

arlier this year, General Atomics Aeronautical Systems, Inc. (GAASI), in cooperation with Iki City, Nagasaki Prefecture, conducted the first demonstration of a large Remotely Piloted Aircraft System (RPAS) in Japan. The maritime surveillance flight demonstrations were conducted in May 2018 using a GA-ASI manufactured MQ-9 Guardian Remotely Piloted

Aircraft (RPA). The flights collected data for scientific research that have been shared across multiple government agencies. This was the first demonstration of a long endurance RPA by a private company in Japan.

As the demonstration flights began, Iki Mayor Shirakawa said: "We are delighted to host the RPA flight demonstration on our island of Iki. The demonstration is an important milestone for the many peaceful uses of RPAs, including maritime disaster security and maritime resource management. Iki is located near the boundaries of Japan, so surveillance capabilities are an important matter for us. Furthermore, holding the nation's first demonstration of this kind has great economic significance for our island."

- During the demonstration, GA-ASI's Guardian accomplished several goals, including:
- Demonstrated utility in Humanitarian and Disaster Response by monitoring the volcano on Fugendake and tracking the spread of a small brush fire on Iki
- Monitored the environmental impact of overfishing in Japan's Exclusive Economic Zone (EEZ)
- Provided overwatch support to the Japanese Fisheries Agency during routine patrols
- Demonstrated the utility of GA-ASI's Detect and Avoid system, which enabled safe operational flight throughout Japanese airspace

 Verified the Automatic Identification System (AIS) ability of SeaVue Radar, demonstrating rapid identification of ships at sea as a method of countering piracy and illegal fishing

The Guardian's sensors provided a constant stream of Intelligence, Surveillance, and Reconnaissance (ISR) data using a long-range maritime

> surface-search radar, stabilized optical and infrared video cameras, and an active collision-avoidance system, including a short range air-to-air radar.



Maritime Domain Awareness

The demonstration flights highlighted the importance of Maritime Domain Awareness (MDA) for Japan. "ISR capability is very important for an island nation like Japan," said Joseph Song, vice president of International Strategic Development for GA-ASI. "As our aircraft continue to evolve, the importance of our RPA on a global scale will continue to increase."

Another important initiative for GA-ASI is enabling its RPA to fly in civil airspace. According to Mr. Song, being able to fly large RPA without restrictions opens up more civil and humanitarian missions for

the aircraft. "In the case of natural disasters, the ISR capability of our RPA have been important to the rescue efforts following hurricanes and floods. Our aircraft put 'eyes in the sky' for first responders to deploy resources efficiently on the ground."

Mr. Song said that with GA-ASI's MQ-9B SkyGuardian and its maritime SeaGuardian, the company took a clean-sheet approach to development that will produce aircraft that meet ICAO standards. He says that's one of the many reasons more international customers are ordering GA-ASI aircraft.

GA-ASI is exhibiting at Japan Aerospace this week in Stand #7204 (East Hall 7 & 8). ■