



# LUFTHANSA TECHNIK DEVELOPS NEW ANTENNA RADOME FOR FASTER DATA TRANSFER

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## EASA and FAA give green light for Ka-band frequency radome/production in Hamburg

Lufthansa Technik has developed its first radome for the Ka-band. The innovative material layer structure of the TIOS (Two-In-One Solution) radome makes it possible to install Ka-band antennas, providing optimal high-speed internet and TV connections for all Boeing Business Jets I (737-700) and II (737-800). This makes Lufthansa Technik one of just a few manufacturers of such radomes worldwide. In December 2016, Lufthansa Technik received the EASA STC (Supplement Type Certificate) and FAA validation for the Two-In-One Solution. Lufthansa Technik has already registered a patent to protect the new radome housing design.



The innovative approach of installing TIOS on the vertical stabilizer makes it the ideal platform for satcom and satellite TV antennas as well as an HD camera. In combination with the installation of the antenna system in the rear fuselage of the aircraft, this solution not only saves space; it also reduces the weight by up to 100 kilograms.

Andrew Muirhead, head of Lufthansa Technik's Original Equipment Innovation division, explains further benefits of TIOS: "The special aerodynamic design and the installation on the vertical stabilizer mean that the radome reduces drag and has a positive effect on the aircraft's center of gravity."

Lufthansa Technik has offered a radome for Ku/L band antennas since 2000. "As the first version of TIOS is not suitable for Ka-band frequencies with high data rates, we investigated many different materials and their characteristics as part of the development of the new TIOS. Ultimately, we were able to develop an innovative material layer structure that allows frequencies in the Ka

band to pass through, providing double speed data transfer for passengers," reports Beate Rehberg, Product Manager TIOS, Original Equipment Innovation at Lufthansa Technik.

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