Tennessee Teen Wins Igor Sikorsky Youth Innovator Award For Year 2050 Helicopter Concept

STRATFORD, Connecticut - Sikorsky Aircraft, a subsidiary of United Technologies Corp. (NYSE:UTX), has given a 15-year-old Tennessee teenager its 2013 Igor Sikorsky Youth Innovator Award and a \$1,000 scholarship check for imagining an electrically driven helicopter designed specifically to serve humankind by mid-century.

Vance Hudson, 15, from Collierville, Tenn., near Memphis, designed his S-2050 helicopter with a detachable main section that he envisions would allow operators to configure the aircraft rapidly for multiple missions, or deliver modular loads with life-saving resources for those in need.

"I came up with the idea for the S-2050 helicopter because many countries can't afford multiple types of emergency aircraft," said Vance. "I envisioned one helicopter that can do many different things, as opposed to a specialist helicopter that sits on the ground until it's needed. One airframe that can serve many different purposes reduces cost and would be able to help people immediately.

Vance's S-2050 aircraft fit the theme for this year's Sikorsky Helicopter 2050 Challenge, a national competition that invited youths ages 9-16 to envision a helicopter capable of addressing global issues likely to be encountered in the year 2050. More than 500 entrants from across the United States were judged on the uniqueness of their concepts, the description of their ideas, and how their helicopter concepts could overcome a global challenge.

"We liked Vance's concept because it takes the idea of a helicopter delivering cargo to a higher level of functionality, namely detaching a part of the aircraft and leaving it behind as a resource for those on the ground," said Larry Levine, a systems engineer who has worked 40 years at Sikorsky Aircraft.

Vance said the main section of his S-2050 helicopter would slide in and out as a fully contained module to carry supplies or be outfitted as a fully functional capability such as a medical center. Heat collected from solar panels and the main rotor gearbox would help recharge the batteries that power the aircraft's electrically driven rotor blades and on-board systems. To keep the aircraft lightweight, the high-strength steel and titanium airframe would be skinned with composite or carbon fiber panels. He imagines the aircraft could be flown autonomously with or without a crew.

As a 10th grader at Collierville High School, Vance enjoys the Robotics Club, band and the Junior Engineering Technical Society (JETS), a club within the school's science, technology, engineering, and mathematics (STEM) program. He credits STEM teacher Shelli Basher for inspiring him to take Sikorsky's Helicopter 2050 Challenge.

Vance travelled to Sikorsky's Stratford, Conn., headquarters Nov. 19 with his father Bill, 12-year-old sister Anna, and Ms. Basher to receive the 2013 Igor Sikorsky Youth Innovator trophy and scholarship check. He met with company engineers and toured the production lines where Sikorsky assembles the BLACK HAWK and SEAHAWK® helicopters for the U.S. Army and Navy.

"We're looking to trigger the excitement that kids feel when they put their skills and innovative thinking into science and technology challenges," said Judy Bankowski, Vice President and Chief Information Officer at Sikorsky. "Students like Vance, who are stimulated and excited by science and technology at an early age, are more likely to consider this important field when they begin their careers."

The 2013 Sikorsky Helicopter 2050 Challenge also has four finalists. They are: Elizabeth Nelson, Savage, Minn.; Sabrina Curley, Collierville, Tenn.; Eric Scheuch, New London, N.H.; and Erik Diehl, Cape Neddick, Maine.

Sikorsky began the annual helicopter challenge in 2011 with By Kids For Kids, a Connecticut-based organization whose educational content inspires kids to become successful inventors. The Sikorsky challenge honors company founder Igor Sikorsky, who in 1939 led an engineering team that developed a vertical lift machine whose core design is still used in 95 percent of all helicopters flying today.

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.

By Kids For Kids® (BKFK®) is a platform that empowers youth invention, innovation and entrepreneurship. BKFK promotes youth social innovation and partners with leading corporations to inspire product development, crucial technology skills, invention, and innovation in young people. BKFK provides a unique platform for young people to develop, showcase, and commercialize their products, inventions and entrepreneurship. BKFK's "cycle of innovation" develops critical 21st Century skills in our nation's youth. The company provides educational resources, curriculum and challenges that promote social change, product development and entrepreneurial endeavors. For more about BKFK visit www.bkfk.com.

Learn more about Vance's winning S-2050 entry and the other Helicopter 2050 Challenge finalists at www.helicopter2050.com.

https://news.lockheedmartin.com/2013-11-25-Tennessee-Teen-Wins-Igor-Sikorsky-Youth-Innovator-Award-for-Year-2050-Helicopter-Concept