

**ORDER FOR SUPPLIES OR SERVICES**

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER 01/24/2012		2. CONTRACT NO. (If any)		6. SHIP TO:	
3. ORDER NO. DTMA-92-P-2012-0023		4. REQUISITION/REFERENCE NO. MA-PR615-20120266		a. NAME OF CONSIGNEE TS STATE OF MAINE	
5. ISSUING OFFICE (Address correspondence to) U.S.DOT/ Maritime Administration Atlantic Div. Acquisition Office MAR-380-2 7737 Hampton Blvd Building 19 Suite 300 NORFOLK VA 23505-1204				b. STREET ADDRESS Maine Maritime Academy 1 Water Street	
7. TO: ALEX B. JOHNSTON				c. CITY Castine	
a. NAME OF CONTRACTOR RELIABILITY MAINTENANCE SERVICES INC				d. STATE ME	
b. COMPANY NAME				e. ZIP CODE 04420	
c. STREET ADDRESS 823 W PARK AVE PMB 245				f. SHIP VIA	
d. CITY ASBURY PARK				8. TYPE OF ORDER	
e. STATE NJ				<input checked="" type="checkbox"/> a. PURCHASE REFERENCE YOUR: _____ _____ Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.	
f. ZIP CODE 07712-7205				<input type="checkbox"/> b. DELIVERY Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.	
9. ACCOUNTING AND APPROPRIATION DATA See Schedule				10. REQUISITIONING OFFICE DIV. of ATLANTIC OPERATIONS	

11. BUSINESS CLASSIFICATION (Check appropriate box(es))				12. F.O.B. POINT	
<input checked="" type="checkbox"/> a. SMALL	<input type="checkbox"/> b. OTHER THAN SMALL	<input type="checkbox"/> c. DISADVANTAGED	<input type="checkbox"/> g. SERVICE-DISABLED VETERAN-OWNED	Destination	
<input type="checkbox"/> d. WOMEN-OWNED	<input type="checkbox"/> e. HUBZone	<input type="checkbox"/> f. EMERGING SMALL BUSINESS			
13. PLACE OF			14. GOVERNMENT B/L NO.	15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date) 05/22/2012	16. DISCOUNT TERMS
a. INSPECTION Destination	b. ACCEPTANCE Destination				

**17. SCHEDULE (See reverse for Rejections)**

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	SOM-VIBRATION AND INFRARED SURVEY					
Continued ...						

SEE BILLING INSTRUCTIONS ON REVERSE	18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		17(h) TOTAL (Cont. pages)
	21. MAIL INVOICE TO:						
	a. NAME MARAD A/P INVOICES						\$8,000.00
	b. STREET ADDRESS (or P.O. Box) P.O. BOX 25710						\$8,000.00
c. CITY OKLAHOMA CITY		d. STATE OK	e. ZIP CODE 73125				

22. UNITED STATES OF AMERICA BY (Signature)			23. NAME (Typed) ALINE SMITH TITLE: CONTRACTING/ORDERING OFFICER		
					

**ORDER FOR SUPPLIES OR SERVICES  
SCHEDULE - CONTINUATION**

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER 01/24/2012	CONTRACT NO.	ORDER NO. DTMA-92-P-2012-0023
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ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	Admin Office: U. S. DOT Maritime Administration Atlantic Div. Acquisition Office MAR-380.2 7737 Hampton Blvd Building 19 Suite 300 Norfolk VA 23505-1204  Accounting Info: 70X1750SMR.2012.120SMB1070.0000160000.25711. 61006600 Period of Performance: 05/04/2012 to 05/22/2012					
0001	GATHER VIBRATION DATA IN ACCORDANCE WITH THE ATTACHED SOW				3,000.00	
0002	GATHER INFRARED MEASUREMENTS IN ACCORDANCE WITH THE ATTACHED SOW				3,000.00	
0003	PERFORM ANALYSIS AND PRODUCE REPORT IN ACCORDANCE WITH ATTACHED SOW				2,000.00	
	The total amount of award: \$8,000.00. The obligation for this award is shown in box 17(i).					

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

**\$8,000.00**

## STATEMENT OF WORK

Title: State of Maine - Annual Vibration and Infrared Surveys

Background & Intent: The Training Ship "State of Maine" is owned by the U.S. government and provided to the Maine Maritime Academy for the purpose of training young men and women for a career in the U.S. Maritime Industry. It is the intent of this Statement of Work (SOW) to perform a vibration and infrared survey of various equipment aboard the State of Maine in accordance with the American Bureau of Shipping (ABS) "Guide For Surveys Based On Preventive Maintenance Techniques (2003)".

Location: The majority of this SOW shall be performed aboard the Training Ship State of Maine, located at her pier at the Maine Maritime Academy, Castine, ME 04420. The remaining scope of work, which requires measurements on the main engine and shafting, will be performed with the ship is underway on the day of departure. This underway period shall occur between Castine, Maine and the pilot station, which is about a 4 hour sail from Castine. The Contractor shall be disembarked by boat in the area of the pilot station and provided transportation back to Castine.

Performance Period: The performance period shall start on or about May 4 and terminate on the day of departure, approximately May 8, 2012. Notification from the Contractor will be expected as soon as possible on machinery which is exhibiting serious vibration or infrared concerns. The completed report will be expected no later than 2 weeks after the final readings are taken.

### WORK DESCRIPTION

CLIN 0001 - Gather Vibration Data: An ABS certified vibration analysis contractor shall gather both overall and spectral (FFT) vibration velocity measurements in three orthogonal planes at each accessible bearing of the eighty seven (87) different equipment listed in the table below. The number of measurements

taken, their frequency ranges (as determined by their high and low pass filter settings), and the resolution of those measurements shall be such as to make it possible to identify any existing faults in that equipment. In addition to the vibration velocity measurements, HFD (high frequency detection, measured in g's acceleration) shall be taken at each accessible bearing. Ultrasonic measurements shall also be taken in the area of each bearing and coupling. An Engineering Officer will be appointed by the Chief Engineer to start/stop various equipment for the technician.

Equipment Listing for Vibration Measurements:

Main Engine

Main Engine Turbocharger

Auxiliary Propulsion Motor

Reduction Gear

Main Thrust and Line Shaft Bearings

#1 S.S. Diesel Generator

#1 S.S. Diesel Generator Turbocharger

#2 S.S. Diesel Generator

#2 S.S. Diesel Generator Turbocharger

#3 S.S. Diesel Generator

#3 S.S. Diesel Generator Turbocharger

Emergency Diesel Generator

#1 Steering Gear Pump (Stbd)

#2 Steering Gear Pump (Port)

#1 CPP Pump Motor

#2 CPP Pump Motor

Main Engine Standby Lube Oil Pump

#1 Reduction Gear Lube Oil Pump

#2 Reduction Gear Lube Oil Pump

#1 Thrust Bearing Lube Oil Pump

#2 Thrust Bearing Lube Oil Pump

#1 Stern Tube Lube Oil Pump

#2 Stern Tube Lube Oil Pump

#1 Main Engine Lube Oil Purifier

#2 Main Engine Lube Oil Purifier

SSGD Lube Oil Purifier

Reduction Gear Purifier

#1 Main Engine Fuel Oil Pressure Pump

#2 Main Engine Fuel Oil Pressure Pump

#1 Main Engine Fuel Oil Circ. Pump

#2 Main Engine Fuel Oil Circ. Pump

SSGD #1 Fuel Oil Pressure Pump

SSGD #2 Fuel Oil Pressure Pump

SSGD DFM Service Pump

#1 HFO Purifier

#2 HFO Purifier

DFM Purifier

#1 HFO Transfer Pump

#2 HFO Transfer Pump

#1 DFM Transfer Pump

#2 DFM Transfer Pump

#1 Central F.W. Cooling Pump

#2 Central F.W. Cooling Pump

#3 Central F.W. Cooling Pump

#1 Main Engine Jacket Water Pump

#2 Main Engine Jacket Water Pump

Main Engine Jacket Water Keep Warm Pump

#1 Nozzle Cooling Pump Motor

#2 Nozzle Cooling Pump Motor

#1 Main S.W. Service Pump

#2 Main S.W. Service Pump

#3 Main S.W. Service Pump

#1 Auxiliary S.W. Service Pump

#2 Auxiliary S.W. Service Pump

Fire and General Service Pump

Fire and Ballast Pump

Emergency Fire Pump

#1 Bilge and Ballast Pump

#2 Bilge and Ballast Pump

#1 Starting Air Compressor

#2 Starting Air Compressor

Control Air Compressor

S.S. Air Compressor

#1 Boiler Fuel Oil Pump

#2 Boiler Fuel Oil Pump

Boiler Circ. Pump/Forced Draft Fan

#1 Boiler Feed Pump

#2 Boiler Feed Pump

#1 Exhaust Gas Boiler Circ. Pump

#2 Exhaust Gas Boiler Circ. Pump

F.W. Generator Ejector Pump

F.W. Generator Circ. Pump

Engine Room Supply Fan No. 33 (Stbd/Fwd)

Engine Room Supply Fan No. 34 (Port/Fwd)

Engine Room Supply Fan No. 36 (Stbd/Aft)

Engine Room Supply Fan No. 37 (Port/Aft)

Engine Room Exhaust Fan No. 38 (Stbd/Inbd)

Engine Room Exhaust Fan No. 39 (Port/Inbd)

Engine Room Exhaust Fan No. 40 (Stbd/Otbd)

Engine Room Exhaust Fan No. 41 (Port/Otbd)

#1 S.S. Reefer. Compressor

#2 S.S. Reefer. Compressor

#1 A/C Compressor

#2 A/C Compressor

#1 A/C Chill Water Pump

#2 A/C Chill Water Pump

#3 A/C Chill Water Pump

CLIN 0002 - Gather Infrared Measurements: At a minimum, an ABS certified infrared technician shall scan the ninety five (95) electrical equipments listed below (switchboards, distribution panels and motor controllers) for the purpose of identifying temperature anomalies (electrical faults) in that equipment. When necessary, amperage readings shall also be taken to help identify phase imbalances and/or overload conditions. Serious faults shall be brought to the attention of the Chief Engineer as soon as possible. An Engineering Officer will be appointed by the Chief Engineer to start/stop various equipment for the technician gathering the data.

Equipment Listing for Infrared Measurements:

Engine Room, EOS Main Switchboard

Section 1 Panel 120 VAC Lighting Distribution Bus SS

Section 2 Panel 450 VAC Distribution Bus 1S

Section 3 Panel 450 VAC Distribution Bus 1S

Section 4 Panel Shore Power Feeders

Section 5 Panel Ships Service Generator 1/Circuit Breaker

Section 6 Panel Ships Service Generator 2/Circuit Breaker

Section 7 Panel Ships Service Generator 3/Circuit Breaker

Section 8 Panel Bus Tie Control and Ground Indication

Section 9 Panel 450 VAC Distribution Bus 2S

Section 10 Panel 450 VAC Distribution Bus 2S

Section 11 Panel 450 VAC Distribution Bus 2S

Section 12 Panel Auxiliary Propulsion Motor Circuit Breaker

Motor Controllers

MCC P-426

Engine Room Supply Fan No. 33 (Stbd/Fwd)

Engine Room Exhaust Fan No. 38 (Stbd/Inbd)

Engine Room Exhaust Fan No. 39 (Port/Inbd)

Engine Room Supply Fan No. 34 (Port/Fwd)

Engine Room Exhaust Fan No. 40 (Stbd/Otbd)

Engine Room Supply Fan No. 37 (Port/Aft)

Engine Room Exhaust Fan No. 41 (Port/Otbd)

Engine Room Supply Fan No. 36 (Stbd/Aft)

Engine Room Motor Controllers

Reduction Gear Lube Oil Pump No. 2

ME Lube Oil Purifier No. 1

ME Lube Oil Purifier No. 2

SSDG Lube Oil Purifier

Reduction Gear Lube Oil Purifier

ME Fuel Oil Pressure Pump I

ME Fuel Oil Pressure Pump II

ME Fuel Oil Circ. Pump I

ME Fuel Oil Circ. Pump II

HFO Purifier No. 1

HFO Purifier No. 2

DFM Purifier

Central F.W. Cooling Pump No. 1

Central F.W. Cooling Pump No. 2

Central F.W. Cooling Pump No. 3

Auxiliary S.W. Service Pump No. 1

Auxiliary S.W. Service Pump No. 2

Fire and General Service Pump

Starting Air Compressor #1

Starting Air Compressor #2

S.S. Reefer. Compressor No. 1

S.S. Reefer. Compressor No. 2

A/C Compressor No. 1

A/C Compressor No. 2

Operating Panels

Control Air Compressor

S.S. Air Compressor

Oil Fire Boiler (#1 F.O. Pump/#2 F.O. Pump/Circ. Pump-Forced Draft Fan)

Exhaust Gas Boiler (#1 Boiler Feed Pump/#2 Boiler Feed Pump/#1 Circ. Pump/#2 Circ. Pump)

F.W. Generator (Ejector Pump/Circ. Pump/Dist. Pump 1/Dist. Pump2)

Miscellaneous Panels

Auxiliary Propulsion Motor Drive

Motor Controllers

MCC P-401

ME Jacket Water Keepwarm Pump

ME Standby Lube Oil Pump

SSGD HFO Pressure Pump No. 1

Jacket Water Pump No. 1

Reduction Gear Lube Oil Pump No. 1

MCC P-402

SSGD DO Service Pump

SSGD Pressure Pump No. 2

Jacket Water Pump No. 2

Thrust Bearing Lube Oil Pump No. 1

MCC P-403/404

Main S.W. Service Pump No. 1

DFM Transfer Pump No. 1

ME Nozzle Cooling Pump No. 1

Fuel Oil Transfer Pump No. 1

Thrust Bearing Lube Oil Pump No. 2

DFM Transfer Pump No. 2

Main S.W. Service Pump No. 2

Standby S.W. Service Pump (No. 3)

ME Nozzle Cooling Pump No. 2

Fuel Oil Transfer Pump No. 2

MCC P-408

A/C Chill Water Circ. Pump No. 1

A/C Chill Water Circ. Pump No. 2

A/C Chill Water Circ. Pump No. 3

MCC P-449

Bilge and Ballast Pump No. 1

Bilge and Ballast Pump No. 2

Shaft Alley Motor Controllers

CPP Pump No. 1

CPP Pump No. 2

Stern Tube Lube Oil Pump No. 1

Stern Tube Lube Oil Pump No. 2

Fire and Ballast Pump

Emergency Fire Pump Trunk (4-65-2) Motor Controllers

Emergency Fire Pump

Steering Gear Room Motor Controllers

#1 Steering Gear Pump (Stbd)

#1 Steering Gear Pump Hyd. Cool. Fan

#2 Steering Gear Pump (Port)

#2 Steering Gear Pump Hyd. Cool. Fan

Vent. Fan S-2-195-2

Emergency Generator Room Emergency Switchboard

120 Volt A.C. Distribution Panel

450 Volt A.C. Distribution Panel

Emergency Generator Control/Circuit Breaker

450 Volt A.C. Distribution Panel

CLIN 0003 – Perform Data Analysis and Produce Report: An ISO certified vibration analyst shall analyze the vibration data gathered in CLIN 0001 for the existence of any equipment faults. Those faults, and the recommended actions to remedy them, must be clearly stated in a printed report. An ABS certified infrared technician shall analyze the data gathered in CLIN 0002 for the existence of any equipment faults. Those faults, and the recommended actions to remedy them, must be clearly stated in a printed report. The report shall indicate the temperature difference (from normal) and provide both an infrared image and white light (normal) image identifying the exact location of the fault. The printed reports shall be produced in triplicate in both printed and CD format and delivered to the attention of Matt O'Donnell, U.S. Maritime Administration, 101 Academy Drive, Buzzards Bay, MA 02532. It shall be the responsibility of the contractor to produce a report satisfactory to ABS for the purpose of satisfying the intent of this work item.

## **DTMA-92-P-2012-0023 VIBRATION AND INFRARED SURVEY TS STATE OF MAINE**

The following FAR, Transportation Acquisition Manual (TAM) and MARAD local provisions and clauses apply to this procurement and are incorporated by reference.

### 52.252.2 Clauses Incorporated by Reference

This contract incorporated one or more clauses by reference with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at the following Internet addresses:

- A. Federal Acquisition Regulations (52.)  
<https://www.acquisition.gov/comp/far/current/html/FARTOCP52.html>
- B. Transportation Acquisition Regulations (1252.) <http://www.dot.gov/ost/m60/tamtar/part1252.htm>
- C. U.S. Maritime Administration Provisions and Clauses (MCL.)  
[https://voa.marad.gov/Solicitation\\_Awards/docs/mar-380/MARAD%20Clauses%MCL%20HTML.htm](https://voa.marad.gov/Solicitation_Awards/docs/mar-380/MARAD%20Clauses%MCL%20HTML.htm)

### 52.212-4 Contract Terms and Conditions – Commercial Items

52.212-5 Contract Terms and Conditions Required to Implement Statutes or Executive Orders – Commercial Items; within FAR Clause 52.212-5(b) and (c), the following items are designed by the Contracting Officer to apply to this solicitation: Facsimile Proposals: 504-589-6593. 52.219-3 Notice of Total Hubzone Set-Aside or Sole Source Award; 52.222-3 Convict Labor, 52.222-19 Child Labor – Cooperation with Authorities and Remedies; 52.222-21 Prohibition of Segregated Facilities; 52.222-26 Equal Opportunity; 52.223-18 Contractor Policy to Ban Text Messaging While Driving

52.232-33 Payment by Electronic Funds Transfer – Central Contractor Registration

52.246-4 Inspection of Services – Fixed-Price

The following TAR clause can be opened in paragraph B above.

I252.223-73 Seat Belt Use Policies and Programs – located in paragraph B above.

The following clauses are MARAD clause and can be opened in paragraph C above.

MCL.H-2 Supplemental Work Requests

MCL.H-6 Standards of Employee Conduct

MCL.H-10 Supplemental Growth Requirements

MCL.H-11 Disposition of removed Equipment and Scrap

MCL.H-12 Maritime Liens, No Authority to Incur

MCL.L-2 Agency Protests (C.O. is Mrs. Aline Smith, same address shown above for quote receipts.)

**Security:** For those contractors working onboard the Training Ship STATE OF MAINE, they shall be responsible for obtaining installation access, as required, for vehicles and personnel needed at the work site. Contractor personnel shall report to the Department of Transportation, Maritime Administration (MARAD), Division of Atlantic Operations (DAO) Contracting Officer Technical Representative (COR), Mr. Matthew O'Donnell at (757) 287-2849 or [matthew.o'donnell@dot.gov](mailto:matthew.o'donnell@dot.gov) BEFORE performing work. Contractor shall be responsible for following all applicable Training Ship STATE OF MAINE regulations while onboard.

**DAMAGE TO GOVERNMENT FACILITIES:** Damage to any facility, interior/exterior equipment, or systems caused by the contractor, as a result of work performed under this contract, shall be repaired by the contractor at his/her own expense. The contractor shall be required to repair or replace all items and components, to return the damaged area to its condition before the damage incident.

## INVOICE SUBMISSION INSTRUCTIONS

The Contractor may submit invoices in either electronic or paper format. Electronic submission is preferred.

- (1) Electronic invoices shall be address to [MARADInvoices@faa.gov](mailto:MARADInvoices@faa.gov), with copy to [MARADSARInvoices@dot.gov](mailto:MARADSARInvoices@dot.gov)

Electronic invoices shall conform to the following criteria, or be subject to rejection:

- a. Invoice and supporting documentation shall be in Adobe Acrobat (pdf) format.
  - b. The e-mail subject shall include the following information: Name of Contractor; Invoice date and number; Invoice amount; Contract number and, if applicable, the order or modification number; Terms of any discount for prompt payment offered; Payment instructions (i.e, financial institution, ABA routing#, account #)
- (2) Paper invoices shall be submitted to one of the following addresses. Multiple copies are not required.

MARAD A/P CR Invoices Branch  
AMZ-150  
PO Box 25710  
Oklahoma City, OK 73125

If a street address is required for delivery (i.e., Federal Express), the following address may be used in lieu of the post office box:

MARAD A/P CR Invoices Branch

AMZ-150

6500 S. MacArthur Blvd.

Oklahoma City, OK 73169