



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
Alaska Fisheries Science Center  
Resource Assessment and Conservation Engineering  
7600 Sand Point Way NE  
Seattle, WA 98115

Final  
Project Instructions

**Date Submitted:** November 27, 2013  
**Platform:** NOAA Ship *Oscar Dyson*  
**Project Number:** DY-14-00 (OMAO)  
**Project Title:** Puget Sound Gear Trials  
**Project Dates:** 28 January 2014

Prepared by:  Dated: 11/27/13  
Taina Honkalehto, Chief Scientist  
Research Fishery Biologist  
AFSC/RACE Division

Approved by:  Dated: 12/2/13  
Dr. Jeffrey M. Napp  
Division Director  
AFSC/RACE Division

Approved by:  Dated: 12/2/13  
Dr. Douglas P. DeMaster,  
Science and Research Director  
Alaska Fisheries Science Center

Approved by:  CAPT NOAA Dated: 1/16/2014  
Captain Wade J. Blake, NOAA  
Commanding Officer  
Marine Operations Center – Pacific



**I. Overview**

A. Brief Summary and Project Period: pre-season scientific gear loading, acoustic system calibration, trawl and equipment testing, 28 January 2014

B. Days at Sea (DAS)

Of the \_1\_ DAS scheduled for this project, \_1\_ DAS are funded by OMAO. This project is estimated to exhibit a high Operational Tempo.

C. Operating Area: Puget Sound, Port Madison, WA (Appendix 1)

D. Summary of Objectives: 1) complete post-ship-yard, pre-field season acoustic system calibration, 3) test acoustic-trawl (AT) survey trawling /oceanographic winches and sampling equipment, 4) test effect of bridal length on spread of Stauffer trawl with large (fishbuster) doors.

E. Participating Institutions: Alaska Fisheries Science Center (AFSC), Seattle WA.

F. Personnel/Science Party: name, title, gender, affiliation, and nationality

| Name (Last, First) | Title           | Date Aboard | Date Disembark | Gender | Affiliation | Nationality |
|--------------------|-----------------|-------------|----------------|--------|-------------|-------------|
| Honkalehto, Taina  | Chief Scientist | Jan 28      | Jan 28         | F      | AFSC        | USA         |
| Towler, Rick       | IT Specialist   | Jan 28      | Jan 28         | M      | AFSC        | USA         |
| Furnish, Scott     | IT Specialist   | Jan 28      | Jan 28         | M      | AFSC        | USA         |
| Jones, Darin       | Fish Biologist  | Jan 28      | Jan 28         | M      | AFSC        | USA         |
| Cooper, Dan        | Fish Biologist  | Jan 28      | Jan 28         | M      | AFSC        | USA         |

**G. Administrative**

1. Points of Contacts: Taina Honkalehto (MACE lead) 7600 Sand Point Way NE Seattle WA 98115, 206-526-4237, [Taina.Honkalehto@noaa.gov](mailto:Taina.Honkalehto@noaa.gov); Alternate: Chris Wilson (MACE Program manager), 206-526-6435, [Chris.Wilson@noaa.gov](mailto:Chris.Wilson@noaa.gov).

2. Diplomatic Clearances: None required

3. Licenses and Permits: This project will be conducted under the Washington State Scientific Collection Permit (Permit #13-093). Permit Holder: Steven Porter (206-526-4271; [steve.porter@noaa.gov](mailto:steve.porter@noaa.gov))

## II. Operations

The Chief Scientist is responsible for ensuring the scientific staff are trained in planned operations and are knowledgeable of project objectives and priorities. The Commanding Officer is responsible for ensuring all operations conform to the ship's accepted practices and procedures.

### A. Project Itinerary Jan 28

- 0700: Embark scientists at a location TBD in Puget Sound
- 0800: Depart. Transit to Port Madison; anchor; conduct sphere calibration; conduct CTD
- 1400: Transit to Shilshole. Trawl test (prioritized) - AWT; Methot winch can be tested w/ a tom weight (2 h)  
Drop TS deployment (1 hr).  
FOCI Stauffer trawl project (3-9 hrs; Appendix 1).

Embark/debark details TBD once plan is approved. We request that small boat transfers at Shilshole be an option

B. Staging and Destaging: Scientific gear will be loaded and mounted onto the vessel in Seattle on 27 January prior to gear trials. The AWT and Stauffer trawls are to be loaded on to the net reels. Stauffer trawl can remain aboard to be offloaded in Kodiak, Alaska.

### C. Operations to be Conducted

1. A standard sphere calibration of the centerboard-mounted scientific acoustic systems (18-, 38-, 70-, 120-, and 200-kHz) will be conducted at the beginning of the project in Port Madison, WA (priority 1, Figure 1). This requires anchoring the vessel at the bow (and stern) and suspending a calibration sphere assembly directly beneath the vessel's centerboard. A CTD cast will be conducted prior to the calibration.
2. MACE trawl testing AWT, Methot (priority 2)
3. FOCI Stauffer trawl project (priority 3, Appendix 1). Two options are described in Appendix 1:
  - i. Minimum effort w/ 2 tows (3 h)
  - ii. Maximum effort w/ 4-6 tows total (6-9 h)
4. Miscellaneous (requiring no vessel time): Test SCS and scientific seawater system, -20 and -80 freezer operations, controlled environment room, calibrate the crane scales, CLAMS dry run.

### D. Dive plan

All dives are to be conducted in accordance with the requirements and regulations of the NOAA Diving Program (<http://www.ndc.noaa.gov/dr.html>) and require the approval of the ship's Commanding Officer. Dives are not planned for this project

E. Applicable Restrictions: No restrictions

### III. Equipment

#### A. Equipment and Capabilities provided by the ship (itemized)

1. Acoustic Equipment
  - GPS with NEMA 183 to ER60 (2)
  - 50/200 kHz ES60 Bridge sounder
  - Furuno FE-700 fathometer
2. Trawling Equipment
  - 3rd wire FS-70 net sonar with winch and accessories (2)
  - Simrad ITI net mensuration system (2)
  - Furuno CN24 headrope transducer
3. Oceanographic Equipment
  - Seabird CTD System
4. Biological Sampling Equipment
  - Fish lab conveyor system
  - Catch sorting and weighing table
5. Computing equipment
  - Scientific Computing System

#### B. Equipment and Capabilities provided by the scientists (itemized)

1. Acoustic Equipment
  - Simrad ER60 system (2)
  - Simrad ES18 transducer (2)
  - Simrad ES38B transducer (2)
  - Simrad ES38DD transducer (in drop TS canister housing)
  - Simrad ES70 transducer (1)
  - Simrad ES120-7C transducer (2)
  - Simrad ES200-7C transducer (3)
  - Standard target & suspension assembly
  - Simrad ME70 system
2. Trawling Equipment
  - Aleutian wing trawl w/ 0.5" mesh liner installed (3, one aboard, 2 in Kodiak)
  - Poly nor'eastern trawl (2), one w/ 0.5" mesh liner installed; the other without
  - 83-112 bottom trawl (2), one w/0.5" mesh liner, one w/o
  - Marinovich trawl with accessories (1, modified if available)
  - Dandylines (10 fm x ½ in.)
  - Dandylines (30 fm x 5/8 in.)
  - Fishbuster door with accessories (1 aboard, 1 in Kodiak)
  - Spare webbing & twine
  - Stauffer trawl (unloaded after gear trials)
  - Spare 0.5" mesh cod end liners (2, for AWT)
  - Spare hardware

- 500 lb. tom weights (4)
- 250 lb. tom weights (4)
- Pocket (1, installed on AWT)
- Cam-trawl system
- Ruggedized cam-trawl system (what are plans for this?)
- Methot net with accessories (2 in MACE workshop ? are they coming north?)
- Miscellaneous supplies\*
- 3. Oceanographic Equipment
  - Seabird SBE39 (2)
  - Seabird CTD
- 4. Biological Sampling Equipment
  - Dynamometer
  - Marel M60 60 kg scale (2)
  - Marel M60 6 kg scale (2)
  - Fish baskets (30)
  - Glycerin/Thymol\*
  - Ethyl Alcohol\*
  - Formalin\*
  - Misc. biological supplies\*
- 5. Computing equipment
  - IBM compatibles w/XP Op.System\*
  - Dell PowerEdge MACEBASE Server
  - Printers\*
- 6. Mooring equipment (PMEL)

Note: \* indicates amount not specified.

#### **IV. Hazardous Materials**

##### **A. Policy and Compliance**

The Chief Scientist is responsible for complying with FEC 07 Hazardous Materials and Hazardous Waste Management Requirements for Visiting Scientific Parties (or the OMAO procedure that supersedes it). 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 the anticipated quantity brought aboard, MSDS and appropriate neutralizing agents, buffers, or absorbents in amounts adequate to address spills of a size equal to the amount of chemical brought aboard, and a chemical hygiene plan. Documentation regarding those requirements will be provided by the Chief of Operations, Marine Operations Center, upon request.

Per OMAO procedure, the scientific party will include with their project instructions and provide to the CO of the respective ship 30 days before departure:

- List of chemicals by name with anticipated quantity
- List of spill response materials, including neutralizing agents, buffers, and absorbents
- Chemical safety and spill response procedures, such as excerpts of the program's Chemical Hygiene Plan or SOPs relevant for shipboard laboratories.
- For bulk quantities of chemicals in excess of 50 gallons total or in containers larger than 10 gallons each, notify ship's Operations Officer regarding quantity, packaging and chemical to verify safe stowage is available as soon as chemical quantities are known.

Upon embarkation and prior to loading hazardous materials aboard the vessel, the scientific party will provide to the CO or their designee:

- An inventory list showing actual amount of hazardous material brought aboard
- An MSDS for each material
- 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
- Confirmation that chemical safety and spill response procedures were brought aboard

Upon departure from the ship, scientific parties will provide the CO or their designee an inventory showing that all chemicals were removed from the vessel. The CO's designee will maintain a log to track scientific party hazardous materials. MSDS will be made available to the ship's complement, in compliance with Hazard Communication Laws.

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.

#### B. Inventory

| Common Name of Material      | Qty       | Notes                            | Trained Individual | Spill control |
|------------------------------|-----------|----------------------------------|--------------------|---------------|
| Glycerol (50%) / Thymol (1%) | 5 gal     | Non-Hazardous in quantities used | Darin Jones        | G             |
| Formaldehyde solution (37%)  | 16 liters | Stored in ship chem. locker      | Darin Jones        | F             |

#### C. Chemical safety and spill response procedures

##### A: Glycerol/Thymol

- Rinse affected area with copious amounts of water.

##### B: Formalin/Formaldehyde

- 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 saw dust.

**Inventory of Spill Kit supplies**

| Product Name | Amount | Chemicals it is useful against | Amount it can clean up |
|--------------|--------|--------------------------------|------------------------|
| NeutraleX    | 5 gal  | Formaldehyde solution (37%)    | 5 gal                  |

Upon departure from the ship, scientific parties will provide the CO or their designee an inventory of hazardous material indicating all materials have been used or removed from the vessel. The CO's designee will maintain a log to track scientific party hazardous materials. MSDS will be made available to the ship's complement, in compliance with Hazard Communication Laws.

Scientific parties are expected to manage and respond to spills of scientific hazardous materials. Overboard discharge of scientific chemicals is not permitted during projects aboard NOAA ships.

D. Radioactive materials: No radioactive isotopes are planned for this project.

**V. Additional Projects**

- A. Supplementary ("Piggyback") Projects: no supplemental projects are planned for this project
- B. NOAA Fleet Ancillary Projects

No NOAA Fleet Ancillary Projects are planned.

**VI. Disposition of Data and Reports**

Disposition of data gathered aboard NOAA ships will conform to NAO 216-101 *Ocean Data Acquisitions* and NAO 212-15 *Management of Environmental Data and Information*. To guide the implementation of these NAOs, NOAA's Environmental Data Management Committee (EDMC) provides the *NOAA Data Documentation Procedural Directive* (data documentation) and *NOAA Data Management Planning Procedural Directive* (preparation of Data Management Plans). OMAO is developing procedures and allocating resources to manage OMAO data and Programs are encouraged to do the same for their Project data.

- A. Data Classifications: *Under Development*
  - a. OMAO Data
  - b. Program Data
- B. Responsibilities:

1. An electronic Marine Operations Abstract (MOA) will be created to log all operations via daily transfers of position data from the ship's SCS system to MACE. An appropriate logging interval will be chosen for automated track position data. Specific events (and frequency) to be recorded will be decided at the beginning of the project. Globe software will be available to log operations data as a backup. All times should be recorded as Greenwich Mean Time (GMT)
2. The data sets requested by the Chief Scientist from the ship will include the following: electronic files (MOA) from the SCS of all operations logged during the project, and backup media (e.g., DVDs) with all sensor data logged to the Scientific Computer System (SCS).
3. The Chief Scientist will represent the AFSC lab director for data disposition. A single copy of all data gathered by the vessel will be delivered to the Chief Scientist for forwarding to the AFSC lab director, who in turn will be responsible for distributing data to other investigators desiring copies.

## **VII. Meetings, Vessel Familiarization, and Project Evaluations**

- A. Pre-Project Meeting: The Chief Scientist and Commanding Officer will conduct a meeting of 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 shall 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.
- B. Vessel Familiarization Meeting: The Commanding Officer is responsible for ensuring scientific personnel are familiarized with applicable sections of the standing orders and vessel protocols, e.g., meals, watches, etiquette, drills, etc. A vessel familiarization meeting shall be conducted in the first 24 hours of the project's start and is normally presented by the ship's Operations Officer.
- C. Post-Project Meeting: The Commanding Officer is responsible for conducted a meeting no earlier than 24 hrs before or 7 days after the completion of a project to discuss the overall success and short comings of the project. Concerns regarding safety, efficiency, and suggestions for future improvements shall be discussed and mitigations for future projects will be documented for future use. This meeting shall be attended by the ship's officers, applicable crew, the Chief Scientist, and members of the scientific party and is normally arranged by the Operations Officer and Chief Scientist.
- D. Project Evaluation Report

Within seven days of the completion of the project, a Ship Operation Evaluation form is to be completed by the Chief Scientist. The preferred method of transmittal of this form is



via email to [omao.customer.satisfaction@noaa.gov](mailto:omao.customer.satisfaction@noaa.gov). If email is not an option, a hard copy may be forwarded to:

Director, NOAA Marine and Aviation Operations  
NOAA Office of Marine and Aviation Operations  
8403 Colesville Road, Suite 500  
Silver Spring, MD 20910

## **VII. Miscellaneous**

### **A. Meals and Berthing**

The ship will provide meals for the scientists listed above. Meals will be served 3 times daily beginning one hour before scheduled departure, extending throughout the project, and ending two 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. Special dietary requirements for scientific participants will be made available to the ship's command at least seven days prior to the project.

Berthing requirements, including number and gender of the scientific party, will be provided to the ship by the Chief Scientist. The Chief Scientist and Commanding Officer will work together on a detailed berthing plan to accommodate the gender mix of the scientific party taking into consideration the current make-up of the ship's complement. 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 which were issued. The Chief Scientist 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 prior to departing the ship.

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 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.

All persons boarding NOAA vessels give implied consent to comply with all safety and security policies and regulations which are administered by the Commanding Officer. All spaces and equipment on the vessel are subject to inspection or search at any time. All personnel must comply with OMAO's Drug and Alcohol Policy dated May 17, 2000 which forbids the possession and/or use of illegal drugs and alcohol aboard NOAA Vessels.

### **B. Medical Forms and Emergency Contacts**

The NOAA Health Services Questionnaire (NHSQ, Revised: 02 JAN 2012) must be completed in advance by each participating scientist. The NHSQ can be obtained from the Chief Scientist or

the NOAA website <http://www.corporateservices.noaa.gov/~noaaforms/eforms/nf57-10-01.pdf>. The completed form should be sent to the Regional Director of Health Services at Marine Operations Center. The participant can mail, fax, or scan and send via secure e-mail the form using the contact information below; participants should take precautions to protect their Personally Identifiable Information (PII) and medical information. The NHSQ should reach the Health Services Office no later than 4 weeks prior to the project to allow time for the participant to obtain and submit additional information that health services might require before clearance to sail can be granted. Please contact MOC Health Services with any questions regarding eligibility or completion of the NHSQ. Be sure to include proof of tuberculosis (TB) testing, sign and date the form, and indicate the ship or ships the participant will be sailing on. The participant will receive an email notice when medically cleared to sail if a legible email address is provided on the NHSQ.

Contact information:

Regional Director of Health Services  
Marine Operations Center – Pacific  
2002 SE Marine Science Dr.  
Newport, OR 97365  
Telephone 541-867-8822  
Fax 541-867-8856  
Email [MOP.Health-Services@noaa.gov](mailto:MOP.Health-Services@noaa.gov)

Prior to 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 telephone number.

C. Shipboard Safety

Wearing open-toed footwear or shoes that do not completely enclose the foot (such as sandals or clogs) outside of private berthing areas is not permitted. Steel-toed shoes are required to participate in any work dealing with suspended loads, including CTD deployments and recovery. The ship does not provide steel-toed boots. Hard hats are also 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.

D. 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 e-mail and the Very Small Aperture Terminal (VSAT) link. Standard VSAT bandwidth at 128kbs is shared by all vessels staff and the science team at no charge.

Increased bandwidth in 30 day increments is available on the VSAT systems at increased cost to the scientific party. If increased bandwidth is being considered, program accounting is required and it must be arranged at least 30 days in advance.

E. IT Security

Any computer that will be hooked into the ship's network must comply with the *OMAO Fleet IT Security Policy* 1.1 (November 4, 2005) prior to establishing a direct connection to the NOAA WAN. Requirements include, but are not limited to:

- (1) Installation of the latest virus definition (.DAT) file on all systems and performance of a virus scan on each system.
- (2) Installation of the latest critical operating system security patches.
- (3) No external public Internet Service Provider (ISP) connections.

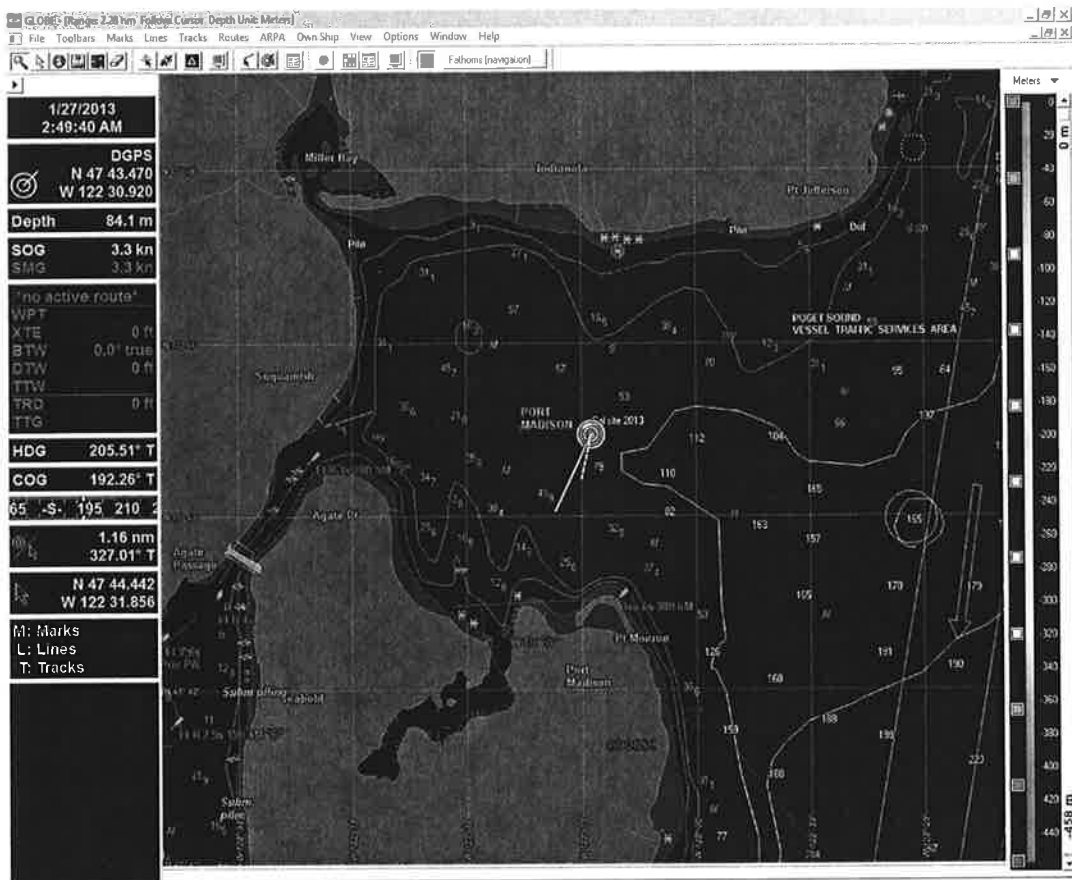
Completion of the above requirements prior to boarding the ship is required.

Non-NOAA personnel using the ship's computers or connecting their own computers to the ship's network must complete NOAA's IT Security Awareness Course within 3 days of embarking.

F. Foreign National Guests Access to OMAO Facilities and Platforms

Foreign National access to the NOAA ship or Federal Facilities is not required for this project.

Figure 1. Port Madison sphere calibration location



## Appendix 1. FOCI Gear trials

**FOCI REQUEST:** CONDUCT SELECTED TOWS TO COMPARE PERFORMANCE OF STAUFFER TRAWL USING VARIABLE BRIDLE LENGTHS ON STAUFFER TRAWL FISHED WITH FISHBUSTER DOORS

**FOCI staff:** Dan Cooper ([Dan.Cooper@noaa.gov](mailto:Dan.Cooper@noaa.gov), 206-526-4330)

We request ~3 hrs (minimum) during the 28 January 2014 gear trials aboard the NOAA ship *Oscar Dyson* to measure the width and height of the Stauffer trawl mouth opening when fished with oversize doors using the standard 30-fm bridles compared with longer, 90-fm bridles. Ultimately, our goal is to be able to compare the fish catch efficiency and selectivity of the Stauffer and the Cantrawl nets at sea without changing doors, which is time consuming and can be dangerous. We normally fish the Stauffer trawl, which is used by FOCI to collect small midwater fishes, with 5'x7' (ca. 3 m<sup>2</sup>), steel-v, 1250-lb (ca. 567 kg) doors. The Cantrawl net, which is used on the BASIS survey by the EMA program, is a much bigger trawl and so is fished with larger 5-m<sup>2</sup>, steel-alloy, 613 kg doors (Murphy et al., 2003. NPAFC Doc. 677). Our expectation is that lengthening the Stauffer trawl bridles will compensate for the increased spread when

fished with the 5-m<sup>2</sup> alloy doors and thereby provide a simple solution to comparing the nets at sea using the 5- m<sup>2</sup> alloy doors. During the gear trials, however, the alloy doors will not be available so we propose to conduct our measurements using the similar-size FishBuster doors that will be available from MACE.

As a first priority, we want to conduct two tows stepping the trawl at 3 depths, depending on bottom depth we expect the 3 depths to be something like 20, 40, and 60 m; however, if bottom depth allows for deeper depths, then we want to increase the middle and maximum depths. The trawl will be equipped with net mensuration equipment, which may include some or all of the following: Scanmar spread sensors, 3<sup>rd</sup>-wire headrope unit, and Marport depth/height sensor (door spread sensors may also be used). The only difference between the two tows is that the Stauffer trawl will be rigged with 30-fm bridles on one tow and 90-fm bridles on the other tow. For each tow, the trawl should be deployed per standard deployment procedures to the deepest depth, allowed to equilibrate, and then towed for up to 20 minutes at depth to ensure sufficient amount of high-quality net mensuration data is collected. The net will then be raised to the next shallower depth and so on. We request that the retrieval rate of the warp wire be 10 m/min, which is the retrieval rate we intend to use at sea during field work. Towing and speed (~2.5 kts) must be kept constant for both tows. If both tows occur one immediately after the other, then we request that tow direction be the same so as to control for direction of tidal current, but this is not crucial.

As a second priority, we propose to conduct 2-4 more tows, identical to those described above, to allow for replication of data. One tow would be conducted with the 30 fm bridle and one with the 90 fm bridle. Anticipated time for second priority work = ~3-6 hours.

- 1) Load one Stauffer trawl onto one of Oscar Dyson's net reel equipped with either the 30-fm or the 90-fmbridles, whichever maximizes overall logistical efficiency.
  - a. Equip the Stauffer trawl with two pair of Scanmar spread sensors. One pair to measure the distance from headrope center to footrope center. A second pair to measure the distance from wingtip to wingtip.
- 2) Equip trawl with 3<sup>rd</sup> wire headrope unit and marport depth/height sensor, and attach two small floats to the footrope to better ensure that the footrope will be visible in the marport output.
- 3) Deploy at normal deployment speed, but retrieve at a wire-in rate of 10 m/sec. Fish the Stauffer trawl over a stepped (60, 40, 20m) path from deepest to shallowest depth. Net to be fished with open cod end.
- 4) Allow net to equilibrate at depth and collect data for 10-20 minutes per target depth.
- 5) After all work is completed, the Stauffer trawl can remain aboard the vessel, and then be offloaded and stored in Kodiak, AK.



**UNITED STATES DEPARTMENT OF COMMERCE**

National Oceanic and Atmospheric Administration  
NOAA Marine and Aviation Operations  
Marine Operations Center - Pacific  
2002 SE Marine Science Drive  
Newport, OR 97365

03 February, 2014

**MEMORANDUM FOR:** Captain Wade J. Blake, NOAA  
Commanding Officer, Marine Operations Center - Pacific

**FROM:** Commander Brian W. Parker, NOAA  
Chief of Operations, Marine Operations Center - Pacific

**SUBJECT:** Amendment 1 to final project instructions, *Oscar Dyson*  
DY-14-00.

Please amend the subject project instructions dated 27 November 2013, as follows:

\_\_\_\_\_  
APPROVED

\_\_\_\_\_  
DISAPPROVED

\_\_\_\_\_  
LET'S DISCUSS



**Please amend the Project Instruction for DY-14-00 with the following:**

- 1) Section I Overview and Section II A. Project Itinerary to reflect a 2/8/14 arrival and departure from Seattle, WA in Puget Sound.
- 2) Add the following personnel the Personnel/Science Party:

| <b>Name (Last, First)</b> | <b>Title</b>   | <b>Date Aboard</b> | <b>Date Disembark</b> | <b>Gender</b> | <b>Affil.</b> | <b>Nationality</b> |
|---------------------------|----------------|--------------------|-----------------------|---------------|---------------|--------------------|
| Lauffenburger, Nathan     | Fish Biologist | 2/8/14             | 2/8/14                | M             | AFSC          | USA                |
| Floering, William         | Fish Biologist | 2/8/14             | 2/8/14                | M             | AFSC          | USA                |
| Deforest, Lisa            | Fish Biologist | 2/8/14             | 2/8/14                | F             | AFSC          | USA                |