UNOLS Fleet Improvement Committee – Report UNOLS Annual Meeting, NOV 2018

FIC Membership:

James Austin, UT-Austin Joan Bernhard, WHOI Byron Blomquist, CU-Boulder Suzanne Carbotte, LDEO Greg Cutter, ODU **Rick Keil, UW** Zoltan Kelety, SIO Nancy Rabalais, LUMCON Ethan Roth, UAF Jim Swift, SIO

(Non-Op Rep) (Oper. Rep) (Non-Op Rep) (At-Large Rep) (Non-Op Rep) (Oper. Rep) (ex-officio, RVOC Liaison) (Oper. Rep) (ex-officio, RVTEC Liaison) (Chair)

The FIC last met on 08-09 July 2018 in Alexandria, VA. Next FIC meeting is 18 December 2018 in Alexandria, VA.

Recent FIC business

- The FIC is keeping updated on the RCRV program. A FIC member was added to the RCRV Oversight Committee. The FIC is pleased to see the plan for a year of sea trials and science verification before operations.
- A FIC observer participated in R/V *Thompson*'s post refit cruise. FIC plans a few post-cruise debriefs to gain user perspectives.
- FIC has had updates on use of ship-launched aircraft, provisions for marine seismic capabilities, new/sought small RVs, & polar RV SMRs.
- The UNOLS Office, with FIC guidance, continues examination and adjusting of fleet projected service life end dates.
- The UNOLS Office, with FIC guidance, continues examination and adjusting of Full Optimal Year (FOY) definitions, intending to improve these via increased contact with the ship operators.

The FIC Chair attended the UNOLS Green Boats and Ports Workshop AUG 2018 in Portland, OR.

Recent FIC business (continued)

New Vessel Debriefs

Summary report for *Sikuliaq* – completed. [1] Completed debriefs for *Armstrong* and *Sally Ride*. Will soon begin a few post-refit debriefs for *Thompson*.[1]

The FIC Subcommittee on Global-class SMRs is taking advantage of overlapping views/activities with the NSF OPP Advisory Committee Subcommittee on the U.S. Antarctic Program's Research Vessel Procurement.

Update the Fleet Improvement Plan:

Have posted the FIP on a Google Drive for periodic review and updates.

The FIC is coordinating with the AICC on polar research ship issues.

The FIC is staying abreast of refit plans for the Global-class ships.

The FIC is staying abreast of plans for new coastal/local ships.

Development of Science Mission Requirements for the next generation of Global-class research ships [FIC Subcommittee, chair G. Cutter (ODU)]

Tasks Completed

- Examine existing/previous SMRs for Global and Ocean Classes
- Gather information on international Global fleet
- Survey last 5 years of Global Class users (41 responses)
- Town Hall at 2018 Ocean Science Meeting (75 attendees)
- Survey entire community (118 responses)

Tasks In Progress

 Survey Global and Ocean Class Ship operators (responses due Nov 19th) Marine superintendents Ships' captains, chief engineers, crew

Marine technicians

• Global-class SMR town hall at AGU, Thursday, December 13th, Marriott Marquis - Independence F-H, 1815-1915.

Tasks to be Completed During 2019

- Draft SMRs
- Circulate SMRs to UNOLS Council
- Edit, compile, and create a "living" document (revisited and edited by FIC)

UNOLS Fleet Improvement Plan

The FIC continues its ongoing examination of the UNOLS Fleet Improvement Plan. A Google doc version is online for editing by FIC members and the UNOLS Office. The academic fleet in 2025 is envisioned to provide 16 ships of diverse capabilities. To plan for the future, the plan specifically recommends:

Determine a course for building future global vessels capable of supporting large (>30) interdisciplinary or discipline-focused science parties.

Support developing plans to renew and utilize the capability of coastal/local class vessels as components of the UNOLS Fleet.

Support the acquisition of new ice-breaking capabilities for science community access to the high latitudes.

Considerations are many, such as:

Ability to adapt to and meet future and shifting research needs.

Other research ships used for academic research.

Planning a highly capable, supportable and sustainable research fleet in an era of increasing operating costs and flat funding.