



Ocean Class AGOR Program Acquisition Status 11 February 2013

Prepared For:
RVTEC

Mr. Christopher MacDonald
Assistant PM
PMS325Q9

Mr. Tim Schnoor
ONR 321RF
Mr. Mike Prince
ONR 321RF





Key Characteristics:

- **Hull Material** Steel; Aluminum pilothouse
- **Length** 238 ft
- **Beam (Max)** 50 ft
- **Draft** 15.0 ft
- **Displacement** 3043 LT (Full Load)
- **Sustained Speed** 12 kts
- **Range** 10,545 nm
- **Endurance** 40 days
- **Propulsion** 4 x 1044 kW Diesels, 2 x 879 kW Electric Propulsion Motors, 2 x Controllable Pitch Propellers
- **Accommodations** 20 crew, 24 science berths
- **ABS Classed/ABS Designed to** ABS ✕A1 Circle E, ✕AMS and ✕ACCU, NIBS, Ice Class D0, USCG COI

Mission: Integrated, interdisciplinary, general purpose oceanographic research in coastal and deep ocean areas. Oceanographic sampling and data collection of surface, mid-water, sea floor, and sub-bottom parameters.

Quantity: Two (2)

User: Woods Hole Oceanographic Institution (AGOR 27), Scripps Institution of Oceanography (AGOR 28)

Ship Names: R/V Neil Armstrong (AGOR 27), TBD (AGOR 28)

Builder: Dakota Creek Industries, Inc.

Contract: FFP

Contract Value: \$177.4M

ROM Unit Cost: \$74.1 M (lead), \$71.0M (follow)

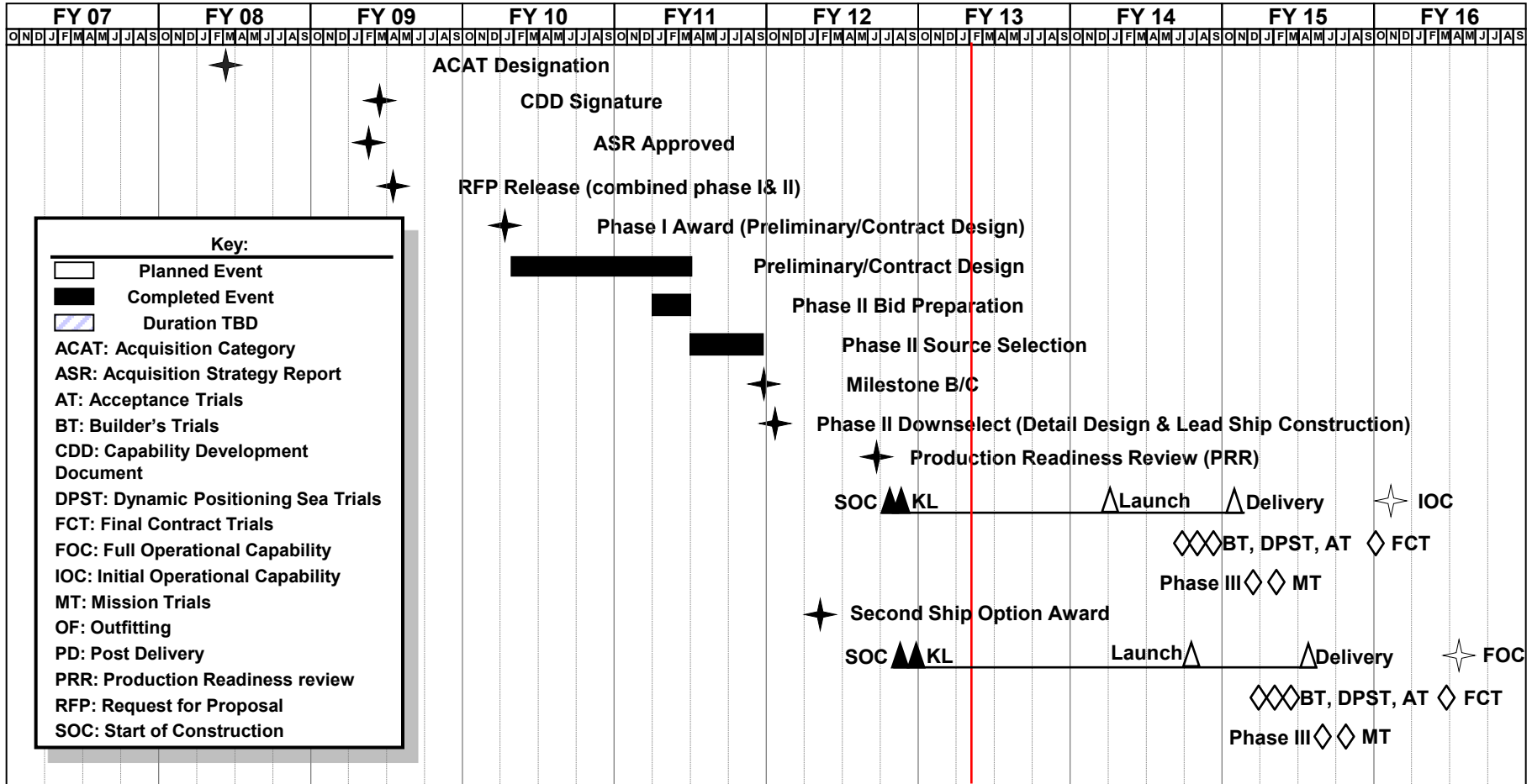
Key Events:

- | Key Events: | Date: |
|------------------------------------|--------|
| • Phase I Contract Award | Jan 10 |
| • Milestone B/C | Sep 11 |
| • Phase II Contract Award | Oct 11 |
| • Follow Ship Award | Feb 12 |
| • Start Construction (Lead Ship) | Jun 12 |
| • Start Construction (Follow Ship) | Jul 12 |
| • Delivery (Lead Ship) | Oct 14 |
| • Delivery (Follow Ship) | Apr 15 |



Ocean Class AGOR Acquisition Schedule

R/V Neil Armstrong (AGOR 27) is on schedule (25% Complete)
AGOR 28 is approximately 11 weeks ahead of schedule (15% Complete)





- All U.S. Navy owned academic research vessels designated as Auxiliary General Purpose Oceanographic Research Vessels (AGOR) were listed on the U.S. Munitions List and were subject to the provisions of the International Trafficking in Arms Regulations (ITAR)
 - Included R/V's *Melville*, *Knorr*, *Thompson*, *Revelle*, *Atlantis*, *Kilo Moana* and the two new vessels – *AGOR 27* and *28*
- ONR requested that AGORs be removed from the U.S. Munitions List because these modern AGOR vessels were built entirely to commercial standards and did not have a military purpose.
- Late last year, the U.S. Department of State approved the request and determined that these vessels were no longer subject to their jurisdiction under ITAR. The vessels are still subject to Export Administration Regulations under the jurisdiction of the Department of Commerce.
- The EAR regulations have a much lower impact on the operation and maintenance of our vessels, however Navy is still determining the operational and contractual impact of this change.
- For the time being only documents that have been approved for public release may be shared, but this should become more inclusive in the near future.



- Ocean Class Advisory Committee
 - Formed by ONR & the UNOLS Fleet Improvement Committee
- Members
 - R. Kipp Shearman, Associate Professor, OSU
 - Expertise: Coastal Physical Oceanography, AUVs, ADCP, CTD
 - William M. Landing, Professor, FSU
 - Expertise: Trace metal chemical oceanography, GEOTRACES, aerosol sampling
 - Robert Pockalny, Associate Research Scientist URI
 - Expertise: seafloor mapping, sub-bottom seismics, potential-field geophysics
 - Michael Gregg, Professor, APL-UW
 - Expertise: Ocean turbulence microstructure profilers, ADCP, acoustic backscatter systems, coastal circulation and optics
- Established to provide community input and advice on the design, construction, outfitting and testing of the Navy's Ocean Class AGORs



ONR
Office of Naval Research

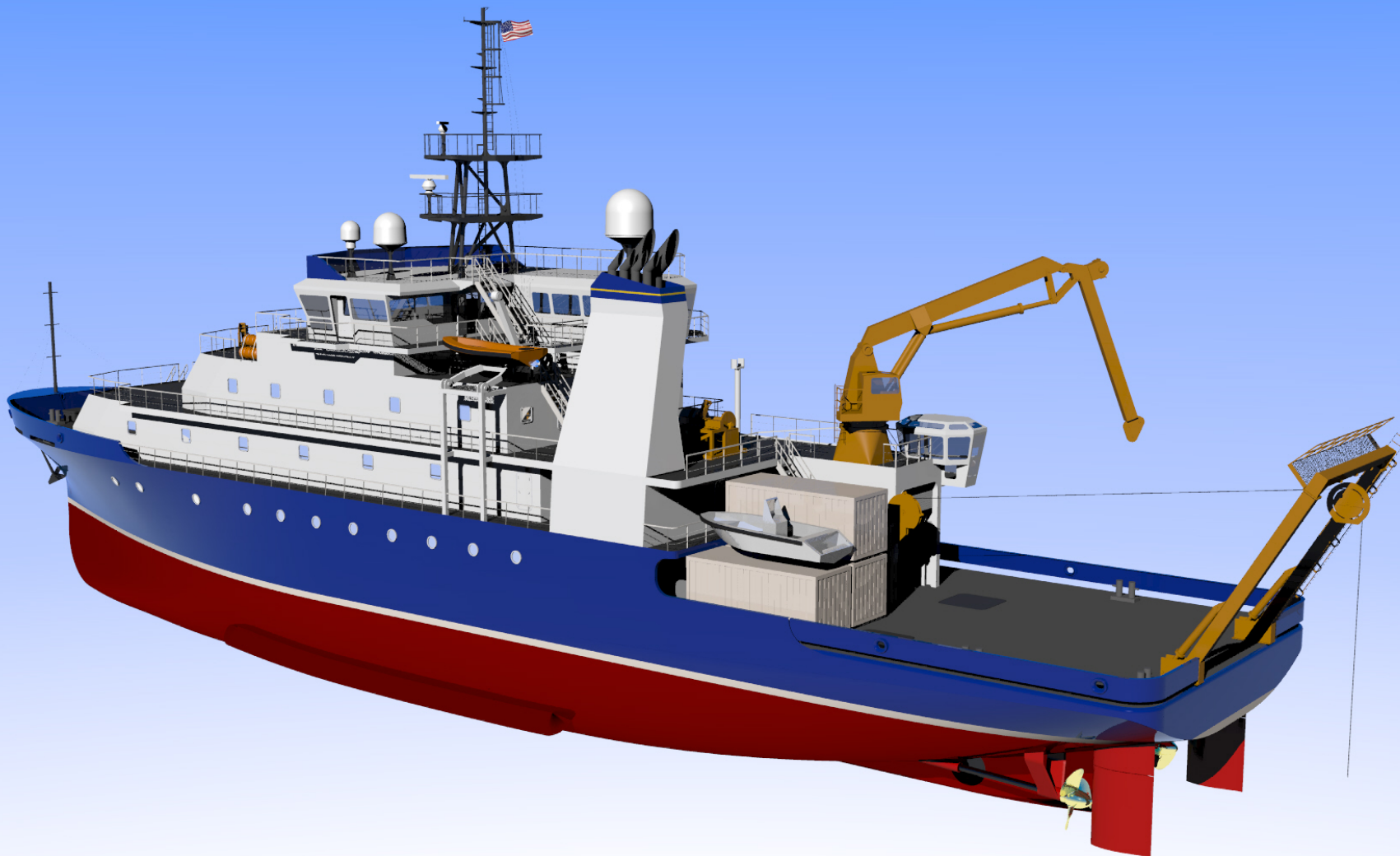
Ocean Class AGOR 3-D Rendering – Stbd Side





ONR
Office of Naval Research

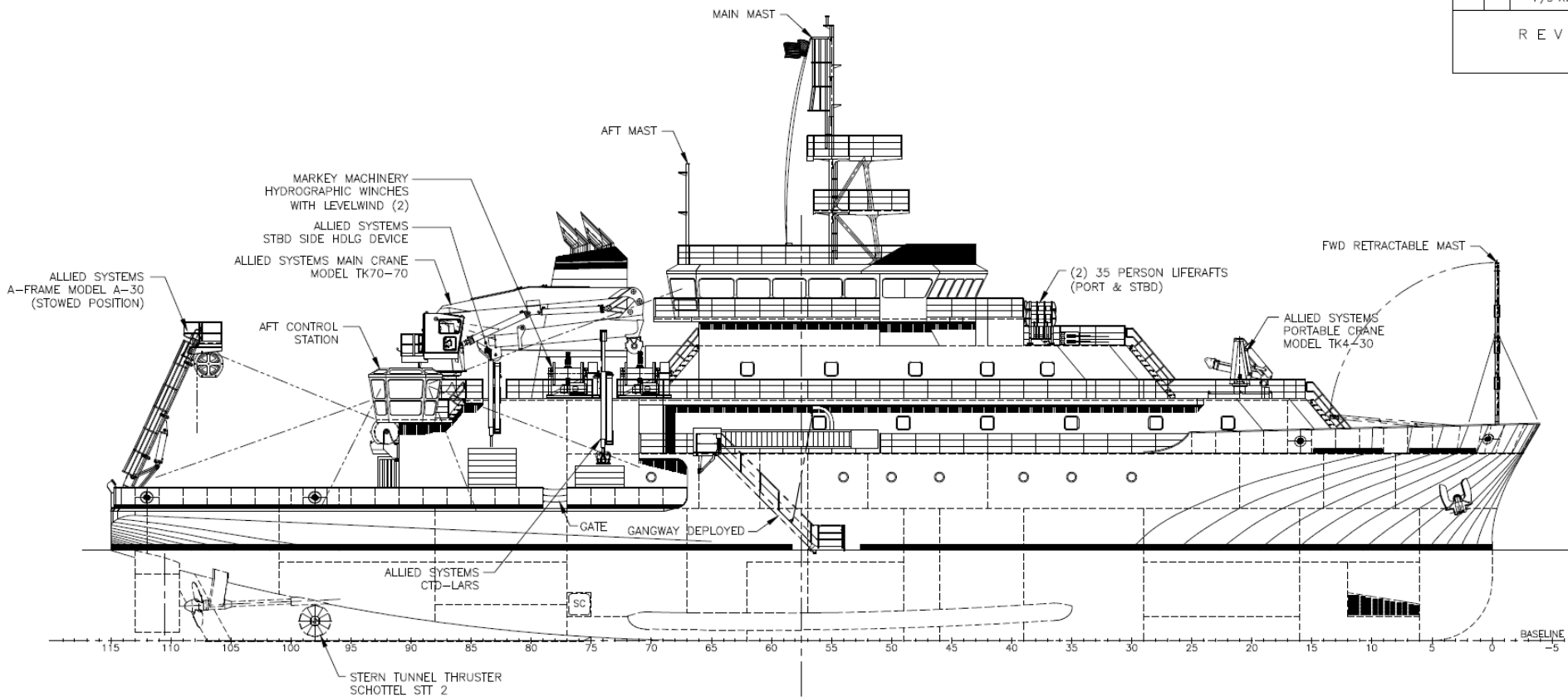
Ocean Class AGOR 3-D Rendering – Port Side

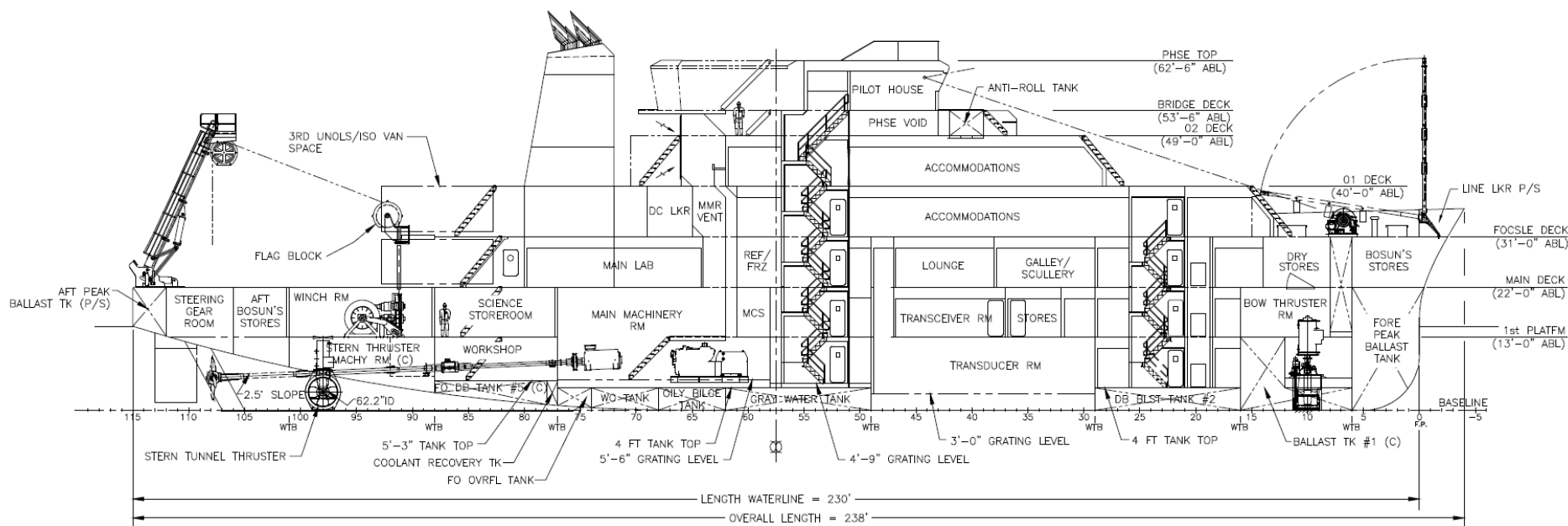




Ocean Class AGOR General Arrangement Drawing

| | | |
|--|--|------------|
| | | P/S AT BHD |
| | | REVISION |
| | | |



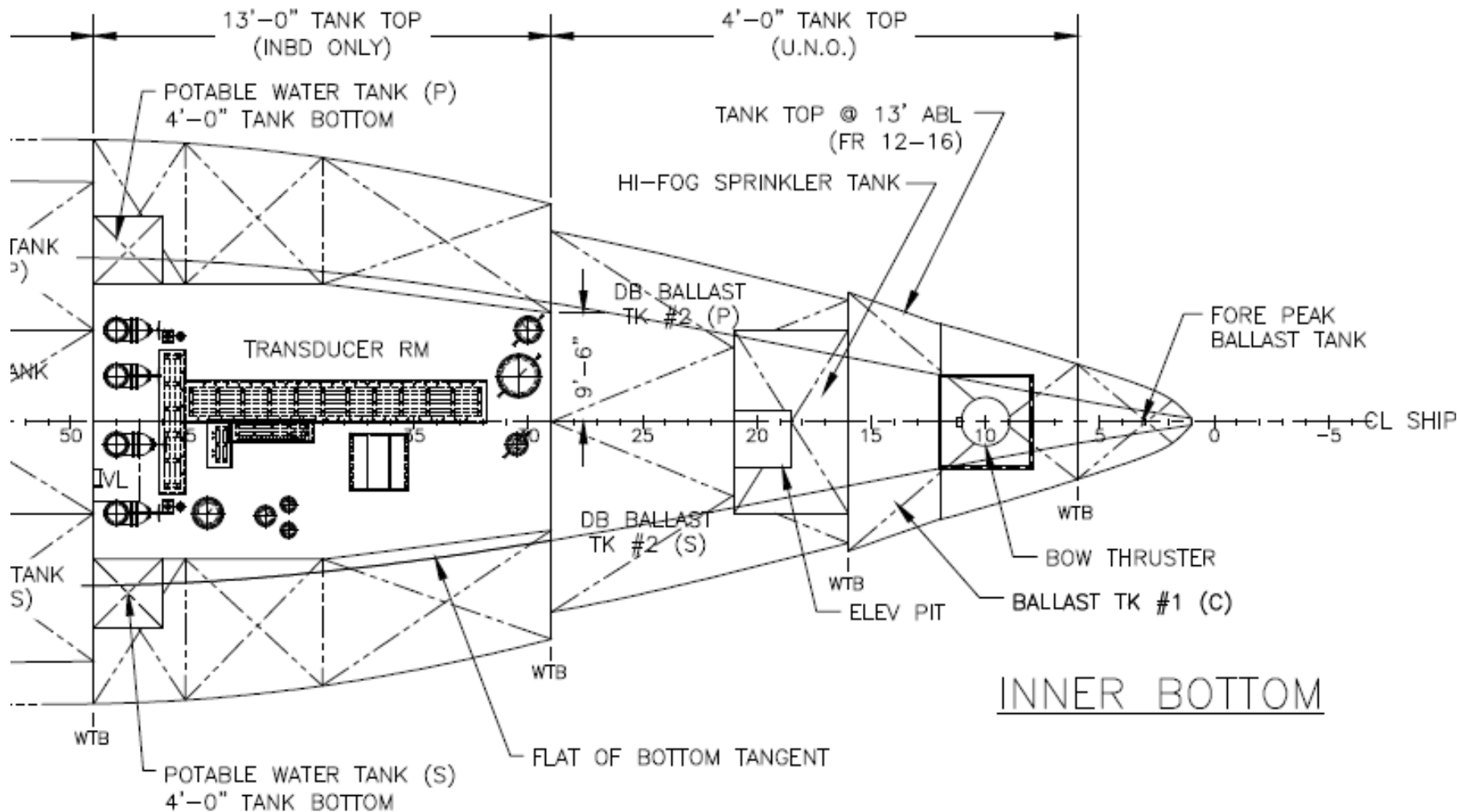


INBOARD PROFILE
FRAME SPACING 24" THROUGHOUT



Mission Equipment – Installed 30 days after delivery of each vessel

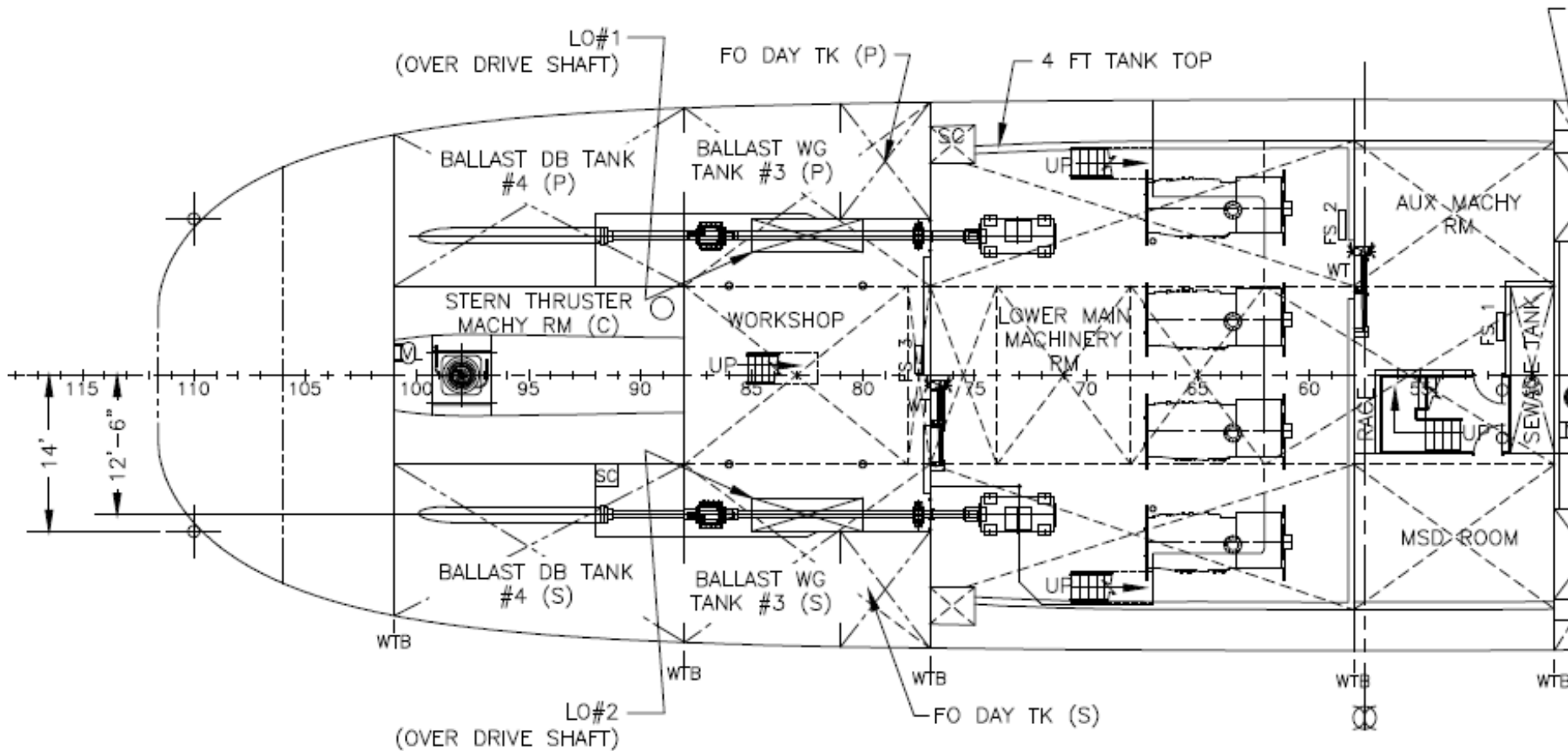
| Mission Equipment – Installed 30 days after delivery of each vessel | | PMS325 Funded (SCN) | ONR Funded (DURIP) |
|---|---|---------------------|--------------------|
| Multibeam Survey System: Deep Water | Kongsberg EM-122: 12 kHz 1° x 2° (or equal) | X | |
| Multibeam Survey System: Mid Water | Kongsberg EM-710: 70-100 kHz 0.5° x 1° (or equal) | | X |
| Sub-bottom Profiler & Single Beam System | Knudsen Chirp 3260 w/ 16 Massa TR-1075 Array 3.5 kHz; & 12 kHz Single beam (or equal) | X | |
| Scientific Echo Sounder | Kongsberg EK60: 18 to 710 kHz actual frequencies TBD | | X |
| Acoustic Doppler Current Profiler | Teledyne RDI Ocean Surveyor 38 kHz | X | |
| Acoustic Doppler Current Profiler | Teledyne RDI Ocean Surveyor 75 kHz or 150kHz & Workhorse Mariner 300 kHz (or equal) | | X |
| Acoustic Navigation and Tracking System | Kongsberg HiPAP 500 21 - 30.5 kHz (or equal) | | X |
| Other Equipment | AHRS PosMV, SS Sound Velocity System, Broadband Sat Comms, Uncontaminated Sea Water System, | X | |
| | SONAR Synchronization Unit, Plotter and Printer, LAN network | | X |





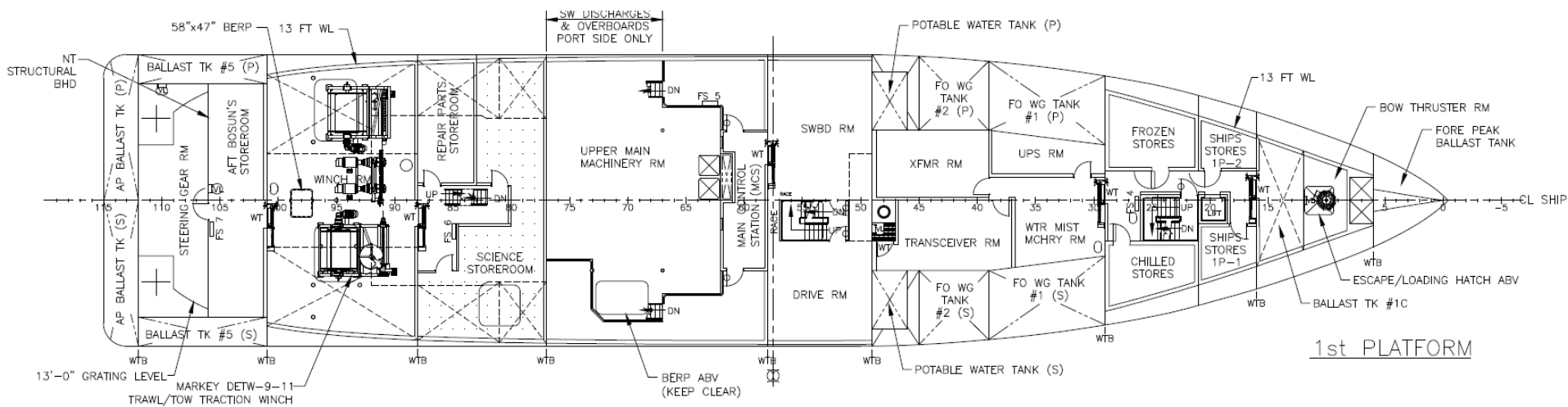


Ocean Class AGOR General Arrangement Drawing





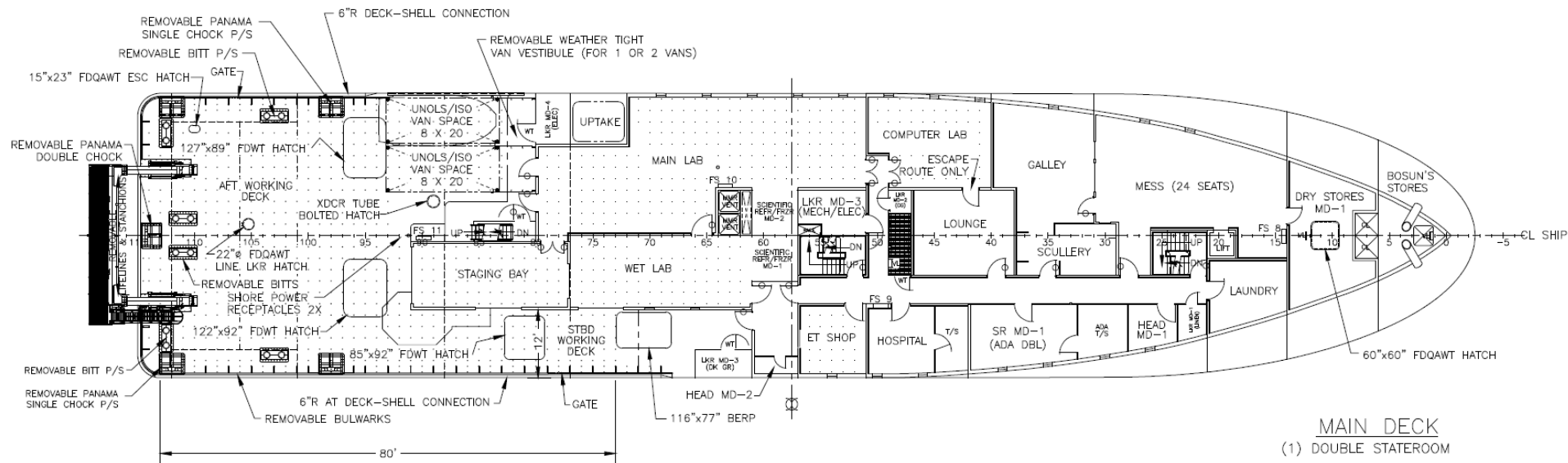
Ocean Class AGOR General Arrangement Drawing

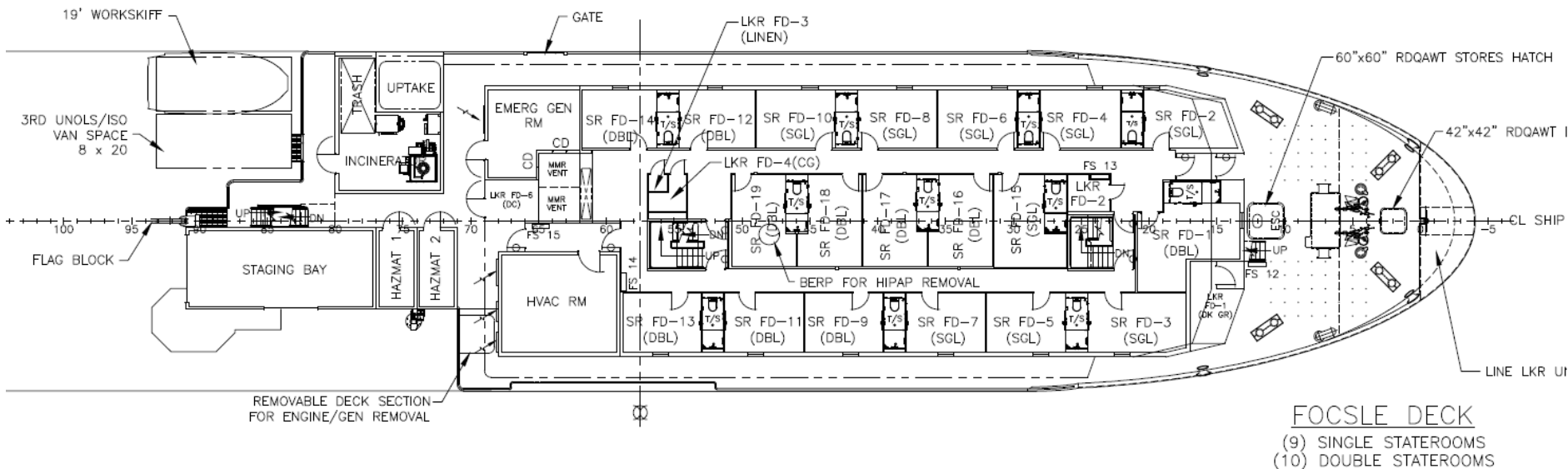


1st PLATFORM



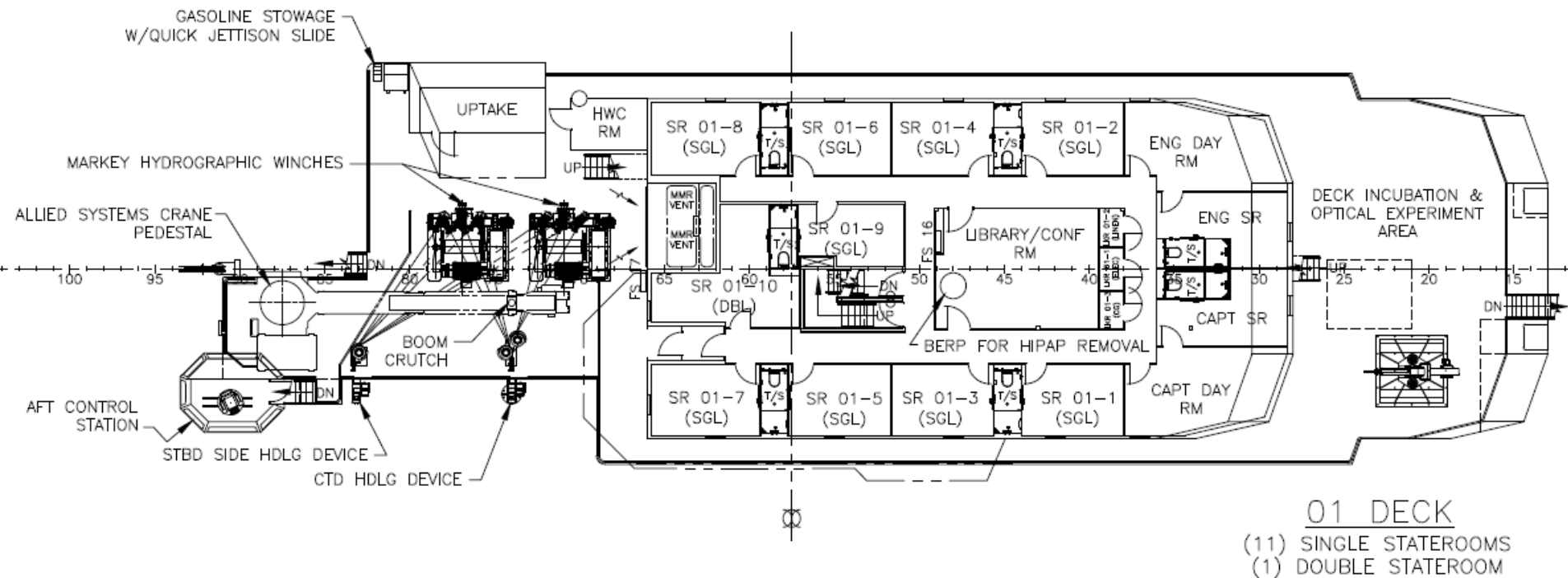
Ocean Class AGOR General Arrangement Drawing





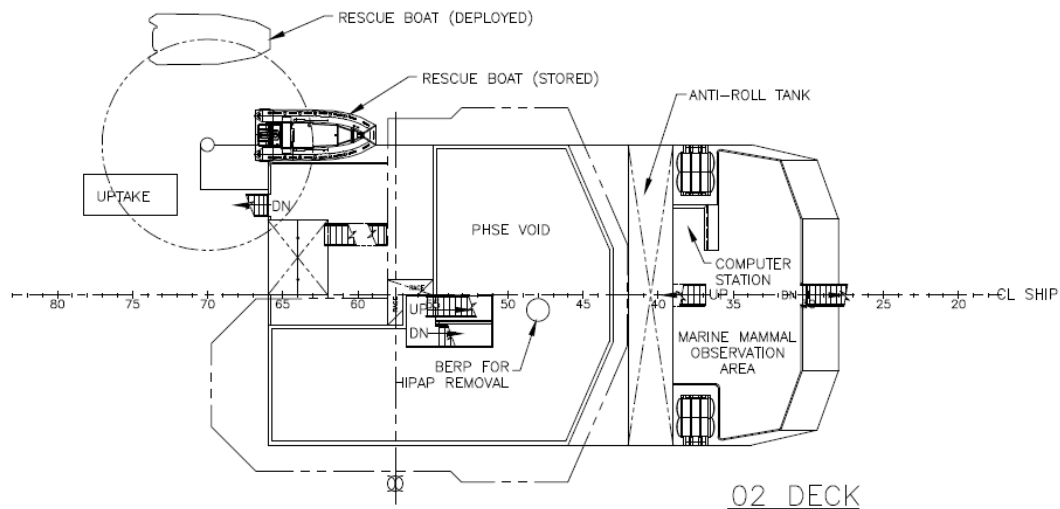
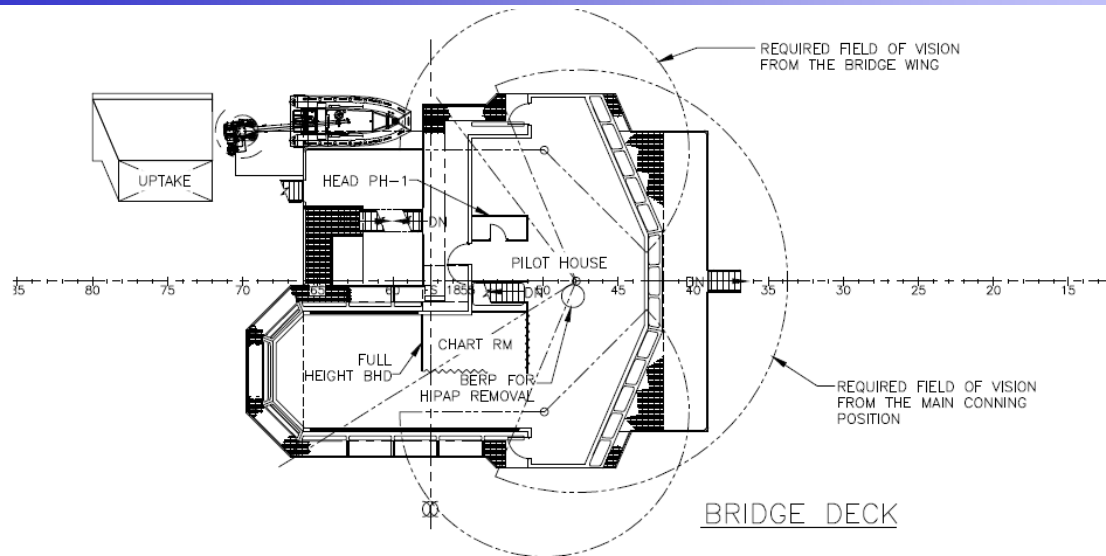


Ocean Class AGOR General Arrangement Drawing





Ocean Class AGOR General Arrangement Drawing





ONR

Office of Naval Research

Ocean Class AGOR Keel Laying Ceremony – Aug 17, 2012









ONR

Office of Naval Research

Ocean Class AGOR Production Photos











Questions?

