



## 適航指令發布單

### Airworthiness Directive Issuance Form

民航局 AD 編號 AD number	CAA-2018-12-002A	發布日期 Date issued	2019/2/12
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	Fokker F27 Mark 050, F28 Mark 3000, F28 Mark 0070 and F28 Mark 0100 aeroplanes; Airbus A318, A319, A320, A321, A330 and A340 aeroplanes; Avions de Transport Régional (ATR) ATR42 and ATR72 aeroplanes; Boeing 737, 757, 767 and 777 aeroplanes; and Bombardier (formerly Canadair) CL-600 and (formerly De Havilland Canada) DHC-8 aeroplanes; as identified in Appendix 1 of this AD.		
主旨摘要	Information Systems – Electronic Flight Bag Universal Serial Bus Receptacle – Modification		
<div style="text-align: center;">民航局 CAA</div> <input type="checkbox"/> 本國產品 Native products  <input type="checkbox"/> 其他個案 Other	<div style="text-align: center;">設計國民航主管機構 Original Authorities</div> <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"><input type="checkbox"/> FAA</div> <div style="width: 50%;"><input type="checkbox"/> Germany LBA</div> <div style="width: 50%;"><input checked="" type="checkbox"/> EASA</div> <div style="width: 50%;"><input type="checkbox"/> CAA-NL</div> <div style="width: 50%;"><input type="checkbox"/> Brazil</div> <div style="width: 50%;"><input type="checkbox"/> UK CAA</div> <div style="width: 50%;"><input type="checkbox"/> Transport Canada Civil Aviation</div> <div style="width: 50%;"><input type="checkbox"/> Japan CAB</div> <div style="width: 50%;"><input type="checkbox"/> DGAC</div> <div style="width: 50%;"><input type="checkbox"/> CAA of Israel</div> <div style="width: 50%;"><input type="checkbox"/> Other_____</div> </div>		
	設計國 AD 編號 Original AD number	2018-0259R1	
	1. 直接採用原 AD 之內容?(Is the original AD directly adopted?) <input checked="" type="checkbox"/> 是(Yes) <input type="checkbox"/> 否(No) _ a. 生效日期另訂為(Re-specify the effective date as) : _____ b. 執行時限另訂為(Re-specify the compliance time or period as) : _____ 2. 使用人是否需要將 AD 執行結果向民航局提出報告?(Do Users need to report the status of compliance to the CAA?) <input type="checkbox"/> 是(Yes) <input checked="" type="checkbox"/> 否(No)		
備註 Note	ATA 46. This AD revises EASA AD 2018-0259(CAA-2018-12-002) dated 30 November 2018.		
註： 1. AD 內容後附。 2. 航空器產品使用人得向民航局提出豁免、替代符合方法、執行時限之展延之申請。 3. 如有任何問題，請聯絡交通部民用航空局初始適航科。Tel：(02)2349-6331~3, Fax：(02)2545-8464, e-mail： <a href="mailto:adcaa@mail.caa.gov.tw">adcaa@mail.caa.gov.tw</a> Note： 1. The AD text is enclosed. 2. Exemption, an alternative method of compliance or adjustment of the compliance time may be proposed to the CAA for approval. 3. For further information, please contact Civil Aeronautics Administration on Tel：(02)2349-6331~3, Fax：(02)2545-8464, e-mail： <a href="mailto:adcaa@mail.caa.gov.tw">adcaa@mail.caa.gov.tw</a>			



## Airworthiness Directive

**AD No.: 2018-0259R1**

**Issued: 07 February 2019**

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 of that Regulation.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [Regulation (EU) 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

### Design Change Approval Holder's Name:

FOKKER SERVICES B.V.

### Modification(s):

USB Receptacle in Cockpit

**Effective Date:** Revision 1: 07 February 2019  
Original issue: 14 December 2018

**TCDS Number(s):** EASA.A.036, EASA.A.037

**STC Number(s):** EASA STC 10061825 (Boeing 737) and STC 10046185 (Bombardier DHC-8)

**Minor mod(s):** Fokker Services ECR016073 (Airbus A18, A319, A320 and A321), CRR-0185 (Airbus A330) CRR-0186 (Airbus A340), CRR-0190 (Boeing 767), CRR-0210 (Boeing 757), CRR-0241 (Boeing 777), CRR-0265 (Bombardier CL-600-2B16) and CRR-0300 (ATR42 and ATR72)

**Foreign AD:** Not applicable

**Revision:** This AD revises EASA AD 2018-0259 dated 30 November 2018.

## ATA 46 – Information Systems – Electronic Flight Bag Universal Serial Bus Receptacle – Modification

### Manufacturer(s):

Lone Star Aviation, Corp., for the affected universal serial bus (USB) receptacles; and Fokker Aircraft B.V., for the affected Fokker aeroplanes

### Applicability:

Fokker F27 Mark 050, F28 Mark 3000, F28 Mark 0070 and F28 Mark 0100 aeroplanes; Airbus A318, A319, A320, A321, A330 and A340 aeroplanes; Avions de Transport Régional (ATR) ATR42 and ATR72 aeroplanes; Boeing 737, 757, 767 and 777 aeroplanes; and Bombardier (formerly Canadair) CL-600 and (formerly De Havilland Canada) DHC-8 aeroplanes; as identified in Appendix 1 of this AD.

### Definitions:

For the purpose of this AD, the following definitions apply:



**The applicable SB/EB:**

Fokker Services (FS) Service Bulletin (SB) SBF50-46-006 (Fokker F27 Mark 050), SBF28-46-002 (Fokker F28 Mark 3000), SBF100-46-008 (Fokker F28 Mark 0070 and Mark 0100), Engineering Bulletin (EB) EBA320-0167 (Airbus A320), EBA330-0011 (Airbus A330), EBA340-0005 (Airbus A340), EBAT72-0013 (ATR42 and ATR72), EBB737-0156 (Boeing 737), EBB757-0020 (Boeing 757), EBB767-0023 (Boeing 767), EBB777-0009 (Boeing 777), EBCL60-0010 (Bombardier CL-600), and EBDHC8-0035 (Bombardier DHC-8), as applicable.

**Affected part:** Lone Star Aviation, Corp. USB receptacles, having part number (P/N) LS03-05050-A.

**Reason:**

Several occurrences on various aeroplanes have been reported of smoke and fumes in the cockpit, due to overheating of an Electronic Flight Bag (EFB) USB receptacle, which had been installed by FS Supplemental Type Certificate (STC), SB, or minor modification, either an Engineering Change Request (ECR) or Compliance Record Report (CRR), as applicable. Investigation results revealed that each of these events was caused by a short circuit in the EFB charging cable.

This condition, if not corrected, could lead to further events of smoke/fumes in the cockpit, possibly resulting in excessive flight crew workload and/or injury to flight deck occupants.

To address this unsafe condition, the USB manufacturer developed a modification (change to USB receptacle P/N LS03-05050-B), and Fokker Services published the applicable SB/EB to provide those modification instructions, installing current limiting and overheat protection.

For the reason described above, EASA issued AD 2018-0259 to require modification of each affected part. That AD also prohibited (re)installation of affected parts.

Since that AD was issued, FS issued Revision 2 of EBA320-0167 and Revision 1 of EBDHC8-0035, redefining the affected aeroplanes. It was determined that aeroplanes with EBA320-0151 embodied are not affected, as this involves a USB power supply from another manufacturer. It was also determined that aeroplanes with FS EBDHC8-0033 embodied (part of EASA STC 10046185) are not affected by the AD, as that mod is a holder-only installation. This AD is revised accordingly.

**Required Action(s) and Compliance Time(s):**

Required as indicated, unless accomplished previously:

**Modification:**

- (1) Within 12 months after 14 December 2018 [the effective date of the original issue of this AD], modify each affected part in accordance with the instructions of the applicable SB/EB.

**Part(s) Installation:**

- (2) After modification of an aeroplane as required by paragraph (1) of this AD, do not install an affected part on that aeroplane.

**Ref. Publications:**

Fokker Services SBF50-46-006 dated 27 July 2018.



Fokker Services SBF28-46-002 dated 27 July 2018.

Fokker Services SBF100-46-008 dated 27 July 2018.

Fokker Services EBA320-0167 Revision 1 dated 30 August 2018, or Revision 2 dated 13 December 2018.

Fokker Services EBA330-0011 dated 27 July 2018.

Fokker Services EBA340-0005 dated 27 July 2018.

Fokker Services EBAT72-0013 dated 27 July 2018.

Fokker Services EBB737-0156 Revision 1 dated 30 August 2018.

Fokker Services EBB757-0020 dated 27 July 2018.

Fokker Services EBB767-0023 dated 27 July 2018.

Fokker Services EBB777-0009 dated 27 July 2018.

Fokker Services EBCL60-0010 Revision 1 dated 30 August 2018.

Fokker Services EBDHC8-0035 dated 27 July 2018, or Revision 1 dated 13 December 2018.

The use of later approved revisions of the above-mentioned documents is acceptable for compliance with the requirements of this AD.

#### Remarks:

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
2. The original issue of this AD was posted on 27 September 2018 as PAD 18-131 for consultation until 25 October 2018. The Comment Response Document can be found in the [EASA Safety Publications Tool](#), in the compressed (zipped) file attached to the record for this AD.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu).
4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the [EU aviation safety reporting system](#).
5. For any question concerning the technical content of the requirements in this AD, please contact: Fokker Services B.V., Technical Services Dept., P.O. Box 1357, 2130 EL, Hoofddorp, The Netherlands, Telephone +31-88-6280-350, Fax +31-88-6280-111,



E-mail: [technicalservices@fokker.com](mailto:technicalservices@fokker.com). The referenced publication(s) can also be downloaded from [www.myfokkerfleet.com](http://www.myfokkerfleet.com).



## Appendix 1 – Detailed Applicability

All listed aeroplane types and models, all manufacturer serial numbers (MSN), having an affected part installed in accordance with the related Fokker Services modification SB or EB, as listed below, as applicable to MSN or configuration.

<b>Affected aeroplanes</b>	<b>Modification SB/EB</b>
Fokker F27 Mark 050	SBF50-46-004
Fokker F28 Mark 3000	SBF28-46-001
Fokker F28 Mark 0070 and Mark 0100	SBF100-46-003
Airbus A318-111; A319-111, -112, -114, -115, and -132; A320-211, -212, -214, -231, -232, and -251N; A321-211, -231, -232, -251N and -253N	EBA319-0025, or -0032; EBA320-0044, -0049, -0059, -0064, -0095, -0097, -0105, -0108, -0124, -0126, -0139, -0140, -0141, -0145, -0150, -0156, -0158, -0160, or -0164
Airbus A330-202, -223, -243, -322 and -343	EBA330-0004, -0005, or -0007
Airbus A340-312, -313 and -542	EBA340-0001, or -0004
ATR42-500; ATR72-212 and -212A	EBAT72-0006, -0007, -0008, -0010, or -0011
Boeing 737-300, -400, -500, -700, -800 and -900ER	(EASA STC 10061825) EBB737-0008, -0021, -0022, -0023, -0025, -0031, -0032, -0041, -0044, -0046, -0052, -0068, -0070, -0071, -0088, -0094, -0096, -0098, -0099, -0108, -0113, -0123, -0124, -0133, -0140, -0143, -0147, -0148, -0149, or -0154
Boeing 757-200	EBB757-0002, -0004, -0005, or -0010
Boeing 767-200 and -300	EBB767-0003, -0004, -0006, -0008, -0009, -0010, -0011, -0014, -0015, or -0018
Boeing 777-200LR	EBB777-0005 or -0007
Bombardier CL-600-2B16 and -2C10	EBCL60-0005 or -0008
Bombardier DHC-8-202, -311, -314, -315 and -402	(EASA STC 10046185) EBDHC8-0019, -0020, -0021, -0022, -0031 or -0034

