

X-47B UCAS Launches the Next Era of Naval Aviation

Navy Live

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Naval aviation will change forever Tuesday as we witness the first-ever launch of an unmanned aircraft from a modern aircraft carrier.

This launch of the X-47B Unmanned Combat Air System demonstrator will mark an inflection point in history on how we will integrate manned and unmanned aircraft on carrier flight decks in the future.



The X-47B is pictured after completed a yearlong test phase at Edwards Air Force Base and before testing at Patuxent River, Md., in 2012.

These are exciting times for the Navy as we are truly doing something that has never been done before – something I never imagined could be done during my 29-year naval career.

This historic event challenges the paradigm of manned carrier landings that were first conducted more than 90 years ago. In that challenge though, comes a respect and admiration for all those naval aviators – past and present – that have ensured the value of the Navy aircraft carrier/carrier air wing team.

The addition of unmanned aviation to this formidable, power projection team provides a complementary capability, which will ensure carrier naval aviation remains viable and relevant

for decades to come. It also shows our collective readiness within naval aviation to embrace these future opportunities to move forward with unmanned carrier aviation. This is a big deal!

An X-47B Unmanned Combat Air System demonstrator is loaded onto the flight deck of the aircraft carrier USS George H.W. Bush (CVN 77) in Norfolk, Va., May 6. George H.W. Bush is scheduled to be the first aircraft carrier to catapult-launch an unmanned aircraft from its flight deck. George H.W. Bush is preparing to conduct training operations in the Atlantic Ocean. (U.S. Navy photo by Mass Communication Specialist 2nd Class Tony D. Curtis/Released)

An X-47B Unmanned Combat Air System demonstrator is loaded onto the flight deck of the aircraft carrier USS George H.W. Bush (CVN 77) in Norfolk, Va., May 6. (U.S. Navy photo by Mass Communication Specialist 2nd Class Tony D. Curtis/Released)

Last week, Sailors aboard USS George H.W. Bush (CVN 77) observed the hoist aboard of the X-47B Unmanned Combat Air System demonstrator in preparation for the aircraft's initial catapult launch.

Shortly after CVN 77 gets underway, our dedicated Navy and Northrop Grumman test team will launch the X-47B from the flight deck. Controlled by a mission operator aboard the ship, the X-47B will execute several carrier approaches demonstrating its ability to operate seamlessly within the carrier environment before it flies over the Eastern Shore and lands back at Naval Air Station Patuxent River, Md., where two demonstration aircraft have resided for the past year.

Leading up to this at-sea period, the UCAS program successfully completed carrier deck operations aboard USS Harry S. Truman (CVN 75) in December 2012 and conducted a shore-based tests at Pax River, including the first steam catapult launch of the pilotless X-47B.

While the X-47B itself is not intended for operational use, the UCAS program is developing a concept of operations and demonstrating technologies for follow-on unmanned, carrier-based aircraft. The intent of the demonstration program is to assess the feasibility of X-47B's seamless integration into the carrier systems and environment.



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An informational graphic depicting the UCAS X47B. (U.S. Navy graphic by Mass Communication Specialist 1st Class Arif Patani/Released)

Over the coming years, we will heavily leverage the technology maturation, networking advances and precision navigation algorithms developed from the X-47B demonstration program to pursue the introduction of the first operational carrier-based unmanned aircraft. This future system will provide a 24/7, carrier-based intelligence, surveillance and reconnaissance and targeting capability, which will operate together with manned aviation assets allowing the opportunity to shape a more efficient carrier air wing.

As we sit here ready to begin a new chapter of naval aviation, I am humbled and privileged to be part of this event, which our future family, friends, Sailors and Marines will learn about in their history lessons 50+ years from now. Congratulations to the military, government civilian and industry teams from UCAS, PEO(U&W), Naval Air Systems Command and USS George H.W. Bush for getting us to this milestone and truly making history.