XM7 Spider

MISSION
Provides the commander with a new capability to shape the battlefield, protect the force, and respond to changing battlefield environments in a graduated manner while minimizing risk to friendly troops and non-combatants.

DESCRIPTION
The XM7 Spider is a hand-emplaced, remotely-controlled, Man-in-the-Loop (MITL), anti-personnel munition system. Spider provides munition field effectiveness, but does so without residual life-threatening risks after hostilities end. The fielding of this system with its sensors, communications, and munitions changes the way Soldiers operate in an otherwise unpredictable battlefield. Each munition is controlled by a remotely stationed Soldier who monitors its sensors, allowing for more precise (non-lethal to lethal) responses—a significant advancement and advantage. The Spider Networked Munitions System enables the MITL to detect, track, classify, count, and destroy the enemy.

The Spider system contains three main components: the remote control unit, residing within a computer interface; the repeater, extending the remote control range; and a munition control unit for sending and receiving commands as well as activating the munitions. Spider can be used as a force-protection-reinforcing obstacle to delay, disrupt, and channel enemy forces as well as restrict their use of critical routes of terrain, thereby reducing civil casualties and the exposure of personnel to hostile fire. It can also be integrated into a base defense system, providing protection to Soldiers in forward operating bases and combat outposts.

The system’s design allows for safe, flexible, and rapid deployment, reinforcement, and recovery as well as safe passage of friendly forces. Spider eliminates the possibility of an unintended detonation through early warning and selective engagement of enemy forces, and has a self-destruct capability. Spider is designed for storage, transport, rough handling, and use in worldwide military environments.

SYSTEM INTERDEPENDENCIES
In this Publication
None

Other Major Interdependencies
Interface with Tactical Internet through Force XXI Battle Command Brigade-and-Below and obstacle positioning through Global Positioning System (GPS)

PROGRAM STATUS
• 2QFY12: Conditional Materiel Release of 43 Systems to U.S. Army Europe
• 2QFY12: Software V4 Contract Award
• 3QFY12: LRIP4 Undefinitized Contract Action Awarded for 120 Systems
• 3QFY12: Level III Tech Data Package Contract Award

PROJECTED ACTIVITIES
• 1QFY13: Follow On Operational Test #3
• 1QFY13: Network Integration Evaluation Participation
• 2QFY13: LRIP4 Modification Contract Award for up to 135 Systems
• 2QFY13: Materiel Release/Type Classification Standard
• 3QFY13: Full-rate production decision
• 2QFY14: Full-rate production Contract Award
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FOREIGN MILITARY SALES
None

CONTRACTORS
Prime:
A joint venture between
Textron Defense Systems
(Wilmington, MA)
Alliant Techsystems (Plymouth, MN)

Subcontractors:
Alliant Techsystems (Rocket Center, WV)
BAE Systems/Holston (Kingsport, TN)
American Ordnance (Milan, TN)