## DARPA

## News Release

## **Defense Advanced Research Projects Agency**

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3701 North Fairfax Drive Arlington, VA 22203-1714

IMMEDIATE RELEASE

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## J-UCAS X-45A DESTROYS TARGET

Target confirmation, arm and cleared to release. With those three commands from its human operator, an X-45A technology demonstrator for the Joint Unmanned Combat Air Systems (J-UCAS) program made aviation history by releasing an inert (non-explosive) Global Positioning System-guided Small Smart Bomb and hitting a ground target Sunday at the Naval Air Warfare Center Weapons Division Range, China Lake, Calif. This marks the first time that an unmanned aircraft has released a GPS-guided weapon.

Once the operator authorized release and the aircraft determined it was within range, it dropped the GPS-guided 250-pound weapon from its internal weapons bay at 35,000 ft. and 0.67 Mach (approximately 440 mph). The aircraft autonomously performed all attack maneuvers, bay door operations, and weapon-away release sequences under human operator supervision. The bomb hit within a few feet of the target, which would have been destroyed, had a live warhead been used.

"I'd like to recognize the hard work and diligence of the entire J-UCAS team. Boeing, NASA Dryden Flight Research Center, the Air Force Flight Test Center, and China Lake worked together brilliantly to accomplish this joint 'first' for unmanned aviation. This is a significant milestone in our path towards developing a lethal unmanned aircraft that can work seamlessly under human control," commented CAPT Ralph N. Alderson, USN, X-45 Program Manager.

The J-UCAS program is a joint Defense Advanced Research Projects Agency/Air Force/Navy effort to demonstrate the technical feasibility, military utility, and operational value of a networked system of high performance, weaponized unmanned air vehicles to effectively and affordably prosecute 21st century combat missions. The Boeing X-45A vehicles are tools for demonstrating the initial technical feasibility of the J-UCAS concept. Boeing and Northrop Grumman are now developing the next generation of vehicles (the X-45C and X-47B, respectively) to demonstrate the military utility and operational value of the J-UCAS concept. J-UCAS will also employ a Common Operating System that enables the two air vehicle types to operate together and also interoperate with other systems within the Department of Defense global information grid.

More information on the program, as well as photos of the demonstration, can be found at <a href="http://www.darpa.mil/j-ucas">http://www.darpa.mil/j-ucas</a> .

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Media with questions, please contact Jan Walker, (703) 696-2404, or  $\underline{jwalker@darpa.mil}$ . Media needing production quality video should contact Bill Barksdale of Boeing at (314) 232-0860.