



**REQUEST FOR PROPOSAL  
No. JF167827P Rev 1 Addendum 1**

**DRYDOCK & REPAIR R/V OCEANUS**



**PROPOSAL DUE DATE AND TIME:  
December 31, 2013 (3:00 PM, PT)**

OSU Procurement and Contract Services Offices are open from 8:00 am – 12:00 noon and 1:00 pm – 5:00 pm.  
Offices are closed during the 12:00 noon – 1:00 pm lunch hour.

**SUBMITTAL LOCATION:**

Oregon State University  
Procurement and Contract Services  
644 SW 13<sup>th</sup> Avenue  
Corvallis, Oregon 97333

INDEX	PAGE
1.0 GENERAL.....	3
1.01 Schedule of Events.....	3
1.02 Pre-Proposal Conference.....	3
1.03 Issuing Office.....	3
1.04 Administrative Contact.....	3
1.05 Definitions.....	3
2.0 INTRODUCTIONS AND BACKGROUND.....	4
2.01 Introduction.....	4
2.02 Background.....	4
2.03 Oregon State University.....	4
3.0 STATEMENT OF WORK.....	4
3.01 Sample Contract.....	4
4.0 PROPOSER QUALIFICATION.....	5
4.01 Minimum Qualifications.....	5
4.02 Preferred Qualifications.....	5
5.0 REQUIRED SUBMITTALS.....	5
5.01 Quantity of Proposals.....	5
5.02 Required Submittals.....	5
6.0 EVALUATION.....	8
6.01 Evaluation.....	8
6.02 Evaluation Criteria.....	9
6.03 Negotiations.....	9
6.04 Investigation of References.....	9
7.0 INSTRUCTIONS TO PROPOSERS.....	10
7.01 Applicable Statutes & Rules.....	10
7.02 Manufacturer's Names and Approved Equivalents.....	10
7.03 Requests for Clarification or Change.....	10
7.04 Addenda.....	10
7.05 Preparation and Signature.....	10
7.06 Public Record.....	10
7.07 Submission.....	10
7.08 Modification.....	11
7.09 Withdrawals.....	11
7.10 Late Submittals.....	11
7.11 Proposal Opening.....	11
7.12 Proposals are Offers.....	11
7.13 Contingent Proposals.....	11
7.14 Right to Reject.....	11
7.15 Awards.....	11
7.16 Legal Review.....	12
7.17 Proposal Results.....	12
7.18 Proposal Preparation Cost.....	12
7.19 Proposal Cancellation.....	12
7.20 Protest of Contract Selection, Contract Award.....	12

**EXHIBITS:**

Exhibit A	Sample Contract	13
Exhibit A-1	Detailed Specifications	27
Attachment 1	R/V Oceanus Paint Schedule	55
Exhibit B	Certifications	65
Exhibit C	References	66
Exhibit D	Pricing	67

## 1.0 GENERAL

### 1.01 SCHEDULE OF EVENTS

- Issue Date ..... December 12, 2013
- Pre-Proposal Conference ..... December 18, 2013 (10:00 am, PT)
- Deadline for Requests for Clarification or Change ..... December 23, 2013 (3:00 pm, PT)
- Proposal Due Date and Time ..... December 31, 2013 (3:00 pm, PT)

This Schedule of Events is subject to change. Any changes will be made through the issuance of Written Addenda.

### 1.02 PRE-PROPOSAL CONFERENCE

A voluntary Pre-Proposal Conference will be held on December 18, 2013, 10:00 AM PT, at 2020 Marine Science Dr., Newport, Oregon 97365. If you are unable to attend in person but wish to call in, a teleconference number will be available. Please contact the Administrative Contact(s) listed in section 1.04 below for the teleconference number. Not participating will not impact a proposers' evaluation.

The vessel will be available for inspection at that time.

### 1.03 ISSUING OFFICE

The Procurement, Contracts, and Materials Management (PCMM) department of Oregon State University (OSU) is the issuing office and is the sole point of contact for this Request for Proposal. Address all concerns or questions regarding this Request for Proposal to the Administrative Contact identified below.

### 1.04 ADMINISTRATIVE CONTACT

### ALTERNATE

Name:	James Figgins	Deanne Lahaie-Noll
Title:	Purchasing Analyst III	Procurement Contracts Officer
Telephone:	541-737-6995	541-737-1150
Fax:	541-737-2170	541-737-2170
E-Mail:	<a href="mailto:James.figgins@oregonstate.edu">James.figgins@oregonstate.edu</a>	<a href="mailto:Deanne.lahaie-noll@oregonstate.edu">Deanne.lahaie-noll@oregonstate.edu</a>

### 1.05 DEFINITIONS

As used in this Request for Proposal, the terms set forth below are defined as follows:

- a. "Addenda" means an addition to, deletion from, a material change in, or general interest explanation of the Request for Proposal.
- b. "Exhibits" means those documents which are attached to and incorporated as part of the Request for Proposal.
- c. "Proposal" means an offer, binding on the Proposer and submitted in response to a Request for Proposal.
- d. "Proposer" means an entity that submits a Proposal in response to a Request for Proposal.
- e. "Proposal Due Date and Time" means the date and time specified in the Request for Proposal as the deadline for submitting Proposals.
- f. "Request for Proposal" (RFP) means a Solicitation Document to obtain Written, competitive Proposals to be used as a basis for making an acquisition or entering into a Contract when price will not necessarily be the predominant award criteria.
- g. "Responsible" means an entity that demonstrates their ability to perform satisfactorily under a Contract by meeting the applicable standards of responsibility outlined in OAR 580-061-0130.
- h. "Responsive" means a Proposal that has substantially complied in all material respects with the criteria outlined in the Request for Proposal.
- i. "Written or Writing" means letters, characters, and symbols inscribed on paper by hand, print, type, or other method of impression intended to represent or convey particular ideas or meanings.

## **2.0 INTRODUCTION AND BACKGROUND**

### 2.01 INTRODUCTION

Procurement and Contract Services is seeking Responsive Responsible Proposers to submit Proposals for the drydocking and rrepair of the research vessel R/V Oceanus. Proposals will be evaluated based on the quality of work performed on other, similar projects, the facilities available to do the work, the planned schedule of the work and the ability to meet the schedule and budgetary constraints. OSU intends that this process results in a contract that provides quality work in a timely manner at a reasonable price.

### 2.02 BACKGROUND

Oceanus is a mid-sized research vessel designed for expeditions lasting two to four weeks. Oceanus accommodates a crew of 12 and a scientific party of 19 for up to 30 days at sea.

The principal dimensions of the vessel are:

Length Overall	177 feet
Beam	33 feet
Draft (full load)	17.5 feet
Displacement (full load)	960 long ton
Estimated maximum draft upon arrival at shipyard	16 feet
Estimated maximum displacement upon arrival at shipyard	1000 long ton

The vessel's hailing port is Newport, Oregon and is utilized by scientists and researchers conducting oceanographic research and education. The R/V Oceanus is managed by OSU Ship Operations, located adjacent to the Hatfield Marine Science Center in Newport.

Additional specifications/information can be found at <http://www.shipops.oregonstate.edu/ops/oceanus/2014ShipyardDrawings>.

### 2.03 OREGON STATE UNIVERSITY

Founded in 1868, Oregon State University is a comprehensive, research-extensive, public university located in Corvallis. OSU is a member of the Oregon University System and one of only two American universities to hold the Land Grant, Sea Grant, Space Grant and Sun Grant designations. OSU is also the only Oregon institution to hold the Carnegie Foundation's top ranking for research universities, a recognition of the depth and quality of OSU's graduate education and research programs.

Through its centers, institutes, Extension offices and Experiment Stations, OSU has a presence in almost every one of Oregon's 36 counties, including its main campus in Corvallis, the Hatfield Marine Sciences Center in Newport and OSU-Cascades Campus in Bend. OSU offers undergraduate, masters and doctoral degrees through 12 academic colleges enrolling more than 25,000 students from every county in Oregon, every state in the country and more than 90 nations.

## **3.0 STATEMENT OF WORK**

### 3.01 SAMPLE CONTRACT

A sample contract containing a statement of work and contractual terms and conditions is included at Exhibit A & Exhibit A-1.

## **4.0 PROPOSER QUALIFICATIONS**

### 4.01 MINIMUM QUALIFICATIONS

In order to qualify as a Responsive Proposer, the Proposer needs to meet the minimum qualifications below. After verification that the minimum qualifications have been met, OSU will award points based on the level of the Proposer's qualifications.

- a. Documented history of compliance with local, state and federal safety and environmental regulations and laws.
- b. Documented experience with managing state and/or federal contracts
- c. Documented history on the calibration and maintenance of ship lifting device (i.e. graving dock, lift, etc.)
- d. Documented examples of weights accommodated and dates for ship lifting device.

### 4.02 PREFERRED QUALIFICATIONS

OSU will award additional points for Proposers able to meet the preferred qualifications below.

- a. Documented history of successfully dry-docking research vessels.
- b. On-site shop facilities capable of addressing machining and fabrication needs.
- c. Reasonable access to the vessel for sub-contractors associated with the repair of the vessel.
- d. ISO 9001 certified organization.

## **5.0 REQUIRED SUBMITTALS**

### 5.01 QUANTITY OF PROPOSAL

Submit one (1) original Proposal and five (5) duplicate copies. Mark original Proposal as "ORIGINAL". Original should contain original signatures on any pages where a signature is required. Proposals should contain the submittals listed in this section below.

### 5.02 REQUIRED SUBMITTALS

It is the Proposer's sole responsibility to submit information in fulfillment of the requirements of this Request for Proposal. If pertinent information or required submittals are not included within the Proposal, it may cause the Proposal to be rejected or have an adverse impact on evaluation.

Proposers should submit the following information:

- Detailed information about how the Proposer can provide the requirements listed in Section 3.0; Exhibit A. Demonstrate an understanding of the contracted requirements.
- Detailed information about how the Proposer meets the minimum/preferred qualifications detailed in section 4. Most of the preferred will be answered by addressing the items below. Provide enough detail on minimum qualifications so determination of responsiveness can be made.
- Past Performance and Investigation of References (see "a" below)
- Facilities (see "b" below)
- Timeline (see "c" below)
- Financial (see "d" below)
- Exhibit B: Certifications, fully completed.
- Exhibit C: References, fully completed.
- Exhibit D: Pricing, fully completed.

### **Submittal Specifics:**

#### **(a) Past Performance and Investigation of References**

All bidders shall submit at least three (3) references on Exhibit C. At least one reference shall be a public agency such as the U.S. Government (USCG, NOAA, Navy) or a State Agency such as the

Alaska Marine Highway System, Washington State Ferries, University of Washington, University of California, Oregon State University, etc. References from agencies with oceanographic ships (NOAA, U of W, Scripps, etc.) are particularly desirable. These references shall have had one or more vessels in the bidder's facilities within the past five years undergoing routine drydocking/repair periods. The list of references will include company/agency name, contact name, current phone number, mailing address, and e-mail address (if applicable). The name of the vessel and the year drydocked will be included as well. If applicable, it is allowable for bidders to list OSU as a reference. OSU reserves the right to consider and evaluate references and comments from other customers who have used the proposer for drydock work, including OSU, as well as listed references provided by the proposers. The questions asked will include:

- a) Satisfaction with the overall quality of work performed on the vessel. Did the work meet established USCG, ABS and other regulatory agency criteria?
- b) Did problems develop after the yard period and, if so, how were they dealt with?
- c) Did the shipyard establish a schedule and follow it? Was the work completed on time?
- d) Did the shipyard provide written "Condition Found Reports" in a timely manner and with sufficient information for the owner's representative to make an informed decision on the scope of needed work?
- e) Were the time and costs associated with unanticipated work "change orders" reasonable?
- f) Were there any particularly noteworthy good or bad experiences with the shipyard?

The Evaluation Committee will attempt to contact each reference during normal OSU business hours. A maximum of three (3) attempts over a period of no more than five (5) working days will be made to contact each reference. If the three attempts are unsuccessful, the bidder will receive a "0" for that reference.

The answers to each question will be rated on a scale from 1 to 10, 10 being the highest/best. So 3 references x (6 questions x up to 10 points each) = 180 points (total reference points will be divided by 6 for 30 possible points per proposal).

Up to five (5) additional points may be assigned accordingly if the bidder lists two or more public or state agencies and agencies with oceanographic ships (NOAA, U of W, Scripps, etc.) making for a possible total of 35 points for the Past Performance and References section.

**(b) Facilities:** All proposers shall submit a description of their facility including the size and capacity of the drydock to be used, length of clear pier space for alongside work, and depth of water between the nearest charted navigation channel and the proposer's drydock and piers. The dock must be capable of safely drydocking *R/V Oceanus* and there must be adequate water depth for the safe navigation of the vessel to/from the proposer's facilities as well as alongside the dock. OSU will make the determination regarding criteria based on the information provided, other published information, and, if needed, a site visit

A yard with more than one drydock capable of hauling *R/V Oceanus* is preferable to a yard with only one. The availability of cranes, alongside pier space, shop space, etc. will also be considered.

A yard with good availability of trades and shops (e.g., electrical, pipefitting, etc.) either on the facility or through sub-contractors is preferable.

**(c) Timeline:** All bidders shall submit a schedule showing the beginning and completion dates of each item in the detailed specifications. This timeline must be within the available shipyard period

stated in the attached sample contract, Exhibit A, section 2, Vessel Availability.

The schedule should allow “slack” for possible additional work (e.g., drydocking and items such as pulling the tail shaft, inspecting the bow thruster, etc. should be early in the period so additional work, if required, can be accommodated without lengthening the overall repair period.)

The schedule should indicate a good understanding of the scope of work for each item.

The schedule should clearly separate items (e.g., sand blasting and painting the hull versus pulling the tail shaft) which can't be performed at the same time.

The schedule should be flexible to accommodate weather conditions (e.g. rain and freezing weather) which may interfere with some activities

**(d) Financial:** For contract award purposes the work items are separated into two classes:

CLASS A: Those items, such as drydocking, which are basic to the work and will be awarded on a fixed price basis.

CLASS B: Those items which are deemed optional by OSU and may, or may not, be awarded based on quoted price, need at time of drydock, or other information not available at the time the specifications were written.

Proposers shall submit a price for all items on Exhibit D. Class A and B items will be bid on a fixed price per item basis. A total price, equaling the sum of all bids for Class A and B items will be provided. The Contract award shall be determined by the total cost and desirable features points assigned by the evaluation team.

OSU reserves the right to award any one item, or any combination of items, or none of the items included in these specifications. OSU may elect to not award any particular item or combination of items if it is determined to be in the best interest of OSU.

Changes to any specifications may be made only by written change order signed by the OSU Marine Superintendent or the Port Engineer and issued by OSU's PCMM department. Any modifications shall be processed as a change order to the Contract and issued by the OSU PCMM department. Cost of such change order shall be negotiated at the time of issuance. The Contractor will receive written notification by the Owner's Representative of the items selected for completion.

The financial proposals shall be awarded points based on the lowest total cost to OSU. The total number of price points available will be 100.

The proposer who proposes the lowest total cost to OSU will receive the maximum amount of price points (100 points). Proposers whose total cost is higher than the lowest will receive a fewer number of price points in a relational manner as described below:

Example of Pricing Points Calculation:

Proposer A's cost is found to be \$275.00 (the lowest).

Proposer A is awarded 100 Price Points

Proposer B's cost total is found to be \$302

Proposer B is awarded 91 Price Points (275/302 X 100)  
Proposer C's cost total is found to be \$351.00  
Proposer C is awarded 78 Price Points (275/351 X 100)  
Proposer D's cost total is found to be \$388.00  
Proposer D is awarded 71 Price Points (275/388 X 100)

## **6.0 EVALUATION**

### 6.01 EVALUATION

The stages of review and evaluation are as follows:

a. Determination of Responsiveness:

OSU will first review all Proposals to determine Responsiveness. Proposals that do not comply with the instructions or are incomplete may be deemed non-Responsive. Written notice will be sent to Proposers whose Proposal is deemed non-Responsive identifying the reason. A proposer has the right to appeal the decision pursuant to OAR 580-061-130(5)(a).

b. First Stage Evaluation:

Those Proposals determined to be Responsive will be evaluated using the required submittals. Proposals will be scored based on the evaluation criteria listed below in section 6.03. Scores will be used to determine Proposer's within a competitive range. The competitive range will be made of Proposers whose individual scores, when viewed together, form a group of the highest ranked Proposers above a natural break in the scores.

OSU may award after the first stage evaluation to the highest ranked Proposer without moving on to the second stage evaluation. If this option is selected, Written notice of intent to award the Contract to the highest ranked Proposer will be provided to all Responsive Proposers, or an award may be made directly without notice of intent in those instances of a single Responsive Proposer.

OSU reserves the right to ask clarifying questions of any or all proposers. These questions will fall within the intent of the RFP and be necessary to adequately score proposals in stage one.

c. Second Stage Evaluation:

If award is not made after the first stage evaluation, OSU may choose any of the following methods in which to proceed:

- i. Issue a Written invitation to Proposers within the competitive range requesting an interview, presentation, site visit or any other evaluative method that is relevant to the goods or services solicited in the Request for Proposal. Written invitations will contain the evaluation criteria and scoring that will be used by the evaluation committee.
- ii. Engage in oral or Written discussions with and receive best and final Proposals from all Proposers in the Competitive Range or all Proposers submitting Responsive Proposals. Discussions may be conducted for the following purposes:
  - Informing Proposers of deficiencies in their initial Proposals;
  - Notifying Proposers of parts of their Proposals for which OSU would like additional information; or
  - Otherwise allowing Proposers to develop revised Proposals that will allow OSU to obtain the best Proposal based on the requirements set forth in this Request for Proposal.



The conditions, terms, or price of the Proposal may be altered or otherwise changed during the course of the discussions provided the changes are within the scope of the Request for Proposal. Best and final Proposals will be scored based on the evaluation criteria listed below in section 6.03.

Points awarded in the first stage evaluation will not be carried to the second stage evaluation. Contract will be awarded to the Proposer who in OSU's opinion, best meets the requirements and qualifications of the RFP and OSU's needs.

d. Additional Stages of Evaluation:

If after completion of the second stage of evaluation, an award is not made, OSU may add another stage of evaluation using any of the methods outlined in the second stage evaluation above.

**6.02 EVALUATION CRITERIA**

Points will be given in each criteria and a total score will be determined. The maximum points available for each criterion are identified below.

<u>Evaluation Criteria</u>	<u>Points</u>
Detailed information about how the Proposer meets the preferred qualifications detailed in section 4 & information demonstrating a thorough understanding of Exhibit A & A-1; Section 3.0	25
Past Performance and References	35
Facilities	25
Timeline	35
Financial/Pricing	<u>100</u>
<b>Total</b>	<b>220</b>

**6.03 NEGOTIATIONS**

OSU may commence serial negotiations with the highest-ranked Proposer or commence simultaneous negotiations with all eligible Proposers. OSU may negotiate:

- a. The statement of work;
- b. The Contract price as it is affected by negotiating the statement of work; and
- c. Any other terms and conditions determined by OSU in its sole discretion to be reasonably related to those expressly authorized for negotiation. Accordingly, Proposers will not submit and OSU will not accept for negotiation, any alternative terms and conditions that are not reasonably related to those expressly authorized for negotiation.

Terms and conditions within the sample contract that are unrelated to the statement of work or Contract price may be negotiated after award, but before legal review or execution of the Contract.

OSU reserves the right to fall back to the second highest rated proposal if negotiations with the highest rated proposer fail to reach an acceptable conclusion.

**6.04 INVESTIGATION OF REFERENCES**

OSU reserves the right to investigate and to consider the references and the past performance of any Proposer with respect to such things as its performance or provision of similar goods or services, compliance with specifications and contractual obligations, and its lawful payment of suppliers, subcontractors, and workers. OSU further reserves the right to consider past performance, historical information and facts, whether gained from the Proposal, Proposer interviews, references, OSU or any other source in the evaluation process. OSU may postpone the award or execution of the Contract after the announcement of the notice of intent to award in order to complete its investigation.

## **7.0 INSTRUCTIONS TO PROPOSERS**

### **7.01 APPLICABLE STATUTES AND RULES**

This Request for Proposal is subject to the applicable provisions and requirements of the Oregon Revised Statutes, Oregon Administrative Rules, and OSU Policies and Procedures.

### **7.02 MANUFACTURER'S NAMES AND APPROVED EQUIVALENTS**

Unless qualified by the provision "NO SUBSTITUTE" any manufacturers' names, trade name, brand names, information and/or catalogue numbers listed in a specification are for information and not intended to limit competition. Proposers may offer any brand for which they are an authorized representative, which meets or exceeds the specification for any item(s). If proposals are based on equivalent products, indicate in the proposal form the manufacturers' name and number. Proposers shall submit with their proposal, sketches, and descriptive literature, and/or complete specifications. Reference to literature submitted with a previous proposal will not satisfy this provision. Proposers shall also explain in detail the reason(s) why the proposed equivalent will meet the specifications and not be considered an exception thereto. Proposals that do not comply with these requirements are subject to rejection. Proposals lacking any written indication of intent to provide an alternate brand will be received and considered in complete compliance with the specification as listed in the RFP.

### **7.03 REQUESTS FOR CLARIFICATION OR CHANGE**

Requests for clarification or change of the Request for Proposal must be in Writing and received by the Administrative Contact no later than the Deadline for Request for Clarification or Change as specified in the Schedule of Events. Such requests for clarification or change must include the reason for the Proposer's request. OSU will consider all timely requests and, if acceptable to OSU, amend the Request for Proposal by issuing an Addendum. Envelopes, e-mails or faxes containing requests must be clearly marked as a Request for Clarification or Change and include the RFP Number and Title.

### **7.04 ADDENDA**

Only documents issued as Written Addenda by PCMM serve to change the Request for Proposal in any way. No other direction received by the Proposer, written or verbal, serves to change the Request for Proposal. PCMM will notify potential Proposers through publication of the Addenda on the OUS procurement website. If you have received a Request for Proposal you are advised to consult the OUS procurement website, prior to Proposal submittal, to ensure that you have not missed any Addenda. Proposers are not required to return Addenda with their Proposal. However, Proposers are responsible for obtaining and incorporating any changes made by the Addendum into their Proposal. Failure to do so may, in effect, make the Proposal non-Responsive, which may cause the Proposal to be rejected.

### **7.05 PREPARATION AND SIGNATURE**

All Required Submittals must be Written or prepared in ink and signed in ink by an authorized representative with authority to bind the Proposer. Signature certifies that the Proposer has read, fully understands, and agrees to be bound by the Request for Proposal and all Exhibits and Addenda to the Request for Proposal.

### **7.06 PUBLIC RECORD**

Upon completion of the Request for Proposal process, information in your Proposal will become subject records under the Oregon Public Records Law. Only those items considered a "trade secret" under ORS 192.501(2), may be exempt from disclosure. If a Proposal contains what the Proposer considers a "trade secret" the Proposer must mark each sheet of information as such. Only bona fide trade secrets may be exempt and only if public interest does not require disclosure.

### **7.07 SUBMISSION**

Proposals must be submitted in a sealed envelope and be delivered to the submittal location listed on the Request for Proposal cover sheet no later than the Proposal Due Date and Time. Proposer must specify on

the outside of the envelope the Request for Proposal number, the Request for Proposal title and the Proposal Due Date and Time. **E-MAIL OR FACSIMILE PROPOSALS WILL NOT BE ACCEPTED.**

#### 7.08 MODIFICATION

Prior to submittal, Proposers should initial modifications or erasures in ink by the person signing the Proposal. After submittal but prior to the Proposal Due Date and Time, Proposals may be modified by submitting a Written notice indicating the modifications and a statement that the modification amends and supersedes the prior Proposal. After the Proposal Due Date and Time, Proposers may not modify their Proposal.

#### 7.09 WITHDRAWALS

A Proposer may withdraw their Proposal by submitting a Written notice to the Administrative Contact identified in this Request for Proposal prior to the Proposal Due Date and Time. The Written notice must be on the Proposer's letterhead and signed by an authorized representative of the Proposer. The Proposer, or authorized representative of the Proposer, may also withdraw their Proposal in person prior to the Proposal Due Date and Time, upon presentation of appropriate identification and evidence of authority to withdraw the Proposal satisfactory to OSU.

#### 7.10 LATE SUBMITTALS

Proposals and Written notices of modification or withdrawal must be received no later than the Proposal Due Date and Time. OSU may not accept or consider late Proposals, modifications, or withdrawals except as permitted in OAR 580-061-0120.

#### 7.11 PROPOSAL OPENING

Proposals will be opened immediately following the Proposal Due Date and Time at the Submittal Location. Proposer may attend the Proposal opening. Only the names of the Proposers submitting Proposals will be announced. No other information regarding the content of the Proposals will be available.

#### 7.12 PROPOSALS ARE OFFERS

The Proposal is the Proposer's offer to enter into a Contract pursuant to the terms and conditions specified in the Request for Proposal, its Exhibits, and Addenda. The offer is binding on the Proposer for one hundred twenty (120) days. OSU's award of the Contract constitutes acceptance of the offer and binds the Proposer. The Proposal must be a complete offer and fully Responsive to the Request for Proposal.

#### 7.13 CONTINGENT PROPOSALS

Proposer shall not make its Proposal contingent upon OSU's acceptance of specifications or contract terms that conflict with or are in addition to those in the Request for Proposal, its Exhibits, or Addenda.

#### 7.14 RIGHT TO REJECT

OSU may reject, in whole or in part, any Proposal not in compliance with the Request for Proposal, Exhibits, or Addenda, if upon OSU's Written finding that it is in the public interest to do so. OSU may reject all Proposals for good cause, if upon OSU's Written finding that it is in the public interest to do so. Notification of rejection of all Proposals, along with the good cause justification and finding of public interest, will be sent to all who submitted a Proposal.

#### 7.15 AWARDS

OSU reserves the right to make award(s) by individual item, group of items, all or none, or any combination thereof. OSU reserves the right to delete any item from the award when deemed to be in the best interest of OSU.

#### 7.16 LEGAL REVIEW

Prior to execution of any Contract resulting from this Request for Proposal, the Contract may be reviewed by a qualified attorney for OSU pursuant to the applicable Oregon Revised Statutes and Oregon Administrative Rules. Legal review may result in changes to the terms and conditions specified in the Request for Proposal, Exhibits, and Addenda.

#### 7.17 PROPOSAL RESULTS

A Written notice of intent to award will be issued to all Proposers. The Proposal file will be available for Proposer's review during the protest period at the PCMM Department. Proposers must make an appointment with the Administrative Contact to view the Proposal file. After the protest period, the file will be available by making a Public Records Request to OSU Office of General Counsel.

#### 7.18 PROPOSAL PREPARATION COST

OSU is not liable for costs incurred by the Proposer during the Request for Proposal process.

#### 7.19 PROPOSAL CANCELLATION

If a Request for Proposal is cancelled prior to the Proposal Due Date and Time, all Proposals that may have already been received will be returned to the Proposers. If a Request for Proposal is cancelled after the Proposal Due Date and Time or all Proposals are rejected, the Proposals received will be retained and become part of OSU's permanent Proposal file.

#### 7.20 PROTEST OF CONTRACTOR SELECTION, CONTRACT AWARD

Any Proposer who feels adversely affected or aggrieved may submit a protest within three (3) business days after OSU issues a notice of intent to award a Contract. The protest must be clearly identified as a protest, identify the type and nature of the protest, and include the Request for Proposal number and title. The rules governing protests are at OAR 580-061-0145.

**EXHIBIT A**  
**SAMPLE CONTRACT/STATEMENT OF WORK**

This is a Contract between the State of Oregon acting by and through the State Board of Higher Education on behalf of **OREGON STATE UNIVERSITY (OSU)** and **(INSERT NAME OF CONTRACTOR] (CONTRACTOR)**.

WHEREAS, **OSU** needs the services outlined in this Contract and has competitively solicited for those services under Request for Proposal number JF167827P entitled Drydock & Repair R/V Oceanus; and

WHEREAS, **CONTRACTOR** has submitted a proposal in response to the above referenced Request for Proposal and was selected as the contractor best able to provide this service; and

WHEREAS, **OSU** and **CONTRACTOR** are both in agreement with the terms of this Contract and desire to enter into this mutually beneficial Contract;

NOW, THEREFORE, **OSU** and **CONTRACTOR** agree as follows:

**1. DEFINITIONS:** (these definitions apply to the entire Contract, not just this section):

"Change Order" means a written formal consent by Owner on an agreed upon standard Change Order form signed by authorized representatives of both parties that allows for a change, deviation, or addition to Exhibit 1 inclusive of Exhibit A-1.

"Contract" means the entire written agreement between the parties, including but not limited to the Request for Proposal ("RFP") JF167827P and its specifications, terms and conditions; solicitation addenda and contract amendments, if any.

"Contractor" means a person or organization with whom OSU has contracted for the provision of services pursuant to this Contract.

"Contractor Coordinator" means the Contractor appointed designee responsible for acting on behalf of the Contractor to represent all trades and activities for which the Contractor is responsible. This person shall act on behalf of and as an agent of the Contractor

"Days" means calendar days.

"OAR" means the Oregon Administrative Rules adopted by the Oregon State Board of Higher Education or OSU.

"ORS" means the Oregon Revised Statutes.

"OSU" means the State of Oregon, acting by and through the State Board of Higher Education, on behalf of Oregon State University.

"Owner" means OSU Ship Operations. While the National Science Foundation holds title to the R/V Oceanus, OSU Ship Operations acts as steward and manages the operation of, scheduling, maintenance, and home port.

"PCMM" means the Procurement, Contracts, and Materials Management department at OSU within the Business Services department.

"Proposal" means Proposer's response to the RFP.

"Proposer" means any respondent to this RFP. The successful Proposer becomes the Contractor. Statements

referring to "Proposer" generally indicate requirements which must be included with the Proposal. Statements referring to "Contractor" generally indicate requirements that will become Contractual obligations.

"RFP" means Oregon State University Request for Proposal JF167827P entitled Drydock & Repair R/V Oceanus.

"RFP and Contract Administrator" means the PCMM staff responsible for managing the RFP and contract administration for RFP JF167827P and the resulting contract.

"Stop Work" means halting any current or ongoing progress of work due to poor workmanship or unsafe working conditions.

"Substantial Completion" means the date when the Owner accepts in writing Contractor having reached that state of completion when all systems are functional, and any discrepancies have been remedied.

## **2. VESSEL AVAILABILITY:**

The vessel will be available at to depart Newport, OR on, or about, February 3<sup>rd</sup>, 2013 for delivery to a shipyard by the Owner. Work shall commence upon arrival at the Contractor's facility and be must be completed, including necessary dock and sea trials per the timeline agreed upon in the solicitation process, (Owner estimates a four (4) week timeline). The completion of work date shall be established by the yard at least two weeks in advance of the sea trial and/or completion date to allow time for O.S.U. to assemble the necessary crew.

## **3. NAVIGATION:**

R/V Oceanus has a deep draft (17.5 feet at full load) for her length. The estimated drafts on arrival at the shipyard will be approximately 16' at the stern. The current editions of navigation charts published by NOAA will be used to determine the controlling water depths between the sea buoy and the Contractor's facility. Should the charts show insufficient water depths for safe navigation, the Contractor is required to provide other competent documentation to show that depths are adequate for the safe navigation of the vessel to the facility. Lack of safe navigation conditions will be sufficient cause to not award or to cancel the contract to a bidder. The shipyard shall provide all necessary pilots, tugs, and line handlers to get the ship from the fairway to the drydock and from the drydock to the fairway or suitable pier. The ship's main propulsion and thruster shall not be used to place the vessel in the drydock or remove it from the drydock.

**4. OWNER'S REPRESENTATIVE:** An Owner's Representative shall be appointed, in writing, by the OSU Ship Operations Marine Superintendent. It is possible that, during the course of the work period, more than one individual will be appointed, but only one individual will act as the Owner's Representative at any given time. The Owner's Representative(s) will be the on-site representative of OSU during the course of work and will, in addition to any specific requirements identified in the statement of work, perform the following:

- (a) Be the liaison between the contractor and the OSU Ship Operations office.
- (b) Receive all "Condition Found Reports," Inspection Reports," Technical data, etc. required by the Contract.
- (c) Respond to information requests by the contractor.
- (d) Witness, or designate another OSU employee to witness, all inspections and tests identified in the contract.
- (e) Attend all progress and other meetings.
- (f) Recommend the approval/disapproval of additional work to the OSU Marine Superintendent and Contracting Officer and forward approved contract modifications to the contractor.
- (g) Otherwise represent OSU Ship Operations as needed in the course of the shipyard work.

Owner's Representative

[CONTACT NAME]

[CONTACT TITLE]

[COMPANY NAME]

[ADDRESS]

[CITY, STATE, ZIP]  
[PHONE NUMBER]  
[EMAIL ADDRESS]

## 5. GENERAL REQUIREMENTS:

### (a) Contractor Coordinator:

(1) The Contractor shall appoint a Coordinator to represent all trades and activities for which the Contractor is responsible. This person shall act on behalf of and as an agent of the Contractor. The Coordinator or his agent shall convene with the Owner's Representatives to discuss the status and progress of tasks at the start of each work day. The scheduling and location of this meeting shall be mutually agreeable to all parties. Any "stop work" order delays or other interruptions to work ordered by the Contractor and/or Owner's Representatives due in any respect to poor workmanship and/or unsafe working conditions, and all costs associated therewith, shall be the responsibility of the Contractor.

#### Contractor Coordinator

[CONTACT NAME]  
[CONTACT TITLE]  
[COMPANY NAME]  
[ADDRESS]  
[CITY, STATE, ZIP]  
[PHONE NUMBER]  
[EMAIL ADDRESS]

### (b) Production Schedule:

(1) The Contractor is encouraged to maintain a production schedule such as a critical path network (CPN) or Gantt chart as means of planning, tracking, and coordinating the accomplishment of contract work. The production schedule shall have the appropriate columns to indicate Item Number, Item Description, Estimated Duration of Days to Complete the Item, Start Date, Finish Date, Float Days, and Percentage Weight of the Total Contract for each item.

(2) For work involving disassembling and inspection of equipment, machinery or systems, the work must be completed and a Condition Report must be submitted during the first 25-percent of the work performance period, unless an earlier requirement is included in the specific item.

(3) Any "stop work" order delays or other interruptions to work ordered by the Contractor and/or Owner's Representatives due in any respect to poor workmanship and/or unsafe working conditions, and all costs associated therewith, shall be the responsibility of the Contractor.

### (c) Condition Reports:

(1) A written Condition Report, in printed form with an electronic copy, shall be prepared and submitted by the Contractor to the Owner's Representative on all of the following occasions:

- (i) Whenever specifically required by this document.
- (ii) Whenever the Contractor determines or notes that additional work or material or other deviation is necessary in order to produce a reliable and/or complete repair.
- (iii) Whenever measurements, tests or inspections are required, results and findings shall be documented on a Condition Report.

(2) Condition Reports shall contain, as a minimum, the following:

- (i) Name of the ship.
- (ii) Contract number and related work item number.
- (iii) Detailed description of conditions observed, including a record of all measurements taken and other supporting data.
- (iv) Recommendations and cost of additional work and materials deemed to be needed, if any.
- (v) Estimate of the impact on the completion of the contract, if any.

(3) Condition Reports shall be submitted to the Owner's Representative within twenty-four hours after completing the measurements, inspections or tests, or after the need for additional work or material is noted.

**(d) Changes to Specifications:**

(1) Changes to any specifications may be made only by written change authorization signed by the OSU Marine Superintendent or the Port Engineer and issued by OSU's PCMM department. Any modifications shall be processed with a change authorization and issued by the OSU PCMM department. Cost of such change authorization shall be negotiated prior to the time of issuance. The Contractor will receive written notification by the Owner's Representative of the items selected for completion. Contractor shall assume costs for any additional work completed that has not been agreed upon in advance by a Change Authorization.

**(e) Work Hours:**

(1) At the beginning of the repair period, the Contractor shall advise the Owner's Representative in writing of the planned regular workday schedule. In the event the contractor desires to work at times other than those previously scheduled, notify the Owner's Representative at least four (4) hours prior to the end of the scheduled workday preceding the unscheduled work time. If previously unscheduled work is to be performed on a weekend or federal holiday, the Owner's Representative must be notified prior to 9:00am on the last regular workday before the unscheduled work. No overtime will be paid unless prior written approval is provided by owner's representative.

**(f) Materials and Workmanship:**

(1) All materials furnished by the Contractor or subcontractors under the contract shall be in accordance with applicable rules and regulations of the U.S. Coast Guard (USCG), American Bureau of Shipping (ABS) and other applicable standards. Workmanship shall conform to the current edition of the American Bureau of Shipping's "Rules for the Building and Classing of Steel Vessels." Welding shall be performed in accordance with the applicable requirements of the USCG.

(2) The ship will be delivered to the Contractor's facility in an "as-is" condition. It is the Contractor's responsibility to engineer, remove, modify, repair or replace all systems necessary to accomplish the contracted work.

(3) The Contractor shall provide all necessary plant facilities, engineering labor, services, materials, machinery, equipment, appurtenances, tools, appliances, transportation, supplies, fuel, water, power, lighting, air, crane services, lift and disposal services, rigging, communication, line handling, wharfage, docking and shifting of the vessel, necessary to complete the specified work items.

(4) Defects, appearing at any stage of construction through the return of the vessel and the subsequent warranty period, shall be cause for rejection of the material or work, even though the material or work had been previously approved as satisfactory. The defect shall be corrected by the Contractor at his expense.

(5) Any and all damages to the vessel or equipment (e.g., paint peeled off by barrier tape, nail holes, water damage, broken glass, etc.) caused during the performance of the work shall be repaired by the Contractor, to the satisfaction of the Owner's Representative and at no additional expense to OSU.

**(g) Protective Coverings:**

(1) Prior to starting work on interior spaces, protect the decks and deck coverings of spaces in which contract work is to be performed and spaces through which workers will traverse by covering the decks and deck coverings with a temporarily fitted heavy vinyl, plywood or particle board, with all edges and joints of the protective covering securely taped. Tape used for securing temporary coverings shall have an adhesive that does not remove paint from decks or bulkheads when removed. Maintain the



protective covering in place during the entire contract period, renewing sections that are damaged during the contract period. For those decks over which equipment, valves, piping, or other materials must be handled, the temporary protective covering shall be plywood or particle board and shall be of sufficient thickness to protect the deck from damage in the event the equipment or materials are dropped.

(2) Protect all compartments, machinery, equipment, deck coverings, furnishings, vent terminals, insulation, glass, cables, piping systems, coatings, structures, and other ship components from damage and from entry of dust, dirt, grit, sand, and other foreign particles.

(3) Any and all damage and contamination resulting from failure to provide adequate protection shall be repaired and cleaned to reestablish the condition that existed at the start of the work.

(4) After completion of all other work, remove and dispose of all protective coverings.

**(h) Safety, Fire Protection and Cleanliness:**

(1) The Contractor shall be responsible for safety, fire protection and the general cleanliness of work areas during the repair period. The Contractor shall make a reasonable effort to clean all traffic and work areas daily. On completion of the work each day, loose gear shall be stowed out of traffic areas, manhole covers temporarily replaced, and deck plates replaced where practicable. The Contractor shall provide fire protection services in accordance with the "Utilities and Services" portion of the specifications.

(2) Whenever abrasive blasting or other operations on or near the ship causes collection of blasting residue or other foreign particles to collect on exterior decks of the ship, the Contractor shall vacuum or sweep the decks to remove the residue and particles prior to the end of the day on which the contamination occurred. Do not wash the residue or particles through the ship's deck drains.

(3) Any and all trash, dust, grit, paint chips and other dirt or debris generated by the contracted work shall be removed from the vessel on a daily basis during the course of the work and properly disposed of by the Contractor.

(4) The Contractor shall provide fire watch standers whenever welding, flame cutting or other hot work is performed where combustible materials are present within 35 feet; or where wall or deck openings within a 35-foot radius expose combustible materials in adjacent areas; or when combustible materials are adjacent to the opposite side of metal partitions exposed to hot work, and could be ignited by conduction or radiation. In the latter case, a fire watch stander is required on both sides of the partition. The fire watch stander shall be outfitted by the contractor with a fire extinguisher of a suitable size and type. Prior to leaving the work site, the fire watch stander shall verify with the worker performing the hot work that no further hot work will be performed.

(5) Engine room bilge cleaning: During the first three days of the repair period, pump and properly dispose of all oily water from the engine room bilges. At the completion of all other work, clean the engine room bilges by steam cleaning or other method approved by Owner's Representative. Remove all debris and pump the bilges dry.

(6) Hazardous Materials: O.S.U. has made and will continue to make all reasonable efforts to identify asbestos-containing materials (ACM) and lead-based paint used in prior construction and repair of the vessel. Any material encountered in the course of work that has not been previously identified as positive or negative for asbestos or lead, and may reasonably be suspected to contain actionable levels of either, shall be sampled by a qualified individual and analyzed by a qualified laboratory at Contractor's expense prior to disturbing the material. If on analysis the material is found to contain actionable levels of ACM or lead, all proper measures for containment, abatement and personnel protection will be taken before and during the continuation of work involving the material. Such

containment, abatement and protective measures will require a Change Work Authorization.

**(i) Disposal of Scrap and Fluids:**

(1) Any and all offcuts or similar remnants of metal, wood or other material remaining from work performed shall be removed from the vessel and properly disposed of by the Contractor. Any surplus of new material purchased for but not used in the work shall be delivered to Owner at the completion of all contracted work, or may be retained by the Contractor with a corresponding reduction to the charges for the work upon agreement in writing by the Contractor and Owner's Representative.

(2) If any parts, fittings, equipment and/or machinery are removed and replaced with new or rebuilt items, the removed items shall be presented to Owner's Representative for inspection prior to disposal. This inspection requirement will not apply to "expendable" items such as bolts, washers, gaskets, etc. removed and replaced in the normal course of the work. Unless otherwise instructed in writing by Owner's Representative upon inspection, the removed items shall be properly disposed of by the Contractor.

(3) Whenever work requires that equipment, machinery, piping, tanks or bilges be drained of fluid, the Contractor shall be responsible for draining and proper disposal of the fluid. The Contractor shall pump all fluid from the applicable spaces into dockside tanks and properly dispose of the fluid.

**(j) Interferences / Access**

(1) The Contractor shall, without additional charges to the contract, remove any and all interferences required in order to perform the work specified in each item. The Contractor shall be responsible for identifying all interferences involved in accomplishing required work. This shall include the disassembly and removal of machinery, piping, ducts, cable, wiring, insulation, structures, and anything else which interferes with the proper accomplishment of work. Except as otherwise specified, this does not include relocations made necessary by new installations which physically prevent an interference from being returned to its existing location.

(2) The Contractor shall, without additional charges to the contract, restore all interferences to their existing configuration and condition. All damaged or missing fasteners shall be replaced with new fasteners of the same as original. New gaskets, packing and seals shall be installed on all disturbed connections and proved leak free. In place of material that is rendered unsuitable for reinstallation during removal or storage, provide and install new materials which are equal in composition, strength, type, and size as existed prior to removal. All insulation removed or damaged shall be renewed with new insulation. Damaged coatings shall be prepared and painted to match the coating that existed prior to the start of work.

(3) The Contractor may, with prior approval (see section (4) below), cut access openings in ship's structure if required to perform work. Such openings shall be limited to those which are essential for access to otherwise inaccessible areas or which greatly improve accessibility for removals or installations.

(4) The Contractor shall submit to the Owner's Representative and to the American Bureau of Shipping (ABS), for approval, dimensioned sketches and the proposed location of any proposed access openings prior to accomplishment of the access cut. Generous radii shall be provided at all corners. Also include a description of the eventual restoration configuration, with material and welding details, and a narrative justification for cutting the opening.

**(k) Gas-Free Certification**

(1) The Contractor shall, without additional charges to the contract, be responsible for identifying and certifying that a safe atmosphere exists in and about a compartment prior to the commencement of any work. Whenever compartments must be gas-free to meet state and federal regulations, the Contractor shall pump down, open, remove sludge, clean, wipe, ventilate and take all other action required to

make the compartments safe for the work to be performed, When requested by the Contractor, and to the extent empty tank space is available, the ship's Engineers will shift fuel as required to facilitate gas-free requirements.

The Contractor shall be responsible for identifying the compartments that require gas-free certification. Specific requirements for gas-free certification are not normally included in the detailed specifications of any work item.

(2) It is anticipated that R/V Oceanus will be delivered to the contractor's facility with no more than 50% fuel on board. Offloading of remaining fuel and lube oil will be necessary for ABS inspection of fuel tanks. When the Contractor is required to, or elects to, off-load fuel or lube oil from the ship, the oil shall be pumped to and stored in a clean, moisture free, storage tank. Oil samples shall be taken when oil is removed from the ship and when it is returned to the ship, and the samples analyzed by a lab for water and impurities to verify that the oils were not contaminated while in the Contractor's possession. Alternately, the Contractor may retain and use the removed fuel or oil and provide replacement fuel or oil of the same grade, specification and quantity as was removed.

(3) Copies of gas-free certificates, issued by a Marine Chemist certified by the National Fire Protection Association, shall be posted on the ship in two locations designated by the Owner's Representative. Follow-up inspections by the Contractor's Competent Person shall also be documented at the same two locations.

**(l) Coatings:**

(1) All new and disturbed surfaces shall be prepared, primed and coated to match surrounding surfaces and in accordance with the R/V Oceanus Paint Schedule provided as Exhibit 1-A of this document. New or disturbed hull surfaces below the waterline shall be treated in accordance with the specifications in Item 103 (Painting Underwater Body) of this document and new or disturbed surfaces in tanks or bilges shall be treated in accordance with the specifications in the R/V Oceanus Paint Schedule.

**(m) Tests and Inspections:**

(1) At least four hours, but not more than 24 hours, in advance of conducting each required test and inspection, the Contractor shall notify the Owner's Representative in order to allow the Owner's Representative the opportunity to witness, or to arrange for another Owner's Representative to witness, the tests and inspections. If an Owner's Representative is not present at the scheduled time of the test or inspection, and if the required 4-hour advance notification was furnished to the Owner's Representative, the Contractor may proceed with the test or inspection.

(2) All tests and inspections shall be witnessed by the Contractor's supervisor responsible for the work. A Condition Report shall be prepared to document the results of all tests and inspections.

(3) To the extent possible, all tests and inspections shall be scheduled during the normal weekday work shift. Tests and inspections may be scheduled for other times only when necessary to avoid a delay in the contract completion. When necessary to schedule a test or inspection after the normal day shift or on a weekend, the Owner's Representative shall be notified of the test or inspection at least four hours before the end of the last preceding regular work shift.

(4) Perform an operational test of all newly installed, overhauled, and repaired equipment, and all equipment removed or partially removed as an interference to other work and subsequently reinstalled, to demonstrate proper operation. Shipboard equipment will be operated by the ship's crew.

**(n) Work by Owner:**

(1) The Owner shall have the right to have work on ship's equipment, not included in the contract, performed by representatives of the manufacturer of the equipment or other qualified individuals. The

Owner shall also have the right to have ship's crew perform work on equipment or perform general maintenance not included in the contract. The Owner shall also have the right, during the course of the dry-docking, to have the Owner's naval architect firm inspect the vessel's underwater body and appurtenances including the shaft, propeller, rudder, bow thruster sea chests and transducer housings and to inspect open tanks and voids and other spaces. The Owner's naval architect may be assisted by other professional services contractors.

Owner-directed work shall not interfere with, or retard the progress of, the Contractor's work.

**(o) Tests and Trials:**

(1) Any and all systems opened for inspection or repair, or removed and reinstalled as interferences for other work, shall be tested for proper operation as soon as practical following completion of all work involving each individual system. Any such tests which can be safely performed with the ship drydocked shall be completed prior to refloating and sea trial.

(2) Approximately two (2) days before the end of the performance period, conduct a one day sea trial. The date for sea trials must be approved by the Owner's Representative.

(3) The Contractor shall submit to the Owner's Representative, no later than two days before sea trials, a schedule for testing all equipment the Contractor has worked on. The Contractor must submit a list of the personnel who will ride the ship during sea trials prior to departure. The list must include Name, Citizenship, Address and person to be notified in case of emergency.

(4) The Contractor shall provide at least one supervisor for sea trials to coordinate testing, adjustment and repair or discrepancies.

(5) All equipment will be operated by ship's personnel.

(6) An attempt will be made to do all testing during normal working hours, however, it may be necessary to depart early and/or return late.

(7) No Contractor work will be allowed during trials except as approved by the Owner's Representative.

**(p) Berthing, Messing and Stores:**

(1) Berthing and messing onboard will not be required with the possible exception of the night of arrival and the night before departure depending on schedule. This will be coordinated with the Contractor.

(2) Stores for the homebound voyage to Newport will be delivered to the vessel no more than 48 hours prior to departure. Owner's Representative shall notify Contractor of scheduled delivery time as soon as known. Contractor shall provide access for the delivery vehicle as close to the vessel as practicable, and shall provide a forklift and qualified operator to transfer palletized stores from the delivery vehicle to a point where the pallets can be picked and loaded aboard the vessel using the ship's crane.

**(q) Drawings and Manuals:**

(1) All drawings and manuals provided to the Contractor shall be returned to the Owner within 5 days of the date the vessel departs the Contractor's facility. The reasonable cost of reproducing or obtaining replacements will be deducted from the final payment for any drawings or manuals not returned in accordance with this provision.

(2) Where required by the detailed specifications, drawings and manuals for new work or equipment will be provided by the Contractor to the Owner. Drawings shall be provided in a form reproducible by blueprint or xerographic techniques and as digital files compatible with AutoCAD software. At least two copies of each manual shall be provided.

**(r) Completion of Work:**

(1) The Owner reserves the right to approve any work presented as “complete” by the Contractor prior to authorization of payment.

**(s) Warranties:**

(1) Contractor warrants all labor, workmanship and repairs for a minimum period of 90 days from time of contract completion. Manufacturer’s warranties for any equipment installed by Contractor shall pass to Owner.

**(t) Owner-Furnished Material (“OFM”)**

(1) All materials and supplies which are required to accomplish the specified work shall be new, Contractor-supplied materials unless they are identified in Exhibit A to this Specification. The items listed in Exhibit A-1 are the only materials which will be Owner-Furnished in association with this work. If an item of material is not listed in Exhibit A-1 and referenced to a Specification Item Number, it is to be Contractor-provided at no additional cost to the Owner.

**(u) Detailed List of work Items:** See Exhibit A-1

**6. Contract Term:** The effective date of the Contract will be the date of the latest signature upon the Contract. The Contract is effective the Owner’s Representative provides written authorization of Contract project completion to the OSU Contract Administrator.

**7. Affirmative Action and Equal Employment Opportunity:** The Contractor shall adhere to OSU’s Affirmative Action and Equal Employment Opportunity policies, as published on OSU’s website.

**8. Notice/Contacts:** Any notice pursuant to this Contract shall be validly given if in writing and sent to the respective addressees of Contractor and OSU. The OSU contacts for submittals and any other correspondence and notices related to performance under Contract shall be:

**OSU Contract Administrator** and: **OSU Ship Operations**

Oregon State University  
644 SW 13<sup>th</sup> Street  
Corvallis, OR 97333-4238  
Phone: (541) 737-6995  
Email:

The Contractor contacts for submittals and any other correspondence and notices related to performance under Contract shall be:

**CONTRACTOR Contract Administrator**  
(CONTACT NAME] (CONTACT TITLE]  
(COMPANY NAME]  
(ADDRESS] (CITY, STATE, ZIP]  
(PHONE NUMBER]

**9. AMENDMENTS:** The terms of this Contract shall not be waived, altered, modified, supplemented or amended in any manner whatsoever without prior written approval of OSU.

**10. INDEPENDENT CONTRACTOR STATUS:** The service or services to be rendered under this Contract are those of an independent contractor. OSU reserves the right (a) to determine and modify the delivery schedule for the services and (b) to evaluate the quality of the services; however, OSU may not and will not control the means or manner of Contractor’s performance. Contractor is responsible for determining the appropriate means and manner of performing the services. Contractor is not an officer, employee or agent of OSU as those terms are used in ORS 30.265.

**11. RETIREMENT SYSTEM STATUS:** Contractor is not a contributing member of the Public Employees’

Retirement System and will be responsible for any federal or state taxes applicable to payment under this Contract. Contractor will not be eligible for any benefits from these Contract payments of federal Social Security, employment insurance, workers' compensation or the Public Employees' Retirement System, except as a self-employed individual.

**12. GOVERNMENT EMPLOYMENT STATUS:**

(a) If this payment is to be charged against federal funds, Contractor certifies that it is not currently employed by the federal government.

(b) Contractor certifies it is not an employee of OSU.

**13. WAIVER:** Failure of OSU to enforce any provision of this Contract shall not constitute a waiver or relinquishment by OSU of the right to such performance in the future nor of the right to enforce any other provision of this Contract.

**14. ASSIGNMENT/SUBCONTRACT/SUCCESSORS:** Contractor shall not assign, sell, transfer, or subcontract rights, or delegate responsibilities under this Contract, in whole or in part, without the prior written approval of PCMM. No such written approval shall relieve Contractor of any obligations of this Contract, and any transferee or subcontractor shall be considered the agent of Contractor. Contractor shall remain liable to OSU under the Contract as if no such assignment, transfer, or subcontract had occurred.

**15. SUCCESSORS IN INTEREST:** The provisions of this Contract shall be binding upon and shall inure to the benefit of the parties to the Contract and their respective permitted successors and assigns.

**16. COMPLIANCE WITH APPLICABLE LAW:** Contractor shall comply with all federal, state, county, and local laws, ordinances, and regulations applicable to the work to be done under this Contract. Contractor specifically agrees to comply with all applicable requirements of federal and state civil rights and rehabilitation statutes, rules, and regulations. Contractor also shall comply with the Americans with Disabilities Act, 42 USC §12100 et seq., ORS 659.425 and all regulations and administrative rules established pursuant to those laws. Failure or neglect on the part of Contractor to comply with any or all such laws, ordinances, rules, and regulations shall not relieve Contractor of these obligations nor of the requirements of this Contract.

**17. PAYMENT OF CONTRACTOR'S OBLIGATIONS:** Contractor agrees to make payments promptly when due, to all persons supplying to such Contractor, labor or materials for the provision of the work provided in this Contract; pay all contributions or amounts due the industrial accident insurance provider from such Contractor incurred in the performance of this Contract; not permit any lien or claim to be filed or prosecuted against the state on account of any labor or material furnished; pay to the Department of Revenue all sums withheld from employees pursuant to ORS 316.167. If Contractor fails or refuses to make any such payments required herein, the appropriate OSU official may pay such claim and charge the amount of the payment against funds due or to become due to the Contractor under this Contract. Any payment of a claim in the manner authorized in this section shall not relieve the Contractor or Contractor's surety, if any, of obligations with respect to any unpaid claims.

Payments shall be made upon successful completion of the schedules and work accepted by OSU Ship Operation.

**18. SEVERABILITY:** If any provisions of this Contract are declared by a court to be illegal or in conflict with any law, the validity of the remaining terms and provisions shall not be affected; and the rights and obligations of the parties shall be construed and enforced as if the Contract did not contain the particular provision held to be invalid.

**19. INDEMNITY, RESPONSIBILITY FOR DAMAGES:** (a) Contractor shall be responsible for all damage to property, injury to persons, and loss, expense, inconvenience, and delay which may be caused by, or result from, the conduct of work under this Contract, or from any act, omission, or neglect of Contractor, its

subcontractors, or employees. Contractor shall save, defend, indemnify, and hold harmless the State of Oregon, the State Board of Higher Education, OSU, and their officers, agents, employees, and members from all claims, suits, and actions of any nature resulting from or arising out of the activities or omissions of Contractor or its subcontractors, officers, agents, or employees acting under this Contract. (b) Without limiting the generality of subsection (a), Contractor expressly agrees to defend, indemnify, and hold OSU, the State of Oregon and their agencies, subdivisions, officers, directors, agents, and employees harmless from any and all claims, suits, actions, losses, liabilities, costs, expenses, including attorney's fees, and damages arising out of or related to any claims that the services or any other tangible or intangible items delivered to OSU by Contractor that may be the subject of protection under any state or federal intellectual property law or doctrine, or OSU's use thereof, infringes any patent, copyright, trade secret, trademark, trade dress, mask work, utility design, or other proprietary right of any third party; provided, that OSU shall provide Contractor with prompt written notice of any infringement claim. (c) Contractor shall have control of the defense and settlement of any claim that is subject to subsections (a) or (b); however, neither Contractor nor any attorney engaged by Contractor shall defend the claim in the name of the State of Oregon or any agency of the State of Oregon, nor purport to act as legal representative of the State of Oregon or any of its agencies, without first receiving from the Oregon Attorney General, in a form and manner determined appropriate by the Attorney General, authority to act as legal counsel for the State of Oregon, nor shall Contractor settle any claim on behalf of the State of Oregon without the approval of the Attorney General. The State of Oregon may, at its election and expense, assume its own defense and settlement in the event that the State of Oregon determines that Contractor is prohibited from defending the State of Oregon, or is not adequately defending the State of Oregon's interests, or that an important governmental principle is at issue and the State of Oregon desires to assume its own defense.

**20. SAFETY AND HEALTH REQUIREMENTS:** Services supplied under this Contract shall comply with all federal Occupational Safety and Health Admin. (OSHA) requirements and with all Oregon safety and health requirements, including those of the State of Oregon Workers' Compensation Division.

**21. ACCESS TO RECORDS:** Contractor shall maintain books, records, documents, and other evidence and accounting procedures and practices sufficient to reflect properly all costs of whatever nature claimed to have been incurred and anticipated to be incurred in the performance of the Contract. The Oregon State Board of Higher Education, Oregon Secretary of State, federal government, and their duly authorized representatives shall have access to the books, documents, papers, and records of Contractor which are directly pertinent to this Contract for the purpose of making audit, examination, excerpts, and transcripts. Such books and records shall be maintained by Contractor for three years from the date of Contract expiration unless a shorter period is authorized in writing. Contractor is responsible for any audit discrepancies involving deviation from the terms of the Contract and for any commitments or expenditures in excess of amounts authorized by OSU.

**22. WAGE AND HOUR LAWS:** All employers, including Contractor, that employ subject workers, who work under this Contract in the State of Oregon shall comply with ORS 656.017 and provide the required workers' compensation coverage, unless such employers are exempt under ORS 656.126. Contractor shall ensure that each of its subcontractors complies with these requirements.

**23. SEXUAL HARASSMENT POLICY:** Contractor shall comply with the Board of Higher Education policies applicable to contractors that prohibit sexual harassment by Contractor and its employees in their interactions with members of the OUS community.

**24. RECYCLABLE PRODUCTS:** Contractors will use recyclable products to the maximum extent economically feasible in the performance of the Contract.

**25. INSURANCE TERMS AND CONDITIONS:** Contractor shall commence no work under the Contract until all insurance requirements have been met and a Contract has been issued.

Contractor shall provide an insurance certificate naming OSU and the Oregon University System, their officers, employees and agents as additional insured's in said insurance policy. The insurance certificate shall be

received by OSU no later than ten (10) Days after request by PCMM.

- (a) **GENERAL LIABILITY INSURANCE:** Contractor shall obtain, at Contractor's expense, and keep in effect during the term of this Contract, General Liability Insurance. Such insurance policy is to be issued by an insurance company authorized to do business in the State of Oregon. Contractual, product, and completed operations liability combined single limit per occurrence shall not be less than \$1,000,000, when applicable. The State of Oregon Acting by and Through the State Board of Higher Education on Behalf of Oregon State University, their officers, employees and agents shall be included as additional insured in said insurance policy.
- (b) **AUTOMOBILE LIABILITY:** Contractor shall obtain, at Contractors expense, and keep in effect during the term of this Contract, Automobile Liability Insurance. Coverage limits shall not be less than \$1,000,000 combined single limit occurrence.
- (c) **SHIP REPAIRER'S LEGAL LIABILITY:** Ship Repairers Legal Liability insurance with limits not less than \$5,000,000 per occurrence.
- (d) **WORKERS' COMPENSATION:** The Contractor, its subcontractors, if any, and all employers providing work, labor or materials under this Contract are subject employers under the Oregon Workers' Compensation law and shall comply with ORS 656.017, which requires them to provide workers' compensation coverage that satisfies Oregon law for all their subject workers, unless such employees are exempt under ORS 656.126.
- (e) **PRIMARY COVERAGE:** Insurance carried by Contractor under this Contract shall be the primary coverage and OSU's insurance is excess and solely for damages or losses for which OSU is responsible.
- (f) **CERTIFICATES OF INSURANCE:** As evidence of the insurance coverages required by this Contract, the Contractor shall furnish Certificate(s) of Insurance to PCMM, upon request. The Certificate(s) will specify all of the parties who are Additional Insureds (or Loss Payees). Insurance coverages required under this Contract shall be obtained from acceptable insurance companies or entities. The Contractor shall be financially responsible for all deductibles, self-insured retentions and/or self-insurance included hereunder.
- (g) **NOTICE OF CANCELLATION OR CHANGE:** There shall be no cancellation, material change, potential exhaustion of aggregate limits or intent not to renew insurance coverage(s) without 30 days' written notice from the Contractor or its insurer(s) to PCMM. Any failure to comply with the reporting provisions of this insurance, shall not affect the coverage(s) provided to OSU.

**NOTE:** Contractor shall ensure all subcontractors, comply with insurance requirements. OSU reserves the right to obtain insurance certificates from these entities at any time during the Contract period.

**26. TERMINATION:** This Contract may be terminated at any time by mutual consent of both parties, or by OSU at its discretion. If sufficient funds are not provided in future legislatively approved budgets of OSU (or from applicable federal, state or other sources) to permit OSU, in the exercise of its reasonable administration discretion, to continue this Contract, or if OSU or the program from which this Contract was executed is abolished, OSU may terminate this Contract without further liability upon delivery of notice to Contractor. This Contract may also be terminated by OSU for default (including breach of contract) if (a) Contractor fails to provide services called for by this Contract within the time specified, (b) Contractor fails to perform any of the other provisions of this Contract, or so fails to pursue the work as to endanger performance of the Contract in accordance with these terms, and after receipt of written notice from OSU, fails to correct such failures within ten days, (c) Contractor institutes or has instituted against it, insolvency, receivership or bankruptcy proceedings, makes an assignment for the benefit of creditors, or ceases doing business on a regular basis, or (d) Contractor no longer holds a license or certificate that is required for Contractor to perform its obligations



under the Contract or Contractor has not obtained such license or certificate within fourteen (14) calendar days after OSU's notice or such longer period as OSU may specify in such notice. The rights and remedies of OSU provided in the above clause related to defaults (Including breach of contract) by Contractor shall not be exclusive and are in addition to any other rights and remedies provided by or under this Contract.

**27. REMEDIES FOR CONTRACTOR'S DEFAULT:** In the event Contractor is in default under the Section titled "Termination", OSU may, at its option, pursue any or all of the remedies available to it under this Contract and at law or in equity, including, but not limited to: (a) rejection of the services, (b) requiring Contractor to correct any defects without charge, (c) negotiation with Contractor to sell the services to OSU at a reduce price, (d) termination of the Contract under the Section titled "Termination", (e) withholding all moneys due for the services Contractor has failed to deliver within any scheduled completion dates or has performed inadequately or defectively, (f) initiation of an action or proceedings for damages, specific performance, or declaratory or injunctive relief, or (g) exercise of its right of set off. These remedies are cumulative to the extent the remedies are not inconsistent, and OSU may pursue any remedy or remedies singly, collectively, successively, or in any order whatsoever.

**28. FORCE MAJEURE:** Neither OSU nor Contractor shall be held responsible for delay or default caused by fire, riot, act of nature, terrorist acts, or other acts of political sabotage, or war where such cause was beyond, respectively, OSU's or Contractor's reasonable control. Contractor shall, however, make all reasonable efforts to remove or eliminate such a cause of delay or default and shall, upon cessation of the cause, diligently pursue performance of its obligations under this Contract.

**29. AWARD TO FOREIGN CONTRACTOR:** If the amount of this Contract exceeds \$10,000 and if Contractor is not domiciled in or registered to do business in the State of Oregon, Contractor shall promptly provide to the Oregon Department of Revenue and Secretary of State Corporation Division, all information required by those agencies relative to this Contract. OSU shall withhold final payment under this Contract until Contractor has met this requirement.

**30. GOVERNING LAW:** This Contract shall be governed and construed in accordance with the laws of the State of Oregon, without resort to any jurisdiction's conflict of laws rules or doctrines. Any claim, action, or suit between OSU and Contractor that arises out of or relates to performance of this Contract shall be brought and conducted solely and exclusively within the Circuit Court for Marion, for the State of Oregon. Provided, however that if any such claim, action, or suit may be brought only in federal forum, it shall be brought and conducted solely and exclusively within the United States District Court for the District of Oregon. Contractor hereby consents to the in personam jurisdiction of said courts.

**31. PAYMENTS:**

Applications for payment may be made every other week. Payment will be based on latest accepted progress schedule as outlined section 5.(b). Within 30-45 days after receipt of application for payment for work completed, certified by the Owner's Representative, OSU will make partial payment to the Contractor, but OSU shall retain a sum equal to 5 percent for each application for payment. Said amount may be retained for the benefit of OSU including any claims, liquidated damages or correction of deficiencies for a period of thirty days following the final acceptance of the completed work by the Contract.

**32. FINAL PAYMENT:** Submission of the final payment by OSU shall represent a release to OSU of all claims and all liability to the Contractor for all work performed under the Contract. No payment, however, final or otherwise, shall represent release of the Contractor from any obligations under the Contract.

**33. AVAILABILITY OF FUNDS:** OSU certifies that sufficient funds are available and authorized for expenditure to finance costs of this Contract within its current biennial appropriation or expenditure limitation, provided, however, that continuation of the Contract or any extension after the end of the fiscal period in which it is written, is contingent upon a new appropriation or limitation for each succeeding fiscal period for the purpose of this Contract.

**34. TAX EXEMPTION:** OSU is tax exempt and will not be responsible for paying state, local, sales or any other taxes from which it is exempt.

**35. NOTICE:** Any notice pursuant to this Contract shall be validly given if in writing and sent by registered or certified mail, postage prepaid, to the respective addressees of Contractor and OSU.

**36. MERGER:** THIS CONTRACT CONSTITUTES THE ENTIRE CONTRACT BETWEEN THE PARTIES. THERE ARE NO UNDERSTANDINGS, ORAL OR WRITTEN, NOT SPECIFIED HEREIN REGARDING THIS CONTRACT. NO AMENDMENT, CONSENT, OR WAIVER OF TERMS OF THIS CONTRACT BINDS EITHER PARTY UNLESS IN WRITING AND SIGNED BY ALL PARTIES. ANY SUCH AMENDMENT, CONSENT, OR WAIVER WILL BE EFFECTIVE ONLY IN THE SPECIFIC INSTANCE AND FOR THE SPECIFIC PURPOSE GIVEN. CONTRACTOR, BY THE SIGNATURE HERETO OF ITS AUTHORIZED REPRESENTATIVE, ACKNOWLEDGES HAVING READ AND UNDERSTOOD THE CONTRACT AND CONTRACTOR AGREES TO BE BOUND BY ITS TERMS AND CONDITIONS. CONTRACTOR ALSO AGREES THAT OSU IS NOT BOUND TO ANY TERMS AND CONDITIONS EXTERNAL TO THIS CONTRACT THAT OSU HAS NOT READ AND AGREED TO IN A WRITING SIGNED BY AN INDIVIDUAL AUTHORIZED TO BIND OSU.

IN WITNESS WHEREOF, the parties hereto have caused this Contract to be executed by their respective duly authorized representatives as of the date last below written.

**CONTRACTOR**

**OREGON STATE UNIVERSITY**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Ed Hyatt

\_\_\_\_\_  
Date

Procurement and Contracts Supervisor

\_\_\_\_\_

**EXHIBIT A-1**  
**Detailed Specifications List of Work Items**

**CLASS A Items - Basic**

- 101 Drydocking and Berthage
- 102 Utilities and Services
- 103 Painting Underwater Body
- 104 Tailshaft, Rudder & CPP
- 105 ABS Load Line Survey
- 106 Valves
- 107 Bow Thruster
- 108 Sewage Tanks
- 109 Potable Water Tanks
- 110 Void Preservation
- 111 Steel Renewals and Hull Welding
- 112 Deck Socket Renewal
- 113 Seachest Crossover Pipe
- 114 Load Tests
- 115 Hull & Tank Zincs
- 116 Forepeak Ballast Tank
- 117 Chain Lockers & Hawsepipes
- 118 Transducer Well Titivation
- 119 Renew Frame and Stiffeners

**CLASS B Items - Optional**

- 201 Starboard Seachest Piping
- 202 Anchors & Chain
- 203 Overhaul Anchor Windlass
- 204 Painting Freeboard
- 205 Gear Oil Tank
- 206 Develop Fuel Sounding Tables
- 207 Replace Special Lab Seawater Intake

## ITEM NO. 101: DRYDOCKING AND BERTHAGE

(1) **General:** Drydock the ship for specified maintenance.

(2) **Owner-Furnished Information (“OFI”)**

Docking Plan

(CDI Marine, 9250-800-21, Rev. C)

(3) **Owner-Furnished Material, (“OFM”):** None for this specification item.

(4) **Contractor-Furnished Material, (“CFM”):** Contractor shall furnish all labor and material to accomplish the specified work.

(5) **Regulatory Requirements:** Refer to section 5 (f) (Materials and Workmanship) of Exhibit A.

(6) **Coordination with other Work Items:** Contractor is responsible for coordinating all specification items to provide the smoothest workflow and minimize the length of the shipyard availability.

(7) **Safety Precautions:** Refer to section 5 (h) (Safety, Fire Protection and Cleanliness) of Exhibit A.

(8) **Statement of Work:**

8.1 Drydock vessel in accordance with position (1) on the referenced drawing and side blocking plan. Aft keel block at section 15-C (frame 61) shall be a minimum of 1' -11 3/8" high and forward most keel block at section 12-A (frame 24) shall be a minimum of 5' - 1 3/8" high. After vessel is in lifting position, resting on keel blocks, and bilge blocks have been set, the Contractor shall have a qualified diver check blocks for proper position and contact.

Note: The following bottom appendages must be kept clear:

- 1) Bow Thruster between frames 9 and 11. Provide adequate clearance to remove bow thruster as set forth in Item 104 (Bow Thruster).
- 2) Transducers between frames 55 and 61.
- 3) Sea chests port/starboard between frames 24 and 25 (sea chest scoops port/starboard protrude 5" below shell).
- 4) Aft sea chest between frames 66 and 67 starboard side.
- 5) Bilge keels port/starboard frames 23 to 58.
- 6) Bilge blocks shall not be placed at Frames 25, 32, 38, 50, 56 or 60 due to blocking rotation.

8.2 After the ship is hauled out, service lines shall be provided and hooked up to provide services specified in Item 102 (Utilities and Services). A suitable brow shall be furnished and maintained to provide a safe access to the ship.

8.3 The Contractor shall remove and provide safe storage for a small number (2) of 6 gallon gasoline tanks for the ship's emergency pump and rescue boat. The Contractor shall also remove the rescue boat and canister life rafts (4) from the vessel prior to commencement of any work, and provide safe and secure storage for them during the duration of the contract period. Depending on the timing of the drydocking period, Owner may elect to send rafts for servicing and return them to the shipyard. The tanks, rescue boat and life rafts shall be returned to the ship at the completion of work.

8.4 Immediately after the ship is hauled the entire hull, including propeller and other appendages, will be water-washed. This item must be completed in no more than 24 hours from commencement of haulout.

8.5 If the ship is docked in cold or freezing weather, all sea valves, pipes or similar fittings attached to the hull shall be drained to prevent freezing and possible damage.

8.6 While the ship is in drydock, all hull openings shall be secured outside of normal working hours to the maximum extent practical.

8.7 The ship shall remain out of the water until all work ordered under the contract which requires drydocking has been completed.

8.8 Sufficient ballast (fresh water) shall be added to the ship prior to undocking to ensure safe trim and stability for refloating, relanding on the blocks if necessary, and transfer to pierside. A ballasting plan will be developed and approved by the vessel's Master and the Contractor's Dockmaster, and submitted in writing to the Owner's Representative no less than 48 hours prior to scheduled undocking of the ship.

8.9 Upon the completion of work the ship will be undocked. Contractor shall in coordination with Owners Representative post personnel in all spaces with disturbed openings to the sea prior to flooding dock to check for leaks. When refloating, the dock shall be flooded until as many underwater openings as possible are covered without lifting the ship off the blocks. If leaks are found, the dock shall be pumped down and repairs made before again flooding. If no leaks occur, upon approval of the Owner, the undocking will continue. Bow and centerline sighting markings shall be referenced so that the ship may be re-landed, if necessary.

8.10 If the Contractor can complete some items outside of the drydock and with the consent of the Owners Representative, the ship will be berthed at a suitable dock at the Contractor's facility. Services in accordance with Item 102 (Utilities and Services) shall be provided as well as a suitable brow.

8.11 An alternative blocking arrangement to that in the referenced drawing will be acceptable only if it is developed and stamped by a qualified naval architect, and approved in advance by the Owner's Representative.

#### **ITEM NO. 102: UTILITIES AND SERVICES**

**(1) General:** Provide utilities and services to the ship while at the Contractor's facility, either in drydock or alongside the pier.

**(2) Owner-Furnished Information ("OFI"):** None for this specification item.

**(3) Owner-Furnished Material ("OFM"):** None for this item.

**(4) Contractor-Furnished Material ("CFM"):** Contractor shall furnish all labor and material to accomplish the specified work.

**(5) Regulatory Requirements:** Refer to section 5 (f) (Materials and Workmanship) of Exhibit A.

**(6) Coordination with other Work Items:** Contractor is responsible for coordinating all specification items to provide the smoothest workflow and minimize the length of the shipyard availability.

**(7) Safety Precautions:** Refer to section 5 (h) (Safety, Fire Protection and Cleanliness) of Exhibit A.

**(8) Statement of Work:** The following utilities and services, including connection and disconnection as required, shall be furnished during the time the ship is in the Contractor's facility:

8.1 100 GPM, 80 PSI water to fire main (connection will be made to the main deck aft fire station using 1-1/2 inch hose to one side of the Y-connection). Connection will be used for cooling water to refers, sewage system, and AC system.

8.2 A minimum 150 amp 460 volt, 3 phase, 60 Hertz electric power via 8AWG grounded four-conductor cable. Owner may furnish one (1) 600VAC, 200A, 4-pin 4-wire plug for connection to ship's service. Contractor shall supply electrician to wire in power cable and connect to vessel.

8.3 Trash skip box. Skip will be emptied at Owners request throughout the dry dock period.

- 8.4 Chemical toilet (if ship's heads are secured).
- 8.5 Potable water, 5/8 or 3/4 inch hose with standard hose bib, pressure regulated to 50 PSI, for refilling tanks at completion of work
- 8.6 120 PSI, 20 cfm, air for ship's control air and occasional use of air tools.
- 8.7 A suitable brow or stairs with safety net, railings, or other fall protection.
- 8.8 Line handling, tug and pilot service, fenders etc., as required for movement or berthing of vessel.
- 8.9 Fire watches for all hot work.
- 8.10 Internet connection to ship (wired, CAT-5).
- 8.11 A suitable office for use by ship's crew and OSU owner's representative. The field office shall be available for occupancy commencing on the start of work on the project, all the way through final re-delivery of the vessel. The field office shall be furnished with the following minimum:
  - 1) One office desk and two chairs.
  - 2) One phone line with external yard access.
  - 3) Internet connection (wireless or CAT-5.)
- 8.12 A minimum of two (2) reserved parking spaces in the yard's main parking area or otherwise convenient to the drydock.

**ITEM NO. 103: PAINTING UNDERWATER BODY**

**(1) General:** Waterwash, inspect, prep and paint hull and appurtenances below waterline.

**(2) Owner-Furnished Information ("OFI")**

<i>R/V Oceanus</i> Paint Schedule, Attachment 1, Rev. L	
Bow Thruster	White-Gill Dwg. #2162 sheets 1&2 (vice 1634)
Outboard Profile	Rodney Lay Dwg. # 2832-A20, Rev 6

**(3) Owner-Furnished Material, ("OFM"):** Sheet metal templates for load line markings (to be returned to Owner's Representative at end of performance period). All paints will be Owner furnished.

**(4) Contractor-Furnished Material, ("CFM"):** Contractor shall furnish all labor and material (other than that shown as Owner-Furnished) to accomplish the specified work.

**(5) Regulatory Requirements:** Refer to section 5 (f) (Materials and Workmanship) of the Exhibit A.

**(6) Coordination with other Work Items:** Contractor is responsible for coordinating all specification items to provide the smoothest workflow and minimize the length of the shipyard availability.

**(7) Safety Precautions:** Refer to section 5 (h) (Safety, Fire Protection and Cleanliness) of Exhibit A.

**(8) Statement of Work:**

8.1 The Owner will obtain and provide the services of a qualified paint manufacturer's technical service representative for the painting system being applied. The manufacturer's representative will report to the Owners Rep on a daily basis, each and every day in which any work is accomplished. The Contractor is required to comply with the direction and recommendations of the manufacturer's representative. The manufacturer's representative will be in attendance for the duration of all blasting and painting work.

8.1.1 In conjunction with the manufacturer's technical service representative, the Contractor shall furnish the Owners Rep with an "International Antifouling Certificate" certifying compliance with the IMO International Convention on the Control of Harmful Anti-fouling Systems on Ships and that the vessel's coatings are tin-free.

This certificate shall provide details on the shipyard, paint manufacturer, paints applied, active ingredients, and CAS numbers.

8.1.2 Final inspection and acceptance of all work shall be by the Owners Rep. Work shall be presented to and accepted by the Owners Rep after surface preparation, prior to initial coating, between each coat, and after all paints have been applied.

8.2 The Contractor shall prepare a paint report and submit same to the Owners Rep within three (3) days of completing the coating application. The Contractor shall develop a Paint Schedule that documents the paint applied to all areas. The schedule shall include surface preparation, primers, and overcoats. Colors, types, DFT in mils, application method, brand names and manufacturer, and the name of the applying company shall also be included. In addition, the report shall also specifically include the following data:

8.2.1 Date and time of applications.

8.2.2 Temperature, humidity, and dewpoint, at time of each application.

8.2.3 Dry film readings for each coat of paint as required by the manufacturer's representative.

8.2.4 Manufacturer, Product Identification No. and Batch Nos. for each type of paint applied.

8.2.5 Results of chloride tests taken before washing, after washing, and after blasting.

8.2.6 Results of blast profile tests taken after surface preparation.

8.3 Prior to the commencement of any blasting or coating work, a meeting shall be held with the Owners Rep, the paint manufacturer's representative, Contractor personnel, and any subcontractor involved in the pre-cleaning, blasting and coating functions. It is incumbent upon the Contractor and its subcontractors to have a clear understanding of the procedures as prescribed by the manufacturer's representative.

8.3.1 The Contractor shall present a coating work schedule to the Owners Rep for review and comment. This coating work schedule will be submitted along with but in addition to the initial production schedule required for the entire work package. After review and discussion of any comments, a final blasting and coating schedule will be provided to the Owners Rep at the conference. The Contractor shall strictly adhere to this final schedule. Note that the Contractor must factor in the seasonal effects of weather on surface preparation and on the curing rate of the coatings being used.

8.4 Paint manufacturer's recommendations regarding surface preparation, paint application, and drying times are to be strictly adhered to.

8.5 The price for blasting shall include proper cleanup and disposal of all grit and all other generated wastes in accordance with the requirements of all Federal, State, and Local regulations.

8.6 Painting works and selected products will fully comply with all current regulations dictating the use and application of marine coatings. The price for disposal of any refuse associated with painting shall be included in this item and shall be completed in accordance with all Federal, State, and Local regulations.

8.7 Specification items include staging, lighting, cranes, and all support services necessary to complete blasting, coating, and subsequent inspections.

8.8 Grit used for blasting and sweeping shall be new, dry, silicon-free, chlorine-free and capable of meeting the conditions specified.

8.9 Compressed air for blasting and painting shall be oil-free and dry.

8.10 The dry dock shall be kept drained from water accumulations during periods of blasting and coating. Spent blasting grit shall be removed from the drydock on a continuous basis. This grit shall be removed PRIOR to coating applications to prevent any undue surface contamination.

8.11 All overboard discharges and drains must be plugged or piped to lead all discharges away from the hull. These shall be removed upon completion of hull coating work. Note that it may be required to lead drains directly to the drydock floor in the event that wind or other conditions make this necessary to prevent water contact with the hull.

8.12 Prior to initiating blasting and coating, the Contractor shall ensure that the vessel's equipment is protected from damage caused by blasting, dust or paint. Measures to be taken include, but are not limited to, the following:

8.12.1 Plug open ends of pipes, including sea connections, vents and ducts.

8.12.2 Install protective covering on all exposed equipment including transducers, propeller, exposed

shafting, thruster, rudder pintle access and rudder stock, deck machinery, hydraulic hoses, wire ropes, and any other equipment which might be adversely affected by grit and paint from blasting and coating works.

8.12.3 In all areas to be abrasive blasted and coated, record all ship's markings, including information, size, and color.

8.12.4 Overboard discharges for services which cannot be secured, such as refrigeration cooling water overboard, anchor chain washdown systems, shall be carried off by means of temporary scuppers, hoses, etc., in order to prevent recontamination of the hull after surface preparation.

8.12.5 Protective covering shall be inspected at regular intervals but not less than at the start of each work shift. Degraded protective covering shall be repaired prior to the restart of work. Contamination of the vessel and its equipment shall be verbally reported to the Owners Representative immediately upon its discovery to be followed by a written report within four (4) hours of the verbal notification. The Contractor shall be responsible for cleaning the contaminated equipment and showing that the contamination has not caused damage to same. Cost to repair equipment damaged by contamination shall be borne by the Contractor.

8.13 All coatings are to be applied under the direct supervision of the manufacturer's technical service representative. No application of coatings shall be made until the prepared surfaces are approved by the coating system manufacturer's technical representative and/or Owners Representative and signed off by him after each inspection. The Contractor is to arrange for inspections after completion of blasting and prior to the initial painting and at each over coating. Areas found to contain runs, over spray, roughness, or any other film irregularities shall be repaired or re-coated as directed.

8.14 Paint material shall be stored within the paint manufacturer's recommended temperature range. When paint is being applied, ensure that the material's temperature is within the manufacturer's recommended range.

8.15 Ensure the following conditions are met prior to painting:

8.15.1 Surfaces shall be clean, dry, and free of oil, grease or residue from abrasive blasting.

8.15.2 Air and metal surface temperatures shall be within the range published by the paint manufacturer.

8.15.3 The substrate temperatures register at least 5 degrees Fahrenheit above the dewpoint temperature.

8.15.4 The relative humidity is no higher than 80 percent.

8.15.5 No coating shall be applied at temperatures below 35 degrees Fahrenheit without prior written approval of the Owners Representative.

8.15.6 Painting shall not be performed between the hours of 1900 and 0800 without prior written approval of the Owners Representative.

8.15.7 Any over spray shall have been removed prior to the application of the next coat of paint in the system.

8.16 Application instructions of the painting system manufacturer are to be closely followed. Paint must be completely mixed using power agitator-type mixers prior to and during application to ensure all solids are kept in full suspension. Mixing of paints will take place in a clean, grit free area. Thinning shall only be done in accordance with and under the supervision of the manufacturer's representative.

8.17 In the event that the prepared surface "blooms" with rust beyond the minimum specified surface preparation, this area shall be re-blasted prior to any paint application. Any such work required will be for the Contractor's account.

8.18 Sufficient drying time, as set forth by the manufacturer, shall be allowed between coats to ensure proper adhesion of subsequent coats.

8.19 Each undercoat shall be of sufficiently different color to provide contrast between thus ensuring full and complete coverage.

8.20 Chloride tests (the number of which shall be specifically determined by the paint manufacturer's representative) shall be taken before water washing, after water washing, and after blasting.

8.21 Blast profile tests (the number of which shall be specifically determined by the paint manufacturer's representative) shall be taken after blasting. If the method of surface preparation is UHP hydroblasting, profile readings shall be taken on the spot blasted areas to determine the existing profile in those locations.

8.22 After the first spot coat has been applied on the boottop and underwater hull, the entire exterior hull shall be freshwater washed to remove all dust, dirt and surface contaminants.



**(9) Paint Schedule: See Attachment 1**

Keel to Deep Load Line (Bottom) Surface Preparation:

- 9.1 The bottom area to be dealt with extends from the keel to the light load line.
- 9.2 Scrape by hand all areas of hard fouling.
- 9.4 High pressure water wash at 3,000 psi (nozzle pressure) the entire underwater hull surface from keel to light load line. Remove all marine growth, salt deposits, slime, sea grass, loose paint, and all forms of surface contaminants. This water blasting will be worked in conjunction with Item 101 - Drydocking and Berthage in order not to duplicate effort.
- 9.5 All areas below the Deep Load Line shall be blasted to SSPC-SP6 (Commercial Blast).
- 9.7 The entire bottom area shall be blown down with dry compressed air to remove all grit material remaining from blasting and left completely dry prior to applying any paint.
- 9.8 Care shall be taken to ensure that the cut-in line between the Freeboard and the Deep Load Line shall be straight and true.

9.12 Keel to Deep Load Line (Bottom) Coating:

9.12.1 The blasted areas shall be coated with two (2) spot coats of epoxy anticorrosive.

9.12.2 When the second coat of epoxy primer is tack free and is approved by the Owners Representative, the entire underwater hull surface shall be evenly applied with two (2) coats of tin-free ablative antifouling paint. The finish coat shall be red in color. The minimum dry film thickness per coat shall be 4.0 mils DFT.

9.12.3 Paints will be applied in accordance with this general schedule:

1st Primer Coat – PPG AMERCOAT 240LT Oxide Red @ 5-6 mils DFT

2nd Primer Coat – PPG AMERCOAT 240LT Haze Gray @ 5-6 mils DFT

1st Full Coat – PPG ABC 3 TIN-FREE ANTIFOULING black @ 5-6 mils DFT

2nd Full Coat – PPG ABC 3 TIN-FREE ANTIFOULING red @ 5-6 mils DFT

9.16 Hull Markings:

Scarf off raised metal letters spelling out former homeport of “Woods Hole” on transom underneath vessel name.

Dress edges to prevent “bleed through” after recoating.

Weld on Owner supplied steel letters of new homeport of “Newport”.

This shall be centered under vessel name on transom.

Weld on new, Owner furnished, draft markings of “19 and 20” .

Numbers are 6” high. The “19” will be placed 6” above the existing “18” and the “20” will be placed 6” above the newly installed “19”.

9.16.1 Repaint all hull markings in areas recoated at this time using two (2) coats of contrasting colored paint compatible with the hull paint finish coat in accordance with the Oceanus Coating Guidelines (Latest Revision). Hull markings include, but shall not be limited to, ship’s name, port of registry, the draft marks, Load Line and Plimsoll markings, bow and stern thruster markings, IMO number, etc.

9.17 Water Washing:

9.17.1 Upon completion of all painting work and just prior to redelivery, the vessel’s entire external topside, including deck house vertical surfaces, horizontal decks, and deck machinery, shall be washed down with clean, fresh water.

9.17.2 All deck drains and scuppers shall be cleaned and proven clear of grit.

9.17.3 All painted areas shall be maintained free of dirt and contamination.

9.17.4 Any areas found to be damaged shall be repaired to the satisfaction of the Owners

Representative.

**ITEM NO. 104: TAILSHAFT, RUDDER & CPP**

**(1) General:** Remove, inspect, gage and reinstall tailshaft & propeller. Check rudder bearing clearances & repack post. Inspect & maintain Controllable Pitch Propeller system. Inspect and gage stern tube bearings.

**(2) Owner-Furnished Information (“OFI”)**

Skeg, Bottom Plate  
Shafting Arrangement

PBI Dwg. No. 9250-103-4, Rev. C  
PBI Dwg. No. 9250-203-1, Rev. C

Propeller Shaft and Coupling Detail  
Shaft Installation  
Hub Assembly  
OD Box Assembly

PBI Dwg. No. 9250-203-2, Rev. C  
Bird Johnson Dwg. # 107241000  
Bird Johnson Dwg. # 107242000  
Bird Johnson Dwg. # E010RA07000 Rev D

**(3) Owner-Furnished Material, (“OFM”):**

- 3.1 Bearing staves (if required).
- 3.2 Replacement tailshaft.
- 3.3 Replacement propeller hub (if required).
- 3.4 CPP oil.

**(4) Contractor-Furnished Material, (“CFM”):** Contractor shall supply all labor and material (other than that shown as Owner-Furnished) to accomplish the specified work.

**(5) Regulatory Requirements:** Refer to section 5 (f) (Materials and Workmanship) of Exhibit A.

**(6) Coordination with other Work Items:** Contractor is responsible for coordinating all specification items to provide the smoothest workflow and minimize the length of the shipyard availability.

**(7) Safety Precautions:** Refer to section 5 (h) (Safety, Fire Protection and Cleanliness) of Exhibit A.

**(8) Statement of Work:**

All activities concerning the tailshaft and propeller will be accomplished under the direction of a qualified technical representative furnished by the Owners Representative. The Contractor shall provide all labor and materials (other than that shown as Owner-Furnished) to perform the work identified below:

8.1 The Controllable Pitch Propeller system oil shall be drained from the hub and tailshaft (approximately 100 gallons). Two samples will be taken for inspection under the supervision of the Owner’s Representative. First sample will be taken immediately after opening the system. A second will be taken after approximately 10 gallons have drained from the system. Samples are to be delivered immediately to the Owner’s Representative. The remaining oil is to be disposed of by Contractor.

8.2 Prior to withdrawing tail shaft, the monkey rudder will have to be removed from the Kort nozzle by flame cutting and lowered to the drydock floor.

8.3 Remove the end cap, disengage and remove the valve pin liner. **Move tailshaft cooling line out of way prior to disassembly of the coupling.** Remove shaft muff coupling and stern tube packing. (CAUTION: Be sure all parts are match marked for reinstallation.) Tailshaft section is to be cleaned prior to drawing through stave bearings and shaft tube.

8.3.1 Contractor is to drill and tap ½ of muff coupling for jacking screws.

8.4 Uncouple the valve rod and withdraw tailshaft and propeller as a unit to the drydock floor. The propeller and shaft must be moved to the inside shop, or to a clean, dry area. Contractor shall provide for safe storage of the shaft off of the vessel while all shaft, propeller, stern tube and rudder work is being performed.

8.5 Visually inspect the stave bearings. Take tailshaft bearing clearance readings, forward and aft stern tube, minimum of eight readings at each end of tube.

8.6 In the event any bearing staves need replacing the Owner will furnish the staves. All old staves removed shall be given to the Owner’s Representative for length comparison of new staves to be provided by Owner.

8.7 Tailshaft tube preservation work, including water blasting and painting (per Item 103), shall be done while the tailshaft is out for inspection.

8.8 **No blasting, painting or controllable airborne debris shall be occurring or present when the system is open. Any damage occurring or delays resulting as a result of blast operations while the system is open shall be repaired at Contractors expense.** Remove the propeller and components from the tail shaft. Inspect the propeller blades and test fit of blade bolthole landings to faces. Reinstall propeller components on the shaft.

8.9 Inspect and clean load control system components. Overhaul CPP Oil Distribution Box in accordance

with manufacturer's recommendations. This will include, at a minimum, replacement of the forward and aft lip seals and O-rings; cleaning and inspection and gaging of the forward and aft bearings; inspection of sliding blocks and ring; replacement of control arm seals; and inspection and gaging of the shaft section internal to the box. Clean, inspect and lap (if necessary) all hydraulic manifold valves and the check valves on the hydraulic line coming from the CPP head tank (below the O.D. Box.)

8.10 Remove, inspect and clean the check valves on the hydraulic line coming from the CPP head tank (below the O.D. Box.)

8.11 Take rudder stock bearing clearance readings. Renew packing in upper rudder post.

8.11.1 **Option Item** Contractor to provide price for removal and reinstallation of Kort nozzle and rudder stock in the event additional repair work is discovered requiring nozzle removal.

8.12 Take rudder stock and pintle bearing clearance readings.

8.13 The hub and propeller are to be assembled onto shaft, prior to shaft being installed.

8.14 Power clean CPP room bilge (up to level of floorplates) of any and all debris, water and oil residue. Paint bilge up to deck plates with Owner furnished paints.

8.15 Complete reinstallation of all associated appurtenances. New 1-1/8" packing shall be installed. A final clearance check will be accomplished between the tailshaft and the stern bearing and presented to the Owner. The Contractor shall refill the system with new Owner furnished AW-46 (ISO 46) hydraulic oil (Approximately 100 gallons).

8.16 Prior to reconnecting and torquing muff coupling, take run outs on shaft to check alignment.

8.17 An accurate pitch check shall be performed prior to refloat and during sea trials and witnessed by the Owner's Representative. This will include comparing the pitch marks on the hub to the pointer on the oil distribution box (prior to refloat), and the OD box pointer to the pitch indicators in the pilothouse, bridge wing repeater box and aft control station while underway. Any error between the pitch marks on the hub and the pointer on the OD box are to be corrected and the pitch check is to be repeated. Minor discrepancies between the other pitch indicators are allowed at the discretion of the Owner's Representative.

8.18 Dimensional Notes:

8.18.1 Stuffing Box: Stuffing box is not a split box as shown on print. Box has a 3/8" extension compression head attached to 1/4" original compression head by two (2) flathead screws. Overall depth of compression head is 3/4".

8.18.2 Staves: Forward staves are 23-1/8" in length. Aft staves are 47".

## **ITEM NO. 105: ABS LOAD LINE SURVEY**

**(1) General:** Provide services of and assistance to American Bureau of Shipping representative (the terms "representative", "inspector" and "surveyor" are considered identical for the purpose of this specification) in conducting the five-year load line survey for renewal of the vessel's load line certificate.

**(2) Owner-Furnished Information, ("OFI"):**

Shell Expansion	PBI Dwg. #9250-100-1, Rev G
Main & Brk Deck Shell Expansion & Frames Construction Profile	PBI Dwg. #9250-107-1 thru 4, Rev C
Framing Sections Below Main Deck	PBI Dwg. #9250-101-1, Rev B
Bulkheads Between Whaleback & Main Deck	PBI Dwg. #9250-101-2 thru 7, Rev B
Skeg, Shell Exp. & 1 <sup>st</sup> Platforms & Frames	PBI Dwg. #9250-101-8
International Load Line Certificate	PBI Dwg. #9250-103-1 thru 4, Rev C
UT Gaging Report of 20 February 2009	#7529631-1622740-001

**(3) Owner-Furnished Material, ("OFM"):** None for this Specification Item.

**(4) Contractor-Furnished Material, ("CFM"):** Contractor shall furnish all labor and materials to accomplish the specified work.

**(5) Regulatory Requirements:** Refer to section 5 (f) (Materials and Workmanship) of Exhibit A.

**(6) Coordination with Other Work Items:** Contractor is responsible for coordinating all specification items to provide the smoothest workflow and minimize the length of the shipyard availability.

**(7) Safety Precautions:** Refer to sections 5 (h) (Safety, Fire Protection and Cleanliness) and 5 (k) (Gas-Free Certification) of Exhibit A.

**(8) Statement of Work:**

8.1 The Contractor shall provide all labor and materials to assist, in performing ABS load line survey. Work to include, but is not limited to:

8.1.1 Provide the Time and Material services to a non-destructive testing (NDT) organization supplied by Owner, to take ultrasonic thickness (UT) readings on the hull frames, tank internals, deck beams and girders, interior decks and weather decks as follows:

8.1.1.1 Three girth belts of shell and deck within the midship half-length, together with internals in way. The ABS Surveyor will provide locations. Readings shall include a minimum of two (2) each readings on each plate in the hull, tank top, superstructure deck, navigation bridge deck and top of house, plus two readings on the web and flange of each frame in way of each hull and deck plate (a minimum of 60 readings per girth belt.)

8.1.1.2 Two wind-and-water strakes, port and starboard, for the midship half-length. The ABS Surveyor will provide locations. (Minimum of 100 readings.)

8.1.1.3 Box keel. The ABS Surveyor will provide locations. (Minimum of 50 readings.) If this work requires cutting into the keel or removing pig-iron ballast, a Change Work Authorization for the additional work will be required.

8.1.1.4 Deck plate on weather decks as specified by ABS Surveyor. (Minimum of 100 readings.)

8.1.1.5 Other areas as may be required by the ABS Surveyor.

8.2 The following tanks will be opened and made safe for entry for inspection under this item and for other work under this contract:

All fuel oil storage tanks P/S/CL.

Main Engine day tanks P/S.

Generator day tank.

Lube oil storage tanks P/S.

Waste oil tank CL.

All ballast tanks P/S/CL.

Potable water tanks P/S.

Sewage tanks P/S.

Chain locker and sump.

The ABS Surveyor may require additional tanks to be opened for inspection and UT testing as above.

All tanks are to be closed at the completion of survey and other work using new gaskets and new cotton grommets.

8.3 Remove all fuel and ballast tank vent valves for inspection and restore at completion of survey. No flame screening is to be installed in any ballast tank vent valve.

8.4 Once vessel has been refloated, hydrostatically test all ballast tanks by filling to overflow through tank vents. Owner's Representative will determine tank sequence for filling. ABS Surveyor will direct areas to be inspected relative to each tank.

8.5 Some readings or inspections may require the removal of sheathing and insulation in living quarters and other areas. All removed material shall be restored to original condition at the completion of testing.

8.6 Any and all coatings and similar coverings disturbed in the course of testing shall be restored to match original condition, including primer and final coating. Surface preparation and coating shall be in accordance with the *Oceanus* Paint Schedule as provided in this Specification.

**ITEM NO. 106: VALVES**

**(1) General:** Remove the valves listed in this Item for inspection, cleaning, and repair or replacement

whichever is more economical. Past experience has shown that it is more economical to replace smaller valves, 2" and under, than it would be to overhaul them. Any larger valve that is found to be defective beyond economical repair shall be reported to the Owner's Representative immediately.

**(2) Owner-Furnished Information ("OFI"):** None for this Item.

**(3) Owner-Furnished Material, ("OFM"):** None for this item.

**(4) Contractor-Furnished Material, ("CFM"):** Contractor shall furnish all labor and material, other than replacement valves above 2" that may be supplied by the Owner, if required.

**(5) Regulatory Requirements:** Refer to section 5 (f) (Materials and Workmanship) of the Exhibit A.

**(6) Coordination with other Work Items:** Contractor is responsible for coordinating all specification items to provide the smoothest workflow and minimize the length of the shipyard availability.

**(7) Safety Precautions:** Refer to section 5 (h) (Safety, Fire Protection and Cleanliness) of Exhibit A

**(8) Statement of Work:**

8.1 Provide labor and materials required to recondition or replace the valves in this item.

8.2 While in drydock, openings in the hull caused by disassembled shell valves shall be closed up temporarily at the end of the workday by replacing the valve or by blank flanging the openings. Before the dock is flooded, all shell valves shall be inspected to assure that they are secured. While flooding the dock, continuous inspection of sea valves shall be made until the ship is afloat and all valves are under a normal working head.

8.3 Remove valves. Disassemble, clean, lap in seats on all metallic valves. Clean valve stem threads and polish stems in way of gland packing. Inspect composition seats in butterfly valves for damage. All butterfly valves are to be hydro-tested at 25psi minimum. All metal-contact sealing valves (globe, gate, wafer, etc.) are to be tested by dye-transfer ("blue fit"). All tests to be witnessed and approved by Owner's Representative, and by ABS Surveyor at the surveyor's discretion. A written report of all valves tested shall be submitted to the Owner's Representative and the ABS Surveyor, in electronic form with a printed copy, no less than 48 hours prior to re-floating the vessel.

8.4 Reassemble all valves with correct size, type and number of rings and new packing, and reinstall. Install with new flange gaskets on all flanged type valves. Renew all burned off, missing or defective bolts, studs, nuts, or other fastenings with material equivalent to original.

8.5 If any valve is found to be defective beyond economical repair it shall be reported to the Owner's Representative immediately. Valve repair (beyond the scope of item 3) or replacement, if required, will be authorized by a Change Work Authorization and/or with Owner-Furnished equipment, but time and labor to install the valve(s) shall be considered within the scope of the original contract.

8.6 Valves (a total of 44) to be serviced under this item are in Appendix B.

**ITEM NO.107: BOW THRUSTER**

**(1) General:** This item provides for inspection and maintenance of the bow thruster, including bearing and clearance readings and ultrasonic testing of seachest & U-tube.

**(2) Owner-Furnished Information, ("OFI"):**

Bow thruster:	White-Gill Dwg. #2162, sheets 1 & 2 (vice 1634)
Fr's, Flr's & Bhd's stem to Fr 12:	PBI Dwg. #9250-101-2, Rev. B
Mn. Dk. shell expansion, stem to Fr 12:	PBI Dwg. No. 9250-107-1, Rev. C
Bow Thruster installation:	PBI Dwg. # 9250-203-4, Rev. B
Coupling for Motor Drive:	PBI Dwg. # 9250-203-6, Rev. B

**(3) Owner-Furnished Material, (“OFM”):** Allube AquaShield grease for bearings. Owner may elect to provide any required replacement parts or provide a Change Work Authorization for purchase of parts to Contractor.

**(4) Contractor-Furnished Material, (“CFM”):** Contractor shall furnish all labor and material to accomplish the specified work other than replacement parts that may be provided by the Owner.

**(5) Regulatory Requirements:** Refer to section 5 (f) (Materials and Workmanship) of Exhibit A.

**(6) Coordination with other Work Items:** Contractor is responsible for coordinating all specification items to provide the smoothest workflow and minimize the length of the shipyard availability.

**(7) Safety Precautions:** Refer to section 5 (h) (Safety, Fire Protection and Cleanliness) of Exhibit A.

**(8) Statement of Work:**

- 8.1 Take & record clearance readings on:
  - 8.1.1 Rotor shaft gland neck ring.
  - 8.1.2 Rotor tip/ liner radial clearance.
  - 8.1.3 Rotor/guide vane hub clearance.
  - 8.1.4 Rotor shaft internal bearing/ sleeve radial clearance.
  - 8.1.5 Discharge deflector/distance piece hub clearance.
  - 8.1.6 Discharge deflector/ distance piece rim clearance
  - 8.1.7 Discharge deflector/ distance piece chamfer clearance.
  - 8.1.8 Discharge deflector/ distance piece radial wobble about true center. (Record movement)
  - 8.1.9 Rotor radial wobble about true center. (Record movement)
- 8.2 Remove the thruster screens and pump impeller, the steering deflector, the lower section of the steering shaft, and shaft tube extension. Indelible witness marks must be made prior to removal to ensure proper orientation for reinstallation. Remove two manhole covers on “U” tube for internal inspection.
- 8.3 After interior of B.T. intake sea chest and tube has been blasted, take a minimum of eight (8) UT readings per side of sea chest and tube area. Check for eroded welds and hairline cracks around hard points.
- 8.4 Check and record end play on steering shaft.
- 8.5 Check SS bearings and housings and impeller bearing. Repack all bearings using Allube AquaShield 109 AF20015 or equal.
- 8.6 Renew packing on pump shaft and steering shaft.
- 8.7 Verify that the steering shaft flange bolts are wired in place.
- 8.8 Renew the 2 (10"x1 ½") round zincs on the manhole covers.
- 8.9 Paint the interior of sea chest and tube as per Item No. 103 (Painting Underwater Body).
- 8.10 Reassemble the unit. No power or air tools are to be used for reassembly of any bow thruster component. Test run the steering deflector 360 degrees in each direction. The thruster pump shall be tested during sea trials.
- 8.11 The removal and reinstallation of the bow thruster components shall be done in the presence of the Owner’s Representative.

**ITEM NO. 108: SEWAGE TANKS**

**(1) General:** Open, clean and recoat port and starboard sewage tanks. Remove the MSD sewage transfer pumps from shaft alley and overhaul.

**(2) Owner-Furnished Information, (“OFI”):**

<i>R/V Oceanus</i> Paint Schedule	Exhibit 1, Rev. L
MSD Transfer Pumps:	Orca IIA Manual, No. 350191-300

**(3) Owner-Furnished Material, (“OFM”):** None for this specification Item.

**(4) Contractor-Furnished Material, (“CFM”):** The Contractor shall furnish all labor and material to accomplish the specified work.

**(5) Regulatory Requirements:** Refer to section 5 (f) (Materials and Workmanship) of Exhibit A.

**(6) Coordination with other Work Items:** Contractor is responsible for coordinating all specification items to provide the smoothest workflow and minimize the length of the shipyard availability.

**(7) Safety Precautions:** Refer to section 5 (h) (Safety, Fire Protection and Cleanliness) of Exhibit A.

**(8) Statement of Work:**

8.1 Remove manhole covers in the shaft alley, pump out, clean and ventilate the port and starboard sewage tanks for inspection of interiors. Each tank has a 6,000 gallon capacity. The Owner’s Representative will inspect the tanks.

8.2 Remove old zincs and straps.

8.3 Remove the two sewage transfer pumps located in the lower shaft alley and move to shop and overhaul. Disassemble the pumps, clean and replace the macerator blades, seals and bearings with Owner furnished parts. Sealed bearings are to be used. Owners Rep will inspect pump prior to reassembly.

8.4 After all repairs are complete and the paint has cured, reinstall float switches, transducers, pumps and valves. Reinstall manhole covers using new gaskets and new cotton grommets on studs.

**(9) OPTION ITEM: BLAST and COAT Sewage Tank**

**This option item will be activated based on coating condition found during initial inspection.**

9.1 Contractor will price 2 (two) options for coating the tanks.

9.1.1 Option 1: Spot blast and coat;

9.1.2 Option 2: Complete blast and coat.

9.2 Blast both tanks to SSPC-SP-6 condition, applies to spot or complete blast, paying particular attention to back sides of frames and webs, to remove loose paint and rust. Thoroughly clean tanks to remove all blasting debris and dust. Owner’s Representative to inspect and approve condition prior to recoating.

9.3 Prior to sandblasting, plug fill/suction holes and vent holes, cover manholes.

9.4 Fully recoat tanks as per *Oceanus* Paint Schedule.

**Paint Schedule:**

**Sewage Tanks:**

Surface Preparation: SSPC-SP-6 (Commercial Blast)

First Coat: Amercoat 240, Blue

8 mils DFT

Second Coat: Amercoat 240, White

8 mils DFT

**ITEM NO. 109: POTABLE WATER TANKS**

**(1) General:** This item provides for cleaning and spot-coating of the port and starboard potable water tanks and the removal of deck drains passing through tanks.

**(2) Owner-Furnished Information (“OFI”)**

*R/V Oceanus* Paint Schedule Exhibit 1, Rev. L

**(3) Owner-Furnished Materials, (“OFM”):** None for this specification Item.

**(4) Contractor-Furnished Material, (“CFM”):** The Contractor shall furnish all labor and material to accomplish the specified work.

**(5) Regulatory Requirements:** Refer to section 5 (f) (Materials and Workmanship) of Exhibit A.

**(6) Coordination with other Work Items:** Contractor is responsible for coordinating all specification items to provide the smoothest workflow and minimize the length of the shipyard availability.

**(7) Safety Precautions:** Refer to section 5 (h) (Safety, Fire Protection and Cleanliness) of Exhibit A.

**(8) Statement of Work:** The Contractor shall provide all labor and materials to:

8.1 Remove the manhole covers in the lower engine room.

8.2 Plug all fill lines and vent lines prior to cleaning. Remove or mask tank level sensors.

8.3 Crop out drains in the tank top and aft bulkhead.

8.3.1 Deck drains are located in the aft, outboard corners of each tank and pass through and connect to the drainage system aft of the engine room.

8.4 Insert tank top and aft bulkhead with appropriate material.

8.4.1 Cap off connection to drainage system.

8.4.2 Coat disturbed areas per *Oceanus* paint schedule.

8.5 Welding repairs shall be in accordance with ABS and Coast Guard requirements.

8.6 For both tanks, clean the tank surfaces only where corrosion is evident, to SSPC-SP-3 condition. This is anticipated to be more pronounced at juncture where frames and stiffeners are skip welded to hull, deck and side plates and the back sides of frame webs. (Note: For bidding purposes, assume a total of twenty-four (24) non-contiguous areas of one square foot (1 ft<sup>2</sup>) each.)

8.6.1 Paint the cleaned areas of the tanks as per *Oceanus* Paint Schedule. Allow adequate drying time for each subsequent layer of paint.

8.7 When cured, remove plugs from fill lines and vents. Owner's Representative is to inspect prior to contractor replacing the manhole covers. Replace covers using new gaskets and cotton grommets.

8.8 Fill with fresh water and sanitize the tank and the potable water system by superchlorinating to a minimum free available chlorine (FAC) level of 80 ppm for at least 1 ½ hours. (This will require 7 gallons of standard or 6 gallons of "ultra-strength" sodium hypochlorite bleach per tank.) Super chlorination of the potable system is to be accomplished by opening all faucets, showerheads, etc. and flushing until super chlorination levels are witnessed in all locations. At that point close off all faucets, showerheads, etc. and allow the system to soak for at least 1 ½ hours. Thoroughly drain the tank through the docking plugs and reinstall plugs. Tanks must be sanitized and drained prior to leaving the drydock. Each tank's capacity is 4,000 gallons.

8.9 Refill and flush tanks and potable water system (minimum 30 minutes flushing through overflow vents) after vessel has been re-floated. Test water at the galley sink to ensure chlorination level meets the chlorination level of the fill water.

## **(9) Paint Schedule**

### **Potable Water Tanks:**

First Coat: Spot-coat, Amercoat 240, Buff  
8 mils DFT

Second Coat: Amercoat 240, Off-White  
8 mils DFT

## **ITEM NO. 110: VOID PRESERVATION**

**(1) General:** Inspect voids for leakage and re-coat for preservation.

### **(2) Owner-Furnished Information, ("OFI"):**

Voids, Fr 7-9	PBI Dwg 9250-107-1, Rev C
Rudder	PBI Dwg 9250-518-1, Rev A
Skeg	PBI Dwg 9250-103-4, Rev C
Rub Rail (Port only)	PBI Dwg 9250-800-2, Rev B
<i>R/V Oceanus</i> Paint Schedule Exhibit 1, Rev. L	



**(3) Owner-Furnished Material, (“OFM”):** None for this Specification Item.

**(4) Contractor-Furnished Material, (“CFM”):** Contractor shall furnish all labor and materials to accomplish the specified work.

**(5) Regulatory Requirements:** Refer to section 5 (f) (Materials and Workmanship) of Exhibit A.

**(6) Coordination with Other Work Items:** Contractor is responsible for coordinating all specification items to provide the smoothest workflow and minimize the length of the shipyard availability.

**(7) Safety Precautions:** Refer to section 5(h) (Safety, Fire Protection and Cleanliness) of Exhibit A.

**(8) Statement of Work:** The Contractor shall provide all labor and materials to:

8.1 Inspect and preserve the following voids:

8.1.1 Void between Frames 7 and 9, below bow thruster.

8.1.2 Rudder Kort nozzle and vertical fin (“monkey rudder”).

8.1.3 Skeg shoe piece.

8.1.4 Exterior hull rub rail, Frames 20-62, Port side only.

8.1.5 Aft seachest, Frames 66-67, Starboard side.

8.2 Remove plugs and check for the presence of water. Apply a fill-and-drain rust-inhibiting compound, grade 2 (water-displacing soft-film properties,) such as Paco Systems “Float-Coat” or equal. Drain. Reinstall plugs using good quality pipe sealant. Owner’s Representative to be present during the removal of all plugs and recoating of voids. Contractor to provide specification sheet for coating used.

8.3 If evidence of water is found, repair of any leaks will be treated as a separate item requiring a Change Work Authorization.

#### **ITEM NO. 111: Steel Renewals and Hull Welding**

**(1) General:** The intent of this work Item is to allow for additional/less steel renewals and hull welding as their requirement becomes identified during the repair period. This item will be used to price change orders for additional and reduction in steel under the original items.

**(2) Owner-Furnished Information, (“OFI”):** None.

**(3) Owner-Furnished Material, (“OFM”):** None.

**(4) Contractor-Furnished Material, (“CFM”):** N/A

**(5) Regulatory Requirements:** Refer to section 5 (f) (Materials and Workmanship) of Exhibit A.

**(6) Coordination with Other Work Items:** Contractor is responsible for coordinating all specification items to provide the smoothest workflow and minimize the length of the shipyard availability.

**(7) Safety Precautions:** N/A

**(8) Statement of Work: Steel Renewals:**

8.1 Quote for each plate type a lump sum price to replace a 3 ft x 3 ft and a 6 ft x 6 ft plate. This price will be used to establish cost for smaller steel renewals. In addition, quote for each plate type a unit price per pound of steel (minimum quantity one long ton) cropped and renewed. This shall be used for prorating the cost of steel renewals for which the aggregate is one ton and up.

8.1.1 Price for all shall include, but not be limited to, labor, material, equipment, staging, testing, painting, and other services as necessary in order to complete shell plating renewal.

8.1.2 Internal structural members/stiffeners shall be quoted on a per pound basis.

8.2 All materials and welding shall be in accordance with ABS and USCG requirements.

8.3 All steel to be priced to be ABS grade "A".

- Item No. 1 FLAT PLATE (3 ft x 3 ft)
- Item No. 2 FLAT PLATE (6 ft x 6 ft)
- Item No. 3 FLAT PLATE (per pound)
- Item No. 4 SHAPED PLATE (3 ft x 3 ft)
- Item No. 5 SHAPED PLATE (6 ft x 6 ft)
- Item No. 6 SHAPED PLATE (per pound)
- Item No. 7 COMPOUND PLATE (3 ft x 3 ft)
- Item No. 8 COMPOUND PLATE (6 ft x 6 ft)
- Item No. 9 COMPOUND PLATE (per pound)
- Item No. 10 BULKHEADS (3 ft x 3 ft)
- Item No. 11 BULKHEADS (6 ft x 6 ft)
- Item No. 12 BULKHEADS (per pound)
- Item No. 13 INTERNALS (per pound)

8.4 Hull Welding:

8.4.1 Quote unit price per foot of length for repair and rewelding of wasted hull and/or rudder welds found upon examination to be necessary.

8.4.2 Price shall include, but not be limited to, labor, material, equipment, staging, testing, painting, and any services as necessary in order to complete, tank, hull and rudder welding repairs.

8.4.3 All materials and welding shall be in accordance with ABS and USCG requirements.

8.4.4 Quote unit price based on the following:

- Item No. 14 GOUGE/VEE OUT AND REWELD
- Item No. 15 CLEAN AND BUILD-UP WITH WELD

**ITEM NO. 112: Deck Socket Renewal**

**(1) General:** The intent of this item is to crop out and replace with new 3 (three) deck sockets.

**(2) Owner-Furnished Information, ("OFI"):**

Voids, Fr 7-9

PBI Dwg 9250-107-1, Rev C

**(3) Owner-Furnished Material, ("OFM"):** Deck sockets.

**(4) Contractor-Furnished Material, ("CFM"):** Contractor shall furnish all labor and materials to accomplish the specified work.

**(5) Regulatory Requirements:** Refer to section 5 (f) (Materials and Workmanship) of Exhibit A.

**(6) Coordination with Other Work Items:** Contractor is responsible for coordinating all specification items to provide the smoothest workflow and minimize the length of the shipyard availability.

**(7) Safety Precautions:** Refer to section 5(h) (Safety, Fire Protection and Cleanliness) of Exhibit A.

**(8) Statement of Work:** The Contractor shall provide all labor and materials to clean the #8 Port and #10 Port ballast tanks, and Steering Room to a "Safe for Men, Safe for Hotwork" condition as specified in the item.

8.1 Contractor shall crop out and install 5 (five) Owner furnished deck sockets.

8.1.1 DWG \*\*\* shows exact locations.

8.2 Contractor shall prove tightness of the sockets by vacuum box, NDT survey, or other means as agreed upon with ABS surveyor and/or Owners Representative.

8.3 Contractor is to supply unit pricing for additional socket replacement located in other ballast tanks not otherwise specified. Cost will be for the socket replacement only and not include cleaning/gas free/safe for hotwork costs.

#### **ITEM NO. 113: SEACHEST CROSSOVER PIPE**

**(1) General:** Clean and re-coat the 10" crossover pipe between the port and starboard seachest in the engine room. The crossover pipe is approximately 18' in length with a 90-degree elbow at each end.

**(2) Owner-Furnished Information, ("OFI"):**

Seachests & Crossover Pipe	PBI Dwg # 9250-120-1 Rev C
<i>R/V Oceanus</i> Paint Schedule	Exhibit 1, Rev. L

**(3) Owner-Furnished Materials, ("OFM"):** Steel "clamshells" for flange sealing.

**(4) Contractor-Furnished Material, ("CFM"):** The Contractor shall furnish all labor and material to accomplish the specified work.

**(5) Regulatory Requirements:** Refer to section 5 (f) (Materials and Workmanship) of Exhibit A.

**(6) Coordination with other Work Items:** Contractor is responsible for coordinating all specification items to provide the smoothest workflow and minimize the length of the shipyard availability.

**(7) Safety Precautions:** Refer to section 5 (h) (Safety, Fire Protection and Cleanliness) of Exhibit A.

**(8) Statement of Work:**

8.1 Remove sea valves from crossover pipe and sea chests (per Item 107, Sea Valves). Reinsert all flange bolts and tighten to hand-tight. Wrap flange assemblies with rubber gasket material and secure with Owner-provided steel "clamshells" using suitable band clamps.

8.2 Remove marine growth from interior of crossover pipe from starboard sea chest to port sea chest by high pressure (6,000 - 8,000 PSI minimum) water wash using a self-propelled in line mole. The marine growth is mainly mussels. A foam "pig" or similar cleaning swab should be run through the pipe sufficient times to ensure cleanliness and removal of debris from the bore.

8.3 Inspect, with Owner's Representative present, via flexible-head video camera or other means which allows for a view of not less than 100% of the pipe interior.

8.4 Re-coat pipe interior as per *Oceanus* Paint Schedule. Pipe shall be re-inspected per para 8.3 above before final anti-fouling coat is applied to ensure even coating.

8.5 Clean pipe exterior to SSPC-SP-2 condition and paint as per *Oceanus* Paint Schedule.

**(9) Paint Schedule:**

**Seachest Crossover Pipe:**

**Interior:**

Surface Preparation: Sandsweep or high-pressure water blast (30,000 psi minimum) to SSPC-SP-7 (Brush-Off Blast).

First Coat: Amercoat 235, Red  
4 mils DFT  
Second Coat: Amercoat 235, White  
4 mils DFT  
Third Coat: ABC3 Anti-Fouling, Black  
3-4 mils DFT

**Exterior:**

Surface Preparation: SSPC-SP-2 (Hand Tool Cleaning)  
First Coat: Amercoat 235, Red  
4 mils DFT  
Second Coat: Amercoat 235, Red  
4 mils DFT

**ITEM NO. 114: LOAD TESTS**

**(1) General:** Conduct load tests on ship's crane, A-frames, CTD squirt boom and Rescue Boat davit.

**(2) Owner-Furnished Information, ("OFI"):** None for this item.

**(3) Owner-Furnished Material, ("OFM"):** None for this Item.

**(4) Contractor-Furnished Material, ("CFM"):** Contractor shall furnish all labor and materials to accomplish the specified work.

**(5) Regulatory Requirements:** Refer to section 5 (f) (Materials and Workmanship) of Exhibit A.

**(6) Coordination with other Work Items:** Contractor is responsible for coordinating all specification items to provide the smoothest workflow and minimize the length of the shipyard availability.

**(7) Safety Precautions:** Refer to section 5 (h) (Safety, Fire Protection and Cleanliness) of Exhibit A.

**(8) Statement of Work:** The Contractor shall provide all labor and materials to perform the overload tests identified below.

8.1 The load tests will not be conducted until all repairs to equipment are completed. All tests are to be conducted while the vessel is waterborne and ballasted to a safe condition as determined by the vessel's Master. The Owner will provide operators for ship's equipment. The Contractor's crane shall remain "slack-hooked" to test loads during each test.

8.1.1 At the completion of all tests the Contractor shall provide written documentation of the test results to the Owner's Representative.

8.2 Allied Marine Crane: The boom shall be pointing aft along the ship's centerline with no list on the ship. A suitable load to verify a 25 percent overload capacity of the crane shall be agreed to by the Owner's and shipyard representatives based on the position of the boom and the load chart in the referenced manual (for bidding purposes a load of 15,000 pounds with the boom fully extended and a boom angle of 30 degrees for a load radius of 62 feet may be assumed). Rig preventer lines athwartship from test load to prevent load moving off center. Lift load clear of deck not to exceed 6". Hold for 15 minutes and lower to deck (the shipyard shall provide suitable dunnage to protect the deck from damage if using solid test weights).

8.3 Stern A-Frame: With the A-Frame in the fully outboard position place a test load of 40,000 pounds on the center eye of the frame and hold for 15 minutes. Remove the test weight, move the frame to the fully inboard position and secure an 8,000 pound test load to the center eye. Extend the A-frame to the fully outboard position and return to the inboard position.

8.4 CTD Well Squirt Boom: With the squirt boom in the fully extended position, place a test load of 7,500 pounds on the end connection and hold for 15 minutes.

**ITEM NO. 115: HULL & TANK ZINCS**

**(1) General:** Inspect and replace hull and ballast/sewage tank zincs.

**(2) Owner-Furnished Information, (“OFI”):**

Zinc Locations PBI Dwg. No. 9250-605-2, Rev B

**(3) Owner-Furnished Material, (“OFM”):** None for this Item.

**(4) Contractor-furnished Material, (“CFM”):** Contractor shall furnish all labor and material to accomplish the specified work.

**(5) Regulatory Requirements:** Refer to section 5 (f) (Materials and Workmanship) of Exhibit A.

**(6) Coordination with other Work Items:** Contractor is responsible for coordinating all specification items to provide the smoothest workflow and minimize the length of the shipyard availability.

**(7) Safety Precautions:** Refer to section 5 (h) (Safety, Fire Protection and Cleanliness) of Exhibit A.

**(8) Statement of Work:**

8.1 Renew all hull zincs. This includes twenty-four (24) each for the exterior hull, type ZH-S-23, 25lb. with steel straps. The new zincs shall be located in the same area as those removed. Straps and weld areas shall be painted in accordance with the requirements for bottom paint in Item 103 (Painting Underwater Body). Provide fixed price for replacement of exterior hull zincs. Contractor is to provide Option pricing for up to 10 (ten) additional hull zincs in locations to be determined by Owners Representative. The exterior hull zincs locations are:

6ea. in engine room sea chests, (3) port and (3)starboard

4ea. on monkey rudder

6ea. on shaft tube

4ea. on hull above & forward of nozzle

4ea. on hull by transducer well

2ea. on top of shoe piece

1ea. in aft sea chest

Total of twenty-seven (27) exterior hull zincs.

8.2 Renew a minimum of six (6) zincs in ballast and/or sewage tanks. Specific zincs to be replaced will be determined by the Owner’s Representative upon inspection.

Contractor is to provide per unit cost for replacement of additional zincs in the interior of the ballast tanks.

**ITEM NO. 116: FOREPEAK BALLAST TANK**

**(1) General:** This item provides for sandblasting and preservation of Forepeak Ballast Tank.

**(2) Owner-Furnished Information, (“OFI”):**

Framing Sections – Frames 61-75 PBI Dwg #9250-101-6, Rev A

R/V Oceanus Paint Schedule Exhibit 1, Rev. L

**(3) Owner-Furnished Material, (“OFM”):** Owner will provide all paints for this item..

**(4) Contractor-Furnished Material, (“CFM”):** Contractor shall furnish all labor and materials to accomplish the specified work.

**(5) Regulatory Requirements:** Refer to section 5 (f) (Materials and Workmanship) of Exhibit A.

**(6) Coordination with Other Work Items:** Contractor is responsible for coordinating all specification items to provide the smoothest workflow and minimize the length of the shipyard availability.

**(7) Safety Precautions:** Refer to section 5 (h) (Safety, Fire Protection and Cleanliness) of Exhibit A.

**(8) Statement of Work:** The Forepeak Ballast Tank is located between the Stem and Frame 4 with a capacity of 3137 gallons. Access to the tank is via a manhole located at Frame 4.

NOTE: The Forepeak tank is currently coated with \*\*\*

The Contractor shall provide all labor and materials to:

- 8.1 Remove manhole cover from Forepeak ballast tank and clean tank prior to sandblasting.
- 8.2 Remove tank gauging transducer prior to sandblasting. Remove zincs.
- 8.3 Prior to sandblasting, plug fill/suction holes and vent holes and cover manholes leading from tank to winch room. Blast tank to SSPC-SP-6 Commercial, paying particular attention to the backsides of frames and webs.
- 8.4 Fully recoat tank as per *Oceanus* paint schedule.
- 8.5 Verify that the tank suction/fill line, sounding tube, tank level transducer fitting and tank vent line are free of dust, grit, rags and debris.
- 8.6 After coating has cured and tank has been inspected by Owner's Representative, replace tank gauging transducer and install new zincs. Replace manhole cover using new gasket and cotton grommets.

**(9) Paint Schedule:**

**Forepeak & Ballast Tanks:**

- |              |   |
|--------------|---|
| First Coat:  | Spot-coat, Amercoat 235, Red<br>1 mil DFT |
| Second Coat: | Amercoat 235, Buff<br>6-8 mils DFT        |
| Third Coat:  | Amercoat 235, White<br>6-8 mils DFT       |

**ITEM NO. 117: CHAIN LOCKER & HAWSEPIPES**

**(1) General:** Spot clean and re-coat chain locker, chain locker sump, hawsepipes and spill pipes. Replace bilge suction line in chain locker sump.

**(2) Owner-Furnished Information, ("OFI"):**

- |   |  |
|---|--|
| Frames, floors & bulkheads below main deck, Stem to frame 12, | PBI Dwg. No. 9250-101-2, Rev B           |
| Anchor Handling,  | PBI Dwg. No. 9250-520-1 Rev B (2 sheets) |
| <i>R/V Oceanus</i> Paint Schedule                             | Exhibit 1, Rev. L                        |

**(3) Owner-Furnished Material, ("OFM"):** Owner will provide all paints for this specification Item.

**(4) Contractor-Furnished Material, ("CFM"):** Contractor shall furnish all labor and material to accomplish the specified work.

**(5) Regulatory Requirements:** Refer to section 5 (f) (Materials and Workmanship) of Exhibit A.

**(6) Coordination with other Work Items:** Contractor is responsible for coordinating all specification items to provide the smoothest workflow and minimize the length of the shipyard availability.

**(7) Safety Precautions:** Refer to section 5 (h) (Safety, Fire Protection and Cleanliness) of Exhibit A.

**(8) Statement of Work:** The chain locker is located between frames 4 and 6 and shares a common thwartship bulkhead with the seawater ballast tank forward and the bow thruster machinery compartment aft. The locker is divided into two compartments by a longitudinal bulkhead at centerline, approximately five feet (5') high; combined surface area for both compartments is approximately 450 square feet. The chain locker sump is located directly beneath the locker, with access via a manhole at Frame 6 at the forward end of the Bow Thruster room.

8.1 While anchor chain is out of chain locker and hawsepipes (see Item 112, Anchors and Anchor Chain) The Contractor shall provide all labor and material to water wash hawsepipes, spill pipes, all interior bulkheads, overhead and center line bulkhead with high-velocity water stream. When wash down is complete, remove standing water (water will drain to chain locker sump and must be removed before opening sump for work specified below.) Allow adequate time to dry before paint is applied.

8.2 Prep chain locker, chain locker sump, spill pipes and hawsepipes for cleaning.

8.2.1 Plug all suction lines from both sides of locker prior to cleaning.

8.2.2 Spot clean both sides of locker and sump to SSPC-SP-3 condition. For estimating purposes, assume a total of eight (8) non-contiguous areas of four square feet (4 ft<sup>2</sup>) each. Contractor shall pay particular attention to the back sides of frame 5, foot holds in centerline bulkhead, chain pipe bell mouth castings and doubler plate located in the lower forward corner of the port locker compartment.

8.2.3 Owner's Representative shall be notified when cleaning of this area is complete so a visual inspection of prepped areas can be made prior to paint application.

8.3 Blast complete interiors of both hawsepipes and both spill pipes to SSPC-SP6 condition.

8.4 Upon completion of all prep, cleanup and inspection by Owners Representative, spot coat the locker and sump interiors as per *Oceanus* Paint Schedule.

8.5 Coat spill pipe and hawsepipe interiors as per *Oceanus* Paint Schedule.

8.6 Anchor chain shall not be brought on board until after the coating has cured and the lockers have been inspected by the Owner's Representative.

## **(9) Paint Schedule:**

### **Chain Lockers:**

First Coat:	Spot coat Amercoat 235, Gray 4-6 mils DFT
Second Coat:	Amercoat 235, Buff 6-8 mils DFT
Third Coat:	Amercoat 235, White 6-8 mils DFT

### **Hawsepipes & Spill Pipes:**

First Coat:	Amercoat 235, Gray 6-8 mils DFT
Second Coat:	Amercoat 235, Black 6-8 mils DFT

## **ITEM NO. 118: Transducer Well Titivation**

**(1) General:** The intent of this item is to clean, check for true of transducer mounting surfaces and true surfaces if required. Clean and chase threads in all mounting holes and install studs.

### **(2) Owner-Furnished Information, ("OFI"):**

Voids, Fr 7-9 PBI Dwg 9250-107-1, Rev C  
R/V *Oceanus* Paint Schedule Exhibit 1, Rev. L

**(3) Owner-Furnished Material, ("OFM"):** 104 Studs, nuts, and washers.

**(4) Contractor-Furnished Material, (“CFM”):** Contractor shall furnish all labor and materials to accomplish the specified work.

**(5) Regulatory Requirements:** Refer to section 5 (f) (Materials and Workmanship) of Exhibit A.

**(6) Coordination with Other Work Items:** Contractor is responsible for coordinating all specification items to provide the smoothest workflow and minimize the length of the shipyard availability.

**(7) Safety Precautions:** Refer to section 5(h) (Safety, Fire Protection and Cleanliness) of Exhibit A.

**(8) Statement of Work:** The Contractor shall provide all labor and materials to remove covers and check for trueness all mounting surfaces.

8.1 Check trueness of mounting surfaces using a qualified straight edge.

8.1.1 Acceptable limit is .002”

8.1.2 Contractor will submit a report to the Owners Representative.

8.2 If required by results of initial check Contractor will true transducer mounting surfaces using machining, lapping, or other method after approval of the Owners Representative.

8.3 Thread chase all mounting bolt holes.

8.3.1 Install 104 Owner furnished studs using “Loctite” or equivalent thread locking compound.

8.4 Install covers using new, Contractor furnished hardware.

8.4.1 Under no circumstances are gasket sealers, adhesives, or lubricants to be used on the gaskets or gasket surfaces.

8.5 Submit final report to the Owners Representative.

#### **ITEM NO. 119: Renew Frame and Stiffeners**

**(1) General:** The intent of this item is for the Contractor to provide all necessary labor, materials, equipment, staging and crainage to crop and renew wasted steel in way of Frames 9, 10, and 11 in the Bow Thruster space.

**(2) Owner-Furnished Information, (“OFI”):**

Frames, Floors, Bhds, Stem - 12

PBI Dwg 9250-101-2, Rev B

**(3) Owner-Furnished Material, (“OFM”):** None for this Specification Item.

**(4) Contractor-Furnished Material, (“CFM”):** Contractor shall furnish all labor and materials to accomplish the specified work.

**(5) Regulatory Requirements:** Refer to section 5 (f) (Materials and Workmanship) of Attachment A.

**(6) Coordination with Other Work Items:** Contractor is responsible for coordinating all specification items to provide the smoothest workflow and minimize the length of the shipyard availability.

**(7) Safety Precautions:** Refer to section 5(h) (Safety, Fire Protection and Cleanliness) of Attachment A.

**(8) Statement of Work:** The Contractor shall crop and renew wasted portion of Frame 10 and hull stiffeners at frames 9 and 11, port and stbd of the bow thruster inlet and discharge tubes.

8.1 Crop out wasted portions of Frames 9, 10, and 11 in way of identified areas.

8.2 All preparations and welding procedures are to meet ABS standards.

8.3 All welding on the shell of the vessel shall be NDT surveyed as required by ABS.

8.4 All new steel shall be ABS grade “A”, Contractor will provide copies of certificates for all steel prior to installation.

8.5 All new steel shall be shop primed prior to construction.

8.6 Coat new steel and disturbed areas, less top coat, as per *Oceanus* Paint Schedule.



**ITEM NO. 201: STARBOARD SEACHEST PIPING**

**(1) General:** Install additional suction line and valve in starboard engine room seachest and install Owner furnished pump.

**(2) Owner-Furnished Information (“OFI”):**

Seachests & Crossover	PBI Dwg # 920-120-1 Rev C
Dimensioned sketches	Pending ABS review
<i>R/V Oceanus</i> Paint Schedule	Exhibit 1, Rev. L

**(3) Owner-Furnished Material, (“OFM”):** 2” butterfly valve, ductile iron body, SS disc, Crane trype 23 or equal, with certification of hydro test.

**(4) Contractor-Furnished Material, (“CFM”):** Contractor shall furnish all labor and material to accomplish the specified work.

**(5) Regulatory Requirements:** Refer to section 5 (f) (Materials and Workmanship) of Exhibit A.

**(6) Coordination with other Work Items:** Contractor is responsible for coordinating all specification items to provide the smoothest workflow and minimize the length of the shipyard availability.

**(7) Safety Precautions:** Refer to section 5 (h) (Safety, Fire Protection and Cleanliness) of Exhibit A.

**(8) Statement of Work:** The starboard engine room seachest is located between Frames 25 and 26 below the engine room floorplates.

- 8.1 The Contractor shall provide all labor and material to cut new penetration and install one (1) new suction line on the aft side of the seachest (intended for service to the clean seawater pump.)
- 8.2 Piping is to be 2” Schedule 80 steel with ANSI Class 150 four-bolt steel flange. Finished length from seachest wall to mating surface of flange is to be four inches (4”) overall.
- 8.3 Fabricate and install foundation for Owner furnished pump.
- 8.4 Connect newly installed penetration and valve to pump using 2” Schedule 40 steel pipe.
  - 8.4.1 Install pipe hangers as required to support new piping with no run being longer than 3 ft.
- 8.5 Fit-up examination, final weld examination and pressure testing to be carried out to the satisfaction of ABS Surveyor.
- 8.6 Coat new work and disturbed areas per *Oceanus* Paint Schedule.

**(9) Paint Schedule:**

**Piping:**

Surface Preparation:	SSPC-SP6 (Commercial Blast)
First Coat:	Dimetcote 302 4 mils DFT
Second Coat:	Amercoat 235, color as appropriate 6-8 mils DFT

**ITEM NO. 202: ANCHORS & CHAIN**

**(1) General:** Inspect, blast and re-coat the ship’s anchors and anchor chain.

**(2) Owner-Furnished Information, (“OFI”):**

<i>R/V Oceanus</i> Paint Schedule	Exhibit 1, Rev. L
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**(3) Owner-Furnished Material, (“OFM”) Paints.**

**(4) Contractor-Furnished Material, (“CFM”) Contractor** shall provide all labor and materials (other than chain and fittings that may be provided by Owner) to perform the work identified below.

**(5) Regulatory Requirements:** Refer to section 5 (f) (Materials and Workmanship) of Exhibit A.

**(6) Coordination with other Work Items:** Contractor is responsible for coordinating all specification items to provide the smoothest workflow and minimize the length of the shipyard availability.

**(7) Safety Precautions:** Refer to section 5 (h) (Safety, Fire Protection and Cleanliness) of Exhibit A.

**(8) Statement of Work:**

8.1 Roust out both anchor chains, including anchors and bitter ends, onto the drydock floor. Chains are 7 shots (105 fathoms) for the starboard anchor and 6 shots (90 fathoms) for the port anchor of 1" Grade Two chain.

8.2 Water-wash and sand-sweep or tumble chains and anchors to SSPC-SP7 condition.

8.3 Inspect the chain, with Owner’s Representative, including connecting links, pear links and swivels. Measure the length of six links in three places on each shot and provide measurements to the Owner’s Representative. The measurement of six links should be 26-3/4" plus 3/4" minus 0". Take diameter measurements of at least three links in each shot. The diameter should exceed 0.90". If any shots are stretched or worn significantly beyond the tolerances stated above, the Owner may elect to replace them as noted in “Owner-Furnished Equipment” above. In either case, the replacement will be considered as part of this item. Any scrap chain will remain property of the Owner and will be loaded on the fantail of the ship prior to departure. The Owner’s Representative may require, based on the measurements made, that some shots be moved in sequence or that the chain be “end-for-ended;” such work will be limited in nature and will be considered to be part of this item.

8.4 On completion of the inspection, paint anchors and chain as per *Oceanus* Paint Schedule. The chain will be hung for painting and marking.

8.5 All locking wires shall be replaced. Shackles, shackle bolts, locking pins, swivels and other anchor chain fittings shall be generously lubricated with a suitable waterproof compound approved by the Owner.

8.6 At the completion of all work, and after all paint has cured, return chain to ship, connect Owner furnished “weak link” and flake chain back into the chain locker in neat rows.

**(9) Paint Schedule:**

**Anchors & Chain:**

First Coat:	Amercoat 235, Red 4-6 mils DFT
Second Coat	Amercoat 235, Black 4-6 mils DFT

**Re-mark and paint shots as follows:**

- The detachable links are to be painted red, white or blue - red for 15 fathoms, white for 30, blue for 45, red for 60, white for 75 and so on.
- At the 15-fathom mark, one (1) link on each side of the detachable link is to be painted white, and one turn of wire to be wrapped securely around each stud. At the 30-fathom mark, two links on each side of the detachable link are to be painted white with two (2) turns of wire wrapped around the studs of the second links from the detachable link (and so on for each subsequent shot).
- The second to last shot will be given a top coat of yellow and the last (inboard) of red.
- Paint used in marking shall be a high gloss marine striping paint and shall be allowed to become dry and hard before stowing in the chain locker.

**ITEM NO. 203: Overhaul Anchor Windlass**

**(1) General:** It is the intent of this item to unship the anchor windlass from its foundation and remove to an overhaul facility. The foundation will be titivated while the windlass is undergoing overhaul.

**(2) Owner-Furnished Information, ("OFI"):**

New England Trawler Tech Man. Model# X-2247  
*R/V Oceanus* Paint Schedule Exhibit 1, Rev. L

**(3) Owner-Furnished Material, ("OFM"):** None for this Specification Item.

**(4) Contractor-Furnished Material, ("CFM"):** Contractor shall furnish all labor and materials to accomplish the specified work.

**(5) Regulatory Requirements:** Refer to section 5 (f) (Materials and Workmanship) of Exhibit A.

**(6) Coordination with Other Work Items:** Contractor is responsible for coordinating all specification items to provide the smoothest workflow and minimize the length of the shipyard availability.

**(7) Safety Precautions:** Refer to section 5(h) (Safety, Fire Protection and Cleanliness) of Exhibit A.

**(8) Statement of Work:** The Contractor shall provide all labor and materials to remove anchor windlass from the vessel and transport to shop for overhaul.

8.1 Contractor shall remove foundation bolts, clean and visually inspect for defects.

8.1.1 Perform an NDT survey of all bolts and submit report to the Owners Representative.

8.2 Disassemble the windlass IAW manufacturer’s tech pub.

8.2.1 Inspect all internal and external gears, shafts, brakes, wildcat heads, windlass drums, and all operating mechanisms for unusual wear.

8.2.2 Perform an NDT survey on the gears and shafts and submit report to the Owners Representative.

8.2.3 Prior to reassembly submit a Condition Found Report to the Owners Representative and make all components available for inspection by Owners Representative.

8.3 Contractor will reassemble the anchor windlass using new, OEM, Owner furnished parts including bearings, soft seals, gaskets and lube oil.

8.4 Blast and coat the windlass IAW Oceanus paint guidelines.

8.5 Mechanically clean the windlass foundation and perform an NDT survey.

8.5.1 Submit NDT report to the Owners Representative.

8.6 Blast and coat the windlass foundation IAW Oceanus paint guidelines.

8.7 Install windlass on ship.

8.7.1 Contractor will supply new foundation bolts to replace any that failed during inspection

8.8 Perform operational test in presence of Owners Representative.

**ITEM NO. 204: Painting Freeboard**

**(1) General:** Waterwash, inspect, prep and paint hull and appurtenances above the waterline.

**(2) Owner-Furnished Information, ("OFI"):**

*R/V Oceanus* Paint Schedule Exhibit 1, Rev. L

**(3) Owner-Furnished Material, ("OFM"):** All paints will be Owner furnished.

**(4) Contractor-Furnished Material, ("CFM"):** Contractor shall furnish all labor and materials, less paints, to accomplish the specified work.

**(5) Regulatory Requirements:** Refer to section 5 (f) (Materials and Workmanship) of Exhibit A.

**(6) Coordination with Other Work Items:** Contractor is responsible for coordinating all specification items to provide the smoothest workflow and minimize the length of the shipyard availability.

**(7) Safety Precautions:** Refer to section 5(h) (Safety, Fire Protection and Cleanliness) of Exhibit A.

**(8) Statement of Work:** The Contractor shall provide all labor and materials to blast and coat the freeboard area of Oceanus. Contractor will follow preparation guidelines as listed in Item 103, section 8.1 through 8.21 prior to application of any paints in this item.

8.1 Deep Load Line to Top of Deck Rail (Freeboard) Surface Preparation:

8.1.1 The freeboard area to be dealt with extends from the deep load line to the deck rail. This area includes all vertical hull surfaces to the deck edge; the tops and outer surfaces of all bulwarks. All vertical surfaces of the stern area to the Main Deck and all hull fittings, such as port and starboard hawse pipes from the sideshell to the main deck,

8.1.2 High pressure water blast at 3,000 psi the entire area specified. Remove all salt deposits, loose paint, rust, and contaminants.

8.1.3 . All areas above the Deep Load Line (Freeboard) shall be blasted to SSPC-SP6 (Commercial Blast).

8.1.4 Expended blast grit which remains on the upper decks shall be removed within twenty-four hours of blasting to avoid ingress into accommodation and machinery spaces and to avoid blowing onto hull surfaces to be painted.

8.1.5 The entire freeboard area shall be blown dry with dry compressed air to remove all grit material remaining from blasting and left completely dry prior to applying any paint.

8.2 Deep Load Line to Top of Deck Rail (Freeboard) Coating:

8.2.1 The blasted areas shall be coated with two (2) spot coats of epoxy anticorrosive. When the second coat of epoxy primer is tack free and is approved by the Owners Representative, the entire freeboard shall be evenly applied with two (2) coats of AMERCOAT 229T. The finish coat shall be black in color.

8.2.2 Paints will be applied in accordance with this general schedule:

1st Primer Coat –PPG AMERCOAT 240LT Haze Gray @ 5-6 mils DFT

2nd Primer Coat – PPG AMERCOAT 240LT Oxide Red @ 5-6 mils DFT

1st Full Coat – PPG AMERCOAT 229T Haze Gray @ 2-4 mils DFT

2nd Full Coat – PPG AMERCOAT 229T black @ 2-4 mils DFT

8.3 Repaint all hull markings in areas recoated at this time using two (2) coats of contrasting colored paint compatible with the hull paint finish coat in accordance with the Oceanus Coating Guidelines (Latest Revision). Hull markings include, but shall not be limited to, ship's name, port of registry, the draft marks, Load Line and Plimsoll markings, bow and stern thruster markings, IMO number, etc.

8.4 Water Washing:

8.4.1 Upon completion of all painting work and just prior to redelivery, the vessel's entire external topside, including deck house vertical surfaces, horizontal decks, and deck machinery, shall be washed down with clean, fresh water.

8.4.2 All deck drains and scuppers shall be cleaned and proven clear of grit.

8.4.3 All painted areas shall be maintained free of dirt and contamination.

8.4.4 Any areas found to be damaged shall be repaired to the satisfaction of the Owners Representative.

#### **ITEM NO. 205: Gear Oil Tank**

**(1) General:** Contractor will open, make safe for hotwork, and create a gear oil tank in the port lube oil storage tank of sufficient size to hold minimum 150 gals.

**(2) Owner-Furnished Information, (“OFI”):**

*R/V Oceanus* Paint Schedule Exhibit 1, Rev. L

**(3) Owner-Furnished Material, (“OFM”):** None for this Specification Item.

**(4) Contractor-Furnished Material, (“CFM”):** Contractor shall furnish all labor and materials to accomplish the specified work.

**(5) Regulatory Requirements:** Refer to section 5 (f) (Materials and Workmanship) of Exhibit A.

**(6) Coordination with Other Work Items:** Contractor is responsible for coordinating all specification items to provide the smoothest workflow and minimize the length of the shipyard availability.

**(7) Safety Precautions:** Refer to section 5(h) (Safety, Fire Protection and Cleanliness) of Exhibit A.

**(8) Statement of Work:** The Contractor shall provide all labor and materials to open, clean to Safe for Hotwork the port lube oil storage tank.

8.1 Install a divider in the port lube oil tank to segregate the tank into 2 (two) tanks.

8.1.1 The newly created gear oil storage tank will have 150 gals capacity.

8.1.2 The forward section of the tank will be the gear oil tank.

8.1.3 The divider will be approximately 3/8” x 30” x 60” of ASB grade “A” steel.

8.2 Fabricate and install a fill line and vent in the aft lube oil tank. Both lines will be vertical penetrations to the messdeck.

8.3 Coat all disturbed areas and inside of tank per *Oceanus* paint schedule.

**ITEM NO. 206: Develop Fuel Sounding Tables**

**(1) General:** Contractor is to develop sounding tables for all fuel tanks based on meter readings as *Oceanus* is fueled.

**(2) Owner-Furnished Information, (“OFI”):** None for this Specification item.

**(3) Owner-Furnished Material, (“OFM”):** None for this Specification Item.

**(4) Contractor-Furnished Material, (“CFM”):** Contractor shall furnish all labor and materials to accomplish the specified work.

**(5) Regulatory Requirements:** Refer to section 5 (f) (Materials and Workmanship) of Exhibit A.

**(6) Coordination with Other Work Items:** Contractor is responsible for coordinating all specification items to provide the smoothest workflow and minimize the length of the shipyard availability.

**(7) Safety Precautions:** Refer to section 5(h) (Safety, Fire Protection and Cleanliness) of Exhibit A.

**(8) Statement of Work:** The Contractor shall provide all labor and materials to accurately meter fuel into *Oceanus* fuel tanks and develop an accurate sounding table for each storage tank.

8.1 Contractor will work with ships crew during Owner contracted fueling prior to departure from shipyard.

8.2 Contractor will determine tank levels for each inch of depth as measured at the installed sounding tube.

8.3 Contractor will develop and present to Owner a sounding table for each fuel oil storage tank and day tank.

**ITEM NO. 207: Replace Special Lab Seawater Intake**

**(1) General:** The Contractor shall provide all labor and materials to crop out and renew the seawater intake for the science lab.

**(2) Owner-Furnished Information, (“OFI”):**

Hull Penetration Schedule

PBI Dwg 9250-120-2, Rev D

**(3) Owner-Furnished Material, (“OFM”):** None for this Specification Item.

**(4) Contractor-Furnished Material, (“CFM”):** Contractor shall furnish all labor and materials to accomplish the specified work.

**(5) Regulatory Requirements:** Refer to section 5 (f) (Materials and Workmanship) of Exhibit A.

**(6) Coordination with Other Work Items:** Contractor is responsible for coordinating all specification items to provide the smoothest workflow and minimize the length of the shipyard availability.

**(7) Safety Precautions:** Refer to section 5(h) (Safety, Fire Protection and Cleanliness) of Exhibit A.

**(8) Statement of Work:**

8.1 Crop out and remove existing seawater intake from hull to sea valve.

8.2 Renew seawater intake per referenced drawing; approximately 24” of 4” sch 80 pipe and 4” 150# welded flange.

8.3 All work will be completed to the satisfaction of the ABS surveyor.

ATTACHMENT 1

**R/V Oceanus Paint Schedule**

**Revision L (by OSU): 15 November 2013**

AS BUILT (Mid-Life Conversion)  
Jensen Maritime Consulting  
Document No. 93202-800-2  
Original Issue: 10 December 1993

Revision A: 14 Dec 93 (JMC)  
Revision B: 04 Jan 94 (JMC)  
Revision C: 27 Jan 94 (JMC)  
Revision D: 01 Jul 96 (OSU)  
Revision E: 27 Aug 98 (OSU)  
Revision F: 15 Mar 01 (OSU)  
Revision G: 22 May 03 (OSU)  
Revision H: 17 May 04 (OSU)  
Revision I: 18 Apr 05 (OSU)  
Revision J: 23 Jun 08 (OSU)  
Revision K: 19 Aug 09 (OSU)

## **INTRODUCTION**

The purpose of this schedule is to document the material and techniques to be used for painting the vessel. All new and existing steel damaged or disturbed by the work shall receive a full coating system as described below.

### **GENERAL SURFACE PREPARATION NOTES**

Coating performance is proportional to the degree of surface preparation. All steel surfaces shall be smooth, dry and cleaned to the degree specified in this schedule. Surfaces must be free of contaminants including salt deposits, weld spatter and flux before coatings are applied.

Application temperatures are critical to the performance of many coatings. Both ambient air temperature and surface temperature of the areas to be painted shall be checked against manufacturer's specifications prior to application.

Sandblasted surfaces shall receive the first coat of paint before surface rust can form or the cleaned surface can be contaminated. Should a sandblasted surface be left uncoated overnight, then it will be necessary to sandsweep and "brighten up" this surface before the application of the first coat of paint.

Unless otherwise specified, interior welds may be hand-cleaned using power wire brush, sanding disk, needle scaler or other Owner-approved method.

Prior to vessel delivery, any areas where scorched, blistered or otherwise damaged coatings exist shall be cleaned and recoated as originally specified, with adequate curing time allowed prior to re-floating of the vessel.

### **PAINT SPECIFICATIONS**

All coatings (thicknesses and materials) and surface preparations shall be in accordance with the following schedules and applied in accordance with the manufacturer's instructions. Owner's Representative can provide copies of these instructions upon request, or they can be viewed on the World Wide Web at <http://ppgamercoatus.ppgpmc.com/products/>.

Where "Amercoat", "Amerlock", "ABC", "Prep 88" or "PSX" is listed in the schedule, it indicates the product of PPG Amercoat, a division of PPG Industries. No substitution of other products is to be made without written authorization from Owner's Representative.

#### **New or Bare Steel Below Waterline:**

Surface Preparation:           SSPC-SP-6 (Commercial Blast)

First Coat:                           Amerlock Sealer  
  1.5 mil DFT

(Note: When plates and shapes are welded in place, overcoat welds with Amercoat 235 to a minimum of 5.0-6.0 mils DFT. Maximum re-coat window is 30 days.)

Second Coat:                       Amercoat 235, Red  
  5-6 mils DFT



Third Coat: Amercoat 235, Black  
5-6 mils DFT

Fourth Coat: ABC3 Anti-Fouling, Red  
3-4 mils DFT

Fifth Coat: ABC3 Anti-Fouling, Red  
3-4 mils DFT

**Existing Hull Below Waterline:**

Surface Preparation: Corroded/mechanically damaged areas: spot-blast to SSPC-SP-6 (Commercial Blast). Square off areas & feather all edges.

“Barnacle feet”/calcium deposit areas: Sandsweep, or water blast at 5,000psi minimum, to SSPC-SP-7 (Brush-Off Blast). Feather all edges.

Treat all surfaces with Prep 88 cleaner, followed by a second pressure wash with fresh water. (Note: If surfaces are hot, pre-wet before application of Prep 88 cleaner. Insure all cleaner is removed from the surface prior to “First Coat”.)

First Coat: Spot-coat Amercoat 235, Black  
5-6 mils DFT  
Remove all dust by water washing before second coat.

Second Coat: Spot-coat Amercoat 235, Red  
5-6 mils DFT

Third Coat: ABC3 Anti-Fouling, Black  
3-4 mils DFT

Fourth Coat: ABC3 Anti-Fouling, Red  
3-4 mils DFT

**Exterior Steel Structure & Hull Above Waterline:**

Surface Preparation: SSPC-SP-10 (Near-White Blast)

Holding Coat: Spot-coat Amercoat 235, Gray  
5-6 mils DFT  
Remove all dust by water washing before second coat.

Second Coat: Amercoat 235, Off-White  
6-8 mils DFT

Third Coat: Amercoat 229, White  
2-4 mils DFT

Fourth Coat: Amercoat 229, Black  
2-4 mils DFT

(Note: Interior steel behind insulation receives First and Second coats only. Interior steel exposed to view receives all four coats, with color for Third and Fourth coat to be specified by Owner's Representative.)

**Existing Topsides – Waterline to Top of Bulwark:**  
**(TOUCH-UP ONLY)**

Surface Preparation: SSPC-SP-6 (Commercial Blast)

First Coat: Amercoat 235, Red  
5-6 mils DFT

Second Coat: Amercoat 235, White  
5-6 mils DFT

Third Coat: Amercoat 229, Black  
2-4 mils DFT

**Stacks:**

Surface Preparation: SSPC-SP-10 (Near-White Blast)

Holding Coat: Spot-coat Amercoat 235, Buff  
5-6 mils DFT  
Remove all dust by water washing before second coat.

Second Coat: Amercoat 235, Haze Gray  
6-8 mils DFT

Third Coat: Amerlock II, White  
1.5-2 mils DFT

Banding: Amerlock II, Black  
1.5-2 mils DFT  
and  
Amerlock II, Custom Tinted to Pantone Shade #166 "OSU Orange"  
(Owner Furnished)

**New Exterior Steel Decks and House Tops:**

Surface Preparation:	SSPC-SP-10 (Near-White Blast)
Holding Coat:	Amerlock Sealer 1.5 mils DFT
Second Coat:	Amercoat 238, Red 5-6 mils DFT
Third Coat:	Amercoat 237M Non-Skid, Haze Gray Practical spread rate of 100 square feet <sup>2</sup> per gallon. Apply via spray or roller. Deck sockets to be taped or otherwise covered during application and finished with Amercoat 229, Haze Gray, 2-4 mils DFT.
Fourth Coat: (House top ONLY)	Amercoat 229, White 2-4 mils DFT

### **Existing Exterior Steel Decks and House Tops:**

Surface Preparation:	SSPC-SP-6 (Commercial Blast) Blow down entire surface to remove any dust/dirt prior to coating.
First Coat:	Amercoat 235, Black 5-6 mils DFT
Second Coat:	Amercoat 237M Non-Skid, Haze Gray Practical spread rate of 80 square feet per gallon. Apply via spray or roller. Deck sockets to be taped or otherwise covered during application and finished with Amercoat 229, Haze Gray, 2-4 mils DFT.

(Note: Approximately twenty-four (24) hours should elapse from Second Coat application prior to allowing any traffic on the coated decks.)

Third Coat: (House top ONLY)	Amercoat 229, White 2-4 mils DFT
---------------------------------	-------------------------------------

### **Mast Banding:**

Holding Coat:	Spot-coat Amercoat 235, Gray 5-6 mils DFT Remove all dust by water washing before second coat.
Second Coat:	Amercoat 235, Off-White 6-8 mils DFT
Third Coat:	Amerlock 2, Pantone 166 (“OSU Orange”)

6-8 mils DFT

**Mast Top:**

Holding Coat: Spot-coat Amercoat 235, Gray  
5-6 mils DFT  
Remove all dust by water washing before second coat.

Second Coat: Amercoat 235, Off-White  
6-8 mils DFT

Third Coat: Amercoat 229, Black  
2-4 mils DFT per coat

**Deck Machinery:**

Surface Preparation: SSPC-SP-3 (Hand Tool Clean)

Spot Prime: Corroseal

First Coat: Amercoat 235, Red  
6-8 mils DFT

Second Coat: Amercoat 229, Haze Gray  
2-4 mils DFT

**Crane Foundation, Platform, Rails & Boom:**

Surface Preparation: SSPC-SP-10 (Near-White Blast)

First Coat: Amercoat 235, Red  
6-8 mils DFT

Second Coat: Amercoat 229, Black  
2-4 mils DFT

**Crane Boom Tip:**

Surface Preparation: SSPC-SP-10 (Near-White Blast)

First Coat: Amercoat 235, Red  
6-8 mils DFT

Second Coat: Amercoat 229, White  
2-4 mils DFT

**Anchors & Chain:**

Surface Preparation: SSPC-SP6 (Commercial Blast)  
First Coat: Amercoat 235, Red  
4-6 mils DFT  
Second Coat: Amercoat 235, Black  
4-6 mils DFT

**Hawsepipes & Spill Pipes:**

Surface Preparation: SSPC-SP-6 (Commercial Blast)  
First Coat: Amercoat 235, Black  
6-8 mils DFT

**Chain Lockers:**

Surface Preparation: SSPC-SP-6 (Commercial Blast)  
First Coat: Spot coat Amercoat 235, Gray  
4-6 mils DFT  
Second Coat: Amercoat 235, Buff  
6-8 mils DFT  
Third Coat: Amercoat 235, White  
6-8 mils DFT

**Seachest Crossover Pipe:**

**Interior:**

Surface Preparation: Sandsweep or high-pressure water blast (30,000 psi minimum) to SSPC-SP-7 (Brush-Off Blast).  
First Coat: Amercoat 235, Red  
4 mils DFT  
Second Coat: Amercoat 235, White  
4 mils DFT  
Third Coat: ABC3 Anti-Fouling, Black  
3-4 mils DFT

### **Exterior:**

Surface Preparation: SSPC-SP-2 (Hand Tool Cleaning)

First Coat: Amercoat 235, Red  
4 mils DFT

Second Coat: Amercoat 235, Red  
4 mils DFT

### **Void Preservation:**

**Includes:** Void between Frames 7 and 9 below bow thruster  
Rudder nozzle and vertical fin  
Skeg shoe piece  
Exterior hull rub rails P/S  
Aft seachest

First Coat: Float-Coat, fill and drain

### **Potable Water Tanks:**

Surface Preparation: Spot-blast any areas of evident corrosion to SSPC-SP-6  
(Commercial Blast).

First Coat: Spot-coat, Amercoat 240, Buff  
8 mils DFT

Second Coat: Amercoat 240, Off-White  
8 mils DFT

### **Sewage Tanks:**

Surface Preparation: SSPC-SP-10 (Near-White Blast)

First Coat: Amercoat 240, Blue  
8 mils DFT

Second Coat: Amercoat 240, White  
8 mils DFT

### **Forepeak & Ballast Tanks:**

Surface Preparation: Spot-blast any areas of evident corrosion to SSPC-SP-6  
(Commercial Blast).

First Coat: Spot-coat, Amercoat 235, Red

1 mil DFT

Second Coat: Amercoat 235, Buff  
6-8 mils DFT

Third Coat: Amercoat 235, White  
6-8 mils DFT

**Transducer Well:**

Surface Preparation: SSPC-SP6 (Commercial Blast)

First Coat: Amercoat 235, Red  
5-6 mils DFT

Second Coat: Amercoat 235, White  
5-6 mils DFT

**Deck Drains IWO Showers & Heads in Lower Berthing Area:**

Surface Preparation: SSPC-SP2 (Hand Tool Cleaning)

First Coat: Spot-coat, Amercoat 235, Buff  
6-8 mils DFT

Second Coat: Amercoat 235, Red  
6-8 mils DFT

**Paint Repairs IWO Tank Level Indicators:**

Surface Preparation: SSPC-SP2 (Hand Tool Cleaning)

First Coat: Spot-coat, Amercoat 235, Buff  
6-8 mils DFT

Second Coat: Spot-coat, Amercoat 235, White  
6-8 mils DFT

**Piping:**

Surface Preparation: SSPC-SP6 (Commercial Blast)

First Coat: Dimetcote 302  
4 mils DFT

Second Coat: Amercoat 235, color as appropriate  
6-8 mils DFT

### **Wood Brightwork:**

Surface Preparation: Sand to smooth finish.  
Repeat between each intermediate coat.

Coating: International or equal Marine Spar Varnish, Gloss, three (3) coats.

Final Finish: Rub to stain finish with fine steel wool and linseed oil.

### **Staterooms, Heads, Passageways & Other Crew Spaces:**

Surface Preparation: Spot-prep any damaged/corroded areas to SSPC-SP2 (Hand Tool Cleaning). Prime any remaining rust with Corroseal.

First Coat: Sherwin-Williams 6405-10208 "Extra White" Satin Alkyd Enamel, with anti-mildew treatment additive.  
4 mils DFT.

Second Coat: Sherwin-Williams 6405-10208 "Extra White" Satin Alkyd Enamel, with anti-mildew treatment additive.  
4 mils DFT.

### **Wheelhouse Interior:**

Surface Preparation: Spot-prep any damaged/corroded areas to SSPC-SP2 (Hand Tool Cleaning).

Steel surfaces: Prime any remaining rust with Corroseal.

Aluminum surfaces (e.g. bridge wing doors): Prime with Pettit 6455 Metal Primer.

First Coat: Sherwin-Williams 6405-10208 Satin Alkyd Enamel, tinted to custom #CW020W "Lemon White".  
4 mils DFT.

Second Coat: Sherwin-Williams 6405-10208 Satin Alkyd Enamel, tinted to custom #CW020W "Lemon White".  
4 mils DFT.

Trim: Rust-O-Leum Gloss Enamel, Hunter Green.



**EXHIBIT B  
CERTIFICATIONS**

By signature on this certification the undersigned certifies that they are authorized to act on behalf of the Proposer and that under penalty of perjury the undersigned will comply with the following:

**SECTION I. OREGON TAX LAWS**

The undersigned hereby certifies under penalty of perjury that the undersigned is authorized to act on behalf of Proposer and that Proposer is, to the best of the undersigned's knowledge, not in violation of any Oregon Tax Laws. For purposes of this certification, "Oregon Tax Laws" means a state tax imposed by ORS 320.005 to 320.150 and 403.200 to 403.250 and ORS chapters 118, 314, 316, 317, 318, 321 and 323 and the elderly rental assistance program under ORS 310.630 to 310.706 and local taxes administered by the Department of Revenue under ORS 305.620.

**SECTION II. AFFIRMATIVE ACTION**

The undersigned hereby certifies that they have not discriminated against Minority, Women or Emerging Small Business Enterprises in obtaining any required subcontracts, pursuant to OAR 580-061-0030 (3).

**SECTION III. COMPLIANCE WITH SOLICITATION**

The undersigned agrees and certifies that they:

1. Have read, fully understands and agrees to be bound by the Request for Proposal and all Exhibits and Addenda to the Request for Proposal; and
2. Are an authorized representative of the Proposer, that the information provided is true and accurate, and that providing incorrect or incomplete information may be cause for rejection of the Proposal or Contract termination; and
3. Will furnish the designated item(s) and/or service(s) in accordance with the Request for Proposal and the Contract; and
4. Has provided a correct Federal Employer Identification Number or Social Security Number with the Proposal.

**SECTION IV. PERMISSIVE COOPERATIVE PROCUREMENTS**

If Proposer is awarded a contract from this Request for Proposal, Proposer hereby (check one)

- agrees
- disagrees

to offer the resulting contractual terms and prices to other public institutions.

Authorized Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name (Type or Print): \_\_\_\_\_ Telephone:(\_\_\_\_\_)\_\_\_\_\_

Title: \_\_\_\_\_ Fax:(\_\_\_\_\_)\_\_\_\_\_

FEIN ID# or SSN# (required): \_\_\_\_\_ Email: \_\_\_\_\_

Company: \_\_\_\_\_

Address, City, State, Zip: \_\_\_\_\_

Construction Contractors Board (CCB) License Number (if applicable): \_\_\_\_\_

Business Designation (check one):

- Corporation
- Partnership
- LLC
- Sole Proprietorship
- Non-Profit

**EXHIBIT C  
REFERENCES**

**REFERENCE 1**

COMPANY: \_\_\_\_\_ CONTACT NAME: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_ PHONE NUMBER: \_\_\_\_\_  
CITY, STATE ZIP: \_\_\_\_\_ FAX NUMBER: \_\_\_\_\_  
WEBSITE: \_\_\_\_\_ E-MAIL: \_\_\_\_\_  
GOODS OR SERVICES PROVIDED: \_\_\_\_\_

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**REFERENCE 2**

COMPANY: \_\_\_\_\_ CONTACT NAME: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_ PHONE NUMBER: \_\_\_\_\_  
CITY, STATE ZIP: \_\_\_\_\_ FAX NUMBER: \_\_\_\_\_  
WEBSITE: \_\_\_\_\_ E-MAIL: \_\_\_\_\_  
GOODS OR SERVICES PROVIDED: \_\_\_\_\_

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**REFERENCE 3**

COMPANY: \_\_\_\_\_ CONTACT NAME: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_ PHONE NUMBER: \_\_\_\_\_  
CITY, STATE ZIP: \_\_\_\_\_ FAX NUMBER: \_\_\_\_\_  
WEBSITE: \_\_\_\_\_ E-MAIL: \_\_\_\_\_  
GOODS OR SERVICES PROVIDED: \_\_\_\_\_

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## EXHIBIT D

### PRICING

<b>Class A Items - Basic</b>			<b>Option Pricing</b>
<b>No.</b>	<b>Description</b>	<b>Cost</b>	
101	Drydocking and Berthage		
102	Utilities and Services		
103	Painting Underwater Body		
104	Tailshaft, Rudder & CPP		8.11.1
105	ABS Load Line Survey		
106	Valves		
107	Bow Thruster		
			9.1.1
108	Sewage Tanks		9.1.2
109	Potable Water Tanks		
110	Void Preservation		
111	Steel Renewals and Hull Welding		
112	Deck Socket Renewal		
113	Seachest Crossover Pipe		
114	Load Tests		
115	Hull & Tank Zincs		8.1-10 hull zincs
116	Forepeak Ballast Tanks		
117	Chain Lockers & Hawsepipes		
118	Transducer Well Titivation		
119	Renew Frame and Stiffeners		
	<b>Subtotal Class A</b>		

<b>Class B Items - Optional</b>			
<b>No.</b>	<b>Description</b>	<b>Cost</b>	
201	Starboard Seachest Piping		
202	Anchors & Chain		
203	Overhaul Anchor Windlass		
204	Painting Freeboard		
205	Gear Oil Tank		
206	Develop Fuel Sounding Tables		
207	Replace Special Lab Seawater Intake		
	<b>Subtotal Class B</b>		
	<b>Total A &amp; B(Total Option Pricing Separately)</b>		

