



U.S. Department
of Transportation

**Federal Aviation
Administration**

December 04, 2020

Lufthansa Technik AG

Dear Lufthansa Technik AG:

The Aircraft Evaluation Group (AEG) has reviewed your request for Supplemental Type Certificate (STC) relief that may be included in an operator's FAA approved MEL. The AEG finds your relief submission allowable as documented in the relief section of this letter. This relief is valid when an operator installs the listed STC on an aircraft that is listed in the Aircraft Model List (AML) below. No other application of this relief is allowed. The STC holder must contact the AEG when the STC is amended, revised or revoked.

Operators may use this relief letter to incorporate the relief listed below into their Minimum Equipment List (MEL) upon publication of this letter and in accordance with the MEL approval process in FAA Order 8900.1. The relief granted remains valid indefinitely with possession of this letter unless the relief is specifically revoked or revised by the Administrator.

STC Applicant	Lufthansa Technik AG
STC Number	ST04543NY
STC Description	This change replaces the existing Global Navigation Satellite Sensor Units (GNSSUs) by new GNSSUs with Satellite-Based Augmentation System (SBAS) capability. The new GNSSUs require active GPS antennas, capable to support SBAS technology. The existing GNSSUs are not capable to transmit sufficient GPS accuracy and integrity information to support ADS-B Out in accordance with RTCA DO-260B for operation in the FAA airspace. This change is required in order to support future use of the onboard GPS system for ADS-B Out functionality in compliance with RTCA DO-260B. The new units are TSO-C145c/C146c certified equipment. The new SBAS GNSSU requires a TSO-C190 approved active antenna. Therefore the existing passive GPS antennas have to be replaced by TSO-C190 certified, active antennas.
Aircraft Model List	MD-11

Sincerely,

Dusan Vukotic
FOEB Chair,
Aircraft Evaluation Group

Approved STC Relief

System	Item	Category	Installed	Required	Remarks-Exceptions
34	Global Positioning System (GPS)	C	-	0	(O) May be inoperative provided alternate procedures are established and used.
		D	-	0	May be inoperative provided enroute or approach procedures do not require its use.