## **UNOLS Fleet Improvement Plan Synopsis**

Final document sent to Council 09 AUG 2019 for discussion and (hopefully) adoption.

Previous Plans 1990, 1995, 2009, and 2015.

2019 Plan contains contributions from entire Fleet Improvement Committee.

Many contributions and much assistance from Annette DeSilva and Alice Doyle.

Detailed editing and much more from Nancy Rabalais.

The Plan discusses the entire Academic Research Fleet (ARF), with principal focus on the ships whose use in research and training is coordinated by UNOLS.

The Plan is an analysis of academic research fleet utilization and support over recent years, with extrapolations into the near future. The Plan also represents how the research community would like to see the fleet configured, while at the same time considering reasonable expectations for fleet support.

The Plan acknowledges significant contributions to academic research and training supported by vessels and other resources that are not part of the academic research fleet coordinated by UNOLS.

Important fleet renewal events underway include mid-life refits and enhancements to extend the service lives of three global class ships, and the construction of two new regional class ships, with a third planned.

Presently 18 ships in the academic fleet; 16 projected for 2025. Fleet size may further decrease due to retirements & declines in funding (both operations and construction).

NOAA, USAP, and Coast Guard fleet changes also have potential impacts on academic research and training.

## Principal Recommendations:

The community must determine a course for building future global vessels capable of supporting large (>30 researchers) interdisciplinary & discipline-focused science.

The community should support developing plans to renew and utilize the capability of coastal/local class vessels as components of the Academic Research Fleet.

The community should support the acquisition of new ships with ice-breaking capabilities for science community access to the high latitudes.