

Broad Agency Announcement 10-016
"Advanced Mooring System"

Amendment Number 0001

The purpose of Amendment Number 0001 is to revise:

1. Section I, entitled "General Information", paragraph 5, entitled "Research Opportunity Description", sub-paragraph 5.2, entitled "Program Plan", part 5.2.1, entitled "AMS System Performance Specifications and Requirements", bullet 1, entitled "Performance Specifications", sub-bullet 2, entitled "Environmental", minor bullet 5 is hereby revised as follows:

- Vessel Data: AMS will be required for a variety of vessels, with the following ranges of motions operating independently: - threshold

	Large Vessels	Connectors	INLS / MCS RRDF
Length (m) (LOA)	185 m to 290 m	41 m to 103 m	73 m to 122 m
Beam (m) (Max)	23 m to 50 m	9 m to 28.5 m	22 m
Draft (m) (Full Load)	7 m to 12 m	2 m to 4 m	0.75 m to 2.4 m
Full Load Displacement (MT)	up to 104,500 MT	up to 2,400 MT	712 MT to 1400 MT
Range of Operating Freeboard (m)	up to 17 m (note mission deck of MLP may submerge)	up to 6.0 m	0.3 m to 2 m
Maximum Roll (SS3/SS4)	1 degree to 12 degrees	up to 5 degrees	up to 9 degrees (SS3)
Maximum Pitch (SS3/SS4)	1 degree to 3 degrees	up to 1.3 degrees	up to 12 degrees (SS3)
Maximum Heave (SS3/SS4)	1 to 2 meters	up to 1.1 meters	up to 2.11m (SS3)
Maximum Surge (SS3/SS4)	up to 1.2 meters	N/A	up to .45 m (SS3)
Maximum Sway (SS3/SS4)	up to 1 meter	N/A	up to 1.5 m (SS3)
Maximum Yaw (SS3/SS4)	up to 1 degree	up to 0.35 degrees	up to 1.2 degrees (SS3)
Vertical Accelerations (G's)	up to 0.2 G's	up to 0.20 G's	xx
Transverse Accelerations (G's)	up to 0.2 G's	up to 0.20 G's	xx
Longitudinal Accelerations (G's)	up to 0.2 G's	up to 0.20 G's	xx

Vertical acceleration load factors associated with motions in the above chart are 1.2 G's. Assume any "up to" amplitudes are maximum amplitudes.

2. Section I, entitled "General Information", paragraph 5, entitled "Research Opportunity Description", sub-paragraph 5.2, entitled "Program Plan", part 5.2.1, entitled "AMS System Performance Specifications and Requirements", bullet 1, entitled "Performance Specifications", sub-bullet 3, entitled "Operational", minor bullet 10, "Reliability, Maintainability, and Availability – threshold", sub-minor bullet 4 is hereby revised as follows:

- The maximum mean-time-to-repair (MTTR) shall be eight hours for all sub-systems. The system shall be designed to minimize scheduled preventive maintenance man-hours. The system maintenance shall not require use of proprietary tools.

3. Section I, entitled "General Information", paragraph 5, entitled "Research Opportunity Description", sub-paragraph 5.2, entitled "Program Plan", part 5.2.1, entitled "AMS System Performance Specifications and Requirements", bullet 1, entitled "Performance

Specifications”, sub-bullet 3, entitled “Operational”, minor bullet 12 is hereby revised as follows:

- **The amount of special test equipment required for maintenance shall be minimized. The amount of tools not normally carried aboard ship required for maintenance shall be minimized.** – threshold

4. Section IV, entitled “Application and Submission Information”, paragraph 1, entitled “Application and Submission Process”, is hereby revised as follows:

“1. Application and Submission Process -

This solicitation is for full proposals only. Full proposals are due before the date and time listed in Section I.4. Full Proposal shall be mailed or **hand delivered** to the technical point of contact listed in Section I.6.

5. Attachment entitled “Proposal Checklist” is hereby incorporated.