



NSWC Crane Electro-Optic Technology Support

Dusty Wilson
Deputy Division Manager
NSWC Crane EO Technology Division



10 July 2007



Information Operations/ Electronic Warfare



Special Missions

EO Technology “Knack”



**NSWC CRANE DIVISION
STRATEGIC FOCUS AREAS**



Lasers

- Rangefinders
- Designators
- Markers and Pointers
- Directed Energy



Visual Augmentation Systems

- Day/Night Optics
- Thermal Imagers
- Image Intensifiers
- Cameras
- Image Fusion



AN/PVS-15

Multi-Sensor EO/IR Targeting Systems

IR Countermeasures

- Airborne Expendables
- Special Energetic Munitions
- Directed IRCM



MTS-B

Weapon Sights

- Rifle Scopes
- Laser Pointers
- Thermal Sights
- Image Intensifiers



IRCM



AN/PAS-13
Thermal
Weapon Sight

Infrared IFF Transponders, Beacons

Displays and Peripherals

- Helmet Mounted Cueing
- Heads Up Displays
- Control and Display Systems
- Sensor Integration



Explosive Detection

Harnessing the Power of Technology for the Warfighter



IFF



AN/PEQ-1A SOFLAM
(Target Designator)

- **Governing Documents**

- **SECNAVINST 5820.7 of 28 Mar 88**

- “Cooperation with Civilian Law Enforcement Officials”

- **Reinvention Lab Waiver Obtained from CNO
10 AUG 99**

- **Allows Extension of Loan Period from Sixty Days to One Year**



Law Enforcement Support Program

- **What Is It?**
 - **A Means of Extending Usage of Cycled Military NVEO Equipment to Assist in Fighting the War on Crime, Drugs and Terrorism**
- **Services Provided**
 - **Loan of NVEO Equipment Not to Exceed One Year for \$300 Per NVEO Device Per Year**
 - **Requires Signed Law Enforcement Loan Agreement**
 - **Repair or Replacement of Inoperable Equipment Included**
 - **Basic NVEO Training Provided if Requested**





Law Enforcement Support Program

- **Law Enforcement Loan Agreement
(Rev 5, 12 May 99)**
 - **Covers Legal Issues (Liability, Etc.)**
 - **No Warranties**
 - **Loss, Stolen, Willfully Damaged**
 - **Procedures for Program Use**
 - **Documentation Requirements**
 - **Covers Up to One Year of Service/Support
from Date of Shipment**





Law Enforcement Support Program

- **Agreement Process Procedure**
 - **Initial Contact via Phone or Email**
 - **Written Request on Department Letterhead Required**
 - **Agency Verification**
 - **Crane Initiates Agreement via Mail**
 - **Agency Returns Signed Agreement**
 - **Agency Provides Approved Purchase Order or Check for Payment**
 - **Crane Command (CO) Signs each Agreement**
 - **Crane Ships Equipment to Specified Location**
 - **One Year Clock Begins**





Law Enforcement Support Program

- **Support Considerations**
 - **Cannot Adversely Impact National Security or Military Preparedness**
 - **Safety and Security Considerations Dictate Allowed Support and NVEO Equipment**
 - **Program Designed “Not” to Compete with Private Industry**
- **Program Issues**
 - **Pull-back: National Security Concerns**





Law Enforcement Support Program

- **Current Program Assets**
 - AN/PVS-5B & 5C Goggles
 - AN/PVS-11 & 11A Pocket Scopes
 - AN/PVS-4 Crew Served Sights
 - AN/PVS-7A & 7B Goggles
 - Catseye Monocular Scopes

- **Potential Future NVEO Equipment**
 - Surface Navy
 - NAVSPECWAR Phased Replacement
 - United States Army/Coast Guard
 - DLA Law Enforcement Support Office (LESO)
 - Assets from Six Specified NSN's





AN/PVS-5C

Type: Night Vision Goggles
Range: 200-300 Yds Man Sized
Magnification: 1X
Field of View: 40 Degrees
Battery Life: 12 Hours at 23 Deg C
Tube Type: 18mm Gen II
Weight: 2.2 Lbs
Immersion: None
Batteries: Two "AA" Alkaline
Cost (Est.): \$4,300.00
NSN: 5855-01-228-0936
Manufacturer: Litton EOSD



AN/PVS-5B

Type: Night Vision Goggles
Range: 200-300 Yds Man Sized
Magnification: 1X
Field of View: 40 Degrees
Battery Life: 12 Hours at 23 Deg C
Tube Type: 18mm Gen II
Weight: 2.2 Lbs
Immersion: None
Batteries: Two "AA" Alkaline
Cost (Est.): \$4,300.00
NSN: 5855-01-228-0938
Manufacturer: Litton EOSD





AN/PVS-11

Type:	Pocketscope
Range:	100-250 Yds Man Sized
Magnification:	1X (Optional 3X)
Field of View:	40 Degrees
Battery Life:	40 Hours at 23 Deg C
Tube Type:	18mm Gen II
Weight:	15 Oz
Immersion:	None
Batteries:	2 BA 3058 "AA"
Cost (Est.):	\$2,950.00
NSN:	5855-01-302-5493
Manufacturer:	Litton EOSD



AN/PVS-11A

Weight:	1.4 Lbs
Size (Approx.):	5"L x 2"W x 4"H
Immersion:	66 Ft
Magnification:	1X or 3X W/Adaptor
Field of View:	40 Degrees
Batteries:	Two "AA" Alkaline
Battery Life:	40 Hours
Tube Type:	18mm GEN III
Cost (Est.):	\$3,500.00
NSN:	5855-01-398-0007
Manufacturer:	Litton EOSD



AN/PVS-7A/7B

Type: Night Vision Goggles
Range: 200-350 Yds Man Sized
Magnification: 1X
Field of View: 40 Degrees
Battery Life: 12 Hours at 23 Deg C
Tube Type: 18mm Gen III
Weight: 1.5 Lbs
Immersion: None
Batteries: Two "AA" Alkaline
Cost (Est.): \$6,000.00
NSN: 5855-01-228-0939
Manufacturer: Litton EOSD



AN/PVS-4

Type: Individual Served Sight
Range: 400-600 Yds Man Sized
Magnification: 3.6X
Field of View: 14.5 Degrees
Battery Life: 12 Hours at 23 Deg C
Tube Type: 25mm Gen II
Weight: 4 Lbs
Immersion: None
Batteries: Two "AA" Alkaline
Cost (Est.): \$2,530.00
NSN: 5855-00-629-5334
Manufacturer: Litton EOSD

Catseye Goggle



Catseye Monocular



- Field of View: 30 Degrees
- Magnification: 1X
- Tube Type: 18mm Gen III
- Weight: 12 oz.
- Batteries: Two "AA" Alkaline
- Immersion: None



- **Program Data as of June 18, 2007**
 - **Current Agencies Supported**
 - 433 (Indiana – 42)
 - **States Participating**
 - 46 of 50
 - As well as, the U. S. Virgin Islands
 - **Total Night Vision Sights on Loan**
 - 1,670 (Indiana – 195)



- **Participating Indiana Data**

– City Agencies	22
– County Agencies	17
– State Agencies	3
– Total	42

- **Night Vision Sights Loaned in Indiana**

– City Agencies	47
– County Agencies	46
– State Agencies	102
– Total	195



- **A “Win-Win” Solution**
 - **Optimizes Use of Taxpayer’s Money by Extending the Useful Life of Cycled Military NVEO Equipment**
 - **Navy Benefits by Reducing Demil Costs**
 - **Provides State, County, Local and Federal Law Enforcement Agencies with Significant Capability that they Might Otherwise Not Be Able to Afford**
 - **Helps Put Criminals In Jail and Assists in the War on Crime/Drugs/Terrorism**



Indiana Survey Quote (Indiana State University – Winter 2005)

“The night vision equipment supplied through this program has proven very valuable. It provides Officers with a necessary tool, while allowing a stealth approach to increase officer safety.”

Dept. 75



Indiana Survey Quote (Indiana State University – Winter 2005)

“The Law Enforcement Program allows smaller police departments (like ours) an affordable option in acquiring night vision capabilities to which we would otherwise not have access.”

Dept. 142



Indiana Survey Quote (Indiana State University – Winter 2005)

“Officers indicate with conclusive evidence that we would be unable to determine if marijuana cultivators are armed (or not) without NVG’s from the Law Enforcement Program. Lack of NVG’s would put my Officer’s safety in peril.”

Dept. 248



NSWC Crane: DOD “Knack” for Electro-Optics!!

- **Delivers** a large volume of EO Products and Services across DOD.
- **Leverages** specialized EO Facilities, Test Equipment and Personnel to provide rapid solutions for the Warfighter.
- **Specializes** in EO “Technology Transition” for diverse platforms.
- **Provides** full spectrum EO life cycle R&D, Acquisition and Sustainment.
- **Offers** objective insight for new EO Technology development and fielding.
 - NAVSEA Technical Warrant Holder for all EO/IR Systems
- **IS** A DIRECT BENEFIT TO THE WARFIGHTER!





Law Enforcement Support Program

For Additional Information Contact:

Sharon Sutton

Telephone: 812-854-8358

Email: sharon.l.sutton@navy.mil

or

Deb Owens

Telephone: 812-854-3095

Email: debbie.owens@navy.mil

