Surveillance Radar Selected for Unmanned MQ-8B Fire Scouts

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Northrop Grumman selected a Telephonics multimode surveillance radar to equip U.S. Navy MQ-8B Fire Scouts. (Photo: U.S. Navy)

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Northrop Grumman selected a Telephonics multimode surveillance radar to equip U.S. Navy MQ-8B Fire Scout unmanned helicopters under a rapid deployment capability program. The company awarded Telephonics a $33 million contract for the production, integration and testing of nine radar systems.

The Telephonics RDR-1700B+ radar, designated AN/ZPY-4(V)1 by the military, is an X-band search radar that will give the Fire Scout wide-area search and long-range imaging capability to supplement its FLIR Systems Brite Star II electro-optical/infrared payload. It provides inverse synthetic aperture (ISAR), stripmap and spotlight SAR modes for imaging targets. The radar aperture will be positioned in the nose of the aircraft, which is based on the Sikorsky-Schweizer 333 manned helicopter. The radar system weighs less than 75 pounds, according to Telephonics.

Responding to an AIN query, Fire Scout prime contractor Northrop Grumman said it has delivered 23 MQ-8Bs to date, and will deliver another seven by year-end. The company is scheduled to complete flight-testing with the radar in May next year, followed by the delivery of spares kits that June. The Navy plans to acquire 168 MQ-8Bs; three have been reported lost in crashes <http://www.ainonline.com/aviation-news/ain-defense-perspective/2012-04-13/us-navys-fire-scout-grounding-highlights-uas-losses>, including one shot down over Libya in June 2011.

Northrop Grumman selected the radar after several systems were demonstrated in 2009. Radars by Telephonics and Selex were rated the top two systems; the Telephonics radar ultimately proved the better fit for the MQ-8B, Northrop Grumman said. The company's own AN/ZPY-1 StarLite surveillance radar <http://ainonline.com/aviation-news/ain-defense-perspective/2012-10-26/northrop-grumman-lightens-starlite-uas-applications> for manned and unmanned aircraft is currently flying on a "whitetail" demonstrator of the larger MQ-8C Fire Scout, based on the Bell 407. Northrop Grumman has a contract from the Naval Air Systems Command to build two demonstration and six production MQ-8Cs <http://ainonline.com/aviation-news/ain-defense-perspective/2012-05-04/northrop-grumman-gets-go-ahead-larger-fire-scouts>. However, there is no current requirement for an MQ-8C radar.

The Navy is also arming the MQ-8B Fire Scout <http://ainonline.com/aviation-news/ain-defense-perspective/2012-03-30/hardware-design-tested-armed-mq-8b-fire-scout>. Plans call for starting weapons testing with the BAE Systems Advanced Precision Kill Weapon System, a laser-guided 70-mm rocket, in this year's second quarter.