

North Central Texas Council of Governments (NCTCOG)
Request for Proposal
for
Night Vision Solutions
RFP No. NCT 2021-007



Night Vision Devices, Inc.
5583 Roosevelt Street
Whitehall, PA 18052-4535



Night Vision Devices, Inc. | 5583 Roosevelt Street
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John.lesniak@nvdevices.com
www.nvdevices.com
CAGE: 36ZQ7 | GSA contract # GS07F0022V

April 7, 2021

TAB A-COVER SHEET

NCTCOG
Attn: North Texas SHARE
616 Six Flags Drive
Arlington, Texas 760011

Dear North Central Texas Council of Governments,

Night Vision Devices, Inc. (NVD) would like to submit consideration for Bid, RFP #2021-007-Night Vision Solutions, and documentation in support of RFP No. NCT 2021-007, issued March 1, 2021.

The following outline is submitted to provide support that included night vision systems, accessories, image intensifications tubes, maintenance and training will meet and exceed performance characteristics regarding fit, form, and function of the named equipment as outlined in the RFP.

- Cover Sheet-(Tab A)
- Executive Summary-(Tab B)
- Key Personnel-(Tab C)
- Technical Proposal-(Tab D)
- References-(Tab E)
- Proposal Pricing Schedule-(Tab F)
- Required Attachments-(Tab G)

The Night Vision Devices presented in this submission meets/exceeds ALL performance specifications, regarding Fit, Form, and Function, including a FULL (10) Year Warranty. All systems will be offered in Green or White Phosphor Mil Spec Image Tubes, MX11769 and MX10160, with FOM Ranges 1900-2400+ for each of the Night Vision Systems, (3) Year Repair/Maintenance Contract, and (4) Binocular Night Vision Device Conversion Upgrades to existing PVS-14 systems.

Sincerely Yours,

John F. Lesniak
Senior Director, Business Development
Night Vision Devices, Inc.



**REQUEST FOR PROPOSALS
For
Night Vision Solutions
RFP # 2021-007**

Sealed proposals will be accepted until **2 PM CT, April 7, 2021** and then publicly opened and read aloud thereafter.

Night Vision Devices, Inc.
Legal Name of Proposing Firm

John Lesniak Senior Director, Business Development
Contact Person Title

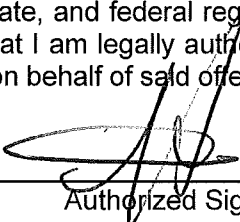
(610) 395-9743 john.lesniak@nvdevices.com
Telephone Number E-Mail Address

5583 Roosevelt Street Whitehall, PA 18052
Street Address of Principal Place of Business City/State Zip

5583 Roosevelt Street Whitehall, PA 18052
Complete Mailing Address City/State Zip

Acknowledgment of Addenda: #1 X #2 X #3 #4 #5

By signing below, you hereby certify that the information contained in this proposal and any attachments is true and correct, and may be viewed as an accurate representation of proposed services to be provided by this organization. You agree that failure to submit all requested information may result in rejection of your company's proposal as non-responsive. You certify that no employee, board member, or agent of the North Central Texas Council of Governments has assisted in the preparation of this proposal. You acknowledge that you have read and understand the requirements and provisions of this solicitation and that the organization will comply with the regulations and other applicable local, state, and federal regulations and directives in the implementation of this contract. And furthermore that I certify that I am legally authorized to sign this offer and to submit it to the North Central Texas Council of Governments, on behalf of said offeror by authority of its governing body.



Authorized Signature



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TAB B-EXECUTIVE SUMMARY

Incorporated as a Small Business in 2005, Night Vision Devices, Inc., (Whitehall, Pennsylvania), is a US Based, Veteran Owned, premier manufacturer, integrator, and distributor of high-quality night vision and thermal imaging equipment. We are Master Channel Partners for Elbit USA, FLIR Systems, Inc., Optics 1-Safran, Steiner Optics, and Knight's Armament and provide equipment, systems, image intensification tubes, repairs/maintenance for Department of Defense, Federal Agencies, Law Enforcement, Commercial and International Markets.

Night Vision Devices, Inc. is currently listed in SAM as a Small Business, maintains a GSA Schedule (GSA Contract # GS07F0022V) and Co-Stars (Contract # 012-112). Since 2005, NVD has manufactured, built and repaired over 50,000 Night Vision Systems and successfully delivered against US Defense and Government Contracts. NVD maintains almost \$5M in inventory at any given time, and has repaired/maintained over 10,000 systems, with an average repair time of 7-14 Days.

Night Vision Devices (NVD) has demonstrated its commitment to world-class quality by implementing and becoming certified to the ISO 9001: 2015 standard. We have joined an elite number of organizations worldwide who have achieved certification to this globally recognized quality standard by implementing a robust Quality Management System (QMS) along with our commitment to continual improvement of our QMS. NVD's extensive use of controlled process throughout the organization, including key processes used for Component Inspection, Manufacturing Operations, and Final Quality Assurance, are the foundation of our Quality Policy----to provide Night Vision and Thermal Products, Parts and Services that are of the Highest Quality and Performance, Unmatched in Value, and Delivered quickly to meet the customer's needs.





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TAB C- KEY PERSONNEL

William H. Grube III-Chief Executive Officer and President

Mr. Grube has been associated with the night vision markets for over 25 years, and started Night Vision Devices in 2005. Bill manages all day-to-day strategic operations, business development, sales/marketing, human resources, inventory control, finance and accounting for (26) Full Time Employees at Night Vision Devices. Prior to starting NVD, Mr. Grube worked at Night Vision Equipment Company, from 1991-2000. Mr. Grube also served in the United States Navy as an Avionics Technician from 1979-1983 and held various position within the Aviation Industry from 1983-1991.

John F. Lesniak-Senior Director, Business Development (NCTCOG Project Manager)

Mr. Lesniak will function as Lead for this project. He has been with Night Vision Devices since 2012, and functions as Senior Director of Business Development for Domestic Markets. In this role, Mr. Lesniak supports business and strategic development, growth and performance of Night Vision Devices business within several different markets, with primary focus on domestic customer groups. Prior to working at Night Vision Devices, he worked at Vectronix, Inc. and spent 16 years in the Pharmaceutical and Biotechnology Industry. Mr. Lesniak graduated from the US Naval Academy and is a Combat Decorated Marine Corps Infantry Officer.

Michael Graham-Director, Inventory/Operations

Mr. Graham manages daily operations of Night Vision Devices to include but not limited to Production, Purchasing, Customer Service, Inventory Control, Key Account Management, and Commercial Operations. Mike also functions as manager of internal information technology systems. Mr. Graham graduated from Pennsylvania College of Technology in 2001, and held technology-based positions with Pace Environmental Products prior to joining NVD, in 2006.

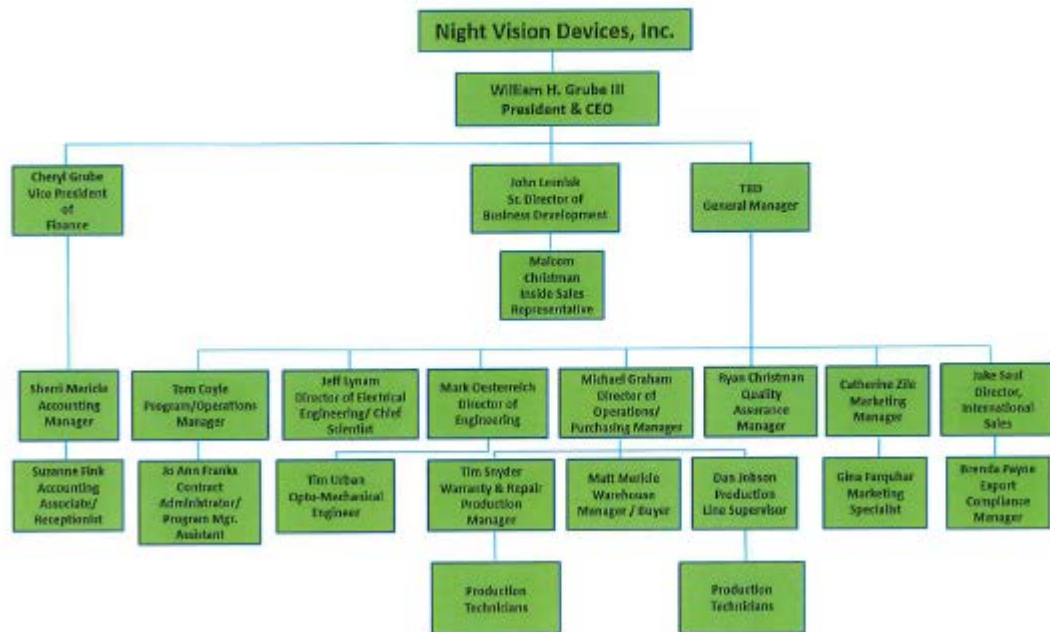
Timothy Snyder-Manager, Production/Repair Operations

Mr. Snyder manages day-to-day manufacturing and repair operations to include customer interface, maintain product/test documentation, and perform product build, test, and quality control activities. His additional responsibilities include commercial account ownership for assigned dealer accounts. Tim manages the Production Team, including (6) Electronic Technicians, and has been with Night Vision Devices since 2007. Mr. Snyder graduated Lincoln Technical Institute in 2001, and has held technical operations positions at TRL Security, Altronics Security, and Viastar Technologies, among others.

Jo Ann Franks, Contract Administrator/Program Manager Assistant

Ms. Franks will function as the contract administrator for this project. She has currently been administering the North Central Texas Council of Governments (NCTCOG) Master Service Agreement for Night Vision Devices. Jo Ann handles the contract management of both government and commercial contracts and is responsible for all compliance matters. Prior to working at Night Vision Devices, she worked in contracts for Air Product and Chemicals, Inc. and Cobham Advanced Electronic Systems, Inc. Ms. Franks graduated from Kutztown University and has continued her professional development by taking additional classes both at Muhlenberg College and through various contract program courses.

The following organizational chart represents the functional organization of Night Vision Devices.



The NVD organization works as a team to provide high quality products, spare parts & accessories, and services.



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TAB D-TECHNICAL PROPOSAL

NIGHT VISION SOLUTIONS

Binocular Night Vision Devices

1. Binocular Night Vision Device, Single Gain, White Phosphor (UL BNVD-SG-WHP)

- A/N PVS-15 and A/N PVS-31A Alternate Submission
- Manufactured by Night Vision Devices, Inc.

The NVD UL BNVD-SG-WHP assembly is the lightest technically compliant and fully functional, MILSPEC image intensified binocular in the industry with a total weight (excluding battery and accessories) of 470 grams. This was achieved by the development and introduction of high performing, lightweight polymer and glass eyepiece and objective lens assemblies as well as an improved lightweight eyepiece diopter focus mechanism. Many binocular system designs achieve weight reduction by reducing the available eyepiece diopter adjustment range to +2 to -2 or by even offering fixed eyepiece diopter settings of zero or .05 to -.05, thus requiring that the customer purchase special add-on diopter attachments that not only add additional weight, but which are expensive and user specific. By contrast, the NVD BNVD-SG-UL assembly has a fully integrated, continuously adjustable diopter adjustment capability of +2 to -6 to accommodate the full spectrum of possible user eyesight variations.

Adjustments and controls of the NVD UL BNVD-SG-WHP are intuitive, and essentially identical to the field proven AN/PVS-14. The same AN/PVS-14 close focus capability of 9.8 inches is also replicated in the NVD UL BNVD-SG-WHP assembly, providing map-reading and close-proximity task capabilities. The system can easily be adjusted for individual interpupillary distances ranging from 51mm to greater than 76mm by rotating each monocular outward.

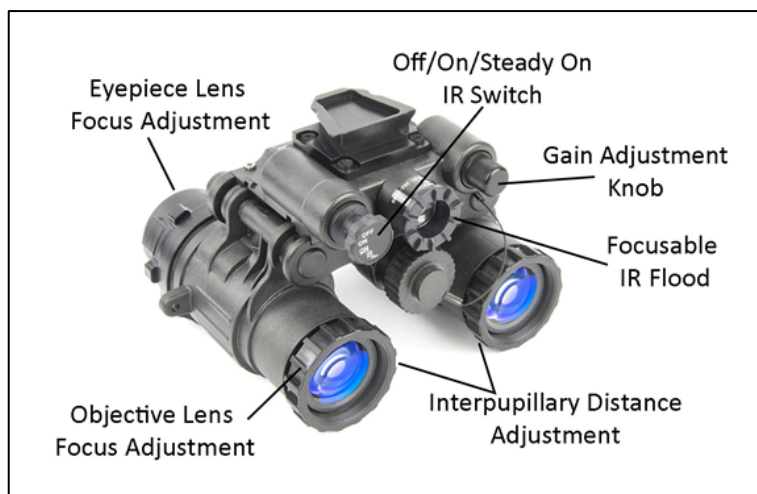


Figure 1 - The NVD UL BNVD-SG-WHP

Tactical Monocular Power Function

The NVD UL BNVD-SG-WHP assembly also features an ability that enables each monocular to independently rotate out of the field of view, providing the user the ability to use the NVD UL BNVD-SG-



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WHP assembly as a monocular system. Additionally, the NVD UL BNVD-SG-WHP assembly provides an AUTOMATIC TURN OFF capability for the channel that is rotated out of the field of view. This monocular turn off feature removes any light security concerns that the user would otherwise expose themselves to if the monocular did not turn off when rolled up during monocular use. When the user is finished using the NVD UL BNVD-SG-WHP assembly in the monocular mode, the monocular channel automatically turns back ON again when the monocular is rotated back within the field of view. The rotational capability of each monocular also provides for a low profile when in the stow position.



Figure 2 - The NVD BNVD Assembly with Rotational Monocular Single Eye Use and Low-Profile Stow Capability

Image Intensification Tube(s)

NVD is first and foremost a “systems” manufacturer, and unlike other manufacturers, whose night vision offerings can only utilize image tubes from that specific manufacturer. NVD’s UL BNVD-SG-WHP system was strategically designed to ensure its customers can select any preferred MX-11769 image intensifier tube that might be available at any point in the future, including Harris-Elbit USA, L-3 or Photonis variable gain image tubes. Consequently, the production of the NVD UL BNVD-SG-WHP assembly will never be constrained by a single image intensifier manufacturer. This was a requirement for all large DOD night vision programs of record prior to the AN/PVS-31.

For the North Texas Central Texas Council of Governments, (NCTCOG) NVD is proposing Harris-Elbit USA, high performance, auto-gated, variable gain, white P-45 or green P-43 phosphor, MX-11769 image tubes that meet or exceed all objective level image intensifier performance parameters, (FOM Ratings of 1900-2200+). This combination of Harris-Elbit USA tubes and the NVD UL BNVD-SG-WHP also provide superior battery run times that will result in substantial logistical savings to the NCTOG over the lifetime of the system.

Power Consumption Models

During the battery life validation testing that was conducted, it was noted that with Harris (Elbit USA) tubes, NVD’s BNVD-SG-UL-WP assembly achieved run times of more than 18 hours on a single internal alkaline battery at ambient temperatures. However, when this same testing was conducted with L-3 tubes, the NVD BNVD-SG-UL-WP assembly was unable to achieve even a two-hour run time. In order to validate that these UL BNVD-SG-WHP run times were not due to some fault in the NVD product, NVD procured an AN/PVS-31 and a 1531 system with L-3 tubes to perform additional testing. During this testing it was determined that neither the AN/PVS-31 or the 1531 could achieve a run time greater than



2.0 hours on a single internal Alkaline AA Battery. In order to validate these results, the testing was conducted multiple times with alkaline batteries from multiple sources of supply and the same results were achieved. To further validate that this was not simply an issue related to the use of Alkaline Batteries, additional testing was done using Lithium batteries. Results are listed in Table 1.

Table 1 – UL BNVD-SG-WHP Battery Testing Validation Summary

		3.6.7.1 Internal Batteries, I² Assembly (22°C)	3.6.7.2 Internal Batteries, Thermal Assembly (22°C)	3.6.7.3 External Batteries, I² Assembly (22°C)	3.6.7.4 External Batteries, I² Assembly, Thermal Assembly, Combined Cold Weather Operation (-20°C)
NVD BNVD average run time	Lithium	41.7H	3.4H	151H	13.9H
	Alkaline	20.2H	N/A	100H	N/A
AN/PVS-31 average run time	Lithium	17.2H	N/A	117H	N/A
	Alkaline	1.1H	N/A	59H	N/A
1531 average run time	Lithium	16.5H	N/A	97.7H	N/A
	Alkaline	1.4H	N/A	48.6H	N/A

The 3.6.7.1 requirement of Table 1 clearly shows that the UL BNVD-SG-WHP assembly far exceeds the objective battery run time with an alkaline battery and in this scenario; an external battery pack would not be required. **Since the cost of a Lithium AA battery is approximately 5 times that of an alkaline battery, significant operational and life cycle cost savings can be achieved utilizing Alkaline Batteries, thereby providing exceptional benefits to Operators.**

NVD designed the UL BNVD-SG-WHP assembly to operate on alkaline batteries for several key reasons:

- Lithium batteries are much harder to source on deployment;
- The US Military will continue to operate AN/PVS-14's which utilize Alkaline Batteries and possible logistical issues may be caused by having to issue Alkaline batteries for Airmen, Sailors, Marines, Federal and State Law Enforcement Agencies using AN/PVS-14s and Lithium batteries to users of the NVD BNVD;
- Perhaps most important is the fact that since Law Enforcement End Users are trained to replace batteries prior to every mission – An Operator could be using up to five Lithium Batteries every night (when using the battery pack), which is estimated to cost \$7.50 per night for Lithium verses an approximate cost of \$1.50 per night for five Alkaline batteries. Which when multiplied over just 10,000 missions, the cost of using Lithium batteries is \$75,000 versus an alkaline mission cost of \$15,000.



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Life Cycle Sustainment

The UL BNVD-SG-WHP assembly provides the NCTCOG with proven total life-cycle sustainment based on readily available spare/repair part availability due to commonality with the long-fielded AN/PVS-14. The UL BNVD-SG-WHP assembly also boasts a simple, straightforward repair process that supports the organic maintenance concept - using the same exact repair tools, testing equipment and maintenance processes already utilized for the repair of both the AN/PVS-14 and the AN/AVS-9. The ability of the NVD BNVD assembly to utilize parts interchangeable with the AN/PVS-14 enables repair technicians to rapidly repair or replace broken BNVD components in the field. **Common spares availability and interchangeability of currently fielded spare parts as well as the previously mentioned high battery life capability of the system significantly reduces the overall life cycle cost of fielding and maintaining the UL BNVD-SG-WHP system for the customer.**

UL BNVD-SG-WHP Assembly

The design of the UL BNVD-SG-WHP assembly's main body assembly provides superior robustness in military applications and harsh environments. As highlighted in Figure 4, the main body assembly is comprised of 1) the bridge that encompasses the electronic circuit board and system purge port; 2) the individual monocular channels that attach and are electrically connected to the bridge by the frictional pivot assembly; and 3) the top cover assembly houses the system multi-function switch, gain adjustment, and infrared illuminator.

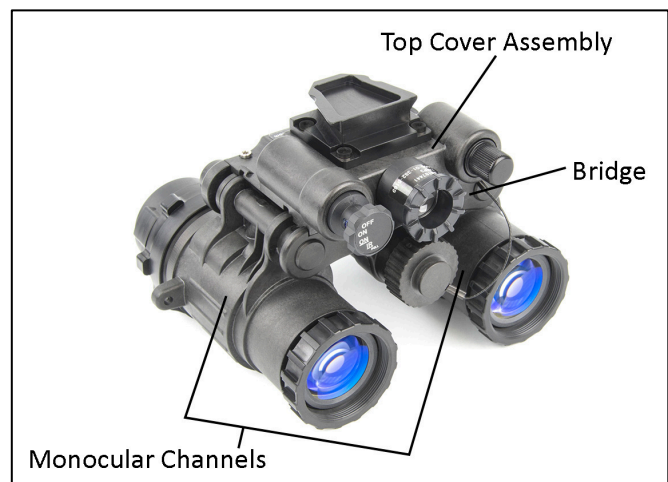


Figure 3 - NVD UL BNVD-SG-WHP

The rotational adjustment of each monocular enables them to be independently positioned in front of the user's eyes to achieve the desired interpupillary distance while also enabling single eye operation and low stow capability. The top cover assembles to lower main body subassembly (bridge + monoculars) using four screws and includes a system O-ring seal between them. The eyepieces have image displacement of the mechanical and optical axis of 0.25 ± 0.05 mm, enabling each UL BNVD-SG-WHP assembly to be precisely collimated at final assembly/test that eliminates eye fatigue during binocular viewing.

Recent product improvements to the UL BNVD-SG-WHP assembly include introduction of 25% carbon filled ULTEM molded components for increased strength, weight reduction and EMI compatibility, high-performance lightweight glass/polymer eyepiece and objective lenses, lightweight eyepiece diopter focus adjustment and individual monocular rotational OFF/ON circuitry and components. The dovetail mount interface provides the means for the I² assembly to attach to the helmet mount. It is precision



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machined from high-strength Aviation Grade aluminum materials and is a removable and replaceable component of the UL BNVD-SG-WHP top cover assembly.

Operational attributes of this system include the following:

- Meets ALL MIL STD 810 Environmental QA Testing Standards, MIL-PRF-49324 (CR), and MIL-PRF-49427 (CR).
- Lightweight Fully Functional and Collimated Ground Compliant Binocular Night Vision Device, with and without Single Gain Adjustment functionality.
- Built in Diopter Adjustment and IR Illumination allow for both near term focus and illumination within 9.8", allowing for the operator to be able to read, write, aid in navigation, weapons cleaning or utilization, driving, and tactical maneuvers.
- Each System comes with a Validated Manufacturing Data Sheet for Image Intensification Tube
- Utilizes Mil Spec Durable Glass Optics or Poly Carbonate Lens Configuration for Optimal Resolution and Image Clarity.
- Single Gain Control to Adjust to any Light Conditions (Limited, Low, and High), Image Tubes w/ Automatic Brightness Control.
- Utilizes Carbon Filled Molded ULTEM Housing Material for full EMI Compliance.
- Operational with a variety of Image Intensification Tubes (Elbit USA, L-3 Harris Communications, or Photonis-Standard Green or White Phosphor, Mil Spec and/or Mil Grade-Commercial Classification).
- BNVD Systems comes with a FULL Accessory Kit and (10) Year Warranty-System and Image Tubes.

2. NVD-BNVD-MINI-B AA Binocular Night Vision Device

- Manufactured by Night Vision Devices, Inc.

With a total system weight that is less than 440 grams, the MINI B AA 18mm, Dual Tube Night Vision Goggle with Single Gain Control is part of NVD's new light-weight product line. The system features a "Tactical Monocular Cutoff" which turns off power to each channel of the monocular whenever a channel is rotated up out of the user's line of sight which assists the warfighter in maintaining light-security on the battlefield. The MINI B AA 18mm additionally provides an automatic system power cutoff when the system is transitioned onto the helmet's mounted stow position, and then powers back on when it is flipped back down. This feature can additionally be disabled by the end user if needed. The MINI B AA 18mm can operate with either one "AA" Battery which powers the system for 40+ hours, or when used in conjunction with the optional three "AA" battery pack, the MINI B AA will run for a continuous 50+ hours. The MINI B incorporates new high-performance optics that are not only much lighter, but also offer higher performance than standard optics. Currently the AN/PVS-14 and most other night vision systems, use optics which were only designed for green (P43) phosphor image tubes. However, these new optics were designed specifically to be optimized for both White (P45) and Green (P43) image tubes



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- Meets ALL MIL STD 810 Environmental QA Testing Standards, MIL-PRF-49324 (CR), and MIL-PRF-49427 (CR).
- Extreme Lightweight, Fully Functional and Collimated Ground Compliant Binocular Night Vision Device, with and without Single Gain Digital Adjustment functionality.
- Push Button Technology allows the operator to control power, gain, and IR Illuminations with push button ease.
- Built in Diopter Adjustment and IR Illumination allow for both near term focus and illumination within 9.8", allowing for the operator to be able to read, write, aid in navigation, weapons cleaning or utilization, driving, and tactical maneuvers.
- Each System comes with a Validated Manufacturing Data Sheet for Image Intensification Tube
- Utilizes Mil Spec Durable Glass Optics or Poly Carbonate Lens Configuration for Optimal Resolution and Image Clarity
- Single Gain Control to Adjust to any Light Conditions (Limited, Low, and High), Image Tubes w/ Automatic Brightness Control
- Utilizes Carbon Filled Molded ULTEM Housing Material for full EMI Compliance
- Operational with a variety of Image Intensification Tubes (Elbit USA, L-3 Harris Communications, or Photonis-Standard Green or White Phosphor, Mil Spec and/or Mil Grade-Commercial Classification)
- BNVD Systems comes with a FULL Accessory Kit and (10) Year Warranty-System and Image Tubes.

3. NVD-BNVD-SG Binocular Night Vision Device

- Manufactured by Night Vision Devices, Inc.

The design of the BNVD-SG assembly's main body assembly provides superior robustness in military applications and harsh environments. The NVD BNVD offers the same reliability and functionality as the UL BNVD-SG-WHP assembly. The key difference between the NVD-BNVD-SG and the UL NVD-BNVD-SG is the use of standard objectives and eyepieces offering a cost saving with a slight increase in weight. The rotational adjustment of each monocular enables them to be independently positioned in front of the user's eyes to achieve the desired interpupillary distance while also enabling single eye operation and low stow capability. The top cover assembles to lower main body subassembly (bridge + monoculars) using four screws and includes a system O-ring seal between them. The eyepieces have image displacement of the mechanical and optical axis of 0.25 +/-0.05mm, enabling each BNVD-SG assembly to be precisely collimated at final assembly/test that eliminates eye fatigue during binocular viewing.

Recent product improvements to the BNVD-SG assembly include introduction of 25% carbon filled ULTEM molded components for increased strength, weight reduction and EMI compatibility, high-performance lightweight glass/polymer eyepiece and objective lenses, lightweight eyepiece diopter focus adjustment and individual monocular rotational OFF/ON circuitry and components. The dovetail mount interface provides the means for the I² assembly to attach to the helmet mount. It is precision



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machined from high-strength Aviation Grade aluminum materials and is a removable and replaceable component of the BNVD-SG top cover assembly.

Operational attributes of this system include the following:

- Meets ALL MIL STD 810 Environmental QA Testing Standards, MIL-PRF-49324 (CR), and MIL-PRF-49427 (CR).
- Lightweight Fully Functional and Collimated Ground Compliant Binocular Night Vision Device, with and without Single Gain Adjustment functionality.
- Built in Diopter Adjustment and IR Illumination allow for both near term focus and illumination within 9.8", allowing for the operator to be able to read, write, aid in navigation, weapons cleaning or utilization, driving, and tactical maneuvers.
- Each System comes with a Validated Manufacturing Data Sheet for Image Intensification Tube
- Utilizes Mil Spec Durable Glass Optics or Poly Carbonate Lens Configuration for Optimal Resolution and Image Clarity
- Single Gain Control to Adjust to any Light Conditions (Limited, Low, and High), Image Tubes w/ Automatic Brightness Control
- Utilizes Carbon Filled Molded ULTEM Housing Material for full EMI Compliance
- Operational with a variety of Image Intensification Tubes (Elbit USA, L-3 Harris Communications, or Photonis-Standard Green or White Phosphor, Mil Spec and/or Mil Grade-Commercial Classification)
- BNVD Systems comes with a FULL Accessory Kit and (10) Year Warranty-System and Image Tubes.

Clip-On Night Vision Devices

4. A/N PVS-30 SOCOM Long Range Clip On Weapon Sight

- CNVD-LR and A/N PVS-27 Alternate Submission
- Manufactured by Knight's Armament

The Knight's Vision Mil Spec A/N PVS-30 Clip on Weapon Sight enhances the latest high performance Generation III image intensification night vision to most rifles and day optics. This system is appropriate for front-line long-range rifles. The Knight Vision patented technology makes the A/N PVS-30 universal and assures the accuracy of range tested day optic's boresight will not be degraded. When the A/N PVS-30 is added to the front of your day optic, your existing optic, eye relief, and cheek weld are unaffected. The refractive lens provides high performance light collection to a very light weight design. Knight's Vision patented single interchangeable battery compartment allows use of either a CR123 or a Single (AA) Battery, with a Battery Life exceeding (24) Hours, and can be changed while you are in the shooting position. The A/N PVS-30 is optimized and tested for medium and long-range sniper weapons



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up to and including the >50 Caliber Rifles, including crew served weapon systems. Day Sight with magnification can be optimized up to 20X power.

- Accessory Kit Included and System Warranty of (1) Year
- System available in both White and Green Phosphor. US Army Refurbished Models also available.

Night Vision Goggles

5. A/N PVS-7 Night Vision Goggle

- Manufactured by Night Vision Devices, Inc.

The NVD-A/N PVS-7 is one of the current Bi-Ocular Night Vision Goggles that is being fielded throughout US and NATO Armies, Guard and Ready Reserves, Law Enforcement, and Federal Agencies. Several hundreds of thousands of these devices remain in inventory and represent the largest implementation of night vision devices when launched in 2005. The system is built to withstand water immersion and utilizes quick connect and disconnect features, including a built in IR Illuminator that can be detected by only operators that utilize night vision devices, with near complete darkness for map reading, navigation, vehicular driving, weapon's employment and cleaning, route reconnoitering, and target engagement. The system has a Low-Level Battery Warning Light and an indication when the IR Illuminator has been engaged. The system utilizes one MX 10160 Image Tube, and requires (2) AA Batteries for an operational run time of over (20) Hours.

- Lightweight Fully Functional Ground Compliant Bi-Ocular Night Vision Device
- Meets ALL MIL STD 810 Environmental QA Testing Standards, MIL-PRF-49324 (CR), and MIL-PRF-49427 (CR).
- Each System comes with a Validated Manufacturing Data Sheet for Image Intensification Tube
- Utilizes Mil Spec Durable Glass Optics for Optimal Resolution and Image Clarity
- Single Gain Control to Adjust to any Light Conditions (Limited, Low, and High), Image Tubes w/ Automatic Brightness Control
- Utilizes Carbon Filled ULTEM Housing Material for full EMI Compliance
- Operational with a variety of Image Intensification Tubes (Elbit USA Corporation, L-3 Harris Communications, or Photonis-Standard Green or White Phosphor, Mil Spec and/or Mil Grade-Commercial Classification)
- Compatibility of ALL Night Vision Accessory Items, to include AFOCAL Magnifiers, Helmet Mount Configurations, Sacrificial Lens, Demist Shields, etc.
- (10) Year System Warranty-(10) Year Image Tube Warranty



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Night Vision Fusion Systems

6. A/N PAS-29 Optics 1 Clip On/Enhanced Thermal Imaging System

- Manufactured by Safran Optics 1

The Optics 1 Clip ON Thermal Imaging Device and Enhanced Clip ON Thermal Imaging Device can easily attach to the suite of NVD systems such as the PVS-14, PVS-7, and BNVD. The COTI and E-COTI increases threat detection and situational awareness by providing a Thermal Imaging Overlay to normalized I 2 Technologies. The systems require relatively low power consumption, with thermal sensor technology and high-performance optics integrating seamlessly state of the art long-wave infrared capability. The COTI and E-COTI mounts on all current night vision devices and needs no additional helmet configuration. A Mounting Bracket is provided as part of the accessory kit. The COTI and E-COTI systems are US Military Programs of Record and are thoroughly ruggedized and able to withstand harsh environmental conditions and waterproofed down to 66ft. NVD's long standing legacy relationship with Optics 1 ensures the devices can be obtained at a very competitive price and serviced if the system would require maintenance or repair.

- Accessory Kit included and System Warranty-(1) Year

Monocular Night Vision Devices

7. A/N PVS-14 Monocular Night Vision Device

- A/N PVS-14 Generation 3, Green (P-43) or White (P-45) Alternate Submission
- Manufactured by Night Vision Devices, Inc.

The NVD-PVS-14 Monocular is a versatile, high performance system designed to assist viewing during nighttime and low visibility tactical operations. The device can be utilized in a hand-held, helmet or weapon mounted option. The A/N PVS-14 is a current Program of Record with the US Military and is the most commonly used night vision system in the world.

NVD will utilize a F9815, MV11769 Type, Generation III, 18mm Image Intensifier with White Phosphor, manufactured by Elbit USA Corporation, (Roanoke, Va.) The F9815 consists of a high efficiency GaAs photocathode bonded to a glass input window, a microchannel plate (MCP) current amplifier, and a P-45 phosphor screen deposited on an inverting fiber-optic output window.

Additionally, since NVD is both the Manufacturer and Distributor of this system, we will be able to offer the system at highly competitive pricing, without the need for a reseller or dealer margins.

Operational attributes of this system include the following:

- Lightweight Fully Functional Ground Compliant Monocular Night Vision Device



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Whitehall, PA 18052-4535
610-395-9743 | F: 610-395-9744
John.lesniak@nvdevices.com
www.nvdevices.com
CAGE: 36ZQ7 | GSA contract # GS07F0022V

- Meets ALL MIL STD 810 Environmental QA Testing Standards, MIL-PRF-49324 (CR), and MIL-PRF-49427 (CR).
- Each System comes with a Validated Manufacturing Data Sheet for Image Intensification Tube
- Utilizes Mil Spec Durable Glass Optics for Optimal Resolution and Image Clarity
- Single Gain Control to Adjust to any Light Conditions (Limited, Low, and High), Image Tubes w/ Automatic Brightness Control
- Utilizes Carbon Filled ULTEM Housing Material for full EMI Compliance
- Operational with a variety of Image Intensification Tubes (Harris Corporation, L-3 Communications, or Photonis-Standard Green or White Phosphor, Mil Spec and/or Mil Grade-Commercial Classification)
- Compatibility of ALL Night Vision Accessory Items, to include AFOCAL Magnifiers, Helmet Mount Configurations, Sacrificial Lens, Demist Shields, etc.
- (10) Year System Warranty-(10) Year Image Tube Warranty

Image Intensifier Tubes

8. F9810 Image Intensification Tube

- Manufactured by ELBIT USA, (formerly ITT Exelis)

The F9810, or MX10130 type, is a US Made, Mil Spec Auto-Gated, Thin Filmed Generation III 18mm image intensifier manufactured by ELBIT USA, formerly ITT Exelis. The F9810 is the most widely used image intensification tube and is found in all models of the A/N PVS-7 series of night vision goggles. The Image Tube is available in Green or White Phosphor, and several different FOM (Figure or Merit) Classifications.

The F9810 series image intensification tube consists of a high efficiency GaAS photocathode bonded to a glass input window, a microchannel plate (MCP) current amplifier, and a P-43 or P-45 phosphor screen deposited on a non-inverting fiber optic output window. The Generation 3 photocathode is extremely sensitive to low radiations levels of visible and, especially, near infrared light. Tube lifespan is an average of 12,000 hours of continuous use.

9. F9815 Image Intensification Tube

- Manufactured by ELBIT USA, (formerly ITT Exelis)

The F9815, or MX11769 type is a US Made, Mil Spec Auto Gated, Thin Filmed Generation III 18mm manufactured by ELBIT USA, formerly ITT Exelis. The F9815 is used in the A/N PVS-14 night vision monocular and several weapon sight platforms. The Image Tube is available in Green or White Phosphor, and several different FOM (Figure or Merit) Classifications.



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The F9815 series image intensification tube consists of a high efficiency GaAS photocathode bonded to a glass input window, a microchannel plate (MCP) current amplifier, and a P-43 or P-45 phosphor screen deposited on a non-inverting fiber optic output window. The Generation 3 photocathode is extremely sensitive to low radiations levels of visible and, especially, near infrared light. Tube lifespan is an average of 12,000 hours of continuous use.

Infrared Illuminator Devices

10. DBAL-A3 and DBAL-I2 Dual Beam Aiming Laser Devices

- PEQ-15 Alternate Submission
- Manufactured by Steiner Optics, Inc.

The DBAL-A3 model is based on the standard issue DBAL-A3 for the US Warfighters. Similar to this model, the unit offers the latest in advances in IR and Visible laser technology. The dual beam infrared laser and illuminator combination is extremely accurate in low and no-light maneuvers. In addition, the DBAL-A3 is the first to feature new defocused adjustable IR Illumination technology to enable both mid-range and close quarter target acquisitions.

The DBAL-I2 Dual Beam Aiming Laser-Intelligent 2 is the most lightweight model in the DBAL Series, this “intelligent” laser provides extreme accuracy in low light conditions and can be utilized with night vision devices. Fully adjustable Windage and Elevation, High and Low Power Models, available with either a visible green or red laser, submersible to 5 m.

Thermal Imaging Devices

11. IR Patrol LE 100 Thermal Monocular

- Manufactured by Trijicon Optics, Inc.

The IR Patrol Series Thermal Monocular is a Military grade monocular that combines a high-quality BAE Thermal Core is a user-friendly housing for the next level of thermal detection. The IR-PATROL has advanced ability to process images with brilliantly sharp detail, and a user-friendly, icon-based menu system for intuitive navigation. Whether your mission is searching for a suspect or securing your position, the Trijicon IR-PATROL® is the ideal multipurpose thermal imaging monocular. It's compact, lightweight, rugged and offers some of the most advanced performance options on the market. Choose from handheld, helmet-mounted or rifle-mounted IR-PATROL systems.

12. IR Patrol M300W Thermal Monocular

- Manufactured by Trijicon Optics, Inc.



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The IR Patrol Series thermal monocular from Trijicon (formally IR Defense), is a military grade monocular that combines a high-quality BAE Thermal Core in a user-friendly housing for the next level of thermal detection. Compact, lightweight, and rugged; the IR Patrol Thermal Monocular is ready for any mission from the battlefield to the hunting field.

The IR Patrol features an easy-to-use control with the tip of the thumb – no more searching for buttons in the dark. This thumb joy-stick provides users the ability to access all features and menus in the unit from a single spot. It is extremely intuitive and easy to find with or without gloves.

Whether the user is military, law enforcement, search & rescue or hunting at night; they need a high resolution thermal monocular with accurate imagery in a compact device. Powered by the new BAE Systems MicroIR Thermal Core, the IR Patrol boasts 12 Micron performance. This provides a 50% increase in magnification during digital zoom compared to most other cores.

Training Materials/Classes

13. System Orientation Training

- Provided by Night Vision Devices, Inc.

NVD is capable of providing End User Product Orientation and Low Level Light Tactical Training at any CONUS NCTCOG Location. The orientation will include an overview on the general equipment, characteristics, features, and benefits of each night vision system. Additionally, operator functions will be outlined, interaction with helmet mounting configuration and all accessory items. Finally, the class will convene with night vision movement drills in low level light conditions.

14. Advanced Night Vision Training

- Provided by Emerging Tactical Solutions and One Minute Out

Advanced Training Offerings will be conducted with tactical operations using night vision equipment requires familiarization, knowledge, understanding and tactical competency with both night vision equipment and tactics. We have partnered with Emerging Tactical Solutions and One Minute Out to provide top notch realistic training with a well-respected SME Cadre of Instructors and Former Law Enforcement SWAT Professionals. For our NVG Operators Course we take a crawl, walk, run format to this training as we believe it is important to form a solid foundation to build on. Our courses teach tactically sound procedures based on best practices and lessons learned from both the L.E. Tactical and US Military Special Operations communities. This course is restricted to LE/MIL and is AZ P.O.S.T. approved. This is a course we developed and is the ONLY NVG Course to be adopted by the National Tactical Officers Association as an official NTOA course offering.

Course is available in Multi Day Course and will cover the systematic approach to equipment selection, its use, advantages, and limitations. We cover legal and training issues and operational considerations



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through classroom discussions, practical exercises, live fire range drills and scenario-based field problems using marking rounds. We will customize this course to meet your tactical needs and requirements.

All Other Night Vision and Thermal Imaging Products

15. Repair/Maintenance/Upgrade and Logistical Consideration(s)

Night Vision Devices has included a reduced semi-annual (180 days) inspection/maintenance/inspection plan to support the MNVD, NVD-PVS-7 and BNVD Systems within NCTCOG for \$95.00/System. NVD can accept up to (10) systems at one time and will conduct regular evaluations of equipment in accordance with Maintenance Cycles. NVD will cover shipping costs to NCTCOG locations within CONUS for (1) Year.

NVD would also propose an upgrade solution that would utilize existing NCTCOG PVS-14's, and retrofit main optical components and image intensification tubes into a fully functional BNVD, w/ Single Gain Adjustment. This process usually takes no more than 15-30 Days, and estimated cost would be \$2,115.00 per unit upgrade.

- NVD will offer NCTCOG an initial (2) BNVD Conversion Upgrades at No Cost with estimated value of \$5,400.00 during the Contractual Period.

16. NVD Manufacturing Operations

Night Vision Devices is an authentic Veteran-Owned Small Business, privately held, with (26) Full Time Employees headquartered in Whitehall, Pennsylvania with annual revenues that exceeds \$30M. NVD is geographically located approximately 60 miles from Philadelphia and 90 miles from New York City.

NVD maintains manufacturing facilities in Whitehall, Pennsylvania where night vision systems are tested, manufactured, assembled and repaired within Mil Spec standards and processes. NVD has a total of (2) Facilities comprised of a 22,000 sq. ft. facility (17,500 Designated Warehousing/Manufacturing, 8,500-Designated Office) and a 9000 sq. ft. facility, (4,000 Sq. Ft.-Designated Office, 3,000 Sq. Ft.-Designated Warehousing, and 2,000 Sq. Ft.-Designated Manufacturing). Night Vision Devices has (15) Optical Assembly/Manufacturing Stations, and employs (26) full time employees, including (8) night vision technicians. Production plant facilities, with specific reference to equipment, tooling, and space are more than adequate to repair these items within contract specifications, requirements, and delivery schedules.

Additionally, NVD can provide additional logistical support as follows:

1. NVD is capable of providing End User Product Orientation and Low Level Light Tactical Training at any CONUS NCTCOG Location.
2. NVD maintains approximately \$5M in inventory levels of night vision equipment including Spare Parts, Image Intensification Tubes and components for all Night Vision Systems.



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3. NVD can provide additional logistical support regarding maintenance and operational training throughout the course of the contractual period.
4. NVD can coordinate an On-Site Plant Tour of facilities for designated NCTCOG Personnel, at any time during the contractual period.



17. NVDs Process for Responding to Customer Orders

Night Vision Devices (NVD) has demonstrated its commitment to world-class quality by implementing and becoming certified to the ISO 9001: 2015 standard. We have joined an elite number of organizations worldwide who have achieved certification to this globally recognized quality standard by implementing a robust Quality Management System (QMS) along with our commitment to continual improvement of our QMS. NVD's extensive use of controlled process throughout the organization, including key processes used for Component Inspection, Manufacturing Operations, and Final Quality Assurance, are the foundation of our Quality Policy----to provide Night Vision and Thermal Products, Parts and Services that are of the Highest Quality and Performance, Unmatched in Value, and Delivered quickly to meet the customer's needs. All customer orders will follow the relevant ISO procedures (see attached ISO Documents) and are outlined below.

- Once an order is received NVD will confirm the order via email with Expected delivery date
- NVD will issue purchase orders for non-NVD manufactured items
- Orders will be assembled in accordance with the specifications for NVD built products
- Each item will be inspected by the NVD Quality Team
- Orders will be shipped using the best commercial methods
- The purchasing agency will be invoiced when the order is shipped with net 30 terms
- Invoices can be paid by check or by electronic wire transfer

18. Contractual Terms and Conditions



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Regarding the Terms and Conditions for any resultant award, Night Vision Devices, Inc. herein proposes its desire to mutually develop with NCTOG an Indemnification Clause to be incorporated into any resultant contract.



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Tab E: References

Since 2005, NVD has produced in excess of 25,000 Night Vision Devices. Since NVD prides itself on building long-term relationships with customers, the named organizations listed below have multi-year experience with NVD products and services, including NVD-PVS-14, NVD-PVS-7 Goggle, NVD-BNVD, NVD-BNVD Conversion Upgrades, and Repair/Maintenance Capabilities. If requested, NVD is able to provide customer testimonials as part of any needed follow up.

United States Department of State

-Mr. Russell Dickinson, Program Manager, DEAV, United States Department of State Bureau of Diplomatic Security, 7957 Cluny Ct., Springfield, VA 22153, dickinsonr2@state.gov

United States National Security Agency

-Mr. Patrick M. Breen, 9800 Savage Rd., Suite 6272, Ft. George G. Meade, MD 20755-6000, (443) 479-9667, pmbreen@nsa.gov.

United States Marshals Service

-Chief Ryan Karle, Chief of TOG, Investigative Operations Division, US Marshals Service, (334) 657-0559, ryan.karle@usdoj.gov

New York/New Jersey/Pennsylvania Port Authority

-Captain Brian MacPherson, Port Authority Police, Special Operations Division, 241 Erie Street, Jersey City, NJ 07310, (201) 239-3523, bmcpherson@panynj.gov

Horry County SWAT

-Cdr. Jeffrey Hamilton, Bomb Squad Commander, Horry County Police Department, 2560 N. Main Street, Suite 7, Conway, South Carolina, 29526, hamiltoj@horrycounty.org

Contract Performance-North Texas Share (2017-2021)

- City of Dallas Police Department, Lt. Steven Spencer, (469) 323-5816
- City of Terrell PD, Officer Chris Lee, (469) 628-8917
- City of Bridgeport PD, Chief Steve Sanford, (940) 683-3433
- City of Arlington PD, Paul Long, (817) 459-5706
- Johnson County Sheriff, Lt. Troy Fuller, troy@johnsoncountytexas.org
- City of Weatherford PD, Cdr. Dave Smith, dsmith@weatherfordtx.gov



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- City of Carrollton PD, Ms. Lauren Hale, lauren.hale@cityofcarrollton.com
- City of Garland PD, Lt Daniel Colasanto, colasant@garlandtx.gov
- City of Burleson PD, Deputy Chief Doug Sandifer, dsandifier@burlesontx.com
- City of Denton PD, Sgt. Keith Martin, kieth.martin@cityofdenton.com
- City of Grand Prairie PD, Ryan Simpson, rsimpson@gptx.org
- City of Greenville TX, William Cole, wcole@ci.greenville.tx.us
- City of Cleburne PD, Lt. Shane Wickson, (817) 556-8827
- City of South Lake, TX, Cpl. Joshua D. Ellis, jdellis@ci-southlake.tx.us
- UNT Police, TX, Officer Nicholas Brauchle, (940) 565-3000



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Tab F: North Texas Pricing Schedule



QUOTE

NIGHT VISION DEVICES, INC.
5583 Roosevelt Street
Whitehall, PA 18052-4535

CAGE CODE: 36ZQ7
DUNS: 165251906
TIN/EIN: 202232863

SEE ORCA FOR OFFICIAL CERTIFICATION

Date: 4/7/2021
 Quote # JL032921A-NCTCOG-02
 Expiration Date: 6/7/2021

Electronic Funds Transfer (EFT)
 Financial Institution: Key Bank
 ABA Routing #: 222370440
 Account #: 0000583065

To **North Central Texas Council of Govt's**
Attn: Craigan Johnson
616 Six Flags Drive
Arlington, TX 76011

Shipping Method	Shipping Terms	Inspection/Acceptance	Payment Terms
UPS Ground	FOB Origin	Destination	Net 30

Item	Part Number	Description	Unit Price	ARO	Line Total
		Night Vision Systems			
		A/N PVS-7 Goggle Systems			
1	NVD-PVS-7-16	P-43 Green Phosphor, 1600 Min FOM	\$2,988.00	90-120 Days	
2	NVD-PVS-7-18	P-43 Green Phosphor, 1800+ Min FOM	\$3,212.00	90-120 Days	
3	NVD-PVS-7-WP-16	P-45 White Phosphor, 1600 Min FOM	\$3,093.00	90-120 Days	
		A/N PVS-14 Monocular System			
4	140018	P-43 Green Phosphor, 1600 Min FOM	\$2,345.00	90-120 Days	
5	140020	P-43 Green Phosphor, 2200+ Min FOM	\$3,395.00	90-120 Days	
6	140021	P-45 White Phosphor, 1600 Min FOM	\$2,425.00	90-120 Days	
7	140023	P-45 White Phosphor, 2200+ Min FOM	\$3,445.00	90-120 Days	
8	140016	P-45 w/ L-3 White Phosphor Filmless Min FOM 1800	\$3,525.00	150-180 Days	
9	140017	P-45 w/ L-3 White Phosphor Filmless Min FOM 2300+	\$4,125.00	150-180 Days	
		NVD-BNVD Systems (PVS-15)			
10	NVD-BNVD-16	P-43 Green Phosphor, 1600 Min FOM	\$5,395.00	90-120 Days	
11	NVD-BNVD-22	P-43 Green Phosphor, 2200+ Min FOM	\$7,195.00	90-120 Days	
12	NVD-BNVD-WP-16	P-45 White Phosphor, 1600 Min FOM	\$5,995.00	90-120 Days	
13	NVD-BNVD-WP-22	P-45 White Phosphor, 2200+ Min FOM	\$7,295.00	90-120 Days	

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		NVD-BNVD-SG Systems (PVS-31)			
14	NVD-BNVD-SG-16	P-43 Green Phosphor, 1600 Min FOM	\$5,495.00	90-120 Days	
15	NVD-BNVD-SG-22	P-43 Green Phosphor, 2200+ Min FOM	\$7,395.00	90-120 Days	
16	NVD-BNVD-SG-WP-16	P-45 White Phosphor, 1600 Min FOM	\$6,095.00	90-120 Days	
17	NVD-BNVD-SG-WP-22	P-45 White Phosphor, 2200+ Min FOM	\$7,395.00	90-120 Days	
18	NVD-BNVD-SG-WP-L-18	P-45 White Phosphor, L-3 Filmless, 1800 Min FOM	\$7,595.00	150-180 Days	
19	NVD-BNVD-SG-WP-23	P-45 White Phosphor, L-3 Filmless, 2300+ Min FOM	\$8,695.00	150-180 Days	
		NVD-BNVD-SG-UL Systems (PVS-31)			
20	NVD-BNVD-SG-UL-16	P-43 Green Phosphor, Lightweight Optics, 1600 Min FOM	\$6,795.00	90-120 Days	
21	NVD-BNVD-SG-UL-22	P-43 Green Phosphor, Lightweight Optics, 2200+ Min FOM	\$8,695.00	90-120 Days	
22	NVD-BNVD-SG-UL-WP-16	P-45 White Phosphor, Lightweight Optics, 1600 Min FOM	\$7,195.00	90-120 Days	
23	NVD-BNVD-SG-UL-WP-22	P-45 White Phosphor, Lightweight Optics, 2200+ Min FOM	\$8,795.00	90-120 Days	
24	NVD-BNVD-SG-UL-WP-L-18	P-45 White Phosphor, Lightweight, L-3 Filmless, 1800+ Min FOM	\$8,795.00	150-180 Days	
25	NVD-BNVD-SG-UL-WP-L-23	P-45 White Phosphor, Lightweight, L-3 Filmless, 2300+ Min FOM	\$9,895.00	150-180 Days	
		NVD-BNVD-Mini (PVS-31)			
26	NVD-Mini B-16	P-43 Green Phosphor, 1600 Min FOM	\$7,095.00	90-120 Days	
27	NVD-Mini-B-22	P-43 Green Phosphor, 2200+ Min FOM	\$8,995.00	90-120 Days	
28	NVD-Mini-B-WP-16	P-45 White Phosphor, 1600 Min FOM	\$7,395.00	90-120 Days	
29	NVD-Mini-B-WP-22	P-45 White Phosphor, 2200+ Min FOM	\$9,095.00	90-120 Days	
		BNVD Conversion			
30	NVD-Conv	Convert (2) PVS-14 Systems to a Fully Collimated BNVD	\$2,115.00	15-30 Days	
		Agency to provide (2) Working A/N PVS-14 Systems			
		NVD Maintenance Plan			
31	NVD-Maint	Provide Annual Maintenance for night vision equipment including disassembly, cleaning, inspection, re-assembly, purge, test, and QC	\$95.00 Per System	TBD	
		Thermal Night Vision Systems			
32	12712-3610-07	Optics 1 Clip On Thermal Imaging System (COTI)	\$3,598.00	15-30 Days	
33	12712-3015-04	Optics 1 Enhanced Clip On Thermal Imaging System (E-COTI)	\$7,467.50	60-90 Days	

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34	IRMO-LE-100	IR Patrol LE100 Thermal Weapon Scope	\$5,675.00	60-90 Days	
35	IRMO-300	IR Patrol M300W Thermal Weapon Scope	\$6,875.00	60-90 Days	
		Night Vision Weapon Sights			
36	26807	A/N PVS-30, Green Phosphor, Accessory Kit	\$11,295.00	90-120 Days	
37	26807-CU	A/N PVS-30, Green Phosphor, (Refurbished) Accessory Kit (Limited Inventory)	\$5,895.00	15-30 Days	
38	26807-W	A/N PVS-30, White Phosphor, Accessory Kit	\$11,495.00	90-120 Days	
39	NVD-KAC-UNS-A3	Universal Night Sight-A3	\$9,285.00	60-90 Days	
		Night Vision Accessory Items, Image Intensification Tubes			
40	MX-11769-GP	US Generation III, P-43 Green Phosphor, Thin Filmed, PVS-14, 18mm, Min FOM 1600	\$1,895.00	30-60 Days	
41	MX-11769-WP	US Generation III, P-45 White Phosphor, Thin Filmed, PVS-14, 18mm, Min FOM 1600	\$2,095.00	30-60 Days	
42	MX-10130-GP	US Generation III, P-43 Green Phosphor, Thin Filmed, PVS-7, 18mm, Min FOM 1600	\$2,195.00	30-60 Days	
43	MX-10130-WP	US Generation III, P-45 White Phosphor, Thin Filmed, PVS-7, 18mm, Min FOM 1600	\$2,595.00	30-60 Days	
44	H179BKF827LNO	Hard Carrying Case	\$88.00	30-60 Days	
45	274048-1	Camera Adapter	\$96.00	30-60 Days	
46	A3256391	3 X AFOCAI Camera Adapter	\$395.00	30-60 Days	
47	A3256368-2	Standard MICH Helmet Mount	\$229.00	30-60 Days	
48	28300G11	Wilcox L4, G11 Mount	\$337.30	30-60 Days	
49	28300G24	Wilcox L4, G24 Helmet Mount	\$458.44	30-60 Days	
		Night Vision Tactical Training			
50	NVD-Training	System Orientation and Training	N/C	TBD	
51	Advanced Tactical Night Vision Training	(1-3) Days Operator Training, Not More Than (20 Attendees per Class)	\$650 or \$850 Per Attendee		
		Shipping to TX			
		Minimum Order \$100.00 Net 30 Terms with Government Contract AMEX, VISA, MC, Wire Transfer, Cashier Check Accepted			
Subtotal					
Shipping (UPS Ground 1 Day) Estimate					
Total					

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- ❖ Price Adjustment-Not More Than 3-5% Per Year for the duration of the Contractual Period (3) Years.
- ❖ NVD will offer (2) BNVD Conversions at no cost to NCTCOG Members
- ❖ NVD will offer a reduced Evaluation/Assessment Fee of \$95.00 Per System for the Contractual Period (3) Years for NCTCOG Members.
- ❖ System Overview and Orientation Training will be at no cost for NCTCOG Members.
- ❖ Advanced Training can be Customized for (1-3) Days.

Quotation prepared by:
John F. Lesniak



Senior Director, Business Development | Night Vision Devices
610-395-9743 | john.lesniak@nvdevices.com

RFP 2021-007 Night Vision Solutions
FOR EVALUATION PURPOSES ONLY

The following information will only be used for evaluation purposes. Respondents are encouraged to provide a market equivalent if their company does not offer the item used to generate specifics.

Item #	Joint Electronics Type Designation System-Nomenclature	Item Description	Percent (%) of Discount off of Catalog or Pricelist	Vendor Price (List Price)	SHARE Price Vendor Price less discount)	Market Equivalent Manufacturer	Market Equivalent Nomenclature	Market Equivalent Vendor Price (List Price)	Market Equivalent SHARE Price (Vendor Price less discount)
1	AN/PVS-15 (BNVD)	Binocular Night Vision Device	green <u> N/A </u> % white <u> N/A </u> %	green \$ <u> N/A </u> white \$ <u> N/A </u>	green <u> N/A </u> white <u> N/A </u>	Night Vision Devices, Inc. green NVD BNVD (15%) white NVD BNVD (8%)	BNVD - green phosphor BNVD - white phosphor	green \$6,195 white \$6,495	green \$5,395 white \$5,595
2	Ground Panoramic Night Vision Goggle (GPNVVG)	Helmet-mounted night vision device with a wide 97-degree horizontal field of view.	NO BID	NO BID	NO BID	NO BID	NO BID	NO BID	NO BID
3	AS/PAS-29 COTI	Clip On Thermal Imager	11%	\$8,449	\$7,467.50	N/A	N/A	N/A	N/A
4	AN/PSQ-20B (ENVG)	Enhanced Night Vision Goggle	NO BID	NO BID	NO BID	NO BID	NO BID	NO BID	NO BID
5	AN/PVS-31A (BNVD)	Binocular Night Vision Device	N/A	N/A	N/A	Night Vision Devices, Inc. green NVD BNVD SG (14%) white NVD BNVD SG (9%)	N/A	green \$6,395 white \$6,695	green \$5,495 white \$6,095
6	AN/PVS-24 (CNVD)	Clip-On Night Vision Device	N/A	N/A	N/A	Knights Armament (18%)	SOCOM A/AN-PVS-30 Long Range Weapon Site	green \$11,295 white \$11,495	green \$13,328 white \$13,564.10
7	AN/PEQ-15	Advanced Target Pointer Illuminator Aiming Laser	N/A	N/A	N/A	Steiner Optics (4.8%)	Dual Band Aiming Laser Pointer	\$1,625.45	\$1,549
8	AN/PVS-14 MNVD White Phosphor	Monocular Night Vision Device	N/A	N/A	N/A	Night Vision Devices, Inc. green NVD PVS-14 (19%) white NVD PVS-14 (16%)	A/N-PVS-14 Night Vision Monocular	green \$2,895 white \$2,895	green \$2,345 white \$2,425

COST PROPOSAL ITEMS

Interested Respondents proposing various manufacturer product lines per line item on the Proposal Specification Form must submit the information as follows or proposal may not be considered. Items below correspond to RFP 2021-007 Exhibit A

☐ Manufacturers Shall be listed in alphabetical order.

☐ Respondents must list one specific percentage discount for each manufacturer listed.

If a Respondent elects to attach a separate sheet, all manufacturers listed on the attachment must indicate per manufacturer the line item that corresponds to Respondent's specification form.

Section I: Night Vision Solutions					
Item #	Description	Extended Description	Percent (%) of Discount off of Catalog or Pricelist	Name of Catalog or Pricelist	State any Exceptions to Discount
9	Discount (%) off Catalog or Pricelist for Binocular Night Vision Devices.	State the total discount (%) off of catalog or pricelist for Binocular Night Vision Devices . Catalog or Price List must be included or proposals will not be considered.	12%	NVD Price List	Quantity Breaks at 50 and 100 unit orders
10	Discount (%) off Catalog or Pricelist for Night Vision Cameras.	State the total discount (%) off of catalog or pricelist for Night Vision Cameras . Catalog or Price List must be included or proposals will not be considered.	N/A	N/A	N/A
11	Discount (%) off Catalog or Pricelist for Clip-On Night Vision Devices.	State the total discount (%) off of catalog or pricelist for Clip-On Night Vision Devices . Catalog or Price List must be included or proposals will not be considered.	18%	NVD Price List	Quantity Breaks at 50 and 100 unit orders
12	Discount (%) off Catalog or Pricelist for Night Vision Goggles.	State the total discount (%) off of catalog or pricelist for Night Vision Goggles . Catalog or Price List must be included or proposals will not be considered.	8%	NVD Price List	Quantity Breaks at 50 and 100 unit orders
13	Discount (%) off Catalog or Pricelist for Night Vision Fusion Systems.	State the total discount (%) off of catalog or pricelist for Night Vision Fusion Systems . Catalog or Price List must be included or proposals will not be considered.	N/A	N/A	N/A
14	State the total discount (%) off of catalog or pricelist for Digital Night Vision Products . Catalog or Price List must be included or proposals will not be considered.	State the total discount (%) off of catalog or pricelist for Digital Night Vision Products . Catalog or Price List must be included or proposals will not be considered.	N/A	N/A	N/A
15	Discount (%) off Catalog or Pricelist for Night Vision Monocular Devices.	State the total discount (%) off of catalog or pricelist for Monocular Night Vision Devices . Catalog or Price List must be included or proposals will not be considered.	18%	NVD Price List	Quantity Breaks at 50 and 100 unit orders
16	Discount (%) off Catalog or Pricelist for Night Vision Device Parts and Components.	State the total discount (%) off of catalog or pricelist for Night Vision Device Parts and Components . Catalog or Price List must be included or proposals will not be considered.	12%	NVD Price List	Quantity Breaks at 50 and 100 unit orders
17	Discount (%) off Catalog or Pricelist for Day/Night Vision Weapon Scopes.	State the total discount (%) off of catalog or pricelist for Day/Night Vision Weapon Scopes . Catalog or Price List must be included or proposals will not be considered.	N/A	N/A	N/A
18	Discount (%) off Catalog or Pricelist for Image Intensifier Tube (White or green phosphor).	State the total discount (%) off of catalog or pricelist for Image Intensifier Tube (White or green phosphor) . Catalog or Price List must be included or proposals will not be considered.	15%	NVD Price List	Quantity Breaks at 50 and 100 unit orders
19	Discount (%) off Catalog or Pricelist for Infrared Illuminator Devices.	State the total discount (%) off of catalog or pricelist for Infrared Illuminator Devices . Catalog or Price List must be included or proposals will not be considered.	4%	NVD Price List	Quantity Breaks at 50 and 100 unit orders
20	Discount (%) off Catalog or Pricelist for Thermal Imaging Devices.	State the total discount (%) off of catalog or pricelist for Thermal Imaging Devices . Catalog or Price List must be included or proposals will not be considered.	10%	NVD Price List	Quantity Breaks at 50 and 100 unit orders

21	Discount (%) off Catalog or Pricelist for Mounting Products and Accessories	State the total discount (%) off of catalog or pricelist for Mounting Products and Accessories . Catalog or Price List must be included or proposals will not be considered.	7%	NVD Price List	Quantity Breaks at 50 and 100 unit orders
22	Discount (%) off Catalog or Pricelist for Training Materials/Classes.	State the total discount (%) off of catalog or pricelist for Training Materials/Classes . Catalog or Price List must be included or proposals will not be considered.	0%	NVD Price List	N/A
23	Discount (%) off Catalog or Pricelist for All Other Night Vision and Thermal Imaging Products.	State the total discount (%) off of catalog or pricelist for All Other Night Vision and Thermal Imaging Products . Catalog or Price List must be included or proposals will not be considered.	5%	NVD Price List	Quantity Breaks at 50 and 100 unit orders
Section II: Installation and Repair Service					
24	Not to Exceed Hourly Labor Rate for Installation/Repair Services	Hourly Labor Rate for the Installation or Repair of Night Vision Products and Accessories Offered Within this Pricing Proposal	\$45.00 per hour	NVD Internal Production	N/A



Night Vision Devices, Inc. | 5583 Roosevelt Street
Whitehall, PA 18052-4535
610-395-9743 | F: 610-395-9744
John.lesniak@nvdevices.com
www.nvdevices.com
CAGE: 36ZQ7 | GSA contract # GS07F0022V

Tab G: Required Attachments

1. Instructions for Proposal Compliance and Submittal (Attachment I)
2. Certifications of Offeror (Attachment II)
3. Certification Regarding Debarment, Suspension, and Other Responsibility Matters (Attachment III)
4. Certification Regarding Lobbying (Attachment IV)
5. Drug-Free Workplace Certification (Attachment V)
6. Certification Regarding Disclosure of Conflict of Interest (Attachment VI)
7. Certification of Fair Business Practices (Attachment VII)
8. Certification of Good Standing-Texas Corporate Franchise Certification (Attachment VIII)
9. Historically Underutilized Businesses, Minority, or Women-Owned or Disadvantages Business Enterprise (Attachment IX)
10. Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment (Attachment X)
11. Prohibited Telecommunications and Video Surveillance Services or Equipment Certification (Attachment XI)
12. Addendum 1
13. NVD Warranty Statement
14. ISO Document-PD-500106 (Receiving of Materials and Products)
15. ISO Document-PD-500107 (Shipping Procedures)
16. ISO Document-PD-500108 (Procedure for Production Scheduling)
17. ISO Document-PD-500112 (Procedure for Repair and Maintenance Services)
18. NCTCOG Digital Catalog
 - NVD-PVS-14, Monocular Night Vision Device Technical Data Sheet, w/ Comparative Analysis
 - NVD Process-PVS-14 to BNVD Conversion Upgrade
 - NVD-BNVD, Binocular Night Vision Device Technical Data Sheet, w/ Comparative Analysis
 - NVD-BNVD-SG-UL, Binocular Night Vision Device Technical Data Sheet, w/ Comparative Analysis
 - NVD-BNVD-Mini-B-18mm, Mini Binocular Night Vision Device Technical Data Sheet
 - NVD-PVS-7 Night Vision Goggle Technical Data Sheet
 - Knight's Vision A/N PVS-30 SOCOM Long Range Weapon Sight, w/ Comparative Analysis
 - Optics 1 A/N PAS-29 Clip On Thermal Night Vision Device
 - Trijicon IR Patrol LE 100 and IR Patrol 300W
 - F9810-MX10130 and F9815-MX11769 Image Intensification Tubes

**ATTACHMENT I:
INSTRUCTIONS FOR PROPOSALS COMPLIANCE AND SUBMITTAL**

Compliance with the Solicitation

Submissions must be in strict compliance with this solicitation. Failure to comply with all provisions of the solicitation may result in disqualification.

Acknowledgment of Insurance Requirements

By signing its submission, Offeror acknowledges that it has read and understands the insurance requirements for the submission. Offeror also understands that the evidence of required insurance may be requested to be submitted within ten (10) working days following notification of its offer being accepted; otherwise, NCTCOG may rescind its acceptance of the Offeror's proposals. The insurance requirements are outlined in Section 6.

Name of Organization/Contractor(s):

Night Vision Devices, Inc.

Signature of Authorized Representative:

Jo Ann Franks

Date: 01 April 2021

**ATTACHMENT II:
CERTIFICATIONS OF OFFEROR**

Name of Organization/Contractor(s):

Night Vision Devices, Inc.

Signature of Authorized Representative:

Jo Ann Franks

Date: 01 April 2021

ATTACHMENT III:
CERTIFICATION REGARDING DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS

This certification is required by the Federal Regulations Implementing Executive Order 12549, Debarment and Suspension, 45 CFR Part 93, Government-wide Debarment and Suspension, for the Department of Agriculture (7 CFR Part 3017), Department of Labor (29 CFR Part 98), Department of Education (34 CFR Parts 85, 668, 682), Department of Health and Human Services (45 CFR Part 76).

The undersigned certifies, to the best of his or her knowledge and belief, that both it and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency;
2. Have not within a three-year period preceding this contract 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 Proposals, or receiving stolen property;
3. Are not presently indicated for or otherwise criminally or civilly charged by a government entity with commission of any of the offense enumerated in Paragraph (2) of this certification; and,
4. Have not within a three-year period preceding this contract had one or more public transactions terminated for cause or default.

Where the prospective recipient of federal assistance funds is unable to certify to any of the qualifications in this certification, such prospective recipient shall attach an explanation to this certification form.

Name of Organization/Contractor(s):

Night Vision Devices, Inc.

Signature of Authorized Representative:

Jo Ann Franks

Date: 01 April 2021

ATTACHMENT IV: RESTRICTIONS ON LOBBYING

Section 319 of Public Law 101-121 prohibits recipients of federal contracts, grants, and loans exceeding \$100,000 at any tier under a federal contract from using appropriated funds for lobbying the Executive or Legislative Branches of the federal government in connection with a specific contract, grant, or loan. Section 319 also requires each person who requests or receives a federal contract or grant in excess of \$100,000 to disclose lobbying.

No appropriated funds may be expended by the recipient of a federal contract, loan, or cooperative agreement to pay any person for influencing or attempting to influence an officer or employee of any federal executive department or agency as well as any independent regulatory commission or government corporation, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any of the following covered federal actions: the awarding of any federal contract, the making of any federal grant, the making of any federal loan the entering into of any cooperative agreement and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.

As a recipient of a federal grant exceeding \$100,000, NCTCOG requires its subcontractors of that grant to file a certification, set forth in Appendix B.1, that neither the agency nor its employees have made, or will make, any payment prohibited by the preceding paragraph.

Subcontractors are also required to file with NCTCOG a disclosure form, set forth in Appendix B.2, if the subcontractor or its employees have made or have agreed to make any payment using nonappropriated funds (to include profits from any federal action), which would be prohibited if paid for with appropriated funds.

**LOBBYING CERTIFICATION
FOR CONTRACTS, GRANTS, LOANS, AND COOPERATIVE AGREEMENTS**

The undersigned certifies, to the best of his or her knowledge or belief, that:

1. No 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 officer or employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal loan, the entering into of any cooperative Contract, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative contract; and
2. 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 contract, grant, loan, and or cooperative contract, the undersigned shall complete and submit Standard Form – LLL, "Disclosure Form to Report Lobbying", in accordance with the instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers and that all sub-recipients shall certify accordingly.

Name of Organization/Contractor(s):

Night Vision Devices, Inc.

Signature of Authorized Representative:

Jo Ann Franks

Date: 01 April 2021

**ATTACHMENT V:
DRUG-FREE WORKPLACE CERTIFICATION**

The Night Vision Devices, Inc. (company name) will provide a Drug Free Work Place in compliance with the Drug Free Work Place Act of 1988. The unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited on the premises of the Night Vision Devices, Inc. (company name) or any of its facilities. Any employee who violates this prohibition will be subject to disciplinary action up to and including termination. All employees, as a condition of employment, will comply with this policy.

CERTIFICATION REGARDING DRUG-FREE WORKPLACE

This certification is required by the Federal Regulations Implementing Sections 5151-5160 of the Drug-Free Workplace Act, 41 U.S.C. 701, for the Department of Agriculture (7 CFR Part 3017), Department of Labor (29 CFR Part 98), Department of Education (34 CFR Parts 85, 668 and 682), Department of Health and Human Services (45 CFR Part 76).

The undersigned subcontractor certifies it will provide a drug-free workplace by:

Publishing a policy Proposal notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the workplace and specifying the consequences of any such action by an employee;

Establishing an ongoing drug-free awareness program to inform employees of the dangers of drug abuse in the workplace, the subcontractor's policy of maintaining a drug-free workplace, the availability of counseling, rehabilitation and employee assistance programs, and the penalties that may be imposed on employees for drug violations in the workplace;

Providing each employee with a copy of the subcontractor's policy Proposal;

Notifying the employees in the subcontractor's policy Proposal that as a condition of employment under this subcontract, employees shall abide by the terms of the policy Proposal and notifying the subcontractor in writing within five days after any conviction for a violation by the employee of a criminal drug abuse statute in the workplace;

Notifying the Board within ten (10) days of the subcontractor's receipt of a notice of a conviction of any employee; and,

Taking appropriate personnel action against an employee convicted of violating a criminal drug statute or requires such employee to participate in a drug abuse assistance or rehabilitation program.

Name of Organization/Contractor(s):

Night Vision Devices, Inc.

Signature of Authorized Representative:

Jo Ann Franks

Date: 01 April 2021

**ATTACHMENT VI:
CERTIFICATION REGARDING DISCLOSURE OF CONFLICT OF INTEREST**

The undersigned certifies that, to the best of his or her knowledge or belief, that:

"No employee of the contractor, no member of the contractor's governing board or body, and no person who exercises any functions or responsibilities in the review or approval of the undertaking or carrying out of this contract shall participate in any decision relating to this contract which affects his/her personal pecuniary interest.

Executives and employees of contractor shall be particularly aware of the varying degrees of influence that can be exerted by personal friends and associates and, in administering the contract, shall exercise due diligence to avoid situations which give rise to an assertion that favorable treatment is being granted to friends and associates. When it is in the public interest for the contractor to conduct business with a friend or associate of an executive or employee of the contractor, an elected official in the area or a member of the North Central Texas Council of Governments, a permanent record of the transaction shall be retained.

Any executive or employee of the contractor, an elected official in the area or a member of the NCTCOG, shall not solicit or accept money or any other consideration from a third person, for the performance of an act reimbursed in whole or part by contractor or Department. Supplies, tools, materials, equipment or services purchased with contract funds shall be used solely for purposes allowed under this contract. No member of the NCTCOG shall cast a vote on the provision of services by that member (or any organization which that member represents) or vote on any matter which would provide a direct or indirect financial benefit to the member or any business or organization which the member directly represents".

No officer, employee or paid consultant of the contractor is a member of the NCTCOG.

No officer, manager or paid consultant of the contractor is married to a member of the NCTCOG.

No member of NCTCOG directly owns, controls or has interest in the contractor.

The contractor has disclosed any interest, fact, or circumstance that does or may present a potential conflict of interest.

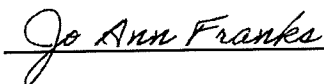
No member of the NCTCOG receives compensation from the contractor for lobbying activities as defined in Chapter 305 of the Texas Government Code.

Should the contractor fail to abide by the foregoing covenants and affirmations regarding conflict of interest, the contractor shall not be entitled to the recovery of any costs or expenses incurred in relation to the contract and shall immediately refund to the North Central Texas Council of Governments any fees or expenses that may have been paid under this contract and shall further be liable for any other costs incurred or damages sustained by the NCTCOG as it relates to this contract.

Name of Organization/Contractor(s):

Night Vision Devices, Inc.

Signature of Authorized Representative:



Date: 01 April 2021

CONFLICT OF INTEREST QUESTIONNAIRE

FORM CIQ

For vendor or other person doing business with local governmental entity

This questionnaire is being filed in accordance with chapter 176 of the Local Government Code by a person doing business with the governmental entity.

By law this questionnaire must be filed with the records administrator of the local government not later than the 7th business day after the date the person becomes aware of facts that require the statement to be filed. See Section 176.006, Local Government Code.

A person commits an offense if the person violates Section 176.006, Local Government Code. An offense under this section is a Class C misdemeanor.

OFFICE USE ONLY

Date Received

1 Name of person doing business with local governmental entity.

Night Vision Devices, Inc.

2

☐ Check this box if you are filing an update to a previously filed questionnaire.

(The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than September 1 of the year for which an activity described in Section 176.006(a), Local Government Code, is pending and not later than the 7th business day after the date the originally filed questionnaire becomes incomplete or inaccurate.)

3

Describe each affiliation or business relationship with an employee or contractor of the local governmental entity who makes recommendations to a local government officer of the local governmental entity with respect to expenditure of money.

None

4

Describe each affiliation or business relationship with a person who is a local government officer and who appoints or employs a local government officer of the local governmental entity that is the subject of this questionnaire.

None

Amended 01/13/2006

CONFLICT OF INTEREST QUESTIONNAIRE

For vendor or other person doing business with local governmental entity

FORM CIQ

Page 2

5 Name of local government officer with whom filer has affiliation or business relationship. (Complete this section only if the answer to A, B, or C is YES.)

This section, item 5 including subparts A, B, C & D, must be completed for each officer with whom the filer has affiliation or business relationship. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer named in this section receiving or likely to receive taxable income from the filer of the questionnaire?

☐ Yes

☒ No

B. Is the filer of the questionnaire receiving or likely to receive taxable income from or at the direction of the local government officer named in this section AND the taxable income is not from the local governmental entity?

☐ Yes

☒ No

C. Is the filer of this questionnaire affiliated with a corporation or other business entity that the local government officer serves as an officer or director, or holds an ownership of 10 percent or more?

☐ Yes

☒ No

D. Describe each affiliation or business relationship.

None

6 Describe any other affiliation or business relationship that might cause a conflict of interest.

None

7

Jo Ann Franks
Signature of person doing business with the governmental entity

01 April 2021

Date

Amended 9/1/13/2006

**ATTACHMENT VII:
CERTIFICATION OF FAIR BUSINESS PRACTICES**

That the submitter has not been found guilty of unfair business practices in a judicial or state agency administrative proceeding during the preceding year. The submitter further affirms that no officer of the submitter has served as an officer of any company found guilty of unfair business practices in a judicial or state agency administrative during the preceding year.

Name of Organization/Contractor(s):

Night Vision Devices, Inc.

Signature of Authorized Representative:

Jo Ann Franks

Date: 01 April 2021

**ATTACHMENT VIII:
CERTIFICATION OF GOOD STANDING
TEXAS CORPORATE FRANCHISE TAX CERTIFICATION**

Pursuant to Article 2.45, Texas Business Corporation Act, state agencies may not contract with for profit corporations that are delinquent in making state franchise tax payments. The following certification that the corporation entering into this offer is current in its franchise taxes must be signed by the individual authorized on Form 2031, Corporate Board of Directors Resolution, to sign the contract for the corporation.

The undersigned authorized representative of the corporation making the offer herein certified that the following indicated Proposal is true and correct and that the undersigned understands that making a false Proposal is a material breach of contract and is grounds for contract cancellation.

Indicate the certification that applies to your corporation:

_____ The Corporation is a for-profit corporation and certifies that it is not delinquent in its franchise tax payments to the State of Texas.

_____ The Corporation is a non-profit corporation or is otherwise not subject to payment of franchise taxes to the State of Texas.

Type of Business (if not corporation): ☐ Sole Proprietor

☐ Partnership

☐ Other

Pursuant to Article 2.45, Texas Business Corporation Act, the North Central Texas Council of Governments reserves the right to request information regarding state franchise tax payments.

(Printed/Typed Name and Title of Authorized Representative)

Signature

Date: _____

NOT APPLICABLE

**ATTACHMENT IX:
HISTORICALLY UNDERUTILIZED BUSINESSES, MINORITY OR WOMEN-OWNED OR DISADVANTAGED
BUSINESS ENTERPRISES**

Historically Underutilized Businesses (HUBs), minority or women-owned or disadvantaged businesses enterprises (M/W/DBE) are encouraged to participate in the solicitation process. Representatives from HUB companies should identify themselves and submit a copy of their certification.

NCTCOG recognizes the certifications of both the State of Texas Program and the North Central Texas Regional Certification Agency. Companies seeking information concerning HUB certification are urged to contact:

State of Texas HUB Program
Texas Comptroller of Public Accounts
Lyndon B. Johnson State Office Building
111 East 17th Street
Austin, Texas 78774
(512) 463-6958
<http://www.window.state.tx.us/procurement/prog/hub/>

Local businesses seeking M/W/DBE certification should contact:

North Central Texas Regional Certification Agency
624 Six Flags Drive, Suite 100
Arlington, TX 76011
(817) 640-0606
<http://www.nctrca.org/certification.html>

Submitter must include a copy of its minority certification documentation as part of this solicitation.
If your company is already certified, attach a copy of your certification to this form and return with your proposal.

Indicate all that apply:

_____ Minority-Owned Business Enterprise
_____ Women-Owned Business Enterprise
_____ Disadvantaged Business Enterprise

ATTEST TO Attachments of Certification:

Authorized Signature

NOT APPLICABLE

Typed Name

Date

Subscribed and sworn to before me this _____ day of _____ (month), 20__ in

_____ (city), _____ (county), _____ (state).

SEAL

Notary Public in and for _____ (County),
State of _____ Commission expires: _____

ATTACHMENT X
REQUEST FOR PROPOSAL/SOLICITATION LANGUAGE
FOR COMPLIANCE WITH THE
PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR
EQUIPMENT

Pursuant to Public Law 115-232, Section 889, and 2 Code of Federal Regulations (CFR) Part 200, including §200.216 and §200.471, NCTCOG is prohibited from using federal funds to procure, contract with entities who use, or extend contracts with entities who use certain telecommunications and video surveillance equipment or services provided by certain Chinese controlled entities. Proposers shall certify its compliance with these requirements as part of their proposal response by completing the "Prohibited Telecommunications and Video Surveillance Services or Equipment Certification" included with the RFP Document. Failure to submit the required certification statement may be grounds for finding the proposal nonresponsive.

ATTACHMENT XI
PROHIBITED TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT
CERTIFICATION

This RFP and any resulting Contract is subject to the Public Law 115-232, Section 889, and 2 Code of Federal Regulations (CFR) Part 200, including §200.216 and §200.471, for prohibition on certain telecommunications and video surveillance or equipment.

Public Law 115-232, Section 889, identifies that restricted telecommunications and video surveillance equipment or services (e.g. phones, internet, video surveillance, cloud servers) include the following:

- A) Telecommunications equipment that is produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliates of such entities).
- B) Video surveillance and telecommunications equipment produced by Hytera Communications Corporations, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliates of such entities).
- C) Telecommunications or video surveillance services used by such entities or using such equipment.
- D) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, Director of the National Intelligence, or the Director of the Federal Bureau of Investigation reasonably believes to be an entity owned or controlled by the government of a covered foreign country.

The entity identified below, through its authorized representative, hereby certifies that no funds under this RFP or any resulting Contract will be obligated or expended to procure or obtain telecommunication or video surveillance services or equipment or systems that use covered telecommunications equipment or services as a substantial or essential component of any system, or as a critical technology as part of any system prohibited by 2 CFR §200.216 and §200.471, or applicable provisions in Public Law 115-232 Section 889.

☒ The Respondent hereby certifies that it does comply with the requirements of 2 CFR §200.216 and §200.471, or applicable regulations in Public Law 115-232 Section 889.

SIGNATURE OF AUTHORIZED
PERSON:

Jo Ann Franks

NAME OF AUTHORIZED PERSON:

Jo Ann Franks

NAME OF COMPANY:

Night Vision Devices, Inc.

DATE:

01 April 2021

-OR-

☐ The Respondent hereby certifies that it cannot comply with the requirements of 2 CFR §200.216 and §200.471, or applicable regulations in Public Law 115-232 Section 889.

SIGNATURE OF AUTHORIZED PERSON: _____

NAME OF AUTHORIZED PERSON: _____

NAME OF COMPANY: _____

DATE: _____



**ADDENDUM TO THE
REQUEST FOR PROPOSALS
North Central Texas Council of Governments
Night Vision Solutions**

ADDENDUM NO. 1

DATE ISSUED: April 1, 2021

**REQUEST FOR PROPOSALS NUMBER: NCT-2021-007
ORIGINAL RFP SUBMISSION DATE: April 7, 2021
REVISED RFP SUBMISSION DATE: April 7, 2021 (No change)**

RFP NCT-2021-007, dated February 26, 2021, is hereby amended to incorporate in full text the following provisions:

Section 3.6 Public Opening:

The public opening for this RFP will be conducted at approximately 2:05 p.m. CT on April 7, 2021.

The meeting will be held digitally via Microsoft Teams, and will be recorded for the RFP file. Please be advised that a large volume of proposals will result in delays in the decryption process.

Access information and the meeting invite will be posted to Public Purchase on the week of April 5, 2021.

Section 6.04 Insurance Requirements:

At all times during the term of a contract resulting from this procurement, the contractor shall procure, pay for, and maintain, with approved insurance carriers, the minimum insurance requirements set forth below, and shall require all contractors and sub-contractors performing work for which the same liabilities may apply under this contract to do likewise. The contractor may cause the insurance to be affected in whole or in part by the sub-contractors or sub-subcontractors under their contracts. NCTCOG reserves the right to waive or modify insurance requirements at its sole discretion.

Workers' Compensation: Coverage and limits as required by law

Commercial General Liability:

- a. Minimum Required Limits:
\$1,000,000 per occurrence;

\$3,000,000 General Aggregate

b. Commercial General Liability policy shall include:

- i. Coverage A: Bodily injury and property damage;
- ii. Coverage B: Personal and Advertising Injury liability;
- iii. Coverage C: Medical payments
- iv. Products: Completed operations
- v. Fire Legal Liability

c. Policy coverage must be on an "occurrence" basis using CGL forms as approved by the Texas State Board of Insurance

d. Attachment of Endorsement CG 20 10- additional insured

e. All other endorsements shall require prior approval by the NCTCOG.

Comprehensive Automobile/Truck Liability: Coverage shall be provided for all owned hired, and non-owned vehicles. Minimum Required Limit: \$1,000,000 combined single limit.

Professional liability:

a. Minimum Required Limits:

\$1,000,000 Each Claim

\$1,000,000 Policy Aggregate

RFP NCT-2021-007, dated April 1, 2021, is hereby amended to incorporate in full text the following provisions:

The following questions were submitted by potential proposers and are answered below. Questions are indicated by standard type and answers indicated by **bold-face type**.

Question #1

On the specifications, for Items #5, #6 & #8 there is no information provided on requirements for: Figure of Merit, Signal to Noise & Resolution. Please advise.

Answer #1: The following specifications are derived from manufacturer datasheets, U.S. Department of Defense publications, and from authorized third-party resellers when data is otherwise not readily available.

Item 5 AN/PVS-31A (BNVD): FOM 2376 (min) SNR: 25.0 (min) Resolution: 64 lp/mm

Item 6 AN/PVS-24 (CNVD): FOM: 1344 (min) SNR: 21:1 (min) Resolution: 64 lp/mm

Item 8 AN/PVS-14 MNVD White Phosphor: FOM 2376 (min) SNR: 36 min. Resolution: 64 lp/mm

Question #2

Is there a Warranty specified for all systems? Please advise.

Answer #2: Vendors are asked in Section 7: How to Submit Your Proposal, Tab D: Technical Proposal #4 to provide a description of their customer satisfaction services, to include any warranty and/or repair capabilities.

Question #3

For all items, please advise if they are to be thin filmed or filmless phosphor technology image intensifier tubes.

Answer #3. Please see the response below:

Item 1 AN/PVS-15 (BNVD): Filmless phosphor technology

Item 2 Ground Panoramic Night Vision Goggle (GPNVG): Filmless phosphor technology

Item 4 AN/PSQ-20B (ENVG): Thin filmed phosphor technology

Item 5 AN/PVS-31A (BNVD): Filmless phosphor technology

Item 6 AN/PVS-24 (CNVD): Filmless phosphor technology

Item 8 AN/PVS-14 MNVD White Phosphor: Filmless phosphor technology

For Items 9-24, if you can provide thin filmed and filmless phosphor technology image intensifier tubes, then please indicate as such in your response. If you can provide both, please indicate. List the specific percentage discount for each.

Question #4

For all items, there is no reference to Mounting Configurations and/or Specific Accessory Items that are to be included in the Systems Offering. Please advise.

Answer #4: SHARE recognizes that there are multiple variants of each item that are manufactured by numerous firms. Each vendor's item offering per system may differ. As such, SHARE does not intend to designate specific accessory items that are to be included in systems offering. Regarding specifications for the mounting configurations for each item, Vendors are asked to provide their mounting options that are compatible with the model the vendor is proposing.

Question #5

Is it required for vendors to bid on every item listed in the Market Basket?

Answer #5: Responses are encouraged from vendors who can only provide a handful of items. Respondents are not expected to be able to provide the entirety of the desired goods, though are welcome to if they are able!

Vendors may propose any combination of categories. Respondent should answer all questions related to each item on which Respondent wishes to propose, and either leave the questions for other items unanswered (blank) or indicate "No Bid."

Question #6

Is this a single or multiple award contract?

Answer #6: SHARE may award contracts to multiple Respondents supplying comparable products or services, also known as a multiple award schedule, or award the contract to a single Respondent.

SHARE's decision to make multiple awards or a single award will be based upon its sole discretion regarding the type of award that provides best value.

Question #7

How long is the term of the contract?

Answer #7: The initial term for a contract(s) resulting from this RFP will be two (2) years. SHARE will have the option to extend the contract for up to three (3) additional one (1) year terms. The total term of the Master Contract shall not exceed five (5) years.

Question #8

What are the potential annual quantities for this "Catalogue-Type" Pricing during this Contractual Period?

Answer #8: Be advised that this project is being solicited with the intent of being made available as a cooperative contract. Also known as an interlocal contract, any agreements retained under this project are intended to be accessible for use by any public sector agency, municipal and local government, etc.

These agencies could access an awarded vendor's services under this project without having to perform a procurement project of their own. Awarded vendors would have the freedom to approach public sector entities and notify them that their Night Vision product offering could be had without requiring a potential client to perform an RFP of their own.

As such, SHARE would not be able to estimate annual quantities. Individual SHARE members utilizing the contract will have their own budgets and night vision needs. The potential business opportunities for an awarded vendor are limited only by their own outreach and marketing capabilities.

Question #9

Can you direct us to where we might find the specific insurance requirements for the State of Texas?

Answer #9: Information regarding the State of Texas's Insurance requirements can be found at the following website: <https://www.tdi.texas.gov/>

Question #10

Is there an overarching delivery requirement in days? Or will each order specify the customer's delivery day requirement?

Answer #10: Delivery may be by common carrier, postal service, or other private delivery service. Delivery must occur within 5 – 7 business days after receipt of order, except in cases of backordered or items that must be assembled to client's need.

If the indicated date cannot be met, the proposer shall state its best delivery time.

Question #11

If an item is quoted in the market basket; does that item also need to be included in the proposed catalog?

Answer #11: Yes, Respondents are asked to complete and submit their Pricing Proposal, in addition to their Catalog or Pricelist. The market basket is a value exercise, while the proposed catalog is an actual record of prices proposed.

The market basket will not populate the Catalog or Pricelist or vice versa.

Question #12

Will there be evaluation point deductions for no bidding any line items listed in the Market Basket?

Answer #12: SHARE will not deduct points for no bidding any line items listed in the RFP 2021-007 Market Basket.

Question #13

The specific insurance coverage requirements cannot be easily located at <https://www.tdi.texas.gov/>. Can you give an explicit breakdown of the required coverage (e.g. commercial liability per incident, general liability, etc.)?

Answer #13: SHARE is a National Public Sector cooperative purchasing program which allows any public entity or non-profit use of a SHARE contract and its selected vendor(s) and pricing to pursue their own projects. As such, depending on the location of the SHARE Entity, different State requirements may be applicable. For the purpose of streamlining responses to the insurance requirements outlined in Section 6, please use the North Central Texas Council of Governments' minimum insurance requirements listed below as a benchmark.

Workers' Compensation: Coverage and limits as required by law

Commercial General Liability:

- f. **Minimum Required Limits:**
 - \$1,000,000 per occurrence;
 - \$3,000,000 General Aggregate
- g. **Commercial General Liability policy shall include:**
 - vi. **Coverage A: Bodily injury and property damage;**
 - vii. **Coverage B: Personal and Advertising Injury liability;**
 - viii. **Coverage C: Medical payments**
 - ix. **Products: Completed operations**
 - x. **Fire Legal Liability**
- h. **Policy coverage must be on an "occurrence" basis using CGL forms as approved by the Texas State Board of Insurance**
- i. **Attachment of Endorsement CG 20 10- additional insured**
- j. **All other endorsements shall require prior approval by the NCTCOG.**

Comprehensive Automobile/Truck Liability: Coverage shall be provided for all owned hired, and non-owned vehicles. Minimum Required Limit: \$1,000,000 combined single limit.

Professional liability:

- a. **Minimum Required Limits:**
 - \$1,000,000 Each Claim
 - \$1,000,000 Policy Aggregate

If you have any exceptions to any of our terms and conditions or clauses contained in this RFP, please state your exceptions in your response.

Question #14

If we propose a % discount at the Manufacturer level, how should we answer the cells within the Market Basket spreadsheet for Items 9-24 where it asks "% Discount off of Catalog or Price list"?

Answer #14: If your catalog/list price for an item already incorporates a % discount and you do not intend to offer an additional discount, then submit a 0% discount in the appropriate space for that item.

Question #15

Can products be added or removed from the catalog during the term of the contract? If so, what is the process?

Answer #15: Yes, awarded vendor(s) are permitted to add or remove products during the term of the contract, but their Electronic catalogs or pricelists must be available/current for interested SHARE Entities to review.

Question #16

Does the % Discount off of Catalog or Pricelist for Items 1-8 need to be the same or can it vary by item?

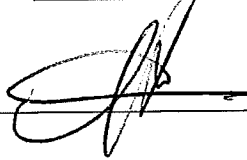
Answer #16: The % Discount off of Catalog or Pricelist does not need to be the same; it can vary based on the item.

Brent Moll
Buyer II

Proposers: Please acknowledge and return a copy of this Addendum with your proposal.

COMPANY NAME: Night Vision Devices, Inc.

SIGNATURE: _____

A handwritten signature in black ink, appearing to be 'Brent Moll', is written over a horizontal line.

NOTE: Company name and signature must be the same as on the RFP documents.



PO BOX 3415
Allentown, PA 18106-9021
Ph: 610-395-9743
Fax: 610-395-9744
www.nvdevices.com
Email: sales@nvdevices.com

NVD Warranty Statement

- (1) Subject to the conditions hereinafter stated, NVD warrants that at the time of delivery to the carrier, all items will be free from defects in material and workmanship.
- (2) NVD's obligation under this warranty shall be limited to (1) repairing, or (2) replacing at its factory or (3) allowing an equitable credit for any item, which upon inspection and in the judgment of NVD, is defective in material or in workmanship, provided that NVD is notified of any such defect or nonconformance within warranty period applicable to the item(s) purchased.
- (3) No item will be accepted for repair, replacement or credit adjustment without a Return Merchandise Authorization (RMA) number, issued by NVD. To obtain an RMA and shipping instructions please contact our service department by either phone (610) 395-9743 or email at service@nvdevices.com. Upon receipt of authorization, and only in accordance with instructions of NVD, items for which adjustment, evaluation, or repair is requested shall be returned to NVD for examination with all shipping charges prepaid by the Buyer. Such items shall be packed in the original shipping container or in a manner substantially equal to the original packing used by NVD or NVD's dealer or distributor. The return package shall include a copy of the RMA number, contact information, and a brief description of the reason for return. Failure to include the documentation or to package correctly may void this warranty. If such items, after examination by NVD, are found to be defective, the credit will be allowed for reasonable shipping charges paid by the Buyer.
- (4) IN THE EVENT THAT THE ITEM APPEARS TO HAVE BEEN DAMAGED IN TRANSIT, NVD SHALL NOTIFY BUYER IN A TIMELY MANNER PERMITTING THE BUYER TO FILE A CLAIM AGAINST THE CARRIER.
- (5) In the event that, pursuant to paragraph (2) above, NVD elects not to repair or replace any such defective item, NVD will refund the purchase price and NVD shall have no further obligation hereunder with respect to the defective item.
- (6) This warranty does not extend to any item which has been subject to misuse, neglect, accident, operation outside of the item's maximum/minimum ratings, incorrect wiring, improper application or installation, use in violation of instructions furnished by NVD, or has had its serial number or any part thereof altered, defaced or removed. Returned items, which are found by NVD to be within original product specifications, will be subject to a handling charge of 10% of the original purchase price billable to the Buyer.
- (7) NVD will be permitted upon request to observe Buyer's incoming inspection testing procedures at any time that is mutually acceptable.
- (8) Except as to title, NVD's liability arising out of the supplying or use of these items, whether or not within warranty, shall not in any case exceed the limitations herein stated nor shall NVD be liable for any general, special or consequential damages for any loss, damage or expense directly or indirectly arising from the use or inability to use the items, or any inability to use them either separately or in combination with any other equipment, or from any other cause. THE WARRANTY HEREIN PROVIDED FOR SHALL BE BUYER'S EXCLUSIVE REMEDY AND IS EXPRESSLY IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE.

Expressed Specific Product Warranties

- (1) **Parts:** All new parts are covered under the above listed warranty conditions for one year after the date of sale.
- (2) **Image Intensifiers:** All new Harris image intensifiers sold by NVD are covered under the above listed warranty conditions for one (1) year after the date of sale. All new L3 image intensifiers sold by NVD are covered under the above listed warranty conditions for two (2) years after the date of sale. All new Photonis image intensifiers sold by NVD are covered under the above listed warranty conditions for one (1) year after the date of sale.
- (3) **NVD Systems:** Unless otherwise expressed, the following NVD manufactured systems sold by NVD are covered under the above listed warranty conditions for the following time period: The NVD-PVS-14, NVD-PVS-7, NVD-MICRO, and all models of the NVD-BNVD series will have a ten year warranty after the date of sale;; The NVD-740/760 will have a two year warranty after the date of sale.
- (4) **Other Systems:** Unless otherwise expressed, all new systems sold by NVD, which are manufactured by other companies, are covered by the manufacturer's original warranty. Specific manufacturer's warranty periods for those products are listed either on NVD's product literature sheets or on that product's web page located at www.nvdevices.com.



PD-500106 Rev. E
18 MARCH 2021

BUSINESS PROCEDURE DOCUMENT

RECEIVING OF MATERIALS AND PRODUCTS

NIGHT VISION DEVICES, INC.

**5583 ROOSEVELT STREET
WHITEHALL, PA 18052**

Revision Status

Revision	Date	Section	Paragraph	Summary of change	Authorized by
-	03/15/16			Initial Release	Bill Grube
A	03/24/17	1,5 & 8	1.1, 5.3.1, 5.3.2, 5.7, 8.1, 8.2	Updated company name, logo, and steps for inspected vs. std. purchased items, rel. docs.	Bill Grube
B	10/11/17	5	5.4, 5.5	Clarify blank receiver form use for customer repair returns	Bill Grube
C	03/20/18	5	5.9	Identification of "shelf life" items / FIRST IN-FIRST OUT concept	Bill Grube
D	08/26/19	5 & 6	5.5-5.8	Updated to include change/addition of LOT Tracking on items received from Vendors	Bill Grube
E	3/18/2021	5 & 6	VARIOUS	LOT # assignment - how / when Receiving Log is updated - Customer Property identification - removed "form examples"	Bill Grube



1.0 Purpose

1.1 This procedure describes the receiving of materials and/or products that are resold and/or used in the manufacture of Night Vision Devices' products.

2.0 Responsibility

2.1 Shipping and Receiving Department for acceptance, Quality Assurance for inspection and Accounting for receiving and inventory.

3.0 Definitions – N/A

4.0 Equipment/Software

4.1 SAGE MAS 100 Accounting Software Program

5.0 Instructions

5.1 The materials and/or products are delivered by shipping carrier (IE. UPS, FEDEX, DHL, Freight carrier).

5.2 Packages are visually inspected for external damage before items are signed for from the carrier. This is done to note damage for future insurance claims.

5.3 Packages are opened AND incoming shipping document(s) / receiver(s) / invoice(s) / CoC's are reviewed for basic information...

- SUPPLIER
- PART NAME / PART NUMBER
- QUANTITIES SHIPPED

5.3.1 If a shipping document / receiver / packing list / CoC (if required), was not provided with the received item(s), notify PURCHASING and they will contact the vendor and request one.

5.3.2 ENTER COMPLETE and RELEVANT information of received shipment on RECEIVING LOG. (ad1\Public\ISO 9001 2008 2015\Records\Administration Operations\Receiving Log)



- 5.3.3 Place "DATE / RECEIVED" stamp w/ individual' on shipping document. (this indicates the products have been entered into the RECEIVING LOG.



- 5.3.4 VERIFY "kind & quantity" of items received and ASSIGN LOT NUMBER

5.3.4.1 **ALL** received products are assigned a **LOT NUMBER** using the following format:

DATE: Year, Month, Day, - last two digits of CURRENT YEAR, two digit MONTH and two digit DAY (ie: JULY 29, 2019... "**190729**CARRG")

VENDOR: Three Character Vendor Code – (ie CARSON "**190729****CARRG**")

REVISION: this is a constant and will NEVER CHANGE, indicates Revision of Drawing / Part ordered - (ie 190729CARR**G**)

REVISION VERSION CHARACTER: – character or letter of the drawing or revision of part number that was ordered under the Purchase Order / received shipment – (ie REV G... "**190729CARRG**")

NOTE: Revision Version Character can be a LETTER or CHARACTER (ie REV " - ")
If the revision is unknown, then the letters **NA** will be used.

EXAMPLE: July 29, 2019, Vendor-CARson, R - Revision, Revision Version Character **G**
The lot number would be... **190729CARRG**



5.3.5 Lot number(s) are recorded on the incoming shipping document / receiver for each part type received.

5.3.6 Fill out Daily Count Sheet (Form 400192) and place with bagged / boxed product.

NOTE: for items that are listed on PURCHASED PART LIST – QUALITY CONFORMANCE INSPECTION (WI-500201) – DO NOT fill in total quantity on Daily Count Sheet, this will be accomplished after inspection is complete in the event of any fall-out.

5.3.7 Enter complete information LOT TRACKING LABEL (Form 400191) and affix to bagged / boxed product.

5.3.7.1 IF the item(s) **ARE** listed on the PURCHASED PART LIST – QUALITY CONFORMANCE INSPECTION (WI-500201), refer to and follow PROCEDURE FOR INSPECTION OF PURCHASED COMPONENTS AND PRODUCTS (WI-500200).

5.3.7.2 If parts are **NOT** on the PURCHASED PART LIST – QUALITY CONFORMANCE INSPECTION (WI-500201), verify quantities and annotate on shipping documents.

5.3.7.2.1 Place **ROUND INSPECTED STAMP** on shipping document / receiver with employee's initials who checked the items and forward documents to ACCOUNTING.



5.3.7.2.2 Place parts in appropriate WAREHOUSE / PRODUCTION Inventory area.

NOTE: ANY Shipping / Receiving paperwork received by Accounting / Billing that does NOT have an "INSPECTED" stamp on it, shall be rejected and given back to Receiving / Incoming Inspection personnel for proper documentation.



5.3 REPAIR / CUSTOMER PROPERTY

5.4.1 A BLANK RECEIVER (Form 400114) is filled out completely for ALL REPAIRS and CUSTOMER PROPERTY. This is to include a date stamp to ensure timely repairs. Once completed, the Receiver Form (Form 400114) should accompany the system(s) throughout the evaluation / repair process for positive identification and work performed.

5.4.2 An ORANGE, CUSTOMER PROPERTY TAG (Form 400168) will be filled out and affixed to EACH SYSTEM for positive identification.

5.4 SHELF-LIFE ITEMS

5.5.1 Any items received that have a “shelf life” assigned to them by the manufacturer or supplier shall have the following steps accomplished to ensure a “FIRST IN – FIRST OUT” manner of exhausting inventory.

5.5.2 ASSIGN unique ID to item and RECORD shelf-life expiration date on Consumable Shelf-Life Record (located – ad1\Public\ISO 9001 2008 2015\Records\Administration Operations\Consumable Shelf Life Records)

5.5.3 RECORD the SHELF-LIFE expiration date on the outer most packaging so it is easily identified by NVD personnel and can not easily wear off.

5.5.4 PLACE items into physical inventory in a manner so that the CLOSEST SHELF-LIFE EXPIRATION DATE items are used FIRST (ie closest expiration date items are placed in FRONT of items that have later expiration dates).



PD-500106 Rev. E
18 MARCH 2021

6.0 Attachments – Forms and Records for this procedure are attached below.

- 6.1 Receiving Log (located - ad1\Public\ISO 9001 2008 2015\Records\Administration Operations\Receiving Log)
- 6.2 Form 400114, Blank Receiver
- 6.3 Form 400191, Product Lot Tracking Labels
- 6.4 Daily count sheet Form 400192
- 6.5 Consumable Shelf Life Record (located – ad1\Public\ISO 9001 2008 2015\Records\Administration Operations\Consumable Shelf Life Records)

7.0 Related Documents

- 7.1 WI-500200, PROCEDURE FOR INSPECTION OF PURCHASED COMPONENTS AND PRODUCTS
- 7.2 WI-500201, PURCHASED PART LIST-QUALITY CONFORMANCE INSPECTION



PD-500107 Rev. A
29 March 2017

BUSINESS PROCEDURE DOCUMENT

SHIPPING PROCEDURES

NIGHT VISION DEVICES, INC.

**542 KEMMERER LANE
ALLENTOWN, PA 18104**

Revision Status

Revision	Date	Section	Paragraph	Summary of change	Authorized by
-	07/15/16			Initial Release	Bill Grube
A	3/29/17	5.1	5.1.2, 5.1.4, 5.1.5	Updated company name, logo, changed sales order to picking sheet	Bill Grube



1.0 Purpose

- 1.1 This procedure describes the shipping of materials and/or products that are manufactured by Night Vision Devices or that are purchased and resold.

2.0 Responsibility

- 2.1 Shipping and Receiving Department

3.0 Definitions – N/A

4.0 Equipment/Software – N/A

5.0 Instructions

5.1 Domestic Shipping

- 5.1.1 A product that has gone through the production procedures and final Quality Assurance inspections is moved to the shipping table.
- 5.1.2 Then the picking sheets and product(s) are compared for accuracy and any remaining line items are then pulled from stock to complete the order.
- 5.1.3 Weight and box dimensions are measured for the shipment.
- 5.1.4 The picking sheets are given to Accounting for processing.
- 5.1.5 Picking sheets that do not go through production are given to Shipping to pull the parts from stock, followed by steps 5.1.3 and 5.1.4 above.
- 5.1.6 Shipping packs the box and readies it for shipment.
- 5.1.7 The box is picked up by a carrier and shipped.

5.2 International Shipping

- 5.2.1 Follow the same procedure as above except after step 5.1.3, the information is given to Export Compliance for preparation of export shipping labels and export documents.
- 5.2.2 Once labels and documents are received back from Export Compliance, Shipping packs the box and readies it for shipment.



PD-500107 Rev. A
29 March 2017

5.2.3 The box is picked up by a carrier and shipped.

6.0 Attachments – N/A

7.0 Forms and Records – N/A

8.0 Related Documents – N/A



PD-500108 Rev. B
27 August 2019

BUSINESS PROCEDURE DOCUMENT

PROCEDURE FOR PRODUCTION SCHEDULING

NIGHT VISION DEVICES, INC.

**542 KEMMERER LANE
ALLENTOWN, PA 18104**

Revision Status

Revision	Date	Section	Paragraph	Summary of change	Authorized by
-	08/12/16			Initial Release	Bill Grube
A	04/10/17			Updated company name, logo	Bill Grube
B	08/27/19	5	5.3.2	Updated Procedure to reflect LOT Tracking added for Configuration Management.	Bill Grube



1.0 Purpose

- 1.1. The purpose of Production Scheduling is:
 - 1.1.1. To schedule the building and shipment of customer orders in a timely manner.
 - 1.1.2. To ensure all systems are built per customers contract/purchase order.
 - 1.1.3. To relay back to the Inventory Manager the current needs for builds and future requirements.

2.0 Responsibility

- 2.1. The Operations Manager is responsible for scheduling system builds for current orders.
- 2.2. The Production Manager is responsible for relaying the status of builds back to Operations and any issues with regard to production.
- 2.3. The Shipping Manager is responsible for making Operations aware of any delays in orders that have occurred due to shipping issues.
- 2.4. Accounting is responsible for relaying any issues with customer accounts (i.e. partial payments, late payments, credit holds, etc.) that could result in delays of shipments to the customer.

3.0 Definitions – N/A

4.0 Equipment/Software

- 4.1. SAGE MAS 100 Inventory Management Module
- 4.2. SAGE MAS 100 Bill of Materials Module
- 4.3. SAGE MAS 100 Sales Order Module

5.0 Instructions

5.1. Production Schedule

- 5.1.1. Obtain a copy of the current back log from the SAGE MAS 100 Accounting System.
- 5.1.2. Ensure build(s) are being built to current or requested parts revision per the customer contract or purchase order.



5.2. Inventory Comparison

- 5.2.1. Compare inventory to the current production schedule and add, remove or change schedule accordingly to accommodate updated and/or new orders.

5.3. Production Schedule

- 5.3.1. Put builds in order of priority based on Department of Defense DO ratings if applicable, priority, and First in First Out (FIFO).
- 5.3.2. Give picking sheets to the Production Manager to start building systems in accordance with Lot/Serial procedures.

6.0 Attachments - Forms and records are attached at the end of this procedure.

7.0 Forms and Records

- 7.1** Sales Order Picking Sheets pdf file
- 7.2** Open Sales Order Status xls file
- 7.3** Bill of Materials Picking Sheet pdf file

8.0 Related Documents – N/A



PD-500108 Rev. B
27 August 2019

ATTACHMENTS

7.1 Sales Order Picking Sheets

Picking Sheet				Page:	1
Warehouse: 000		NIGHT VISION DEPOT			
Order Number: 0023050		Order Date: 10/21/2019			
Customer Number: ADSI001		Salesperson: JL			
Sold To:			Ship To:		
ADS INC 621 LYNNHAVEN PKWY SUITE 400 VIRGINIA BEACH VA 23452			ADS Aviator-2 Warehouse 2512 AVIATOR DRIVE VIRGINIA BEACH VA 23453		
Confirm To:					
Customer P.O.	Ship VIA	F. O. B.	Terms		
1055464	UPSGROUND	DESTINATION	NET 30 DAYS		
Location	Item Number	Unit	Ordered	Shipped	Backordered
	A3144264	EACH	50		
PVS-7/14 SACRIFICIAL WINDOW			Lot Number:		
	A3256347	EACH	32		
PVS-14/6015 HEADMOUNT ADAPTER					

7.2 Open Sales Order Status Schedule

Updated 10-08-2019		Night Vision Devices Sales Order Status Report								
Sales Order Number	Date Order Received	Customer Requested Delivery Date	Customer	System	Qty	Schedule Dates		Tube Status	Parts Status	Notes
						Production Start	Anticipated Delivery Date			
22214	4/22/2019	11/18/2019	USAF AFRC 442 OSF/OSL	Bino Subassembly	3	N/A	10/25/2019	N/A	PO 2006371	
22518	6/13/2019	11/30/2019	PRAMACOM	BNVD-SG-MINI-WHP	7					EUS & DSP-83 received 08-19-2019. Per Brenda we need to wait to see what FOM they might get approved for before building/ordering tubes. License received 09-30-2019 - Approved for FOM 1800 Gated.
22544	6/20/2019	10/21/2019	Leonardo	NVD-BNVD-SG HOUSING 1020nm IR Hopelite NVG Refocus Cover BNVD Battery Pack Assembly	90 181 91	10/14 Testing and Board alterations	10/25/2019		Boards Arrived 10/14 Waiting on Batt Packs from Adam (Priority)	Estimated Delivery on Battery Packs 11-15-2019. Have 50 in stock for this order.
22546	6/20/2019	10/20/2019	Leonardo	18MM, P45, 4G, FOM-1800, PVS 14EGAC	180	N/A	10/25/2019	10/25/2019	N/A	To be dropped shipped from Photonix Original Date was 10-29-2019. Per Photonix 10-18-2019 tubes will be shipping now 10-25-2019.
22647	7/15/2019	10/15/2019	Quantico Tactical	NVD-PVS-14-FOM Gated, FOM 1600, Green Phosphor	88	10/28/2019	11/1/2019	PO 2006455 - Delivery 10-25-2019	In Stock - Carson Kits 10-09-2019 Kits sent to production to prep for tube arrival.	See Comments
22650	7/10/2019	9/20/2019	LEONARDO	18MM, P45, 4G, FOM-1800, PVS14EGAC	16	N/A	12/16/2019	PO 2006431	N/A	
22658	7/17/2019	10/16/2019	Quantico Tactical	Clip on NV Weapons Sight w/ White	15	10/1/2019	11/15/2019	N/A		



PD-500108 Rev. B
27 August 2019

7.3 Bill of Materials Picking Sheet

Page: 1

Picking Sheet

Warehouse: 000 NIGHT VISION DEPOT

Bill Number: BNVD-LWR-S1

Description: BNVD LOWER STAGE 1

Picked By: _____

Date Picked: _____

Option Codes:

Quantity: 1

Extended Quantity: 1

Location	Component Item Code/Description	Unit of Measure	Quantity Per Bill	Total Quantity	Quantity Picked	Short
450127	MONOCULAR, RT, MACHINED FROM M	EACH	1	1	_____	_____
Lot/Serial: _____						
450129	MONOCULAR, LT, MACHINED FROM M	EACH	1	1	_____	_____
Lot/Serial: _____						
450133	BRIDGE, MACHINED FROM MOLDED	EACH	1	1	_____	_____
Lot/Serial: _____						
450144	PIVOT PIN, FRONT	EACH	2	2	_____	_____



PD-500112 Rev. C
10 March 2020

BUSINESS PROCEDURE DOCUMENT

PROCEDURE FOR REPAIR AND MAINTENANCE SERVICES

NIGHT VISION DEVICES, INC.

**542 KEMMERER LANE
ALLENTOWN, PA 18104**

Revision Status

Revision	Date	Section	Paragraph	Summary of change	Authorized by
-	07/29/16			Initial Release	Bill Grube
A	04/10/17	5, 7	5.2.1, 5.3.3- 5.3.4, 5.3.9, 5.3.10, 7.5, 7.6	Updated company name, logo, added customer info. tag, updated evaluation, added Intl. Repair section	Bill Grube
B	8/1/17	5, 7, 8	5.3.5, 5.3.10.4, 7.7, 7.8, 8.1	Updated for new quote forms and quote number convention	Bill Grube
C	3/10/20	5	5.1.4, 5.1.5, 5.1.6, 5.2.3	Repair Authorization Log	Bill Grube



1.0 Purpose

1.1 This procedure describes Repair Services and Maintenance Procedures.

2.0 Responsibility

2.1 The Repair and Maintenance department provides the customer with service and maintenance of night vision products supported by Night Vision Devices.

3.0 Definitions – N/A

4.0 Equipment/Software

4.1 Hand tools found on each work bench

4.2 Specialized tools if system requires them

4.3 Hoffman 126A Test Set

4.4 Purge Kit

4.5 SAGE MAS 100 Accounting Software Program

5.0 Instructions

5.1 Description of Step 1

- 5.1.1 The customer calls or Emails Night Vision Devices with issue of their Night Vision Device.
- 5.1.2 Night Vision Devices identifies the Night Vision Device the customer has.
- 5.1.3 The issue with the device is noted.
- 5.1.4 If the device is supported by Night Vision Devices, the customers contact information is taken and a Repair Authorization Number is issued to the customer to send the device in for evaluation. Shipping instructions are issued at this time.
- 5.1.5 Repair Authorization number is created either from MAS or a generic number is created by the associate. The following method is used to



create the generic Repair Authorization Numbers. If the call was received on 3/10/20 the Authorization number would consist of NVD and the date backwards with the initials of the associate issuing the RMA. If the associate issues multiple repair authorization numbers they will include a -1, -2 etc. Example: NVD-201003TS, NVD-201003TS-1, NVD-201003TS-2

- 5.1.6 The Repair Authorization Number is recorded on the Repair log with the customers information filling out the different fields required. This Log is located on the Public drive under the ISO folder with the KPI's.
- 5.1.7 Z:\ISO 9001_2008_2015
Implementation\Records\Administration_Operations\Key
Performance Indicators

5.2 Description of Step 2

- 5.2.1 The device arrives at the NVD Facility, is received by the Receiving Department, and an Orange Customer Property Tag, Form 400168, is attached to the product.
- 5.2.2 The Receiving Department turns the paperwork and items over to the Service Department.
- 5.2.3 The Service Department will reference the log if any customer information is missing inside the box. The Service Department will track what Repair Authorization numbers have been received.

5.3 Description of Step 3

- 5.3.1 Evaluation of the Night Vision Device begins.
- 5.3.2 The technician pulls the proper evaluation sheet from Forms and Records to proceed.
- 5.3.3 The device is fully evaluated, looking over every individual part and piece of the system for failures, including Resolution and Gain on the Hoffman 126A Test Set.



- 5.3.4 The information is documented on the correct form as to the issues and parts that need to be replaced.
- 5.3.5 A quote for repair is prepared and either transmitted via phone call, email, or a formal quote depending upon how the customer requires it to be presented for approval. For formal quotes and for multiple system repair quotes, the Domestic Quote Form, 400170 can be used, following the convention for establishing the quote number according to paragraph 5.1.1.4 of the Quality Manual, PD-500118. Before transmittal to the customer, the formal quote is saved as a PDF file and a copy saved on Public Drive. Typically retail customers receive the quote over the phone, while Law Enforcement customers and Dealers receive it through email. Some Department of Defense customers require a formal quote.
- 5.3.6 If the customer decides not to repair the device, the customer is responsible for the Evaluation Fee. If the customer decides to repair the device, the Evaluation Fee will go towards the Labor, Cleaning, Nitrogen Purging and final testing of the device.

5.3.7 Authorization

- 5.3.7.1 If the customer is a retail customer, a verbal agreement is acceptable over the phone along with credit card and return shipping information.
- 5.3.7.2 Law Enforcement customers automatically receive Net 30 terms and we would require a Purchase Order (PO) or agreement in writing, agreeing to the price quoted. If the customer wants to pay by credit card, a verbal agreement is acceptable.
- 5.3.7.3 Dealer / Distributor authorizations for repair/maintenance depend on the terms set up in their individual agreements regarding payment. A verbal agreement or PO may authorize the work, depending on the payment type.

5.3.8 Repair / Maintenance Action



5.3.8.1 At this time, a Sales Order is generated in SAGE MAS 100 for the repair. This allows the parts to be accounted for with respect to inventory and gives accounting the ability to know what to charge the customer for the repair.

5.3.8.2 Repair of the Night Vision Device is performed. The device is Nitrogen purged upon completion if it has the features and provisions for this process.

5.3.8.3 Using the Hoffman 126A test set, the device is tested for full function of the system and quality of the repair, including setting collimation for Dual Tube Binoculars.

5.3.8.4 The completed repair is checked by Quality Assurance for the quality of the repair and that the device functions according to its' specifications.

5.3.9 Return of Product

5.3.9.1 The repaired device is turned over to Shipping for a weight and dimensions assessment for shipping.

5.3.9.2 Shipping turns over the paperwork to Accounting for billing and creation of a UPS or FED EX Label.

5.3.9.3 The repaired device is returned to the customer.

5.3.10 International Repairs

5.3.10.1 The customer calls or emails that they have a unit to be repaired. The Email should have a serial number of unit, when it was purchased, and the nature of the problem.

5.3.10.2 Export Compliance receives the RMA number from Operations and completes the Proforma invoice. The Proforma invoice must include the ITAR exemption for repairs 22CFR 123.4 (a) (1).

5.3.10.3 Export Compliance emails the Proforma invoice to the customer and to the freight forwarder. The freight forwarder coordinates the return of the unit for repair and supplies Export Compliance with the import certificate.



PD-500112 Rev. C
10 March 2020

5.3.10.4 After the unit arrives, the steps in 5.3.8 for Repair / Maintenance Action are followed. To be in compliance with the provisions of the exemption, three things can occur with regard to repairing the unit:

5.3.10.4.1 Repair the unit to its original state – the unit cannot be upgraded. The Business Development Manager advises the customer of the cost by preparing a quotation using the International Quote Form, 400171, following the convention for establishing the quote number according to paragraph 5.1.1.4 of the Quality Manual, PD-500118. The quote is saved as a PDF file, and emailed to the customer. A PO is provided by the customer if they select this option.

5.3.10.4.2 If the unit cannot be repaired and is determined to be BER (Beyond Economical Repair), then the customer can purchase a replacement of the same unit (one-for-one) replacement. The Business Development Manager advises the customer of the cost by preparing a quotation using the International Quote Form, 400171, following the convention for establishing the quote number according to paragraph 5.1.1.4 of the Quality Manual, PD-500118. The quote is saved as a PDF file, and emailed to the customer. A PO is provided by the customer if they select this option.

5.3.10.4.3 If the unit cannot be repaired and the customer does not want to purchase another unit, the unit is returned to the customer “as is”.

5.3.10.5 Once a repair/decision has been made, Shipping notifies Export Compliance of the shipment details including the new serial number if the unit is being replaced, or the original serial number if it is being returned having been repaired or “as is”.

5.3.10.6 Export Compliance completes the export paperwork, to include the import certificate number and ITAR exemption, and sends it to Shipping, following the steps of 5.3.9 for Return of Product.

6.0 Attachments – N/A

7.0 Forms and Records

7.1 Generic Evaluation Sheet, Form 400105



PD-500112 Rev. C
10 March 2020

7.2 Procedure#: AN/PVS-14, Form#: QC-14-01A

7.3 Procedure#: AN/PVS-5C, Form#: QC-5C01B

7.4 Procedure#: AN/PVS-4, Form#: QC-PVS4-01

7.5 Procedure#: AN/PVS-7, Form#: QC-7B/D-05A

7.6 Customer Property Tag, Form 400168

7.7 Domestic Quote Form, Form 400170

7.8 International Quote Form, Form 400171

8.0 Related Documents

8.1 Quality Manual, PD-500118



**North Central Texas
Council Of Governments
Night Vision Solutions
Market Basket 2021**



ABOUT NIGHT VISION DEVICES

Night Vision Devices is a premier manufacturer of night vision systems. Most of the systems we manufacture use full MIL SPEC components and are the same versions fielded by the US Department of Defense. We are a leader in the production of night vision tactical equipment; specializing in the design, product development and large-scale production of Image Intensified systems.

Night Vision Devices provides customers with honest and reliable information, quality products and services at the best prices available. Our highly experienced sales team and well-rounded

product line ensure that our customers purchase the system that will be most useful in fulfilling their requirements.

Specifications subject to change without notice. Export of the commodities described herein is strictly prohibited without a valid export license issued by the U.S. Department of State Office of Defense Trade Controls prescribed in the International Traffic in Arms Regulation (ITAR), Title 22, Code of Federal Regulations, Parts 120-130. All orders must be accompanied by our End User Statement.



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TABLE OF CONTENTS

PAGE	4	GENERATIONS & WHITE PHOSPHOR
	5	IMAGE INTENSIFIER INFORMATION
	6	PARTS/REPAIRS
	7	PVS-14 CONVERSION
	8	PVS-14 MONOCULAR
	9	PVS-14 VS. L3 PVS-14
	10	BNVD BINOCULAR
	11	BNVD VS. PVS-15
	12	UL BNVD-SG BINOCULAR
	13	UL BNVD-SG VS. PVS-31
	14	MINI B AA 18MM BINOCULAR
	15	PVS-7 GOGGLE
	16	AN/PVS-30 WEAPON SIGHT
	17	PVS-30 VS. PVS-27 VS. CNVDLR
	18	COTI CLIP ON THERMAL IMAGER
	20	ECOTI CLIP ON THERMAL IMAGER
	22	DBAL A3 LASER
	23	DBAL I² LASER
	24	MX10130 IMAGE INTENSIFIER
	25	MX11769 IMAGE INTENSIFIER
	26	ACCESSORIES
	27	IR PATROL M300W THERMAL MONOCULAR
	28	IR PATROL LE100 THERMAL MONOCULAR

GENERATIONS

Generations refer to differences in performance over the years. Since its creation, night vision was developed to allow people to see better and sharper images in low light areas.

Gen I: Developed in the 1960s, Gen I systems utilized the basic principles which will amplify the existing light several thousand times letting you clearly see in the dark. These Gen I systems provide a bright image, however they are not very clear or distinguishable. Gen I lifespan 1000 hours.

Gen II: Developed in the 1970s, Gen II offered a substantial increase in performance over Gen I systems. This performance enhancement was obtained by the addition of a micro-channel plate, commonly referred to as a MCP. The MCP works as an electron amplifier and is placed directly behind the photocathode. The MCP consists of millions of short parallel glass tubes. When the electrons pass through these short tubes, thousands more electrons are released. Gen II lifespan 2000 to 4000 hours.

Gen III: Developed in the 1980s, Gen III systems offer the highest clarity and performance in extreme darkness that is currently available. Gen III systems use a gallium arsenide photocathode film to increase their performance over Gen II systems. In the last 10 years or so, Gen III systems have had upgrades such as thin films and gated power supplies (Pinnacle) incorporated into them, which have even further enhanced the performance of Gen III tubes. This makes them the highest performance image intensifiers currently available. Gen III lifespan 12,000+ hours.



Gen IV: When upgrades were made to Gen III tubes, such as gated power supplies and the use of un-filmed or thin filmed photocathode, the manufacturers sought to label these enhancements as Gen IV image intensifiers. However the Department of Defense did not see these enhancements as substantial enough improvements for the creation of a new Gen IV category. Nonetheless some companies still try to use the Gen IV moniker as a marketing ploy to charge more for the same exact Gen III image intensifiers that are already currently available at a substantially lower cost from other manufacturers.



Gen 3 traditional phosphor/P-43



Gen 3 white phosphor/P-45

WHITE PHOSPHOR

Traditional image intensifier tubes use a P-43 phosphor screen output, resulting in the yellow-green image that has become the signature view through most Gen III night vision technology. The White Phosphor tube uses a P-45 phosphor screen, which yields an alternate coloration closer to black and white imagery. This change in color has been reported to enhance overall object recognition while providing contrast sensitivity equivalent to green phosphor.

CAPABILITIES

Founded in 2005, Night Vision Devices (NVD) has grown to be the third largest manufacturer within the USA for Image Intensified (I²) Night Vision Products. With over 35,000 square feet of production space, NVD has the capability to provide custom solutions of any size.

Each NVD system product line has been rigorously tested prior to market entry and have been validated through extensive tactical operator use. NVD adheres to the most strenuous military testing processes, quality assurance and production-controlled procedures in the industry. As an example, the organization maintains a Quality Management System that provides compliance in accordance with the requirements established via ISO 9001:2015 for the design, production and marketing of electro-optical systems.

IMAGE INTENSIFIERS

With our expansive capabilities and strategic partnerships, we are able to custom build any of our NVD manufactured products with **Image Intensifiers** from either **Elbit Systems of America**®, **Photonis**® or **L3Harris**®. This includes green and white phosphor, thin or un-filmed, and 16mm or 18mm image tubes.



The MX10160 type is an image intensifier available in both 16mm or 18mm. It is found in the AN/AVS-6 & 9 Aviators Night Vision Imaging Systems (ANVIS), most weapon sights, and many different goggles and monocular systems.



The MX10130 type is an 18mm image intensifier. It is used in the AN/PVS-7, B, C & D binocular series of night vision goggles along with a few weapon sights.



The MX11769 type is an image intensifier available in both 16mm or 18mm. The MX11769 is the most widely used image intensifier and is used in the AN/PVS-14 night vision monocular and several weapon sights and goggles.

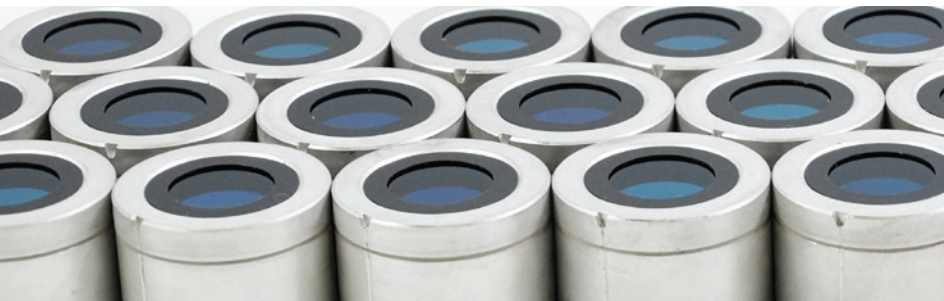


FIGURE OF MERIT (FOM)

Each Image Intensified Night Vision system is available in several different FOM ratings. The FOM, or Figure of Merit, available is variable depending on what US DOS permits for your country's buy.



PARTS AND REPAIRS

Night Vision Devices is one of the largest stocking distributors and manufacturers of night vision systems, image intensifiers and parts. We carry parts in stock for almost every major night vision system ever fielded by the US Military.

With more than 30 combined years experience in the evaluation and repair of American Made night vision systems, our highly trained staff can repair and service the following systems: AN/PVS-4, AN/TVS-5, AN/PVS-5A/B/C, M912/915, AN/PVS-7A/B/C/D, AN/PVS-14, AN/PVS-15, AN/PVS-18, and AN/PVS-23, along with their many commercial derivatives.

Due to our large parts inventory and highly trained staff, we can turn most repairs around in 1-2 weeks using the same components used during original manufacture. Some of these systems include the AN/PVS-4, AN/TVS-5, AN/PVS-5A/B/C, AN/PVS-7A/B/C/D, AN/PVS-14, AN/AVS-6 and AN/AVS-9. We utilize the Hoffman ANV-126, TS-3895/UV and the TS-4348/UV test set for evaluation and repair of all of the night vision systems we service. Use of these test sets ensures the utmost in system performance, calibration and compliance to MIL SPECS.

All repairs are made using the same high quality parts most systems were originally manufactured with and upgrades are also available for most systems. All repairs must pass minimum performance and image quality criteria and where applicable, all systems are fully nitrogen purged.



CONTACT US FOR AN RMA NUMBER:

610-395-9743 ■ SERVICE@NVDEVICES.COM ■ NVDEVICES.COM



PVS-14 TO BNVD-SG CONVERSION

NVD exclusively offers the ability to convert two PVS-14 monocular systems into a single fully collimated MILSPEC BNVD-SG binocular product. The depiction highlights the logistically simple 4-step “PVS-14 to Binocular” conversion process. This capability can be implemented seamlessly by NVD’s Production Engineering personnel. The result provides improved ergonomics; operational performance features and a more streamlined and simplified maintenance/sustainment model.



STEP 1

The customer provides two PVS-14s



STEP 2

Disassemble PVS-14s and evaluate all parts and components



STEP 3

Install PVS-14 parts into BNVD-SG housing



STEP 4

Completed BNVD-SG and remaining PVS-14 parts returned to inventory

PVS-14 NIGHT VISION MONOCULAR



SPECIFICATIONS

EYE RELIEF:	25 MM
POWER SOURCE/LIFE:	(1) AA-SIZE BATTERY/50+ HRS
FOCUS RANGE:	9.8" TO INFINITY
SUBMERSIBLE:	66 FEET
MAGNIFICATION:	ONE POWER (1X)
FIELD OF VIEW:	40°
DIOPTER ADJUSTMENT:	-6 TO +2
OBJECTIVE LENS:	27MM, F/1.2
WEIGHT:	307 G (10.8 OZ) W/O BATTERIES
DIMENSIONS:	4.5" X 2.5" X 2.75"

FEATURES

- » TEN YEAR WARRANTY
- » SINGLE AA BATTERY USAGE
- » SUBMERSIBLE TO 66 FEET
- » INFRARED LED INDICATOR
- » HIGH LIGHT CUTOFF
- » LOW BATTERY LED INDICATOR
- » GAIN CONTROL

The **NVD-PVS-14 Night Vision Monocular** is available with Green or White Phosphor Image Intensifiers. Head or helmet mounted, the PVS-14 allows the user to retain their night adapted vision in one eye while viewing their surroundings through the illuminated eyepiece of the PVS-14. The new battery housing completes the perfect package by allowing the user to power off the unit when in an upright position and power on when flipped down.

Another strength is its ability to be weapon mounted behind most collimated daylight aimers and Reflex sights such as the ACOG, Aimpoint and EO Tech systems. This allows the user the ability to use their PVS-14 both as a night vision monocular for increased mobility and tactical awareness and as a short range weapon sight.

Gain control gives the user the ability to increase or decrease the tube gain. Under extremely dark conditions, gain control allows the user to adjust the gain upward, giving a better image. Under high light conditions, details can be washed out due to an excess of light. Lowering the system gain can allow those details to be better seen. Additional features of the PVS-14 include an infrared LED with LED indicator and a low battery indicator.

With our expansive capabilities and strategic partnerships, we are able to custom build any of our NVD manufactured products with Image Intensifiers from either Elbit Systems of America®, Photonis®, or L3Harris®. This includes green and white phosphor and thin or un-filmed image tubes.

This system complies with MIL-PRF-49324(CR), MIL-PRF-49427(CR) and MIL-STD-810G.



Standard accessories included with each NVD-PVS-14: Soft Carry Case, Operator's Manual, (2) AA Batteries, Demist Shield, Sacrificial Filter for Objective Lens, Head/Helmet Mount Adapter (J-arm), Head-mount Assembly with 3 Brow Pads, Lens Tissue, Neck Cord, Eye-Cup, and Front Lens Cap.

Optional Accessories: Picatinny Rail Weapon Mount, Shuttered Eyeguard, Hard Case, 3X Magnifier, 5X Magnifier, Compass Assembly, PASGT Helmet Mount, MICH Helmet Mount, and Camera Adapter.



COMPARATIVE DATA SHEET

NVD PVS-14

L3 PVS-14

WEIGHT	307 GRAMS W/O BATTERY	352 GRAMS W/O BATTERY
DIMENSIONS: 4.5"L X 2"W X 2.25"H	✓	✓
BATTERY LIFE: APPROX. 50 HRS @ ROOM TEMP.	✓	✓
POWER: ONE (1) STANDARD AA BATTERY	✓	✓
WARRANTY	10 YEARS	1 YEAR
OBJECTIVE FOCUS: 9.8" TO INFINITY	✓	✓
DIOPTER: -2 TO +6	✓	✓
SUBMERSIBLE: 66' FOR 2 HRS	✓	✓
FIELD OF VIEW: 40° +/- 2°	✓	✓
KIT INCLUDES:	PVS-14 ADAPTER (J-ARM) EYECUP DAYLIGHT FILTER (LENS CAP) SACRIFICIAL WINDOW DEMIST SHIELD NECKCORD SOFT CARRY CASE TWO AA BATTERIES LENS CLEANING TISSUE OPERATOR'S MANUAL HEADMOUNT ASSEMBLY	PVS-14 ADAPTER (J-ARM) EYECUP DAYLIGHT FILTER (LENS CAP) SACRIFICIAL WINDOW DEMIST SHIELD NECKCORD SOFT CARRY CASE TWO AA BATTERIES LENS CLEANING TISSUE MILITARY MAINTENANCE STANDARDS WARRANTY REGISTRATION CARD

BNVD NIGHT VISION BINOCULAR



SPECIFICATIONS

POWER SOURCE:	(1) AA-SIZE BATTERY
FOCUS RANGE:	9.8" TO INFINITY
OPERATION TIME:	20+ HRS, 1 ALKALINE BATTERY 40+ HRS, 1 LITHIUM BATTERY
MAGNIFICATION:	ONE POWER (1X)
FIELD OF VIEW:	40°
DIOPTER ADJUSTMENT:	-6 TO +2
EYE RELIEF:	25MM
WEIGHT (W/O BATTERY):	545 G (19.2 OZ)
DIMENSIONS:	4.3" X 4.2" X 3.3"

FEATURES

- » TEN YEAR WARRANTY
- » TACTICAL MONOCULAR CUTOFF
- » SUBMERSIBLE TO 66 FT UP TO 3 HRS
- » 40+ HOUR BATTERY LIFE WITH LITHIUM AA BATTERY
- » IR LED AND LOW BATTERY INDICATOR
- » POWER OFF THE UNIT WHEN IN AN UPRIGHT POSITION AND POWER ON WHEN FLIPPED DOWN

The **NVD-BNVD Binocular** is a dual tube night vision goggle with outstanding depth perception and supportability at an affordable price. Never before could you utilize the depth perception of a collimated dual tube goggle and the convenience of a monocular in one system without switching equipment.

With a total system weight of 545 grams, the BNVD Binocular is a Dual Tube Night Vision Goggle that provides enhanced depth perception and supportability at the most economical price point. The BNVD features a "Tactical Monocular Cutoff", which turns off power to each channel of the binocular whenever a channel is rotated up out of the users' line of sight. This eliminates stray light emitting from the monocular eyepiece, which would reveal the user to anyone else on the battlefield. The BNVD has an automatic system power cutoff whenever the BNVD is flipped up into the helmet mounted stow position, and then powers back on when it is flipped back down. NVD can customize builds for the BNVD with Image Intensifiers from either Elbit Systems of America®, Photonis® or L3Harris®. NVD can additionally deliver many system applicable accessories for end-user kit customization to meet every low-light requirement for ground mission applications. Like all NVD goggles, this system features a complete diopter focus of +2 to -6, and IR LED and a close focus of 9.8 inches (25 cm) and a 66 foot submersion capability.

With our expansive capabilities and strategic partnerships, we are able to custom build any of our NVD manufactured products with Image Intensifiers from either Elbit Systems of America®, Photonis® or L3Harris®. This includes green and white phosphor and thin or un-filmed image tubes. This system complies with MIL-STD 810G, MIL-PRF-A3256342A(CR) and MIL-PREF-49427(CR).



Standard accessories: Soft Carry Case, Demist Shields, Sacrificial Windows, IR Spot/Flood Lens, Dovetail Mounting Adapter, Lens Tissue, (2) AA Batteries, Operator's Manual & Card, Neck Cord, Eyecups, & Retaining Lens Covers.

Optional Accessories: Battery pack for 50+ hours of continual use for extended missions. See more optional accessories on page 26.



COMPARATIVE DATA SHEET

BNVD

PVS-15

WEIGHT	545 GRAMS W/O BATTERY	650 GRAMS W/O BATTERY
TACTICAL MONOCULAR CUTOFF	YES	NO
BATTERY LIFE (ALKALINE)	20+ HRS (1 AA BATTERY)	16+ HRS (1 AA BATTERY)
EXTERNAL BATTERY PACK (ALKALINE)	60+ HRS OPTIONAL BATTERY PACK (3 AA BATTERIES)	NOT AVAILABLE
WARRANTY	10 YEARS	1 YEAR
OBJECTIVE FOCUS	9.8" TO INFINITY	9.8" TO INFINITY
INTERNAL DIOPTR SETTINGS DIOPTR ADJUSTMENT	-6 TO +2 DIOPTRS	-6 TO +2 DIOPTRS
COMPATIBLE WITH 3X MAGNIFIERS	YES	NO
IR ILLUMINATOR	YES - BUILT-IN	YES - BUILT-IN
SUBMERSIBLE	66' FOR 3 HRS	66' FOR 2 HRS
FIELD OF VIEW - 40° +/- 2°	✓	✓
DIMENSIONS	4.3"L X 4.2"W X 3.3"H	4.6"L X 4.5"W X 3.6"H
ENVIRONMENTAL QUALIFICATION MIL-STD-810G	✓	✓

UL BNVD-SG WHITE PHOSPHOR



SPECIFICATIONS

POWER SOURCE:	(1) AA-SIZE BATTERY
FOCUS RANGE:	9.8" TO INFINITY
OPERATION TIME:	20+ HRS, 1 ALKALINE BATTERY 40+ HRS, 1 LITHIUM BATTERY
MAGNIFICATION:	ONE POWER (1X)
FIELD OF VIEW:	40°
DIOPTER ADJUSTMENT:	-6 TO +2
EYE RELIEF:	25MM
WEIGHT (W/O BATTERY):	475 G (16.8 OZ)
DIMENSIONS:	4.3" X 4.2" X 3.3"

FEATURES

- » TEN YEAR WARRANTY
- » TACTICAL MONOCULAR CUTOFF
- » LENSES OPTIMIZED FOR WHITE PHOSPHOR
- » 40+ HOUR BATTERY LIFE WITH LITHIUM AA BATTERY
- » SINGLE GAIN CONTROL KNOB
- » POWER OFF THE UNIT WHEN IN AN UPRIGHT POSITION AND POWER ON WHEN FLIPPED DOWN

At only 475 Grams, the **UL BNVD-SG White Phosphor ultra light dual tube goggle with Single Gain Control** incorporates new high performance optics that are not only much lighter, but also offer higher performance than standard optics. Currently most other night vision systems, use optics which were only designed for green (P43) phosphor image tubes. However these new BNVD optics were designed specifically to be optimized for both White (P45) and Green (P43) image tubes. Traditional image intensifier tubes use a P-43 phosphor screen output, resulting in the yellow-green image that has become the signature view through most Gen 3 night vision technology. The UL BNVD-SG-WP uses a P-45 phosphor screen which yields an alternate coloration closer to black and white imagery. This change in color has been reported to enhance overall object recognition while providing contrast sensitivity equivalent to green phosphor.

The UL BNVD-SG includes features not found in other dual tube goggle designs in this weight class. These features include: EMI compatibility, Full Diopter Adjustment Range (-6 to +2), Infrared LED, and most importantly: a close focus range of 9.8 inches. This is critical when trying to read maps or do close up work such as clearing a weapons jam.

NVD-UL BNVD-SG now features a "Tactical Monocular Cutoff", which turns off power to each channel of the binocular whenever a channel is rotated up out of the users' line of sight. This eliminates stray light emitting from the monocular eyepiece, which would reveal the user to anyone else on the battlefield. The UL BNVD-SG is submersible to 66 feet (20 meters) for up to 3 hours. Like all other NVD products, the UL BNVD-SG also features our best in the business, 10 year warranty.



Standard accessories: Soft Carry Case, Demist Shields, Sacrificial Windows, IR Spot/Flood Lens, Dovetail Mounting Adapter, Lens Tissue, (2) AA Batteries, Operator's Manual & Card, Neck Cord, Eyecups, & Retaining Lens Covers.

Optional Accessories: Battery pack for 50+ hours of continual use for extended missions. See more optional accessories on page 26.



COMPARATIVE DATA SHEET



UL BNVD-SG-WP



PVS-31

WEIGHT	475 GRAMS W/O BATTERY	450 GRAMS W/O BATTERY
TACTICAL MONOCULAR CUTOFF	YES	NO
BATTERY LIFE (ALKALINE)	20+ HRS (1 AA BATTERY)	12 HRS (1 AA BATTERY)
EXTERNAL BATTERY PACK (ALKALINE)	60+ HRS OPTIONAL BATTERY PACK (3 AA BATTERIES)	50+ HRS (4 AA BATTERIES)
WARRANTY	10 YEARS	1 YEAR
* OBJECTIVE FOCUS	9.8" TO INFINITY	* 18" TO INFINITY
** INTERNAL DIOPTR SETTINGS DIOPTR ADJUSTMENT	-6 TO +2 DIOPTERS	** FIXED -0.5
COMPATIBLE WITH 3X MAGNIFIERS	YES	NO
IR ILLUMINATOR	YES - BUILT-IN	NO
SUBMERSIBLE	66' FOR 3 HRS	66' FOR 2 HRS
FIELD OF VIEW - 40° +/- 2°	✓	✓
DIMENSIONS	4.3"L X 4.2"W X 3.3"H	4.7"L X 4.2"W X 3.4"H
ENVIRONMENTAL QUALIFICATION MIL-STD-810G	✓	✓
ADJUSTABLE/VARIABLE GAIN CONTROL	✓	✓

* THE OBJECTIVE FOCUS DISTANCE IS THE CLOSEST AN ITEM CAN BE TO THE OBJECTIVE LENS WHILE REMAINING IN FOCUS. READING A MAP WITH THE PVS-31; 18" REQUIRES HOLDING THE MAP AT THIS MAXIMUM ARM LENGTH IN ORDER TO BE IN FOCUS.

** THE AN/PVS-31 REQUIRES THE USE OF A SPECIAL DIOPTR KIT WHEN USED BY INDIVIDUALS WHO DO NOT HAVE 20/20 VISION.

MINI B AA 18mm



SPECIFICATIONS

POWER SOURCE:	(1) AA-SIZE BATTERY
FOCUS RANGE:	9.8" TO INFINITY
OPERATION TIME:	40+ HRS
MAGNIFICATION:	ONE POWER (1X)
FIELD OF VIEW:	40°
DIOPTER ADJUSTMENT:	-6 TO +2
EYE RELIEF:	25MM
WEIGHT (W/O BATTERY):	SUB 440 G (15.5 OZ)
DIMENSIONS:	4.3" X 4.2" X 3.3"

FEATURES

- » TEN YEAR WARRANTY
- » LENSES OPTIMIZED FOR WHITE PHOSPHOR
- » 40+ HOUR BATTERY LIFE
- » TACTICAL MONOCULAR CUTOFF
- » SIMULTANEOUSLY ADJUST GAIN FOR BOTH EYEPIECES
- » POWER OFF THE UNIT WHEN IN AN UPRIGHT POSITION AND POWER ON WHEN FLIPPED DOWN

With a total system weight that is less than 440 grams, the **MINI B AA 18mm, Dual Tube Night Vision Goggle with Single Gain Control** is part of NVD's new light-weight product line. The system features a "Tactical Monocular Cutoff" which turns off power to each channel of the monocular whenever a channel is rotated up out of the user's line of sight which assists the warfighter in maintaining light-security on the battlefield. The MINI B AA 18mm additionally provides an automatic system power cutoff when the system is transitioned onto the helmet's mounted stow position, and then powers back on when it is flipped back down. This feature can additionally be disabled by the end user if needed.

The MINI B incorporates new high performance optics that are not only much lighter, but also offer higher performance than standard optics. Currently the AN/PVS-14 and most other night vision systems, use optics which were only designed for green (P43) phosphor image tubes. However these new optics were designed specifically to be optimized for both White (P45) and Green (P43) image tubes.

NVD can customize builds for our MINI B AA 18mm system with image intensifiers from either Elbit Systems of America®, Photonis® or L3Harris®. NVD can additionally deliver many system applicable accessories for end-user kit customization to meet every low-light requirement for ground mission applications. Like all NVD goggles, this system features a complete diopter focus of +2 to -6, and IR LED and a close focus of 9.8 inches (25 cm) and a 66 foot submersion capability.



Standard accessories: Soft Carry Case, Demist Shields, Sacrificial Windows, IR Spot/Flood Lens, Dovetail Mounting Adapter, Lens Tissue, (2) AA Batteries, Operator's Manual & Card, Neck Cord, Eyecups, & Retaining Lens Covers.

Optional Accessories: Battery pack for 50+ hours of continual use for extended missions. See more optional accessories on page 26.

PVS-7 NIGHT VISION GOGGLE



SPECIFICATIONS

EYE RELIEF:	15 MM
POWER SOURCE/LIFE:	(2) AA-SIZE BATTERIES/40+ HRS
FOCUS RANGE:	9.8" TO INFINITY
MAGNIFICATION:	ONE POWER (1X)
FIELD OF VIEW:	40°
DIOPTER ADJUSTMENT:	-6 TO +2
WEIGHT:	24 OZ (680 G) W/O BATTERIES
DIMENSIONS:	6" X 6" X 3"

FEATURES

- » TEN YEAR WARRANTY
- » TWO AA BATTERY USAGE
- » INFRARED LED INDICATOR
- » HIGH LIGHT CUTOFF
- » LOW BATTERY LED INDICATOR
- » SIMPLICITY OF USE

The **NVD-PVS-7 Goggle** is the current military issue night vision goggles for the US armed forces. It is also the preferred choice of many foreign (NATO) forces. Produced by the hundreds of thousands, the PVS-7D will continue to march on for many years to come. Built to withstand water immersion, utilize quick connect and disconnect features, include an infrared LED for use in complete darkness and assist in reading maps. An LED warning light is built into the unit to remind the user that the infrared LED can be seen by others who are using night vision devices. A low battery warning light is also built into the unit and there is also high light cut-off which will turn the unit off if it is left on during daylight conditions.

The 7D runs on two AA batteries which power the unit for more than 40 hours. With our expansive capabilities and strategic partnerships, we are able to custom build any of our NVD manufactured products with Image Intensifiers from either Elbit Systems of America®, Photonis® or L3®. This includes green and white phosphor and thin or un-filmed image tubes.

For optimum performance, maximum durability, and the best possible supportability, the AN/PVS-7B night vision device is the best choice for law enforcement, home security, outdoorsmen, boaters, campers, wildlife studies, or predator control.

This system complies with MIL-PREF-49313, MIL-STD-810G.



STANDARD ACCESSORIES

Soft Carry Case, (2) AA Batteries, Operators Manual, Lens Tissue, Head-mount Assembly, Demist Shields and Sacrificial Window.

OPTIONAL ACCESSORIES

Hard Case, 3X Magnifier, 5X Magnifier, Compass Assembly, PASGT Helmet Mount, MICH Helmet Mount, Shuttered Eyeguard, IR Flood/Spot Lens Assembly and Camera Adapter.

AN/PVS-30 NIGHT VISION WEAPON SIGHT



The **Knight Vision® MIL Spec AN/PVS-30 Clip-on Weapon Sight**, adds the latest high performance Gen 3 light intensification night vision to most rifles and day scopes. This product is appropriate for front line long range rifles. The Knight Vision® patented technology makes the AN/PVS-30 universal and assures the accuracy of your range-tested day scope boresight will not be degraded. When the AN/PVS-30 is added in front of your dayscope, your existing optic, eye relief, and cheek weld are undisturbed. The refractive lens provides high performance light collection in a light weight design. Knight Vision® patented Single Interchangeable Battery (SIB)® allows use of either 123 or AA single batteries, with a battery life exceeding 24 hours, and can be changed while you remain in shooting position. The highly efficient power circuit allows use of depleted flashlight batteries to provide several hours of operation. The AN/PVS-30 is optimized and tested for medium and long-range sniper weapons including .50 caliber rifles and daysights with magnification up to 20x.

We also offer a **Refurbished AN/PVS-30** that features a green phosphor image intensifier and a 1 year warranty.

SPECIFICATIONS

POWER SOURCE:	(1) AA OR 123 BATTERY
BATTERY LIFE:	AA EXCEEDS 24HRS, 123 EXCEEDS 36 HRS
MOUNT:	KAC 26597 FOR QUICK ATTACH / DETACH TO MIL-STD-1913 RAIL OR EQUIVALENT MOUNTING SURFACE
WATERPROOF:	3 FT. FOR 4 HRS
FOCUS RANGE:	20 METERS TO INFINITY
RECOG. RANGE:	1000 M (HUMAN, 1/4 MOON)
MAGNIFICATION:	UNITY
BORE SIGHT:	WITHIN .5 MOA
FINISH:	FLAT BLACK MATTE OR DESERT SAND BROWN, CORROSION RESISTANT
CONTROLS:	ON/OFF GAIN CONTROL KNOB, FOCUS RING
WEIGHT:	2.9 LBS. (1.32 KG)
SIZE:	9.6" (244 MM) LONG



STANDARD ACCESSORIES

Operator's Manual, Soft Case, (1) AA Battery, Light Shroud and Lens Cleaning Kit.



FEATURES

- » 1 YEAR WARRANTY
- » GAIN CONTROL
- » SIB® - SINGLE INTERCHANGE BATTERY
- » CLIP-ON NIGHT VISION SCOPE
- » QUICK ATTACH/DETACH MOUNT



COMPARATIVE DATA SHEET



PVS-30



PVS-27



CNVDLR

WEIGHT	2.8 LBS	3.125 LBS	2.25 LBS
DIMENSIONS	9.9"L X 3.8"W X 3.4"H	8.7"L X 4.5"W X 3.75"H	9.9"L X 3.8"W X 3.4"H
BATTERY LIFE	36 HRS (1 AA BATTERY) 44 HRS (1 CR123 BATTERY)	16 HRS (2 AA BATTERIES)	16 HRS (1 AA OR 1 CR123 BATTERY)
OPTIMIZED DAYSCOPE MAGNIFICATION	12X	12X	12X
MAGNIFICATION 1X	✓	✓	✓
MAN SIZED RECOGNITION - STARLIGHT	800 METERS	<700 METERS	600 METERS
MAN SIZED RECOGNITION - 1/4 MOON	1500 METERS	1380 METERS	800 METERS
DETECTION	1800 METERS	1730 METERS	1500 METERS
FOCUS DISTANCE	20M TO INFINITY	15M TO INFINITY	25M TO INFINITY
SHOCK MITIGATION	50 CAL	50 CAL	7.62 X 51 NATO
OBJECTIVE LENS FOCAL LENGTH	120MM	92MM	110MM
FIELD OF VIEW	9°	10°	8°
BORESIGHT ACCURACY <0.5MOA	✓	✓	✓
BORESIGHT REPEATABILITY	<0.5 MOA	<0.5 MOA	1.0 MOA
WATERPROOF UP TO 66'	✓	✓	✓
MAX HEIGHT ABOVE RAIL	3.5"	3.75"	3.5"



CLIP-ON THERMAL IMAGER

COTI Strengths:

- + Improve visibility in no-light/low-light situations including smoke and dust conditions
- + Detect thermal sources
- + See through basic camouflage
- + See into dark openings such as windows and doorways
- + Detect residual heat: see if people have been in a room or if a vehicle was used recently
- + Find people in search-and-rescue situations

Interchangeability

- + Projection optics allow complete interchangeability between host goggles
- + Display injects image into the NVD or directly into user's FOV

Fixed focus objective

- + Minimal user interaction

Quick release

+ COTI can be easily be used alone by attaching an eyepiece or mounted to an existing NVD. Several mounts for different NVDs and Picatinny Rails available.



Extended operating time

- + Single CR123 battery operation
- + External power capable with optional battery pack kit

Image & video capability

- + Ability to capture and store images
- + Ability to inject video from external sources into NVDs
- + Compass information displayed in the FOV in NVDs

Small size and lightweight

- + Small and lightweight
- + Fits into pocket

Rotary ON/OFF

- + Also controls Brightness, Polarity, and Calibration

Easy push-mode buttons

- + Simple button on each side to control Viewing Mode (Full Thermal, Patrol, and Outline) and Zoom settings.

View the World Differently

Day or night, the COTI reveals more than what is visible to the normal eye. The COTI adds a layer of thermal detection capabilities to identify heat sources - either present or residual - in any situation. COTI offers broader dimension imagery to users to assess any potential threats. While Night Vision Devices (NVDs) provide users with the ability to see in ambient or low-light environments, users get only a part of the available picture. The COTI exposes potential threats that may be hidden - i.e. in defilade, under clothing, or covered in a layer of dirt. It helps to identify and assess those situations to give users more awareness and information to make knowledgeable decisions on how to proceed with a mission.

Small and Lightweight

The small, compact, and lightweight COTI has low-power consumption that allows for extended use. COTI is waterproof to 10m and its rugged construction can withstand the harshest environments.

Interchangeability

The COTI can be easily attached to an existing NVD, with the use of a mounting bracket, to add additional thermal capabilities to the I2 system. It can also be used as a stand-alone handheld with the use of an eyepiece. Its low-power consumption, optimal sensor technology, and high-performance optics integrate seamlessly to provide state-of-the-art long-wave infrared technology.

To make detection easier, the COTI offers two heat detection modes (White Hot and Black Hot) and three viewing modes (Full Thermal, Patrol, and Outline) that users can choose from to better customize the device for the situation and mission.

TECHNICAL SPECIFICATIONS

Optics

Magnification	1x (optical unity)
Field of view	20° circular, centered Fixed Focus f/1.2
Aperture	f / 1.15

Image sensor

Sensor Type	uncooled LWIR Microbolometer
Image Sensor	320 x 240 pxel
Wavelength	8 - 12 μ m

Range performance

Thermal Range	Clear	Obscured
Detection	> 500 m	> 500 m
Recognition	> 300 m	> 300 m

Display

Display	Micro Display
Polarity	White Hot or Black Hot
Brightness	Adjustable

Physical

Dimensions (l x w x h)	140 mm x 38 mm x 76 mm
Weight	150 g (5.8 oz), Incl. battery
Tested	MIL-STD-810

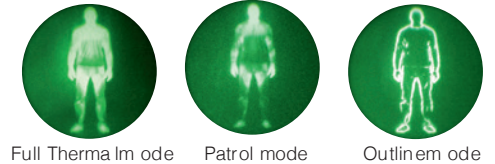
Power Supply

Battery	1x 3VDC Lithium, type CR 123A
Operating time (one battery)	> 3.0 h @ 23°C
Operating time (auxiliary battery pack)	> 8.0 h @ 23°C
Combined operating time (without change of batteries)	> 11.0 h @ 23°C

Identification

NOM	COTI Sovas Imager
NSN	5855-01-582-3974
NIIN	015823974
LIN	FA 5509

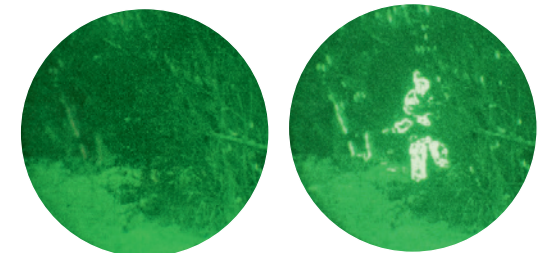
Multiple Modes



Full Thermal mode

Patrol mode

Outlin mode



Without Thermal

Thermal

ENHANCED CLIP-ON THERMAL IMAGER

Small Size and Lightweight

- + Small and lightweight
- + Fits into pocket
- + Minimal additional mass on helmet

Single Battery Operation or Battery Pack

- + Long operational life on single CR123A battery (>3.5 hrs)
- + Longer battery life with O1 Smart Power Pack



Heads Up Display (HUD)

- + Import/Display RS-170 video
- + Export RS-170 video
- + 7-PIN connector
- + Connect to PC/Droid™ for picture download and Nav File upload
- + Connect to Situational Awareness Apps (SA-Apps)
- + Connect to external accessories: GPS, Smart Power Pack, etc.

Easy Push-Mode Buttons

- + Simple buttons allow user to modify Polarity settings
- + Optimized thermal mode, brightness, capture still pics

ENHANCED CLIP-ON THERMAL IMAGER

Clip and Go

The E-COTI easily attaches to existing Night Vision Devices (NVDs) to increase threat detection and situational awareness. Low-power consumption, thermal sensor technology, and high-performance optics integrate seamlessly to provide state-of-the-art long-wave infrared capability. With the ability to mount on NVDs with a bracket, the need to refit helmets with special equipment is eliminated. Along with being able to withstand the harshest environments, the E-COTI's rugged construction is waterproof to 66 ft.

Works with Legacy and Recently Fielded NVDs

The E-COTI enhances the functionality of NVDs by adding a thermal image overlay to the image intensified (I2) scene without modification of existing hardware. Used in extreme low-light, no-light, or foliated conditions where I2 devices are limited, E-COTI improves situational awareness and increases threat detection capabilities. The E-COTI system allows for custom configuration to meet individual user needs.

Ease of Use

The compact and lightweight E-COTI attaches to NVDs in mere seconds without tools using a simple bracket.

Augmented Reality

E-COTI's Augmented Reality capability provides a Heads-Up Display (HUD) with navigation and route execution as well as real-time, geo-referenced, XML-based augmented reality. When used with Android devices, the NVD becomes a remote HUD display for identifying teammates, targets, and route points. The E-COTI allows the ability to keep eyes on the mission while the HUD eliminates the need to stop and look down at a screen. The navigation capability utilizes KML and GPX formats from Google Earth® and similar programs for simple route planning. Along with route execution, the built-in 16GB SD card provides on-board storage for image capture (>10,000 .TIF images), navigation tracks, and marking capability. AIR-based routes provide real-time altitude and glide ratio 3D Landing Point information for navigation under canopy.

TECHNICAL SPECIFICATIONS

Optics

Magnification	1x (optical unity)
Field of view	30° circular, centered
Objective	Fixed Focus

Image sensor

Sensor Type	Uncooled LWIR Microbolometer
Image Sensor	640 x 480 17 µm pixel
Wavelength	8 - 12 µm

Range performance

Thermal Range	Clear	Obscured
Detection (2.3m NATO)	> 1400 m	> 750 m
Detection (0.75m man)	> 450 m	> 350 m

Display

Display	High contrast Micro display (field changeable)
Polarity view mode	White Hot or Black Hot
Brightness	Adjustable

Power Supply

Battery	Internal: Type CR123A External: Battery Pack - 3xAA or 6xAA
Operating time (one Internal battery)	> 3.5h @ 23°C
Operating time (auxiliary battery pack)	> 8.0h @ 23°C or >16 hrs (6xAA Battery Pack)
Combined operating time (w/o change of batteries)	> 11.0h @ 23°C or >19 hrs (6xAA Battery Pack)

Physical

Dimensions (l x w x h)	50 x 43 x 60 mm (ext. battery) 90 x 43 x 60 mm (int. battery)
Weight	
E-COTI with internal battery	125 g. (w/ battery and mounting bracket) 110 g. (w/ battery only)
E-COTI with external battery	95 g. (w/ mounting bracket) 80 g. (system only)
Tested	MIL-STD-810



E-COTI image with augmented reality

DBAL-A3 DUAL BEAM AIMING LASER



STEINER
Nothing Escapes You

FEATURES

- » FULLY ADJUSTABLE WINDAGE & ELEVATION
- » HIGH & LOW POWER MODES
- » INCLUDES REMOTE CABLE PORT
- » ACTIVATION/LOW BATTERY INDICATOR LIGHT
- » AVAILABLE WITH EITHER A VISIBLE GREEN OR RED LASER
- » SUBMERSIBLE TO 5 M

SPECIFICATIONS

Model	9008
Laser Type	
Visible Red Or Green	Green - Class IIIa
IR Laser Pointer	Class I
IR Laser Illuminator	IR - Class 3r
Power Output	
Visible Red / Green Laser	<5 mW
IR Laser Pointer	<0.7 mW
IR Laser Illuminator	<4.0 mW
Wavelength	
Visible Green Laser	532 nm
IR Laser Pointer	850 nm
IR Laser Illuminator	835 nm
Beam Divergence	
Visible Laser	<0.8 mRad
IR Laser Pointer	<0.8 mRad
IR Laser Illuminator	95 to 195mRad
Range Visibility Night/Day	
Visible Green Laser	750 m / 15m
IR Laser Pointer	>250 m
IR Laser Illuminator	>175m
Temperature	5° C to +55° C
Weight	8 oz (with battery)
Dimensions (L x W x H)	3.5 x 2.75 x 1.59
Battery Type / Life	CR123A / > 3 Hours
Material	Aircraft Aluminum
Waterproof	Submersible to 5 m
Mount	QD HT Mount
Activation Switch	Integrated Push Button
Windage & Elevation Adjustment	Yes
Remote Cable Pressure Pad	Yes

The DBAL-A3 - Civilian Dual Beam Aiming Laser - Advanced3 is now available for the commercial market. It features an adjustable IR illuminator for better illumination at longer ranges, dual activation switches and high/low power modes.

The DBAL-A3 civilian model is based on the standard issue DBAL-A3 for U.S. warfighters. And just like the restricted models, this unit offers the latest advances in IR and visible laser technology. The dual-beam infrared laser and illuminator combination is extremely accurate in low- and no-light maneuvers. In addition, the DBAL-A3 is the first to feature new defocused adjustable IR illumination technology to enable both midrange and close quarter target acquisition.

The DBAL-I² features a remote cable-pressure-pad switch activation; tap and release for momentary activation; tap twice for 5-minute continuous ON.



STEINER 
Nothing Escapes You

The DBAL-I² Dual Beam Aiming Laser - Intelligent2 is the most lightweight model in the DBAL Series, this “intelligent” laser provides extreme accuracy in low-light conditions and can be used with night vision devices.

DBAL series lasers provide a tactical advantage on the battlefield, especially when day turns to night. Rugged, reliable and easy to operate, give yourself the advantage.

The DBAL-I² features a remote cable-pressure-pad switch activation; tap and release for momentary activation; tap twice for 5-minute continuous ON.

FEATURES

- » **FULLY ADJUSTABLE WINDAGE & ELEVATION**
- » **HIGH & LOW POWER MODES**
- » **INCLUDES REMOTE CABLE PORT**
- » **ACTIVATION/LOW BATTERY INDICATOR LIGHT**
- » **AVAILABLE WITH EITHER A VISIBLE GREEN OR RED LASER**
- » **SUBMERSIBLE TO 5 M**

SPECIFICATIONS

Model	9003	9004
Laser Type		
Visible Red Or Green	Green - Class IIIa	Red - Class IIIa
IR Laser Pointer	Class I	Class I
Power Output		
Visible Red / Green Laser	<5 mW	<5 mW
IR Laser Pointer	<0.7 mW	<0.7 mW
Wavelength		
Visible Red Laser	-	635 nm
Visible Green Laser	532 nm	-
IR Laser Pointer	850 nm	850 nm
Beam Divergence		
Visible Laser	<0.8 mRad	<0.8 mRad
IR Laser Pointer	<0.8 mRad	<0.8 mRad
Range Visibility Night/Day		
Visible Red Laser	-	250 m / 5 m
Visible Green Laser	750 m / 15 m	-
IR Laser Pointer	>250 m	>250 m
Temperature	5° C to +65° C	-40° C to +65° C
Weight	8 oz (with battery)	
Dimensions (L x W x H)	3.5 x 2.75 x 1.59	
Battery Type / Life	CR123A / > 3 Hours	
Material	Aircraft Aluminum	
Waterproof	Submersible to 5 m	
Mount	QD HT Mount	
Activation Switch	Integrated Push Button	
Windage & Elevation Adjustment	Yes	
Remote Cable Pressure Pad	Yes	



MX10130 NIGHT VISION IMAGE INTENSIFIER



Master Commercial & MIL SPEC Tube Distributor
Night Vision Devices

The MX10130 is a Gen 3 18mm image intensifier manufactured by Elbit Systems of America (previously Harris Night Vision). The MX10130 is the most widely used image intensifier and is found in the AN/PVS-7A, B, C & D series of night vision goggles along with a few weapon sights.

The MX10130 series image intensifier consists of a high efficiency GaAs photocathode bonded to a glass input window, a microchannel plate (MCP) current amplifier, and a P-43 phosphor screen deposited on non inverting fiber optic output window. The Gen 3 photocathode is very sensitive to low radiation levels of visible and, especially, near infrared light. Tube lifespan is an average of 12,000 hours continuous use.

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The MX10130 series image intensifier consists of a high efficiency GaAs photocathode bonded to a glass input window, a microchannel plate (MCP) current amplifier, and a P-43 phosphor screen deposited on non inverting fiber optic output window. The Gen 3 photocathode is very sensitive to low radiation levels of visible and, especially, near infrared light. Tube lifespan is an average of 12,000 hours continuous use.

The MX10130 is available in several grades based upon their Figure of Merit (FOM) in both green and white phosphor. The FOM, or Figure of Merit is a number calculated by multiplying the Signal-to-noise ratio by the resolution of an image intensifier. The FOM number allows a quick estimate of the general performance level of that image intensifier. All MX10130 tubes come with a tube data sheet listing the following specifications: Signal to Noise Ratio (S/N), Resolution, EBI (electronic background input), HALO, Photocathode Response (PR). These specifications are the most critical to the actual tube performance, as no two tubes are exactly alike.

NVD GEN III MX10130 IMAGE INTENSIFIERS

MODELS:	FOM 1600	FOM 1900	FOM 2200	FOM 2500
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Master Commercial & MIL SPEC Tube Distributor
Night Vision Devices

The MX11769 is a Gen 3 18mm image intensifier manufactured by Elbit Systems of America (previously Harris Night Vision). The MX11769 is used in the AN/PVS-14 night vision monocular and several weapon sights.

The MX11769 series image intensifier consists of a high efficiency GaAs photocathode bonded to a glass input window, a microchannel plate (MCP) current amplifier, and a P-43 phosphor screen deposited on non inverting fiber optic output window. The Gen 3 photocathode is very sensitive to low radiation levels of visible and, especially, near infrared light. Tube lifespan is an average of 12,000 hours continuous use.

The MX11769 also incorporates a variable gain power supply which gives the user the ability to adjust the tube gain or brightness in the field. This can be extremely helpful under high or low light conditions.

The MX11769 is available in several grades based upon their Figure of Merit (FOM) in both green and white phosphor. The FOM, or Figure of Merit is a number calculated by multiplying the Signal-to-noise ratio by the resolution of an image intensifier. The FOM number allows a quick estimate of the general performance level of that image intensifier. All MX11769 tubes come with a tube data sheet listing the following specifications: Signal to Noise Ratio (S/N), Resolution, EBI (electronic background input), HALO, Photocathode Response (PR). These specifications are the most critical to the actual tube performance, as no two tubes are exactly alike.

NVD GEN III MX11769 IMAGE INTENSIFIERS

MODELS:

FOM 1600

FOM 1900

FOM 2200

FOM 2500

ACCESSORIES

Based on your application, these accessories will greatly enhance your night vision capabilities and help you get the most out of your equipment. For example: use a shuttered eyeguard for covert operations, attach a camera adapter to capture images/video, extend your visible range with a magnifier, or utilize a helmet mount for hands-free operation. If you have specific questions about which **night vision accessory** will best suit your activity, feel free to contact us and one of our knowledgeable specialists will help you find what you need. We have many accessories available for end-user kit customization to meet every low-light requirement for ground mission applications.

NVDEVICES.COM · 610-395-9743 · SALES@NVDEVICES.COM



BALLISTIC HELMET
HARD HEADED VETERANS



BUMP HELMET
HARD HEADED VETERANS



BATTERY PACK
450175 (PN)



**WILCOX DOVETAIL
J-ARM**
26300G01 (PN)



**WEAVER WEAPON
MOUNT**
A3256348 (PN)
5340-01-446-8588



**CAMERA ADAPTER
(46mm)**
274049-1 (PN)
4310-01-096-1353



PASGT HELMET MOUNT
A3256368-1 (PN)
5855-01-457-2953



MICH HELMET MOUNT
A3256368-2 (PN)
5855-01-551-4525



**3X & 5X
AFOCAL MAGNIFIERS**
A3256391 (PN 3X)
275095 (PN 5X)



**WILCOX L4 SERIES
THREE HOLE SHROUD**
56100G35-B (PN)



**WILCOX L4 SERIES
HYBRID SHROUD**
56100G39-B (PN)



**WILCOX L4 G11
HELMET MOUNT**
28300G11 (PN)
5855-01-610-8704



**WILCOX L4 G22
HELMET MOUNT**
28300G22-T (PN)
5855-01-593-6332



**WILCOX L4 G24
HELMET MOUNT**
28300G24-B (PN)
5855-01-593-6422

IR PATROL M300W THERMAL MONOCULAR



The **IR Patrol Series Thermal Monocular** is a military grade monocular that combines a high quality BAE Thermal Core in a user friendly housing for the next level of thermal detection.

The IR Patrol features an easy-to-use control with the tip of the thumb – no more searching for buttons in the dark. This thumb joy-stick provides users the ability to access all features and menus in the unit from a single spot. It is extremely intuitive and easy to find with or without gloves.

Whether the user is military, law enforcement, search & rescue or hunting at night; they need a high resolution thermal monocular with accurate imagery in a compact device. Powered by the new BAE Systems MicroIR Thermal Core, the IR Patrol boasts 12 Micron performance. This provides a 50% increase in magnification during digital zoom compared to most other cores.

The IR Patrol M300W is a Weapon-Mounted Thermal Monocular Scope. It is capable of being used as a standalone scope with internal digital reticle or as a clip-on capacity in front of low magnification weapon optics. It features 640x480 high resolution running at a 60hz frame rate. Polarity Swap with MaxPol Control, Digital Electronic Zoom, Brightness and DFC Digital Focus are standard. The M300W also features Edge Detect Mode, which darkens the image while outlining heat-producing objects for quick reference. This mode is valuable for retaining the user's natural night vision because the display is not nearly as bright. Image capture and video out are standard on all M300W Models (download cable sold separately).

The M300W's comes with a dovetail shoe that clips into the Wilcox Flip Base. This is required to attach to a weapon (available in the tactical kit only). The Flip Mount Base is a precision-engineered and crafted part that tightly secures the scope inline with the bore, but can allow it to be flipped to the side using a force-to-overcome mechanism. The shooter can use the IR Patrol M300W in front of an existing weapon optic. But, when faced with a target behind glass (through which thermal imagers cannot see), the shooter can quickly flip the M300W to the side and engage the target with the standard optic. This saves time because the M300W does not need to be removed when faced with various environmental factors. The M300W is rated for .308 (7.62x51mm) weapon platforms.

SENSOR RESOLUTION:	640X480
FRAME RATE:	60HZ
MAGNIFICATION:	1X OPTICAL, 8X DIGITAL
MICRON:	12 MICRON
SPECTRAL RESPONSE:	8 - 12 UM
START UP TIME:	>4 SECONDS
DIOPTER ADJUSTMENT:	-6 TO +4
BATTERY TYPE/LIFE:	(1) CR123 BATTERY / 1.5 HOURS
WEIGHT:	16 OZ (454 G)
DIMENSIONS:	5.95"L X 2.0"H X 2.95"W
POLARITY:	BLACK HOT/WHITE HOT
IMAGE CAPTURE:	STILL IMAGE AND VIDEO OUT
SENSITIVITY:	<50MK
FOV:	22° OPTICAL, 3° DIGITAL
OBJECTIVE LENS:	19MM F/1.1
WARRANTY:	3 YEARS



STANDARD ACCESSORIES

Eye Cup, Tactical Soft Case, Download Cable, Lanyard, Lens Cap, Operator's Manual, Quick Reference Guide, Batteries, and Wilcox Dovetail Shoe Interface. The Wilcox Flip Mount Base come in the Weapon Mount Kit Only

IR PATROL LE100 THERMAL MONOCULAR



The **IR Patrol Series Thermal Monocular** is a military grade monocular that combines a high quality BAE Thermal Core in a user friendly housing for the next level of thermal detection. Compact, Light-weight, and Rugged; the IR Patrol Thermal Monocular is ready for any mission from the battlefield to the hunting field.

The IR Patrol features an easy-to-use control with the tip of the thumb – no more searching for buttons in the dark. This thumb joy-stick provides users the ability to access all features and menus in the unit from a single spot. It is extremely intuitive and easy to find with or without gloves.

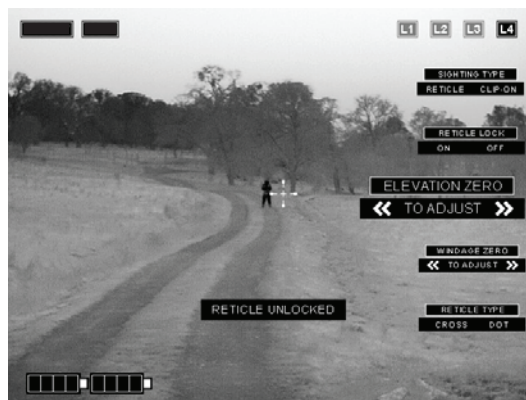
Whether the user is military, law enforcement, search & rescue or hunting at night; they need a high resolution thermal monocular with accurate imagery in a compact device. Powered by the new BAE Systems MicroIR Thermal Core, the IR Patrol boasts 12 Micron performance. This provides a 50% increase in magnification during digital zoom compared to most other cores.

The IR Patrol LE100 & LE100C feature 640×480 high resolution running at a 30hz frame rate. Polarity Swap with MaxPol Control, Digital Electronic Zoom, Brightness and DFC Digital Focus are standard. The LE100 Series is designed as a handheld thermal monocular only. Comes with a section of M1913 Picatinny Rail for mounting accessories directly to the unit such as lights and lasers.

The LE100C is identical to the LE100 with the addition of image capture. It will capture still images only that can be later downloaded with the included download cable.

The IR Patrol is made in the USA and designed for military applications with an affordable consumer price point. Overall it is one of the most affordable, high resolution, thermal night vision devices on the market.

SENSOR RESOLUTION:	640X480
FRAME RATE:	30HZ
MAGNIFICATION:	1X OPTICAL, 8X DIGITAL
MICRON:	12 MICRON
SPECTRAL RESPONSE:	8 - 12 UM
START UP TIME:	>4 SECONDS
DIOPTER ADJUSTMENT:	-6 TO +4
BATTERY TYPE/LIFE:	(1) CR123 BATTERY / 2 HOURS
WEIGHT:	16 OZ (454 G)
DIMENSIONS:	5.95"L X 2.0"H X 2.95"W
POLARITY:	BLACK HOT/WHITE HOT
IMAGE CAPTURE:	STILL IMAGE AND VIDEO OUT (LE100C ONLY)
SENSITIVITY:	<50MK
FOV:	22° OPTICAL, 3° DIGITAL
OBJECTIVE LENS:	19MM F/1.1
WARRANTY:	3 YEARS



STANDARD ACCESSORIES

Eye Cup, Tactical Soft Case, Lanyard, Lens Cap, Operator's Manual, Quick Reference Guide, Batteries, Image Download Cable (LE100C Only)



Schedule
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