

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 which can be both weapon-mounted or used in an observation mode. The 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: 9 degrees/18 degrees (narrow/wide)

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

- **FY12:** Awarded production contracts for TWS with 17 micron technology; systems delivered in FY13 will be lighter and consume less power

PROJECTED ACTIVITIES

- **FY13:** Continue to support and field in accordance with Headquarters Department of the Army guidance

ACQUISITION PHASE

Technology Development

Engineering & Manufacturing Development

Production & Deployment

Operations & Support

Night Vision Thermal Systems— Thermal Weapon Sight (TWS)

FOREIGN MILITARY SALES

Thailand, Czech Republic, Sweden

CONTRACTORS

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

