

Night Vision Thermal Systems-Thermal Weapon Sight (TWS)

INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance

MISSION

Enables the Soldier to detect and engage targets, day or night, in all weather and visibility-obscured conditions.

DESCRIPTION

The Night Vision Thermal Systems-Thermal Weapon Sight (TWS) family is a group of advanced infrared devices that can be both weapon mounted or used in an observation mode. The AN/PAS-13 TWS gives Soldiers with individual and crew served weapons the capability to see deep into the battlefield, increase surveillance and target acquisition range, and penetrate obscurants, day or night. The TWS systems use uncooled, forward-looking infrared technology and provide a standard video output for training, image transfer, or remote viewing. TWS systems are lightweight and mountable to a weapon rail. They operate to the maximum effective range of the weapon.

The TWS family comprises three variants, each of which is silent, lightweight, compact, durable, and battery-powered. They include:

- AN/PAS-13(V)1 Light Weapon Thermal Sight (LWTS) for the M16 and M4 series rifles and carbines, as well as the M136 Light Anti-Armor Weapon
Weight: 1.9 pounds
Field of view: 18 degrees
Operational time: 7 hours
Power: Four lithium AA batteries
- AN/PAS-13(V)2 Medium Weapon Thermal Sight (MWTS) for the M249 Squad Automatic Weapon and M240B series medium machine guns
Weight: 2.8 pounds
Field of view: 6 degrees/18 degrees (narrow/wide)
Operational time: 7 hours
Power: Six lithium AA batteries
- AN/PAS-13(V)3 Heavy Weapon Thermal Sight (HWTS) for the squad leader's weapon M16 and M4 series rifles and carbines, M24 and M107 sniper rifles, and M2 HB and MK19 machine guns
Weight: 3.9 pounds
Field of view: 3 degrees/9 degrees (narrow/wide)
Operational time: 7 hours
Power: Six lithium AA batteries

SYSTEM INTERDEPENDENCIES

None

PROGRAM STATUS

- **FY11:** Fielded to units supporting Operation Enduring Freedom and Operation New Dawn
- **FY11:** Completed 17 micron technology validation testing; 17 micron technology allows production of a LWTS clip-on and reduces power and weight in the MWTS and HWTS

PROJECTED ACTIVITIES

- **FY12:** Continue to support and field in accordance with Headquarters Department of the Army G8 guidance; begin procurement of 17 micron TWS
- **FY13:** TWS III contract award (17 micron)

ACQUISITION PHASE

Technology Development

Engineering and Manufacturing Development

Production and Deployment

Operations and Support



Night Vision Thermal Systems- Thermal Weapon Sight (TWS)

FOREIGN MILITARY SALES

Deputy Assistant Secretary of the
Army Defense Exports and Cooperation
(DASA DE&C)

CONTRACTORS

BAE Systems (Lexington, MA; Manchester,
NH; Austin, TX; Manassas VA)
DRS Optronics (Dallas, TX; Melbourne, FL)
Raytheon (Dallas, TX; Goleta, CA;
McKinney, TX)

