Update on Polar Research Vessel Acquisition Status 23 March 2015
GEO/Division of Polar Programs

Planning for a new Polar Research Vessel was put on hold while a Service Life Extension Program (SLEP) feasibility study was conducted for the *Nathaniel B Palmer* (NBP). Originally scheduled for October 2013, the government shutdown delayed the onsite inspection and commencement of the study until this past October 2014.

As part of the study, JMS was asked to determine what, if any, PRV-like capabilities could be incorporated into the NBP if it underwent a service life extension. These capabilities were taken from the 2012 UNOLS Polar Research Vessel Science Mission Requirements refresh. Specifically, JMS looked at:

- 1. Increase science berthing from 39 to up to 55 science and technical personnel
- 2. Increase lab space by 15-20%
- 3. Increase deck space by 10-15%
- 4. Increase endurance from ~55 days up to 90 days
- 5. Increase acoustic "quietness" as much as practical/economical
- 6. Increase icebreaking capability from A2 up to PC3
- 7. Extend total service life to 40+ years (2032 or beyond)

The final SLEP report was received at NSF just last week (March 18) and Polar Programs is still reviewing the recommendations and cost estimates. However, NSF can state that the NBP was found to be in very good shape and is well suited to undergo a SLEP. While increasing the icebreaking capability does not appear economically viable, increasing berthing, lab space, deck space, and endurance are all possible, as is extending the life of the vessel to 2032 (40-year life for vessel). In the coming weeks Polar Programs will be reviewing the report in greater detail and working to establish a path forward.