



## ***European Aviation Safety Agency***

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**EASA**

**TYPE-CERTIFICATE  
DATA SHEET**

**EASA.A.362**

**EA 300**

**Extra Flugzeugproduktions- und Vertriebs GmbH**

Schwarze Heide 21  
46569, Hünxe  
Germany

For models: EA 300; EA 300/S; EA 300/L; EA 300/200; EA 300/SC; EA 300/LT;  
EA 300/LC

Issue 05: 08 April 2011

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## **SECTION A: EA 300**

### **A.I. General**

- |   |   |
|---|---|
| 1. Data Sheet No.:                              | EASA.A.362  |
| 2. a) Type:                                     | EA 300  |
| b) Model:                                       | -/-   |
| c) Variant:                                     | -/-   |
| 3. Airworthiness Category:                      | Normal, Aerobatic   |
| 4. Type Certificate Holder:<br>(see Note 6)     | Extra Flugzeugproduktions- und Vertriebs- GmbH<br>Schwarze Heide 21<br>46569 Hünxe<br>Germany |
| 5. Manufacturer:<br>(see Note 6)                | Extra Flugzeugproduktions- und Vertriebs- GmbH<br>Schwarze Heide 21<br>46569 Hünxe<br>Germany |
| 6. Certification Application<br>Date:           | 18-December-1986  |
| 7. National Certifying Authority                | Luftfahrt-Bundesamt (Germany)   |
| 8. National Authority Type<br>Certificate Date: | 16-May-1990   |

### **A.II. EASA Certification Basis**

- |  |  |
|--|--|
| 1. Reference Date for<br>determining the applicable<br>requirements: | Updated on 12-March-1993 (from initial 14 CFR<br>eff. Feb. 1, 1965, incl. Amdt 23-1 through 23-33)   |
| 2. Airworthiness Requirements:                                       | 14 CFR eff. 1-February-1965, incl. Amdt 23-1<br>through 23-34, effective 14-September-1987   |
| 3. Special Conditions:   | C-1, Ermüdungs-/Schadens-Toleranznachweis der<br>Faserverbundstruktur (Fatigue/Damage Tolerance<br>Substantiation of Composite Structure)<br>C-4, Structural Design and Loads Criteria<br>(LBA I 311-1086/93, dated 12-March-1993 &<br>FAA Issue Paper C-1 and C-4, Project N°<br>CA581EU)<br>Smoke System (optional equipment)<br>(LBA I 311-1086/96, dated 07-February-1996)<br>Lufttüchtigkeitsforderungen für den Schleppflug<br>(Airworthiness Requirement for Glider Towing)<br>(LBA I 23-60/100, dated February-1971) |

- |                                       |                          |
|---------------------------------------|--------------------------|
| 4. Exemptions:                        | None                     |
| 5. Deviations:                        | None                     |
| 6. Equivalent Safety Findings:        | None                     |
| 7. Requirements elected to<br>comply: | None                     |
| 8. Environmental Standards:           | ICAO, Annex 16, Volume 1 |
| 9. (Reserved)                         |                          |
| 10. (Reserved)                        |                          |

### **A.III. Technical Characteristics and Operational Limitations**

1. Type Design Definition: EA-03102.1 Description and Operation of Aircraft and Systems (most current issue);
2. Description: Single engine, mid wing cantilever monoplane with reciprocating engine and fixed main gear in tail-wheel configuration; wing, empennage and landing gear in fibre-composite construction; fuselage and engine mount in conventional steel tube construction.
3. Equipment: Equipment List, refer to POH/AFM Doc. N° EA-03701, (See Note 4)
4. Dimensions:

Span:	8.0 m	(26.25 ft)
Length:	7.12 m	(23.36 ft)
Height:	2.62 m	(8.60ft)
Wing area:	10.72 m <sup>2</sup>	(115.39 sq.ft.)
5. Engine:
  - 5.1.1 Model 1: Lycoming AEIO-540-L1B5
  - 5.1.2 Type Certificate: LBA No. 4535
  - 5.1.3 Limitations:

Take-off and continuous power	224 kW / 300 BHP
Max. engine rotational speed	2700 RPM
Manifold Pressure	100 kPa / 29.5”Hg
  - 5.2.1 Model 2: Lycoming AEIO-540-L1B5D
  - 5.2.2 Type Certificate: LBA No. 4535
  - 5.2.3 Limitations:

Take-off and continuous power	224 kW / 300 BHP
Max. engine rotational speed	2700 RPM
Manifold Pressure	100 kPa / 29.5”Hg
6. Load factors:

Normal category	+6/ -3
Aerobatic category	
Single Seat Operation / ACRO I	±10
Double Seat Operation / ACRO II	±8
7. Propeller:
  - 7.1.1 Model 1: MT Propeller MTV-9-B-C/C200-15
  - 7.1.2 Type Certificate: LBA No. 32.130/65
  - 7.1.3 Number of blades: 3
  - 7.1.4 Diameter: 2000 mm ± 0 mm
  - 7.1.5 Sense of Rotation: Right-hand tractor (viewed in direction of flight)
  - 7.2.1 Model 2: MT Propeller MTV-14-B-C/C190-17
  - 7.2.2 Type Certificate: EASA.P.017
  - 7.2.3 Number of blades: 4

- 7.2.4 Diameter: 1900 mm  $\pm$  0 mm
- 7.2.5 Sense of Rotation: Right-hand tractor (viewed in direction of flight)
8. Fluids:
- 8.1 Fuel: 100/100LL minimum grade aviation gasoline
- 8.2 Oil: Single or multi – viscosity aviation grade oils see latest issue of Textron Lycoming S.I. N° 1014
- 8.3 Coolant: None
- 8.4 Smoke Oil: Straight paraffin oil, kin. viscosity 30-50 cSt at 20°C (68°F), initial boiling point >330°C (626°F);  
For example: Fauth FC05, Texaco Canopus 13 or equivalent.
9. Fluid capacities:
- 9.1.1 Fuel (Standard):
- |                                |           |               |
|--------------------------------|-----------|---------------|
| Total capacity                 | 160 Liter | (42.3 US.gal) |
| Usable capacity                | 158 Liter | (41.0 US.gal) |
| Usable capacity for aerobatics | 38 Liter  | (10.0 US.gal) |
- 9.1.2 Fuel (Long Range):
- |                                |           |               |
|--------------------------------|-----------|---------------|
| Total capacity                 | 194 Liter | (51.2 US.gal) |
| Usable capacity                | 192 Liter | (50.7 US.gal) |
| Usable capacity for aerobatics | 38 Liter  | (10.0 US.gal) |
- 9.2 Oil:
- |                            |            |          |
|----------------------------|------------|----------|
| Max. sump capacity         | 15.1 Liter | (16 qts) |
| Min. sump capacity aerobic | 11.3 Liter | (12 qts) |
| Min. sump capacity normal  | 8.5 Liter  | (9 qts)  |
- 9.3 Coolant system capacity: None
- 9.4 Smoke Oil: 35 Liter (9.2 US.gal)
10. Air Speeds:
- Design Manoeuvring Speed  $V_A$ :
- |                    |          |
|--------------------|----------|
| Aerobatic category | 158 KIAS |
| Normal category    | 140 KIAS |
- Max. Structural Cruising Speed  $V_{NO}$ :
- |                    |          |
|--------------------|----------|
| Aerobatic category | 158 KIAS |
| Normal category    | 140 KIAS |
- Never Exceed Speed  $V_{NE}$  : 220 KIAS
11. Maximum Operating Altitude: 4877 m (16.000 ft )
12. Allweather Operations Capability: Day-VFR
13. Maximum Weights:
- Take-off and Landing:
- |                                 |                   |
|---------------------------------|-------------------|
| Normal category                 | 950 kg (2095 lbs) |
| Aerobatic category              |                   |
| Single Seat Operation / ACRO I  | 820 kg (1808 lbs) |
| Double Seat Operation / ACRO II | 870 kg (1918 lbs) |
- Empty:

	Normal category	
	Standard	745 kg (1643 lbs)
	Long Range	724 kg (1596 lbs)
	Aerobatic category	
	Single Seat Operation / ACRO I	701 kg (1546 lbs)
	Double Seat Operation / ACRO II	665 kg (1466 lbs)
14. Centre of Gravity Range:	Forward limit (aft of datum):	
	at 820 kg (1808 lbs) or below	75.0 cm (29.53")
	Normal category	
	at 950 kg (2095 lbs)	78.0 cm (30.71")
	Aerobatic category at 870 kg (1918 lbs)	
	Double Seat Operation / ACRO II	76.5 cm (30.12")
	Rear limit (aft of datum):	
	at 820 kg (1808 lbs) or below	89.8 cm (35.35")
	Normal category	
	at 950 kg (2095 lbs)	86.0 cm (33.86")
	Aerobatic category at 870 kg (1918 lbs)	
	Double Seat Operation / ACRO II	88.5 cm (34.84")
	Straight line variation between mass limits.	
15. Datum:	Plane of Firewall	
16. Control surface deflections:	Aileron:	30°±2° upward; 30°±2° downward
	Elevator:	25°±2° upward, 25°±2° downward
	Rudder:	30°±2° left, 30°±2° right
	Elevator trim tab:	40°±5° upward, 50°±5° downward
17. Levelling Means:	Upper fuselage longeron	
18. Minimum Flight Crew:	1 Pilot (rear seat)	
19. Maximum Passenger Seating Capacity:	1 (front seat)	
20. Baggage/Cargo Compartments:	None	
21. Wheels and Tyres:	Main Wheel Tyre Size:	5.00-5 6ply
	Tail Wheel Tyre Size:	Solid rubber 125/50-75 ZL or 6" (optional)
22. (Reserved):		

#### **A.IV. Operating and Service Instructions**

1. Flight Manual:
  - Flughandbuch (FHB) Doc. No. EA-03701D
  - Pilot's Operating Handbook (POH) & Airplane Flight Manual (AFM) Doc. No. EA-03701
  - Manuel de Vol (MdV) Doc. No. EA-03701F
2. Technical Manual:
  - Service Manual Doc. No. EA-03702
3. Repair Manual:
  - Service Manual Doc. No. EA-03702
4. Manual for Operation:
  - Flughandbuch (FHB) Doc. No. EA-03701D
  - Pilot's Operating Handbook (POH) & Airplane Flight Manual (AFM) Doc. No. EA-03701
  - Manuel de Vol (MdV) Doc. No. EA-03701F
5. Spare Parts Catalogue:
  - Parts Catalogue Doc. No. EA-03703
6. Table of Dimensions, Limits and Clearances:
  - Service Manual Doc. No. EA-03702
7. Instruments and aggregates:
  - None

**A.V. Notes:**

1. This certification applies to Serial numbers V1, 03, 05, 06, 015 and on.
2. The use of an exhaust silencer system type Gomolzig EA300-606500 is certified. The installation of the exhaust silencer system has to be in accordance with the Retrofit-Instruction UA-300-1-92. For service of the optional system the instructions of the appendix to the Service Manual EA 300 are obligatory.
3. A standard Certificate of Airworthiness can only be issued for an aircraft which is equipped with the 4-blade propeller MTV-14-B-C/C190-17 in combination with the exhaust silencer system type Gomolzig EA300-606500 or EA300-606000. Otherwise a Certificate of Airworthiness can only be issued for aerial work.
4. For more certified optional equipment refer to EXTRA Doc. No. EA-03707, or AFM/POH latest revision. The applicable Retrofit-Instructions and supplements of the AFM are to be observed. Available: At manufacturer
5. Structure is qualified up to 72°C (161.6°F). Structure temperatures (composite) above 72°C (161.6°F) are not permitted. Not to exceed this temperature limit, colour specification for composite structure of the manufacturer (document EA-03205.19) has to be complied with.
6. The address of the design and production organization until September 15th, 2003 is:  
Extra-Flugzeugbau GmbH  
Flugplatz Dinslaken  
46569 Hünxe  
Germany
7. Model EA 300 serial numbers 35 to 67 (airplanes manufactured by Extra Flugzeugbau GmbH) and serial numbers 1068 and on (continuation of manufacture by Extra Flugzeugproduktions- und Vertriebs- GmbH.) See type certificate holder record. (Administrative Section II)

## **SECTION B: EA 300/S**

### **B.I. General**

- |   |   |
|---|---|
| 1. Data Sheet No.:                              | EASA.A.362  |
| 2. a) Type:                                     | EA 300  |
| b) Model:                                       | EA 300/S  |
| c) Variant:                                     | -/-   |
| 3. Airworthiness Category:                      | Normal, Aerobatic   |
| 4. Type Certificate Holder:<br>(see Note 6)     | Extra Flugzeugproduktions- und Vertriebs- GmbH<br>Schwarze Heide 21<br>46569 Hünxe<br>Germany |
| 5. Manufacturer:<br>(see Note 6)                | Extra Flugzeugproduktions- und Vertriebs- GmbH<br>Schwarze Heide 21<br>46569 Hünxe<br>Germany |
| 6. Certification Application<br>Date:           | 17-September-1991   |
| 7. National Certifying Authority                | Luftfahrt-Bundesamt (Germany)   |
| 8. National Authority Type<br>Certificate Date: | 19-March-1993   |

### **B.II. EASA Certification Basis**

- |  |  |
|--|--|
| 1. Reference Date for<br>determining the applicable<br>requirements: | Updated on 12-March-1993 (from initial 14 CFR<br>eff. Feb. 1, 1965, incl. Amdt 23-1 through 23-33)   |
| 2. Airworthiness Requirements:                                       | 14 CFR eff. 1-February-1965, incl. Amdt 23-1<br>through 23-34, effective 14-September-1987   |
| 3. Special Conditions:   | C-1, Ermüdungs-/Schadens-Toleranznachweis der<br>Faserverbundstruktur (Fatigue/Damage Tolerance<br>Substantiation of Composite Structure)<br>C-4, Structural Design and Loads Criteria<br>(LBA I 311-1086/93, dated 12-March-1993 &<br>FAA Issue Paper C-1 and C-4, Project N°<br>CA581EU)<br>Smoke System (optional equipment)<br>(LBA I 311-1086/96, dated 07-February-1996)<br>Lufttüchtigkeitsforderungen für den Schleppflug<br>(Airworthiness Requirement for Glider Towing)<br>(LBA I 23-60/100, dated February-1971) |

- |                                       |                          |
|---------------------------------------|--------------------------|
| 4. Exemptions:                        | None                     |
| 5. Deviations:                        | None                     |
| 6. Equivalent Safety Findings:        | None                     |
| 7. Requirements elected to<br>comply: | None                     |
| 8. Environmental Standards:           | ICAO, Annex 16, Volume 1 |
| 9. (Reserved)                         |                          |
| 10. (Reserved)                        |                          |

### **B.III. Technical Characteristics and Operational Limitations**

1. Type Design Definition: EA-04102.1 Description and Operation of Aircraft and Systems (most current issue);
2. Description: Single engine, low wing cantilever monoplane with reciprocating engine and fixed main gear in tail-wheel configuration; wing, empennage and landing gear in fibre-composite construction; fuselage and engine mount in conventional steel tube construction.
3. Equipment: Equipment List, refer to POH/AFM Doc. N° EA-04701, (See Note 4)
4. Dimensions:

Span:	7.5 m	(24.61 ft)
Length:	6.65 m	(21.82 ft)
Height:	2.62 m	(8.60ft)
Wing area:	10.44 m <sup>2</sup>	(112.38 sq.ft.)
5. Engine:
  - 5.1.1 Model 1: Lycoming AEIO-540-L1B5
  - 5.1.2 Type Certificate: LBA No. 4535
  - 5.1.3 Limitations:

Take-off and continuous power	224 kW / 300 BHP
Max. engine rotational speed	2700 RPM
Manifold Pressure	100 kPa / 29.5"Hg
  - 5.2.1 Model 2: Lycoming AEIO-540-L1B5D
  - 5.2.2 Type Certificate: LBA No. 4535
  - 5.2.3 Limitations:

Take-off and continuous power	224 kW / 300 BHP
Max. engine rotational speed	2700 RPM
Manifold Pressure	100 kPa / 29.5"Hg
6. Load factors:

Normal category	+6/ -3
Aerobatic category	±10
7. Propeller:
  - 7.1.1 Model 1: MT Propeller MTV-9-B-C/C200-15
  - 7.1.2 Type Certificate: LBA No. 32.130/65
  - 7.1.3 Number of blades: 3
  - 7.1.4 Diameter: 2000 mm ± 0 mm
  - 7.1.5 Sense of Rotation: Right-hand tractor (viewed in direction of flight)
  - 7.2.1 Model 2: MT Propeller MTV-14-B-C/C190-17
  - 7.2.2 Type Certificate: EASA.P.017
  - 7.2.3 Number of blades: 4
  - 7.2.4 Diameter: 1900 mm ± 0 mm

- 7.2.5 Sense of Rotation: Right-hand tractor (viewed in direction of flight)
8. Fluids:
- 8.1 Fuel: 100/100LL minimum grade aviation gasoline
- 8.2 Oil: Single or multi – viscosity aviation grade oils see latest issue of Textron Lycoming S.I. N° 1014
- 8.3 Coolant: None
- 8.4 Smoke Oil: Straight paraffin oil, kin. viscosity 30-50 cSt at 20°C (68°F), initial boiling point >330°C (626°F);  
For example: Fauth FC05, Texaco Canopus 13 or equivalent.
9. Fluid capacities:
- 9.1.1 Fuel (Standard):
- |                                |           |               |
|--------------------------------|-----------|---------------|
| Total capacity                 | 171 Liter | (45.1 US.gal) |
| Usable capacity                | 169 Liter | (44.6 US.gal) |
| Usable capacity for aerobatics | 49 Liter  | (12.9 US.gal) |
- 9.1.2 Fuel (Long Range):
- |                                |           |               |
|--------------------------------|-----------|---------------|
| Total capacity                 | 205 Liter | (54.1 US.gal) |
| Usable capacity                | 203 Liter | (53.5 US.gal) |
| Usable capacity for aerobatics | 49 Liter  | (12.9 US.gal) |
- 9.2 Oil:
- |                              |            |          |
|------------------------------|------------|----------|
| Max. sump capacity           | 15.1 Liter | (16 qts) |
| Min. sump capacity aerobatic | 11.3 Liter | (12 qts) |
| Min. sump capacity normal    | 8.5 Liter  | (9 qts)  |
- 9.3 Coolant system capacity: None
- 9.4 Smoke Oil: 35 Liter (9.2 US.gal)
10. Air Speeds:
- Design Manoeuvring Speed  $V_A$ :
- |                    |          |
|--------------------|----------|
| Aerobatic category | 158 KIAS |
| Normal category    | 140 KIAS |
- Max. Structural Cruising Speed  $V_{NO}$ :
- |                    |          |
|--------------------|----------|
| Aerobatic category | 158 KIAS |
| Normal category    | 140 KIAS |
- Never Exceed Speed  $V_{NE}$ : 220 KIAS
11. Maximum Operating Altitude: 4877 m (16.000 ft )
12. Allweather Operations Capability: Day-VFR
13. Maximum Weights:
- Take-off and Landing:
- |                    |                   |
|--------------------|-------------------|
| Normal category    | 920 kg (2028 lbs) |
| Aerobatic category | 820 kg (1808 lbs) |
- Empty:
- |                    |                   |
|--------------------|-------------------|
| Normal category    |                   |
| Standard           | 711 kg (1568 lbs) |
| Long Range         | 786 kg (1513 lbs) |
| Aerobatic category | 697 kg (1537 lbs) |

- |   |                               |  |
|---|-------------------------------|--|
| 14. Centre of Gravity Range:            | Forward limit (aft of datum): |  |
|   | 920 kg (2028 lbs) or below    | 48.9 cm (19.3")                            |
|   | Rear limit (aft of datum):    |  |
|   | 920 kg (2028 lbs) or below    | 71.4 cm (28.1")                            |
| 15. Datum:                              | Plane of Firewall             |  |
| 16. Control surface deflections:        | Aileron:                      | 30°±2° upward; 30°±2° downward             |
|   | Elevator:                     | 25°±2° upward, 25°±2° downward             |
|   | Rudder:                       | 30°±2° left, 30°±2° right                  |
|   | Elevator trim tab:            | 40°±5° upward, 50°±5° downward             |
| 17. Levelling Means:                    | Upper fuselage longeron       |  |
| 18. Minimum Flight Crew:                | 1 Pilot (rear seat)           |  |
| 19. Maximum Passenger Seating Capacity: | None                          |  |
| 20. Baggage/Cargo Compartments:         | None                          |  |
| 21. Wheels and Tyres:                   | Main Wheel Tyre Size:         | 5.00-5 6ply                                |
|   | Tail Wheel Tyre Size:         | Solid rubber 125/50-75 ZL or 6" (optional) |
| 22. (Reserved):                         |                               |  |

#### **B.IV. Operating and Service Instructions**

1. Flight Manual:
  - Flughandbuch (FHB) Doc. No. EA-04701D
  - Pilot's Operating Handbook (POH) & Airplane Flight Manual (AFM) Doc. No. EA-04701
2. Technical Manual:
  - Service Manual Doc. No. EA-04702
3. Repair Manual:
  - Service Manual Doc. No. EA-04702
4. Manual for Operation:
  - Flughandbuch (FHB) Doc. No. EA-04701D
  - Pilot's Operating Handbook (POH) & Airplane Flight Manual (AFM) Doc. No. EA-04701
5. Spare Parts Catalogue:
  - Parts Catalogue Doc. No. EA-04703
6. Table of Dimensions, Limits and Clearances:
  - Service Manual Doc. No. EA-04702
7. Instruments and aggregates:
  - None

**B.V. Notes:**

1. This certification applies to Serial Numbers 01 and on.
2. The use of an exhaust silencer system type Gomolzig EA300-606500 is certified. The installation of the exhaust silencer system has to be in accordance with the Retrofit-Instruction UA-300-1-92. For service of the optional system the instructions of the appendix to the Service Manual EA 300 are obligatory.
3. A standard Certificate of Airworthiness can only be issued for an aircraft which is equipped with the 4-blade propeller MTV-14-B-C/C190-17 in combination with the exhaust silencer system type Gomolzig EA300-606500 or EA300-606000. Otherwise a Certificate of Airworthiness can only be issued for aerial work.
4. For more certified optional equipment refer to EXTRA Doc. No. EA-04707, or AFM/POH latest revision. The applicable Retrofit-Instructions and supplements of the AFM are to be observed. Available: At manufacturer
5. Structure is qualified up to 72°C (161.6°F). Structure temperatures (composite) above 72°C (161.6°F) are not permitted. Not to exceed this temperature limit, colour specification for composite structure of the manufacturer (document EA-03205.19) has to be complied with.
6. The address of the design and production organization until September 15th, 2003 is:  
Extra-Flugzeugbau GmbH  
Flugplatz Dinslaken  
46569 Hünxe  
Germany
7. Model EA 300/S serial number 1 to 31 (airplanes manufactured by Extra Flugzeugbau GmbH) and serial numbers 1032 and on (continuation of manufacture by Extra Flugzeugproduktions- und Vertriebs- GmbH.) See type certificate holder record. (Administrative Section II)

## **SECTION C: EA 300/L**

### **C.I. General**

- |   |   |
|---|---|
| 1. Data Sheet No.:                              | EASA.A.362  |
| 2. a) Type:                                     | EA 300  |
| b) Model:                                       | EA 300/L  |
| c) Variant:                                     | -/-   |
| 3. Airworthiness Category:                      | Normal, Aerobatic   |
| 4. Type Certificate Holder:<br>(see Note 6)     | Extra Flugzeugproduktions- und Vertriebs- GmbH<br>Schwarze Heide 21<br>46569 Hünxe<br>Germany |
| 5. Manufacturer:<br>(see Note 6)                | Extra Flugzeugproduktions- und Vertriebs- GmbH<br>Schwarze Heide 21<br>46569 Hünxe<br>Germany |
| 6. Certification Application<br>Date:           | 02-February-1994  |
| 7. National Certifying Authority                | Luffahrt-Bundesamt (Germany)  |
| 8. National Authority Type<br>Certificate Date: | 31-January-1995   |

### **C.II. EASA Certification Basis**

- |  |  |
|--|--|
| 1. Reference Date for<br>determining the applicable<br>requirements: | 03-February-1994   |
| 2. Airworthiness Requirements:                                       | 14 CFR eff. 1-February-1965, incl. Amdt 23-1<br>through 23-34, effective 14-September-1987   |
| 3. Special Conditions:   | C-1, Ermüdungs-/Schadens-Toleranznachweis der<br>Faserverbundstruktur (Fatigue/Damage Tolerance<br>Substantiation of Composite Structure)<br>C-4, Structural Design and Loads Criteria<br>(LBA I 311-1086/93, dated 12-March-1993 &<br>FAA Issue Paper C-1 and C-4, Project N°<br>CA581EU)<br>Smoke System (optional equipment)<br>(LBA I 311-1086/96, dated 07-February-1996)<br>Lufttüchtigkeitsforderungen für den Schleppflug<br>(Airworthiness Requirement for Glider Towing)<br>(LBA I 23-60/100, dated February-1971) |

- |                                       |                          |
|---------------------------------------|--------------------------|
| 4. Exemptions:                        | None                     |
| 5. Deviations:                        | None                     |
| 6. Equivalent Safety Findings:        | None                     |
| 7. Requirements elected to<br>comply: | None                     |
| 8. Environmental Standards:           | ICAO, Annex 16, Volume 1 |
| 9. (Reserved)                         |                          |
| 10. (Reserved)                        |                          |

### **C.III. Technical Characteristics and Operational Limitations**

1. Type Design Definition: EA-06102.1 Description and Operation of Aircraft and Systems (most current issue);
2. Description: Single engine, low wing cantilever monoplane with reciprocating engine and fixed main gear in tail-wheel configuration; wing, empennage and landing gear in fibre-composite construction; fuselage and engine mount in conventional steel tube construction.
3. Equipment: Equipment List, refer to POH/AFM Doc. N° EA-06701, (See Note 4)
4. Dimensions:

Span:	8.0 m	(26.25 ft)
Length:	6.96 m	(22.83 ft)
Height:	2.62 m	(8.60ft)
Wing area:	10.84 m <sup>2</sup>	(116.68 sq.ft.)
5. Engine:
  - 5.1.1 Model 1: Lycoming AEIO-540-L1B5
  - 5.1.2 Type Certificate: LBA No. 4535
  - 5.1.3 Limitations:

Take-off and continuous power	224 kW / 300 BHP
Max. engine rotational speed	2700 RPM
Manifold Pressure	100 kPa / 29.5"Hg
  - 5.2.1 Model 2: Lycoming AEIO-540-L1B5D
  - 5.2.2 Type Certificate: LBA No. 4535
  - 5.2.3 Limitations:

Take-off and continuous power	224 kW / 300 BHP
Max. engine rotational speed	2700 RPM
Manifold Pressure	100 kPa / 29.5"Hg
  - 5.3.1 Model 3: Lycoming AEIO-580-B1A
  - 5.3.2 Type Certificate: IM.E.027
  - 5.3.3 Limitations:

Take-off and continuous power	235 kW / 315 BHP
Max. engine rotational speed	2700 RPM
Manifold Pressure	100 kPa / 29.5"Hg
6. Load factors:

Normal category	+6/ -3
Aerobatic category	
Single Seat Operation / ACRO I	±10
Double Seat Operation / ACRO II	±8
Double Seat Operation / ACRO III	±6
7. Propeller:
  - 7.1.1 Model 1: MT Propeller MTV-9-B-C/C200-15
  - 7.1.2 Type Certificate: LBA No. 32.130/65
  - 7.1.3 Number of blades: 3

- 7.1.4 Diameter: 2000 mm  $\pm$  0 mm
- 7.1.5 Sense of Rotation: Right-hand tractor (viewed in direction of flight)
- 7.2.1 Model 2: MT Propeller MTV-14-B-C/C190-17
- 7.2.2 Type Certificate: EASA.P.017
- 7.2.3 Number of blades: 4
- 7.2.4 Diameter: 1900 mm  $\pm$  0 mm
- 7.2.5 Sense of Rotation: Right-hand tractor (viewed in direction of flight)
- 7.3.1 Model 3: MT Propeller MTV-9-B-C/C198-25  
(see Note 8)
- 7.3.2 Type Certificate: LBA No. 32.130/65
- 7.3.3 Number of blades: 3
- 7.3.4 Diameter: 1980 mm  $\pm$  5 mm
- 7.3.5 Sense of Rotation: Right-hand tractor (viewed in direction of flight)
- 8. Fluids:
  - 8.1 Fuel: 100/100LL minimum grade aviation gasoline
  - 8.2 Oil: Single or multi – viscosity aviation grade oils see latest issue of Textron Lycoming S.I. N° 1014
  - 8.3 Coolant: None
  - 8.4 Smoke Oil: Straight paraffin oil, kin. viscosity 30-50 cSt at 20°C (68°F), initial boiling point >330°C (626°F);  
For example: Fauth FC05, Texaco Canopus 13 or equivalent.
- 9. Fluid capacities:
  - 9.1.1 Fuel (Standard):

Total capacity	171 Liter (45.1 US.gal)
Usable capacity	165.5 Liter(43.7 US.gal)
Usable capacity for aerobatics	45.5 Liter (12.0 US.gal)
  - 9.1.2 Fuel (Long Range):

Total capacity	205 Liter (54.1 US.gal)
Usable capacity	199.5 Liter(52.7 US.gal)
Usable capacity for aerobatics	45.5 Liter (12.0 US.gal)
  - 9.1.3 Fuel (Raised Standard):  
See Note 9

Total capacity	189 Liter (49.9 US.gal)
Usable capacity	187 Liter (49.4 US.gal)
Usable capacity for aerobatics	67 Liter (17.7 US.gal)
  - 9.2.1 Oil (Engine Model 1 & 2):

Max. sump capacity	15.1 Liter (16 qts)
Min. sump capacity aerobatic	11.3 Liter (12 qts)
Min. sump capacity normal	8.5 Liter (9 qts)
  - 9.2.2 Oil (Engine Model 3):

Max. sump capacity	15.1 Liter (16 qts)
Min. sump capacity normal	8.5 Liter (9 qts)
  - 9.3 Coolant system capacity: None
  - 9.4 Smoke Oil: 31 Liter (8.2 US.gal)

10. Air Speeds:	Design Manoeuvring Speed $V_A$ :	
	Aerobatic category	158 KIAS
	Normal category	140 KIAS
	Max. Structural Cruising Speed $V_{NO}$ :	
	Aerobatic category	158 KIAS
	Normal category	140 KIAS
	Never Exceed Speed $V_{NE}$ :	220 KIAS
11. Maximum Operating Altitude:	4877 m (16.000 ft )	
12. Allweather Operations Capability:	Day-VFR	
13. Maximum Weights:	Take-off and Landing:	
	Normal category	950 kg (2095 lbs)
	Aerobatic category	
	Single Seat Operation / ACRO I	820 kg (1808 lbs)
	Double Seat Operation / ACRO II	870 kg (1918 lbs)
	Double Seat Operation / ACRO III	950 kg (2095 lbs)
	Empty (with Engine Model 1 & 2):	
	Normal category	
	Standard	745 kg (1643 lbs)
	Raised Standard	729 kg (1607 lbs)
	Long Range	720 kg (1588 lbs)
	Aerobatic category	
	Single Seat Operation / ACRO I	701 kg (1546 lbs)
	ACRO I (raised Standard)	686 kg (1513 lbs)
	Double Seat Operation / ACRO II	665 kg (1466 lbs)
	Double Seat Operation / ACRO III	745 kg (1643 lbs)
	Empty (with Engine Model 3):	
	Normal category	
	Standard	742 kg (1636 lbs)
	Raised Standard	729 kg (1607 lbs)
	Long Range	720 kg (1588 lbs)
	Aerobatic category	
	Single Seat Operation / ACRO I	698 kg (1540 lbs)
	ACRO I (raised Standard)	686 kg (1513 lbs)
	Double Seat Operation / ACRO II	662 kg (1460 lbs)
	Double Seat Operation / ACRO III	742 kg (1636 lbs)
14. Centre of Gravity Range:	Forward limit (aft of datum):	
	at 950 kg (2095 lbs) or below	67.1 cm (29.4")
	Rear limit (aft of datum):	
	at 950 kg (2095 lbs) or below	84.1 cm (33.1")
15. Datum:	Plane of Firewall	

- |   |                         |  |
|---|-------------------------|--|
| 16. Control surface deflections:        | Aileron:                | 30°±2° upward; 30°±2° downward             |
|   | Elevator:               | 25°±2° upward, 25°±2° downward             |
|   | Rudder:                 | 30°±2° left, 30°±2° right                  |
|   | Elevator trim tab:      | 40°±2° upward, 50°±2° downward             |
| 17. Levelling Means:                    | Upper fuselage longeron |  |
| 18. Minimum Flight Crew:                | 1 Pilot (rear seat)     |  |
| 19. Maximum Passenger Seating Capacity: | 1 (front seat)          |  |
| 20. Baggage/Cargo Compartments:         | None                    |  |
| 21. Wheels and Tyres:                   | Main Wheel Tyre Size:   | 5.00-5 6ply                                |
|   | Tail Wheel Tyre Size:   | Solid rubber 125/50-75 ZL or 6" (optional) |
| 22. (Reserved):                         |                         |  |

#### **C.IV. Operating and Service Instructions**

1. Flight Manual:
  - Flughandbuch (FHB) Doc. No. EA-06701D
  - Pilot's Operating Handbook (POH) & Airplane Flight Manual (AFM) Doc. No. EA-06701
2. Technical Manual:
  - Service Manual Doc. No. EA-06702
3. Repair Manual:
  - Service Manual Doc. No. EA-06702
4. Manual for Operation:
  - Flughandbuch (FHB) Doc. No. EA-06701D
  - Pilot's Operating Handbook (POH) & Airplane Flight Manual (AFM) Doc. No. EA-06701
5. Spare Parts Catalogue:
  - Illustrated Parts Catalogue Doc. No. EA-06703
6. Table of Dimensions, Limits and Clearances:
  - Service Manual Doc. No. EA-06702
7. Instruments and aggregates:
  - None

**C.V. Notes:**

1. This certification applies to Serial Numbers 01 and on.
2. The use of an exhaust silencer system type Gomolzig EA300-606500 is certified. The installation of the exhaust silencer system has to be in accordance with the Retrofit-Instruction UA-300-1-92. For service of the optional system the instructions of the appendix to the Service Manual EA 300 are obligatory.
3. A standard Certificate of Airworthiness can only be issued for an aircraft which is equipped with
  - a) the 4-blade propeller MTV-14-B-C/C190-17 in combination with the exhaust silencer system type Gomolzig EA300-606500 or EA300-606000 or
  - b) the 3-blade propeller MTV-9-B-C/C198-25 in combination with the exhaust silencer system type Gomolzig EA300-606000 and a reduced max. take-off engine rotational speed of 2600RPM.Otherwise a Certificate of Airworthiness can only be issued for aerial work.
4. For more certified optional equipment refer to EXTRA Doc. No. EA-06707, or AFM/POH latest revision. The applicable Retrofit-Instructions and supplements of the AFM are to be observed. Available: At manufacturer
5. Structure is qualified up to 72°C (161.6°F). Structure temperatures (composite) above 72°C (161.6°F) are not permitted. Not to exceed this temperature limit, colour specification for composite structure of the manufacturer (document EA-03205.19) has to be complied with.
6. The address of the design and production organization until September 15th, 2003 is:

Extra-Flugzeugbau GmbH  
Flugplatz Dinslaken  
46569 Hünxe  
Germany
7. Model EA 300/L serial number 1 to 167 (airplanes manufactured by Extra Flugzeugbau GmbH) and serial numbers 168 to 170, 1171, 172, 173, 1174 and on (continuation of manufacture by Extra Flugzeugproduktions- und Vertriebs-GmbH.) See type certificate holder record. (Administrative Section II)

Serial numbers 166 and 167 are under warranty of Extra Flugzeugproduktions- und Vertriebs- GmbH although manufactured by Extra Flugzeugbau GmbH.
8. The 3-blade propeller MTV-9-B-C/C198-25 is only approved in combination with the Lycoming engine AEIO-580-B1A specified in section C.III 5.3.1
9. The raised-standard fuel system provides an increased fuel capacity of the center fuel tank approved for operation in the normal and aerobatic category delivered ex factory. It can not be combined with the increased fuel capacity of the wing fuel tank of the long range tank option specified in section C.III 9.1.2.

## **SECTION D: EA 300/200 (Sales designation: EXTRA 200)**

### **D.I. General**

- |   |   |
|---|---|
| 1. Data Sheet No.:                              | EASA.A.362  |
| 2. a) Type:                                     | EA 300  |
| b) Model:                                       | EA 300/200 (Sales designation EXTRA 200)  |
| c) Variant:                                     | -/-   |
| 3. Airworthiness Category:                      | Normal, Aerobatic   |
| 4. Type Certificate Holder:<br>(see Note 6)     | Extra Flugzeugproduktions- und Vertriebs- GmbH<br>Schwarze Heide 21<br>46569 Hünxe<br>Germany |
| 5. Manufacturer:<br>(see Note 6)                | Extra Flugzeugproduktions- und Vertriebs- GmbH<br>Schwarze Heide 21<br>46569 Hünxe<br>Germany |
| 6. Certification Application<br>Date:           | 26-May-1995   |
| 7. National Certifying Authority                | Lufffahrt-Bundesamt (Germany)   |
| 8. National Authority Type<br>Certificate Date: | 12-August-1996  |

### **D.II. EASA Certification Basis**

- |  |  |
|--|--|
| 1. Reference Date for<br>determining the applicable<br>requirements: | 26-May-1995  |
| 2. Airworthiness Requirements:                                       | 14 CFR eff. 1-February-1965, incl. Amdt 23-1<br>through 23-34, effective 14-September-1987   |
| 3. Special Conditions:   | C-1, Ermüdungs-/Schadens-Toleranznachweis der<br>Faserverbundstruktur (Fatigue/Damage Tolerance<br>Substantiation of Composite Structure)<br>C-4, Structural Design and Loads Criteria<br>(LBA I 311-1086/93, dated 12-March-1993 &<br>FAA Issue Paper C-1 and C-4, Project N°<br>CA581EU)<br>Lufttüchtigkeitsforderungen für den Schleppflug<br>(Airworthiness Requirement for Glider Towing)<br>(LBA I 23-60/100, dated February-1971) |
| 4. Exemptions:   | None   |

5. Deviations: None
6. Equivalent Safety Findings: EA-07406.1 issued 31-May-1999 and ACE-96-6, dated December 4, 1996, for paragraphs §§23.963(e), 23.1337(b), and 23.1553
7. Requirements elected to comply: None
8. Environmental Standards: ICAO, Annex 16, Volume 1
9. (Reserved)
10. (Reserved)

### **D.III. Technical Characteristics and Operational Limitations**

1. Type Design Definition: EA-07102.1 Description and Operation of Aircraft and Systems (most current issue);
2. Description: Single engine, low wing cantilever monoplane with reciprocating engine and fixed main gear in tail-wheel configuration; wing, empennage and landing gear in fibre-composite construction; fuselage and engine mount in conventional steel tube construction.
3. Equipment: Equipment List, refer to POH/AFM Doc. N° EA-07701, (See Note 3)
4. Dimensions:

Span:	7.5 m	(24.61 ft)
Length:	6.65 m	(21.82 ft)
Height:	2.62 m	(8.60ft)
Wing area:	10.44 m <sup>2</sup>	(112.38 sq.ft.)
5. Engine:
  - 5.1.1 Model: Lycoming AEIO-360-A1E
  - 5.1.2 Type Certificate: LBA No. 4569
  - 5.1.3 Limitations:

Max. take-off power	149 kW/200 BHP
Max. take-off engine rotational speed	2700 RPM
Manifold Pressure	96.9 kPa/28.6”Hg
Max. continuous power	138 kW/185 BHP
Max. cont. engine rotational speed	2500 RPM
Manifold Pressure	97.2 kPa/28.7”Hg
6. Load factors:

Normal category	+6/ -3
Aerobatic category	
Single Seat Operation / ACRO I	±10
Double Seat Operation / ACRO II	±8
7. Propeller:
  - 7.1.1 Model: MT Propeller MTV-12-B-C/C183-17e
  - 7.1.2 Type Certificate: EASA.P.013
  - 7.1.3 Number of blades: 3
  - 7.1.4 Diameter: 1830 mm ± 0 mm
  - 7.1.5 Sense of Rotation: Right-hand tractor (viewed in direction of flight)
8. Fluids:
  - 8.1 Fuel: 100/100LL minimum grade aviation gasoline
  - 8.2 Oil: Single or multi – viscosity aviation grade oils see latest issue of Textron Lycoming S.I. N° 1014
  - 8.3 Coolant: None

9. Fluid capacities:																																					
9.1.1 Fuel (Standard): See Note 2	<table border="0"> <tr> <td>Total capacity</td> <td>122 Liter</td> <td>(32.1 US.gal)</td> </tr> <tr> <td>Usable capacity</td> <td>117 Liter</td> <td>(30.8 US.gal)</td> </tr> <tr> <td>Usable capacity for aerobatics</td> <td>32 Liter</td> <td>(8.5 US.gal)</td> </tr> </table>	Total capacity	122 Liter	(32.1 US.gal)	Usable capacity	117 Liter	(30.8 US.gal)	Usable capacity for aerobatics	32 Liter	(8.5 US.gal)																											
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9.1.2 Fuel (Long Range):	<table border="0"> <tr> <td>Total capacity</td> <td>190 Liter</td> <td>(50.2 US.gal)</td> </tr> <tr> <td>Usable capacity</td> <td>185 Liter</td> <td>(48.0 US.gal)</td> </tr> <tr> <td>Usable capacity for aerobatics</td> <td>32 Liter</td> <td>(8.5 US.gal)</td> </tr> </table>	Total capacity	190 Liter	(50.2 US.gal)	Usable capacity	185 Liter	(48.0 US.gal)	Usable capacity for aerobatics	32 Liter	(8.5 US.gal)																											
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9.2. Oil:	<table border="0"> <tr> <td>Max. sump capacity</td> <td>7.6 Liter</td> <td>(8 qts)</td> </tr> <tr> <td>Min. sump capacity aerobic</td> <td>5.7 Liter</td> <td>(6 qts)</td> </tr> <tr> <td>Min. sump capacity normal</td> <td>3.8 Liter</td> <td>(4 qts)</td> </tr> </table>	Max. sump capacity	7.6 Liter	(8 qts)	Min. sump capacity aerobic	5.7 Liter	(6 qts)	Min. sump capacity normal	3.8 Liter	(4 qts)																											
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9.3 Coolant system capacity:	None																																				
10. Air Speeds: See Note 2	<table border="0"> <tr> <td colspan="3">Design Manoeuvring Speed <math>V_A</math>:</td> </tr> <tr> <td>Aerobatic category</td> <td>154 KIAS / 158 KCAS</td> <td></td> </tr> <tr> <td>Normal category</td> <td>138 KIAS / 140 KCAS</td> <td></td> </tr> <tr> <td colspan="3">Max. Structural Cruising Speed <math>V_{NO}</math>:</td> </tr> <tr> <td>Aerobatic category</td> <td>154 KIAS / 158 KCAS</td> <td></td> </tr> <tr> <td>Normal category</td> <td>138 KIAS / 140 KCAS</td> <td></td> </tr> <tr> <td>Never Exceed Speed <math>V_{NE}</math> :</td> <td>217 KIAS / 220 KCAS</td> <td></td> </tr> </table>	Design Manoeuvring Speed $V_A$ :			Aerobatic category	154 KIAS / 158 KCAS		Normal category	138 KIAS / 140 KCAS		Max. Structural Cruising Speed $V_{NO}$ :			Aerobatic category	154 KIAS / 158 KCAS		Normal category	138 KIAS / 140 KCAS		Never Exceed Speed $V_{NE}$ :	217 KIAS / 220 KCAS																
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11. Maximum Operating Altitude:	4877 m (16.000 ft )																																				
12. Allweather Operations Capability:	Day-VFR																																				
13. Maximum Weights:	<table border="0"> <tr> <td colspan="3">Take-off and Landing:</td> </tr> <tr> <td>Normal category</td> <td>840 kg</td> <td>(1852 lbs)</td> </tr> <tr> <td colspan="3">Aerobatic category</td> </tr> <tr> <td>Single Seat Operation / ACRO I</td> <td>700 kg</td> <td>(1808 lbs)</td> </tr> <tr> <td>Double Seat Operation / ACRO II</td> <td>800 kg</td> <td>(1764 lbs)</td> </tr> <tr> <td colspan="3">Empty:</td> </tr> <tr> <td colspan="3">Normal category</td> </tr> <tr> <td>Standard</td> <td>646 kg</td> <td>(1424 lbs)</td> </tr> <tr> <td>Long Range</td> <td>621 kg</td> <td>(1368 lbs)</td> </tr> <tr> <td colspan="3">Aerobatic category</td> </tr> <tr> <td>Single Seat Operation / ACRO I</td> <td>591 kg</td> <td>(1303 lbs)</td> </tr> <tr> <td>Double Seat Operation / ACRO II</td> <td>606 kg</td> <td>(1336 lbs)</td> </tr> </table>	Take-off and Landing:			Normal category	840 kg	(1852 lbs)	Aerobatic category			Single Seat Operation / ACRO I	700 kg	(1808 lbs)	Double Seat Operation / ACRO II	800 kg	(1764 lbs)	Empty:			Normal category			Standard	646 kg	(1424 lbs)	Long Range	621 kg	(1368 lbs)	Aerobatic category			Single Seat Operation / ACRO I	591 kg	(1303 lbs)	Double Seat Operation / ACRO II	606 kg	(1336 lbs)
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14. Centre of Gravity Range:	<table border="0"> <tr> <td colspan="3">Forward limit (aft of datum):</td> </tr> <tr> <td>at 840 kg (1852 lbs) or below</td> <td>73.2 cm</td> <td>(28.8")</td> </tr> <tr> <td colspan="3">Rear limit (aft of datum):</td> </tr> <tr> <td>at 840 kg (1852 lbs) or below</td> <td>89.1 cm</td> <td>(35.1")</td> </tr> </table>	Forward limit (aft of datum):			at 840 kg (1852 lbs) or below	73.2 cm	(28.8")	Rear limit (aft of datum):			at 840 kg (1852 lbs) or below	89.1 cm	(35.1")																								
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at 840 kg (1852 lbs) or below	89.1 cm	(35.1")																																			
15. Datum:	Plane of Firewall																																				
16. Control surface deflections:	<table border="0"> <tr> <td>Aileron:</td> <td>30°±2° upward;</td> <td>30°±2° downward</td> </tr> <tr> <td>Elevator:</td> <td>25°±2° upward,</td> <td>25°±2° downward</td> </tr> </table>	Aileron:	30°±2° upward;	30°±2° downward	Elevator:	25°±2° upward,	25°±2° downward																														
Aileron:	30°±2° upward;	30°±2° downward																																			
Elevator:	25°±2° upward,	25°±2° downward																																			

- Rudder:  $30^{\circ} \pm 2^{\circ}$  left,  $30^{\circ} \pm 2^{\circ}$  right  
Elevator trim tab:  $40^{\circ} \pm 5^{\circ}$  upward,  $50^{\circ} \pm 5^{\circ}$  downward
17. Levelling Means: Upper fuselage longeron
18. Minimum Flight Crew: 1 Pilot (rear seat)
19. Maximum Passenger Seating Capacity: 1 (front seat)
20. Baggage/Cargo Compartments: None
21. Wheels and Tyres: Main Wheel Tyre Size: 5.00-5 6ply  
Tail Wheel Tyre Size: Solid rubber 125/50-75 ZL or 6" (optional)
22. (Reserved):

#### **D.IV. Operating and Service Instructions**

1. Flight Manual:
  - Flughandbuch (FHB) Doc. No. EA-07701D
  - Pilot's Operating Handbook (POH) & Airplane Flight Manual (AFM) Doc. No. EA-07701
2. Technical Manual:
  - Service Manual Doc. No. EA-07702
3. Repair Manual:
  - Service Manual Doc. No. EA-07702
4. Manual for Operation:
  - Flughandbuch (FHB) Doc. No. EA-07701D
  - Pilot's Operating Handbook (POH) & Airplane Flight Manual (AFM) Doc. No. EA-07701
5. Spare Parts Catalogue:
  - None
6. Table of Dimensions, Limits and Clearances:
  - Service Manual Doc. No. EA-07702
7. Instruments and aggregates:
  - None

**D.V. Notes:**

1. This certification applies to Serial Numbers 01 and on.
2. The fuel capacity of the wing tank and the maneuvering speed of Serial Number 01 and 02 differ from the model design as follows:
  - a) Maneuvering speed (Acrobatic category):  $V_A = 138$  KIAS
  - b) Wing- and acro tank:

Total fuel capacity	156 L
Usable fuel capacity	151 L
  - c) Operator's instruction:  
Supplement Airplane Flight Manual / POH EXTRA 300/200 Doc. No. EA-07701D.2
3. For more certified optional equipment refer to EXTRA Doc. No. EA-07707, or AFM/POH latest revision. The applicable Retrofit-Instructions and supplements of the AFM are to be observed. Available: At manufacturer
4. Structure is qualified up to 72°C (161.6°F). Structure temperatures (composite) above 72°C (161.6°F) are not permitted. Not to exceed this temperature limit, colour specification for composite structure of the manufacturer (document EA-03205.19) has to be complied with.
5. Export to USA:  
The airplanes to be registered in USA must comply with the provisions of "Modification Instruction for conformity to the Type Certificate A67EU EA 300/200" (EXTRA Doc. N° UA-300-1-96)
6. The address of the design and production organization until September 15th, 2003 is:  
Extra-Flugzeugbau GmbH  
Flugplatz Dinslaken  
46569 Hünxe  
Germany
7. Model EA 300/200 serial number 1 to 31 (airplanes manufactured by Extra Flugzeugbau GmbH) and serial numbers 1032 and on (continuation of manufacture by Extra Flugzeugproduktions- und Vertriebs- GmbH.) See type certificate holder record. (Administrative Section II)

## **SECTION E: EA 300/SC**

### **E.I. General**

- |   |   |
|---|---|
| 1. Data Sheet No.:                          | EASA.A.362  |
| 2. a) Type:                                 | EA 300  |
| b) Model:                                   | EA 300/SC   |
| c) Variant:                                 | -/-   |
| 3. Airworthiness Category:                  | Normal, Aerobatic   |
| 4. Type Certificate Holder:<br>(see Note 6) | Extra Flugzeugproduktions- und Vertriebs- GmbH<br>Schwarze Heide 21<br>46569 Hünxe<br>Germany |
| 5. Manufacturer:<br>(see Note 6)            | Extra Flugzeugproduktions- und Vertriebs- GmbH<br>Schwarze Heide 21<br>46569 Hünxe<br>Germany |
| 6. Certification Application<br>Date:       | 23-November-2007  |
| 7. Reserved                                 |   |
| 8. Reserved                                 |   |

### **E.II. EASA Certification Basis**

- |  |  |
|--|--|
| 1. Reference Date for<br>determining the applicable<br>requirements: | 31-January-2008<br>(initial type board meeting at EASA)  |
| 2. Airworthiness Requirements:                                       | 14 CFR eff. 1-February-1965, incl. Amdt 23-1<br>through 23-34, effective 14-September-1987   |
| 3. Special Conditions:   | C-1, Ermüdungs-/Schadens-Toleranznachweis der<br>Faserverbundstruktur (Fatigue/Damage Tolerance<br>Substantiation of Composite Structure)<br>C-4, Structural Design and Loads Criteria<br>(LBA I 311-1086/93, dated 12-March-1993 &<br>FAA Issue Paper C-1 and C-4, Project N°<br>CA581EU)<br>Smoke System (optional equipment)<br>(LBA I 311-1086/96, dated 07-February-1996) |
| 4. Exemptions:   | None   |
| 5. Deviations:   | None   |
| 6. Equivalent Safety Findings:                                       | a) Static longitudinal stability §§23.171; 23.173,   |

23.175

b) Stall warning §23.207

7. Requirements elected to  
comply:

None

8. Environmental Standards:

ICAO, Annex 16, Volume 1,  
Fourth Edition, Amdt. 8

9. (Reserved)

10. (Reserved)

### **E.III. Technical Characteristics and Operational Limitations**

1. Type Design Definition: EA-04102.1 Description and Operation of Aircraft and Systems (most current issue); and EA-0C102.1 Description of differences to EA 300/S type design (most current issue)
2. Description: Single engine, low wing cantilever monoplane with reciprocating engine and fixed main gear in tail-wheel configuration; wing, empennage and landing gear in fibre-composite construction; fuselage and engine mount in conventional steel tube construction.
3. Equipment: Equipment List, refer to POH/AFM Doc. N° EA-0C701, (See Note 3)
4. Dimensions:

Span:	7.5 m	(24.61 ft)
Length:	6.72 m	(22.05 ft)
Height:	2.55 m	(8.36ft)
Wing area:	9.81 m <sup>2</sup>	(105.59 sq.ft.)
5. Engine:
  - 5.1.1 Model 1: Lycoming AEIO-580-B1A
  - 5.1.2 Type Certificate: IM.E.027
  - 5.1.3 Limitations: Aerobatic category

Take-off and continuous power	235 kW / 315 BHP
Max. engine rotational speed	2700 RPM
Manifold Pressure	100 kPa / 29.5”Hg
  - 5.1.4 Limitations: Normal category; see Note 2

Take-off and continuous power	226 kW / 303 BHP
Max. engine rotational speed	2600 RPM
Manifold Pressure	100 kPa / 29.5”Hg
6. Load factors:

Normal category	+6/ -3
Aerobatic category (780kg and below)	±10
7. Propeller:
  - 7.1.1 Model 1: MT Propeller MTV-9-B-C/C198-25
  - 7.1.2 Type Certificate: LBA No. 32.130/65
  - 7.1.3 Number of blades: 3
  - 7.1.4 Diameter: 1980 mm ± 5 mm
  - 7.1.5 Sense of Rotation: Right-hand tractor (viewed in direction of flight)
8. Fluids:
  - 8.1 Fuel: 100/100LL minimum grade aviation gasoline
  - 8.2 Oil: Single or multi – viscosity aviation grade oils see latest issue of Textron Lycoming S.I. N° 1014
  - 8.3 Coolant: None

8.4	Smoke Oil:	Straight paraffin oil, kin. viscosity 30-50 cSt at 20°C (68°F), initial boiling point >330°C (626°F); For example: Fauth FC05, Texaco Canopus 13 or equivalent.	
9.	Fluid capacities:		
9.1.	Fuel:	Total capacity	224 Liter (59.2 US.gal)
		Usable capacity	221 Liter (58.4 US.gal)
		Usable capacity for aerobatics	101 Liter (26.7 US.gal)
9.2.	Oil:	Max. sump capacity	15.1 Liter (16 qts)
		Min. sump capacity normal	8.5 Liter (9 qts)
9.3	Coolant system capacity:	None	
9.4	Smoke Oil:	23 Liter (6.1 US.gal)	
10.	Air Speeds:	Design Manoeuvring Speed $V_A$ :	
		Aerobatic category	154 KIAS / 158 KCAS
		Normal category	138 KIAS / 141 KCAS
		Max. Structural Cruising Speed $V_{NO}$ :	
		Aerobatic category	154 KIAS / 158 KCAS
		Normal category	138 KIAS / 141 KCAS
		Never Exceed Speed $V_{NE}$ :	219 KIAS / 220 KCAS
11.	Maximum Operating Altitude:	3048 m (10.000 ft )	
12.	Allweather Operations Capability:	Day-VFR (limited from SR to SS) Day-VFR (if position light system is installed)	
13.	Maximum Weights:	Take-off and Landing:	
		Normal category	870 kg (1918 lbs)
		Aerobatic category	780 kg (1720 lbs)
		Empty:	
		Normal category	624 kg (1377 lbs)
		Aerobatic category	620 kg (1367 lbs)
14.	Centre of Gravity Range:	Forward limit (aft of datum):	
		Normal category	
		at 820 kg (1808 lbs) or below	53.7 cm (21.1")
		at 870 kg (1918 lbs)	54.5 cm (21.5")
		Aerobatic category	
		at 780 kg (1720 lbs) or below	53.7 cm (21.1")
		Rear limit (aft of datum):	
		Normal category	
		at 780 kg (1720 lbs) or below	66.8 cm (26.3")
		at 870 kg (1918 lbs)	62.6 cm (24.6")
		Aerobatic category	
		at 780 kg (1720 lbs) or below	66.8 cm (26.3")

Straight line variation between mass limits.

- |   |   |
|---|---|
| 15. Datum:                              | Plane of Firewall   |
| 16. Control surface deflections:        | Aileron: $30^{\circ}\pm 2^{\circ}$ upward; $30^{\circ}\pm 2^{\circ}$ downward<br>Elevator: $25^{\circ}\pm 1^{\circ}$ upward, $25^{\circ}\pm 1^{\circ}$ downward<br>Rudder: $30^{\circ}-2^{\circ}$ left, $30^{\circ}-2^{\circ}$ right<br>Elevator trim tab: $32^{\circ}\pm 2^{\circ}$ upward, $32^{\circ}\pm 2^{\circ}$ downward |
| 17. Levelling Means:                    | Upper fuselage longeron   |
| 18. Minimum Flight Crew:                | 1 Pilot (rear seat)   |
| 19. Maximum Passenger Seating Capacity: | None  |
| 20. Baggage/Cargo Compartments:         | None  |
| 21. Wheels and Tyres:                   | Main Wheel Tyre Size: 5.00-5 6ply<br>Tail Wheel Tyre Size: Solid rubber 125/50-75 ZL or 6" (optional)   |
| 22. (Reserved):                         |   |

#### **E.IV. Operating and Service Instructions**

- |   |                   |
|---|-------------------|
| 8. Flight Manual:<br>Pilot's Operating Handbook (POH) &<br>Airplane Flight Manual (AFM)         | Doc. No. EA-0C701 |
| 9. Technical Manual:<br>Service Manual  | Doc. No. EA-0C702 |
| 10. Repair Manual:<br>Service Manual  | Doc. No. EA-0C702 |
| 11. Manual for Operation:<br>Pilot's Operating Handbook (POH) &<br>Airplane Flight Manual (AFM) | Doc. No. EA-0C701 |
| 12. Spare Parts Catalogue:<br>Illustrated Parts Catalogue                                       | Doc. No. EA-0C703 |
| 13. Table of Dimensions, Limits and Clearances:<br>Service Manual                               | Doc. No. EA-0C702 |
| 14. Instruments and aggregates:<br>None   |                   |

**E.V. Notes:**

1. This certification applies to Serial Numbers SC003 and on.
2. A standard Certificate of Airworthiness can only be issued for an aircraft which is equipped with:
  - the 3-blade propeller MTV-9-B-C/C198-25 in combination with the exhaust silencer system type Gomolzig EA300-606000 and a reduced max. take-off engine rotational speed of 2600RPM.

Otherwise a Certificate of Airworthiness can only be issued for aerial work.

3. For more certified optional equipment refer to approved AFM/POH Supplements latest revision.
4. Structure is qualified up to 72°C (161.6°F). Structure temperatures (composite) above 72°C (161.6°F) are not permitted. Not to exceed this temperature limit, colour specification for composite structure of the manufacturer (document EA-03205.19) has to be complied with.

## **SECTION F: EA 300/LT**

### **F.I. General**

1. Data Sheet No.: EASA.A.362
2. a) Type: EA 300  
b) Model: EA 300/LT  
c) Variant: -/-
3. Airworthiness Category: Normal, Aerobatic
4. Type Certificate Holder: Extra Flugzeugproduktions- und Vertriebs- GmbH  
(see Note 6) Schwarze Heide 21  
46569 Hünxe  
Germany
5. Manufacturer: Extra Flugzeugproduktions- und Vertriebs- GmbH  
(see Note 6) Schwarze Heide 21  
46569 Hünxe  
Germany
6. Certification Application Date: 22-January-2009
7. Reserved
8. Reserved

### **F.II. EASA Certification Basis**

1. Reference Date for determining the applicable requirements: 28-April-2009  
(initial type board meeting at EASA)
2. Airworthiness Requirements: 14 CFR eff. 1-February-1965, incl. Amdt 23-1 through 23-34, effective 14-September-1987
3. Special Conditions: C-1, Ermüdungs-/Schadens-Toleranznachweis der Faserverbundstruktur (Fatigue/Damage Tolerance Substantiation of Composite Structure)  
C-4, Structural Design and Loads Criteria (LBA I 311-1086/93, dated 12-March-1993 & FAA Issue Paper C-1 and C-4, Project N° CA581EU)  
Smoke System (optional equipment) (LBA I 311-1086/96, dated 07-February-1996)  
Lufttüchtigkeitsforderungen für den Schleppflug (Airworthiness Requirement for Glider Towing) (LBA I 23-60/100, dated February-1971)

- |                                       |  |
|---------------------------------------|--|
| 4. Exemptions:                        | None   |
| 5. Deviations:                        | None   |
| 6. Equivalent Safety Findings:        | Static longitudinal stability §§23.171; 23.173,<br>23.175 & 23.177 |
| 7. Requirements elected to<br>comply: | None   |
| 8. Environmental Standards:           | ICAO, Annex 16, Volume 1<br>Fourth Edition, Amdt. 8                |
| 9. (Reserved)                         |  |
| 10. (Reserved)                        |  |

### **F.III. Technical Characteristics and Operational Limitations**

1. Type Design Definition: EA-06102 Description and Operation of Aircraft and Systems (most current issue); and EA-0D102.1 Description of differences to EA 300/L type design (most current issue)
2. Description: Single engine, low wing cantilever monoplane with reciprocating engine and fixed main gear in tail-wheel configuration; wing, empennage and landing gear in fibre-composite construction; fuselage and engine mount in conventional steel tube construction.
3. Equipment: Equipment List, refer to POH/AFM Doc. N° EA-0D701, (See Note 3)
4. Dimensions:

Span:	8.0 m	(26.25 ft)
Length:	7.01 m	(23.00 ft)
Height:	2.62 m	(8.60ft)
Wing area:	10.84 m <sup>2</sup>	(116.68 sq.ft.)
5. Engine:
  - 5.1.1 Model 1: Lycoming AEIO-580-B1A
  - 5.1.2 Type Certificate: IM.E.027
  - 5.1.3 Limitations:

Take-off and continuous power	235 kW / 315 BHP
Max. engine rotational speed	2700 RPM
Manifold Pressure	100 kPa / 29.5"Hg
6. Load factors:

Normal category	+6/ -3
Aerobatic category	
Single Seat Operation / ACRO I	±10
Double Seat Operation / ACRO II	±8
Double Seat Operation / ACRO III	±6
7. Propeller:
  - 7.1.1 Model 3: MT Propeller MTV-9-B-C/C198-25
  - 7.1.2 Type Certificate: LBA No. 32.130/65
  - 7.1.3 Number of blades: 3
  - 7.1.4 Diameter: 1980 mm ± 5 mm
  - 7.1.5 Sense of Rotation: Right-hand tractor (viewed in direction of flight)
8. Fluids:
  - 8.1 Fuel: 100/100LL minimum grade aviation gasoline
  - 8.2 Oil: Single or multi – viscosity aviation grade oils see latest issue of Textron Lycoming S.I. N° 1014
  - 8.3 Coolant: None

8.4	Smoke Oil:	Straight paraffin oil, kin. viscosity 30-50 cSt at 20°C (68°F), initial boiling point >330°C (626°F); For example: Fauth FC05, Texaco Canopus 13 or equivalent.	
9. Fluid capacities:			
9.1.	Fuel:	Total capacity	221 Liter (58.4 US.gal)
		Usable capacity	209 Liter (55.2 US.gal)
		Usable capacity for aerobatics	67 Liter (17.7 US.gal)
9.2.	Oil:	Max. sump capacity	15.1 Liter (16 qts)
		Min. sump capacity normal	8.5 Liter (9 qts)
9.3	Coolant system capacity:	None	
9.4	Smoke Oil:	31 Liter (8.2 US.gal)	
10. Air Speeds:			
		Design Manoeuvring Speed $V_A$ :	
		Aerobatic category	160 KIAS / 158 KCAS
		Normal category	143 KIAS / 140 KCAS
		Max. Structural Cruising Speed $V_{NO}$ :	
		Aerobatic category	160 KIAS / 158 KCAS
		Normal category	143 KIAS / 140 KCAS
		Never Exceed Speed $V_{NE}$ :	221 KIAS / 220 KCAS
11.	Maximum Operating Altitude:	3048 m (10.000 ft )	
12.	Allweather Operations Capability:	Day-VFR	
13. Maximum Weights:			
		Take-off and Landing:	
		Normal category	950 kg (2095 lbs)
		Aerobatic category	
		Single Seat Operation / ACRO I	820 kg (1808 lbs)
		Double Seat Operation / ACRO II	870 kg (1918 lbs)
		Double Seat Operation / ACRO III	950 kg (2095 lbs)
		Empty:	
		Normal category	723 kg (1594 lbs)
		Aerobatic category	
		Single Seat Operation / ACRO I	686 kg (1513 lbs)
		Double Seat Operation / ACRO II	662 kg (1460 lbs)
		Double Seat Operation / ACRO III	742 kg (1636 lbs)
14. Centre of Gravity Range:			
		Forward limit (aft of datum):	
		at 820 kg (1808 lbs) or below	70.7 cm (27.8")
		at 870 kg (1918 lbs)	71.6 cm (28.2")
		at 950 kg (2095 lbs)	73.0 cm (28.7")
		Rear limit (aft of datum):	
		at 915 kg (2018 lbs) or below	88.0 cm (34.6")

at 950 kg (2095 lbs)

84.1 cm (33.1")

Straight line variation between mass limits.

15. Datum: Plane of Firewall
16. Control surface deflections: Aileron:  $30^{\circ}\pm 2^{\circ}$  upward;  $30^{\circ}\pm 2^{\circ}$  downward  
Elevator:  $25^{\circ}\pm 2^{\circ}$  upward,  $25^{\circ}\pm 2^{\circ}$  downward  
Rudder:  $30^{\circ}\pm 2^{\circ}$  left,  $30^{\circ}\pm 2^{\circ}$  right  
Elevator trim tab:  $35^{\circ}\pm 2^{\circ}$  upward,  $27^{\circ}\pm 2^{\circ}$  downward
17. Levelling Means: Upper fuselage longeron
18. Minimum Flight Crew: 1 Pilot (rear seat)
19. Maximum Passenger Seating Capacity: 1 (front seat)
20. Baggage/Cargo Compartments: 1 baggage compartment within the upper aft fuselage section behind the rear seat. The baggage compartment must be empty for aerobatics.  
Max. baggage mass: 10 kg (22 lbs)  
C.G. (aft of datum): 331 cm (130.3")
21. Wheels and Tyres: Main Wheel Tyre Size: 5.00-5 6ply  
Tail Wheel Tyre Size: Solid rubber 125/50-75 ZL or 6" (optional)
22. (Reserved):

#### **F.IV. Operating and Service Instructions**

- |   |                   |
|---|-------------------|
| 15. Flight Manual:<br>Pilot's Operating Handbook (POH) &<br>Airplane Flight Manual (AFM)        | Doc. No. EA-0D701 |
| 16. Technical Manual:<br>Service Manual   | Doc. No. EA-0D702 |
| 17. Repair Manual:<br>Service Manual  | Doc. No. EA-0D702 |
| 18. Manual for Operation:<br>Pilot's Operating Handbook (POH) &<br>Airplane Flight Manual (AFM) | Doc. No. EA-0D701 |
| 19. Spare Parts Catalogue:<br>Illustrated Parts Catalogue                                       | Doc. No. EA-0D703 |
| 20. Table of Dimensions, Limits and Clearances:<br>Service Manual                               | Doc. No. EA-0D702 |
| 21. Instruments and aggregates:<br>None   |                   |

**F.V. Notes:**

1. This certification applies to Serial Numbers LT001 and on.
2. res.
3. For more certified optional equipment refer to approved AFM/POH Supplements latest revision.
4. Structure is qualified up to 72°C (161.6°F). Structure temperatures (composite) above 72°C (161.6°F) are not permitted. Not to exceed this temperature limit, colour specification for composite structure of the manufacturer (document EA-03205.19) has to be complied with.

## **SECTION G: EA 300/LC (Sales designation: EXTRA 330LX)**

### **G.I. General**

1. Data Sheet No.: EASA.A.362
2. a) Type: EA 300  
b) Model: EA 300/LC (Sales designation: EXTRA 330LX)  
c) Variant: -/-
3. Airworthiness Category: Normal, Aerobatic
4. Type Certificate Holder: Extra Flugzeugproduktions- und Vertriebs- GmbH  
(see Note 6) Schwarze Heide 21  
46569 Hünxe  
Germany
5. Manufacturer: Extra Flugzeugproduktions- und Vertriebs- GmbH  
(see Note 6) Schwarze Heide 21  
46569 Hünxe  
Germany
6. Certification Application Date: 27-October-2009; amended on 02-December-2009
7. Reserved
8. Reserved

### **G.II. EASA Certification Basis**

1. Reference Date for determining the applicable requirements: 21-January-2010  
(initial type board meeting at EASA)
2. Airworthiness Requirements: 14 CFR eff. 1-February-1965, incl. Amdt 23-1 through 23-34, effective 14-September-1987
3. Special Conditions: C-1, Ermüdungs-/Schadens-Toleranznachweis der Faserverbundstruktur (Fatigue/Damage Tolerance Substantiation of Composite Structure)  
C-4, Structural Design and Loads Criteria (LBA I 311-1086/93, dated 12-March-1993 & FAA Issue Paper C-1 and C-4, Project N° CA581EU)  
Smoke System (optional equipment) (LBA I 311-1086/96, dated 07-February-1996)  
Lufttüchtigkeitsforderungen für den Schleppflug (Airworthiness Requirement for Glider Towing) (LBA I 23-60/100, dated February-1971)

- |                                       |  |
|---------------------------------------|--|
| 4. Exemptions:                        | None   |
| 5. Deviations:                        | None   |
| 6. Equivalent Safety Findings:        | a) Static longitudinal stability §§23.171; 23.173,<br>23.175<br>b) Stall warning §23.207 |
| 7. Requirements elected to<br>comply: | None   |
| 8. Environmental Standards:           | ICAO, Annex 16, Volume 1<br>Fourth Edition, Amdt. 8                                      |
| 9. (Reserved)                         |  |
| 10. (Reserved)                        |  |

### **G.III. Technical Characteristics and Operational Limitations**

1. Type Design Definition: EA-06102.1 Description and Operation of Aircraft and Systems (most current issue); and EA-0E102.1 Description of differences to EA 300/L type design (most current issue)
2. Description: Single engine, low wing cantilever monoplane with reciprocating engine and fixed main gear in tail-wheel configuration; wing, empennage and landing gear in fibre-composite construction; fuselage and engine mount in conventional steel tube construction.
3. Equipment: Equipment List, refer to POH/AFM Doc. N° EA-0E701, (See Note 3)
4. Dimensions:

Span:	8.0 m	(26.25 ft)
Length:	7.20 m	(23.62 ft)
Height:	2.62 m	(8.60ft)
Wing area:	10.72 m <sup>2</sup>	(115.39 sq.ft.)
5. Engine:
  - 5.1.1 Model 1: Lycoming AEIO-580-B1A
  - 5.1.2 Type Certificate: IM.E.027
  - 5.1.3 Limitations: Aerobatic category

Take-off and continuous power	235 kW / 315 BHP
Max. engine rotational speed	2700 RPM
Manifold Pressure	100 kPa / 29.5”Hg
  - 5.1.4 Limitations: Normal category; see Note 2

Take-off and continuous power	226 kW / 303 BHP
Max. engine rotational speed	2600 RPM
Manifold Pressure	100 kPa / 29.5”Hg
6. Load factors:

Normal category	+6/ -3
Aerobatic category	
Single Seat Operation / ACRO I	±10
Double Seat Operation / ACRO II	±8
Double Seat Operation / ACRO III	±6
7. Propeller:
  - 7.1.1 Model 3: MT Propeller MTV-9-B-C/C198-25
  - 7.1.2 Type Certificate: LBA No. 32.130/65
  - 7.1.3 Number of blades: 3
  - 7.1.4 Diameter: 1980 mm ± 5 mm
  - 7.1.5 Sense of Rotation: Right-hand tractor (viewed in direction of flight)
8. Fluids:
  - 8.1 Fuel: 100/100LL minimum grade aviation gasoline
  - 8.2 Oil: Single or multi – viscosity aviation grade oils see latest

issue of Textron Lycoming S.I. N° 1014

- 8.3 Coolant: None
- 8.4 Smoke Oil: Straight paraffin oil, kin. viscosity 30-50 cSt at 20°C (68°F), initial boiling point >330°C (626°F);  
For example: Fauth FC05, Texaco Canopus 13 or equivalent.
9. Fluid capacities:
- 9.1 Fuel: Total capacity 189 Liter (49.9 US.gal)  
Usable capacity 187 Liter (49.4 US.gal)  
Usable capacity for aerobatics 67 Liter (17.7 US.gal)
- 9.2 Oil: Max. sump capacity 15.1 Liter (16 qts)  
Min. sump capacity normal 8.5 Liter (9 qts)
- 9.3 Coolant system capacity: None
- 9.4 Smoke Oil: 31 Liter (8.2 US.gal)
10. Air Speeds: Design Manoeuvring Speed  $V_A$ :  
Aerobatic category 154 KIAS / 158 KCAS  
Normal category 138 KIAS / 140 KCAS  
Max. Structural Cruising Speed  $V_{NO}$ :  
Aerobatic category 154 KIAS / 158 KCAS  
Normal category 138 KIAS / 140 KCAS  
Never Exceed Speed  $V_{NE}$  : 219 KIAS / 220 KCAS
11. Maximum Operating Altitude: 3048 m (10.000 ft )
12. Allweather Operations Capability: Day-VFR
13. Maximum Weights: Take-off and Landing:  
Normal category 950 kg (2095 lbs)  
Aerobatic category  
Single Seat Operation / ACRO I 820 kg (1808 lbs)  
Double Seat Operation / ACRO II 870 kg (1918 lbs)  
Double Seat Operation / ACRO III 950 kg (2095 lbs)
- Empty:  
Normal category 738 kg (1627 lbs)  
Aerobatic category  
Single Seat Operation / ACRO I 686 kg (1513 lbs)  
Double Seat Operation / ACRO II 662 kg (1460 lbs)  
Double Seat Operation / ACRO III 742 kg (1636 lbs)
14. Centre of Gravity Range: Forward limit (aft of datum):  
at 950 kg (2095 lbs) or below 67.1 cm (29.4")  
Rear limit (aft of datum):  
at 950 kg (2095 lbs) or below 84.1 cm (33.1")

15. Datum: Plane of Firewall
16. Control surface deflections: Aileron:  $30^{\circ} \pm 2^{\circ}$  upward;  $30^{\circ} \pm 2^{\circ}$  downward  
Elevator:  $25^{\circ} \pm 2^{\circ}$  upward,  $25^{\circ} - 2^{\circ}$  downward  
Rudder:  $30^{\circ} \pm 2^{\circ}$  left,  $30^{\circ} \pm 2^{\circ}$  right  
Elevator trim tab:  $35^{\circ} \pm 2^{\circ}$  upward,  $27^{\circ} \pm 2^{\circ}$  downward
17. Levelling Means: Upper fuselage longeron
18. Minimum Flight Crew: 1 Pilot (rear seat)
19. Maximum Passenger Seating Capacity: 1 (front seat)
20. Baggage/Cargo Compartments: None
21. Wheels and Tyres: Main Wheel Tyre Size: 5.00-5 6ply  
Tail Wheel Tyre Size: Solid rubber 125/50-75 ZL or 6" (optional)
22. (Reserved):

#### **G.IV. Operating and Service Instructions**

- |   |                   |
|---|-------------------|
| 22. Flight Manual:<br>Pilot's Operating Handbook (POH) &<br>Airplane Flight Manual (AFM)        | Doc. No. EA-0E701 |
| 23. Technical Manual:<br>Service Manual   | Doc. No. EA-0E702 |
| 24. Repair Manual:<br>Service Manual  | Doc. No. EA-0E702 |
| 25. Manual for Operation:<br>Pilot's Operating Handbook (POH) &<br>Airplane Flight Manual (AFM) | Doc. No. EA-0E701 |
| 26. Spare Parts Catalogue:<br>None  |                   |
| 27. Table of Dimensions, Limits and Clearances:<br>Service Manual                               | Doc. No. EA-0E702 |
| 28. Instruments and aggregates:<br>None   |                   |

**G.V. Notes:**

1. This certification applies to Serial Numbers LC001 and on.
2. A standard Certificate of Airworthiness can only be issued for an aircraft which is equipped with:
  - the 3-blade propeller MTV-9-B-C/C198-25 in combination with the exhaust silencer system type Gomolzig EA300-606000 and a reduced max. take-off engine rotational speed of 2600RPM.

Otherwise a Certificate of Airworthiness can only be issued for aerial work.

3. For more certified optional equipment refer to approved AFM/POH Supplements latest revision.
4. Structure is qualified up to 72°C (161.6°F). Structure temperatures (composite) above 72°C (161.6°F) are not permitted. Not to exceed this temperature limit, colour specification for composite structure of the manufacturer (document EA-03205.19) has to be complied with.

## **ADMINISTRATIVE SECTION**

I. Acronyms

II. Type Certificate Holder Record

EXTRA Flugzeugbau GmbH: until 15 September-2003

EXTRA Flugzeugproduktions- und Vertriebs GmbH: from 15 September-2003

III. Change Record

<b>Issue</b>	<b>Date</b>	<b>Changes</b>	<b>TC Issue No. &amp; Date</b>
Issue 01	17 July 2008	Initial issue (replaces LBA TCDS 1086) including new model EA 300/SC	Original 17 July 2008
Issue 02	25 July 2008	Added alternative engine for model EA 300/L	
Issue 03	18 February 2009	Added alternative propeller and increased center fuel tank capacity (as raised standard) for model EA 300/L, general review	
Issue 04	31 May 2010	New model EA 300/LT	
Issue 05	08 April 2011	New model EA 300/LC	