TYPE-CERTIFICATE

DATA SHEET

BALLONS CHAIZE HOT AIR BALLOONS

Manned Free Hot Air Balloon

Type Certificate Holder:

BALLONS CHAIZE

CHEMIN DE MIRECOULY
07 100 ANNONAY
FRANCE

For models: CS-Type; JZ-Type; JZX-Type; DC-Type, SW-Type, SSHAB-Type

Issue 13 18 September 2020
Issue 12 10 decembre 2019
Issue 11 12 April 2019
Issue 10 19 March 2019
Issue 09 08 January 2019
Issue 08 11 July 2018
Issue 07 25 May 2018
Issue: 06 04 January 2017
Issue: 05 12 May 2016
Issue: 04 12 January 2015
Issue: 03, 4 July 2014
Issue: 02, 26 July 2013
Issue: 01, 25 October 2010
Issue: 00, 6 April 2006

Issue 19 21 Aug 2023
Issue 18 27 Apr 2022
Issue 17 29 Dec 2021
Issue 16 21 Aug 2021
Issue 15 01 May 2021
Issue 14 01 Mars 2021

CONTENTS

SECTION 1: GENERAL, All models

I. General
II. Certification Basis
III. Technical Characteristics and Operating Limitations
IV. Operating and Service Instructions
V. Notes

SECTION 2: CS model definition and certification data

Table 2.1: Type Design
Table 2.2: Envelopes
Table 2.3: Burners
Table 2.4: Baskets
Table 2.5: Approved combinations of envelopes and baskets for CS models

SECTION 3: JZ/JZX model definition and certification data

Table 3.1: Type Design
Table 3.2: Envelopes
Table 3.3: Burners
Table 3.4: Baskets
Table 3.5: Approved combinations of envelopes and burners for JZ/JZX
Table 3.6: Approved combinations of envelopes and baskets for JZ/JZX

SECTION 4: DC model definition and certification data

Table 4.1: Type Design
Table 4.2: Envelopes
Table 4.3: Burners
Table 4.4: Baskets
Table 4.5: Approved combinations of DC envelopes and baskets

SECTION 5: SW model definition and certification data

Table 5.1: Type Design
Table 5.2: Envelopes
Table 5.3: Approved combinations of envelopes and burners for SW
Table 5.4: Approved combinations of envelopes and baskets for SW

SECTION 1 GENERAL, All Types and Variants

I. General

1.	Data Sheet No: EASA.BA.015	Issue 19 Date: 21 Aug 2023
2.	Type / Variant or Model	
	- Type:	Ballons Chaize Hot Air Balloons
	- Model, Variant:	CS, JZ, JZX, SW, DC, SSHAB
3.	Airworthiness Category:	Normal
4.	Type Certificate Holder:	Ballons Chaize Chemin de Mirecouly 07100 Annonay FRANCE
5.	Manufacturer:	Ballons Chaize Chemin de Mirecouly 07100 Annonay France Former Manufacturers : ALTISPH'AIR 14 rue des Bruyères 64140 MORLAAS FRANCE ANNONAY AIR CONCEPT 7 rue Vidal 07100 ANNONAY FRANCE BALLONS CHAIZE Annonay Air Concept Chemin des Falcons 07100 ANNONAY FRANCE
6.	National DGAC-FR Certification Date :	Refer to Sections 2 and 3
7.	DGAC-FR Initial Application Date:	Refer to Sections 2 and 3
8.	EASA Application Date:	Refer to Sections 2, 3 and 4
9.	EASA Type Certification Date:	Refer to Sections 2, 3 and 4
10.	Certification History	This EASA TCDS incorporates the data of 'Chaize JZ/JZX Type' TC data sheet N°. 182, édition n° 7, dated April 2001 issued by the DGAC France and replaces it. The corresponding Certificat de Navigabilité de type N°. 182 initially issued by the DGAC France 7 December 1992 and last amended 19 April 2001 is replaced by the TC EASA.BA.015. The CS-model, former DGAC France TC N°. 79 with its TCDS N°. 152, was already part of the TCDS EASA.BA.015 Iss. 0

II. Certification Basis

1.	Reference Date for determining the applicable requirements:	Refer to Tables 2.1, 3.1 and 4.1 in Section 2 and 3
2.	DGAC-FR Type Certificate Data Sheet No:	for CS Type: N°. 152, Issue 8 for JZ Type N°. 182, Issue 7 for JZX Type N°. 182, Issue 7
3.	Certification Basis:	Refer to Tables 2.1, 3.1 and 4.1 in Section 2, 3 and 4: - Conditions Techniques Générales CTG 015, édition no. 1 of 27 October 1975, marked (□) - Conditions Techniques Générales CTG 015, édition no. 2 of 3 March 1980, and CTG 015/A introducing the requirements of FAR 31 Amdt. 4, marked (□□) - Certification Specifications and Acceptable Means of Compliance for Hot Air Balloons CS-31HB Amdt. 1 dated 5 December 2011 marked (□□□)
4.	Airworthiness Requirements:	Refer to Tables 2.1, 3.1 and 4.1 in Section 2 and 3: - FAR 31 change 2; Additional Technical Conditions, CTG 015 – Section I; Acceptable Means of Compliance, CTG 015 – Section II; Free Manned Balloons Certification, CTG 015 – Section III; Basic Technical Conditions, CTG 015 – Section IV marked (○) - CS 31HB Amdt. 1 marked (○○)
5.	Special Conditions:	None
6.	Reversion and Exemptions:	None
7.	Equivalent Safety Findings:	None

III. Technical Characteristics and Operational Limitations

1.	Type Design Definition:	Refer to Tables 2.1, 3.1 and 4.1 in Section 2, 3 and 4:
2.	Description:	Manned free hot-air balloon with the natural shape envelope of 1 540 – 12000 m³ volume, vertical or horizontal construction with 12-32 gores. Parachute in top for control and rapid deflation. Option : Fast deflation system, Turning vents or Double layer. Single backed up, double or Triple burner as heater system. Conventional wicker baskets suspended beneath the envelope by stainless-steel cables and karabiners with a screw gate. Stainless steel, duralumin or titanium fuel cylinders and other equipment/instruments fixed on the inner side of the basket wall. Baskets can be fitted with a door option or harness option
3.	Equipment:	- Altimeter - Rate of climb/descent indicator - Melting link for the envelope overheating check - Fuel quantity gauge
4.	Envelope:	Refer to Section 2, 3 and 4, see Table 2.2, 3.2 or 4.2
5.	Burner:	Refer to Section 2, 3 and 4, see Table 2.3, 3.3 or 4.3

6.	Basket:	Refer to Section 2, 3 and 4, see Table 2.4, 3.4 or 4.4
7.	Mass:	Minimum Landing Weight & Maximum take-off mass: Refer to Section 2, 3 or 4 see Table 2.2, 3.2 or 4.2
8.	Maximum Envelope Temperature:	for CS Types (polyamide fabric): 120°C for JZ Types (polyamide fabric): 120°C for JZX Types (polyester fabric): 130°C for DC Types (polyamide fabric): 120°C For SW (polyamide fabric): 120°C For SSHAB (polyamid fabric): 120°C
9.	Minimum Flight Crew:	1 Pilot
10.	Maximum number of persons on board:	In accordance with approved Flight Manual
11.	Other Limitations:	- The balloon is approved for VFR-Day flight - Life limited parts – see Airworthiness Limitations Section (ALS) in the Maintenance Manual

IV. Operating and Service Instructions

Flight Manual: Manuel Utilisateur – Ballons Chaize, Rèf: Manuel-1401001, Version 07_13, or later EASA approved revision,

Supplements concerning combinations with other manufacturer's parts:

- Supplément 4 – Base Cameron, Version 02_00,or later EASA approved revision
- Supplément 5 – Base Kubíček, Version 01_05, or later EASA approved revision
- Supplément 6 – Base Lindstrand, Version 01_04, or later EASA approved revision
- Supplément 7 – Base Ultramagic, Version 01_05, or later EASA approved revision
- Supplément 8 – Base Thunder&Colt, Version 01_03, or later EASA approved revision
- Supplément 9 – Base Raven, Version 01_02, or later EASA approved revision
- Supplément 10 – Base Sky Balloons, Version 01_02, or later EASA approved revision
- Supplément 11 – Base Schroeder, Version 01_04, or later EASA approved revision
- Supplément 14 – Base LTL, Version 01_03, or later EASA approved revision
- Supplement JZ30 Lindstrand, Version 01_00, or later EASA approved revision
- Supplement SW12000F28 – Ultramagic Version 01_00 , or later EASA approved revision

Maintenance Manual: Manuel de maintenance et instructions de suivi de navigabilité série: JZ/JZX/CS/DC/SW, Rèf: ManE-1307001, Version : 04_2, or later EASA accepted revision Applicable to:

1. CS Type, JZ Type JZX Type and SW Type balloons (up to including s/n 231 and NG001 and up);
2. DC Type balloons (from s/n DC001 and up).
3. SSHAB Type balloons (from s/n SSHAB-001 and up).

Maintenance supplement or Flight manual supplement for special shape balloon SSHAB are listed in Section 6

V. Notes

1. Manufacturing confined to approved Part 21 Subpart F or Subpart G organisation (Commission Regulation (EU) No 748/2012 of 03/08/2012)
2. Two Fuel Cells approved for use at less per model
3. Combinations with other manufacturer's parts (bottom ends).
   - See approved AFM and related supplements

SECTION 2: CS-model definition and certification data

Table 2.1: Type Design

CS model definition is defined in Type Design Document MDL-1706001 initially approved as per approval date indicated in Table below or later EASA approved revision

Model	Type design document n°	Reference date	Airworthiness Requirements (see II.4)	Certification basis (see II.3)	Approval date
CS 1600 F12	MDL-1706001	1 July 1975	○	□	7 November 1975
CS 1600 F24	MDL-1706001	1st November, 2003	○	□	March 2006
CS 1800 F12	MDL-1706001	1 January 1979	○	□	11 May 1979
CS 1800 F24	MDL-1706001	1st November, 2003	○	□	March 2006
CS 2000 F12	MDL-1706001	1 July 1975	○	□	7 November 1975
CS 2000 F24	MDL-1706001	1st November, 2003	○	□	March 2006
CS 2200 F12	MDL-1706001	1 January 1979	○	□	11 May 1979
CS 2200 F16	MDL-1706001	1st November, 2003	○	□	March 2006
CS 2200 F24	MDL-1706001	1st November, 2003	○	□	March 2006
CS 2200 F32	MDL-1706001	1 January 1979	○	□	11 May 1979
CS2500 F24	MDL-1706001	10 December 2019			December 2019
CS 3000 F16	MDL-1706001	1 January 1979	○	□	27 August 1981
CS 3000 F24	MDL-1706001	12 May 2016			12 May 2016
CS 3000 F32	MDL-1706001	1st November, 2003	○	□	March 2006
CS 3700 F24	MDL-1706001	11 November 2016	○○	□□□	November 2016
CS 4000 F16	MDL-1706001	1 January 1979	○	□	11 May 1979
CS 4000 F24	MDL-1706001	08 January 2019			January 2019
CS 4000 F32	MDL-1706001	1st November, 2003	○	□	March 2006
CS 4500 F24	MDL-1706001	11 November 2016	○○	□□□	November 2016
CS 5000 F24	MDL-1706001	13 April 2015	○○	□□□	Aprill 2015
CS5500 F24	MDL-1706001	18 March 2018	○○	□□□	April 2018

Table 2.2: Envelopes

Model	Type design document n°	Approval date	Volume [m³]	Gores [-]	MLM [kg]	MTOM [kg]
CS 1600 F12	MDL-1706001	7 November 1975	1 540	12	N/A	500
CS 1600 F24	MDL-1706001	March 2006	1 540	24	N/A	500
CS 1800 F12	MDL-1706001	11 May 1979	1 850	12	N/A	500
CS 1800 F24	MDL-1706001	March 2006	1 850	24	N/A	500
CS 2000 F12	MDL-1706001	7 November 1975	2 150	12	N/A	500
CS 2000 F24	MDL-1706001	March 2006	2 150	24	N/A	500
CS 2200 F12	MDL-1706001	11 May 1979	2 650	12	N/A	750
CS 2200 F16	MDL-1706001	March 2006	2 650	16	N/A	750
CS 2200 F24	MDL-1706001	March 2006	2 650	24	N/A	750
CS 2200 F32	MDL-1706001	11 May 1979	2 650	32	N/A	750
CS 2500 F24	MDL-1706001	10 Decembre 2019	2500	24	N/A	815
CS 3000 F16	MDL-1706001	27 August 1981	3 350	16	N/A	1 000
CS 3000 F24	MDL-1706001	May 2016	3030	24	N/A	1000
CS 3000 F32	MDL-1706001	March 2006	3 350	32	N/A	1 000
CS 3700 F24	MDL-1706001	11 november 2016	3700m3	24	540	1260
CS 4000 F16	MDL-1706001	11 May 1979	4 250	16	N/A	1 100
CS4000 F24	MDL-1706001	08 January 2019	4000m3	24	600	1 100
CS 4000 F32	MDL-1706001	March 2006	4 250	32	N/A	1 100
CS4500 F24	MDL-1706001	11 November 2016	4550m3	24	700	1460
CS 5000 F24	MDL-1706001	12 May 2016	5 000	24	700	1 700
CS5500 F24	MDL-1706001	18 March 2018	5500m3	24	700	1850

Table 2.3: Burners

Model	Description	Applicable load frames (measures)	Drawing n°.	Certification basis	Approval date
Chaize 303	Double	900 x 600	303	CTG15	11 May 1979
Chaize 304	Single	640 x 615	304	CTG15	7 November 1975

Table 2.4: Baskets

DDEF-1409007 initially approved as per approval date indicated in Table above or later EASA approved revision.

At the time of this TCDS, the current version of the DDEF is edition 2 revision 3

Model	Description [m]	Drawing n°.	Certification basis	Approval date	Option door	Option harness
A 100	1.10 x 1.10	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A 101	1.10 x 1.10	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A 200	1.30 x 1.10	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A 201	1.10 x 1.30	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
405	1.10 x 1.30	CHAIZE Doc. L-00-AX2093 R1	CTG 015A	14 Jan 2005	X	X
A201 C	1.20 x 1.30	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A 300	1.50 x 1.10	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A 301	1.10 x 1.50	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A 302	1.10 x 1.50	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A 303 T	1.10 x 1.50	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A 401	1.30 x 1.70	DDEF-1409007	CS31HB amdt 1	21 Aug 2023	X	X
A 403	1.30 x 1.70	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A 403 T	1.30 x 1.70	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A501	1.50 x 2.00	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A 503	1.50 x 2.00	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A 503 T	1.50 x 2.00	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
B240T	1.50x2.40	DDEF-1409007	CS31HB amdt 1	01 May 2021	X	X

Table 2.5: Approved combinations of envelopes and baskets for CS models

Enveloppe Model		Basket															
	A 100	A 101	A 200	A 201	A 201 C	405	A 300	A 301	A 302	A 303 T	A 401	A 403	A 403 T	A 501	A 503	A 503 T	B240T
CS 1600 F12	●	●	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
CS 1600 F24	●	●	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
CS 1800 F12	●	●	●	●	---	---	---	---	---	---	---	---	---	---	---	---	
CS 1800 F24	●	●	●	●	---	---	---	---	---	---	---	---	---	---	---	---	
CS 2000 F12	---	---	●	●	●	●	---	---	---	---	---	---	---	---	---	---	
CS 2000 F24	---	---	●	●	●	●	---	---	---	---	---	---	---	---	---	---	
CS 2200 F12	---	---	●	●	●	●	●	●	●	●	---	---	---	---	---	---	
CS 2200 F16	---	---	●	●	●	●	●	●	●	●	---	---	---	---	---	---	
CS 2200 F24	---	---	●	●	●	●	●	●	●	●	---	---	---	---	---	---	
CS 2200 F32	---	---	●	●	●	●	●	●	●	●	---	---	---	---	---	---	
CS2500 F24	---	---	●	●	●	●	●	●	●	●	●	●	●	---	---	---	
CS 3000 F16	---	---	●	●	●	●	●	●	●	●	●	●	●	---	---	---	
CS3000 F24	---	---	●	●	●	●	●	●	●	●	●	●	●	---	---	---	
CS 3000 F32	---	---	●	●	●	●	●	●	●	●	●	●	●	---	---	---	
CS3700 F24	---	---			●	●	●	●	●	●	●	●	●	●	---	---	
CS 4000 F16	---	---	---	---	---	---	●	●	●	●	●	●	●	●	●	●	
CS 4000 F24	---	---	---	---	---	---	●	●	●	●	●	●	●	●	●	●	
CS 4000 F32	---	---	---	---	---	---	●	●	●	●	●	●	●	●	●	●	
CS 4500 F24	---	---	---	---	---	---	●	●	●	●	●	●	●	●	●	●	●
CS 5000 F24	---	---	---	---	---	---	---	---	---	---	●	●	●	●	●	●	●
CS 5500 F24	---	---	---	---	---	---	---	---	---	---	●	●	●	●	●	●	●

Legend: ● combination approved
--- combination not approved

SECTION 3: JZ/JZX-model definition and certification data

Table 3.1: Type Design

JZ model definition is defined in Type Design Document MDL-1706001 initially approved as per approval date indicated in Table below or later EASA approved revision.

Model	Type design document n°	Reference date	Airworthiness Requirements (see II.4)	Certification basis (see II.3)	Approval date
JZ 18 F12	MDL-1706001	June 2016	○	□□	30 March 1993
JZ 18 F24	MDL-1706001	June 2016	○	□□	11 June 1999
JZ 20 F12	MDL-1706001	June 2016	○	□□	11 June 1999
JZ 20 F24	MDL-1706001	June 2016	○	□□	11 June 1999
JZ 22 F12	MDL-1706001	June 2016	○	□□	27 July 1994
JZ 22 F24	MDL-1706001	June 2016	○	□□	11 June 1999
JZ 25 F12	MDL-1706001	June 2016	○	□□	27 July 2009
JZ 25 F16	MDL-1706001	June 2016	○	□□	30 March 1993
JZ 25 F24	MDL-1706001	June 2016	○	□□	11 June 1999
JZ 25 F32	MDL-1706001	June 2016	○	□□	11 June 1999
JZ 30 F16	MDL-1706001	June 2016	○	□□	7 December 1992
JZ30 F24	MDL-1706001	January 2019	○	□□	January 2019
JZ 30 F32	MDL-1706001	June 2016	○	□□	11 June 1999
JZ34 F16	MDL-1706001	June 2016	○	□□	3 January 2017
JZ 34 F24	MDL-1706001	June 2016	○	□□	3 January 2017
JZ 35 F16	MDL-1706001	June 2016	○	□□	27 July 1994
JZ 35 F32	MDL-1706001	June 2016	○	□□	11 June 1999
JZ 40 F16	MDL-1706001	June 2016	○	□□	7 December 1992
JZ 40 F24	MDL-1706001	April 2022	○○	□□□	27 April 2022
JZ 40 F32	MDL-1706001	June 2016	○	□□	11 June 1999
JZ45 F24	MDL-1706001	December 2019	○	□□	10 December 2019
JZX 18 F12	MDL-1706001	June 2016	○	□□	30 March 1993
JZX 18 F24	MDL-1706001	June 2016	○	□□	11 June 1999
JZX 20 F12	MDL-1706001	June 2016	○	□□	11 June 1999
JZX 20 F24	MDL-1706001	June 2016	○	□□	11 June 1999
JZX 22 F12	MDL-1706001	June 2016	○	□□	27 July 1994
JZX 22 F24	MDL-1706001	June 2016	○	□□	11 June 1999
JZX 25 F12	MDL-1706001	June 2016	○	□□	27 July 2009
JZX 25 F16	MDL-1706001	June 2016	○	□□	30 March 1993
JZX 25 F24	MDL-1706001	June 2016	○	□□	11 June 1999
JZX 25 F32	MDL-1706001	June 2016	○	□□	11 June 1999
JZX 30 F16	MDL-1706001	June 2016	○	□□	7 December 1992
JZX 30 F32	MDL-1706001	June 2016	○	□□	11 June 1999
JZX 35 F16	MDL-1706001	June 2016	○	□□	27 July 1994
JZX 35 F32	MDL-1706001	June 2016	○	□□	11 June 1999
JZX 40 F16	MDL-1706001	June 2016	○	□□	7 December 1992
JZX 40 F32	MDL-1706001	June 2016	○	□□	11 June 1999

Table 3.2: Envelopes

Model	Type design document n°	Approval date	Volume [m³]	Gores [-]	MTOM [kg]
JZ 18 F12	MDL-1706001	4 January 2017	1 887	12	570
JZ 18 F24	MDL-1706001	4 January 2017	1 887	24	570
JZ 20 F12	MDL-1706001	4 January 2017	2 138	12	650
JZ 20 F24	MDL-1706001	4 January 2017	2 138	24	650
JZ 22 F12	MDL-1706001	4 January 2017	2 408	12	725
JZ 22 F24	MDL-1706001	4 January 2017	2 408	24	725
JZ 25 F12	MDL-1706001	4 January 2017	2 547	12	815
JZ 25 F16	MDL-1706001	4 January 2017	2 547	16	815
JZ 25 F24	MDL-1706001	4 January 2017	2 547	24	815
JZ 25 F32	MDL-1706001	4 January 2017	2 547	32	815
JZ 30 F16	MDL-1706001	4 January 2017	3 100	16	963
JZ30 F24	MDL-1706001	08 January 2019	3 100	24	963
JZ 30 F32	MDL-1706001	4 January 2017	3 100	32	963
JZ34 F16	MDL-1706001	4 January 2017	3400	16	1080
JZ 34 F24	MDL-1706001	4 January 2017	3400	24	1080
JZ 35 F16	MDL-1706001	4 January 2017	3 515	16	1 120
JZ 35 F32	MDL-1706001	4 January 2017	3 515	32	1 120
JZ 40 F16	MDL-1706001	4 January 2017	4 080	16	1 300*
JZ40 F24	MDL-1706001	4 April 2022	2080	24	1300
JZ 40 F32	MDL-1706001	4 January 2017	4 080	32	1 300*
JZ 45 F24	MDL-1706001	December 2019	4500	24	1460
JZX 18 F12	MDL-1706001	4 January 2017	1 887	12	570
JZX 18 F24	MDL-1706001	4 January 2017	1 887	24	570
JZX 20 F12	MDL-1706001	4 January 2017	2 138	12	650
JZX 20 F24	MDL-1706001	4 January 2017	2 138	24	650
JZX 22 F12	MDL-1706001	4 January 2017	2 408	12	725
JZX 22 F24	MDL-1706001	4 January 2017	2 408	24	725
JZX 25 F12	MDL-1706001	4 January 2017	2 547	12	815
JZX 25 F16	MDL-1706001	4 January 2017	2 547	16	815
JZX 25 F24	MDL-1706001	4 January 2017	2 547	24	815
JZX 25 F32	MDL-1706001	4 January 2017	2 547	32	815
JZX 30 F16	MDL-1706001	4 January 2017	3 100	16	963
JZX 30 F32	MDL-1706001	4 January 2017	3 100	32	963
JZX 35 F16	MDL-1706001	4 January 2017	3 515	16	1 120
JZX 35 F32	MDL-1706001	4 January 2017	3 515	32	1 120
JZX 40 F16	MDL-1706001	4 January 2017	4 080	16	1 300*
JZX 40 F32	MDL-1706001	4 January 2017	4 080	32	1 300*

*** MTOM = 1 260 kg must not be exceeded with the baskets A 101, A 201, A 301, A 302 A 303 T**

Table 3.3: Burners

Model	Description	Applicable load frame measures [mm]	Drawing n°.	Certification basis	Approval date
T&C Mk II / Mk III	single	730 x 670	Colt 2 / Colt 3	CTG15	1991
T&C Mk II / Mk III	double	730 x 670	Colt 2 / Colt 3	CTG15	1991
T&C Mk II / Mk III	triple	1 000 x 1 000	Colt 2 / Colt 3	CTG15	1991

Table 3.4: Baskets

Model	Description [m]	Drawing n°.	Certification basis	Approval date	Option door	Option harness
A 100	1.10 x 1.10	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A 101	1.10 x 1.10	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A 200	1.30 x 1.10	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A 201	1.10 x 1.30	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
405	1.10 x 1.30	CHAIZE Doc. L-00-AX2093 R1	CTG 015A	14 Jan 2005	X	X
A201 C	1.20 x 1.30	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A 300	1.50 x 1.10	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A 301	1.10 x 1.50	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A 302	1.10 x 1.50	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A 303 T	1.10 x 1.50	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A 401	1.30 x 1.70	DDEF-1409007	CS31HB amdt 1	21 Aug 2023	X	X
A 403	1.30 x 1.70	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A 403 T	1.30 x 1.70	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A501	1.50 x 2.00	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A 503	1.50 x 2.00	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A 503 T	1.50 x 2.00	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
B240T	1.50x2.40	DDEF-1409007	CS31HB amdt 1	01 May 2021	X	X

Table 3.5: Approved combinations of envelopes and burners for JZ/JZX models

Envelope Model	Burner		
	T&C Mk II / Mk III single	T&C Mk II / Mk III double	T&C Mk II / Mk III triple
JZ 18 F12	●	●	---
JZ 18 F24	●	●	---
JZ 20 F12	---	●	---
JZ 20 F24	---	●	---
JZ 22 F12	---	●	---
JZ 22 F24	---	●	---
JZ 25 F12	---	●	---
JZ 25 F16	---	●	---
JZ 25 F24	---	●	---
JZ 25 F32	---	●	---
JZ 30 F16	---	●	---
JZ30 F24	---	●	---
JZ 30 F32	---	●	---
JZ34 F16	---	●	●
JZ34 F24	---	●	●
JZ 35 F16	---	●	●
JZ 35 F32	---	●	●
JZ 40 F16	---	●	●
JZ 40 F24	---	●	●
JZ 40 F32	---	●	●
JZ45 F24	---	●	●
JZX 18 F12	●	●	---
JZX 18 F24	●	●	---
JZX 20 F12	---	●	---
JZX 20 F24	---	●	---
JZX 22 F12	---	●	---
JZX 22 F24	---	●	---
JZX 25 F12	---	●	---
JZX 25 F16	---	●	---
JZX 25 F24	---	●	---
JZX 25 F32	---	●	---
JZX 30 F16	---	●	---
JZX 30 F32	---	●	---
JZX 35 F16	---	●	●
JZX 35 F32	---	●	●
JZX 40 F16	---	●	●
JZX 40 F32	---	●	●

Legend: ● combination approved
--- combination not approved

Table 3.6: Approved combinations of envelopes and baskets for JZ/JZX models

Envelope Model		Basket														
	A 100	A 101	A 200	405	A 201	A 300	A 301	A 302	A 303 T	A 401	A 403	A 403 T	A 501	A 503	A 503 T	B240T
JZ 18 F12	●	●	---	---	---	---	---	---	---	---	---	---	---	---	---	---
JZ 18 F24	●	●	---	---	---	---	---	---	---	---	---	---	---	---	---	---
JZ 20 F12	---	---	●	●	●	---	---	---	---	---	---	---	---	---	---	---
JZ 20 F24	---	---	●	●	●	---	---	---	---	---	---	---	---	---	---	---
JZ 22 F12	---	---	●	●	●	---	---	---	---	---	---	---	---	---	---	---
JZ 22 F24	---	---	●	●	●	---	---	---	---	---	---	---	---	---	---	---
JZ 25 F12	---	---	●	●	●	●	●	●	●	---	---	---	---	---	---	---
JZ 25 F16	---	---	●	●	●	●	●	●	●	---	---	---	---	---	---	---
JZ 25 F24	---	---	●	●	●	●	●	●	●	---	---	---	---	---	---	---
JZ 25 F32	---	---	●	●	●	●	●	●	●	---	---	---	---	---	---	---
JZ 30 F16	---	---	●	●	●	●	●	●	●	●	●	●	---	---	---	---
JZ30 F24	---	---	●	●	●	●	●	●	●	●	●	●	---	---	---	---
JZ 30 F32	---	---	●	●	●	●	●	●	●	●	●	●	---	---	---	---
JZ34F16	---	---	●	●	●	●	●	●	●	●	●	●	---	---	---	---
JZ34F24	---	---	●	●	●	●	●	●	●	●	●	●	---	---	---	---
JZ 35 F16	---	---	---	---	---	●	●	●	●	●	●	●	---	---	---	---
JZ 35 F32	---	---	---	---	---	●	●	●	●	●	●	●	---	---	---	---
JZ 40 F16	---	---	---	---	---	●	●	●	●	●	●	●	●	●	●	---
JZ 40 F24	---	---	---	---	---	●	●	●	●	●	●	●	●	●	●	---
JZ 40 F32	---	---	---	---	---	●	●	●	●	●	●	●	●	●	●	---
JZ45F24	---	---	---	---	---	●	●	●	●	●	●	●	●	●	●	●
JZX 18 F12	●	●	---	---	---	---	---	---	---	---	---	---	---	---	---	---
JZX 18 F24	●	●	---	---	---	---	---	---	---	---	---	---	---	---	---	---
JZX 20 F12	---	---	●	●	●	---	---	---	---	---	---	---	---	---	---	---
JZX 20 F24	---	---	●	●	●	---	---	---	---	---	---	---	---	---	---	---
JZX 22 F12	---	---	●	●	●	---	---	---	---	---	---	---	---	---	---	---
JZX 22 F24	---	---	●	●	●	---	---	---	---	---	---	---	---	---	---	---
JZX 25 F12	---	---	●	●	●	●	●	●	●	---	---	---	---	---	---	---
JZX 25 F16	---	---	●	●	●	●	●	●	●	---	---	---	---	---	---	---
JZX 25 F24	---	---	●	●	●	●	●	●	●	---	---	---	---	---	---	---
JZX 25 F32	---	---	●	●	●	●	●	●	●	---	---	---	---	---	---	---
JZX 30 F16	---	---	●	●	●	●	●	●	●	●	●	●	---	---	---	---
JZX 30 F32	---	---	●	●	●	●	●	●	●	●	●	●	---	---	---	---
JZX 35 F16	---	---	●	●	●	●	●	●	●	●	●	●	---	---	---	---
JZX 35 F32	---	---	---	---	---	●	●	●	●	●	●	●	---	---	---	---
JZX 40 F16	---	---	---	---	---	●	●	●	●	●	●	●	●	●	●	---
JZX 40 F32	---	---	---	---	---	●	●	●	●	●	●	●	●	●	●	---

Legend: ● combination approved
--- combination not approved

SECTION 4: DC-model definition and certification data

Table 4.1: Type Design

DC model definition is defined in Type Design Document MDL-1706001 initially approved as per approval date indicated in Table below or later EASA approved revision

Model	Type design document n°	Reference date	Airworthiness Requirements (see II.4)	Certification basis (see II.3)	Approval date
DC 1800 F16	MDL-1706001	June 2016	○○	□□□	4 July 2014
DC 2000 F16	MDL-1706001	June 2016	○○	□□□	4 July 2014
DC 2200 F16	MDL-1706001	June 2016	○○	□□□	4 July 2014

Table 4.2: Envelopes

Model	Type design document n°	Approval date	Volume [m³]	Gores [-]	MTOM [kg]	Min. Landing Mass [kg]
DC 1800	MDL-1706001	4 January 2016	1 800	16	600	260
DC 2000	MDL-1706001	4 January 2016	2 000	16	630	290
DC 2200	MDL-1706001	4 January 2016	2 200	16	680	340

Table 4.3: Burners

Model	Description	Applicable load frame measures [mm]	Drawing n°.	Certification basis	Approval date
Chaize 303	Double	900 x 600	303	CTG15	11 May 1979

Table 4.4: Baskets

Model	Description [m]	Drawing n°.	Certification basis	Approval date	Option door	Option harness
A 100	1.10 x 1.10	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A 101	1.10 x 1.10	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A 200	1.30 x 1.10	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A 201	1.10 x 1.30	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
405	1.10 x 1.30	CHAIZE Doc. L-00-AX2093 R1	CTG 015A	14 Jan 2005	X	X
A201 C	1.20 x 1.30	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A 300	1.50 x 1.10	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A 301	1.10 x 1.50	DDEF-1409007	CTG 015A	18 Nov 2014	X	X
A 302	1.10 x 1.50	DDEF-1409007	CTG 015A	18 Nov 2014	X	X

Table 4.5: Approved combinations of envelopes and baskets for DC models

Envelope Model		Basket						
	A 100	A 101	A 200	A 201	405	A 300	A 301	A 302
DC 1800	●	●	●	●	●	●	●	●
DC 2000	●	●	●	●	●	●	●	●
DC 2200	●	●	●	●	●	●	●	●

Legend: ● combination approved
--- combination not approved

SECTION 5: SW-model definition and certification data

Table 5.1: Type Design

SW model definition is defined in Type Design Document MDL-1706001 initially approved as per approval date indicated in Table below or later EASA approved revision

Model	Type design document n°	Reference date	Airworthiness Requirements (see II.4)	Certification basis (see II.3)	Approval date
SW5500F24	MDL-1706001	18/09/2020	○○	□□□	Sept 2020
SW6000F24	MDL-1706001	18/09/2020	○○	□□□	Sept 2020
SW6000F28	MDL-1706001	18/09/2020	○○	□□□	Sept 2020
SW7000F24	MDL-1706001	18/09/2020	○○	□□□	Sept 2020
SW7000F28	MDL-1706001	18/09/2020	○○	□□□	Sept 2020
SW8000F28	MDL-1706001	18/09/2020	○○	□□□	Sept 2020
SW9000F28	MDL-1706001	18/09/2020	○○	□□□	Sept 2020
SW10000F28	MDL-1706001	18/09/2020	○○	□□□	Sept 2020
SW11000F28	MDL-1706001	18/09/2020	○○	□□□	Sept 2020
SW12000F28	MDL-1706001	18/09/2020	○○	□□□	Sept 2020

Table 5.2: Envelopes

Model	Type design document n°	Approval date	Volume [m³]	Gores [-]	MTOM [kg]	Min. Landing Mass [kg]
SW5500F24	MDL-1706001	Sept 2020	5500m3	24	1850	880
SW6000F24	MDL-1706001	Sept 2020	6000m3	24	2100	960
SW6000F28	MDL-1706001	Sept 2020	6000m3	28	2100	960
SW7000F24	MDL-1706001	Sept 2020	7000m3	24	2500	1120
SW7000F28	MDL-1706001	Sept 2020	7000m3	28	2500	1120
SW8000F28	MDL-1706001	Sept 2020	8000m3	28	2800	1280
SW9000F28	MDL-1706001	Sept 2020	9000m3	28	3000	1440
SW10000F28	MDL-1706001	Sept 2020	10000m3	28	3200	1650
SW11000F28	MDL-1706001	Sept 2020	11000m3	28	3600	1760
SW12000F28	MDL-1706001	Sept 2020	12000m3	28	4000	1920

Table 5.3: Approved combination of Burner with SW series

The burners compatibility is described in supplement to the HABFM manual in its latest revision

Manufacturer	Model or category	SW5500	SW6000 F24/F28	SW7000 F24/F28	SW8000 F28	SW9000 F28	SW10000 F28	SW11000 F28	SW12000 F28
Cameron	Double Stratus	X							
Cameron	Double Stratus	X							
Kubiceck	Ignis Double		X						
	Ignis Triple		X	X	X				
	Ignis Quad		X	X	X	X	X	X	X
Ultramagic	MK32 triple		X						
	MK21 quadruple						X	X	X

Legend: X combination approved

Table 5.4: Approved combination of Baskets with SW series

The Basket compatibility is described in supplement to the HABFM manual in its latest revision

Manufacturer	Model or category	SW5500	SW6000 F24/F28	SW7000 F24/F28	SW8000 F28	SW9000 F28	SW10000 F28	SW11000 F28	SW12000 F28
Chaize	B240T	X	X						
Cameron	G	X							
Cameron	H	X							
Kubicek	K50TT8, K55X, K55TTA, K58HH, K60 (sn400 and up)				X	X	X	X	X
Kubicek	K60 (up to sn399)						X	X	X
Kubicek	K60X K55X						X	X	X
Kubicek	K65TTA, K70, K70TTA				X	X	X	X	X
Kubicek	K80				X	X	X	X	X
Kubicek	K85, K90, K100, K110						X	X	X
Ultramagic	C-5								
	C-7								
	C-8		X						
	C-9								
	C-11								
	C-12						X	X	X

Legend: X combination approved

SECTION 6: SSHAB-model definition and certification data

Table 6.1: Type Design

Model	Type design document n°	Reference date	Airworthiness Requirements (see II.4)	Certification basis (see II.3)	Approval date
Unicorn	MDL-1706001 V2.2 or latter approved DDEF-1809001	12/2018	○	□	7/09/2021
Petit Prince	MDL-1706001 V2.2 or latter approved DDEF-2109029	29/12/2021			29/12/2021

Table 6.2: Envelopes

Model	Type design document n°	Approval date	Volume [m³]	Gores [-]	MTOM [kg]	Min. Landing Mass [kg]
Unicorn	MDL-1706001 V2.2 or latter approved DDEF-1809001	7/09/2021	2200	16	680	340
Petit Prince	MDL-1706001 V2.2 or latter approved DDEF-2109029	29/12/2021	2800	20	815	550

Table 6.3: Approved combination of Burners and Baskets

The burners and basket compatibility is described in supplement to the HABFM manual in its latest revision

Model	Burner Compatibilty	Basket compatibility
Unicorn	Refer to DC2200 model in section 4	Refer to DC2200 model in section 4
Petit Prince	Refer to JZ30 model in section 3	Refer to JZ30 model in section 3

Table 6.4: Flight Manual and Maintenance supplement

Model	Maintenance manual supplement	Flight manual supplement
Unicorn	Supplement 3	Supplement 13
Petit Prince	Supplement 3	Supplement 13