USNS NAVAJO (T-ATS 6) Class Towing, Salvage, and Rescue Ship

Overview Briefing for Surface Navy Association Symposium

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PEO Ships – PMS325

Distribution A: Approved for Public Release. Distribution is unlimited
PMS325 Support Ships, Boats, and Craft
Program Executive Office, Ships

Auxiliary Ships
- T-AO 205 Class
- T-AKE

Special Mission Ships
- T-AGS 67
- NOAA AGOR Variant
- T-ARC (X)
- T-ATS
- T-AGOS(X)

FMS
- EN FMC
- NCPV
- SDAF 7M RIB
- NSW RIB
- Jordan 35M PB

Boats & Combatant Craft
- 40PB
- OSV
- 11M RIB
- FP MED
- WB Medium

Service Craft & Seaborne Targets
- YP 676 Class SLEP
- YT
- APL
- HSMST
- YON

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T-ATS Overview

- T-ATS will replace the capabilities of both retiring Rescue and Salvage Ship (T-ARS 50) class and Fleet Ocean Tug (T-ATF 166) class mission requirements
- T-ATS will be a Multi Mission Common Hull Platform based on commercial offshore Anchor Handling Tug Supply (AHTS) vessels
  - Large, unobstructed deck allows for the embarkation of a variety of stand alone / interchangeable systems
- Able to support current missions
  - Towing, Salvage, Rescue, Oil Spill Response, Humanitarian Assistance
  - Wide Area Search and Surveillance: UUV and UAV
- Enables Future Rapid Capability Initiatives
  - Support modular payloads with hotel services and appropriate interfaces.
  - Can embark any type of containerized, stand alone system. Future payloads could include: Cyber, EW, Decoy and Surveillance packages
Key Requirements / Market Research

- Key Requirements listed below:
  - Deck Space (5,000 ft²)
  - Dynamic Positioning (DPS-2)
  - Bollard Pull (130 ST)
  - 40 ton salvage crane

- Conducted market research to investigate viability of modifying an existing
  Commercial Offshore Vessel or Vessel Design

**Anchor Handing Tug Supply**
- Met towing requirements
- But most did not meet deck length

**Platform Supply Vessel**
- Met Deck Area
- But not bollard pull

**Multi-Purpose Vessel**
- Met Deck Area, towing, and crane
- But not affordable within budget

<table>
<thead>
<tr>
<th></th>
<th>Bollard Pull</th>
<th>Deck Area</th>
<th>Price</th>
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<tr>
<td>AHTS</td>
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Support Submarine Rescue
Tow a CVN

*Distribution A: Approved for Public Release. Distribution is unlimited*
Acquisition Approach and Status

- 8 T-ATS Vessels planned
- Industry Studies completed September 2016
  - Contractors: Bollinger, Eastern, Fincantieri, and VT Halter Marine
- Detail Design & Construction RFP issued 31 March 2017 as a small business set-aside
  - Offerors proposed a T-ATS design based on modifications to a proven commercial vessel Parent Design
  - Offerors proposed their specification based on Navy’s circular of mandatory requirements, non-mandatory requirements, and “desired features”
    - The program’s Capability Development Document identified desired, but not mandatory, features that would improve mission success
    - Value adjustments were given to an Offeror’s evaluated price for proposed desired features
- Detail Design & Construction Contract awarded to Gulf Island Shipyards, LLC on 16 March 2018 based on the Wartsila VS 4612 Anchor Handling Tug Supply (AHTS) vessel design
## T-ATS Key Milestones/Schedule

### Gates, Decisions, Milestones

<table>
<thead>
<tr>
<th>Year</th>
<th>NCB</th>
<th>Gate 1</th>
<th>Gate 3</th>
<th>Gate 5</th>
<th>Industry Studies Proposal Prep</th>
<th>Source Selection</th>
<th>Industry Studies Performed</th>
<th>Contract Award</th>
<th>DD&amp;C Proposal Prep</th>
<th>Source Selection</th>
<th>Contract Award</th>
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### Acquisition

- Contract Award
- DD&C RFP Released
- Industry Studies Proposed
- Industry Studies Performed
- Source Selection
- Source Selection

### Lead Vessel

- T-ATS 6 Award
- SOC BT AT DEL
- OWLD

### Follow Vessels (2 - 5)

- T-ATS 7 Option Exercised
- SOC BT AT DEL
- OWLD
- T-ATS 8 Option Exercised
- SOC BT AT DEL
- OWLD
- T-ATS 9 Option Exercised
- SOC BT AT DEL
- OWLD
- T-ATS 10 Option Exercised
  - SOC BT AT DEL
  - OWLD

### Planned Vessels (6 - 8)

- T-ATS 11 Option Exercised
  - SOC BT AT DEL
  - OWLD
- T-ATS 12 Option Exercised
  - SOC BT AT DEL
  - OWLD
- T-ATS 13 Option Exercised
  - SOC BT AT DEL
  - OWLD

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Mission Enablers and Capability Features

Principal Characteristics

- LOA: 80.1 m (262.8 ft)
- LBP: 70.2 m (230.3 ft)
- Beam: 18 m (59.1 ft)
- Depth: 7.5 m (24.6 ft)
- Draft, Full Load: 5.4 m (17.7 ft)
- Displacement, Full Load: 5191 mt (5110 LT)
- Speed, Sustained: 15.1 knots
- Endurance Range: 8170 nm @ 10 knots

1. Hull form with Bulbous Bow provides excellent fuel efficiency and seakeeping
2. Diesel Mechanical Propulsion Plant with Shaft Generators for operational flexibility and redundancy
3. Bollard Pull of 176 Short Tons for above-threshold towing and debeaching force
4. Bridge provides 360-degree interior and exterior visibility
5. Permanent accommodations for 42 persons plus crew (Navy Desired Feature)
6. Traction Winch for Towing (Navy Desired Feature)
7. Mission Equipment Stowage (Navy Desired Feature)
8. Deck crane sized and located for maximum multi-mission flexibility
9. Working Deck area exceeds minimum requirement with cargo rails and bulwarks to protect equipment and personnel
10. Offship Firefighting (Navy Desired Feature)
11. Open deck area on the 02 Level provides space for future mission systems

Distribution A: Approved for Public Release. Distribution is unlimited
Questions?
BACKUP
## T-ATS vs T-ARS and T-ATF

<table>
<thead>
<tr>
<th></th>
<th>T-ATS (NAVAJO CLASS)</th>
<th>T-ARS (SAFEGUARD CLASS)</th>
<th>T-ATF (POWHATAN CLASS)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall Length</strong></td>
<td>263 ft (80m)</td>
<td>255 ft (77m)</td>
<td>226 ft (68.9m)</td>
</tr>
<tr>
<td><strong>Beam</strong></td>
<td>59 ft (18m)</td>
<td>51 ft (15.5m)</td>
<td>42 ft (12.8m)</td>
</tr>
<tr>
<td><strong>Draft</strong></td>
<td>17.7 ft (5.4m)</td>
<td>17 ft (5m)</td>
<td>14.9 ft (4.6m)</td>
</tr>
<tr>
<td><strong>Deck Space</strong></td>
<td>6,000 sqft</td>
<td>1,500 sqft (Bow) / 3,000 sqft (Aft)</td>
<td>4,000 sqft</td>
</tr>
<tr>
<td><strong>Speed</strong></td>
<td>15 kts</td>
<td>14.5 kts</td>
<td>14.5 kts</td>
</tr>
<tr>
<td><strong>Installed Power</strong></td>
<td>9,408 KW (12,618 HP)</td>
<td>3,132 KW (4,200 HP)</td>
<td>5,369 KW (7,200 HP)</td>
</tr>
<tr>
<td><strong>Bow Thruster</strong></td>
<td>2 @ 900 KW (1,224 HP)</td>
<td>1 @ 372 KW (500HP)</td>
<td>1 @ 372 KW (500HP)</td>
</tr>
<tr>
<td><strong>Stern Thruster</strong></td>
<td>1 @ 900 KW (1,224 HP)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Range</strong></td>
<td>8,170 NM (@10kts)</td>
<td>8,000 NM</td>
<td>10,000 NM (@13kts)</td>
</tr>
<tr>
<td><strong>Bollard Pull</strong></td>
<td>176 Short Tons</td>
<td>68 Short Tons</td>
<td>90 short Tons</td>
</tr>
<tr>
<td><strong>Towing Machine</strong></td>
<td>2 ATM's / 3,000 ft of 2.5&quot; wire / 3,500ft of 3&quot; wire</td>
<td>2 ATM's / 3,000 ft of 2.25&quot; wire</td>
<td>1 ATM / 2,500 ft of 2.25&quot; wire</td>
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<tr>
<td><strong>Traction Winch</strong></td>
<td>Yes</td>
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<td>Yes</td>
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<tr>
<td><strong>Dive System</strong></td>
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<td>SNDL Compressor Chamber / Assessment -underwater work space / FADS III Transportable Recompression Chamber</td>
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<tr>
<td><strong>Total Crew</strong></td>
<td>23</td>
<td>29</td>
<td>18</td>
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<tr>
<td><strong>Persons other than crew</strong></td>
<td>42</td>
<td>51</td>
<td>40</td>
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<tr>
<td><strong>Total Accomodations</strong></td>
<td>65</td>
<td>80</td>
<td>58</td>
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<tr>
<td><strong>Salvage</strong></td>
<td>40T Dynamic Lift Crane</td>
<td>5T Crane (FWD)</td>
<td>Multi-Purpose Crane (10Ton)</td>
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<td>40T Boom (AFT)</td>
<td>Yellow Gear</td>
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<td>300T Heavy Lift System</td>
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<td><strong>Off Ship Firefighting</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<td><strong>DP Systems</strong></td>
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<td><strong>MISC</strong></td>
<td>Tugger Winches</td>
<td>Retractable Tow Pins</td>
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<td>Shark Jaws</td>
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<td>Retractable Tow Pins</td>
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AHTS to T-ATS changes and impacts

- Removed Small Cranes
- Added 80,000 lb Offshore Crane
- Lowered Bulwarks
- Modified Cargo Rail
- Changed Pilothouse (comes from a variant)
- Lowered Stern by ~0.7 meters
- Added 6.0 meters in Midbody
- Red. Gear and Shaft Gen. Relocated
- Engines Moved Aft
- Propulsion Plant Configuration Changed to that from a Lower Powered Variant

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AHTS to T-ATS changes and impacts

- Traction Winch Added
- Anchor Handling Winch Replaced with Towing Winch
- Added Hatches in Main Deck
- Bulk Tanks and Rig Fluid Tanks Removed
- Stowage Holds Created
- Rearranged to Add Accommodations
- Distribution A: Approved for Public Release. Distribution is unlimited