







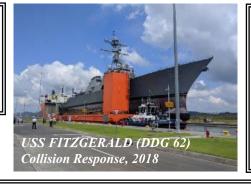
National Asset and World Leader



Underwater Ship Repair

(N97 & Customer Funded)

- □ Procedures/Technology Development
- ☐ Ship Design for Underwater Repair
- □ Up to 11:1 Return on Investment



Search & Recovery (N97 & Customer Funded)

- □ Space Shuttle Columbia & Challenger
- □ Ehime Maru SAR and Relocation
- Cargo Ship El Faro (NTSB Customer)
- ☐ Argentinian Submarine San Juan Search
- **USMC AAV Recovery**
- □ F-35 Recoveries Japan, Mediterranean, South China Sea

USS CHUNG HOON (DDG 93) Main Bearing Replacement, 2021



Salvage, Towing, & Heavy Lift (N97 &

Customer Funded)

- □ USS Bonhomme Richard (LHD 6) Fire
- NAVY ESP Parbuckle in Mountain Lake
- NATO Port Clearance in Northeast Greece
- USAF Missile Retriever Stranding
- □ USS McCain & USS Fitzgerald Collisions
- Disaster Relief: Japan Tsunami, Hurricanes Irma, Michael, Ida

Oil Spill Response (N45)

- **■** Ex Prinz Eugen oil removal
- Deepwater Horizon Oil Spill
- **■** Ex USS Chehalis Fuel Removal
- Hurricane Ida
- Operation Iraqi Freedom
- **■** USS Mississinewa Oil Removal
- ☐ Tier II/III OSRO for Navy Ships/Facilities
- Emphasis on Transportability in Austere Environments

Diving/Certification (N97)

- □ Saturation Diving Capability
- Navy Experimental Diving Unit One of a kind in the world
- **■** USN Lead Service for Diving
- USN Diving Manual & Decompression Tables used worldwide
- □ Equipment Dev & Procurement
- □ Certification Authority for all DoD

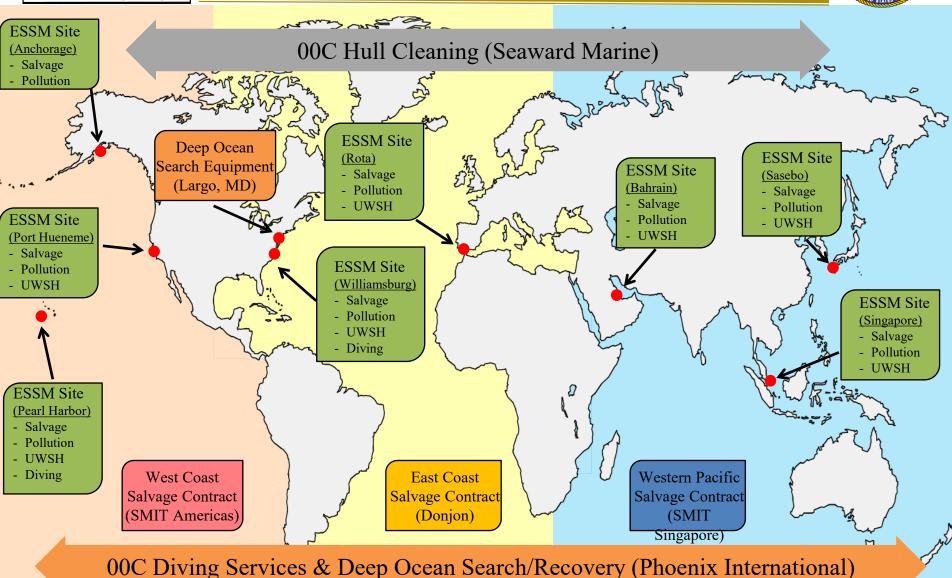






SUPSALV Worldwide Capabilities (Diving, Salvage, Pollution & UWSH)







SUPSALV Search & Recovery Systems





Shallow Water Intermediate Search System (SWISS) Depth - 7,000 ft



AUV - Hugin Depth - 20,000 ft



Towed Pinger Locator (TPL)



MR2 HYDROS Depth – 5,000 ft



Deep Drone ROV Depth - 8,000 ft

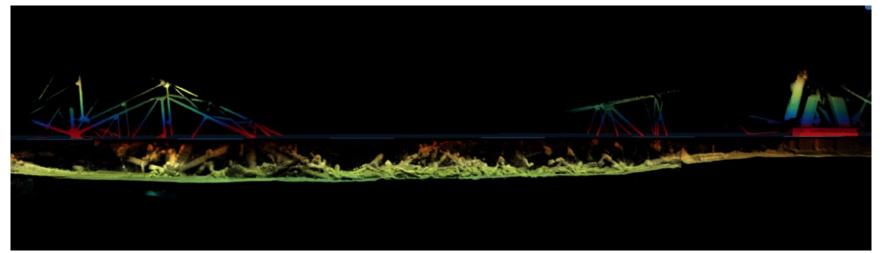


Cable-Controlled Underwater Recovery Vehicle (CURV) 21 ROV Depth - 20,000 ft



FSK Bridge Collapse



















State of Marine Salvage in the United States



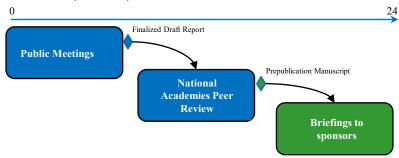
Proposal:

An ad hoc committee will assess the current national posture for conducting ship rescue salvage for time-critical near-shore and off-shore salvage operations to protect lives, safeguard the environment, prevent property damage, and maintain the flow of commerce. With these public interests in mind, the study will examine current marine salvage capabilities, to include marine firefighting and open ocean salvage towing, when contrasted with capabilities of the recent past and in anticipation of requirements for the next two decades

Why:

- Preventing maritime casualties is a public policy priority to protect lives, safeguard the environment, prevent property damage, and maintain the flow of commerce
- The need for specialized marine salvage and firefighting services has grown
- Growing public interest in safeguarding coastlines and marine habitat and navigable waterways vital to domestic and international trade
- Difficult for private companies to invest in and sustain the specialized equipment and trained personnel
- Requires advance planning of logistics arrangements and targeted investments in specialized equipment and trained personnel
- It has now been 30 years since the last comprehensive study of the U.S. marine salvage posture has been undertaken

Timeline (months):



Audience:

- US Navy Supervisor of Diving and Salvage
- USCG
- US Congress
- · Commercial Marine Salvage Industry
- Vessel Companies

Committee Composition:

- Marine firefighting, salvage, and open ocean towing operations
- Ship management to include VRPs
- Naval Architecture
- Marine Salvage Engineering
- Admiralty Law
- Risk Analysis
- Marine Insurance
- Naval and Marine Systems Development

Not all inclusive





Questions?