

AWARD/CONTRACT		1. This Contract Is A Rated Order Under DPAS (15 CFR 700)	Rating DOA4	Page 1	Of 46	Pages
2. Contract (Proc. Inst. Ident.) No. W56HZV-14-C-0049		3. Effective Date 2014SEP05	4. Requisition/Purchase Request/Project No. SEE SCHEDULE			
5. Issued By U.S. ARMY CONTRACTING COMMAND TROY HAARALA WARREN, MICHIGAN 48397-5000 HTTP://CONTRACTING.TACOM.ARMY.MIL		Code W56HZV	6. Administered By (If Other Than Item 5) DCMA CHICAGO 1523 WEST CENTRAL ROAD BLDG 203 ARLINGTON HEIGHTS IL 60005-2451		Code S1403A	
e-mail address: TROY.R.HAARALA.CIV@MAIL.MIL		7. Name And Address Of Contractor (No., Street, City, County, State and Zip Code) THERMOANALYTICS, INC. 23440 AIRPARK BLVD CALUMET, MI 49913-9233		8. Delivery <input type="checkbox"/> FOB Origin <input checked="" type="checkbox"/> Other (See Below)		
Code 06NK7		Facility Code		9. Discount For Prompt Payment		
11. Ship To/Mark For SEE SCHEDULE		Code	12. Payment Will Be Made By DFAS-COLUMBUS CENTER DFAS-CO WEST ENTITLEMENT OPERATIONS P.O. BOX 182381 COLUMBUS, OH 43218-2381		Code HQ0339	
13. Authority For Using Other Than Full And Open Competition: <input type="checkbox"/> 10 U.S.C. 2304(c)() <input type="checkbox"/> 41 U.S.C. 253(c)()		14. Accounting And Appropriation Data SEE SECTION G				
15A. Item No.	15B. Supplies/Services	15C. Quantity	15D. Unit	15E. Unit Price	15F. Amount	
SEE SCHEDULE						
15G. Total Amount Of Contract →					\$543,961.00	

16. Table Of Contents

(X)	Sec.	Description	Page(s)	(X)	Sec.	Description	Page(s)
Part I - The Schedule				Part II - Contract Clauses			
X	A	Solicitation/Contract Form	1	X	I	Contract Clauses	25
X	B	Supplies or Services and Prices/Costs	4	Part III - List Of Documents, Exhibits, And Other Attachments			
X	C	Description/Specs./Work Statement	10	X	J	List of Attachments	46
X	D	Packaging and Marking	16	Part IV - Representations And Instructions			
X	E	Inspection and Acceptance	17		K	Representations, Certifications, and Other Statements of Offerors	
X	F	Deliveries or Performance	18		L	Instrs., Conds., and Notices to Offerors	
X	G	Contract Administration Data	19		M	Evaluation Factors for Award	
X	H	Special Contract Requirements	23				

Contracting Officer Will Complete Item 17 (Sealed-Bid or Negotiated Procurement) Or 18 (Sealed-Bid Procurement) As Applicable

17. <input checked="" type="checkbox"/> Contractor's Negotiated Agreement (Contractor is required to sign this document and return 2 signed copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents: (a) this award/contract, (b) the solicitation, if any, and (c) such provisions, representations, certifications, and specifications, as are attached or incorporated by reference herein. (Attachments are listed herein.)		18. <input type="checkbox"/> Sealed-Bid Award (Contractor is not required to sign this document.) Your bid on Solicitation Number _____, including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the items listed above and on any continuation sheets. This award consummates the contract which consists of the following documents: (a) the Government's solicitation and your bid, and (b) this award/contract. No further contractual document is necessary. (Block 18 should be checked only when awarding a sealed-bid contract.)	
19A. Name And Title Of Signer (Type Or Print)		20A. Name Of Contracting Officer JACLYN FLEWELLING JACLYN.M.FLEWELLING.CIV@MAIL.MIL (586)282-6730	
19B. Name of Contractor	19c. Date Signed	20B. United States Of America	20C. Date Signed
By _____ (Signature of person authorized to sign)		By _____ /SIGNED/ (Signature of Contracting Officer)	2014SEP05

Name of Offeror or Contractor: THERMOANALYTICS, INC.

SECTION A - SUPPLEMENTAL INFORMATION

Buyer Name: TROY HAARALA
 Buyer Office Symbol/Telephone Number: CCTA-ASG-C/(586)282-7873
 Type of Contract: Cost Plus Fixed Fee
 Kind of Contract: Research and Development Contracts
 Type of Business: Other Small Business Performing in U.S.
 Surveillance Criticality Designator: C
 Weapon System: No Identified Army Weapons Systems

*** End of Narrative A0000 ***

	<u>Regulatory Cite</u>	<u>Title</u>	<u>Date</u>
A-1	52.204-4850	ACCEPTANCE APPENDIX	SEP/2008
<p>(a) Contract Number W56HZV-14-C-0049 is awarded to ThermoAnalytics, Inc.</p> <p>(b) The contractor, in its proposal, provided data for various solicitation clauses, and that data has been added in this contract.</p> <p>(c) Any attachments not included within this document will be provided by Army Contracting Command - Warren directly to the administrative contracting officer (ACO) via e-mail, as required. Technical data packages that are only available on CD-ROM will be mailed by Army Contracting Command - Warren to the ACO. Within one week of this award, any office not able to obtain attachments from the Army Contracting Command - Warren website (https://contracting.tacom.army.mil/) and still requiring a copy, can send an email request to the buyer listed on the front page of this contract.</p> <p>(d) The following Amendment(s) to the solicitation are incorporated into this contract: N/A</p> <p>(e) Other changes from the solicitation and results of negotiations include:</p> <ol style="list-style-type: none"> 1. At Paragraph B.5.1.1, the option rate schedule is populated with hourly rates. NOTE: Total Hourly Rates include all labor costs, burdened with indirect costs and fixed fee. 2. The total funded amount of the contract is \$543,961.00, as detailed in CLINs 0001 and 0002. <p>(f) The contractor by signing block 19 agrees to these terms.</p> <p style="text-align: center;">[End of Clause]</p>			

A-2	52.201-4000	ARMY CONTRACTING COMMAND-WARREN (DTA) OMBUDSPERSON	APR/2011
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Information regarding the Ombudsperson for this contract is located at the following website:
<http://contracting.tacom.army.mil/acqinfo/ombudsperson.htm>

[End of Provision]

A-3	52.204-4024	NOTICE OF RANDOM ANTITERRORISM MEASURES PROGRAM (RAMP)	JUN/2014
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In accordance with AR 525-13, Contractor personnel working on an Army installation, arsenal, base or other DoD facility (owned or leased by DoD/Department of the Army), are subject to participation in Installation RAMP security program (e.g. vehicles searches, wearing of ID badges, etc).

(End of Notice)

A-4	52.209-4025	NOTICE OF TRAINING OPPORTUNITIES AT THE DETROIT ARSENAL	MAR/2013
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The contractor is notified that in accordance with training requirements required in the performance of this solicitation, and subsequent contract, that the G2 Office of TACOM LCMC can provide the following training upon request to contracting personnel. This

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-14-C-0049 MOD/AMD	Page 3 of 46
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Name of Offeror or Contractor: THERMOANALYTICS, INC.

opportunity is extended to all contractor personnel performing at the Detroit Arsenal and TACOM LCMC Organizations, including Selfridge Air National Guard Base.

Training is available for AT/OPSEC requirements including but not limited to: iWatch Training, Annual Security Training, and OPSEC Training as part of Annual Security training.

Contractors should make requests for training to the buyer listed on this solicitation and contract.
(End of Notice)

CONTINUATION SHEET

Reference No. of Document Being Continued
 PIIN/SIIN W56HZV-14-C-0049 MOD/AMD

Name of Offeror or Contractor: THERMOANALYTICS, INC.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT									
0001AB	<p><u>LABOR - BASE EFFORT</u></p> <p>1</p> <p>SERVICE REQUESTED: MUSES SOFTWARE DEVELOPMENT CLIN CONTRACT TYPE: Cost Plus Fixed Fee PRON: 724209RD72 PRON AMD: 01 ACRN: AB PSC: AC43</p> <p><u>Inspection and Acceptance</u> INSPECTION: Destination ACCEPTANCE: Destination</p> <p><u>Deliveries or Performance</u> Period of Performance Start Date: 05-SEP-2014 End Date: 04-SEP-2015</p> <table border="0"> <tr> <td>DLVR SCH</td> <td></td> <td>PERF COMPL</td> </tr> <tr> <td><u>REL CD</u></td> <td><u>QUANTITY</u></td> <td><u>DATE</u></td> </tr> <tr> <td>001</td> <td>1</td> <td>04-SEP-2015</td> </tr> </table> <p>\$ 92,500.00</p>	DLVR SCH		PERF COMPL	<u>REL CD</u>	<u>QUANTITY</u>	<u>DATE</u>	001	1	04-SEP-2015	1	LO	<p>Estimated Cost \$ 87,264.00 Fixed Fee \$ 5,236.00 Not to Exceed (Funding) \$ 92,500.00</p>	
DLVR SCH		PERF COMPL												
<u>REL CD</u>	<u>QUANTITY</u>	<u>DATE</u>												
001	1	04-SEP-2015												
0001AC	<p><u>LABOR - BASE EFFORT</u></p> <p>1</p> <p>SERVICE REQUESTED: MUSES SOFTWARE DEVELOPMENT CLIN CONTRACT TYPE: Cost Plus Fixed Fee PRON: R33JS016R3 PRON AMD: 01 ACRN: AC AMS CD: 633130DS800 PSC: AC43</p> <p><u>Inspection and Acceptance</u> INSPECTION: Destination ACCEPTANCE: Destination</p> <p><u>Deliveries or Performance</u> Period of Performance Start Date: 05-SEP-2014 End Date: 04-SEP-2015</p> <table border="0"> <tr> <td>DLVR SCH</td> <td></td> <td>PERF COMPL</td> </tr> <tr> <td><u>REL CD</u></td> <td><u>QUANTITY</u></td> <td><u>DATE</u></td> </tr> <tr> <td>001</td> <td>1</td> <td>04-SEP-2015</td> </tr> </table> <p>\$ 263,097.00</p>	DLVR SCH		PERF COMPL	<u>REL CD</u>	<u>QUANTITY</u>	<u>DATE</u>	001	1	04-SEP-2015	1	LO	<p>Estimated Cost \$ 248,205.00 Fixed Fee \$ 14,892.00 Not to Exceed (Funding) \$ 263,097.00</p>	
DLVR SCH		PERF COMPL												
<u>REL CD</u>	<u>QUANTITY</u>	<u>DATE</u>												
001	1	04-SEP-2015												

CONTINUATION SHEET

Reference No. of Document Being Continued
 PIIN/SIIN W56HZV-14-C-0049 MOD/AMD

Name of Offeror or Contractor: THERMOANALYTICS, INC.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT									
0001AD	<p><u>LABOR - BASE EFFORT</u></p> <p>SERVICE REQUESTED: MUSES SOFTWARE DEVELOPMENT CLIN CONTRACT TYPE: Cost Plus Fixed Fee PRON: R34JS003R3 PRON AMD: 01 ACRN: AD AMS CD: 633130DS800 PSC: AC43</p> <p><u>Inspection and Acceptance</u> INSPECTION: Destination ACCEPTANCE: Destination</p> <p><u>Deliveries or Performance</u> Period of Performance Start Date: 05-SEP-2014 End Date: 04-SEP-2015</p> <table border="0"> <tr> <td>DLVR SCH</td> <td></td> <td>PERF COMPL</td> </tr> <tr> <td><u>REL CD</u></td> <td><u>QUANTITY</u></td> <td><u>DATE</u></td> </tr> <tr> <td>001</td> <td>1</td> <td>04-SEP-2015</td> </tr> </table> <p style="text-align: right;">\$ 36,054.00</p>	DLVR SCH		PERF COMPL	<u>REL CD</u>	<u>QUANTITY</u>	<u>DATE</u>	001	1	04-SEP-2015	1	LO	Estimated Cost Fixed Fee Not to Exceed (Funding)	\$ 34,013.00 \$ 2,041.00 \$ 36,054.00
DLVR SCH		PERF COMPL												
<u>REL CD</u>	<u>QUANTITY</u>	<u>DATE</u>												
001	1	04-SEP-2015												
0002	MUSES SOFTWARE DEVELOPMENT													
0002AA	<p><u>MATERIALS/TRAVEL/ODCS - BASE EFFORT</u></p> <p>SERVICE REQUESTED: MUSES SOFTWARE DEVELOPMENT CLIN CONTRACT TYPE: Cost No Fee PRON: R34JS003R3 PRON AMD: 01 ACRN: AD AMS CD: 633130DS800 PSC: AC43</p> <p><u>Inspection and Acceptance</u> INSPECTION: Destination ACCEPTANCE: Destination</p> <p><u>Deliveries or Performance</u> Period of Performance Start Date: 05-SEP-2014 End Date: 04-SEP-2015</p> <table border="0"> <tr> <td>DLVR SCH</td> <td></td> <td>PERF COMPL</td> </tr> </table>	DLVR SCH		PERF COMPL	1	LO	Estimated Cost Not to Exceed (Funding)	\$ 59,810.00 \$ 59,810.00						
DLVR SCH		PERF COMPL												

CONTINUATION SHEET

Reference No. of Document Being Continued
 PIIN/SIIN W56HZV-14-C-0049 MOD/AMD

Name of Offeror or Contractor: THERMOANALYTICS, INC.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT									
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<u>REL CD</u>	<u>QUANTITY</u>	<u>DATE</u>												
001	1	04-SEP-2015												
	\$ 59,810.00													
0003	<p><u>DATA ITEM- CONTRACT MANPOWER REPORTING</u></p> <p>SERVICE REQUESTED: MUSES DEVELOPMENT - SBIR PSC: AC43 CLIN CONTRACT TYPE: Firm Fixed Price</p> <p>The contractor shall provide the information required per contract clause 52.237-4000, entitled "Contractor Manpower Reporting."</p> <p>Unit Identification Code (UIC): W4GHAA</p> <p>This CLIN is NOT SEPARATELY PRICED</p> <p>(End of narrative B001)</p> <p><u>Inspection and Acceptance</u> INSPECTION: Destination ACCEPTANCE: Destination</p> <p><u>Deliveries or Performance</u> DLVR SCH PERF COMPL <table border="0"> <tr> <td><u>REL CD</u></td> <td><u>QUANTITY</u></td> <td><u>DATE</u></td> </tr> <tr> <td>001</td> <td>1</td> <td>AS REQUIRED</td> </tr> </table> </p>	<u>REL CD</u>	<u>QUANTITY</u>	<u>DATE</u>	001	1	AS REQUIRED	1	LO		\$ ** NSP **			
<u>REL CD</u>	<u>QUANTITY</u>	<u>DATE</u>												
001	1	AS REQUIRED												
0004	<p><u>DATA ITEM- CONTRACT DATA REQUIREMENTS LIST - EXHIBIT A</u></p> <p>SERVICE REQUESTED: MUSES DEVELOPMENT - SBIR PSC: AC43 CLIN CONTRACT TYPE: Firm Fixed Price</p> <p>Technical Data as set forth in Contract Data Requirements List (DD Form 1423) hereinafter referred to as Exhibit A</p> <p>This CLIN is NOT SEPARATELY PRICED</p> <p>(End of narrative B001)</p>				\$ ** NSP **									

CONTINUATION SHEET

Reference No. of Document Being Continued
PIIN/SIIN W56HZV-14-C-0049 **MOD/AMD**

Name of Offeror or Contractor: THERMOANALYTICS, INC.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	<p><u>Inspection and Acceptance</u> INSPECTION: Destination ACCEPTANCE: Destination</p>				

Name of Offeror or Contractor: THERMOANALYTICS, INC.

B.1 ESTIMATED COST, FIXED FEE, AND PAYMENT

B.1.1 The estimated cost for performance of the work under this contract is set forth in the Schedule, Section B. In consideration of performance of the work specified under each CLIN, the Government anticipates paying the Contractor the Estimated Cost amount shown. The amount shown initially includes the basic contract effort, and will be revised by the Government as appropriate to incorporate any options exercised. The estimated cost of CLIN 0001 shall constitute the estimated cost for the purpose of the Contract Clause entitled "Limitation of Cost", but neither the Government nor the Contractor guarantee the accuracy of said estimates.

B.1.2 The Contractor will be paid the fixed fee stated in Section B opposite CLIN 0001 for the performance of work under the contract and in accordance with the terms of the Contract Clause entitled "Fixed Fee", (Jun 2011), FAR 52.216-8. The fixed fee together with the reimbursement of costs shall constitute full and complete consideration for the Contractor's service in connection with the work required and performed under this contract.

B.1.3 Allowable cost shall be determined, and payment thereof shall be provided, in accordance with the Contract Clause hereof entitled "Allowable Cost and Payment".

B.2 MATERIAL

B.2.1 For the purpose of this contract, "material" shall be defined as stated in FAR 31.205-26.

B.3 FUNDING

B.3.1 The Contractor shall notify the Government in accordance with the Contract Clause hereof entitled "LIMITATION OF COST", whenever there is reason to believe that the funds allotted to this Contract are either insufficient or excessive for the performance of the work required.

B.4 OVERRUNS/UNDERRUNS

B.4.1 In general, the Government will address both overruns and underruns via the Limitation of Cost General Provision of the contract. To the extent consistent with law, regulation, and customer requirements, the PCO will determine whether Work Directives projecting an overrun can be used to offset those projecting an underrun.

B.5 RATE SCHEDULE

B.5.1 For Option Hours exercised, funds will be obligated against the contract in accordance with the rate schedule set forth below, the fiscal year (FY) referenced is the Government's.

B.5.1.1 If the date of option
exercise falls during: The applicable Hourly Rate is:

	Est. Cost Per Hr	Fixed Fee Per Hr	Total Hrly Rate
Basic Award	\$ 81.11	\$4.87	\$ 85.98
Balance of FY2014	\$101.11	\$6.07	\$107.18
FY2015	\$ 96.08	\$5.76	\$101.84
FY2016	\$ 98.82	\$5.93	\$104.75
FY2017	\$101.82	\$6.11	\$107.93
FY2018	\$104.79	\$6.29	\$111.07

B.5.2 The above rates include only anticipated labor costs (burdened) required for contract performance. Additional material or travel costs that are required for contract effort shall be proposed separately (against each work directive estimate) on a cost reimbursement, no fee basis.

CONTINUATION SHEET**Reference No. of Document Being Continued**

Page 10 of 46

PIIN/SIIN W56HZV-14-C-0049

MOD/AMD

Name of Offeror or Contractor: THERMOANALYTICS, INC.

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

<u>Regulatory Cite</u>	<u>Title</u>	<u>Date</u>
------------------------	--------------	-------------

C-1	52.204-4600 TRUSTED ASSOCIATE SPONSORSHIP SYSTEM (TASS) PROGRAM	OCT/2013
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The contractor is responsible for processing applications for Common Access Cards (CAC) for every contractor employee who deploys with the military force, OR who has need to access any government computer network in accordance with FAR 52.204-9, Personal Identity Verification of Contractor Personnel.

The contractor is responsible for managing requests for new or renewal CAC cards in sufficient time to ensure that all contractor employees have them when needed to perform work under this contract. The norm is at least ten calendar days advance notice to the Trusted Agent* (TA), unless there are extenuating circumstances approved by the Contracting Officers Representative (COR) or Contracting Officer. *The COR will be the TA for this contract.

The contractor shall obtain an Army Knowledge Online (AKO) email address for each applicant, including subcontractors, who may be deployed or require logical access to a government computer network. This can be done by going to <http://www.us.army.mil> and register as an Army Guest with the sponsor being the COR. Note: If a contractor employee loses the privilege to access AKO, they lose the ability to renew their CAC. Therefore it is critical that contractor employees maintain their AKO accounts.

It is recommended that a Corporate Facility Security Officer (FSO) be established to serve as your firms single point of contact for Trusted Associate Sponsorship System (TASS). If a FSO is not established, each contractor employee requiring a CAC card will be required to process their own applications.

CAC applications must be processed through the DoDs TASS. The contractors FSO or contractor employee shall submit requests for a CAC via email to the TASS Trusted Agent (TA) at wenjie.mao.civ@mail.mil before accessing the TASS website.

The government will establish a TASS application account for each CAC request and will provide each contractor employee a USER ID and Password via email to the FSO. The FSO or contractor employee shall access the TASS account and complete the CAC application (entering/editing contractor information as applicable) at <https://www.dmdc.osd.mil/tass/operator/consent?continueToUrl=%2Ftass%2Findex.jsp>.

The FSO or contractor employee will submit completed applications in TASS, and will follow up to ensure that the TA is processing the request.

The government will inform the contractors applicant via email of one of the following:

- Approved*. Upon approval, the information is transferred to the Defense Enrollment Eligibility Reporting System (DEERS) database and an email notification is sent to the contractor with instructions on obtaining their CAC. The contractor proceeds to a Real-Time Automated Personnel Identification System (RAPIDS) station (<https://www.dmdc.osd.mil/rsl/> provides RAPIDS locations).
- Rejected*. Government in separate correspondence will provide reason(s) for rejection.
- Returned. Additional information, or correction to the application, required by the contractor employee.

*The contractor will maintain records of all approved and rejected applications.

At the RAPIDS station, the RAPIDS Verification Officer will verify the contractor by SSN, and two forms of identification, one of which must be a picture ID. The Verification Officer will capture primary and alternate fingerprints and picture, and updates to DEERS and will then issue a CAC.

Issued CACs shall be for a period of performance not longer than three (3) years or the individuals contract end date (inclusive of any options) whichever is earlier.

The contractor shall return issued CACs to the DEERS office upon return from deployment, departure or dismissal of each contractor employee. A receipt for each card must be obtained and provided to the TA/COR.

A CAC cannot be issued without evidence that a National Agency Check with Written Inquires (NACI) has at least been initiated by the FSO. TASS will be linked to the Joint Personnel Adjudication System (JPAS) in the near future. The TA will have to verify via JPAS that the NACI has been initiated by the FSO before he/she can approve a contractor request for a CAC.

Details and training on TASS are available on AKO at <https://www.us.army.mil/suite/portal/index.jsp> or by contacting the CAC helpdesk at cacsupport@mail.mil or 866-738-3222.

(End of Clause)

CONTINUATION SHEET	Reference No. of Document Being Continued	Page 11 of 46
	PIIN/SIIN W56HZV-14-C-0049 MOD/AMD	
Name of Offeror or Contractor: THERMOANALYTICS, INC.		

C-2 52.209-4020 ANTI-TERRORISM (AT) LEVEL I TRAINING REQUIREMENT JUL/2014
(TACOM)

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. The contractor shall submit certificates of completion for each contractor employee and subcontractor employee requiring access to Army installations, facilities, or controlled access areas to the COR within 10 calendar days after completion of training. AT Level I awareness training is available at <https://jkodirect.jten.mil> Course# JS-UA007-14*.

* As of 13 August 2014, the link above was unavailable, please contact the Government Security Manager via the COR to arrange the needed training.

C-3 52.209-4022 iWATCH TRAINING JUL/2012
(TACOM)

The contractor and all associated subcontractors shall brief all employees on the local iWATCH program (training standards provided by the requiring activity Anti-Terrorism Officer (ATO)). 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 21 calendar days of new employees commencing performance, with the results reported to the COR no later than 30 calendar days after contract award. Training may be obtained at <http://www.myarmyonesource.com/familyprogramsandservices/iwatchprogram/default.aspx>.
(End of Clause)

C-4 52.204-4020 ACCESS AND GENERAL PROTECTION/SECURITY POLICY AND PROCEDURES JUN/2012
(TACOM)

The contractor and all associated subcontractors employees shall comply with applicable installation, facility, and area commander installation and facility access and local security policies and procedures (provided by the Government representative). The contractor shall also provide all information required for background checks to meet installation access requirements to be accomplished by the installation Provost Marshal Office, Director of Emergency Services, or Security Office. The contractor workforce must comply with all personal identity verification requirements as directed by DoD, HQDA, and/or local policy. In addition to the changes otherwise authorized by the changes clause of this contract, should the Force Protection Condition (FPCON) at any individual facility or installation change, the Government may require changes in contractor security matters or processes.

(End of Clause)

C-5 52.204-4021 CONTRACTOR EMPLOYEES WHO REQUIRE ACCESS TO GOVERNMENT INFORMATION JUN/2012
(TACOM) SYSTEMS

All contractor employees shall be registered in the ATCTS (Army Training Certification Tracking System) at commencement of services and must successfully complete the DoD Information Assurance Awareness training prior to access to the information system, and annually thereafter.

(End of Clause)

C-6 52.204-4022 REQUIREMENT FOR AN OPSEC STANDING OPERATION PROCEDURE/PLAN JAN/2014
(TACOM)

a. The contractor is subject to provisions of the TACOM LCMC OPSEC Standing Operating Procedures (SOP/Plan), or other U.S. Government OPSEC plan, per AR 530-1, Operations Security. This SOP/Plan specifies the governments critical information, why it needs to be protected, where it is located, who is responsible for it, and how to protect it.

CONTINUATION SHEET**Reference No. of Document Being Continued**

Page 13 of 46

PIIN/SIIN W56HZV-14-C-0049

MOD/AMD

Name of Offeror or Contractor: THERMOANALYTICS, INC.

(8) Predominant Federal Service Code (FSC) reflecting services provided by contractor (and separate predominant FSC for each sub-contractor if different);

(9) Data collection cost;

(10) Organizational title associated with the Unit Identification Code (UIC) for the Army Requiring Activity (the Army Requiring Activity is responsible for providing the contractor with its UIC for the purposes of reporting this information);

(11) Locations where contractor and sub-contractors perform the work (specified by zip code in the United States and nearest city, country, when in an overseas location, using standardized nomenclature provided on website);

(12) Presence of deployment or contingency contract language; and

(13) Number of contractor and sub-contractor employees deployed in theater this reporting period (by country).

Reporting inputs will be for the labor executed during the period of performance during each Government fiscal year (FY), which runs October 1 through September 30. While inputs may be reported any time during the FY, all data shall be reported no later than October 31 of each calendar year, beginning with 2013. Contractors may direct questions to the help desk at : <https://cmra.army.mil>.

End of Clause]

SCOPE OF WORK

C.1 OBJECTIVE

The contractor, acting as an independent contractor and not as an agent of the Government, shall provide the necessary personnel, facilities, materials, and services to perform the effort described below. The contractor shall continue to develop the vehicle thermal design tool known as the Multi-Service Electro-optic Signature (MuSES) software, to enhance the capability of rapidly carrying vehicle designs through the phases of concept design, simulation, and analysis. This effort continues the Phase III Small Business Innovation Research (SBIR) efforts of contract W56HZV-09-C-0007. The effort to refine the tools code shall focus on removing as much of the burden of CAD-to-thermal analysis as possible. The tool shall continue to focus on the needs of both legacy and future military systems. In addition, the contractor shall provide code enhancing survivability modeling, simulation, material design and development, testing, and analysis services, related to vehicle system signatures, as detailed by discrete work directives, to various customers within the DoD community in support of military systems. For this effort Signature Survivability shall include all aspects of detection of visible, RADAR, acoustic, and thermal signatures.

C.2 VEHICLE SIGNATURE OPTIMIZATION WORK DIRECTIVES

C.2.1 All work under this contract shall be performed in accordance with work directives issued by the Procuring Contracting Officer (PCO). No work shall commence until the contractor has received a fully executed work directive. Each work directive shall include the following information as a minimum:

- (1) Work directive number and title
- (2) Objective of this work directive
- (3) Maximum number of hours authorized
- (4) Detailed description of work to be performed
- (5) Required completion date(s)
- (6) Identification of applicable contract number, contractor's name and address
- (7) Identification of software or prototype hardware to be delivered to TARDEC
- (8) Projected material costs
- (9) The Contracting Officers signature

C.2.2 The contractor shall notify the Contracting Officer's Representative (COR see contact info in section G) immediately by telephone or E-mail if delivery dates will not be met. The contractor shall follow up with a letter to the PCO.

C.2.3 The Government has the unilateral right to increase or decrease the work to be performed hereunder by the issuance of work directives signed by the PCO. It is understood and agreed that such adjustments shall be made within the scope of work and level of effort of the contract. The COR has the right to prioritize the work being performed under the contract.

C.2.4 If, at any time, the contractor has reason to believe that the amount (hours, other direct costs of material and travel) which it expects to incur in the performance of a work directive are insufficient, the contractor shall provide written notification to the COR for appropriate action. The contractor shall furnish a revised statement of total hours to complete such work together with said notice. The Government does not authorize the contractor to expend dollars or hours in excess of the work directive.

C.3 PROGRAM CONTROL

Name of Offeror or Contractor: THERMOANALYTICS, INC.

C.3.1 Data Management: The contractor shall prepare, reproduce, assemble, package and deliver data items, including monthly progress and status reports (costs, schedule, contractual management and work directive status), work directive final technical reports, drawings, engineering & associated lists, meeting minutes, presentation materials, Classification and Procedures guides, archive management plans, program protection plans and software requirements as specified in each work directive in accordance with Exhibit A, DD Form 1423 Contract Data Requirements List (CDRL), data items #A001 - A011.

C.3.1.1 Progress & Status Report. The contractor's monthly progress & status report (CDRL #A001) indicates the progress of work, the status of the program and of each of the assigned tasks; and informs of reporting costs and existing or potential problem areas. The format shall be contractor format, including a narrative description and any graphics necessary to convey the information concerning the status of each work directive and the contract. The cost tracking included in these reports for each work directive and the entire contract shall include but not be limited to:

- a) Initial hours authorized and expended to date including Prime and sub-contracted efforts and shall state whether or not the remaining funds & hours are sufficient to complete each work directive.
- b) Total cost authorized and expended to date, and the percentage of total cost authorized expended to date. State whether or not the remaining funds are sufficient to complete the work directive.
- c) Percentage of work completed to date for each work directive.

Technical reports shall describe to the analytical & scientific community the precise nature and results of the tasks pursued under the work directive.

C.3.1.2 Presentations. The contractor shall prepare materials for oral reports that are to be presented by the COR in accordance with CDRL #A008. Presentation materials include briefing charts (electronic [PowerPoint] and hard display, media determined by COR), photographs and drawings, and displaying technical schedule, technical results, and cost data for the effort.

C.3.1.3 Work Directive Final Report. A work directive final report summarizing the activities and conclusions resulting from any individual work directive shall be delivered, in contractor format, within 30 days of the conclusion of each work directive, in accordance with CDRL #A002. Other reports, documentation and analyses shall be prepared and delivered in accordance with work directives. Format and frequency of submission shall be as specified in work directives. All reports shall be submitted in draft contractor format for Government review. Final versions reflecting Government comments shall be submitted as required by work directive. Work directive final technical reports shall completely describe the scientific issues pertinent to the task, how the work performed has or has not satisfied the work directive requirements. The report shall detail the necessary steps, if any, required to further improve the item or study requested in the work directive.

C.3.2 Access to Data. On request by the PCO or COR, the contractor agrees to provide access to records and data. The Government shall have access and retention rights to all data (e.g. hard copy and computer files generated under this contract, and all underlying data and files) generated under this contract as well as reports, assessments, software programs, technical reports and analyses.

C.3.3 The contractor shall use computer software, which is compatible with the hardware/software utilized by TARDEC Research Business Group (currently Microsoft Windows 7 Enterprise for PC).

C.4 GENERAL ENGINEERING AND DESIGN SUPPORT

C.4.1 Continued Interaction with Scene Renderers. The contractor shall ensure that any changes to the software conducted under work directives maintain compatibility with the synthetic scene renderer, CameoSim, as well as the synthetic scene renderer EOView. The contractor shall insert MuSES targets into CameoSim and EOView synthetic scenes and determine the quality of images using existing metrics or via metrics developed by the contractor. New metrics must be approved by the COR for this purpose.

C.4.2 MuSES Models. The contractor shall develop models to be used in the proof of principle of this analysis tool (MuSES). The MuSES thermal data file (TDF) data files shall be prepared and delivered in accordance with CDRL #A004.

C.4.2.1 Models. The contractor shall develop additional target models to assess integrated survivability performance in order to determine the overall performance of a system (i.e. visual, RADAR, acoustic, & infrared (IR) models).

C.4.3 Computational Fluid Dynamics (CFD) support. This support includes creating lessons learned from previous modeling efforts, software import/export functional developments to link MuSES with CFD codes, and general pre-processor technique developments that facilitate a smoother interaction between the different software packages.

C.4.4 Software Updates and Modifications. The contractor shall update its MuSES Pro Thermal Simulation Modeling software as testing reveals functional weaknesses discovered by the contractor and the COR. These modifications will be made by the contractor, incorporated into the next available revision of the software, and delivered to the COR upon the release date (CDRL #A005). Such modifications may include adding new features or increased capabilities.

C.5 VERIFICATION, VALIDATION AND TESTING

CONTINUATION SHEET**Reference No. of Document Being Continued**

Page 15 of 46

PIIN/SIIN W56HZV-14-C-0049

MOD/AMD

Name of Offeror or Contractor: THERMOANALYTICS, INC.

C.5.1 The contractor shall fabricate and install test components for field validation trials and shall conduct field trials to verify and validate the changes to MuSES. The test plans shall be developed in accord with CDRL #A006, and the COR shall be present during these field tests. The contractor shall follow the guidance of the Defense Modeling and Simulation Office as outlined at <http://www.msco.mil> for documenting the verification and validation of the software.

C.5.2 Support and Management. The contractor shall provide test management, test logistical support (to include mechanical lift and generator equipment rental, other test equipment necessary to conduct testing, and personnel to provide test site coordination support and visual data collection support), test asset management (to include tracking, handling, updating maintenance records, storage, destruction of Government-owned materials, vehicles or general test items), mechanical maintenance of Government-owned test assets (includes preventative maintenance and is limited to engine, transmission, cooling, fuel, exhaust, driveline, hydraulic, electrical, Heating-Ventilation-and-Air-Conditioning, outer surface and suspension systems), and security management (to include all general security functions) in support of all validation field tests. The Government shall make available at TARDEC/TACOM LCMC, office space and basic office equipment (i.e. Blank media, computer, desk, stapler, etc.), all parts, tools, lubrications, fluids, vehicle training, fuel, and repair manuals for these tasks.

C.5.3 Testing. The contractor shall conduct vehicle signature tests to determine the baseline and modified values to support verification and validation of simulation models. The tests will provide baselines for future analysis to verify whether or not any changes to the survivability treatments of the vehicle as depicted by the survivability performance analyses, adversely alters the various signatures (i.e. visual, RADAR, acoustic, & IR) to a point where the probability of detection is increased.

C.5.4 Material Research and Development. The contractor shall conduct material development to include designs for integration onto vehicle platforms, as well as material tests to determine the baseline and modified values to support verification and validation of calculated values and material properties. The tests will provide baselines for future material analysis to verify whether or not any changes to the material or survivability treatments of the vehicle as depicted by the survivability performance analyses, adversely alters the various signatures to a point where the probability of detection is increased.

C.6 MEETINGS

C.6.1 Kickoff Meeting. The contractor shall coordinate with the COR to set-up and host a kickoff meeting to be held at TACOM or a TAI office within fifteen days after contract award (or as otherwise mutually agreed upon by the contractor and the COR).

C.6.2 The contractor shall be required to conduct bi-weekly and special project reviews at the contractor's facility, subcontractor/vendor facility or any approved Government facility. The contractor shall prepare and send minutes in accord with CDRL #A007. An agenda will be coordinated between the COR and the contractor prior to contractor hosted reviews.

C.7 DELIVERABLES

C.7.1 Software Delivery. The contractor shall deliver the MuSES software (including source code) that will result from this entire effort at the end of the last work directive. It shall be delivered either via compact disc (CD) or file transfer protocol (FTP) (CDRL #A005). Included with this delivery will be the Software Product Specification in accordance with CDRL #A003 (Data Item Description DI-IPSC-81442).

C.7.2 Report Deliverables. The contractor shall provide as required on work directives and in accordance with the Contract Data Requirements List (DD Form 1423) and the associated data item description:

- a. Interim progress status and management reports (CDRL #A001) described in C.3.1.1;
- b. Work directive Final Technical Report (CDRL #A002) described in C.3.1.3;
- c. Software product specification (CDRL #A003) described in C.7.1
- d. MuSES Models (CDRL #A004) described in C.4.2;
- e. MuSES Software (CDRL #A005) described in C.4.4 and C.7.1;
- f. Test plans (CDRL #A006) described in C.5.1;
- g. Meeting Minutes (CDRL #A007) described in C.6.2;
- h. PowerPoint Presentations (CDRL #A008) described in C.3.1.2,
- i. Classification and Procedures Guide (CDRL #A009) referenced in C.3.1;
- j. Archive Management plans (CDRL #A010) referenced in C.3.1;
- k. Program Protection plans (CDRL #A011) referenced in C.3.1.

C.8 Contractor employees shall maintain Unclassified/For Official Use Only (U/FOUO) and Controlled Unclassified Information (CUI) at its location in accordance with Army Regulation (AR) 380-5.

C.9 Contract documents shall be properly marked (classification markings and distribution statements) as applicable in accordance with AR 380-5.

*** END OF NARRATIVE C0001 ***

CONTINUATION SHEET**Reference No. of Document Being Continued**

Page 16 of 46

PIIN/SIIN W56HZV-14-C-0049

MOD/AMD

Name of Offeror or Contractor: THERMOANALYTICS, INC.

SECTION D - PACKAGING AND MARKING

<u>Regulatory Cite</u>	<u>Title</u>	<u>Date</u>
D-1 52.247-4016 (TACOM)	HEAT TREATMENT AND MARKING OF WOOD PACKAGING MATERIALS	AUG/2005

Boxes/pallets and any wood used as inner packaging made of non-manufactured wood shall be heat-treated. All non-manufactured wood used in packaging shall be heat treated to a core temperature of 56 degrees Celsius for a minimum of 30 minutes. The box/pallet manufacturer and the manufacturer of wood used as inner packaging shall be affiliated with an inspection agency accredited by the board of review of the American Lumber Standard Committee. The box/pallet manufacturer and the manufacturer of wood used as inner packaging shall ensure traceability to the original source of heat treatment.

Marking. Each box/pallet shall be marked to show the conformance to the International Plant Protection Convention Standard. The quality mark shall be placed on both ends of the outer packaging, between the end cleats or end battens; on two sides of the pallet. Foreign manufacturers shall have the heat treatment of non-manufactured wood products verified in accordance with their National Plant Protection Organization's compliance program. In addition, wood used as dunnage for blocking and bracing shall be ordered with ALSC certified marking for dunnage or the markings may be applied locally at two foot intervals.

[End of Clause]

D.1 Packaging and Marking

D.1.1 All hardware deliverable under this contract shall be packaged in accordance with good commercial practice to assure arrival at destination without loss or damage. Further details will be called out in the discreet work directive.

D.1.2 All technical data (including software deliverables) delivered under this contract shall be delivered electronically subject to any security restrictions and shall be identified by the prime contract number, the name and address of the prime contractor and the name of the subcontractor (if any), which generated the data. The electronic data shall bear the following marking for (1) prime contractor of (2) subcontractor generated data as applicable:

- (1) Prime Contract number:
Contractor:
- (2) Prime Contract Number:
Contractor:
Subcontractor:
Subcontractor's Address:

*** END OF NARRATIVE D0001 ***

CONTINUATION SHEET**Reference No. of Document Being Continued****Page 17 of 46****PIIN/SIIN** W56HZV-14-C-0049**MOD/AMD****Name of Offeror or Contractor:** THERMOANALYTICS, INC.

SECTION E - INSPECTION AND ACCEPTANCE

	<u>Regulatory Cite</u>	<u>Title</u>	<u>Date</u>
E-1	52.246-5	INSPECTION OF SERVICES--COST-REIMBURSEMENT	APR/1984
E-2	52.246-9	INSPECTION OF RESEARCH AND DEVELOPMENT (SHORT FORM)	APR/1984
E-3	(52.246-4009) (TACOM)	INSPECTION AND ACCEPTANCE POINTS: DESTINATION	FEB/1995

Inspection and acceptance of supplies/services offered under this contract shall take place as specified here. Inspection: DESTINATION.
Acceptance: DESTINATION.

[End of Clause]

CONTINUATION SHEET**Reference No. of Document Being Continued**

Page 18 of 46

PIIN/SIIN W56HZV-14-C-0049

MOD/AMD

Name of Offeror or Contractor: THERMOANALYTICS, INC.

SECTION F - DELIVERIES OR PERFORMANCE

	<u>Regulatory Cite</u>	<u>Title</u>	<u>Date</u>
F-1	52.242-15	STOP-WORK ORDER (AUG 1989) -- ALTERNATE I (APR 1984)	APR/1984
F-2	52.242-17	GOVERNMENT DELAY OF WORK	APR/1984
F-3	52.247-34	F.O.B. DESTINATION	NOV/1991
F-4	52.247-55	F.O.B. POINT FOR DELIVERY OF GOVERNMENT-FURNISHED PROPERTY	JUN/2003
F-5	252.211-7007	REPORTING OF GOVERNMENT-FURNISHED PROPERTY	AUG/2012

F.1 PERIOD(S) OF PERFORMANCE

F.1.1 The period of performance for the basic efforts (5,631 manhours) shall be twelve (12) months from date of contract award. All option efforts will be completed within 60 months of contract award date. (The option exercise period ends 54 months after contract award date, the period of performance for any exercised option shall not extend beyond the contract performance period [60 months]). If an option is not exercised during a certain Government fiscal year, the contract is considered lapsed and expires at the end of that certain period.

F.1.2 The period of performance for individual work directives will be specified on the work directive. The work directive period of performance shall not extend beyond the contract period of performance (60 months after contract award date).

F.2 DELIVERY. All data will be delivered in accordance with the Contract Data Requirement List (CDRL) DD Form 1423.

*** END OF NARRATIVE F0001 ***

CONTINUATION SHEET

Reference No. of Document Being Continued

PIIN/SIIN W56HZV-14-C-0049

MOD/AMD

Name of Offeror or Contractor: THERMOANALYTICS, INC.

SECTION G - CONTRACT ADMINISTRATION DATA

LINE	PRON/ AMS CD/ MIPR/ <u>ITEM</u>	OBLG <u>STAT</u>	JO NO/ <u>ACCT ASSIGN</u>	ACRN	OBLIGATED <u>AMOUNT</u>
0001AA	4746M20947	2	A.0008737.1.2.6.13	AA	\$ 92,500.00
0001AB	724209RD72	2	A.0009261.2.3.4.2	AB	\$ 92,500.00
0001AC	R33JS016R3 633130DS800	2	32C006	AC	\$ 263,097.00
0001AD	R34JS003R3 633130DS800	2	42C004	AD	\$ 36,054.00
0002AA	R34JS003R3 633130DS800	2	42C004	AD	\$ 59,810.00
TOTAL					\$ 543,961.00

ACRN	ACCOUNTING CLASSIFICATION	OBLIGATED <u>AMOUNT</u>
AA	021 201420152040 A5XGJ 273735330RU01 2550 L036138120 A.0008737.1.2.6.13	021001 \$ 92,500.00
AB	021 201420152040 A5XGJ 273735371RU08 2550 L035922455 A.0009261.2.3.4.2	021001 \$ 92,500.00
AC	21 32040000036N6N7EP633130255Y S20113 W56HZV	\$ 263,097.00
AD	21 42040000046N6N7EP633130255Y S20113 W56HZV	\$ 59,810.00
TOTAL		\$ 543,961.00

LINE	ACRN	EDI/SFIS ACCOUNTING CLASSIFICATION	OBLIGATED <u>AMOUNT</u>
0001AA	AA	021 201420152040 A5XGJ 273735330RU01 2550 L036138120 A.0008737.1.2.6.13	021001
0001AB	AB	021 201420152040 A5XGJ 273735371RU08 2550 L035922455 A.0009261.2.3.4.2	021001
0001AC	AC	21 131420400000 W56HZV 36N6N7E633130DS800255YR33JS016R3 32C0064RS S20113	
0001AD	AD	21 141520400000 W56HZV 46N6N7E633130DS800255YR34JS003R3 42C0044RS S20113	
0002AA	AD	21 141520400000 W56HZV 46N6N7E633130DS800255YR34JS003R3 42C0044RS S20113	

Regulatory Cite _____ **Title** _____ **Date** _____

G-1 252.232-7006 WIDE AREA WORKFLOW PAYMENT INSTRUCTIONS MAY/2013

(a) Definitions. As used in this clause--

"Department of Defense Activity Address Code (DoDAAC)" is a six position code that uniquely identifies a unit, activity, or organization.

"Document type" means the type of payment request or receiving report available for creation in Wide Area WorkFlow (WAWF).

"Local processing office (LPO)" is the office responsible for payment certification when payment certification is done external to the entitlement system.

(b) Electronic invoicing. The WAWF system is the method to electronically process vendor payment requests and receiving reports, as authorized by DFARS 252.232-7003, Electronic Submission of Payment Requests and Receiving Reports.

(c) WAWF access. To access WAWF, the Contractor shall--

(1) Have a designated electronic business point of contact in the System for Award Management at <https://www.acquisition.gov>; and

Name of Offeror or Contractor: THERMOANALYTICS, INC.

(2) Be registered to use WAWF at <https://wawf.eb.mil/> following the step-by-step procedures for self-registration available at this Web site.

(d) WAWF training. The Contractor should follow the training instructions of the WAWF Web-Based Training Course and use the Practice Training Site before submitting payment requests through WAWF. Both can be accessed by selecting the "Web Based Training" link on the WAWF home page at <https://wawf.eb.mil/>.

(e) WAWF methods of document submission. Document submissions may be via Web entry, Electronic Data Interchange, or File Transfer Protocol.

(f) WAWF payment instructions. The Contractor must use the following information when submitting payment requests and receiving reports in WAWF for this contract/order:

(1) Document type. The Contractor shall use the following document type(s).

Cost Voucher

(2) Inspection/acceptance location. The Contractor shall select the following inspection/acceptance location(s) in WAWF, as specified by the contracting officer.

N/A

(3) Document routing. The Contractor shall use the information in the Routing Data Table below only to fill in applicable fields in WAWF when creating payment requests and receiving reports in the system.

Routing Data Table*

Field Name in WAWF	Data to be entered in WAWF
Pay Official DoDAAC	HQ0339
Issue By DoDAAC	W56HZV
Admin DoDAAC	S1403A
Inspect By DoDAAC	W91ATL
Ship To Code	W56HZV
Ship From Code	N/A
Mark For Code	N/A
Service Approver (DoDAAC)	W91ATL
Service Acceptor (DoDAAC)	W91ATL
Accept at Other DoDAAC	N/A
LPO DoDAAC	N/A
DCAA Auditor DoDAAC	Contact ACO
Other DoDAAC(s)	N/A

(4) Payment request and supporting documentation. The Contractor shall ensure a payment request includes appropriate contract line item and subline item descriptions of the work performed or supplies delivered, unit price/cost per unit, fee (if applicable), and all relevant back-up documentation, as defined in DFARS Appendix F, (e.g. timesheets) in support of each payment request.

(5) WAWF email notifications. The Contractor shall enter the email address identified below in the "Send Additional Email Notifications" field of WAWF once a document is submitted in the system.

COR: wenjie.mao.civ@mail.mil

(g) WAWF point of contact. (1) The Contractor may obtain clarification regarding invoicing in WAWF from the following contracting activity's WAWF point of contact.

N/A

(2) For technical WAWF help, contact the WAWF helpdesk at 866-618-5988.

(End of clause)

CONTINUATION SHEET**Reference No. of Document Being Continued**

Page 22 of 46

PIIN/SIIN W56HZV-14-C-0049

MOD/AMD

Name of Offeror or Contractor: THERMOANALYTICS, INC.

If your paying office is Columbus, direct any payment-related questions to the Defense Finance Accounting Services (DFAS) Columbus at 1-888-756-4571. Please have your order number and invoice ready when calling about payment status. If your paying office is other than Columbus, contact your contract administrator for the customer service phone/fax numbers.

[End of Clause]

G-6 52.242-4011 WORK DIRECTIVES
(TACOM)

FEB/1998

(a) All work under this contract shall be performed in accordance with Work Directives signed by the Contracting Officer. Each Work Directive shall include, but not necessarily be limited to, the following information:

- (1) Reference to specific requirement(s) of Section C of this Contract under which the work is to be performed.
- (2) Objective of the work to be performed.
- (3) Number of hours to accomplish the work.
- (4) Estimated completion date as applicable.
- (5) Identification of the Contract Line Item Number (CLIN) under which the work is to be performed.

(6) Relative priority of the work to be performed, if applicable. Work shall be performed in sequential order unless otherwise stated.

(b) The Government has the unilateral right to increase, decrease and prioritize the work to be performed hereunder by the issuance of Work Directives by the Contracting Officer. It is understood and agreed that such adjustments shall be made within the general scope of work and level of effort of the contract and without equitable adjustment thereto.

(c) If, at any time, the Contractor has reason to believe that the hours which it expects to incur in the performance of a Work Directive, when added to all hours incurred previously in performance of such Work Directive, shall exceed the estimated total hours set forth in the Work Directive, the Contractor shall notify in writing the Procuring Contracting Officer and Technical Representative for their appropriate action. The Contractor shall furnish a revised statement of total hours to complete such work together with said notice. Said notice must be furnished as early as possible and prior to the incurrence of additional hours.

(End of Clause)

CONTINUATION SHEET**Reference No. of Document Being Continued**

Page 23 of 46

PIIN/SIIN W56HZV-14-C-0049

MOD/AMD

Name of Offeror or Contractor: THERMOANALYTICS, INC.

SECTION H - SPECIAL CONTRACT REQUIREMENTS

	<u>Regulatory Cite</u>	<u>Title</u>	<u>Date</u>
H-1	252.222-7006	RESTRICTIONS ON THE USE OF MANDATORY ARBITRATION AGREEMENTS	DEC/2010
H-2	52.204-4005	REQUIRED USE OF ELECTRONIC CONTRACTING	AUG/2012

(a) All contract awards, modifications and delivery orders issued by Army Contracting Command - Warren (DTA) will be issued electronically. The contractor has the option to receive these actions either via the Worldwide Web (WWW) or Electronic Data Interchange (EDI). Many provisions/clauses that appear "by reference," meaning only clause titles and regulation site are listed; their full texts can be found at the website <http://farsite.hill.af.mil/>

(b) In order to be eligible to receive an award under this solicitation, the successful offeror must be registered with the Department of Defense (DOD) System for Award Management (SAM). The SAM registration process may be done electronically at the World Wide Web (WWW) site: <https://www.sam.gov/portal/public/SAM>. (In order to be registered to use EDI, you must use the long form for registration. Certification information, including information on the EDI 838 TPP, must be furnished to the Contracting Officer within 60 calendar days after contract award to complete networking requirements within the Government.)

(c) Worldwide Web Distribution. The contractor will receive an electronic Notice of the Award, Modification, or Delivery Order via e-mail. If you choose the WWW option, you must download the file from the appropriate Army Contracting Command - Warren webpage:

Warren: http://contracting.tacom.army.mil/CFDATA/AWARDS/AWARD_RPT01.cfm
Rock Island - JMTC: <https://acquisition.army.mil/asfi/>
Red River Army Depot: <https://acquisition.army.mil/asfi/>
Anniston Army Depot: <https://acquisition.army.mil/asfi/>

(d) Electronic Data Interchange. If you choose to receive contract awards, modifications and delivery orders through EDI, they will be delivered electronically via the Federal Acquisition Network (FACNET). Federal Standard Version 3050 of Standard X12 from the American National Standards Institute (ANSI) will be used as the format for these electronic transactions.

(1) You must complete the EDI 838 Trading Partner Profile, and must agree (i) to subcontract with a DoD certified VAN or Value Added Service (VAS) provider, or (ii) to become DoD certified as a Value Added Network (VAN). The EDI 838 Training Partner Profile is contained in the basic SAM registration form and includes portions of the registration form which are titled "Optional".

(2) You must select a VAN from the official DoD approved list. DoD Certified VANs are listed at <http://www.acq.osd.mil/dpap/ebiz/VANs.htm>. If your VAN is later removed from the official list, or if you voluntarily drop your initially selected VAN, then you must switch to a VAN that remains on the official DoD approved list. You must maintain an active account on a DoD approved VAN for the entire duration of the contract, beginning no later than the 60th day after award.

(e) Unless otherwise specified elsewhere in the contract, all data items you are required to provide under this contract must be submitted electronically. Please go to the following webpage for detailed information about submitting your offer electronically: <http://contracting.tacom.army.mil/acqinfo/ebidnotice.htm>

(f) Additional information can be obtained by sending a message to: usarmy.detroit.acc.mbx.wrn-web-page@mail.mil or by calling (586) 282-7059.

H.1 Ordering and Contract Administration: All ordering and contract administration will be effected by the Contracting Officer, address as shown on the face page of this Contract. Communications pertaining to Contractual administrative matters will be addressed to him. No changes in or deviation from the statement of work or Work Directives shall be effected without written authorization by the Contracting Officer authorizing such changes. The Contractor shall not accept any instructions issued by any person other than the Contracting Officer.

H.2 Option for Additional Level-of-Effort

H.2.1 The Government shall have the unilateral right to increase the contract level of effort (LOE) by a maximum of 84,369 direct labor hours at an estimated cost per hour and a fixed fee per hour as shown in the table at B.5.1.1. The total number of direct labor hours under the contract for all options and the base effort shall not exceed 90,000 direct labor hours. Option hours may be exercised by the Government at any time after contract award, but not later than 54 months after award of the base contract as specified in Section F.1.1. Although the Government estimates exercising 18,000 option hours per year, the Government may, at its discretion, exercise more or less hours per year as long as the total number of option hours exercised does not exceed 84,369 direct labor hours in total (excluding the base effort hours) and the total obligated contract value does not exceed \$9.8M (including the base effort value), whichever comes first. If an option is not exercised during a certain Government fiscal year, the contract is considered lapsed and expires at the end of that certain period.

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-14-C-0049 MOD/AMD	Page 24 of 46
Name of Offeror or Contractor: THERMOANALYTICS, INC.		

H.2.2 The option hours exercised to date total 0 hours.

H.2.3. The option hours remaining for exercise total 84,369 hours.

H.2.4 The obligated amount to date totals \$543,961. The total amount remaining for the Not-To-Exceed value of the contract is \$9,260,496.

H.3 WORK DIRECTIVE LIMITATION OF COST: The Contractor shall notify the Contracting Officer in writing whenever they have reason to believe that the costs or hours incurred under the Work Directive in the next 30 days, when added to all costs or hours previously incurred, will exceed 85 percent of the estimated cost or hours specified on the Work Directive. The time period and percentage for contractor notification supersedes that in FAR 52.232-20.

H.4 Services to be Performed

The parties to this contract recognize and agree that the services to be provided hereunder will be provided only in strict accordance with the Scope of Work set forth herein and as further defined in Work Directive signed by the Contracting officer. This is to insure that the policies in Office of Federal Procurement Policy (OFPP) Policy Letter 92-1 and Department of Defense (DOD) Directive 4205.2 are adhered to. Contractors are specifically prohibited from performing inherently Governmental functions. Appropriate Agency control of the work product must be preserved to insure that the Contractor's performance of permissible services does not approach being an inherently Government function because of the manner in which the contract is performed or administered. Additionally, this contract is not to be used under any circumstances specifically to aid in influencing or enacting legislation.

The parties agree that the Contractor personnel rendering the services under this contract are not subject either by the contract terms or the manner of its administration, to the supervision and control usually prevailing in relationship between the Government and its employees. The Contractor shall not be reimbursed for any work that is outside the scope of the Work Directive signed by the Contracting Officer.

*** END OF NARRATIVE H0001 ***

CONTINUATION SHEET

Reference No. of Document Being Continued

Page 25 of 46

PIIN/SIIN W56HZV-14-C-0049

MOD/AMD

Name of Offeror or Contractor: THERMOANALYTICS, INC.

SECTION I - CONTRACT CLAUSES

	<u>Regulatory Cite</u>	<u>Title</u>	<u>Date</u>
I-1	52.202-1	DEFINITIONS	NOV/2013
I-2	52.203-3	GRATUITIES	APR/1984
I-3	52.203-5	COVENANT AGAINST CONTINGENT FEES	MAY/2014
I-4	52.203-6	RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT	SEP/2006
I-5	52.203-7	ANTI-KICKBACK PROCEDURES	MAY/2014
I-6	52.203-8	CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY	MAY/2014
I-7	52.203-10	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY	MAY/2014
I-8	52.203-12	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS	OCT/2010
I-9	52.204-2	SECURITY REQUIREMENTS	AUG/1996
I-10	52.204-4	PRINTED OR COPIED DOUBLE-SIDED ON POSTCONSUMER FIBER CONTENT PAPER	MAY/2011
I-11	52.204-9	PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL	JAN/2011
I-12	52.204-10	REPORTING EXECUTIVE COMPENSATION AND FIRST-TIER SUBCONTRACT AWARDS	JUL/2013
I-13	52.204-12	DATA UNIVERSAL NUMBERING SYSTEM NUMBER MAINTENANCE	DEC/2012
I-14	52.204-13	SYSTEM FOR AWARD MANAGEMENT MAINTENANCE	JUL/2013
I-15	52.209-6	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT	AUG/2013
I-16	52.209-9	UPDATES OF PUBLICLY AVAILABLE INFORMATION REGARDING RESPONSIBILITY MATTERS	JUL/2013
I-17	52.210-1	MARKET RESEARCH	APR/2011
I-18	52.211-5	MATERIAL REQUIREMENTS	AUG/2000
I-19	52.211-15	DEFENSE PRIORITY AND ALLOCATION REQUIREMENTS	APR/2008
I-20	52.215-2	AUDIT AND RECORDS--NEGOTIATIONS	OCT/2010
I-21	52.215-8	ORDER OF PRECEDENCE--UNIFORM CONTRACT FORMAT	OCT/1997
I-22	52.215-10	PRICE REDUCTION FOR DEFECTIVE CERTIFIED COST OR PRICING DATA	AUG/2011
I-23	52.215-12	SUBCONTRACTOR CERTIFIED COST OR PRICING DATA	OCT/2010
I-24	52.215-14	INTEGRITY OF UNIT PRICES (OCT 2010) -- ALTERNATE I (OCT 1997)	OCT/1997
I-25	52.215-15	PENSION ADJUSTMENTS AND ASSET REVERSIONS	OCT/2010
I-26	52.215-18	REVERSION OR ADJUSTMENT OF PLANS FOR POSTRETIREMENT BENEFITS (PRB) OTHER THAN PENSIONS	JUL/2005
I-27	52.215-23	LIMITATIONS ON PASS-THROUGH CHARGES	OCT/2009
I-28	52.216-8	FIXED FEE	JUN/2011
I-29	52.219-6	NOTICE OF TOTAL SMALL BUSINESS SET-ASIDE	NOV/2011
I-30	52.219-8	UTILIZATION OF SMALL BUSINESS CONCERNS	MAY/2014
I-31	52.219-14	LIMITATIONS ON SUBCONTRACTING	NOV/2011
I-32	52.222-1	NOTICE TO THE GOVERNMENT OF LABOR DISPUTES	FEB/1997
I-33	52.222-19	CHILD LABOR--COOPERATION WITH AUTHORITIES AND REMEDIES	JAN/2014
I-34	52.222-20	CONTRACTS FOR MATERIALS, SUPPLIES, ARTICLES, AND EQUIPMENT EXCEEDING \$15,000	MAY/2014
I-35	52.222-21	PROHIBITION OF SEGREGATED FACILITIES	FEB/1999
I-36	52.222-26	EQUAL OPPORTUNITY	MAR/2007
I-37	52.222-37	EMPLOYMENT REPORTS ON VETERANS	JUL/2014
I-38	52.222-40	NOTIFICATION OF EMPLOYEE RIGHTS UNDER THE NATIONAL LABOR RELATIONS ACT	DEC/2010
I-39	52.222-50	COMBATING TRAFFICKING IN PERSONS	FEB/2009
I-40	52.222-54	EMPLOYMENT ELIGIBILITY VERIFICATION	AUG/2013
I-41	52.223-5	POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION	MAY/2011
I-42	52.223-6	DRUG-FREE WORKPLACE	MAY/2001
I-43	52.223-10	WASTE REDUCTION PROGRAM	MAY/2011
I-44	52.223-18	ENCOURAGING CONTRACTOR POLICIES TO BAN TEXT MESSAGING WHILE DRIVING	AUG/2011
I-45	52.225-13	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES	JUN/2008
I-46	52.227-1	AUTHORIZATION AND CONSENT (DEC 2007) -- ALTERNATE I (APR 1984)	APR/1984
I-47	52.227-2	NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT	DEC/2007
I-48	52.227-10	FILING OF PATENT APPLICATIONS--CLASSIFIED SUBJECT MATTER	DEC/2007
I-49	52.228-7	INSURANCE--LIABILITY TO THIRD PERSONS	MAR/1996
I-50	52.232-1	PAYMENTS	APR/1984
I-51	52.232-8	DISCOUNTS FOR PROMPT PAYMENT	FEB/2002
I-52	52.232-11	EXTRAS	APR/1984
I-53	52.232-17	INTEREST	MAY/2014
I-54	52.232-20	LIMITATION OF COST	APR/1984
I-55	52.232-23	ASSIGNMENT OF CLAIMS (MAY 2014) -- ALTERNATE I (APR 1984)	APR/1984
I-56	52.232-25	PROMPT PAYMENT	JUL/2013

CONTINUATION SHEET

Reference No. of Document Being Continued

Page 26 of 46

PIIN/SIIN W56HZV-14-C-0049

MOD/AMD

Name of Offeror or Contractor: THERMOANALYTICS, INC.

	<u>Regulatory Cite</u>	<u>Title</u>	<u>Date</u>
I-57	52.232-33	PAYMENT BY ELECTRONIC FUNDS TRANSFER--SYSTEM FOR AWARD MANAGEMENT	JUL/2013
I-58	52.232-39	UNENFORCEABILITY OF UNAUTHORIZED OBLIGATIONS	JUN/2013
I-59	52.232-40	PROVIDING ACCELERATED PAYMENTS TO SMALL BUSINESS SUBCONTRACTORS	DEC/2013
I-60	52.233-1	DISPUTES	MAY/2014
I-61	52.233-3	PROTEST AFTER AWARD	AUG/1996
I-62	52.233-4	APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM	OCT/2004
I-63	52.242-1	NOTICE OF INTENT TO DISALLOW COSTS	APR/1984
I-64	52.242-3	PENALTIES FOR UNALLOWABLE COSTS	MAY/2014
I-65	52.242-4	CERTIFICATION OF FINAL INDIRECT COSTS	JAN/1997
I-66	52.242-13	BANKRUPTCY	JUL/1995
I-67	52.243-2	CHANGES - COST-REIMBURSEMENT (AUG 1987) -- ALTERNATE V (APR 1984)	APR/1984
I-68	52.244-5	COMPETITION IN SUBCONTRACTING	DEC/1996
I-69	52.244-6	SUBCONTRACTS FOR COMMERCIAL ITEMS	JUL/2014
I-70	52.245-1	GOVERNMENT PROPERTY	APR/2012
I-71	52.245-9	USE AND CHARGES	APR/2012
I-72	52.246-23	LIMITATION OF LIABILITY	FEB/1997
I-73	52.247-63	PREFERENCE FOR U.S.-FLAG AIR CARRIERS	JUN/2003
I-74	52.249-6	TERMINATION (COST REIMBURSEMENT)	MAY/2004
I-75	52.249-14	EXCUSABLE DELAYS	APR/1984
I-76	52.253-1	COMPUTER GENERATED FORMS	JAN/1991
I-77	252.201-7000	CONTRACTING OFFICER'S REPRESENTATIVE	DEC/1991
I-78	252.203-7000	REQUIREMENTS RELATING TO COMPENSATION OF FORMER DOD OFFICIALS	SEP/2011
I-79	252.203-7001	PROHIBITION ON PERSONS CONVICTED OF FRAUD OR OTHER DEFENSE-CONTRACT-RELATED FELONIES	DEC/2008
I-80	252.203-7002	REQUIREMENT TO INFORM EMPLOYEES OF WHISTLEBLOWER RIGHTS	SEP/2013
I-81	252.203-7003	AGENCY OFFICE OF THE INSPECTOR GENERAL	DEC/2012
I-82	252.204-7000	DISCLOSURE OF INFORMATION	AUG/2013
I-83	252.204-7002	PAYMENT FOR SUBLINE ITEMS NOT SEPARATELY PRICED	DEC/1991
I-84	252.204-7003	CONTROL OF GOVERNMENT PERSONNEL WORK PRODUCT	APR/1992
I-85	252.204-7004	ALTERNATE A, SYSTEM FOR AWARD MANAGEMENT	FEB/2014
I-86	252.204-7005	ORAL ATTESTATION OF SECURITY RESPONSIBILITIES	NOV/2001
I-87	252.204-7006	BILLING INSTRUCTIONS	OCT/2005
I-88	252.204-7012	SAFEGUARDING OF UNCLASSIFIED CONTROLLED TECHNICAL INFORMATION	NOV/2013
I-89	252.205-7000	PROVISION OF INFORMATION TO COOPERATIVE AGREEMENT HOLDERS	DEC/1991
I-90	252.209-7004	SUBCONTRACTING WITH FIRMS THAT ARE OWNED OR CONTROLLED BY THE GOVERNMENT OF A TERRORIST COUNTRY	MAR/2014
I-91	252.215-7000	PRICING ADJUSTMENTS	DEC/2012
I-92	252.215-7002	COST ESTIMATING SYSTEM REQUIREMENTS	DEC/2012
I-93	252.223-7004	DRUG-FREE WORK FORCE	SEP/1988
I-94	252.223-7006	PROHIBITION ON STORAGE AND DISPOSAL OF TOXIC AND HAZARDOUS MATERIALS	APR/2012
I-95	252.225-7001	BUY AMERICAN AND BALANCE OF PAYMENTS PROGRAM	DEC/2012
I-96	252.225-7002	QUALIFYING COUNTRY SOURCES AS SUBCONTRACTORS	DEC/2012
I-97	252.225-7006	QUARTERLY REPORTING OF ACTUAL CONTRACT PERFORMANCE OUTSIDE THE UNITED STATES	OCT/2010
I-98	252.225-7012	PREFERENCE FOR CERTAIN DOMESTIC COMMODITIES	FEB/2013
I-99	252.225-7013	DUTY-FREE ENTRY	OCT/2013
I-100	252.225-7015	RESTRICTION ON ACQUISITION OF HAND OR MEASURING TOOLS	JUN/2005
I-101	252.225-7016	RESTRICTION ON ACQUISITION OF BALL AND ROLLER BEARINGS	JUN/2011
I-102	252.225-7033	WAIVER OF UNITED KINGDOM LEVIES	APR/2003
I-103	252.225-7048	EXPORT-CONTROLLED ITEMS	JUN/2013
I-104	252.226-7001	UTILIZATION OF INDIAN ORGANIZATIONS, INDIAN-OWNED ECONOMIC ENTERPRISES, AND NATIVE HAWAIIAN SMALL BUSINESS CONCERNS	SEP/2004
I-105	252.227-7013	RIGHTS IN TECHNICAL DATA--NONCOMMERCIAL ITEMS	FEB/2014
I-106	252.227-7015	TECHNICAL DATA--COMMERCIAL ITEMS	FEB/2014
I-107	252.227-7016	RIGHTS IN BID OR PROPOSAL INFORMATION	JAN/2011
I-108	252.227-7018	RIGHTS IN NONCOMMERCIAL TECHNICAL DATA AND COMPUTER SOFTWARE--SMALL BUSINESS INNOVATION RESEARCH (SBIR) PROGRAM	FEB/2014
I-109	252.227-7019	VALIDATION OF ASSERTED RESTRICTIONS--COMPUTER SOFTWARE	SEP/2011
I-110	252.227-7025	LIMITATIONS ON THE USE OR DISCLOSURE OF GOVERNMENT-FURNISHED INFORMATION MARKED WITH RESTRICTIVE LEGENDS	MAY/2013
I-111	252.227-7027	DEFERRED ORDERING OF TECHNICAL DATA OR COMPUTER SOFTWARE	APR/1988
I-112	252.227-7030	TECHNICAL DATA--WITHHOLDING OF PAYMENT	MAR/2000
I-113	252.227-7037	VALIDATION OF RESTRICTIVE MARKINGS ON TECHNICAL DATA	JUN/2013

CONTINUATION SHEET**Reference No. of Document Being Continued**

Page 27 of 46

PIIN/SIIN W56HZV-14-C-0049

MOD/AMD

Name of Offeror or Contractor: THERMOANALYTICS, INC.

	<u>Regulatory Cite</u>	<u>Title</u>	<u>Date</u>
I-114	252.227-7039	PATENTS--REPORTING OF SUBJECT INVENTIONS	APR/1990
I-115	252.231-7000	SUPPLEMENTAL COST PRINCIPLES	DEC/1991
I-116	252.232-7003	ELECTRONIC SUBMISSION OF PAYMENT REQUESTS AND RECEIVING REPORTS	JUN/2012
I-117	252.232-7010	LEVIES ON CONTRACT PAYMENTS	DEC/2006
I-118	252.235-7011	FINAL SCIENTIFIC OR TECHNICAL REPORT	NOV/2004
I-119	252.239-7001	INFORMATION ASSURANCE CONTRACTOR TRAINING AND CERTIFICATION	JAN/2008
I-120	252.242-7005	CONTRACTOR BUSINESS SYSTEMS	FEB/2012
I-121	252.242-7006	ACCOUNTING SYSTEM ADMINISTRATION	FEB/2012
I-122	252.243-7001	PRICING OF CONTRACT MODIFICATIONS	DEC/1991
I-123	252.243-7002	REQUESTS FOR EQUITABLE ADJUSTMENT	DEC/2012
I-124	252.244-7000	SUBCONTRACTS FOR COMMERCIAL ITEMS	JUN/2013
I-125	252.244-7001	CONTRACTOR PURCHASING SYSTEM ADMINISTRATION--BASIC	MAY/2014
I-126	252.245-7001	TAGGING, LABELING, AND MARKING OF GOVERNMENT-FURNISHED PROPERTY	APR/2012
I-127	252.245-7002	REPORTING LOSS OF GOVERNMENT PROPERTY	APR/2012
I-128	252.245-7003	CONTRACTOR PROPERTY MANAGEMENT SYSTEM ADMINISTRATION	APR/2012
I-129	252.245-7004	REPORTING, REUTILIZATION, AND DISPOSAL	MAY/2013
I-130	252.246-7000	MATERIAL INSPECTION AND RECEIVING REPORT	MAR/2008
I-131	252.246-7001	WARRANTY OF DATA--BASIC	MAR/2014
I-132	252.247-7023	TRANSPORTATION OF SUPPLIES BY SEA--BASIC	APR/2014
I-133	252.247-7024	NOTIFICATION OF TRANSPORTATION OF SUPPLIES BY SEA	MAR/2000
I-134	52.216-7	ALLOWABLE COST AND PAYMENT	JUN/2013

(a) Invoicing.

(1) The Government will make payments to the Contractor when requested as work progresses, but (except for small business concerns) not more often than once every 2 weeks, in amounts determined to be allowable by the Contracting Officer in accordance with Federal Acquisition Regulation (FAR) Subpart 31.2 in effect on the date of this contract and the terms of this contract. The Contractor may submit to an authorized representative of the Contracting Officer, in such form and reasonable detail as the representative may require, an invoice or voucher supported by a statement of the claimed allowable cost for performing this contract.

(2) Contract financing payments are not subject to the interest penalty provisions of the Prompt Payment Act. Interim payments made prior to the final payment under the contract are contract financing payments, except interim payments if this contract contains Alternate I to the clause at 52.232-25.

(3) The designated payment office will make interim payments for contract financing on the 30th day after the designated billing office receives a proper payment request. In the event that the Government requires an audit or other review of a specific payment request to ensure compliance with the terms and conditions of the contract, the designated payment office is not compelled to make payment by the specified due date.

(b) Reimbursing costs.

(1) For the purpose of reimbursing allowable costs (except as provided in subparagraph (b)(2) of this clause, with respect to pension, deferred profit sharing, and employee stock ownership plan contributions), the term costs includes only --

(i) Those recorded costs that, at the time of the request for reimbursement, the Contractor has paid by cash, check, or other form of actual payment for items or services purchased directly for the contract;

(ii) When the Contractor is not delinquent in paying costs of contract performance in the ordinary course of business, costs incurred, but not necessarily paid, for --

(A) Supplies and services purchased directly for the contract and associated financing payments to subcontractors, provided payments determined due will be made

(1) In accordance with the terms and conditions of a subcontract or invoice; and

(2) Ordinarily within 30 days of the submission of the Contractors payment request to the Government;

(B) Materials issued from the Contractors inventory and placed in the production process for use on the contract;

(C) Direct labor;

(D) Direct travel;

CONTINUATION SHEET**Reference No. of Document Being Continued**

Page 28 of 46

PIIN/SIIN W56HZV-14-C-0049

MOD/AMD

Name of Offeror or Contractor: THERMOANALYTICS, INC.

(E) Other direct in-house costs; and

(F) Properly allocable and allowable indirect costs, as shown in the records maintained by the Contractor for purposes of obtaining reimbursement under Government contracts; and

(iii) The amount of financing payments that have been paid by cash, check or other form of payment to subcontractors.

(2) Accrued costs of Contractor contributions under employee pension plans shall be excluded until actually paid unless

(i) The Contractors practice is to make contributions to the retirement fund quarterly or more frequently; and

(ii) The contribution does not remain unpaid 30 days after the end of the applicable quarter or shorter payment period (any contribution remaining unpaid shall be excluded from the Contractors indirect costs for payment purposes).

(3) Notwithstanding the audit and adjustment of invoices or vouchers under paragraph (g) of this clause, allowable indirect costs under this contract shall be obtained by applying indirect cost rates established in accordance with paragraph (d) of this clause.

(4) Any statements in specifications or other documents incorporated in this contract by reference designating performance of services or furnishing of materials at the Contractors expense or at no cost to the Government shall be disregarded for purposes of cost-reimbursement under this clause.

(c) Small business concerns. A small business concern may receive more frequent payments than every 2 weeks.

(d) Final indirect cost rates.

(1) Final annual indirect cost rates and the appropriate bases shall be established in accordance with Subpart 42.7 of the Federal Acquisition Regulation (FAR) in effect for the period covered by the indirect cost rate proposal.

(2)(i) The Contractor shall submit an adequate final indirect cost rate proposal to the Contracting Officer (or cognizant Federal agency official) and auditor within the 6-month period following the expiration of each of its fiscal years. Reasonable extensions, for exceptional circumstances only, may be requested in writing by the Contractor and granted in writing by the Contracting Officer. The Contractor shall support its proposal with adequate supporting data.

(ii) The proposed rates shall be based on the Contractors actual cost experience for that period. The appropriate Government representative and the Contractor shall establish the final indirect cost rates as promptly as practical after receipt of the Contractors proposal.

(iii) An adequate indirect cost rate proposal shall include the following data unless otherwise specified by the cognizant Federal agency official:

(A) Summary of all claimed indirect expense rates, including pool, base, and calculated indirect rate.

(B) General and Administrative expenses (final indirect cost pool). Schedule of claimed expenses by element of cost as identified in accounting records (Chart of Accounts).

(C) Overhead expenses (final indirect cost pool). Schedule of claimed expenses by element of cost as identified in accounting records (Chart of Accounts) for each final indirect cost pool.

(D) Occupancy expenses (intermediate indirect cost pool). Schedule of claimed expenses by element of cost as identified in accounting records (Chart of Accounts) and expense reallocation to final indirect cost pools.

(E) Claimed allocation bases, by element of cost, used to distribute indirect costs.

(F) Facilities capital cost of money factors computation.

(G) Reconciliation of books of account (i.e., General Ledger) and claimed direct costs by major cost element.

(H) Schedule of direct costs by contract and subcontract and indirect expense applied at claimed rates, as well as a subsidiary schedule of Government participation percentages in each of the allocation base amounts.

(I) Schedule of cumulative direct and indirect costs claimed and billed by contract and subcontract.

(J) Subcontract information. Listing of subcontracts awarded to companies for which the contractor is the prime or upper-tier contractor (include prime and subcontract numbers; subcontract value and award type; amount claimed during the fiscal year; and the

CONTINUATION SHEET**Reference No. of Document Being Continued**

Page 29 of 46

PIIN/SIIN W56HZV-14-C-0049

MOD/AMD

Name of Offeror or Contractor: THERMOANALYTICS, INC.

subcontractor name, address, and point of contact information).

(K) Summary of each time-and-materials and labor-hour contract information, including labor categories, labor rates, hours, and amounts; direct materials; other direct costs; and, indirect expense applied at claimed rates.

(L) Reconciliation of total payroll per IRS form 941 to total labor costs distribution.

(M) Listing of decisions/agreements/approvals and description of accounting/organizational changes.

(N) Certificate of final indirect costs (see 52.242-4, Certification of Final Indirect Costs).

(O) Contract closing information for contracts physically completed in this fiscal year (include contract number, period of performance, contract ceiling amounts, contract fee computations, level of effort, and indicate if the contract is ready to close).

(iv) The following supplemental information is not required to determine if a proposal is adequate, but may be required during the audit process:

(A) Comparative analysis of indirect expense pools detailed by account to prior fiscal year and budgetary data.

(B) General Organizational information and limitation on allowability of compensation for certain contractor personnel. See 31.205-6(p). Additional salary reference information is available at [://www.whitehouse.gov/omb/procurement_index_exec_comp/](http://www.whitehouse.gov/omb/procurement_index_exec_comp/).

(C) Identification of prime contracts under which the contractor performs as a subcontractor.

(D) Description of accounting system (excludes contractors required to submit a CAS Disclosure Statement or contractors where the description of the accounting system has not changed from the previous year's submission).

(E) Procedures for identifying and excluding unallowable costs from the costs claimed and billed (excludes contractors where the procedures have not changed from the previous year's submission).

(F) Certified financial statements and other financial data (e.g., trial balance, compilation, review, etc.).

(G) Management letter from outside CPAs concerning any internal control weaknesses.

(H) Actions that have been and/or will be implemented to correct the weaknesses described in the management letter from subparagraph (G) of this section.

(I) List of all internal audit reports issued since the last disclosure of internal audit reports to the Government.

(J) Annual internal audit plan of scheduled audits to be performed in the fiscal year when the final indirect cost rate submission is made.

(K) Federal and State income tax returns.

(L) Securities and Exchange Commission 10-K annual report.

(M) Minutes from board of directors meetings.

(N) Listing of delay claims and termination claims submitted which contain costs relating to the subject fiscal year.

(O) Contract briefings, which generally include a synopsis of all pertinent contract provisions, such as: Contract type, contract amount, product or service(s) to be provided, contract performance period, rate ceilings, advance approval requirements, pre-contract cost allowability limitations, and billing limitations.

(v) The Contractor shall update the billings on all contracts to reflect the final settled rates and update the schedule of cumulative direct and indirect costs claimed and billed, as required in paragraph (d)(2)(iii)(I) of this section, within 60 days after settlement of final indirect cost rates.

(3) The Contractor and the appropriate Government representative shall execute a written understanding setting forth the final indirect cost rates. The understanding shall specify

(i) the agreed-upon final annual indirect cost rates,

Name of Offeror or Contractor: THERMOANALYTICS, INC.

(ii) the bases to which the rates apply,

(iii) the periods for which the rates apply,

(iv) any specific indirect cost items treated as direct costs in the settlement, and

(v) the affected contract and/or subcontract, identifying any with advance agreements or special terms and the applicable rates.

The understanding shall not change any monetary ceiling, contract obligation, or specific cost allowance or disallowance provided for in this contract. The understanding is incorporated into this contract upon execution.

(4) Failure by the parties to agree on a final annual indirect cost rate shall be a dispute within the meaning of the Disputes clause.

(5) Within 120 days (or longer period if approved in writing by the Contracting Officer) after settlement of the final annual indirect cost rates for all years of a physically complete contract, Contractor shall submit a completion invoice or voucher to reflect the settled amounts and rates. The completion invoice or voucher shall include settled subcontract amounts and rates. The prime contractor is responsible for settling subcontractor amounts and rates included in the completion invoice or voucher and providing status of subcontractor audits to the contracting officer upon request.

(6)(i) If the Contractor fails to submit a completion invoice or voucher within the time specified in paragraph (d)(5) of this clause, the Contracting Officer may--

(A) Determine the amounts due to the Contractor under the contract; and

(B) Record this determination in a unilateral modification to the contract.

(ii) This determination constitutes the final decision of the Contracting Officer in accordance with the Disputes clause.

(e) Billing rates. Until final annual indirect cost rates are established for any period, the Government shall reimburse the Contractor at billing rates established by the Contracting Officer or by an authorized representative (the cognizant auditor), subject to adjustment when the final rates are established. These billing rates --

(1) Shall be the anticipated final rates; and

(2) May be prospectively or retroactively revised by mutual agreement, at either party's request, to prevent substantial overpayment or underpayment.

(f) Quick-closeout procedures. Quick-closeout procedures are applicable when the conditions in FAR 42.708(a) are satisfied.

(g) Audit. At any time or times before final payment, the Contracting Officer may have the Contractor's invoices or vouchers and statements of cost audited. Any payment may be --

(1) Reduced by amounts found by the Contracting Officer not to constitute allowable costs; or

(2) Adjusted for prior overpayments or underpayments.

(h) Final payment.

(1) Upon approval of a completion invoice or voucher submitted by the Contractor in accordance with paragraph (d)(5) of this clause, and upon the Contractor's compliance with all terms of this contract, the Government shall promptly pay any balance of allowable costs and that part of the fee (if any) not previously paid.

(2) The Contractor shall pay to the Government any refunds, rebates, credits, or other amounts (including interest, if any) accruing to or received by the Contractor or any assignee under this contract, to the extent that those amounts are properly allocable to costs for which the Contractor has been reimbursed by the Government. Reasonable expenses incurred by the Contractor for securing refunds, rebates, credits, or other amounts shall be allowable costs if approved by the Contracting Officer. Before final payment under this contract, the Contractor and each assignee whose assignment is in effect at the time of final payment shall execute and deliver --

(i) An assignment to the Government, in form and substance satisfactory to the Contracting Officer, of refunds, rebates, credits, or other amounts (including interest, if any) properly allocable to costs for which the Contractor has been reimbursed by the Government under this contract; and

(ii) A release discharging the Government, its officers, agents, and employees from all liabilities, obligations, and claims arising out of or under this contract, except --

CONTINUATION SHEET**Reference No. of Document Being Continued**

Page 31 of 46

PIIN/SIIN W56HZV-14-C-0049

MOD/AMD

Name of Offeror or Contractor: THERMOANALYTICS, INC.

(A) Specified claims stated in exact amounts, or in estimated amounts when the exact amounts are not known;

(B) Claims (including reasonable incidental expenses) based upon liabilities of the Contractor to third parties arising out of the performance of this contract; provided, that the claims are not known to the Contractor on the date of the execution of the release, and that the Contractor gives notice of the claims in writing to the Contracting Officer within 6 years following the release date or notice of final payment date, whichever is earlier; and

(C) Claims for reimbursement of costs, including reasonable incidental expenses, incurred by the Contractor under the patent clauses of this contract, excluding, however, any expenses arising from the Contractors indemnification of the Government against patent liability.

(End of Clause)

I-135 52.222-2 PAYMENT FOR OVERTIME PREMIUMS JUL/1990

(a) The use of overtime is authorized under this contract if the overtime premium does not exceed zero or the overtime premium is paid for work --

(1) Necessary to cope with emergencies such as those resulting from accidents, natural disasters, breakdowns of production equipment, or occasional production bottlenecks of a sporadic nature;

(2) By indirect-labor employees such as those performing duties in connection with administration, protection, transportation, maintenance, standby plant protection, operation of utilities, or accounting;

(3) To perform tests, industrial processes, laboratory procedures, loading or unloading of transportation conveyances, and operations in flight or afloat that are continuous in nature and cannot reasonably be interrupted or completed otherwise; or

(4) That will result in lower overall costs to the Government.

(b) Any request for estimated overtime premiums that exceeds the amount specified above shall include all estimated overtime for contract completion and shall --

(1) Identify the work unit; e.g., department or section in which the requested overtime will be used, together with present workload, staffing, and other data of the affected unit sufficient to permit the Contracting Officer to evaluate the necessity for the overtime;

(2) Demonstrate the effect that denial of the request will have on the contract delivery or performance schedule;

(3) Identify the extent to which approval of overtime would affect the performance or payments in connection with other Government contracts, together with identification of each affected contract; and

(4) Provide reasons why the required work cannot be performed by using multishift operations or by employing additional personnel.

(End of Clause)

I-136 52.227-11 PATENT RIGHTS--OWNERSHIP BY THE CONTRACTOR MAY/2014

(a) As used in this clause--

Invention means any invention or discovery that is or may be patentable or otherwise protectable under title 35 of the U.S. Code, or any variety of plant that is or may be protectable under the Plant Variety Protection Act (7 U.S.C. 2321, et seq.)

Made means--

(1) When used in relation to any invention other than a plant variety, the conception or first actual reduction to practice of the invention; or

(2) When used in relation to a plant variety, that the Contractor has at least tentatively determined that the variety has been reproduced with recognized characteristics.

Nonprofit organization means a university or other institution of higher education or an organization of the type described in section 501(c)(3) of the Internal Revenue Code of 1954 (26 U.S.C. 501(c)) and exempt from taxation under section 501(a) of the Internal

Name of Offeror or Contractor: THERMOANALYTICS, INC.

Revenue Code (26 U.S.C. 501(a)), or any nonprofit scientific or educational organization qualified under a State nonprofit organization statute.

Practical application means to manufacture, in the case of a composition of product; to practice, in the case of a process or method; or to operate, in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or Government regulations, available to the public on reasonable terms.

Subject invention means any invention of the Contractor made in the performance of work under this contract.

(b) Contractor's rights. (1) Ownership. The Contractor may retain ownership of each subject invention throughout the world in accordance with the provisions of this clause.

(2) License. (i) The Contractor shall retain a nonexclusive royalty-free license throughout the world in each subject invention to which the Government obtains title, unless the Contractor fails to disclose the invention within the times specified in paragraph (c) of this clause. The Contractor's license extends to any domestic subsidiaries and affiliates within the corporate structure of which the Contractor is a part, and includes the right to grant sublicenses to the extent the Contractor was legally obligated to do so at contract award. The license is transferable only with the written approval of the agency, except when transferred to the successor of that part of the Contractor's business to which the invention pertains.

(ii) The Contractor's license may be revoked or modified by the agency to the extent necessary to achieve expeditious practical application of the subject invention in a particular country in accordance with the procedures in FAR 27.302(i)(2) and 27.304-1(f).

(c) Contractor's obligations. (1) The Contractor shall disclose in writing each subject invention to the Contracting Officer within 2 months after the inventor discloses it in writing to Contractor personnel responsible for patent matters. The disclosure shall identify the inventor(s) and this contract under which the subject invention was made. It shall be sufficiently complete in technical detail to convey a clear understanding of the subject invention. The disclosure shall also identify any publication, on sale (i.e., sale or offer for sale), or public use of the subject invention, or whether a manuscript describing the subject invention has been submitted for publication and, if so, whether it has been accepted for publication. In addition, after disclosure to the agency, the Contractor shall promptly notify the Contracting Officer of the acceptance of any manuscript describing the subject invention for publication and any on sale or public use.

(2) The Contractor shall elect in writing whether or not to retain ownership of any subject invention by notifying the Contracting Officer within 2 years of disclosure to the agency. However, in any case where publication, on sale, or public use has initiated the 1-year statutory period during which valid patent protection can be obtained in the United States, the period for election of title may be shortened by the agency to a date that is no more than 60 days prior to the end of the statutory period.

(3) The Contractor shall file either a provisional or a nonprovisional patent application or a Plant Variety Protection Application on an elected subject invention within 1 year after election. However, in any case where a publication, on sale, or public use has initiated the 1-year statutory period during which valid patent protection can be obtained in the United States, the Contractor shall file the application prior to the end of that statutory period. If the Contractor files a provisional application, it shall file a nonprovisional application within 10 months of the filing of the provisional application. The Contractor shall file patent applications in additional countries or international patent offices within either 10 months of the first filed patent application (whether provisional or nonprovisional) or 6 months from the date permission is granted by the Commissioner of Patents to file foreign patent applications where such filing has been prohibited by a Secrecy Order.

(4) The Contractor may request extensions of time for disclosure, election, or filing under paragraphs (c)(1), (c)(2), and (c)(3) of this clause.

(d) Government's rights--(1) Ownership. The Contractor shall assign to the agency, on written request, title to any subject invention--

(i) If the Contractor fails to disclose or elect ownership to the subject invention within the times specified in paragraph (c) of this clause, or elects not to retain ownership; provided, that the agency may request title only within 60 days after learning of the Contractor's failure to disclose or elect within the specified times.

(ii) In those countries in which the Contractor fails to file patent applications within the times specified in paragraph (c) of this clause; provided, however, that if the Contractor has filed a patent application in a country after the times specified in paragraph (c) of this clause, but prior to its receipt of the written request of the agency, the Contractor shall continue to retain ownership in that country.

(iii) In any country in which the Contractor decides not to continue the prosecution of any application for, to pay the maintenance fees on, or defend in reexamination or opposition proceeding on, a patent on a subject invention.

(2) License. If the Contractor retains ownership of any subject invention, the Government shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice, or have practiced for or on its behalf, the subject invention throughout the world.

Name of Offeror or Contractor: THERMOANALYTICS, INC.

(e) Contractor action to protect the Government's interest. (1) The Contractor shall execute or have executed and promptly deliver to the agency all instruments necessary to--

(i) Establish or confirm the rights the Government has throughout the world in those subject inventions in which the Contractor elects to retain ownership; and

(ii) Assign title to the agency when requested under paragraph (d) of this clause and to enable the Government to obtain patent protection and plant variety protection for that subject invention in any country.

(2) The Contractor shall require, by written agreement, its employees, other than clerical and nontechnical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in the Contractor's format, each subject invention in order that the Contractor can comply with the disclosure provisions of paragraph (c) of this clause, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. The disclosure format should require, as a minimum, the information required by paragraph (c)(1) of this clause. The Contractor shall instruct such employees, through employee agreements or other suitable educational programs, as to the importance of reporting inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars.

(3) The Contractor shall notify the Contracting Officer of any decisions not to file a nonprovisional patent application, continue the prosecution of a patent application, pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than 30 days before the expiration of the response or filing period required by the relevant patent office.

(4) The Contractor shall include, within the specification of any United States nonprovisional patent or plant variety protection application and any patent or plant variety protection certificate issuing thereon covering a subject invention, the following statement, "This invention was made with Government support under (identify the contract) awarded by (identify the agency). The Government has certain rights in the invention."

(f) Reporting on utilization of subject inventions. The Contractor shall submit, on request, periodic reports no more frequently than annually on the utilization of a subject invention or on efforts at obtaining utilization of the subject invention that are being made by the Contractor or its licensees or assignees. The reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the Contractor, and other data and information as the agency may reasonably specify. The Contractor also shall provide additional reports as may be requested by the agency in connection with any march-in proceeding undertaken by the agency in accordance with paragraph (h) of this clause. The Contractor also shall mark any utilization report as confidential/proprietary to help prevent inadvertent release outside the Government. As required by 35 U.S.C. 202(c)(5), the agency will not disclose that information to persons outside the Government without the Contractor's permission.

(g) Preference for United States industry. Notwithstanding any other provision of this clause, neither the Contractor nor any assignee shall grant to any person the exclusive right to use or sell any subject invention in the United States unless the person agrees that any products embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement for an agreement may be waived by the agency upon a showing by the Contractor or its assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States, or that under the circumstances domestic manufacture is not commercially feasible.

(h) March-in rights. The Contractor acknowledges that, with respect to any subject invention in which it has retained ownership, the agency has the right to require licensing pursuant to 35 U.S.C. 203 and 210(c), and in accordance with the procedures in 37 CFR 401.6 and any supplemental regulations of the agency in effect on the date of contract award.

(i) Special provisions for contracts with nonprofit organizations. If the Contractor is a nonprofit organization, it shall--

(1) Not assign rights to a subject invention in the United States without the written approval of the agency, except where an assignment is made to an organization that has as one of its primary functions the management of inventions, provided, that the assignee shall be subject to the same provisions as the Contractor;

(2) Share royalties collected on a subject invention with the inventor, including Federal employee co-inventors (but through their agency if the agency deems it appropriate) when the subject invention is assigned in accordance with 35 U.S.C. 202(e) and 37 CFR 401.10;

(3) Use the balance of any royalties or income earned by the Contractor with respect to subject inventions, after payment of expenses (including payments to inventors) incidental to the administration of subject inventions for the support of scientific research or education; and

(4) Make efforts that are reasonable under the circumstances to attract licensees of subject inventions that are small business concerns, and give a preference to a small business concern when licensing a subject invention if the Contractor determines that the small business concern has a plan or proposal for marketing the invention which, if executed, is equally as likely to bring the invention to practical application as any plans or proposals from applicants that are not small business concerns; provided, that the

CONTINUATION SHEET	Reference No. of Document Being Continued	Page 34 of 46
	PIIN/SIIN W56HZV-14-C-0049	MOD/AMD

Name of Offeror or Contractor: THERMOANALYTICS, INC.

Contractor is also satisfied that the small business concern has the capability and resources to carry out its plan or proposal. The decision whether to give a preference in any specific case will be at the discretion of the Contractor.

(5) Allow the Secretary of Commerce to review the Contractor's licensing program and decisions regarding small business applicants, and negotiate changes to its licensing policies, procedures, or practices with the Secretary of Commerce when the Secretary's review discloses that the Contractor could take reasonable steps to more effectively implement the requirements of paragraph (i)(4) of this clause.

(j) Communications. N/A

(k) Subcontracts. (1) The Contractor shall include the substance of this clause, including this paragraph (k), in all subcontracts for experimental, developmental, or research work to be performed by a small business concern or nonprofit organization.

(2) The Contractor shall include in all other subcontracts for experimental, developmental, or research work the substance of the patent rights clause required by FAR Subpart 27.3.

(3) At all tiers, the patent rights clause must be modified to identify the parties as follows: references to the Government are not changed, and the subcontractor has all rights and obligations of the Contractor in the clause. The Contractor shall not, as part of the consideration for awarding the subcontract, obtain rights in the subcontractor's subject inventions.

(4) In subcontracts, at any tier, the agency, the subcontractor, and the Contractor agree that the mutual obligations of the parties created by this clause constitute a contract between the subcontractor and the agency with respect to the matters covered by the clause; provided, however, that nothing in this paragraph is intended to confer any jurisdiction under the Contract Disputes statute in connection with proceedings under paragraph (h) of this clause.

(End of clause)

I-137

52.243-7

NOTIFICATION OF CHANGES

APR/1984

(a) Definitions. Contracting Officer, as used in this clause, does not include any representative of the Contracting Officer.

Specifically Authorized Representative (SAR), as used in this clause, means any person the Contracting Officer has so designated by written notice (a copy of which shall be provided to the Contractor) which shall refer to this subparagraph and shall be issued to the designated representative before the SAR exercises such authority.

(b) Notice. The primary purpose of this clause is to obtain prompt reporting of Government conduct that the Contractor considers to constitute a change to this contract. Except for changes identified as such in writing and signed by the Contracting Officer, the Contractor shall notify the Administrative Contracting Officer in writing promptly, within 10 calendar days from the date that the Contractor identifies any Government conduct (including actions, inactions, and written or oral communications) that the Contractor regards as a change to the contract terms and conditions. On the basis of the most accurate information available to the Contractor, the notice shall state --

(1) The date, nature, and circumstances of the conduct regarded as a change;

(2) The name, function, and activity of each Government individual and Contractor official or employee involved in or knowledgeable about such conduct;

(3) The identification of any documents and the substance of any oral communication involved in such conduct;

(4) In the instance of alleged acceleration of scheduled performance or delivery, the basis upon which it arose;

(5) The particular elements of contract performance for which the Contractor may seek an equitable adjustment under this clause, including --

(i) What contract line items have been or may be affected by the alleged change;

(ii) What labor or materials or both have been or may be added, deleted, or wasted by the alleged change;

(iii) To the extent practicable, what delay and disruption in the manner and sequence of performance and effect on continued performance have been or may be caused by the alleged change;

(iv) What adjustments to contract price, delivery schedule, and other provisions affected by the alleged change are estimated; and

(6) The Contractors estimate of the time by which the Government must respond to the Contractors notice to minimize cost, delay or

CONTINUATION SHEET	Reference No. of Document Being Continued	Page 35 of 46
	PIIN/SIIN W56HZV-14-C-0049 MOD/AMD	
Name of Offeror or Contractor: THERMOANALYTICS, INC.		

disruption of performance.

(c) Continued performance. Following submission of the notice required by paragraph (b) of this clause, the Contractor shall diligently continue performance of this contract to the maximum extent possible in accordance with its terms and conditions as construed by the Contractor, unless the notice reports a direction of the Contracting Officer or a communication from a SAR of the Contracting Officer, in either of which events the Contractor shall continue performance; provided, however, that if the Contractor regards the direction or communication as a change as described in paragraph (b) of this clause, notice shall be given in the manner provided. All directions, communications, interpretations, orders and similar actions of the SAR shall be reduced to writing promptly and copies furnished to the Contractor and to the Contracting Officer. The Contracting Officer shall promptly countermand any action which exceeds the authority of the SAR.

(d) Government response. The Contracting Officer shall promptly, within 14 calendar days after receipt of notice, respond to the notice in writing. In responding, the Contracting Officer shall either --

(1) Confirm that the conduct of which the Contractor gave notice constitutes a change and when necessary direct the mode of further performance;

(2) Countermand any communication regarded as a change;

(3) Deny that the conduct of which the Contractor gave notice constitutes a change and when necessary direct the mode of further performance; or

(4) In the event the Contractor's notice information is inadequate to make a decision under subparagraphs (d)(1), (2), or (3) of this clause, advise the Contractor what additional information is required, and establish the date by which it should be furnished and the date thereafter by which the Government will respond.

(e) Equitable adjustments.

(1) If the Contracting Officer confirms that Government conduct effected a change as alleged by the Contractor, and the conduct causes an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the work under this contract, whether changed or not changed by such conduct, an equitable adjustment shall be made --

(i) In the contract price or delivery schedule or both; and

(ii) In such other provisions of the contract as may be affected.

(2) The contract shall be modified in writing accordingly. In the case of drawings, designs or specifications which are defective and for which the Government is responsible, the equitable adjustment shall include the cost and time extension for delay reasonably incurred by the Contractor in attempting to comply with the defective drawings, designs or specifications before the Contractor identified, or reasonably should have identified, such defect. When the cost of property made obsolete or excess as a result of a change confirmed by the Contracting Officer under this clause is included in the equitable adjustment, the Contracting Officer shall have the right to prescribe the manner of disposition of the property. The equitable adjustment shall not include increased costs or time extensions for delay resulting from the Contractor's failure to provide notice or to continue performance as provided, respectively, in paragraphs (b) and (c) of this clause.

NOTE: The phrases contract price and cost wherever they appear in the clause, may be appropriately modified to apply to cost-reimbursement or incentive contracts, or to combinations thereof.

(End of Clause)

I-138 52.244-2 SUBCONTRACTS

OCT/2010

(a) Definitions. As used in this clause

Approved purchasing system means a Contractor's purchasing system that has been reviewed and approved in accordance with Part 44 of the Federal Acquisition Regulation (FAR)

Consent to subcontract means the Contracting Officer's written consent for the Contractor to enter into a particular subcontract.

Subcontract means any contract, as defined in FAR Subpart 2.1, entered into by a subcontractor to furnish supplies or services for performance of the prime contract or a subcontract. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.

Name of Offeror or Contractor: THERMOANALYTICS, INC.

(b) When this clause is included in a fixed-price type contract, consent to subcontract is required only on unpriced contract actions (including unpriced modifications or unpriced delivery orders), and only if required in accordance with paragraph (c) or (d) or this clause.

(c) If the contractor does not have an approved purchasing system, consent to subcontract is required for any subcontract that--

(1) Is of the cost-reimbursement, time-and-materials, or labor-hour type; or

(2) Is fixed-price and exceeds

(i) For a contract awarded by the Department of Defense, the Coast Guard, or the National Aeronautics and Space Administration, the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of the contract; or

(ii) For contracts awarded by a civilian agency other than the Coast Guard and the National Aeronautics and Space Administration, either the simplified acquisition threshold or 5 percent of the total estimated cost of the contract.

(d) If the Contractor has an approved purchasing system, the Contractor nevertheless shall obtain the Contracting Officer's written consent before placing the following subcontracts: N/A

(e)(1) The Contractor shall notify the Contracting Officer reasonably in advance of placing any subcontract or modification thereof for which consent is required under paragraph (b), (c), or (d) of this clause, including the following information:

(i) A description of the supplies or services to be subcontracted.

(ii) Identification of the type of subcontract to be used.

(iii) Identification of the proposed subcontractor.

(iv) The proposed subcontract price.

(v) The subcontractor's current, complete, and accurate certified cost or pricing data and Certificate of Current Cost or Pricing Data, if required by other contract provisions.

(vi) The subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract.

(vii) A negotiation memorandum reflecting --

(A) The principal elements of the subcontract price negotiations;

(B) The most significant considerations controlling establishment of initial or revised prices;

(C) The reason certified cost or pricing data were or were not required;

(D) The extent, if any, to which the Contractor did not rely on the subcontractor's certified cost or pricing data in determining the price objective and in negotiating the final price;

(E) The extent to which it was recognized in the negotiation that the subcontractor's certified cost or pricing data were not accurate, complete, or current; the action taken by the Contractor and the subcontractor; and the effect of any such defective data on the total price negotiated;

(F) The reasons for any significant difference between the Contractor's price objective and the price negotiated; and

(G) A complete explanation of the incentive fee or profit plan when incentives are used. The explanation shall identify each critical performance element, management decisions used to quantify each incentive element, reasons for the incentives, and a summary of all trade-off possibilities considered.

(2) The Contractor is not required to notify the Contracting Officer in advance of entering into any subcontract for which consent is not required under paragraph (c), (d), or (e) or this clause.

(f) Unless the consent or approval specifically provides otherwise, neither consent by the Contracting Officer to any subcontract nor approval of the Contractor's purchasing system shall constitute a determination --

(1) Of the acceptability of any subcontract terms or conditions;

CONTINUATION SHEET	Reference No. of Document Being Continued	Page 37 of 46
	PIIN/SIIN W56HZV-14-C-0049 MOD/AMD	

Name of Offeror or Contractor: THERMOANALYTICS, INC.

(2) Of the allowability of any cost under this contract; or

(3) To relieve the Contractor of any responsibility for performing this contract.

(g) No subcontract or modification thereof placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis, and any fee payable under cost-reimbursement type subcontracts shall not exceed the fee limitations in FAR 15.404-4(c)(4)(i).

(h) The Contractor shall give the Contracting Officer immediate written notice of any action or suit filed and prompt notice of any claim made against the Contractor by any subcontractor or vendor that, in the opinion of the Contractor, may result in litigation related in any way to this contract, with respect to which the Contractor may be entitled to reimbursement from the Government.

(i) The Government reserves the right to review the Contractor's purchasing system as set forth in FAR Subpart 44.3.i

(j) Paragraphs (c) and (e) of this clause do not apply to the following subcontracts, which were evaluated during negotiations: N/A
(End of clause)

I-139 252.203-7004 DISPLAY OF FRAUD HOTLINE POSTER(S) DEC/2012

(a) Definition. United States, as used in this clause, means the 50 States, the District of Columbia, and outlying areas.

(b) Display of fraud hotline poster(s).

(1) The Contractor shall display prominently in common work areas within business segments performing work in the United States under Department of Defense (DoD) contracts DoD hotline posters prepared by the DoD Office of the Inspector General. DoD hotline posters may be obtained via the Internet at http://www.dodig.mil/HOTLINE/hotline_posters.htm.

(2) If the contract is funded, in whole or in part, by Department of Homeland Security (DHS) disaster relief funds, the DHS fraud hotline poster shall be displayed in addition to the DoD fraud hotline poster. If a display of a DHS fraud hotline poster is required, the Contractor may obtain such poster from:

N/A

(3) Additionally, if the Contractor maintains a company website as a method of providing information to employees, the Contractor shall display an electronic version of the poster(s) at the website.

(c) Subcontracts. The Contractor shall include the substance of this clause, including this paragraph (c), in all subcontracts that exceed \$5 million except when the subcontract--

(1) Is for the acquisition of a commercial item; or

(2) Is performed entirely outside the United States.

(End of clause)

I-140 252.225-7043 ANTITERRORISM/FORCE PROTECTION POLICY FOR DEFENSE CONTRACTORS OUTSIDE
THE UNITED STATES MAR/2006

(a) Definition. United States, as used in this clause, means, the 50 States, the District of Columbia, and outlying areas.

(b) Except as provided in paragraph (c) of this clause, the Contractor and its subcontractors, if performing or traveling outside the United States under this contract, shall

(1) Affiliate with the Overseas Security Advisory Council, if the Contractor or subcontractor is a U.S. entity;

(2) Ensure that Contractor and subcontractor personnel who are U.S. nationals and are in-country on a non-transitory basis, register with the U.S. Embassy, and that Contractor and subcontractor personnel who are third country nationals comply with any security related requirements of the Embassy of their nationality;

(3) Provide, to Contractor and subcontractor personnel, antiterrorism/force protection awareness information commensurate with that which the Department of Defense (DoD) provides to its military and civilian personnel and their families, to the extent such information can be made available prior to travel outside the United States; and

CONTINUATION SHEET	Reference No. of Document Being Continued	Page 38 of 46
	PIIN/SIIN W56HZV-14-C-0049 MOD/AMD	

Name of Offeror or Contractor: THERMOANALYTICS, INC.

(4) Obtain and comply with the most current antiterrorism/force protection guidance for Contractor and subcontractor personnel.

(c) The requirements of this clause do not apply to any subcontractor that is:

- (1) A foreign government;
- (2) A representative of a foreign government; or
- (3) A foreign corporation wholly owned by a foreign government.

(d) Information and guidance pertaining to DoD antiterrorism/force protection can be obtained from: HQDA-AT; telephone, DSN 222-9832 or commercial (703) 692-9832.

(End of clause)

I-141 252.235-7010 ACKNOWLEDGMENT OF SUPPORT AND DISCLAIMER MAY/1995

(a) The Contractor shall include an acknowledgment of the Government's support in the publication of any material based on or developed under this contract, stated in the following terms: This material is based upon work supported by the U.S. Army Tank, Automotive, Research, Development, and Engineering Center (TARDEC) under Contract No. W56HZV-14-C-0049.

(b) All material, except scientific articles or papers published in scientific journals, must, in addition to any notices or disclaimers by the Contractor, also contain the following disclaimer: Any opinions, findings and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the U.S. Army Tank, Automotive, Research, Development, and Engineering Center (TARDEC).

(End of clause)

I-142 52.203-13 CONTRACTOR CODE OF BUSINESS ETHICS AND CONDUCT APR/2010

(a) Definitions. As used in this clause--

"Agent" means any individual, including a director, an officer, an employee, or an independent Contractor, authorized to act on behalf of the organization.

"Full cooperation"--

(1) Means disclosure to the Government of the information sufficient for law enforcement to identify the nature and extent of the offense and the individuals responsible for the conduct. It includes providing timely and complete response to Government auditors and investigators' request for documents and access to employees with information;

(2) Does not foreclose any Contractor rights arising in law, the FAR, or the terms of the contract. It does not require--

(i) A Contractor to waive its attorney-client privilege or the protections afforded by the attorney work product doctrine; or

(ii) Any officer, director, owner, or employee of the Contractor, including a sole proprietor, to waive his or her attorney client privilege or Fifth Amendment rights; and

(3) Does not restrict a Contractor from--

(i) Conducting an internal investigation; or

(ii) Defending a proceeding or dispute arising under the contract or related to a potential or disclosed violation.

"Principal" means an officer, director, owner, partner, or a person having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a division or business segment; and similar positions).

"Subcontract" means any contract entered into by a subcontractor to furnish supplies or services for performance of a prime contract or a subcontract.

"Subcontractor" means any supplier, distributor, vendor, or firm that furnished supplies or services to or for a prime contractor or another subcontractor.

CONTINUATION SHEET**Reference No. of Document Being Continued**

Page 39 of 46

PIIN/SIIN W56HZV-14-C-0049

MOD/AMD

Name of Offeror or Contractor: THERMOANALYTICS, INC.

"United States," means the 50 States, the District of Columbia, and outlying areas.

(b) Code of business ethics and conduct.

(1) Within 30 days after contract award, unless the Contracting Officer establishes a longer time period, the Contractor shall--

(i) Have a written code of business ethics and conduct; and

(ii) Make a copy of the code available to each employee engaged in performance of the contract.

(2) The Contractor shall--

(i) Exercise due diligence to prevent and detect criminal conduct; and

(ii) Otherwise promote an organizational culture that encourages ethical conduct and a commitment to compliance with the law.

(3)(i) The Contractor shall timely disclose, in writing, to the agency Office of the Inspector General (OIG), with a copy to the Contracting Officer, whenever, in connection with the award, performance, or closeout of this contract or any subcontract thereunder, the Contractor has credible evidence that a principal, employee, agent, or subcontractor of the Contractor has committed--

(A) A violation of Federal criminal law involving fraud, conflict of interest, bribery, or gratuity violations found in Title 18 of the United States Code; or

(B) A violation of the civil False Claims Act (31 U.S.C. 3729-3733).

(ii) The Government, to the extent permitted by law and regulation, will safeguard and treat information obtained pursuant to the Contractors disclosure as confidential where the information has been marked confidential or proprietary by the company. To the extent permitted by law and regulation, such information will not be released by the Government to the public pursuant to a Freedom of Information Act request, 5 U.S.C. Section 552, without prior notification to the Contractor. The Government may transfer documents provided by the Contractor to any department or agency within the Executive Branch if the information relates to matters within the organizations jurisdiction.

(iii) If the violation relates to an order against a Governmentwide acquisition contract, a multi-agency contract, a multiple-award schedule contract such as the Federal Supply Schedule, or any other procurement instrument intended for use by multiple agencies, the Contractor shall notify the OIG of the ordering agency and the IG of the agency responsible for the basic contract.

(c) Business ethics awareness and compliance program and internal control system. This paragraph (c) does not apply if the Contractor has represented itself as a small business concern pursuant to the award of this contract or if this contract is for the acquisition of a commercial item as defined at FAR 2.101. The Contractor shall establish the following within 90 days after contract award, unless the Contracting Officer establishes a longer time period:

(1) An ongoing business ethics awareness and compliance program.

(i) This program shall include reasonable steps to communicate periodically and in a practical manner the Contractors standards and procedures and other aspects of the Contractors business ethics awareness and compliance program and internal control system, by conducting effective training programs and otherwise disseminating information appropriate to an individuals respective roles and responsibilities.

(ii) The training conducted under this program shall be provided to the Contractors principals and employees, and as appropriate, the Contractors agents and subcontractors.

(2) An internal control system.

(i) The Contractors internal control system shall--

(A) Establish standards and procedures to facilitate timely discovery of improper conduct in connection with Government contracts; and

(B) Ensure corrective measures are promptly instituted and carried out.

(ii) At a minimum, the Contractors internal control system shall provide for the following:

(A) Assignment of responsibility at a sufficiently high level and adequate resources to ensure effectiveness of the business ethics awareness and compliance program and internal control system.

CONTINUATION SHEET**Reference No. of Document Being Continued**

Page 40 of 46

PIIN/SIIN W56HZV-14-C-0049

MOD/AMD

Name of Offeror or Contractor: THERMOANALYTICS, INC.

(B) Reasonable efforts not to include an individual as a principal, whom due diligence would have exposed as having engaged in conduct that is in conflict with the Contractors code of business ethics and conduct.

(C) Periodic reviews of company business practices, procedures, policies, and internal controls for compliance with the Contractors code of business ethics and conduct and the special requirements of Government contracting, including--

(1) Monitoring and auditing to detect criminal conduct;

(2) Periodic evaluation of the effectiveness of the business ethics awareness and compliance program and internal control system, especially if criminal conduct has been detected; and

(3) Periodic assessment of the risk of criminal conduct, with appropriate steps to design, implement, or modify the business ethics awareness and compliance program and the internal control system as necessary to reduce the risk of criminal conduct identified through this process.

(D) An internal reporting mechanism, such as a hotline, which allows for anonymity or confidentiality, by which employees may report suspected instances of improper conduct, and instructions that encourage employees to make such reports.

(E) Disciplinary action for improper conduct or for failing to take reasonable steps to prevent or detect improper conduct.

(F) Timely disclosure, in writing, to the agency OIG, with a copy to the Contracting Officer, whenever, in connection with the award, performance, or closeout of any Government contract performed by the Contractor or a subcontract thereunder, the Contractor has credible evidence that a principal, employee, agent, or subcontractor of the Contractor has committed a violation of Federal criminal law involving fraud, conflict of interest, bribery, or gratuity violations found in Title 18 U.S.C. or a violation of the civil False Claims Act (31 U.S.C. 3729-3733).

(1) If a violation relates to more than one Government contract, the Contractor may make the disclosure to the agency OIG and Contracting Officer responsible for the largest dollar value contract impacted by the violation.

(2) If the violation relates to an order against a Governmentwide acquisition contract, a multi-agency contract, a multiple-award schedule contract such as the Federal Supply Schedule, or any other procurement instrument intended for use by multiple agencies, the contractor shall notify the OIG of the ordering agency and the IG of the agency responsible for the basic contract, and the respective agencies contracting officers.

(3) The disclosure requirement for an individual contract continues until at least 3 years after final payment on the contract.

(4) The Government will safeguard such disclosures in accordance with paragraph (b)(3)(ii) of this clause.

(G) Full cooperation with any Government agencies responsible for audits, investigations, or corrective actions.

(d) Subcontracts.

(1) The Contractor shall include the substance of this clause, including this paragraph (d), in subcontracts that have a value in excess of \$5,000,000 and a performance period of more than 120 days.

(2) In altering this clause to identify the appropriate parties, all disclosures of violation of the civil False Claims Act or of Federal criminal law shall be directed to the agency Office of the Inspector General, with a copy to the Contracting Officer.

(End of clause)

I-143

52.215-19

NOTIFICATION OF OWNERSHIP CHANGES

OCT/1997

(a) The Contractor shall make the following notifications in writing:

(1) When the Contractor becomes aware that a change in its ownership has occurred, or is certain to occur, that could result in changes in the valuation of its capitalized assets in the accounting records, the Contractor shall notify the Administrative Contracting Officer (ACO) within 30 days.

(2) The Contractor shall also notify the ACO within 30 days whenever changes to asset valuations or any other cost changes have occurred or are certain to occur as a result of a change in ownership.

(b) The Contractor shall --

CONTINUATION SHEET**Reference No. of Document Being Continued**

Page 41 of 46

PIIN/SIIN W56HZV-14-C-0049

MOD/AMD

Name of Offeror or Contractor: THERMOANALYTICS, INC.

- (1) Maintain current, accurate, and complete inventory records of assets and their costs;
 - (2) Provide the ACO or designated representative ready access to the records upon request;
 - (3) Ensure that all individual and grouped assets, their capitalized values, accumulated depreciation or amortization, and remaining useful lives are identified accurately before and after each of the Contractors ownership changes; and
 - (4) Retain and continue to maintain depreciation and amortization schedules based on the asset records maintained before each Contractor ownership change.
- (c) The Contractor shall include the substance of this clause in all subcontracts under this contract that meet the applicability requirement of FAR 15.408(k).

(End of Clause)

I-144

52.219-28

POST-AWARD SMALL BUSINESS PROGRAM REREPRESENTATION

JUL/2013

(a) Definitions. As used in this clause--

"Long-term contract" means a contract of more than five years in duration, including options. However, the term does not include contracts that exceed five years in duration because the period of performance has been extended for a cumulative period not to exceed six months under the clause at 52.217-8, Option to Extend Services, or other appropriate authority.

"Small business concern" means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR part 121 and the size standard in paragraph (c) of this clause. Such a concern is "not dominant in its field of operation" when it does not exercise a controlling or major influence on a national basis in a kind of business activity in which a number of business concerns are primarily engaged. In determining whether dominance exists, consideration shall be given to all appropriate factors, including volume of business, number of employees, financial resources, competitive status or position, ownership or control of materials, processes, patents, license agreements, facilities, sales territory, and nature of business activity.

(b) If the Contractor represented that it was a small business concern prior to award of this contract, the Contractor shall rerepresent its size status according to paragraph (e) of this clause or, if applicable, paragraph (g) of this clause, upon the occurrence of any of the following:

(1) Within 30 days after execution of a novation agreement or within 30 days after modification of the contract to include this clause, if the novation agreement was executed prior to inclusion of this clause in the contract.

(2) Within 30 days after a merger or acquisition that does not require a novation or within 30 days after modification of the contract to include this clause, if the merger or acquisition occurred prior to inclusion of this clause in the contract.

(3) For long-term contracts

(i) Within 60 to 120 days prior to the end of the fifth year of the contract; and

(ii) Within 60 to 120 days prior to the date specified in the contract for exercising any option thereafter.

(c) The Contractor shall rerepresent its size status in accordance with the size standard in effect at the time of this rerepresentation that corresponds to the North American Industry Classification System (NAICS) code assigned to this contract. The small business size standard corresponding to this NAICS code can be found at <http://www.sba.gov/content/table-small-business-size-standards>

(d) The small business size standard for a Contractor providing a product which it does not manufacture itself, for a contract other than a construction or service contract, is 500 employees.

(e) Except as provided in paragraph (g) of this clause, the Contractor shall make the representation required by paragraph (b) of this clause by validating or updating all its representations in the Representations and Certifications section of the System for Award Management (SAM) and its other data in SAM, as necessary, to ensure that they reflect the Contractor's current status. The Contractor shall notify the contracting office in writing within the timeframes specified in paragraph (b) of this clause that the data have been validated or updated, and provide the date of the validation or update.

CONTINUATION SHEET	Reference No. of Document Being Continued	Page 42 of 46
	PIIN/SIIN W56HZV-14-C-0049	MOD/AMD

Name of Offeror or Contractor: THERMOANALYTICS, INC.

(f) If the Contractor represented that it was other than a small business concern prior to award of this contract, the Contractor may, but is not required to, take the actions required by paragraphs (e) or (g) of this clause.

(g) If the Contractor does not have representations and certifications in SAM, or does not have a representation in SAM for the NAICS code applicable to this contract, the Contractor is required to complete the following rerepresentation and submit it to the contracting office, along with the contract number and the date on which the rerepresentation was completed:

The Contractor represents that it [] is, [] is not a small business concern under NAICS Code _____ assigned to contract number _____. [Contractor to sign and date and insert authorized signer's name and title].

(End of clause)

I-145 52.222-35 EQUAL OPPORTUNITY FOR VETERANS JUL/2014
(a) Definitions. As used in this clause--

"Active duty wartime or campaign badge veteran," "Armed Forces service medal veteran," "disabled veteran," "protected veteran," "qualified disabled veteran," and "recently separated veteran" have the meanings given at FAR 22.1301.

(b) Equal opportunity clause. The Contractor shall abide by the requirements of the equal opportunity clause at 41 CFR 60-300.5(a), as of March 24, 2014. This clause prohibits discrimination against qualified protected veterans, and requires affirmative action by the Contractor to employ and advance in employment qualified protected veterans.

(c) Subcontracts. The Contractor shall insert the terms of this clause in subcontracts of \$100,000 or more unless exempted by rules, regulations, or orders of the Secretary of Labor. The Contractor shall act as specified by the Director, Office of Federal Contract Compliance Programs, to enforce the terms, including action for noncompliance. Such necessary changes in language may be made as shall be appropriate to identify properly the parties and their undertakings.

(End of clause)

I-146 52.222-36 EQUAL OPPORTUNITY FOR WORKERS WITH DISABILITIES JUL/2014
(a) Equal opportunity clause. The Contractor shall abide by the requirements of the equal opportunity clause at 41 CFR 60-741.5(a), as of March 24, 2014. This clause prohibits discrimination against qualified individuals on the basis of disability, and requires affirmative action by the Contractor to employ and advance in employment qualified individuals with disabilities.

(b) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order in excess of \$15,000 unless exempted by rules, regulations, or orders of the Secretary, so that such provisions will be binding upon each subcontractor or vendor. The Contractor shall act as specified by the Director, Office of Federal Contract Compliance Programs of the U.S. Department of Labor, to enforce the terms, including action for noncompliance. Such necessary changes in language may be made as shall be appropriate to identify properly the parties and their undertakings.

(End of clause)

I-147 52.223-3 HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA JAN/1997

(a) Hazardous material, as used in this clause, includes any material defined as hazardous under the latest version of Federal Standard No. 313 (including revisions adopted during the term of the contract).

(b) The offeror must list any hazardous material, as defined in paragraph (a) of this clause, to be delivered under this contract. The hazardous material shall be properly identified and include any applicable identification number, such as National Stock Number or Special Item Number. This information shall also be included on the Material Safety Data Sheet submitted under this contract.

Material	Identification No.
(If none, insert None)	
_____	_____
_____	_____
_____	_____

CONTINUATION SHEET	Reference No. of Document Being Continued	Page 43 of 46
	PIIN/SIIN W56HZV-14-C-0049 MOD/AMD	

Name of Offeror or Contractor: THERMOANALYTICS, INC.

(c) This list must be updated during performance of the contract whenever the Contractor determines that any other material to be delivered under this contract is hazardous.

(d) The apparently successful offeror agrees to submit, for each item as required prior to award, a Material Safety Data Sheet, meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous material identified in paragraph (b) of this clause. Data shall be submitted in accordance with Federal Standard No. 313, whether or not the apparently successful offeror is the actual manufacturer of these items. Failure to submit the Material Safety Data Sheet prior to award may result in the apparently successful offeror being considered nonresponsible and ineligible for award.

(e) If, after award, there is a change in the composition of the item(s) or a revision to Federal Standard No. 313, which renders incomplete or inaccurate the data submitted under paragraph (d) of this clause, the Contractor shall promptly notify the Contracting Officer and resubmit the data.

(f) Neither the requirements of this clause nor any act or failure to act by the Government shall relieve the Contractor of any responsibility or liability for the safety of Government, Contractor, or subcontractor personnel or property.

(g) Nothing contained in this clause shall relieve the Contractor from complying with applicable Federal, State, and local laws, codes, ordinances, and regulations (including the obtaining of licenses and permits) in connection with hazardous material.

(h) The Government's rights in data furnished under this contract with respect to hazardous material are as follows:

(1) To use, duplicate and disclose any data to which this clause is applicable. The purposes of this right are to --

(i) Apprise personnel of the hazards to which they may be exposed in using, handling, packaging, transporting, or disposing of hazardous materials;

(ii) Obtain medical treatment for those affected by the material; and

(iii) Have others use, duplicate, and disclose the data for the Government for these purposes.

(2) To use, duplicate, and disclose data furnished under this clause, in accordance with subparagraph (h)(1) of this clause, in precedence over any other clause of this contract providing for rights in data.

(3) The Government is not precluded from using similar or identical data acquired from other sources.

(End of Clause)

I-148 52.223-11 OZONE-DEPLETING SUBSTANCES MAY/2001

(a) Definition. Ozone-depleting substance, as used in this clause, means any substance the Environmental Protection Agency designates in 40 CFR Part 82 as--

(1) Class I, including, but not limited to, chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform; or

(2) Class II, including, but not limited to hydrochlorofluorocarbons.

(b) The Contractor shall label products which contain or are manufactured with ozone-depleting substances in the manner and to the extent required by 42 U.S.C. 7671j (b), (c), and (d) and 40 CFR Part 82, Subpart E, as follows:

Warning

Contains (or manufactured with, if applicable) * _____, a substance(s) which harm(s) public health and environment by destroying ozone in the upper atmosphere.

* The Contractor shall insert the name of the substance(s).

(End of Clause)

I-149 52.252-2 CLAUSES INCORPORATED BY REFERENCE FEB/1998

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon

CONTINUATION SHEET	Reference No. of Document Being Continued	Page 44 of 46
	PIIN/SIIN W56HZV-14-C-0049	MOD/AMD

Name of Offeror or Contractor: THERMOANALYTICS, INC.

request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address:

<http://www.acq.osd.mil/dpap/dars/far.html> or <http://www.acq.osd.mil/dpap/dars/index.htm> or <http://farsite.hill.af.mil/VFAFARA.HTM>

(End of Clause)

I-150 52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES APR/1984

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of (DEVIATION) after the date of the clause.

(b) The use in this solicitation or contract of any DoD FAR SUPPLEMENT (48 CFR 2) clause with an authorized deviation is indicated by the addition of (DEVIATION) after the name of the regulation.

(End of Clause)

I-151 252.223-7001 HAZARD WARNING LABELS DEC/1991

(a) Hazardous material, as used in this clause, is defined in the Hazardous Material Identification and Material Safety Data clause of this contract.

(b) The Contractor shall label the item package (unit container) of any hazardous material to be delivered under this contract in accordance with the Hazard Communication Standard (29 CFR 1910.1200 et seq). The Standard requires that the hazard warning label conform to the requirements of the standard unless the material is otherwise subject to the labeling requirements of one of the following statutes:

- (1) Federal Insecticide, Fungicide and Rodenticide Act;
- (2) Federal Food, Drug and Cosmetics Act;
- (3) Consumer Product Safety Act;
- (4) Federal Hazardous Substances Act; or
- (5) Federal Alcohol Administration Act.

(c) The Offeror shall list which hazardous material listed in the Hazardous Material Identification and Material Safety Data clause of this contract will be labeled in accordance with one of the Acts in paragraphs (b)(1) through (5) of this clause instead of the Hazard Communication Standard. Any hazardous material not listed will be interpreted to mean that a label is required in accordance with the Hazard Communication Standard.

MATERIAL (If None, Insert None.) ACT

_____	_____
_____	_____
_____	_____

(d) The apparently successful Offeror agrees to submit, before award, a copy of the hazard warning label for all hazardous materials not listed in paragraph (c) of this clause. The Offeror shall submit the label with the Material Safety Data Sheet being furnished under the Hazardous Material Identification and Material Safety Data clause of this contract.

(e) The Contractor shall also comply with MIL-STD-129, Marking for Shipment and Storage (including revisions adopted during the term of this contract).

(End of clause)

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-14-C-0049 MOD/AMD	Page 45 of 46
Name of Offeror or Contractor: THERMOANALYTICS, INC.		

I-152 52.204-4009 MANDATORY USE OF CONTRACTOR TO GOVERNMENT ELECTRONIC COMMUNICATION MAR/2005

(a) All references in the contract to the submission of written documentation shall mean electronic submission. All electronic submissions shall be in the formats and media described in the website:

<http://contracting.tacom.army.mil/acqinfo/ebidnotice.htm>

(b) This shall include all written unclassified communications between the Government and the Contractor except contract awards and contract modifications which shall be posted on the internet. Return receipt shall be used if a commercial application is available. Classified information shall be handled in full accordance with the appropriate security requirements.

(c) In order to be contractually binding, all Government communications requiring a Contracting Officer signature must be sent from the Contracting Officer's e-mail address. The Contractor shall designate the personnel with signature authority who can contractually bind the contractor. All binding contractor communication shall be sent from this contractor e-mail address(es).

(d) Upon award, the Contractor shall provide the Contracting Officer with a list of e-mail addresses for all administrative and technical personnel assigned to this contract.

(e) Unless exempted by the Procuring Contracting Officer in writing, all unclassified written communication after contract award shall be transmitted electronically.

[End of Clause]

CONTINUATION SHEET**Reference No. of Document Being Continued****Page 46 of 46**

PIIN/SIIN W56HZV-14-C-0049

MOD/AMD

Name of Offeror or Contractor: THERMOANALYTICS, INC.

SECTION J - LIST OF ATTACHMENTS

<u>List of</u> <u>Addenda</u>	<u>Title</u>	<u>Date</u>	<u>Number</u> <u>of Pages</u>	<u>Transmitted By</u>
Exhibit A	CONTRACT DATA REQUIREMENTS LIST (CDRL) DD FORM 1423			
Exhibit B	CONTRACT SECURITY CLASSIFICATION SPECIFICATION (DD FORM 254)			EMAIL
Attachment 0001	WORK DIRECTIVE TAI-001			EMAIL
Attachment 0002	WORK DIRECTIVE TAI-002			EMAIL

CONTRACT DATA REQUIREMENTS LIST

Form Approval OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 440 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO.: 0003 B. EXHIBIT: A C. CATEGORY:
D. SYSTEM/ITEM: E. CONTRACT/PR NO.: W56HZV-14-C-0049 F. CONTRACTOR: ThermoAnalytics, Inc.

1. DATA ITEM NO. A001
2. TITLE OF DATA ITEM: Contractors Progress Status and Management Report
3. SUBTITLE:
4. AUTHORITY DI-MGMT-80227 (T) 5. CONTRACT REFERENCE: C.3.1 6. REQUIRING OFFICE: AMSRD-TAR-R
7. DD250 REQ: LT 8. APP CODE: N/A 9. DIST. STATEMENT REQUIRED: 10. FREQUENCY: Monthly
11. AS OF DATE: 12. DATE OF 1ST SUB: 60 DAC 13. DATE OF SUBS. SUB:

14. DISTRIBUTION A. ADDRESSEES B. COPIES DRAFT FINAL
SUBMIT REPORTS ELECTRONICALLY TO THE E-MAIL ADDRESSES SHOWN IMMEDIATELY BELOW:
JULIA MAO, CONTRACTING OFFICER'S REPRESENTATIVE, E-MAIL: WENJIE.MAO.CIV@MAIL.MIL 1
TROY HAARALA, CONTRACT SPECIALIST, E-MAIL: TROY.R.HAARALA.CIV@MAIL.MIL 1
15. TOTAL: 2

16. REMARKS: If report is classified, contact the COR for instructions on how to transmit.
DI-MGMT-80227 is tailored by deleting 10.2 and 10.3(f-1).

17. PRICE GROUP: 18. ESTIMATED TOTAL PRICE:

1. DATA ITEM NO. A002
2. TITLE OF DATA ITEM: Scientific and Technical Report
3. SUBTITLE:
4. AUTHORITY DI-MISC-81612A(T) 5. CONTRACT REFERENCE: C.3.1, C.7.2 6. REQUIRING OFFICE: AMSRD-TAR-R
7. DD250 REQ: DD 8. APP CODE: A 9. DIST. STATEMENT REQUIRED: 10. FREQUENCY: Once per work directive
11. AS OF DATE: 12. DATE OF FIRST SUB: 13. DATE OF SUBS. SUB:

14. DISTRIBUTION A. ADDRESSEES B. COPIES: DRAFT FINAL
JULIA MAO, CONTRACTING OFFICER'S REPRESENTATIVE, E-MAIL: WENJIE.MAO.CIV@MAIL.MIL 1
15. TOTAL: 1

16. REMARKS: If report is classified, contact the COR for instructions on how to transmit. The contractor shall deliver a Final Technical Report at the end of the period of performance for each work directive.

17. PRICE GROUP: 18. ESTIMATED TOTAL PRICE:

1. DATA ITEM NO. A003
2. TITLE OF DATA ITEM: Software Product Specification
3. SUBTITLE:63
4. AUTHORITY DI-IPSC-81441 5. CONTRACT REFERENCE: C.3.3, C.4.4, C.7.1 6. REQUIRING OFFICE:AMSRD-TAR-R
7. DD250 REQ: DD 8. APP CODE: A 9. DIST. STMT REQUIRED: 10. FREQUENCY: See 16. Remarks below
11. AS OF DATE: 12. DATE OF FIRST SUB: As generated 13. DATE OF SUBS. SUB:

14. DISTRIBUTION A. ADDRESSEES B. COPIES DRAFT FINAL
JULIA MAO, CONTRACTING OFFICER'S REPRESENTATIVE, E-MAIL: WENJIE.MAO.CIV@MAIL.MIL 1
15. TOTAL: 1

16. REMARKS: If submission is classified, contact the COR for instructions on how to transmit. The contractor shall deliver software as new versions become available. DI-IPSC-81442 is to be used for guidance/as a reference. Contractor may use own format if it includes all

the pertinent information outlined in DI-IPSC-81441. The report shall be delivered electronically via CD, FTP, or e-mail to the COR.

17. PRICE GROUP: 18. ESTIMATED TOTAL PRICE:

1. DATA ITEM NO. A004
2. TITLE OF DATA ITEM: MuSES Models
3. SUBTITLE: MuSES TDF Data Files
4. AUTHORITY
5. CONTRACT REFERENCE: C.4.2
6. REQUIRING OFFICE:AMSRD-TAR-R
7. DD250 REQ: DD
8. APP CODE: N/A
9. DIST. STMT REQUIRED:
10. FREQUENCY: See Item 16
11. AS OF DATE:
12. DATE OF FIRST SUB: See Item 16
13. DATE OF SUBS. SUB:

14. DISTRIBUTION A. ADDRESSEES	B. COPIES DRAFT FINAL
JULIA MAO, CONTRACTING OFFICER'S REPRESENTATIVE, E-MAIL: WENJIE.MAO.CIV@MAIL.MIL	1
15. TOTAL:	1

16. REMARKS: If report is classified, contact the COR for instructions on how to transmit. MuSES Models shall be delivered in accordance with project deadlines. The report shall be delivered electronically via CD, FTP, or e-mail in MuSES TDF format using version 8.1 or higher to the COR.

17. PRICE GROUP: 18. ESTIMATED TOTAL PRICE:

1. DATA ITEM NO. A005
2. TITLE OF DATA ITEM: Software Delivery
3. SUBTITLE: MuSES Software and Source Code
4. AUTHORITY DI-IPSC-81442
5. CONTRACT REFERENCE: C.4.4, C.7.1
6. REQUIRING OFFICE:AMSRD-TAR-R
7. DD250 REQ: LT
8. APP CODE: N/A
9. DIST. STMT REQUIRED:
10. FREQUENCY: See Item 16
11. AS OF DATE:
12. DATE OF FIRST SUB: See Item 16
13. DATE OF SUBS. SUB:

14. DISTRIBUTION A. ADDRESSEES	B. COPIES DRAFT FINAL
JULIA MAO, CONTRACTING OFFICER'S REPRESENTATIVE, E-MAIL: WENJIE.MAO.CIV@MAIL.MIL	1
15. TOTAL:	1

16. REMARKS: If submission is classified, contact the COR for instructions on how to transmit. The contractor shall deliver software as new versions become available. DI-IPSC-81442 is to be used for guidance/as a reference. Contractor may use own format if it includes all the pertinent information outlined in DI-IPSC-81442. The report shall be delivered electronically via CD, FTP, or e-mail to the COR.

17. PRICE GROUP: 18. ESTIMATED TOTAL PRICE:

1. DATA ITEM NO. A006
2. TITLE OF DATA ITEM: Test Plans
3. SUBTITLE:
4. AUTHORITY
5. CONTRACT REFERENCE: C.5.1
6. REQUIRING OFFICE:AMSRD-TAR-R
7. DD250 REQ: DD
8. APP CODE: N/A
9. DIST. STMT REQUIRED:
10. FREQUENCY: See Item 16
11. AS OF DATE:
12. DATE OF FIRST SUB: See Item 16
13. DATE OF SUBS. SUB:

14. DISTRIBUTION A. ADDRESSEES	B. COPIES DRAFT FINAL
JULIA MAO, CONTRACTING OFFICER'S REPRESENTATIVE, E-MAIL: WENJIE.MAO.CIV@MAIL.MIL	1
15. TOTAL:	1

16. REMARKS: If report is classified, contact the COR for instructions on how to transmit. Test plans will be submitted to the COR 14 days before scheduled field trials.

17. PRICE GROUP: 18. ESTIMATED TOTAL PRICE:

1. DATA ITEM NO. A007
2. TITLE OF DATA ITEM: Meeting Minutes
3. SUBTITLE: Minutes

4. AUTHORITY: DI-ADMN-81250A 5. CONTRACT REFERENCE: C.6.2 6. REQUIRING OFFICE:AMSRD-TAR-R
7. DD250 REQ: 8. APP CODE: 9. DIST. STMT REQUIRED: 10. FREQUENCY: As Required
11. AS OF DATE: 12. DATE OF FIRST SUB: See block 16 13. DATE OF SUBS. SUB: See block 16

14. DISTRIBUTION A. ADDRESSEES	B. COPIES DRAFT FINAL
JULIA MAO, CONTRACTING OFFICER'S REPRESENTATIVE, E-MAIL: WENJIE.MAO.CIV@MAIL.MIL	1
15. TOTAL:	1

16. REMARKS:
Minutes are to be submitted within three (3) days of a meeting completion. If revisions or updates are required to submissions, they shall be made as notified. Electronic submission is acceptable.

17. PRICE GROUP: 18. ESTIMATED TOTAL PRICE:

1. DATA ITEM NO. A008
2. TITLE OF DATA ITEM: Status Report
3. SUBTITLE: PowerPoint Presentations
4. AUTHORITY: DI-MGMT-80555A 5. CONTRACT REFERENCE: C.3.1.2 6. REQUIRING OFFICE: AMSRD-TAR-R
7. DD250 REQ: 8. APP CODE: 9. DIST. STMT REQUIRED: 10. FREQUENCY: As Required in WD
11. AS OF DATE: 12. DATE OF FIRST SUB: 13. DATE OF SUBS. SUB:

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16. REMARKS:

17. PRICE GROUP: 18. ESTIMATED TOTAL PRICE:

1. DATA ITEM NO. A009
2. TITLE OF DATA ITEM: Classification and Procedures Guides
3. SUBTITLE:
4. AUTHORITY: DI-MISC-81762 (T) 5. CONTRACT REFERENCE: C.3 6. REQUIRING OFFICE: AMSRD-TAR-R
7. DD250 REQ: DD 8. APP CODE: N/A 9. DIST. STMT REQUIRED: 10. FREQUENCY: See Item 16
11. AS OF DATE: 12. DATE OF FIRST SUB: See Item 16 13. DATE OF SUBS. SUB:

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16. REMARKS: If report is classified, contact the COR for instructions on how to transmit.
Classification and Procedures Guides will be submitted as required, per work directive, to fulfill new or revised program requirements.

17. PRICE GROUP: 18. ESTIMATED TOTAL PRICE:

1. DATA ITEM NO. A010
2. TITLE OF DATA ITEM: Archive Management Plan
3. SUBTITLE:
4. AUTHORITY: DI-MISC-81107 (T) 5. CONTRACT REFERENCE: C.3 6. REQUIRING OFFICE: AMSRD-TAR-R
7. DD250 REQ: DD 8. APP CODE: N/A 9. DIST. STATEMENT REQUIRED: 10. FREQUENCY: ANNUALLY
11. AS OF DATE: 12. DATE OF FIRST SUB: 90 DAC 13. DATE OF SUBS. SUB:

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17. PRICE GROUP: 18. ESTIMATED TOTAL PRICE:

1. DATA ITEM NO. A011
2. TITLE OF DATA ITEM: Program Protection Plan
3. SUBTITLE:
4. AUTHORITY: DI-MISC-81346 (T) 5. CONTRACT REFERENCE: C.3 6. REQUIRING OFFICE: AMSRD-TAR-R
7. DD250 REQ: DD 8. APP CODE: N/A 9. DIST. STATEMENT REQUIRED: 10. FREQUENCY: ANNUALLY
11. AS OF DATE: 12. DATE OF FIRST SUB: 90 DAC 13. DATE OF SUBS. SUB:

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17. PRICE GROUP: 18. ESTIMATED TOTAL
PRICE:

G. PREPARED BY: Julia Mao	I. APPROVED BY:
H. DATE: 01 April 2014	J. DATE: