

Backgrounder

Boeing Defense, Space & Security P.O. Box 516 St. Louis, MO 63166 www.boeing.com

Phantom Ray

Description and Purpose:

The Phantom Ray unmanned combat air vehicle (UCAV) is a fighter-sized technology demonstrator designed as a flying test bed for advanced technologies.



Phantom Ray is an internally funded program that evolved from the prototype vehicle Boeing originally developed for the Defense Advanced Research Projects Agency (DARPA)/U.S. Air Force/U.S. Navy Joint-Unmanned Combat Air System (J-UCAS) program.

Beginning in December 2010, Phantom Ray will conduct up to 10 flights over a period of approximately six months, supporting missions that may include intelligence, surveillance, and reconnaissance; suppression of enemy air defenses; electronic attack; hunter/killer; and autonomous aerial refueling. To make that schedule possible, Boeing is employing rapid prototyping processes and tools to achieve the project objectives as rapidly and as cost effectively as possible to make a state of the aerospace system.

General Characteristics:

Length:	36 ft (10.9 m)
Wingspan:	50 ft (15.2 m)
Gross Weight:	36,500 lb (16,556 kg)
Operating Altitude:	40,000 ft (12,192 m)
Cruise Mach:	0.8 (614 mph-988 km/h)
Engine:	F404-GE-102D

Background:

Phantom Ray is not a production vehicle. It is a "one off" demonstration vehicle intended to be a flying test bed for future technology development opportunities. Phantom Ray began with a feasibility study in the spring of 2008 and a decision to go forward with the program was made in the fall of 2008. Phantom Ray is being built in St. Louis.

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