NOAA’s Integrated Response to the Gulf of Mexico Hurricane Season- A Collaborative Approach

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NOAA & Hazards

Before
Prepare
During
Response
After
Rebuild
Hurricanes Katrina and Rita
NOAA Support to Interagency Response Effort

- Marine Weather
- Storm Surge Models
- Water Levels and PORTS®
- Aerial Photography
- Navigation Surveys
- Hazardous Materials Scientific Support
- National Spatial Reference System
- Navigation Managers
A NOAA-Wide Approach

- NOAA OCS Coordination, COOPS, NGS, NOS, NOAA ICC
- NOAA Coordination with USCG, COE, Ports, Pilots
Hurricanes for the Gulf Area 2005

- Arlene
- Cindy
- Dennis
- Katrina
- Rita
- Wilma
- 2004 Season-
  Ivan
Katrina
Katrina
Katrina
Three stranded vessels at Bayou La Batre
Rita
Rita
Rita
Nav Response

- Exceeded 2004 Hurricane Season by 10-20 times
- Virtually the entire NRT Organization with Almost all Field Personnel
- More Nav Managers and the Additional Support of NSD Staff
Navigation Response

- The Use of Extensive HSD assets through Contracting
- The Use of NOAA ships Thomas Jefferson and Foster
- The Integration of all NOAA OCS and NMAO assets into one coordinated response and operational program
NOAA Hurricane Katrina and Rita Response: Emergency Hydrographic Surveys
In Support of Reopening Ports and Waterways
Office of Coast Survey and Office of Marine and Aviation Operations
Water Level Support of Hydrographic Surveying

Rapid restoration of water level gauges was essential to NOAA hydrographic survey operations to restore shipping traffic in damaged ports.
Navigation Surveys

- NOAA deployed its teams in advance of the hurricanes to begin survey operations immediately after storm passing
- Navigation Response Teams, NOAA Ships Nancy Foster and Thomas Jefferson, and NOAA contractors surveyed rivers and ports to ensure waterways were free of hazards to navigation
- Hydrographic surveys allowed USCG and USACE to reopen ports critical ports and harbors to commercial and emergency vessel traffic sooner
Damage from Hurricanes Ivan and Katrina

Dauphin Island, Alabama
Obstructions and Salvage

NOAA coordinates closely with USCG, USACE and USN to identify and remove navigational hazards and obstructions.
• Operational Support Expanded and Needed
• Placement of Hydro Officers at USCG ICCs
• Rotation of NRT field crew
• Provision of RVs and expanded field gear for extended operations in areas with heavy damage and little support
• Early Recon of Port and coastal areas for determination of Survey Capabilities
Navigation and NRT Field Efforts
Hazardous Materials

- NOAA information products used for planning and response operations throughout impact region

- Continue to work with Federal, State, and local agencies to identify, assess, prioritize, and mitigate oil and hazardous material spills

- Providing guidance on vessel salvage, conducting shoreline cleanup assessments, and collecting information to assess impacts to natural resource from spills
The Regular Day Job

• Barge and Oil Spill- Lake Charles
• Atchafalaya Surveys
• Fourchon Surveys
• Navy Survey Areas Work
• NRT Field Work and ENC Validation
• COOPS and NGS coordination
Navigation Hazards and Debris

- Large Collection of Reports
- Coordination with USCG, COE, Ports, ORR and others
- Large Need for Surveying and Charting
- Continued Refinement of Surveying and Disposition
Living with AI

- Eat
- Sleep
- Snore
- Save your Sanity
But it wasn’t all about AI
There was a Team Effort
Conclusion

Hurricane 2006 Season starts in less than 2 months

- Partnerships were critical in helping NOAA respond to the Hurricane 2005 Season
- Partnerships will be critical to effective interagency responses to future events