Revised: August 20, 2018

Agenda

Scientific Committee for Oceanographic Aircraft Research (SCOAR)

NASA Ames Research Center

Building N-232, Rm. 122 Moffett Field, CA 94035 August 22-23, 2018

For Participants who cannot attend in person: Webex Log in information:

To join the online meeting, go to:

https://unols.webex.com/unols/j.php?MTID=mba034dc042284c42aeda6988ece4b4eb

Meeting number: 802 092 959 Meeting password: air2018

Join by phone: 1-877-668-4490, Access code: 802 092 959

Day 1, Wednesday, August 22nd:

0830 Welcome and Introduction

- Welcome by SCOAR Chair Luc Lenain
- Introduction of participants
- Review the Meeting Agenda

0845 Agency and UNOLS Reports

- **NSF /PLR** UAS Antarctic Operations (10 min)
- **ICCAGRA** (10 min)
- **USCG Report** Phil McGillivary (15 minutes)
- **NOAA** Aircraft Facilities and Operations (10 min)
- **NOAA's UAS Program** (10 minutes)
- **UNOLS report** Annette DeSilva (10 minutes)
- Airborne research developments (both unmanned and manned based) at NASA AMES Ved Chirayath (NASA CS) (15 Min)
- Discussion/Q&A

1030 *Break*

1050 CIRPAS Report - UNOLS National Oceanographic Aircraft Facility

- An overview of the CIRPAS Transition Haf Jonsson
- Current capabilities Haf Jonsson
- Recent Science Projects Haf Jonsson

1140 Manned and Unmanned Oceanographic Aircraft Development/ Operations at Institutions - (Non-NOAF):

 WHOI Unmanned Aircraft Vehicle Operations – Report on WHOI UAV systems, operations, and planned activities – David Fisichella (15 min)

1155 Lunch Break

1310 Manned and Unmanned Oceanographic Aircraft Development/ Operations at Institutions - (Non-NOAF) continued:

- UAF UAV Operations Cathy Cahill (15 min)
- UAS Activities at LDEO Chris Zappa (15 min)
- Activities at Lone Star UAS FAA test site related to coastal mapping Michael Starek (TAMUCC) (15 min)
- SOI's plans for UAS operations from R/V *Falkor* Victor Zykov (15 min)

1410 *Break*

1430 Technology and Science Showcases:

- CW3E: understand, monitor and predict extreme events in the Western U.S Marty Ralph (SIO) (20 min)
- Calibration of the SWOT next generation satellite altimeter using airborne platforms Luc Lenain (SIO) (20min)

1510 Next step? Can instrumented UAS become a standard instrument on R/Vs?

- Operational purpose (ship inspection, obstacle avoidance...)
- Outreach
- Search and rescue operations
- Science support

Is the technology mature enough? Could this be expanded to larger UAS, beyond part 107 requirements? Would we need specific expertise in one (or several) operator institutions, perhaps through a center of excellence? How can SCOAR help?

1540 NASA AMES UAS Facility Tour

1700 Adjourn Day One

1715 SCOAR Executive Session

SCOAR Meeting, Day 2, Thursday, August 23rd:

Web/Phone Log-In is the same as Day 1.

0830 Day-2 Opening Remarks – Luc Lenain

0840 Technology and Science Showcases (continued from day-1):

- Aerosol flux measurements above the ocean surface using unmanned aerial systems Greg Roberts/Radiance Calmer (CNRS/MeteoFrance) (20min)
- International Society for Atmospheric Research using Remotely Piloted Aircraft (ISARRA, http://www.isarra.org/) update Greg Roberts/Radiance Calmer (CNRS/MeteoFrance) (10min)
- UAS Research: Polar Environments and DOD applications Hanu Singh (NEU) (20 min)
- Update on airborne remote sensing at APL–UW Chris Chickadel (10min)

0940 UNOLS Fleet Improvement Committee (FIC): Update on Global SMRs and Fleet Improvement plan - Jim Swift SIO (20min)

1000 Break

1015 Policies, guidance and training for aircraft operations

- Review draft guidance document on use of UAS from UNOLS Ships The document would assist both the research community who are interested in using airborne assets in support of their research as well as the ship.
- UNOLS Research Vessel Safety Standards (RVSS) Chapter on UAS Operations (Chapter 19) – https://www.unols.org/sites/default/files/RVSS_Edition_10_July2015.pdf

1145 Future Business and Direction for SCOAR - Brainstorming on future activities.

1140 SCOAR Outreach Activities:

Discussion on future outreach activities and venues

1200 Other Business:

- Discussion on SCOAR Membership including Ex-officio members Luc Lenain
- AICC Liaison Report Steve Hartz
- Next meeting, dates and location

1215 Closing Remarks

1220 Adjourn meeting