



X-47B UCAS

Unmanned Combat Air System



THE VALUE OF PERFORMANCE.

NORTHROP GRUMMAN

X-47B UCAS

The U.S. Navy's X-47B Unmanned Combat Air System (UCAS) program was designed to demonstrate the ability of a tailless, fighter-sized unmanned aircraft to land on and be launched from the flight deck of a Navy aircraft carrier while underway at sea, one of the most challenging aviation environments.

Under a contract awarded in August 2007 by the U.S. Naval Air Systems Command (NAVAIR), Northrop Grumman designed, produced and flight tested two autonomous, low-observable relevant demonstrator aircraft designated the X-47B UCAS.

The two X-47B aircraft have demonstrated the following "firsts" for unmanned jet-powered aviation:

- First catapult launch from the deck of an aircraft carrier
- First arrested landing, or "trap," on the deck of an aircraft carrier
- First autonomous unmanned aircraft to refuel in mid-air

To date, the X-47B has conducted operations aboard three different aircraft carriers: USS Harry S. Truman (CVN 75), USS George H.W. Bush (CVN 77), and USS Theodore Roosevelt (CVN 71).

In addition to the carrier demonstrations, the X-47B successfully conducted autonomous aerial refueling. This revolutionary technology increases the range and flexibility of future unmanned and manned aircraft platforms.

The X-47B has paved the way for the future sea-based unmanned aircraft system by digitizing the carrier controlled environment, achieving precision landing navigation performance, demonstrating a deck handling solution, and refining the concept of operations.

X-47B Specifications

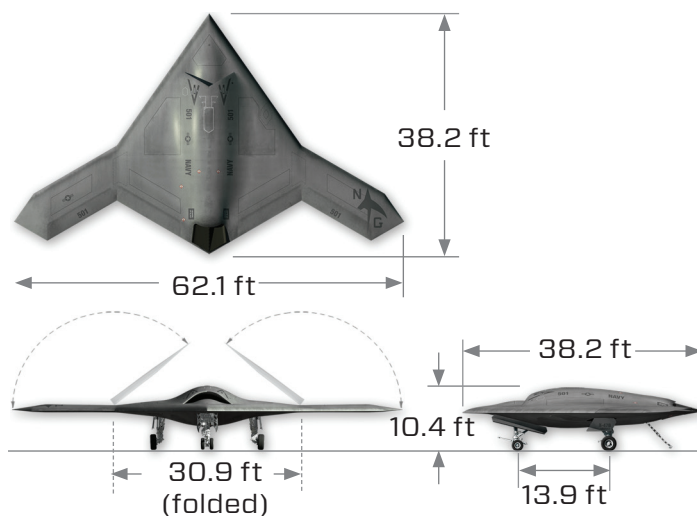
Wingspan 62.1 ft
Length 38.2 ft
Altitude >40,000 ft
Range >2,100 nm
Max Gross Takeoff Weight (MGTOW) 44,000 lbs
Top Speed High Subsonic
Powerplant Pratt & Whitney F100-PW-220U

X-47B System Provisions

Autonomous Aerial Refueling
(USN "probe-and-drogue" method)
Twin Internal Weapons Bay 4,500 lbs
Design Load



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For more information, please contact:

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