MQ-8B Fire Scout UAV - 2014, LCS

United States

Type: Unmanned Aerial Vehicle (UAV)

Min Speed: 55 kt Max Speed: 115 kt Commissioned: 2014

Length: 7.3 m Wingspan: 1.2 m Height: 2.9 m

Crew: 0

Empty Weight: 940 kg Max Weight: 1430 kg Max Payload: 272 kg

Propulsion: 1x 250-C20W



Sensors / EW: - Generic FLIR - (DEPRECATED - 3rd Gen, Surveillance) Infrared, Infrared, Surveillance Camera, Max range: 83.3 km

- Generic Laser Designator (Surface Only) Laser Designator, Laser Target Designator & Ranger (LTD/R), Max range: 18.5 km
- AN/AAQ-22 BRITE Star II [IR] (Group, Rangefinder) Infrared, Infrared, Target Search, Tracking and Identification Camera, Max range: 111.1 km
- AN/AAQ-22 BRITE Star II [Laser Rangefinder] (Group, Rangefinder) Laser Rangefinder, Laser Rangefinder, Max range: 18.5 km
- AN/AAQ-22 BRITE Star II [Optronics] (Group, Rangefinder) Visual, Visual, Target Search, Tracking and Identification TV Camera, Max range: 55.6 km

Weapons / Loadouts:

- HYDRA APKWS II 70mm Rocket [WGU-59/B, Rotary Wing Launch] - (2012) Guided Weapon. Surface Max: 5 km. Land Max: 5 km.

OVERVIEW: The Northrop Grumman MQ-8 Fire Scout is an unmanned autonomous helicopter developed by Northrop Grumman for use by the United States Armed Forces. The Fire Scout is designed to provide reconnaissance, situational awareness, aerial fire support and precision targeting support for ground, air and sea forces. The initial RQ-8A version was based on the Schweizer 330, while the enhanced MQ-8B was derived from the Schweizer 333. The larger MQ-8C variant is based on the Bell 407.

DETAILS: The MQ-8B features a four-blade main rotor, in contrast to the larger-diameter three-blade rotor of the RQ-8A, to reduce noise and improve lift capacity and performance. The four-blade rotor had already been evaluated on Fire Scout prototypes. They boost gross takeoff weight by 500 lb to 3,150 lb (by 225 kg to 1,430 kg), with payloads of

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up to 700 lb (320 kg) for short-range missions. The MQ-8B is fitted with stub wings which serve both an aerodynamic purpose as well as an armament carriage location. Weapons to be carried include Hellfire missiles, Viper Strike laser-guided glide weapons, and, in particular, pods carrying the "Advanced Precision Kill Weapon System (APKWS)", a laser-guided 70 mm (2.75 in) folding-fin rocket, which the Army saw as ideal for the modern battlefield. The Army was also interested in using the Fire Scout to carry up to 200 lb (90 kg) of emergency supplies to troops in the field.

The MQ-8B is being modified to permit rapid swap out of payload configurations. The current sensor configuration of a day/night turret with a laser target designator will remain an option. Alternate sensor payloads in consideration include a TSAR with Moving Target Indicator (MTI) capability, a multispectral sensor, a SIGINT module, the Target Acquisition Minefield Detection System (ASTAMIDS), and the Tactical Common Data Link (TCDL). The Army wanted the Fire Scout to operate as an element of an integrated ground sensor network as well.

SPECIFICATIONS: Crew: (0) || Payload: 600 lb (272 kg) || Length: 23.95 ft (7.3 m) || Rotor diameter: 27.5 ft (8.4 m) || Height: 9.71 ft (2.9 m) || Max. takeoff weight: 3,150 lb (1,430 kg) || Powerplant: (1) Rolls-Royce 250, 313 kW (420 hp).

PERFORMANCE: Maximum speed: 115 knots (213 km/h)+ || Combat radius: 110 nmi (203.7 km) with 5+ hours on station || Endurance: 8 hours (typical), 5 hours fully loaded || Service ceiling: 20,000 ft (6,100 m).

SOURCE: [SCO] Wikipedia http://en.wikipedia.org