

UNOLS Fleet Improvement Committee
Subcommittee on Future Global-Class Ship Science Mission Requirements

“SMRs for a 21st century Global Class Vessel”
Status report to the UNOLS Council – June 2018

Global SMR Sub-committee: Greg Cutter (chair), Bryon Blomquist, Suzanne Carbonette, Clare Reimers, Jim Swift

Tasks: Evaluate existing designs, including non-US vessels
Survey Global Class users from the last 5 years
Survey entire community
Survey ship’s captains and chief engineers
Based on these, draft SMR

Status: First 3 steps have been completed and developing very modified survey for captains.

The community survey had 118 responses, with some highlights:

- 44% responses from senior scientists, 19% mid-career, 17% early career, and rest were graduate students and technicians
- 92% have used Globals and will need to in the future (NOTE: Seems like we received responses from appropriate users)
- Discipline breakdown (broadly defined) for respondents: 12% biological oceanography, 17% chemical, 10% physical, 9% climate, and 36% seismology/geophysics. (NOTE: this breakdown is rather surprising, but perhaps the retirement of the Langseth resulted in a disproportionate response from its community of users)
- Berthing for 36 scientists sufficient: 88% yes
- Existing lab and deck space sufficient: 75% yes
- Existing scientific support instrumentation and systems (sensors, ADCP, CTD, etc.) sufficient: 50% yes
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- Are network and technical systems (e.g., broad band) on existing ships sufficient now and into future: 52% yes (NOTE: these responses are surprising, everyone complains about networks and high seas broadband)
- Are overboarding systems (A frames, etc.) sufficient: 71% yes. (NOTE: Written comments regarding long coring systems)
- Are handling characteristics of existing ships (e.g., dynamic positioning; operations as a function of sea state) sufficient: 72% yes
- The most numerous comments had to do with high quality seismics a la Langseth, followed by improved acoustics/quiet ship, and then piston coring/long core capabilities. There were 3 comments about improving ROV handling and deck operations.