Recapitalizing the Coast Guard’s Inland Cutter Fleet: Waterways Commerce Cutter Program Update

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Agenda

• Current State of the Inland Fleet
• Unique Aspects of Inland Tender Recapitalization
• Distinct Mission Sets
• Operational and Maintenance Needs
• Lack of Commercial-off-the-Shelf Solutions
• Acquisition Process and Program Progress
• Desired Fielding Schedule
• Program Concerns
• Q&A
Current State of the Fleet

- 35 tenders in nine subclasses perform the inland aids to navigation (ATON) mission
- The average age of the fleet is more than 53 years
  - The inland construction tender Smilax was commissioned in 1944
- Issues:
  - Rapidly increasing maintenance costs
  - Decreased operational availability
  - Habitability concerns
The inland fleet covers approximately 12,000 nautical miles of U.S. inland waterways.
Unique Aspects of Inland Tender Recapitalization

• The ATON mission consists of three mission sets:
  • Inland construction operations
  • River buoy operations
  • Inland buoy operations

• The inland tenders also complete the following missions:
  • Ports, waterways, and coastal security
  • Search and rescue
  • Marine environmental protection
  • Marine safety
Distinct Mission Sets

- Inland Construction
- River Buoy Tending
- Inland Buoy Tending
Inland Construction Tenders (WLIC)

- Construct, repair, and maintain fixed ATON within inland waterways along the Eastern Seaboard and Gulf of Mexico
- Only Coast Guard platform with the capability to drive and remove piles, erect towers, and effect major structural repairs
- 13 currently in fleet
River Buoy Tenders (WLR)

- Service short-range ATON on the Western Rivers. They set, relocate, and recover buoys to mark the navigable channel in the rivers as the water level changes.
- Establish and maintain fixed aids, lights, and daybeacons within their area of responsibility
- 18 currently in fleet
Inland Buoy Tenders (WLI)

- Service short-range ATON along coastal and inland waterways
- Maintain buoys that are beyond the capabilities of the nearest aids to navigation team (ANT) and that are located in areas either too shallow or otherwise too restricted for larger buoy tenders to reach
- Four currently in fleet
  - One each in Alaska, Michigan, North Carolina, and Oregon
# Fleet Distribution

<table>
<thead>
<tr>
<th>Mission Type</th>
<th>Hull Classification</th>
<th>Years Built</th>
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<tbody>
<tr>
<td>Inland Construction Operations</td>
<td>WLIC (13 total)</td>
<td>1944 (1, 100-foot)</td>
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<td></td>
<td></td>
<td>1962 (8, 75-foot)</td>
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<td>1976 (4, 160-foot)</td>
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<tr>
<td>River Buoy Operations</td>
<td>WLR (18 total)</td>
<td>1960 (6, 65-foot)</td>
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<td></td>
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<td>1964 (10, 75-foot)</td>
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<td>1990 (2, 75-foot)</td>
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<tr>
<td>Inland Buoy Operations</td>
<td>WLI (4 total)</td>
<td>1945 (1, 100-foot)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1954 (2, 65-foot)</td>
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<tr>
<td></td>
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<td>1963 (1, 100-foot)</td>
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</tbody>
</table>
Operational Needs

Any solution must:

• Fill the capability requirements for three distinct ATON mission sets

• Use state-of-the-market technologies proven in the intended operational environment
  • May include solutions that can perform the missions more efficiently and effectively using different methods than the current fleet

• Maximize commonality and standardization
Maintenance Needs

• Driven by geographical dispersion

• Solutions should minimize drydocking, preventive maintenance, and reliance on external maintenance providers
Lack of Commercial-off-the-Shelf Solutions

- Market research and internal studies indicate there may be no viable commercial solutions currently available to meet Coast Guard mission needs

- Available commercial solutions explored do not meet draft key performance parameters for endurance, access, and mission execution
Coast Guard Acquisition Process

- At Acquisition Decision Event 1 (ADE-1), January 2018, the Department of Homeland Security designated the WCC Program as a Level 1 major system acquisition.
- WCC Program is in the Analyze/Select phase of the acquisition.
- Coast Guard is partnering with the Navy to conduct an independent Alternatives Analysis (AA) to identify viable solutions to meet the mission need within cost and schedule constraints.
- AA results will inform the WCC acquisition strategy.

**Coast Guard Acquisition Process Diagram:**

- **Program Identification:** Identify Capability Gap
- **Need:** Define the Problem
- **Analyze/Select Phase:** Analyze alternatives and identify resources
  - Alternative Analysis
  - Operational Requirements Document
  - Life Cycle Cost Estimate
  - Integrated Logistics Support Plan
  - Acquisition Plan
  - Acquisition Program Baseline
- **Obtain and Evaluate:**
  - ADE-2A
  - ADE-2B
- **Produce/Deploy and Support:**
  - ADE-3 (CG Only)
  - ADE-4 (CG Only)

**Notes:**
- Bold font denotes program items currently in progress.
Recent Progress

• Analysis is underway with the U.S. Army Corps of Engineers Marine Design Center and the Coast Guard’s Ship Design Team to ensure future request for proposal (RFP) requirements are technically feasible and affordable

• The Navy is actively conducting the AA
  • They are using the assistance of a technical contracting firm

• Sustainment planning and lifecycle cost estimating have been initiated
Desired Fielding Schedule

- **FY24: Initial operational capability**
  - Achieved after the first tender has successfully completed operational test and evaluation; all crewmembers are trained; and the tender has been delivered to its homeport, ready for missions

- **FY30: Full operational capability**
  - Achieved when the capability has been fully fielded
Program Areas of Concern

- Cyber requirements (for both shipyard and ship systems)
- Production capacity
- Design maturity at proposal submission
- Misunderstanding the unique Coast Guard inland mission
Questions?