Sikorsky Aircraft And LORD Corporation Successfully Test Hub Mounted Vibration Suppressors

Montreal, Canada -

Sikorsky Aircraft and LORD Corporation today announced the successful completion of flight demonstration testing of the Hub Mounted Vibration Suppressor (HMVS), a new technology aimed to reduce vibration on helicopters. The demonstration was part of an effort to address the challenge of crew fatigue and reduced equipment reliability and readiness that are caused by helicopter vibration. Sikorsky Aircraft is a subsidiary of United Technologies Corp. (NYSE: UTX).

Sikorsky and LORD made the announcement during the American Helicopter Society's 70th Annual Forum and Technology Display here in Montreal.

The two companies collaborated on the HMVS flight demonstration at the U.S. Army's Aviation Applied Technology Directorate (AATD) at Fort Eustis, Virginia, in March. The flight test, completed in March 2014, was performed as part of the Active Rotor Component Demonstration (ARCD) program.

The ARCD HMVS flight test was a joint effort among AATD, Sikorsky Aircraft and LORD Corporation. Flight testing on AATD's UH-60A BLACK HAWK helicopter included progression from a hover to 150 kts, auto-rotations and 60-degree angle-of-bank turns. Successful testing in the maneuvering conditions proved the HMVS technology suppressed vibration even in the most dynamic flight conditions.

The HMVS cancels the largest vibratory loads near the source of the vibration, which is the main rotor hub, thus keeping the loads from propagating into the airframe. In preliminary flight testing, the HMVS was found to reduce vibration significantly, with a 30 percent weight reduction.

"This new technology is truly in the spirit of Igor Sikorsky for the way that the team took an exciting innovation from bench testing through successful flight testing," said Mark Miller, Vice President of Research & Engineering. "The HMVS reduced helicopter empty weight and dramatically reduced vibrations. We would expect both crew endurance and aircraft reliability to increase substantially under this new technology."

"LORD is proud to be part of this significant technical achievement, and we are excited to continue to discuss the benefits of this new technology," said Lane Miller, LORD Corporation's Vice President of Research and Technology.

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

LORD Corporation is a diversified technology and manufacturing company developing highly reliable adhesives, coatings, motion management devices, and sensing technologies that significantly reduce risk and improve product performance. With world headquarters in Cary, North Carolina, LORD has more than 2,900 employees in 25 countries and operates 15 manufacturing facilities and nine R&D centers worldwide.

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