AN/PVS-7C
Submersible Single Tube Night Vision Goggle
NSN: 5855-01-363-7491

DESCRIPTION
The AN/PVS-7C is the latest generation of the Gen II or Gen III Single Tube Night Vision Goggle originally fielded with the US Army as the AN/PVS-7A. That unit has been modified to meet special submersion requirements for the US Navy to allow stowage and transport in underwater conditions up to 20 meters. This new capability carries the designation AN/PVS-7C. Operation of the AN/PVS-7C remains exactly the same as the “A” model, with control of the system by a five position rotary switch. One ON position operates when the goggle is mounted on its facemask and the other when it is dismounted in a handheld position. In both ON positions, an infrared light source can be activated by depressing the button in the center of the switch, and turning the knob one more position. This Light Emitting Diode provides illumination for map reading or other close range tasks. The AN/PVS-7C can also be fitted with a selection of magnifying objectives that convert it to a high performance night vision binocular system for handheld observation. The AN/PVS-7C is particularly suited for operations where depth perception is critical for mission performance, such as controlling land vehicles and boats at high speed, waist gunner accuracy on helicopters, open turret command of armored vehicles, and carrier deck night operations. The unit cost, depending on quantities ordered, and in what year ordered, is approximately $5,978 each.

REQUIREMENT
Milestone Decision Authority: Program Executive Office, PMS 480 / JSOP-10
Program Management Office: PM Night Vision, Joint & Special Operations Programs, Naval Surface Warfare Center, Crane, IN
Authorization/Validation: Specific Operational Requirement 36-41R2
System Mission: Detect, Identify, and engage enemy targets in low light or night environments.

CHARACTERISTICS
Manufacturer: Northrop Grumman Corporation, Garland, TX
Magnification: 1X
Field of View: 40°
Min. Focus Range: 9.8 in (249mm)
Focal Length: 27mm
F Number: 1.27
Weight with batteries: 1.5 lbs (680 grams)
Diopeter Adjustment: +2 to –6
Eye Relief: 25mm (.98 in)
Dimensions 1X Goggle: 6.9 in L X 5 in W (150mm L X 127 mm W)
Power Source: 2 - AA Batteries (Alkaline) or 1 - BA5567.U (Lithium)
Operating Temperature: -51° C to +49° C (-59.6°F to +120°F)
Storage Temperature: -51° C to +68° C (-59.6°F to +154°F)
Immersion: Submersible to 60 ft (20 m)
Suitable for Use with: Hand-held or helmet mounted
Manuels: SW215-AK-MMO-010
Brad Pridemore, PM Night Vision, NSWC-Crane, DSN 462-5841 Comm (812) 854-5841
Email: bradley.pridemore@navy.mil
SIPRNET: Bradley.Pridemore@crane.navy.mil

LOGISTICS
National Stock Number (NSN): 5855-01-363-7491
Allowance Equip Page List: 0-006400410 and 0-006400411
Allowance Parts List: 00540048301
Technical Manual Number: SW215-AK-MMO-010 REV 02
PMS Maintenance Index Page: 7621/001
PMS Maintenance Requirement Card: GFEL
Supply Cost (w/turn in and w/o turn in): $3034.00/$6217.00
Last updated: 18 May 2009
AN/PVS-18
Submersible Monocular Night Vision System
NSN: 5855-01-433-1217

DESCRIPTION

The AN/PVS-18 is a self-contained pocketscope, for left or right eye mounting as a monocular and has a range of 100-200 yards for man sized targets with a 40° field of view at 1X magnification. The AN/PVS-18 can be configured with a number of available adaptors for use with SLR, CCTV, or Camcorder systems. Additional magnification is available with the supplied 3X afocal objective lens. A five position switch controls operation. New models contain a special threaded eyepiece to accommodate the underwater lenses. The AN/PVS-18 is supplied with a face mask. Other options available include various flip-up helmet mounts. The AN/PVS-18 is supplied with Gen III image intensifier.

REQUIREMENT

Milestone Decision Authority: NAVSEA, SEA 00-ATA (PMS 480) / JSOP
Program Management Office: PM Night Vision, Joint & Special Operations Programs, Naval Surface Warfare Center, Crane, IN
Authorization/Validation: CNO Itr 8210 Ser N864/09U180005 dated 19 Oct 2009
System Mission: The pocketscope is a hand-held or head-mounted device used for forward observation, information gathering or photography.

CHARACTERISTICS

Manufacturer: Northrop Grumman Corporation, Garland, TX
Magnification: 1X or 3X
Field of View (degrees): 1X: 40°, 3X: 13.5°
Min Focus Range: 1X: 25 cm ( ), 3X: 3 m ( )
Focal Length: 1X: 27 mm, 3X: 75 mm
F Number: 1X: 1.2, 3X: 1.3
Weight (incl batt): 1X: 350 g (12.3 oz), 3X: 602 g (21.23 oz)
Eye relief: 25 mm (.98 in)
Diopter Adjustment: +2 to -6 dipters
Power source: (1) AA battery (Alkaline or Lithium)
Operating temperature: -40°C to +55°C (-40°F to 131°F)
Storage temperature: -51°C to +71°C (-60°F to 160°F)
Immersion: 20 meters (66 feet) for 2 hours
Suitable for Use with: Helmet Mount, Hand Held
Manuals: SW215-AP-MMO-010
POC: Brenda Pridemore, PM Night Vision, NSWC-Crane, DSN 482-5842 Comm (812) 854-5842 Email: brenda.pridemore@navy.mil

LOGISTICS

National Stock Number (NSN): 5855-01-433-1217
Allowance Equipage List: 0-00640A048 & 0-00640A049
Allowance Parts List: 00640A348
Technical Manual Number: SW-215-BD-MMO-010
PMS Maintenance Index Page: 7621/001
PMS Maintenance Requirement Card: GGQW/GGJU
Supply Cost (w/turn in and w/o turn in) $1662.00/$4906.00
Last updated: Sept 2012
**DESCRIPTION**

The Thermal Eye 250D is a hand-held, or tripod mounted infrared camera. The Thermal Eye 250D has a video output that is compatible with all standard video recording devices. The Thermal Eye 250D gives the user full control of the gain, level, polarity, zoom, and brightness. The Thermal Eye 250D is also equipped with automatic control of the gain, and level. At a weight of only four pounds the Thermal Eye 250D is light weight and very versatile. The Thermal Eye 250D is also equipped with a 2x digital zoom for increased range. This allows the operator to detect a human target at 2,400 feet, assuming the operator is using a 75mm lens.

**REQUIREMENT**

Milestone Decision Authority: Program Executive Office, PMS 480 / JSOP-10

Program Management Office: PM Night Vision, Joint & Special Operations Programs, Naval Surface Warfare Center, Crane, IN

Authorization/Validation: Specific Operational Requirement 36-41R2

System Mission: Detect, Identify, and engage enemy targets in all lighting environments, day & night.

**CHARACTERISTICS**

- **Manufacturer:** Raytheon Company, Waltham, MA
- **Detector:** 320x240
- **Spectrum Response:** 7-14 microns
- **Focus Depth:** Approx. 6in (152mm) to infinity w/25mm lens
- **Dimensions:** 10 in L x 5.5 in W x 4 in H
  
  (254mm x 140mm x 102mm)
- **Weight:** 4 pounds
- **Power:** Rechargeable Camcorder Battery (6VDC)
- **Operational Time:** More than 2 hours (Variable)
- **Operating Temperature:** -20° to 49°C (-4° to 120°F)
- **Storage Temperature:** -25° to 70°C (-13 to 158°F)
- **Suitable for Use with:** Hand-held or tripod mounted.
- **Manuals:** Factory Operators Manual
  
  Brenda Pridemore, PM Night Vision, NSWC-Crane, DSN 482-5542 Comm (812) 854-5842
  
  Email: brenda.pridemore@navy.mil

**LOGISTICS**

- **National Stock Number (NSN):** 5855-01-549-9265
- **Allowance Equipoage List:** 00640A468
- **Allowance Parts List:** 00640B359
- **Technical Manual Number:** Commercial Manual used
- **PMS Maintenance Index Page:**
- **PMS Maintenance Requirement Card:**
- **Supply Cost (w/turn in and w/o turn in):** $5908.00/$14184.00

Last updated: 18 May 2009