



## *European Aviation Safety Agency*

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**EASA**

**TYPE-CERTIFICATE  
DATA SHEET**

No. EASA.R.145

**for  
CABRI G2**

**Type Certificate Holder  
Hélicoptères Guimbal**

1070, rue du Lieutenant Parayre  
Aérodrome d'Aix-en-Provence  
13290 Les Milles  
France

For Models: G00-00-000

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## **SECTION 1: CABRI G2 – Model G00-00-000**

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

- |                                 |   |
|---------------------------------|---|
| 1. Data Sheet No                | EASA.R.145  |
| 2. Type / Variant or Model      |   |
| (a) Type                        | Cabri G2  |
| (b) Variant or Model            | None  |
| 3. Airworthiness Category       | Normal category rotorcraft  |
| 4. Type Certificate Holder      | Hélicoptères Guimbal<br>1070, rue du Lieutenant Parayre<br>Aérodrome d'Aix en Provence<br>13 290 Les Milles<br>France |
| 5. Manufacturer                 | Hélicoptères Guimbal  |
| 6. EASA Application Date        | December 21 <sup>st</sup> , 2006  |
| 7. EASA Type Certification Date | December 14 <sup>th</sup> , 2007  |

### ***II. Certification Basis***

- |  |   |
|--|---|
| 1. Airworthiness Requirements:             | CS-27 (CRI A1)  |
| 2. Special Conditions:                     | Protection against effects of High intensity radiated fields (HIRF). (CRI F1)   |
| 3. Reversions and exemptions granted       | None  |
| 4. Equivalent Safety Findings              | Separation between fuel tank and firewall (CRI E1)<br>Fuel bladder filling drop test (CRI E2)<br>Chip detectors test in flight (CRI F3) |
| 5. Environmental Standards including Noise | JAR 36 (first issue dated May 23, 1997) subpart E (CRI A3)  |

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

- |                           |  |
|---------------------------|--|
| 1. Type Design Definition | G00-00-000   |
| 2. Description            | Two seat piston engine helicopter  |
| 3. Equipment              | As per compliance with CABRI G2 certification basis and included in the original Type Design Standard or indicated on the section 2 - limitations of the Flight Manual |

|                       |            |                    |                     |
|-----------------------|------------|--------------------|---------------------|
| <b>4. Dimensions:</b> | Fuselage   | Length             | 6 m 31 (20 ft 8 in) |
|                       |            | Width              | 1 m 24 (4 ft 1 in)  |
|                       |            | Height             | 2 m 37 (7 ft 9 in)  |
|                       | Main Rotor | 3 blades           |                     |
|                       |            | Diameter           | 7.2 m (23 ft 7 in)  |
|                       | Tail Rotor | 7 blades, shrouded |                     |
|                       |            | Diameter           | 0.6 m (0 ft 24 in)  |

**5. Engine:** One Lycoming O360-J2A piston engine  
(FAA TCDS E 286)  
with Hélicoptères Guimbal modification N° J45-002  
(STC EASA.E.S.01001)

**5.1 Installed Engine Limits** Maximum continuous / take-off power :  
145 shp from 2575 to 2700 rpm

**6. Fluids (Fuel/Oil/Additives)**

**6.1 Fuel :** AVGAS 100 LL

|                  |               |                                      |                                |
|------------------|---------------|--------------------------------------|--------------------------------|
| <b>6.2 Oil :</b> | Engine oil    | Oil grade during break-in (50 hours) | MIL-L-6082B                    |
|                  |               | Oil grade after break-in             | MIL-L-22851 Ashless dispersant |
|                  | Gearboxes oil | HG30-85W140                          |                                |

**7. Fluid capacities**

**7.1 Fuel** 170 L, 45 USG

**7.2 Oil** 6Qt, 5.7 L

**8. Airspeed limits** VNE power-on = 130 kt - 2kt / 1000 ft Zp  
VNE power-off = 110 kt - 2kt / 1000 ft Zp

**9. Rotor Speed Limits** Power on 515 – 540 rpm  
Power off 450 – 610 rpm

**10. Maximum Operating Altitude and Temperature**

**10.1 Altitude** 13 000 ft Zp

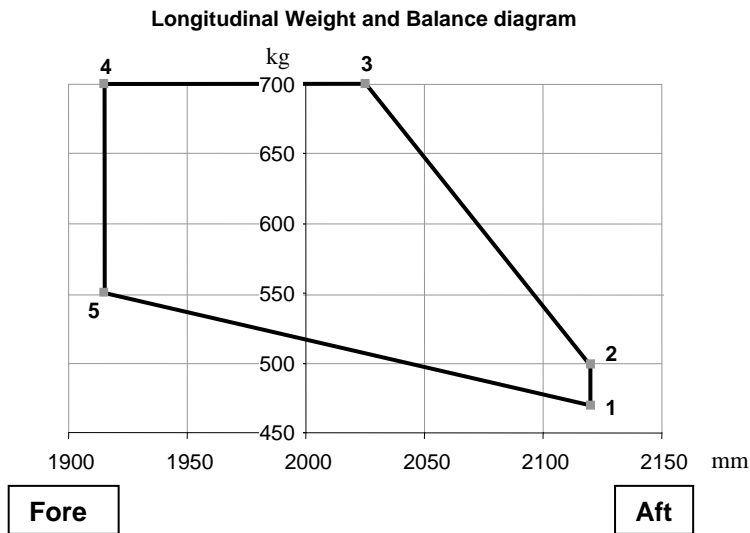
**10.2 Temperature** - 20°C to ISA + 30°C limited to + 45°C  
(Minimum for storage: - 30°C)

**11. Operating Limitations** Day and Night VFR (see Note 2)  
Flight under known icing condition and aerobatic maneuvers prohibited  
For additional information, refer to flight manual

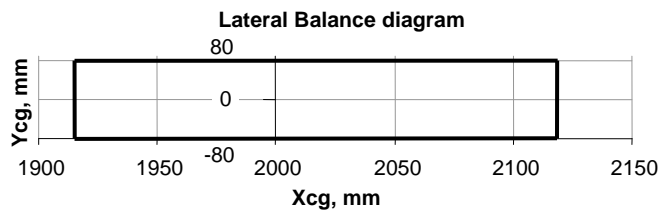
12. **Maximum Certified Weights**

Take-off and landing 700 kg (1543 lb)

13. **Centre of Gravity Range:**



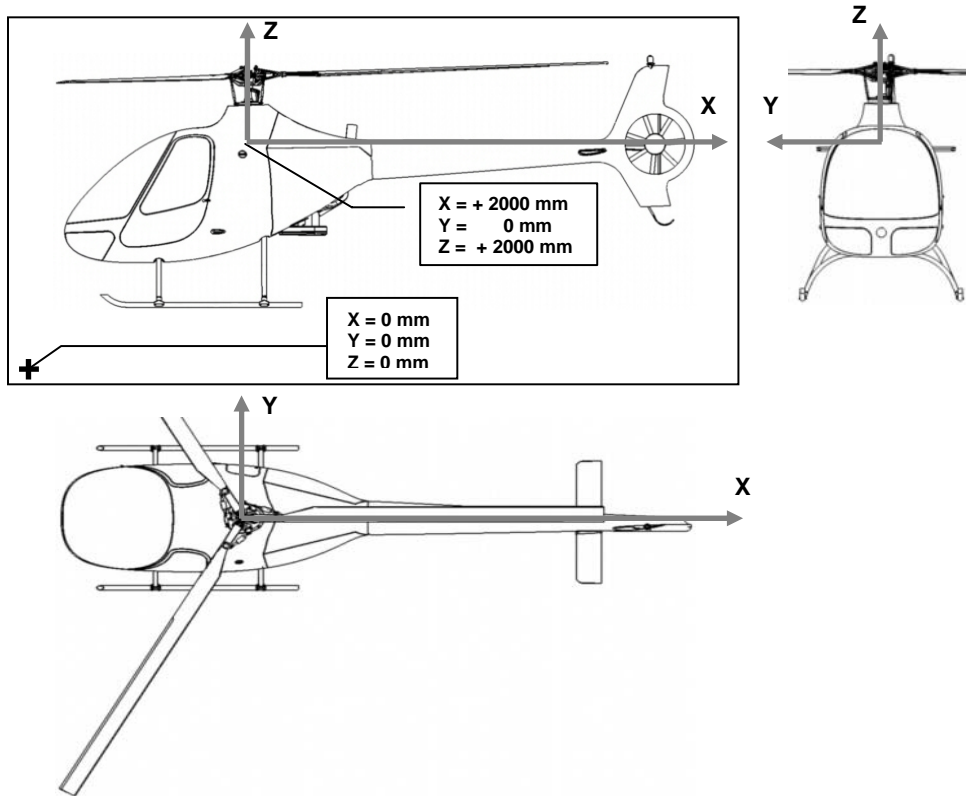
|         |               |                |
|---------|---------------|----------------|
| Point 1 | <b>470 kg</b> | <b>2120 mm</b> |
| Point 2 | <b>500 kg</b> | <b>2120 mm</b> |
| Point 3 | <b>700 kg</b> | <b>2025 mm</b> |
| Point 4 | <b>700 kg</b> | <b>1915 mm</b> |
| Point 5 | <b>550 kg</b> | <b>1915 mm</b> |



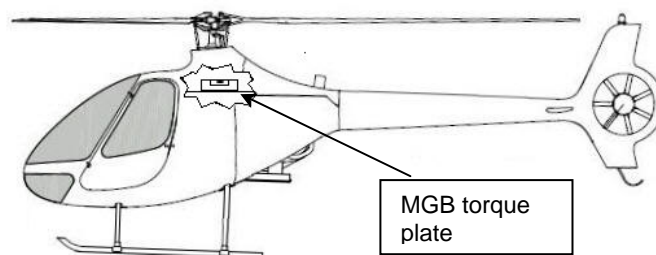
14. Datum:

Datum is defined such that main gearbox center coordinates are :

$$\begin{aligned} X &= +2000 \text{ mm} \\ Y &= 0 \text{ mm} \\ Z &= +2000 \text{ mm} \end{aligned}$$



15. Leveling Means:



16. **Minimum Flight Crew** One pilot on the right seat
17. **Maximum Passenger Seating Capacity** One passenger or copilot on the left seat
18. **Passenger Emergency Exit (location)** One, on the left.
19. **Maximum Baggage/Cargo Loads**
- | Location             | Max Load/Loading |
|----------------------|------------------|
| Baggage compartments | 40 kg ; 2.kg/cm2 |
| Cabin compartment    | 5kg              |
20. **Rotor blade and control movement** For rigging information, refer to Cabri G2 Maintenance manual
21. **Auxiliary Power Unit (APU):** No
22. **Life-limited parts:** No
23. **Wheels and Tyres:** For ground handling only

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

1. **Rotorcraft Flight Manual, Document No** J40-001
2. **Maintenance Manual, Document No:** J70-002
3. **Service Letters and Service Bulletins:** As published by Hélicoptères Guimbal and approved by EASA.
4. **Airworthiness Limitations, Document No** J40-002
5. **Required Equipment:** EPM, BARC, RRM (engine governor)

#### **V. Notes**

1. **Equipment:** EPM, BARC and RRM (engine governor) equipment substantiation is limited to Cabri G2
2. **Night VFR operation:** This kind of operation requires installation of:
- 1) Hélicoptères Guimbal modifications n° MOD-045-08 (Wide instrument panel option), MOD-054-08 (EPM modification), MOD-063-08 (Interior light – instrument and cabin - night VFR compatible), MOD-066-08 (Electrical harness modification including interior light harness) and EPM acquisition software version 1.2 or later approved version.
  - 2) Avionics instruments requested by operational rules. Hélicoptères Guimbal basic night VFR avionics configuration consists in MOD-065-08 (Gyroscopes – night VFR compatible) and MOD-013-08 (GNS 430 W and CDI indicator). Installation of alternative or additional instruments requires an airworthiness approval by EASA.



## **SECTION 2 : ADMINISTRATIVE**

### ***I. Acronyms and Abbreviations***

|      |  |
|------|--|
| BARC | Boitier d'Alarmes Rotor et Carburant (Rotor and fuel warning device) |
| EPM  | Electronic Pilot Monitor   |
| RRM  | Régulateur de Régime Moteur (Engine governor)                        |

### ***II. Type Certificate Holder Record***

Since 14 December 2007 : Hélicoptères Guimbal  
1070, rue du Lieutenant Parayre  
Aérodrome d'Aix en Provence  
13 290 Les Milles  
France

### ***III. Change Record***

| <b>Issue</b> | <b>Date</b>      | <b>Changes</b>   | <b>TC issue</b>                                |
|--------------|------------------|--|--|
| Issue 01     | 14 December 2007 | Initial Issue  | Initial Issue, December, 14 <sup>th</sup> 2007 |
| Issue 02     | 25 May 2009      | Addition of Night VFR  |  |
| Issue 03     | 18 May 2011      | New TCDS format, change in minimum operating temperature and minor corrections |  |

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