

Stinger-Reprogrammable Microprocessor (RMP) Missile

The Stinger missile is the Army's system for short-range air defense. It provides the ground maneuver commander with force protection against low-altitude airborne targets, such as fixed-wing aircraft, helicopters, unmanned aerial vehicles, and cruise missiles. The Stinger is launched from a number of platforms: Bradley Linebacker, Avenger on the High Mobility Multi-Purpose Wheeled Vehicle (HMMWV), and helicopters, as well as the Man-Portable Air Defense configurations.

The Army had planned a two-phase upgrade program for the Stinger-Reprogrammable Microprocessor (RMP) missile to correct known operational deficiencies of the original Stinger-RMP missile system. The first upgrade, called Stinger-RMP Block I, made software and hardware changes, including a new roll frequency sensor, a small battery, and an improved computer processor and memory. It is currently in the Army and Marine Corps inventory. The second upgrade, Stinger-RMP Block II, added an advanced imaging array infrared seeker and additional signal processing software. The Stinger-RMP Block II missile was intended to provide improved performance against targets in terrain clutter, more advanced stealthy cruise missiles, unmanned aerial vehicles, and helicopter targets employing countermeasures, as well as improved performance during nighttime operations.

The Stinger-RMP Block II missile test program was suspended during Operation Desert Storm, and the Block I missiles were rushed into the field. Subsequently, the Army conducted tests on the Stinger-RMP Block I without DOT&E approval. It is DOT&E's opinion that this test was inadequate.

In 1999, the Army initiated the Stinger-RMP Block II program for a Milestone II decision in early FY00; DOT&E worked with the Army to obtain approval of an updated Operational Requirement Document, an updated System Threat Assessment Report and new Critical Operational Issues, and to develop a test strategy. The Test and Evaluation Master Plan was approved, but subsequently the Army canceled the Stinger-RMP Block II missile program in early FY00. There had been plans to produce approximately 11,000 Stinger-RMP Block II missiles. The Stinger-RMP Block I missiles will remain in inventory until at least 2020.

As a separate but related issue, Congress mandated that the Army evaluate the Stinger RMP Block I and the British Starstreak missiles as armaments for the AH-64 Longbow Apache.

TEST & EVALUATION ACTIVITIES

All Test & Evaluation activities on the Stinger-RMP Block II program were suspended when the Army canceled the Block II program. No test plan or test resources have been identified for conducting the Stinger and Starstreak comparison test.

TEST & EVALUATION ASSESSMENT

It is DOT&E's opinion that the currently fielded Stinger-RMP Block I missile was not adequately tested, because the test conditions were not representative of how the missile would be fired in combat. Thus, modifications to resolve the known operational deficiencies were not verified, and the Block I effectiveness and suitability remains unknown.



Troops preparing to fire the shoulder-launched anti-aircraft Stinger missile.

ARMY PROGRAMS

To date, the Congressional mandate to conduct Stinger-Starstreak comparison tests for air-to-air capability has not been performed by the Army because of concerns that the Starstreak cannot be safely fired from a helicopter due to the excessive back blast from the missile.