

UNOLS Fleet Improvement Committee – Report to the Annual Meeting

01 December 2016 – J. Swift (Chair, FIC)

Summary of 2016 FIC Business:

1. Ship design, construction, science verifications, refit, and repair activities

Ocean Class Research Vessel (OCRV) – R/V *Neil Armstrong* and R/V *Sally Ride*

Regional Class Research Vessel (RCRV)

Mid-life refit plans for R/Vs *Thompson*, *Revelle*, and *Atlantis*

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 – Update on future design/construction activities

2. Science verification cruises and post-cruise feedback

R/Vs *Sikuliaq*, *Armstrong* and *Ride*

(FIC oversight proceeding without significant problems)

3. Review of fleet status (retirements, additions, service life end dates, optimal year definitions, etc.).

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4. FIC is looking at more flexible definitions of Full Optimal Year allowing for range definitions.
5. Modification of UNOLS STRS schedules to account for each calendar day
6. R/V *Langseth* & MLSOC/FIC Liaison (Discussion of *Langseth* operations and future plans)
7. The FIC participated in UNOLS discussions regarding support for the Ocean Observing Initiative.
8. FIC is monitoring the Green Ship Initiative.
9. FIC discussed science party cruise orientation, with reference to a PowerPoint provided to cruise participants on R/V Falkor via PowerPoint.

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10. New Technologies and System Evaluations:

SIO and Univ. of Hawaii ROV updates

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

Measurements of the water and carbon cycles using in situ stable isotope systems.

11. Vicki Ferrini (LDEO and Multibeam Advisory Committee) provided an update on sea acceptance tests of multibeam systems on new vessels and MAC resources.

12. Areas of new or increased FIC activity include:

a. Science Mission Requirements for Global class

FIC subcommittee was formed to draft mission scenarios

Gather UNOLS community input

Engage federal agencies

Lessons learned from recent vessel construction projects

Compare these to the Global class capabilities.

Re-design the SMRs to be a living document

b. Liaison with UNOLS AAIC to provide input regarding US polar vessel refits and acquisitions.