**Project Instructions Template Overview**

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* The Project Instructions Template is the only acceptable structure and format for project implementation.
* Black text are items to be included in the Project Instructions unless otherwise indicated.
* Non-underlined blue text denotes notes to the preparer that should be deleted from the final version with the exception of underlined website hyperlinks and email addresses. All blue text requires manual modification. Once modified, highlight and revise the text to black.
* Red Text denotes information that matches the STR and the corresponding section number. The preparer can refer to the STR to populate these areas, and the red text should be deleted from the final version. Review and confirm auto generated STR elements. Once confirmed, highlight and revise the text to black.
* Where a highlighted “**OR**” is stipulated, only one set of the applicable black text is to be included. Delete the other set and the “**OR**.”
* If a highlighted “**AND/OR**” is stipulated, include all of the black text options that apply. Delete the non-applicable text.
* All personnel and operations need to be identified before final signing of their instructions. “TBD” will not be accepted.
* The signature page is to be printed on the organization's letterhead and on one page.
* This form is subject to changes. Any suggested improvements can be submitted to the Marine Operations Program, Planning, and Services Branch (PPSB) via email at ppsb.fleetperformance@noaa.gov.

**(DELETE THIS ENTIRE PAGE FROM FINAL VERSION)**

**Project Instructions**

Date Submitted Month DD, YYYY (e.g., February 22, 2020)

Platform NOAA Ship (Full ship name, first letter capitalized, *all italicized*)

Project Number \*\* - ## - ## (As assigned in the current fleet allocation plan, e.g., SH-20-02)

Project Title Project Name

Project Dates Month DD, YYYY to Month DD, YYYY

(Must encompass transits to/from project ports as well as total project days)

Prepared by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Dated \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Chief Scientist Name  
Chief Scientist  
Affiliation (Program or Lab)

Approved by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Dated \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Program Director Name  
Title  
Affiliation (Program or Lab)

Approved by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Dated \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Lab Director Name  
Title  
Affiliation (Program or Lab)

Approved by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Dated \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Rank First Last, NOAA

Commanding Officer

Marine Operations Center – Atlantic **OR** Pacific **OR** Pacific Islands

# 

# Overview

## **Project Purpose**

Provide a brief description, overall mission goals, and expected contribution to Line Office (LO) and/or NOAA Annual Operating Plan. [STR **II.3** “Project Purpose”]

## **Project Impact**

State how the absence of this data collection will negatively affect NOAA’s mission, noting the products and services provided to the general public. [STR **II.4** “Project Impact”]

## **Project Performance Metrics**

### (A) Identify and describe total project performance metrics required to achieve Project Purpose described above (e.g., Square nautical miles multibeam data - 500, CTDs - 45, bottom trawl stations - 6).

### (B) Use the preexisting categories to the greatest extent possible.

### (C) To add other Mission Sampling metrics, first add a category header, followed by the sampling name, and lastly add the value and units of sampling.

**Note:** Any added other Mission Sampling metrics will be validated by the LO Representative.

### (D) Total project performance metrics required to achieve Project Purpose:

**(1) Acoustic/Echo Sampling**

Acoustic Doppler Current Profiler (ADCP) % Project Time: [STR **II.5** “Project Performance Metrics”]

Hydrographic Survey Operations (Hours) # Needed: [STR **II.5** “Project Performance Metrics”]

Radiosonde # Needed: [STR **II.5** “Project Performance Metrics”]

Sonobuoy # Needed: [STR **II.5** “Project Performance Metrics”]

Fisheries Acoustic Survey Linear Miles # Needed: [STR **II.5** “Project Performance Metrics”]

Mammal Acoustic Transects Linear Miles # Needed: [STR **II.5** “Project Performance Metrics”]

Side Scan Sonar Linear Miles # Needed: [STR **II.5** “Project Performance Metrics”]

Multibeam Echo Sounder Linear Miles # Needed: [STR **II.5** “Project Performance Metrics”]

Multibeam Echo Sounder Square Miles # Needed: [STR **II.5** “Project Performance Metrics”]

Single Beam Mapping Linear Miles # Needed: [STR **II.5** “Project Performance Metrics”]

Towed Sonar Array Linear Miles # Needed: [STR **II.5** “Project Performance Metrics”]

**(2) Video/Optical Sampling**

Towed Video recording Hours # Needed: [STR **II.5** “Project Performance Metrics”]

Camera Drops # Needed: [STR **II.5** “Project Performance Metrics”]

Secchi Disk # Needed: [STR **II.5** “Project Performance Metrics”]

**(3) Visual Observation Sampling**

Mammal Observation Time (Hours) # Needed: [STR **II.5** “Project Performance Metrics”]

Mammal Visual Transects Linear Miles # Needed: [STR **II.5** “Project Performance Metrics”]

Seabird Observation Time (Hours) # Needed [STR **II.5** “Project Performance Metrics”]

Sea Bird Transects Linear Miles # Needed: [STR **II.5** “Project Performance Metrics”]

**(4) Tactile/Tangible Sampling**

Bottom Cores # Needed: [STR **II.5** “Project Performance Metrics”]

Bottom Trawl # Needed: [STR **II.5** “Project Performance Metrics”]

Bucket Water # Needed: [STR **II.5** “Project Performance Metrics”]

Continuous Underway Fish Egg Sampler % Project Time: [STR **II.5** “Project Performance Metrics”]

Fish Traps # Needed: [STR **II.5** “Project Performance Metrics”]

Hook and Line Downrigger # Needed: [STR **II.5** “Project Performance Metrics”]

Long Line # Needed: [STR **II.5** “Project Performance Metrics”]

Midwater Trawl # Needed: [STR **II.5** “Project Performance Metrics”]

Mooring Deployment # Needed: [STR **II.5** “Project Performance Metrics”]

Mooring Recovery # Needed: [STR **II.5** “Project Performance Metrics”]

Mooring Serviced # Needed: [STR **II.5** “Project Performance Metrics”]

Pelagic Shark Bottom Trawl # Needed: [STR **II.5** “Project Performance Metrics”]

Small Boat Scientific Support Hours # Needed: [STR **II.5** “Project Performance Metrics”]

Surface Trawl # Needed: [STR **II.5** “Project Performance Metrics”]

Transient Plankton Nets (Assorted) # Needed: [STR **II.5** “Project Performance Metrics”]

Vertical Nets # Needed: [STR **II.5** “Project Performance Metrics”]

**(5) Chemical/Oceanographic Sampling**

Argo Floats # Needed: [STR **II.5** “Project Performance Metrics”]

Carbon Dioxide Partial Pressure % Project Time: [STR **II.5** “Project Performance Metrics”]

CTD # Needed: [STR **II.5** “Project Performance Metrics”]

Drift Array # Needed: [STR **II.5** “Project Performance Metrics”]

Drifter Buoys # Needed: [STR **II.5** “Project Performance Metrics”]

Expendable Bathythermograph (XBT) # Needed: [STR **II.5** “Project Performance Metrics”]

Moving Vessel Profiler/CTD Underway # Needed: [STR **II.5** “Project Performance Metrics”]

Thermosalinograph (TSG) % Project Time: [STR **II.5** “Project Performance Metrics”]

Total Alkalinity (TA) % Project Time: [STR **II.5** “Project Performance Metrics”]

Water Column Spectral Analysis # Needed: [STR **II.5** “Project Performance Metrics”]

Other:

**(6) Other Mission Sampling**

Other:

## **Days at Sea (DAS)**

### Total number (#) of DAS

## **Participating Institutions**

Could be semi-populated from STR Section I: Organization Unit?

Additional institutions that were not captured in STR

### (A)

### (B)

### (C)

## **Licenses and Permits**

None required.

**OR**

This project will be conducted under the Scientific Research Permit (U.S.) **AND/OR** Marine Mammal License (U.S.) **AND/OR** Foreign Fishing Vessel License (Canada) **AND/OR** Species at Risk Act permit (Canada) issued by \_\_\_\_\_\_\_\_\_\_\_ (U.S. AND/OR foreign agency) on \_\_\_\_\_\_ (date) to \_\_\_\_\_\_\_\_\_\_ State the name of the license holder--often but not always the Chief Scientist. There could be multiple permits/licenses. The Chief Scientist is responsible for obtaining and listing all permits as well as any identification numbers they contain.

**AND/OR**

Add best management practices for operating around marine mammals.

## **Foreign Research Clearances**

None required.

**OR**

This project involves Marine Scientific Research in waters under the jurisdiction of \_\_\_\_\_\_\_ (Fill in the foreign countries). Diplomatic clearance has been requested. Consent has been received from \_\_\_\_\_\_\_ (Fill in the foreign countries). Consent from \_\_\_\_\_\_ (Fill in the names of the missing countries) is pending.

## **Personnel/Science Party**

### (A) Principal Investigators/Chief Scientists

Name & Title: [STR **I.7** “Principal Investigator/Chief Scientist”]  
Laboratory/Office: [STR **I.7** “Principal Investigator/Chief Scientist”]  
Phone Number: [STR **I.7** “Principal Investigator/Chief Scientist”]  
Email Address: [STR **I.7** “Principal Investigator/Chief Scientist”]

### (B) Additional Contacts

(Provide same information for PI/Chief Sci Alternate, Project Operation Leads, Ops Officer/Alternate, agent if needed/selected)

Name & Title: [STR **I.7** “Principal Investigator/Chief Scientist”]  
Laboratory/Office: [STR **I.7** “Principal Investigator/Chief Scientist”]  
Phone Number: [STR **I.7** “Principal Investigator/Chief Scientist”]  
Email Address: [STR **I.7** “Principal Investigator/Chief Scientist”]

Sort the completed table alphabetically by Last Name

| **Name (Last, First)** | **Title** | **Date Aboard** | **Date Disembark** | **Gender** | **Affiliation** | **Nationality** |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

## **Project Classification**

### (A) Supplementary (“Piggyback”) Projects [STR **V.7** “Project Classification”]

### (B) NOAA Fleet Ancillary Projects List any ancillary projects (this is not captured in STR)



# 

# Operations

## Project Area

[STR **IV.2** “Project Area”] For example: Florida, Gulf Coast. / Pacific (Hawaii). / Gulf of Mexico (Alabama, Florida Gulf Coast, Louisiana, Mississippi, and Texas).

### (A) Desired Operational Waters [STR **IV.1** “Desired Operational Waters”] (Territorial / Coastal / Intermediate / Ocean)

### (B) Way Point/Station List Provide coordinates for waypoints/stations

### (C) Project Area Shapefile(s)

[STR **IV.3** “Project Area Shapefile(s)”]

The above URL links to the VPASS STR ArcGIS Project Area.

Provide a screenshot of Project Area via URL above.

## Project Itinerary

### (A) Starting Port: [STR **IV.4** “Starting Port”]

### (B) Number (#) of Staging Days: [STR **V.5** “Staging Days”]

### (C) Itinerary Information: Describe additional project itinerary information

### (D) Intermediate Port Call(s): [STR **IV.5** “Intermediate Port Call(s)”] (If not applicable insert N/A)

### (E) Foreign Port Call(s): [STR **IV.5** Intermediate Port Call(s)] (If not applicable insert N/A)

### (F) Ending Port: [STR **IV.4** “Ending Port”]

### (G) Number (#) of Destaging Days: [STR **V.6** “Destaging Days”]

## Staging and Destaging

Include necessary steps, actions, or equipment.

### (A)

### (B)

## Operations To Be Conducted

Detailed breakdown of each type of proposed operation, i.e., in-situ, station, observing

### (A)

### (B)

## Dive Operations

Dives are not planned for this project.

**OR**

All dives are being conducted per the requirements and regulations of the NOAA Diving Program and will receive ship CO approval prior to proceeding.

The Dive Plans encompassing all legs of ##-##-## (Project Number) are attached in the Appendices.

## Small Boat Operations

Small boat operations are not planned for this project.

**OR**

All small boat operations are being conducted per the requirements and regulations of the NOAA Small Boat Program (<https://sites.google.com/a/noaa.gov/noaa-small-boat-program/home>) and will receive ship CO approval prior to proceeding. Any associated documentation is attached in the Appendices.

[STR **VII.35 “**Small Boat”]

Small boat operations include:

# small boats required.

* 1. Acoustic/Echo Support
  2. Chemical/Oceanographic Support
  3. Diver Support
  4. Tactile/Tangible Support
  5. UxS Support
  6. Video/Optical Support
  7. Visual Observation Support
  8. Small Boat Transfer

## Uncrewed Systems Operations

Uncrewed systems operations are not planned for this project.

**OR**

### Any Uncrewed Systems Plans are attached in the Appendices.

### (A) UxS Deployment and Recovery [STR **VIII.1 “**UxS Deployment and Recovery”]

### (B) UxS Operator [STR **VIII.2** “UxS Operator”]

## Applicable Restrictions

### (A) Conditions That Preclude Normal Operations

### List restrictions such as poor weather conditions, equipment failure, safety concerns, unforeseen circumstances, as well as mitigation strategies that might be used.

#### (1)

**2.9 Energy Efficiency**

Describe efforts to improve energy efficiency via transit planning, Mission Partner / Chief Scientist embarkation and disembarkation, station planning, securing unnecessary equipment (i.e. freezers), and use of SMARTspeed (use of efficient transit speed; using higher speed only when necessary). If no energy efficient plans are agreed upon, please include a statement based on discussions at pre-project meeting.

# Equipment

## Platform Capabilities

Itemized list of required equipment and capabilities provided by the ship. Use the following headers to categorize the list.

### (A) Vessel Core Systems: [STR **VII** “Platform Capabilities”]

### (B) Labs/Interior Spaces: [STR **VII** “Platform Capabilities”]

### (C) Exterior Spaces: [STR **VII** “Platform Capabilities”]

### (D) Handling And Over-The-Side

### Deployment/Retrieval: [STR **VII** “Platform Capabilities”]

### (E) Acoustic Suite: [STR **VII** “Platform Capabilities”]

### (F) Other: [STR **VII** “Platform Capabilities”]

## Scientific Capabilities

Itemized list/table of equipment and capabilities provided by scientists. All Standard Operating Procedure(s) must be provided for equipment and capabilities operated by the ship.

### (A)

### (B)

STR **II.9** “Standard Operating Procedure(s)”

# Hazardous Materials

## Policy and Compliance

Hazardous Materials are not being brought aboard the ship for this project.   
(Replaces all below)

**OR**

Hazardous Materials are required for this project and will be utilized in compliance with current NOAA Policies.

## Inventory

| **Common Name of Material** | **Quantity** | **Notes** | **Trained Individual** | **Spill  Control** |
| --- | --- | --- | --- | --- |
| Formaldehyde solution (2%) | 1 x 500ml | Alkalinity | First Name, Last Name | F |
| Formaldehyde solution (37%) | 1 x 500ml | Alkalinity, Stored in ship chem. lkr | First Name, Last Name | F |
| Hydrochloric Acid, 0.1N | 20 x 500ml | Alkalinity, Stored in ship chem. lkr | First Name, Last Name | A |
| Mercuric Chloride | 1 x 10g | Located in Sci Van | First Name, Last Name | M |

## Safety and Spill Response

| **Product Name** | **Quantity** | **Chemicals it is effective against** | **Amount it can clean up** |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |

## Radioactive Materials and X-ray Generating Devices

No Radioactive Isotopes or X-ray Generating Devices are planned for this project.   
(Replaces all below)

**OR**

Radioactive Materials are required for this project and will be utilized in compliance with current NOAA Policies.

Radioactive Material (RAM): NOAA Form 57-07-02 “Request to Use Radioactive Material aboard a NOAA Ship” must be submitted at least three months in advance of a domestic project and eight months in advance of a foreign project start date to MOC-CO, including any of the applicable required documentation outlined in Section 5.1 of Appendix A HAZMAT Supplement.

**AND/OR**

X-ray Generating Devices are required for this project and will be utilized in compliance with current NOAA Policies.

X-ray Generating Devices (XGD): NOAA Form 57-07-19 “Request to Use X-ray Generating Devices (XGD) Aboard a NOAA Ship” must be submitted at least three months in advance of a domestic or foreign project start date to MOC-CO, including any of the applicable required documentation outlined in Section 5.3 of Appendix A HAZMAT Supplement.

| **Common Name RAM** | **Concentration** | **Amount** | **Notes** |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |

## Lithium Batteries

Equipment containing lithium batteries are not being brought aboard for this project.

**OR**

Lithium Batteries are required for this project and will be utilized in compliance with current NOAA Policies.

Insert the risk management plan, SOPs, and SDS for equipment containing lithium batteries in accordance with the requirements outlined in Appendix A, Section 5.4.

# Disposition of Data and Reports

Disposition of data gathered aboard NOAA ships must conform to all Federal, Agency, Chief Scientist’s LO, and OMAO data governance directives, policies and stewardship (Appendices A and B). Systems that produce data continually, periodically, and during specific operations described in Section 2.4, and equipment listed in Sections 3.1 and 3.2, will have accompanying entries in the Project Data Management plan. The data will be classified as either OMAO data or Program Data and roles and responsibilities for acquisition, stewardship, and submission to archive will be determined during pre-project communications and meetings. OMAO expects the Chief Scientist, Program, and Lab Directors to abide by their LO Data Management Plan and procedural directive. By completing this section all parties agree to OMAO Policy 1102-38 Shipboard Data Acquisition and Stewardship.

## Data Acquisitions Plan

1. A Data Management Plan (DMP) is in place per the [NOAA Administrative Order (NAO) 121-15-B, Management of NOAA's Data and Information](https://drive.google.com/file/d/1Itx8gksynQZeZ0UOACnDPojbLlCKE5Vc/view).

**OR**

1. The Data Management Plan (DMP) is completed following a program specific template.

* Attach the Data Management Plan for Program Data, as defined in Appendix A, Section 3.3 (B). Example template can be found in Appendix C of the [Data Management Handbook](https://sites.google.com/noaa.gov/noaa-data/handbook).

**OR**

(C) Data will be managed and provided in accordance with Appendix A, Section 3.3.

* List any deviations from Appendix A, Section 3.3, to include data types not mentioned, that will be submitted as Program Data
* Provide Responsible Party for Data Management.

Program Managers, or their designee, shall be responsible for ensuring the proper management of the data produced by their Program. Please indicate the responsible party below:

1. Position of Title:
2. Name of Current Position Holder:
3. Email of Current Position Holder:

# Appendix A Operational Standards

# 1. Meetings, Vessel Familiarization, and Project Evaluations

## 1.1 Pre-Project Meeting

The Chief Scientist and Commanding Officer (CO) will meet with pertinent members of the scientific party and ship’s crew to discuss required equipment, planned operations, concerns, and establish mitigation strategies for all concerns. This meeting must be conducted before the beginning of the project with sufficient time to allow for preparation of the ship and project personnel. The ship’s Operations Officer usually is delegated to assist the Chief Scientist in arranging this meeting.

## 1.2 Vessel Familiarization Meeting

The CO is responsible for ensuring scientific personnel are familiarized with applicable sections of the standing orders and ship protocols (e.g., meals, watches, etiquette, drills, etc.). A ship familiarization meeting must be conducted in the first 24 hours of the project’s start and is normally presented by the ship’s Operations Officer. All embarked personnel are expected to participate in drills, and the timing of drills will be determined by the CO or designated delegate. See OMAO Procedure 1102-20 - General Rules and Minimum Requirements for Embarked Personnel and OMAO Procedure 1201-08 - NOAA Ship Familiarization.

## 1.3 Meals and Berthing

* + 1. The ship will provide meals for the scientists listed above. Meals will be served three (3) times daily beginning one (1) hour before scheduled departure, extending throughout the project, and ending two (2) hours after the termination of the project. Since the watch schedule is split between day and night, the night watch may often miss daytime meals and will require adequate food and beverages (for example a variety of sandwich items, cheeses, fruit, milk, juices) during what are not typically meal hours. Send special dietary requirements for scientific participants to the ship’s command no less than two (2 weeks) before the start of a project.
    2. Berthing requirements, including number and gender of the scientific party, will be provided to the ship by the Chief Scientist. The Chief Scientist and CO will work together on a detailed berthing plan to accommodate the gender mix of the scientific party taking into consideration the current makeup of the ship’s complement per OMAO Procedure 1102-03 - Vessel Quarters. The Chief Scientist is responsible for ensuring the scientific berthing spaces are left in the condition in which they were received; for stripping bedding and linen return; and for the return of any room keys that were issued. Unless prior arrangements are made, the science party may move aboard the night before scheduled departure and must move off the ship the day after scheduled arrival (at the end of project). The Chief Scientist/Principal Investigator is also responsible for the cleanliness of the laboratory spaces and the storage areas utilized by the scientific party, both during the project and at its conclusion before departing the ship.
    3. All NOAA scientists will have proper travel orders when assigned to any NOAA ship. The Chief Scientist will ensure that all non-NOAA or non-Federal scientists aboard also have proper orders. It is the responsibility of the Chief Scientist or Principal Investigator to ensure that the entire scientific party has a mechanism in place to provide lodging and food and to be reimbursed for these costs in the event that the ship becomes uninhabitable and/or the galley is closed during any part of the scheduled project.

## 1.4 Shipboard Safety

#### All embarked personnel are required to fully support and comply with NAO 202-1106: NOAA Sexual Assault and Sexual Harassment Prevention and Response Policy. The at-sea working/living environment is particularly sensitive and it is incumbent upon all personnel to uphold a positive and professional workplace dynamic in order to successfully accomplish cruise objectives.

#### All persons boarding NOAA vessels give implied consent to comply with all safety and security policies and regulations administered by the CO. All spaces and equipment on the vessel are subject to inspection or search at any time. All personnel must comply with OMAO Procedure 1102-20 General Rules and Minimum Requirements for Embarked Personnel, which forbids the possession and/or use of illegal drugs and alcohol aboard NOAA Vessels.

* + 1. All embarked personnel are required to fully support and comply with all drills conducted aboard NOAA vessels, in compliance with SOLAS regulations. The CO or designated delegate shall determine the nature and timing of the drill, which can occur at any time of day within any space aboard the vessel. All embarked personnel are to participate in the drills as assigned by the Station Bill, and all operations aboard the vessel that are impacted by the drill shall be halted until the completion of the drill.
    2. Surge protectors, power strips, and Uninterrupted Power Sources (UPS) must be approved for marine/shipboard use, removed from service if hot to the touch, regularly inspected for damage or wear, limited to one surge protector per duplex receptacle (i.e., “outlet”), and never daisy chained. The equipment must meet Military Performance Specification MIL-PRF-32167A (Transient Voltage Surge Suppressors), which incorporates American Society for Testing and Materials ASTM F1507 (Standard Specifications for Surge Suppressors for Shipboard Use) and Underwriters Laboratories UL 1449 (Safety Standards for Surge Protective Devices).
    3. Hard hats are required when working with suspended loads. Work vests are required when working near open railings and during small boat launch and recovery operations. Hard hats and work vests will be provided by the ship when required.
    4. Wearing open-toed footwear or shoes that do not completely enclose the foot (such as sandals, clogs, or crocs) outside of private berthing areas is not permitted. At the discretion of the ship CO, safety shoes (i.e. steel or composite toe protection) may be required to participate in any work dealing with suspended loads, including CTD deployment and recovery. The ship does not provide safety-toed shoes/boots. The ship’s Operations Officer should be consulted by the Chief Scientist to ensure members of the scientific party report aboard with the proper attire. See OMAO Procedure 1102-20 or SSI equivalent.

## 1.5 Post-Project Meeting

The CO is responsible for conducting a meeting no earlier than 24 hrs before or 7 days after the completion of a project to discuss the overall success and shortcomings of the project. Concerns regarding safety, efficiency, and suggestions for future improvements are discussed and mitigations for future projects will be documented for future use. This meeting includes the ship’s officers, applicable crew, the Chief Scientist, and members of the scientific party and is normally arranged by the ship’s Operations Officer and Chief Scientist.

## 1.6 Project Evaluation Report

Within 7 days of the completion of the project, the Chief Scientist or Principal Investigator completes a Customer Satisfaction Survey, as appropriate. The form is available at https://sites.google.com/a/noaa.gov/omao-intranet-dev/operations/marine/customer-satisfaction-survey and provides a “Submit” button at the end of the form. It is also located at [Marine Operations Customer Satisfaction Survey](https://docs.google.com/a/noaa.gov/forms/d/1a5hCCkgIwaSII4DmrHPudAehQ9HqhRqY3J_FXqbJp9g/viewform). Submitted form data is deposited into a spreadsheet used by OMAO management to analyze the information. Though the complete form is not shared with the ships, specific concerns and praises are followed up on while not divulging the identity of the evaluator.

**2. Shoreside Support**

## 2.1 Medical Forms and Emergency Contacts

* + 1. The Chief Scientist must ensure all scientists have created/updated their eSAIL account with their emergency contact information. This must be completed seven (7) days prior to the departure date. An emergency contact is required to include: valid phone number, address, and email (if applicable). US based phone numbers are preferred, if a foreign number is used we require a US based alternate be listed as well.   
       Link for eSAIL: [esail.omao.noaa.gov](http://esail.omao.noaa.gov)

All NOAA scientists will have proper travel orders when assigned to any NOAA ship. The Chief Scientist will ensure that all non-NOAA or non-Federal scientists aboard also have proper orders. It is the responsibility of the Chief Scientist or Principal Investigator to ensure that the entire scientific party has a mechanism in place to provide lodging and food and to be reimbursed for these costs in the event that the ship becomes uninhabitable and/or the galley is closed during any part of the scheduled project. NOAA Form (NF) 57-10-01 - Health Services Questionnaire (NHSQ) must be completed in advance by each participating scientist.

NHSQs must be submitted every 2 years for individuals under the age of 50 and every 1 year for ages 50 and above. NHSQs must be accompanied by NOAA Form (NF) 57-10-02 - Tuberculosis Screening Document in compliance with OMAO Policy 1008 (Tuberculosis Protection Program).

The completed forms should be sent to Marine Health Services at the applicable Marine Operations Center. Before clearance to sail can be granted, all participating scientists must submit the NHSQ and Tuberculosis Screening Document to Marine Medical Branch no later than 4 weeks before the start of the project to allow time for the participant to obtain and submit additional information should health services require it. Please contact Marine Medical Branch with any questions regarding eligibility or completion of either form. The participant will receive an email notice when medically cleared to sail if a legible email address is provided on the NHSQ.

The participant can mail, fax, or email the forms to the contact information below. Participants should take precautions to protect their Personally Identifiable Information (PII) and medical information and ensure all correspondence adheres to DOC guidance. <https://www.osec.doc.gov/opog/privacy/pii_bii.html>.

* + 1. Contact information:

Marine Health Services

Marine Operations Center – Atlantic

439 W. York Street

Norfolk, VA 23510

Phone 757-441-6320

Fax 757-441-3760

Email [MOA.Health.Services@noaa.gov](mailto:MOA.Health.Services@noaa.gov)

**OR**

Marine Health Services

Marine Operations Center – Pacific

2002 SE Marine Science Dr.

Newport, OR 97365

Phone 541-351-4696

Fax 541-351-4737

Email [MOP.Health-Services@noaa.gov](mailto:MOP.Health-Services@noaa.gov)

* + 1. Before departure, the Chief Scientist must provide an electronic listing of emergency contacts to the Executive Officer for all members of the scientific party, with the following information: Contact name, Address, Relationship to member, and Phone number.

**3. Communications and Information Technology (IT)**

## 3.1 Communications

A progress report on operations prepared by the Chief Scientist may be relayed to the program office. Sometimes it is necessary for the Chief Scientist to communicate with another vessel, aircraft, or shore facility. Through various means of communications, the ship can usually accommodate the Chief Scientist. Special radio voice communications requirements should be listed in the Project Instructions.

The ship’s primary means of communication with the Marine Operations Center is via email and the Very Small Aperture Terminal (VSAT) link. If increased bandwidth is being considered, program accounting is required and it must be arranged through the CO at least 30 days in advance.

## 3.2 IT Security

#### (A) IT Security Awareness Training:

#### Guest scientists must complete NOAA’s IT Security Awareness Course before using or accessing any NOAA ship science computer or network resources. It is recommended that guests complete the course 3 days before embarking. Guest scientists must review and sign the Rules of Behaviour (ROB)

#### For Foreign Nationals see Section 4

#### Any computer that will be hooked into the ship's network must meet the following requirements, at a minimum:

#### Installation of the latest virus definition (.DAT) file on all systems and performance of a virus scan on each system.

#### Installation of the latest critical operating system security patches.

#### No external public Internet Service Provider (ISP) connections.

#### No Kaspersky products are allowed

* + - 1. Adhere to all licenses, copyright laws, contracts, and other restricted or proprietary information.
      2. Utilize all security measures that are in place to protect the confidentiality, integrity, and availability of information and systems.
      3. Refrain from using NOAA OMAO Public Network information resources for inappropriate activities.
      4. Do not visit inappropriate sites while using NOAA OMAO Public Network. Inappropriate sites can be but are not limited to:
         1. Sexually Explicit Content (including nudity, pornography, and other obscene materials)
         2. Websites With Extreme Political Views
         3. Hate Websites
         4. Websites That Promote Drug Use or Terrorist Activities
         5. Online Gambling (including ads with adult-only content)
         6. Web Sharing Websites (downloading illegal content, BitTorrent, Webtorrent, uTorrent)
    1. Computer Operating Systems that the support vendor has identified as reaching “End of Life” for support will not be allowed on the shipboard network.

#### At any time, NOAA/OMAO may monitor and/or audit user activity and/or network traffic. In addition, NOAA/OMAO may access your system and disclose information obtained through audits to third parties, including law enforcement authorities.

## 3.3 Disposition of Data and Reports

Data Classifications:

### OMAO Data

#### Since OMAO has limited tools and bandwidth for moving large datasets, OMAO commits to acquisition and archive responsibility for:

##### Scientific Computer System (SCS) data and metadata

##### Conductivity Temperature Depth (CTD profile) data

##### Acoustic Doppler Current Profile (ADCP) data

##### Ship Daily Activity Tracker (SDAT) Cruise level metadata

#### On a project by project basis, if special submission capabilities are made available, the CO may commit to stewardship of other datasets.

### Program Data

#### Systems attached to and maintained by the ship but will be run by the science party or Survey department such as bathymetric multibeam sonar, water column single, split beam, multibeam sonar, video and other digital imagery.

#### Systems the Scientific Party brings aboard

#### SCS, CTD, and ADCP will remain part of the Chief Scientist’s project data package as well as being submitted to the archive in near real time by ship’s personnel.

### Communication and Documentation

#### Data Management Plans are reviewed at the Pre-Project Meeting (Section 7).

#### Instrument, system, geographic, and operational interference are discussed and prioritized during pre-cruise communications and the Pre-Project Meeting. This ensures that every data acquisition system can operate to satisfy commitments to initiatives such as Seabed 2030 and OMAO’s general guidance to acquire the most and best data possible, while not interfering with the project’s primary objectives.

### Data Transmittal and Storage Media

#### Before departure, bandwidth, storage capacity, and MACC (Marine and Aviation Cyber Center) media policies will guide strategies for stewardship of data collected during the project and the manner that the Chief Scientist’s data package and other large data files will be transmitted to shore or carried from the ship at the end of the project.

#### The ship CO completes data transmittal or other chain of custody documentation and a copy of each is retained on the ship and will accompany the data media.

### Acknowledgment and Acceptance

#### Cover page signatures acknowledge each parties acceptance of the data submission responsibilities outlined in this section.

## 3.4 Responsibilities

(A) OMAO Data

(1) OMAO owned shipboard systems will be maintained, calibrated at prescribed intervals, in good working order, and tested before departure. Sounders and systems that require patch test or sphere calibration may require project time if the ship does not have the means to conduct calibrations before the beginning of the project

* + 1. System (SCS) data, Conductivity Temperature Depth (CTD profile) data, Acoustic Doppler Current Profile (ADCP) data will be submitted in near real time or at end-of-project through existing and developing utilities.
    2. Metadata for each data type will be complete, up-to-date, and accurate.
    3. SDAT ship and cruise level metadata will be accurate and updated every 2 to 3 days.
    4. On a project by project basis, if special submission capabilities are made available, the ship’s CO may commit to stewardship of other datasets.

1. Program Data
   * + 1. All non-OMAO data collected is stewarded and delivered to the lab’s data managers for prompt packaging and submission to National Centers for Environmental Information according to their LO’s directives.
       2. Holds, or embargoes may be placed on sensitive data for up to 1 year.
2. Communication and Documentation
   * + 1. Data Management Plans are reviewed at the Pre-Project Meeting.
       2. Instrument, system, geographic, and operational interference are discussed and prioritized during pre-cruise communications and the Pre-Project Meeting. This ensures that every data acquisition system can operate to satisfy commitments to initiatives such as Seabed 2030 and OMAO’s general guidance (including OMAO Environmental Data Management Directive and ship specific instructions) to acquire the most and best data possible, while not interfering with the project’s primary objectives.
3. Data Transmittal and Storage Media
   * + 1. Before departure, bandwidth, storage capacity, and MACC (Marine and Aviation Cyber Center) media policies will guide strategies for stewardship of data collected during the project and the manner that the Chief Scientist’s data package and other large data files will be transmitted to shore or carried from the ship at the end of the project.
       2. The ship CO completes data transmittal or other chain of custody documentation and a copy of each is retained on the ship and will accompany the data media.
       3. Acknowledgment and Acceptance
       4. Signatures on this document acknowledge each parties acceptance of the data submission responsibilities outlined in this section.

**3.5 Shipboard Data Acquisition and Stewardship Procedures**

(A) Chief Scientist/Principal Investigator – Draft Project Instructions, Collect Data, Define Metadata, and Submit Processed Data

The CS/PI shall:

(1) Include a section entitled “Disposition of Data and Reports” in the Project Instructions.

(a) This section shall state that the CS/PI is responsible for the collection, management, and archiving of all project-specific data in accordance with NOAA’s Administrative Order (NAO) 212-15 - Management of Environmental Data and Information.

(2) Clearly identify in the “Disposition of Data and Reports” the data sets generated during the project and classifications of data as either OMAO Data or Program Data. OMAO is required to archive OMAO data and the Program is required to archive Program Data. Programs will archive their data following their own internal procedures.

(3) Clearly identify in the “Disposition of Data and Reports” Section 5 of the Project Instructions all data that NOAA will publicly release and all data that NOAA will not publicly release along with responsible parties for each data set.

(4) Assign an indefinite date for public release by the proper authorities for data having homeland/national security, cultural heritage, or protected resources.

(5) Document in the Project Instructions the specific justification for non-release of data, as well as the authority responsible for the non-release decision.

(6) The CS/PI shall work with shipboard personnel to collect data of the highest possible quality and to create project metadata. Unless otherwise excepted, the project data and metadata shall include a date for public release of data not to exceed 1 year after collection.

(7) As soon as practical and not to exceed 15 days following the completion of the project, the CS/PI shall obtain a copy of raw data collected with OMAO-owned instruments.

(8) The CS/PI shall provide all project-specific processed data with corresponding project metadata to a data archive within 1 year of collection. In addition, the CS/PI shall submit, when available, data event logs, Project Instructions, survey reports, and other high-utility documentation to this archive.

(9) Upon receiving evidence (preferably an accession number or a digital object identifier) that the project-specific processed data has been properly archived following NOAA guidelines with metadata, the CS/PI’s responsibility for archival is complete.

(10) The CS/PI shall be responsible for all data generated from instruments not owned by OMAO. Future opportunities to participate in data collection activities, as a CS/PI aboard a NOAA ship, may require verification from a data archive that project-specific processed data with project metadata were delivered within 1 year of collection.

(B) Commanding Officer/Master - Submit Raw Data to NCEI and Data Disposition

(1) Depending on connectivity, and preferably not to exceed 60 days following the completion of each cruise/project, the CO shall ensure all OMAO-collected data, corresponding project metadata, and Project Instructions are submitted to NCEI.

(a) These data include all raw data collected with OMAO-owned and scientific party-provided instruments that OMAO is responsible for per the Project Instructions, as well as any processed data available at the time of submission.

(2) The CO or the CO's designee shall notify NCEI electronically when the data are ready for transfer. This procedure does not relieve the CS/PI from their responsibility to provide all project-specific data and project metadata to a data archive within 1 year of data collection.

(3) The CO’s responsibility for archiving the data is complete upon receiving confirmation from NCEI that raw data and project metadata are archived (preferably an accession number or a digital object identifier).

(4) Policy for implementing Appendix B Section 3.5 is outlined in OMAO Policy 1102-38 Shipboard Data Acquisition and Stewardship.

(5) For each project, the CO shall ensure that all OMAO-owned instruments are acquiring high-quality data. OMAO instruments should be acquiring data at all times unless it interferes with the specific project, violates rules/laws/policy, or is due to another reason specified in the SDAL Ship Operations Log for that sea day.

(C) OMAO Environmental Data Acquisition Manager

(1) The EDAM plans, directs, and implements policies and procedures to standardize the acquisition, safeguarding, and submission of high quality environmental, water column, and bathymetric data by NOAA Ships.

(2) The EDAM will validate and monitor publication of the appropriate metadata in the NOAA archive, ensure the data is publicly available by the agreed date of public release, and assess current digital inventories of all published OMAO owned data sets.

(3) The EDAM will ensure proper data stewardship and implementation of the terms of the submission agreements, address policy requirements, and adopt procedural directives throughout the data lifecycle.

### (D) NCEI Data Manager - Archive and Publish Data at NCEI

### (1) After confirming that raw data and project metadata received from the CO or the CO's designee are valid, a DM will archive them at NCEI and then return confirmation (preferably an accession number or a digital object identifier) to the CO and/or the CO's designee and the OMAO Data Manager.

### (2) A DM will validate and publish metadata, archive appropriate data in accordance with data archival best practices, make the data publicly available by the agreed date of public release, safeguard non-public, restricted data (i.e., data with homeland/national security, cultural heritage, or protected resources value), and maintain current digital inventories of all public data.

### (3) NCEI will make publicly available all unrestricted raw and processed data (i.e., all data with no homeland/national security, cultural heritage, or protected resources value) no sooner than the agreed date of public release and not later than 1 year after collection. Ships should account for NCEI’s time to receive and process the data (~90 days) in this 1 year.

### (4) OMAO and NCEI will describe the technical details of implementing Section 5 in their Submission Agreements and appendices to this document. The DM will ensure to implement the terms of the submission agreements.

**4. Foreign Nationals**

## 4.1 Foreign National Guests Access to OMAO Facilities and Platforms

All foreign national (FN) access to the vessel shall be in accordance with [NAO 207-12: Technology Controls and Foreign National Access](https://www.noaa.gov/organization/administration/nao-207-12-technology-controls-and-foreign-national-access). All LO personnel will use the Foreign National Registration System (FNRS) to submit requests for access to NOAA facilities and ships. FNRS does not route through/to OMAO, so for access to OMAO facilities and platforms sponsors must route an OMAO [Request for Foreign National Access to OMAO Facilities and Platforms](https://drive.google.com/drive/folders/1oAoB35QAGPMH334-OJBCIkosvZ7c7YzO?usp=drive_link) form in order to provide information on access to OMAO Information Technology systems. The Departmental Sponsor (DSN) is responsible for obtaining clearances, export licenses as required, and providing escorts for FN(s). DSN should consult with their LO Controlled Technology Coordinator if assistance is required during the process.

When FN access is requested, the DSN shall also request access to all NOAA, OMAO and Federal Facilities and platforms their FN may come in contact with, enter or pass through while gaining access to the requested destination. This includes, but is not limited to NOAA Marine Operations Centers, NOAA port offices, NOAA ships, USCG Bases, Navy Bases, and commercial ports.

Full compliance with NAO 207-12 is required.

### Responsibilities of the Chief Scientist

#### Provide the facility or platform CO with the email generated by the Servicing Security Office granting approval. This email will identify the guest’s DSN and Designated Escorts (if any) and will serve as evidence that the requirements of NAO 207-12 have been complied with.

#### Escorts – The DSN is responsible to provide escorts to comply with NAO 207-12 Section 5.10, or as required by the vessel’s DOC/OSY Regional Security Officer.

#### Ensure all DSN or identified escorts complete the briefing on Espionage Indicators briefing (NAO 207-12) at least annually or as required by the Servicing Security Office.

#### Export Control - Ensure that approved controls are in place for any controlled technologies subject to [Export Administration Regulations (EAR)](https://www.bis.doc.gov/index.php/regulations/export-administration-regulations-ear) that are present on or will be brought aboard the ship.

#### The CO or designated official and the Chief Scientist will keep each other informed of controlled technologies belonging to the ship and to the scientific party. They shall work together to implement any access controls necessary to ensure no unlicensed export occurs.

### Responsibilities of the Commanding Officer

#### Ensure only those FN(s) with DOC/OSY clearance are granted access.

#### Access control shall be IAW Bureau of Industry and Security country guidance.

#### Ensure foreign national access is permitted only if unlicensed deemed export is not likely to occur.

#### Ensure receipt from the Chief Scientist or the DSN of the Servicing Security Office email granting approval for the FN(s) guest’s visit.

#### Ensure Foreign Port Officials, e.g., Pilots, immigration officials, receive escorted access in accordance with maritime custom to facilitate the vessel’s visit to foreign ports.

#### Ensure all OMAO personnel onboard receive the Espionage Indicators briefing (NAO 207-12) as required for FN visitors or guests.

* + - 1. Controlled Technology shall be protected IAW the Controlled technology Plan

### Responsibilities of the Departmental Sponsor

#### Export Control - The DSN is responsible for obtaining any required export licenses and complying with any conditions of those licenses prior to the FN being provided access to controlled technology regardless of the technology’s ownership.

#### The DSN, if not sailing for the project, shall assign an escort from the on-board scientific party. The identified escort will be responsible for the FN while on board. The identified individual must be a U.S. citizen and a NOAA or DOC employee and have completed and submitted training to LO CTC.

#### Ensure completion and submission of NAO 207-12 (Certification of Conditions and Responsibilities for a Foreign National) within 3 days of the FN’s arrival onboard the ship.

# 5. Hazardous Materials

## 5.1 Policy and Compliance

The Chief Scientist is responsible for complying with OMAO Procedure 0701-22 Visiting Scientists' Chemicals and Related Hazardous Materials (Mission HAZMAT). By federal regulations and NOAA Marine and Aviation Operations policy, the ship may not sail without a complete inventory of all hazardous materials by name and quantity, Safety Data Sheets (SDS), appropriate spill cleanup materials (i.e., neutralizing agents, buffers, or absorbents) in amounts adequate to address spills of a size equal to the amount of chemical brought aboard, and chemical safety and spill response procedures. Documentation regarding those requirements will be provided by the Chief of Operations, Marine Operations Center, upon request.

* + 1. Per OMAO Procedure 0701-22, the scientific party will include with their Project Instructions and provide the CO of the respective ship 30 days before departure:
       1. List of chemicals by name with anticipated quantity;
       2. List of spill response materials, including neutralizing agents, buffers, and absorbents;
       3. Chemical safety and spill response procedures, such as excerpts of the program’s Chemical Hygiene Plan or SOPs relevant for shipboard laboratories; and
       4. For bulk quantities of chemicals in excess of 50 gallons total or in containers larger than 10 gallons each, notify the ship's Operations Officer regarding quantity, packaging, and chemical to verify safe stowage is available.
    2. During embarkation and before loading hazardous materials aboard the vessel, the scientific party will provide the CO or their designee:
       1. An inventory list (NF 57-07-11 or similar) showing actual amount of hazardous material to be brought aboard;
       2. An SDS for each material;
       3. Confirmation that neutralizing agents and spill equipment were brought aboard sufficient to contain and cleanup all of the hazardous material brought aboard by the program; and
       4. Confirmation that chemical safety and spill response procedures were brought aboard.
    3. During loading, the scientific parties will work with the ship’s Operations Officer and the ECO to track mission hazmat brought aboard, using NOAA Form 57-07-11 or similar. SDS will be made available to the ship’s complement, in compliance with Hazard Communication Laws.
    4. Underway, the scientific parties are expected to manage and respond to spills of scientific hazardous materials. Overboard discharge of hazardous materials is not permitted aboard NOAA ships.
    5. Upon departure from the ship, the removal of mission hazmat and related products must be verified and the Chief Scientist and Operations Officer or designee must initial the Mission HAZMAT Log (NF 57-07-11). A closed out copy of the Mission Hazmat Log will be provided to the scientific party upon request.

## 5.2 Chemical safety and spill response procedures

### (A) ACID [A]

#### (1) Wear appropriate protective equipment and clothing during clean-up. Keep upwind. Keep out of low areas.

#### (2) Ventilate closed spaces before entering them.

#### (3) Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.

#### Large Spills: Dike far ahead of spill for later disposal. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

#### Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

#### Never return spills in original containers for re-use.

#### Neutralize spill area and washings with soda ash or lime. Collect in a non-combustible container for prompt disposal.

#### J. T. Baker NEUTRASORB® acid neutralizers are recommended for spills of this product.

### (B) Mercury [M]

#### Spills: Pick up and place in a suitable container for reclamation or disposal in a method that does not generate dust. Sprinkle area with sulfur or calcium polysulfide to suppress mercury. Use Mercury Spill Kit if need be.

### (C) Formalin/Formaldehyde [F]

#### Ventilate area of leak or spill. Remove all sources of ignition.

#### Wear appropriate personal protective equipment.

#### Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible.

#### Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e.g., vermiculite, dry sand, earth), and place in a chemical waste container.

#### Do not use combustible materials, such as sawdust.

## 5.3 Radioactive Materials and X-ray Generating Devices

The Chief Scientist is responsible for complying with OMAO Procedure 0701-10 Radioactive Material and X-ray Generating Device Use Aboard NOAA Ships. Documentation regarding those requirements is provided by the Chief of Operations, Marine Operations, upon request. Use of radioactive isotopes in areas under the jurisdiction of other countries may require additional permits from the host countries. Port calls in other countries, while the ship is carrying radioactive isotopes, may also require special notification, compliance with host country regulations, and consent from the host.

### Radioactive Materials (RAM)

### The Chief Scientist submits, at least three months in advance of a domestic project and eight months in advance of a foreign project start date, required documentation to MOC-CO, including:

### NF 57-07-02 Request to use Radioactive Material Aboard a NOAA Ship.

### Draft Project Instructions (only one copy required per project).

### Licenses: Nuclear Regulatory Commission (NRC) Materials License (NRC Form 374) or State license with Report of Proposed Activities in Non-Agreement States, Areas of Exclusive Federal Jurisdiction, or Offshore Waters (NRC Form 241).

### Experiment and usage protocols, including spill clean-up and accidental exposure procedures.

### If applicable, copies of any applications submitted and/or consent obtained from other countries.

### X-ray Generating Devices (XGD)

### The Chief Scientist submits, at least three months in advance of a domestic or foreign project start date, required documentation to MOC-CO, including:

### NF 57-07-19 Request to use X-ray Generating Device (XGD) Aboard a NOAA Ship.

### Draft Project Instructions (only one copy required per project).

### Experiment or usage protocol, including all proposed use parameters.

### A current (within 1 year of the day the vessel is to leave port) performance test report for each device

### Manufacturer specification sheet.

### If applicable, copies of any applications submitted and/or consent obtained from other countries.

#### Scientific parties will follow responsibilities and requirements for storage and use, routine wipe tests, signage, and material disposal as outlined in OMAO Procedure 0701-10.

## 5.4 Lithium Batteries

Lithium batteries include:

* Lithium batteries,
* Lithium cells,
* Lithium battery-powered, or associated, systems or equipment, and
* Batteries that utilize lithium metal, alloys, or compounds.

Per OMAO Procedure 1102-04 Lithium Battery Safety Procedures, the Chief Scientist is responsible for:

### Providing a risk management plan to mitigate lithium battery concerns, including:

#### Packaging. How will the system/battery be packaged?

#### Storage facilities. How will the system/battery be stored from delivery to disposal?

#### Transportation methods

#### Operational use scenario (Include a complete description of how the system/batteries will be handled and used; what platform(s) will carry or deploy the system; location of recharging operations; recovery operations; number of units anticipated to be used; and, where appropriate, the sequence of events before system use/activation/deployment, etc.).

#### Disposal information

### Provide scientific party and Ship’s Command with relevant SOPs related to equipment containing lithium batteries.

### Include Safety Data Sheets and/or Technical Data Sheets in the hazardous materials inventory that is transmitted to the ship.

### Notify the ship's Command/ECO when equipment arrives on-scene.

# Appendix B References

**Federal Regulations and Standards**

* ASTM F1507 American Society for Testing and Materials - Standard Specifications for Surge Suppressors for Shipboard Use
* Export Administration Regulations (EAR)
* MIL-PRF-32167A Military Performance Specification - Transient Voltage Surge Suppressors
* UL 1449 Underwriters Laboratories - Safety Standards for Surge Protective Devices

**NOAA Administrative Orders**

* NAO 121-15-B Management of NOAA's Data and Information
* NAO 202-1106 NOAA Sexual Assault and Sexual Harassment Prevention and Response Policy
* NAO 207-12 Technology Controls and Foreign National Access
* NAO 212-15 Management of Environmental Data and Information 
  + NOAA Data Documentation Procedural Directive
  + NOAA Data Management Planning Procedural Directive (preparation of DMPs)
* NAO 216-101 Ocean Data Acquisitions

**OMAO Policies and Procedures**

* OMAO Policy 1008 Tuberculosis Protection Program
* OMAO Policy 1102-38 Shipboard Data Acquisition and Stewardship
* OMAO Procedure 0701-10 Radioactive Material and X-ray Generating Device Use aboard NOAA Ships
* OMAO Procedure 0701-22 Visiting Scientists' Chemicals and Related Hazardous Materials (Mission HAZMAT)
* OMAO Procedure 1102-03 Vessel Quarters
* OMAO Procedure 1102-04 Lithium Battery Safety Procedures
* OMAO Procedure 1102-20 General Rules and Minimum Requirements for Embarked Personnel
* OMAO Procedure 1201-080 NOAA Ship Familiarization

# Appendix C Forms

* NOAA Form 57-07-02 Request to Use Radioactive Material Aboard a NOAA Ship
* NOAA Form 57-07-19 Request to Use X-ray Generating Devices (XGD) Aboard a NOAA Ship
* NOAA Form 57-10-02 Tuberculosis Screening Document
* NOAA Form 57-10-01 Health Services Questionnaire (NHSQ)
* NRC Form 374 Nuclear Regulatory Commission Materials License
* NRC Form 241 Report of Proposed Activities in Non-Agreement States, Areas of Exclusive Federal Jurisdiction, or Offshore Waters
* Request for Foreign National Access to OMAO Facilities and Platform