



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

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**EASA**

**TYPE-CERTIFICATE  
DATA SHEET**

**EASA.A.370**

**CAP 10**

**Type Certificate Holder**

**Dyn'Aviation**  
1 Route de Troyes  
21121 DAROIS  
FRANCE

For models: CAP10  
CAP10B

Issue 03: 28 September 2010

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## **SECTION A: CAP10**

CAP10 was the first model, introduced in 1970. This model was retrofitted to become a CAP10B. There are no remaining CAP10 examples.

## **SECTION B: CAP10B**

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

1. Data Sheet No.: **EASA A.370**
2. a) Type: CAP10  
b) Model: CAP10B  
c) Variant:
3. Airworthiness Category: Utility and Aerobatic
4. Type Certificate Holder: Dyn'Aviation
5. Manufacturer: Dyn'Aviation
6. Certification Application Date: Previously DGAC TC n°55 dated 04/09/1970 for CAP10 and 21/03/1972 for CAP10B
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: 01/01/1970
2. Airworthiness Requirements: France AIR2052 amendment November 11<sup>th</sup> 1969
- 3...Special Conditions: None
3. Exemptions: None
4. Deviations: None
5. Equivalent Safety Findings: None
6. Requirements elected to comply: None
7. Environmental Standards: None
8. (Reserved) Additional National Requirements:

9. (Reserved)

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

1. Type Design Definition: Document referenced according Dyn'Aviation procedure
2. Description: Single-engine, two-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	8.06 m	(26.4 ft)
Length	7.00 m	(23.0 ft)
Height	1.76 m	(5.8 ft)
Wing Area	10.9 m <sup>2</sup>	(117.3 ft <sup>2</sup> )
5. Engine:
  - 5.1.1 Model: Lycoming IO-360-B2F equipped with CHRISTEN systém  
Lycoming AEIO-360-B2F
  - 5.1.2 Type Certificate: FAA 1E10
  - 5.1.3 Limitations: For power-plant limits refer to AFM latest revision
6. Load factors:
 

CATEGORY U :	
Flaps retracted positive n	+4.4
Flaps retracted negative n	-1.8
Flaps extended positive n	+2
Flaps extended negative n	-1.8
CATEGORY A :	
Flaps retracted positive n	+6
Flaps retracted negative n	-4.5
Flaps extended positive n	+2
Flaps extended negative n	-2
7. Propeller:
  - 7.1 Model: Hoffmann. P/N HO 29 HM-180-170  
EVRA. P/N CAP 3. 180-170-H5.F  
EVRA. P/N CAP. 180-170-H5.I  
SENSENICH. P/N 76 EM 8S5.0.64
  - 7.2 Type Certificate:
  - 7.3 Number of blades: 2 for each model
  - 7.4 Diameter:
 

Hoffmann. P/N HO 29 HM-180-170	<b>1.80m</b>
EVRA. P/N CAP 3. 180-170-H5.F	<b>1.80m</b>
EVRA. P/N CAP. 180-170-H5.I	<b>1.80m</b>
SENSENICH. P/N 76 EM 8S5.0.64	<b>1.93m</b>
  - 7.5 Sense of Rotation: clockwise

8. Fluids:
- 8.1 Fuel: Minimum Grade 91/96 or 100/130
  - 8.2 Oil: Refers to AFMs
  - 8.3 Coolant: Not Applicable
9. Fluid capacities:
- 9.1 Fuel: Front Fuel Tank
    - Total: 75 liters
    - Usable: 72 liters for Utility Category  
For Aerobatic Category refer to AFMAft Fuel Tank
    - Total: 79 liters
    - Usable: 78 liters for Utility Category only  
forbidden in A Category  
The 10 latest liters are usable in  
horizontal flight only
  - 9.2 Oil:
    - Category U :
      - Maximum: 7.6 liters      8.0 qts
      - Minimum: 1.9 liters      2.0 qts
    - Category A :
      - Maximum: 5.7 liters      6.0 qts
      - Minimum: 1.9 liters      2.0 qts
  - 9.3 Coolant system capacity: Not Applicable
10. Air Speeds:
- Never Exceed Speed  $V_{NE}$  340 km/h (IAS)
  - Maximum normal operation Speed  $V_{NO}$  300 km/h (IAS)
  - Maximum full deflection speed in CAT U  $V_A$  200 km/h (IAS)
  - Maximum full deflection speed in CAT A  $V_A$  235 km/h (IAS)
  - Maximum speed for snap maneuvers  $V_{AD}$  160 km/h (IAS)
  - Maximum Flap Extension Speed  $V_{FE}$  160 km/h (IAS)
11. Maximum Operating Altitude: 5000 m (16 404 ft)
12. Allweather Operations Capability: VFR Day. Flight in known icing conditions is forbidden
13. Maximum Weights:
- CATEGORY U :
    - Manoeuvring 830 kg (1829 lbs)
    - Take-Off 830 kg (1829 lbs)
    - Landing 800 kg (1763 lbs)
  - CATEGORY A :
    - Manoeuvring 760 kg (1675 lbs)
    - Take-Off 760 kg (1675 lbs)
    - Landing 760 kg (1675 lbs)

14. Centre of Gravity Range:
- CATEGORY U :
- |                 |                              |
|-----------------|------------------------------|
| Forward Limits: | 0.27 m (0.88ft) aft of datum |
| Aft Limits:     | 0.45 m (1.47ft) aft of datum |
- CATEGORY A :
- |                 |                              |
|-----------------|------------------------------|
| Forward Limits: | 0.3 m (0.98ft) aft of datum  |
| Aft Limits:     | 0.39 m (1.27ft) aft of datum |
15. Datum:
- Wing leading edge located at 1.30 m (4.26ft) from fuselage centre line  
Cord length at reference section : 1.50 m (4.92ft)
16. Control surface deflections:
- Elevator :
- |        |         |
|--------|---------|
| Up :   | 25° ±2° |
| Down : | 25° ±2° |
- Rudder :
- |   |                                  |
|---|----------------------------------|
| Left and Right :                                | ±18° ±2°                         |
| automatic tab : left staggered neutral position | 1° ± <sub>0</sub> <sup>2</sup> ° |
- Ailerons :
- |        |         |
|--------|---------|
| Up :   | 25° ±2° |
| Down : | 15° ±2° |
- Trim tab elevator (manual) :
- |        |         |
|--------|---------|
| Up :   | 24° ±2° |
| Down : | 14° ±2° |
- Trim tab elevator (electrical) :
- |        |         |
|--------|---------|
| Up :   | 17° ±2° |
| Down : | 17° ±2° |
- Flaps :
- |           |         |
|-----------|---------|
| 1st notch | 15° ±2° |
| 2nd notch | 40° ±2° |
17. Levelling Means:
- Spirit Level: canopy rail
18. Minimum Flight Crew:
- 1 (Pilot) at 0.55 m (1.8ft) to 0.65 m (2.13ft) aft of datum
19. Maximum Passenger Seating Capacity:
- 1 at 0.55 m (1.8ft) to 0.65 m (2.13ft) aft of datum
20. Baggage/Cargo Compartments:
- 50 kg between 1.2 m (3.4ft) and 1.8 m (5.9ft) aft of datum shelf behind seats
21. Wheels and Tyres:
- Main gear :
- |                                |                 |
|--------------------------------|-----------------|
| Width                          | 2.06 m (6.75ft) |
| Main Wheel Tire Size           | 380 x 150       |
| Tire pressure                  | 2 bars          |
| Oleo strut pressure            |                 |
| CAARP type SEFAC / AEROLOUVOIS | 19 bars         |
| CAARP type SAB T10 or T10A (*) | 8 bars          |
| AMC 32.11.01 (*)               | 8 bars          |
- Auxiliary gear :
- |                     |         |
|---------------------|---------|
| Auxiliary Tire Size | 6 x 200 |
|---------------------|---------|

(\*) The oleo strut type T10A is used in series from aircraft number 55 (by major change design number 6). The oleo strut type AMC

32.11.01 is used in series from aircraft number 269 (by major change design number 17).

22. (Reserved):

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

### 1. Flight Manual:

<b>Reference</b>	<b>Airplanes</b>	<b>Language</b>
4EXNO21	Equipped with design change 000302	French
4EXNO22	Equipped with design change 000302	English
4EXNO25	$1 \leq \text{Serial Number} < 240$ not retrofitted with design change 000302	French
4EXNO26	$240 \leq \text{SN} \leq 282$ not retrofitted with design change 000302	French
4EXNO27	$1 \leq \text{SN} \leq 282$ not retrofitted with design change 000302	English

### 2. Maintenance Manual:

<b>Reference</b>	<b>Airplanes</b>	<b>Language</b>
4EXNO02	All SN	French

### 3. Maintenance Schedule:

<b>Reference</b>	<b>Airplanes</b>	<b>Language</b>
4EXNO04	All SN	English
4EXNO28	All SN	French
4EXNO29	All equipped with design change 000302	English
4EXNO30	All equipped with design change 000302	French

### 4. Spare Parts Catalogue:

<b>Reference</b>	<b>Airplanes</b>	<b>Language</b>
4EXNO03	All SN	English
4EXNO32	All SN	French

### 6. Instruments and aggregates:

Equipment list numbered according to Dyn'Aviation procedure

**B.V. Notes: Major Change 000302, Wing change, approved February 27<sup>th</sup> 2002. Commercial name CAP10C**

Incorporated as standard design beginning with aircraft serial 300, and as retrofit.

Same as model CAP10B except :

1. Wing structure modified to include pre-cured carbon fibre in the spar caps, and different aileron shape and actuation.
2. Airplane Flight Manual (AFM) (French) document n°4EXNO21 and (English) 4EXNO22
3. Certification basis : for the wing only JAR-23, Change 1, dated 11-Mar-1994  
EASA Special Conditions: recording G-meter : PGM 1212

4. Maximum Masses :

CATEGORY A	Manoeuvring	780 kg (1719 lbs)
	Take-Off	780 kg (1719 lbs)
	Landing	780 kg (1719 lbs)

5. Centre of Gravity Range :

CATEGORY U :

Forward Limits: 0.3 m (0.98ft) aft of datum at 830 kg (1829 lbs)

6. Wheels and Tires

Main gear : Apex Aircraft (\*)

Oleo strut pressure 8 bars

(\*) The main gear type Apex Aircraft is used in series from aircraft number 300 (by major change design number 000302).

7. Control surface movements

Ailerons : Down :  $25^{\circ} \pm 2^{\circ}$

Flaps (electrical)

8. Propellers : only the HOFFMANN and EVRA propellers can be installed.

9. Maintenance Program (French) 4EXNO30, latest revision  
(English) 4EXNO29, latest revision

## **ADMINISTRATIVE SECTION**

I. Acronyms;  
N/A

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
01	28 March 2008	Initial issue to replace DGAC TCDS No 55	22 March 2008
02	11 June 2010	Change of TC holder from Apex Industries to Dyn'Aviation	11 June 2010
03	28 September 2010	Correction to B.III, 5.1.1 and 5.1.2 to add Lycoming AEIO-360-B2F and FAA TCDS numbers, inadvertently omitted from Issue 2	11 June 2010