



## COMMENT RESPONSE DOCUMENT

EASA PAD No. 18-131

[Published on 27 September 2018 and officially closed for comments on 25 October 2018]

### Commenter 1: Flybe – Derrick Neal-Jones – 02/10/2018

#### Comment # 1

Flybe acknowledges the publication of PAD18-131 relating to Cockpit USB Receptacle.

We would advise that the unit referred to in the PAD (P/N LS03-05050-A) is also installed on DHC8-400 operated by Flybe together with superseded P/N LS03-05050 under Flybe SB24-E2066.

The Flybe installation mitigates the unsafe condition described in the PAD by installing a 2.5A fuse between the Power Supply unit and the USB receptacle, and therefore achieves the same objective as the current limiting circuit within the “new” USB outlet LS03-05050-B.

We therefore believe that for the Flybe installation, no further action will be required in relation to this PAD, which is effective for Fokker produced design changes. Would you kindly confirm?

#### EASA response:

**Comment noted. The AD only applies to certain installation, the design approval holder for which is Fokker Services. At this time, we have no indication that other designed installations of this part (the method/design of installation is affected, not the part itself) could lead to an unsafe condition.**

**No changes have been made to the Final AD in response to this comment.**

### Commenter 2: Lone Star Aviation Corporation – Valerie Mantos – 04/10/2018

#### Comment # 2

Lone Star Aviation is writing to you regarding the attached EASA proposed AD, PAD 18-131. We are the manufacture of the USB named in this PAD.



Fokker is a valued customer of Lone Star Aviation and we have worked tirelessly to solve their problem regarding the shorted IPAD cable issues.

Our FAA Approved Designed data for our USB has recommended installation for a single USB connector per converter. When the IPAD cable shorting problem was first presented to us, we suggested to Fokker to use a ½ amp circuit breaker in their installations.

A ½ circuit breaker provides protection against a shorted IPAD cable if installed per Lone Star Aviation's approved design documents. During the discussion with Fokker regarding shorted IPAD cables, we discovered that our design was changed by Fokker so they could operate multiple USB's per converter. Lone Star never designed or envisioned multiple USBs per converters. We tested this scenario for Fokker and found that no circuit breaker could solve their design change and thus installation problem.

Lone Star Aviation concluded the best way to solve a multiple USB problem was to stop the short at the USB itself. That is how we developed the new model LS03-05050-B. It will stop the short at the USB if a short circuit condition occurs. When the shorted iPad cable is removed, the USB will return to normal operations when a non-defective cable is installed. Lone Star Aviation also designed a Ruggedized DO160G TESTED iPad cable for onboard iPad operations that are 100% quality tested to solve the high rate of IPAD cable failures.

In the interest of safety, we have supplied Fokker with a total of 1920, LS03-05050-B kits, free of charge, for retrofitting their installations.

To state that the old USB is defective is simply not true. When installed as per our design, i.e. (one USB per converter) with a (.5 amp) breaker it is a safe part. To place an AD on all of our USB's sold in the EU is not necessary. If the AD emphasized the ½ amp breaker for installations according to our design, that would be sufficient to ensure safe operation.

We have not had another operator notify us regarding a similar occurrence regarding a defective iPad cable other than Fokker.

We would like you to reconsider your AD due to the installer's redesign of our product and limit it to multiple USB installations. We would also recommend the ½ amp breaker only for installations that conform to our design. The true problem is the lack of proper circuit breaker protection and not a defective USB. We have attached an email between Fokker and Lone Star that reveal the design change from a single USB to multiple USB in Fokker installations.

**EASA response:**

***Comment noted and appreciated. The AD, as proposed and now published, is already limited in scope and does not apply to any other aircraft than those that have a USB receptacle installed by certain Fokker Services modification instructions, either STC or minor (DOA approved) modification. The replacement of the LS03-05050-A USB power outlet with the LS03-05050-B USB power outlet corrects the unsafe condition identified in the AD. No changes have been made to the Final AD in response to this comment.***

**Commenter 3: Hifly – Rui Cavaco – 12/10/2018**



**Comment # 3**

A330-322 MSN 0096 was modified in accordance with Modification EBA330-0001 (under which it was provisioned with affected parts), and, Modification EBA330-0004 (which only activated such affected parts).

For clarity, we would be in favor of manifesting Modification EBA330-0001 in Appendix 1, line item 'Airbus A330-202, -223, -243, -322 and -343', because the context of Appendix 1 is "(...) having an affected part installed in accordance with the related Fokker Services modification (...)".

**EASA response:**

*Comment noted, but not agreed. The installation modification by itself does not create the unsafe condition. Only when the 'activation' modification is (also) embodied can the unsafe condition manifest itself. Since the 'activation' modification cannot be embodied unless the installation is already in place, there is no need to mention the installation modification (number) as well.*

*No changes have been made to the Final AD in response to this comment.*

**Commenter 4: Lufthansa Technik AG – Benjamin Krick – 24/10/2018****Comment # 4**

The applicability of PAD 18-131 is limited by the applicability of the documents listed in appendix 1 of the PAD. These documents and the applicability of these documents is available on chargeable basis only. This implements that all aircrafts of the affected aircraft type may be affected and review all of these aircrafts is required. This would cause high efforts for the different operators. LHT is aware that MSN and line numbers of the affected aircraft are known by Fokker and are mentioned in the referenced documents. LHT would like to request to add a list of all affected aircraft (MSN) to the AD.

**EASA response:**

*Comment understood, but not agreed. Despite any communication/exchange of information which might occur between an operator and the design (change) approval holder about the aircraft MSNs on which a certain modification/SB can have been applied, it is ultimately the operator's responsibility identifying which aircraft MSNs are affected by an AD, using its "Applicability" criteria.*

*No changes have been made to the Final AD in response to this comment.*

