

**“The International Tsunami Information Center: a UNESCO/IOC-NOAA Partnership”
ITIC TRAINING PROGRAMME (ITP) – HAWAII
24 August – 9 September 2009**

The 2009 ITIC Training Programme (ITP-Hawaii) will be held 24 August to 9 September 2009 in Honolulu, Hawaii, USA. The Programme, under the direction of the International Tsunami Information Centre (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 Centre, 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 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 centres.

At the beginning of the Programme, participants will be expected to make a 15-20 min presentation on the status of tsunami 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 2009

Sat, 22 August 2009	Arrival, hotel check-in, orientation
Sun, 23 August 2009	
Mon, 24 August ITIC	Morning: Programme Logistics, telephone, internet, printing, library ITP-Hawaii Participant – Country Presentations Afternoon: Science Overview – Earthquakes, Tsunamis - generation, detection Tsunami Awareness Materials TsunamiTeacher Resource Toolkit, ITIC materials
Tues, 25 August ITIC	Morning: PTWS, ITIC, and PTWC: Organization & Operations International and National Tsunami Warning and Mitigation Systems Requirements & Implementations Regional and Local Tsunami Warning Systems for Hawaii End-to-end Tsunami Warning Stakeholders & Their Needs, Roles & Responsibilities Afternoon: 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)
Wed, 26 August ITIC Makapu'u, Oahu Univ of Hawaii	Morning: Lessons Learned from Past Tsunamis PTWC Standard Concept of Operation and Standard Operating Procedures as PTWS International Tsunami Warning Center as US National and Hawaii Regional Tsunami Warning Center Seismic & Water Level Instrumentation used for tsunami warning Tsunami Warning Decision Support Tools – demonstration, installation CISN, Tide Tool (SLDecode), IOC SL Monitoring Facility Afternoon: Visit University of Hawaii Sea Level Center – Sea Level instrumentation Visit Makapu'u Sea Level Station
Thurs, 27 August ITIC Hawaii SCD	Morning: Monitoring, Detection and Evaluation Instrumentation and Methodologies (seismic, water level, communications) 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 Tsunami Warning Decision Support Tools – demonstration, installation RANET SMS, PAGER, Tsunami Bulletin Board, IOC Public List Serve Afternoon: Visit State Civil Defense Emergency Operations Center State Emergency Agency Responses to PTWC Tsunami Messages
Fri, 28 August PTWC	Visit PTWC and HON Seismic station PTWS TWC Operations Tour Seismic Monitoring (source location and magnitude estimation)

	Sea Level Monitoring (Coastal and DART stations) Monitoring (Tide Tool) Wave forecasting (SIFT) Creating TWC Standard Operating Procedures (SOP) and Checklists Introduce template of best practices. Participant creation of SOPs and Checklists - assignment (Discussion/Sharing on 9 September)
Sat & Sun 29-30 August	Free days
Mon, 31 August ITIC Oahu CD Univ of Hawaii	Morning: 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 Afternoon: Visit Oahu County Civil Defense Emergency Operations Center County Emergency Agency Responses to PTWC Tsunami Messages Visit University of Hawaii – Hawaii Inundation Maps
Tues, 1 September ITIC	Morning: Creating TER Standard Operating Procedures (SOP) and Checklists Templates and examples of SOP best practices. Participant creation of SOP's and Checklists - assignment (Discussion/Sharing on 9 September) Planning a Tsunami Exercise Example: Exercise Pacific Wave '08 Manual and Concepts Afternoon: Information Flow SOPs - the Role of Media in Tsunami Warning Awareness and Educational Materials Tsunami Warning Decision Support Tools (continuing as needed)
Wed, 2 September ITIC Big Island	Checkout of Waikiki hotel Morning: Review, Summary and other new topics The Indian Ocean Tsunami, Dec 26, 2004 and its aftermath Afternoon: Depart for Big Island, Hawaiian Airlines Check-in hotel, Hilo, Hawaii
Thurs, 3 September Big Island	Checkout hotel, Hilo, Hawaii Hawaii County Civil Defense Emergency Operations Center Pacific Tsunami Museum Tsunami memorials Late Afternoon: Check-in hotel, Volcano, Hawaii
Fri, 4 September Big Island	Checkout of hotel USGS Hawaiian Volcano Observatory Seismic and volcano monitoring

	Late Afternoon / Early Evening: Return to Honolulu, Hawaiian Airlines Check-in to Waikiki hotel
Sat, 5 September	Free days
Sun, 6 September	
Mon, 7 September	Public Holiday, Labor Day
Tues, 8 September 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
Wed, 9 September 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
Thurs, 10 September	Hotel Checkout. Depart for home country