



AHS INTERNATIONAL THE VERTICAL FLIGHT SOCIETY

Philadelphia Chapter of the American Helicopter Society

DINNER MEETING

Tuesday, November 9th, 2010

Program: **“Overview of X-2”**

Speakers: **Kevin Brendenbeck – Chief Test Pilot
Steven Weiner – Director of Engineering Sciences
Sikorsky Aircraft Corp.**

Sponsor: **Sikorsky Global Helicopters**

Place: D'Ignazio's Towne House
117 Veteran's Square, Media, PA 19063

Time: **Cocktails - 5:30 pm, Dinner - 6:30 pm, Presentation - 7:30 pm**

Menu: **Filet Mignon, Lobster Ravioli, Breaded Chicken Stuffed w/ Ham & Cheese,
Vegetarian Option**

Registration: **Please RSVP as early as possible. *Deadline Friday, November 5th Please!***

Members	\$25
Member + Spouse	\$45
Guests of AHS Members	\$30
Non-Members	\$35
Student Members	\$15

Reservations: **email: dinnermeetings@ahsphillypa.org Phone: 610-522-4973**

Please provide (1) first & last name (2) menu selection (3) registration type

If you need to cancel your reservation PLEASE do so by 10 AM the day of the meeting.

NO-SHOWS COST YOUR CHAPTER MONEY!

<http://vtol.org>

<http://www.ahsphillypa.org>

X-2 Technology

Historically, vertical flight has required a compromise between hover performance and forward speed. If you look at efficiency vs. speed image on the right; the desired helicopter attributes (good hover efficiency, low speed controllability, low downwash, hover endurance) fall to the left of the plot. High disk loading aircraft such as Harriers and JSF, fall on the right of the plot: while fast, their hovering capabilities are limited, and their operational costs tend to increase due to the required power loading. Sikorsky is focused on creating an aircraft that operates to the right on this scale: providing more speed without compromising the essential attributes that make helicopters valuable.



The Sikorsky X2 TECHNOLOGY™ demonstrator aircraft will incorporate several new technologies and demonstrate them in a flight environment. These technologies include an integrated Fly-by-Wire system that allows the engine/rotor/propulsor system to operate efficiently, with full control of rotor rpm throughout the flight envelope, high lift-to-drag rigid blades, low drag hub fairings, and Active Vibration Control. In addition, the aircraft will be used as a 'flying wind tunnel' to determine the main rotor to propulsor aerodynamic interaction, shaft angle optimization for performance, and blade tip clearance for a range of maneuvers. This will allow optimization of the X2 TECHNOLOGY™ suite for future products.



Sikorsky

A United Technologies Company

About our sponsor....

During the past 50 years, Keystone Helicopter has gained a reputation as an industry leader in quality rotor-craft services. Today, the company employs more than 900 people at one of the finest and fastest-growing facilities in the country. In late 2005, Keystone was purchased by Sikorsky Aircraft Corporation—its largest customer. During the next two years, Sikorsky transitioned the final assembly of both the S-76 and S-92 helicopter to Keystone, as well as all new air-craft completions. In 2008, Sikorsky added a new state-of-the-art paint facility, and in 2009 a new world-class flight and delivery hangar. Also during 2009, Sikorsky re-branded the new aircraft operation as Sikorsky Global Helicopters.

In addition to the new aircraft final assembly and completions services it performs, the world-recognized Keystone Helicopter brand has been retained for aftermarket services. Keystone operates the premier full-service maintenance and customization center in the northeast U.S. The company is factory-authorized by every major rotorcraft OEM and avionics manufacturer, as well as Rolls-Royce for engine manufacturers.

As an FAA-and EASA-certified repair station, Keystone Helicopter provides complete rotorcraft services, including airframe maintenance, avionics integration and installation, component repair and overhaul, engineering, custom fabrication, machining, paint and refinishing, “green aircraft” completions and complete interior refurbishments. Keystone also offers complete repair and overhaul of Rolls-Royce 250 series engines, as well as repair services for many engine accessories. This year, Keystone also successfully petitioned FAA for the addition of the S-92 to its Production Certificate 121NE, signifying it met the most stringent quality standards.

Keystone Helicopter’s engineering services division provides comprehensive technical and certification support for both rotorcraft and fixed-wing owners and operators. Keystone was awarded one of the first ODA designations by FAA. Its engineers have issued hundreds of STCs, with expertise in structures, avion-ics, systems engineering, flight critical software, and flight-testing. Overall, Key-stone offers a wide range of certification services, including STC, TSO, PMA and FAA/DER-approved data for 337s.

Thank you for joining us this evening and your interest in the AHS. Please fill out this guest voucher to receive the guest rate.

AHS Philadelphia Chapter Dinner Meeting Guest Voucher

Guest’s Name: _____

Guest Contact Info: _____

(e.g., Address, Tele No., E-mail) _____

Sponsoring
Member’s Name: _____

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