

BRONDA BRADY

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE	PAGE OF PAGES 1 9
2. AMENDMENT/MODIFICATION NO. P00001	3. EFFECTIVE DATE 07/10/2006	4. REQUISITION/PURCHASE REQ. NO. RSEN-07-00073	5. PROJECT NO. (if applicable)
6. ISSUED BY U.S. Dept. of Homeland Security Office of Procurement Operations S&T Acquisition Branch 245 Murray Lane, SW Building 410 Washington DC 20328	CODE DHS/OPO/S&T/S&T	7. ADMINISTERED BY (if other than item 6) OPO S&T Acquisition Branch	CODE DHS/OPO/S&T/S&T
8. NAME AND ADDRESS OF CONTRACTOR (Type, street, county, State and ZIP Code) NORTHEASTERN UNIVERSITY 360 HUNTINGTON AVENUE 251 RI BOSTON MA 021155000		9A. AMENDMENT OF SOLICITATION NO.	9B. DATED (SEE ITEM 11)
CODE 0014236310000 FACILITY CODE		X 10A. MODIFICATION OF CONTRACT/ORDER NO. HSHQDC-07-C-00016	10B. DATED (SEE ITEM 11) 12/06/2006

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is awarded 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 10, 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 this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (if received) Net Increase: \$420,000.00
See Schedule

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/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 data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: 43.103(a)(3)
	D. OTHER (specify type of modification and authority)

E. IMPORTANT: Contractor is not is required to sign this document and return _____ 1 copies to the issuing office.

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

Tax ID Number: 04-1579980
DUNS Number: 001423631+0000
Division: Explosives
PPA: Explosives
Thrust Area: Explosives Detection
Program: Checkpoint Program
Project: Next Generation Passenger Checkpoint Project
Performer: Northeast University

Description: The purpose of this effort is to exercise the second increment of Phase I of the Northeastern Award under BAA05-03 Prototypes and Technologies for Improvised Explosive Continued ...

Except as provided herein, all terms and conditions of the document referenced in item 8A or 10A, as herebefore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print) [Redacted]	15B. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Douglas S. Roark
15C. DATE SIGNED 5-17-07	15D. DATE SIGNED 5-17-07

CONTINUATION SHEET

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NAME OF OFFEROR OR CONTRACTOR
 NORTHEASTERN UNIVERSITY

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
0001	<p>Device Detection. Discount Terms: Net 30 FOB: Destination Period of Performance: 07/10/2006 to 04/07/2008</p> <p>Change Item 0001 to read as follows (amount shown is the obligated amount):</p> <p>PTIEDD - Phase I: BomDetec Project Including Data Deliverables Fully Funded Obligation Amount \$1,711,383.00 Product/Service Code: R425 Product/Service Description: ENGINEERING & TECHNICAL SERVICES</p> <p>Delivery: 04/09/2007 Delivery Location Code: DHS Department of Homeland Security 245 Murray Lane Bldg. 410 Washington DC 20528</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: NONE000-000-5X-06-10-DC-005-06-01-0000-00-00-00-00 -GE-DL-25-50-00000 Funded: \$0.00</p> <p>Accounting Info: NONE000-000-5X-06-20-DC-005-06-01-0000-00-00-00-00 -GE-DL-25-50-00000 Funded: \$0.00</p> <p>CLIN 0001 Total Estimated Cost: \$1,687,533 CLIN 0001 Total Fixed Fee: \$23,850 CLIN 0001 Total CPFF: \$1,711,383</p> <p>CLIN 0001 is incrementally funded in the amount of \$1,305,181. This amount appears in Block 15G of the SF26 as the amount obligated with this action.</p> <p>Change Item 0002 to read as follows (amount shown is the obligated amount):</p> <p>OPTION 1: PTIEDD - Phase II: BomDetec Project Continued ...</p>	1	LO	1,711,383.00	0.00
0002	<p>OPTION 1: PTIEDD - Phase II: BomDetec Project Continued ...</p>	1	LO	1,697,743.00	0.00

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ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Including Data Deliverables Amount: \$1,697,743.00 (Option Line Item) 04/09/2007 Product/Service Code: R425 Product/Service Description: ENGINEERING & TECHNICAL SERVICES Delivery: 365 Days After Award Delivery Location Code: DHS Department of Homeland Security 245 Murray Lane Bldg. 410 Washington DC 20528 Accounting Info: Funded: \$0.00 CLIN 0002 Total Estimated Cost: \$1,564,740 CLIN 0002 Total Fixed Fee: \$133,003 CLIN 0002 Total CPFF: \$1,697,743 Change Item 0003 to read as follows (amount shown is the obligated amount):				
0003	OPTION 2: PTIEDD - Phase III: BomDetec Project Including Data Deliverables Amount: \$523,332.00 (Option Line Item) 04/06/2008 Product/Service Code: R425 Product/Service Description: ENGINEERING & TECHNICAL SERVICES Delivery: 180 Days After Award Delivery Location Code: DHS Department of Homeland Security 245 Murray Lane Bldg. 410 Washington DC 20528 Accounting Info: Funded: \$0.00 CLIN 0003 Total Estimated Cost: \$482,334 CLIN 0003 Total Fixed Fee: \$40,998 CLIN 0003 Total CPFF: \$523,332 If and to the extent that all options are exercised: Add Item 0004 as follows: Continued ...	1	LO	523,332.00	0.00

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NORTHEASTERN UNIVERSITY

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
0004	Funding for the second increment for Phase I Obligated Amount: \$420,000.00 Product/Service Code: R425 Product/Service Description: ENGINEERING & TECHNICAL SERVICES Delivery: 04/09/2008 Delivery Location Code: S&T MURRAY LANE DHS S&T 245 Murray Lane Building 410 Washington DC 20528 Amount: \$420,000.00 Accounting Info: NONE000-000-7X-33-02-03-0001-01-00-0000-00-00-00-0 0-GE-AP-25-50-000000 Funded: \$420,000.00				420,000.00

Statement of Work for Northeastern University

U.S. Department of Homeland Security Science and Technology Directorate Explosives Division

RSEN-07-00073

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. The Suicide Borne IED program supports this effort by focusing on protecting the homeland from the threat of explosives through detection. Solutions targeted are either near-term or more in-depth for suicide bomb and/or leave-behind bomb detection.

II. Scope of Work

The purpose of this SOW is to exercise the second increment for Phase I of the Northeastern Award under BAA05-03 Prototypes and Technologies for Improvised Explosives Device Detection. The remaining \$420K will be funded in FY07. The core deliverable for the remainder of this Phase will be a summary report to include potential technological issues related to the integration of multiple technologies.

	Item	Time After Award
1.	Monthly Technical Progress and Cost Reports	Monthly
2.	Report on Laboratory and Field Evaluation Criteria	Thirty (30) Weeks
3.	Report on Laboratory and Field Evaluation Results for each sensor	Thirty-four (34) Weeks
4.	Independent Review Board Report on the use of Human Test Subjects	Thirty (30) days prior to testing
5.	System Configuration concept	Thirty-six (36) Weeks
6.	Preliminary Design Review (PDR) with Detailed Summary Report	Thirty-six (36) Weeks
7.	Final Report Phase I	Nine (9) Months

Northeastern University has completed items 2.1, 2.2, 4.1 and 4.3 as numbered in the Contract Section C1: Statement of work and will perform the remaining tasks described below with the additional \$420K.

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.

- 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) (PDT)
 - 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. 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

III. Other Contract Details

1. **Period of Performance.** The period of performance for this SOW will continue from the contract award date to 9 April 2007. DHS may give subsequent extension notices to Northeastern University in writing for further performance in accordance with the terms of this SOW.

Travel. The DHS Explosives Division Director and the DHS S&T Special Assistant for International Policy must approve all foreign travel in advance.

2. DHS-Furnished Information.

- a. DHS will provide certain DHS information, materials, and forms unique to DHS to Northeastern University to support certain tasks under this SOW.
 - b. The DHS S&T Technical Representative identified in this SOW will be the point of contact (POC) for identification of any required information to be supplied by DHS.
 - c. Northeastern University will prepare any documentation according to the guidelines provided by DHS.
- 3. 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 personnel working in S&T's office.
- 4. Place of Performance.** Northeastern University will perform the work under this SOW at Northeastern University or the facility of one of the subcontractors.
- 5. DHS-Furnished Property.** DHS property will not be provided to Northeastern University 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 shall obtain the DHS S&T Technical Representative's prior written consent. The DHS S&T Technical Representative may lower or raise the aforementioned \$50,000 threshold at his/her discretion and on written notice to Northeastern University. If the DHS S&T Technical Representative consents to such purchase, such item shall become the property of DHS. Northeastern University will maintain any such items according to currently existing property accountability procedures. The DHS S&T Technical Representative will determine the final disposition of any such items.

- 6. Deliverables.** Northeastern University will provide all deliverables identified in this SOW directly to the DHS S&T Technical Representative with a copy of the transmittal letter to the Contracting Officer.
- 7. Program Status Report.** Northeastern University will deliver a monthly program status report to the DHS S&T Technical Representative and DHS S&T Resource Manager containing metrics pertaining to financial, schedule, and scope information, risk information, and performance assessment information of all work performed hereunder.

8. **Cost Summary.** DHS will provide funding to Northeastern University in accordance with DHS's appropriations and available funds pursuant to the allocation outlined below:

Budget Summary*						
Task	Labor	Materials and Supplies	Capital Equipment	Travel	Other Direct Costs	Total
Complete Phase I	\$265,000	\$10,000	\$100,000	\$10,000	\$35,000	\$420,000
Totals	\$265,000	\$10,000	\$100,000	\$10,000	\$35,000	\$420,000

**Figures extracted from NRL's Phase II Proposal Cost Summary*

9. **Security Requirements.**

- a. All work performed under this SOW is unclassified unless otherwise specified by DHS.
- b. If classified work is required under this SOW, DHS will provide specific guidance to Northeastern University as to which work will be conducted in a classified manner and at which classification level. If such DHS-guidance conflicts with applicable DOE guidelines, Northeastern University will adhere to the applicable DOE guidelines. Northeastern University will also adhere to other applicable Government orders, guides, and directives pertaining to classified or confidential work. This SOW may require access to information at the FOUO level.
- c. The Contractor shall closely coordinate with the COTR regarding any proposed scientific, technical or professional publication of the results of the work performed or any data developed under this contract. The Contractor shall provide the COTR an opportunity to review any proposed manuscripts describing, in whole or in part, the results of the work performed or any data developed under this contract at least 45 days prior to publication. The COTR will review the proposed publication and provide comments. A response shall be provided to the Contractor within 45 days; otherwise, the Contractor may assume that the COTR has no comments. The Contractor agrees to address any concerns or issues identified by the COTR prior to publication.