#### **2017 RVTEC**

# Large Lakes Observatory University of Minnesota, Duluth Scientific Committee for Oceanographic Aircraft Research (SCOAR) Report

Steven Hartz - University of Alaska R/V SIKULIAQ

#### Agency

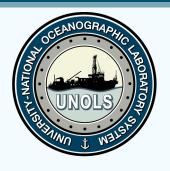
- Office of Naval Research ONR
- National Science Foundation
  - o Polar Programs
  - o NSF Center for Unmanned Aircraft Systems Industry Advisory Board
- The United States Interagency Coordinating Committee for Airborne Geosciences Research and Applications (ICCAGRA)
- US Coast Guard

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- National Oceanic and Atmospheric Administration (NOAA)
- National Aeronautics and Space (NASA) Ames Research Center
- Center for Interdisciplinary Remotely-Piloted Aircraft Studies (CIRPAS)

#### Universities\Institutes

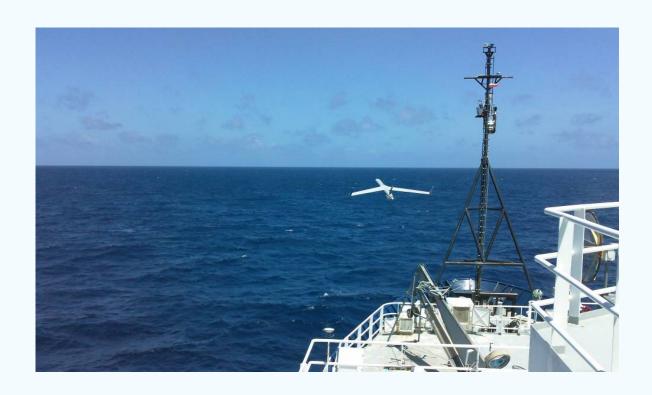
- University of Alaska, Fairbanks
- Woods Hole Oceanographic Institution
- Lamont Doherty Earth Observatory
- Schmidt Ocean Institute
- University of Washington Applied Physics Laboratory
- Scripps Institute of Oceanography



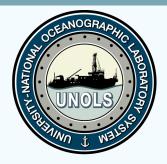
# Policies, guidance and training for aircraft operations

Luc Lenain Scripps Institution of Oceanography

**August 17 2017** 



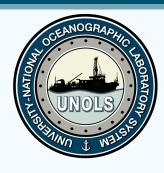
## **UAS Shipboard Operations**



UAS Policy (endorsed by the UNOLS Council in summer 2016):

With the recent publication of the FAA small UAS rule, a policy for UNOLS ships has become necessary. Effective immediately, operation of Unmanned Aircraft Systems (UAS), or drones, from or over UNOLS ships may not take place without demonstrated compliance with national or international regulations (ICSA, FAA) and specific approval of the ship's captain or designee, as a minimum. This applies to crew, techs and members of the science party, and refers to all operations, whether recreational, educational, or professional. Obtaining national approvals, such as FAA's Sec 333 exemption or Certificate of Authority or Waiver (COA), as well as pilot qualifications, are not a guarantee the operations will be approved by the ship's captain. Recreational or hobbyist freedom of use over land is not available at sea, so the importance of contacting the ship's operator ahead of time is critical. Detailed policies and processes are in development by SCOAR to provide guidance and training.

# **SCOAR Subcommittee on UAS Shipboard Operations**



Goals: Develop UAS Policy and guidance documents for Shipboard Operations on UNOLS ships

leveraging existing and on-going efforts by NSF, NOAA, USCG

#### Members:

Luc Lenain (SIO, UNOLS SCOAR Chair)

David Johnston (Duke)

David Fisichella (WHOI)

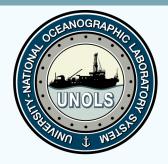
Jeff Garrett (RVOC Safety Committee Chair)

Steve Hartz (UAF)

Tim McGovern (NSF)

JC Coffey (NOAA)

# **UAS Shipboard Operations**



### In the process of

- Compiling guidance documents and information to the research community who
  are interested in using airborne assets in support of their research (e.g. FAA POC
  per region, aircraft operators with contact information, recent field deployments
  summary with POCs etc.)
- Developing pilot training for UAS operations from ships
- Draft guidance document (handbook) for PIs who are planning UAS operations from ships
- Discussing policy on use of UAS for non-research purposes from ships

