
Project Plan

N.C.R. Bomb Squad Equipment & Regional Cache

Contact Information

Contact name: Jerome Swain
Title: Bomb Squad Commander
Organization affiliation: Loudoun County Fire/Rescue
Jurisdiction: Loudoun County
E-mail address: jswain@loudoun.gov
Phone number: 571-436-4141
Facsimile number: 703-737-8640
Mailing address: 16600 Courage Court, Leesburg, VA 20175

Project Information

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I. Project Summary

Initiative:

The local bomb squads that serve as the first responders for the NCR do not have adequate resources to obtain necessary operational equipment. As a result, all area squads have immediate equipment deficiencies that affect the safety of the general public, emergency responders and bomb technicians. None of the state/local (S/L) squads in the NCR meet the minimum capabilities for Type I bomb squads as defined by FEMA and further, there is no regional reserve/cache of equipment for addressing a regional event or should front line equipment become inoperable or insufficient to address operational needs.

Approach:

Currently, all NCR area bomb squads have a high level of interoperability by participating in information exchange, joint training and mutual aid. All NCR civilian bomb technicians take the same basic training together on the same equipment. The NCR bomb squads have already identified secure and available facilities for the equipment this initiative seeks to acquire via UASI. The equipment that does not go directly to the affected NCR bomb squads will be cached. In FY '06, the required training for new equipment is included in the equipment cost. However, the NCR bomb squads will benefit from one or more regional exercises starting in FY '07 and continuing through the 5 year time period aimed at a multi-agency, cross discipline explosive device response (especially focusing on LBVIED threats and render safe procedures). These are needed to develop and maintain the outcomes the initiative seeks to achieve. Advanced training to adequately address emerging threats and technologies will be included in the FY '07-FY '10 grant requests

Benefits:

- Implement National Incident Management System and National Response Plan
- Expand Regional Collaboration and Multi-Disciplinary Operational Readiness
- Upgrades NCR Bomb Squads to the Minimum FEMA Type I Requirements
- Ensures Adequate Geographic Distribution of equipment
- Establishes Regional Equipment Caches
- Provides equipment necessary to handle multiple simultaneous incidents, as in the 2005 London attacks, possibly involving vehicle borne IEDs (VBIED) or WMD.
- Enhances the overall safety of responding bomb squads, other responders and the general public by adequately equipping responding bomb technicians with equipment to counter VBIED and WMD threats.

II. Project Background and Goals

A. Project Background

The NCR's bomb squads are the first responders to improvised explosive device (IED)/WMD incidents involving many nationally significant, high value and critical infrastructure sites. The recent attacks on the London and Madrid mass transit systems and the use of large vehicle borne IEDs (LVBIEDs) by terrorist groups have raised awareness of critical deficiencies in the capabilities of the NCR state/local squads tasked to respond to such

incidents that affect the NCR as a whole. The July 2005 London attacks illustrate the need to equip and train those squads to respond to multiple incidents within their jurisdictions within minutes. These attacks provide key lessons: widely separated and occurred within a 75-minute timeframe; the London road network gridlocked; and equipment/personnel at the first scene could not redeploy to other scenes due to issues such as cross-contamination.

In May 2005, given the threats to the NCR and the formulation of strategic plans and standards involving bomb squad operations, Metrotech member squads discussed operational requirements so that the squads could adequately respond to multiple, simultaneous LVBIED attacks, involving CBRNE elements, and perform required threat assessments and render safe procedures. To assess the NCR's needs, Metrotech conducted a capabilities survey focusing on the NCR's state and local bomb squads. In response to the survey results, Metrotech commanders formulated a multi-year approach to identify/correct weaknesses in equipment and training, build interoperability and formulate standards. The equipment requests contained in this FY 2006 grant application address immediate, critical deficiencies. The 2006 grant request's objectives are: (1) Address immediate equipment, safety and response deficiencies and weaknesses; (2) Immediately bring NCR bomb squads up to the minimum requirements for equipment, safety and interoperability established in national standards (i.e., FEMA Type I)¹; (3) Ensure adequate geographic distribution of equipment for availability and response times; (4) Establish regional equipment caches to serve as reserves for operational equipment and surge capacity.

Metrotech members have identified the primary deficiency in terrorism preparedness as the lack of equipment necessary for member squads in the NCR to respond to multiple, simultaneous incidents, involving vehicle-borne explosive devices (VBIEDs) with CBRNE capabilities. Currently, all squads field a minimum of two bomb response teams (BRT). However, even with intersquad mutual aid, all the squads lack equipment necessary to fully outfit their BRTs or respond with the equipment necessary to deal with multiple incidents (in some cases, one) involving VBIEDs and/or CBRNE threats. Real-world response times, high threat periods and instances of multiple attacks (London/Madrid) magnify these critical deficiencies. The existing and ongoing threat environment in the NCR requires each first response squad to be adequately equipped to deal immediately with multiple simultaneous IED attacks. Just as importantly, all NCR squads must have equipment and training that makes them thoroughly interoperable. Lastly, the NCR lacks virtually any reserve equipment readily accessible to the state and local squads.

To address the objectives and deficiencies described above, the equipment listed below is requested on behalf of NCR bomb squads. The establishment of bomb squad equipment reserves (caches) for the NCR has also been identified as a critical need. The caches will (a) replace frontline/deployed equipment down for maintenance, etc. and (b) augment Metrotech squads' equipment in the event of a multiple incident scenario that extends across the NCR. Metrotech has identified the need to establish two equipment caches. These will consist of immediately deployable equipment identical to that used by all area squads. Two sites are required due to the response times required of NCR bomb squads to respond, conduct threat assessments, and render safe operations. Mutual aid from other squads will not be sufficient should multiple incidents across the NCR occur simultaneously. For example, immediately following the 7/7/2005 London attacks, all NCR bomb squads were inundated with responses. All available assets were deployed and could not keep pace with all suspect IED reports and threats. Preliminarily, Metrotech has identified two cache sites. One, near Dulles Airport primarily tasked to support Dulles and the Northern Virginia squads. The second, in Northeast Washington, DC primarily tasked to support National Airport and the Washington, DC/Maryland squads.

NCR Strategic Initiatives	DHS Target Capabilities & Performance Measures
4.4.1. Model and exercise the appropriate 15 DHS Scenarios to assess region-wide impact	Explosive Device Response Operations-conduct threat assessments and render safe operations*
4.4.2 Align Public, private and NGO Resources with identified needs for response and recovery	(new task) Conduct IED threat analysis
	(new task) Command, control and coordinate IED response operations
	Res.B.2.6.2.2 (Revised) Perform IED render safe and/or disposal procedures
	Res.B.2.6.3 (Revised) Detect IED terrorist weapons
	Performance Measure: Time for bomb squad to be assembled, dispatched and on scene: Less than 1 hour from notification
	Performance Measure: Time to conduct Render Safe Operations: Less than 1 hour from arrival on scene.
	Performance Measure: Robot requirements. By 2009, all bomb squads must have a robot, at a <u>minimum</u> .

***Note: Render safe procedures (RSP) are the procedures and the equipment utilized by bomb technicians to eliminate or mitigate the real or potential explosive hazards associated with a device, substance or item of concern in a scenario where an explosive element is present. All equipment requested as part of this initiative is employed in the threat assessment (diagnostic phase) or render safe procedures (RSP) phase of bomb squad operations.**

B. Goals and Outcomes

Goal	Outcomes
Upgrade NCR Bomb Squads to minimum FEMA Type I Requirements	All eligible NCR bomb squads are provided sufficient resources to meet the missions defined in FEMA resource typing for Type I bomb squads by end of implantation of the full initiative plan. (see deliverables section for listing)
Ensure adequate geographic distribution of equipment and resources to meet required performance measures	All eligible NCR bomb squads tasked as first responders have equipment sufficient to address multiple incidents with vehicle borne IEDs and/or WMD components
Establish Equipment Caches across the NCR	Two caches of equipment with interoperable equipment are established and maintained by the Metrotech/NCR bomb squads
Address Equipment and Safety Response Deficiencies	Procure equipment required to fill gaps identified by Metrotech/NCR bomb squads during gap analysis

Goal	Outcomes
	(see deliverables section)

C. Project Managers

1. *Jerome Swain*, Bomb Squad Commander, Loudoun County Fire/Rescue

D. Project Assumptions & Scalability

Item Number	Description	Notes
1	Staff is available, with the required skill set, to complete all tasks identified in the project schedule	Ongoing commitment obtained from all NCR bomb squad commanders. Project manager confirmed as of 06/15/2006.
2	Operating funds will be available in each jurisdiction for FY06 and beyond to accommodate the ongoing maintenance costs	Deliverables include warranty, spare parts and equipment specific training packages as part of original purchase cost for all equipment. Project is highly sustainable due to durability and interoperability with equipment currently in use.
3	Planning for a separate project to implement additional phases/unfunded deliverables of this initiative can start before the completion of this project plan	Confirmed with COG Fire Chiefs via conference call on 06/15/2006
4	This project meets the basic measures defined in the target capabilities list (TCL) published by DHS and provided to Metrotech by COG.	Confirmed during January 2006 COG UASI capability review.
5	NCR bomb squads have agreed on basic equipment specifications and capabilities for each deliverable. All deliverables are listed on the DHS	Confirmed at Metrotech working group meeting on 06/13/2006
6	All deliverables can be fully implemented within stated grant period	Confirmed with potential vendors via telecom and emails in 10/2006. Project Manager has confirmed with procurement/contract officials.
7.	All requested deliverables are on the DHS/ODP authorized equipment list	Confirmed by review of current authorized equipment list, 10/2005 and consultation with DHS-OGT on 11/10/2005.

1. Scalability

All requested equipment is considered mission critical in order to correct deficiencies identified by the Metrotech bomb squad commanders and through a needs survey and gap analysis performed by Metrotech. The NCR Bomb Squads are tasked with the responsibility of responding to simultaneous multiple incidents involving large vehicle bombs and possible WMD as in the 2005 London attacks. In order to fulfill the requirements under the DHS Target Capabilities and Performance Measures, the NCR Bomb Squads, working through this initiative, are poised to fill these requirements.

Given the limited UASI 2006 funding awarded to the NCR by DHS, at the direction of the COG Fire Chiefs, Metrotech has scaled its initiative for this grant cycle. The affected bomb squad commanders have reached a consensus on the priority of each deliverable listed below in the deliverable section.

Those deliverables are listed in rank order. Generally, the deliverables can be grouped into 3 phases: Numbers 1-4, Numbers 5-10 and Numbers 11-14. The NCR bomb squad commanders who reviewed the gap analysis survey and original concept paper determined the phases. The commanders determined the level of priority for each equipment line item based on the current availability of the equipment among the affected squads and the need for each piece of equipment based on the day-to-day mission the NCR squads face.

Metrotech believes all equipment is essential. The scaling in no way diminishes the need for ALL aspects of the initiative in FY 2006 and beyond. The objective of establishing two regional caches/reserves for this equipment has been scaled as well. This was done by including in the each deliverable line item equipment sufficient to begin establishing a regional cache.

All equipment contained in the initiative project plan and original concept paper directly addresses the critical tasks, performance measures and objectives articulated in the Explosive Device Response Operations target capability by DHS. Specifically, the execution of render safe procedures including conducting IED threat analysis, conducting on-scene IED response, the performance of IED render safe and disposal procedures and the detection of IED terrorist weapons within the DHS articulated time frames. Those timeframes are less than one hour for a bomb squad to be on-scene with required equipment and less than one hour from time of arrival until render safe procedures are executed. Additionally, the requirement for squad to have robotic capabilities is addressed by including robots under this initiative that are intended to address deficiencies in NCR squad capabilities when compared to missions requiring the employment of robots.

III. Project Approach

A. Activities

- Procure Equipment
- Ensure adequate geographic distribution and deployment of equipment to NCR jurisdiction bomb squads.
- Establish Regional Equipment Caches
- Design Response and Regional Equipment Deployment Plans

B. Resources

Resource Name	Type	Responsibility	Duration
Metrotech Regional Working Group	Staff	Program Oversight, establish equipment caches, develop deployment policies and regional	On-going

		standards for equipment and mutual aid, Training Support, Program management and evaluation, establish sites and SOPs for regional caches	
COG Fire Prevention Committee	Staff	Program Oversight and evaluation	19 months
Resource Name	Type	Responsibility	Duration
FBI-Washington Field Office	Staff	Guidance and overall program support	On-going
Loudoun County Government (Fire Marshals Office)	Staff	Procuring equipment, Procurement Oversight procedures	19 months
COG Fire Chiefs	Staff	Program oversight and guidance, liaison with other ESFs	On-going

C. Deliverables

To address the objectives and deficiencies described above, the equipment listed below is requested on behalf of NCR local squads. The deliverables directly address identified deficiencies and DHS target capabilities and performance measures. In addition, given the lack of any regional reserve for the affect bomb squads to draw upon in an multiple incident scenario such as the 2005 London attacks or 2004 Madrid bombings, the NCR bomb squad commanders have identified the need for the establishment of bomb squad equipment reserves (caches) has been identified as a critical need. As explained above, the caches will (a) augment Metrotech squads' equipment in the event of a multiple incident scenario that extends across the NCR and (b) replace frontline/deployed equipment down for maintenance, etc. Metrotech has identified the need to establish two equipment caches. These will consist of immediately deployable equipment identical and interoperable with that used by all area squads. Two sites are required due to the response times required of NCR bomb squads to respond, conduct threat assessments, and render safe operations.

Deliverable number 8 cannot be fully implemented without deliverable seven.

Deliverable	Delivery Date	Estimated Cost
1. Digital X-Ray Units	12 Months	\$384,000.00
2. Remote Access Camera System (Hazprobe)	12 Months	\$270,000.00
3. Bomb Suits w/ SCBA cap., cooling	12 – 16 Months	\$615,500.00
4. Robot-aircraft/vehicle entry capable/man portable (from cache line item)	12 – 16 Months	\$255,000.00
5. Remote Control Firing System	12 Months	\$81,000.00
6. Fiberscope Camera System	12 Months	\$165,000.00
7. LVBCM System Capable Robot	12 - 16 Months	\$1,912,000.00
8. Large Vehicle Bomb Counter Measures System w/ Gander	12 – 16 Months	\$100,125.00

9. Total Containment Vessel w/ CBRNE	16 Months	\$2,100,000.00
10. Rigging kits (4 components)	12 Months	\$367,000.00
11. PAN disrupter systems	12 Months	\$259,270.00
12. EOD Radiation Search/ID Kit	12 Months	\$224,500.00
13. Cobra EOD Laptop Computers w/ aircard subscriptions	12 – 16 Months	\$151,000.00
14. Regional Equipment Caches, equipment and costs not reflected above	19 Months	\$1,106,530.02

D. Next Steps

IV. Project Methodology

A. Project Dependencies

If not implemented, identified deficiencies in the NCR bomb squads' current inventory of diagnostic, protective equipment and render safe equipment will not be addressed. Therefore, the NCR bomb squads tasked with first response for all NCR jurisdictions will not be adequately equipped for their stated mission. In addition, the goal of the regions bomb squads bringing each bomb squad FEMA Type I capable will not be achieved. This is especially true of the capability of the NCR local squads to respond to multiple, simultaneous incidents, including those involving vehicle borne IEDs and WMD components.

In addition, the continued lack of a regional equipment reserve or cache that is readily accessible to the NCR local bomb squads so that they can meet the DHS performance measures contained in target capability description, will remain unaddressed. The need for a regional cache is highlighted by the demands placed on bomb squads when forced to deal with scenarios involving multiple incidents with vehicle born IEDs/WMD components or an attack across a region such as the 2005 London Underground bombings.

Most of the listed deliverables are not dependent upon any other listed deliverable. The exceptions are that deliverable number 8 cannot be fully implemented without deliverable seven.