1. CONTRACT (Proc. No. and Km) NO.
   NSBDC-08-C-00128

2. ISSUED BY
   Code: DHS/OPD/NDDO

3. NAME OF CONTRACTOR
   L-3 Communications Corporation
   105 Commerce Way
   Woburn MA 01801-1028

4. DELIVERY
   Origin: FOR ORIGIN
   Other (if any): Other (if any)

5. DISCOUNT FOR PROMPT PAYMENT
   Net: 30

15. ITEM 15B TOTAL AMOUNT OF CONTRACT
   $1,317,000.00

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>SUPPLIES/SERVICES</th>
<th>QAUNTITY</th>
<th>UNIT PRICE</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

17. TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>PART</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>THE SCHEDULE</td>
</tr>
<tr>
<td>II</td>
<td>CONTRACT CLAUSES</td>
</tr>
<tr>
<td>III</td>
<td>SUPPLIES/SERVICES AND PRICE DETAILS</td>
</tr>
<tr>
<td>IV</td>
<td>DESCRIPTIONS, PACKAGING, HANDLING</td>
</tr>
<tr>
<td>V</td>
<td>INSPECTION AND ACCEPTANCE</td>
</tr>
<tr>
<td>VI</td>
<td>DELIVERY OR PERFORMANCE</td>
</tr>
<tr>
<td>VII</td>
<td>CONTRACT ADMINISTRATION</td>
</tr>
<tr>
<td>VIII</td>
<td>SPECIAL CONTRACT REQUIREMENTS</td>
</tr>
</tbody>
</table>

19. NAME OF CONTRACTING OFFICER
   Wanda McLean

20. NAME AND TITLE OF SIGNER (Type or Print)
   Joseph Caglioni, Acting Director of Contracts

AWARD/CONTRACT

This contract is a rated order under EPA (S) CFA 360

3. EFFECTIVE DATE
   09/22/2008

4. PROCUREMENT/PURCHASE REQUEST/PROJECT NO.
   RMR-08-00249

5. ADMINISTERED BY (If other than item 3)
   Code: DHS/OPD/NDDO

U.S. Dept. of Homeland Security
Office of Procurement Operations
Domestic Nuclear Detection Office
Acquisition Division
245 Murray Lane, SW, Bldg. 410
Washington, DC 20528

U.S. Dept. of Homeland Security
Office of Procurement Operations
Domestic Nuclear Detection Office
Acquisition Division
245 Murray Lane, SW, Bldg. 410
Washington, DC 20528
The contractor shall provide all necessary labor, materials and all other resources needed in support of the Department of Homeland Security, Domestic Nuclear Detection Office's Advanced Technology Demonstration program for the Mobile Dual Energy Neutron Scanner for SNM Detection in accordance with the terms and conditions of this contract in the cost-plus-fixed-fee price of [b](4) for Phase I, incrementally funded in the not-to-exceed ceiling price of $1,337,000.

The period of performance for Phase I is for 9 months from September 22, 2008 through June 21, 2009.

Phases 2, 3 and 4 are options to be exercised at the government's discretion in accordance with Section F.5.

The total value of this contract including the base period and all options (if exercised) is in the not-to-exceed ceiling price of [b](4)

Accounting Info:
7-RD08XAO00D-2008-RT0860-303200-ATDE-TR30-305000-305000-05000000000000-2550
FOB: Destination
Period of Performance: 09/22/2008 to 06/21/2009

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>QUANTITY</th>
<th>UNIT</th>
<th>UNIT PRICE</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>0001</td>
<td>1</td>
<td></td>
<td></td>
<td>1,337,000.00</td>
</tr>
</tbody>
</table>

Base Period
Phase I - Preliminary Design in accordance with the Statement of Work outlined in Section J in the cost-plus-fixed fee amount of [b](4) incrementally funded at $1,337,000.00 as follows:

Est. Cost - [b](4) Fixed Fee -

The period of performance shall be from September 22, 2008 through June 21, 2009.

Obligated Amount: $1,337,000.00

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>QUANTITY</th>
<th>UNIT</th>
<th>UNIT PRICE</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>0002</td>
<td>0</td>
<td></td>
<td></td>
<td>0.00</td>
</tr>
</tbody>
</table>

Option 1
Phase 2 - Critical Design in the cost-plus-fixed-fee price of Continued ...
The period of performance for Option 1, Phase 2 (if exercised) shall be for 9 months. Product/Service Code: AJ42

0003
Option 2
Phase 3 - Test Readiness in the cost-plus-fixed fee amount of (b)(4) as follows:

Est. Cost - (b)(4)
Fixed Fee - (b)(4)

The period of performance for Option 2, Phase 3 (if exercised) shall be for 12 months.
Product/Service Code: AJ42

0004
Option 3
Phase 4 - Transport and Test System in the cost-plus-fixed fee of (b)(4) as follows:

Est. Cost - (b)(4)
Fixed Fee - (b)(4)

The period of performance for Option 3, Phase 4 (if exercised) shall be for 5 months.
Product/Service Code: AJ42

The total amount of award: $1,337,000.00. The obligation for this award is shown in box 15G.
SECTION B

SUPPLIES OR SERVICES AND PRICES/COSTS

This is a cost-plus-fixed-fee contract for Advanced Technology Demonstration for Shielded Nuclear Alarm Resolution Program for the Mobile Dual Energy Neutron Scanner for SNM Detection in accordance with the terms and conditions of this contract in the cost-plus-fixed fee not-to-exceed ceiling price of $1,344,287 for Phase I – Preliminary Design. Phase I is incrementally funded at the not-to-exceed ceiling price of $1,337,000.

Each Contract Line Item Number (CLIN) is outlined as follows:

<table>
<thead>
<tr>
<th>CLIN</th>
<th>Description</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>0001</td>
<td>I – Preliminary Design</td>
<td>Base</td>
</tr>
<tr>
<td>0002</td>
<td>II – Critical Design</td>
<td>Option 1</td>
</tr>
<tr>
<td>0003</td>
<td>III – Test Readiness</td>
<td>Option 2</td>
</tr>
<tr>
<td>0004</td>
<td>IV – Transport and Test System</td>
<td>Option 3</td>
</tr>
</tbody>
</table>

Phases II, III and IV are options to be exercised at the government’s discretion as outlined herein in accordance with Section F.5.

Pricing for Phase II is based on the Statement of Work specified in Section J. Pricing for Statements of Work for subsequent Phases III and IV are estimates based on the Statements of Work in Section J. Statements of Work in subsequent phases will be based on work completed in the prior phase, which may impact pricing in the subsequent phases.
SECTION C

DESCRIPTION/SPECIFICATION/WORK STATEMENT

Attachment J.1 – Statement of Work Phase I
Attachment J.1 – Statement of Work Phase II
Attachment J.1 – Statement of Work Phase III
Attachment J.1 – Statement of Work Phase IV
SECTION D

PACKAGING AND MARKING

[This page intentionally left blank]
SECTION E

INSPECTION AND ACCEPTANCE

E.1 CONTRACT CLAUSES INCORPORATED BY REFERENCE

The following contract clauses are hereby incorporated by reference in accordance with the Federal Acquisition Regulation clause, 52.252-2 “CLAUSES INCORPORATED BY REFERENCE” in Section I of this contract. The contracting officer can provide a copy of the full text clause or electronic access can be obtained at www.acquisition.gov

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>TITLE/DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>52.246-9</td>
<td>INSPECTION OF RESEARCH AND DEVELOPMENT (Short Form) (APR 1984)</td>
</tr>
</tbody>
</table>

E.2 INSPECTION AND ACCEPTANCE

The Contracting Officer Technical Representative (COTR) as identified in Section G of this contract is responsible for inspection and acceptance of all services/deliverables submitted under this contract.

E.3 ACCEPTANCE CRITERIA

Certification by the COTR of satisfactory services provided is contingent upon the contractor performing in accordance with the terms and conditions of the contract and all modifications.
SECTION F
DELIVERIES OR PERFORMANCE

F.1 CLAUSES INCORPORATED BY REFERENCE

The following contract clauses are hereby incorporated by reference in accordance with the Federal Acquisition Regulation clause, 52.252-2 “CLAUSES INCORPORATED BY REFERENCE” in Section I of this contract. The contracting officer can provide a copy of the full text clause or electronic access can be obtained at www.acquisition.gov

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>TITLE/DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>52.242-15</td>
<td>STOP-WORK ORDER (AUG 1989) ALTERNATE I (APR 1984)</td>
</tr>
<tr>
<td>52.247-34</td>
<td>FOB DESTINATION (NOV 1991)</td>
</tr>
</tbody>
</table>

F.2 PERIOD OF PERFORMANCE

The period of performance of this contract is for 9 months from September 22, 2008 through June 21, 2009. If exercised, the option periods are outlined as follows:

Option 1 (9 months) – June 22, 2008 – March 21, 2009
Option 2 (12 months) – March 22, 2009 – March 21, 2010
Option 3 (5 months) – March 22, 2011 – August 21, 2011

F.3 PLACE OF PERFORMANCE

The primary place of performance for this contract shall be at the contractor’s and any subcontractor’s facilities.

F.4 DELIVERY ADDRESS

All deliverables shall be submitted electronically to the COTR/Program Manager identified in Section G.

F.5 OPTION TO EXTEND THE TERM OF THE CONTRACT

The Government may extend the term of this contract by written notice to the Contractor within 1 day; provided that the Government gives the Contractor a preliminary written
notice of its intent to extend at least 30 days before the contract expires. The preliminary notice does not commit the Government to an extension.

(b) If the Government exercises this option, the extended contract shall be considered to include this option clause.

(c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed 35 months.

F.6 DELIVERABLES

The contractor shall perform and submit the following deliverables:

| # | Deliverable                                           | Phase | Due                                      | Format       | Req
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Monthly Report</td>
<td>All</td>
<td>Two weeks after the last day of each month</td>
<td>Government</td>
<td>COTR/PM, CO</td>
</tr>
<tr>
<td>2</td>
<td>Quarterly Performance Review (QPR) Brief</td>
<td>All</td>
<td>One week before QPR</td>
<td>Contractor</td>
<td>COTR/PM, CO</td>
</tr>
<tr>
<td>3</td>
<td>QPR Meeting Minutes</td>
<td>All</td>
<td>One week after QPR</td>
<td>Contractor</td>
<td>COTR/PM, CO</td>
</tr>
<tr>
<td>4</td>
<td>End-of-Phase Performance Evaluation (EPE) Brief</td>
<td>All</td>
<td>One week before EPE</td>
<td>Contractor</td>
<td>COTR/PM, CO</td>
</tr>
<tr>
<td>5</td>
<td>EPE Meeting Minutes</td>
<td>All</td>
<td>Two weeks after EPE</td>
<td>Contractor</td>
<td>COTR/PM, CO</td>
</tr>
<tr>
<td>6</td>
<td>Draft Phase End Report</td>
<td>All</td>
<td>One week before EPE</td>
<td>Contractor</td>
<td>COTR/PM, CO</td>
</tr>
<tr>
<td>7</td>
<td>Final Phase End Report</td>
<td>All</td>
<td>Two weeks after EPE</td>
<td>Contractor</td>
<td>COTR/PM, CO</td>
</tr>
<tr>
<td>8</td>
<td>Final Report</td>
<td>IV</td>
<td>End of program</td>
<td>Contractor</td>
<td>COTR/PM, CO</td>
</tr>
<tr>
<td>9</td>
<td>Technical Report</td>
<td>I-III</td>
<td>As needed</td>
<td>Contractor</td>
<td>COTR/PM, CO</td>
</tr>
<tr>
<td>10</td>
<td>SNAR Prototype</td>
<td>IV</td>
<td>Phase IV</td>
<td>N/A</td>
<td>To be defined in Phase III</td>
</tr>
</tbody>
</table>

Payment will be made based on submission and acceptance of deliverables (see Section G for payment information).
SECTION G

CONTRACT ADMINISTRATION DATA

G.1 CONTRACTING OFFICER AUTHORITY

The contracting officer (CO) assigned to this contract has responsibility for ensuring the performance of all necessary actions for effective contracting; ensuring compliance with the terms and conditions of the contract and safeguarding the interests of the United States in its contractual relationships. The CO is the only individual authorized to enter, administer or terminate this contract and is the only person authorized to approve changes to any of the contract requirements.

The CO is identified as follows:

Wanda E. Moorman
Department of Homeland Security
Office of Procurement Operations/Domestic Nuclear Detection Office
245 Murray Lane, Bldg. 410
Mail Stop 7100
Washington, DC 20528
Telephone: (202) 254-7025
Email: wanda.moorman@dhs.gov

G.2 CONTRACTING OFFICER’S TECHNICAL REPRESENTATIVE (HSAR 3052.242-72) (DEC 2003)

(a) The Contracting Officer may designate Government personnel to act as the Contracting Officer’s Technical Representative (COTR) to perform functions under the contract such as review or inspection and acceptance of supplies, services, including construction, and other functions of a technical nature. The Contracting Officer will provide a written notice of such designation to the Contractor within five working days after contract award. The designation letter will set forth the authorities and limitations of the COTR under the contract.

(b) The Contracting Officer cannot authorize the COTR or any other representative to sign documents, such as contracts, contract modifications, etc., that require the signature of the Contracting Officer.

The Program Manager and COTR is identified as follows:
G.3 PAYMENT AND INVOICE INFORMATION

Payment shall be made for services accepted by the Government delivered to the destinations set forth in the contract. The Government will make payment in accordance with the Prompt Payment Act (31 U.S.C. 3903) and Office of Management and Budget (OMB) Circular A-125, Prompt Payment. The Government will make payment in accordance with the clause FAR 52-232-33, Payment By Electronic Funds Transfer – Central Contractor Registration 9May 1999).

All invoices/vouchers shall contain the following information:

- Name and Address of Contractor/Signature and Name of point of contact
- Date and invoice number
- Contract number
- Contract Line Item Number (CLIN), if applicable
- Quantity, unit price and extension of each CLIN
- Performance period (covered by the invoice)
- Interim payment period, payment for partial delivery, if applicable
- Prompt payment discounts
- Bank Account Number for Electronic Funds Transfer (EFT).

Invoices/Vouchers shall be submitted on a monthly basis for all work performed for the preceding month.

Upon inspection and written acceptance of the services described, the contractor shall be entitled to payment. Payment of each CLIN will be made upon representation of an acceptable voucher.

To receive timely payment, the Contractor shall follow the instructions provided above and submit to the following addresses:

**MAILING ADDRESS:**
Coast Guard Finance Center
DNDO Invoices
P.O. Box 4141
Chesapeake, VA 23327
ELECTRONIC ADDRESS:

FIN-SMB-DND0Invoices@uscg.mil
Monthly Reports shall be submitted with electronic invoices

Payment will be made not later than the 30th calendar day after the designated paying office has received a proper invoice/voucher from the contractor.
SECTION H
SPECIAL CONTRACT REQUIREMENTS

H.1 CONFIDENTIALITY OF INFORMATION

(a) To the extent that the work under this contract requires that the Contractor be given access to or be furnished with confidential or proprietary business, technical or financial information or data belonging to other entities which is clearly marked as confidential or proprietary, the Contractor shall, after receipt thereof, treat such information in confidence and agrees not to appropriate such information to its own use or to disclose such information to third parties unless specifically authorized in writing by the Contracting Officer. The foregoing obligations, however, shall not apply to and the contractor shall have no obligations under this contract to hold information in confidence which, although identified and disclosed as stated herein, has been or is developed by the contractor independently and without benefit of information disclosed hereunder; and:

(1) Information or data which is in the public domain at the time of receipt by the contractor;

(2) Information or data which is published or otherwise subsequently becomes part of the public domain through no fault of the contractor;

(3) Information or data which the contractor can demonstrate was already in its possession at the time of receipt thereof; or

(4) Information or data which the contractor can demonstrate was received by it from a third party who did not require the contractor to treat it in confidence.

(b) The contractor agrees (1) to enter into an agreement, identical in all material respects to the requirements of paragraph (a) above, with each entity requesting such agreement and that is supplying such confidential or proprietary information or data to the contractor under this contract and (2) to supply a copy of such agreement to the Contracting Officer upon written request.

(c) This clause shall be included in any subcontract under which there is a requirement or there becomes a requirement that the subcontractor be given access to or be furnished with confidential or proprietary business, technical or financial information or data.
H.2 ACCESS RESTRICTION

The contractor shall restrict access to those individuals with a valid need-to-know who are actually providing services under this contract. Further dissemination to other contractors, subcontractors or other Government agencies and private individuals or organizations is prohibited unless authorized in writing by the Contracting Officer’s Technical Representative (COTR).

H.3 ADVERTISEMENTS, PUBLICIZING AWARDS, AND NEWS RELEASES

All press releases or announcements about agency programs, projects, and contract awards need to be cleared by the Program Office and the Contracting Officer. Under no circumstances shall the Contractor, or anyone acting on behalf of the Contractor, refer to the supplies, services, or equipment furnished pursuant to the provisions of this contract in any publicity news release or commercial advertising without first obtaining explicit written consent to do so from the Program Office and the Contracting Officer.

The Contractor agrees not to refer to awards in commercial advertising in such a manner as to state or imply that the product or service provided is endorsed or preferred by the Federal Government or is considered by the Government to be superior to other products or services.

H.4 GOVERNMENT-FURNISHED EQUIPMENT (GFE)

GFE from a prior project with DHS that is currently stored at L-3 Communications SDS and the Massachusetts Institute of Technology (MIT) is incorporated into this contract for use by the contractor in performance of this contract.

H.5 APPLICABILITY OF E-VERIFY

The contractor shall register and participate in the Department of Homeland Security E-Verify program at https://www.vis-dhs.com/employerregistration/

H.6 TRAVEL COSTS

All travel shall be reimbursed in accordance with the Federal Travel Regulations for lodging, meals and incidental expenses.
SECTION I

CONTRACT CLAUSES

1.1 CONTRACT CLAUSES INCORPORATED BY REFERENCE

The following contract clauses are incorporated by reference in accordance with the clause at FAR 52.252-2, CLAUSES INCORPORATED BY REFERENCE (Feb 1998) with the same force and effect as if they were given in full text. Upon request, the contracting officer will make their full text available. However, the full text clauses may be accessed electronically at www.acquisition.gov

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>TITLE</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>52.202-1</td>
<td>DEFINITIONS</td>
<td>JUL 2004</td>
</tr>
<tr>
<td>52.203-3</td>
<td>GRATUITIES</td>
<td>APR 1984</td>
</tr>
<tr>
<td>52.203-5</td>
<td>COVENANT AGAINST CONTINGENT FEES</td>
<td>APR 1984</td>
</tr>
<tr>
<td>52.203-6</td>
<td>RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT</td>
<td>SEP 2006</td>
</tr>
<tr>
<td>52.203-7</td>
<td>ANTI-KICKBACK PROCEDURES</td>
<td>JUL 1995</td>
</tr>
<tr>
<td>52.203-8</td>
<td>CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY</td>
<td>JAN 1997</td>
</tr>
<tr>
<td>52.203-10</td>
<td>PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY</td>
<td>JAN 1997</td>
</tr>
<tr>
<td>52.203-12</td>
<td>LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS</td>
<td>SEP 2007</td>
</tr>
<tr>
<td>52.204-7</td>
<td>CENTRAL CONTRACTOR REGISTRATION</td>
<td>APR 2008</td>
</tr>
<tr>
<td>52.209-6</td>
<td>PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED OR PROPOSED FOR DEBARMENT</td>
<td>SEP 2006</td>
</tr>
<tr>
<td>52.215-2</td>
<td>AUDIT AND RECORDS - NEGOTIATION</td>
<td>JUN 1999</td>
</tr>
<tr>
<td>52.215-11</td>
<td>RICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA —MODIFICATIONS</td>
<td>OCT 1997</td>
</tr>
<tr>
<td>52.215-13</td>
<td>SUBCONTRACTOR COST AND PRICING DATA — MODIFICATIONS</td>
<td>OCT 1997</td>
</tr>
<tr>
<td>52.215-8</td>
<td>ORDER OF PRECEDENCE—UNIFORM CONTRACT FORMAT</td>
<td>OCT 1997</td>
</tr>
<tr>
<td>52.215-14</td>
<td>INTEGRITY OF UNIT PRICE</td>
<td>OCT 1997</td>
</tr>
<tr>
<td>52.215-17</td>
<td>WAIVER OF FACILITIES CAPITAL COST OF MONEY</td>
<td>OCT 1997</td>
</tr>
<tr>
<td>52.215-19</td>
<td>NOTIFICATION OF OWNERSHIP CHANGES</td>
<td>OCT 1997</td>
</tr>
<tr>
<td>NUMBER</td>
<td>TITLE</td>
<td>DATE</td>
</tr>
<tr>
<td>----------</td>
<td>----------------------------------------------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>52.215-21</td>
<td>REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA—MODIFICATIONS — ALT IV (OCT 1997)</td>
<td>OCT 1997</td>
</tr>
<tr>
<td>52.216-7</td>
<td>ALLOWABLE COST AND PAYMENT</td>
<td>DEC 2002</td>
</tr>
<tr>
<td>52.216-8</td>
<td>FIXED FEE</td>
<td>MAR 1997</td>
</tr>
<tr>
<td>52.217-8</td>
<td>OPTION TO EXTEND SERVICES</td>
<td>NOV 1999</td>
</tr>
<tr>
<td>52.219-8</td>
<td>UTILIZATION OF SMALL BUSINESS CONCERNS</td>
<td>MAY 2004</td>
</tr>
<tr>
<td>52.219-9</td>
<td>SMALL BUSINESS SUBCONTRACTING PLAN</td>
<td>APR 2008</td>
</tr>
<tr>
<td>52.219-14</td>
<td>LIMITATIONS ON SUBCONTRACTING</td>
<td>DEC 1996</td>
</tr>
<tr>
<td>52.222-2</td>
<td>PAYMENT FOR OVERTIME PREMIUMS</td>
<td>JUL 1990</td>
</tr>
<tr>
<td>52.222-3</td>
<td>CONVICT LABOR</td>
<td>JUN 2003</td>
</tr>
<tr>
<td>52.222-21</td>
<td>PROHIBITION OF SEREGREGATED FACILITIES</td>
<td>FEB 1999</td>
</tr>
<tr>
<td>52.222-26</td>
<td>EQUAL OPPORTUNITY</td>
<td>MAR 2007</td>
</tr>
<tr>
<td>52.222-35</td>
<td>EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF VIETNAM ERA, AND OTHER ELIGIBLE VETERANS</td>
<td>SEP 2006</td>
</tr>
<tr>
<td>52.222-36</td>
<td>AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES</td>
<td>JUN 1998</td>
</tr>
<tr>
<td>52.222-37</td>
<td>EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS</td>
<td>SEP 2006</td>
</tr>
<tr>
<td>52.222-38</td>
<td>COMPLIANCE WITH VETERANS' EMPLOYMENT REPORTING REQUIREMENTS</td>
<td>DEC 2001</td>
</tr>
<tr>
<td>52.222-39</td>
<td>NOTIFICATION OF EMPLOYEE RIGHTS CONCERNING PAYMENT OF UNION DUES OR FEES</td>
<td>DEC 2004</td>
</tr>
<tr>
<td>52.222-41</td>
<td>SERVICE CONTRACT ACT OF 1965</td>
<td>NOV 2007</td>
</tr>
<tr>
<td>52.222-50</td>
<td>COMBATING TRAFFICKING IN PERSONS</td>
<td>AUG 2007</td>
</tr>
<tr>
<td>52.223-6</td>
<td>DRUG-FREE WORKPLACE</td>
<td>MAY 2001</td>
</tr>
<tr>
<td>52.223-14</td>
<td>TOXIC CHEMICAL RELEASE REPORTING</td>
<td>AUG 2003</td>
</tr>
<tr>
<td>52.225-13</td>
<td>RESTRICTION ON CERTAIN FOREIGN PURCHASES</td>
<td>JUN 2008</td>
</tr>
<tr>
<td>52.227-1</td>
<td>AUTHORIZATION AND CONSENT--ALTERNATE 1 (APR 1984)</td>
<td>DEC 2007</td>
</tr>
<tr>
<td>52.227-2</td>
<td>NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT</td>
<td>DEC 2007</td>
</tr>
<tr>
<td>52.227-11</td>
<td>PATENT RIGHTS-OWNERSHIP BY THE CONTRACTOR</td>
<td>DEC 2007</td>
</tr>
<tr>
<td>52.227-14</td>
<td>RIGHTS IN GENERAL—GENERAL</td>
<td>DEC 2007</td>
</tr>
<tr>
<td>52.228-7</td>
<td>INSURANCE — LIABILITY TO THIRD PERSONS</td>
<td>MAR 1996</td>
</tr>
<tr>
<td>52.232-17</td>
<td>INTEREST</td>
<td>JUNE 1996</td>
</tr>
<tr>
<td>52.232-18</td>
<td>AVAILABILITY OF FUNDS</td>
<td>APR 1984</td>
</tr>
<tr>
<td>52.232-20</td>
<td>LIMITATION OF COST</td>
<td>APR 1984</td>
</tr>
<tr>
<td>52.232-22</td>
<td>LIMITATION OF FUNDS</td>
<td>APR 1984</td>
</tr>
<tr>
<td>52.232-23</td>
<td>ASSIGNMENT OF CLAIMS</td>
<td>JAN 1986</td>
</tr>
<tr>
<td>NUMBER</td>
<td>TITLE</td>
<td>DATE</td>
</tr>
<tr>
<td>----------</td>
<td>------------------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>52.232-25</td>
<td>PROMPT PAYMENT</td>
<td>OCT 2003</td>
</tr>
<tr>
<td>52.232-33</td>
<td>PAYMENT BY ELECTRONIC FUNDS TRANSFER CONTRACT REGISTRATION</td>
<td>OCT 2003</td>
</tr>
<tr>
<td>52.232-35</td>
<td>DESIGNATION OF OFFICE FOR GOVERNMENT RECEIPT OF ELECTRONIC</td>
<td>MAY 1999</td>
</tr>
<tr>
<td></td>
<td>FUNDS TRANSFER INFORMATION</td>
<td></td>
</tr>
<tr>
<td>52.233-1</td>
<td>DISPUTES</td>
<td>JUL 2002</td>
</tr>
<tr>
<td>52.233-2</td>
<td>SERVICE OF PROTEST</td>
<td>SEP 2006</td>
</tr>
<tr>
<td>52.233-3</td>
<td>PROTEST AFTER AWARD</td>
<td>AUG 1996</td>
</tr>
<tr>
<td>52.233-4</td>
<td>APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM</td>
<td>OCT 2004</td>
</tr>
<tr>
<td>52.242-1</td>
<td>NOTICE OF INTENT TO DISALLOW COSTS</td>
<td>APR 1984</td>
</tr>
<tr>
<td>52.242-3</td>
<td>PENALTIES FOR UNALLOWABLE COSTS</td>
<td>MAY 2001</td>
</tr>
<tr>
<td>52.242-4</td>
<td>CERTIFICATION OF FINAL INDIRECT COST RATES</td>
<td>JAN 1997</td>
</tr>
<tr>
<td>52.242-13</td>
<td>BANKRUPTCY</td>
<td>JUL 1995</td>
</tr>
<tr>
<td>52.243-2</td>
<td>CHANGES – COST-REIMBURSEMENT</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– ALTERNATE V (APR 1984)</td>
<td>AUG 1987</td>
</tr>
<tr>
<td>52.243-7</td>
<td>NOTIFICATION OF CHANGES</td>
<td>APR 1984</td>
</tr>
<tr>
<td>52.244-2</td>
<td>SUBCONTRACTS</td>
<td>JUN 2007</td>
</tr>
<tr>
<td>52.244-5</td>
<td>COMPETITION IN SUBCONTRACTING</td>
<td>DEC 1996</td>
</tr>
<tr>
<td>52.244-6</td>
<td>SUBCONTRACTS FOR COMMERCIAL ITEMS</td>
<td>MAR 2007</td>
</tr>
<tr>
<td>52.245-1</td>
<td>GOVERNMENT PROPERTY</td>
<td>JUN 2007</td>
</tr>
<tr>
<td>52.245-9</td>
<td>USE AND CHARGES</td>
<td>JUN 2007</td>
</tr>
<tr>
<td>52.246-25</td>
<td>LIMITATION OF LIABILITY – SERVICES</td>
<td>FEB 1997</td>
</tr>
<tr>
<td>52.247-34</td>
<td>F.O.B. DESTINATION</td>
<td>NOV 1991</td>
</tr>
<tr>
<td>52.247-67</td>
<td>SUBMISSION OF TRANSPORTATION DOCUMENTS FOR AUDIT</td>
<td>FEB 2006</td>
</tr>
<tr>
<td>52.249-6</td>
<td>TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (COST-</td>
<td>MAY 2004</td>
</tr>
<tr>
<td></td>
<td>REIMBURSEMENT)</td>
<td></td>
</tr>
<tr>
<td>52.249-14</td>
<td>EXCUSABLE DELAYS</td>
<td>APR 1984</td>
</tr>
<tr>
<td>52.250-3</td>
<td>SAFETY ACT BLOCK DESIGNATION/ CERTIFICATION</td>
<td>NOV 2007</td>
</tr>
<tr>
<td>52.250-5</td>
<td>SAFETY ACT – EQUITABLE ADJUSTMENT</td>
<td>NOV 2007</td>
</tr>
<tr>
<td>52.251-1</td>
<td>GOVERNMENT SUPPLY SOURCES</td>
<td>APR 1984</td>
</tr>
<tr>
<td>52.253-1</td>
<td>COMPUTER GENERATED FORMS</td>
<td>JAN 1991</td>
</tr>
</tbody>
</table>

The following Department of Homeland Security Acquisition Regulation clauses are incorporated in full text:

**1.2 HSAR 3052.209- 70 PROHIBITION ON CONTRACTS WITH CORPORATE EXPATRIATES (JUN 2006)**

(a) Prohibitions.
Section 835 of the Homeland Security Act, 6 U.S.C. 395, prohibits the Department of Homeland Security from entering into any contract with a foreign incorporated entity which is treated as an inverted domestic corporation as defined in this clause, or with any subsidiary of such an entity. The Secretary shall waive the prohibition with respect to any specific contract if the Secretary determines that the waiver is required in the interest of national security.

(b) Definitions. As used in this clause:

*Expanded Affiliated Group* means an affiliated group as defined in section 1504(a) of the Internal Revenue Code of 1986 (without regard to section 1504(b) of such Code), except that section 1504 of such Code shall be applied by substituting 'more than 50 percent' for 'at least 80 percent' each place it appears.

*Foreign Incorporated Entity* means any entity which is, or but for subsection (b) of section 835 of the Homeland Security Act, 6 U.S.C. 395, would be, treated as a foreign corporation for purposes of the Internal Revenue Code of 1986.

*Inverted Domestic Corporation.* A foreign incorporated entity shall be treated as an inverted domestic corporation if, pursuant to a plan (or a series of related transactions)—

1. The entity completes the direct or indirect acquisition of substantially all of the properties held directly or indirectly by a domestic corporation or substantially all of the properties constituting a trade or business of a domestic partnership;

2. After the acquisition at least 80 percent of the stock (by vote or value) of the entity is held—

   i. In the case of an acquisition with respect to a domestic corporation, by former shareholders of the domestic corporation by reason of holding stock in the domestic corporation; or

   ii. In the case of an acquisition with respect to a domestic partnership, by former partners of the domestic partnership by reason of holding a capital or profits interest in the domestic partnership; and

3. The expanded affiliated group which after the acquisition includes the entity does not have substantial business activities in the foreign country in which or under the law of which the entity is created or organized when compared to the total business activities of such expanded affiliated group.
Person, domestic, and foreign have the meanings given such terms by paragraphs (1), (4), and (5) of section 7701(a) of the Internal Revenue Code of 1986, respectively.

(c) Special rules. The following definitions and special rules shall apply when determining whether a foreign incorporated entity should be treated as an inverted domestic corporation.

(1) Certain Stock Disregarded. For the purpose of treating a foreign incorporated entity as an inverted domestic corporation these shall not be taken into account in determining ownership:

(i) Stock held by members of the expanded affiliated group which includes the foreign incorporated entity; or

(ii) stock of such entity which is sold in a public offering related to the acquisition described in subsection (b)(1) of Section 835 of the Homeland Security Act, 6 U.S.C. 395(b)(1).

(2) Plan Deemed In Certain Cases. If a foreign incorporated entity acquires directly or indirectly substantially all of the properties of a domestic corporation or partnership during the 4-year period beginning on the date which is 2 years before the ownership requirements of subsection (b)(2) are met, such actions shall be treated as pursuant to a plan.

(3) Certain Transfers Disregarded. The transfer of properties or liabilities (including by contribution or distribution) shall be disregarded if such transfers are part of a plan a principal purpose of which is to avoid the purposes of this section.

(d) Special Rule for Related Partnerships. For purposes of applying section 835(b) of the Homeland Security Act, 6 U.S.C. 395(b) to the acquisition of a domestic partnership, except as provided in regulations, all domestic partnerships which are under common control (within the meaning of section 482 of the Internal Revenue Code of 1986) shall be treated as a partnership.

(e) Treatment of Certain Rights.

(1) Certain rights shall be treated as stocks to the extent necessary to reflect the present value of all equitable interests incident to the transaction, as follows:

(i) warrants;

(ii) options;
(iii) contracts to acquire stock;
(iv) convertible debt instruments; and
(v) others similar interests.

(2) Rights labeled as stocks shall not be treated as stocks whenever it is deemed appropriate to do so to reflect the present value of the transaction or to disregard transactions whose recognition would defeat the purpose of Section 835.

(f) Disclosure. The offeror under this solicitation represents that [Check one]: ___ it is not a foreign incorporated entity that should be treated as an inverted domestic corporation pursuant to the criteria of (HSAR) 48 CFR 3009.104-70 through 3009.104-73;

___ it is a foreign incorporated entity that should be treated as an inverted domestic corporation pursuant to the criteria of (HSAR) 48 CFR 3009.104-70 through 3009.104-73, but it has submitted a request for waiver pursuant to 3009.104-74, which has not been denied; or

___ it is a foreign incorporated entity that should be treated as an inverted domestic corporation pursuant to the criteria of (HSAR) 48 CFR 3009.104-70 through 3009.104-73, but it plans to submit a request for waiver pursuant to 3009.104-74.

(g) A copy of the approved waiver, if a waiver has already been granted, or the waiver request, if a waiver has been applied for, shall be attached to the bid or proposal.

(End of provision)

1.3 3052.219-70 SMALL BUSINESS SUBCONTRACTING PLAN REPORTING (JUN 2006)

(a) The Contractor shall enter the information for the Subcontracting Report for Individual Contracts (formally the Standard Form 294 (SF 294)) and the Summary Subcontract Report (formally the Standard Form 295 (SF-295)) into the Electronic Subcontracting Reporting System (eSRS) at www.esrs.gov.

(b) The Contractor shall include this clause in all subcontracts that include the clause at (FAR) 48 CFR 52.2 19-9.

(End of clause)

1.4 3052.242-71 DISSEMINATION OF CONTRACT INFORMATION (DEC 2003)
The Contractor shall not publish, permit to be published, or distribute for public consumption, any information, oral or written, concerning the results or conclusions made pursuant to the performance of this contract, without the prior written consent of the Contracting Officer. An electronic or printed copy of any material proposed to be published or distributed shall be submitted to the Contracting Officer.

(End of clause)

I.5 3052.242-72 CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (DEC 2003)

(a) The Contracting Officer may designate Government personnel to act as the Contracting Officer's Technical Representative (COTR) to perform functions under the contract such as review or inspection and acceptance of supplies, services, including construction, and other functions of a technical nature. The Contracting Officer will provide a written notice of such designation to the Contractor within five working days after contract award or for construction, not less than five working days prior to giving the contractor the notice to proceed. The designation letter will set forth the authorities and limitations of the COTR under the contract.

(b) The Contracting Officer cannot authorize the COTR or any other representative to sign documents, such as contracts, contract modifications, etc., that require the signature of the Contracting Officer.

(End of clause)
SECTION J
LIST OF ATTACHMENTS

J.1 – Statement of Work
J.1 – Statement of Work Phase II
J.1 – Statement of Work Phase III
J.1 – Statement of Work Phase IV
J.2 – Monthly Report Template

*Statements of Work are subject to change based on work in prior phases.
Statement of Work

Re-locatable Shielded Nuclear Alarm Resolution System (R-SNAR)

HSHQDC-08-R-00020
BAA 08-102

Table of Contents

<table>
<thead>
<tr>
<th>1.0</th>
<th>Phase 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Design Target and High energy Beam Transport</td>
</tr>
<tr>
<td>1.2</td>
<td>Models, Detector Experiments, SNR</td>
</tr>
<tr>
<td>1.3</td>
<td>Container Transport</td>
</tr>
<tr>
<td>1.4</td>
<td>Radiation Safety and Shielding, System Concept</td>
</tr>
<tr>
<td>1.5</td>
<td>PDR Material, SEN and trade studies, Reports, Requirements Specification</td>
</tr>
<tr>
<td>2.0</td>
<td>Phase 2</td>
</tr>
<tr>
<td>3.0</td>
<td>Phase 3</td>
</tr>
<tr>
<td>4.0</td>
<td>Phase 4</td>
</tr>
</tbody>
</table>
1.0 PHASE 1

Task 1.1 Design Target and Beam Transport/Accelerator

Overall Task Description: Deuterons from the accelerator impinging on the target will produce neutrons through a nuclear reaction. The target design will consider the most effective material to produce neutrons of the energies of interest, and optimize the quantity of neutrons produced. The beam transport section design will take deuterons from the accelerator and transport them to the target with the required beam properties (size and angular spread).

Detailed Tasks: Study optimum target material and target thickness. Consider design options that allow for a simple method of changing the output neutron energy. On the beam transport, understand the properties of the deuteron beam from the accelerator, and the required beam properties at the target. Propose beam transport magnets (likely quadrupoles and dipoles) for the beam transport line. Run particle beam transport codes to track particles through the transport line and model the beam properties.

Deliverables: Concept for target and beam transport line.

Task 1.2 Models, Detector Experiments, SNR

Overall Task Description: Monte Carlo base simulations using MCNPX will be needed to assess the best approach to active SNM interrogation using beam of fast neutrons. Following goals will be accomplished using MCNP simulations:

1. Determine necessary neutron flux for fast fissionable material detection. The result will influence a choice of neutron generating target, target characteristics (such as density, cooling, etc.), deuteron beam characteristics (such as beam energy current, repetition rate, duty factor, etc.) and shielding.

2. Determine best strategy to detect fissionable material and differentiate between SNM and fissionable material. The result will determine overall design and performance characteristics of the system.

3. Determine best option for neutron/photon detection. We will model performance of various detectors and evaluate its suitability for detection strategy determined in step 2.

4. Test detector prototypes with naturally radioactive neutron source as well as accelerator based neutron source (NRR accelerator). Study interference signals from typical cargo materials.

A final report will be generated based on the results of MCNP studies.

Detailed Tasks: To achieve all the goal outlined above the following tasks will be performed:

1. Collect information about commonly shipped cargo materials
2. Create input files for the MCNP based on findings in 1. Examine option to create pulsed source in MCNPX and validate model with experimental data. 
3. Run detailed MCNP simulations for all cargo material with and without Special Nuclear Material or other fissionable material 
4. Analyze the result of the simulations to maximize fissionable material detection capabilities 
5. Repeat steps 3 and 4 for neutron beams of other energies 
6. Analyze the results to maximize differentiation between SNM and other fissionable materials 
7. Calculate best achievable Signal-To-Noise ratio (SNR) to determine performance characteristics of the system 
8. Model various detector materials to study their interaction with neutrons and photons to determine the best option for detection 
9. Test detector prototypes with naturally radioactive neutron source as well as accelerator based neutron source (NRR accelerator) 
10. Write a report 

**Deliverables:**  System Design Report, System Performance Report, Detection Algorithm Report 

**Task 1.3 Container Transport**

**Overall Task Description:** Produce simple re-locatable design for automated movement of cargo TEU through the SNAR system. 

**Detailed Tasks:**

1) Perform information exchange with DNDO as to how containers are to be presented to SNAR system. For example, if containers are on a train like system no elaborate cargo transport is required. If the cargo arrives on trucks, a simple automated system using a mechanical “mule” can be used to pull the cargo through the system 

2) If the mule is required, mule will be designed to be re-locatable and compatible with 24 hour setup/tear down. 

**Deliverables:** Design concept for container transport 

**Task 1.4 Radiation Safety and Shielding, System Concept**

**Overall Task Description:** We will know from the outcome of the MCNP studies in section 1.2 how much neutron flux will be generated at the source. This will establish the total radiation dose to the environment. Based on the dose we will first simulate using
MCNP and then test with the existing accelerator our shielding design. Shielding design will ultimately keep background radiation at or below the level specified in the performance requirements.

**Detailed Tasks:** In order to design a shielding concept that will keep background radiation at the required level following tasks will be completed:

1. Simulate neutron beam transport in MCNP with different cargo materials
2. Create an MCNP model of the shielding
3. Run the model
4. Calculate the dose from the results of the simulation
5. Modify shielding and rerun the model until the dose is at or below the level specified
6. Based on the results of the MCNP modeling design and construct a shielding prototype
7. Test the prototype shielding with the existing neutron source (NRR)
8. Design final shielding that will be used with the ATD prototype
9. Create radiation safety report for planned TRR testing at MIT

**Deliverables:**
Shielding Design Report, results from the prototype testing

**Task 1.5 Management and Documentation**

**Overall Task Description:** This task encompassed all the documentation required for the project phase. It will also include any plan or documents to proceed to the next phase.

**Detailed Tasks:**

1) Monthly reports
2) Support of quarterly meetings if required
3) Preparation of system engineering notebook entries and trade studies as required
4) Preparation of PDR documents and Power point presentations, attendance of PDR and follow-up
5) Program management - coordinate and manage all phase 1 program activities including Task 1.1 Design Target and Beam Transport/Accelerator, Task 1.2 Models, Detector Experiments, SNR, Task 1.3 Container Transport, and Task 1.4 Radiation Safety and Shielding, System Concept . Generate a program plan (with resource loading). Track progress and budget and adjust program plan accordingly. Support quarterly meetings and PDR.

**Deliverables:** PDR documentation, Monthly reports, Quarterly review briefs, System engineering notebook entries and trade studies.
2.0 PHASE 2

Overall Task Description: Phase II will use the results of phase I to design the SNAR prototype. The target and detector prototype will be designed, built and tested. The beam transport magnets will be designed. The concept of how all the equipment fits onto the trailers will be developed. The radiation shielding will be designed. Target and detector prototypes will be tested using the existing DL-3 accelerator from the NRR project.

The Tasks are as follows:

1) Target Prototype design
2) Beam transportation modeling
3) Detector prototype
4) Cargo Tests
5) Accelerator truck integration
6)Shielding design
7) Test plan
8) CDR material
9) SEN and trade studies
10) Reports to DNDO and meetings
11) Order accelerator and truck

Phase II will culminate with CDR and is expected to last 9 Months.

Detailed Tasks

1) We will create prototypes of the high and low energy neutron source targets and test them on the existing deuteron accelerator. This will allow us to verify neutron flux rates, cooling and instrumentation schemes to help reduce risk in the final target design.

2) We will complete the design of the beam transport magnets and verify integration with the accelerator and target. We will specify emittance parameters to the accelerator manufacture to endure successful beam transport.

3) We will build a small prototype of our proposed detectors and readout electronics and test them with radioactive sources, and with neutrons from the existing accelerator. We will measure the response of the detectors to fissionable materials and potential background sources.

4) We will study the response of the detectors and electronics to fissionable and non fissionable materials in various cargo like configurations.

5) We will verify that the accelerator, beam transport, target shielding and target fit together in the trailer, have the required space for maintenance, and are properly aligned to scan a complete cargo container.
6) We will design the shielding, both around the neutron source target and any other collimation and beam stops required.

7) We will prepare a test readiness review plan for DNDO for phase 3 testing.

8-10) Program management - coordinate and manage all phase 2 program activities. Update the program plan (with resource loading). Track progress and budget and adjust program plan accordingly. Support quarterly meetings and CDR. We will prepare all required material, CDR presentation and documentation, monthly reports, trade studies and system engineering notebook entries. This will also include any plans for the next phase.

11) The accelerator is a very long lead item (10 months). We expect that once the beam transport and target design are known, and the accelerator integration has been verified that we will be able to order the accelerator prior to full CDR (executed through a Special Long Lead item CDR). The only other required parameters are the accelerator beam energy and the value and tolerance on the beam emittance to place the order.

**Deliverables:** Target design, beam transport design, CDR documents, Monthly reports, Target prototype

### 3.0 PHASE 3

**Overall Task Description:** In this phase we will assemble and test the prototype All parts will be received and the System with be tested at MIT-Bates. The production target and beam transport system will be built. The detectors will be ordered, and the cargo transport mechanism built. All parts will be integrated and mounted in the trailers. The full system will be tested.

The tasks are

1) Order/Build target
2) Order/Build beam transport
3) Order/build detector array
4) Order/Build cargo transport
5) Mechanical integration of components
6) Develop software/GUI
7) Integration
8) System Test at Bates
9) Test Readiness Review
10) Reports to DNDO and meetings
11) System Control software
12) Detection Software
13) Accelerator factory acceptance tests

This phase is expected to last 12 months and will culminate in the test readiness review.
Detailed Tasks:

1) Based on the final design, we will order, build and test the neutron source target.
2) Based on the final design, we will order, build and test the beam transport system.
3) Based on the final design, we will order, build and test the detector array system.
4) Based on the final design, we will order, build and test the cargo transport system.
5) We will perform factory acceptance on the accelerator, trailer, and verify the mobility.
6) We will provide mechanical engineering support for all the above components.
7) We will develop and test the system GUI, the system control software (which monitors neutron production, target temperature, accelerator beam current and spot location etc). We will develop a detection algorithm that will monitor the photon, neutron, and imaging detectors for fission and SNM signatures and analyze images for insufficient penetration or possible engineered shields.
8) We will integrate and test all system components.
9) We will perform a system test at Bates to verify the system is ready for the test readiness review.
10) We and or DNDO will conduct the test readiness review.
11) We will prepare all required material, TRR presentation and documentation, monthly reports, trade studies and system engineering notebook entries. This will include any plans or documents to proceed to the next phase.
12) Program management - coordinate and manage all phase 3 program activities. Update the program plan (with resource loading). Track progress and budget and adjust program plan accordingly. Support quarterly meetings and the Test Readiness Review.

Deliverables: The complete system will be assembled, but it will not be delivered to DNDO until after phase IV (unless the project is terminated at this point).

4.0 PHASE 4

Overall Task Description:
The final phase involve moving the system to the Nevada Test Site for testing. At the End of this phase, the prototype will be delivered to DNDO and a final report will be written.

Detailed Tasks:
1) The system will be transported to the Nevada test site.
2) The system will be re-assembled
3) The system will be tested with support from L-3 and MIT.
4) A final report will be prepared.
5) Program management - coordinate and manage all phase 4 program activities.
   Update the program plan (with resource loading). Track progress and budget and adjust program plan accordingly. Support quarterly meetings and final test results meeting.

**Deliverables**: Re-locatable Shielded Nuclear Alarm Resolution System
Monthly Progress Report #(Insert)
Insert FOUO or other restrictions as needed.

Project Title

Solicitation Number / Name
DNDO Program Manager: (Insert PM name)

Contract: (Insert Contract #)
CDRL: (Insert CDRL #)

Monthly Progress Report (Insert #)
Issued: Month, day, year
Covering the Period: Month, Day, Year through Month, Day, Year
(Financial information through Month, Day, Year)

Prepared by: Name, Title
Company, Laboratory, or Institution Name
Address Line 1
Address Line 2
Place, State Zip
Email Address
1. **Program Overview**

Provide a one to two paragraph overview of the project.

*Most of this section will not change from month to month.*

2. **Progress Since Last Report and Status**

Provide several paragraphs providing a summary review of the project progress, compared to the last reporting period. This should include all planned activities discussed in section ‘Planned Activities for Next Period’ of the previous month; planned activities that did not occur should be explained.

In the table below, indicate if significant progress was made or technical difficulties were encountered in any areas during the report period. Include for each row (Task):

- Task numbers and brief description as delineated in the SOW/WBS. Sub-Task numbering and reporting is encouraged when extra detail is required.
- Progress and accomplishments since last report against program SOW/WBS milestones/deliverables.
- Last month color code status (see below) and the number of months (mo) or weeks (wks) behind or ahead of the original target completion date.
- Current month color status and the number of months (mo) or weeks (wks) behind or ahead of the original target completion date.

*Use additional space after the table for a more detailed explanation of progress, accomplishments, and the status and difficulties encountered in reporting period. Changes in status should be explained in sufficient detail for the DNDO PM to understand the rationale.*

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Progress/Accomplishments</th>
<th>Last Report Status</th>
<th>Current Report Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.0</td>
<td>Brief description of task objective</td>
<td>We have made a lot of progress in performing measurements with the bench top apparatus ###, but still have difficulty in acquiring the needed materials – see below.</td>
<td></td>
</tr>
<tr>
<td>3.0</td>
<td>...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.0</td>
<td>Task overview</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.1 Sub task ...
4.2 Sub task ...
5.0

**Status color code definitions:** ■= Task completion at risk, Y= Milestones/Deliverables at risk, □= Task proceeding as planned, ●= Task Completed.

**Progress Details:**

**Task N:** This is a more detailed explanation of the task progress to properly inform the DNDO PM of anticipated hang-ups or accomplishments.

3. **Key Issues: Technical, Budget, and Schedule**

Update the table below with any key technical, budget and schedule issues. **NOTE** any changes from last report.

[Use additional space after the table for more detailed explanations of issues and responses. Changes in status should be explained in sufficient detail for the DNDO PM to understand the rationale.]

<table>
<thead>
<tr>
<th>Issues</th>
<th>Response</th>
<th>T/S</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Example: Vendor had delay in obtaining starting materials</td>
<td>CLOSED - Materials received and schedule has adequate contingency</td>
<td>Issue resolved without impact on 6/10/06</td>
</tr>
<tr>
<td>2</td>
<td>Work in characterization lab delayed due to water leak</td>
<td>OPEN - Repairs in progress, minimal impact</td>
<td>T.S 1 week delay in results, Contingency adequate</td>
</tr>
<tr>
<td>3</td>
<td>Lead engineer retiring</td>
<td>OPEN - Posting out, temp. help available</td>
<td>Milestone 5 delayed by 1 months</td>
</tr>
</tbody>
</table>
4. **Cumulative Funding Profile**

Provide a chart with cumulative actual expenses versus planned (budgeted) expenses over the entire period of performance. Use the chart template shown below. To edit this graph in Excel, double click on it. Explain variances of more than 25% per month, whether positive or negative.

(*Planned as of June, 2006)
5. **Funding Summary - Actual Costs**

Labor, Material and Supplies (M&S), Travel, Subcontractors and Consultants (Subs), and Other are fully burdened costs. Provide an explanation of costs not yet posted (e.g., commitments). Provide a description of M&S and Other costs above $25K.

<table>
<thead>
<tr>
<th>Task</th>
<th>Labor</th>
<th>M&amp;S</th>
<th>Travel</th>
<th>Subs</th>
<th>Other</th>
<th>Monthly Total</th>
<th>Cumulative Total</th>
<th>Plan Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1. Cost Breakdown in Thousands of Dollars by Task and Phase as of (date)

---

### Monthly Travel

<table>
<thead>
<tr>
<th>Trip Destination &amp; Dates</th>
<th>Purpose of Trip</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

6. **Planned Activities for Next Month**

Provide a detailed list of activities by Task that are planned for the following month.

[Use additional space after the table for more detailed explanations of planned activities, if needed.]

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Planned Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Brief description of task</td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7. **Contract Schedule Status**

Provide copy of Gantt chart with the all tasks and key milestones and current projected adjustments to meet future deliverables.

8. **Organizational Status**

Provide relevant information on organizational status including, but not limited to, personnel changes, management changes, safety or security issues etc.

9. **Additional Information**

Provide any additional information worth sharing: new modeling/measurement/analysis results, photos, graphs, tables, etc. This section should be used to highlight important achievements of the period.
SECTION K

REPRESENTATIONS AND CERTIFICATIONS

The contractor's annual representations and certifications electronically filed at www.orca.bpn.gov are incorporated herein by reference and made a part of this contract.
SECTION K

REPRESENTATIONS AND CERTIFICATIONS

The contractor's annual representations and certifications electronically filed at www.orca.bpn.gov are incorporated herein by reference and made a part of this contract.