

**Scientific Committee for Oceanographic Aircraft Research (SCOAR)
Tele-Conference
11 June 2009/ 1330 EDST**

Attendees:

Annette DeSilva
Jon Alberts
Mike Prince
Dan Schwartz
Vernon Asper
Tim Schnoor
John Bane
Jim Hain
Bob Bluth
Haflidi Jonsson

Our apologies to Steve Ramp: he was recently appointed by the UNOLS Council as a committee member, but we had not yet added his e-mail address to the notification messages.

Suggested Agenda Items (sent to us by Jim Hain.)

- The role of aircraft in the UNOLS program
- Revitalization of the Small Environmental Research Aircraft (SERA) effort
- Update on sensors
- Update and issues for Remotely Piloted Air Vehicles (RPAVs)
- Coordination with Interagency Coordinating Committee for Airborne Geosciences Research and Applications (ICCAGRA)
- Future meeting/workshop?

Opening Remarks by Dan Schwartz:

The SCOAR committee and the application of aerial assets to oceanographic research needs better marketing to the broader ocean science community. This is perhaps our first tasking as we reinvigorate the work of this committee. We still encounter surprise when informing colleagues about the state of the art in Unmanned Aerial Vehicles (UAVs), aerial remote sensing, use of aircraft, and the assets of Center for Interdisciplinary Remotely-Piloted Aircraft Studies (CIRPAS) as well as other federal and privately owned/operated aircraft.

Discussion:

Funding: need proposals to drive and prove the need for these assets, but it has been a “chicken & the egg” type problem. Putting the cost of the aircraft into a proposal budget scares off the reviewers. This is similar to an issue that has been discussed within DESSC when investigators wanted to use non-National Deep Submergence Facility (NDSF) submersible vehicles: they too had to show the vehicle costs in their budgets and they felt this was a deterrent to funding. (There is more discussion on this issue, later.)

We asked Mike Prince if there is a NSF program manager for aircraft to whom we can speak about this and other related items. Jim Hunting apparently is no longer the NSF point-of-contact and the name Steve Nelson was mentioned as having taken over from Jim and Cliff Jacobs. Tim Schnoor/ONR & Bob Houtman/NSF should also be included in this opening of communications with the federal funding agencies.

Role of UNOLS in SCOAR- Jim Hain stated that we “need to get more visibility in community.” ICCAGRA has met recently in Italy, and Dan will re-establish contact with them.

Dan suggested that we conduct a broad survey of what aviation assets are presently being (or have been) used by members of the oceanographic community. John Bane did a prior survey of platform and instrumentation needs, and perhaps he could share those results with us. The atmospheric science community too has also looked at platform and science needs, and they are generally more aware of what aircraft offer to their investigations. They did a short piece in EOS some time back. Dan made the distinction that a new survey should attempt to capture information on ALL the aviation-related activity by marine scientists – whether they are using government aircraft, unmanned systems, or general aviation assets. That will give us a sense of the size of the community’s sector already involved and will broaden the database of types of missions on which these various assets are being employed.

Air capability on ships: Despite suggestions that the new Alaska Region Research Vessel (ARRV) design, and the *Langseth*, retain some sort of minimal infrastructure for supporting aerial operations, both ended up deleting that capability to dedicate scarce shipboard “real estate” to more traditional uses with which investigators are comfortable. With the new UNOLS Ocean Class and Regional Class ships on the horizon, we need to make the case for some sort of provision to field off-board sensors via the new generation of small UAVs soon to become available. We need to continue our interaction with the UNOLS Fleet Improvement Committee to make the case for having aviation deck capability on future designs.

Jim Hain: other innovative remotely operated aircraft are being used around the country. There is a blimp in Maine being built under SAIC umbrella, (Ron Hochstadler as the contact source?) The UW’s Applied Physics Lab is also using a tethered aerostat with a radar for measuring wave heights.

Bob Bluth commented that we do a lot of UAV work for military, but there are regulatory issues such as airspace, costs. The airspace and de-confliction issues over or close in to the United States landmass is a major issue, but offshore and in the open-ocean or arctic icepack, there should be fewer if any problems.

Haflidi noted that CIRPAS has been designated a UNOLS facility but there continues to be frustration in accessing facilities. There needs some structure on how PIs can access this facility. Every program is funded differently and this causes problems. There is only one program for NSF oceanographers next year and usage continues to be low.

John Bane noted that NSF has aircraft, too.

Annette asked: Should SCOAR have a presence at Ocean Science Meeting in Feb 2010? Dan responded that the Ocean Sciences Meeting would be a good venue, as it entrains scientists from across the sub-disciplines of oceanography in one venue. He suggested a Town Hall meeting like the UNOLS Arctic Icebreaker Coordinating Committee (AICC) or DEep Submergence Science Committee (DESSC) have frequently held to inform potential users about their assets, what they are doing in the field, what missions they can undertake in the future, and what they can do to help and facilitate proposal pressure.

Annette also offered the assistance of the UNOLS Office to set up a survey. John Bane reminded us that we had a SCOAR oceanography meeting at Moss Landing Marine Lab (MLML) on May 25, 2006, attended by 30-50 scientists with posters & presentations; very useful, but that sort of venue is “preaching to the choir.” While it is important to see science results from present users of the airborne assets, it will be good to have outreach to a broad swath of the community.

A pressing need is the updating of our web resources: The material on both the SCOAR and CIRPAS websites is way out of date. Haf said that the CIRPAS website is presently going through complete review and overhaul. Jon and Annette confirmed that UNOLS will post information as SCOAR sends it to the office.

Jim – small environmental aircraft (to be discussed at a future meeting.)

Haf indicated that we should have a SCOAR annual meeting at CIRPAS to familiarize new members of the committee with the facility and to strengthen the relationship between CIRPAS and UNOLS.

Dan asked whom we should use for a point-of-contact at CIRPAS, for setting up a meeting and visit there: - It is Bob Bluth

Committee members: please send your updated contact information to the UNOLS Office and the rest of us so that we do not end up using out-of-date e-mail addresses and telephone numbers.

Acknowledgments:

Thanks to all for participating in this effort: let’s keep communication running! Special thanks to Jon Alberts and Annette DeSilva at the UNOLS Office for arranging this meeting, helping with taking minutes, and providing the conference call connections.

Dan Schwartz, submitted 16 June 2009