Bringing Protected Satellite Communications To The Tactical User: Industry Team Successfully Tests Low Cost Terminal With On-Orbit AEHF Satellite

The new terminal will enable more military users to transmit jam-resistant, high-priority communications

REDONDO BEACH, Calif., Aug. 24, 2017 /PRNewswire/ -- The industry-funded Low Cost Terminal (LCT) was successfully tested this month with an on-orbit Advanced Extremely High Frequency (AEHF) satellite. This critical milestone demonstrates the ability of an affordable tactical terminal to connect with the DoD's most highly assured protected communications network. The industry development team is led by Northrop Grumman Corporation (NYSE: NOC) and Lockheed Martin (NYSE: LMT).

The AEHF system, designed for both strategic and tactical users, enables military users around the globe to securely transmit critical information which includes everything from nuclear command and control to real-time video, battlefield maps and targeting data. The AEHF system is already on orbit, and can potentially support many more users than there are terminals available today. LCT can enable more tactical warfighters to be able to use protected satellite communications, so they can have assured connectivity in contested environments.

"This is a huge milestone for protected satellite communications and its military users," saidCyrus Dhalla, vice president of communications systems, Northrop Grumman. "LCT achieves low cost by leveraging existing designs, technology, and investments, while adopting a commercial procurement and production model. It was designed for easy operation and low maintenance and training costs to make it truly affordable for tactical users needing highly protected anti-jam, low probability of detection communications."

This is the first time that a completely industry-funded and developed terminal has been allowed to access the AEHF satellite. In order to reach this milestone, the security architecture had to be validated by the appropriate organizations, and additional approvals had to come from Strategic Command and Air Force Space Command.

"The ability to send sensitive information over a protected network that is resistant to interruption and anti-jam is critical to ensuring the safety and success of our military troops here at home and allies abroad," said Iris Bombelyn, vice president, Protected Communications, Lockheed Martin Space Systems. "The successful over-the-air test of the Low Cost Terminal shows that we are ready to bring this capability to more users in the near-term."

The LCT is currently being developed in three variants: airborne, ground comm-on-the-move and rapidly deployable fixed terminal designs, which can also be deployed for maritime applications. Each variant is significantly smaller in size and weight than fully-capable strategic terminals, making them a better fit for tactical applications, while offering major cost and ease of use. The Industry team is seeking government partners to help champion the final production-version LCT for government certification. Provided testing and certifications are completed in time, the terminals can be available by the end of 2018. No other option for fielding protected SATCOM for the tactical warfighter is possible in the next few years.

The LCT takes advantage of Northrop Grumman and Lockheed Martin system knowledge and engineering experience gained over 30 years as providers of the nation's MILSTAR and AEHF satellite systems for protected military communications. They manage a team which combines commercial and military experience, small and large businesses, which has resulted in the innovations necessary to produce an LCT that will cost a small fraction of the cost of current generation terminals.

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 $\underline{https://news.lockheedmartin.com/2017-08-24-Bringing-Protected-Satellite-Communications-to-the-Tactical-User-Industry-Team-Successfully-Tests-Low-Cost-Terminal-with-On-Orbit-AEHF-Satellite}$