

DEPARTMENT OF LAND AND NATURAL RESOURCES (DLNR)

DIVISION OF BOATING AND OCEAN RECREATION (DOBOR)



TSUNAMI EMERGENCY PLAN (Updated 03/22/2013)

PURPOSE

The following is intended to inform affected parties of the policies and procedures that the Division of Boating and Ocean Recreation (DOBOR) will follow when a tsunami threatens its harbors and facilities. It is essential for each boater to devise their own emergency plan tailored to fit their unique situation in the event of a tsunami. It is also essential for boaters to act independently to safeguard their vessel(s) and property, or designate skilled and knowledgeable agents to act on their behalf, in concert with DOBOR procedures for closing and securing harbor facilities.

BACKGROUND

A tsunami is a series of water waves caused by displacement of a large volume of water typically caused by earthquakes, volcanic activity, or landslides.

Tsunamis have been called "tidal waves" because the surge and withdrawal may resemble rapidly rising or falling tides. Tsunami waves may come ashore as a "bore," a vertical wall of water, superficially resembling the tidal bores observed in Turnagain Arm (Cook Inlet, Alaska), the Hangzhou River estuary (China), and the Gironde River (France), but tsunamis are in no way caused by the tides.

There is no tsunami season. A tsunami is an unpredictable event that can happen at any time. Most tsunamis that strike the Hawaiian Islands are generated in the oceanic trenches around the border of the Pacific Ocean. The unstable areas are the Pacific Coast of Japan, the Kuril-Kamchatka Island chain, the Aleutian Island Arc, and the Pacific Coasts of Central America and South America.

It is important to note that a tsunami event can last for several hours and the first wave is often not the largest of the series.

A tsunami has great destructive potential and is capable of inundating (or flooding) areas hundreds of feet or even miles inland past the normal high tide level. Their fast-moving waters can crush cars, homes, buildings, boats, and anything else in their path. They also have great erosion potential, stripping beaches of sand and undermining trees and other coastal vegetation.

In Hawaii, tsunamis have caused death and destruction on all of the major islands. The town of Hilo has been hardest hit in historic times with destruction to major parts of the city in both 1946 and again in 1960. Both of these tsunamis were generated by earthquakes along the Pacific Rim: the 1946 tsunami from the Aleutian Trench that impacted mainly the northeast shores of our

islands, and the 1960 tsunami from the Peru-Chile Trench that impacted mainly the southeast shores of our State.

Tsunami waves, generated by the 2011 Tohoku magnitude 9.0 earthquake, caused significant damage to Hawaii's recreational boat harbors with the loss of dozens of vessels and damage to countless more.

A tsunami in Hawaii can also be generated by a nearby as well as a distant earthquake. This is especially true on the Big Island where seismic events are commonly associated with the volcanic activity at Kilauea and Mauna Loa. Any violent earthquake—one that causes you to fall to the ground or to hold onto something to keep from falling—should be considered a natural tsunami warning. If in a low-lying area, you should move immediately to higher ground or evacuate vertically above the fourth floor of a reinforced concrete building.

In 1975 two campers at Halape, a coastal camping area in Hawaii Volcanoes National Park, were killed by a locally generated tsunami. A magnitude 5.7 foreshock struck the south side of the island of Hawaii at 3:36am, but the campers did not understand the danger from a tsunami. A little over an hour later the main 7.2 magnitude quake struck generating tsunami waves that came ashore at Halape rising to 26 feet above sea level.

In general, all coastal areas of the Hawaiian Islands are vulnerable to inundation by a tsunami.

"As tsunami waves approach islands, they encounter shallower depths which cause the waves to bend or refract. The bending (refraction) means that tsunami waves may wrap completely around an island causing inundation even on the side of an island farthest from the area of tsunami generation. Tsunami wave refraction may result in smaller waves in some areas and larger waves in other areas. Tsunami waves may also be reflected off coastal areas with steeply sloping shorelines. These reflected waves may combine with incoming, refracted, or other reflected waves to produce large wave run-up in unexpected places. No matter where a tsunami is generated, all sides of our islands are at risk." - The Pacific Tsunami Museum

Please refer to the Civil Defense pages in the front of the telephone book for maps of the coastal evacuation zones (<u>http://www.csc.noaa.gov/psc/riskmgmt/tsunami.html</u>) in Hawaii.

TSUNAMI WARNINGS FOR DISTANT EARTHQUAKES

In the event of a significant earthquake in a distant area of the Pacific Basin, the Pacific Tsunami Warning Center (PTWC) may issue these types of notifications. It should be noted that over time, the terms used by the PTWC may change and DOBOR will update this page when these changes are noted. It is to your advantage to keep up with current terminology and not rely on this document as your sole source of information about tsunami events and emergency readiness.

Tsunami Information Statement – Minor Waves At Most – No Action Suggested. A tsunami information statement is issued to inform emergency management officials and the public that an earthquake has occurred, or that a tsunami warning, watch or advisory has been issued for another section of the ocean. In most cases, information statements are issued to indicate there is no threat of a destructive tsunami and to prevent unnecessary evacuations as the earthquake may have been felt in coastal areas. An information statement may, in appropriate situations, caution about the

possibility of destructive local tsunamis. Information statements may be re-issued with additional information, though normally these messages are not updated. However, a watch, advisory or warning may be issued for the area, if necessary, after analysis and/or updated information becomes available. *

LEVEL THREE ALERT

Tsunami Watch – Danger Level Not Known Yet – Stay Alert For More Information. A tsunami watch is issued to alert emergency management officials and the public of an event, which may later impact the watch area. The watch area may be upgraded to a warning or advisory - or canceled - based on updated information and analysis. Therefore, emergency management officials and the public should prepare to take action. Watches are normally issued based on seismic information without confirmation that a destructive tsunami is underway. *

LEVEL TWO ALERT

Tsunami Advisory – Strong Currents Likely - Stay Away From The Shore. A tsunami advisory is issued when a tsunami with the potential to generate strong currents or waves dangerous to those in or very near the water is imminent, expected, or occurring. The threat may continue for several hours after initial arrival, but significant inundation is not expected for areas under an advisory. Appropriate actions to be taken by local officials may include closing beaches, evacuating harbors and marinas, and the repositioning of ships to deep waters when there is time to safely do so. Advisories are normally updated to continue the advisory, expand/contract affected areas, upgrade to a warning, or cancel the advisory. *

LEVEL ONE ALERT – HIGHEST LEVEL

Tsunami Warning - Inundating Wave Possible – Full Evacuation Suggested. A tsunami warning is issued when a tsunami with the potential to generate widespread inundation is imminent, expected, or occurring. Warnings alert the public that dangerous coastal flooding accompanied by powerful currents is possible and may continue for several hours after initial arrival. Warnings alert emergency management officials to take action for the entire tsunami hazard zone. Appropriate actions to be taken by local officials may include the evacuation of low-lying coastal areas, and the repositioning of ships to deep waters when there is time to safely do so. Warnings may be updated, adjusted geographically, downgraded, or canceled. To provide the earliest possible alert, initial warnings are normally based only on seismic information. *

*(Source-NOAA http://wcatwc.arh.noaa.gov/?page=message_definitions)

DOBOR RESPONSE TO A TSUNAMI WATCH OR A TSUNAMI ADVISORY (LEVEL THREE AND LEVEL TWO ALERT)

Depending on the location of a seismic disturbance, shorelines affected by a tsunami can be predicted by the PTWC. Given adequate warning before the anticipated arrival time of the first wave, DOBOR staff may be able to take certain initiatives to protect infrastructure, equipment and records. This is, again, based on staff having adequate warning to arrive at their respective harbor (if they are not already on-site), complete the needed tasks and exit the harbor prior to road closures. If there isn't enough time to transit to the harbors (after hours, etc.), accomplish their tasks and

evacuate, DOBOR staff will not be ordered to the harbors. DOBOR backs up data on a regular basis at each harbor and off-site. Redundancy is built into the division's system. Tenant records are safe. Any data/document loss will be minimal.

Following the issuance of a **Tsunami Watch** or a **Tsunami Advisory**, DOBOR District Managers will initiate the following steps <u>if</u> there is adequate time before the anticipated arrival of the first potentially damaging wave:

- 1. Make sure all radios and other communication equipment are functioning/charged.
- 2. Secure and protect emergency call lists and keep them close at hand.
- 3. Gather any records that are not backed up on a computer off-site, including new vessel registration, transfers of ownership and similar documents.

DOBOR RESPONSE TO A TSUNAMI WARNING (LEVEL ONE ALERT – HIGHEST LEVEL)

The PTWC will issue a **Tsunami Warning** when a tsunami is confirmed and evacuation is necessary.

The warning will be announced over the radio and on television through the Emergency Broadcast System, in conjunction with the sounding of Civil Defense sirens. The warning will include the predicted time of arrival of the first wave. Civil Defense sirens will be sounded three hours, two hours, one hour, and 30 minutes prior to the estimated arrival time of the first wave. It should be noted that one hour (and sometimes earlier depending on the situation) prior to the expected arrival of a tsunami, local authorities close roadways and access to harbor facilities.

Following the issuance of a **Tsunami Warning** or a minimum of three hours prior to the arrival of the first wave, DOBOR District Managers at the direction of the Division Administrator will initiate the following harbor closure procedure:

PROCEDURES FOR CLOSING A HARBOR:

- 1. Remove recently received records that are not backed up on a computer off-site, including new vessel registration, transfers of ownership and similar documents.
- 2. Harbor staff will attempt to contact tenants and live-aboards that are on-site. Harbor tenants will be expected to have their vessels and belongings facilities secured and personnel vacated when the **Tsunami Warning** is issued.
- 3. Harbor personnel may, with the prior approval of the District Manager and at the discretion of the Harbor Agent, direct traffic within the harbor to expedite evacuation if necessary. No unnecessary, unpermitted vehicles will be allowed on the harbor's property during evacuation. Tenants and harbor users should be urged to leave as early as possible to avoid gridlock in the inundation zones.
- 4. In the interest of safety, and for the protection of State property, staff and the maintenance

crew may assist harbor tenants and harbor users in their emergency preparations at the discretion of the District Manager.

- 5. As soon as all closure procedures are completed, power, water and other utilities are to be shut off and the harbor will be secured.
 - All harbor personnel will be released to go home, to evacuate to higher ground or evacuate "vertically" above the fourth floor in the nearest reinforced concrete building with four or more floors.
 - Employees should monitor radio broadcasts and return to work when the <u>local</u> "ALL CLEAR" signal is issued by <u>their county Civil Defense agencies and authorities</u> (not just the PTWC or State Civil Defense), and/or upon contact by their Supervisor.

LOCAL EARTHQUAKES

If a significant earthquake occurs in the vicinity of the Hawaiian Islands, PTWC will issue an <u>Urgent Local Tsunami Warning</u>.

The warning will be announced over the radio and on television through the Emergency Broadcast System, in conjunction with the sounding of Civil Defense sirens. If the Urgent Local Tsunami Warning identifies the island you are on as subject to impact, leave any evacuation zone immediately.

As stated previously, <u>in the event of a local earthquake that causes you to fall to the ground or</u> <u>to hold onto something to keep from falling, if you are in an evacuation zone, move</u> <u>immediately to higher ground when the shaking stops.</u>

There may be no time for an official warning from PTWC, the Emergency Broadcast System, or Civil Defense sirens. **You must act on your own.**

PLEASE NOTE: During a local tsunami event there is always a possibility that the PTWC will go down. In that case, the West Coast Alaska Tsunami Warning Center (WCATWC) is the official back-up center and will issue the warning messages. Boaters should understand that the WCATWC can serve in this capacity and should not ignore such a warning is it specifies Hawaii in the message.

DOBOR RESPONSE TO A SEVERE LOCAL EARTHQUAKE

In the event of a severe local earthquake or immediately following issuance of an Urgent Local Tsunami Warning, Harbor Agents will secure harbor offices and immediately evacuate to higher ground or evacuate "vertically" above the fourth floor in the nearest reinforced concrete building with four or more floors. Employees should monitor radio broadcasts and return to work when the local "ALL CLEAR" signal is issued by <u>their county Civil Defense agencies and</u> <u>authorities</u> (not just the PTWC or State Civil Defense), and/or upon contact by their Supervisor.

ALL CLEAR announcements may be made by local authorities through the Emergency Broadcast System over the radio and on television. Mariners may receive the ALL CLEAR announcement via

VHF radio, channel 16. Civil Defense sirens are neither sounded during ALL CLEAR announcements nor used to indicate ALL CLEAR conditions. Remain in a safe area until you hear an official, <u>local</u> ALL CLEAR announcement.

PLANNING AHEAD

The need to evacuate may occur suddenly and at any time. DOBOR staff process vessel registrations and other vital records frequently and on a regular basis to minimize the need to reconstruct records should they be lost due to a tsunami. Records deemed irreplaceable are being digitized or duplicated as time allows for archiving in a secure location.

All boaters should know what to do in each of the tsunami and local earthquake scenarios and should develop a Tsunami Emergency Plan that addresses each scenario. DOBOR staffers, with the approval of District Managers and at their discretion, will ask harbor tenants from time to time if they have a Tsunami Emergency Plan and understand the notifications issued by the PTWC.

It is a good idea to check your emergency gear each and every time you go out on the water. Perform maintenance, make repairs and replace out-of-date or worn equipment as needed. Check and replace rubber parts and hoses that are brittle or cracked. Make sure you have spare fuel filters aboard.

The powder in dry chemical fire extinguishers can pack down into a solid mass over time. This greatly reduces its effectiveness during actual use. Before you launch, unpack and loosen the powder by inverting the extinguisher and giving it a few taps with a rubber mallet at the base.

DOBOR recommends that all vessel owners insure their vessels and make sure their policies cover salvage costs for grounded and sunken vessels, damage to docks, pollution containment, wreck removals, etc.

Contact your local US Coast Guard Auxiliary flotilla for a courtesy vessel safety check. If these safety checks are being offered at a harbor near you, take advantage of the opportunity. It may save a life.

These practices keep your vessel at a high state of readiness for emergencies.

THE FOLLOWING ARE SUGGESTIONS FOR BOATERS AND DOBOR FACILITY USERS

If you do not know about the issuance of emergency notifications, you could lose precious preparation time. You should pay heed to the monthly testing of State Civil Defense sirens near your workplace, near your home and other locations that you frequent. Report outages so the system can be properly maintained. Consider adopting a siren at <u>http://sirens.honolulu.gov</u> and you, too, can contribute to keeping this system working properly.

Another method for receiving an emergency alert is through the State's Nixle system, which sends text messages to a mobile device for anyone who signs up for the free service. You can receive warnings issued for severe weather, earthquakes, etc. via Nixle. Visit <u>http://local.nixle.com/register/</u>

for more details.

A Tsunami Emergency Plan may include any of the following steps that are applicable to the vessel, the vessel owner, their situation and other considerations.

If your vessel is in an evacuation zone you will have three options: move it inland, move it off shore or leave it in place. The decision to leave a safe place to go to your boat should depend on your equipment, your state of readiness and adequate warning.

Is your vessel seaworthy or will your engine quit in the entrance channel preventing other vessels from transiting that waterway? If your vessel is moored in a DLNR/DOBOR facility it is required to leave the confines of the harbor every 90 days to demonstrate its seaworthiness. It should be able to move offshore to the recommended minimum depth. Are your towing vehicle and trailer in good condition or will you have a breakdown on the road worsening traffic? To renew the registration for your towing vehicle and trailer they must be inspected annually. These are safeguards built into rules and regulations that prompt you to provide regular maintenance for your vessel and support equipment.

Again, regular maintenance is an essential part of your Tsunami Emergency Plan. If you are confident that your equipment is up to the task of launching and waiting offshore, or relocating outside the evacuation zone, that is one big hurdle.

Do you have necessary supplies or will you need to face long lies at the grocery store for food and drinking water? Do have adequate fuel to stay out of the harbor for 24 hours? If you have adequate fuel and supplies on hand or can get them easily, that is a second big hurdle.

If, in your assessment, you, your vessel and trailer are at a high state of readiness, and you have more than adequate time, that's the final hurdle. The decision to go to your boat is yours. However, traffic on the roads, weather conditions and other unforeseen factors can change everything and rob you of precious time. Reassess your situation periodically. If you think to yourself that you will have just enough time to move inland or out to sea, you are probably not expecting the unexpected. Be realistic and know when it's time to evacuate, with or without your vessel.

1. <u>If your boat is on a trailer in an evacuation zone, prepare it for relocation as soon as a</u> <u>Tsunami Advisory is issued</u> and move it outside the evacuation zone. Don't rush, but try to get off the roadways as soon as you can.

2. <u>If your boat is in the water and cannot be trailered, prepare to put to sea as soon as a</u> <u>Tsunami Advisory is issued.</u> Consider having someone drive you to the harbor. If you drive yourself and leave your vehicle in the harbor parking lot, it may sustain damage from the tsunami while you are offshore in your boat. Even worse, it may impede vehicle traffic or prevent emergency personnel from conducting their assigned duties.

Move your vessel offshore to waters 300+ feet in depth as soon as a Tsunami Warning is

declared. It is important to note that even if the event is not elevated to a **Tsunami Warning** (Level One Alert), a **Tsunami Advisory (Level Two Alert)** is still associated with strong currents or waves dangerous to those in or very near the water and that the threat may continue for several hours. The decision to move your vessel out of the harbor under a **Tsunami Advisory** should be part of your Tsunami Emergency Plan.

Maintain the minimum water depth of 300+ feet just prior to and during the expected arrival time of the tsunami. You should plan to have enough fuel, food and water, and anything else you consider essential for at least 24 hours. Be sure to turn on your navigation lights at night and in times of limited visibility.

Stay clear of the harbor entrance channel during a tsunami event. Tsunamis can cause rapid changes in water level and unpredictable and dangerous currents in harbors and entrance channels, in addition to destruction from waves. If your vessel is unable to navigate to a safe depth in advance of the arrival time, do not attempt to move your boat offshore or you may be caught in the tsunami or the dangerous currents associated with it.

3. If your boat is in an evacuation zone and cannot be moved inland or offshore, determine ahead of time what you want to remove and how you will secure the boat. As soon as a Tsunami Advisory is declared, remove pre-designated items, secure the boat, and leave the evacuation zone. Don't rush, but get off the roadways as soon as you can.

4. All shores of all Hawaiian Islands are subject to seasonal high surf, some of which directly impact boat channels and harbor entrances. If a Tsunami Warning occurs during a period of seasonal high surf, especially at night, and your Tsunami Emergency Plan calls for moving your boat offshore, you should give serious consideration to leaving it where it is and just removing whatever you can, securing your boat, and leaving the evacuation zone.

5. One hour before the expected arrival of the first wave, police and Civil Defense volunteers at the perimeters of the evacuation zones will establish roadblocks. After that, only police and DLNR enforcement officers, fire fighters, lifeguards, EMS personnel, and Civil Defense volunteers will be allowed into the evacuation zones to assist those individuals who are still evacuating. Therefore, if you intend to take some kind of emergency action for your boat, you should complete it and be out at sea or out of the evacuation zone at least one hour prior to the expected arrival of the first wave.

6. Anticipate heavy traffic island-wide when a Tsunami Warning is issued. Again, allow ample travel time to reach your boat before the evacuation zones are closed to non-emergency traffic.

7. If, for any reason, you are unable to tend to your boat during a tsunami event, designate someone else to carry out your Tsunami Emergency Plan. <u>If your vessel is moored in a DLNR/DOBOR</u> facility and you are out of the State, off island or otherwise unable to immediately respond to an emergency related to your vessel for any length of time, you are required to have a caretaker serve in this capacity.

DOBOR must have your contact information and/or you caretaker's most current contact information so we can reach one of you at any hour of any day. Many times, vessels have been saved from sinking in their slips with a phone call.

Your designated caretaker should be very familiar with your boat and its seaworthiness. If your caretaker is expected to take your vessel to sea, he/she should be very capable of piloting your vessel. If not, your designated caretaker should be prepared to identify the items on your predesignated list of equipment, remove them and evacuate. **Do not** put your caretaker in harm's way to move your vessel if the condition of your vessel, trailer, etc. is questionable. **Do not** put your caretaker at risk if there isn't adequate time to travel to your harbor to remove items or secure your mooring. Equipment can be replaced. Lives cannot.

In 1964 in Kodiak, Alaska, a warning was received prior to the arrival of the first tsunami waves. People who rushed down to the harbor to secure or take their boats out to sea constituted two thirds of all the fatalities caused by the tsunami at Kodiak City.

BOATS AT SEA DURING A TSUNAMI

Tsunami wave activity is imperceptible in the open ocean, so one could think that would be the safest place for most boats. Just keep in mind that out on the water you are at the mercy of the weather and seasonal ocean conditions. You could run out of fuel, and anchoring at the minimum safe depth (300 feet of water) could be problematic. You must take all of that and more into consideration before moving your boat offshore.

Most large harbors and ports are under the control of a harbor authority and a vessel traffic system. If the harbor authority orders a forced evacuation of vessels to deeper water, you will need to be aware of the marine traffic, especially if it will impact you and your boat.

If a tsunami does strike, will your cellular phone still work if power on shore is knocked out? Do you have a VHF radio and can you call for help if you are adrift? <u>If you go more than one mile from shore your vessel must be equipped with a VHF radio or an Emergency Position</u> <u>Indicating Radio Beacon (EPIRB) according to State law.</u> If you only have an EPIRB and you are in distress, will anyone respond to your MAYDAY call during the tsunami? The VHF radio may be your most practical piece of communication equipment during a tsunami event. It allows you to monitor Channel 16 for information from the U.S. Coast Guard and harbor management agencies, and the ALL CLEAR signal to return to your harbor. You can also hail other vessels and ask for depth readings or signal that you are in distress. Remember that Channel 16 is for distress, safety and calling (hailing) another vessel. Once you are in contact with another party, agree to switch to a working channel designated for non-commercial vessels. Even if you do have a VHF radio on board, it doesn't hurt to have the EPIRB, the fully charged cellular phone and a working transistor radio in your survival kit.

Please Note: For instructions on communication via your VHF radio, please see the section at the end of this document titled "Conventions for VHF Radio Use."

If the official **ALL CLEAR** announcement for your harbor is not given for some time, operate your vessel in a manner that will conserve fuel. The tsunami warning may last for hours and harbor/ocean conditions following the tsunami may not permit a quick return to port.

There will be a lot of boating traffic in your area. If you actually have adequate line to anchor and it's after sunset, put on your anchor lights to indicate you are stationary. If you are underway, put on your running lights. At night or when visibility is limited, your navigation lights may save lives.

Footnote 6/2011. The US Coast Guard is in the process of formalizing the South Oahu Tsunami Vessel Evacuation Zone Plan. It would create an exclusion area ½ a nautical mile on either side of Hotel Buoy at a bearing of 028° for three (3) nautical miles (HNL Harbor Range). To the left of the exclusion area (looking mauka/inland) would be the <u>commercial</u> vessel evacuation staging area. To the right of the exclusion area would be the <u>recreational</u> vessel evacuation staging area. The vessel evacuation plan should appear along with tsunami inundation zone maps in telephone directories in the near future.

BOATS AT SEA AFTER A TSUNAMI

Damaging wave activity and dangerous currents can affect harbors for an undetermined period of time following the impact of the tsunami on the coast. Do not return to port until an official ALL CLEAR announcement for vessel traffic is given for your harbor.

While waiting aboard your boat, be alert for people who may have been swept out to sea by the tsunami as well as large amounts of debris that could become hazards to navigation.

Be prepared to yield to or assist emergency personnel involved in rescue or salvage operations. Monitor Channel 16 on your VHF radio.

Footnote 6/2011. The US Coast Guard, in conjunction with State and County agencies and emergency responders, is in the process of devising a system for assessing the safety of our waterways and issuing an "ALL CLEAR" announcement for Hawaii's harbors. Vessels may be instructed to wait for the issuance of this announcement before returning to their ports or anchorages.

AFTER THE ALL CLEAR IS GIVEN

Tsunami damage may prevent you from returning to the facility from which you departed. After the ALL CLEAR announcement is given for your harbor, ocean conditions should be safe for your return but you many find your mooring ball is gone or the catwalk for your slip is severely damaged. You may need to go to another facility or anchor offshore. Contact your DOBOR harbor agent or harbor manager and ask for instructions and alternatives.

If you left your vessel on a trailer or in the water, check it as soon as you are able.

Make sure your vessel is moored or trailered securely where it was/is and that it's not an obstruction to harbor and emergency personnel.

Some vessels sink in their slips when their bilge pumps cannot keep up with flooding due to a breach in the hull and the batteries powering the bilge pumps run down.

If your vessel is missing, report it to your harbor agent/manger along with key information that would help to identify it.

If your vessel is grounded, take immediate steps to remove it. This is essential for the recovery of the harbor and the waterway. Take responsibility for your vessel.

If your vessel is damaged, document the damage to file with your claim. Notify your insurance company.

If your finger pier, catwalk, utilities, etc. are damaged, report it immediately to harbor agents.

Please follow directions from harbor staff in the startup period. Your cooperation is essential as your facility recovers from the tsunami event.

CONVENTIONS FOR VHF RADIO USE

The standard procedure for a non-emergency call such as calling another vessel is as follows.

- 1. Name of station being called, spoken three times.
- 2. The words "THIS IS", spoken once.
- 3. Name of your vessel or boat registration number, spoken once.
- 4. The word "OVER".
- 5. Then you wait for the station being called to answer. Their answer should be in the same manner as your call.
- 6. Once answered you should suggest going to a working channel to carry on your conversation.
- 7. The word "OVER".
- 8. Wait for reply or confirmation from the station being called, switch to the working channel and repeat the process.

An example might be:

Calling Station: "Lucky Lady, Lucky Lady, Lucky Lady, THIS IS the motor vessel Grander, HA4321Echo, OVER."

Responding Station: "Grander, Grander, Grander, THIS IS Lucky Lady, HA1234Golf, OVER." Calling Station: "Please switch and listen channel 68, OVER."

Responding Station: "Switching channel 68, OVER."

You would then switch to channel 68 and call Lucky Lady using the same procedure and conduct your business. All conversations whether on a hailing channel or a working channel should be kept short and to the point.

Standard procedure for an emergency MAYDAY situation.

Transmit, in this order:

- 1. If you have a VHF marine radio, tune it to channel 16.
- 2. Distress signal "MAYDAY", spoken three times.
- 3. The words "THIS IS", spoken once.
- 4. Name of vessel in distress (spoken three times) and boat registration number, spoken once.
- 5. Repeat "MAYDAY" and name of vessel, spoken once.
- 6. Give position of vessel by latitude or longitude or by bearing (true or magnetic, state which) and distance to a well-know landmark such as a navigational aid or small island, or in any terms which will assist a responding station in locating the vessel in distress. Include any information on vessel movement such as course, speed and destination.
- 7. Nature of distress (sinking, fire etc.).
- 8. Kind of assistance desired.
- 9. Number of persons onboard.
- 10. Any other information which might facilitate rescue, such as length or tonnage of vessel, number of persons needing medical attention, color hull, cabin, masks, etc.
- 11. The word "OVER".

An example might be:

MAYDAY-MAYDAY-MAYDAY

"This Is Lucky Lady - Lucky Lady - HA1234Golf."

"Three miles due south of Diamond Head Lighthouse."

"Struck submerged object, taking on water, disabled and adrift."

"Need pumps - medical assistance and tow."

"Two adults, two children onboard."

"One person possible concussion."

"Estimate can remain afloat three hours."

"Lucky Lady is twenty-four foot cabin cruiser - white hull - green cabin."

"Over."

Repeat at intervals until an answer is received.