Exponent®
Engineering and Scientific Consulting

Targeting Technologies

Overview

Exponent's Technology Development practice has a well-established track record of delivering innovative targeting solutions to match our clients' needs. Our unique mix of in-theater experience (Iraq and Afghanistan) and deep understanding of technology allows us to create highly effective, cutting-edge solutions that are well matched to our clients' operational concepts. Exponent's in-house engineering design capabilities and broad expertise in sensors, optics, electronics, algorithms, and software allow for rapid prototyping and concept realization.

An example of our capabilities in the area of targeting technology is the Multifunction Advanced Rifle Sight (MARS), which was a concept prototype developed to expand the capabilities of the Army/Marine Corps existing M-203 Grenade launcher. It provided a GPS, compass, inclinometer, and a laser rangefinder in a compact and lightweight unit that mounts on the Picatinny rail of an M4 or M16 rifle. It also provides a "see-through" computer display with a range-adjusted sight position. The shooter lazes his target then computes the firing solution and adjusts the aiming reticle for a direct hit. If the target distance is large and the elevation angle required causes the barrel to block the line of sight, MARS provides a virtual target view to allow the shooter to properly aim his weapon. If the shooter needs to move to concealment before shooting, MARS notes the change in GPS position and compensates in its aim point.

©2015 Exponent, Inc. All Rights Reserved.