

UNOLS Fleet Improvement Plan

March 2013 Draft Outline

Anticipated Publication Date: late 2014

Web-based

CONTENTS

- I. U.S. Science at Sea
 - a. The Societal Benefits of Modern Ocean Science
 - i. Provide illustrative examples of cutting edge research, education and discovery - **Emphasize/articulate tangible benefits to society of ship-based research, both near and long term. E.g., forecasting, hazard, ecosystem-based fisheries management, climate change research, drugs from the sea, emergency response (Deep Horizon), Arctic, OOI, CLIVAR, GEOTRACES and so on. A community query might be useful.**
 1. Assignment- all FIC members
 - a. Must be sea-going
 - b. Has societal relevance
 - c. Have broader impact and intellectual merit.
 - d. Examples of emerging technologies
 - i. Observatories
 - ii. Autonomous systems
 - iii. Tsunami warning systems.
 - ii. Incorporate high quality imagery, graphics and video
Status: drafted. Needs some expansion and addition of images.
 - b. Scientists at Sea: The Importance of Being There -
 - i. Assignment -Clare – first draft (reference - Fornari, Fryer, et al)
Status: drafted. FIC should review
 - c. Broader impacts through Tele-presence
 - i. Assignment - Fernando – contact Chris German, Cindy Van Dover, etc.
Status: Clare has drafted. Needs further input. Fernando provide by APRIL 1, 2014.

How do scientist get to sea?:

- d. The Federal Agencies Supporting Science at Sea
 - i. Assignment – Sandy Shor - Reference IWG-FI Fleet Status report – assistance from Debbie Smith
Status: Just started. Should emphasize increasing role of NSF and the community concern about facility costs versus core programs. Relate to section f. Provide by APRIL 1.
- e. Private Entities Supporting Science at Sea (e.g., Packard Foundation, Schmidt,)

UNOLS Fleet Improvement Plan

- i. Assignment - Joan Bernhard - How do scientists get to sea on non-UNOLS platforms?

Status: drafted. Edited to merge with leading content.

- f. The UNOLS Mission: Inclusive Fleet Access, Scheduling and Facility Management

- i. Assignment – Miles – UNOLS provides a partnership between agencies and the community and open access to facilities. Articulate why UNOLS differs from e above in performing their mission – safety and mission-specific capabilities. I.e., why UNOLS fleet is necessary.

Status: drafted. Edited to merge with leading content.

Consider strategic links to other web descriptions of UNOLS -

- g. The Process of Improvement and Renewal of a Fleet designed for Academic Research - Assignment - Clare

- i. Historical perspective – provide a background on how ships entered the fleet in the past.

How far back should we go? Who has best historical perspective? Al Suchy? Fred Jones?

- ii. Current Renewal Activities – MREFC. A more ordered process. Ship acquisition takes more time. Link to IWG-FI

- 1. How did we do on our fleet renewal projections from FIP 2009?

Status: Not done. Provide by APRIL 1.

II. The UNOLS Fleet of 2014-2024

- a. Decadal Core Research and Major Science Programs – Assignment - Greg Cutter & David Bradley

- i. Link to other decadal planning documents

- 1. Critical Infrastructure for Ocean Research and Societal Needs in 2030 (NRC)

- 2. Science at Sea – Meeting Future Oceanographic Goals with a Robust Academic Research Fleet (NRC)

Status: drafted. Need to edit to merge with leading content.

- b. Fleet-wide Science-Mission-Requirements-Vessel Specifications

- i. Fleet-wide Matrix – Assignment – Al Suchy

- 1. Construct a table for each Class – Global, Ocean/Intermediate, Regional, Coastal/Local

Instead of SMRs fleet-wide table comparing specifications organized by class.

UNOLS Fleet Improvement Plan

Clare has already started at NSF's request. Should be useful reference for all.

c. Status of Capabilities

i. 2014 facilities – Assignment – Annette

Status: drafted. Need to update and merge with leading sections. By MAY 1

d. Fleet Support, Utilization and Operational Costs

i. Assignment – Annette

Status: drafted. Need to update and merge with leading sections. By MAY 1

e. An Analysis of Where Science Requirements, Facilities, Capabilities and Budget May Not Align

i. Assignment – Annette, Clare and others

ii. This analysis should examine where there may be excess capacity and where there is insufficient facilities-leading to fleet renewal recommendation.

Status: Should be outcome of proceeding analyses and based on FIC recommendations.

Draft by JUNE 1.

III. Fleet Renewal Considerations for 2025-2035

a. Facilities Projected to Retire 2025-2035

i. Assignment - Annette and Clare

Status: Service Life Table. Need accompanying text. By JULY 1

b. Projections of New Fleet Requirements and Utilization

i. Assignment – ~~David Checkley~~ Nancy Rabalais– refer to the Decadal study, Agency commitments to large programs – OOI, Alvin, etc

c. Projections for Polar Programs – Assignment - Al Devol By JULY 1

d. A Decade for Green Technologies- Assignment – Bruce Corliss and Peter Ortner

Will request after URI Workshop to be received by JULY 1.

e. Future options for Meeting Ship Time Requirements – trade-off – save for later

IV. Recommendations for Fleet Renewal Activities – To be ACTION ITEM for Fall FIC meeting once leading material is assembled and reviewed by FIC.

a. Priorities

b. Timeline

c. Engagement

UNOLS Fleet Improvement Plan

Appendices

Timeline Summary

- April 1, 2014. All subsections of section I completed. Input received from Sandy, Fernando and Clare according to assignments. Clare prompts FIC to review.
- April 15, 2014. FIC reviews of Section I submitted to Dropbox. Clare and Annette incorporate.
- May 1, 2014. Section II a.-d. Revised or drafted. Greg, Dave B., Al S., Clare and Annette.
- June 1, 2014 Section II e. Drafted by Clare and Annette. Clare prompts FIC to review.
- June 15, 2014. FIC reviews of combined Sections I&II submitted to Dropbox. Clare and Annette incorporate.
- July 1, 2014. Section III subsections drafted by Nancy, Al D., Peter, Bruce C., Annette and Clare. Clare prompts FIC to review.
- August 1, 2014. FIC reviews of combined Sections I&II&III submitted to Dropbox. Clare and Annette incorporate.
- September 1, 2014. WEB formatted draft of Sections I-III prepared by UNOLS Office and made available for review.
- FALL FIC Meeting. Committee holds half-day working session to draft Section IV and a Highlights Section to complete the report.
- Post meeting draft report goes to Council for review.