



Automating Munitions Testing

U.S. Army Yuma Test Center and Cal-Bay Systems, Inc.

The Yuma Test Center (YTC), part of the U.S. Army's Yuma Proving Grounds, performs various ballistic and chronographic measurements of military weapons and munitions. YTC operates three different types of ballistic data systems, four different types of Doppler velocimeters and assorted timing equipment and software applications. They recently embarked on a project to streamline these aging, disparate systems with a single system that integrates new commercially available hardware, with a new software application, to provide automated electronic data acquisition, calibration, and computer control of pan/tilt positioners used to align various instruments with ballistic trajectories. Required payloads include velocimeter antennas and IR flash detectors.

The YTC's requirements called for ruggedized pan/tilt positioners to be located adjacent to weapons and launchers. The positioners are required to provide timely, automatic re-alignment of instruments requiring a particular orientation to a weapon, launcher, or expected trajectory. The positioners are also required to provide status, settings, and axis positions to the automated ballistic test system.

To meet these important needs, Directed Perception's **PTU-D300** was called into action. Multiple **PTU-D300's** will be networked to provide coordinated, single-point control during test procedures. The flexible payload mounting, rugged design, and built-in computer control provided an ideal match for YTC's stringent requirements.

Cal-Bay Systems, Inc. of San Rafael, CA was tapped to provide the design, development and supply of the ballistics test system under a five-year contract with the U.S. Army's Yuma Test Center.

About Yuma Test Center

Yuma Test Center is part of Yuma Proving Ground originally established in 1942. It is a multi-purpose test facility able to test nearly every weapon system in the ground combat arsenal. More than 1,300 miles in size, the test center is one of the few places where military munitions and hardware can be tested in an area almost completely removed from urban encroachment and noise concerns.

About Cal Bay Systems, Inc

Cal-Bay Systems, Inc. is based in San Rafael, California, with offices in Irvine California, and Bangalore, India. located just north of San Francisco in Marin County. Cal-Bay Systems is a value-added provider for the test, measurement, and automation industry.



The U.S. Army's Yuma Test Center provides ballistic measurement testing

Customer Success Story