Making Unmanned Search And Rescue A Reality: Unmanned K-MAX® Helicopter Conducts First Collaborative Casualty Evacuation

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BLOOMFIELD, Conn., April 29, 2015 /PRNewswire/ -- Dangerous frontline operations call for a safe and efficient method to locate and evacuate wounded personnel. To address this critical need and help save lives, Lockheed Martin (NYSE: LMT), Kaman Aerospace (NYSE: KAMN), and Neya Systems demonstrated the first ever collaborative unmanned air and ground casualty evacuation using the unmanned aerial system (UAS) control segment architecture and K-MAX® cargo helicopter on March 26.

During the demonstration, a distress call led ground operators to send an unmanned ground vehicle to assess the area and injured party. The ground operators used control stations that communicated with one another using the UAS control segment architecture. Upon successful identification, the ground operators requested airlift by unmanned K-MAX of one individual who was injured. From the ground, the K-MAX operators used a tablet to determine the precise location and a safe landing area to provide assistance to the team. The injured team member was strapped into a seat on the side of the unmanned K-MAX, which then flew that individual to safety.

"This application of the unmanned K-MAX enables day or night transport of wounded personnel to safety without endangering additional lives," said Jay McConville, director of business development for Unmanned Integrated Solutions at Lockheed Martin Mission Systems and Training. "Since the K-MAX returned from a nearly three-year deployment with the U.S. Marine Corps, we've seen benefits of and extended our open system design incorporating the UAS control segment architecture, which allows rapid integration of new applications across industry to increase the safety of operations, such as casualty evacuation, where lives are at stake."

"Neya is continuing to develop advanced technologies for human robot interfaces for complex platforms and multi-robot missions," said Dr. Parag Batavia, president of Neya. "Our and Lockheed Martin's use of the unmanned aircraft system control segment architecture greatly sped up integration of our respective technologies, resulting in a comprehensive capability that can be ultimately transitioned to the warfighter very efficiently."

While deployed with the U.S. Marine Corps from 2011 to 2014, unmanned K-MAX successfully conducted resupply operations, delivering more than 4.5 million pounds of cargo during more than 1,900 missions. Manufactured by Kaman and outfitted with an advanced mission suite by Lockheed Martin, unmanned K-MAX is engineered with a twin-rotor design that maximizes lift capability in the most challenging environments, from the mountainous Alps to the Persian Gulf. Its advanced autonomy allows unmanned K-MAX to work day and night, in all-weather, even when manned assets are unable to fly. Lockheed Martin continues to extend and mature the K-MAX helicopter's onboard technology and autonomy for defense operations, as well as demonstrate its use for civil and commercial applications.

With five decades of experience in unmanned and robotic systems for air, land and sea, Lockheed Martin's unmanned systems are engineered to help our military, civil and commercial customers accomplish their most difficult challenges today and in the future.

Headquartered in Bethesda, Maryland, Lockheed Martin is a global security and aerospace company that employs approximately 112,000 people worldwide and is principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services. The Corporation's net sales for 2014 were $45.6 billion.

Kaman Aerospace is a division Kaman Corporation , which was founded in 1945 by aviation pioneerCharles H. Kaman. Headquartered in Bloomfield, Connecticut, The company produces and/or markets widely used proprietary aircraft bearings and components; complex metallic and composite aerostructures; safe and arm solutions for missile and bomb systems ; and support for the company's SH-2G Super Seasprite maritime helicopters and K-MAX medium-to-heavy lift helicopters.

Neya Systems, LLC is a small business unmanned systems company inWexford, Pennsylvania. Founded in 2009, Neya focuses on developing interoperable solutions to the world's hardest robotics problems. Neya Systems, LLC, is a 2014 INC 5000 Listee, and in 2015 was named by Fast Company magazine as one of the Top-10 Worldwide Most Innovative Companies in Robotics. For more information, visit http://www.neyasystems.com

*For additional information, visit our website:*www.lockheedmartin.com/auvsi

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