



# NSF ARF Cyber Security Pilot Program

Year 1: 12-Month Effort



- National Science Foundation (NSF) has identified the need for a Pilot Program to address Cybersecurity compliance for the 18 ships, 14 Operators, of the US Academic Research Fleet (ARF) in order to meet the IMO Cybersecurity and DFARS 252.204.7012 requirements.



[DFARS 252 . 204 . 7012]



# Vendor Scope of Work



- The scope of the work of the vendor will be to aide each Operator to meet the 2021 IMO Cybersecurity Compliance.
- The intent of the IMO Cybersecurity Compliance is to reduce vessels-at-sea vulnerability to cyber threats of both:
  - **Information Technology (IT)** and
  - **Operational Technology (OT)** systems.
- The scope of the Pilot Program is for each vessel operator to obtain IMO Compliance by having a documented Cybersecurity Risk Management (CRM) Plan incorporated in their Safety Management System (SMS) at the time of their first External ABS Document of Compliance (DoC) Survey in 2021.

## THE GUIDELINES ON CYBER SECURITY ONBOARD SHIPS



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*BIMCO Guidelines details compliance*

# NSF ARF: Operators, Owners and Class



Count	Institution	Vessels	Ownership (NSF, NAVY, Institution)	Class
1	Bermuda Institute for Ocean Sciences	Atlantic Explorer	Institution	Intermediate
2	Lamont Doherty Earth Observatory Columbia University	Marcus Langseth	NSF	Global
3	Louisiana Universities Marine Consortium (LUMCON)	Pelican	Institution	Coastal
		Gilbert R Mason	NSF	Regional
4	Oregon State University	Oceanus	NSF	Intermediate
		Taani	NSF	Regional
5	Scripps Institution of Oceanography	Roger Revelle	US Navy	Global
6		Sally Ride	US Navy	Ocean
7		Robert Gordon Sproul	Institution	Coastal
8	Skidaway Institute of Oceanography University of Georgia	Savannah	Institution	Coastal
9	University of Alaska Fairbanks	Sikuliaq	NSF	Global
10	University of Delaware	Hugh R. Sharp	NSF	Regional
11	University of Hawaii	Kilo Moana	US Navy	Ocean
12	University of Miami	Walton Smith	Institution	Coastal
13	University of Minnesota Duluth	Blue Heron	Institution	Coastal
14	University of Rhode Island	Endeavor	NSF	Intermediate
		RCRV #2	NSF	Regional
15	University of Washington	Thomas G. Thompson	US Navy	Global
16		Rachel Carson	Institution	Coastal
17	Woods Hole Oceanographic Institution	Atlantis	US Navy	Global
18		Neil Armstrong	US Navy	Ocean

# Operator Priority List



- Operator's 2021 ABS DoC Survey Dates drive the Operator Priority List
- Operators need the documents no less than a month prior to the ABS Survey date

Priority	Institution	Date of next External ABS Survey: Document of Compliance (SMS)
1	Scripps Institution of Oceanography	7-Apr-21
2	Woods Hole Oceanographic Institution	23-Apr-21
3	University of Hawaii	13-Jun-21
4	University of Rhode Island	13-Jul-21
5	Oregon State University	27-Jul-21
6	University of Alaska Fairbanks	13-Aug-21
7	University of Washington	21-Aug-21
8	Lamont Doherty Earth Observatory Columbia University	24-Sep-21
9	University of Miami	30-Dec-21
10	University of Minnesota Duluth	30-Dec-21
11	Skidaway Institute of Oceanography University of Georgia	30-Dec-21
12	Bermuda Institute for Ocean Sciences	30-Dec-21
13	University of Delaware	30-Dec-21
14	Louisiana Universities Marine Consortium (LUMCON)	30-Dec-21

# Program Management and Contract Status Update



- NSF ARF Cybersecurity Pilot Program Management
  - Meeting with Trusted CI and SATNAG Bi-Weekly
  - Pam, Ken and Scott will coordinate correspondence and meetings with Operators

- Jim Holik
  - Pam Clark
- Ken Feldman
- Scott Ferguson

- The Request for Proposal (RFP) has been released by U. Hawaii
  - The RFP will be open through 26 October 2020.
  - Review Team will assess the competitive RFP.
  - Target Contract to be awarded by the end of November 2020





Questions?