

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE	PAGE OF PAGES
				J	1 26
2. AMENDMENT/MODIFICATION NO. 0001	3. EFFECTIVE DATE 20-Dec-2022	4. REQUISITION/PURCHASE REQ. NO. SEE SCHEDULE		5. PROJECT NO.(If applicable)	
6. ISSUED BY ARMY CONTRACTING COMMAND - REDSTONE CONTRACTING OFFICE CORPUS CHRISTI ARMY DEPOT 9035 OCEAN DR. BLDG 10, MAIL STOP 18 CORPUS CHRISTI TX 78419-5260	CODE W912NW	7. ADMINISTERED BY (If other than item 6) ARMY CONTRACTING COMMAND - REDSTONE KEVIN M PALMER (361) 961-9071 CORPUS CHRISTI ARMY DEPOT 9035 OCEAN DR. BLDG 10, MAIL STOP 18 CORPUS CHRISTI TX 78419-5260		CODE	W912NW
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)				X	9A. AMENDMENT OF SOLICITATION NO. W912NW22Q0067
				X	9B. DATED (SEE ITEM 11) 03-Aug-2022
					10A. MOD. OF CONTRACT/ORDER NO.
					10B. DATED (SEE ITEM 13)
CODE	FACILITY CODE				
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS					
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input checked="" type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning <u>1</u> copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.					
12. ACCOUNTING AND APPROPRIATION DATA (If required)					
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.					
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.					
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).					
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:					
D. OTHER (Specify type of modification and authority)					
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.					
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) THE PURPOSE OF THIS AMENDMENT IS TO: 1. INCORPORATE THE REVISED STATEMENT OF WORK. 2. REVISE THE CLIN SCHEDULE. AS A RESULT, CLINS 0001 THROUGH 0004 HAVE BEEN REVISED. ALL OTHER CLINS HAVE BEEN DELETED. 3. ADD THE ADDITIONAL INSTRUCTIONS TO OFFERORS. 4. REVISE THE EVALUATION CRITERIA. 5. REVISE THE SOLICITATION CLOSING DATE TO 04:00 PM CENTRAL 20 JAN 2023. ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.					
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.					
15A. NAME AND TITLE OF SIGNER (Type or print)			16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)		
			TEL: _____ EMAIL: _____		
15B. CONTRACTOR/OFFEROR _____ (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY _____ (Signature of Contracting Officer)		16C. DATE SIGNED 20-Dec-2022	

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SUMMARY OF CHANGES

SECTION SF 1449 - CONTINUATION SHEET

SOLICITATION/CONTRACT FORM

The required response date/time has changed from 17-Aug-2022 03:30 PM to 20-Jan-2023 04:00 PM.

SUPPLIES OR SERVICES AND PRICES

CLIN 0001

The CLIN description has changed from Gas Chromatograph (GC) / Mass Spectromet to GAS CHROMATOGRAPH / MASS SPECTROMETER.

The CLIN extended description has changed from:

The Contractor shall furnish and install one (1) each GCMS in accordance with SOW para. 3.1.5 contained herein or exact equal.

To:

THE CONTRACTOR SHALL FURNISH ONE (1) EACH GAS CHROMATOGRAPH / MASS SPECTROMETER IN ACCORDANCE WITH THE STATEMENT OF WORK CONTAINED HEREIN.

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CLIN 0002

The CLIN description has changed from CONSUMABLES KIT to OPERATIONAL TRAINING.

The CLIN extended description has changed from:

Consumables Kit in accordance with SOW para. 3.1.23 or exact equal.

To:

THE CONTRACTOR SHALL PROVIDE OPERATIONAL, PROGRAMMING, AND MAINTENANCE TRAINING IN ACCORDANCE WITH THE STATEMENT OF WORK CONTAINED HEREIN.

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CLIN 0003

The CLIN description has changed from 3 DAYS GC/GCMS ONSITE SPT to INSTALLATION.

The CLIN extended description has changed from:

3 Days GC/GCMS Onsite Support in accrcance with para. 3.1.30

To:

THE CONTRACTOR SHALL INSTALL THE GAS CHROMATOGRAPH / MASS SPECTROMETER IN ACCORDANCE WITH THE STATEMENT OF WORK CONTAINED HEREIN. INSTALLATION WILL BE AT THE CORPUS CHRISTI ARMY DEPOT LOCATED IN CORPUS CHRISTI TEXAS, 78419-5260.

CLIN 0004

The CLIN description has changed from GC CONSUMABLES VOUCHER to IUID MARKING AND REGISTRY.

The CLIN extended description has changed from:

GC Consumables Voucher in accordance with SOW para. 3.1.29

To:

IN SUPPORT OF CLIN 0001 IN ACCORDANCE WITH DFARS CLAUSE 252.211-7003 CONTAINED HEREIN.

CLIN 0005

The CLIN description has changed from SSL ESSENTIALS KIT to Canceled.

The CLIN extended description has changed from:

-1 each 26096-1420 TG-5SILMS GC Column 30m x0.25mmx0.25µm-1 each 290VA191 Vespel Ferrule for the TRACE 1300 Series GC; capillary column 0.1-0.25 mm ID, 10 pk-1 each 290GA092 Siltek Treated Inlet Seals for the TRACE 1300 Series GC; 0.8mm, 2pk-1 each 29001320 Liner Sealing Ring for SSL, 5pk-1 each 31303233-BP BTO Septa 11mm Diameter50pk (Blister Pack)-1 each 453A1925-UI LinerGOLD Splitless Liner, Single Taper, Wool 4x6.5x78.5mm, 5pk in accordance with SOW para. 3.1.28 or exact equal.

To:

Canceled

CLIN 0006

The CLIN description has changed from SYRINGE to Canceled.

The CLIN extended description has changed from:

Fixed needle syringes for TriPlus RSH autosampler in accordance with SOW para. 3.1.27 or exact equal.

To:

Canceled

CLIN 0007

The CLIN description has changed from START UP KIT to Canceled.

The CLIN extended description has changed from:

GC/GCMS Start Up Kit TRC1300 in accordance with para 3.1.26 or exact equal.

To:

Canceled

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CLIN 0008

The CLIN description has changed from OIL MIST FILTER to Canceled.

The CLIN extended description has changed from:

Mist filter capture oil mist from the outlet of pumps in accordance with SOW 3.1.25 or exact equal.

To:

Canceled

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CLIN 0009

The CLIN description has changed from PERF SPEC KIT to Canceled.

The CLIN extended description has changed from:

ISQ 7000 Performance Spec Kit in accordance with SOW 3.1.24 or exact equal

To:

Canceled

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CLIN 0010

The CLIN description has changed from ION SOURCES CARTRIDGE to Canceled.

The CLIN extended description has changed from:

EI Ion Source Cartridge, complete assembly for ISQ and TSQ 8000 in accordance with SOW 3.1.22 or exact equal.

To:

Canceled

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CLIN 0011

The CLIN description has changed from DUAL DETECTOR MICROFLUIDICS KIT to Canceled.
The CLIN extended description has changed from:

includes a SGE wafer with restrictions and connectors allowing to split 1:1 the column outlet to two detectors (including MS detector) in accordance in SOW para. 3.1.21 or exact equal.

To:

Canceled
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CLIN 0012

The CLIN description has changed from NIST 2020 MS LIBRARY to Canceled.
The CLIN extended description has changed from:

Mass Spectral library is a fully evaluated collection of electron ionization (EI) and MS/MS mass spectra, with chemical and GC data, plus search software to identify your own unknown spectra, in accordance with SOW para. 3.1.20 or exact equal.

To:

Canceled
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CLIN 0013

The CLIN description has changed from CHROMELEON LICENSE CODE to Canceled.
The CLIN extended description has changed from:

Required for all new Chromeleon 7.3 or later installations and includes:-New license Code-Installation media-Installation literature in accordance with SOW para. 3.1.19 or exact equal

To:

Canceled
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CLIN 0014

The CLIN description has changed from CHROMELEON SE GC/SM PROMO to Canceled.
The CLIN extended description has changed from:

Provides one client and enables control of one Thermo Scientific GCMS instrument and:-may only be quoted on the same order as a new Thermo Scientific GCMS system in accordance with SOW in para. 3.1.18-includes Instrument Controller, Class 1 Instrument license, Spectral License, Data Client, Instrument Operation, Report Designer Pro and Fraction Collection -must be ordered with 7050.0104A-GC-GCMS can only be used for Workstation

installations

To:

Canceled

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CLIN 0015

The CLIN description has changed from POWER SUPPLY to Canceled.

The CLIN extended description has changed from:

Power Supply, DSKTP, 12V, 1.5A, 18W in accordance with SOW para. 3.1.17 or exact equal.

To:

Canceled.

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CLIN 0016

The CLIN description has changed from ETHERNET HUB to Canceled.

The CLIN extended description has changed from:

ETHERNET, HUB, 5 PORT, 1GBIT, RoHS in accordance with SOW para. 3.1.16 or exact equal.

To:

Canceled

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CLIN 0017

The CLIN description has changed from RSH HANDHELD TERM to Canceled.

The CLIN extended description has changed from:

Handheld controller for TriPlus RSH in accordance with para. 3.1.15 or exact equal

To:

Canceled

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CLIN 0018

The CLIN description has changed from RSH TOOL CHANGE STN to Canceled.

The CLIN extended description has changed from:

for the storage and automatic change of up to three syringe tools in accordance with para sow 3.1.14 or exact equal.

To:

Canceled.

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CLIN 0019

The CLIN description has changed from RSH TRACE MTG KIT to Canceled.

The CLIN extended description has changed from:

RSH TRACE 1300/1310 Mounting Kit in accordance with para. 3.1.13 or exact equal.

To:

Canceled

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CLIN 0020

The CLIN description has changed from TRIPLUS RSH BASE to Canceled.

The CLIN extended description has changed from:

Basic TriPlus RSH for liquid and Headspace injections with standard Xlength in accordance with para 3.1.12 or exact equal.

To:

Canceled.

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CLIN 0021

The CLIN description has changed from POWER CORD to Canceled.

The CLIN extended description has changed from:

Power Cord C13 TypeB 125V Max in accordance with para. 3.1.11 or exact equal

To:

Canceled

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CLIN 0022

The CLIN description has changed from POWER CORD to Canceled.
The CLIN extended description has changed from:

Power Cord C19 Type5-20 125V Max in accordance with SOW para. 3.1.10. or exact equal.

To:

Canceled
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CLIN 0023

The CLIN description has changed from TRACE 1300 FID MOD to Canceled.
The CLIN extended description has changed from:

Instantaneously Connected-Flame Ionization Detector module: high performance in terms of sensitivity and dynamic range featuring acquisition rate as high as 300 Hz in accordance with SOW para. 3.1.9 or exact equal.

To:

Canceled
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CLIN 0024

The CLIN description has changed from TRACE 1300 INJECTOR MOD to Canceled.
The CLIN extended description has changed from:

Instantaneously Connected-Split/Spitless Injector module, includes: complete injector with integrated electronic gas control (IEC) featuring constant Flow and Pressure modes, programmable Flow and Pressure modes, Leak check and Column Evaluation, in accordance with SOW para 3.1.8 or exact equal.

To:

Canceled
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CLIN 0025

The CLIN description has changed from TRACE 1310 MAINFRAME to Canceled.
The CLIN extended description has changed from:

'-1000-holes' fast GC oven with operating T range ambient +3 to 450°C; optional cooling to -100°C with LN2 or -50°C with CO2 -Multiple-level temperature program with 32-ramp/33-plateaux with maximum heating rate of 125°C/min -Cooling down from 450°C to 50°C in less than 4 minutes -Six independent heated zones for individual control of injectors and detectors plus auxiliary zone -LAN interface -USB port -Color touch-screen interface with local status update of the oven, injectors and detectors, maintenance commands, run log, multiple language capabilities and video tutorials in accordance SOW para. 3.1.7 or exact equal.

To:

Canceled

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CLIN 0026

The CLIN description has changed from ION GUAGE to Canceled.

The CLIN extended description has changed from:

Ion Gauge Option for TSQ 8000/TSQ9000, in accordance with SOW para 3.1.6 or exact equal.

To:

Canceled

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CLIN 0027

The CLIN description has changed from IUID Marking and Registry to Canceled.

The CLIN extended description has changed from:

In accordance with DFARS 252.211-7003 contained herein.

NOTE: The requirements in DFARS 252.211-7003, Item Identification and Valuation, are applicable for this line item. The contractor shall provide DoD unique identification or a DoD recognized unique identification equivalent.

To:

Canceled

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The following have been added by full text:

INSTRUCTION TO OFFERORS

ADDITIONAL INSTRUCTION TO OFFERORS: All quotes submitted must define/contain a detailed description of how the equipment proposed will meet the requirements at SOW Paragraph 3.2.1 through sub-paragraph 3.2.1.17. A single word such as "Check," "Yes," or "Meets minimum requirements," will not be considered as an adequate description and the quote may not be further considered for award.

The following have been modified:

SOW

STATEMENT OF WORK
FOR
GAS CHROMATOGRAPH / MASS SPECTROMETER (GC/MS) SYSTEM

Prepared by

CORPUS CHRISTI ARMY DEPOT, CHEMICAL PROCESS BRANCH

1. **SCOPE.** This Statement of Work (SOW) defines the equipment, performance, training, software, and support requirements for a GC/MS analytical instrument with auto-sampler and headspace module now defined as a “GC/MS System,” required by the Materials and Process Engineering Division (MPED), Chemical Process Branch (CPB).

1.1. **Background.** The analytical instrument will be used during chemical laboratory support of micro-forensic chemical analyses targeting U.S. Army aviation asset mishap organic fluid failure analyses and an ancillary involvement in Corpus Christi Army Depot (CCAD) process control projects submitted to the CPB. Laboratory support applies to all U.S. Army rotary and fixed wing aircraft and cross service support for other service agencies as necessary.

2. APPLICABLE DOCUMENTS.

2.1. Industry documents.

2.1.1. **American National Standards Institute/National Electrical Manufacturers Association (ANSI/NEMA)**

ANSI/NEMA ICS 1 - Industrial Controls and Systems.

ANSI/NEMA MG 1 - Motors and Generators.

<https://webstore.ansi.org/Info/>

2.1.2. **Occupational Safety and Health Act (OSHA) of 1970**

29 CFR Part 1910 Occupational Safety and Health Standards.

29 CFR Part 1926 Safety and health regulations for construction.

<https://www.osha.gov>

2.1.3. **International Organization for Standardization (ISO)**

ISO 9000 Quality Management Systems - Fundamentals and Vocabulary.

ISO 9001 Quality Management Systems - Requirements-Third Edition; Supersedes ISO 9002:1994 and ISO 9003:1994.

<https://www.iso.org>

2.1.4. **American Society for Testing and Materials (ASTM International)**

ASTM D6420 – 18 Standard Test Method for (the) Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry. (Application for copies should be addressed to ASTM International© 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-

ASTM D3951-18 Standard Practice for Commercial Packaging

3. REQUIREMENTS.

3.1. General.

3.1.1. **Equipment.** The contractor shall be responsible for furnishing, delivering, installing, and the on-site testing of all hardware, software, documentation, support accessories/modules and any materials necessary to comprise a complete operational GC/MS System as described in this SOW.

3.1.2. **Training.** The contractor shall be responsible for training designated CCAD personnel in the efficient operation, programming, and maintenance of the GC/MS System.

3.1.3. **Installation.** The GC/MS shall be configured to permit installation and operation at CCAD, Building 8, Chemical Process Branch, Instrumentation Laboratory.

3.2. Detail tasks.

3.2.1. **Equipment.**

3.2.1.1. **Purpose.** The GC/MS System shall be designed and constructed for the purpose of analyzing, identifying, and quantitating multiple component organic fluid mixtures.

3.2.1.2. **Electrical.** The GC/MS System's electrical power requirement shall require either 115 ± 5 or 230 ± 10 volts alternating current (VAC) operating at a frequency of 60/50 Megahertz (Hz).

3.2.1.3. **Automation.** All GC/MS methods, components, and modules must have 100% software single computer driven control capability. No single component or module periphery requiring additional computer control or programming will be acceptable. Specifically, the autosampler and the headspace module of the GC/MS System must be controlled through the single computer software driving the GC/MS.

3.2.1.4. **Dual Detection Method Capability.** The GC/MS System shall have dual capabilities. First functioning independently as a GC/MS or as a Gas Chromatograph (GC) detection system employing one or two, temperature controlled, split or splitless inlets, connected to individual capillary columns for sample component separation. The second functional capability will be operating as a simultaneous GC/MS, GC System with a software programmed method to split the sample from an injection inlet into two separate capillary columns with one column connected to a flame ionization detector (FID) for gas chromatography quantitation and the second column connected to a single quadrupole detection platform for unknown compound molecular mass fragment identification. Both the First and Second Functions shall employ the defined auto-sample preparation system. For standardization qualification, the detection capability of the GC/MS shall have the capability to identify and quantify the 36 volatile organic compounds contained within ASTM D 6420 measuring from 150 parts per billion (ppb) to 100 parts per million (ppm) using a full scan operation between 45 and 300 atomic mass units¹.

3.2.1.5. **Safety.** If the single quadrupole acceleration platform contains a redundant or backup filament electron stream molecular ionizer, an open circuit alarm must be provided.

3.2.1.6. **Dimensions.** The GC/MS must be a limited, compact, bench-top model type, and shall be vendor installed and ready for use. Dimensions are limited to no greater than 213 centimeters (cm) (84 inches) in width, 70-cm (27.5 inches) in depth, and 94-cm (37 inches) in height. Weight as well as height, unless stipulated after the fact, is not a critical factor.

3.2.1.7. **GC/MS Sample Introduction Component** shall include an auto-sampler capable of liquid and headspace (gaseous) sample injection methodology. The auto-sampler must have a minimum of 150 each, 2 milliliter (mL) vial position trays and a second configuration with a minimum of 50 each 10-mL minimum volume vial tray(s). The auto-sampler must include an incubation oven with a minimum of five vial heating positions between 40 and 250 degrees Celsius ($^{\circ}\text{C}$) (104 and 482 degrees Fahrenheit [$^{\circ}\text{F}$]), fluid agitation capability, headspace syringe tool, syringe solvent flushing station, a minimum of five each 10 milliliter (mL) vials capable of bidirectional movement, automatically changing syringes for various sample types, and configured to create programmed dilutions, solution agitation prior to injection, and sense the bottom of a sample vial to prevent syringe damage.

3.2.1.8. **Sample Inlet Module.** Inlets for both the MS and GC must be septa secured and capable of providing a computer programmable, split or splitless sample volume to capillary columns that vary between 0.25 and 0.40 millimeter (mm) diameters. Each Inlet shall be independently temperature programmable equal to approximately ambient room temperature to 400°C (752°F) minimum in one $^{\circ}\text{C}$ increments.

3.2.1.9. **Standard GC Capillary Column Connections.** Standardized GC capillary column connections are required. The capillary columns currently in use are between 30 and 100 meters (m) in length and coiled on circular saddles approximately six inches in diameter that hang on supports within the GC/MS oven.

3.2.1.10. **GC/MS Capillary Column Oven** temperature shall be computer controlled from approximately 25°C (77°F) to 400°C (752°F) minimum to the nearest single $^{\circ}\text{C}$ at designated temperature profiles. No sub-ambient temperature GC method profiles will be necessary. The oven temperatures must be capable of being ramped to stipulated temperatures at programmed rates of up to 125°C (225°F) per minute run time to the nearest 5°C (9°F) minimum. The temperature profile temperature setting, as well as

¹ Page 1, Paragraph 1.1.

the actual temperature of the oven must be observable. Routine oven temperature profiles experienced are between 30-minutes and one hour; however, extended temperature profiles involving four different temperature ramp designations, and up to five hours total run time should be possible. The temperature equilibration time following a GC/MS run should only require a maximum time of one minute to equilibrate from the run's maximum oven temperature of 400°C (752°F) to the run's initiating oven temperature of 50°C (122°F).

3.2.1.11. Flame Ionization Detector (FID). The hydrogen gas flow shall routinely deliver between 35 - 45 milliliters per minute (min) for routine analyses, and be controllable over a range of 1 to 100 mL/min. The Zero Grade Air mass flow shall routinely deliver between 350 – 450 mL/min for routine analyses, and must be controllable from between 5 – 500 mL/min. The helium mobile phase gas mass flow shall routinely deliver 40 mL/min for average analyses, and must be controllable from between 1 – 50 mL/min. The FID's temperature range shall be controllable to the nearest single degree from approximately ambient to 450°C (842°F).

3.2.1.12. MS Vacuum Source. Vacuum pump-down capability should employ a 300 liter per second (L/sec) minimum turbomolecular pump driven in part from an oil free scroll or roughing pump.

3.2.1.13. MS Single Quadrupole Resolving Power of the detection system is understood to be the contractor's stipulated design with the capability of acquiring a minimum of 90 scans per second in full scan mode over a range of 125 microseconds (μsec). The electron energy shall be adjustable over a range of 0 to 150 electron Volts (eV) at an emission current up to 350 micro Amps (μA). The sample transfer line should be programmable up to 400°C (752°F) and include Chemical Ionization (CI) capability along with the Electron Ionization (EI) sources. The instrument should have no need to release vacuum to switch between CI and EI sources. Mass to charge ratio detection must provide ionic detection capabilities with molecular ion mass weight ranges between 25 to 650 mass units minimum.

3.2.1.14. Simultaneous Run Capability. The GC/MS System must be capable of analyzing simultaneous GC and MS runs via two capillary columns, programmable metered sample volumes, with split sample injection technology.

3.2.1.15. GC/MS System. The GC/MS System, (GC, GC/MS and Autosampler) must be manufactured by one single company, who will warranty and maintain the System as a single entity. This will also be required following the warranty period into a System Maintenance period for the life of the System.

3.2.1.16. Tools. The contractor shall furnish all special tools required to perform maintenance, repair, or removal and installation of any of the system's consumable components and columns. Instructions for disassembly, repair, re-assembly, and adjustment maintenance shall be clear, concise, definitive, and composed in the English language.

3.2.1.17. Reduction. In addition to the requirements contained within this SOW, the procurement guidelines for the GC/MS System will include a marked reduction in electrical energy consumption per industry kilowatt-hour standard consumption, as compared to industry standard use, and enhanced automation to reduce operator/instrument interface familiarization and analytical method creation time as compared to previous generation GC/MS industry use research grade production models.

3.2.2. Information Technology and Industrial System.

3.2.2.1. Computer (PC) Software used to drive the GC/MS and the ancillary accessory equipment will be loaded onto a CCAD supplied computing system.

3.2.2.2. CCAD PC Operating System (OS) function in a 64 bit, Microsoft Windows 10 OS environment with a minimum of one terabyte hard drive storage capability minimum.

3.2.2.3. Vendor Supplied GC/MS System Software must include digitally searchable mass fragment libraries of known use industrial organic and inorganic compounds compared to stipulated GC/MS run

displayed ion fragments. The libraries must include the most recent National Institute of Standards and Technology (NIST) digital MS library capable of determining the designated ion fragment's comparison by molecular weight percent.

3.2.2.4. **GC/MS Peripheral Equipment** will be capable of generating and receiving digital data into the PC through a Universal Serial Bus (USB), a standard serial cable connection (RS-232), or an Ethernet connection. All of the applicable GC/MS interconnection cables shall be contractor furnished. If an Ethernet connection is used to interconnect the dedicated PC to peripheral equipment, the required Network Interface Card (NIC) card(s) shall be supplied with an extra RJ-45 port to allow an ANSI Standard 802.3, 100 Base-T, Ethernet connection supporting the full TCP/IP stack implemented by firmware. Any updated periphery support connection technology from CCAD not stipulated here will be acceptable if the subsequent output digital data remains identical.

3.2.2.5. **Army Gold Master (AGM)** security profile software is loaded onto the computer's hard drive to guard against internet cyber-attacks. AGM is a collection of security settings for Microsoft operating systems that must be applied to all Army computer systems for internet connection capability.

3.2.2.6. **Documentation Requirements.** A complete set of GC/MS instruction manuals written in the English language shall be provided that contain all the information necessary to operate, maintain, and reinstall all GC/MS operating software and hardware in the system must be provided. Step by step instructions shall be provided to facilitate rebuilding the system in the event of a fatal computer system crash.

3.2.2.7. **Prior to GC/MS Component Acceptance**, the contractor shall provide copies of all source codes developed for the system, firmware and software used in the system, as well as one set of backup configuration software for the data acquisition, and system control / communication computer(s). All GC/MS programs shall be tested and fully operational before the GC/MS is accepted.

3.2.2.8. **Special Programing.** If any special programming software or programming software interface devices (such as hardware "keys", "dongles" or "PIC" modules) were required to access software, these programs and devices shall be included along with necessary registration information. If custom application software was written and provided, a copy of the required compiler (with license) shall be provided as well. At acceptance, all these items shall become property of the government. Any software purchased for this project shall be registered to Commander, Corpus Christi Army Depot, Corpus Christi, Texas 78419. Operational software updates following the GC/MS procurement will be installed through notification of CCAD, Information Technology Directorate. Information regarding acceptable CCAD software profiles may be discussed with [CCAD IT Specialists](#) .

3.2.2.9. **Certificate of Networkiness.** Networkiness certification ensures Automated Information Systems (AIS) utilizing the Army Network are developed in compliance with the Clinger Cohen Act and are secure, supportable, sustainable, and compatible with the Army Enterprise Infrastructure (AEI) (as defined in AR 25-IA). Each new AIS capability and all capability modifications/upgrades must be assessed to verify/validate its Networkiness (network security, network impact, compatibility with the infrastructure, infrastructure requirements, spectrum support, security policy compliance, JTA-A standards compliance, communications and information manpower, training, logistics support, schedule, and funding). The Contractor is responsible for completing a Request to Operate Networkiness COTS/GOTS checklist that will be supplied by the CCAD Information Technology Division. Once completed, the form shall be provided to the CCAD Information Technology Division.

3.2.3. Alternate Specifications. Proposals or specifications that deviate from those described herein shall be pre-coordinated for specific approval or rejection by the Government CCAD Information Technology representatives prior to shipment, installation, and acceptance of the equipment.

3.2.4. Installation.

3.2.4.1. **Cost.** The price of the GC/MS will include installation of the equipment and operations/maintenance training by certified field service personnel.

3.2.4.2. **Receiving.** The government will receive the GC/MS equipment at Corpus Christi Army Depot, Property Book Warehouse, Building 258 Door 58C2, Corpus Christi, TX 78419. The equipment will be off-loaded at site. The GC/MS will then be moved to the second floor of the MPED Laboratory, Room 207, in Bldg. 8. The contractor may be present and supervise the equipment move to the Laboratory or perform the off-loading function at the Laboratory if desired.

3.2.4.3. **Contractor Responsibilities.** Installation shall be the responsibility of the contractor to the extent specified herein. The contractor shall provide Corpus Christi Army Depot with any pre-installation or special instructions necessary to install the equipment within 30 days after the contract is awarded. This information shall be sent to Corpus Christi Army Depot, Materials and Process Engineering Division representative at 308 Crecy Street, Lab Stop 14 Corpus Christi TX 78419-5260. The contractor is responsible for equipment startup and pre-acceptance testing of the equipment.

3.2.4.4. **Site Placement.** Installation shall consist of connection (by properly qualified personnel) of all components and utilities necessary to bring the GC/MS system to production ready condition. Corpus Christi Army Depot will provide utilities to within 5 feet of the GC/MS. The contractor shall provide all cables, disconnects and connectors to connect with utilities and existing equipment necessary to provide a completely operational system capable of meeting the inspection and test requirements. Contractor shall also provide a purge or bleed valve if this is necessary for equipment use or maintenance. Corpus Christi Army Depot will provide an electrical disconnect box for hardwiring and provide gas to the site with approximately 250 pounds per square inch (psi) pressure.

3.2.4.5. **Installation Notification.** Installation shall be completed within thirty (30) calendar days of equipment delivery to CCAD.

3.2.4.6. **Site Visits.** Contractor will notify Corpus Christi Army Depot personnel, at least two weeks in advance, of any visits involving such official operations as installation, training, consultation, etc. Visits will be made during normal business hours between 0700 and 1500, Monday through Friday, excluding government holidays. Site visits may be arranged by contacting the Governments receiving point of contact at the Corpus Christi Army Depot during normal business hours.

3.2.4.7. **Security.** The contractor shall comply with all the security requirements as identified in the Corpus Christi Army Depot Security Requirements for Contract Personnel, 2001. See 4.0 Security Requirements of this document.

3.2.4.8. **Notification of Contractor Personnel Visit.** The contractor shall give the Governments receiving point of contact at the Corpus Christi Army Depot or the Government Project Engineer at least 2 weeks prior notice for each new visitor to the depot so that the security office can authorize the visitors.

3.2.4.9. **Site Clean Up.** The contractor shall contain all packaging and packing debris, including pallets, cardboard and paper after installation, to the immediate unpacking site. The contractor will specify if any packing boxes are to be kept for future shipment of components.

3.2.5. Operational Training.

3.2.5.1. **Training.** The contractor shall provide a minimum of two (2) days of training to designated MPED laboratory personnel at CCAD. After installation, the contractor shall include instructions for the operation of the GC/MS to its full operating capabilities, programming, routine maintenance, and simple trouble shooting techniques.

3.2.6. Manuals.

3.2.6.1. **GC/MS Operating Manuals.** Two complete sets of manuals for the GC/MS, written in the English language, shall be provided by the contractor upon delivery of the system. The manuals shall consist of operating, maintenance, programming and installation, and include a complete parts list including part numbers. Manuals are accepted in CD-ROM format if available.

3.2.6.2. **GC/MS PC Operational Program Manuals.** A complete set of instruction manuals shall be provided that contain all the information necessary to operate, maintain, and reinstall all software and hardware in the system. Step by step instructions shall be provided to facilitate rebuilding the system in the event of a fatal system crash.

3.3. Warranty and Maintenance.

3.3.1.1. **Warranty.** The equipment and supplies furnished under this SOW as well as all accessory modules shall be guaranteed for a period of time equal to the contractor's standard commercial warranty beginning the day of acceptance of equipment. The warranty shall cover 100 percent (%) of all the costs for parts and labor as well as other contingencies necessary to return the system to full operating capability.

3.3.1.2. **Maintenance.** Major assemblies and installed attachments shall be accessible for maintenance, inspection and repair using common tools. The inspection, adjustment, repair, and replacement of components and accessories shall be accomplished with minimum requirements and minimum disturbance to other components and accessories of the system.

3.3.2. Environmental Conditions and Restrictions.

3.3.2.1. **Temperature.** The GC/MS system shall be capable of operating in an ambient room temperature of between 10-30 °C (50 – 86 °F) with a relative humidity typically between 40% and 60% but possible brief transitions of up to 80%.

3.3.2.2. **Noise.** Operation of the GC/MS shall not subject personnel or operators to dB noise levels that exceed OSHA Section 1910.95 standards. Permissible noise exposure shall be based on OSHA time weighed average of over an eight (8) hour testing sound level of 84 dB level.

3.3.2.3. **Unacceptable Materials.** The system design shall not include polychlorinated biphenyls, asbestos or asbestos compounds, fragile or brittle materials not specifically approved by the procuring activity. The system design shall not utilize any Class I ozone depleting substances as defined by the Environmental Protection Agency, even if they are contained in a closed cooling system.

3.3.3. Safety.

3.3.3.1. **Electrical Equipment.** All electrical equipment shall be guarded and grounded to protect all persons and objects from electrical shock hazard. All electrical components and connections shall be in compliance with NEMA regulations and the National Electrical Code.

3.3.3.2. **Moving Parts.** All rotational or other moving parts shall be properly guarded.

3.3.3.3. **Circuit Test.** Each circuit of the electrical system shall be tested for dielectric strength, continuity, insulation, resistance and faulty grounds in accordance with (IAW) requirements of NEMAICS.

3.3.4. Quality Assurance Provisions.

3.3.4.1. **Responsibilities for Inspection.** Except as otherwise specified in the contract, the contractor may use his own or any other facilities suitable for the inspection of the equipment before installation. The Government reserves the right to perform any of the inspections set forth in the SOW when such action is deemed necessary to assure supplies and services conform to prescribed requirements.

3.3.4.2. **Quality Conformance Inspection.** Quality conformance inspection shall be applied to each item prior to being offered for acceptance under the contract.

3.3.4.3. **Examination.** The GC/MS shall be examined to determine compliance with the requirements set forth. The operational and performance testing shall be checked in accordance with manufacturer's standard test methods to determine compliance with the requirements.

3.3.4.4. **Operational Testing.** Functions of the GC/MS shall be checked IAW the manufacturer's standard operational procedures outlined in the manufacturer's operational manual. The checks shall include operating the system in each of its modes of operation to determine proper response of the system.

3.3.4.5. **Performance Testing.** The contractor shall demonstrate at Corpus Christi Army Depot that all components of the GC/MS system are functioning as specified in the contract. Testing shall include complete and satisfactory "running" of the system using government supplied parts at the Corpus Christi Army Depot. Performance testing shall be conducted during working hours between 0700 to 1530 hours, Monday through Friday, excluding Government holidays, by Government representatives. Each phase of equipment installation and testing shall be monitored by Government representatives to comply with all sections as specified in this SOW.

3.3.5. Acceptance.

3.3.5.1. **GC/MS Solicitation Offers** will be reviewed by MPED Laboratory Chemists before contract award to verify all specifications are being met.

3.3.5.2. **Acceptance Test.** Acceptance of the system shall be based upon a demonstration of the capabilities of the system during testing. Acceptance of the demonstration by government personnel will constitute an acceptable working system.

3.3.5.3. **Final Acceptance.** Final acceptance of the system will be made by a qualified Government representative (Contracting Officer's Representative) at CCAD after all testing has been completed satisfactorily.

3.3.6. Packing and Packaging.

3.3.6.1. **Preservation.** As a minimum, the equipment shall be preserved, packaged and parked in accordance with ASTM D3951-18, Standard Practice for Commercial Packaging. The packaging shall be accomplished in a manner that ensures adequate protection of the equipment against damage during shipment from the contractor's plant to the Government installation.

4. SECURITY REQUIREMENTS FOR ALL CONTRACTS PERFORMED AT CORPUS CHRISTI ARMY DEPOT

This document is a brief overview of rules and regulations of Naval Air Station Corpus Christi (NASCC) and Corpus Christi Army Depot (CCAD). It is not intended to be all-inclusive or cover all contingencies. Direct specific security requirements questions to the following numbers:

CCAD: (361) 961-3313

NASCC: (361) 961-2480

Regulations:

AR 25-1, Army Knowledge Management and Information Technology

AR 25-2, Information Assurance

AR 25-55, The Department of the Army Freedom of Information Act

AR 70-31, Standards for Technical Reporting

AR 190-13, Department of the Army Physical Security Program

AR 360-1, The Army Public Affairs Program

AR 380-5, Department of the Army Information Security Program

AR 380-10, Foreign Disclosure and Contact with Foreign Representatives

AR 380-49, Industrial Security Program

AR 530-1, Operations Security (OPSEC)

AR 530-1, AMC Security Operations Security (OPSEC)

AR 530-1, CCAD Plan Operations Security (OPSEC)

AMC-R 525-13, AMC Force Protection Program

DOD Directives 5230.24, Distribution Statements on Technical Documents

DOD Directives 5230.25, Withholding of Unclassified Technical Data from Public Disclosure

DOD 5400.11-R, Department of Defense Privacy Program

4.1. **Conduct and Behavior:** IAW DoD Directive 5200.8, "Security of DoD Installations and Resources", the NAS commander has broad authority to remove or exclude any person or persons from the military installation to protect personnel and property, to maintain good order and discipline, and to ensure the uninterrupted and successful performance of the installations mission. In the exercise of this authority, the commander may refuse to grant entry or may bar Contractor employees. Refusal of entry or barment of any employee does not relieve the Contractor of the responsibility to continue performance under this contract.

4.1.1 All personnel entering and working at CCAD are subject to all rules, regulations and applicable laws. All personnel and their effects are subject to search, to include vehicles and company belongings.

4.1.2 No person shall willfully fail or refuse to comply with lawful orders or direction of any civilian or military security police officer.

4.1.3. The Contractor shall not employ persons for work on this contract if such employees are identified to the Contractor by the Government as a potential threat to the health, safety, security, general wellbeing or operational mission of the installation and its population. Disrespectful behavior, failure to obey orders or regulations, fighting, horseplay, stealing, illegal use of drugs (using/transporting/selling), consuming or being under the influence of alcohol, or being in the possession of illegal weapons are prohibited and subject to appropriate penalties. This may include being detained, banned from entering the Government facility, or remanded to civilian authorities.

4.1.4. All Contractor personnel will limit their travel on the installation only to specific areas required for performance of the contract, specified break and meal areas, or in travel directly to and from these locations. Employees found on the installation away from officially identified areas may be detained and/or debarred from the installation.

4.1.5. Subcontracts; if the Contractor enters into a Subcontractor arrangement with another Contractor, the prime Contractor is responsible for Subcontractor performance and compliance. The prime Contractor must provide a copy of the security requirements to the subcontractor. The contracting officer must ensure any questions of adequacy of the Subcontractor are resolved to the mutual satisfaction of the prime Contractor, Subcontractor, security, and CCAD commander.

4.1.6. All prospective government and contractor employees are subject to a check of their criminal history prior to being granted access to CCAD. Adverse or derogatory information revealed by these checks, or failure to provide full disclosure, may result in denial of access.

5.2. **Support:**

5.2.1. Security support provided by CCAD to the Contractor includes (if applicable) storage containers for classified information/material, use of base destruction facilities, classified reproduction facilities, use of base classified mail services, security badging, base visitor control, investigation of security incidents, base traffic regulations, use of security forms, and conducting inspections required by DoD 5220.22-R "Industrial Security Regulation", Army Instruction 380-49 "Industrial Security Program", AR 380-5 "Department of Army Information Security Program", and AR 25-2 "Information Assurance" and others as required or deemed necessary by the Government.

5.2.2. Security support requiring joint Army and Contractor coordination includes packaging classified information, mailing and receiving classified materials, implementing emergency procedures for protection of classified

information, security checks, and internal security controls for protection of classified material, sensitive material, and high value pilfer able property.

5.3. Security Investigation Requirements: (As Applicable)

5.3.1. Contractors must maintain the same level investigation or higher as their civilian counterparts. In the absence of a civilian counterpart, CCAD Security will determine the level of investigation based on a position sensitivity review. Close coordination with the COR and company are required.

5.3.2. Classified Contracts: An interim clearance must be in place prior to entering CCAD facilities. All documentation (i.e. SF 86, etc.) required for security clearance shall be processed through the Contractor Facility Security Office (FSO).

5.3.2.1 For all contracts involving employees who require a security clearance for performance of their duties or access to classified material, the Contractor must possess or obtain a facility security clearance prior to performing contract work. If the Contractor does not possess a facility clearance, the Government (Contracting Office) may request one from the Defense Security Service (DSS).

5.3.2.2. Contractor employees without a clearance level or background check properly indicated in the Joint Personnel Adjudication System (JPAS), or with other security concerns, will not be assigned to this task directly or indirectly. Contractor employee(s) will not be authorized access, regardless of personal clearance, without the facility first being cleared to the appropriate level by Defense Security Service (DSS).

5.3.3.1. The Contractor shall request security clearances for personnel requiring access to classified information or IT Level I or II within 15 days after receiving a facility clearance. If the Contractor is already cleared, they shall request security clearances for the personnel within 15 days after contract award. Due to costs involved with security investigations, requests for Contractor employee security clearances shall be kept to an absolute minimum necessary to perform contract requirements.

5.3.3.1.1 IT Level I positions; Contractor employees shall have one of the following prior to commencing work: A current, valid Single Scope Background Investigation (SSBI) indicated in JPAS or Granted "Interim" Top Secret eligibility by Defense Industrial Security Clearance Office (DISCO) indicated in JPAS.

5.3.3.1.2. IT Level II positions; Contractor employees shall have one of the following prior to commencing work: A favorably completed National Agency Check with Law and Credit (NACLC) background investigation indicated in JPAS or granted "Interim" Secret eligibility by DISCO indicated in JPAS.

5.3.3.1.3. IT Level III positions; Contractor employees shall have one of the following prior to commencing work: A favorably completed National Agency Check with Law and Credit (NACLC) background investigation indicated in JPAS or granted "Interim" Secret eligibility by DISCO indicated in JPAS.

5.3.4. Unclassified Contracts requiring IT access: All documentation (i.e. SF 85P, etc.) required for their initial security appointment for unclassified contracts to IT Level III shall be processed through the CCAD Security Pass and ID Office prior to entering CCAD facilities.

5.3.4.1. IT Level III positions; Contractor employees requiring access to CCAD Local Area Network (LAN) shall have favorably completed NACI (National Agency Check Plus Written Inquires and Credit Check) background investigation processed through CCAD Personnel Security Office. If the Contractor employee does not possess a NACI, the Government (Contracting Office) will request one. The Government assumes costs and initiates the NACI investigations by submitting the appropriate Personnel Security Investigation request to the Army Center of Excellence. Minimum requirements for CAC issuance and access to the LAN are an initiated NACI with a favorable FBI fingerprint check. Due to costs and the inherent delays involved with security investigations, requests for Contractor LAN access shall be kept to an absolute minimum necessary to perform contract requirements.

5.3.5. Fitness Issues:

5.3.5.1. The Contracting Officer Representative (COR) and Contractor will be notified when discovery of adverse information indicates potentially actionable issues which may disqualify the Contractor employee from access.

5.3.5.2. OPM Memorandum, Final Credentialing Standards for Issuing Personal Identity Verification Cards under HSPD-12 provides government-wide credentialing standards to be used by all Federal departments and agencies in determining whether to issue or revoke personal identity verification (PIV) cards to employees and contractor personnel.

5.3.5.3. Whether or not to grant access is the sole discretion of the Government. The decision not to grant access will not be grounds for contract modification and shall not constitute an excuse for Contractor performance failure.

5.3.6. System Authorization Access Request (SAAR): Prior to system access, a SAAR, DD Form 2875, System Authorization Action Requirement, shall be completed by the Contractor employee and Contractor security manager. The Contractor employee shall complete Part I, the COR shall complete Part II, and CCAD Personnel Security shall complete Part III.

5.3.6.1. **Unclassified Contracts NOT requiring IT access:** Contracts not requiring access to CCAD LAN shall be subject to installation access requirements that include Rapid Gate and/or guest sponsorship. The COR shall provide the appropriate details and contact information.

5.4. IT/IA Requirements:

5.4.1. All contract employees with access to the CCAD network must be registered in the Army Training Certification Tracking System (ATCTS) at commencement of services. Contractors and associated subcontractor employees must also complete DoD IA Awareness Training before they can be granted access to the CCAD network and complete the training annually thereafter.

5.4.2. All contractors working IA/IT functions must comply with DoD and Army training requirements in DoD 8570.01, DoD 8570.01-M, and AR 25-2 within 6 months of employment.

5.4.3. Per DoD 8570.01-M, DFARS 252.239.7001, and AR 25-2, the contractor employees' supporting IA/IT functions shall be appropriately certified upon contract award. The baseline certification, as stipulated in DOD 8570.01-M, must be completed upon contract award.

5.5. Foreign Nationals:

5.5.1. **Official Visits:** All official foreign visits (visits sponsored by a foreign government) must be based on a legitimate need, be sanctioned by the appropriate foreign attaché or embassy, and approved through Department of Army channels. Access will be coordinated through the CCAD Foreign Disclosure Officer (FDO), COR, and respective NASCC/CCAD security offices.

5.5.2. **Unofficial Visits:** These are visits by foreign nationals that are not endorsed by a foreign government. The Contractor will submit a request for employee access, based on a legitimate need, to the appropriate COR. The COR will in turn notify the FDO of the request. Due to security considerations, requests for these types of visits should be kept to a minimum. Foreign nationals will require a government escort at all times while on CCAD property. The COR will ensure the foreign contractor employee provides a copy of their passport to NASCC and CCAD security offices, to ensure the appropriate background checks are completed. NOTE: Properly validated permanent resident alien registration card holders are exempt from this requirement.

5.6. **Notifications:** The following information will be submitted to the COR and the CCAD Security Manager on company letterhead, signed by the Contractor Facility Security Officer (FSO) within 15 days of awarding the contract. An updated listing shall be provided annually or when the company or an employee's status or information changes. Electronic equivalents are acceptable. The notification shall include:

- a) Name, address, and telephone number of company representatives.
- b) Employee's name, social security number, level of security clearance, and date of investigation.
- c) The contract number and contracting agency.
- d) The highest level of classified information to which Contractor employees require access.
- e) The location(s) of contract performance.
- f) The date contract performance begins and terminates.

5.7. **Security Point of Contact:** At no cost to the Government, the Contractor shall appoint a senior Contractor employee to serve as an on-site point of contact for any security concerns at the CCAD location. This may be a full time position or an additional duty position.

5.8. Security Training:

5.8.1. All contractor employees, including subcontractor employees, requiring access to Army installations, facilities, or controlled access areas shall complete AT Level I awareness training within 30 calendar days after contract start date or effective date of incorporation of this requirement into the contract, whichever applies. The contractor shall submit certificates of completion for each affected contractor employee and subcontractor employee to the COR (or to the contracting officer, if a COR is not assigned) within 30 calendar days after completion of training by all employees and subcontractor personnel. AT Level I awareness training is available at <https://atlevel1.dtic.mil/at>. (CDRL A011)

5.8.2. US-based contractor and subcontractor employees who are required to travel overseas in performance of their duties must receive government provided AT awareness training that is specific to the area of responsibility (AOR), as directed by AR 525-13. Specific AOR training content will be directed by the combatant commander and the unit ATO will ensure an applicable AT foreign travel briefing is provided to the contractor.

5.8.3. The contractor and all associated subcontractors shall brief all employees on the local iWATCH program. This locally developed training will be used to inform employees of the types of behavior to watch for and instruct employees to report suspicious activity to the COR. This training shall be completed within 30 calendar days of

contract award and within 30 calendar days of new employees' commencing performance, with the results reported to the COR no later than 30 days after training completion. The Army OneSource website provides information on the iWatch program at <http://www.myarmyonesource.com/familyprogramsandservices/iwatchprogram/default.aspx>.

5.8.4. Those contractors who require a CAC Card and access to the CCAD network, they contractor must develop an OPSEC Standing Order Procedure (SOP)/Plan within 90 days of contract award, which will be reviewed by the CCAD OPSEC Officer for approval IAW AR 530-1, Operations Security. The SOP/Plan must identify CCAD's critical information, why it needs to be protected, where it is located, who's responsible for it, and how to protect it. In addition, the contract must appoint an OPSEC Coordinator and ensure this individual achieves OPSEC Level II certification IAW AR 530-1 para 2-3.

5.8.5. IAW AR 530-1, new contractor and associated subcontractor employees who require a CAC Card and access to the CCAD network must complete Level I OPSEC training within 30 calendar days of reporting for duty. In addition, all contractor and associated subcontractors must complete annual OPSEC awareness training.

5.9. **Pass and Identification Items:** The Contractor shall obtain the pass and identification items for employees and Contractor owned vehicles required for contract performance.

5.10. **Retrieving Identification Media:** The Contractor shall retrieve all identification media, including vehicle passes from employees who depart for any reason before the contract expires; e.g. terminated for cause, retirement, etc. and surrender to security or the COR as appropriate.

5.11. **Weapons, Firearms, and Ammunition:** Contractor employees are prohibited from possessing weapons, firearms, or ammunition, on themselves or within their Contractor-owned vehicle or privately-owned vehicle while on CCAD.

5.12. **Safeguarding Classified or Sensitive Information:** Any material marked as Top Secret, Secret, Confidential, For Official Use Only (FOUO) Freedom of Information Act (FOIA), Privacy Act Information, or any other restrictively marked material discovered by the Contractor or Contractor employees will be surrendered at the earliest opportunity to any military or DOD employee of the installation. Under no circumstances will the Contractor retain such material. The Contractor and all Contractor employees will execute a SF 312, Classified Information Non-Disclosure Agreement or equivalent CCAD Non-Disclosure Agreement as directed or required.

5.12.1. **Classified:** Visitor Groups will safeguard classified information IAW DoD 5200.1-R, DoD Information Security Program, AR 380-5, Department of the Army Information Security Program, AR 380-49, Industrial Security Program, and other directives deemed necessary by the Servicing Security Activity (SSA)

5.12.2. **Information Systems (IS):** All Contractor personnel will protect and restrict access to all documentation (i.e. maps, test and evaluation results, vulnerability assessments, audits, results, or findings) describing operational IS architectures, designs, configurations, vulnerabilities, address listings, or user information.

5.12.3. **FOR OFFICIAL USE ONLY (FOUO):** The Contractor shall comply with DoD 5400.7-R, Chapter 4, DoD Freedom of Information Act (FOIA) Program requirements and AR 25-55, Chapter III and Chapter IV, The Department of the Army Freedom of Information Act Program. These regulations set forth policy and procedures for the disclosure of records to the public and for marking, handling, transmitting, and safeguarding FOUO material.

5.12.4. **Privacy Act:** All data associated with this task is covered by the Privacy Act of 1974, Title 5 of the U.S. Code, Section 552a and applicable CCAD rules and regulations. Violation of the Act may involve the imposition of criminal penalties. Therefore, all Contractor personnel assigned shall take appropriate actions to prevent unauthorized disclosure of Privacy Act information.

5.12.5. **Operation Security (OPSEC):** Contractor personnel must protect information that has been designated as critical to the CCAD mission from disclosure. Critical information will only be disseminated on a "need-to-know" basis and not be discussed in public areas such as hallways, bathrooms, eateries, smoke shacks, or any off-base gathering locations. Contractor employees will not pass critical information over unsecured telephones, facsimiles, and/or e-mail outside of the CCAD firewall. Contractor employees will not post critical information on the web, personal "blogs," or where it is visible to visitors or the public.

5.12.6. **Proprietary Information:** Information and materials developed at CCAD are considered business sensitive and must be protected from unauthorized disclosure. This information is the sole property of CCAD and must not be revealed or used except in contract performance. Distribution is limited to authorized US Government agencies and identified Contractors. Contractor personnel must receive prior authorization from the CCAD Public Affairs Officer (PAO) to disseminate CCAD information.

5.13. **Reporting Requirements:** Contractor personnel shall report to an appropriate authority any information or circumstances of which they are aware may pose a threat to the security of personnel, resources, and classified or unclassified defense information. Contractor employees shall be briefed by their immediate supervisor upon initial on-base assignment.

5.14. **Physical Security:** The Contractor shall be responsible for safeguarding all Government property and controlled forms provided for Contractor use. At the end of each work period, all Government facilities, equipment, and materials shall be secured.

5.15. **Key Control:** The Contractor shall establish and implement methods of making sure all keys issued to the Contractor by the Government are not lost or misplaced and are not used by unauthorized persons. The Contractor shall not duplicate any keys issued by the Government.

5.15.1. The Contractor shall immediately report to security, the Quality Assurance Evaluator (QAE), and Program Manager any occurrences of lost or duplicated keys.

5.15.2. In the event keys, other than master keys, are lost or duplicated, the Contractor may be required, upon written direction of the contracting officer, to re-key or replace the affected lock or locks at no cost to the Government. The Government may, however, at its option, replace the affected lock or locks or perform re-keying and deduct the cost of such assistance from payment due the Contractor. In the event a master key is lost or duplicated, all locks and keys for that system shall be replaced by the Government and the total cost deducted from payment due the Contractor.

5.15.3. The Contractor shall prohibit the use of keys, issued by the Government, by any persons other than the Contractor's employees and the opening of locked areas by Contractor employees to permit entrance of persons other than Contractor employees engaged in performance of contract work requirements in those areas.

5.16. **Lock Combinations:** The Contractor shall control access to all Government provided lock combinations to preclude unauthorized entry. The Contractor is not authorized to change lock combinations without written approval by the Government Program Manager. Records with written combinations to authorized secure storage containers, secure storage rooms, or certified vaults, shall be marked and safeguarded at the highest classification level as the classified or sensitive material maintained inside the approved containers or room.

5.17. **Other Responsibilities:**

5.17.1. **Traffic Rules and Regulations:** All personnel will abide by all traffic and parking rules and regulations. Failure to abide may result in issuance of Government citations.

5.17.1.2. Permission to park company support vehicles within the perimeters of the job must be approved in advance by the COR and Security. Company support vehicles must have company identification.

5.17.2. **Identification:** CCAD requires Contractor personnel wear a Government issued identification badge provided by CCAD. Safety restrictions may require the pass to be removed while working, but it **must be worn in plain view**, above the waist, when away from the job site. Failure to do so is a violation of security regulations and may result in disciplinary action.

5.17.3. **Visitors:** Contractor personnel must clear all visitors in advance through the COR. This includes Contractor personnel and personal guests. All foreign national visitors will be identified to the appropriate authorities, be based on a legitimate need, and are only allowed at the discretion of the installation commander.

5.17.4. **Photography:** All photographic or video equipment must be cleared in advance through the COR and personnel must be issued a Camera Pass from PAO.

5.17.4.1. Photographs, video, drawings, blueprints, or any other type of rendering or measurements unrelated to contract performance of sensitive areas, such as critical resources, controlled or restricted areas, or other areas deemed sensitive by the Government is strictly prohibited. The Government reserves the right to seize equipment used for unauthorized purposes and the employee and/or Contractor may be debarred from the base, detained, reported and/or remanded to civilian authorities, or have other sanctions placed against them.

5.17.4.2. Transfer of digitized or electronic photographs, video, drawings, blueprints, or any other type of rendering or measurements must be coordinated/requested through the CCAD information assurance office.

5.17.5. **Weekends /After Duty Hours:** Notice of weekend/after duty hours scheduled work must be submitted to Security through the COR. Personnel working weekend or after duty hours must check in and out with Security Building access support to job sites must be arranged with the COR. Keys to areas are obtained by the COR. Requesting areas to be unlocked by personnel other than contract representatives is not authorized.

5.17.6. **Barricades/Construction Areas:**

5.17.6.1. Designating construction areas is Contractor's responsibility and must be coordinated in advance through the COR, Safety, CCAD Fire Marshall, and CCAD Security. Work (construction) areas will be secured at the end of each day. All doors and windows must be closed and locked, and lights and electrical equipment turned off.

5.17.6.2. All Contractor property locks and keys must be properly secured. The Government is not responsible for personal property left unattended or unsecured.

5.17.6.3. CCAD Security is to be notified of all emergencies, accidents, disturbances, etc. (as soon after the event as is reasonably possible) or requests for Security related assistance. CCAD Security will make the appropriate calls for proper authorities.

5.17.6.4. All personnel will abide by all applicable safety procedures and responsibilities. Smoking in areas other than authorized areas located throughout the Depot is prohibited.

5.17.6.5. Opening or blocking doors, entering non-job related areas without permission or clearance, or removing tools or other Government equipment without proper permission is not permitted. Government buildings and property will not be left unattended and unsecured.

6.0 IT AND INDUSTRIAL SYSTEM REQUIREMENTS

6.1 **Physical Environment Specifications:** Any equipment provided shall be able to operate in the environment it will be placed within. Temperature, humidity, and the use of harsh chemicals or liquids in designated installation areas may dictate the use of appropriate National Electrical Manufacturers Association (NEMA) rated enclosures and certified equipment. These same conditions will dictate the use of rugged peripheral equipment. Cabinets containing “industrial computer systems” shall meet with the following specifications: they shall maintain an average maximum internal operating temperature of less than 95 degrees Fahrenheit with a sustained average external temperature of up to 115 degrees Fahrenheit. The cabinets shall also provide for a maximum internal average humidity of 80% when the external average humidity is 98%.

6.2 **Computer Hardware Specifications:** All modified industrial computer systems installed at CCAD must be connected to and communicate through the CCAD Industrial Local Area Network (ILAN). Standard desktop Industrial computer systems will be provided by the Corpus Christi Army Depot (CCAD). If CCAD is providing the computer systems, the contractor shall provide CCAD IT with a detailed list of required equipment specifications. CCAD will use these specifications to determine whether the use of a standard system is feasible. When CCAD cannot provide the required hardware (e.g. rack mounted and integrated systems) the contractor shall provide them. If the contractor is providing the computer systems, they must meet the following minimum requirements:

- 1) Intel Core i5-5675C or better
- 2) System clock speed must be 3.3 Ghz or better
- 3) Random Access Memory must be 8GB or better (1DIMM)
- 4) Windows Aero-capable graphics card with 1GB VRAM
- 5) 500GB SATA drive with 16MB cache
- 6) DVD-RW/CD-RW
- 7) RJ-45 and Wireless capable Network Interface Card (NIC)

6.3 **Peripheral equipment:** Will be capable of generating data output onto a dedicated computer system through either a standard serial cable connection (e.g. USB, RS-232) or an Ethernet connection. If an Ethernet connection is used to interconnect a dedicated PC to peripheral equipment, the contractor shall supply an extra Network Interface Card (NIC). The NIC must have a RJ-45 port to allow an ANSI Standard 802.3, 100Base-T, or an IEEE 802.3ah, 1000Base-T Ethernet connection which supports the full Transmission Control Protocol/Internet Protocol (TCP/IP) stack implemented by firmware.

6.4 **Operating System (OS) Specifications:** The OS must be Microsoft Windows 7, Windows Server 2012R2, or RedHat Linux version 5. Any OS supplied with the system must contain all necessary service packs, updated patches, and hot fixes.

6.5 **Army Gold Master:** The Army Golden Master (AGM) is a collection of security settings for Microsoft Operating systems that must be applied to all Army computer systems. The AGM will be supplied to the

contractor by CCAD. The contractor is responsible for the installation of the AGM and ensuring their software runs as intended.

6.6 Security Technical Implementation Guides (STIGs): STIGs are the configuration standards for the Department of Defense and contain technical guidance to lock down Information Systems (IS) and software applications that might otherwise be vulnerable to malicious attacks. The contractor shall be responsible for ensuring all appropriate STIGs are implemented and their software runs acceptably.

6.7 System Software Specifications: Industrial systems are required to interact with other network resources on the CCAD ILAN. These systems shall be capable of connecting to and communicating through a windows based network and must operate using domain-level user accounts through Active-Directory. All supplied software must be capable of operating in a multi-user environment and data which contains permissions information shall be hidden from view and inaccessible to those with less than administrator level access. Shared accounts shall not be used, and users shall only be authorized the minimum-security rights to operate the application software. Users will not have access to system or software configuration items (e.g., Control Panel, software and hardware installation). Under no circumstances will the intended end user log in using the Administrator or Root account for routine operation of the equipment. The use of these accounts will be restricted to only administrative activities which will be carried out by CCAD Information Technology personnel. All software products shall employ a minimum of three permission based levels of access.

- 1) *Administrator* - Full control at root level, restricted to CCAD IT personnel and when required, the contractor or vendor
- 2) *Maintenance* - Mid-level control required to perform maintenance and alter control parameters as needed
- 3) *Operator* - Minimum control necessary to perform the routine operation of software. The Operator shall not be able to alter the programming of software, make changes to executable files, or modify control parameters

6.8 Software Installations: Any application code installed at CCAD must be installed in a standard container (i.e., Program Files) and be located in a volume separate from the standard System Files. Interactive applications are required to run as services and daemons and any time WEB services are used, file types (e.g., XML, HTML) must be separated.

6.9 Software Licensing: All licensing for computers, control units e.g., Programmable Logic Controllers, or other IT systems will be surrendered to the Information Technology Configuration Manager and will become the property of the Government upon acceptance of the system.

6.10 Applications: If applications such as McAfee Anti-Virus or any other application will interfere with the operation of the system, then a written statement must be provided to the CCAD IT Directorate explaining the technical restrictions.

6.11 Prior to acceptance: If the software has been customized for CCAD's use or is other than Commercial Off The Shelf (COTS); the contractor shall provide copies of all source code, firmware and software used in the system, as well as one set of backup and configuration software for PLC's, control and communication computers, and data acquisition. All programs shall have been tested and fully operational.

6.12 Special Programing: If any special programming software or programming software interface devices (such as hardware "keys", dongles or "PIC" modules) were required to access software, these programs and devices shall be included along with necessary registration information. If custom application software

was written and provided, a copy of the required compiler and compiler license shall be provided as well. At acceptance, all these items shall become property of the government. Any software or hardware purchased for this project shall be registered to Commander, Corpus Christi Army Depot, Corpus Christi, Texas 78419.

6.13 Certificate of Networthiness (CoN): Networthiness certification ensures Automated Information Systems (AIS) utilizing the Army Network are developed in compliance with the Clinger Cohen Act and are secure, supportable, sustainable, and compatible with the Army Enterprise Infrastructure (AEI) (as defined in AR 25-1). All new AIS capabilities and all capability modifications and upgrades must be assessed to validate their Networthiness (network security, network impact, compatibility with the infrastructure, infrastructure requirements, spectrum support, security policy compliance, JTA-A standards compliance, communications and information manpower, training, logistics support, schedule, and funding). The contractor shall work with CCAD IT Department personnel to ensure a Certificate of Networthiness is requested and all documentation is submitted.

6.14 Programmable Logic Controllers (PLC)'s: Any PLC installed at CCAD shall be manufactured by Allen Bradley and must provide an Ethernet Connection to allow for connection to the Industrial Network. If an Ethernet connection is used to interconnect the PLC to peripheral equipment an additional Ethernet Port must be provided.

6.15 Documentation Requirements: A complete set of instruction manuals shall be provided that contain all the information necessary to operate, maintain, and reinstall all software and hardware in the system. Step by Step instructions shall be provided to facilitate the rebuilding of the system in the event of a fatal system crash. The vendor or contractor shall also provide network design drawings to both the Information Technology Industrial Automation group and Information Technology Operations Division. These drawings should include complete data flow diagrams which are sufficient for system familiarization and troubleshooting. The vendor or contractor shall provide to Industrial Automation at least two electronic copies of all control unit programs. These copies should include description files of the ladder logic and any cabling required to connect to the control systems. No control units will be password protected and no other form of lockout measure shall be implemented by anyone other than CCAD IT employees. The vendor or contractor shall also provide electrical wiring diagrams for all installed control systems to the CCAD Industrial Automation group.

6.16 Proposals or Specifications: Deviations from those described herein shall be coordinated for specific approval or rejection by Government CCAD Information Technology representatives prior to shipment, installation, and acceptance of the equipment.

52.212-2 EVALUATION--COMMERCIAL PRODUCTS AND COMMERCIAL SERVICES (NOV 2021)

(a) The Government will award a contract resulting from this solicitation to the responsible offeror whose offer conforming to the solicitation will be most advantageous to the Government, price and other factors considered. The following factors shall be used to evaluate offers:

Technical capability of the equipment to meet the Statement Of Work requirements and price.

(b) Options. The Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement. The Government may determine that an offer is unacceptable if the option prices are significantly unbalanced. Evaluation of options shall not obligate the Government to exercise the option(s).

(c) A written notice of award or acceptance of an offer, mailed or otherwise furnished to the successful offeror within the time for acceptance specified in the offer, shall result in a binding contract without further action by either party. Before the offer's specified expiration time, the Government may accept an offer (or part of an offer), whether or not there are negotiations after its receipt, unless a written notice of withdrawal is received before award.

(End of provision)

(End of Summary of Changes)