

Sikorsky Receives Robert J. Collier Trophy For X2 Technology™ Demonstrator Initiative

STRATFORD, Connecticut -

The National Aeronautics Association (NAA) Thursday night presented the prestigious Robert J. Collier Trophy to Sikorsky Aircraft Corp. at a ceremony at the Crystal Gateway Marriott in Arlington, Va. The trophy, awarded annually to recognize the greatest achievements in aeronautics or astronautics in America, was presented to Sikorsky President Jeffrey P. Pino who accepted on behalf of the company's X2 Technology™ demonstrator team and Sikorsky's entire 18,000-member workforce. Sikorsky is a subsidiary of United Technologies Corp. (NYSE:UTX).

The award recognizes achievements that improve the performance, efficiency, and safety of air or space vehicles, the value of which has been thoroughly demonstrated by actual use during the preceding year. The award presentation came eight months after the X2 Technology demonstrator successfully achieved 250-knot true air speed in level flight, setting an unofficial speed record for a helicopter and accomplishing the program's ultimate speed milestone.

Along with Pino, Sikorsky Vice President of Engineering and Research Mark Miller, the X2 Technology demonstrator team, and Sergei Sikorsky, son of company founder Igor Sikorsky, attended the NAA banquet, which drew more than 340 guests from the aviation industry and media.

"Eighteen-thousand of us are very, very proud and humbled and honored, and we thank you very much," Pino said.

Robert J. Collier was an aviator, humanitarian, and sportsman who commissioned the trophy that bears his name in 1910 with the intent to encourage the American aviation community to strive for excellence and achievement in aeronautic development, according to the National Aeronautic Association web site. Previous Collier Trophy winners comprise a veritable "Who's Who" of aviation excellence including Orville Wright, Chuck Yeager, and the F-22 Raptor Team.

Sergei Sikorsky offered the toast to launch the evening's program, saying "The Collier Trophy has noted the steady progress of aviation from the wood, wire and fabric aircraft of the early pioneers to today's all-metal 500-ton aircraft, into supersonic flight, and to man walking on the moon. As regards the future, I remain a stubborn, convinced optimist. We will face challenges, we will find solutions, because in the words of my father, 'aviation breeds innovation.'"

The keynote speaker was Dick Rutan, who himself won the Collier Trophy in 1986 as a member of the team that created and flew the Voyager aircraft in a non-stop, non-refueled flight around the world. Rutan commended Sikorsky Aircraft's team for funding the X2 Technology program and executing it to its objectives.

"The Collier sets a very high standard," Rutan said. "I give quite a bit of credit to those who take the risk and they do it with their own money. To me that epitomizes just exactly what has happened with the X2 (demonstrator), and I am very proud to be part of that. I want to congratulate that team because what you have demonstrated is a breakthrough in this particular technology that in many years from now will manifest itself in some way we can't even imagine. This is the highest achievement and if you're nominated for this, you can be proud that what you accomplished to aviation and to our future, it will be there for all of us."

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

As a “follow-on” to the successful X2 program, Sikorsky Aircraft is continuing development of the next-generation rotary wing technology by launching the S-97 RAIDER™ helicopter program. Sikorsky and select suppliers will design, build, and fly two prototype light tactical helicopters. These prototype vehicles will enable the U.S. armed forces to experience, first hand, the advanced performance capabilities X2 Technology can provide.

Like the X2 Technology demonstrator, the S-97 RAIDER helicopter will feature twin coaxial counter-rotating main rotors and a pusher propeller. In addition to flying at nearly twice the speed of a conventional helicopter, the S-97™ RAIDER prototype aircraft will incorporate other key performance parameters critical to combat operations — increased maneuverability, greater endurance, and the ability to operate at high altitudes.

The X2 Technology program began in 2005 when Sikorsky first committed resources and full funding for the program’s development. Key suppliers for the X2 Technology demonstrator are:

- Eagle Aviation Technologies, LLC: Main rotor blades, miscellaneous composite hardware
- Goodrich Corporation: SmartProbe™ air data system and engine fuel control system
- Hamilton Sundstrand Corp.: Flight Control Computers, Active vibration control, engineering support
- LHTEC (Light Helicopter Turbine Engine Company, a partnership between Rolls-Royce/Honeywell): Engines, engineering support
- Moog, Inc.: Active vibration actuation, Consignment MU/EU components, engineering support
- Rotating Composite Technologies, LLC: Pusher propeller

The X2 Technology demonstrator’s Collier Trophy award marks the second time a Sikorsky team has been awarded the esteemed trophy. In 2002, the S-92® helicopter and its program team won the award. The trophy recognized the S-92 helicopter team for designing, manufacturing, testing and introducing into service the S-92 helicopter, which raised “across-the-board” standards for rotary wing air travel.

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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