

Guardian UAS Maritime Variant Predator B



U.S. Customs and Border Protection, Air and Marine Operations (AMO) operates the Predator B unmanned aircraft system (UAS) to increase domain awareness in the land and maritime environments. AMO worked with the U.S. Coast Guard to develop a maritime variant of its Predator B UAS called the Guardian. This was done to increase reconnaissance, surveillance, targeting, and acquisition capabilities in maritime operating environments.

The Guardian was modified from a standard Predator B with structural, avionics, and communications

enhancements, as well as the addition of a Raytheon SeaVue marine search radar and an electro-optical/infrared sensor that is optimized for maritime operations.

Aircrews conduct long-range surveillance in the source and transit zones, along the coasts of Southern California and Gulf of Mexico.

Fiscal Year 2020, AMO's UAS recorded 17,351 confirmed detections of illegal activity. UAS missions also led to the seizure of 6,698 pounds of marijuana.

Performance and Weight:

- Maximum Speed
 240 knots (276 mph)
- Service Ceiling Altitude 50,000 feet
- Endurance
 Up to 20 hours
- Maximum Gross Weight 10,500 pounds

Other System Components

- Fixed and mobile ground control stations
- Electro-optical/infrared sensors
- SeaVue marine search radar