

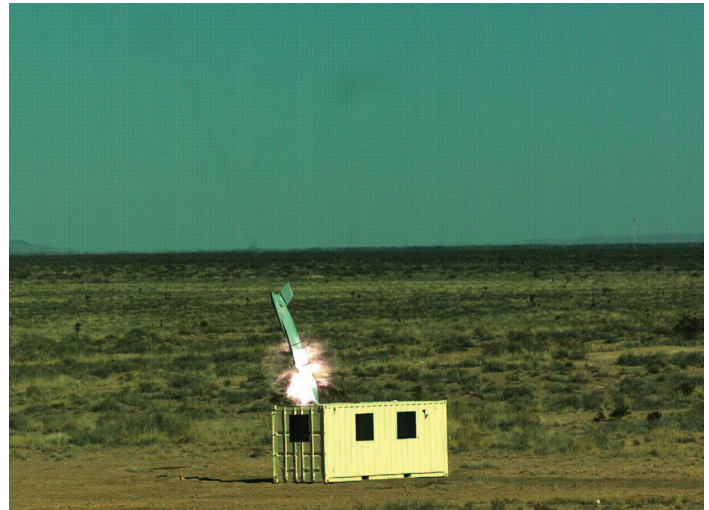
Joint Air-to-Surface Standoff Missile – Extended Range (JASSM-ER)

Executive Summary

- The Air Force and Lockheed Martin are in the process of engineering development of the FMU-162/B Electronic Safe and Arm Fuze (ESAF) as a replacement for the mechanical fuzes currently used in Joint Air-to-Surface Standoff Missile – Extended Range (JASSM-ER).
- The Air Force should continue to conduct Reliability Assessment Program testing on Lot 8 and later JASSM-ER missiles in the Weapons System Evaluation Program (WSEP).

System

- The AGM-158B JASSM-ER is a stealthy cruise missile that flies a preplanned route from launch to a target, using GPS guidance and an internal navigation system.
- JASSM-ER:
 - Has a 1,000-pound penetrating warhead
 - Has an imaging infrared seeker that can be used for greater accuracy and precision; the seeker uses image templates prepared by a rear echelon intelligence unit
 - Can be launched by B-1B aircraft, with plans to integrate it on the F-15E, F-16, and B-52
 - Includes a container that protects the weapon in storage and aids ground crews in moving, loading, and checking the missile
 - Uses the same Air Force mission planning systems utilized for aircraft and other weapons
- FMU-162/B ESAF takes advantage of advances in fuze technology and is intended to be a more reliable fuze with the same capabilities as the baseline mechanical fuze. The FMU-162/B ESAF would be used in JASSM baseline and ER variants.



Mission

- Operational units equipped with JASSM-ER will employ the weapon from the B-1B Lancer against high-value or highly-defended targets from outside the lethal range of many threats. Units equipped with JASSM-ER will:
- Destroy targets with minimal risk to flight crews and support air dominance in the theater
 - Strike a variety of targets greater than 500 miles away
 - Execute missions using automated preplanning or manual pre-launch retargeting planning
 - Attack a wide range of targets including soft, medium, and very hard (not deeply buried) targets

Major Contractor

Lockheed Martin, Missile and Fire Control – Orlando, Florida

Activity

AGM-158B JASSM-ER

- The Air Force completed the JASSM-ER IOT&E in November 2012.
- DOT&E submitted an IOT&E report in May 2013 with the determination that the JASSM-ER is operationally effective and suitable.
- The Air Force conducted all testing in accordance with the DOT&E-approved Test and Evaluation Master Plan and test plan.

- The Air Force has not taken delivery of any production JASSM-ER weapons yet, so no Reliability Assessment Program missions have been flown for Lot 8 or future JASSM-ER missiles.

FMU-162/B JASSM ESAF

- The FMU-162/B ESAF is in technical development testing.
- The Air Force and contractor are currently re-designing the fuze based on the results of the sled testing conducted.

Assessment

AGM-158B JASSM-ER

- There was no operational test activity to report following the conclusion of the JASSM-ER IOT&E in November 2012.
- Despite improvements in workmanship and production processes, there is still a need to evaluate the inherent reliability of production lot missiles (through Lot 8, at a minimum) to ensure that the reliability growth plan is successful. Since there has been no Lot 8 JASSM-ER production missiles flown in WSEP, it is not possible to evaluate the reliability of these weapons.

FMU-162/B JASSM ESAF

- The FMU-162/B ESAF program has the potential to increase the overall reliability of all JASSM variants. The FMU-162/B ESAF program would replace the current

electro-mechanical fuze, which relies on moving parts prone to reliability failures. In addition, the FMU-162/B ESAF has more built-in test capability than the current electro-mechanical FMU-156/B ESAF.

Recommendations

- Status of Previous Recommendations. The Air Force has not addressed either of the FY12 recommendations. The Air Force should continue Reliability Assessment Program testing for Lot 8 and beyond in the WSEP. In addition, the Air Force should, in conjunction with the contractor, continue the technical development and evaluation of the FMU-162/B ESAF.
- FY13 Recommendations. None.