

Hughes Demonstrates Live, High Definition Video Transmission over Satellite from an In-Flight Black Hawk Helicopter

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Hughes HeloSat transmits from the moving Black Hawk, through the rotary blades, delivering live-stream satellite connectivity ideal for Intelligence, Surveillance and Reconnaissance

GERMANTOWN, Md., June 9, 2020 /PRNewswire/ -- <u>Hughes Network Systems, LLC</u> (HUGHES), the global leader in broadband satellite networks and services, today announced the successful in-flight demonstration of Hughes HeloSatTM satellite communications (SATCOM) from a Black Hawk helicopter. The HeloSat solution—including a Hughes HM series modem with proprietary through-the-rotor waveform, fuselage-mounted antenna and network management—transmitted consistent, real-time, full-motion video to a live global audience from the Black Hawk as it surveilled theTennessee landscape on May 21.

"Customers from as far away as Spain, India and the United Arab Emirates watched the Hughes HeloSat demonstration in Tennessee via livestream – the epitome of Beyond Line of Sight (BLoS) communications," said Wayne Marhefka, senior director, Hughes Defense. "This flight validates the Hughes HeloSat capability to support missions such as Intelligence, Surveillance and Reconnaissance (ISR), search and rescue, emergency response and airborne command aboard rotary aircraft like the Black Hawk."

"Throughout the 30-minute flight, HeloSat maintained the live-stream video feed—something I've never experienced before on a rotary wing," said John Wellington, chief flight instructor, XP Services Inc., and former 160th Special Operations Aviation Regimen flight lead, who piloted the Black Hawk for the demonstration. "Maintaining connectivity for the duration of the mission is critical, because when it is time to go, you need to be ready to go."

With the low Size, Weight and Power (SWAP) necessary for in-flight applications, HeloSat has been tested on more than a dozen different types of rotary-wing aircraft. The wideband SATCOM solution supports mission-critical transmissions ranging from basic voice and data to bandwidth-intensive, high definition camera and electro-optical/infrared (EO/IR) feeds.

Several partners contributed to the success of the demonstration, including GetSat, DataPath, Applied Concept Group, Intelsat and XP Services.

Watch a video recap of the Hughes HeloSat In-Flight Black Hawk demonstration here. More information about HeloSat may found on the Hughes website.

About Hughes Network Systems

Hughes Network Systems, LLC (HUGHES) is the global leader in broadband satellite technology and services for home and office. Its flagship high-speed satellite Internet service is HughesNet®, the world's largest satellite network with over 1.5 million residential and business customers across North and South America. For large enterprises and governments, the company's HughesON[™] managed network services provide complete connectivity solutions employing an optimized mix of satellite and terrestrial technologies. The JUPITER[™] System is the world's most widely deployed High-Throughput Satellite (HTS) platform, operating on more than 40 satellites by leading service providers, delivering a wide range of broadband enterprise, mobility and cellular backhaul applications. To date, Hughes has shipped more than 7 million terminals of all types to customers in over 100 countries, representing approximately 50 percent market share, and its technology is powering broadband services to aircraft around the world.

Headquartered outside Washington, D.C., in Germantown, Maryland, USA, Hughes operates sales and support offices worldwide, and is a wholly owned subsidiary of EchoStar Corporation (NASDAQ: SATS), a premier global provider of satellite operations. For additional information about Hughes, please visit www.hughes.com and follow @HughesConnects on Twitter.

About EchoStar

EchoStar Corporation (NASDAQ: SATS) is a premier global provider of satellite communication solutions. Headquartered in Englewood, Colo., and conducting business around the globe, EchoStar is a pioneer in secure communications technologies through its Hughes Network Systems and EchoStar Satellite Services business segments. For more information, visit www.echostar.com. Follow @EchoStar on Twitter.

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