F-35 Test & Support Equipment
Test Solutions from the Flightline to the Depot

MARVIN TEST SOLUTIONS | The Marvin Group | AeroPrecision
Vertically integrated solutions including design, production, repair, overhaul, upgrades, maintenance, and training
F-35 Alternate Mission Equipment

ARL: Alternate Lightweight Advanced Rail Launcher

AGP: Air-to-Ground Pylon
- (2) Configurations for CV
- (1) Configuration for CTOL/STOVL

AAAP: Alternate Lightweight Air-to-Air Pylon

Adapters
F-35 Test & Support Equipment

MTS-3060 SmartCan
Universal O-Level Armament Tester supporting legacy and “smart” weapons systems
marvintest.com/products/MTS-3060

Flightline to Depot Test Solutions

AME Systems

O-Level
(on aircraft)

I-Level / Depot-Level
(off aircraft)
MT1888 Series
O-Level, eye-safe laser target simulator for system level test of laser-guided weapons systems
marvintest.com/products/MT1888

MTS-235
F-35 Alternate Mission Equipment (AME) Test Set
marvintest.com/products/MTS-235
From the Flightline to the Depot

WE MAKE TEST EASY™

“Sustained commitment to product quality and innovation are among the characteristics Lockheed Martin has grown to identify in the service it receives from Geotest (Marvin Test Solutions).”

Barry Breslow, Senior Contract Manager, Lockheed Martin

Inspired by the demanding and critical nature of our customers’ missions, we strive to be the world’s most innovative, best-value test solutions provider. With more than 25 years of global experience in the aerospace and manufacturing industries, we are able to quickly deliver full-spectrum, successful test solutions for defense, commercial aerospace and manufacturing organizations from the flightline to the depot.

Download our armament test gap white paper at marvintest.com/armament.
Bridging the Armament Test Gap

Marvin Test Solutions

The U.S. Air Force (USAF) took delivery of its fifth F-16 aircraft which features "state of the art" technology including sophisticated avionics, munitions, and armament systems in August of 1998. This sophisticated armament resulted in the USAF equipping maintenance with a new generation of test equipment at the flightline, supporting operational-level (500-hour) maintenance. One of the new areas of test equipment, the USAF issued maintenance was a small handheld test equipment called the Armament Data Pre-test Set (ADPS). The ADPS was round, cylindrical, and resembled a榛子. Thus, the ADPS quickly earned the nickname "Hazelnut" among maintainers. The F-16 ADPS was a very simple device with a single measurement channel. To provide adequate flightline armament test capability, this piece of test equipment was correlated with large test systems, such as the 19901 test, making the flightline near the F-16 armament and combat capable (Figure 1).

The Armament Test Gap

Over the years, F-16 aircraft have received numerous upgrades to their avionics and armament systems including "smart" (AF-STD 1553 and 1962) weapons technology. Maintainers, as well as those involved in the design and production of new equipment, have realized that the introduction of "smart" weapons has created an armament test gap because of the inability of today's O-level testers to provide the necessary tests to test and maintain armament and munitions. The amount of test equipment required to maintain and troubleshoot the various systems is much larger than what was required to use the same or similar ADPS equipment with the large box test equipment designed to verify that these sophisticated armament and munitions systems are fully mission capable (FMC). This combination of few systems and O-level tester equipment doesn't drive the capability needed to support today's "smart" weapons. The introduction of Smart Weapons, as well as new and advanced maintenance equipment, has caused a significant test equipment gap because of the inability of O-level testers to provide the necessary tests to maintain and troubleshoot today's "smart" weapons systems. The amount of test equipment required to maintain and troubleshoot the various systems is much larger than what was required to use the same or similar equipment with the large box test equipment designed to verify that these sophisticated armament and munitions systems are fully mission capable (FMC).

Closing the Armament Test Gap

Current-generation test equipment is inadequate to test the advanced armament deployed on F-16 aircraft. Marvin Test Solutions' AFS-3000 SmartCam Universal O-Level Tester represents a paradigm shift away from the traditional one-for-one test equipment replacement approach and a quantum leap in capabilities available to maintainers on the flightline who are working within the constraints of shrinking budgets. With the need to test smart armament and associated interface interfaces, Marvin Test Solutions' SmartCam Universal O-Level Tester represents a paradigm shift away from the traditional one-for-one test equipment replacement approach and a quantum leap in capabilities available to maintainers on the flightline who are working within the constraints of shrinking budgets. With the need to test smart armament and associated interface interfaces, Marvin Test Solutions' SmartCam Universal O-Level Tester represents a paradigm shift away from the traditional one-for-one test equipment replacement approach and a quantum leap in capabilities available to maintainers on the flightline who are working within the constraints of shrinking budgets. With the need to test smart armament and associated interface interfaces, Marvin Test Solutions' SmartCam Universal O-Level Tester represents a paradigm shift away from the traditional one-for-one test equipment replacement approach and a quantum leap in capabilities available to maintainers on the flightline who are working within the constraints of shrinking budgets.

Closing the Armament Test Gap, one aircraft at a time, the MTS-3300 SmartCam Universal O-Level Tester is already deployed and proven effective on the F-10 Block 15 and 50, F-16C, F-16D, F-16A, and F-16B aircraft.