Issue: 09

STCDS No.: 10071994



SUPPLEMENTAL TYPE-CERTIFICATE DATA SHEET Issue 09

Supplemental Type Certificate 10071994

for
AIRBUS A320/A321
Passenger to Freighter Conversion

Supplemental Type Certificate Holder:

Elbe Flugzeugwerke GmbH

Grenzstr. 1, 01109 Dresden, Germany

For Models: A320-232, A321-211, A321-231

Passenger-to-Freighter



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SECTION 1: A320/A321 P2F SERIES

I. General

1.	Type/ Model/ Variant	A320/A321 A320-232, A321-211, A32 EASA STC 10071994 referenced as A320/A321	•
2.	Performance Class	Α	
3.	Certifying Authority	EASA	
4.	STC Holder	Elbe Flugzeugwerke Gmb Grenzstr. 1, 01109 Dresden, Germany	oH (EFW)
5.	STC Application Date	06 Jul 2015 (A320-200 & A 18 May 2017 (A321-200) a 09 November 2018 (A320-	nd
6.	Date of STC approval	20 Feb 2020	(A321-231 P2F)
	Date of STC revision approval	14 July 2020	(Revision 1)
		1 st Sept 2020	(Revision 2)
		1st Oct 2020	(Revision 3)
		12th Oct 2020	(Revision 4)
		16th Dec 2020	(Revision 5)
		11th Feb 2021	(Revision 6)
		21st Mar 2021	(Revision 7)
		26th May 2021	(Revision 8)
		15th July 2021	(Revision 9)
		23rd March 2022	(Revision 10)
		12th May 2022	(Revision 11)
		17th May 2022	(Revision 12)
		12 th August 2022	(Revision 13)
		17 th August 2022	(Revision 14)
		29 th November 2022	(Revision 15)
		2 nd December 2022	(Revision 16)
		8 th March 2023	(Revision 17)
		23 rd May 2023	(Revision 18)
		15 th September 2023	(Revision 19)
		07 th November 2023	(Revision 20)



18th December 2023

(Revision 21)

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22nd February 2024 (Revision 22) 05th March 2024 (Revision 23)

II. Certification Basis

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1. Reference Date for determining the applicable airworthiness requirements 06 July 2015 (A321-200) and 09 November 2018 (A320-200)

- 2. Reference Date for determining the applicable operational suitability requirements 16 October 2018
- 3. Airworthiness Requirements

The certification bases for the STC application are based upon a combination of the following:

- a. Original Certification Basis JAR-25 Change 11, with some paragraphs at JAR-25 Change 10, 13, and 14, and CS-25 Amdt 8, as defined in TCDS EASA.A.064
- b. CS-25 Amdt 16 effective on 12 March 2015 (For A321-200P2F)
- c. CS-25 Amdt 22 effective on 06 November 2018 (For A320-200P2F)
- d. CS-25 Amdt 17 as "elect-to-comply" (voluntary step-up) for CS 25.1316 & CS 25.1317
- e. CS- MMEL Initial Issue
- f. CS-FCD Initial Issue
- g. CS-36 Amdt 5
- h. CS-26 Issue 3

CS / JAR	CS/JAR Paragraph	CS/JAR Amdt Level	
	Subpart B - Flight		
CS	25.23	Amdt 16	
CS	25.25	Amdt 16	
CS	25.27	Amdt 16	
CS	25.29	Amdt 16	
JAR	25.105*	Chg 14 Amended by SC-F11 / S79	
JAR	25.107*	Chg 14 Amended by SC-F5001	
JAR	25.109*	Chg 14 Amended by SC-F11 / S79	
JAR	25.113*	Chg 14 OP96/1 Amended by SC-F11 / S79	
JAR	25.119*	Chg 14 OP96/1 (b) amended by SC-F5001	
JAR	25.121*	Chg14 OP96/1 (c)(d) amended by SC-F5001	
JAR	25.123*	Chg 14	
JAR	25.125*	Chg 14 OP96/1 Amended by SC-F5001	
JAR	25.143(b)*	Chg 14 OP96/1 Amended by SC-F8	
JAR	25.145 *	Chg 14 OP96/1	
CS	25.235	Amdt 16	
	Subpart C - Structure		
CS	25.301	Amdt 16	
cs	25.302	Amdt 16	



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CS / JAR **CS/JAR Paragraph CS/JAR Amdt Level** CS 25.303 Amdt 16 **JAR** 25.303 (For Legacy Doors) Chg 11 CS 25.305 (a)(b)(c)(f) Amdt 16 25.305(a)(b)(c) JAR Chg 13 OP 91/1 (For Legacy Doors) 25.307(a) CS Amdt 16 25.307(a) Chg 11 (WTF) JAR/CS (For Legacy Doors) Amdt 8 (SHK) CS 25.321 Amdt 16 Amdt 16 JAR / CS 25.331(a)(b)(c)(1) (2)* (c)(2) Chg 13 OP 91/1 Amended by SC A-2.2.2 (WTF) CS 25.333 Amdt 16 CS 25.337(a) Amdt 16 Amdt 16 JAR / CS 25.341(a)(b)* (b) Chg 13 OP 91/1 (WTF), 25.343 (a)(b)(1)(2)(3) CS Amdt 16 25.345(a)(d) Amdt 16 CS Amdt 16 CS 25.351 CS 25.365 (For Modified Compartments) Amdt 16 Chg 13 OP 91/1 (WTF), JAR / CS 25.371* Amdt 16 (a) Chg 13 OP 91/1 (WTF), JAR / CS 25.373(a)(b)* Amdt 16 CS 25.427(a)(b) Amdt 16 CS 25.471(a)(b) Amdt 16 CS 25.473 Amdt 16 CS 25.479(a)(c)(d) Amdt 16 CS 25.481(a)(c) Amdt 16 CS 25.483 Amdt 16 25.485 CS Amdt 16 CS 25.489 Amdt 16 CS 25.491 Amdt 16 CS 25.493(b)(c)(d)(e) Amdt 16 CS 25.495 Amdt 16 CS 25.499 Amdt 16 CS 25.507(a)(b) Amdt 16 CS 25.511(a)(c)(d)(e) Amdt 16 JAR 25.511(b)* Chg 11 25.561 CS Amdt 16 Amdt 16 JAR / CS 25.571(a)(b)(e)* (b) Chg 11 (b)(2) Chg 13 OP 91/1 (WTF) JAR / CS 25.571(a)(b)(e) Chg 11



CS / JAR	CS/JAR Paragraph	CS/JAR Amdt Level
	(For Legacy Doors)	(b)(2) Chg 13 OP 91/1 (WTF)
	,	Amdt 8 (SHK)
CS	25.581	Amdt 16
	Subpart D - Design and	1111
CS	25.601	Amdt 16
	25.601	Chg 11 (WTF),
JAR / CS	(For Secondary Changes)	Amdt 8 (SHK)
CS	25.603	Amdt 16
JAR / CS	25.603	Chg 11 (WTF)
JAN / CS	(For Secondary Changes)	Amdt 8 (SHK)
CS	25.605(a)	Amdt 16
JAR	25.605(a)	Chg 11 (WTF)
	(For Legacy Doors)	Amdt 8(SHK)
CS	25.607	Amdt 16
JAR	25.607	Chg 11 (WTF)
<i>3</i> /410	(For Legacy Doors)	Amdt 8 (SHK)
CS	25.609	Amdt 16
IAD / CC	25 COO (For Secondary Changes)	Chg 11 (WTF)
JAR / CS	25.609 (For Secondary Changes)	Amdt 8 (SHK)
CS	25.611	Amdt 16
JAR	25.611 (For Secondary Changes)	Chg 11
CS	25.613(a)(b)	Amdt 16
JAR	25.613(a)(b)	Chg 11 (WTF)
JAN	(For Legacy Doors)	Amdt 8 (SHK)
CS	25.619	Amdt 16
JAR	25.619	Chg 11 (WTF)
<i>3</i> /410	(For Legacy Doors)	Amdt 8 (SHK)
CS	25.623	Amdt 16
JAR	25.623	Chg 11 (WTF)
3 7.11	(For Legacy Doors)	Amdt 8 (SHK)
JAR / CS	25.629*	Chg 11 (WTF)
<i></i> , cc	25.025	Amdt 8 (SHK)
CS	25.625	Amdt 16
JAR	25.625	Chg 11 (WTF)
<i>5,</i> 111	(For Legacy Doors)	Amdt 8 (SHK)
CS	25.631	Amdt 16
JAR	25.771(e)	Chg 11
JAR	25.773(a)(2)	Chg 11
CS	25.777(a)(b)(c)(g)	Amdt 16
CS	25.783	Amdt 16
JAR	25.783	Chg 11
	(For Legacy Doors)	

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CS / JAR **CS/JAR Paragraph CS/JAR Amdt Level** 25.785(a)(b)(c)(d) (f)(i)(k)(j) CS Amdt 16 (For RFD Option Config) CS 25.787(a)(b) Amdt 16 CS 25.787(c) (For MDCC) Amdt 16 CS 25.789(a) Amdt 16 25.791 CS Amdt 16 CS 25.793 Amdt 16 Amdt 16 CS 25.795 (b)(1)(c)(2) CS 25.801 Amdt 16 CS 25.803(a) Amdt 16 25.807(a) CS Amdt 16 (g)(1)(i)(1)(j)#25.809(a)(b)(c)(e)(f)(g)(i)# Amdt 16 CS CS 25.810(a) Amdt 16 25.811(a)(b)(c) CS Amdt 16 (d)(2)(e)(f)(g)25.812(a)(b)(2) (c)(d) CS Amdt 16 (e)(h)(1) (i)(k)(l)# CS 25.813(c)(4)(ii)# Amdt 16 CS 25.820 Amdt 16 CS 25.831 (a)(b)(c)(d)(e) Amdt 16 CS 25.832 Amdt 16 25.841 CS Amdt 16 CS 25.843 Amdt 16 25.851(a)(1)(2)(5) (6)(7)(8) CS Amdt 16 ((a)(3) only applicable for MDCC Access Config) CS 25.853(a)(c)(f)(g) (h) Amdt 16 CS 25.854(b) Amdt 16 25.855(a)(b)(1)(c)(2)(d) CS Amdt 16 (e)(f)(g)(h)(2)(i)(j) CS 25.856(a) Amdt 16 25.857(e) (For MDCC) CS Amdt 16 CS 25.858 Amdt 16 CS 25.863(a)(b) Amdt 16 CS 25.869(a) Amdt 16 CS 25.899 Amdt 16 CS Amdt 16 25.903(d)(1) **Subpart E - Powerplant** 25.981(a)(b) Amdt 16 CS CS 25.1001(a)(b) Amdt 16 Subpart F - Equipment CS 25.1301 Amdt 16 JAR 25.1301 (For Secondary Changes) Chg 11 JAR 25.1301(a) (For re-located equipment) Chg 11 with JAA TGL6 and AMC 20-26 CS 25.1302 Amdt 16



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CS / JAR	CS/JAR Paragraph	CS/JAR Amdt Level
cs	25.1309	Amdt 16
JAR	25.1309 (For Secondary Changes)	Chg 11
JAR	25.1309 (a) (For re-located equipment)	Chg 11 with JAA TGL6 and AMC 20-26
CS	25.1316	Amdt 17
CS	25.1317	Amdt 17
JAR	25.1321(e)	Chg 11
JAR	25.1322 (For Secondary Changes)	Chg 11
CS	25.1322	Amdt 16
JAR	25.1351(a)	Chg 11
CS	25.1353(a)(b)(e)	Amdt 16
JAR	25.1353(a) (For Secondary Changes)	Chg 11
JAR	25.1357(a)	Chg 11
CS	25.1360	Amdt 16
CS	25.1381	Amdt 16
JAR	25.1403	Chg 11
CS	25.1411(a)(b)(c) (d)(e)(f)	Amdt 16
CS	25.1415(a)(b)(c)(d)	Amdt 16
JAR	25.1419(b)*	Chg 11 Amended by AMC-F14
CS	25.1431(a)(c)(d)	Amdt 16
CS	25.1435(a)(b)(3)(4)(c)	Amdt 16
JAR	25.1438	Chg 11
CS	25.1439	Amdt 16
CS	25.1441(a)(b)(c)	Amdt 16
CS	25.1443(c)	Amdt 16
CS	25.1445(b)	Amdt 16
CS	25.1447(c)(3)	Amdt 16
CS	25.1455	Amdt 16
CS	25.1459(e)	Amdt 16
JAR	25.1461(c)	Chg 11
	Subpart G - Operating Limitatio	ns & Information
CS	25.1529	Amdt 16
cs	25.1535	Amdt 16
CS	25.1541	Amdt 16
CS	25.1555(a)	Amdt 16
CS	25.1557(a)(c)	Amdt 16
CS	25.1561	Amdt 16
CS	25.1581	Amdt 16
CS	25.1583(c)(1)(2)	Amdt 16
cs	25.1585	Amdt 16
CS	25.1587(b)	Amdt 16
CS	25.1591	Amdt 16
	Subpart H - Electrical Wiring Inter	connection System
cs	25.1701	Amdt 16
CS	25.1703	Amdt 16
CS CS JAR CS	25.1447(c)(3) 25.1455 25.1459(e) 25.1461(c) Subpart G - Operating Limitation 25.1529 25.1535 25.1541 25.1555(a) 25.1557(a)(c) 25.1561 25.1581 25.1583(c)(1)(2) 25.1585 25.1587(b) 25.1591 Subpart H - Electrical Wiring Interpart	Amdt 16 Amdt 16 Amdt 16 Chg 11 Ins & Information Amdt 16

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CS / JAR	CS/JAR Paragraph	CS/JAR Amdt Level
cs	25.1705	Amdt 16
CS	25.1707	Amdt 16
CS	25.1709	Amdt 16
cs	25.1711	Amdt 16
CS	25.1713	Amdt 16
CS	25.1715	Amdt 16
CS	25.1717	Amdt 16
CS	25.1719	Amdt 16
CS	25.1721	Amdt 16
CS	25.1723	Amdt 16
CS	25.1729	Amdt 16
	Others	
cs	36.1	Amdt 5
CS	26.332	Issue 3
CS	26.333	Issue 3
CS	FCD	Initial
CS	MMEL	Initial

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i. Certification Review Items (CRIs) introduced based on the proposed changes for A320/A321P2F:

A-01	Determination of Cert Basis (A321P2F)
C-0336-001	Rigid Cargo Barrier Wall, Emergency Landing Conditions
C-0337-001	Decompression - Small Compartments
C-4305-004	Seat to Floor Interface Structure
D-0307-001	Access to Class E Cargo Compartment in Flight*
D-0339-001	Emergency Exit Arrangement
D-0340-001	Emergency Exit Dimensions
D-0341-001	Redefined Flight Deck
F-0316-001	Development Assurance of Airborne Electronic Hardware
F-0317-001	New, Modified or Re-used Equipment Qualification Requirements
F-0307-002	Non-rechargeable Lithium Battery Installations
F-22-3302	Oxygen Fire Hazard in Oxygen Systems
F-34-3302	Management of Erroneous Air Data Parameters, by Aircraft Systems, and their
	Effects at Aircraft Level
CAI 01-01	Level of Involvement Definition
CAI 11-01	Access to Class E Cargo Compartment in flight

j. Certification basis for A320/A321P2F with RFD Option A configuration:

The certification basis for A320/A321P2F with the RFD Option A configuration is revised according to 349/QAD/006-1 Rev B - "Certification Plan for Major Change to A321P2F with Optional Configurations - 14-Pallet Configuration".

The Certification basis is that of the A320/A321P2F amended by the following:

CS-25 Amdt 16 for:

CS 25.56 2

CS 25.785(a)(b)(c)(d)(f)(i)(k)(j)

CS 25.1365

CS 25.1447(a)(b)(c)(1)

CS 25.1449

CS 25.1453(a)(b)(c)(d)(e)

k. Certification basis for A320/A321P2F with In-Flight MDCC Access configuration

The certification basis for A320/A321P2F with the In-flight MDCC Access configuration is revised according to 349/QAD/006-1 Rev B - "Certification Plan for Major Change to A321P2F with Optional Configurations - 14-Pallet Configuration".

The Certification basis is that of the A320/A321P2F amended by the following:

CS-25 Amdt 16 for:

CS 25.851(a)(3)

CS 25.1443(b)(e)



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I. Certification Review Items (CRIs) introduced based on the proposed changes for A320/A321P2F with RFD Option A configuration:

C-4305-004 Seat to Floor Interface Structure F-22-3302 Oxygen Fire Hazard in Oxygen Systems

m. Certification Review Items (CRIs) introduced based on the proposed changes for A320/A321P2F with In-Flight MDCC Access configuration:

D-0307-001 Access to Class E Cargo Compartment in Flight

n. Certification basis for A320P2F 11-Pallet configuration

The certification basis for A320P2F configuration is revised according to 349/QAD/005-1 Rev E – "Certification Programme for A320 Passenger to Freighter Conversion – 11-Pallet Configuration".

The Certification basis is that of the A321P2F (including the RFD Option A and In-flight MDCC Access configurations) amended by the following:

CS-25 Amdt 22 for:

CS 25.1309(e)

JAR-25 Chg 11 for:

JAR 25.1301(a) with JAA TGL6 and AMC 20-26 JAR 25.1309(a) with JAA TGL6 and AMC 20-26 JAR 25.1323 JAR 25.1325

o. Certification Review Items (CRIs) introduced based on the proposed changes for A320P2F 11-Pallet configuration:

F-34-3302 Management of Erroneous Air Data Parameters, by Aircraft Systems, and their Effects at Aircraft Level



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3.1. Special Conditions

a. A320/A321 Existing Special Conditions:

SC-F8	Normal load factor limiting
SC-F11	Accelerate-stop distances and related performances, worn brakes
SC-S79	Brakes requirements, qualification and testing
SC-F5001	Stalling and scheduled operating speeds
SC-A2	Stalling Speeds for Structural Design

b. New Special Conditions for A320/A321P2F:

D-0341-001 Redefined Flight Deck F-0307-002 Non-rechargeable Lithium Battery Installations

c. New Special Conditions for A320/A321 P2F with In-flight MDCC Access configuration:

D-0307-001 Access to Class E Cargo Compartment in Flight

3.2. Environmental Protection Requirements

This certificate involves a change to the requirements for environmental protection and a change to the certified noise levels.

- 4. Operational Suitability Requirements
- 4.1 Master Minimum Equipment List

CS-MMEL Initial Issue

4.2 Flight Crew Data (FCD)

CS-FCD Initial Issue



III. Technical Characteristics and Operational Limitations

1. STC Design Definition

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As defined in the EASA Approved A320/A321P2F Master Drawing List 349-MDL-001.

2. Description

The A320/A321 P2F modification converts the passenger airplane into a freighter with the following major features:

- a. Introduction of a Re-defined Flight Deck
- b. Installation of a 9g Rigid Cargo Barrier (RCB)
- c. Installation of a Main Deck Cargo Door (MDCD)
- d. Installation of a MDCD Frame Shell Structure (MDCD FSS)
- e. Conversion of the main cabin to a Class E Cargo Compartment
- f. Reinforcement of Main Deck Cargo Compartment Floor Structures
- g. Installation of a Crew Entry Door (CED)
- h. Installation of CED Surround Structure (CEDSS)
- Modification of RH No. 2 Cockpit Window Opening Mechanism to be externally openable
- 2.1 The A320/A321 P2F with RFD Option A modification includes the following major features:
 - a. Installation of new Monument containing Hot-Cup Oven and Meal Box
 - b. Installation of new Supernumerary Seat
- 2.2 The A320/A321 P2F with In-flight MDCC Access modification includes the following major features:
 - a. Loudspeakers and Leave Compartment Lighted Signs installed in the MDCC for Aural & Visual signalling
 - b. Installation of Portable Oxygen Equipment for use when accessing MDCC in-flight

3. Equipment

As defined in the EASA Approved A320/A321P2F Master Drawing List 349-MDL-001.

4. Dimensions

Remains the same as defined in TCDS EASA.A.064.

5. Engines

Remains the same as defined in TCDS EASA.A.064.

6. Auxiliary Power Unit

Remains the same as defined in TCDS EASA.A.064.



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7. Propellers

Not applicable.

8. Fluids (Fuel, Oil, Additives, Hydraulics)

Remains the same as defined in TCDS EASA.A.064.

9. Fluid Capacities

Remains the same as defined in TCDS EASA.A.064.

10. Airspeed Limits

Remains the same as defined in TCDS EASA.A.064.

11. Flight Envelope

Remains the same as defined in TCDS EASA.A.064.

12. Operating Limitations

12.1. Approved Operations

See the appropriate A320/A321 PAX Approved Airplane Flight Manual and appropriate EASA Approved A321 P2F Airplane Flight Manual Supplement Envelope (A321P2F-AFM-ENV) or A320 P2F Airplane Flight Manual Supplement Envelope (A320P2F-AFM-ENV).

12.2. Other Limitations

See the appropriate A320/A321 PAX Approved Airplane Flight Manual and appropriate EASA Approved A321 P2F Airplane Flight Manual Supplement Envelope (A321P2F-AFM-ENV) or A320 P2F Airplane Flight Manual Supplement Envelope (A320P2F-AFM-ENV).

13. Maximum Certified Masses

Remains the same as defined in TCDS EASA.A.064.

14. Centre of Gravity Range

Remains the same as defined in TCDS EASA.A.064.

15. Date

Remains the same as defined in TCDS EASA.A.064.



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16. Mean Aerodynamic Chord (MAC)

Remains the same as defined in TCDS EASA.A.064.

17. **Levelling Means**

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Remains the same as defined in TCDS EASA.A.064.

18. Minimum Flight Crew

Two (2): Pilot and Co-pilot. Remains the same as defined in TCDS EASA.A.064.

19. Minimum Supernumeraries

No minimum supernumerary is required.

20. **Maximum Seating Capacity**

Redefined flight deck can accommodate up to 3 supernumeraries.

Note: Persons authorised to occupy the redefined flight deck are as defined in the appropriate EASA Approved A321 P2F Airplane Flight Manual Supplement Envelope (A321P2F-AFM-ENV) or A320 P2F Airplane Flight Manual Supplement Envelope (A320P2F-AFM-ENV).

21. Baggage/ Cargo Compartment

Refer to the appropriate EASA approved A320/A321 P2F Weight and Balance Manual Supplement Envelope (A320-A321P2F-WBM-ENV)

22. Wheels and Tyres

Remains the same as defined in TCDS EASA.A.064.

23. **ETOPS**

Refer to the appropriate EASA approved A320/A321 P2F ETOPS CMP Document Supplement (A320/A321P2F-AMC 20-6-CMP)

IV. Operating and Service Instructions

1. Airplane Flight Manual (AFM)

Refer to the appropriate EASA Approved A321 P2F Airplane Flight Manual Supplement Envelope (A321P2F-AFM-ENV) or A320 P2F Airplane Flight Manual Supplement Envelope (A320P2F-AFM-ENV).



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2. Instructions for Continued Airworthiness and Airworthiness Limitations

Refer to the appropriate EASA approved A321 P2F Instructions for Continued Airworthiness Document (349/AED/ICA001) or A320 P2F Instructions for Continued Airworthiness Document, (349/AED/ICA002).

3. Weight and Balance Manual (WBM)

Refer to the appropriate EASA approved A320/A321 P2F Weight and Balance Manual Supplement Envelope, A320-A321P2F-WBM-ENV.

V. Operating Suitability Data (OSD)

The Operational Suitability Data elements listed below are approved by the European Aviation Safety Agency under the EASA Type Certificate [original TC number] as per Commission Regulation (EU) 748/2012 as amended by Commission Regulation (EU) No 69/2014.

- 1. Master Minimum Equipment List
 - a. Refer to the appropriate EASA approved A320/A321 P2F MMEL Supplement (A320-A321P2F-MMEL-ENV.)
 - b. Required for entry into service by EU operator
- 2. Flight Crew Data
 - a. Refer to the appropriate EASA approved A321 P2F Flight Crew Data ref. 349/TST/OSD-FCD or A320 P2F Flight Crew Data ref. 349/TST/11P-OSD-FCD.
 - b. Required for entry into service by EU operator
- 3. Cabin Crew Data

Not applicable

4. SIM Data

Not applicable

5. Maintenance Certifying Staff Data

Not applicable

6. Other

(e.g. EFB, special operations and special equipment, ...)

Not applicable



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VI. Notes

- 1. Additional information is provided in EASA TCDS (EASA.A.064).
- 2. This modification must be installed concurrently with the following:
 - a. To carry cargo, an EASA approved Cargo Loading System must be installed, which is not part of this STC.
 - b. Airbus Cockpit Computer Modifications :
 - i. EIS2 S15 [Mod No. 163156] or EIS1 V80 [Mod No. 164010] or higher standards (applicable to both A321P2F & A320P2F)
 - ii. FWS F10 [Mod No. 162159] or higher standards (A321P2F)
 - iii. FWS F12 [Mod No. 163413] or higher standards (A320P2F)
 - c. Airbus ADIRU Computer Modifications:
 ADIRU Block II: AE25 (Mod No 166461) or AE45 (Mod No 166462) (A320P2F only)



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SECTION 2: ADMINISTRATIVE

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I. Acronyms and Abbreviations

AFM	Airplane Flight Manual
CS	Certification Specification
EASA	European Aviation Safety Agency
EIS	Electronic Instrument System
ETOPS	Extended Range Operations with Two-Engined Aeroplanes
EU	European Union
EWIS	Electrical Wiring Interconnection System
FCD	Flight Crew Data
FDIU	Flight Data Interface Unit
FDIMU	Flight Data Interface and Management Unit
FWC	Flight Warning Computer
ICA	Instructions for Continued Airworthiness
JAR	Joint Aviation Requirements
MMEL	Master Minimum Equipment List
OSD	Operational Suitability Data
P2F	Passenger-to-Freighter
SC	Special Condition
SDAC	System Data Acquisition Concentrator
SHK	Sharklet
SIM	Simulator
STC	Supplemental Type Certificate
TC	Type Certificate
TCDS	Type Certificate Data Sheet
WTF	Wing tip Fence

II. Supplemental Type Certificate Holder Record

Elbe Flugzeugwerke GmbH (EFW) Grenzstr. 1 01109 Dresden Germany



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III. Change Record

Issue	Date	Changes
Issue 01	03 Mar 2020	Initial Issue
Issue 02	14 July 2020	Removal of limitations
Issue 03	01 Sept 2020	A321P2F with Optional Configurations
		- Re-defined Flight Deck Option A configuration
		- In-Flight MDCC Access configuration
Issue 04	06 Oct 2020	A321P2F Frame Shell Structure Design Enhancement - 14-Pallet and
		ESG Upgrade.
Issue 05	20 Sept. 2021	- Extension of A321 P2F STC to A321-211P2F – Performance
		and noise.
		- A321P2F Rigid Cargo Barrier (RCB) design change
		- A321P2F ALS Part 2 Rev 01 update
		- Update of A321P2F Electronic Instrument System 1 (EIS1)
Issue 06	17 May 2022	Extension of A321 P2F STC to A320-232P2F
Issue 07	15 Nov 2022	Editorial changes; STCDS update for introduction of STC Revisions 13
		and 14; Section VI "Notes" is updated with item 2.c
Issue 8	08 Nov 2023	Update of STC revision approvals.
Issue 9	05 March 2024	Update of STC revision and approvals. Minor clarifications
		introduced in Cert. Basis table.