Aviat Participates in Field Testing on 6 GHz Unlicensed Devices with Ameren and EPRI

August 10, 2020

Determines Interference Effects of Unlicensed Devices on Licensed Microwave Links

AUSTIN, Texas, Aug. 10, 2020 /PRNewswire/ -- Aviat Networks, Inc. (NASDAQ: AVNW), today announced the results of recent field testing with Ameren and Electric Power Research Institute (EPRI) to determine the effects of unlicensed device interference on licensed point to point microwave links in the 6GHz band.

The field test was conducted on an existing 18.5-mile Aviat IRU 600v3 microwave link in the Ameren network operating at 5974.85 MHz with a 30 MHz channel and 256 QAM static modulation configuration with 8-foot antennas. Two types of interferer signals were used; A Part 15 compliant point to point radio and an IEEE 802.11ax waveform from a signal generator. Several points were carefully chosen both on and off the centerline of the main microwave beam to a distance of 4.8km from the receiver. At the different points several tests were conducted varying the interferer power levels, the interferer bandwidth and applying partial fading to the main link. At all times, the implementation of both the licensed PTP link and the unlicensed 6GHz devices were within legal limits of the FCC regulations.

Test Results Summary:

- Both types of unlicensed devices were found to produce interference to the incumbent microwave link when operating in a co-channel frequency. However, the two unlicensed sources did not affect the link equally. The IEEE 802.11ax device produced less interference compared to the Part 15 point to point radio
- The antenna elevation mismatch did not significantly protect the incumbent licensed microwave link when the unlicensed sources were at a distance <1.2 km
- Side and back lobes of the incumbent licensed microwave link are vulnerable locations for a co-channel source of a Part 15 compliant transmitter
- Unlicensed sources operating at an adjacent channel frequency did not cause any significant interference to the incumbent licensed microwave radio
- Aviat's new Frequency Assurance Software (FAS) was successful in detecting and reporting on the interference events and accurately captured the interference details

"We are committed to providing the most reliable microwave solutions at the lowest total cost of ownership," states Pete Smith, President and CEO, Aviat Networks. "This testing demonstrates that, with the evolution of Wi-Fi 6e and other unlicensed devices operating in the band, solutions like FAS which is an expert system to detect and report on interference events, are critical to maintain the trusted reliability of licensed microwave links."

EPRI's publicly available test report is available for download *here*.

About Aviat Networks

Aviat Networks, Inc. is the leading expert in wireless transport solutions and works to provide dependable products, services and support to its customers. With more than one million systems sold into 170 countries worldwide, communications service providers and private network operators including state/local government, utility, federal government and defense organizations trust Aviat with their critical applications. Coupled with a long history of microwave innovations, Aviat provides a comprehensive suite of localized professional and support services enabling customers to drastically simplify both their networks and their lives. For more than 70 years, the experts at Aviat have delivered high performance products, simplified operations, and the best overall customer experience. Aviat Networks is headquartered in Austin, Texas. For more information, visit www.aviatnetworks.com or connect with Aviat Networks on Twitter, Facebook and LinkedIn.

Media Contact: Gary Croke, Aviat Networks, Inc., gary.croke@aviatnet.com

Investor Relations Contact: Keith Fanneron, Aviat Networks, Inc., keith.fanneron@aviatnet.com