



425 S. Palos Verdes Street Post Office Box 151 San Pedro, CA 90733-0151 TEL/TDD 310 SEA-PORT www.portoflosangeles.org

Eric Garcetti

*Mayor, City of Los Angeles*

Board of Harbor  
Commissioners

Ambassador Vilma S. Martinez  
*President*

David Arian  
*Vice President*

Patricia Castellanos

Anthony Pirozzi, Jr.

Edward R. Renwick

Eugene D. Seroka

*Executive Director*

January 26, 2016

Mr. Darren Wright  
Center for Operational Oceanographic Products and Services (CO-OPS)  
1305 East West Highway  
Silver Spring, MD 20910

**SUBJECT: RESOLUTION NO. 15-7886 – APPROVAL OF AGREEMENT BETWEEN THE CITY OF LOS ANGELES HARBOR DEPARTMENT AND THE UNITED STATES DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SERVICE CENTER FOR OPERATIONAL OCEANOGRAPHIC PRODUCTS AND SERVICES FOR AIR GAP MEASUREMENT SYSTEM INSTALLATION, OEPRATION AND MAINTENANCE**

At its meeting held November 23, 2015, the Board of Harbor Commissioners approved Agreement No. 15-3367, regarding the above subject. Enclosed is an executed original of Agreement No. 15-3367.

Please feel free to contact me at 310-732-2642 for any inquires.

Best Regards,

AMBER M. KLESGES  
Commission Secretary

Transmittal 1

RECOMMENDATION APPROVED;  
RESOLUTION NO. 15-7886 ADOPTED; AND  
AGREEMENT NO. 15-3367 APPROVED  
BY THE BOARD OF HARBOR COMMISSIONERS



**THE PORT  
OF LOS ANGELES**

Executive Director's

Report to the

Board of Harbor Commissioners

November 23, 2015

AMBER M. KLESGES  
Board Secretary

11/23/15  
8

**DATE: NOVEMBER 18, 2015**

**FROM: PORT PILOTS**

**SUBJECT: RESOLUTION NO. 15-7886 APPROVAL OF AGREEMENT BETWEEN THE CITY OF LOS ANGELES HARBOR DEPARTMENT AND THE UNITED STATES DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SERVICE CENTER FOR OPERATIONAL OCEANOGRAPHIC PRODUCTS AND SERVICES FOR AIR GAP MEASUREMENT SYSTEM INSTALLATION, OPERATION AND MAINTENANCE**

**SUMMARY:**

The Port Pilots Division recommends the Board of Harbor Commissioners approve the City of Los Angeles Harbor Department (Harbor Department) Memorandum of Agreement (MOA) with the United States Department of Commerce National Oceanic and Atmospheric Administration (NOAA) National Ocean Service Center for Operational Oceanographic Products and Services (CO-OPS) to install an air gap measurement system to the apex of the Vincent Thomas Bridge (Bridge). The proposed MOA between the Harbor Department and CO-OPS, which is based in Silver Spring, Maryland, provides for the installation, operation and maintenance of air gap sensor equipment and access to the collected data, in addition to the continued operation and maintenance of existing atmospheric sensors. The precise, real-time air gap data from the new system will add an additional measurement of safety for increasingly large vessels piloted under the Bridge. The terms of the agreement will be five years ending December 31, 2020 for a total amount of \$135,459 with each year's annual amount to be funded in advance annually by the Harbor Department, this is in addition to a current purchase order commitment of \$17,000 per year for the operation and maintenance (O&M) of existing atmospheric sensors by the Harbor Department.

**RECOMMENDATION:**

It is recommended that the Board of Harbor Commissioners (Board):

1. Find that the Director of Environmental Management has determined that the proposed action is exempt from the requirements of the California Environmental Quality Act (CEQA) under Article III Class 1(6) of the Los Angeles City CEQA Guidelines;

SUBJECT: RESOLUTION NO. 15-7886 - APPROVAL OF MOA WITH NOAA'S CO-OPS FOR AIR GAP MEASUREMENT SYSTEM

2. Approve the Memorandum of Agreement between the City of Los Angeles Harbor Department and the United States Department of Commerce National Oceanic and Atmospheric Administration National Ocean Service Center for Operational Oceanographic Products and Services;
3. Authorize the Executive Director to execute and the Board Secretary to attest to the Agreement term of five years at an amount of \$135,459; and
4. Adopt Resolution No. 15-7886.

**DISCUSSION:**

Background/Context – The continued efficiency and security of the supply chain at the Port of Los Angeles is dependent on the safe navigation of in-and-outbound vessels. It is anticipated that as alliances among shipping companies grow, so will the size of container vessels and their respective air drafts. With commercial ship heights continuing to increase, it is important to have a measurement device in place to prevent potential allisions with the Vincent Thomas Bridge (Bridge). While the published Bridge navigational clearance is 185 feet at mean high tide, the gap between the Bridge and the water surface can be impacted by bridge traffic loads; temperature related expansion and contraction, as well as tides at various times of the day. Port Pilots plan to use air gap data to navigate ships safely under the Bridge, especially in cases of low visibility and/or when shipments require increased attention to the Bridge's air gap.

Port Pilots currently use information from existing NOAA sensors that were installed for the collection and dissemination of a variety of oceanographic data at the Port of Los Angeles. In 2001, the Harbor Department, in partnership with the Southern California Marine Exchange and NOAA's National Ocean Service, installed a suite of oceanographic and environmental sensors as part of the nationwide Physical Oceanographic Real-Time System (PORTS). These sensors include an air acoustic water level sensor at the outer harbor, as well as wind speed/direction and barometric pressure and air temperature sensors at Berth 161, Cerritos Channel, and Pier 400. The Harbor Department maintains these sensors through purchase orders on an annual basis.

Air Gap Sensor Technology – The air gap measurement system is a set of sensors that accurately measures the clearance between the surface of the water and the underside of the highest point of a bridge. Air gap sensor technology is proprietary and only available through NOAA. It is proposed that CO-OPS will install and maintain microwave (primary) and laser (backup) air gap sensors onto the Bridge. Data will then be transmitted and collected by CO-OPS and made publicly available via the internet following Continuous Real-Time Monitoring System review.

SUBJECT: RESOLUTION NO. 15-7886 - APPROVAL OF MOA WITH NOAA'S CO-OPS FOR AIR GAP MEASUREMENT SYSTEM

The installation of this type of equipment is beneficial to all Port of Los Angeles stakeholders. Air gap sensor equipment has already been successfully installed on the Gerald Desmond Bridge in Long Beach and other many major ports throughout the nation (Transmittal 1). NOAA has a similar agreement in place with the City of Long Beach. If installed, the provided data would complete the collection of atmospheric information available for the entire San Pedro Bay Ports Complex.

Memorandum of Agreement – The proposed MOA would formalize the maintenance terms of all existing NOAA sensors and provide terms for the installation and maintenance and operation of the new air gap measurement system.

Upon approval, NOAA will be able to expand its transmissions of PORTS data to include the collection and dissemination of air gap sensor readings at the Port of Los Angeles. The Harbor Department would be financially responsible for the installation, operation, and maintenance of the air gap measurement system.

CO-OPS will act as the project manager, provide engineering design of the air gap sensors' mounting hardware, and contract with a third party vendor for the installation, operation, and maintenance of the equipment, as needed. CO-OPS will also be responsible for obtaining permission from the State of California to install the equipment on their property (Vincent Thomas Bridge).

Additionally, the Harbor Department will commit to the continued O&M of existing PORTS related sensors in the Port of Los Angeles, which requires separate funding not included in the proposed MOA payment schedule.

All responsibilities under the MOA are subject to the availability of appropriated funds to CO-OPS or from the Harbor Department. The MOA may be amended or modified at any time with mutual written consent and may be canceled by either party after 120 days of written notice.

**ENVIRONMENTAL ASSESSMENT:**

The proposed action is approval of an MOA with CO-OPS for installation and maintenance of an air gap sensor on the Vincent Thomas Bridge to increase safety for large vessels piloting under the Bridge. As an activity involving the addition of a safety device for use in conjunction with an existing structure, the Director of Environmental Management has determined that the proposed action is exempt from the requirements of CEQA in accordance with Article III Class 1(6) of the Los Angeles City CEQA Guidelines.

**FINANCIAL IMPACT:**

The Harbor Department would be financially responsible for both the existing PORTS sensors and the new air gap measurement system. The existing PORTS sensors are

**SUBJECT: RESOLUTION NO. 15-7886 - APPROVAL OF MOA WITH NOAA'S CO-OPS FOR AIR GAP MEASUREMENT SYSTEM**

currently maintained through a sole source purchase order at an average cost of \$10,000 per year. The terms of the current purchase order is for one year of O&M costs up to \$17,000 and expires on October 29, 2016, with an annual renewal option for two additional years. If the purchase order extensions are exercised, O&M cost increases would not exceed more than three percent of the total purchase order amount year over year.

The MOA provides the payment terms for the installation, operation and maintenance of the air gap measurement system only. While NOAA is able to provide the technology and platform to distribute air gap sensor data, it is not annually funded to install or maintain sensor equipment and therefore cannot enter into a contract with a third party to perform the necessary work. CO-OPS has similar financial restrictions and therefore requires the Harbor Department to fund the costs of the air gap measurement system in advance. The proposed MOA is for five years at an amount of \$139,459, pre-paid in five annual installments.

It is expected that funds under this agreement and a sole source purchase order will be expended as follows:

Task	Sensors	Commitment		Performance Period
		MOA	PO	
Installation	Air Gap	\$60,000		Upon Enactment
Period 1	Air Gap	\$14,500		Upon Enactment through December 31, 2016
O&M	Existing		\$17,000	October 28, 2015 through October 29, 2016
	<b>Combined</b>	<b>\$91,500</b>		<b>Maximum during FY 15/16</b>
Period 2	Air Gap	\$14,790		January 1, 2017 through December 31, 2017
O&M	Existing		\$17,000	October 28, 2016 through October 29, 2017, if renewed.
	<b>Combined</b>	<b>\$31,790</b>		<b>Approximate FY 16/17 Costs</b>
Period 3	Air Gap	\$15,086		January 1, 2018 through December 31, 2018
O&M	Existing		\$17,000	October 28, 2017 through October 29, 2018, if renewed.
	<b>Combined</b>	<b>\$32,086</b>		<b>Approximate FY 17/18 Costs</b>
Period 4	Air Gap	\$15,388		January 1, 2019 through December 31, 2019
O&M	Existing		\$17,000	TBD
	<b>Combined</b>	<b>\$32,388</b>		<b>Approximate FY 18/19 Costs</b>
Period 5	Air Gap	\$15,695		January 1, 2020 through December 31, 2020
O&M	Existing		\$17,000	TBD
	<b>Combined</b>	<b>\$32,695</b>		<b>Approximate FY 19/20 Costs</b>
	<b>Subtotals</b>	<b>\$135,459</b>	<b>\$85,000</b>	
	<b>Total</b>	<b>\$220,459</b>		

DATE: NOVEMBER 18, 2015

PAGE 5 OF 5

SUBJECT: RESOLUTION NO. 15-7886. APPROVAL OF MOA WITH NOAA'S CO-OPS FOR AIR GAP MEASUREMENT SYSTEM

With the signing of this MOA, CO-OPS will invoice the Harbor Department and be responsible for the installation and Period 1 costs. Upon funding from the Harbor Department, CO-OPS will be responsible for the installation, maintenance and operation of the air gap measurement system at the Port of Los Angeles. The first year's cost for installation, operation and maintenance of the air gap measurement system will be charged to the Port Police Division out of the Outside Services Account 54030, Center 0412, Program 000. All costs in subsequent fiscal years will be requested as part of the Port Pilots Division's annual budget request.

**CITY ATTORNEY:**

The City Attorney's Office has reviewed the Memorandum of Agreement and approves it as to form and legality.

**TRANSMITTALS:**

1. List of Air Gap Sensor Locations
2. Memorandum of Agreement with NOAA's CO-OPS

FIS Approval: MB (initials)  
CA Approval: MB (initials)



MICHAEL RUBINO  
Chief Port Pilot



THOMAS E. GAZSI  
Acting Chief of Public Safety and  
Emergency Management

APPROVED:



EUGENE D. SEROKA  
Executive Director

EDS/TEG/BC/RB:ez  
Author: D. McLaurin

**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-2015-035/9099**

**I. PARTIES AND PURPOSE**

- A. This Agreement is entered into by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA), National Ocean Service's (NOS) Center for Operational Oceanographic Products and Services (CO-OPS) and the City of Los Angeles (City), acting by and through the Board of Harbor Commissioners (Board). CO-OPS provides the national infrastructure, science, and technical expertise to monitor, assess, and distribute tide, current, water level, bridge air gap and other coastal oceanographic products and services that support NOAA's mission of environmental stewardship and environmental assessment and prediction. The Board is the governing body for the City, America's Port<sup>®</sup> (Port) and the premier gateway for international commerce. The Port is located in San Pedro Bay, 20 miles south of downtown Los Angeles. This thriving seaport not only sustains its competitive edge with record-setting cargo operations, but is also known for groundbreaking environmental initiatives, progressive security measures, diverse recreational and educational facilities, and LA's emerging waterfront destination. In 1991, there was a formal partnership between Jacobsen Pilots, the Marine Exchange, the LA Port Pilots and the U.S. Coast Guard to jointly operate the Vessel Traffic Service. The same partnership jointly started the NOAA PORTS<sup>®</sup> system in 2001.
- B. The purpose of this Agreement is to install and disseminate data from a new air gap sensor on the Vincent Thomas Bridge and establish the requirements necessary for NOAA to receive and distribute wind data from the City as part of the Los Angeles / Long Beach Physical Oceanographic Real Time System, hereafter referred to as LA/LB PORTS<sup>®</sup>. PORTS<sup>®</sup> is a program that supports safe and cost-efficient navigation by providing ship masters, pilots, and other users with accurate real-time information required for safe vessel loading and transit, and to avoid groundings and collisions. PORTS<sup>®</sup> is a partnership program where NOAA is funded for and provides the program management, data collection and dissemination infrastructure, 24x7 data quality control and assurance and national standards. NOAA is not funded for and needs to partner with the City for the local equipment, installation and annual operations and maintenance of the equipment. Because NOAA is not funded for the local equipment, installation and annual operations and maintenance of the equipment, NOAA will require advanced payment for these items to carry out the installation. This Agreement between the City and CO-OPS will result in the quality control and dissemination of the meteorological and air gap data through CO-OPS' web products and voice system. City agrees to maintain LA/LB PORTS<sup>®</sup> winds sensors and provide the winds sensor data to NOAA in accordance with CO-OPS standards delineated in

Appendices B and C. CO-OPS, using City funds, will install and maintain the air gap system on the Vincent Thomas Bridge.

## II. AUTHORITIES

- A. The legal authority for CO-OPS and the City to enter into this Agreement is the Coast and Geodetic Survey Act (CGSA), 33 U.S.C. § 883e, which authorizes the Secretary of Commerce to enter into cooperative agreements, or any other agreement, with, and to receive and expend funds made available by, any state, or subdivision, thereof, any federal agency, or any public or private organization, or individual, for surveys and investigations authorized under the CGSA, 33 U.S.C. §§ 883a *et seq.*
- B. The programmatic authority for NOS to enter into this Agreement is the CGSA, 33 U.S.C. §§ 883a *et seq.*, which authorizes the Secretary of Commerce to conduct hydrographic and topographic surveys and tide and current observations, and analysis and prediction of tide and current data.
- C. The Board has authority to enter this Agreement pursuant to the City Charter sections 651 and 652.

## III. BACKGROUND

- A. CO-OPS and the City have a common interest in the safe navigation and environmental management of Los Angeles Harbor, California, and in the collection and dissemination of related meteorological data in near real time. LA/LB PORTS<sup>®</sup> was established for Los Angeles-Long Beach Harbor in response to this common interest.
- B. The data quality of all PORTS<sup>®</sup> data is maintained by CO-OPS through the Continuous Operational Real-Time Monitoring System (CORMS). CORMS is a 24-hour, 7-day watch to monitor all PORTS<sup>®</sup> data as well as data from CO-OPS National Water Level Observation Network (NWLON) stations. The automated system flags questionable data and monitoring personnel then intervene and stop transmission of questionable data until the issue is resolved.

## IV. THE LOS ANGELES / LONG BEACH PORTS<sup>®</sup>

The LA/LB PORTS<sup>®</sup> will consist of the following major components:

- A. Stand alone meteorological stations at Badger Avenue Bridge, Berth 161 and Pier 400, each station consists of an anemometer, modem, rechargeable battery. Some stations may have solar panels.

- B. New Air gap system on the Vincent Thomas Bridge to be installed and included as part of the LA/LB PORTS<sup>®</sup>. This system will measure the air gap between the bottom of the bridge and the water surface. This system will consist of a microwave (primary) and a laser (backup) air gap sensor. In addition, the system will contain telemetry to transmit data back to NOAA via a Geostationary Operational Environmental Satellite (GOES) transmitter and through an IP modem.
- C. Additional data collection sites or sensors may be added to the LA/LB PORTS<sup>®</sup> in the future and identified by amendments to this Agreement.

**V. RESPONSIBILITIES OF THE PARTIES**

- A. CO-OPS agrees to provide at no expense to the City:
  - 1. Personnel and technical expertise required to ensure that system operation and maintenance (O&M) of the LA/LB PORTS<sup>®</sup> are in accordance with CO-OPS guidelines and standards. This requirement to provide maintenance includes the responsibility to coordinate access to the Vincent Thomas Bridge with the California Department of Transportation (Caltrans).
  - 2. Real-time quality control of all LA/LB PORTS<sup>®</sup> data in the form of a 24 hours per day/7 days per week CORMS operation. This activity will be staffed by personnel contracted by CO-OPS to ensure that the data disseminated meets NOAA's standards for safe navigation. Note: the direct data feed available to the Port for quicker access to wind data will not receive quality control from CORMS.
  - 3. Communications costs associated with CORMS.
  - 4. Recommendations for hardware and equipment upgrades.
  - 5. Dissemination of the data through web products on the internet.
  - 6. All necessary permits allowing for the installation of the air gap sensor system. Including, but not limited to, all necessary permits from the State of California. This obligation includes the provision of all necessary engineering drawings and other requirements specified by the State of California.

7. A centralized Voice Data Response System (VDRS) located at NOS Headquarters, Silver Spring, Maryland, with access provided via a toll-free number.
8. A project manager and site representative. CO-OPS' project manager and site representative is the contact listed in Section VII. CO-OPS shall notify City if a new project manager and site representative is designated.

B. Using City funds, CO-OPS agrees to:

1. Purchase and install an air gap sensor system on the Vincent Thomas Bridge and to secure any necessary permission from Caltrans to access the bridge and to pay any associated fees to do so;
2. Purchase or provide all electrical connections, wired or wireless communications systems, labor, materials and other ancillary equipment necessary for installation of the air gap sensor;
3. Provide routine maintenance of the air gap system including permission from Caltrans to access the bridge and to pay any associated fees to do so;
4. Provide personnel and expertise required to install and manage the O&M of the Vincent Thomas Bridge Air Gap Measurement System (this effort may utilize contractor support when appropriate);
5. Ensure that necessary hardware and software maintenance agreements and software licenses are in place on selected air gap equipment; and
6. Provide emergency repairs to the air gap system in accordance with CO-OPS standards.

C. The City agrees to:

1. Provide funds for the equipment, installation and annual O&M of the microwave air gap sensor on the Vincent Thomas Bridge;
2. Ensure that no modifications or upgrades to hardware or software of any kind are made without the prior written approval of CO-OPS;

3. Ensure that air gap equipment is used only for purposes specified in this Agreement;
  4. Provide system management, operation, maintenance, and repair of the wind stations as described in Section IV in accordance to CO-OPS guidelines described Appendices B and C of this Agreement;
  5. Provide a direct feed from the data collection system that provides the Port quicker access to wind information. CO-OPS does not have access to this direct feed and is not responsible for this data nor the quality control of this data;
  6. Provide all services and materials necessary for the ongoing operation, maintenance, and repair of wind stations, including recurring communications costs with the exception of communication costs associated with CORMS;
  7. Obtain necessary permits and other approvals for wind measurement stations;
  8. Wind systems that are free from damaged, defective, or worn-out parts and are replaced only with comparable parts or components. Any substitute parts or components must be approved in advance and in writing by the CO-OPS PORTS<sup>®</sup> Program Manager;
  9. Emergency repairs necessary to keep wind systems operational; and,
  10. Designate a local site representative. The site representative is the City's contact listed in Section VII. The City shall notify CO-OPS if a new LA/LB PORTS<sup>®</sup> site representative is designated.
- D. City will notify CO-OPS of any modification, or upgrade of any component of LA/LB PORTS and any changes must be agreed upon by written consent of all parties via amendment to this agreement.

## **VI. SCHEDULE, FUNDING, AND REIMBURSEMENT ARRANGEMENTS**

- A. The Vincent Thomas Bridge Microwave Air Gap Measurement System will be purchased, installed, maintained and operated with funds provided by the City. The total cost to the City over this five period Agreement shall not exceed \$135,459 (see Appendix A for funding details) for the Air Gap Sensor.

- B. With the signing of this Agreement, NOS will invoice the City in the amount of \$74,500 for the purchase, installation and operation, maintenance, and repair of the Vincent Thomas Bridge Microwave Air Gap Measurement System (see Appendix A for funding details). Period 1 will commence at the signature of both parties through December 30, 2016. 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 January 1 and ending on December 31. Thus, the second period will begin on January 1, 2017 and end on December 31, 2018. Periods three, four and five shall follow the same schedule. NOS will invoice 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 December 31, 2020. 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, costs or products.
- D. Fiscal and Accounting Data
1. NOAA/NOS/CO-OPS  
DUNS Number: 78-4769085  
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
  2. Los Angeles Port Authority  
DUNS Number: 13-83325690001  
Employer ID: 95-6000735
- E. CO-OPS Policy requires advance payment by the City under this Agreement in order to reduce the financial risks of contracting.
- F. NOS will send invoice(s) to the following address:  
Name: Bent Christiansen  
Address: Port of Los Angeles  
Berth 68  
P.O. Box 151  
San Pedro, CA 90733-0151  
Telephone Number: (310) 732-3808  
E-mail: [BChristiansen@portla.org](mailto:BChristiansen@portla.org)

- G. Any unused funds which remain at the conclusion of any period of performance shall be carried over into the following funding period without further amendment.
- H. Equipment used in support of this project, including the air gap measurement system, shall remain CO-OPS property. CO-OPS will leave the air gap equipment in place so long as there is an Agreement in place between CO-OPS and the City.
- I. If the City fails to provide the necessary funds for the air gap measurement system, CO-OPS will monitor data quality and terminate dissemination of information when, in its sole discretion, the information quality approaches unacceptable limits.
- J. With the signing of this Agreement, the City will assume responsibility for the operation, maintenance, and repair of the wind stations of the LA/LB PORTS<sup>®</sup> as defined in section IV, in accordance with Appendices B and C.
- K. If the City fails to provide adequate system maintenance or repair of the wind stations of the LA/LB PORTS<sup>®</sup>, CO-OPS will monitor data quality and terminate dissemination of information when, in its sole discretion, the information quality approaches unacceptable limits.
- L. NOAA/NOS/CO-OPS will not achieve full cost recovery for the services it is providing. NOAA's contribution to the PORTS<sup>®</sup> partnership includes maintaining its Continuous Operational Real-time Monitoring System (CORMS) for data quality control, related PORTS<sup>®</sup> data dissemination infrastructure and other technical and administrative oversight in the amount appropriated for PORTS<sup>®</sup> in the current fiscal year. In accordance with 33 U.S.C. § 883e(2), NOAA has determined that the amount of benefits it derives from this Agreement exceeds its contribution to it.
- M. There will be no required amendments to this agreement unless there is a change in service, costs or products.

## VII. CONTACTS

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

1. CO-OPS: Darren Wright  
Position: PORTS Program Manager  
Address: NOAA/NOS/CO-OPS  
1305 East West Highway  
Silver Spring, Maryland 20910  
Telephone Number: (301) 713-2981 x 193  
Fax: (301) 713-4392  
Cell: (240) 338-1347  
E-mail: [darren.wright@noaa.gov](mailto:darren.wright@noaa.gov)
  
2. City: Eunice Zordilla  
Address: 425 South Palos Verdes Street,  
San Pedro, California, USA 90731  
Telephone Number: 310-732-3808  
Cell: 310-993-6058  
E-mail: [EuzordillaEuzordilla@portla.org](mailto:EuzordillaEuzordilla@portla.org)

B. Day-to-day operations and technical assistance  
the CO-OPS contact is the LA/LB PORTS<sup>®</sup> Site Representative:

CO-OPS: Mark Bailey  
Address: NOAA/NOS/CO-OPS/FOD  
7600 Sand point Way N.E.  
Seattle, Washington 98115  
Telephone Number: (206) 526-6910  
Fax: (206) 526-6365  
Email: [Mark.Bailey@noaa.gov](mailto:Mark.Bailey@noaa.gov)

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

1. CO-OPS: Brian Johnson  
Position: Financial Analyst  
Address: NOAA/NOS/CO-OPS  
1305 East West Highway  
Silver Spring, Maryland 20910  
Telephone Number: (301) 713-2981 x 121  
Fax: (301) 713-4392  
E-mail: [brian.a.johnson@noaa.gov](mailto:brian.a.johnson@noaa.gov)

2. City: Don McLaurin  
Address: Port of Los Angeles  
Berth 68  
P.O. Box 151  
San Pedro, CA 90733-0151  
Telephone Number: (310) 732-3808  
E-mail: [DMcLaurin@portla.org](mailto:DMcLaurin@portla.org)

- D. The Parties agree that if there is a change regarding the information in this section, the Party making the change will notify the other Party in writing of such change. This change does not require a formal amendment.

#### **VIII. DURATION OF AGREEMENT, AMENDMENTS, OR TERMINATION**

- 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 December 31, 2020. The Agreement will be reviewed annually.
- B. This Agreement may be amended or modified at any time by the mutual written consent of the Parties. This Agreement may be canceled or terminated by either Party upon 120 days written notice to the other Party.
- C. CO-OPS reserves the right to assume maintenance and operation of the LA/LB PORTS<sup>®</sup> at any time if, in its sole discretion, it believes that such an action would be in the public's best interest.

#### **IX. RESOLUTION OF DISAGREEMENTS**

Should disagreement arise as to the interpretation of the provisions of this Agreement, or amendments and/or revisions thereto that cannot be resolved at the operating level, the area(s) of disagreement will be stated in writing by each Party and presented to the other Party for consideration. If agreement on interpretation is not reached with 30 days, the Parties shall forward the written presentation of the disagreement to respective higher officials for appropriate resolution.

#### **X. OTHER TERMS AND CONDITIONS**

- A. All responsibilities under this Agreement are subject to the availability of appropriated funds. CO-OPS participation in this Agreement is contingent on receipt of the Federal funding required to operate the CORMS. Should CO-OPS be required to terminate this Agreement, data quality control and dissemination

would cease, and any funds transferred to CO-OPS will be returned to the City to the extent that CO-OPS has not incurred obligations. Should funds fail to be available to City, City shall have the right, at its sole discretion, to cancel this Agreement.

- B. This Agreement in no way limits other government agencies (federal, state, and local), port authorities, companies involved in maritime commerce, commercial fishermen, recreational boaters and fishermen, researchers, and the general public from having access to LA/LB PORTS<sup>®</sup> data.
- C. This MOA and all exhibits and other documents attached to or referenced herein or therein, shall constitute the entire agreement between the Parties relating to the subject matter hereof and thereof, and there are no representations, warranties or commitments except as set forth herein or therein.
- D. Except as otherwise provided herein, nothing under this MOU is intended or shall be construed to create any rights in, or confer any benefits upon, any person or entity other than the Parties hereto.
- E. Neither the City, nor any officer, employee or contractor thereof, is responsible for any injury, damage, or liability occurring by reason of any act or omission by CO-OPS under or in connection with any work performed by CO-OPS or its agents under this Agreement.
- F. CO-OPS agrees to promptly consider and adjudicate any and all claims which arise out of work under this Agreement by CO-OPS or duly authorized representatives or contractors of CO-OPS and to pay for any damage or injury as may be required by Federal law. Such adjudication will be pursued under the Federal Torts Claim Act, 28 U.S.C. § 2671 *et seq.* or other such Federal legal authority as may be pertinent. CO-OPS also agrees to consider and adjudicate any claims for damage or injury sustained by CO-OPS personnel in the performance of their official duties while doing the work under this agreement. Such adjudication will be made pursuant to the Federal Employees' Compensation Act, 5 U.S.C. § 8101 *et seq.*, or other such Federal legal authority as may be pertinent.
- G. CO-OPS shall cause its contractors to maintain during the performance of any work under the terms of this Agreement, insurances with limits of liability not less than those stated in the Federal Acquisition Regulation (FAR) 28.307-2 (Appendix D).

**XI. APPROVALS**

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: 12/30/15

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

BY: 

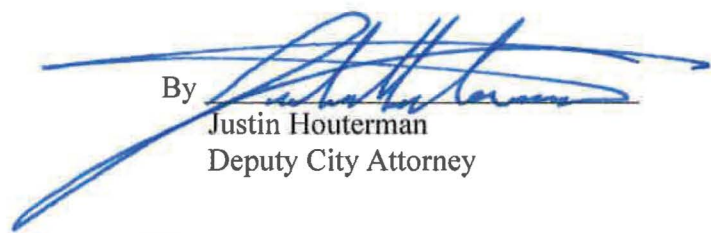
Eugene D. Seroka,  
Executive Director

DATE: 1/8/2016

APPROVED AS TO FORM:

Date: December 17, 2015

MICHAEL N. FEUER  
Los Angeles City Attorney

By   
Justin Houterman  
Deputy City Attorney

Attest:   
Amber M. Klesges, Board Secretary

**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 December 31, 2016
Period 2 O&M	\$14,790	January 1, 2017 through December 31, 2017
Period 3 O&M	\$15,086	January 1, 2018 through December 31, 2018
Period 4 O&M	\$15,388	January 1, 2019 through December 31, 2019
Period 5 O&M	\$15,695	January 1, 2020 through December 31, 2020
<b>Total</b>	<b>\$135,459</b>	

## **APPENDIX B**

### **MANAGEMENT, OPERATION, MAINTENANCE, AND REPAIR OF LOS ANGELES / LONG BEACH 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 Los Angeles / Long Beach PORTS® is a continuation of previously deployed technology, the physical and geographical challenges unique to the Los Angeles area require ongoing 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 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:

1. Schedule maintenance activities and ensure that they are conducted according to specifications and minimize down time;
2. Obtain quick response support as required to minimize system down time;
3. Manage support contracts (e.g. - measurement subsystem maintenance, data acquisition and dissemination subsystem maintenance, instrument refurbishment and calibration); and
4. Interact with NOAA, Coast Guard, other federal agencies, port authorities, ship pilots and masters, tug and tow operators, companies engaged in maritime commerce, environmental agencies, the general public, and others as required.

5. Following each station visit, the City Contractor shall complete and submit to CO-OPS a Site Report describing the maintenance and repair action performed within 30 calendar days of completion. Critical configuration information, such as acoustic sensor and datum offsets, GOES parameter changes, or installation/removal of any DCP/sensors shall be sent to CO-OPS email address within 24 hours. The CO-OPS team email address is [nos.coops.oetteam@noaa.gov](mailto:nos.coops.oetteam@noaa.gov).

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 make arrangements for corrective actions. The City shall equip a watchstander 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 as may be appropriate.

## **MANAGEMENT, OPERATION AND MAINTENANCE SCHEDULE**

### **Two-Month Service Interval**

1. All components of PORTS<sup>®</sup> shall be inspected visually.
2. The solar panels shall be cleaned when necessary
3. Batteries (other than gel cell batteries) shall be checked for proper fluid level.
4. All hardware, external wiring, cable connections, and brackets shall be inspected for corrosion and/or damage.
5. Locks shall be lubricated or replaced.
6. Wind sensor bearings shall be checked visually for freedom of movement. Repairs and replacements as may be necessary to ensure system reliability and data quality shall be made. The sensors which are removed will be returned to the manufacturer for repair/recalibration.
7. The City shall prepare a bi-monthly report. This report will be available upon request. 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, summaries of interactions with users, schedule of upcoming events, and identification of potential problems.

### **Annual Service Interval**

1. Wind sensor nose cones shall be replaced. Verify the wind sensor alignment using "Wind Sensor Alignment Procedures for the R.M. Young Wind Monitor, October 2005" (in reference section). The City shall return the nose cones to manufacturer for recalibration. All wind sensor bearings shall be replaced.

**4 Year Service Interval**

1. Replace the wind sensor and send old sensor to manufacturer for refurbishment.

**Unscheduled**

Respond to system failures as required. Repairs and replacements as may be necessary to ensure system reliability and data quality shall be made.

**Routine Maintenance Intervals**

Table 1 below shows the required service intervals.

**Table 1 Sensor Service Intervals**

Sensor	2 Mo	4 Mo	6 Mo	Yearly	2 Year	4 Year
Wind Sensors	I			S		
Key: C-Clean D-Dive I-Inspect L-Have CO-OPS Recalibrate R-Replace S-Service						

## APPENDIX C

### SYSTEM AND COMPONENT DOCUMENTATION

**Documentation for the measurement and data transmission components includes:**

1. Wind Sensor Alignment Procedures for the R.M. Young Wind Monitor
2. NOAA Technical Report NOS CO-OPS 030 NWLON/DMS Quality Control Software (QC)

The majority of these documents are available on CO-OPS web site at:

<http://tidesandcurrents.noaa.gov/pub.html>

All other references may be obtained by contacting the PORTS site representative or PORTS site representative backup.

## APPENDIX D

# Federal Acquisition Regulations

### 28.307-2 Liability.

- a) ***Workers' compensation and employer's liability.*** Contractors are required to comply with applicable Federal and State workers' compensation and occupational disease statutes. If occupational diseases are not compensable under those statutes, they shall be covered under the employer's liability section of the insurance policy, except when contract operations are so commingled with a contractor's commercial operations that it would not be practical to require this coverage. Employer's liability coverage of at least \$100,000 shall be required, except in States with exclusive or monopolistic funds that do not permit workers' compensation to be written by private carriers. (See 28.305(c) for treatment of contracts subject to the Defense Base Act.)
- b) ***General liability.***
1. The contracting officer shall require bodily injury liability insurance coverage written on the comprehensive form of policy of at least \$500,000 per occurrence.
  2. Property damage liability insurance shall be required only in special circumstances as determined by the agency.
- c) ***Automobile liability.*** The contracting officer shall require automobile liability insurance written on the comprehensive form of policy. The policy shall provide for bodily injury and property damage liability covering the operation of all automobiles used in connection with performing the contract. Policies covering automobiles operated in the United States shall provide coverage of at least \$200,000 per person and \$500,000 per occurrence for bodily injury and \$20,000 per occurrence for property damage. The amount of liability coverage on other policies shall be commensurate with any legal requirements of the locality and sufficient to meet normal and customary claims.
- d) ***Aircraft public and passenger liability.*** When aircraft are used in connection with performing the contract, the contracting officer shall require aircraft public and passenger liability insurance. Coverage shall be at least \$200,000 per person and \$500,000 per occurrence for bodily injury, other than passenger liability, and \$200,000 per occurrence for property damage. Coverage for passenger liability bodily injury shall be at least \$200,000 multiplied by the number of seats or passengers, whichever is greater.
- e) ***Vessel liability.*** When contract performance involves use of vessels, the contracting officer shall require, as determined by the agency, vessel collision liability and protection and indemnity liability insurance.

## Villarreal, Lhea

---

**From:** McLaurin, Don  
**Sent:** Tuesday, January 26, 2016 11:34 AM  
**To:** Villarreal, Lhea  
**Cc:** Klesges, Amber  
**Subject:** RE: Address Needed\_Agmt. w/US Commerce Dept.

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Hi Lhea,  
Darren Wright is our POC, he's listed as:

Darren Wright  
Center for Operational Oceanographic Products and Services (CO-OPS)  
1305 East West Highway  
Silver Spring, MD 20910  
(301) 713-4278 ext. 193  
FAX: (301) 713-4392  
[Darren.Wright@noaa.gov](mailto:Darren.Wright@noaa.gov)

Don

---

**From:** Villarreal, Lhea  
**Sent:** Tuesday, January 26, 2016 8:44 AM  
**To:** McLaurin, Don  
**Cc:** Klesges, Amber  
**Subject:** Address Needed\_Agmt. w/US Commerce Dept.

Good morning Don,

Could you please confirm the address for the US Department of Commerce National Oceanic and Atmospheric Administration regarding Agreement No. 15-3367? The executed letter and agreement is ready for disbursement.

Thank you,

**Lhea Villarreal**  
Commission Office | Port of Los Angeles  
[LVillarreal@portla.org](mailto:LVillarreal@portla.org) | (310) 732-3444

 Please consider the environment before printing this email