

AMENDMENT 001 TO MOA-2015-035/9099

A REIMBURSABLE AGREEMENT

Between The

**U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
CENTER FOR OPERATIONAL OCEANOGRAPHIC PRODUCTS
AND SERVICES**

And The

**CITY OF LOS ANGELES
ACTING BY AND THROUGH THE BOARD OF HARBOR
COMMISSIONERS**

For The

**INSTALLATION, OPERATION AND MAINTENANCE OF AN AIR
GAP SENSOR ON THE VINCENT THOMAS BRIDGE**

And For

**THE QUALITY CONTROL AND DISSEMINATION OF WIND DATA
FOR NOAA'S LOS ANGELES / LONG BEACH
PHYSICAL OCEANOGRAPHIC REAL-TIME SYSTEM (PORTS®)**

NOS Agreement Code: MOA-2015-035(Amend 001)/11882

The purpose of Amendment 001 is to revise the dates for the Periods of Operations and Maintenance (O&M) and extend the end of the underlying Agreement due to a 2-year delay in the installation of the Microwave Air Gap Measurement System on the Vincent Thomas Bridge. The Amendment also updates to the Points of Contact (POC) for the Agreement and the Appendices. Therefore, pursuant to Section **VIII. DURATION OF AGREEMENT, AMENDMENTS, OR TERMINATION**, the Parties herein agree to amend the underlying Agreement, MOA-2015-035-9099, and addenda, as follows:

1. **Section V. RESPONSIBILITIES OF THE PARTIES**, insert a new Paragraph **B.**, with the following and move all subsequent Paragraphs up one letter:

- B. In support of the informed use of the Vincent Thomas air gap sensor, the City will immediately notify NOAA when there are changes to the bridge infrastructure over the navigation channel, for example, the installation of temporary maintenance platforms; changes in the location or dimensions of the channel navigation lights; or changes in the location or dimensions of a RACON unit.

2. **Section VI. SCHEDULE, FUNDING, AND REIMBURSEMENT ARRANGEMENTS**, replace Paragraphs **B., C., D., and F.** in its entirety with the following:

- B. With the signing of the underlying Agreement, NOS invoiced the City in the amount of \$74,500 for the purchase, installation, operation and maintenance for Period One of the Vincent Thomas Bridge Microwave Air Gap Measurement System (see Appendix A for funding details). Period 1 commenced at the signature of both parties on the underlying agreement through July 31, 2019. These funds will be provided to NOS within 30 days of the invoice.

- C. The duration of each subsequent period of this Agreement shall be for one year, beginning on August 1st and ending on July 31st. Thus, the second period will begin on August 1, 2019 and end on July 31, 2020. Periods three, four, and five shall follow the same schedule. NOS will invoice the City annually for the next subsequent four periods in advance of the anniversary expiration dates in accordance with Appendix A, for a total of 135,459 as per Appendix A, over the 5 periods of the Agreement ending on July 31, 2023. These funds will be provided to NOS within 30 days of the invoice, always subject to the same terms and conditions described above. There will be no required amendments to this Agreement unless there is a substantial change in service, cost or products.

- D. Fiscal and Accounting Data

1. NOAA/NOS/CO-OPS

DUNS Number: 15-6140209

Employer ID: 52-0821608

Treasury Account Symbol (appropriation code for collection):13x1450

CBS ACCS number: 14-2015-1BK6EVT-P00-10-16-0000-00-00-00-00

- F. NOS will send invoice(s) to the following address:

Name of City POC: Jeremy Karmelich

Attention: Chief Port Pilots

Address: Los Angeles Pilot Service

Port of Los Angeles
Berth 68
P.O. Box 151
San Pedro, CA 90733-0151
Telephone Number: (310) 732-3525
E-mail: jkarmelich@portla.org

3. **Section VII. CONTACTS**, replace Paragraph A.1., A.2. B.1., and C.2 in its' entirety and add Paragraphs A.3. and B.2. with the following:

A. The Points of Contact (POC) for each of the Parties to this Agreement are:

1. Name of NOS POC: Christopher DiVeglio
Position: Maritime Services Program Manager
Address: NOAA/NOS/CO-OPS
1305 East West Highway
Silver Spring, Maryland 20910
Telephone Number: (240) 533-0571
Cellphone: (240) 620-6919
Fax: (301) 713-4392
E-mail: christopher.diveglio@noaa.gov

2. Name of City POC: Captain D. Craig Flinn
Position: Chief Port Pilot
Address: Los Angeles Pilot Service
Port of Los Angeles
Berth 68
P.O. Box 151
San Pedro, CA 90733-0151
Telephone Number: (310) 732-3805
Cellphone: (310) 567-3260
E-mail: dflinn@portla.org

3. Name of City POC: Captain John L. Dwyer
Position: Chief Port Pilot II
Address: Los Angeles Pilot Service
Port of Los Angeles
Berth 68
P.O. Box 151
San Pedro, CA 90733-0151
Telephone Number: (310) 732-3805
Cellphone: (310) 567-2337
E-mail: jdwyer@portla.org

B. Day-to-day operations and technical assistance Point of Contact for each of the Parties is:

1. Name of NOS POC: Rolland Brail
Position: NOAA/NOS/CO-OPS/POB
Address: 7600 Sand Point Way N.E.
Seattle, Washington 98115
Telephone Number: (206) 526-6916
Cellphone: (206) 713-5271
Fax: (206) 526-6365
E-mail: rolland.brail@noaa.gov

2. Name of City POC: Capt. J.L. Dwyer or Capt. D.C. Flinn
Position: Chief Port Pilots
Address: Los Angeles Pilot Service
Port of Los Angeles
Berth 68
P.O. Box 151
San Pedro, CA 90733-0151
Telephone Number: (310) 732-3805
Direct Line: (310) 732-3533
E-mail: jdwyer@portla.org or dflinn@portla.org

C. The Financial Points of Contact (POC) for this Agreement are:

1. Name of City POC: Jeremy Karmelich
Address: Los Angeles Pilot Service
Port of Los Angeles
Berth 68
P.O. Box 151
San Pedro, CA 90733-0151
Telephone Number: (310) 732-3525
E-mail: jkarmelich@portla.org

4. **Section VIII. DURATION OF AGREEMENT, AMENDMENTS, OR TERMINATION**, replace Paragraph A., in its entirety with the following:

- A. This 5-year Agreement will become effective upon the signature of both of the approving officials of the respective organizations entering into this Agreement and will remain in effect through July 31, 2023. The Agreement will be reviewed annually.

5. **Section X. OTHER TERMS AND CONDITIONS**, insert Paragraph H., with the following:

- H. In executing the terms and conditions of this agreement, CO-OPS and the City shall comply with all applicable federal, state, and local environmental laws, statutes, regulations, executive orders, and permits. CO-OPS and the City agree to provide any information requested by the other party that is needed to meet its environmental compliance obligations.

6. Replace underlying Agreement **APPENDIX A** to adjust the dates for Periods 1-5, due to the 2-year delay in the installation of the Microwave Air Gap Measurement System on the Vincent Thomas Bridge.
7. Replace underlying Agreement **APPENDIX B and C**.
8. All of the other terms and conditions of the underlying Agreement, as amended, remain in full force and effect.

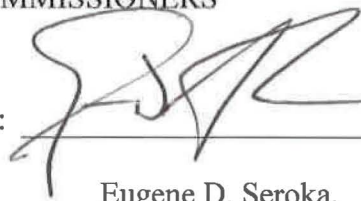
ACCEPTED AND APPROVED FOR THE
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC
ADMINISTRATION
NATIONAL OCEAN SERVICES

BY: 

Richard Edwing
Director
Center for Operational Oceanographic
Products and Services

DATE: 11/13/19

ACCEPTED AND APPROVED FOR THE
CITY OF LOS ANGELES, ACTING BY AND
THROUGH ITS BOARD OF HARBOR
COMMISSIONERS

BY: 


Eugene D. Seroka,
Executive Director

DATE: 01/07/2020

APPROVED AS TO FORM:

Date: January 6, 20²⁰~~15~~ 

MICHAEL N. FEUER
Los Angeles City Attorney

By 
Justin Houterman
Deputy City Attorney

APPENDIX A

LA/LB PORTS® Costs

Microwave Air Gap Measurement System Vincent Thomas Bridge

Task	Cost	Performance Period
Equipment & Installation	\$60,000 *	Upon Enactment
Period 1 O&M	\$14,500 *	Upon Enactment through July 31, 2019
Period 2 O&M	\$14,790 **	August 1, 2019 through July 31, 2020
Period 3 O&M	\$15,086	August 1, 2020 through July 31, 2021
Period 4 O&M	\$15,388	August 1, 2021 through July 31, 2022
Period 5 O&M	\$15,695	August 1, 2022 through July 31, 2023
Total	\$135,459	

* Equipment & Installation and Period 1 O&M in the amount of \$74,500 was collected in 2016 upon enactment of MOA-2015-035.

** NOS will invoice the City for Period 2 O&M upon execution of the Amendment #001.

APPENDIX B

MANAGEMENT, OPERATION, MAINTENANCE, AND REPAIR OF LA/LB PORTS®

INTRODUCTION

The science, technology, and operations included in PORTS® are leading edge, cover a very wide range, and will continue to present challenges in the ongoing management of the system. Development and implementation of PORTS® by NOS requires the expertise of specialists in technical management, oceanography, engineering, and information systems. It includes knowledge of currents and circulation, water levels, instrumentation, communications, computers, voice response systems, data management, and field operations.

Although the LA/LB PORTS® is a continuation of previously deployed technology, the physical and geographical challenges unique to the Bay area require on-going system refinement and upgrading. System management, operation, maintenance, and repair (MOM&R) and the most appropriate documentation of these activities will require further refinement as additional experience is gained. Modification of the required activities described in this Appendix must be approved by NOS. The modified requirement(s) must be stated in writing, signed by the NOS PORTS® Program Manager, and attached to NOS and the City copies of this Agreement.

Maintenance must be conducted both at the system level and at the component level, at intervals that vary from twice daily to every four years. For reliable operation of the system with less than five percent down time, and to ensure dissemination of quality assured data, PORTS® must be maintained rigorously by personnel with the required expertise.

MANAGEMENT AND OPERATION

The City shall perform the following duties:

- Schedule maintenance activities and ensure that they are conducted according to CO-OPS specifications to minimize downtime;
- Obtain quick initial and follow-up response support as required to rapidly diagnose problems and thus minimize system down time;
- Manage support contracts (e.g., diving services, vessels, measurement subsystem maintenance, and data acquisition and dissemination subsystem maintenance);
- Interact, in a professional manner, with NOAA; U.S. Coast Guard; U.S. Army Corp. of Engineers; members of the City; other federal agencies; port authorities; ship pilots and masters; ferry, tug and tow operators; companies engaged in maritime commerce; environmental agencies; the general public; and others as required.
- Submit documentation to include but not limited to, applicable site reports, sensor and bench mark leveling metadata and other supporting documentation as stated in the CO-OPS Standing Project

Instructions (see Appendix C for more information) for each site visit;

- Maintain field activity logs for the installation, removal, repair, and maintenance of all sensors. Copies shall be retained by the Partner and made available for CO-OPS review upon request.

The NOS-operated CORMS will conduct continuous system checks and will provide the City the results from the checks. When problems are encountered with critical system components, the City shall respond within four (4) hours of receiving negative system check information to arrange for corrective actions. The City shall equip a watch stander or other appropriate employee with a pager or other means of responding 24 hours per day, 365 days per year for this purpose. The City shall designate a contact person and back-up contact persons responsible for responding to negative system check information and identify these individuals to NOS upon the execution of this Agreement. The City shall notify NOS of any changes in contact or backup persons within one workday.

MAINTENANCE

The City will coordinate all maintenance activities and participate in such activities as may be appropriate.

The routine operations, maintenance, and emergency maintenance of the Meteorological measurement systems must be carried out by individual(s) knowledgeable in the methods and procedures of NOS CO-OPS. NOS will train the City in the maintenance, and operation of these observing systems. Routine inspections and maintenance of the observing systems will be completed by the City.

Emergency maintenance of the NOS NWLON water level gauges must be carried out by individual(s) knowledgeable in the methods and procedures of NOS CO-OPS. NOS will train the City in the maintenance, and operation of water level gages. Routine annual inspection and maintenance of the water level gauges will be completed by NOS.

The routine operation, maintenance, and software management of the PORTS Data Acquisition System (DAS) will be carried out by NOS.

The City will be provided on-site assistance for DAS operations as determined by NOS.

MANAGEMENT, OPERATION AND MAINTENANCE SCHEDULE

The City shall prepare a monthly report. A single copy of this report shall be provided to NOS and anyone requesting it at any time after the 10th of the month following the month for which the report was prepared. The format and scope of this report shall be negotiated between NOS and the City and will include elements such as summaries of site visits, maintenance and repair actions taken, daily system check logs, system performance statistics, user call-in statistics, summaries of interactions with users, schedule of upcoming events, and identification of potential problems.

Daily

Monitor the various LA/LB PORTS® data products issued by CO-OPS so as to maintain knowledge of those products and the associated data values. Respond to all requests regarding instrument status, repair schedules, etc.

Twelve (12) - Month Service Interval

Perform the following:

- a. Replace the wind sensor nose cone(s) and verify the wind sensor alignment. Replace all wind sensor bearings.
- b. Replace expired gel cell batteries in the DCP and top side electronics with approved replacements. Batteries shall be labeled with the installation date, shall be load tested annually, and shall be replaced every four years.
- c. Inspect and clean all solar panels.

City shall be responsible for repairs and replacement of PORTS® components as may be necessary to ensure system reliability and data quality shall be made.

On an annual basis, the City shall prepare an annual work plan and budget for the following year. This a copy of the plan shall be provided to NOS and to anyone requesting it. The City will work with the NOS PORTS® Program Manager in any manner necessary to support the LA/LB PORTS®.

An annual report shall be prepared by NOS. The annual report shall consist of an executive summary and data dissemination statics of the PORTS system, but no financial information, since the Partner operates and maintains the PORTS to NOAA standards. The distribution of the report shall be made to anyone requesting it.

Unscheduled Service

NOS provided updates to the DAS/IDS operating system, languages, and utilities shall be installed as necessary. Respond to system failures as required. Repairs and replacements as may be necessary to ensure system reliability and data quality shall be made.

Table 1. Sensor Service Intervals

Sensor	2 Mo	6 Mo	Yearly	2 Year	4 Year
Met Sensors			S		
Met Sensors (offshore)			S		
Standard Batteries		I			R
Solar Panels			I/C		

Key: C-Clean, D-Dive, K-Calibrate On Site, L-Return to CO-OPS for Calibration, R-Replace, S-Service

APPENDIX C

REFERENCES

CO-OPS has a publicly accessible [CO-OPS Field Library](#) in order to distribute field operations reference material to in-house and partner PORTS field personnel. The Field Library contains CO-OPS Standard Operating Procedures, check lists, protocols, equipment manuals, diagrams, project instructions, and additional references, etc. with sensitive information removed.

Please refer to the following documents for information regarding the installation, operation and maintenance of CO-OPS observation stations.

All questions pertaining to references shall be directed to the NOS POC for day-to-day operations and technical assistance (see Section VII.B).

DCP References

- Next Generation Water Level Measurement System (NGWLMS) Site Design, Preparation, and Installation Manual
- Sutron Xpert Data Logger Operations and Maintenance Manual
- Sutron Xpert2 Data Logger Operations and Maintenance Manual
- Sutron 9210 XLite Operations and Maintenance Manual
- Sutron 9210B XLite Operations and Maintenance Manual
- Sutron Satlink 2 Logger & Transmitter Operations and Maintenance Manual
- Xpert and Xpert Dark Internal Battery Replacement
- Procedures for Requesting a Platform ID
- NGWLMS GOES Message Formatting for Hourly Transmissions
- Attachment of Conduits to Enclosures
- EB 10-002 Standardize Battery Type for CO-OPS Water Level and Meteorological Stations

Sensor References

- User's Guide for Model 4100/4110 Series Aquatrak
- Aquatrak Calibration Procedure
- Field Installation Procedures for Design Analysis WaterLog H3611i Microwave Radar Water Level Sensor Using the Sutron Data Collection Platform, Ver 1.0
- MWWL Sensor Annual Inspection Checklist
- WaterLog H-3551 Gas Purge Bubbler Owner's Manual
- Air Gap Field Installation Guide
- Sutron Accubar Barometric Pressure Multiple Interface Sensor Operations & Maintenance Manual
- Sutron Barometer Calibration Procedure
- RM Young Model 05103 Wind Monitor User Manual
- Wind Sensor Alignment Procedures for the R.M. Young Wind Monitor

- On-site Verification of Water Temperature Readings
- Vaisala FS11 User's Guide
- Field Installation Guide for the Deployment of Atmospheric Visibility Measurement Systems: Siting Requirements and Installation/Maintenance Procedures
- Maintenance Procedure for Visibility Sensor Cleaning and Calibration Check
- SonTek Acoustic Doppler Profiler Operation Manual
- SonTek Acoustic Doppler Profiler Software Manual
- Nortek Aquadopp Current Profiler User Guide
- Anti-Fouling Procedures for Current Meters

Maintenance Specifications and References

- Standing Project Instructions for CO-OPS Observing Systems
- Project Instructions for CO-OPS Observing Systems
- CO-OPS Specifications and Deliverables for Installation, Operation, and Removal of Water Level Stations
- Upgrading an Existing Station or Installing a New Water Level Station
- CO-OPS Water Level and Meteorological Site Reconnaissance Procedures
- CO-OPS Meteorological Reconnaissance Form
- CO-OPS Current Meter Reconnaissance Procedures
- Current Meter Site Reconnaissance Log
- Current Meter Station Site report
- Requirements for Reporting During Maintenance of Real-Time Current Stations
- Guidelines for the Emergency Recovery of a Current Meter
- Requirements and Guidelines for Equipment Shipping
- CO-OPS Equipment Return Form

Safety References

- [Department of Commerce Occupational Safety and Health Manual](#)
- [NOAA Safety Policy, NAO 209-1](#)
- NAO xxx-xxx NOAA Charter Vessel Safety (rev.1)
- [Survey Safety Handbook, Florida Department of Transportation](#)
- [OSHA Diving Safety Regulations](#)