

EURO HAWK®

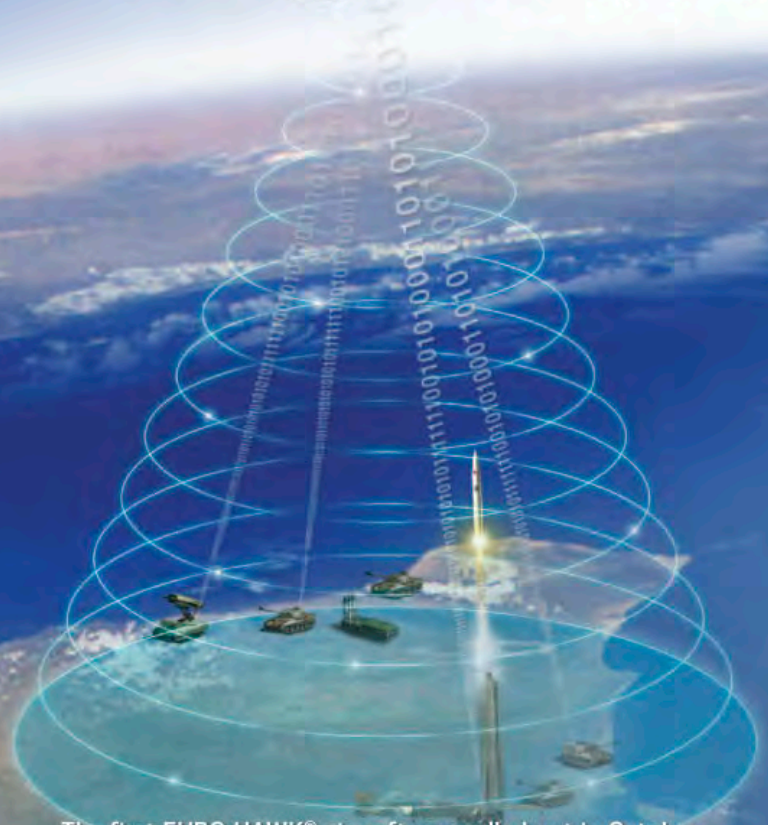
*High-Altitude Long-Endurance Unmanned Aircraft System
for Standoff Wide-Area Surveillance and Reconnaissance*



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The EURO HAWK® Concept



After involvement in recent conflicts, the European armed forces' need for unrestricted and immediate access to intelligence, surveillance and reconnaissance information has become even more urgent.

This sensitive, unfiltered and secure information is essential for the political and military decision-makers to manage crises, prevent conflicts, and command forces.

EADS Deutschland GmbH (Cassidian) and Northrop Grumman have developed a system solution tailored to fit these needs.

With the state-of-the-art EURO HAWK® unmanned aircraft system (UAS), the manufacturers combined an already proven platform based on Northrop Grumman's Global Hawk with Cassidian's highly sophisticated payload technology.

EuroHawk GmbH, a joint venture formed by Northrop Grumman and Cassidian, was awarded a contract from the German Ministry of Defence to develop the EURO HAWK® signals intelligence (SIGINT) system.

The first EURO HAWK® aircraft was rolled out in October 2009. It successfully flew its first flight in June 2010 and completed its ferry flight to Manching, Germany in July 2011 for mission system integration and testing.

The development of EURO HAWK® has ushered in a new era for unmanned standoff, wide-area surveillance in Europe. With a flight altitude up to 60,000 feet and a total endurance of 30 hours, EURO HAWK® will serve as an innovative high-altitude, long-endurance UAS capability.

EURO HAWK® will provide an interoperable, modular and cost-effective European information superiority solution for future engagements, including support of NATO, UN and EU operations.

SIGINT
SIGNALS INTELLIGENCE

The EURO HAWK® Mission Equipment

(Intelligent System Integration)

With its specially defined mission system integration, EURO HAWK® is one example of the flexible, customer-tailored products made by Cassidian and Northrop Grumman. Initially designed to fulfill SIGINT missions, EURO HAWK® can extend its capabilities to include imagery intelligence (IMINT) and other missions.



Integrated SIGINT (ELINT / COMINT)

A surveillance and reconnaissance system for detection, identification, processing and evaluation of electronic intelligence (ELINT) and communications intelligence (COMINT).

Through the EURO HAWK® mission system, Cassidian is leading SIGINT technology with key characteristics:

- Frequency detection over a wide frequency range
- Very high bandwidth
- Man-in-the-loop concept with high degree of automation
- Real-time situation display
- Correlation of ELINT and COMINT results
- Interface for integration in network-enhanced capabilities environments
- Full ground support for sensor mission planning, online sensor control, monitoring and post-evaluation



Wide-area surveillance and reconnaissance with standoff capabilities. Detection and evaluation of radar emitters (ELINT) and communications emitters (COMINT)



SAR / MTI Radar (IMINT)

A surveillance and reconnaissance system for all-weather imagery intelligence.

The huge payload capacity of the EURO HAWK® platform enables the integration of high-resolution synthetic aperture radar / moving target indicator (SAR/MTI) sensor for wide-area, high-altitude IMINT missions:

- Use of second-generation airborne ground surveillance SAR/MTI radar based on state-of-the art European technology
- Active electronically scanned array antenna technology
- Dual mode SAR/MTI high resolution

Maritime Surveillance

By integrating specific maritime sensors and equipment, EURO HAWK® can be extended to provide comprehensive information data for joint and naval headquarters as well as for ship's commanders:

- Maritime radar, electro-optical/infrared sensor and laser designator fulfill maritime intelligence, surveillance, target acquisition and reconnaissance missions for anti surface warfare and coastal protection support
- Air vehicle controlled by ship and/or ground station



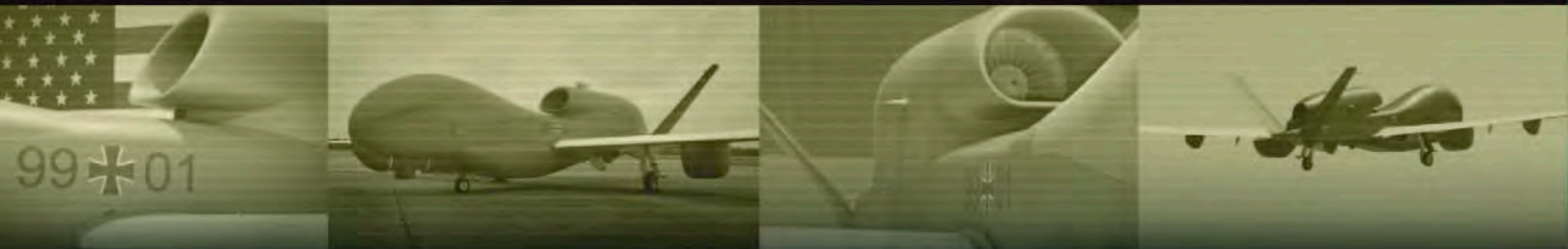
*In-flight photographs of the
EURO HAWK® 99+01 ferry flight
to Manching, Germany, 2011*

EURO HAWK® within the Network-Centric Environment

The modern architecture of warfare demands that EURO HAWK® will be an integrated part of the network-centric environment.

In this environment, EURO HAWK® can play a decisive role by providing real-time, crucial intelligence information. EURO HAWK® enables its user to take the appropriate steps within a short period of time.

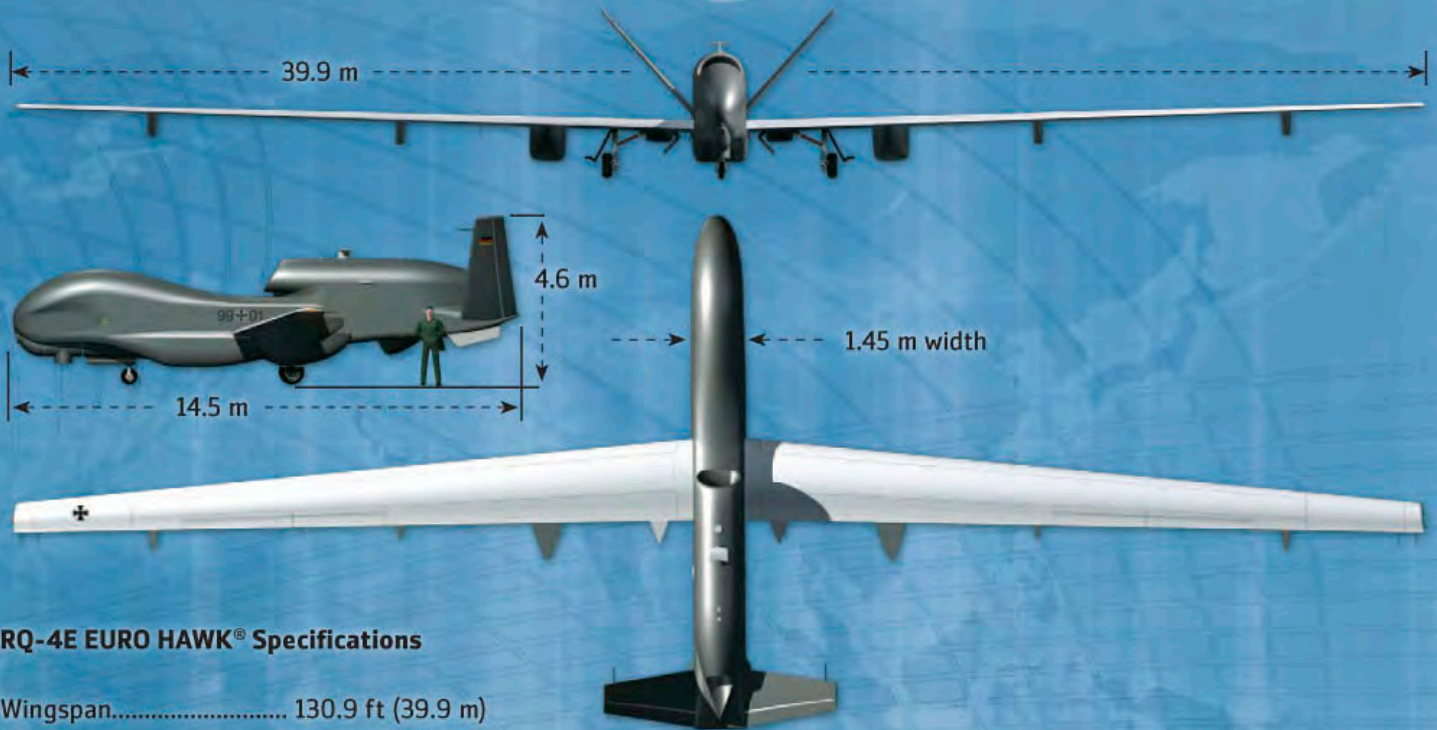
This enables optimum strategies in areas of engagement.





EURO HAWK®

Teaming to Provide the EURO HAWK® System



RQ-4E EURO HAWK® Specifications

Wingspan.....	130.9 ft (39.9 m)
Length	47.6 ft (14.5 m)
Height.....	15.4 ft (4.6 m)
Gross Takeoff Weight	32,250 lbs (14,628 kg)
Payload Capability	3,000 lbs (1,360 kg)
Maximum Altitude	60,000 ft (18.3 km)
Loiter Velocity	310 kts TAS
Maximum Endurance.....	30.5 hrs

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