

Benchmark Electronics Research and Development in the Field of Border Security Technologies

Benchmark Electronics develops advanced mobile surveillance systems to assist U.S. Border Patrol agents in conducting their border protection mission. Benchmark has invested more than \$4M over the past five years into rugged pickup truck based surveillance suites that enable the border agents to rapidly deploy surveillance sensor payloads to heights over 30 ft without the support of any guy wires. The sensor suites employed have long range high definition imaging from thermal and day cameras, laser range finding and laser spotters.

Our research and development efforts have produced numerous advancements in these mobile surveillance delivery systems. Benchmark has created the first ever covert mobile surveillance suite that folds completely and discretely in the bed of an F150 pickup truck that also automatically levels the mast to deploy the systems on uneven terrain.

Benchmark's additional Research and Development efforts for Border Security missions include the integration of 360 degree radar for its F150 based mobile surveillance solution, a fully autonomous drone to allow agents to perform a close-in inspection of any targets detected by its mobile surveillance system, and integration of long-range mesh networking to provide long-range situational awareness and coordination between deployed border surveillance assets in a given sector.

In conjunction with all of the above border security research and development efforts, Benchmark has invested significantly in a common command and control (C2) software to seamlessly fuse the operation and information display for the many technologies being deployed. From imaging sensors to radar and autonomous drone imagery, to auto detection and tracking algorithms, our C2 software can provide a single, integrated solution for border security.