

Tradition and Innovation

The Design of the Ferry *Island Home*

Presented to
SNAME Maritime Technology Conference
by
Douglas Wolff, PE (M)

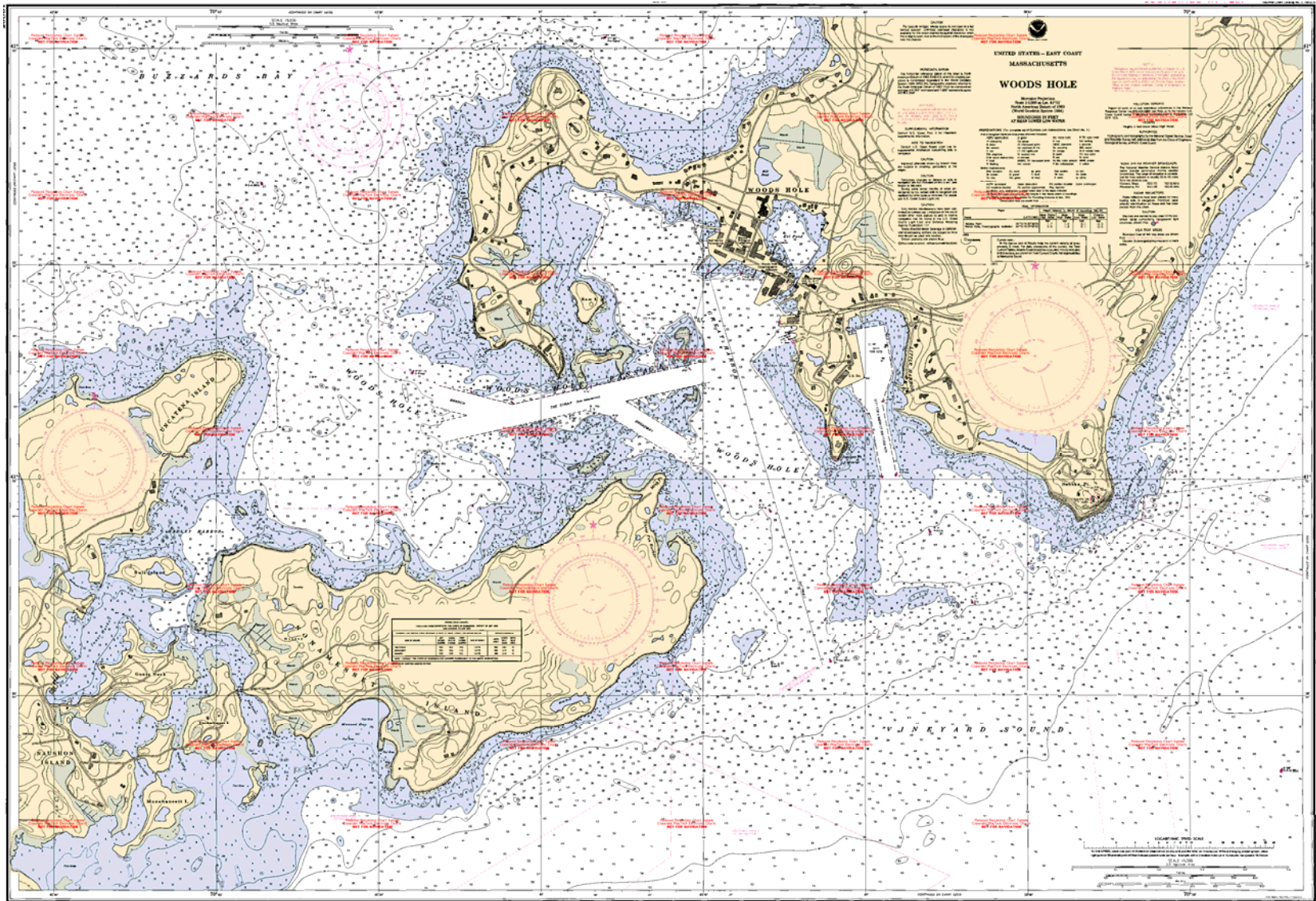
November 16, 2007

Agenda

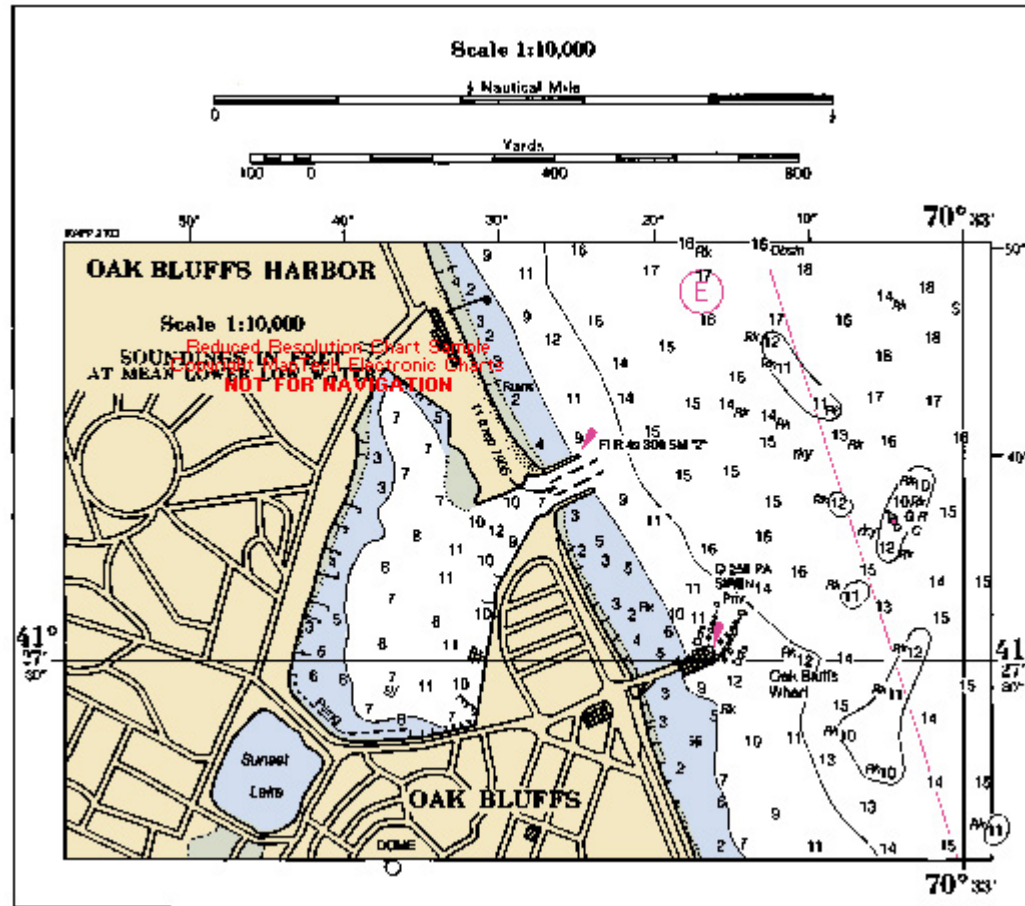
- Route
- Studies
- Design
- Interesting features
- Photo tour



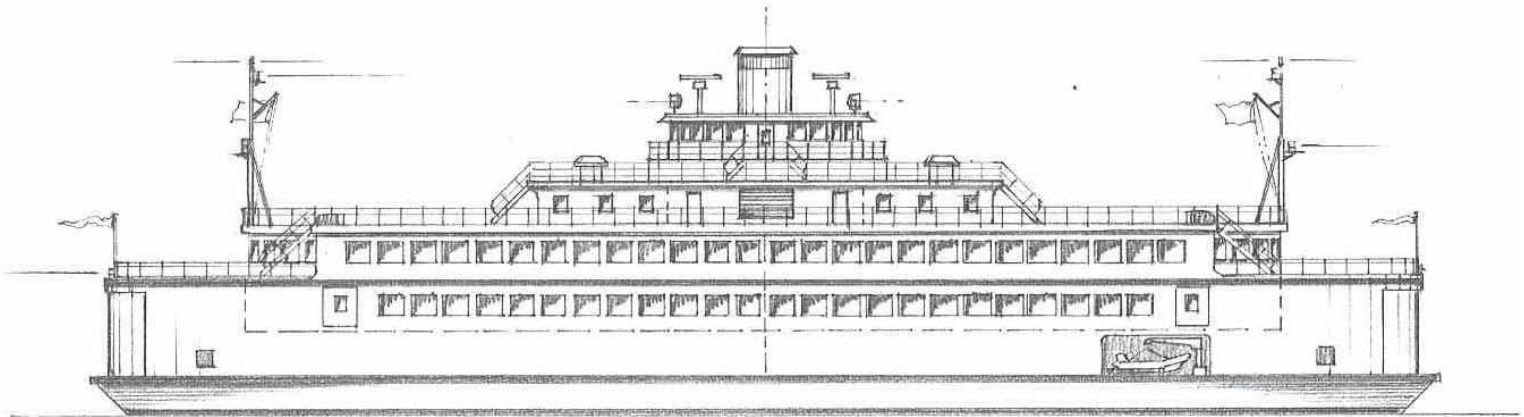
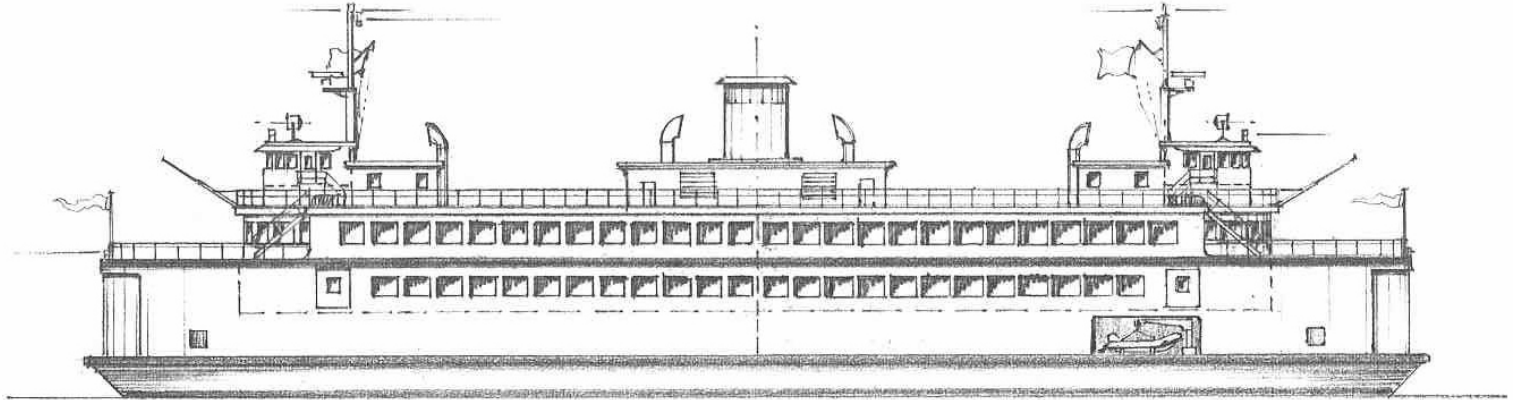
Woods Hole Harbor



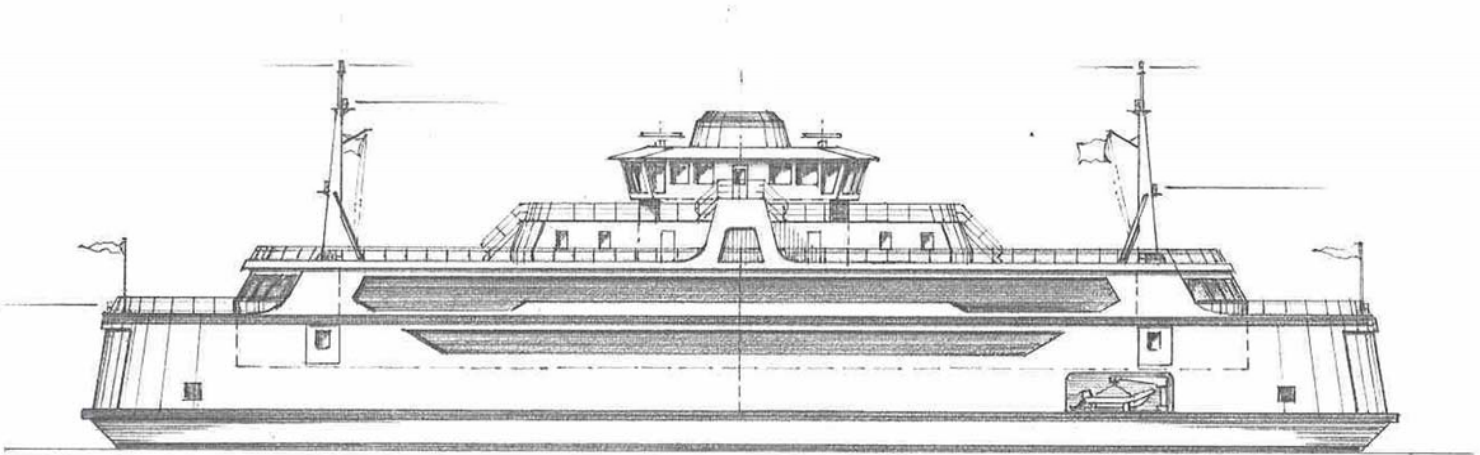
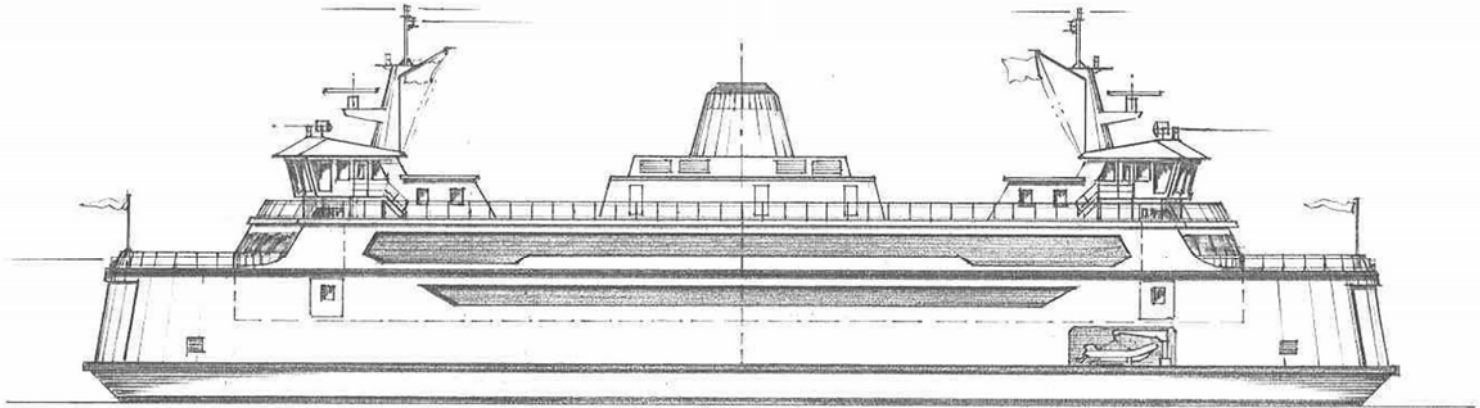
Oak Bluffs Harbor



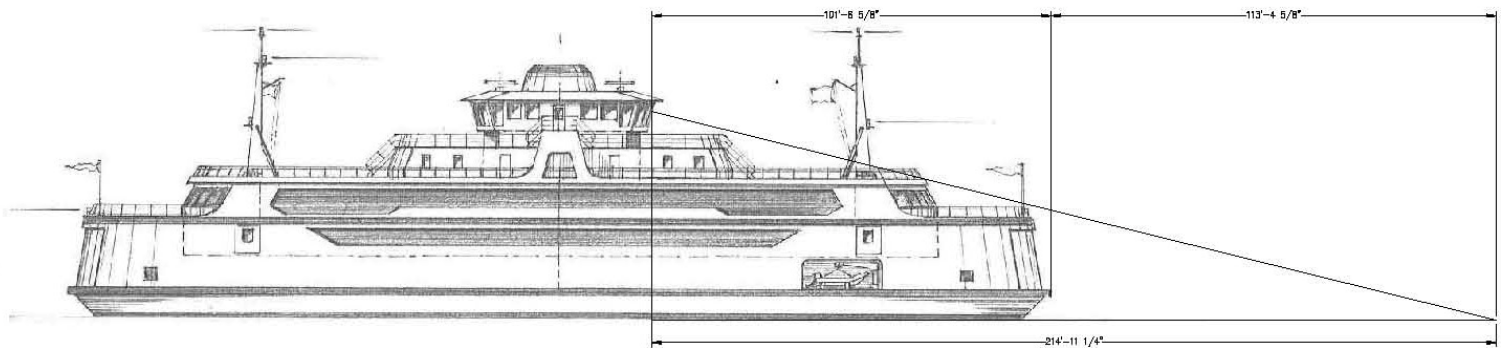
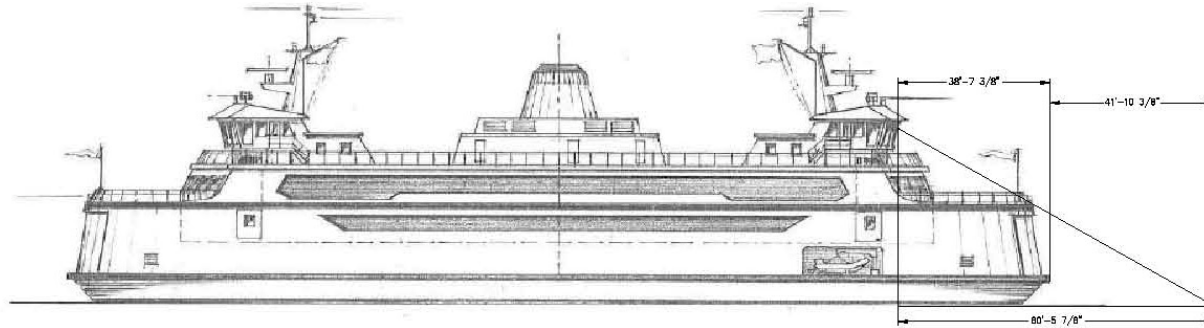
Styling Study - Traditional



Styling Study - Modern



Visibility Study



Visibility Comparison

	PH aft of stem	Shadow distance to target on water	PH to target on water
<i>Nantucket</i>	81'	149'	230'
Fore & aft PH's	39'	42'	81'
Amidships PH	101'	113'	214'

Maritime Security (MarSec) Issues

- **Pilothouse access protection**
- **Crew safety**

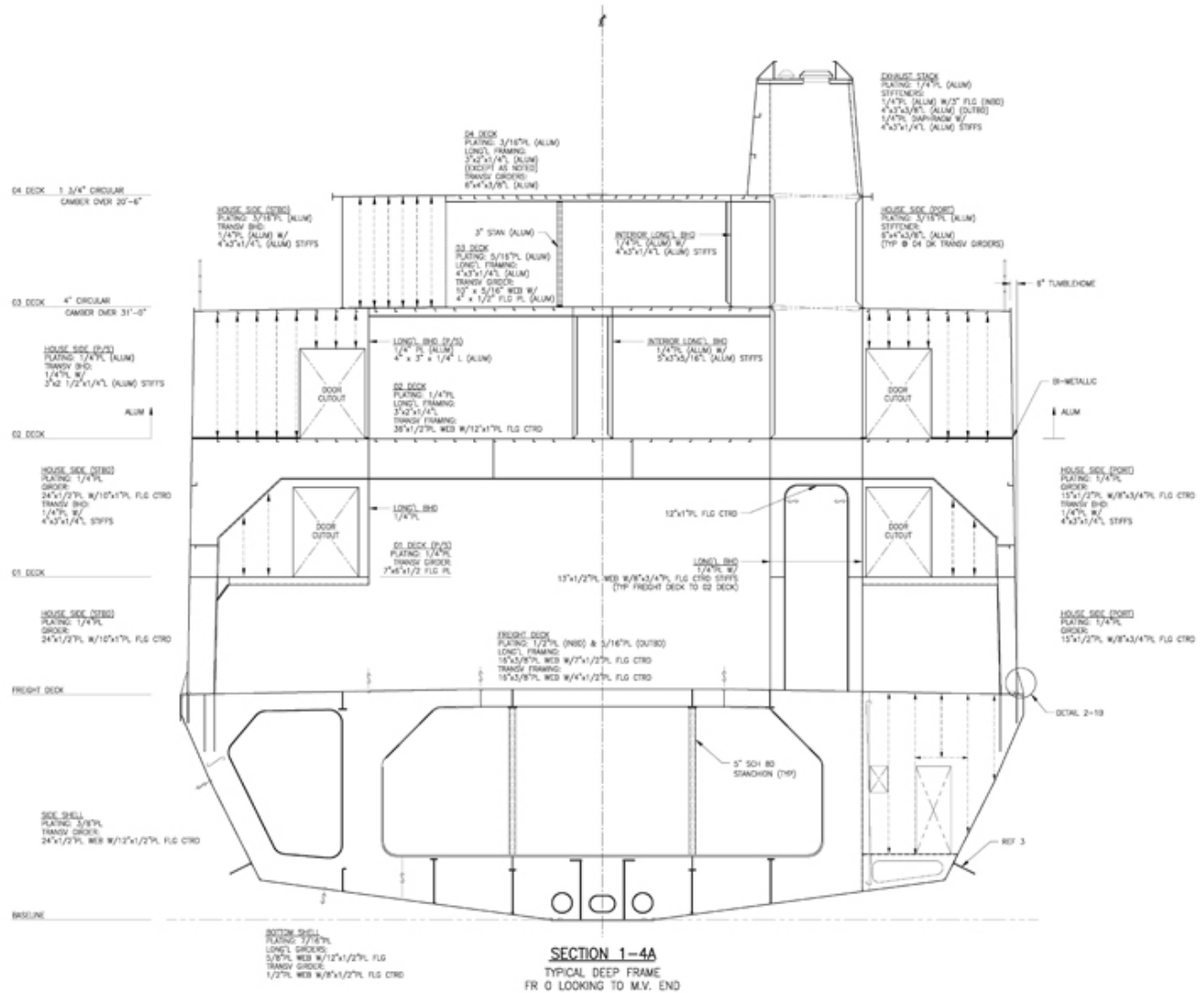
Direct Drive Propulsion Options

- Propeller, high-lift rudder & directional thruster at each end
- One main engine and one azimuthing propulsor unit at each end
- Two main engines and one azimuthing propulsor unit at each end

Diesel Electric Propulsion Options

- Propeller, high-lift rudder & directional thruster at each end
- One main engine and one azimuthing propulsor unit at each end
- Two main engines and one azimuthing propulsor unit at each end

Midship Section



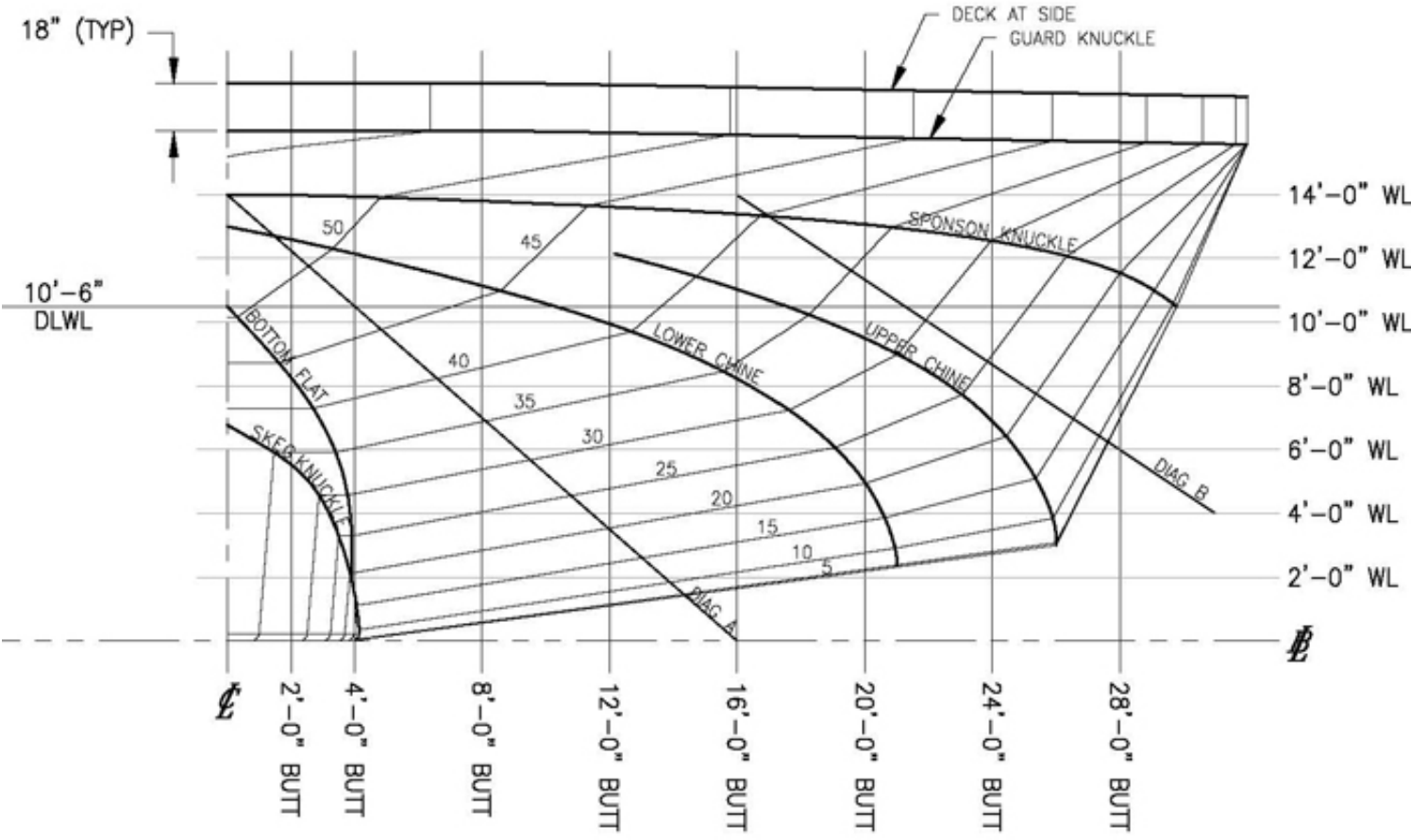
Truck Maneuvering



Truck Maneuvering



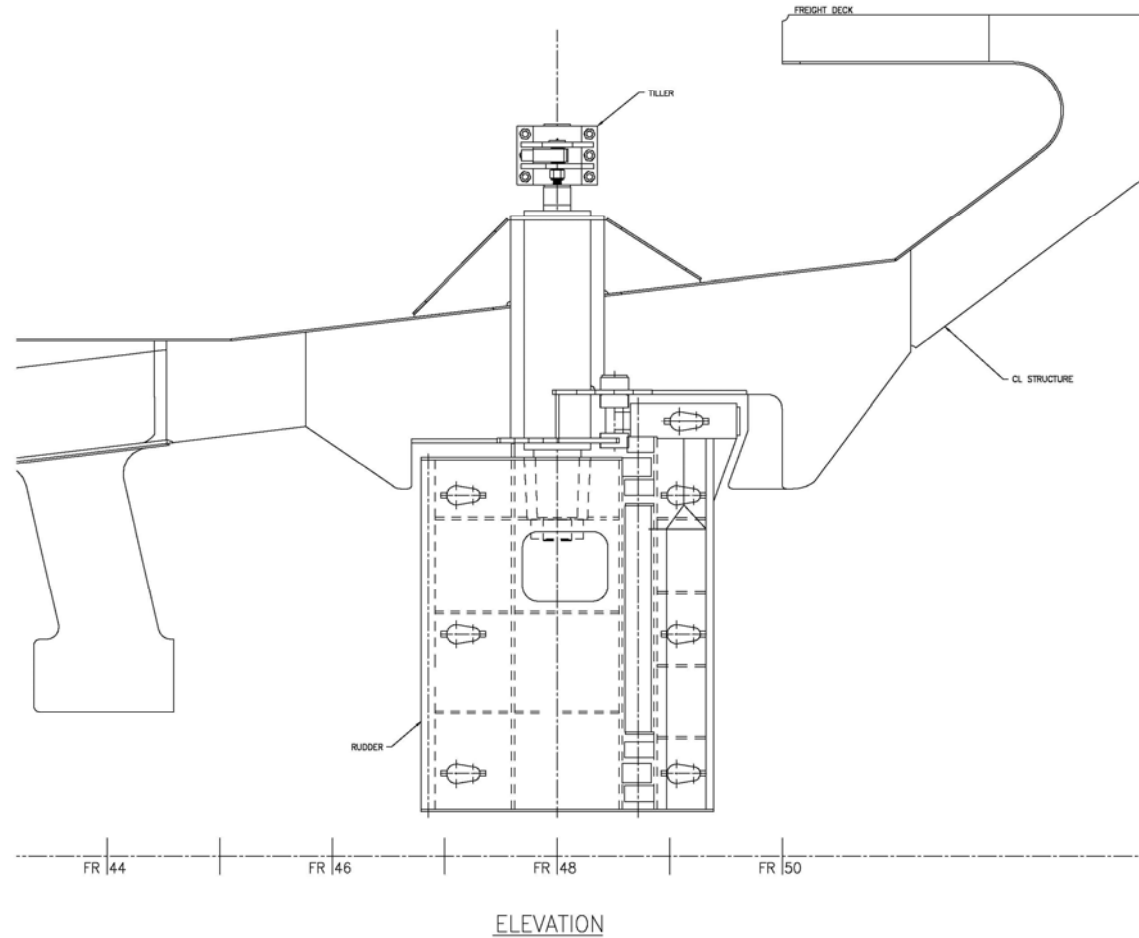
Body Plan



Particulars

- Length overall. 254'-8"
- Length, waterline 238'-8"
- Beam, molded 64'-0"
- Depth at amidships, molded. 17'-6"
- Design draft. 10'-6"
- Block coefficient. 0.415
- Midship coefficient. 0.791
- Prismatic coefficient. 0.526
- Deadrise angle. 7.5°
- Molded displacement. 1928 LT

Rudder Arrangement



Running Gear



Launching



Launching



Evacuation Slide Boarding Area



Evacuation Slide Equipment



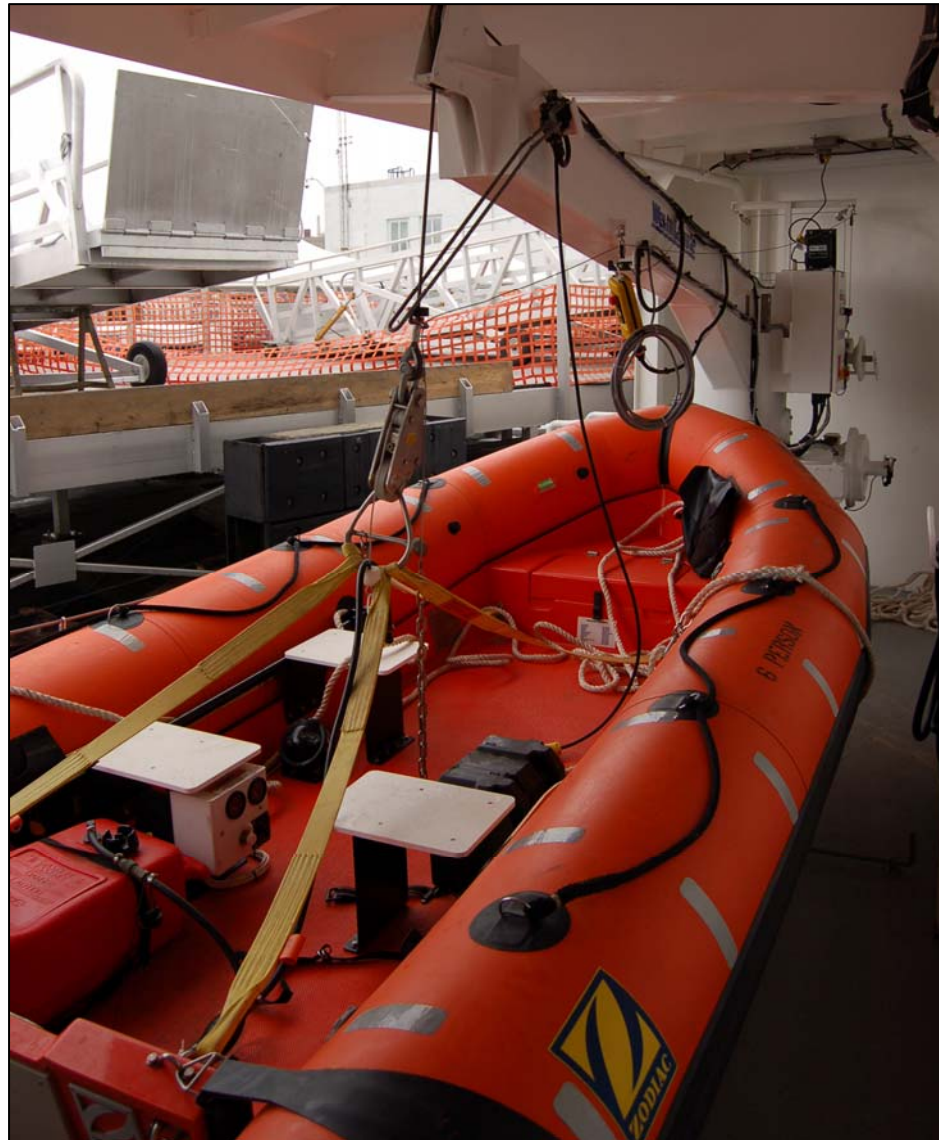
Deployed Evacuation Slide



Deployed Evacuation Slide



Rescue Boat



Lift Deck (looking aft)



Lift Deck Mechanism



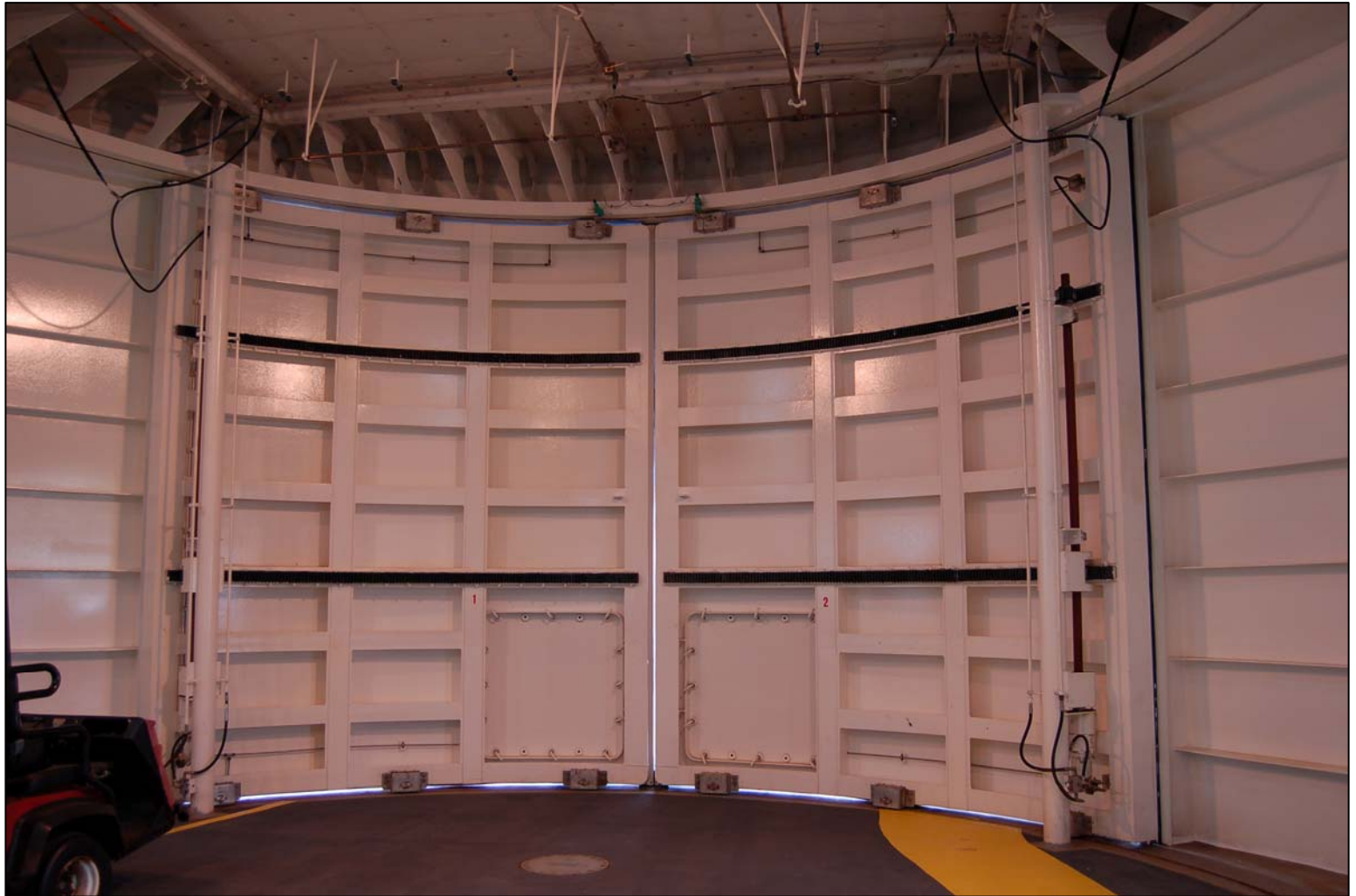
Lift Decks (looking forward)



Lift Decks (lowered)



Freight Deck Doors



Freight Deck Door



House Front



Pilothouse Interior



Wing Control Station



View from Wing Station



03 Deck Seating



Crew Pantry



Crew Mess



Passenger Lounge



Food Service Area



Food Service Area



Dining Area



Mezzanine Seating



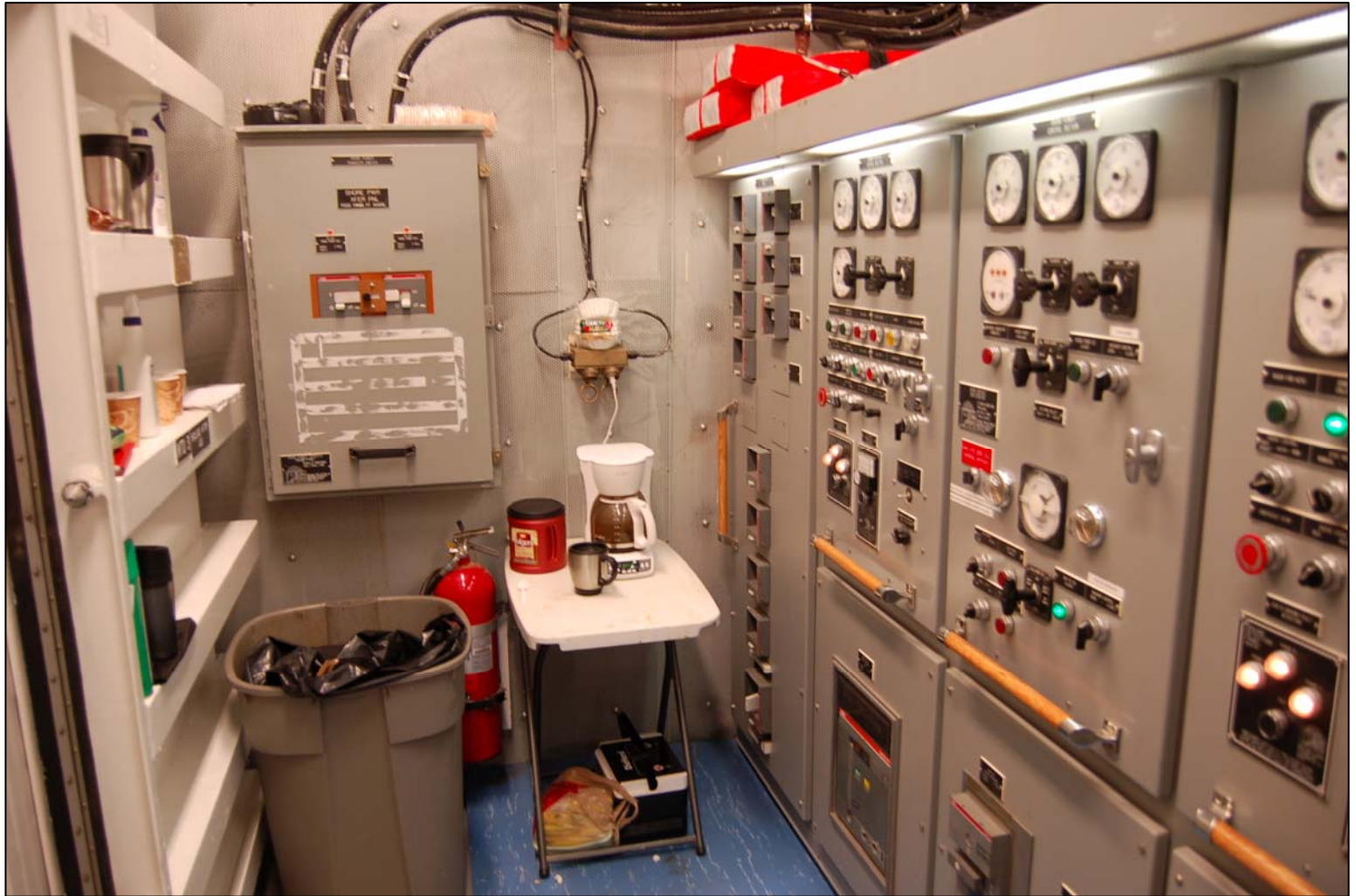
Lift Deck & Stair Tower Access



Freight Deck (looking aft)



Engineer Operating Station



HPU Units & EOS



Boilers



Main Engines



Generator



Work Shop



Batteries & MCC



Reduction Gear Room



Islander and Island Home



Island Home

