



Erie Maritime Museum

Project Update 7/24/2025

As part of the Pennsylvania Historical and Museum Commission's strategic vision to own, operate, and maintain the U.S. Brig *Niagara*, Bristol Marine at Sample's Shipyard in Boothbay Harbor will work in partnership to meet current contract priorities. This document is meant to guide current discussions, communicate progress, and bring definition to ongoing planning and implementation.

Critical Path Line Items:

1. 7/24/25 Meeting with Caterpillar & Twin Disc Reps. (Engineering & Design needed for exhaust modifications and final specifications by Erie Maritime)
Possible COR for purchase of Engines and gensets.
2. 7/28/25 Finalize Fastener Order. (*Portland Bolt* - Boat Spikes)
Hood end and rabbit fasteners?
3. 7/28/25 Finalize selection of lumber for laminating stem timbers.
4. 7/28/25 Complete bow framing removal to expose stem timber for final repair decision.
5. 7/31/25 Review Engine & Generator Specs to confirm equipment purchase change order.
6. 7/6/25 USCG Inspection; rig & internal structure inspection. Guidance of electrical system upgrade.

In Process:

- Review & Approval dates of Invoices #002, #003 & #004
- Drawing review for Engine Foundation & change order list.
- Electrical, mechanical planning.
- Continue with bow, stern and deck demo.
- Completing initial inspection of masts, rigging & deck structure.
- Douglas Fir and White Oak shipment - Late August

Priority Planning & Implementation:

Section 1: Haulout & Preparation

- Blocking & haulout. **Complete**
- Wood frame & cover design.
- Staging layout & access. **Near Completion**
- Down Rig planning, schedule and USCG mast and mast partner/deck inspection. Repairs require a Change Order Request.

Section 2: Tankage & Plumbing

- Low Priority at this time.
- USCG requirements for Inspection of internal hull structure.

Section 3: Engine & Drivetrain, Peripheral Systems

- Equipment removal planning.
- Naval Architect & USCG requirements for new equipment and drawing approval including engine foundations & exhaust modifications. Requires Change Order Request. **Concept drawings are approved and now require change order request for final installation design, mock ups, fabrication and installation.**
- **Engine room mechanical systems require possible modifications and final engineering. (Main Engine Exhaust has water jacketed pipe smaller than 6" Dia.; Fuel supply pipe sizes; Raw water strainer and intake piping; PTO foundations for auxiliary pump and alternator; Requires Change Order Request.**
- Remove shafts for inspection. Shaft replacement requires Change Order Request.

Section 4: Carpentry / Shipright Work

- Staging / Access, Deck protection & Set-up.
- First phase of demolition for bow & stern above the waterline.
- Naval Architect & USCG requirements and approval for above waterline stem repair configuration and steel reinforcement. Requires Change Order Request.

Section 5: Electrical System Upgrade

- Electrical Technician reviewing potential repairs and upgrades. Requires Change Order Request. **USCG review of existing electrical drawings.**
- Genset removal planning.
- Naval Architect & USCG requirements and approval for exhaust modifications and system upgrades. Requires Change Order Request.

Section 6: Close Out

- Low priority at this time.

PHMC ACTION ITEMS

	Delivery status of Engines, Gensets, Aquadrive units. Equipment needed on site for final mock-up of foundations. Final specifications needed for possible COR for equipment purchase.	
	Payment status of invoice #1 , #2 & #3	
X	Review of First Change Orders	7/9/25
	USCG schedule for inspections. (Fastener pull, Internal Structural, Drydock, Mechanical and electrical system upgrade, Spars & Rigging, Stem 835)	
X	Above Waterline Stem Timber Repair Proposal. Has been reviewed by Naval Architect and will require final design and approval after demo and assessment. Laminating is an option.	6/12/25
	Winterization of engines and systems including pump-out of black and grey water tanks.	
	Review of lumber species and finalize initial orders. Stem Timber Lamination will require change order.	

USCG ACTION ITEMS

	Inspection Schedule - Next inspection ??? Electrical, Stem & Stern	
	Mechanical Systems Replacement Requirements	
	Electrical System Replacement/Upgrade Requirements - Existing Drawing Review & project guidance.	
	Masts & Rigging Inspection Expectations	
X	Naval Architecture & USCG Drawing Approvals - Engine & Genset Replacement, Engine Foundation Modifications, Steel Stem Fabrication, Engine & Genset Exhaust Modifications.	6/12/25
	Internal Hull Structure & Keel Bolt inspection; Possible tank and ballast removal.	

SHIPYARD ACTION ITEMS

X	Lead Shipwrights inspection and planning to define the first phase of demolition for Bow & Stern above waterline repairs. Removal of 15-20 planks above waterline, Port & Stbd, Bow & Stern.	6/12/25
X	Diesel tech inspected the engine room to start planning removal.	6/17/25
X	Haul out vessel and secure.	6/25/25
	Build staging to surround the vessel.	
	Main engine room electrical distribution report.	
X	Downrigging and remove masts	7/10/25
	Repower & Genset Review - Meet 7/24/25 with Cat & Twin Disc Reps. Decision to purchase equipment.	