

Amendment 0001  
Solicitation Number ONRBAA 14-003  
“Aluminum Alloy Corrosion Control and Prevention”

The purpose of Amendment 0001 is to respond to questions received prior to 09 January 2014 and to amend the BAA as follows. Questions received after 09 January 2014 and before the deadline for submissions of questions will be addressed in a subsequent amendment.

I. Questions and Answers are provided as follows:

**1. Question:**

In Section 6.4, Page 11, the BAA states: "The objective of this research area is for the development and transition of an exterior durable coating system that provides the ability to reduce 5000 series aluminum alloy sensitization caused by prolonged thermal exposure, while also enhancing corrosion resistance." Since sensitization is a metallurgical phenomenon, it is not clear how a coating might be expected to reduce sensitization? Perhaps what is meant is that the coating should "reduce the impact of sensitization on the corrosion behavior of the alloy"?

**Answer:**

Temperature reduction via an engineered coating can reduce the diffusion rate of Mg, while enhancing corrosion resistance. This could "reduce the impact" as suggested, so both modes of sensitization resistance improvement are possible.

**2. Question:**

What are the typical or maximum/minimum aluminum plate thicknesses that our tool would be required to be able to inspect?

**Answer:**

Please see Section II., Number 2 below.

**3. Question:**

What is the thickness range of the coatings? What is the coating material? Is the coating material transparent in visible and/or infrared ranges?

**Answer:**

Please see Table 2, Aluminum Surfaces, Surface Ships, of Navy Standard Item, 009-32. There is no information available concerning visible and/or infrared transparency.

**4. Question:**

The Technical Content document lists Section 8 "Attachments (Addendums, Exhibits, Figures, Resumes, etc.)". Does this mean that any/all figures should not be included throughout the proposal and instead listed separately in this section?

**Answer:**

Please see Section II., Number 3 below.

**5. Question:**

Where should the References/Bibliography be placed.

**Answer:**

Please see section 5 of the Required Technical Content Template.

**6. Question:**

Also, if we will be submitting electronic copies of the proposal via email, is it still necessary to submit an additional hard copy via CD-ROM?

**Answer:**

Please see Section IV, Section 5 of ONR BAA 14-003.

**7. Question:**

I just wanted to confirm that there was not a website where we could submit the proposal electronically through a portal. If they are to be mailed, I would assume that an overnight FedEx would be accepted?

**Answer:**

Please see Section IV, Section 5 of ONR BAA 14-003. Regarding the FedEx, yes, this would be an acceptable form of delivery.

II. **Amendments.** BAA 14-003 is hereby amended as follows.

1. The due date for ONRBAA14-003 is extended from 20 January 2014 to 21 January 2014 to accommodate the Federal holiday on 20 January 2014.
2. The Tables in Section I, “General Information”, Research Opportunity 6.1.1 “Program Plan” (pages 5 and 6) are hereby amended to read as follows:

Detection:

Base

Specification	Metric
Probability of Detection	>90% successful detection of sensitized 5000 series aluminum
Accuracy/Performance	>90% Confidence Interval of detecting DoS level as compared to the standard ASTM G67 test
Area of Detection	2ft x 2ft section
Aluminum Panel Thickness Ranges	AA5083: AA5083: 3mm-12mm Typical - 6mm  AA5456: 1/8"-5/8" Typical - 1/4" & 3/8"  Note that the use of metric units for the former and engineering units for the latter are intentional as these are the way the plate is designated for the two different naval platforms for which they were specified.
Reliability of the Tool	90% reliability
Measurement Time	<20min
Destructiveness	Does not require the removal of coatings or use hazardous chemicals or substances to provide DoS measurements

Detection:

Option

Specification	Metric
Probability of Detection	>95% successful detection of sensitized 5000 series aluminum

Accuracy/Performance	>95% Confidence Interval of detecting DoS level as compared to the standard ASTM G67 test
Area of Detection	2ft x 2ft section
Aluminum Panel Thickness Ranges	AA5083: AA5083: 3mm-12mm Typical - 6mm  AA5456: 1/8"-5/8" Typical - 1/4" & 3/8"  Note that the use of metric units for the former and engineering units for the latter are intentional as these are the way the plate is designated for the two different naval platforms for which they were specified.
Reliability of the Tool	95% reliability
Measurement Time	<10min
Destructiveness	Does not require the removal of coatings or use hazardous chemicals or substances to provide DoS measurements
Power Requirements	Self-contained or easily connected to ship's power
Size	Must fit through a 26"x66" Navy Standard Watertight Door
Weight	Must meet requirements of MIL-STD-1472G

3. Section IV., "Application and Submission Information", Section 2.a.i., Paragraph 5 (bottom of page 19) is hereby amended to read as follows:

"The format requirements for any attachments are as follows:

- Paper Size- 8.5 x 11 inch paper
- Margins – 1 inch
- Spacing- single or double spaced
- Font- Times New Roman, 12 point
- Maximum Number of Pages Permitted - 10 pages (excluding cover page, resumes, bibliographies and table of contents). Full Proposals exceeding the page limit may not be evaluated. The Technical Content to be included in the standard Word Template is limited to no more than 10 pages. Figures may be included throughout the proposal but if included in the Technical Approach and Justification portion of the Required Technical Content template they contribute to the maximum

10 page limit. The Technical Proposal Template (pdf file) is not included in the page limitations noted above.

- There is no page limitation for the Cost Proposal”