

Advanced Medium Range Air-to-Air Missile (AMRAAM)

Executive Summary

- AIM-120C-7 Advanced Medium Range Air-to-Air Missile (AMRAAM) operational testing is ongoing and will continue through FY06.
- AIM-120D is in development and the Air Force plans to make a production cut-in decision in the spring of 2006.

System

- The AIM-120 AMRAAM is an all-weather, radar-guided air-to-air missile with launch-and-leave capability in both the beyond-visual-range and within-visual-range arenas.
- The AMRAAM program develops and incorporates phased upgrades periodically.
- The latest version, the AIM-120C-7, is currently in operational test. It incorporates an upgraded antenna, receiver, signal processor, and new software algorithms to counter new threats. It also has some smaller components to create room for future system growth.
- The AIM-120D, the next upgrade to the AMRAAM, is currently in development.

Mission

- The Air Force and Navy, as well as several foreign military forces, use various versions of the AIM-120 to shoot down enemy aircraft.



- All U.S. fighter aircraft except the F-14 use the AMRAAM as the primary beyond-visual-range air-to-air weapon to shoot down enemy aircraft.
- A single launch aircraft can engage multiple targets with multiple missiles simultaneously.

Activity

- AIM-120C-7 operational testing started in February 2005. Operational testing to date uncovered two software deficiencies that the program is correcting. The lead test agency (Air Force Operational Test and Evaluation Center (AFOTEC)) is combining the current operational test period, originally scheduled to complete in March 2006, with a previously planned software upgrade program test period that will result in a continuous operational test period, scheduled to complete in the summer of 2006.
- AIM-120D, the next version of AMRAAM, is continuing in development and began early developmental testing in 2005. The AIM-120D is planned to provide significantly upgraded capabilities, including Global Positioning System and datalink.
- The Air Force deferred a production cut-in decision to start procurement of AIM-120D missiles from September 2005 to spring of 2006.

Assessment

The AIM-120C-7 is approximately two years behind the originally planned development schedule. Testing to date shows that it will likely provide the required capabilities when fielded. Testing occurred in accordance with the DOT&E-approved Test and Evaluation Master Plan and test plan.

Recommendation

1. Test and Evaluation Master Plan development for the AIM-120D must include enough test missiles to adequately characterize performance and suitability.

AIR FORCE PROGRAMS