ARMY PROGRAMS

Precision Guided Mortar Munition (PGMM)

SUMMARY

- By 2001, the Rapid Force Projection Initiative Advanced Technology Demonstration (RFPI ATD) produced a prototype 120mm mortar round that could achieve controlled-glide flight. This round incorporated gyroscopic guidance with a laser seeker on a maneuverable airframe.
- Following the ATD, a Component Advanced Development (CAD) effort focused on identifying the most effective warhead and fuze technologies. Lockheed Martin completed this effort in September 2003.
- The Army approved Precision Guided Mortar Munition's (PGMM) entry into its System Development and Demonstration (SDD) Phase with a conditional Milestone B decision in September 2003. Final



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- Milestone B approval occurred in May 2004, following approval of the PGMM operational requirements document by the Joint Requirements Oversight Council.
- The Army announced in December 2003 that Alliant Techsystems (ATK) would be the SDD contractor. Before the Army actually awarded the contract, however, Lockheed Martin, the ATD and CAD contractor, protested ATK's selection.
- In May 2004, the GAO instructed the Army to reopen discussions with the two contractors and to reevaluate the final proposal revisions.
- The Army plans to complete the reevaluation process, select an SDD contractor, and award the contract by the end of calendar year 2004.

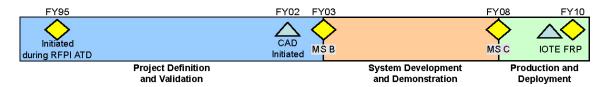
SYSTEM DESCRIPTION AND MISSION

The PGMM is a 120mm mortar munition. The Army intends that PGMM will provide the maneuver commander with an organic capability to attack critical point targets with low collateral damage. The Army will use PGMM to incapacitate personnel in standard brick over block masonry structures, collapse earth and timber bunkers, and defeat stationary lightly armored vehicles or incapacitate personnel inside. PGMM will be compatible with all current and future mortar and mortar fire control systems. PGMM's terminal guidance will employ a man-in-the-loop laser designator to ensure precision engagement and minimize collateral damage. The Army intends PGMM to be compatible with all DoD laser designation devices.

PGMM is an Acquisition Category II development program that will produce three evolutionary increments. The Army plans for Increment I to provide the ability to engage point targets at ranges comparable to current 120mm mortar munitions. The intent for Increment II is to increase the engagement range to 10 km with 12 km as an objective. Finally, the Army intends for Increment III to increase the engagement range to 12 km with 15 km as an objective. The Army also wants Increment III to defeat moving, lightly-armored vehicles; to destroy additional masonry targets; and to achieve enhanced maneuverability during its flight to the target. The Army plans to conduct the Milestone B decision reviews for Increments II and III in FY08 and FY10, respectively.

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TEST AND EVALUATION ACTIVITY



In ATD and CAD testing prior to the Milestone B decision, guidance, airframe, control actuation, sensor (laser detector), and warhead/fuze subsystems demonstrated appropriate technology readiness levels for entry into the SDD phase of the acquisition cycle. No test activity has occurred since Lockheed Martin completed the CAD effort in September 2003.

TEST AND EVALUATION ASSESSMENT

Once the Army awards the SDD contract, the PGMM Integrated Product Team will reconvene and update the Milestone B Test and Evaluation Master Plan (TEMP). The Milestone B TEMP will provide details of SDD contractor and government developmental test plans. It will also describe sufficient operational and live fire testing to support major program decisions such as the Milestone C low-rate initial production (LRIP) and the full-rate production decisions. We anticipate that the Army will submit this TEMP for our review by the summer of 2005.

Because Soldiers have not previously used laser designators for terminal guidance of mortar munitions, the system evaluation will include a limited user test (LUT). The LUT will assess the effectiveness of the tactics, techniques, and procedures for the employment of PGMM, to include limitations on laser designator employment.

The January 2003 PGMM Acquisition Strategy and Acquisition Plan states that the Army plans to award a full-rate production contract through full and open competition. Should a supplier other than the SDD/LRIP contractor win this contract, the Army will need to conduct additional operational test and evaluation events to ensure the operational effectiveness and suitability of production rounds.