



European Aviation Safety Agency

EASA

**TYPE-CERTIFICATE
DATA SHEET**

EASA.A.369

CAP 20 Series

Type Certificate Holder

Dyn'Aviation
1 Route de Troyes
21121 DAROIS
FRANCE

For models: CAP20
CAP20L/S200
CAP21
CAP230
CAP231
CAP231EX
CAP232

Issue 02: 18 November 2010

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SECTION A: CAP20

A.I. General

- | | |
|---|--------------------------------|
| 1. Data Sheet No.: | EASA A.369 |
| 2. a) Type: | CAP20 series |
| b) Model: | CAP20 |
| c) Variant: | N/A |
| 3. Airworthiness Category: | Utility and Aerobatic category |
| 4. Type Certificate Holder: | DYN'AVIATION |
| 5. Manufacturer: | N/A |
| 6. Certification Application Date: | 20/06/1973 |
| 7. (Reserved) National Certifying Authority | |
| 8. (Reserved) National Authority Type Certificate Date: | |

A.II. EASA Certification Basis

- | | |
|--|--|
| 1. Reference Date for determining the applicable requirements: | 11th may 1971 |
| 2. Airworthiness Requirements: | FAR23 amendments 1 to 12 |
| 3...Special Conditions: | <ul style="list-style-type: none">• additional requirements : §3.397 and §6.655 from AIR 2052A regulation• installation of a continuous accelerometer and a warning light |
| 4. Exemptions: | exemption to FAR 23.207 : no stall warning installation |
| 5. Deviations: | |
| 6. Equivalent Safety Findings: | |
| 7. Requirements elected to comply: | |
| 8. Environmental Standards: | |
| 9. (Reserved) Additional National Requirements: | |
| 10. (Reserved) | |

A.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Document n°UBENOLI01 latest revision
2. Description: Single-engine, single-seat, low-wing airplane, wood construction, fixed conventional landing gear.
3. Equipment: The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification
4. Dimensions:

Span	7.57 m
Length	7.21 m
Height	1.82 m
Wing Area	10.47 m ²
5. Engine:
 - 5.1.1 Model: LYCOMING AIO-360-B1B
 - 5.1.2 Type Certificate: USA 1E10
 - 5.1.3 Limitations: For power-plant limits refer to AFM latest revision
6. Load factors: UTILITY CAT

Positive n	+4.4
Negative n	-1.8

AEROBATIC CAT

Positive n	+8
Negative n	-6
7. Propeller:

7.1 Model:	HARTZELL	HARTZELL
	Hub: HC-C2YK-1B	Hub: HC-C2YK-4F
	Blades: 7666A	Blades: C-7666A
7.2 Type Certificate:	EASA.IM.P.130	EASA.IM.P.130
7.3 Number of blades:	2	2
7.4 Diameter:	189 cm	189 cm
7.5 Sense of Rotation:	clockwise	clockwise
7.6 Governor	Woodward 210693	Woodward 8907001
8. Fluids:
 - 8.1 Fuel: Aviation gas
Grade 100/130 or 100LL
 - 8.2 Oil: Above 15°C : SAE 50
Between 0°C and +30°C : SAE 40
Between -20°C and +20°C : SAE 30
Below -15°C : SAE 20
 - 8.3 Coolant: N/A

9. Fluid capacities:

- 9.1 Fuel: Total: 86 liters. One tank in the fuselage made with 2 cells of 43 liters each.
Usable : 75 liters
Lever arm : 1.475 m
- 9.2 Oil: 10 liters. One tank in the fuselage
minimum : 5 liters
maxi CAT A : 8 liters
- 9.3 Coolant system capacity:

10. Air Speeds:	Speeds in km/h	CAT U	CAT A
	Never Exceed Speed V_{NE}	370	370
	Maximum normal operation Speed V_{NO}	340	340
	Cruising speed V_C	340	340
	Manoeuvring speed V_A	197	266
	maximum computed speed V_D	418	418
	Stalling speed V_S	107	102

11. Maximum Operating Altitude: /

12. Allweather Operations Capability: /

13. Maximum Weights:

UTILITY CAT
for operations 830 kg
For take-off 830 kg
For landing 800 kg

AEROBATIC CAT
for maneuvers 760 kg
For take-off 760 kg
For landing 760 kg

14. Centre of Gravity Range:

UTILITY CAT
Front limit 0.285 (19%)
Aft limit 0.390 (26%)

AEROBATIC CAT
Front limit 0.285 (19%)
Aft limit 0.375 (25%)

15. Datum:

Leading edge of the reference chord
Length of the reference chord : 1.500 m
Position of this reference chord : 1.33 m from symmetry plane of the airplane

- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|----------|-----------------|----|--------|-------------------------|--------|----------|-------------------|----|--------|--------|--------|----------------------|-----------|------|----------------------|--------|--------|----------------|--------|--------|-------------------------|-----------------|---------|----------|-----------------|------------|--|-------------------|--------|------|--------|
| 16. Control surface deflections: | <table border="0"> <tr> <td colspan="2">Elevator</td> </tr> <tr> <td>Up</td> <td>21°±2°</td> </tr> <tr> <td>Down</td> <td>24°±2°</td> </tr> <tr> <td colspan="2">Ailerons</td> </tr> <tr> <td>Up</td> <td>25°±2°</td> </tr> <tr> <td>Down</td> <td>15°±2°</td> </tr> <tr> <td colspan="2">Rudder</td> </tr> <tr> <td>Left</td> <td>25°±2°</td> </tr> <tr> <td>Right</td> <td>28°±2°</td> </tr> <tr> <td colspan="2">elevator tab</td> </tr> <tr> <td colspan="2">manual</td> </tr> <tr> <td>Tab up</td> <td>20°±2°</td> </tr> <tr> <td>tab down</td> <td>20°±2°</td> </tr> <tr> <td colspan="2">Rudder tab</td> </tr> <tr> <td>Right</td> <td>18°±2°</td> </tr> <tr> <td>Left</td> <td>28°±2°</td> </tr> </table> | Elevator | | Up | 21°±2° | Down | 24°±2° | Ailerons | | Up | 25°±2° | Down | 15°±2° | Rudder | | Left | 25°±2° | Right | 28°±2° | elevator tab | | manual | | Tab up | 20°±2° | tab down | 20°±2° | Rudder tab | | Right | 18°±2° | Left | 28°±2° |
| Elevator | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Up | 21°±2° | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Down | 24°±2° | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ailerons | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Up | 25°±2° | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Down | 15°±2° | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rudder | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Left | 25°±2° | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Right | 28°±2° | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| elevator tab | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| manual | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tab up | 20°±2° | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| tab down | 20°±2° | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rudder tab | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Right | 18°±2° | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Left | 28°±2° | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17. Levelling Means: | Spirit Level: marks are made on the fuselage to define the horizontal reference | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18. Minimum Flight Crew: | 1 pilot
Lever arm : 0.586 m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19. Maximum Passenger Seating Capacity: | No passengers. Single seat airplane | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20. Baggage/Cargo Compartments: | Maximum mass : 10 kg
Lever arm : 1.475 m
Allowed only in CAT U | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21. Wheels and Tyres: | <table border="0"> <tr> <td>model</td> <td>C.A.A.R.P. ERAM</td> <td></td> </tr> <tr> <td></td> <td>C.A.A.R.P. AERO LOUVOIS</td> <td></td> </tr> <tr> <td></td> <td>A.M.C. SAB T 10.A</td> <td></td> </tr> <tr> <td>width</td> <td>2.06 m</td> <td></td> </tr> <tr> <td>Main Wheel Tire Size</td> <td>380 x 150</td> <td></td> </tr> <tr> <td>Tire pressure (bars)</td> <td>2 bars</td> <td></td> </tr> <tr> <td>Auxiliary gear</td> <td>150x50</td> <td></td> </tr> <tr> <td>Shock absorber pressure</td> <td>C.A.A.R.P. ERAM</td> <td>19 bars</td> </tr> <tr> <td></td> <td>C.A.A.R.P. ERAM</td> <td>10 bars</td> </tr> <tr> <td></td> <td>A.M.C. SAB T 10.A</td> <td>8 bars</td> </tr> </table> | model | C.A.A.R.P. ERAM | | | C.A.A.R.P. AERO LOUVOIS | | | A.M.C. SAB T 10.A | | width | 2.06 m | | Main Wheel Tire Size | 380 x 150 | | Tire pressure (bars) | 2 bars | | Auxiliary gear | 150x50 | | Shock absorber pressure | C.A.A.R.P. ERAM | 19 bars | | C.A.A.R.P. ERAM | 10 bars | | A.M.C. SAB T 10.A | 8 bars | | |
| model | C.A.A.R.P. ERAM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | C.A.A.R.P. AERO LOUVOIS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | A.M.C. SAB T 10.A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| width | 2.06 m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Main Wheel Tire Size | 380 x 150 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tire pressure (bars) | 2 bars | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Auxiliary gear | 150x50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shock absorber pressure | C.A.A.R.P. ERAM | 19 bars | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | C.A.A.R.P. ERAM | 10 bars | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | A.M.C. SAB T 10.A | 8 bars | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22. (Reserved): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

A.IV. Operating and Service Instructions

1. Flight Manual:

TC holder	Reference	Edition	revision
Dyn'Aviation	UEXNO05		latest
Previous		1 of 1975	2 of sept 1988

2. Maintenance Manual:

TC holder	Reference	Edition	revision
Dyn'Aviation	UEXNO06		latest
Previous		1973	none

3. Spare Parts Catalogue

TC holder	Reference	Edition	revision
Dyn'Aviation	UEXNO33		latest
Previous		1975	none

A.V. Notes:

SECTION B: CAP20L/S200

B.I. General

- | | |
|---|--------------------------------|
| 1. Data Sheet No.: | EASA A.369 |
| 2. a) Type: | CAP20 series |
| b) Model: | CAP20L/S200 |
| c) Variant: | N/A |
| 3. Airworthiness Category: | Utility and Aerobatic category |
| 4. Type Certificate Holder: | DYN'AVIATION |
| 5. Manufacturer: | N/A |
| 6. Certification Application Date: | 07/12/1977 |
| 7. (Reserved) National Certifying Authority | |
| 8. (Reserved) National Authority Type Certificate Date: | |

B.II. EASA Certification Basis

- | | |
|--|---|
| 1. Reference Date for determining the applicable requirements: | 11th may 1971 |
| 2. Airworthiness Requirements: | FAR23 amendments 1 to 12 |
| 3...Special Conditions: | additional requirements : §3.397 and §6.655 from AIR 2052A regulation |
| 4. Exemptions: | <ul style="list-style-type: none">• exemption to FAR 23.207 : no stall warning installation• exemption to §23.173 (no back load on the pitch control and deflection very slight at low speeds during clim at full power with rear balance)• exemption to §23.177 (during nose down sideslip, the lower of the two wing does not go up by itself) |
| 5. Deviations: | |
| 6. Equivalent Safety Findings: | |
| 7. Requirements elected to comply: | |
| 8. Environmental Standards: | |
| 9. (Reserved) Additional National Requirements: | |
| 10. (Reserved) | |

B.III. Technical Characteristics and Operational Limitations

- | | |
|----------------------------|--------------------------------------|
| 1. Type Design Definition: | Document n°UBENOLI02 latest revision |
|----------------------------|--------------------------------------|

2. Description: Single-engine, single-seat, low-wing airplane, wood construction, fixed conventional landing gear.
3. Equipment: The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification
4. Dimensions:
- | | |
|-----------|----------------------|
| Span | 7.57 m |
| Length | 6.46 m |
| Height | 1.80 m |
| Wing Area | 10.47 m ² |
5. Engine:
- 5.1.1 Model: LYCOMING AEIO-360-A1B
- 5.1.2 Type Certificate: USA 1E10
- 5.1.3 Limitations: For power-plant limits refer to AFM latest revision
6. Load factors: UTILITY CAT
- | | |
|------------|------|
| Positive n | +4.4 |
| Negative n | -1.8 |
- AEROBATIC CAT
- | | |
|------------|----|
| Positive n | +8 |
| Negative n | -6 |
7. Propeller:
- 7.1 Model: HARTZELL
Hub: HC-C2YK-4BF
Blades: FC7666A-2
- 7.2 Type Certificate: EASA.IM.P.130
- 7.3 Number of blades: 2
- 7.4 Diameter: 189 cm
- 7.5 Sense of Rotation: clockwise
- 7.6 Governor: Woodward 210693
8. Fluids:
- 8.1 Fuel: Aviation gas
Grade 100/130 or 100LL
- 8.2 Oil: Above 15°C : SAE 50
Between 0°C and +30°C : SAE 40
Between -20°C and +20°C : SAE 30
Below -15°C : SAE 20
- 8.3 Coolant: N/A
9. Fluid capacities:
- 9.1 Fuel: Total : 55 liters including 4 liters unusable
Lever arm : -0.017 m
- 9.2 Oil: 7.5 liters.

minimum for aerobatic operation: 3.8 liters
minimum for level flight operation: 1.9 liters

9.3 Coolant system capacity:

10. Air Speeds:	Speeds in km/h	CAT U	CAT A
	Never Exceed Speed V_{NE}	372	372
	Maximum normal operation Speed V_{NO}	295	295
	Cruising speed V_C	295	295
	Manoeuvring speed V_A	206	266
	maximum computed speed V_D	418	418
	Stalling speed V_S	90	85
11. Maximum Operating Altitude:	/		
12. Allweather Operations Capability:	/		
13. Maximum Weights:	UTILITY CAT		
	for operations	750 kg	
	For take-off	750 kg	
	For landing	750 kg	
	AEROBATIC CAT		
	for operations	650 kg	
	For take-off	650 kg	
	For landing	650 kg	
14. Centre of Gravity Range:	UTILITY CAT		
	Front limit	0.315 (21%)	
	Aft limit	0.390 (26%)	
	AEROBATIC CAT		
	Front limit	0.315 (21%)	
	Aft limit	0.390 (26%)	
15. Datum:	Leading edge of the reference chord Length of the reference chord : 1.500 m Leading edge of the airfoil reference located in the rectangular part of the wing		
16. Control surface deflections:	Elevator		
	Up	20°±2°	
	Down	25°±2°	
	Ailerons		
	Up	22°±2°	

- | | | |
|--|--------------|-------|
| | Down | 18±2° |
| | Rudder | |
| | Left | 25±2° |
| | Right | 25±2° |
| | elevator tab | |
| | manual | |
| | Tab up | 15±2° |
| | tab down | 15±2° |
17. Levelling Means: Spirit Level: marks are made on the fuselage to define the horizontal reference
18. Minimum Flight Crew: 1 pilot
Lever arm : 0.95 m
19. Maximum Passenger Seating Capacity: No passengers. Single seat airplane
20. Baggage/Cargo Compartments: Maximum mass : 50 kg
Lever arm : 1.60 m
Allowed only in CAT U
21. Wheels and Tyres:
- | | |
|-------------------------|-------------------|
| model | A.M.C. SAB T 10.A |
| width | 2.06 m |
| Main Wheel Tire Size | 380 x 150 |
| Tire pressure (bars) | 2 bars |
| Auxiliary gear | 155x50 |
| Shock absorber pressure | 8 bars |
22. (Reserved):

B.IV. Operating and Service Instructions

1. Flight Manual:

TC holder	Reference	Edition	revision
Dyn'Aviation	UEXNO07		latest
Previous		1978	none

2. Maintenance Manual:

TC holder	Reference	Edition	revision
Dyn'Aviation	UEXNO08		latest
Previous		1979	none

B.V. Notes:

SECTION C: CAP21

C.I. General

- | | |
|---|-------------------------------|
| 1. Data Sheet No.: | EASA A.369 |
| 2. a) Type: | CAP20 series |
| b) Model: | CAP21 |
| c) Variant: | N/A |
| 3. Airworthiness Category: | Normal and Aerobatic category |
| 4. Type Certificate Holder: | DYN'AVIATION |
| 5. Manufacturer: | N/A |
| 6. Certification Application Date: | 04/05/1983 |
| 7. (Reserved) National Certifying Authority | |
| 8. (Reserved) National Authority Type Certificate Date: | |

C.II. EASA Certification Basis

- | | |
|--|--|
| 1. Reference Date for determining the applicable requirements: | 11th may 1971 |
| 2. Airworthiness Requirements: | FAR23 amendments 1 to 12 |
| 3...Special Conditions: | <ul style="list-style-type: none">• additional requirement : §23.1581 of FAR23 amendment 23• additional requirements : §3.397 from AIR 2052A regulation• installation of a continuous accelerometer |
| 4. Exemptions: | <ul style="list-style-type: none">• exemption to FAR 23.207 : no stall warning installation• exemption to §23.177a.2• exemption to §23.173 (no back load on the pitch control and deflection very slight at low speeds during climb at full power with rear balance) |
| 5. Deviations: | |
| 6. Equivalent Safety Findings: | |
| 7. Requirements elected to comply: | |
| 8. Environmental Standards: | |
| 9. (Reserved) Additional National Requirements: | |
| 10. (Reserved) | |

C.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Document n°UBENOLI03 latest revision
2. Description: Single-engine, single-seat, low-wing airplane, wood construction, fixed conventional landing gear.
3. Equipment: The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification
4. Dimensions:

Span	8.08 (+0.70 with tanks) m
Length	6.46 m
Height	1.80 m
Wing Area	9.4 m ²
5. Engine:
 - 5.1.1 Model: LYCOMING AEIO-360-A1B (200HP) or IO-360-A1B equipped for inverted flight
 - 5.1.2 Type Certificate: USA 1E10
 - 5.1.3 Limitations: For power-plant limits refer to AFM latest revision
6. Load factors:

NORMAL CAT	
Positive n	+3.8
Negative n	-1.52
AEROBATIC CAT	
Positive n	+8
Negative n	-6
7. Propeller:
 - 7.1 Model: HARTZELL
Hub: HC-C2YK-4BF
Blades: FC-7666 A2
 - 7.2 Type Certificate: EASA.IM.P.130
 - 7.3 Number of blades: 2
 - 7.4 Diameter: 189 cm
 - 7.5 Sense of Rotation: clockwise
 - 7.6 Governor: Woodward 210693
8. Fluids:
 - 8.1 Fuel: Aviation gas
Grade 100/130 or 100LL
 - 8.2 Oil: Above 16°C : SAE 50
Between -1°C and +32°C : SAE 40
Between -18°C and +21°C : SAE 30
Below -23°C : SAE 20
 - 8.3 Coolant: N/A

9. Fluid capacities:

9.1 Fuel: One tank in the fuselage of 41L including 1 liter unusable
Lever arm : 0.06 m
Two tanks at wing tips of 40 L each. Only in CAT N

9.2 Oil: 7.5 liters.
minimum for aerobatic operation: 3.8 liters
minimum for level flight operation: 1.9 liters

9.3 Coolant system capacity:

10. Air Speeds:

Speeds in km/h	CAT N	CAT A
Never Exceed Speed V_{NE}	303	372
Maximum normal operation Speed V_{NO}	238	300
Cruising speed V_C	238	300
Manoeuvring speed V_A	206	270
maximum computed speed V_D	333	418
Stalling speed V_S	90	85

11. Maximum Operating Altitude:

/

12. Allweather Operations Capability:

/

13. Maximum Weights:

NORMAL CAT	
for operations	700 kg
For take-off	700 kg
For landing	700 kg
AEROBATIC CAT	
for operations	620 kg
For take-off	620 kg
For landing	620 kg

14. Centre of Gravity Range:

NORMAL CAT	
Front limit	0.252 (18%)
Aft limit	0.385 (27.5%)
AEROBATIC CAT	
Front limit	0.252 (18%)
Aft limit	0.406 (29%)

15. Datum:

Leading edge of the reference chord
Length of the reference chord : 1.4 m
Position of this reference chord : 0.40 m from symmetry

plane of the airplane

16. Control surface deflections:

Elevator		
Up		20°±2°
Down		23°±2°
Ailerons		
Up		24°±2°
Down		20°±2°
Rudder		
Left		30° ^{+0°} _{-2°}
Right		30° ^{+0°} _{-2°}
elevator tab		
manual		
Tab up		25°±2°
tab down		15°±2°

17. Levelling Means:

Spirit Level: marks are made on the fuselage to define the horizontal reference

18. Minimum Flight Crew:

1 pilot
Lever arm : 0.881 m

19. Maximum Passenger Seating Capacity:

No passengers. Single seat airplane

20. Baggage/Cargo Compartments:

Maximum mass : 30 kg
Lever arm : 1.60 m
Allowed only in CAT N

21. Wheels and Tyres:

model	A.M.C. Glass fiber Leaf spring
width	2.40 m
Main Wheel Tire Size	5.00 x 5
Tire pressure (bars)	2 bars
Auxiliary gear	6.00x2
Shock absorber pressure	NA

22. (Reserved):

C.IV. Operating and Service Instructions

1. Flight Manual:

TC holder	Reference	Edition	revision
Dyn'Aviation	UEXNO09		latest
Previous		1983	2 of November 2000

2. Maintenance Manual:

TC holder	Reference	Edition	revision
Dyn'Aviation	UEXNO10		latest
Previous		1982	none

C.V. **Notes:**

SECTION D: CAP230

D.I. General

- | | |
|---|-------------------------------|
| 1. Data Sheet No.: | EASA A.369 |
| 2. a) Type: | CAP20 series |
| b) Model: | CAP230 |
| c) Variant: | N/A |
| 3. Airworthiness Category: | Normal and Aerobatic category |
| 4. Type Certificate Holder: | DYN'AVIATION |
| 5. Manufacturer: | N/A |
| 6. Certification Application Date: | 02/10/1989 |
| 7. (Reserved) National Certifying Authority | |
| 8. (Reserved) National Authority Type Certificate Date: | |

D.II. EASA Certification Basis

- | | |
|--|---|
| 1. Reference Date for determining the applicable requirements: | 11th may 1971 |
| 2. Airworthiness Requirements: | FAR23 amendments 1 to 12 |
| 3...Special Conditions: | <ul style="list-style-type: none">• additional requirement : §23.1581 of FAR23 amendment 23• additional requirements : §3.397 from AIR 2052A regulation• installation of a continuous accelerometer |
| 4. Exemptions: | <ul style="list-style-type: none">• exemption to FAR 23.207 : no stall warning installation• exemption to §23.177a.2• exemption to §23.173• exemption to §23.1193d (this is acceptable for an aerobatic airplane, dedicated to very high level competitions, in which the downward visibility requires windows in the floor)• exemption to §23.735b (airplane designed for high level aerobatic championship, it needs powerful engine) |
| 5. Deviations: | |
| 6. Equivalent Safety Findings: | |
| 7. Requirements elected to comply: | |

8. Environmental Standards:
9. (Reserved) Additional National Requirements:
10. (Reserved)

D.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Document n°YBENOLI01 latest revision
2. Description: Single-engine, single-seat, low-wing airplane, wood construction, fixed conventional landing gear.
3. Equipment: The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification
4. Dimensions:

Span	8.08 m
Length	6.75 m
Height	1.80 m
Wing Area	9.66 m ²
5. Engine:
 - 5.1.1 Model: LYCOMING AEIO-540-L1B5D
 - 5.1.2 Type Certificate: USA 1E4
 - 5.1.3 Limitations: For power-plant limits refer to AFM latest revision
6. Load factors:

NORMAL CAT	
Positive n	+3.8
Negative n	-1.52
AEROBATIC CAT	
Positive n	+10
Negative n	-10
7. Propeller:
 - 7.1 Model: HARTZELL
Hub: HC-C2YR-4CF
Blades: FC-8475-6
 - 7.2 Type Certificate: EASA.IM.P.130
 - 7.3 Number of blades: 2
 - 7.4 Diameter: 189 cm
 - 7.5 Sense of Rotation: clockwise
 - 7.6 Governor: Woodward 210688
8. Fluids:
 - 8.1 Fuel: Aviation gas
Grade 100/130 or 100LL
 - 8.2 Oil: TOTAL AERO DM 15W50

8.3 Coolant:	N/A		
9. Fluid capacities:			
9.1 Fuel:	One tank in the fuselage of 65 L usable. Lever arm : 0.16 m		
9.2 Oil:	15.1 liters. minimum for level flight operation: 7.6 liters		
9.3 Coolant system capacity:			
10. Air Speeds:	Speeds in km/h	CAT N	CAT A
	Never Exceed Speed V_{NE}	320	400
	Maximum normal operation Speed V_{NO}	255	300
	Cruising speed V_C	255	300
	Manoeuvring speed V_A	193	300
	maximum computed speed V_D	352	445
	Stalling speed V_S	100	95
11. Maximum Operating Altitude:	/		
12. Allweather Operations Capability:	/		
13. Maximum Weights:	NORMAL CAT		
	for operations	820 kg	
	For take-off	820 kg	
	For landing	820 kg	
	AEROBATIC CAT		
	for operations	730 kg	
	For take-off	730 kg	
	For landing	730 kg	
14. Centre of Gravity Range:	NORMAL CAT		
	Front limit	0.33 (23%)	
	Aft limit	0.432 (30%)	
	AEROBATIC CAT		
	Front limit	0.33 (23%)	
	Aft limit	0.432 (30%)	
15. Datum:	Leading edge of the airfoil reference located in the rectangular part of the wing Length of the reference chord : 1.500 m		
16. Control surface deflections:	Elevator		
	Up	20 \pm 2 $^\circ$	

	Down	23°±2°
	Ailerons	
	Up	26°±2°
	Down	24°±2°
	Rudder	
	Left	30° ^{+0°} _{-2°}
	Right	30° ^{+0°} _{-2°}
	elevator tab	
	manual	
	Tab up	25°±2°
	tab down	15°±2°
17. Levelling Means:	Spirit Level: marks are made on the fuselage to define the horizontal reference	
18. Minimum Flight Crew:	1 pilot Lever arm : 1.125 m	
19. Maximum Passenger Seating Capacity:	No passengers. Single seat airplane	
20. Baggage/Cargo Compartments:	Maximum mass : 20 kg Lever arm : 1.80 m Allowed only in CAT N	
21. Wheels and Tyres:	model	A.M.C. Glass fiber Leaf spring
	width	2.40 m
	Main Wheel Tire Size	5.00 x 5
	Tire pressure (bars)	2 bars
	Auxiliary gear	6.00x2
	Shock absorber pressure	NA
22. (Reserved):		

D.IV. Operating and Service Instructions

3. Flight Manual:
Does not exist any more
4. Maintenance Manual:
Does not exist any more

D.V. Notes:

All CAP230 have been retrofited to become a CAP231.
There is no remaining CAP230

SECTION E: CAP231

E.I. General

- | | |
|---|-------------------------------|
| 1. Data Sheet No.: | EASA A.369 |
| 2. a) Type: | CAP20 series |
| b) Model: | CAP231 |
| c) Variant: | N/A |
| 3. Airworthiness Category: | Normal and Aerobatic category |
| 4. Type Certificate Holder: | DYN'AVIATION |
| 5. Manufacturer: | N/A |
| 6. Certification Application Date: | 25/07/1990 |
| 7. (Reserved) National Certifying Authority | |
| 8. (Reserved) National Authority Type Certificate Date: | |

E.II. EASA Certification Basis

- | | |
|--|---|
| 1. Reference Date for determining the applicable requirements: | 11th may 1971 |
| 2. Airworthiness Requirements: | FAR23 amendments 1 to 12 |
| 3...Special Conditions: | <ul style="list-style-type: none">• additional requirement : §23.1581 of FAR23 amendment 23• additional requirements : §3.397 from AIR 2052A regulation• installation of a continuous accelerometer |
| 4. Exemptions: | <ul style="list-style-type: none">• exemption to FAR 23.207 : no stall warning installation• exemption to §23.177a.2• exemption to §23.173• exemption to §23.1193d (this is acceptable for an aerobatic airplane, dedicated to very high level competitions, in which the downward visibility requires windows in the floor)• exemption to §23.735b (airplane designed for high level aerobatic championship, it needs powerful engine) |
| 5. Deviations: | |
| 6. Equivalent Safety Findings: | |
| 7. Requirements elected to comply: | |

8. Environmental Standards:
9. (Reserved) Additional National Requirements:
10. (Reserved)

E.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Document n°YBENOLI02 latest revision
2. Description: Single-engine, single-seat, low-wing airplane, wood construction, fixed conventional landing gear.
3. Equipment: The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification
4. Dimensions:

Span	8.08 m
Length	6.75 m
Height	1.80 m
Wing Area	9.86 m ²
5. Engine:
 - 5.1.1 Model: LYCOMING AEIO-540-L1B5D
 - 5.1.2 Type Certificate: USA 1E4
 - 5.1.3 Limitations: For power-plant limits refer to AFM latest revision
6. Load factors:

NORMAL CAT	
Positive n	+3.8
Negative n	-1.5
AEROBATIC CAT	
Positive n	+9
Negative n	-9
7. Propeller:

7.1 Model:	HARTZELL	MT-Propeller	MT-Propeller
	Hub: HC-C2YR-4CF	Hub: MTV-9-BC	Hub: MTV-14-B-C
	Blades: FC-8475-6	Blades: C200-15	Blades: C190-17
7.2 Type Certificate:	EASA.IM.P.130	Germany 32.130/65	EASA.P.017
7.3 Number of blades:	2	3	4
7.4 Diameter:	189 cm	200 cm	190 cm
7.5 Sense of Rotation:	clockwise		
7.6 Governor	Woodward C210988 for each model of propeller		
8. Fluids:
 - 8.1 Fuel: Aviation gas
Grade 100/130 or 100LL
 - 8.2 Oil: TOTAL AERO DM 15W50

- 8.3 Coolant: N/A
9. Fluid capacities:
- 9.1 Fuel: One tank in the fuselage of 67 L including 2L unusable.
Lever arm : 0.105 m
- 9.2 Oil: 15.1 liters.
minimum for level flight operation: 7.6 liters
minimum for aerobatics operation: 8 liters
- 9.3 Coolant system capacity:
10. Air Speeds:
- | Speeds in km/h | CAT N | CAT A |
|---|-------|-------|
| Never Exceed Speed V_{NE} | 320 | 400 |
| Maximum normal operation Speed V_{NO} | 255 | 295 |
| Cruising speed V_C | 255 | 300 |
| Manoeuvring speed V_A | 193 | 300 |
| maximum computed speed V_D | 352 | 445 |
| Stalling speed V_S | 100 | 98 |
| Maximum speed for flick rolls | NA | 240 |
11. Maximum Operating Altitude: /
12. Allweather Operations Capability: /
13. Maximum Weights:
- NORMAL CAT
- | | |
|----------------|--------|
| for operations | 820 kg |
| For take-off | 820 kg |
| For landing | 820 kg |
- AEROBATIC CAT
- | | |
|----------------|--------|
| for operations | 780 kg |
| For take-off | 780 kg |
| For landing | 780 kg |
14. Centre of Gravity Range:
- NORMAL CAT
- | | |
|-------------|---------------|
| Front limit | 0.276 (22.6%) |
| Aft limit | 0.377 (30.9%) |
- AEROBATIC CAT
- | | |
|-------------|---------------|
| Front limit | 0.276 (22.6%) |
| Aft limit | 0.377 (30.9%) |
15. Datum: Leading edge of the reference chord
Length of the reference chord : 1.220 m
Position of this reference chord : 1.97 m from symmetry plane of the airplane

- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|----------|--------------------------------|-------|--------|----------------------|----------|----------------------|----------|----------------|--------|-------------------------|--------|--------|--|------|-----------------------------------|-------|-----------------------------------|--------------|--|--------|--|--------|--------|----------|--------|-----------|--|--------|----|----------|----|
| 16. Control surface deflections: | <table border="0"> <tr> <td colspan="2">Elevator</td> </tr> <tr> <td>Up</td> <td>20°±2°</td> </tr> <tr> <td>Down</td> <td>23°±2°</td> </tr> <tr> <td colspan="2">Ailerons</td> </tr> <tr> <td>Up</td> <td>26°±2°</td> </tr> <tr> <td>Down</td> <td>24°±2°</td> </tr> <tr> <td colspan="2">Rudder</td> </tr> <tr> <td>Left</td> <td>30°^{+0°}_{-2°}</td> </tr> <tr> <td>Right</td> <td>30°^{+0°}_{-2°}</td> </tr> <tr> <td colspan="2">elevator tab</td> </tr> <tr> <td colspan="2">manual</td> </tr> <tr> <td>Tab up</td> <td>25°±2°</td> </tr> <tr> <td>tab down</td> <td>15°±2°</td> </tr> <tr> <td colspan="2">automatic</td> </tr> <tr> <td>tab up</td> <td>9°</td> </tr> <tr> <td>tab down</td> <td>9°</td> </tr> </table> | Elevator | | Up | 20°±2° | Down | 23°±2° | Ailerons | | Up | 26°±2° | Down | 24°±2° | Rudder | | Left | 30° ^{+0°} _{-2°} | Right | 30° ^{+0°} _{-2°} | elevator tab | | manual | | Tab up | 25°±2° | tab down | 15°±2° | automatic | | tab up | 9° | tab down | 9° |
| Elevator | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Up | 20°±2° | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Down | 23°±2° | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ailerons | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Up | 26°±2° | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Down | 24°±2° | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rudder | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Left | 30° ^{+0°} _{-2°} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Right | 30° ^{+0°} _{-2°} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| elevator tab | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| manual | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tab up | 25°±2° | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| tab down | 15°±2° | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| automatic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| tab up | 9° | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| tab down | 9° | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17. Levelling Means: | Spirit Level: marks are made on the fuselage to define the horizontal reference | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18. Minimum Flight Crew: | 1 pilot
Lever arm : 1.070 m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19. Maximum Passenger Seating Capacity: | No passengers. Single seat airplane | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20. Baggage/Cargo Compartments: | Maximum mass : 35 kg
Lever arm : 1.745 m
Allowed only in CAT N | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21. Wheels and Tyres: | <table border="0"> <tr> <td>model</td> <td>A.M.C. Glass fiber Leaf spring</td> </tr> <tr> <td>width</td> <td>2.10 m</td> </tr> <tr> <td>Main Wheel Tire Size</td> <td>5.00 x 5</td> </tr> <tr> <td>Tire pressure (bars)</td> <td>2.5 bars</td> </tr> <tr> <td>Auxiliary gear</td> <td>6.00x2</td> </tr> <tr> <td>Shock absorber pressure</td> <td>NA</td> </tr> </table> | model | A.M.C. Glass fiber Leaf spring | width | 2.10 m | Main Wheel Tire Size | 5.00 x 5 | Tire pressure (bars) | 2.5 bars | Auxiliary gear | 6.00x2 | Shock absorber pressure | NA | | | | | | | | | | | | | | | | | | | | |
| model | A.M.C. Glass fiber Leaf spring | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| width | 2.10 m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Main Wheel Tire Size | 5.00 x 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tire pressure (bars) | 2.5 bars | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Auxiliary gear | 6.00x2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shock absorber pressure | NA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22. (Reserved): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

E.IV. Operating and Service Instructions

1. Flight Manual:

TC holder	Reference	Edition	revision	language
Dyn'Aviation	YEXNO11		latest	French
Dyn'Aviation	YEXNO12		latest	English
Previous		1990	3 of September 1998	French
Previous		1990	3 of September 1998	English

2. Maintenance Manual:

TC holder	Reference	Edition	revision	language
Dyn'Aviation	YEXNO13		latest	French
Dyn'Aviation	YEXNO14		latest	English
Previous		1990	1 of may 2001	French
Previous		1990	1 of may 2001	English

3. Maintenance Schedule

TC holder	Reference	Edition	revision	language
Dyn'Aviation	YEXNO15		latest	French
Dyn'Aviation	YEXNO16		latest	English
Previous		2001	1 of July 2001	French
Previous		2001	1 of July 2001	English

4. Parts Catalogue

TC holder	Reference	Edition	revision	language
Dyn'Aviation	YEXNO34		latest	French
Previous		1992	none	French

E.V. Notes:

SECTION F: CAP231EX

F.I. General

- | | |
|---|-------------------------------|
| 1. Data Sheet No.: | EASA A.369 |
| 2. a) Type: | CAP20 series |
| b) Model: | CAP231EX |
| c) Variant: | N/A |
| 3. Airworthiness Category: | Normal and Aerobatic category |
| 4. Type Certificate Holder: | DYN'AVIATION |
| 5. Manufacturer: | N/A |
| 6. Certification Application Date: | 04/02/1993 |
| 7. (Reserved) National Certifying Authority | |
| 8. (Reserved) National Authority Type Certificate Date: | |

F.II. EASA Certification Basis

- | | |
|--|---|
| 1. Reference Date for determining the applicable requirements: | 11th may 1971 |
| 2. Airworthiness Requirements: | FAR23 amendments 1 to 12 |
| 3...Special Conditions: | <ul style="list-style-type: none">• additional requirement : §23.1581 of FAR23 amendment 23• additional requirements : §3.397 from AIR 2052A regulation• installation of a continuous accelerometer• special condition for the wing made with composite material |
| 4. Exemptions: | <ul style="list-style-type: none">• exemption to FAR 23.207 : no stall warning installation• exemption to §23.177a.2• exemption to §23.173• exemption to §23.1193d (this is acceptable for an aerobatic airplane, dedicated to very high level competitions, in which the downward visibility requires windows in the floor) |
| 5. Deviations: | |
| 6. Equivalent Safety Findings: | |
| 7. Requirements elected to comply: | |
| 8. Environmental Standards: | |

9. (Reserved) Additional National Requirements:
10. (Reserved)

F.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Document n°LBENOLI01 latest revision
2. Description: Single-engine, single-seat, low-wing airplane, wood and composite construction, fixed conventional landing gear.
3. Equipment: The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification
4. Dimensions:

Span	7.40 m
Length	6.75 m
Height	1.80 m
Wing Area	10.2 m ²
5. Engine:
 - 5.1.1 Model: LYCOMING AEIO-540-L1B5D
 - 5.1.2 Type Certificate: USA 1E4
 - 5.1.3 Limitations: For power-plant limits refer to AFM latest revision
6. Load factors:

NORMAL CAT	
Positive n	+3.8
Negative n	-1.6
AEROBATIC CAT	
Positive n	+10
Negative n	-10
7. Propeller:

7.1 Model:	HARTZELL	MT-Propeller	MT-Propeller
	Hub: HC-C2YR-4CF	Hub: MTV-9-BC	Hub: MTV-14-B-C
	Blades: FC-8475-6	Blades: C200-15	Blades: C190-17
7.2 Type Certificate:	EASA.IM.P.130	Germany 32.130/65	EASA.P.017
7.3 Number of blades:	2	3	4
7.4 Diameter:	189 cm	200 cm	190 cm
7.5 Sense of Rotation:	clockwise		
7.6 Governor	Woodward C210988 for each model of propeller		
8. Fluids:
 - 8.1 Fuel: Aviation gas
Grade 100/130 or 100LL
 - 8.2 Oil: half-synthetic or synthetic oil after the 50 first hours
 - 8.3 Coolant: N/A

9. Fluid capacities:

- 9.1 Fuel:
- One tank in the fuselage of 67.5 liters (Usable 65 liters)
Lever arm : 0.335 m
 - Two auxiliary tanks of 55 liters each (usable 50 liters each). Only in CAT N
Lever arm : 0.055 m
- 9.2 Oil: 15.1 liters.
minimum for level flight operation: 7.6 liters
- 9.3 Coolant system capacity:

10. Air Speeds:

Speeds in km/h	CAT N	CAT A
Never Exceed Speed V_{NE}	340	405
Maximum normal operation Speed V_{NO}	300	315
Cruising speed V_C	315	315
Manoeuvring speed V_A	207	315
maximum computed speed V_D	378	450
Stalling speed V_S	106	100
Maximum speed for flick rolls	NA	240

11. Maximum Operating Altitude:

/

12. Allweather Operations Capability:

/

13. Maximum Weights:

NORMAL CAT	
for operations	820 kg
For take-off	820 kg
For landing	820 kg
AEROBATIC CAT	
for operations	730 kg
For take-off	730 kg
For landing	730 kg

14. Centre of Gravity Range:

NORMAL CAT	
Front limit	24%
Aft limit	31%
AEROBATIC CAT	
Front limit	24%
Aft limit	31%

15. Datum:

Leading edge of the reference chord
Length of the reference chord : 1.377 m

Position of this reference chord : 1.853 m from symmetry plane of the airplane

16. Control surface deflections:

Elevator

Up $20^{\circ} \pm 2^{\circ}$
Down $23^{\circ} \pm 2^{\circ}$

Ailerons

Up $30^{\circ} \pm 2^{\circ}$
Down $30^{\circ} \pm 2^{\circ}$

Rudder

Left $30^{\circ} \begin{smallmatrix} +0^{\circ} \\ -2^{\circ} \end{smallmatrix}$
Right $30^{\circ} \begin{smallmatrix} +0^{\circ} \\ -2^{\circ} \end{smallmatrix}$

elevator tab

manual

Tab up $10^{\circ} \pm 1^{\circ}$
tab down $10^{\circ} \pm 1^{\circ}$

automatic

tab up $11^{\circ} \pm 1^{\circ}$
tab down $7^{\circ} \pm 1^{\circ}$

17. Levelling Means:

Spirit Level: marks are made on the fuselage to define the horizontal reference

18. Minimum Flight Crew:

1 pilot
Lever arm : 1.205 m

19. Maximum Passenger Seating Capacity:

No passengers. Single seat airplane

20. Baggage/Cargo Compartments:

Maximum mass : 35 kg
Lever arm : 1.505 m
Allowed only in CAT N

21. Wheels and Tyres:

model A.M.C. Glass fiber Leaf spring
width 1.78 m
Main Wheel Tire Size 5.00 x 5
Tire pressure (bars) 2.8 bars
Auxiliary gear 6.00x2
Shock absorber pressure NA

22. (Reserved):

F.IV. Operating and Service Instructions

1. Flight Manual:

TC holder	Reference	Edition	revision	language
Dyn'Aviation	LEXNO17		latest	French
Dyn'Aviation	LEXNO18		latest	English
Previous		1993	3 of February 1996	French
Previous		1993	3 of February 1996	English

2. Maintenance Schedule

TC holder	Reference	Edition	revision	language
Dyn'Aviation	LEXNO19		latest	French
Dyn'Aviation	LEXNO20		latest	English
Previous	1001006	2001	1 of June 2001	French
Previous	1001006GB	2001	1 of June 2001	English

F.V. Notes:

SECTION G: CAP232

G.I. General

- | | |
|---|-------------------------------|
| 1. Data Sheet No.: | EASA A.369 |
| 2. a) Type: | CAP20 series |
| b) Model: | CAP232 |
| c) Variant: | N/A |
| 3. Airworthiness Category: | Normal and Aerobatic category |
| 4. Type Certificate Holder: | DYN'AVIATION |
| 5. Manufacturer: | DYN'AVIATION |
| 6. Certification Application Date: | 20/03/1998 |
| 7. (Reserved) National Certifying Authority | |
| 8. (Reserved) National Authority Type Certificate Date: | |

G.II. EASA Certification Basis

- | | |
|--|---|
| 1. Reference Date for determining the applicable requirements: | 11th may 1971 |
| 2. Airworthiness Requirements: | FAR23 amendments 1 to 12 |
| 3...Special Conditions: | <ul style="list-style-type: none">• additional requirement : §23.1581 of FAR23 amendment 23• additional requirements : §3.397 from AIR 2052A regulation• installation of a continuous accelerometer• amendment 1 to 45 of FAR23 for the wing made of composite material |
| 4. Exemptions: | <ul style="list-style-type: none">• exemption to FAR 23.207 : no stall warning installation• exemption to §23.177a.2• exemption to §23.173• exemption to §23.1193d (this is acceptable for an aerobatic airplane, dedicated to very high level competitions, in which the downward visibility requires windows in the floor) |
| 5. Deviations: | |
| 6. Equivalent Safety Findings: | |
| 7. Requirements elected to comply: | |
| 8. Environmental Standards: | |

9. (Reserved) Additional National Requirements:
10. (Reserved)

G.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Document n°LBENOLI02 latest revision
2. Description: Single-engine, single-seat, low-wing airplane, wood and composite construction, fixed conventional landing gear.
3. Equipment: The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification
4. Dimensions:

Span	7.40 m
Length	6.75 m
Height	1.80 m
Wing Area	10.2 m ²
5. Engine:
 - 5.1.1 Model: LYCOMING AEIO-540-L1B5D
Or LYCOMING AEIO-540-L1B5
Or LYCOMING AEIO-540-L1D5
 - 5.1.2 Type Certificate: USA 1E4
 - 5.1.3 Limitations: For power-plant limits refer to AFM latest revision
6. Load factors:

NORMAL CAT	
Positive n	+3.8
Negative n	-1.6
AEROBATIC CAT	
Positive n	+9.2
Negative n	-9.2
7. Propeller:

7.1 Model:	HARTZELL	MT-Propeller	MT-Propeller
	Hub: HC-C2YR-4CF	Hub: MTV-9-BC	Hub: MTV-14-B-C
	Blades: FC-8475-6	Blades: C200-15	Blades: C190-17
7.2 Type Certificate:	EASA.IM.P.130	Germany 32.130/65	EASA.P.017
7.3 Number of blades:	2	3	4
7.4 Diameter:	189 cm	200 cm	190 cm
7.5 Sense of Rotation:	clockwise		
7.6 Governor	Woodward C210988 for each model of propeller		
8. Fluids:
 - 8.1 Fuel: Aviation gas
Grade 100/130 or 100LL

- 8.2 Oil: mineral oil 80 during the 50 first hours and half-synthetic or synthetic oil after the 50 first hours
- 8.3 Coolant: N/A
9. Fluid capacities:
- 9.1 Fuel:
- One tank in the fuselage of 65 liters (Usable 62.5 liters)
Lever arm : 0.300 m
 - Two auxiliary tanks of 57 liters each (52 liters usable for each). Allowed Only in CAT N
Lever arm : 0.055 m
- 9.2 Oil: 15.1 liters.
minimum for level flight operation: 7.6 liters
- 9.3 Coolant system capacity:
10. Air Speeds:
- | Speeds in km/h | CAT N | CAT A |
|---|-------|-------|
| Never Exceed Speed V_{NE} | 340 | 405 |
| Maximum normal operation Speed V_{NO} | 300 | 315 |
| Cruising speed V_C | 315 | 330 |
| Manoeuvring speed V_A | 207 | 330 |
| maximum computed speed V_D | 378 | 450 |
| Stalling speed V_S | 110 | 109 |
| Maximum speed for flick rolls | NA | 257 |
11. Maximum Operating Altitude: /
12. Allweather Operations Capability: /
13. Maximum Weights:
- NORMAL CAT
- | | |
|----------------|--------|
| for operations | 820 kg |
| For take-off | 820 kg |
| For landing | 820 kg |
- AEROBATIC CAT
- | | |
|----------------|--------|
| for operations | 780 kg |
| For take-off | 780 kg |
| For landing | 780 kg |
14. Centre of Gravity Range:
- NORMAL CAT
- | | |
|-------------|-----|
| Front limit | 24% |
| Aft limit | 31% |
- AEROBATIC CAT
- | | |
|-------------|-----|
| Front limit | 24% |
|-------------|-----|

Aft limit 31%

15. Datum: Leading edge of the reference chord
Length of the reference chord : 1.342 m
Position of this reference chord : 1.934 m from symmetry plane of the airplane
16. Control surface deflections:
- | | |
|--------------|-----------------------------------|
| Elevator | |
| Up | 20°±2° |
| Down | 23°±2° |
| Ailerons | |
| Up | 30°±2° |
| Down | 30°±2° |
| Rudder | |
| Left | 30° ^{+0°} _{-2°} |
| Right | 30° ^{+0°} _{-2°} |
| elevator tab | |
| manual | |
| Tab up | 10°±1° |
| tab down | 10°±1° |
| automatic | |
| tab up | 11°±1° |
| tab down | 7°±1° |
17. Levelling Means: Spirit Level: marks are made on the fuselage to define the horizontal reference
18. Minimum Flight Crew: 1 pilot
Lever arm : 1.167 m
19. Maximum Passenger Seating Capacity: No passengers. Single seat airplane
20. Baggage/Cargo Compartments: Maximum mass : 35 kg
Lever arm : 1.505 m
Allowed only in CAT N
21. Wheels and Tyres:
- | | |
|----------------------|--------------------------------|
| model | A.M.C. Glass fiber Leaf spring |
| width | 1.78 m |
| Main Wheel Tire Size | 5.00 x 5 |
| Tire pressure (bars) | 2.8 bars |
| Auxiliary gear | 6.00x2 |
| Shock absorber | NA |

pressure

22. (Reserved):

G.IV. Operating and Service Instructions

1. Flight Manual:

TC holder	Reference	Edition	revision	language
Dyn'Aviation	LEXNO35		latest	French
Dyn'Aviation	LEXNO36		latest	English
Previous		2000	5 of September 2002	French
Previous		1997	2 of October 2002	English

2. Maintenance Schedule

TC holder	Reference	Edition	revision	language
Dyn'Aviation	LEXNO37		latest	French
Dyn'Aviation	LEXNO38		latest	English
Previous	1001006	2001	1 of June 2001	French
Previous	1001006GB	2001	1 of June 2001	English

3. Parts Catalogue

TC holder	Reference	Edition	revision	language
Dyn'Aviation	LEXNO39		latest	French
Previous		1999	6 of April 2007	English

G.V. Notes:

ADMINISTRATIVE SECTION

I. Acronyms

AMC stands for "*Avions Mudry and Cie*"

II. Type Certificate Holder Record

Avions Mudry and Cie

Akrotech Europe

CAP Aviation

Apex Aircraft

Dyn'Aviation

III. Change Record

Issue	Date	Changes	TC Issue No. & Date
Issue 01	17 August 2010	Initial issue to replace DGAC TCDS No 69 -138 issue 10 December 2002	20 June 1973 17 August 2010
Issue 02	18 November 2010	Corrections to line above; original DGAC TCDS is TCDS N° 138 issue 10 December 2002. Correction to TC issue date which should have been the EASA TC, not the original DGAC TC.	17 August 2010