



TYPE CERTIFICATE DATA SHEET

No. EASA.BA.119

for
MA Series

Type Certificate Holder
L'Atelier S.A.R.L.

6 rue Etienne Lenoir
F-51420 Witry-les-Reims
France

For Models MA-18, MA-22, MA-26, MA-30, MA-35



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SECTION 1: General, all models

I. General

1. Type/ Model	
1.1 Type	MA Series
1.2 Models	MA-18, MA-22, MA-26, MA-30, MA-35 (see Note V.6)
2. Airworthiness Category	Standard
3. Type Certificate Holder	L'Atelier S.A.R.L. 6 rue Etienne Lenoir F-51420 Witry-les-Reims, France
4. Manufacturer	see Note 1
5. Type Certification Application Date	to DGAC FR: refer to Section 2, Application Date
6. State of Design Authority	EASA
7. Type Certification Date	by DGAC FR: refer to Section 2
8. Type Certificate n°	EASA: EASA.BA.022 (replaces DGAC FR: No. 186)
9. EASA Type Certification Date	28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2 nd bullet, 1 st indented bullet.

II. Certification Basis

1. Reference Date for determining the applicable requirements	Refer to Section 2, see Table 2.1
2. Airworthiness Requirements	Conditions Techniques Générales: - CTG 015, édition no. 2, dated 3 March 1980, and, - CTG 015/A introducing the requirements of FAR 31 Amdt. 3 & 4
3. Special Conditions	none
4. Equivalent Safety Findings	none
5. Deviations	none

III. Technical Characteristics and Operational Limitations

1. Type Design Definition	Refer to Section 2, I. Type Design, column: Type design document n°
2. Description	Free hot-air balloon with a natural shape envelope of 1 880 - 3 395 m ³ volume, construction with 20 and 24 gores; parachute in top for control and rapid deflation; turning valves optional. Heater system, burner frame, basket and fuel cylinders are taken over from other TC Holders. All approved combinations are defined in Section 2, III.
3. Equipment	- 1 Altimeter - 1 Rate of climb/descent indicator - 1 Indicator for the limit temperature of the envelope - 1 Fuel gauge for each cylinder
4. Envelope	Refer to Section 2, I. Envelopes
5. Burner	Refer to Section 2, II., Tables II.1 to II.6
6. Basket	Refer to Section 2, II., Tables II.1 to II.



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|--|---|
| 7. Fuel Cylinder | Refer to Section 2, III. |
| 8. Mass | Refer to Section 2, I., column: MTOM |
| 9. Envelope Temperature | 121°C |
| 10. Maximum Operating Altitude | <i>reserved</i> |
| 11. Minimum Flight Crew | 1 pilot |
| 12. Maximum number of persons on board | See approved Flight Manual |
| 13. Other limitations | VFR day |
| 14. Life-limited Parts | Refer to the approved Airworthiness Limitation Section (ALS) of the Maintenance Manual
- Fuel cylinder pressure relief valve SLL: 10 years |

IV. Operating and Service Instructions

- | | |
|--|---|
| 1. Flight Manual | Nouvelle Manufacture d'Aérostats Flight Manual, Issue 04/09/1995, and subsequent approved EASA revisions |
| 2. Maintenance Manual | Nouvelle Manufacture d'Aérostats Maintenance Manual, Issue 04/09/1995, and subsequent accepted EASA revisions |
| 3. Service Letters and Service Bulletins | As published by the TC holder |

V. Notes

1. Eligible serial numbers:
 - s/n 001 to 150: manufactured by Pilâtre de Rozier S.I.G.A
 - s/n 151 to 237: manufactured by Llopis Balloons
 - s/n 238 to 249: manufactured by Nouvelle Manufacture d'AérostatsManufacturing ceased on 15 April 2021.
2. A minimum of two fuel cylinders are required to supply pilot lights. Extra fuel cylinders may be used.
3. Combinations with other manufacturer's parts (bottom ends):
 - See approved AFM and related supplements
4. For the purpose of maintenance and inspection, a logbook must be maintained with each hot air balloon envelope. If the burner, basket, instruments and/or cylinders are interchanged, they must be listed in the logbook of each envelope with which they are used.
5. For burners, burner frames, baskets and fuel cylinders:
For Airworthiness Limitations of other manufacturers' burner, cylinder and basket refer to their latest applicable OEM Maintenance Manual.
6. MA-40 model only:
EASA published Certification Information 2020-18 with the decision to suspend EASA Type Certificate No. EASA.BA.119 for Nouvelle Manufacture d'Aérostats Hot Air Balloons, MA-40 model only, with effect of 14 October 2020.



SECTION 2: MA-Series type definition and certification data

I. Envelopes

Model	Drawing n°.	Volume [m³]	Gores [-]	MTOM [kg]	MLM [kg]	Approval date
MA-18	MA-18 NMA 03-17	1 880	20	600	---	4 September 1995
MA-22	MA-22 NMA 03-17	2 200	24	750	---	4 September 1995
MA-26	MA-26 NMA 03-17	2 680	24	850	---	4 September 1995
MA-30	MA-30 NMA 03-17	3 000	24	950	475	4 September 1995
MA-35	MA-35 NMA 03-17	3 395	24	1 100	550	27 November 1998

II. Approved combination with other manufacturers' bottom ends

Table II.1: Aerostar (non-EU)

		Envelopes				
		MA-18	MA-22	MA-26	MA-30	MA-35
Baskets	RWS	●	●	●	●	---
	CW	●	●	●	●	●
	CWS	---	---	●	●	●
	TW	---	---	---	---	---
Burners	HPIII Single	●	●	●	●	---
	HPIV Single	●	●	●	●	---
	HPIII Dual	●	●	●	●	●
	HPIII Triple	●	●	●	●	●

Legend:
● combination approved
--- combination not approved

Table II.2: Schroeder fire balloons

		Envelopes				
		MA-18	MA-22	MA-26	MA-30	MA-35
Baskets / Load frame	II / 201.2, 201.6 or 201.7	●	●	---	---	---
	III / 201.2, 201.6 or 201.7	●	●	●	●	---
	IV / 201.2, 201.6 or 201.7	---	●	●	●	●
	V / 201.2, 201.6 or 201.7	---	---	●	●	●
	VI / 201.2, 201.6 or 201.7	---	---	---	●	●
	VII / 201.1 or 201.5	---	---	---	---	---
	VIII/8 / 201.1 or 201.5	---	---	---	---	---
	VIII/9 / 201.1 or 201.5	---	---	---	---	---
Burners	Optima III Single	●	●	●	●	●
	Optima III Double	---	●	●	●	●
	Optima IV Single	●	●	●	●	●
	Optima IV Double	●	●	●	●	●
	FB V Double	●	●	●	●	●
	FB V Triple	---	---	---	---	●
	FB 6/7 Double	●	●	●	●	●
	FB 6/7 Triple	---	---	---	---	●

Legend:
● combination approved
--- combination not approved

Table II.3: Ballons Chaize

		Envelopes				
		MA-18	MA-22	MA-26	MA-30	MA-35
Baskets / Load frame	A101	●	●	●	●	●
	A201	---	●	●	●	●
	A301	---	---	●	●	●
	A302	---	---	●	●	●
	A303T	---	---	●	●	●
	A401	---	---	---	---	---
	A403	---	---	---	---	---
	A403T	---	---	---	---	---
	A404	---	---	---	---	---
	A405	---	---	---	---	---
	A501	---	---	---	---	---
	A503	---	---	---	---	---
	A503T	---	---	---	---	---
	A101	---	---	---	---	---
	A201	---	---	---	---	---
	A301	---	---	---	---	---
	A302	---	---	---	---	---
	A303T	---	---	---	---	---
	A401	---	---	---	---	●
	A403	---	---	---	---	●
	A403T	---	---	---	---	●
	A404	---	---	---	---	●
	A405	---	---	---	---	●
	A501	---	---	---	---	●
	A503	---	---	---	---	●
	A503T	---	---	---	---	●
		<u>Note:</u> Ballons Chaize baskets are designed to be used with appropriate burner frames of: Schroeder, Ultramagic, Lindstrand, Cameron Balloons				

Legend:
● combination approved
--- combination not approved

Table II.4: Ultramagic

			Envelopes				
			MA-18	MA-22	MA-26	MA-30	MA-35
Baskets / Load frame	C1		●	●	●	●	---
	C2		●	●	---	---	---
	C3		●	●	●	●	●
	C4		---	---	●	●	●
	C5		---	---	---	---	---
	C6		---	---	---	●	●
	C7		---	---	---	●	●
	C10		●	●	●	●	●
	3101-0800 (wheel chair)		---	---	●	●	●
Burners	BMK-008	Single	●	●	●	●	●
		Double	●	●	●	●	●
	MK-2	Single	●	●	---	---	---
		Super-single	●	●	---	---	---
		Double	●	●	●	●	●
		Super-double	●	●	●	●	●
		Triple	---	---	---	---	---
		Super-triple	---	---	---	---	---
	MK-10	Single	●	●	---	---	---
		Double	●	●	●	●	●
		Triple	---	---	---	---	---
	MK-21	Single	●	●	---	●	●
		Double	●	●	●	●	●
		Triple	---	---	---	---	---

Legend: ● combination approved
--- combination not approved

Table II.5: Lindstrand (non-EU)

			Envelopes				
			MA-18	MA-22	MA-26	MA-30	MA-35
Baskets / Load frame	BA-001		●	●	●	●	---
	BA-002		●	●	●	●	---
	BA-003		●	●	●	●	●
	BA-010		---	---	---	---	●
	BA-011		---	---	---	---	●
	BA-012		---	---	---	---	●
	BA-013		---	---	---	---	●
	BA-014		---	---	---	---	●
	BA-020		---	---	---	---	---
Burners	Jetstream Single (BU-001)		●	●	---	---	---
	Jetstream Double (BU-002)		●	●	●	●	●
	Jetstream Double + CLF (BU-003)		---	---	---	---	●
	Jetstream Triple (BU-004)		---	---	---	---	●
	Jetstream Triple + CLF (BU-005)		---	---	---	---	---
	Jetstream Super SINGLE (BU-007)		●	●	●	●	---
	Jetstream Series 2 Double (BU-008)		●	●	●	●	●
	Jetstream Series 2 Triple (BU-010)		---	---	---	---	●

Legend: ● combination approved
--- combination not approved

Table II.6: Cameron Balloons (non-EU)

			Envelopes				
			MA-18	MA-22	MA-26	MA-30	MA-35
Baskets / Load frame	Basket	Applicable load frame					
	LITE CB3037	CB2356	●	---	---	---	---
	56-65 CB300-2A CB310-2A CB3050-2 or CB3115-2	CB2598, CB2224, CB2203, CB2231, CB2874 or CB871	●	●	●	---	---
	77-84 CB300-3A CB310-3 CB3050-3 or CB3115-3	CB2598, CB2224, CB2203, CB2231, CB2874 or CB871	●	●	●	●	---
	C60 / 70 CB3051	CB2203, CB2598, CB2562, CB2224, CB2560, CB2231, CB2874 or CB2226	● <u>Excluded:</u> CB2562, CB2560	●	●	●	---
	C80 / 90 CB3052	CB2598, CB2224, CB2203, CB2231, CB2874 or CB2226	●	●	●	●	●
	90-105 CB300-4A CB310-4A CB3050-4 or CB3115-4	CB2598, CB2224, CB2203, CB2231, CB2874 or CB871	●	●	●	●	●
	120-133 CB303	CB2309 or CB2312	---	---	---	●	●
	120-133 P CB3238	CB2468 or CB2470	---	---	---	---	●
	120-133 T CB3233		---	---	---	---	●
	140 T CB991 or CB3376	CB2264 or CB2263	---	---	---	---	---
	140 TW CB 3360	CB2265 or CB2266	---	---	---	---	---
Burners	Double Colt C2 (B2-100, B2-200)		●	●	●	●	●
	Triple Colt C2 (B2-300, B2-400, B3-300)		---	---	---	---	---
	Double Colt C3(T) (B3-100, B3-200, B3T-200)		●	●	●	●	●
	Triple Colt C3(T) (B3-400, B3T-300 B3T-400, B3T-700)		---	---	---	---	---
	Double Stealth (CB2008-1/-2, CB2031-1/-2, CB2085-1/-2, CB2086-1/-2 CB2239-1/-2, CB2240-1/-2)		●	●	●	●	●
	Double Mk-3 (CB205)		●	●	●	●	●
	Double Mk-5 (CB2059)		●	●	●	●	●
	Double Shadow (CB2075-1/-2, CB2101-1/-2, CB2153-1/-2, CB2195-1/-2, CB2215, CB2222, CB2243, CB2244, CB2460-1/-2, CB2461-1/-2, CB2465-1/-2, CB2466-1/-2, CB2478-1/-2, CB2479-1/-2, CB2494-1/-2)		●	●	●	●	●
	Single Shadow (CB2130-1/-2, CB2233, CB2245, CB2246)		●	●	●	●	●
	Double Shadow (CB2234, CB2244)		●	●	●	●	●
	Double Sirocco (CB2694, CB2695, CB2698, CB2699)		●	●	●	●	●
	Single Mk-4 (CB391)		●	●	---	---	---
	Double Mk-4 (CB392, CB451, CB460, CB494)		●	●	●	●	●
	Double Mk-4 Super (CB579-1/-2, CB595-1/-2, CB2111-1/-2)		●	●	●	●	●
	Single Stratus (CB8710, CB8712)		●	●	---	---	---
	Double Stratus (CB8720, CB8721)		●	●	●	●	●

Legend: ● combination approved
--- combination not approved

III. Fuel cylinders

Manufacturer	P/N
Aerostar (non-EU)	vertical stainless steel 15 gal vertical stainless steel 18 gal vertical stainless steel 23 gal horizontal stainless steel 20 gal
Schroeder fire balloons (OEM)	VA 50 VA 70
Ultramagic	4100-U4-27 M-20 M-20D M-30 M-30D M-20 M-20D M-30 M-30D M-40 M-40D T 25
Cameron Balloons (non-EU) (including former Lindstrand Hot Air Balloons, Ltd.)	CB901 CB250 CB426 CB497 CB599 CB959 CB2088 CB2900 CB2901 CB2902 CB2903 V20-100-00 V30-100-00 V40-100-00 CB2380 CB2383 CB2385 CB2387 A0/V30 A0/V40 CB8414 CB8424 V 20 V 30 V 40 H30 H40 H55 T 30



SECTION: ADMINISTRATIVE

I. Acronyms and Abbreviations

s/n	Serial number
SLL	Service Life Limit
TC	Type Certificate
VFR	Visual Flight Rules

II. Type Certificate Holder Record

Type Certificate Holder	Period
S.I.G.A. Pilâtre de Rozier 6, place du Temple BP 18 57 530 Courcelles-Chaussy, France	from 4 September 1994
Llopis Balloons Zone intercommunale Pointes Saint Georges BP 18 57590 Delme, France	from 3 May 2005
Nouvelle Manufacture d'Aérostats 4 Impasse de la Noue 54 770 Agincourt, France	from 3 April 2017
Pilâtre de Rozier - S.I.G.A. S.A. Aérodrome de Chambley - Hangar G/6 11 boulevard Antoine de Saint-Exupéry F-54470 Hagéville, France	from 15 April 2021
L'Atelier S.A.R.L. 6 rue Etienne Lenoir F-51420 Witry-les-Reims, France	from 19 February 2024

III. Manufacturer Record

Manufacturer (see Section 1, Note 1)	Period
Siga Pilâtre de Rozier 6, place du Temple BP 18 57530 Courcelles – Chaussy, France	from 16 March 1992
Llopis Ballons Zone intercommunale Pointes Saint Georges BP 18 57590 Delme, France	from 1 December 2002
Nouvelle Manufacture d'Aérostats Zone Intercommunale Pointes Saint Georges 57590 Delme, France	from 3 April 2017 until 30 October 2020

IV. Change Record

Issue	Date	Changes	TC issue
Issue 1	3 Apr 2017	Initial issue of TCDS No. EASA.BA.119 (former DGAC FR No. 186, issue 3)	Initial Issue, 3 December 2010
Issue 2	30 Jun 2017	Non-existing model MA-34 corrected to read MA-35	---



Issue	Date	Changes	TC issue
Issue 3	30 Oct 2020	Suspension of model MA-40	---
Issue 4	15 Apr 2021	Transfer of TCDS No. EASA.BA.119 to PILÂTRE DE ROZIER	---
Issue 5	6 Mar 2023	Section 2, III., (c): combination MA-18/77-84 and C60/70 amended	---
Issue 6	19 Feb 2024	<ul style="list-style-type: none">- Transfer of TC to S.A.R.L. L'Atelier de la Montgolfière.- Section 2, III.: 'Lindstrand' fuel cylinders added to 'Cameron'.- TCDS adapted to latest EASA format, Issues re-numbered	19 February 2024

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