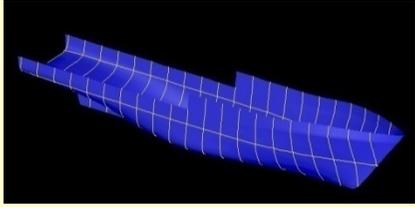


US Ocean Class AGOR Program



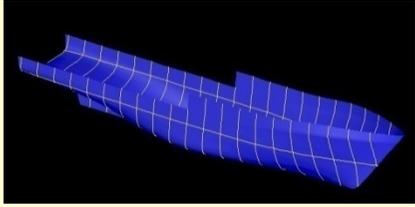
ERVO May 2011



Ocean Class AGOR Program

- Class of 2 Mid Size, General Purpose, Monohull Research Vessels
- Vessel is approximately 70 meters long
- Budget is ~ \$70M USD each
- Funded by US Navy; Operated by UNOLS Academic Institutions
- Concept Design, Requirements Development Performed During 2008/2009
- Design Awarded to Two Shipyards January 2010
 - Dakota Creek Industries
 - Marinette Marine Corporation
- Design Competition Completed in Feb 2011
- Selection of Shipyard and Start of Construction for First Ship Expected in Sept 2011
- Delivery of both ships planned in 2014

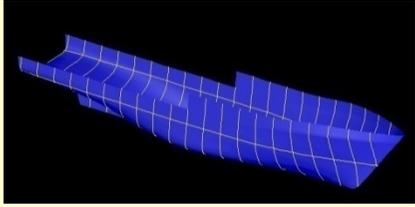




*Ocean Class
AGOR Program*

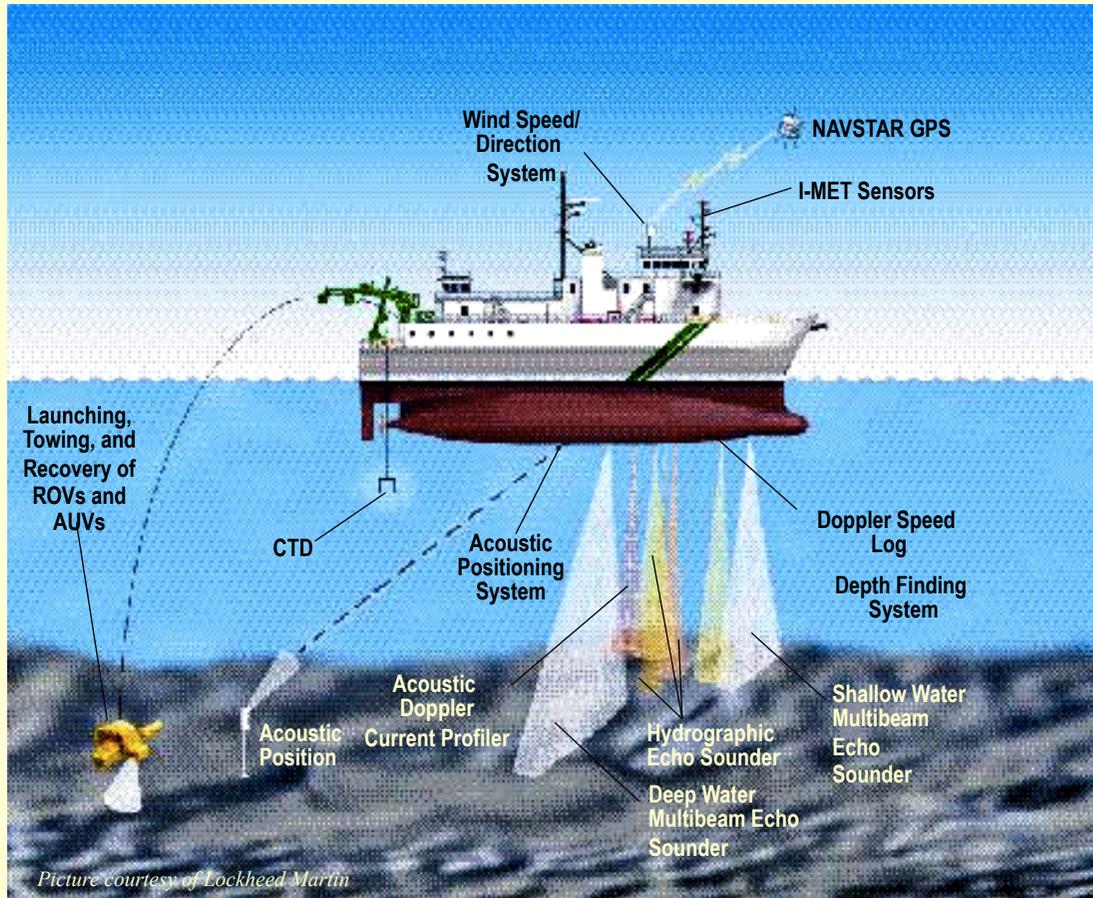
*OCEAN Class Science Mission
Requirement Highlights*

Length:	70 meters
Displacement:	3,000 tonnes
Accommodations:	25 Scientists, 21 Crew (USCG inspected vessel)
Range:	10,800 NM at optimal cruising speed (\approx10 Kt)
Speed:	12 Knots
Science load:	200 Tons
Acoustics:	EM122 (2 deg); EM710; SBP 120
Handling Systems	Full Suite of Winches, Cranes, and Overboard Gear
Design:	ABS Classed, USCG inspected, SOLAS compliant
Laboratories:	2,000 Sq Ft
Working Deck:	2,000 Sq Ft
Vans:	Carry 3 standard 20 Ft ISO containers.

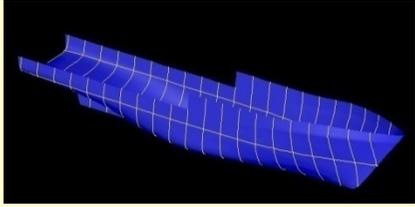


Ocean Class AGOR Program

OCEAN Class Sonar Systems



- EM122 1 x 2 Deg Multibeam
- EM710 0.5 x 1 Deg Multibeam
- EA-600 Single Beam Echosounders- 12, 30 120, KHz
- HiPAP 500 - Acoustic Positioning System
- SBP 120 6 x 6 Subbottom Profiler
- ADCP – 38, 150, 300 KHz



*Ocean Class
AGOR Program*

End