# ITP-Hawaii 2025 Tsunami Exercise Exercise Hawaii Wave 2025 (EHW-25)

On 25 September, a Tsunami Exercise in 'real-time' will be conducted as part of the training workshop. The post-exercise evaluation will take place on 26 September through a 'Press Conference.' The aim of Exercise Hawaii Wave 2025 (EHW-25) is to provide participants the opportunity to demonstrate the knowledge obtained in the workshop in a practical manner.

# Participants will:

- Use and interpret PTWC tsunami products
- Apply a tsunami warning scenario to pre-developed time lines, flowcharts, criteria action tables, checklists, and templates that constitute their SOP's for warning and evacuation.
- Identify and describe the individual actions taken by each stakeholder in response to the tsunami warning
- Demonstrate the above through report-back at 'Press Conference' to the plenary
- Receive comment from lecturers and peers on their reports

# **Objectives:**

- Exercise, evaluate, and improve TWC and TER local tsunami SOPs, including
  evacuation, focusing on actions taken within the first minutes after local earthquake
  origin time, and at and after warning cancellation.
- Integrate tsunami warning decision support tools (e.g., CISN, Tide Tool, IOC Sea Level Monitoring web site, TTT, TsuCAT tsunami database, TTT, your own tools for detection, threat assessment, monitoring, etc) into SOPs
- Integrate evacuation maps and associated procedures as part of the response

#### **Assumptions:**

- Each country is interested in enabling and improving own national SOPs
- EHW-25 allows the opportunity to identify the best-practice SOPs, using each country's experience, and then to test those SOPs.

# **Scope and Format**

EHW-25 will be conducted as a modified functional exercise. It will take place on 25 September with Group actions and responses taking place in real, or near-real time, and the Group reporting orally on their response and evaluation the same day through a 'Press Conference' with media questions.

Discussion of the scenario and injects, and their responses will be conducted by Groups representing the Tonga, New Zealand, and Chile national tsunami warning center or national and local disaster management office (emergency management agency). Participants should take into account and apply the knowledge and preparation they have developed during the training to demonstrate an appropriate response to the scenario.

Groups will represent and respond as a country according to when the first-arriving tsunami is expected. The Groups will react, based on their pre-planned SOPs to international/national/other information or injects starting immediately after the earthquake and continuing as a tsunami is confirmed and impacts the coast. The scenario will be a Pacific scenario (earthquake parameters, tsunami predictions and observations) and be used by all Groups.

Groups will be separated physically and according to their 'country' and responsibility (TWC or DMO/TER) in order to simulate a realistic environment where face-to-face continuous interaction may not be possible.

To communicate, Injects will be provided by the Exercise Controllers. For each Inject, Countries should evaluate and response as necessary. Communications are by Messages through WhatsApp (Phone, Text) and Email.

Groups should use the EHW-25 Preparation Session (Thursday 0930-1200) to discuss and decide on their SOPs, e.g., public/media information flow, and TWC or TER SOPs (criteria, timeline-driven activities, messages, checklists, templates, etc.). The developed SOPs do NOT have to follow the country's actual SOPs.

# **Exercise Participants**

All participants in the training workshop will take part in the exercise. Participants will be divided into 2 sets of Groups representing TWC and TER (DMO) agencies.

#### **EXERCISE CONDUCT**

# **Exercise Control**

Exercise Controllers are ITIC, PTWC.

Simulators will represent persons or agencies for the exercise:

ROLE	PERSON
Government High-Level Official, National/Local Authority	Stanley Goosby
Media (TV, Radio, etc)	Ardito Kodijat
Other Agencies, Private Sector (Hotels, Ports/Harbors, Power/Fuel, Transportation, etc)	Christa von Hillebrandt,
Public (Schools, Hospitals, Residents, Surfers, etc)	Marie Eble, PTWC
TSP PTWC	Chip McCreery
All Other Stakeholders, Backup	Laura Kong, Chip McCreery

Observers - ITIC, PTWC

#### **Exercise Time**

Universal Coordinated Time (UTC, or Zulu) will be used to simplify discussion and action. The exercise will start at 0000 UTC. Exercise time will be projected on screen (actual exercise length will be ~2 hours from 1400 – 1600 local). Because our exercise time is limited, the Controllers will have to advance time, or slow time, in order to give time to react to all injects.

- · Time is logged as UTC
- Exercise Clock controlled Controller
- Shared with NTWC and TER Timekeepers (Google Meet Invitation)

#### **PTWC Products**

This event is comprised of 30 PTWC message products

To conduct EHW-25 in two hours and for it to be manageable, only 11 messages will be issued by the Controller. 19 messages will be skipped and 8 Time Advances will be done to cover the 26 hours of the event.

Message that are skipped and time advances will be informed by Controller

## **Post-Exercise Evaluation**

Evaluation will be in a 'Press Conference' where each Group (TWC/TER-DMO) will provide the Exercise Statement summarizing its Actions, Issues, Challenges and Improvements. The 'Media', consisting of the trainers and participants, may ask questions and comment on the actions by each group. The quality and comprehensiveness of the report-backs will provide an over-all impression on the level of achievement by the groups, and identify areas needing improvement.

### **EXERCISE FLOW, GROUPS, COUNTRY INFORMATION**

### Scenario - Products and General Timeline

For Exercise Hawaii Wave 2025, the source will be a local, regional or distant tsunami affecting the countries (Tonga, New Zealand, Chile). PTWC text messages will be provided to everyone (TWC, TER); PTWC enhanced products will be provided only to the TWCs – it is then the TWC's decision on whether to further distribute the products to the NDMO, other organizations, or the public. The Groups will represent and issue tsunami warning and safety information nationally or locally for this local event.

Each Group will follow an SOP based on the tsunami threat that is agreed by the group The SOPs to be used are decided during the EHW-23 Preparation Session.

- 1. For EHW-25, we request one participant from each TER and TWC Group to volunteer their email address for use as the Communication Focal Point (CFP) for each Group
- 2. The TWCs will receive PTWC products from PTWC by email issued by the Exercise Controller.
- 3. The TWCs and TERs will receive tsunami information by email issued by the Exercise Controller.
- 4. The TWCs fill follow the agreed SOP for their action.
- 5. The TERs will follow the agreed SOP for their action.

# Messages

All EHW-25 communications and products are Messages delivered by WhatsApp or Email, or by Hard Copy (some Inject messages)

- Inject Messages provide the PTWC products, event, and situation information
- Action Messages can inform (give out) information, receive (take in) information, or respond to inquiries or information requests
- Groups are in control of the timing of communications when, to whom, and how
- Possible communications (WhatsApp, Email) could be from
  - TSP to TWC,
  - TWC to TER and vice versa,
  - TWC or TER to customers (public, media, special needs groups, stakeholders, media, high government officials, etc) and vice versa.

#### **Communication Methods**

- Injects Messages will be from Exercise Controllers by EMAIL
- Actions Messages by Countries will be by WHATSAPP (Phone, Text) or EMAIL
  - o To and From TWC and TER Groups (use CFP)
  - To Exercise Controllers for other audiences (other than EHW25 Simulators)

#### WhatsApp Format

Voice or Text or Graphics to designated phone number (CFP) or EHW-25 Simulator

## **EMAIL** format

- Use the ACTIONS template for communication (to be shared).
- The template specifies
   TO, FROM, DATE/TIME, COMMUNICATION METHOD, SUBJECT, MESSAGE

# **Exercise Log**

It's important log your actions in the EXERCISE LOG because the Controller will not be aware of any Country interactions

#### **Exercise Flow**

The Exercise Flow will flow as follows:

After receiving an Inject, each Group should:

- Review inject
- Decide on the Action
- Take TWC and TER SOP action
   (issue action through phone call to designated entity phone number)
- Log Actions electronic or hard copy
- · Follow SOPs, e.g., that cover Who, What, When, How, Where
- Communicate information or action to stakeholders / agencies (government, non- government)
- · Include dissemination of alerts, public safety actions (evacuation) and/or media info

#### Generalized scenario timeline:

- 1. Time 0 minutes: Hypothetical local earthquake occurs off a country's coastline, with strong ground shaking lasting between 1 to 2 minutes
- 2. Time A minutes after earthquake: Initial earthquake information, or outside data received
- 3. Time B minutes: Initial PTWC products issued (text, graphics, tables)
- 4. Time C (10-45) minutes: initial waves arrive at coastline
- 5. Time D minutes: Initial sea level gauge readings received (Tide Tool or other means, confirming tsunami
- 6. Time E minutes to hours: PTWC last forecast issued
- 7. Time F hours: Country warning cancellation
- 8. Time G hours: Country All-Clear for some communities

## **Exercise Groups**

There will be Three (3) countries conducting the same Pacific scenario.

- 1. Tonga, affected by Local Tsunami
- 2. New Zealand, affected by Regional Tsunami
- 3. Chile affected by Distant Tsunami

Each Country will have 2 Groups, one representing the NTWC and the other the NDMO/TER

(total six (6) groups - Three (3) for TER and Three (3) for TWC)

Each Group will have of max 7 participants

Tonga	TER-1	TWC-1
New Zealand	TER-2	TWC-2
Chile	TER-3	TWC-3

# **Location of Groups, Controller, and Simulators:**

- 1. The three TERs will be working in Rm 1377.
- 2. The three TWCs will be working in ITIC Library, Conference Room, and nearby Conference Room on the 3rd Flr
- 3. The Controllers and PTWC, Political, Media will work in Rm 1377 or nearby 3rd Flr
- 4. Other Entities (Public, Other agencies, stakeholders etc) will work from ITIC or nearby conference room (Note the requirement to 'escort' foreign nationals)

# Countries – TWC, TER/NDMO, Stakeholders and Customers

Group 1:

Tonga PrivateNTWC: Tonga Meteorological Services (TMS)

Tonga TER: NEMO

Tonga Politician / High-Level Official: Prime Minister, King Tupou VI

Tonga Media: Tonga Broadcasting Corporation, Mataagi Tonga newspaper

Tonga Other Agencies / NGO: Geological Services, Land and Survey, Red Cross

### Group 2:

New Zealand NTWC: Earth Sciences New Zealand

New Zealand TER: NZ NEMA

New Zealand Politician / High-Level Official: Prime Minister

New Zealand Media: TVNZ, Newstalk ZB Wellington

New Zealand Other Agencies / NGO: Public Works, Red Cross

Group 3:

Chile NTWC: SHOA Chile TER: SENAPRED

Chile Politician / High-Level Official: President, Ministers

Chile Media: Tv Noticias, EL PAIS

Chile Other Agencies / NGO: RAHCh, ADRA