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MISSILE DEFENSE

Opportunities Exist to Strengthen Acquisitions by Reducing Concurrency and Improving Parts Quality

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Highlights

Highlights of GAO-12-600T, a testimony before the Subcommittee on Strategic Forces, Committee on Armed Services, U.S. Senate

Why GAO Did This Study

In order to meet its mission, MDA is developing a highly complex system of systems—ground-, sea-, and space-based sensors, interceptors, and battle management. Since its initiation in 2002, MDA has been given a significant amount of flexibility in executing the development and fielding of the ballistic missile defense system. This statement addresses progress MDA made in the past year, the challenges it still faces with concurrent acquisitions and how it is addressing parts quality issues. It is based on GAO's April 2012 report on missile defense and its June 2011 report on space and missile defense parts quality problems.

What GAO Recommends

GAO makes no new recommendations in this statement. In the April 2012 report, GAO made recommendations to strengthen MDA's longer-term acquisition prospects including a review of MDA's acquisitions for concurrency to determine whether the proper balance has been struck between planned deployment dates and concurrency risks to achieve those dates. The report includes additional recommendations on how individual program elements can reduce concurrency. DOD agreed with six of the seven recommendations and partially agreed with one.

DOD generally concurred with the recommendations in the June 2011 report for greater coordination between government organizations responsible for major space and missile defense programs on parts quality issues and periodic reporting to Congress.

View GAO-12-600T. For more information, contact Cristina Chaplain at (202) 512-4841 or chaplainc@gao.gov.

What GAO Found

In fiscal year 2011, the Missile Defense Agency (MDA) experienced mixed results in executing its fiscal year 2011 development goals and tests. For the first time in 5 years, GAO was able to report that the agency delivered all of the targets used in fiscal year 2011 test events with the targets performing as expected. In addition, the Aegis Ballistic Missile Defense program's Standard Missile-3 Block IA missile was able to intercept an intermediate-range target for the first time and the Terminal High Altitude Area Defense program successfully conducted its first operational flight test. However, none of the programs GAO assessed were able to fully accomplish their asset delivery and capability goals for the year. Flight test failures, a test anomaly, and delays disrupted MDA's flight test plan and the acquisition strategies of several components. Flight test failures forced MDA to suspend or slow production of three out of four interceptors currently being manufactured. Some of the difficulties in MDA's testing and production of assets can be attributed to its highly concurrent acquisition approach.

Concurrency is broadly defined as the overlap between technology development and product development or between product development and production. High levels of concurrency were present in MDA's initial efforts and are present in current efforts. For example, MDA's flight test failures of a new variant of the Ground-based Midcourse Defense program's interceptors while production was underway delayed delivery to the warfighter, increased costs, and will require retrofit of fielded equipment. Flight test costs to confirm its capability has increased from $236 million to about $1 billion. MDA has taken positive steps to incorporate some acquisition best practices, such as increasing competition and partnering with laboratories to build prototypes. For example, MDA took actions in fiscal year 2011 to reduce acquisition risks and prevent future cost growth in its Aegis SM-3 Block IIA program. Nevertheless, as long as newer programs adopt acquisition approaches with elevated levels of concurrency, there is still considerable risk of future performance shortfalls that will require retrofits, cost overruns, and schedule delays.

MDA is also taking the initiative to address parts quality issues through various means, including internal policies, collaborative initiatives with other agencies, and contracting strategies to hold its contractors more accountable. Quality issues have seriously impeded to the development of the missile defenses in recent years. For example, during a fiscal year 2010 Terminal High Altitude Area Defense flight test, the air-launched target failed to initiate after it was dropped from the aircraft and fell into the ocean. A failure review board identified shortcomings in internal processes at the contractor to be the cause of the failure. This failure led to a delay of the planned test, restructuring of other planned tests, and hundreds of millions of dollars being spent to develop and acquire new medium-range air-launched targets. Parts quality issues will require sustained attention from both the executive and legislative branches. MDA is exhibiting some leadership, but there are significant barriers to addressing quality problems, such as the increase in counterfeit electronic parts, a declining government share of the overall electronic parts market, and workforce gaps within the aerospace sector.