

UNIVERSITY-NATIONAL OCEANOGRAPHIC LABORATORY SYSTEM (UNOLS)

~ The Current and Future Fleet ~

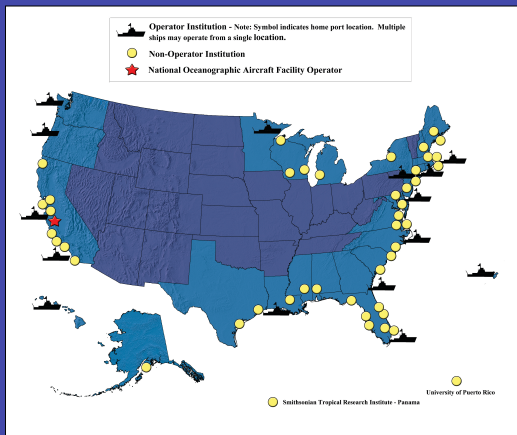
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What is UNOLS?

The University-National Oceanographic Laboratory System (UNOLS), formed in 1971, is an organization of 61 academic institutions and National Laboratories involved in oceanographic research and joined for the purpose of coordinating oceanographic ships' schedules and research facilities. The UNOLS Office is located at the University of Rhode Island Graduate School of Oceanography. One of the primary functions of UNOLS is to ensure the efficient scheduling of scientific cruises aboard the 20 research vessels located at 15 operating institutions in the UNOLS organization. Both current and future schedules for these ships are available through the UNOLS Ship Time Request System (STRS) at strs.unols.org.

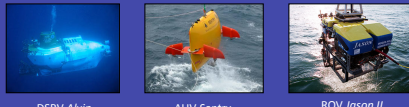
Locations of UNOLS Members



UNOLS National Oceanographic Facilities

In addition to the UNOLS Fleet, there are 3 specialized UNOLS Oceanographic Facilities.

UNOLS National Deep Submergence Facility



UNOLS National Oceanographic Aircraft Facility – Center for Interdisciplinary Remotely-Piloted Aircraft Studies (CIRPAS)



UNOLS National Oceanographic Seismic Facility



R/V Marcus G. Langseth

The UNOLS Academic Research Fleet

	Vessel	Operator	Length (ft)	Year Build/Refit
R/V Melville	Global Class			
	MELVILLE	UCSD	279	1969/1991
	KNORR	WHOI	279	1970/1989
	THOMAS G. THOMPSON	UW	274	1991
	ROGER REVELLE	UCSD	274	1996
	ATLANTIS	WHOI	274	1997
R/V Kilo Moana	MARCUS G. LANGSETH	LDEO	235	1996/2007
	Ocean/Intermediate Class			
	KILO MOANA	U Hawaii	186	2002
	ENDAVOR	URI	184	1976/1993
R/V Cape Hatteras	COESAUS	OSU	177	1976/1994
	NEW HORIZON	UCSD	170	1978/1996
	ATLANTIC EXPLORER	BIOIS	168	1982/2006
	Regional Class			
R/V Pelican	HUGH R. SHARP	U Delaware	148	2005
	CAPE HATTERAS	UNC/Duke	135	1981/2004
	POINT SUR	MLML	135	1981
	Coastal/Local Class			
R/V Pelican	ROBERT G. SPROUL	UCSD	125	1981/1985
	PELICAN	LIMCON	105	1985/2003
	F.G. WALTON SMITH	UMiami	95	2000
	SAVANNAH	Skidaway	92	2001
	BLUE HERON	UMN	86	1985/1999
	CLIFFORD A. BARNES	UW	86	1966/1984

The Future Fleet – New UNOLS facilities are planned and in construction!

R/V Sikuliaq

Global Class Ice-Capable Research Vessel



R/V *Sikuliaq* was designed by The Glosten Associates and is under construction at Marinette Marine Corporation in Marinette, WI. The National Science Foundation is funding the project and will own the vessel. The ship operator will be the University of Alaska, Fairbanks.

Project Timeline:

Construction Began – January 2011
Launch - October 2012
Delivery to UAF - July 2013
Begin Science Ops - Early 2014

R/V Sikuliaq Characteristics	
Length, Overall	261 feet
Beam, Max across reamer	52 feet
Depth, Keel to Main Deck	28 feet
Draft, Design Waterline	18 feet 9 inches
Freeboard, Design Waterline	8 feet 9 inches
Displacement at Design Waterline	3,665 long tons
Propulsion Power	5,750 BHP
Endurance	45 days
Endurance, Hotel Only	60 days
Speed, Calm Open Water	14.2 knots
Speed, 4 M Sea (13.1 ft)	12.3 knots
Level Ice at 2 knots	Ice thickness = 3 feet
Science Berths	24
Crew Berths	20 crew plus 2 marine technicians
Science/Storage Vans, 8' x 20'	2 - 4 vans
Science storage	8,000 cubic feet
Science Labs	2250 square feet
Deck Working Area	4360 square feet

AGOR 27 & 28

Ocean Class Research Vessels



The Navy is supporting the construction of two new Ocean Class vessels. The vessels were designed by Guido Perla & Associates in Seattle, WA and the shipyard contractor is Dakota Creek Industries, Inc in Anacortes, WA. The ship operators will be Woods Hole Oceanographic Institution (AGOR 27), and Scripps Institution of Oceanography, UCSD (AGOR 28).

Project Timeline

	AGOR 27	AGOR 28
Keel Laying	Summer 2012	Late 2012
Launch	Early 2014	Late 2014
Begin Science Ops	Spring/Sum 2015	Late 2015

AGOR 27 & AGOR 28 Characteristics

Length, Overall	238 feet
Maximum Breadth (molded)	50 feet
Depth to Main Deck	22 feet
Waterline Length	230 feet
Draft	15 feet
Full Load Displacement (with SLA)	3024 LT
Installed Total Power	3952 kw
Endurance	40 days
Range (at sustained speed)	11,500 nm
Max Speed (estimated)	12.8 knots
Sustained Speed	12 knots
Science Berths	24
Crew Berths	20
Science storage	5,017 cubic feet
Science Labs	2035 square feet

Regional Class Research Vessels

NSF continues plans for the acquisition of up to three new Regional Class Research Vessels. Design refresh and construction can begin when funds are available.

Alvin Upgrade

NSF is supporting the project to upgrade the Human Occupied Vehicle (HOV) DSRV *Alvin*. The updated *Alvin* will have a new titanium personnel sphere that will provide improved ergonomics and eventually offer an increased depth rating of 6500 meters. The *Alvin* Upgrade is in 2013.



Federal agencies that support UNOLS



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