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**Section I. AS 350 B2****I.1 General Information**

- I.1.1 Airworthiness Category: Normal Category Rotorcraft
- I.1.2 Type Certificate Holder: AIRBUS HELICOPTERS (EUROCOPTER)  
Aéroport International Marseille Provence  
13725 Marignane, Cedex  
France
- I.1.3 Manufacturer: AIRBUS HELICOPTERS (EUROCOPTER)  
Aéroport International Marseille Provence  
13725 Marignane, Cedex  
France  
For helicopters manufactured under license - see sub-paragraph I.5.1.- Eligible serial numbers
- I.1.4 Rotorcraft Description: Small single-engine helicopter designed as a derivative product of the former type certified model AS 350 B1.

**I.2. Certification Basis:**

- I.2.1. SAAU Certification Basis: See SAAU CRI G-0
- SAAU Airworthiness requirements: "Airworthiness requirements for normal category rotorcraft. Part 27" (AR-27).
- Environmental Protection Requirements: Annex 16 to the Convention on International Civil Aviation "Environmental Protection":  
- Volume I "Aircraft Noise", Part II, Issue 3.  
- Volume II "Aircraft Engine Emissions", Part II and III.
- I.2.2. Special Conditions :  
Complementary and special conditions defined in letters 6518 dated August 17,1976, 6437 dated July 28, 1977 and 53639 dated June 25, 1985 (see letter 53151/SFACT/TC dated February 9, 1989)  
For a/c equipped with VEMD major modification, as above plus:  
- special conditions on protection against the effects of High Intensity Radiated Fields (HIRF) and Lightning  
- equivalent safety findings for powerplant instrument marking  
See AS350B2 (VEMD) CRI n. A-1 issue 3 dated 17/11/06 for details
- I.2.3. Exemptions: No

**I.3. Technical Characteristics and Operational Limitations:**

- I.3.1. Type Design Definition: The rotorcraft Type Design is defined by Eurocopter document 350A.04.4541
- I.3.2. Required equipment: The approved items of equipment are listed in AIRBUS HELICOPTERS document No.350A04.4320.

## I.3.3. Dimensions (m):

Fuselage:

Length:	10.93
Width:	1.87
Height:	3.14

Main Rotor Diameter: 3 blades - 10.69

Tail Rotor Diameter: 2 blades – 1.86

## I.3.4. Engines:

I.3.4.1. Type and quantity: Turbomeca Arriel 1 D1  
SAAU TC № TD 0039.

## I.3.4.2. Installed Engine Limits

Power rating	Time limit	Limit torque on shaft (m.daN)	Minimum guaranteed power* (kW)	Generator speed** without VEMD (%)	Generator speed** with VEMD (%)	T45 temperature (°C)
Maximum transient	5 seconds	-	-	107.5 (+6)	103.1 (+1)	-
Maximum at takeoff	5 minutes	83	478***	Without P2 air bleed (0) With P2 air bleed (-0.6)	Automatic P2 derating by VEMD	845
Max. Continuous	Unlimited	83	449	98% (-3.5)	98% (-4)	795

\* ISA, ground level

\*\* 100% Ng= 51 800 rpm

\*\*\* The mechanical power has been limited to this value taking the fuel flow limit into account.

*Note: Refer to approved RFMs for detailed information.*

## I.3.5. Transmission Torque Limits:

Max continuous torque :	94 %
Take-off torque range from 0 to 40kt :	94 to 100%
Max take-off torque :	100%
Max transient torque (5s):	107%

(100% torque corresponds to 478kW (641 shp) at 386 rpm main rotor speed)

- I.3.6. Fluids (Fuel/Oil/Additives/Hydraulics):
- I.3.6.1. Oils type, conditions and limitations: see Flight Manual
- I.3.6.2. Hydraulics: see Flight Manual
- I.3.6.3. Fuel capacities (liters):
- |         |        |
|---------|--------|
| Total:  | 540    |
| Usable: | 538.75 |
- I.3.7. Air Speeds Limits:
- |                |  |
|----------------|--|
| Power on VNE:  | -Absolute VNE: 287 km/h (155 kt) for HP = 0<br>-In altitude, speed decreases by 18 km/h per 1000 m (3 kt per 1000 ft)<br>-In cold weather, when OAT is below - 30°, subtract 19 km/h (10 kt) from the above VNE  |
| Power off VNE: | -Absolute VNE: 231 km/h (125 kt) for HP = 0.<br>-In altitude, speed decreases by 18 km/h per 1000 m (3 kt per 1000 ft).<br>-In cold weather, subtract the following values from the above VNE:<br>●19 km/h (10 kt), when OAT is between - 20° and - 30° 0<br>●37 km/h (20 kt), when OAT is below - 30°, without VNE being less than 120 km/h (65 kt) |
- I.3.8. Operating pressure altitude:
- I.3.8.1. Maximum:
- |                       |                    |
|-----------------------|--------------------|
| Flight:               | 6096 m (20 000 ft) |
| Take-off and landing: | see Flight Manual  |
- I.3.9. Ambient air temperature at see level: see Flight Manual
- I.3.10. Operating Limitations:
- Day VFR flight
  - Night VFR flight, when additional equipment required by operational regulations is installed and serviceable
  - Flight in falling snow: refer to Flight Manual (For more information refer to Flight Manual)
- I.3.11. Weights, Center of Gravity and Loading:
- I.3.11.1. Maximum Certified Weights: 2250 kg (4960 lb)
- I.3.11.2. Datum:
- |               |  |
|---------------|--|
| longitudinal: | 3.4 m (134 in) forward of the MRH centreline |
| lateral:      | aircraft symmetry plane                      |

- I.3.11.3. Center of Gravity Data: in accordance with the Flight Manual
- I.3.11.4. Baggage compartment:
- |                                      |        |
|--------------------------------------|--------|
| Maximum load in R.H. side hold :     | 100 kg |
| Maximum load in L.H. side hold :     | 120 kg |
| Maximum load in rear hold:           | 80 kg  |
| Maximum load in rear cabin floor:    | 310 kg |
| Maximum load in forward cabin floor: | 150 kg |
- I.3.12. Minimum Flight Crew: 1 pilot on the R.H.seat
- I.3.13. Maximum Occupants: 5  
(When the aircraft is fitted with the forward two-place seat optional equipment, the maximum number of passengers is increased to six (pilot not included). This optional is to be used in accordance with the corresponding Flight Manual supplement)
- I.3.14. Emergency Exits: see Flight Manual
- I.3.15. Placards and marking: All placards and markings listed in approved Flight Manual
- I.3.16. Other Limitations: see approved Flight Manual

#### **I.4. Operating and Service Instructions:**

- I.4.1. For flight operation:
- AS 350 B2 Flight Manual, approved by DGAG-F on April 26, 1989 or later approved revision (RFM);
- For VEMD major modification:
- AS 350 B2 (VEMD) Flight Manual, approved under ref. EASA.R.C 01396 on 22 November 2006 or later approved revision (reference in English language)
  - AS 350 B2 (VEMD) Flight Manual, approved under ref 10029919 on 03 May 2010 or later approved revision (reference in French language)
  - EASA approved Flight Manual Appendix for Ukraine
- I.4.2. Instructions for Maintenance and Continued Airworthiness:
- AS 350 B2 Service Manual
  - AS 350 Overhaul Manual
  - AS 350 Repair Manual
  - AS 350 B2 Illustrated Parts Catalogue
- Compatibility between optional items of equipment is described:
- From an installation aspect: in the "Master Servicing Recommendations"
  - From an operational aspect: in "Supplements" chapter of the Flight Manual

**I.5. Notes****I.5.1. Eligible serial numbers:**

- AS 350 B2 aircraft S/N 2100 and up
- AS 350 B1 aircraft converted into AS 350 B2 by application of Service Bulletin n° 01.26 or 01.00.26
- AS 350 B aircraft converted into AS 350 B2 by application of Service Bulletin n° 01.00.51
- AS 350 BA aircraft converted into AS 350 B2 by application of Service Bulletin n° 01.00.50 or Service Bulletin n° 01.90.61
- AS 350 B2 with VEMD major modification: aircraft S/N 4129 and up

The aircrafts whose s/n is listed in AIRBUS HELICOPTERS document 1102-001 are manufactured under Helibras license and those in L 102-002 under AE-MS license.

**I.5.2. In rotorcrafts, which are included in the State Register of Civil Aircraft of Ukraine, should be equipped as following:**

- Placards and decals in Russian or Ukrainian languages on customer request;
- With the following modification:
  - VEMD data download kit will be added to the list of mandatory items of the Data Sheet for AS350 B2 equipped with VEMD.
  - Emergency Locator Transmitter (ELT) must have at least the 2 following frequencies: 121.5 and 406 MHz (for example, Kannad 406 AF-H).
- Flight Manual Appendix for Ukraine included
  - the Ukrainian fuel TS-1 (produced in accordance with GSTU 320.00149943.011-99 standard) and RT (produced in accordance with GSTU 320.00149943.007-97 standard) should be added to list of approved fuel
  - Placard with Ukrainian fuel TS-1 and RT will be fitted under fuel filter neck.

**I.5.3. Each of the documents listed below and their revisions and supplements to them which contain a statement that it is approved by the EASA and which are issued by AIRBUS HELICOPTERS in accordance with design organization authorities are accepted by the SAAU and are considered as SAAU approved:**

- Flight Manual;
- Maintenance Servicing Manual;
- ASB/EASB (Alert/Emergency Alert Service Bulletin);
- Service Bulletin;
- Work Cards;
- IPC (Illustrated Part Catalog);
- SIN/IN/LS/SI;
- Information notice.

**I.5.4. Noise Certification Basis**

ICAO Annex 16, Volume I, 1 Edition, Amendment 3, Chapter 8(8.4.1)

EASA Record No.	Maximum Mass (kg)		Take-off EPNL		Overflight EPNL	
	Take-off	Landing	Level	Limit	Level	Limit
D71	2,250	2,250	89.8	93.5	87.6	92.5

**Section II. AS350 B3****II.1      General**

Type/Model:

- Type                                   AS 350
- Model                                  AS 350 B3
- Variant                                n/a

II.1.1    Airworthiness Category:       Small Rotorcraft

II.1.2.   Manufacturer:                 Airbus Helicopters

Aéroport International Marseille Provence

13725 Marignane CEDEX, France

For helicopters manufactured under license see sub-paragraph II.5.1 – Eligible serial numbers

II.1.3.   Primary Certification:

- State of Design Authority           EASA
- Type Certificate Date by DGAC FR   24 December 1997
- Type Certificate                       EASA: EASA R.008
- Type Certificate Data Sheet         EASA: EASA.R.008
- EASA Type Certification Date        28 September 2003

**II.2.      Certification Basis:**

II.2.1.   Reference Date for determining the applicable requirements       19 June 1974

II.2.2.   Certification Basis of primary certification                   The Airworthiness Requirements, Environmental Protection Requirements, Exemptions, Equivalent Safety Findings, Special Conditions, Requirements elected to comply are in accordance with EASA TCDS № EASA.R.008

II.2.3.   SAAU Certification Basis:           Refer to SAAU CRI G-0 (see sub-paragraph II.5.6)

Airworthiness Requirements       Airworthiness Standards for normal category rotorcraft AR-27

Environmental Protection Requirements:

Noise Requirements                  ICAO Annex 16, Volume I, Part II

Emission Requirements               ICAO Annex 16, Volume II, Part II



### II.3. Technical Characteristics and Operational Limitations :

- II.3.1. Type Design Definition Document 350A.04.4805;  
Document 350A045426 for a/c incorporating mod. OP-3369 (2370 kg weight extension);  
Document 350A047343 for a/c incorporating mod. OP-4305 (Arriel 2D engine installation)  
AS350 B3 Type Design Definition For Ukraine 350ABN0324 (see sub-paragraph II.5.7)
- II.3.2. Description:
- Main rotor: three (3) blades  
Tail rotor: two (2) blades  
Fuselage: metal-sheet monocoque  
Landing gear: skid-type  
Powerplant: one turbo-shaft engine  
Designed as a derivative model AS 350 B2
- II.3.3. Equipment: The approved items of equipment are listed in Airbus Helicopters document No. 350A044320
- II.3.4. Dimensions (m):
- Fuselage: Length: 10.93 m  
Width hull: 1.87 m  
Height: 3.14 m  
Main Rotor: Diameter: 10.69 m, 3 blades  
Tail Rotor: Diameter: 1.86 m, 2 blades
- II.3.5. **Engine:**
- II.3.5.1. Model: Safran Helicopter Engines (former: Turbomeca)  
1 x Model Arriel 2B, or,  
1 x Model Arriel 2B1, or,  
1 x Model Arriel 2D
- II.3.5.2. SAAU Type Certificate: SAAU Type Certificate № TD0043

#### II.3.6. Limitations:

##### II.3.6.1 Installed Engine Limitations and Transmission Torque Limits

On AS 350 B3 Arriel 2B (before modifications AMS 072803 and 072808):

	Limit TQ on shaft [Nm]	Gas generator NG** ( $\Delta Ng$ ) [%]	Min.guaranteed PWR* [kW]	Temperature T4 [°C]
Max. transient (5 sec)	---	102.3 (+1)	---	---
Max. TOP (5 min)	853	101.1 (0)	535	915
MCP	716	94.8(-4) Vi > 70 kt 97.1(-4) Vi < 70 kt	450	849

On AS 350 B3 Arriel 2B (after modification AMS 072803 and 072808), and on AS 350 B3 Arriel 2B1:

	Limit TQ on shaft [Nm]	Gas generator NG**(Δ Ng) (%)	Min.guaranteed PWR* [kW]	Temperature T4 [°C]
Max. transient (5 sec)	---	102.3 (+1)	---	---
Max. TOP (5 min)	853	101.1 (0)	535	915
MCP	791	97.1 (-4)	497	849

Notes: - \* ISA, ground level at 386 rpm MR speed

-\*\* 100% = 52 110 rpm, - with neither electrical nor P2 bleed, ISA ground level

On AS 350 B3 Arriel 2D\*\*\*\*:

	Limit TQ on shaft [Nm]	Gas generator NG**(Δ Ng) (%)	Min.guaranteed PWR* [kW]	Temperature T4 [°C]
Max. transient (20 sec)	---	101.9 (+1)	---	---
Max. TOP (5 min)	853	100.9 (0)	535	949
Max. TOP/HIP (30 min)*****				
MCP	791	98.0 (-4)	497	905

Notes: - \*ISA, ground level at 386 rpm MR speed

-\*\*100% = 52 110 rpm

-\*\*\* As the actual Ng limitations depend on ambient conditions, the operating limitations are the ΔNg values. Ng values correspond to the maximum Ng reached in the whole flight domain.

-\*\*\*\* The engine is not physically derated but its performance is limited when installed in the AS 350 B3. Specific limitations have been implemented in the VEMD, allowing the pilot to control the installed Arriel 2D at the same power limitations as when an Arriel 2B1 is installed, for each aircraft rating (MCP, MTOP and MTP).

-\*\*\*\*\*Use of HIP (Hover Increased Power, TOP 30 min) is only allowed when enhanced thermal protection is fitted on the AS 350 B3 tail boom (modification OP-4309).

### II.3.6.2. Transmission Torque Limits:

On AS 350 B3 Arriel 2B (before modifications AMS 072803 and 072808):

For  $V < 40$  kt (74 km/h):

- Max. transient TQ (10 sec): 104%
- Max. continuous TQ: 100%

For  $V \geq 40$  kt (74 km/h)

- Max. continuous TQ: 84%

On AS 350 B3 Arriel 2B (after modifications AMS 072803 and 072808):

For  $V < 40$  kt (74 km/h):

- Max. transient TQ (10 sec): 104%
- Max. continuous TQ: 100%

For  $V \geq 40$  kt (74 km/h):

- Max. continuous TQ: 92.7%

On AS 350 B3 Arriel 2B1:

- Max. continuous TQ: 92.7%

-TKOF TQ range from 0 to 40 kt: 92.7% to 100%

- Max.TKOF TQ: 100%

-Max. transient TQ (5 sec): 104%

On AS 350 B3 Arriel 2D:

- Max. continuous TQ: 92.7%

-TKOF TQ range from 0 to 40 kt: 92.7% to 100%

-Max. TKOF TQ: 100%

-Max.transient TQ (5 sec.): 104%

Note: 100% TQ corresponds to: 535 kW at 386 rpm MR speed

### II.3.7. Fluids (Fuel/Oil/Additives):

II.3.7.1 Fuel: Refer to approved RFM

II.3.7.2 Oil: Refer to approved RFM

II.3.7.3 Additives: Refer to approved RFM

### II.3.8. Fluid capacities:

#### II.3.8.1 Fuel

Fuel tank  
capacity: 540 litres

Usable fuel: 538.7 litres post AMS 070289  
538 litres post AMS OP4605  
or 07.20034

Unusable  
fuel: 1.3 litre post AMS 070289  
2 litres post AMS OP 4605,  
or 07.20034

#### II.3.8.2. Oil:

Engine: 5.2 litres

MGB: 6.5 litres (circuit included)

TGB: 0.33 litre

#### II.3.8.3. Coolant System Capacity:

n/a

### II.3.9. Airspeed Limitations:

#### II.3.10. For AS 350 B3 Arriel 2B

$V_{NE}$  power-on:

(before modifications AMS 072803  
and 072808),

- 155 KIAS (287 km/h) for PA = 0

- at altitude, speed decreases by 3 kt/1000 ft (18  
km/h/1000m)

and for AS 350 B3 Arriel 2B1:

- in cold weather, for  $-30^{\circ}\text{C} > \text{OAT}$ , subtract 10 kt (19 km/h) from the above  $V_{\text{NE}}$

$V_{\text{NE}}$  power-off:

-125 KIAS (231 km/h) for PA=0

-at altitude, speed decreases by 3 kt/1000 ft

(18 km/h/1000m), without  $V_{\text{NE}}$  being less than 65 KIAS (120 km/h)

- in cold weather, subtract 20 kt (37 km/h) from the above  $V_{\text{NE}}$  for  $\text{OAT} < -20^{\circ}\text{C}$ , without  $V_{\text{NE}}$  being less than 65 KIAS (120 km/h)

For AS 350 B3 Arriel 2B

(after modifications AMS 072803 and 072808):

$V_{\text{NE}}$  power-on:

- 155 KIAS (287 km/h) for PA = 0

- at altitude, speed decreases by 3 kt/1000 ft (18 km/h/1000m)

- in cold weather, for  $-30^{\circ}\text{C} > \text{OAT}$ , subtract 10 kt (19 km/h) from the above  $V_{\text{NE}}$

- In the cross-hatched area in the C of G graph,  $V_{\text{NE}}$  is limited to 133 KIAS (246 km/h) or the  $V_{\text{NE}}$  defined above (the lowest value)

$V_{\text{NE}}$  power-off:

-125 KIAS (231 km/h) for PA=0

-at altitude, speed decreases by 3 kt/1000 ft

(18 km/h/1000m), without  $V_{\text{NE}}$  being less than 65 KIAS (120 km/h)

- in cold weather, subtract 20 kt (37 km/h) from the above  $V_{\text{NE}}$  for  $\text{OAT} < -20^{\circ}\text{C}$ , without  $V_{\text{NE}}$  being less than 65 KIAS (120 km/h)

For AS 350 B3 Arriel 2D:

- 155 KIAS (287 km/h) for PA = 0

- at altitude, speed decreases by 3 kt/1000 ft (18 km/h/1000m)

- in cold weather, for  $-30^{\circ}\text{C} > \text{OAT}$ , subtract 10 kt (19 km/h) from the above  $V_{\text{NE}}$

- In the cross-hatched area in the C of G graph,  $V_{\text{NE}}$  is limited to 133 KIAS (246 km/h) or the  $V_{\text{NE}}$  defined above (the lowest value)

$V_{\text{NE}}$  power-off:

-125 KIAS (231 km/h) for PA=0

-at altitude, speed decreases by 3 kt/1000 ft

(18 km/h/1000m), without  $V_{NE}$  being less than 65 KIAS (120 km/h)

- in cold weather, subtract 20 kt (37 km/h) from the above  $V_{NE}$  for OAT < -20°C, without  $V_{NE}$  being less than 65 KIAS (120 km/h)

### II.3.11. Rotor Speed Limitations

#### II.3.11.1 For AS 350 B3 Arriel 2B:

Power on:

Maximum 394 rpm

Minimum 385 rpm

#### II.3.11.2 For AS 350 B3 Arriel 2B1:

Power on:

Maximum 405 rpm

Minimum 375 rpm

#### II.3.11.3 For AS 350 B3 Arriel 2D:

Power on:

Maximum 405 rpm

Minimum 375 rpm

#### II.3.11.4 For all AS 350 B3:

Power off:

Maximum 430 rpm  
(audio warning above 410 rpm)

Minimum 320 rpm (audio warning below 360 rpm)

### II.3.12. Maximum Operating Altitude and Temperature:

#### II.3.12.1. Altitude

Take-off/Landing: Refer to approved RFM

En route: 7010 m (23000 ft PA),  
see section II.5.3.

#### II.3.12.2. Temperature

Refer to approved RFM

#### II.3.13. Operating limitations

VFR day

VFR night, when the additional equipment required by operational regulations is installed and serviceable. (For more information refer to RFM)

#### II.3.14. Maximum mass

2 250 kg

2 370 kg, for aircraft incorporating modification OP-3369

#### II.3.15. Centre of Gravity Range:

Longitudinal C.G. limits:

Maximum forward limit:

4 375 mm aft of DP at 1700 kg

4 337 mm aft of DP at 2000 kg

4400 mm aft of DP at 3350 kg

Maximum rearward limit:

4 670 mm aft of DP at 1 700 kg

4 520 mm aft of DP at 3 350 kg

Lateral C.G. Limits

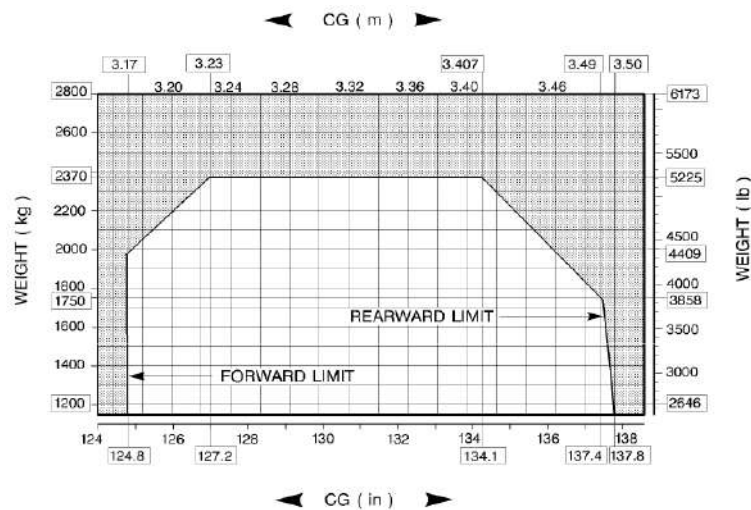
Maximum deviation on right/left:

up to 2850 kg 100 mm

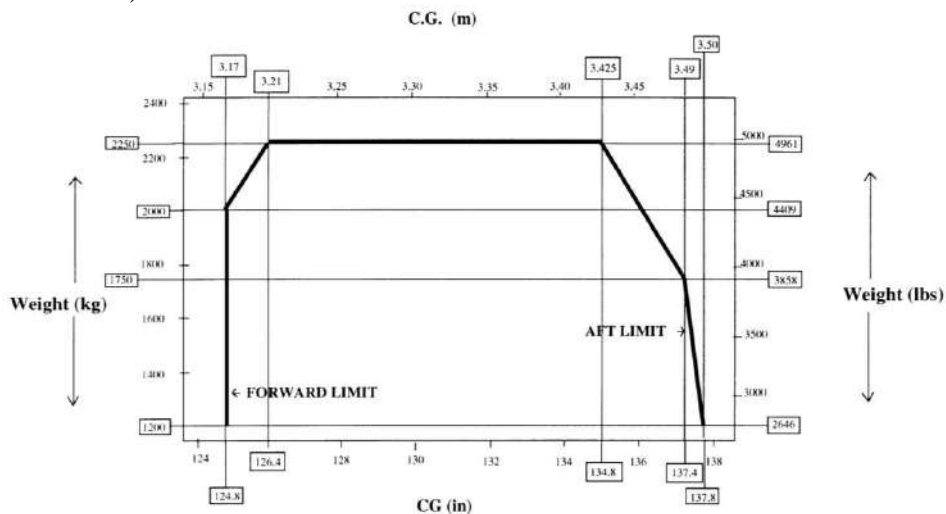
above 2850 kg 80 mm

II.3.15. Centre of Gravity Range:

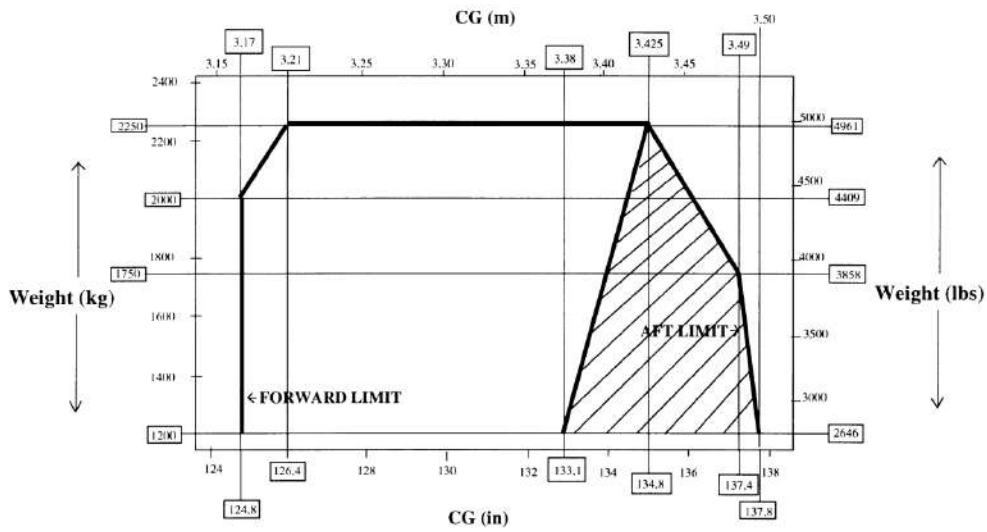
II.3.15.1 Longitudinal C.G. limits for AS 350B3 Arriel 2B1 for aircraft incorporating modification OP-3369:



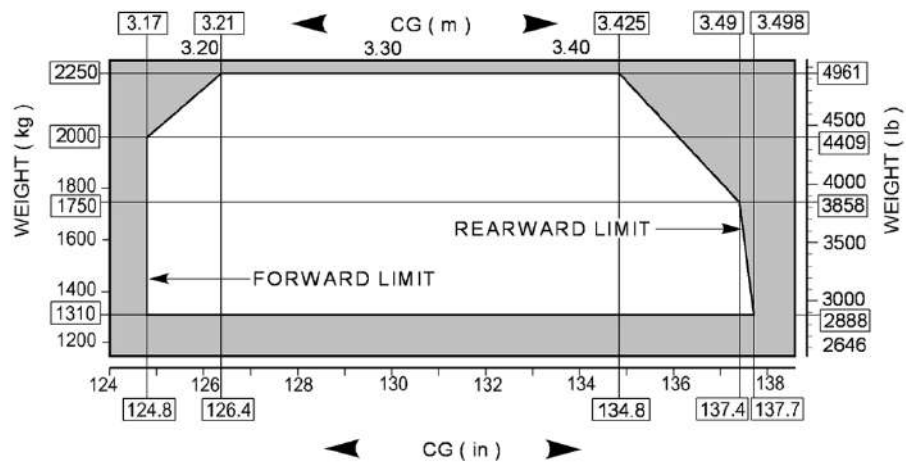
II.3.15.2 Longitudinal C.G. limits for AS 350 B3 Arriel 2B (before modifications AMS 072803 and 072808)



II.3.15.3 Longitudinal C.G. limits for AS 350 B3 Arriel 2B (after modifications AMS 072803 and 072808)



II.3.15.4. Longitudinal C.G. limits for AS 350B3 Arriel 2D a/c incorporating modification OP-3369:



II.3.16. Lateral C.G. Limits:

L.H. limit: 180 mm up to 2250 kg, and  
80 mm from 2250 kg up to 2370 kg for aircraft incorporating modification OP3369

R.H. limit: 140 mm up to 2250 kg and  
80 mm from 2250 kg up to 2370 kg for aircraft incorporating modification OP3369

II.3.17. Datum

Longitudinal:

The datum plane (STA 0) is located at 3400 mm forward of MRH centre line

Lateral: aircraft symmetry plane

II.3.18. Levelling Means

Transmission deck

II.3.19.	Minimum Flight Crew	1 pilot (right seat)
II.3.20.	Maximum Passenger Seating Capacity	5 When the aircraft is fitted with the forward two-place seat optional equipment, the maximum number of passengers is increased to six (pilot not included). This option is to be used in accordance with the corresponding RFMS
II.3.21.	Passenger Emergency Exit	2 (two), on each side of the passenger cabin
II.3.22.	Maximum Baggage/Cargo Loads	Max. load in: R.H. side hold: 100 kg L.H. side hold: 120 kg Rear hold: 80 kg Forward cabin floor: 150 kg Rear cabin floor: 310 kg
II.3.23.	Rotor blade control movements	For rigging information refer to Maintenance Manual
II.3.24.	Auxiliary Power Unit (APU)	n/a
II.3.25.	Life-limited Parts	The AS 350 Master Servicing Manual Chapter 4 “Airworthiness Limitations”, originally approved by DGAC FR and subsequently by EASA (or GDAC-F), contains limitations which are mandatory
II.3.26.	Placards and marking	All placards and markings listed in approved RFM
II.3.27.	Other Limitations	Refer to approved RFM
<b>II.4.</b>	<b><u>Operating and Service Instructions</u></b>	
II.4.1.	Flight Manual	- AS 350 B3 Arriel 2B Flight Manual, approved by DGAC FR on 24 December 1997 plus rapid revision RR 1A (after modifications AMS 072803 and 072808), or later (DGAC FR and subsequently EASA) approved revisions; - AS 350 B3 Arriel 2B1 Flight Manual, approved by DGAC FR on 16 July 2004, or later (DGAC FR and subsequently EASA) approved revisions (reference: in English language) - AS 350 B3e Flight Manual, in English (for a/c incorporating mod.OP-4305 – Arriel 2D engine installation – and additional modifications to the



- tail rotor control system – see point II.5.2 in section II.5.Notes), EASA-approved 17 June 2011, or later approved revisions
- AS 350 B3e Flight Manual, in French (for a/c incorporating mod.OP-4305 – Arriel 2D engine installation – and additional modifications to the tail rotor control system – see point II.5.2 in section II.5. Notes), EASA – approved 17 June 2011, or later approved revisions
- II.4.2. Flight Manual Appendix for Ukraine AS 350 B3e APP.1.4.
- II.4.3. Maintenance Manual
- AS350 B3 Master Servicing Manual
  - AS350 Maintenance Manual
- Compatibility between optional items of equipment is described:
- from an installation aspect in the:
    - “Master Servicing Recommendations”,
  - from an operational aspect in:
    - “Supplements” chapter of the Flight Manual
- II.4.4. Structural Repair Manual AS 350 Repair Manual
- II.4.5. Weight and Balance Manual Refer to approved RFM
- II.4.6. Illustrated Parts Catalogue AS 350 B3 Illustrated Parts Catalogue
- II.4.7. Service Letters and Service Bulletins: As published by Eurocopter or Airbus Helicopters
- II.4.8. Required Equipment
- Refer to EASA-approved Rotorcraft Flight Manual and related supplements for other approved mandatory and optional equipment and Master Minimum Equipment List
- II.5. Notes**
- II.5.1. Manufacturer’s eligible serial number:
- for AS 350 B3: s/n 2968, s/n 3063, and subsequent
  - for AS 350 B3: s/n 4201, and subsequent for aircraft incorporating modification OP-3369 (2370 kg weight extension)
  - for AS 350 B3: s/n 4767, and subsequent for aircraft incorporating modification OP-4305 (with or without modification OP-3369)
- The aircraft, the s/n of which are listed in Airbus Helicopters document:
- L102-001 are manufactured under Helibras license;
  - L102-002 are manufactured under AE-MS license
- II.5.2. The commercial designation is: Ecureuil
- The commercial designation related to particular modifications (MOD):

- OP-4305 (Arriel 2D engine installation), and additionally,
  - 07-5601 (Tail rotor control mechanism modification),
  - 07-5600 (Tail rotor blade reinforcement),
  - 07-8551 (Tail Gear Box control lever modification)
- is H125 (previously AS 350 B3e)
- II.5.3. For helicopter fitted with:
- Arriel 2B engine and Pre-MOD 072810; or
  - Arriel 2B1 or 2D engine, and Post-Mod 073368 and Pre-MOD AL-4236;
- en route altitude is 6096 m (20000 ft)
- II.5.4. In rotorcraft which are included in the State Register of Civil Aircraft of Ukraine, should be equipped as following:
- Placards and decals in Russian or Ukrainian languages on customer request;
  - With the following modification:
    - VEMD data download kit will be added to the list of mandatory items of the Data Sheet for AS 350 B3.
    - Emergency Locator Transmitter (ELT) must have at least the 2 following frequencies:  
121.5 and 406 MHz (for example Kannad 406 AF-H)
  - Flight Manual Appendix for Ukraine included
    - The Ukrainian fuel TS-1 (produced in accordance with GSTU 320.00149943.011-99 standard) and RT (produced in accordance with GSTU 320.00149943.007-97 standard) should be added to list of approved fuel
    - Placard with Ukrainian fuel TS-1 and RT will be fitted under fuel filler neck.
- II.5.5. Each of the documents listed below and their revisions and supplements to them which contain a statement that it is approved by the EASA and which are issued by AIRBUS HELICOPTERS (EUROCOPTER) in accordance with design organization authorities are accepted by the SAAU and are considered as SAAU approved:
- Flight Manual;
  - Maintenance Servicing Manual;
  - ASB/EASB (Alert/Emergency Alert Service Bulletin);
  - Service Bulletin;
  - Work Cards;
  - IPC (Illustrated Part Catalog);
  - SIN/IN/LS/SI;
  - Information notice.
- II.5.6. SAAU certification basis for EASA minor and major not significant changes are in accordance with EASA TCDS R.008.
- II.5.7. SAAU approved modifications are in accordance with AS 350B3 Type Design Definition for Ukraine 350ABN0324.
- II.5.8. Noise Certification Basis/ Arriel 2B  
ICAO Annex 16, Volume I, 2 Edition / Amendment 4, Chapter 8 (8.4.1)

EASA Record №	Maximum Mass		Take-off EPNL		Overflight EPNL		Approach EPNL	
	Take-off (kg)	Landing (kg)	Level	Limit	Level	Limit	Level	Limit
D72	2,250	2,250	89.7	93.5	87.3	92.5	91.3	94.5

Arriel 2B/ AMS 072803 and 072803 (Extended MCP)

ICAO Annex 16, Volume I, 3 Edition / Amendment 5, Chapter 11 (11.4.1)

EASA Record №	Maximum Mass		Overflight SEL	
	Take-off (kg)	Landing (kg)	Level	Limit
D73	2,250	2,250	84.6	86.5

Arriel 2B1

ICAO Annex 16, Volume I, 3 Edition/Amendment 7, Chapter 11 (11.4.1)

EASA Record №	Maximum Mass		Overflight SEL	
	Take-off (kg)	Landing (kg)	Level	Limit
D64	2,370	2,370	84.1	86.8
D128	2,250	2,250	84.6	86.5

Arriel 2D

ICAO Annex 16, Volume I, 5 Edition / Amendment 9, Chapter 11 (11.4.1)

EASA Record №	Maximum Mass		Overflight SEL	
	Take-off (kg)	Landing (kg)	Level	Limit
D337	2,370	2,370	84.2	86.8
D338	2,250	2,250	84.4	86.5

**Section: Administrative****1. Acronyms and Abbreviations**

ALS	Airworthiness Limitations Section	RFM	Rotorcraft Flight Manual
Amdt.	Amendment	RFMS	Rotorcraft Flight Manual supplement
TGB	Tail Gear Box	s/n	Serial Number
MGB	Main Gear Box	sec	Seconds
C.G.	Center of Gravity	STA	Station
CR	(European) Commission Regulation	TKOF	Take-off
CRI	Certification Review Item	TO	Take-off
DGAC	Direction Generale de l'Aviation	TOP	Take-off Power
FR	Civile - France	TQ	Torque
HIRF	High Intensity Radiated Field	VFR	Visual Flight Rules
IAS	Indicated air speed	V <sub>NE</sub>	Never Exceed Speed
JAA	Joint Aviation Authorities		
JAR	Joint Aviation Requirements		
L.H.	Left-hand		
LDG	Landing		
Max.	Maximum		
MCP	Maximum Continuous Power		
min	Minute		
Min.	Minimum		
MMEL	Master Minimum Equipment List		
MOD	Modification		
MR	Main rotor		
MRH	Main rotor hub		
MSL	Mean Sea Level		
MSM	Maintenance Servicing Manual		
MTOP	Maximum Take-Off Power		
MTP	Maximum Transient Power		
NG	Gas Generator		
PA	Pressure Altitude		
PWR	Power		
R.H.	Raight-Hand		

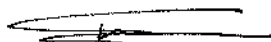
2. Type Certificate Holder RecordType Certificate HolderPeriod

Aerospatiale 37, Boulevard de Montmorency 75781 Paris CEDEX 16, France	from 27 October 1977 until 31 December 1991
Eurocopter France Aéroport International Marseille Provence 13725 Marignane CEDEX, France	From 1 January 1992 Until 31 May 1997
Eurocopter Aéroport International Marseille Provence 13725 Marignane CEDEX, France	From 1 June 1997 Until 6 January 2014
Airbus Helicopters Aéroport International Marseille Provence 13725 Marignane CEDEX, France	Since 7 January 2014

3. Change Record

Issue	Date	Changes	TC issue
Issue 1	15.08.2017	Initial issue of SAAU TCDS TB0027	Initial issue, 15.08.2017
Issue 2	13.12.2019	Adding information in Section II AS350B3	---
Issue 3	27.07.2020	Adding information on pages 8, 9, 10, 11, 18, change of numbering	---

**Deputy Director -  
Head of Aeronautical Products  
Type Certification Department**



**Sergii GREZIN**