

SkyGuardian Completes Atlantic Crossing

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Tony Osborne



MQ-9B: General Atomics

[RAF FAIRFORD](#), England—The prototype [General Atomics](#) MQ-9B SkyGuardian unmanned aircraft has touched down on the eve of the Royal International Air Tattoo after a milestone Transatlantic crossing.

The aircraft has become the first medium-altitude, long-endurance UAV to cross the Atlantic, flying from Grand Forks, North Dakota, General Atomics' training and test base, to Fairford in 24 hr., 2 min., landing here shortly before 7 p.m. July 11.

It also has become the first UAV to operate in British airspace controlled via satellite communications.

The aircraft routed through Canada, then across the Atlantic and turned around the coast of Southern Ireland before crossing the UK coastline in West Wales and coming down to land at Fairford.

Two crews operating in 12-hr. shifts flew the SkyGuardian across. Several orbits were performed off the Cornwall and Welsh coasts as the aircraft crossed the Atlantic slightly faster due to tailwinds. The aircraft arrived in the vicinity of Fairford 2 hr. before it was due to land and performed a series of orbits until its allocated landing slot, all the time flying in segregated but controlled airspace. This was tactically controlled, according to the Civil Aviation Authority's Tom Gratton. Gratton led the setup of the airspace to enable the flight, establishing temporary danger zones along the route at set altitudes with other airspace users warned through Notices to Airmen.

While the aircraft was flown by crews at Grand Forks, another ground control station with line-of-sight capability was set up at Fairford in case of a lost-link situation and to support the taxiing of the aircraft once it had arrived. On arrival, the aircraft still had at least 16 hr. of fuel still onboard. The SkyGuardian has a 40-hr. endurance, the manufacturer says.

The SkyGuardian's flight and international debut was in support of the Royal Air Force's centenary, which is being marked at this year's air show.

The aircraft will form the basis of the UK's new Protector platform, which will replace the UK's fleet of [MQ-9](#) Reapers. The RAF is the lead customer for the platform and is currently funded to purchase 16 aircraft, with service entry expected in the early 2020s.

Officials would not be specific on time lines for introduction to service. But the government's National Security Capability Review, published in March, suggested they would be introduced by mid-2024.

"The game-changing element of this platform is that it is certifiable," said Air Vice Marshal Julian Young, chief of materiel for fixed-wing aviation at the UK's Defense Equipment & Support procurement agency. "That's not a given—we have got to work hard to certify it though the Military Aviation Authority, but that is what it is designed to do."

Young said the aim was to make the platform able to "fly freely over populated areas" in the UK and abroad.

The RAF wants to be able to operate the aircraft in nonsegregated airspace in the UK to support training and national security missions. But this is likely to be a gradual process, operating in controlled airspace initially and then nonsegregated airspace later with the use of a due-regard radar, ADS-B in/out transponders, and TCAS III.

The Protector program has recently come under scrutiny after data released by the UK defense ministry revealed there were concerns about the delivery of the £907 million (\$1.19 billion) program, after it had undergone a "financial review" and "rebaselining."

Senior officials told Aerospace DAILY the reviews were a result of an adjustment in Royal Air Force priorities. The air force is continuing to mull over how to achieve a “seamless” transition from the Reaper to the Protector while getting the “most bang for their buck” out of the existing Reaper fleet, they said.

There also are questions about manpower to support the expanded fleet, and where they will be based.

Meanwhile, the RAF chief of air staff, Air Chief Marshal Sir Stephen Hillier, announced that the first squadron to operate the Protector will be 31 Sqn., which currently flies the Panavia Tornado.