Project Manager Night Vision/Reconnaissance, Surveillance and Target Acquisition (PM NV/RSTA)

Contract Opportunities

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<tr>
<th>Report Date</th>
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<tr>
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**Title and Subtitle**
Project Manager Night Vision/Reconnaissance, Surveillance and Target Acquisition (PM NV/RSTA)

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**Performing Organization Name(s) and Address(es)**
NV/RSTA

**Sponsoring/Monitoring Agency Name(s) and Address(es)**
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**Supplementary Notes**
See also ADM001406, non-print version on CD-ROM. Conference briefings from Advance Planning Briefing for Industry (APBI) held May 6-7, 2002., The original document contains color images.

**Abstract**

**Subject Terms**

**Report Classification**
unclassified

**Classification of Abstract**
unclassified

**Number of Pages**
21
PM NV/RSTA develops, acquires, and provides superior, affordable day/night vision, multi-sensor and artillery locating radar systems to the American warfighter.
PM NV/RSTA Organization

PM NV/RSTA

PM FLIR

Thermal Systems for Vehicles

PRODUCT MANAGER

UAV PAYLOADS

Robotic and Unmanned Sensors

PRODUCT MANAGER FIREFINDER

VISUS PER
NEBULUM BELLI

Artillery Locating Radar
Thermal System for Vehicles

B-KIT
- Standard Advanced DEWAR Assembly II
- 1 WATT Linear Drive Cooler

SENSOR UNIT
- Detector/Cooler
- Imager

ELECTRONICS UNIT

SIGHTS
- CITV
- GPS
- LRAS3
- IBAS
- CIV
- LOSAT

PLATFORMS

Horizontal Technology Integration Second Gen FLIR
Driver’s Vision Enhancer (DVE), AN/VAS-5

Long Range Advanced Scout Surveillance System (LRAS3)

Lightweight Laser Designator Rangefinder (LLDR)
PM Robotic & Unmanned Sensors

Current Business

UAV Payloads

Synthetic Aperture Radar/
Moving Target Indicator (SAR/MTI)
Robotic & Unmanned Sensors

Future Opportunities

UAVs

Other Layered Sensors

RSTA Sensor/UGV

UGS

C2

Infantry Carrier
Firefinder
(AN/TPQ-36(V)8)

Firefinder
(AN/TPQ-37(V)8)
Artillery Locating Radar

Increased Targeting Accuracy

Firefinder
(AN/TPQ-47)
Uncooled Lightweight Thermal Module – B-Kit

• Uncooled B-Kit is a light weight, infrared module, that interfaces to the optics and electronics of various systems.

• Presently no standard exists for the lightweight thermal detector in industry. These thermal detectors are different from each other and can only be used with specific optics and electronics.

• The development of a lightweight thermal detector B-Kit standard will encourage competition and reduce costs.
Future Programs

Hand Held Sense through the Wall (STTW) Scanner

• Hand Held STTW Scanner is a light weight, stand alone, STTW device that provides infantry the capability of detecting people through building walls, ceilings, and floors.

• Hand Held STTW Scanner is the first in a series of STTW devices leveraging technologies assembled in National Institute of Justice coordinated research.

• Follow on STTW devices will provide enhanced capabilities on vehicular and unmanned platforms through HTI.
Thermal Omnibus II TWS Characteristics

- Lightweight Day/Night Thermal Target Acquisition System
- Operates in Adverse Weather and Dirty Battlefield Conditions
- Provides Surveillance and Target Acquisition Capability for Individual and Crew Served Weapons

- Light and Medium Versions:

<table>
<thead>
<tr>
<th>Light TWS</th>
<th>Medium TWS</th>
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<tbody>
<tr>
<td>Weight (lbs.)</td>
<td>2 (obj.) - 3 (threshold)</td>
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<tr>
<td>Field of View (° min)</td>
<td>14</td>
</tr>
<tr>
<td>Range (M, clear air, man tgt)</td>
<td>550</td>
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- Desired Enhancements
  - Lower Weight, Power, Operations & Support Costs
  - Increased Reliability, Range, Field of View
  - Path for Technology Improvement Insertion
Thermal Weapon Sight (TWS)  
AN/PAS-13

Light TWS

View Through TWS

Heavy TWS

Medium TWS
Thermal Omnibus II DVE Characteristics

- Thermal Imaging Device to Aid Driving of Tactical Wheeled Vehicles and Combat Vehicles
- Enhances Vehicle Movement During Daylight, Darkness, Adverse Weather, and Dirty Battlefield Conditions
- System Consists of “A” and “B” Kits Comprised of Vehicle Installation/Mounting Hardware, Sensor, and Display/Control
- Supports Detection of 22 Inch Object at 110 Meters
- Required Minimum Field of View: 20° Vertical, 40° Horizontal
- Desired Enhancements
  - Increased Field of View, Better Depth Perception
  - Improved Limited Visibility Operations, High Resolution Display
  - Increased Reliability, Reduced Operation & Support Cost
  - Ability to Incorporate Technology Improvements Such As Multi-Spectral Image
Driver’s Vision Enhancer (DVE)  
AN/VAS-5
**Objective:** Procurement of Light and Medium Thermal Weapon Sights (TWS) and Driver’s Vision Enhancers (DVE)

**Contract Type:** Firm Fixed Price, 3-Year Multi-Year w/ Basic Quantity and Options in Each Year, 2 Year Option (Total 5 Years), One or More Awards

**Estimated Value:** Basic ~ $82-92M (qtys: ~ 3500 LTWS, 2000 MTWS, 2500 DVE); Total Options ~ $200M

**Key Milestones:** 1QFY03 RFP Release, 2QFY03 Contract Award, 1QFY04 First Deliveries

**Technical Contact:** Mr. Daniel Kitts (TWS) 703-704-1292  
Mr. Joseph Brooks (DVE) 703-704-1251

**Acquisition Contact:** Ms. Deborah Gilligan 732-532-5454

**Solicitation # or RFQ #:** TBD
Thermal Omnibus II
TWS & DVE
Sense Thru The Wall (STTW) Characteristics

- Lightweight System to Detect Humans on the Opposite Side of Walls
- Operates in Adverse Weather and Dirty Battlefield Conditions
- Performs Close Range Surveillance
- Performance Parameters: TBD
- Operational Requirements Definition Underway at Ft Benning, GA.
- CECOM I2WD Performing Technical Management of the System Development
Sense Thru The Wall (STTW) Scanner
Objective: Perform Concept Studies Leading to Milestone B Decision for the First Sense Thru The Wall Infantry System

Contract Type: Broad Area Announcement, One or More Awards

Estimated Value: TBD

Key Milestones: 2QFY03 RFP Release, 2QFY03 Contract Award

Technical Contact: Mr. Robin Whitworth (703)704-1391

Acquisition Contact: TBD

Solicitation # or RFQ #: TBD
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