

Award-Winning X2 Technology™ Demonstrator Takes Its Final Flight - Program Paved The Way For Upcoming S-97 Raider™ Helicopter

WEST PALM BEACH, Florida - Sikorsky Aircraft Corp.'s X2 Technology™ demonstrator has flown for the last time, the company announced today. Sikorsky is a subsidiary of United Technologies Corp. (NYSE:UTX).

In an early morning demonstration flight conducted from the company's new Sikorsky Innovations Center within its Development Flight Center, the X2 Technology demonstrator gave invited guests one last look at its technology in flight before officially being retired and transitioning to its first application, the S-97 Raider™.

It was the twenty-third test flight of the award-winning X2™ aircraft, which flew approximately 22 total hours and achieved a maximum cruise speed of 253 knots in level flight at its peak point in the program. That milestone, an unofficial speed record for a conventional helicopter, was achieved on Sept. 15, 2010.

"This flight is the culmination of a five-year, internally funded program to expand the operational envelope of helicopters," said Sikorsky President Jeffrey Pino. "The results of this program speak to the success of a rapid prototyping environment, where a small empowered team was able to meet a specific number of very challenging goals. We met these within a small budget and a compressed schedule.

"The X2 program also has helped to develop the next generation of Sikorsky engineers, including some who are now in key positions on the S-97 Raider™ program and the Firefly™ electric helicopter program. Today, the entire Sikorsky workforce stands proud of this accomplishment and what it means for the future of rotorcraft aviation," Pino said.

The S-97 Raider helicopter program is the follow-on program to the X2 Technology demonstrator initiative. Sikorsky Vice President of Research & Engineering Mark Miller said the S-97 Raider program will design, build and fly two prototype light tactical helicopters to enable the U.S. military to evaluate the viability of a fast and maneuverable next-generation rotorcraft for a variety of combat missions. A number of Sikorsky's military and commercial customers were on hand to observe today's final X2™ flight.

"This program will produce two prototype assault/attack aircraft with six passenger cabins and the ability to carry armament," Miller said. "In addition to the superior speed and maneuverability of X2 technology, these aircraft are designed to be capable of 10,000-foot hover out of ground effect on a 95-degree day. The future awaits this technology, and today we can say that we see it on the horizon."

The X2 Technology program began in 2005 when Sikorsky first committed resources and full funding, ultimately \$50 million, for the program's development. Earlier this year, the X2 Technology™ demonstrator team won the 2010 Robert J. Collier Trophy, awarded annually to recognize the greatest achievements in aeronautics or astronautics in America.

In addition to winning the 2010 Collier Trophy, over the past two years the X2 Technology demonstrator received numerous accolades including the 2010 Hughes Award from the American Helicopter Society and *Aviation Week*'s "One of the Top 10 Technologies to Watch" for 2010. In 2009, it won a *Popular Mechanics* Breakthrough Innovator Award, and a *Popular Science* "Best of What's New" award. It also was named "One of 2009's Best Inventions" by *Time*.

Like the X2 Technology demonstrator, the S-97 Raider helicopter will be designed to feature twin coaxial counter-rotating main rotors and a pusher propeller that enables an X2-designed helicopter to cruise at 220 knots. Other innovative technologies include fly-by-wire flight controls, hub drag reduction, active vibration control, and an integrated auxiliary propulsion system.

The X2 design is scalable, opening up a variety of potential mission uses including joint-multi-role such as combat search and rescue, armed aerial scout, medical evacuation (MEDEVAC), attack, VIP transport, and offshore oil.

The X2 Technology demonstrator combines an integrated suite of technologies intended to advance the state-of-the-art, counter-rotating coaxial rotor helicopter. It is designed to demonstrate a helicopter can cruise comfortably at 250 knots while retaining such desirable attributes as excellent low speed handling, efficient hovering, and a seamless and simple transition to high speed.

Among the innovative technologies the X2 Technology demonstrator employs are:

- Fly-by-wire flight controls
- Counter-rotating rigid rotor blades
- Hub drag reduction
- Active vibration control
- Integrated auxiliary propulsion system

Sikorsky Aircraft Corp., based in Stratford, Conn., is a world leader in helicopter design, manufacture, and service. United Technologies Corp., based in Hartford, Conn., provides a broad range of high-technology products and support services to the aerospace and building systems industries.

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