

APPLICANT PROFILE



GOVERNMENT OF THE
DISTRICT OF
COLUMBIA

APPLICANT PROFILE

| FY 2005 Homeland Security Grant Program: Urban Areas Security Initiative | |
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| PROJECT TITLE: | Personal Protective Equipment |
| EMERGENCY SUPPORT FUNCTION: | RESF 13 - 3 thru 6 / RFA 13B |
| PROJECT PERIOD: | March 1, 2005 thru February 28, 2007 |
| PROJECT SYNOPSIS: | Through the acquisition of Personal Protective Equipment, to include Level C Protective Boots, specially designed Over Vests, Tactical SCBA Communications Devices and Voice Amplifiers, first responders will be allowed a greater level of personal safety and communication. A secondary benefit to this proposal is a realization of cost savings that will be inherent to the concept of utilizing nylon vest material. |
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TABLE OF CONTENTS

Urban Areas Security Initiative RESF 13 -3 thru 6 – RFA 13B Personal Protective Equipment

Grant Application

PROPOSAL SUMMARY

PROJECT GOALS AND OBJECTIVES

PROJECT DESCRIPTION

ORGANIZATION, EXPERIENCE AND QUALIFICATIONS

STAFFING PLAN

PROJECT BUDGET AND BUDGET NARRATIVE

CERTIFICATIONS

ASSURANCES

Urban Areas Security Initiative – RESF 13 – RFA 13B

Personal Protective Equipment

PROPOSAL SUMMARY

All Metropolitan Police agencies are training or have trained their first responders in the donning of Personal Protective Equipment to enter and work within a hazardous environment. The necessity to maintain law enforcement capabilities is paramount, emphasizing the basic tools of the first responder; gun belt, magazine carrier, radio holder, handcuffs and other similar items.

However, leather and leather products do not decontaminate and must be discarded following exposure to a hazardous material environment. Replacement cost for leather products could include a significant cost factor, which would be the sole burden of the responding agency.

The purchasing of an over-vest, made of a nylon material and produced to carry essential law enforcement gear, can be decontaminated and re-used. This will allow essential law enforcement personnel the ability to safely work in a hazardous environment without the added cost of discarding valuable leather gear.

A deficiency that also exists in the level C bootie has been recognized as a safety issue for officers. The current manufactured level C bootie is made of the same material as the level C suit. The bootie is designed for ideal and sterile environments and not for maneuvering in and around a hazardous site. The bootie tears easily and is of poor quality allowing contaminants to enter the level C protection.

The Prince William Police Department recognized this hazard and replaced all of the level C booties with more durable and practical rubber boots which can be decontaminated and re-used. The purchasing of level C rubber boots would allow officers to enter hazardous areas without the fear of tearing the plastic bootie.

In addition, a serious and unsettling communication flaw has been recognized through the use and training of the Self Contained Breathing Apparatus (SCBA). None of the aforementioned entities have a method of communicating when deployed in the SCBA. Teams are reverted to hand and arm signals with no direct communication with a tactical leader or command post. It is urgently requested that voice amplification devices be procured to alleviate this dangerous communication gap.

The COG Chiefs committee recognized the Metropolitan Police Department, the Fairfax County Police Department, the Montgomery County Police Department and the Prince Georges County Police Department as being the regional WMD tactical response entities.

This designation has emphasized the allocation and distribution of earlier UASI funding to these agencies for procurement of specialized WMD equipment to include Self-Contained Breathing Apparatus (SCBA), used for level B deployment.

Urban Areas Security Initiative – RESF 13 – RFA 13B

Personal Protective Equipment

The purchasing of this communication equipment will allow individual tactical officers to coordinate and converse with other team members using their issued police radios. It will also open up a line of communication from tactical supervisors to commanders.

Urban Areas Security Initiative – RESF 13 – RFA 13B

Personal Protective Equipment

GOALS AND OBJECTIVES

Goal 1:

Over-vests will allow essential law enforcement personnel the ability to safely work in a hazardous environment without the added cost of discarding valuable leather gear. An overall greater level of protection will be provided. In addition, a cost savings will be realized due to not having to discard leather gear.

Objective:

To purchase over-vest, manufactured of nylon material and produced to carry essential law enforcement gear. The vest will be able to be decontaminated and re-used.

Goal 2:

The level C boots will allow officers to enter hazardous areas without the fear of tearing the boot, thereby keeping contaminants from entering the equipment. An overall greater level of protection will be provided.

Objective:

To purchase level C rubber boots.

Goal 3:

This SCBA communication equipment will allow individual tactical officers to coordinate and converse with other team members using their issued police radios. It will also open up a line of communication from tactical supervisors to commanders. The voice amplification equipment will for use by general law enforcement officers.

Objective:

The purchasing of tactical SCBA communication devices and voice amplification equipment designed for use with Self Contained Breathing Apparatus.

PROJECT DESCRIPTION

THE TERRORISM PREPARATION PARADIGM AND NIOSH STUDIES ¹

Preparation is key to protecting the health and safety of emergency responders, and valuable lessons were learned from previous responses. In December 2001, the National Institute for Occupational Safety and Health (NIOSH²) convened a conference in New York City to identify lessons learned for protecting the life and health of emergency workers who respond to terrorist attacks. The focus was on personal protective equipment (PPE), and input was provided by workers who responded to the 1995 attack on the Alfred P. Murrah Federal Building in Oklahoma City, Oklahoma; the September 11 attacks on the World Trade Center and the Pentagon; and the anthrax incidents that occurred during autumn 2001.

NIOSH engaged the RAND Science and Technology Policy Institute to organize and lead the conference and on November 2, 2001, NIOSH and RAND held an organizational and planning meeting at which representatives of key government and nongovernmental organizations endorsed the December conference and offered their cooperation. Eleven of these organizations elected to be designated as Organizing Partners of the meeting. With assistance from the Organizing Partners, NIOSH and RAND were able to attract to the meeting a diverse group of attendees with considerable breadth and depth of experience in responding to terrorist attacks. The 150 individuals who participated in the NIOSH/RAND conference were selected on the basis of their central roles in responding to these attacks and for their ability to think broadly and creatively about PPE and management issues. Conference participants included both rank-and-file and top-level representatives from local, state, and federal emergency-services organizations; trade unions; health and safety agencies; private-sector equipment and services providers; and government and academic research institutions. Most of the participants had firsthand experience working at the incident sites (many were present on the day of the attacks) or served in a direct support capacity off-site.

Participants were assigned to one of eight breakout groups according to their role in responding to the attacks:

- Firefighters
- Firefighter special operations (2 panels)
- Emergency medical services (EMS)
- Law enforcement
- Construction and other trade services
- Health and safety
- Federal and state agencies

RESF 13 Law Enforcement

¹ Derived from "Protection Emergency Responder, Lessons Learned from Terrorist Attacks. RAND Science and Policy Institute, 2002.

² A subordinate agency operating under the Department of Health and Human Services (HHS), Center for Disease Control (CDC)

Urban Areas Security Initiative - RESF 13 - RFA 13B

Personal Protective Equipment

The panels were tasked with addressing a common set of topics, including:

- Tasks performed during the initial and sustained phases of the response
- Hazards encountered
- Availability and relevance of personal protective equipment
- Training and information about the use of personnel protective equipment

In spring 2001, NIOSH established the National Personal Protective Technology Laboratory (NPPTL). The mission of the NPPTL is to provide leadership in the prevention and reduction of occupational disease, injury, and death for those workers who rely on personal protective technology, through research, partnership, service, and communication. The lessons learned by emergency responders involved in the recent terrorist events and discussed at the conference offer important and timely information that will help in developing the Laboratory's research agenda.

The NIOSH/RAND report summarizes the key lessons learned about PPE during those events.

At the World Trade Center, 450 emergency responders perished in the response to the terrorist attacks—about one-sixth of the total number of victims. Hundreds more were seriously injured. In this light, the terrorist events are also forcing emergency responders to reconsider the equipment and practices they use to protect themselves in the line of duty.

The broad outlines of the September 11 attacks, the Oklahoma City bombing, and the autumn 2001 anthrax incidents are well known. In many ways, the events differed greatly. The World Trade Center event was much larger than the others in scale, the amount of damage that occurred, lives lost, and the number of responders involved. Its location in downtown Manhattan made managing the scene very complex. The Pentagon attack occurred at a building whose location facilitated rapid site control. The Murrah Building attack was similar in scale to the Pentagon attack but presented additional difficulties because of its location within an urban area: Adjacent buildings were impacted but not destroyed, and isolating the site was more difficult. The anthrax attacks consisted of a series of biohazard incidents involving cases of real contamination, false alarms, and hoaxes, spread over several months and many jurisdictions nationwide.

Despite their differences, these terrorist incidents and the responses to them share several characteristics that set them apart from most other events requiring emergency response: They were large in scale, long in duration, and presented an array of hazards, many of them unusual. In addition, unlike most other large-scale disaster scenes, the terrorist-attack sites are also crime scenes requiring preservation and collection of evidence for investigation and prosecution. Because of these characteristics, these events thrust responders into new roles for which they may not have been properly prepared or equipped.

Urban Areas Security Initiative - RESF 13 - RFA 13B

Personal Protective Equipment

The themes of scale, duration, and range of hazards were repeated frequently during the discussions at the conference because they were seen as having critical implications for protecting the health and safety of emergency responders— during both the immediate, urgent phase and the sustained campaign phase of the responses.

Deficiencies were found in numerous personnel protective equipment, including Footwear, Intra-communications, Self-Contained Breathing Apparatus (SCBA), and NBC Proof Police Tactical Overvests.

The attached but separate Request For Application (RFA) reflects the Washington COG Law Enforcement agencies attempts to circumvent these deficiencies in Personal Protective Equipment and incorporate the suggestions of the NIOSH/RAND report.

PERSONNEL PROTECTIVE FOOTWEAR

At both the Pentagon and the World Trade Center, first responders' boots became soaked because the seams failed or water came in over the sides. In addition, at the World Trade Center, the rubble pile was so hot in places that it melted the soles of boots.³ Work shoes with steel reinforcements in the soles and toes protected feet against punctures by sharp objects but often could not be worn because they conducted and retained the heat, causing blistered or scorched feet.

Steel toes never break in. We'd all be sitting there at night bandaging up and everybody had the same blisters. It was related to wearing the steel toe for that duration.

- Special-operations panel member

Wearing fire boots for 40 hours straight is not good for your feet. . . . They're not designed for that long of use. They're designed for quick 30 minutes, 45 minutes, hour firefights. They're not designed for working piles and walking on steel.

- Firefighter-special-operations panel member

Members of the law-enforcement panel noted that they have access to boots as part of their standard uniform. However, the boots were not designed for the extraordinary conditions present. Some officials reported using more-expensive brands (e.g., Danners, Matter-horns) that offered a greater range of protection and more comfort over longer intervals, but they cost up to \$300 per pair. At the World Trade Center site, even the expensive leather boots frequently had to be discarded because they became contaminated with the biological and chemical materials in the water around the site.

³ A problem also noted by members of the trades, law-enforcement, and firefighter panels

Urban Areas Security Initiative - RESF 13 - RFA 13B

Personal Protective Equipment

My feet were blistered and bloody by the second day because [I was] wearing leather boots soaking wet, and there was nothing I could do.

- Firefighter panel member

To protect boots from contamination at both the Pentagon and Trade Center attack sites, latex or Tyvek™ overbooties were often used, but the law-enforcement panel commented on the difficulties of putting latex booties on over their work boots. For example, a size 13 latex overbootie should ideally fit over a size 13 boot, but up to three people may be needed to get the bootie over the boot (one to hold down the boot, the other two to put on the bootie). Panelists questioned the durability of overbooties, remarking that some types are not durable and get torn up almost as quickly as they are put on. The law-enforcement panel also questioned whether latex overbooties had been subjected to any form of testing or certification.

An industrial hygienist showed me her work boots, and the soles were dissolved off. So you really don't know what you're going to step into sometimes. It had just eaten through the bottom of the soles.

- Federal-and-state-agency panel member

CURRENT STATUS AND PROPOSAL FOR PERSONNEL PROTECTIVE FOOTWEAR

The personnel protective footwear presently on-hand and in use by the Washington COG Law Enforcement agencies are identical to the conditions expressed by the NIOSH/RAND conference members – that is, boots that are acceptable for short duration deployment in conventional circumstances; however, substantively deficient for prolonged use in conditions expected in the extraordinary conditions following a terrorist incident. As delineated in the NIOSH/RAND findings, the CONDITIONS expected in a terrorist incident would include first responders carrying heavy or delicate equipment while navigating over sharp and hot debris in an environment that may also include nuclear, biological and chemical agents. Overbooties delivered with level “C” protective suits are designed and optimized for limited deployment in arenas where only one of these physical hazards is present. Therefore, to provide a reasonable measure of protection for emergency personnel tasked in managing such conditions, and to improve likelihood of mission effectiveness, durable boots that withstand the multiple hazards and conditions expected from a terrorist attack are necessary.

Most of the equipment we have is designed for one hazard, not multiple hazards. Bunker gear works well in the fire situation for thermal [protection], but when you're working in a collapse situation, BDUs work better because you're moving around. We also had a couple of USAR team members get burned when they had pockets of gas ignite around them and they were not wearing thermal protection.

- Firefighter-special-operations panel member

Urban Areas Security Initiative - RESF 13 - RFA 13B

Personal Protective Equipment

An off-the-shelf solution is provided through a GSA⁴ vendor, Tricon Environmental, Inc., Model No. G-5011 at a GSA an estimated cost of \$80.00 a pair.

The boots are constructed of tough polymers and designed for long-duration wear. These boots comply with the chemical permeation requirements of ASTM F 1001 and tested for hazardous chemical emergencies identified in ASTM F 739 Test Methods. These boots comply with MIL-STD 282 - providing protection against common chemical warfare blister and nerve agents. The boots can be deployed to assigned personnel without any special training needs. They may also be deployed at a disaster scene then cleaned/decontaminated and reused.

ENHANCING AIR PURIFYING RESPIRATOR COMMUNICATIONS THROUGH VOICE AMPLIFIERS

Emergency services personnel, in the chaotic conditions following a terrorist attack, are challenged with rapidly changing information and conditions, as well as complications resulting from ambiguities and uncertainties. Under such chaotic conditions, personnel can only rely on communications with other first responders in very close proximity. During the Oklahoma City, World Trade Center, and Pentagon events, many off-duty EMS, police, and fire personnel responded directly to the scenes, as did private ambulance services, doctors, and nurses. Many traveled hours to reach a site without adequate PPE or radio communications, and operated outside the direction of the incident commander, yet were willing to enter extremely hazardous locations. Such activity adds to the confusion and compounds the safety and rescue responsibilities of firefighters and other responders who are in the command structure. In the process, emergency responders without adequate communications were subjected to greater danger from threats such as a collapse or other secondary events.

Respirators make it difficult for people to communicate, and as a result, many wearers broke their protective seals in order to talk or more importantly, to give instruction or operational direction. This is an important problem, particularly in the early stages of response to a terrorist attack, when access to accurate information is most crucial: Workers need to be able to warn their colleagues about dangers, such as falling objects, and supervisors need to be able to communicate with their teams. Special-operations panelists were particularly concerned about such communication problems, especially with the less-expensive respirator models provided at the terrorist-attack sites. Communication continues to be a problem in the sustained phase, when responders want to take a break, or in high-noise environments, when workers pull their masks down to talk over the noise, they inhale contaminants in the process.

The full-face respirator worked the best. As a hazmat team member, I have a full-face respirator. So when everybody else was looking for dust masks, the hazmat team was slapping cartridges on their full-face, and they could handle just about everything. We had voice amplifiers where we could communicate. If they had just a half-face from [retail stores], their communications went down quickly.

- Firefighter-special-operations panel member

⁴ GSA Contract No. GS-07F-0078K

Urban Areas Security Initiative - RESF 13 - RFA 13B

Personal Protective Equipment

[A respirator] has to be comfortable and non-inhibitive. From a supervisor's point of view, I have to be able to talk to my guys. If I [sound like] "blah blah blah," then five times a day I'm pulling off my mask just to tell them something. Next thing you know, it comes off one time and it doesn't go back on.

- Firefighter-special-operations panel member

[The respirator] was uncomfortable. I was afraid it didn't have a good seal, so I broke the seal. I spent about 20 hours at the scene. I wore a P-100 with those little cartridges. I still was uncomfortable; I kept going like this [gestures with back and forth motion like a trombone player], fooling around with it. I kept saying to myself, "I don't know how those folks working in the pile, doing heavy labor, could do it with any type of mask."

- Health-and-safety panel member

CURRENT STATUS AND PROPOSAL FOR ENHANCING AIR PURIFYING RESPIRATOR COMMUNICATIONS THROUGH VOICE AMPLIFIERS

Such communications deficiencies have been noted for Washington COG Law Enforcement agencies since present APR equipment does not facilitate clear, reliable intra-communications in an high risk environment inherent in a terrorist incident. In addition to determining such deficiencies through the findings made in the NIOSH/RAND report, these deficiencies were also confirmed through local training and field use of the Millennium APR.

An off-the-shelf solution has been identified and is provided through a commercial vendor, MSA that supplies a voice amplifier (ESP II) for integration with present inventory of Millennium Chemical Biological masks. The ESP II communications system is a self-contained electronic speech projection device. The compact, battery-operated unit amplifies and projects the wearer's voice, allowing ungarbled speech to be heard in high ambient noise environments. It is especially useful in domestic preparedness applications and in other environments where full-face piece air-purifying respirators must be worn and where communication between workers is vital to mission success and to personnel safety. The ESP II system readily fastens to the Millennium face piece speaking diaphragm housing and can be deployed to assigned personnel with minimal training needs. This off the self solution, NIOSH approved amplifier, unit cost is estimated at \$250.00

Urban Areas Security Initiative - RESF 13 - RFA 13B

Personal Protective Equipment

ENHANCING SELF-CONTAINED BREATHING APPARATUS (SCBA) COMMUNICATIONS THROUGH COMMUNICATION DEVICES

As part of the domestic preparedness, Emergency Special Weapons And Tactics (SWAT) police officers are training for terrorist interdiction and mitigation. This new paradigm of law enforcement has been thrust into making conventional equipment and tactics operate in a hazardous environment not thought of five years ago. In fact, most conventional equipment in use today by Washington COG Law Enforcement agencies is woefully inadequate for this mission assignment. Technological advancements have not kept pace with the high demands of this Law Enforcement genre. The NIOSH/RAND study did not address the needs or particulars of SWAT operations simply.

Self Contained Breathing Apparatus (SCBA), which has operated in the hazardous materials (HAZMAT) environment for many years is now being produced specifically for SWAT operations. Many Washington COG Law Enforcement agencies are now equipped with SWAT SCBA equipment. SCBA equipment is used in a class “B” protective environment. Level “B” protection consists of chemical resistant clothing, inner and outer gloves, chemical resistant boots, hard hat and a SCBA, not to mention the associated law enforcement gear.

Level “B” protection makes it difficult for people to communicate. Inherently important to SWAT operations is the ability to maintain a Command and Control communication structure. Command and Control systems are used world wide in many crisis incidents and is an industry standard for SWAT operations. Command and Control has many supporting arms with communication being one which is vitally important. Communications is the glue which holds the collective strategy together, explicit communications is vital when dealing with assault maneuvers. Without timely communications Command and Control is lost.

During SWAT operations team members routinely communicate deviations to plans, point out known threats and assist in locating and mitigating terrorist through radio communications. Additionally, Sniper-Observer posts continuously stream in vital information to the Command Center which analyzes and disseminates the information to SWAT operators.

CURRENT STATUS AND PROPOSAL FOR ENHANCING SELF-CONTAINED BREATHING APPARATUS (SCBA) COMMUNICATIONS THROUGH COMMUNICATION DEVICES

The pitfalls of communicating in Level “B” protection equipment has been recognized by Washington COG Law Enforcement SWAT teams. Unfortunately, level “B” protective gear does not allow for the use of conventional SWAT communication devices. SCBA equipment in particular is not compatible to current law enforcement SWAT communication devices.

An off the self, NIOSH and NFPA approved solution has been identified to resolve this communication problem. The E-Z Radiocom Communication device, GSA Contract Number GS-07F-0078K, made by the Tyco/ Scott Company, fits onto the exterior of the SCBA mask allowing clear radio communications. Its unit cost is estimated at \$1,200.

POLICE TACTICAL OVERVESTS

The clothing that emergency response personnel typically wore to the terrorist scenes often was too heavy for the extended campaigns and heavy labor (e.g., hauling concrete on 12-hour shifts) they had to perform. First-response firefighters arrived at the World Trade Center and the Pentagon in standard structural-fire turnout gear—heavy bunker pants and coat. In the high-heat environments at these sites, the suits’ limited breathability and extra weight contributed to fatigue and heat stress as the emergency response personnel performed demanding physical labor. Furthermore, after the emergency responders had been on the scene for an extended time, the layers of their garments often became compressed from sweat on the inside or water penetration (e.g., through the boot-pant interface), leading to reduced thermal protection capacity.

Once the inside of a garment was damp, re-exposure to heat sometimes led to steam burns. Members of the firefighter panel who were present at the World Trade Center, the Pentagon, and the Murrah Federal Building said that their bunker gear worked well during firefighting and for the initial response, but they agreed that other types of gear would be useful for situations where there is no risk of fire. Several special-operations personnel said that they never used full bunker gear during the emergency responses because of problems with overheating and the difficulty of maneuvering in the rubble pile. Accordingly, many reported that they modified or improvised on the basis of their personal assessment of the situation and what worked best for them.

“I’m on the dive team,” said one firefighter. “What I wore initially was my military jungle boots, my dive coveralls, a fire department helmet.”

Most police equipment is not designed or manufactured with decontamination in mind. In one example, during decontamination, one police first responder reported leakage through sewn seams—the bleach solution had seeped through to a t-shirt worn underneath the suit in the same areas as the seams. This gave rise to concerns that anthrax spores may have also seeped through the seams. Another officer had assumed that his police vest was liquid-resistant. Indeed, the fabric was liquid-resistant, but the sewn seams were not, again giving rise to worries of possible contamination.

Firefighters and special-operations panelists expressed their concern that PPE decontamination efforts (the process of removing potentially hazardous material from personnel and equipment as they leave a site) were haphazard and not very effective. At the attack sites themselves, practical concerns got in the way of effective decontamination. Workers at the World Trade Center who had only a single set of protective clothing did not want the clothes wetted (any more) during decontamination, fearing that this would further reduce their comfort and mobility.

Remember the balance between protection and usability. Don’t design something that is perfectly the maximum safety [but] that is so heavy and so uncomfortable nobody will wear it, because then they really have zero protection.

- Firefighter panel member

Urban Areas Security Initiative - RESF 13 - RFA 13B

Personal Protective Equipment

You've got to go get the bad guys. . . . How do you see? What's your range of vision? Aiming a weapon, putting handcuffs on, wrestling subjects to the ground. I can't be wearing stuff that's all bulked up and restricts my movement when I have those kinds of law-enforcement missions in mind.

- Law-enforcement panel member

In such scenarios, Police forces have the added complication of ready access to firearms, handcuffs, batons, flashlights, handheld radios, etc. Wearing any level of protective clothing will make it difficult for police officers to locate, access and use basic police equipment, which is typically belt-mounted for ready access. Police tactical overvests provide a solution and can be donned atop of HazMat apparel, but such overvests must be suited for exposure to harmful agents and permit decontamination.

CURRENT STATUS FOR POLICE TACTICAL OVERVESTS

Currently, most all Washington COG Law Enforcement agencies issue leather made equipment carriers to each officer. Leather gear does not lend it self to decontamination procedures and once contaminated, it must be discarded. Leather gear, in particular belts, need simple straps to hold the belt to the waist of the officer. This conventional way of donning police gear is inadequate for working in a contaminated environment. As an example, if an officer needed to wear a level "C" suit to assist with crowd control on the perimeter of a warm zone, they would either be without essential tools, wear the leather belt, which would be discarded after the event, or wear the leather belt inside the level "C" suit making their gear inaccessible.

A solution to this gear carrying problem would be to issue decontaminated overvests to officers who will be working in a contaminated environment. The overvest would be constructed of decontaminated friendly material and act as a load bearing vest. The vest would also have prominent police identification affixed. The overvest could be used in the contaminated environment, removed in the environment and reused by another operator or decontaminated, saving time and money.

Currently, no off the self solution exist. However, a local body armor company, PT Armor of Chantilly Virginia, is in the process of producing a prototype for test and evaluation. It is estimated the overvest will be tested and ready for manufacturing by spring of 2005. The estimated unit cost of the overvest is estimated at \$130.00

Urban Areas Security Initiative – RESF 13 – RFA 13B

Personal Protective Equipment

ORGANIZATION, EXPERIENCE AND QUALIFICATIONS

Fairfax County is proposed as the subcontractor for UASI funding to facilitate the identified safety upgrades in the area of Personal Protective Equipment. Fairfax County is well qualified to serve in this capacity as it has provided many years of organizational support for Law Enforcement programs throughout the National Capital Region.

Fairfax County has received national recognition as one of the top local governments in the nation, including:

- Fairfax County is “one of the best-managed jurisdictions in America” according to the evaluation results announced today by Governing Magazine and the Government Performance Project (GPP).
- Fairfax County has one of the best government Web sites in the country, according to the Center for Digital Government, an international research and advisory institute on information technology in government and education.
- Fairfax County was recognized as an international best practice example in the “Balanced e-Government” study conducted by the Bertelsmann Foundation of Germany.

In addition, the County has received the following awards:

- The transformation of the facade of an older building on Richmond Highway and a newly developed mini-park in Annandale were two projects that garnered top honors as part of the Community Appearance Alliance of Northern Virginia’s 2004 Community Appearance Awards.
- Fairfax County’s Norman M. Cole Jr. Pollution Control Plant recently received the Gold Peak Performance Award from the Association of Metropolitan Sewerage Agencies to recognize the facility’s outstanding accomplishments in wastewater treatment and environmental protection of water quality in the county, as well as improvement of the Chesapeake Bay water quality.
- Because of its under-budget cost, environmentally sensitive design and ahead-of-schedule construction, the new Fairfax County Judicial Center parking structure has won the Project of the Year award from the regional chapter of the American Public Works Association.
- Fairfax County recently won nine 2003 National Association of Counties Achievement Awards, one Virginia Association of Counties Achievement Award, and one VACo Honorable Mention and one International City/Council Management Association award.
- Fairfax County Executive Anthony H. Griffin has been named the 2003 “Stone Practitioner Award” winner by the Section on Intergovernmental Administration and Management (SIAM) of the American Society for Public Administration

Urban Areas Security Initiative – RESF 13 – RFA 13B

Personal Protective Equipment

- (ASPA), which seeks to promote and encourage the study, understanding and improvement of the intergovernmental system, its infrastructure and related cooperative and coordinative efforts of all levels of government and the private sector.
- Fairfax County is “one of the best-managed jurisdictions in America” according to the evaluation results announced today by Governing Magazine and the Government Performance Project (GPP). Fairfax County received an overall grade of “A-,” one of only two jurisdictions to receive the highest grade awarded in the comprehensive study that looked in-depth at management practices in 40 counties nationwide. Maricopa County, Arizona was the only other jurisdiction to earn an overall grade of “A-.”
- Fairfax County was also recently recognized for excellence in procurement.

The County has the necessary corporate infrastructure to manage the budgeting, financial, procurement and programmatic requirements of this project.

Urban Areas Security Initiative - RESF 13 – RFA 13B

Personal Protective Equipment

STAFFING PLAN

The Personal Protective Equipment management team will consist of staff as outlined below to provide project direction and assistance throughout the life of the endeavor.

Briefly, these positions are:

1. **Senior Project Manager:** This senior position will be located in Fairfax County, Virginia and will be responsible for the total 'health' of the project, ensuring that objectives are met as delineated and that deliverables are complete, produced to schedule and budget, and are consistent with the quality as specified. This individual will ensure that project business and implementation issues are addressed and resolved, and that delivery of the project and the attainment of project outcomes are both timely and complete. Included areas of responsibility are approval of budgetary strategy in conjunction with the Grants Coordinator, defining of and realizing benefits, the monitoring of risks, quality and timelines, the making of policy and resourcing decisions, and the assessment of requests for changes to project scope.
 - Captain William Gulsby, Fairfax County Police Department
2. **Project Coordination / Technical Committee:** Responsibilities will include the identification of key resources within their local government required for implementation of the planned safety upgrades, for managing implementation of the program, for any required equipment testing, approving and accepting delivery, and for communicating issues and concerns to Senior Project Manager.
 - To Be Identified
3. **Fairfax County Multi-Agency Management and Administration Support:** Three Fairfax County agencies will be integral in the management and administration of this project, the Department of Management and Budget (DMB), the Department of Purchasing and Supply Management (DPSM) and the Department of Finance. These three agencies will provide the fiscal, procurement and accounting guidance for the project.
4. **Grants Coordinator:** Located in the Fairfax County Police Department, will provide for the necessary infrastructure to manage the budgeting, financial, procurement and programmatic requirements of the project. This position further supports the activities of the project through the development of reporting templates, direction of project status tracking, financial reconciliation and time and issue tracking.
 - Donald Owens, Grants Coordinator, Fairfax County VA Police Department

Urban Areas Security Initiative - RESF 13 - RFA 13A

National Capital Regional Automated Fingerprint Identification System - Mobile AFI

APPENDIX C: BUDGET JUSTIFICATION WORKSHEET

PERSONAL PROTECTIVE EQUIPMENT

- A. Personnel -** Not Applicable to this Project
- B. Fringe Benefits -** Not Applicable to this Project
- C. Travel -** Not Applicable to this Project
- D. Equipment -** Not Applicable to this Project

| ITEM | COMPUTATION | COST |
|---|--------------|------------------|
| Personal Protective Equipment | | |
| <i>Level C Protective Boots</i> * To protect responder from hazardous tears in equipment | 922 @ \$80 | \$73,760 |
| <i>Over Vest</i> * To provide vest that is safer and can be decontaminated and reused. | 743 @ \$130 | \$96,590 |
| <i>Voice Amplifier</i> * To provide method of communication when utilizing SCBA equipment | 927 @ \$250 | \$231,750 |
| <i>Tactical SCBA Communication Device</i> * To provide method of communication when utilizing SCBA equipment | 92 @ \$1,200 | \$110,400 |
| Total Equipment | | \$512,500 |


- E. Supplies** Not Applicable to this Project
- F. Consultants / Contracts** Not Applicable to this Project
- G. Other Costs** Not Applicable to this Project
- H. Indirect Costs** Not Applicable to this Project

APPLICANT PROFILE



GOVERNMENT OF THE
DISTRICT OF
COLUMBIA

APPLICANT PROFILE

| FY 2005 Homeland Security Grant Program: Urban Areas Security Initiative | |
|---|--|
| PROJECT TITLE: | Personal Protective Equipment |
| EMERGENCY SUPPORT FUNCTION: | RESF 13 - 3 thru 6 / RFA 13B |
| PROJECT PERIOD: | March 1, 2005 thru February 28, 2007 |
| PROJECT SYNOPSIS: | Through the acquisition of Personal Protective Equipment, to include Level C Protective Boots, specially designed Over Vests, Tactical SCBA Communications Devices and Voice Amplifiers, first responders will be allowed a greater level of personal safety and communication. A secondary benefit to this proposal is a realization of cost savings that will be inherent to the concept of utilizing nylon vest material. |
| IMPLEMENTING JURISDICTION: | County of Fairfax, Virginia |
| AGENCY: | Fairfax County Police Department |
| ADDRESS: | 4100 Chain Bridge Road Fairfax, Virginia 22030 |
| AUTHORIZATION OFFICIAL | |
| NAME: | Anthony H. Griffin |
| TITLE: | County Executive |
| ADDRESS: | 12000 Government Center Parkway |
| TEL: | 703-324-3440 |
| FAX: | 703-324-3927 |
| EMAIL: | anthony.griffin@fairfaxcounty.gov |
| PROJECT DIRECTOR | |
| NAME: | William Gulsby |
| TITLE: | Captain |
| ADDRESS: | 4100 Chain Bridge Road, Fairfax VA |
| TEL: | 703-280-0502 |
| FAX: | 703-280-0624 |
| EMAIL: | bill.gulsby@fairfaxcounty.gov |
| FINANCIAL OFFICER | |
| NAME: | Donald A. Owens |
| TITLE: | Grants Coordinator |
| ADDRESS: | 4100 Chain Bridge Road |
| TEL: | 703-246-7525 |
| FAX: | 703-273-6940 |
| EMAIL: | donald.owens@fairfaxcounty.gov |
|  | 2/23/05 |
| Signature of Authorized Official | Date |

APPENDIX E: CERTIFICATIONS

GOVERNMENT OF THE DISTRICT OF COLUMBIA
OFFICE OF THE DEPUTY MAYOR FOR PUBLIC SAFETY AND JUSTICE

Certifications Regarding Lobbying; Debarment, Suspension and Other Responsibility Matters; and Drug-Free Workplace Requirements

Applicants should refer to the regulations cited below to determine the certification to which they are required to attest. Applicants should also review the instructions for certification included in the regulations before completing this form. Signature of this form provides for compliance with certification requirements under 28 CFR Part 69, "New Restrictions on Lobbying" and 28 CFR Part 67, "Government-wide Debarment and Suspension (Non-procurement) and Government-wide Requirements for Drug-Free Workplace (Grants)." The certifications shall be treated as a material representation of fact.

1. LOBBYING

As required by Section 1352, Title 31 of the U.S. Code. and implemented at 28 CFR Part 69, for persons entering into a grant or cooperative agreement over \$100,000, as defined at 28 CFR Part 69, The applicant certifies that:

- (a) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the making of any Federal grant, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal grant or cooperative agreement;
- (b) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal grant or cooperative agreement, the undersigned shall complete and submit Standard Form - III, "Disclosure of Lobbying Activities," in accordance with its instructions;
- (c) The undersigned shall require that the language of this certification be included in the award documents for all sub awards at all tiers including sub grants, contracts under grants and cooperative agreements, and subcontracts) and that all sub-recipients shall certify and disclose accordingly.

2. DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS (DIRECT RECIPIENT)

As required by Executive Order 12549, Debarment and Suspension, and implemented at 28 CFR Part 67, for prospective participants in primary covered transactions, as defined at 28 CFR Part 67, Section 67.510—

A. The applicant certifies that it and its principals:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, sentenced to a denial of Federal benefits by a State or Federal court, or voluntarily excluded from covered transactions by any Federal department or agency;
- (b) Have not within a three-year period preceding this application been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c.) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
- (d) Have not within a three-year period preceding this application had one or more public transactions (Federal, State, or local) terminated for cause or default; and

B. Where the applicant is unable to certify to any of the statements in this certification, he or she shall attach an explanation to this application.

3. DRUG-FREE WORKPLACE (GRANTEES OTHER THAN INDIVIDUALS)

As required by the Drug Free Workplace Act of 1988, and implemented at 28 CFR Part 67, Subpart F. for grantees, as defined at 28 CFR Part 67 Sections 67.615 and 67.620—

A. The applicant certifies that it will or will continue to provide a drug-free workplace by:

- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in The applicant's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
- (b) Establishing an on-going drug-free awareness program to inform employees about—
 - (1) The dangers of drug abuse in the workplace;
 - (2) The applicant's policy of maintaining a drug-free workplace;
 - (3) Any available drug counseling, rehabilitation, and employee assistance programs;and

- (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
 - (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);
 - (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will—
 - (1) Abide by the terms of the statement; and
 - (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;
 - (e) Notifying the agency, in writing, within 10 calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title to: Office of Grants Management and Development, 717 14th St., NW, Suite 1200, Washington, DC 20005. Notice shall include the identification number(s) of each affected grant;
 - (f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted—
 - (1) Taking appropriate personnel action against such an employee, up to and incising termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
 - (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;
 - (3) Making a good faith effort to continue to maintain a drug free workplace through implementation of paragraphs (a), (1), (c), (d), and (e). and (f)
- B. The applicant may insert in the space provided below the sites for the performance of work done in connection with the specific grant:
 Place of Performance (Street address, city. county, state, zip code)

As the duly authorized representative of the applications, I hereby certify that the applicant will comply with the above certifications.

1. Grantee Name and Address:


County of Fairfax, Virginia Police Department
4100 Ch-in Bridge Raod
Fairfax, Virginia 22030

2. Application Number and/or Project Name: RESF 13 - 3 thru 6 / RFA 13B
Personal Protective Equipment

3. Grantee IRS/Vendor Number: 54-787833

Anthony H. Griffin , County Executive

4. Typed Name and Title of Authorized Representative



5. Signature

2/23/05

6. Date

APPENDIX F: STANDARD ASSURANCES

GOVERNMENT OF THE DISTRICT OF COLUMBIA
OFFICE OF THE DEPUTY MAYOR FOR PUBLIC SAFETY AND JUSTICE

STANDARD ASSURANCES

The applicant hereby assures and certifies compliance with all Federal statutes, regulations, policies, guidelines and requirements, including OMB Circulars No. A-21, A-110, A-122, A-128, A-87; E.O. 12372 and Uniform Administrative Requirements for Grants and Cooperative Agreements - 28 CFR, Part 66, Common Rule, that govern the application, acceptance and use of Federal funds for this federally-assisted project.

Also, the Application assures and certifies that:

1. It possesses legal authority to apply for the grant; that a resolution, motion or similar action has been duly adopted or passed as an official act of The applicant's governing body, authorizing the filing of the application, including all understandings and assurances contained therein, and directing and authorizing the person identified as the official representative of The applicant to act in connection with the application and to provide such additional information as may be required.
2. It will comply with requirements of the provisions of the Uniform Relocation Assistance and Real Property Acquisitions Act of 1970 P.L. 91-646 which provides for fair and equitable treatment of persons displaced as a result of Federal and federally-assisted programs.
3. It will comply with provisions of Federal law which limit certain political activities of employees of a State or local unit of government whose principal employment is in connection with an activity financed in whole or in part by Federal grants. (5 USC 1501, et. seq.).
4. It will comply with the minimum wage and maximum hour's provisions of the Federal Fair Labor Standards Act if applicable.
5. It will establish safeguards to prohibit employees from using their positions for a purpose that is or gives the appearance of being motivated by a desire for private gain for themselves or others, particularly those with whom they have family, business, or other ties.
6. It will give the sponsoring agency of the Comptroller General, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the grant.
7. It will comply with all requirements imposed by the Federal-sponsoring agency concerning special requirements of Law, program requirements, and other administrative requirements.

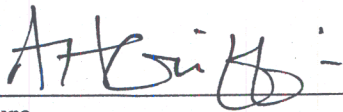
8. It will insure that the facilities under its ownership, lease or supervision which shall be utilized in the accomplishment of the project are not listed on the Environmental Protection Agency's (EPA), list of Violating Facilities and that it will notify the Federal grantor agency of the receipt of any communication from the Director of the EPA Office of Federal Activities indicating that a facility to be used in the project is under consideration for listing by the EPA.
9. It will comply with the flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973, Public Law 93-234-, 87 Stat. 975, approved December 31, 1976. Section 102(a) requires, on and after March 2, 1975, the purchase of flood insurance in communities where such insurance is available as a condition for the receipt of any Federal financial assistance for construction or acquisition purposes for use in any area that has been identified by the Secretary of the Department of Housing and Urban Development as an area having special flood hazards. The phrase "Federal Financial Assistance" includes any form of loan, grant, guaranty, insurance payment, rebate, subsidy, disaster assistance loan or grant, or any other form of direct or indirect Federal assistance.
10. It will assist the Federal grantor agency in its compliance with Section 106 of the National Historic Preservation Act of 1966 as amended (16 USC 470), Executive Order 11593, and the Archeological and Historical Preservation Act of 1966 (16 USC 569a-1 et. seq.) By (a) consulting with the State Historic Preservation Officer on the conduct of investigations, as necessary, to identify properties listed in or eligible for inclusion in the National Register of Historic Places that are subject to adverse effects (see 36 CFR Part 800.8) by the activity, and notifying the Federal grantor agency of the existence of any such properties, and by (b) complying with all requirements established by the Federal grantor agency to avoid or mitigate adverse effects upon such properties.
11. It will comply, and assure the compliance of all its sub grantees and contractors, with the applicable provisions of Title I of the Omnibus Crime Control and Safe Streets Act of 1968, as amended, the Juvenile Justice and Delinquency Prevention Act, or the Victims of Crime Act, as appropriate; the provisions of the current edition of the Office of Justice Programs Financial and Administrative Guide for Grants; and all other applicable Federal laws, orders, circulars, or regulations.
12. It will comply with the provisions of 28 CFR applicable to grants and cooperative agreements including Part 18. Administrative Review Procedure; Part 20, Criminal Justice Information Systems; Part 22, Confidentiality of Identifiable Research and Statistical Information; Part 23, Criminal Intelligence Systems Operating Policies; Part 30, Intergovernmental Review of Department of Justice Programs and Activities; Part 42, Nondiscrimination/Equal Employment Opportunity Policies and Procedures; Part 61, Procedures for Implementing the National Environmental Policy Act; Part 63, Flood Plain Management and Wetland Protection Procedures; and Federal laws or regulations applicable to Federal Assistance Programs.
13. It will comply, and all its contractors will comply, with the non-discrimination requirements of the Omnibus Crime Control and Safe Streets Act of 1968, as amended, 42 USC 3789(d),

or Victims of Crime Act (as appropriate); Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973, as amended; Subtitle A, Title II of the Americans with Disabilities Act (ADA) (1990); Title IX of the Education Amendments of 1972; the Age Discrimination Act of 1975; Department of Justice Non-Discrimination Regulations, 28 CFR Part 42, Subparts C, D, E and G; and Department of Justice regulations on disability discrimination, 28 CFR Part 35 and Part 39.

14. In the event a Federal or State court or Federal or State administrative agency makes a finding of discrimination after a due process hearing on the grounds of race, color, religion, national origin, sex, or disability against a recipient of funds, the recipient will forward a copy of the finding to the Office for Civil Rights, Office of Justice Programs.
15. It will provide an Equal Employment Opportunity Program if required to maintain one, where the application is for \$500,000 or more.
16. It will comply with the provisions of the Coastal Barrier Resources Act (P.L 97-348), dated October 19, 1982, (16 USC 3501 et. seq.) which prohibits the expenditure of most new Federal funds within the units of the Coastal Barrier Resources System.

Anthony H. Griffin
Print Name

Fairfax County Executive
Print Title


Signature

2/23/05
Date