Hurricane hazards – Marine Meeting Kit



WHAT'S AT STAKE

Hurricanes can cause significant damage to marine infrastructure, such as marinas, harbors, and navigational aids. Docks, piers, and moorings can be destroyed or rendered unusable, hindering maritime activities. The wreckage of boats and ships during a hurricane can also pose navigation hazards and contribute to marine debris. The specific impacts of a hurricane on marine environments can vary depending on factors such as the intensity of the storm, the proximity to the coast, and the resilience of the ecosystems involved.

WHAT'S THE DANGER

HURRICANE HAZARDS IN MARINE SETTING

- Hurricanes can reach speeds of over 100 miles per hour (160 kilometers per hour) or even higher. High winds make navigation difficult and increase the risk of capsizing or damage to vessels.
- One of the most devastating hazards associated with hurricanes is storm surge. It occurs when hurricane-force winds push ocean waters toward the shore, causing a rise in sea level.
- Heavy rainfall can result in reduced visibility, making navigation challenging for ships.
- Hurricanes generate rough seas can be hazardous for ships, especially smaller vessels, causing them to pitch and roll and potentially leading to structural damage or even sinking.
- The combination of storm surge, wave action, and high winds can lead to significant coastal erosion during hurricanes. This erosion can damage coastal infrastructure, such as piers, jetties, and beachfront properties.
- Ports may close due to the threat of a hurricane, preventing ships from entering or leaving.
- Offshore structures, such as oil and gas platforms, wind turbines, and drilling rigs, are vulnerable to hurricanes.

HOW TO PROTECT YOURSELF

PROACTIVE MEASURES TO PROTECT CREW AND VESSEL DURING A HURRICANE

Plan in Advance:

- Develop a comprehensive emergency plan specific to your vessel and crew,
- Ensure all crew members are familiar with the emergency plan and their assigned roles.

Monitor Weather Conditions:

- Stay informed about the hurricane’s progress through reliable sources such as the National Hurricane Center.
- Monitor weather forecasts, storm tracks, updates on wind speed and storm surge.

Secure Your Vessel:

- If time allows, relocate your vessel to a safe location away from the path of the hurricane.
- If relocation is not possible, secure your vessel in a marina or a hurricane-rated mooring.

Reinforce Vulnerable Areas:

- Inspect and reinforce hatches, windows, doors, and any other openings to ensure they are watertight.
- If possible, add additional protection, such as storm shutters or covers, to vulnerable areas.

Emergency Supplies and Equipment:

- Stock your vessel with essential emergency supplies. Ensure you have enough supplies to sustain your crew for several days.
- Equip your vessel with reliable communication devices, such as a VHF radio, satellite phone, or EPIRB (Emergency Position Indicating Radio Beacon), to stay in contact with authorities and other vessels.

Personal Safety:

- Ensure crew members are wearing personal protective equipment (PPE) during the storm.
- Stay inside the vessel during the storm and avoid going on deck unless necessary.

Review Emergency Plans and Procedures:

- have a well-defined emergency plan for the vessel and crew. Update it regularly.
- Assign roles to crew for communication protocols and evacuation procedures.

Develop a Hurricane Preparedness Checklist:

- Create a comprehensive checklist of tasks to complete before the hurricane arrives.

Review Insurance Coverage:

- Verify that your vessel’s insurance coverage is up to date and provides

adequate protection.
- Document the condition of your vessel through photographs or videos to facilitate insurance claims.

Secure Important Documents:

- Safeguard important documents, such as vessel registration, insurance policies, and identification papers, in a waterproof and easily accessible container.
- Make digital copies of documents and store them securely online or on a portable storage device.

Communicate and Notify:

- Inform family, friends, and marina authorities about your plans and whereabouts before the hurricane.
- Provide contact information and keep communication lines open with local authorities.

Plan for Evacuation:

- Identify potential evacuation routes and destinations in case evacuation becomes necessary.
- Determine the triggers for when to evacuate and establish a timeline for acting.

After the Storm:

- Wait until authorities declare it safe before leaving your vessel or attempting any repairs or assessments.
- Assess the condition of your vessel and document any damage for insurance claims.

FINAL WORD

The severity and consequences of hurricanes on the marine environment varies depending on intensity of the storm, the proximity to land, and the resilience of the ecosystem and infrastructure in the affected areas.