

SUPERVISOR OF SALVAGE AND DIVING

NAVSEA 00C

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Supervisor of Salvage and Diving
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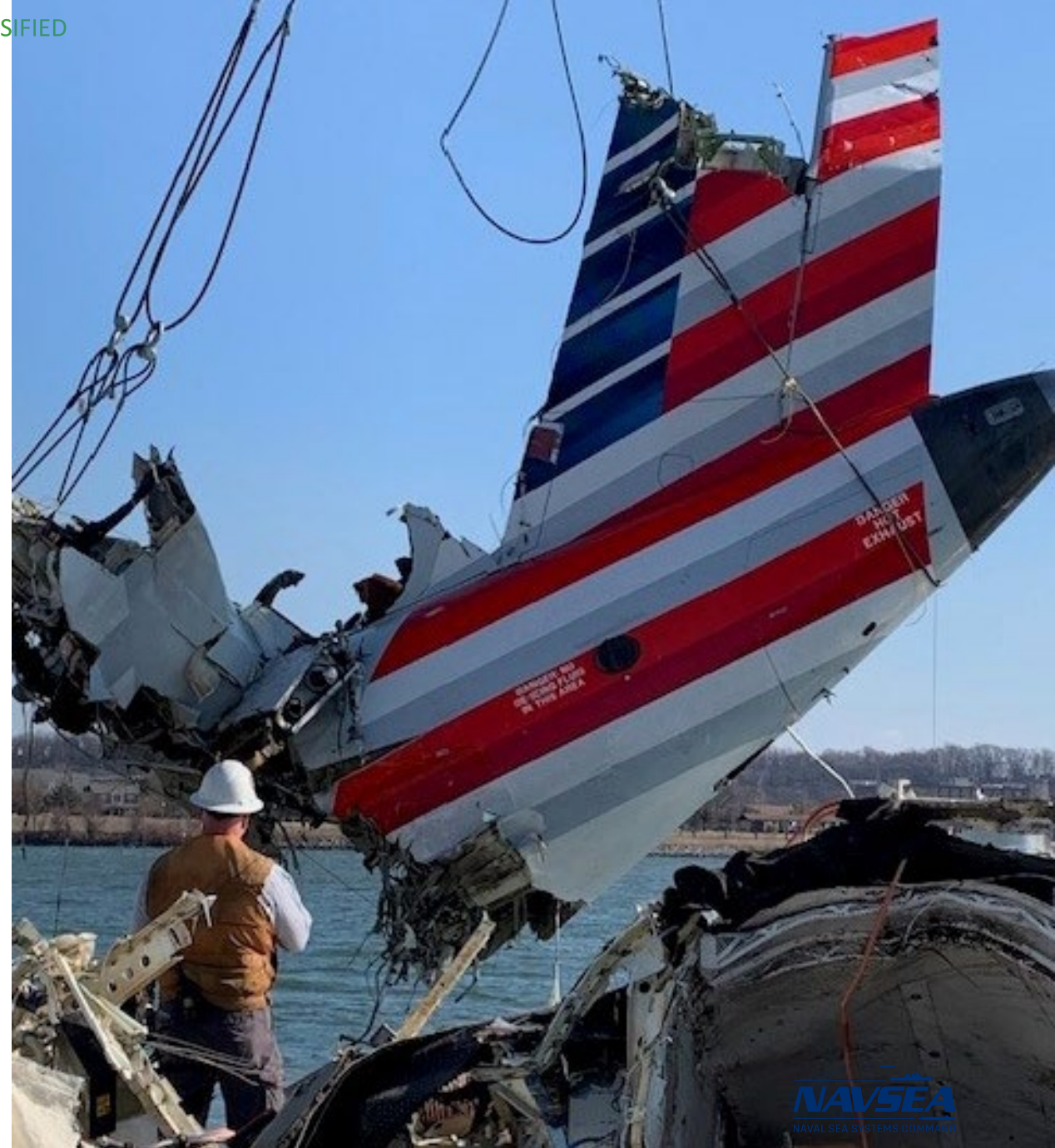


SUPSALV MISSION

To provide technical, operational, and emergency support to U.S. government agencies in the ocean engineering disciplines of:

- Marine Salvage
- Pollution Abatement
- Diving
- Diving System Certification
- Underwater Ship Husbandry (UWSH)

We prevent, respond to, and minimize the effects of catastrophes and other national emergencies.



National Asset and World Leader NAVSEA 00C

Diving / Certification (N97)

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

Salvage, Towing, & Heavy Lift (N97 & Customer Funded)

T-AO BIGHORN Salvage & Tow
Key Bridge Collapse
USS Bonhomme Richard Fire
Disaster Relief
Army LCU Heavy Lift

Underwater Ship Repair (N97 & Customer Funded)

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

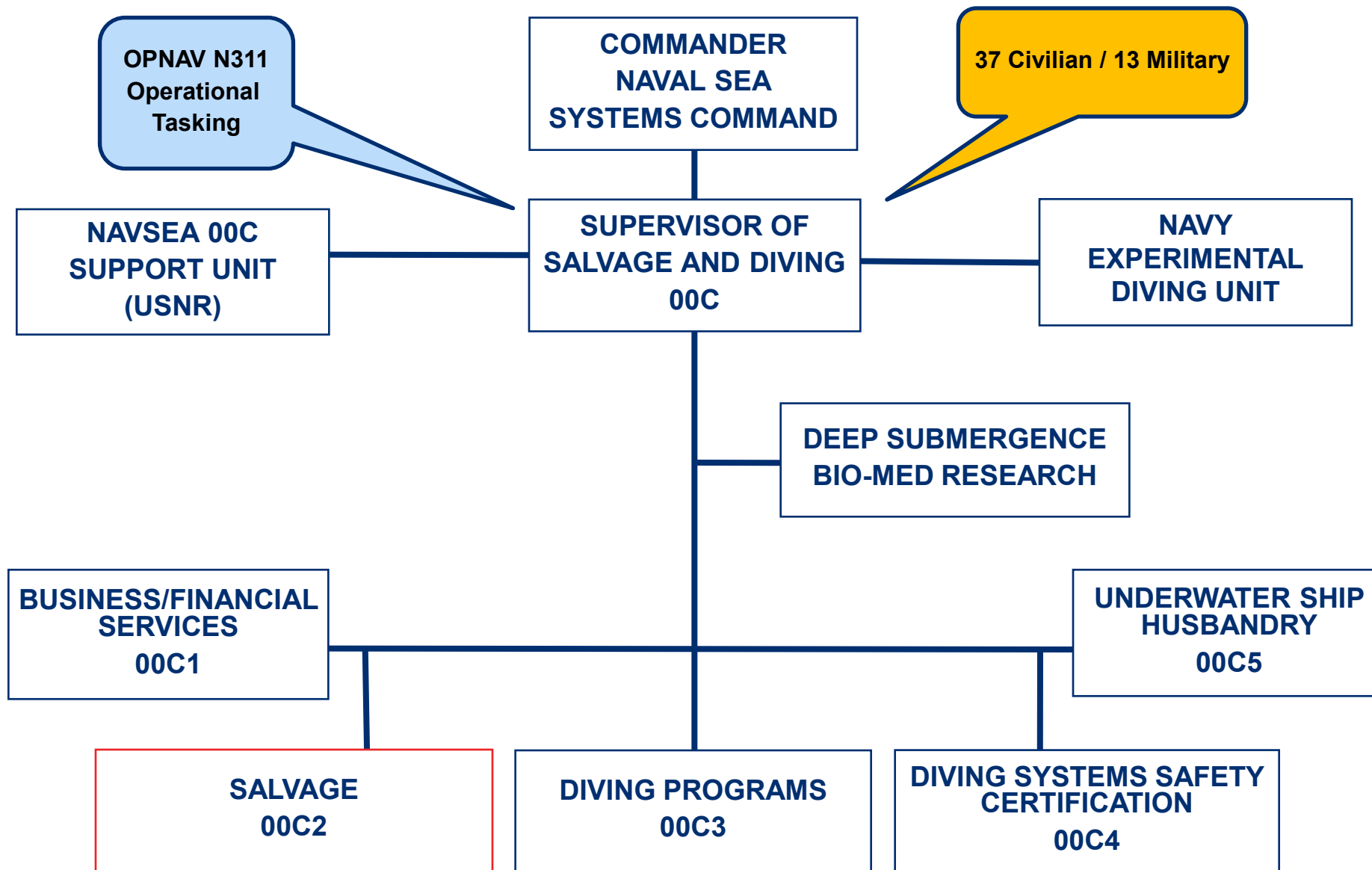
Search & Recovery (N97 & Customer Funded)

DCA Aircraft Recovery Operation
Classified Recoveries
Japanese SH-60K Search and Recovery
P-8A Poseidon Recovery
Mexican Navy Helicopter Recovery

Oil Spill Response (N45)

Ex Prinz Eugen oil removal
Deepwater Horizon Oil Spill
Ex USS Chehalis Fuel Removal
Hurricane Ida
OSRO Exercise Program
Tier II/III OSRO for Navy Ships/Facilities

SUPSALV / SEA 00C Organization



SUPSALV Salvage Responsibilities

Ship and Submarine Salvage

- Conduct Salvage Operations
- Conduct Deep S&R
- Towing and Heavy Lift
- Technical Authority
- Provide:
 - Emergency Salvage Equipment
 - Technical Documentation
 - Salvage Engineering Software
- Salvage related Battle Damage Assessment and Repair (BDAR)

Resources

- World-Wide Salvage Contracts
 - 3 Geographic Zones
- Deep Ocean S&R Contract
- Salvage Equipment (ESSM)
- Program of Ship Salvage Engineering (POSSE)
- Naval Reserve Unit



SUPSALV Guiding Directives

Salvage and Search & Recovery

10 USC §7361-7364 – The Salvage Facilities Act

Authorizes the Secretary of the Navy to provide necessary Salvage Facilities and Oil Spill Response Capability.

↪ **SECNAVINST 4740.1**

The Supervisor of Salvage is delegated all Secretarial authority in 10 USC §7361-7364 to provide salvage facilities for public and private vessels.

↪ **OPNAVINST 4740.2 directs Supervisor of Salvage to...**

- Maintain commercial contracts to supplement the Navy's salvage, search, and recovery capabilities
- Maintain and operate deep ocean search and recovery assets with global full ocean depth capability down to 11,000 meters (36,000 feet) sea water
- Provide Fleet Commanders with equipment and systems to assist in the accomplishment of salvage and recovery missions from the ESSM system
- Develop salvage, towing and search and recovery systems and equipment consistent with operational requirements
- Provide for procurement, maintenance and distribution of salvage and related pollution abatement material to ESSM storage facilities
- Serve as the Navy's technical authority for all technical matters concerning salvage, towing, heavy lift, search and recovery



SUPSALV Guiding Directives

Oil and Hazardous Substance Spill Response

33 CFR Part 155 (OPA-90)

Requires that vessel response plans include contingencies for oil spill response, salvage, and marine firefighting.

↪ OPNAV 5090.1

- Directs MSC and Navy vessels comply with OPA-90 requirements despite legal exemptions as “public vessels”
- **Designates Supervisor of Salvage as the Navy’s corporate oil spill response organization** and directs the Supervisor of Salvage to...
 - Assist Fleet Commanders in the development of OHS spill response plans
 - Maintain an extensive inventory of salvage and large-scale oil spill response equipment to support offshore and salvage related spill operations
 - Provide oil spill response equipment along with trained operators, mechanics, supervisory personnel, and technical experts when requested
 - Also references USCG-SUPSALV Interagency Agreement for OHS spill response and SUPSALV’s support of the National Response Team



Other Support Tasking

Agreements, MOA's, MOU's

- USACE
- USCG
- NASA
- NOAA
- NTSB
- Others less significant

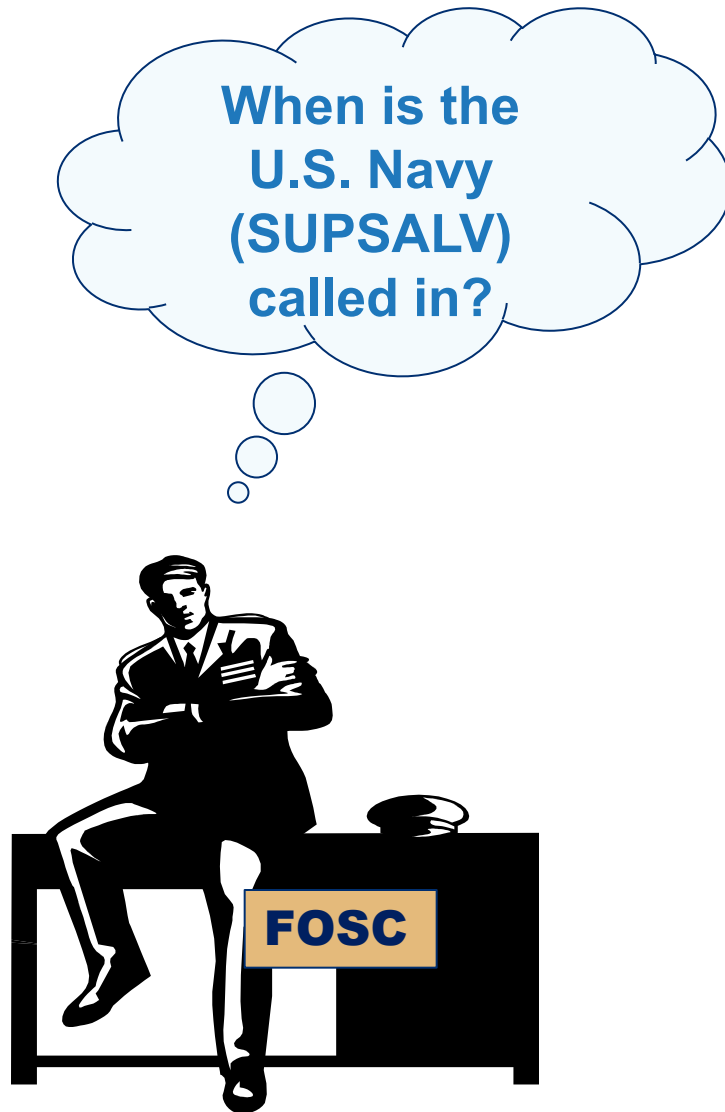
- ***SUPSALV DOD REP to the NRT***
 - National Response Team → National Response Framework (NRF)



Demonstrates breadth of our coverage and extent to which Federal government relies on capabilities

USCG Support Agreement

	USCG w/ SUPSALV
Date	JUN '15
Authorities	NCP; 33 USC 1251(Pollution Control Act); NRF ESF #10 Salvage Facilities Act – 10 USC 1761
Support/ Assistance	Oil Spill and Salvage <ul style="list-style-type: none"> • OSR & Salvage specialized equipment and expertise • Consultation, evaluation, planning and operation Naval craft, vessels and aircraft <ul style="list-style-type: none"> • Reciprocal
Requests/ Tasking	<ul style="list-style-type: none"> • SUPSALV may be contacted directly by the FOSC • The FOSC shall make the request via a message to SUPSALV with parallel request for support forwarded to Chief of Naval Operations CNO N311
Funding	<ul style="list-style-type: none"> • Pollution Removal Funding Authorization (PFRA) or • Military Interdepartmental Purchase Req (MIPR) • USCG shall reimburse SUPSALV its actual costs of performing the services



When ...

Responsible Party is GOV

or

Responsible Party is Unknown
and will be a cost benefit to
the GOV

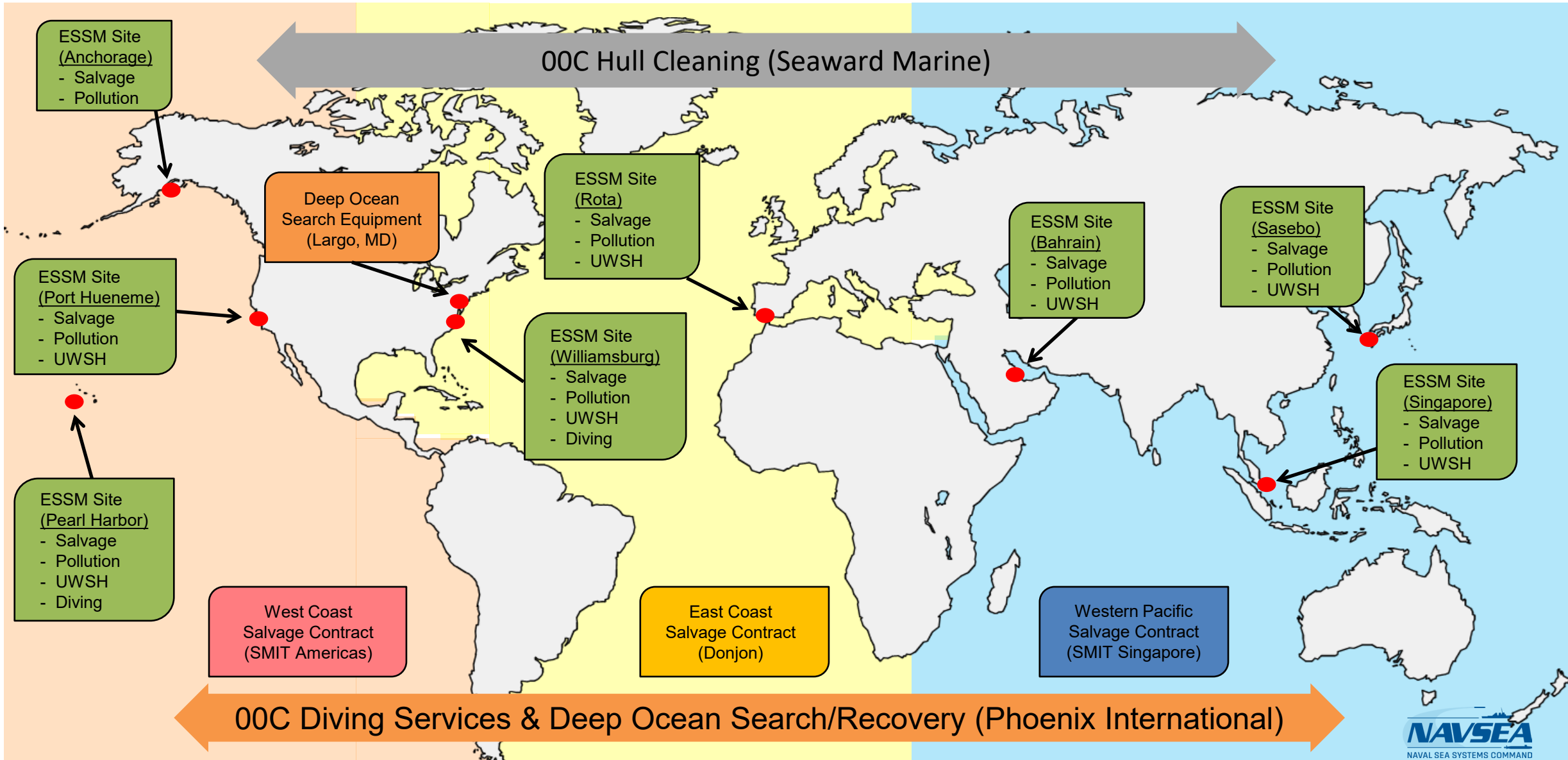
or

National Level Response (Spill
of National Significance)

or

Technical Advice / Assistance in
Management

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



SUPSALV Oil Spill Response Responsibilities

Oil Pollution Control Response

- Able to respond to pollution incidents anywhere in the world
- Serves as Tier III Oil Spill Response Organization (OSRO) to provide support to Navy On-Scene Commander for Navy spills or Federalized spills
- Provides equipment, personnel, planning, and training to all Navy activities
- National Response Team (NRT) Member - works with other Federal agencies to respond to emergencies
- Equipment staged for rapid deployment to spill sites
- Equipment and operators provided on a reimbursable basis

Resources

- Navy OSRO sized to Navy's Worst Case Discharge Afloat
- Four Manned ESSM Bases
 - Williamsburg, VA - Anchorage, AK
 - Port Hueneme, CA - Pearl Harbor, HI
- Equipment Categories:
 - Containment – Boom – 225K total feet of 18", 26", and 42" inflatable boom across the U.S.
 - Recovery – Skimmers – 133K total bpd (Marco Class V & NOFI Current Buster + smaller skimmers)
 - Temporary Storage – Oil Bladders – 70K total bbls (sizes from 500 bbls – 3,100 bbls)... augmented standby capability by NRC contract to meet tier requirements
 - Logistics Support – Boom Tow Boats, Support Containers w/ office space, repair parts, etc.



Deployment of skimming system during an USCG exercise (2017)



Skimmers operate around the EXXON Valdez Prince William's Sound, AK (1989)

SUPSALV Oil Spill Response Systems



Open Ocean Containment Boom Deployment



Dracone Barge System



Hot Tap Systems



Vessel of Opportunity Skimming System (VOSS)



Oil Offload Systems



SUPSALV Command Trailer



Marco Class V Self Propelled Skimming Systems



ESSM Response Equipment

- **Command and Control Centers**
 - ✓ Large office trailers with conference rooms and workstations
 - ✓ Satellite communication systems
 - ✓ Stocked with office supplies
- **Generators**
 - ✓ Provides power for work site lights, computers, air conditioners
- **Hydraulic Power Units**
- **Workshop**
 - ✓ Spare parts for equipment
 - ✓ All shapes and sizes of tools
- **Patching & Rigging Locker**
 - ✓ Various types of line,
 - ✓ Safety equipment



SUPSALV Oil Spill Response Responsibilities

Oil Pollution Control Response

- Able to respond to pollution incidents worldwide
- Tier III Oil Spill Response Organization (OSRO) support for Federal On-Scene Commander (Navy or USCG)
- Provides equipment, personnel, planning, and training to all Navy activities
- National Response Team (NRT) Member - works with other Federal agencies to respond to emergencies
- Equipment staged for rapid deployment to spill sites
- Customer – reimbursable basis

Resources

- Inventory sized to Navy's "Worst Case Discharge" Afloat
- Four Manned ESSM Bases
 - Williamsburg, VA - Anchorage, AK
 - Port Hueneme, CA - Pearl Harbor, HI
- Equipment Categories:
 - Containment – 225K feet of 18", 26", and 42" boom.
 - Recovery – 133K total bpd (Marco Class V, NOFI Current Buster, and skimmers)
 - Temporary Storage – 120K bbls (sizes from 700 bbls – 4,300 bbls) Dracones
 - Logistics Support – Boom Tow Boats, Support Containers w/ CZ, repair parts, etc.



Deepwater Horizon Oil Spill Response, 2010

- ❑ **Offshore drilling rig explodes and sinks**
- ❑ Major oil leak from well head and this source was not contained for several months
- ❑ U.S. spill responders came together to coordinate the clean-up, while engineers worked to stop the source.
- ❑ Unknown amount of oil spilled



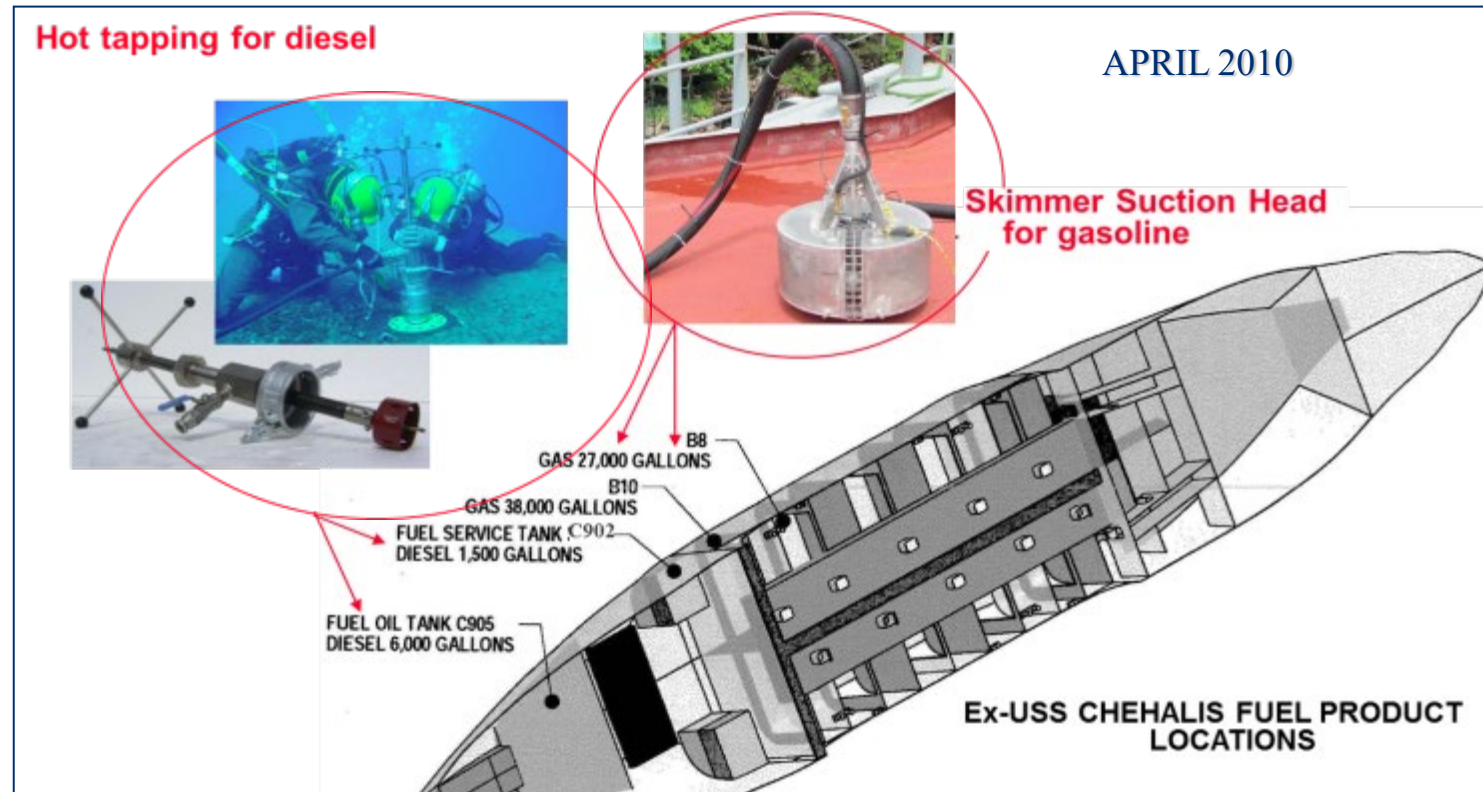
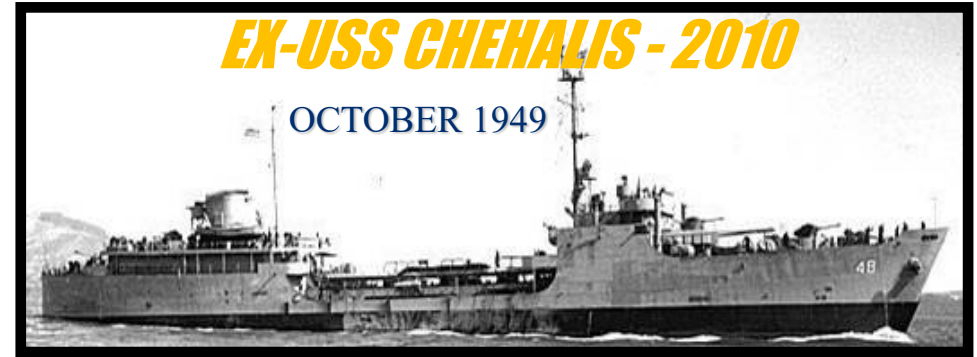
30,000 meters of Navy boom sent
4 High Speed Skimmers deployed at source
18 Skimmer Vessels deployed near shore

130+ personnel deployed
200+ truck loads of equipment sent
32,000 barrels of oil cleaned up by Navy



Sunken Vessel Oil Removal : EX-CHEHALIS

- ❑ Ex-USS gasoline tanker caught fire at the pier and sank in 1949 in American Samoa, Pago Pago Harbor
- ❑ 2009 wrecked vessel starts leaking fuel
- ❑ SUPSALV removed 2,000 barrels of fuel
- ❑ Fuel barged back to U.S. for recycling



Sunken Vessel Oil Removal : EX PRINZ EUGEN

- Ship Length Overall: 692 ft
- Wreck sits completely inverted 10 degrees down by the bow with a 10 degree list to the starboard
- Propellers and rudder awash
- Bow in ~110 fsw
- Lies approximately 300 yards off of Enebuju (Carlson) Island



PRINZ EUGEN before Atomic Tests



- Primary objectives met:
 1. Removed all recoverable oil from accessible tanks.
 2. Ensured, at a minimum, oil was removed from any actively leaking tanks.
 3. All tanks where oil was removed were permanently capped to prevent tampering.
 4. Removed risk of catastrophic release of any significant volume of oil from PRINZ EUGEN

CY24 – Current Oil Spill and HAZMAT Operations

Spills & Operations (1)

- ARIZONA Memorial Spill Mitigation

Training Exercises (7)

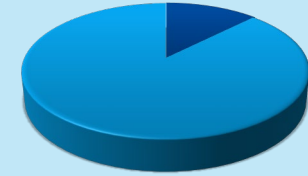
- Oil Spill in Ice Response Exercise
- Port Hueneme Equipment Deployment Exercise
- Cheatham Annex Equipment Deployment Exercise
- Hawaii Oil Spill Response Exercise
- ARIZONA Memorial Spill Mitigation Exercise
- Deveselu, Romania Annual Spill Exercise
- Bahrain Spill Response Exercise

Response Capability

- 59 Skimming Systems
- 68K River/Harbor Boom
- 165K Feet Ocean Boom
- 4M Gallons Portable Storage

8

Operations



1 Spills & Operations

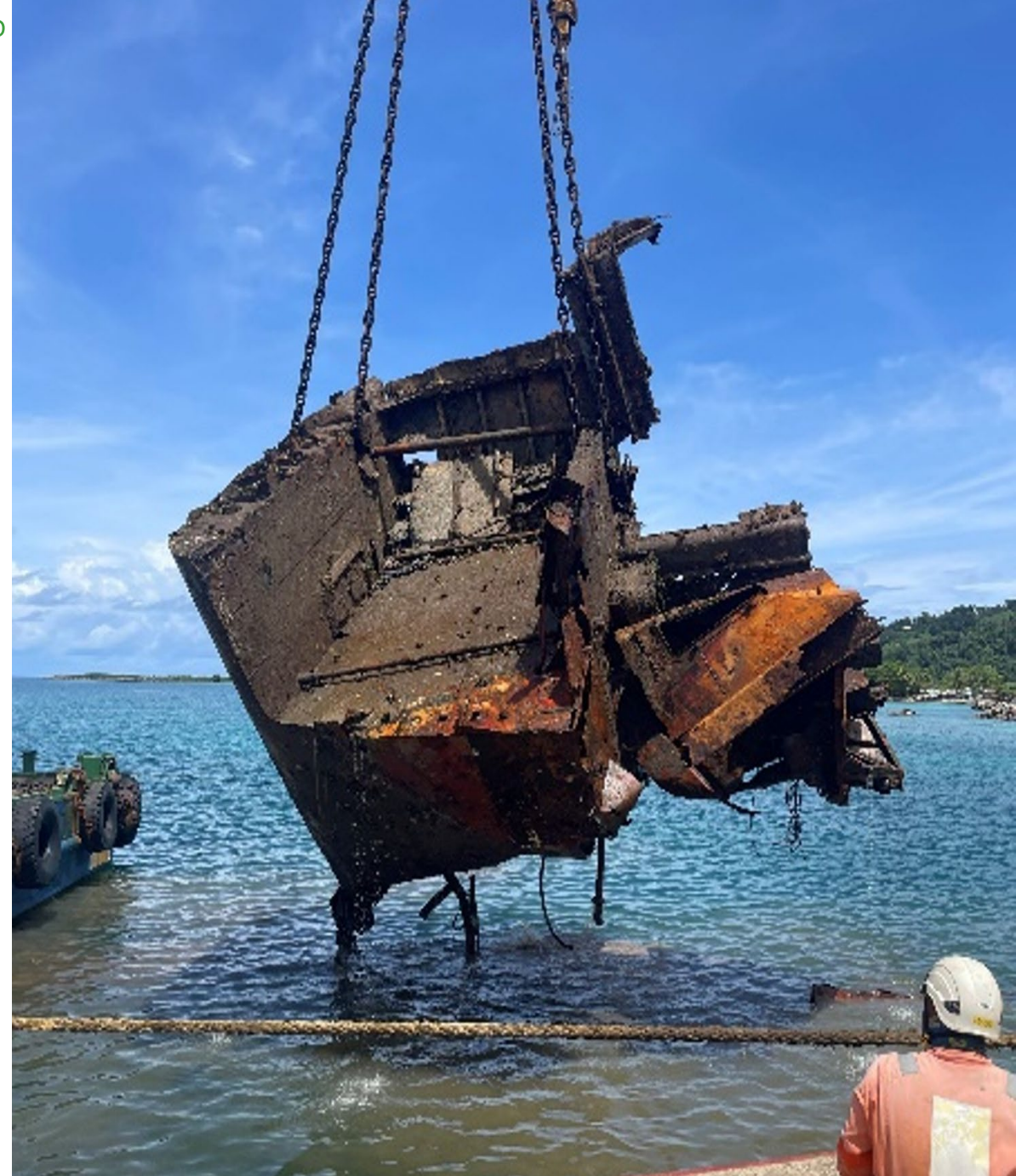
7 Training Exercises



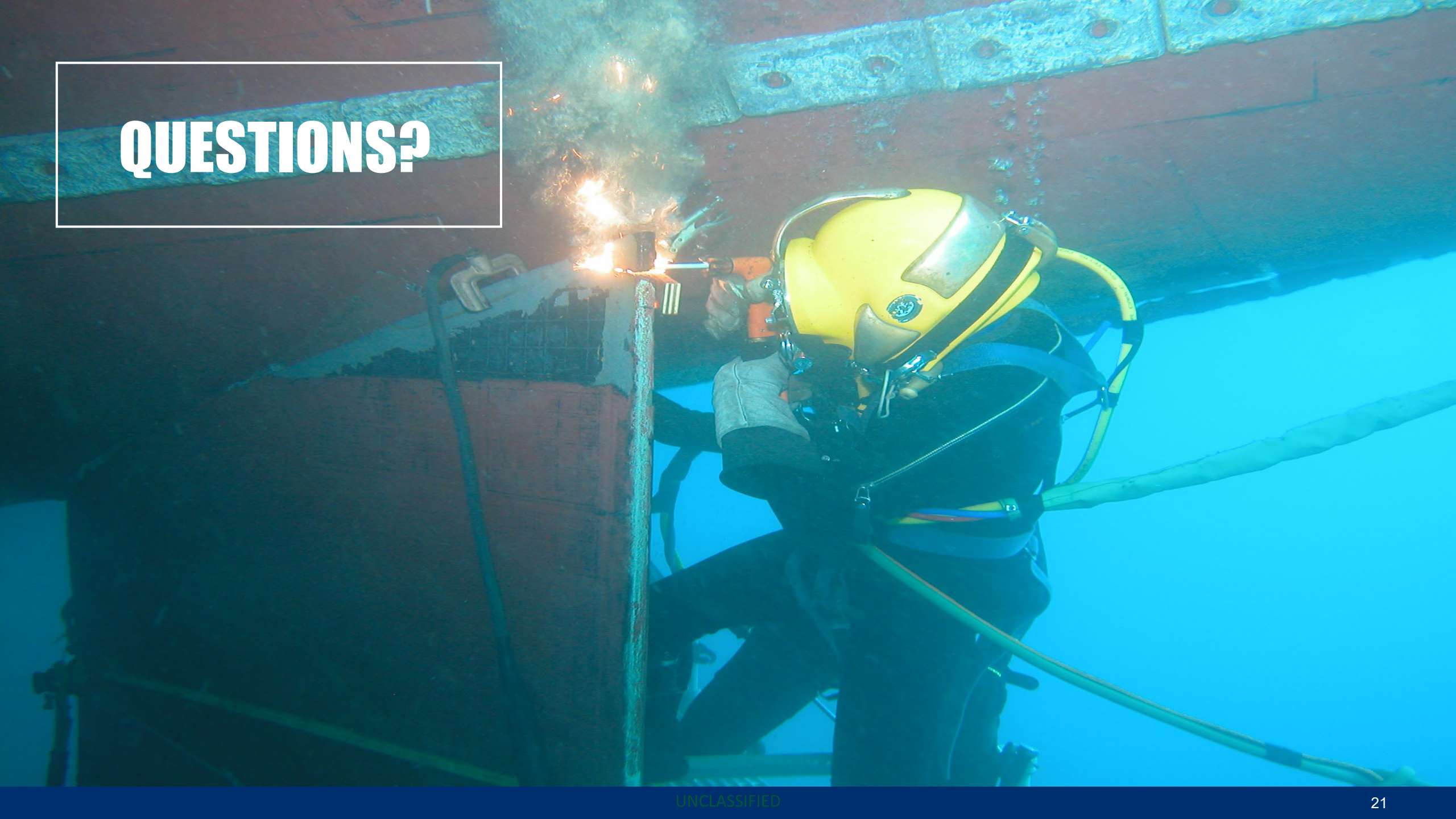
Supervisor of Salvage and Diving

NAVSEA 00C Summary

- National Recognition as US Authority for Salvage & Oil Spill Response
- Salvage – Battle Damage Assessment and Repair (BDAR)
- The Navy's Only Fly Away Saturation Diving System
- Navy Technical Authority For
 - Salvage and Diving
 - Diving Systems Safety Certification
 - Underwater Ship Husbandry
 - Towing
- Supports Navy and other DOD Diving
 - USN Dive Manual Used Worldwide
 - Fleet Support (Tech & Operational) Supported by NEDU
- Ensures Safety of Divers Through Certification of Diving Equipment
 - USN, USMC, USA
- Underwater Maintenance & Repair of USN Ships
 - Avoids Dry Dock Cost & Saves Time
 - Gives Back One Shipyear Each Year (100+:1 ROI)
- Customers – Fleet, NAVSEA PEOs, NAVAIR, SPAWAR, DOD, USCG, NTSB, NASA, NOAA, FBI, DOS
- Lean Organization Leveraging Response Through Contractor Support Utilizing Commercial Assets



QUESTIONS?



The logo features a stylized white ship silhouette with a missile silhouette above it, and another missile silhouette below it. The word "NAVSEA" is written in a bold, italicized, white sans-serif font across the center. The entire logo is set against a dark blue background with a light blue grid pattern.

NAVSEA

FORCE BEHIND THE FLEET