Maritime Planning in PR, USVI and the Caribbean

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NWS Caribbean Tsunami Warning Program

NTHMP Summer Meeting
Seattle, WA
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Risk to Ports and Harbors
For example: Port at Charlotte Amalie Bay, St. Thomas, USVI.

20 Foot tsunami, November 18, 1867

30 people lost their lives on November 18, 1867 in a 20 ft tsunami.

Same bay in St. Thomas today with the lives of 25,000+ tourists & residents at risk! **80% of jobs and Gross Territorial Product are Tourism Dependant**
• **Issues and Initiatives**
  
  • Communities depend on Ports for Commerce, Tourism and Recreation
  
  • Educational component of an NSF Grant
    **TSUNAMOS: A Validated, Multi-Scale Tsunami Model for Hybrid Numerical-Experimental Simulation** 2007-2011
    • Workshop to develop Response Guide for Ports and Harbor authorities
  
  • Shipping routes study IOC in the Caribbean
  
  • Caribbean Regional Response Team
Preparedness Materials
Maritime Community

available at:
http://www.srh.noaa.gov/srh/ctwp/
and http://prsn.uprm.edu
IOC Study of Tsunami Threat for Cruise Activity in the Caribbean

- Development of a Cruise Ships Database
  - Name/company
  - Size of vessel (length, beam, draught, number of decks)
  - Gross tonnage
  - Speed
  - Number of passengers
  - Number of crew
IOC Study of Tsunami Threat for Cruise Activity in the Caribbean

- Development of a Ports of Call Database for 80 sites
  - Geolocation
  - Cruise passenger per year
  - Number of cruise berths
  - Number of cruise moorings
  - Distance to 100 meters water depth
IOC Study of Tsunami Threat for Cruise Activity in the Caribbean
Maritime Traffic Information for Ships with gross tonnage > 300 tons
Event specific risk analysis
Tsunami threat as a function of time
Caribbean Regional Response Team

- Responsible for preparedness activities including planning, training, and exercising to ensure an effective response to releases of hazardous substances and oil spills
- Lead agencies: EPA and USCG
- Meets twice a year (Puerto Rico and USVI)
- Venue for planning for tsunami response in port environments
Additional Comments

• Conversations with Cruise Ship captains
  • Time it takes for a ship to get underway
• Puerto Rico, thru Aurelio Mercado, UPRM, will be conducting tsunami current studies for San Juan harbor
• Easier and more successful to go to Port stakeholders meetings
• Ports Security Conference Dominican Republic, Oct. 21-24, 2014. Would like to have a speaker addressing tsunamis in harbors. Any volunteers?