United States Coast Guard
Sector Houston-Galveston
Ports of National Significance

- 1st in U.S. foreign tonnage
- 1st in U.S. exports
- 2nd in overall tonnage
- 2nd largest petrochemical complex worldwide
- 6th busiest U.S. container port
- 4th busiest U.S. cruise ship port
- $412 Million/Day Economic Impact
## TYPICAL DAY HOUSTON SHIP CHANNEL

<table>
<thead>
<tr>
<th>Type</th>
<th>Avg</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tanker Transits</td>
<td>39</td>
<td>56</td>
</tr>
<tr>
<td>Freighter Transits</td>
<td>23</td>
<td>51</td>
</tr>
<tr>
<td>Cruise Ship Transits</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Tow Transits</td>
<td>378</td>
<td>493</td>
</tr>
<tr>
<td>Public Vessel Transits</td>
<td>7</td>
<td>30</td>
</tr>
<tr>
<td>Ferry Transits</td>
<td>298</td>
<td>489</td>
</tr>
<tr>
<td>OSV / Other Transits</td>
<td>18</td>
<td>49</td>
</tr>
<tr>
<td>Ships in Port</td>
<td>79</td>
<td>111</td>
</tr>
</tbody>
</table>
Coast Guard Game Plan

The Four Phases

➢ Get ready to “Hunker Down”
   - EMPTY THE PORTS
   - SECURE THE PORTS

➢ Emergency Response / Search and Rescue

➢ “Assess the Mess”

➢ Prioritize and “Go to Work”
   - RE-OPEN THE PORTS
One Texan’s Philosophy

The time for taking all measures for a ship’s safety is while still able to do so. Nothing is more dangerous than for a seaman to be grudging in taking precautions lest they turn out to have been unnecessary. Safety at sea for a thousand years has depended on exactly the opposite philosophy.

Fleet Admiral Chester W. Nimitz
Hurricane Harvey Cargo and Tanker Vessel Signal Density Plots

Katherine Touzinsky, U.S. Army Corps of Engineers Engineer Research and Development Center, Coastal and Hydraulics Lab

August 1, 2017
Tropical Storm Harvey will be named August 16

August 24, 2017
USCG declares Port of Houston under condition Yankee

August 25, 2017
USCG declares Port of Houston under condition ZULU

August 26, 2017
Hurricane Harvey becomes a tropical storm over inland Texas

August 28, 2017
Harvey recedes towards the Gulf, record rainfall recorded at 51.88 in

September 4, 2017
Vessels queue at anchorage areas. Port reopens with restrictions September 6th.
Major Salvage Operations

Green’s Bayou

Brady’s Island Dry Dock

Lynchburg Ferry

Lynchburg Dry dock
Millions of tons of sediment
Waterway Issues
Enablers for Success

- **People:** Leadership, initiative and bias for action
- **Partnerships:** PCT and NRT = Resiliency
- **Decentralized Command & Control Authority**
- **Multi-mission character of the Coast Guard**
- Coast Guard **Sector Facility**
- **Pre-positioned forces** across Gulf Coast
- **Joint Information Center** – Public Affairs resources/posture; vital part of ICP
Partnerships

Port of Houston

Port of Texas City

Port of Galveston

Offshore Port

American Waterways Operators

Port of Freeport

Oil Terminals

Non-VTS Users

Port of Texas City Pilots

West Gulf Maritime

Chemical Carriers

Harbor Tugs

Oil Refineries

Port Coordination Team
How do we buy down risk

- **Partnerships** – Port Coordination Team, Navigation Restoration Team
  - Communicate

- **Improve Resiliency** – learn from lessons

- **Contingency Planning** – fight complacency