

FOCUS: Surveillance Aircraft

Meanwhile, the company's Baron G58 ISR aircraft offers the reliability of twin engines, a maximum cruise speed of up to 352km per hour, a range of 2,788km and a service ceiling of 6,306m. This allows operators to reach mission areas quickly and safely, flying above weather rather than through it.

The aircraft's basic surveillance package includes: an EO/IR camera package with a 9-inches or 10-inches diameter turret, controller and monitor; a mission management system with mapping capability for situational awareness; a high-definition imagery recorder with playback that records metadata; and a V/UHF radio for tactical communications. Surveillance options include a line-of-sight and/or satellite data link; search and rescue direction finding; and an automatic identification system for maritime surveillance.



Do 228NG

RUAG Do 228NG made its Asian debut at the Langkawi International Maritime and Aerospace Exhibition (LIMA) held early December 2011. The Malaysian Maritime Enforcement Agency (MMEA) aside from the Royal Malaysian Air Force was looking at a number of surveillance aircraft. RUAG was proposing at least four operational aircraft with additional two for spares to the MMEA. The Dornier Do 228NG is a special mission aircraft, which the company says has low operational cost. The aircraft can be configured, fitted and utilised for coast guard duties such as the EEZ, customs watch and anti-pollution patrols. The Do 228NG is a highly upgraded version of the former Do 228-212 and features a glass cockpit which can be interfaced with ISR sensor operator station as well as significantly improved characteristics.

The five-blade Dornier 228NG is deployed in two main areas. Firstly as a short-range commercial aircraft for 19 passengers with short take-off and landing potential of the robust high-wing monoplane, which can also land on unpaved airstrips or even in tall grass.



Do 228NG

UK RAF Sentinel R1



daily weighting between 700 and 800kg, meaning that extra fuel can be carried.

Bombardier Global Aircraft

Bombardier Global aircraft can fly faster and farther, and climb quicker than any other business jet in their class with spacious cabin space. The aircraft's higher ground clearance allows for mission sensor installations, and has damage-tolerant airframes with superior structural integrity and excellent loiter time capabilities at low speeds and high altitudes with greater lockdown capability. The advanced version can undertake missions that range from low-level flight inspection to high-level surveillance.

Challenger Aircraft

Bombardier's Challenger aircraft are also well suited to undertake special missions that include ISR with spacious cabins providing ample space for operator consoles and mission system electronics. It has long range and endurance, low altitude manoeuvrability and can carry external stores.

Q-Series

The rugged and reliable Bombardier Q-Series aircraft is another option that offers good endurance, loiter time and flexibility, another platform that is used for various tasks like coastal surveillance, air and marine interdiction, and airspace security. Amongst the operators are the coast guard units of Japan, Sweden, Iceland as well as Customs.

Sentinel R1

A modified version of the Global Express by Bombardier known as the Sentinel R1 is powered by 2 BMW/Rolls Royce 710 engines with a maximum operating altitude of 49,000ft and a speed of Mach 0.89. It is equipped with Dual Mode Radar, collects SAR imagery and GMTI data. A typical crew would comprise two pilots, mission commander and two mission operators. Operated by the RAF in Afghanistan, the high-tech state-of-the-art aircraft have proven to be very effective in support of ground forces providing timely and critical intelligence.

Apart from Afghanistan, the Sentinel R1 has also been used by the RAF in operations over Libya as well as in Mali recently.

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