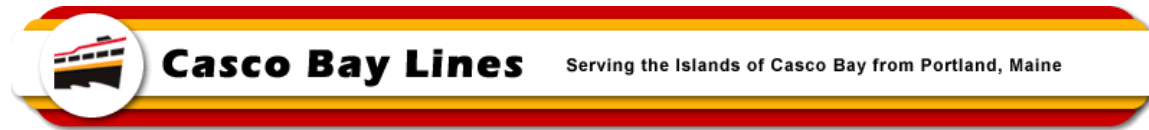


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TO: File

FROM: Paul D. Pottle, Director of Projects

DATE: August 8, 2024

SUBJECT: Construction Progress-Photos for MV Battery Steele at Senesco - # 9

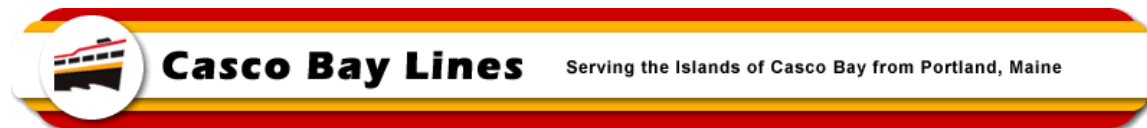
This report covers construction at the Senesco Shipyard for the months of June 2024 and July 2024. The shipyard continues to make steady progress on many of the systems but there are still some delays on the electrical support functions that are currently being addressed. Over the last two months, much of the focus has been on getting piping installed as well as getting things like stairways and railing systems in place. They also continue to install support framing for the various equipment that will be placed on the vessel. Staff continues to join in on remote testing and inspection of the electrical and mechanical systems as they are completed and before they are shipped. Work still continues on developing various submissions for the Coast Guard and approvals to those submissions continue to come in. Inspections by the US Coast Guard are ongoing, with no major issues identified as of this writing. The Coast Guard is on site one to two times per week inspecting work completed since their last visit and signs off on work that meets the standards.

As reported in the last report, the work associated with the electrical systems for this hybrid vessel is complex and this has made making the appropriate working drawing for submission and to support construction to be delayed. Based on the meetings held with Senesco and CBL staff, and a close review of the activities still remaining to be completed, the more realistic delivery date is not the end of 2024, but is in March of 2025. This date would still allow CBL to do the familiarization activities that will be necessary with the crews and the local US Coast Guard to obtain the final certificates. Based on this, we expect to be able to have the vessel ready for regular service before the beginning of the 2025 summer season.

The following is a brief overview of the work done from June 1st, 2024 to July 31st 2024:

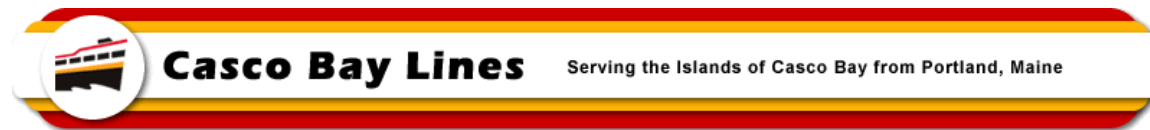
- Crowley Engineering continues to work on plan development for both US Coast Guard submission and for the shipyard to follow for actually building the vessel. Other sub-contractors are also making submissions for various finishes and fixtures throughout the vessel. Most of these are not required to go to the Marine Safety Center of the US Coast Guard, but they will be shared with the local Coast Guard inspection team for them to check on conformance with approved submissions.
- ABB (propulsion provider) has provided a number of documents to be submitted by the shipyard to the Marine Safety Center for the propulsion system. Those documents are being reviewed and will be submitted to the Coast Guard shortly.
- Senesco continued with piping fabrication and has been installing various piping systems on the vessel. Extensive work has been advanced on the bilge, fuel oil, vents, fill lines and deck drain piping systems.
- Continued to construct various equipment foundation frames and install them on the vessel.
- Continued limited installation of insulation studs (pins) throughout the vessel.

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- Continued work on the exhaust systems to include the various clips, supports and misc. components.
- Fabricated many handrail sections and installed handrails on the bulwark as well as installed the swing gates at the side gate locations.
- Installed additional cleats and line chocks with supporting framing under the deck.
- Made adjustments to some of the starboard stairways to meet minimum clearances required for the railings.
- Performed limited painting in the main and 01 deck cabins. That work will advance as items are installed and areas are made available.
- Completed the fabrications and installed the Pilot House stairs and railing system.
- Began installing the stern tubes on both ends of the vessel.
- Fire main piping was installed.
- Installed bilge manifolds, valves and piping in the engine room.
- Installed sanitary piping.
- Installed a majority of the deck hatches throughout the vessel.
- Installed the elevator shaft ladders
- Did limited painting throughout the vessel.
- Finished and installed the Pilot House Mast structure.
- Performed checks on a percentage of the batteries that were being stored to ensure that they maintained a certain state of charge. During that inspection and testing, several batteries did not meet the minimum requirements. The battery manufacturer was notified, and they sent a representative to the site to further investigate and most of the batteries were fine and restored to a state of charge to keep them safely in storage until they can be installed on the vessel. A couple of batteries are being replaced to make sure there are no issues moving forward. Senesco has brought in climate controlled storage to optimize the storage conditions to help avoid any additional issues and we will continue to do regular sampling of the batteries to ensure they are staying where they are expected to.
- Federal Transit Administration staff visited the shipyard in June with CBL staff present.
- CBL Operations staff and a couple of the senior captains visited the shipyard in July.

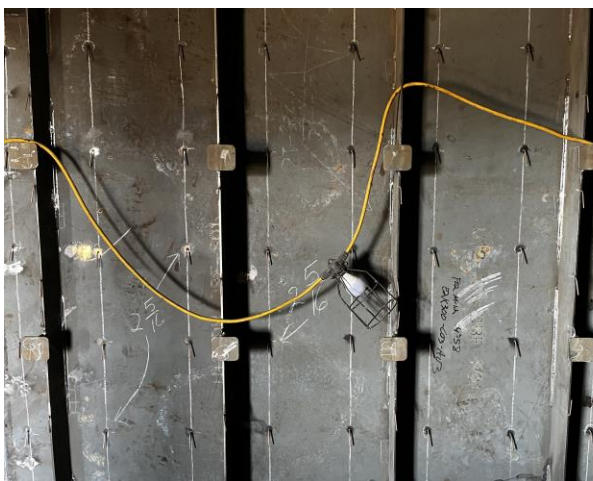
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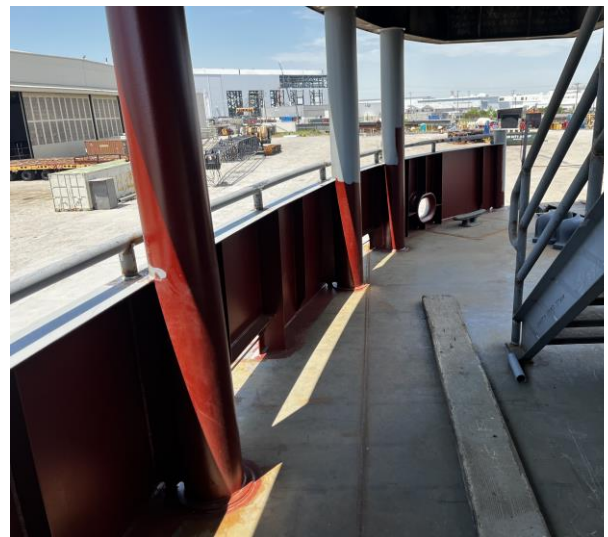
4485 – Typical Swing Gate at Man Overboard Station



4487 – Typical Swing Gate at Man Overboard Station



4498 – Insulation Pins Installed



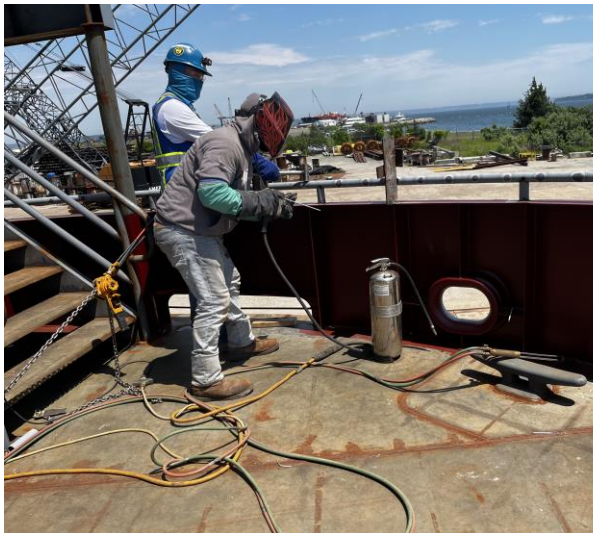
4503 – Painting on Bulwark and Columns

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4504 – Installing Rail on Top of Bulwark



4505 – Piping in Engine Room



4506 – Piping in Engine Room



4507 – Paint Coat in Main Deck Starboard Cabin

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4508 – Paint & Insulation Pins, Main Deck Starboard Cabin



4509 – Paint & Insulation Pins in Main Starboard Cabin @ Elevator Opening, Insulated Piping Overhead

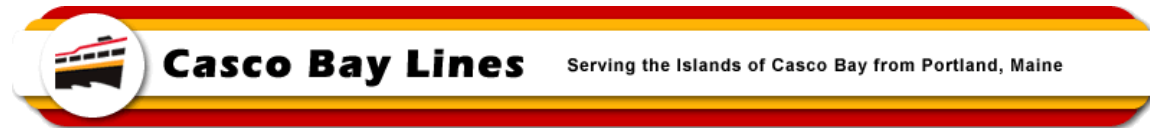


4510 – Paint & Insulation Pins in Main Starboard Cabin @ Elevator Opening, Insulated Piping Overhead



4523 – CBL & FTA Staff in Pilot House

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4525 – View of Pilot House from Bow



4536 – Stair Access to Pilot House

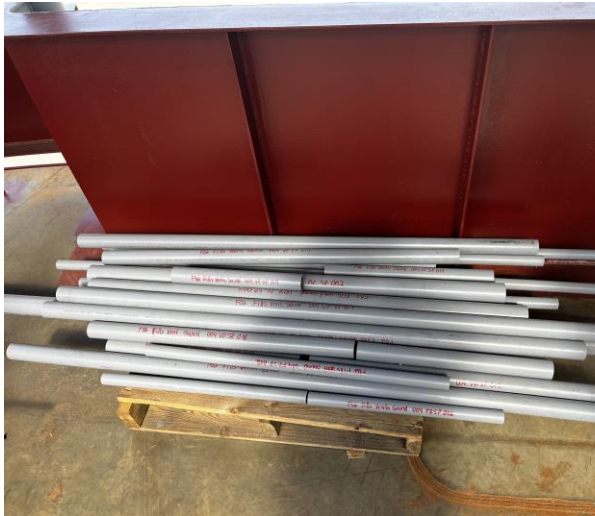
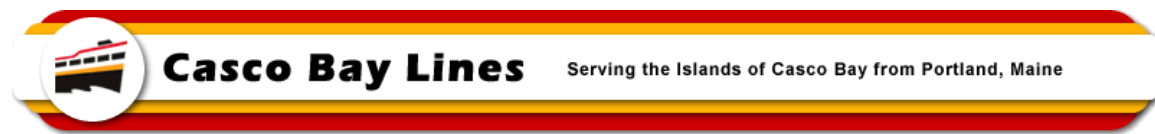


4537 – Misc. Painting of Vessel sections



4542 – View of Pilot House from Stern, note exhaust stacks in for generators and sewer tank vent pipe

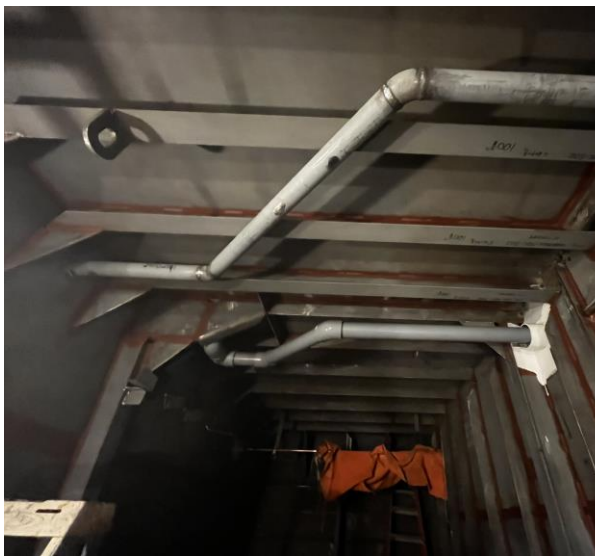
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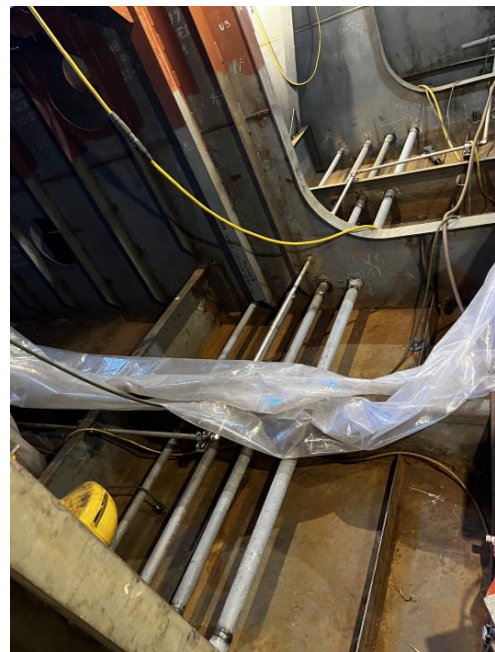
4545 – Pre-Cut Piping for Installation



4547 – Systems Chase at Engine Room Stairs

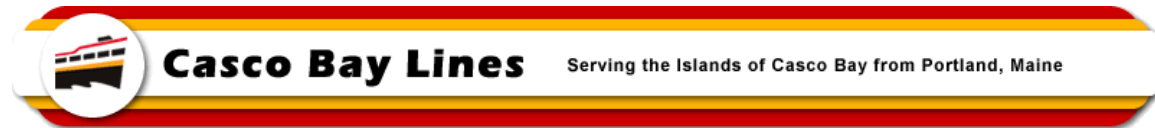


4548 – Piping in Engine Room



4552 – Piping in Engine Room

MEMO



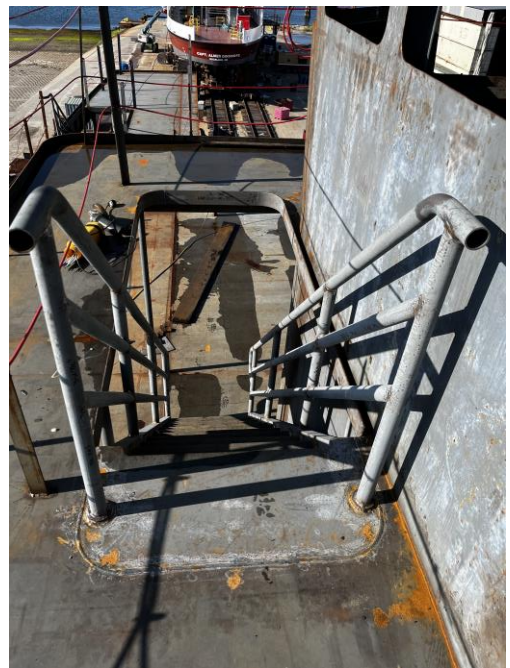
4556 – View Down Center of Vessel from Stern



4563 – Last Exhaust Stack Added, for Furnace



4564 – Pilot House with all Exhaust Pipes in



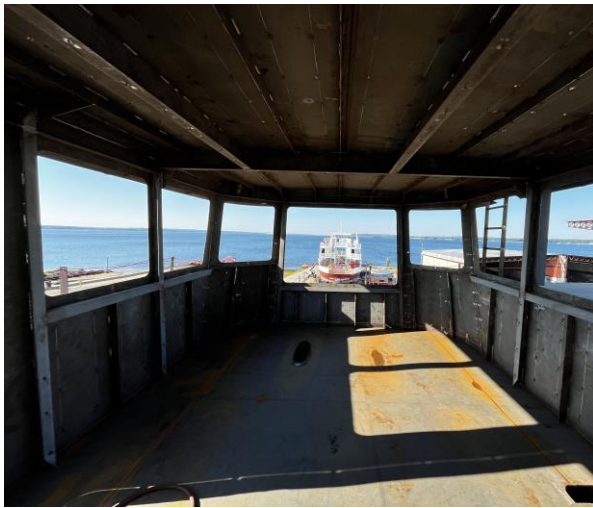
4566 – Stairs from Pilot House

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4567 – Inside Pilot House Looking Toward Bow



4568 – Line Chocks and Cleat Ready for Installation

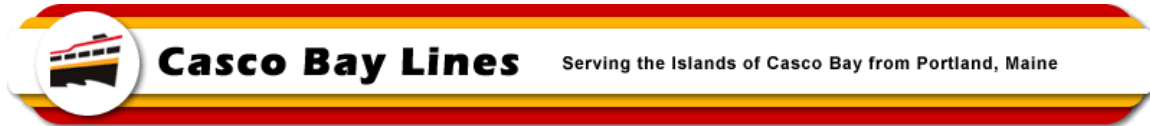


4569 – Cleat Install Location

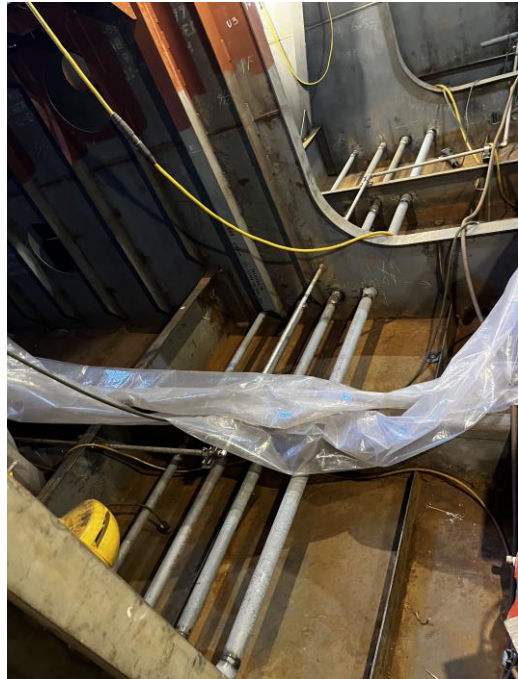


4570 – Systems Chase on 01 Deck

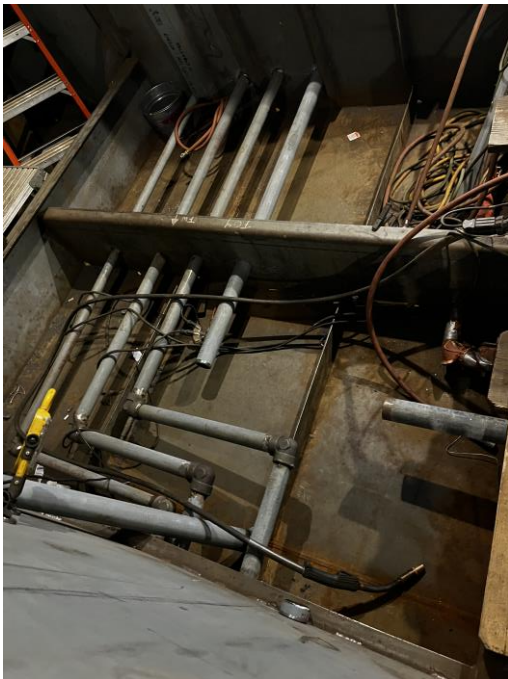
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4571 – Piping in Engine Room



4572 – Piping in Engine Room

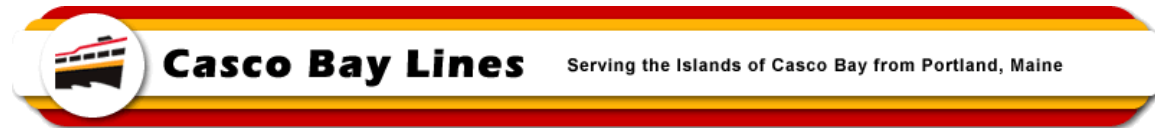


4573 – Piping in Engine Room



4575 – Piping in Engine Room

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4577 – Handrail Sections Fabricated



4578 – Handrail Sections Fabricated



4618 – Stern Tube Being Installed, Stern End



4621 – Stern Tube Being Installed, Bow End

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4619 – Handrail Sections Assembled and Primed



4620 – Handrail Sections Assembled and Primed



4623 – Piping in Engine Room



4648 – Piping in Engine Room

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4652 – Handrail Sections Assembled & Primed



4653 – Handrail Installed Around Pilot House



4655 – Handrail Installed Around Pilot House



4657 – Handrail Installed Around Pilot House

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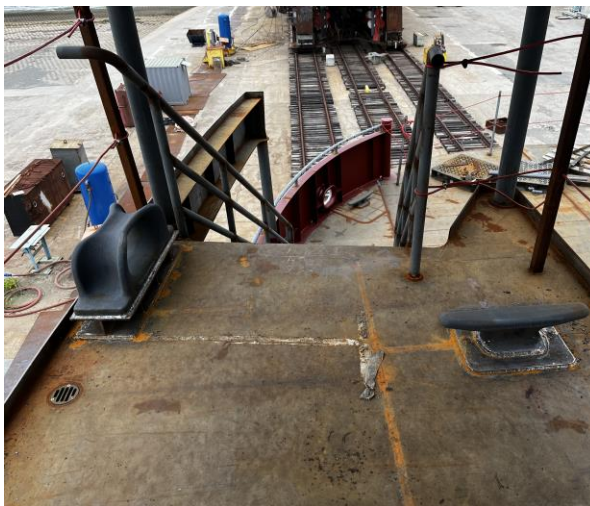
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4658 – Cleat Installed & Line Chock Set & Tacked



4659 – Cleat Installed & Line Chock Set & Tacked

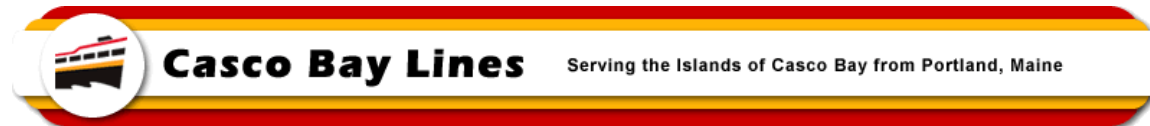


4660 – Another Cleat & Line Chock Installed (Port Bow 01 Deck)



4669 – Rudder for Stern (Portland End or End 2)

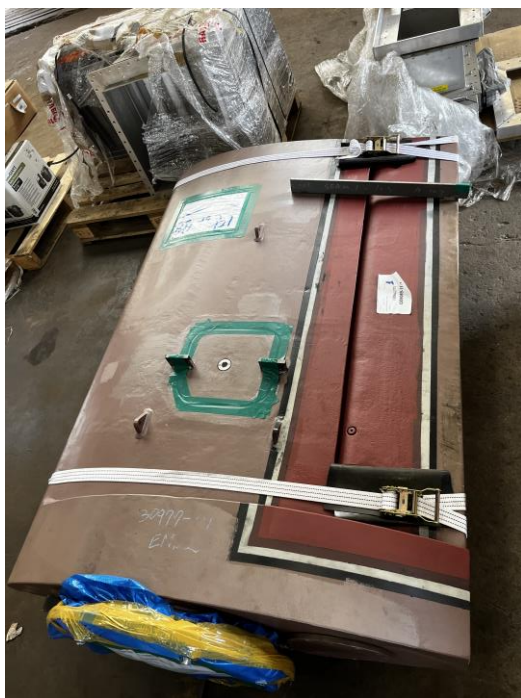
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4673 – Capt. & Ops Mngr. at Pilot House Bow Window



4674 – Rudder for Bow (Peaks End or End 1)



4675 – Stern End Rudder



4676 – Stern Tube Installed

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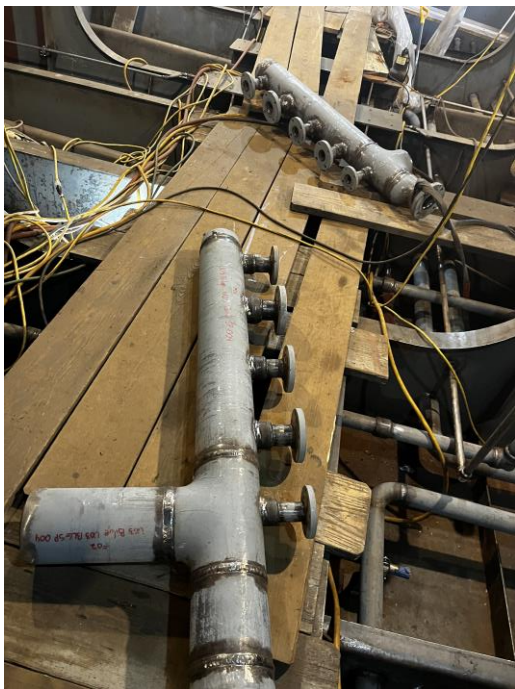
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4679 – Piping @ Engine Room Stairs



4685 – Hatches Ready for Installation



4687 – Piping Manifold



4688 – Piping Manifold Area

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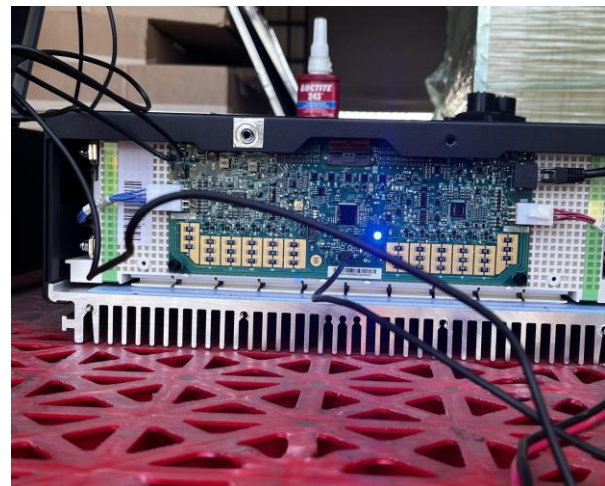
4692 – Battery Modules



4693 – Checking State of Charge for Sample of Battery Modules

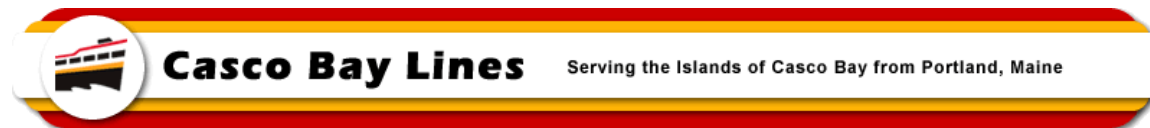


4710 – Modules Ready for Testing



4695 – battery Module Circuit Board on Rear of Module

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4697 – Hatches Being Installed



4704 – Hatches Being Installed



4715 – Hatches Being Installed



4752 – Hatch with Ladder to Engine Room Below

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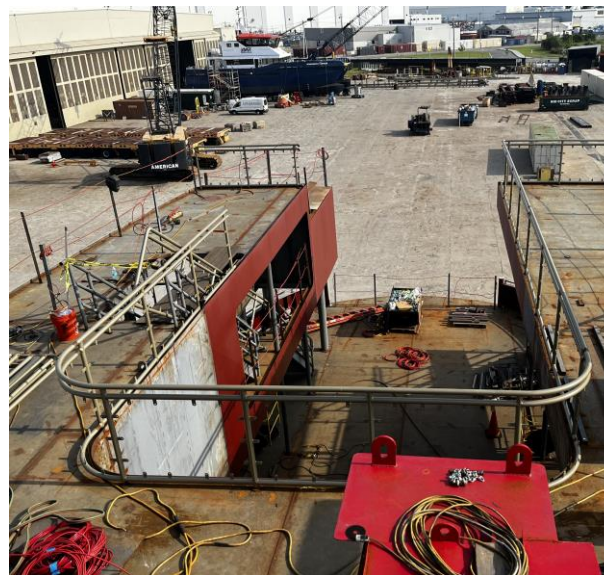
4718 – Piping Manifold Being Installed



4720 – Piping Manifold Being Installed



4721 - Pedestrian Handrail System being Installed



4739 - Pedestrian Handrail System being Installed

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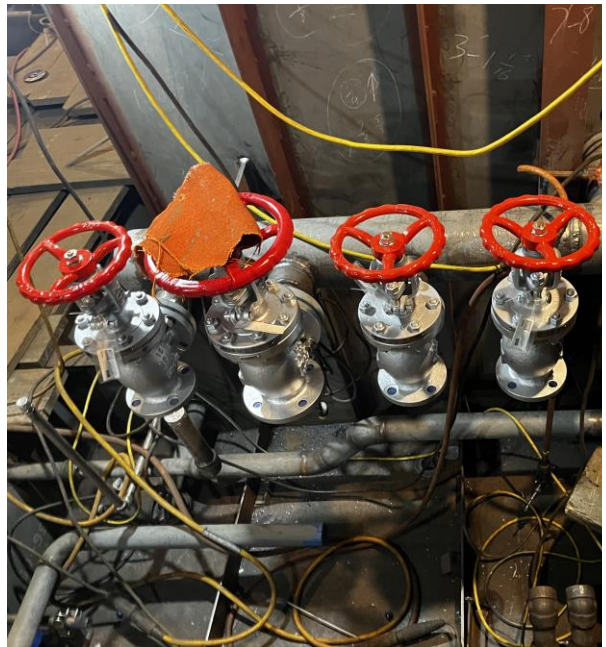


Casco Bay Lines

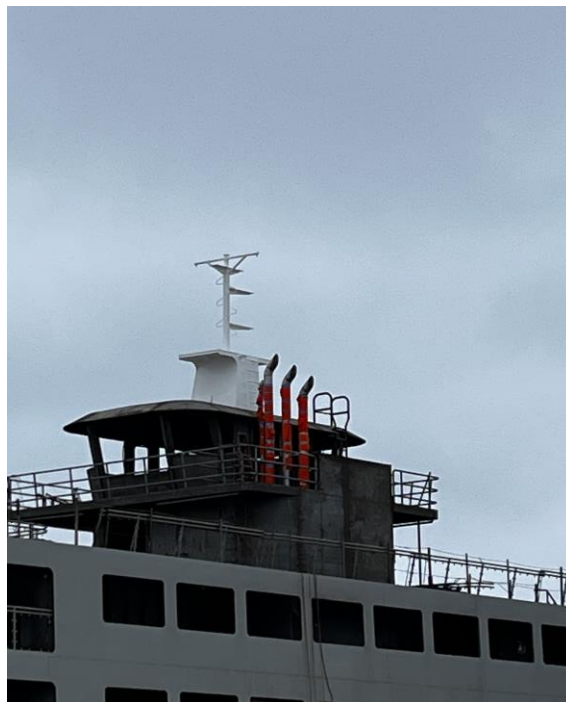
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4750 – Valves Being Installed on Manifold



4751 – Valves Being Installed on Manifold



4759 – Antenna/Light Mast Installed on PH

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4762 – Piping Clamps & Supports



4763 – Piping in 01 Deck Starboard Cabin

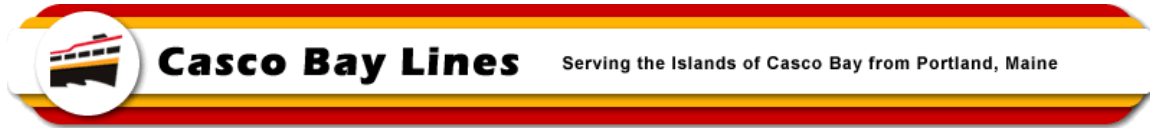


4764 – Piping in 01 Deck Starboard Cabin



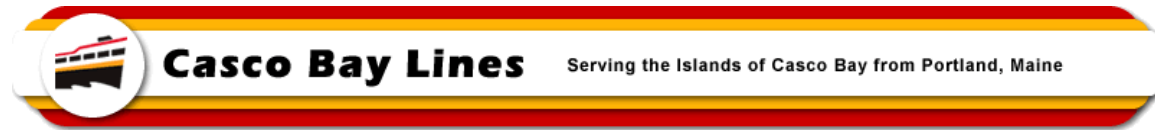
4765– Mast on Pilot House

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4521 – Looking Down Starboard Side of Battery Steele from Stern End

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4544 – Starboard Bow of Battery Steele