# UNOLS Fleet Improvement Committee – Report to UNOLS Council 30 November 2016 – J. Swift (Chair, FIC)

Summary of Business from the November 2016 FIC Meeting:

- 1. Regarding ship design, construction, science verifications, refit, and repair activities, the FIC is presently attending to
  - Ocean Class Research Vessels (OCRVs) R/V Neil Armstrong and R/V Sally Ride
  - Regional Class Research Vessels (RCRVs) FIC mostly in stand-by at present
  - Mid-life refit plans for R/Vs Thompson & Revelle (and Atlantis, we hope)
  - Engine control and other modifications on R/V Kilo Moana
  - R/V Barnes replacement plans
  - California state effort to acquire a vessel to replace Robert Gordon Sproul
  - Polar vessels FIC support and interest in upcoming NSF/PLR ship matters
- 2. Science verification cruises and post-cruise feedback

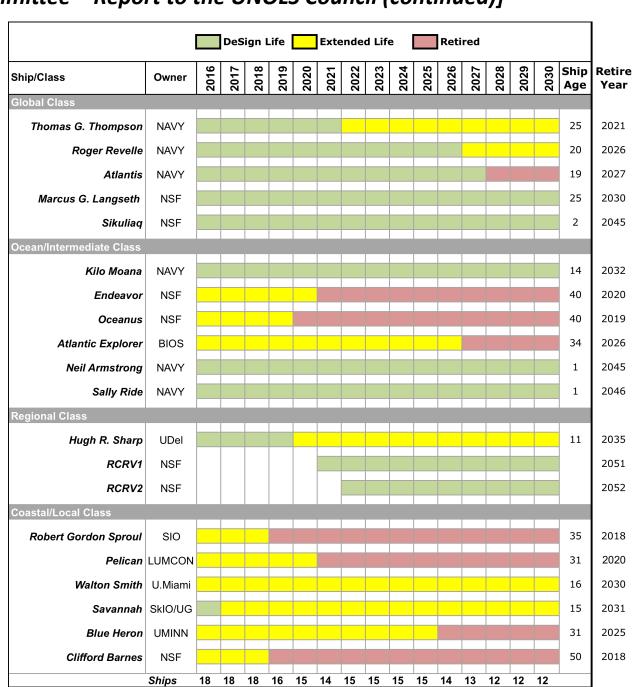
R/Vs Sikuliaq, Armstrong and Ride

FIC oversight is proceeding without significant problems. Sikuliaq post-cruise feedback to FIC has reached the point – regarding its purpose – that the FIC can now move back to the PCAs to help assess user experiences.

3. FIC reviewed fleet status (retirements, additions, service life end dates, optimal year definitions, etc.). Updates are in line with prior projections.

# FY2016 - FY2030 Projected UNOLS Fleet Capacity

(updated: 11/23/2016)



- 4. The FIC examined more flexible definitions of Full Optimal Year for each ship which better take into account unique events such as significant planned yard time. Optimal year definitions recommended in May 2016 are being implemented.
- 5. The FIC approved modifications of UNOLS STRS schedules which more clearly account for each calendar day.
- 6. No significant update from FIC regarding R/V *Langseth* operations and its liaison with the MLSOC (now reconfigured and renamed).
- 7. FIC membership was discussed. One non-operator member recently needed to retire due to change of institution, and there will soon be an open at-large representative position. Council and Office assistance will be sought to fill those positions.

Council approval is sought to approve a second term for operator member Nancy Rabalais (Lumcon).

8. Research Vessel Safety Standards Appendix B (UNOLS Overboard Handling Systems)

Appendix B is a set of safety standard designed to ensure that all components of an overboard handling system (including the ship's structure and the means of attaching handling systems to the ship) are designed to meet the loads applied to the system.

FIC notes that the goals of Appendix B are suitable but the methods of getting there must be revised to be more realistic. For example no institution has yet been able to meet the current Appendix B requirements, and this puts institutions in a tenuous situation.

FIC recommends that Appendix B be evolved into a simpler set of guidelines for achieving its goals such that it is both easily understandable and also achievable.

When this is worked out, it would also be valuable to provide a road map so individual PIs who own over the side handling equipment can get their equipment into Appendix B compliance.

- 9. The FIC greatly appreciated a talk by Vicki Ferrini (LDEO and Multibeam Advisory Committee/MAC) which provided an update on sea acceptance tests of multibeam systems on new vessels and MAC resources.
- 10. Areas of new or increasing FIC activity include:
- a. Science Mission Requirements (SMRs) for Global class
  FIC subcommittee was formed to draft mission scenarios
  beginning to gather UNOLS community input
  will engage federal agencies
  attention to lessons learned from recent vessel construction projects
  compare these to the Global class capabilities
  examine modern non-US global-ranging research ships
  consider infrastructure requirements and implications to back up the SMRs
  should also consider the process of moving from SMRs to design specifications
  re-design the SMRs to be a living document
- b. The FIC would like to develop a liaison with the UNOLS AAIC to jointly provide input regarding US polar ship refits and acquisitions.