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|--|-----------------------------------|--|---------------------------|
| AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT | | CONTRACT ID CODE | PAGE OF PAGES |
| 2 AMENDMENT/MODIFICATION NO P00004 | 3 EFFECTIVE DATE See Block 16C | 4 REQUISITION/PURCHASE REQ NO. RSEN-09-00040 | 13 |
| 5 ISSUED BY U.S. Dept. of Homeland Security Office of Procurement Operations S&T Acquisition Division 245 Murray Lane, SW Building 410 Washington DC 20528 | CODE DHS/OPO/S&T/EXBOR | 7 ADMINISTERED BY (if other than item 5) | CODE DHS/OPO/S&T/EXBOR |
| 8 NAME AND ADDRESS OF CONTRACTOR (inc. street, county, state and ZIP Code) NORTHEASTERN UNIVERSITY 360 HUNTINGTON AVENUE 251 R1 BOSTON MA 021155000 | | 9A AMENDMENT OF SOLICITATION NO. 9B DATED (SEE ITEM 11) 9C MODIFICATION OF CONTRACT ORDER NO. X HSHQDC-07-C-00016 9D DATED (SEE ITEM 13) 12/06/2006 | |
| CODE 00142363:0000 | FACILITY CODE | | |

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers is extended, is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing items 9 and 16, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of the amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and the amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (if required)
See Schedule Net Increase: \$549,918.00

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACT ORDERS. IT MODIFIES THE CONTRACT ORDER NO. AS DESCRIBED IN ITEM 14.

| | |
|-----------|---|
| CHECK ONE | A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A. |
| | B. THE ABOVE NUMBERED CONTRACT ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 48.103(b). |
| X | C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF FAR 52.243-2 Alt V Changes - Cost Reimbursement - Alternate V |
| | D. OTHER (Specify type of modification and authority) |

14. IMPORTANT: Contractor is not, is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

DUNS Number: 0014236310000
The purpose of this modification to contract HSHQDC-07-C-00016 is to increase the ceiling for CLIN 0001 by \$143,716.00 for a new total of \$1,855,099, add additional funding of \$549,918.00 to CLIN 0001 to continue Phase I of the original contract in accordance with the attached Statement of Work (SOW), extend the period of performance of the contract through 30 September 2010, and update the invoicing instructions as follows:

Invoicing instructions previously provided in clause G-7, Invoicing Instructions, are revised as follows: Invoices may be e-mailed to SAT.Invoice.Consolidation@dhs.gov, or mailed to:

DHS ICE

Continued ...

Except as provided herein, all terms and conditions of the document referenced in item 5A or 10A, as heretofore changed, remains unchanged and in full force and effect

| | |
|--|---|
| 15A. NAME AND TITLE OF SIGNER (Type or print) Lawrence W. Barnett, Acting Director Div. of Sponsored Project Admin | 15B. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Joseph F. Wolfinger |
| 15C. DATE SIGNED 4/29/09 | 15D. UNITED STATES OF AMERICA (b) (6) |
| 15E. CONTRACT NUMBER (b) (6) | 15F. DATE SIGNED 5-4-2009 |

NSN 7540-01-152-8070
Previous edition unusable

NAME OF OFFEROR OR CONTRACTOR
NORTHEASTERN UNIVERSITY

| ITEM NO. (A) | SUPPLIES/SERVICES (B) | QUANTITY (C) | UNIT (D) | UNIT PRICE (E) | AMOUNT (F) |
|-----------------|---|-----------------|-------------|-------------------|---------------|
| 0001 | <p>Burlington Finance Center P.O. Box 1000 Attn: S&T Explosives Division Williston, VT 05495-1000 Delivery: 09/30/2010 Discount Terms: Not 30 Delivery Location Code: DHS Department of Homeland Security 245 Murray Lane Bldg. 410 Washington DC 20528</p> <p>FOB: Destination Period of Performance: 07/10/2006 to 09/30/2010</p> <p>Change Item 0001 to read as follows (amount shown is the obligated amount):</p> <p>PTIEDD - Phase I: BomDetect Project including Data Deliverables Fully Funded Obligation Amount \$1,855,099.00 Product/Service Code: R425 Product/Service Description: ENGINEERING & TECHNICAL SERVICES</p> <p>Accounting Info: NONE000-000-RX-06-10-DC-005-06-01-0000-00-00-00-00 -GE-DL-25-50-00000 Funded: \$0.00</p> <p>Accounting Info: NONE000-000-SX-06-10-DC-005-06-01-0000-00-00-00-00 -GR-DL-25-50-00000 Funded: \$0.00</p> <p>Accounting Info: NONE000-000-SX-06-20-DC-005-06-01-0000-00-00-00-00 -GE-DL-25-50-00000 Funded: \$0.00</p> <p>Accounting Info: NONE000-000-SX-33-06-03-006-01-00-0000-00-00-00-00 -GE-OR-25-50-000000 Funded: \$549,918.00</p> <p>CLIN 0001 is now fully funded in the amount of \$1,855,099.00.</p> | 1 | EO | 1,855,099.00 | 549,918.00 |

Statement of Work for Intelligent Pedestrian Surveillance Platform
Directorate of Science and Technology
U.S. Department of Homeland Security
Explosives Division

RSEN-03-00040

I. Background

The U.S. Department of Homeland Security (DHS) is committed to using cutting-edge technologies and scientific talent in its quest to make America safer. The DHS Directorate of Science and Technology (S&T) is tasked with researching and organizing the scientific, engineering, and technological resources of the United States and leveraging these existing resources into technological tools to help protect the homeland. DHS S&T is committed to protecting the homeland, its infrastructure, and citizens from threats including those presented by Improvised Explosive Devices (IEDs).

The Counter-IED (C-IED) program at DHS S&T is accomplishing this by developing technologies that aid in the detection of IEDs and their explosive components. DHS S&T customers need a greater capability than what is currently available for detecting IEDs on people, whether at checkpoints or in standoff applications. This is especially relevant at high volume public areas and entrances to important infrastructure.

Intelligent Pedestrian Surveillance Platform will support this effort through providing a potential capability to monitor and track individuals in a crowd.

II. Scope of Work

Siemens Corporate Research will perform the tasks described in this SOW with managerial oversight by Northeastern University. This scope of work is a modification to the original contract (awarded under BAA 05-03 Prototypes and Technologies for Improvised Explosives Device Detection). This SOW is a continuation of Phase I work for Northeastern University's subcontractor, Siemens Corporate Research.

In Phase I, Northeastern University completed the following tasks with the exception of the highlighted ones:

1) Intelligent Video:

- a. Test and analyze the performance of the Intelligent Video
- b. Test the software System architecture, and integration
- c. Test and evaluate visualization front end, policy engine
- d. Develop system configuration Concept (w/team)
- e. Write Preliminary Design Review (Intelligent Video, software integration) (PDR)
- f. Write Phase I Final Report (Intelligent Video, and software integration)

- 2) Radar:
 - a. Design experiments to validate the algorithms
 - b. Investigate clutter reduction approaches
 - c. Develop system configuration Concept (w/team)
 - d. Write Preliminary Design Review (radar sensor) (PDR)
 - e. Based on the existing wide aperture antenna array, establish specifications and design a single multi-monostatic mm-wave element of the full array.
 - f. Design and fabricate or purchase a standard gain feed and a reflector antenna for radar.
 - g. Build the radar element by combining source, antennas, and drive electronics.
 - h. Fabricate an adjustable support structure for mounting and repositioning the single element to simulate a full array of stationary elements.
 - i. Test the array antenna mm-wave radar element indoors in a large W-band rated anechoic chamber. Compare with modeled results.
 - j. Write Phase I Final Report (radar sensor)
- 3) X-Ray:
 - a. Develop System Configuration Concept (w/team)
 - b. Write Preliminary Design Review (X-ray sensor, hardware integration) (PDR)
 - c. Write Phase I Final Report (X-ray sensor, hardware integration)
- 4) Terahertz:
 - a. Develop system Configuration Concept
 - b. Write Preliminary Design review (THz sensor) (PDR)
 - c. Write Phase I Final Report (THz sensor)
- 5) Suicide bomber Test subject:
- 6) Hardware and software Integration:
- 7) Program Management:
 - a. System Configuration Concept
 - b. Preliminary Design Review (PDR)
 - c. Phase I Final Report

In the extension of Phase I, called Phase Ia and Ib here, Northeastern University and their subcontractor will complete the following tasks completing the work highlighted in Section I above:

- I. Fast indexing
 - I.1. Background Subtraction
The work involved will be incorporating Siemens background modeling techniques to the demo system and detecting boundaries of pedestrian groups.
 - I.2. Base-level Illumination Compensation

Fast illumination changes in outdoor environments (e.g., due to fast moving clouds blocking the sun) can cause difficulties in vision algorithm performance. To improve robustness against such lighting changes, we propose to introduce a global illumination compensation component in the system.

1.3. Shape-based Indexing

Siemens will take steps to make the algorithm [Dong07] robust, accurate and real-time. The efforts involve robustness against cast shadow, faster search algorithm and better optimization algorithms.

2. Level 1 Detection and Tracking

2.1. Basic Blob Tracking

The effort involves integrating the tracker and making it perform robustly against environment factors such as changing illumination.

2.2. Discriminative Tracker

Discriminative features are selected that can best separate a pedestrian from the background.

3. Level 2 Detection and Tracking

3.1. Pedestrian Detection by Segmentation

Siemens will build upon the algorithm described in [Dong07]. The improvements will be made in the following areas: 1) Improving the speed. Currently, the algorithm takes on average 1 second to segment the people in the group using the Markov Chain Monte Carlo (MCMC) method. This is far from the desired real-time performance (processing one frame in less than 33 milliseconds). Solving this problem will be a major challenge; 2) Improving the accuracy of the segmented people. We will try to reduce misdetected people and false alarms using appearance (color) information and temporal integration.

3.2. Multiple Pedestrian Tracking in a Small Group

Siemens will take steps to make multiple-people tracking in level-2 cases accurate, robust and real-time.

3.3. Discriminative Tracking using Discriminative Features Selection and Dynamics of Groups

3.4. Active Sensor Control for acquiring discriminative features (depends on the funding of the prototype system development)

4. Empirical Performance Evaluation

4.1. Empirical Performance Evaluation: Fast Indexing

4.2. Empirical Performance Evaluation: Detection

4.3. Empirical Performance Evaluation: Tracking

5. Advanced HMI – Workflow and Ergonomic/Human Factor Analysis

A novel HMI concept for use within the framework of the intelligent pedestrian tracking is developed.

6. Advanced HMI – Feasibility of using Eye Tracking in Pedestrian Surveillance HMI Design

An empirical study will evaluate, using human participants, whether the novel HMI concept can feasibly be deployed within the context of the intelligent pedestrian tracker.

Prototype Multi-Camera System and IPSP

7. Sensor System

7.1. Basic Level Sensor Planning

Basic level sensor planning includes the following tasks:

1) Selection of cameras and lens systems, including the overview panoramic camera(s), stereo camera and the PTZ camera. Selected cameras should be compatible with the Surveillance platform for minimum efforts in camera interface development. 2) Camera geometry design; *i.e.* where to mount and orient the cameras

7.2. Video Stabilization

Siemens will adapt an internal stabilization algorithm for the HISARPA project needs.

Improvements needed include faster processing speed and robustness against moving crowd.

7.3. Camera Calibration

Siemens will use existing calibration algorithms to calibrate the camera systems, including the relative displacement and orientation among the overview cameras, the stereo camera, and the PTZ camera.

7.4. Multiple View Video Stitching

Once cameras are calibrated, the stitching function can be derived. The emphasis will be on real-time generation of panoramic videos.

7.5. Pan/Tilt/Zoom Slaving

Siemens will design the PTZ pointing function. There are two levels of effort involved. First, when an operator clicks on a pixel in the panorama, the PTZ camera will be directed to the corresponding location using a pre-computed zoom-level.

Second, in conjunction with the tracking/detection algorithms (work packages 2 and 3), the IVS automatically computes the best pan, tilt angles and zoom level in order to best observe a group of pedestrians.

7.6. Stereo Matching and Triangulation

The emphasis will be on robust feature correspondence and real-time performance.

A stereo measurement confidence will also be generated. When correspondences are un-reliable, possibly due to occlusion, low-texture or visual ambiguity, low measurement confidence levels will be reported.

8. Intelligent Pedestrian Surveillance Platform

Siemens will develop:

8.1. System architecture design

8.2. Interface for video processing plug-ins to perform intelligent video tasks.

8.3. A simple user interface for tracking result display and enabling an operator to click on a specific tracked pedestrian for a PTZ close-up survey. The outputs from the plug-ins will be sent to a second PC (command and control (C&C)) as events, utilizing the event handling mechanism of surveillance. A (possibly incomplete) list of events include: panoramic video frame event, object tracking event, auto-zoom event, and optical tripwire event. The results will then be displayed on the C&C computer screen.

Siemens will define a test protocol and test the software quality and compatibility of the demo system

| Program Element / Project | Major Tasks | Key Milestones and Deliverables |
|---|---|--|
| Phase I. Previously Funded | 1. BomDetec Integrated Suicide bomber detection platform | <ul style="list-style-type: none"> • Monthly summaries, due NLT 8 business days after month's end • Monthly teleconferences with DHS S&T Contracting Officer Technical Representative (COTR), NLT 10 days after month's end • Quarterly reports- 3, 6, 9, 12, 15, and 17 months from contract award date • Final report-17 months after award date |
| Phase Ia. Pedestrian Tracker Base Package Funded by this action. | <ol style="list-style-type: none"> 1. Fast indexing 2. Level 1 Detection and Tracking 3. Level-2 Pedestrian Detection and Tracking 4. Empirical Performance Evaluation 5. Advanced HMI | <ul style="list-style-type: none"> • Monthly summaries, due NLT 8 business days after month's end • Monthly teleconferences with DHS S&T COTR, NLT 10 days after month's end • Demonstration - 6 months after award |

| Program Element / Project | Major Tasks | Key Milestones and Deliverables |
|--|--|--|
| | | <ul style="list-style-type: none"> • Demonstration- 12 months after award • Quarterly reports and reviews- 3, 6, 9, 12, 15, and 17 months from award • Final report-17 months after award date |
| <p>Phase Ib. Prototype Multi-Camera System and IPSP. Funded by this action.</p> | <ol style="list-style-type: none"> 1. Basic Level Sensor Planning 2. Video Stabilization 3. Camera Calibration 4. Multiple View Video Stitching 5. Pan/Tilt/Zoom Slaving 6. Stereo Matching and Triangulation 7. Intelligent Pedestrian Surveillance Platform | <ul style="list-style-type: none"> • Monthly summaries, due NLT 8 business days after month's end • Monthly teleconferences with DHS S&T COTR, NLT 10 days after month's end • Demonstration - 6 months after award • Demonstration- 12 months after award • Quarterly reports and reviews- 3, 6, 9, 12, 15, and 17 months from award • Final report and review-17 months after award date • TRI.6 Level Prototype Demo |

Monthly Status Teleconferences will consist of the following:

A monthly teleconference will take place within 10 business days of the end of the month between the Principal Investigator for Northeastern University and subcontractor Siemens Corporate Research and DHS S&T COTR. In addition, a supplemental document, not to exceed one page in length, will be electronically submitted to the DHS S&T COTR at least 48 hours prior to the scheduled teleconference. This document will describe the previous 30 calendar days' activity, technical progress achieved against goals, difficulties encountered, recovery plans (if needed), plans for the next 30 day period, and financial status. The teleconference and one page document will satisfy monthly reporting requirements.

Due Date: Within 8 business days of the end of the month for summary sheet and 10 days for teleconference.

Quarterly Reports and Reviews will consist of the following:

Quarterly presentations will take place within 5 days of submission of the quarterly reports. Quarterly reports are due as outlined in the chart above and are not to exceed 10 pages with cover page and will be electronically submitted to the DHS S&T COTR. The Quarterly Presentations will be either conducted via phone or in person between the Principal Investigator for Northeastern University and subcontractor Siemens Corporate Research and the DHS S&T COTR to discuss the Quarterly Reports. These reports will describe the previous 90 calendar days' activity (60 days for the final time period), principals involved in the actual work of the period, technical progress achieved against goals, difficulties encountered, funds expended against each sub-task in the previous period, recovery plans (if needed), explicit plans for the next time period, and financial status.

Due Date: 3, 6, 9, 12, 15, and 17 months after award.

Final Reports will consist of the following:

For a final report, Northeastern University and subcontractor Siemens Corporate Research will provide a technical report of their work performed during the preceding Phase or Phases. This will include, where applicable, performance predictions, estimates of cost of ownership, and an enumeration of remaining unknowns and uncertainties. This final report will be a cumulative, stand-alone document that describes the work of the entire Phase leading up to it. It must include any technical data gathered, such as, measurements taken, models developed, simulation results, and formulations developed. This final report should also include "lessons learned" from the effort, recommendations for future research in this area, and a comprehensive account of all funds expended. Northeastern University and subcontractor Siemens Corporate Research will develop a plan for executing Phase II of the project. This must include a test plan for evaluating the prototype video analytics system. The final report will also include documentation of the executed work plan, including the contracted Statement of Work (SOW), as well as a work plan and SOW for proposed future efforts where appropriate.

Due Date: 17 months after award.

Other Reports:

7

Distribution is authorized to U.S. government agencies only. Contains information that may be exempt from public release under the Freedom of Information Act. Before this SOW is released to the public, approval is required by the Department of Homeland Security Directorate of Science and Technology.

Additional deliverables will be required depending upon specific program attributes. Northeastern University and subcontractor Siemens Corporate Research and government will come to mutual agreement of the format and extent of such deliverables at the time of award. Additional deliverables may include, but are not limited to:

- Participation in an annual DHS event at the discretion of the DHS S&T Technical Representative. Possible events include presentation or exhibition at Stakeholder's meetings, customer events, or select technical conferences.
- Review meetings include a kickoff meeting and a final review meeting. Location of these meetings will be at the discretion of the DHS S&T Technical Representative, but will likely be at the preferred location of Northeastern University, Siemens Corporate Research or DHS S&T HQ
- Where appropriate, system engineering drawings, blueprints, and specifications will be compiled and delivered to DHS S&T along with the final report.

III. Other Contract Details

- A. Period of Performance.** The period of performance for this SOW is from the contract award date to 18 months after the award date. DHS may give subsequent extension notices to Northeastern University and subcontractor Siemens Corporate Research in writing for further performance in accordance with the terms of this SOW.
- B. Travel.** Travel may be required in the performance of the duties listed herein. It is anticipated that travel will be limited to the Washington DC metro area, Boston, MA and Princeton, NJ. The DHS S&T COIR must approve all additional travel. All travel and other direct costs associated with the execution of the tasks indicated in this SOW will be reimbursed in accordance with the limits set forth in the Federal Travel Regulations, provided the performer provides appropriate supporting documentation.
- C. DHS-Furnished Information.**
1. DHS will provide certain DHS information, materials, and forms unique to DHS to Northeastern University and subcontractor Siemens Corporate Research to support certain tasks under this SOW.
 2. The DHS S&T COIR identified in this SOW will be the point of contact (POC) for identification of any required information to be supplied by DHS.
 3. Northeastern University and subcontractor Siemens Corporate Research will prepare any documentation according to the guidelines provided by DHS.
- D. DHS-Furnished Facilities, Supplies, and Services.** If work at DHS-provided facilities is necessary for the services being performed under this SOW, such facilities will be provided

at S&T's office in Washington, D.C. Parking facilities are not provided, however several commercial parking facilities are located near S&T's office. Basic facilities such as work space and associated operating requirements (e.g., phones, desks, utilities, desktop computers, and consumable and general purpose office supplies) will be provided to Northeastern University and subcontractor Siemens Corporate Research personnel working in S&T's office.

- E. Place of Performance.** Northeastern University and subcontractor Siemens Corporate Research will perform the work under this SOW at Siemens Corporate Research in Princeton, NJ.
- F. DHS-Furnished Property.** DHS property will not be provided to Northeastern University and subcontractor Siemens Corporate Research unless otherwise agreed in a task order issued under this SOW. In such instances, DHS will maintain property records.

Before purchasing any individual item equal to or exceeding \$50,000 that is required to support technical tasks performed pursuant to this SOW, Northeastern University and subcontractor Siemens Corporate Research shall obtain the DHS S&T Technical Representative's prior written consent. The DHS S&T COTR may lower or raise the aforementioned \$50,000 threshold at his/her discretion and on written notice to Northeastern University and subcontractor Siemens Corporate Research. If the DHS S&T COTR consents to such purchase, such item shall become the property of DHS. Northeastern University and subcontractor Siemens Corporate Research will maintain any such items according to currently existing property accountability procedures. The DHS S&T COTR will determine the final disposition of any such items.
- G. Deliverables.** Northeastern University and subcontractor Siemens Corporate Research will provide all deliverables identified in this SOW directly to the DHS S&T COTR and DHS Contracting Officer with a copy of the transmittal letter to the Financial Analyst.
- H. Program Status Report.** Northeastern University and subcontractor Siemens Corporate Research will deliver a monthly program status report to the DHS S&T COTR and DHS S&T Explosives Business Operations Manager, and DHS S&T Financial Analyst. This document is due within 8 business days of the end of the month and will describe the previous 30 calendar days' activity, technical progress achieved against goals, difficulties encountered, recovery plans (if needed), plans for the next 30 day period, and financial status. The length of the report will not exceed one page.
- I. Funding Requirements.** DHS will provide funding to Northeastern University and subcontractor Siemens Corporate Research in accordance with DHS's appropriations and available funds.
- J. Security Requirements.**

1. All work performed under this SOW is unclassified unless otherwise specified by DHS.
2. If classified work is required under this SOW, DHS will provide specific guidance to Northeastern University and subcontractor Siemens Corporate Research as to which work will be conducted in a classified manner and at which classification level. Northeastern University and subcontractor Siemens Corporate Research will also adhere to other applicable Government orders, guides, and directives pertaining to classified or confidential work.

IV. Points of Contact

Northeastern University Points of Contact (POCs) are as follows:

Technical POC(s) -

Michael Silevitch
Northeastern University
360 Huntington Avenue, (b) (6)
Boston, MA 02115

Financial POC(s) -

John Harris
Director of Research and Property Accounting
Northeastern University, 251RI
360 Huntington Avenue
Boston, MA 02115
Tel: (b) (6)
(b) (6)

Lawrence W. Barnett

Acting Director, Division of Sponsored Projects Administration
Northeastern University
360 Huntington Avenue, (b) (6)
Boston, MA 02115
Tel: (b) (6)
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(b) (6)

Anne Magrath, CRA
Director of Finance & Research Contracts Administration Operations
The Bernard M. Gordon Center for Subsurface Sensing and Imaging Systems
Northeastern University
360 Huntington Avenue, (b) (6)
Boston, MA 02115
Tel: (b) (6)

Cell: (b) (6)
Fax: 617-373-8627

Northeastern University may change the individual designated as a POC upon notice to DHS S&T of such change.

The DHS POCs are as follows:

DHS S&T COTR -

Michael Shepard, PhD
Department of Homeland Security
ATTN: Science and Technology Directorate
Explosives Division
245 Murray Lane
Washington, DC 20528
Tel: (b) (6)
Fax: 202-254-5396
(b) (6)

DHS S&T Explosives Operations Manager -

Wallicia Tapscott
Department of Homeland Security
ATTN: Science and Technology Directorate
Explosives Division
245 Murray Lane
Washington, DC 20528
Tel: (b) (6)
Fax: 202-254-5395
(b) (6)

DHS S&T Financial Analyst -

Omar Canales
Contractor in Support of:
Department of Homeland Security
ATTN: Science and Technology Directorate
Office of Chief Financial Officer
245 Murray Lane
Washington, DC 20528
Tel: (b) (6)
Fax: 202-254-5392
(b) (6)

DHS S&T may change the individual designated as a POC upon notice to Northeastern University and subcontractor Siemens Corporate Research of such change.