiian Volcano Observatory

Seismic and volcano monitoring

Late Afternoon / Early Evening:

Return to Honolulu, Hawaiian Airlines

**Check-in to Waikiki hotel**

**Thurs, 9 Sept**  
ITIC

**Morning:**

Tsunami Mitigation – Education, Awareness, Mitigation

Countermeasures and Public Policy

Tourism sectors, TsunamiReady programme

Designing buildings to withstand tsunami and earthquake shaking

**Afternoon:**

Preparation of Country SOPs

<b>Fri, 10 Sept</b> ITIC	Roundtable discussion – Tsunami Warning and Mitigation PTWC, ITIC, NWS Pacific Region, ITP-Hawaii participants, other guests Participant sharing of SOPs and Checklists Future Directions, International and National Travel vouchers and other logistics Summary and Closing
<b>Sat, 11 Sept</b>	<b>Hotel Checkout. Depart for home country</b>