TYPE-CERTIFICATE

DATA SHEET

NO. EASA.A.367

for
DR 200, DR300, AND DR400 SERIES

Type Certificate Holder
C.E.A.P.R.

1b route de TROYES
21121, DAROIS
FRANCE

For models:

DR 200	DR 220	DR 220 A	DR 220 B	DR 220 AB
DR 221	DR 221 B	DR 250	DR 250-160	DR 250 B
DR 250 B-160	DR 253	DR 253 B		
DR 340	DR 315	DR 360	DR 380	DR 300/108
DR 300/180 R	DR 300/140	DR 300/125	DR 300/120	
DR 400/125	DR 400/140	DR 400/160	DR 400/180	DR 400/180 R
DR 400/2+2	DR 400/120	DR 400/125i	DR 400/140 B	DR 400/120 A
DR 400/160 D	DR 400/120 D	DR 400/180 S	DR 400/100	DR 400 RP
DR 400 NGL	DR 400/200 R	DR 400/500	DR 400/200 I	

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Section A: DR 200

A.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 200
2.	Airworthiness Category:	Normal Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification Date:	April 06, 1965
7.	EASA Type Certification Date:	Transferred by Commission Regulation (EC) No. 1702/2003
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 34.	

A.II Certification Basis

1.	Reference Date for determining the applicable requirements:	30 October 1964
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	None
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	None.

A.III Technical Characteristics and Operational Limitations

1.	Type Design Definition:	Refer to the CEAPR document 1003343
2.	Description:	Single-engine, four-seat, low-wing airplane, wooden 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. Stall warning system “Safe Flight” n°164 must be installed.

4. Dimensions:

Span .....8.72 m (28.61 ft)
Height .....1.83 m (6.00 ft)
Length.....6.68 m (21.92 ft)
Wing Area .....14.15 m² (152.31 ft²)

5. Engines: POTEZ 4 E 20 B

5.1 Engine Limits: Maximum Continuous Power:. 2750 rpm (105 HP, 77 kW)

6. Propellers:

Manufacturer	Model	∅	Number of blades	Minimum static RPM at sea level
Légère	2102 RA (pitch - 0,5)	1.80 m	2	2400 rpm
Ratier	FH-110R (pitch 62.5°)	1.75 m	2	2400 rpm

7. Fluids:

7.1 Fuel: 100 octane minimum aviation gasoline grade.

7.2 Engine Oil:
below 0°C (30°F): .....SAE 30 (AERO 65)
above 0°C (30°F): .....SAE 40 (AERO 80)

8. Fluid capacities:

8.1 Fuel:
Wing tanks: .....2 x 40 litres

Main fuel tank capacity: .....55 litres
Usable:.. the last 5 litres are only usable during level flight

8.2 Oil: Oil sump capacity ..... 4.5 litres (4.8 U.S. quarts)

9. Air speeds:

V_{NE} .....275 km/h (148.5 knots IAS)
V_{NO} .....240 km/h (130 knots IAS)
V_A .....178 km/h (92 knots IAS)
V_{FE} .....150 km/h (81 knots IAS)
V_C .....240 km/h (130 knots IAS)

10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:
Take-Off: ..... 850 kg (1874 lb)
Landing ..... 850 kg (1874 lb)

13. Centre of Gravity Range:

Forward limit (18.1 % ref.): ..... 0.31 m aft of datum
Aft limit (32.1 % ref.): ..... 0.55 m aft of datum

14. Datum:
Leading edge of the rectangular part of the wing.
Chord length at reference section: 1.71 m.

15. Load factor (n) at maximum weight:

Flaps retracted positive n .....+ 3.8
Flaps retracted negative n .....- 1.52

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.42 ±0.05 m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.42 ±0.05 m and 2 at 1.16m aft of datum.

19. Baggage/cargo compartment Maximum baggage compartment 20 kg at 1.85m aft of datum, within weight and balance limits.

20. Wheels and Tires

Main gear track ..... 2.59 m (8.5ft)
Wheel tire size main gear wheel: .....380 x 150
tail wheel: .....6 x 2
Tire pressure..... Refer to the maintenance manual

21. Control surface movements:

Elevator: up ..... 9.5° ± 0.5°
down ..... 12° ± 0.5°

Ailerons: up ..... 12° ± 0.5°
down ..... 12° ± 0.5°

Rudder L & R: ..... 25° (+0°; -3°)
before differential braking..... right: 18°
left: 15°

Elevator trim tab (manual):
Elevator nose down
Tab down position: .....4° ± 1°
Tab up position: ..... 30° ± 1°
Elevator nose up
Tab down position: ..... - 11° ± 1°
Tab up position: ..... - 16° ± 1°

Wing Flaps: 1st notch .....20° ± 3°
2nd notch .....45° ± 3°

22. (Reserved)

A.IV Operating and Service Instructions

Airplane Flight Manual.....Refer to latest amendment of service letter n°6
Airplane Maintenance Manual.....Refer to latest amendment of service letter n°6
Airplane Major Inspection Schedule.....Refer to latest amendment of service letter n°6

A.V Note:

Section B: DR 220

B.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 220
2.	Airworthiness Category:	**N**ormal Category and **U**tility Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification Date:	June 24, 1966
7.	EASA Type Certification Date:	Transferred by Commission Regulation (EC) No. 1702/2003
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 40.	

B.II Certification Basis

1.	Reference Date for determining the applicable requirements:	15 November 1965
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment May 1st 1965
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	None
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	None

B.III Technical Characteristics and Operational Limitations

1.	Type Design Definition	Refer to the CEAPR document 1003343
2.	Description:	Single-engine, four-seat, low-wing airplane, wooden 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. Stall warning system “Safe Flight” n°164 must be installed.

4. Dimensions:

Span ..... 8.72 m (28.6 ft)
Height ..... 1.90 m (6.2 ft)
Length ..... 6.80 m (22.3 ft)
Wing Area ..... 13.60 m² (146.4 ft²)

5. Engines: Continental (or Rolls Royce) O-200A

The EASA type certification standard includes that of FAA TC E-252, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum Continuous Power: 2750 rpm (100 HP, 74.5 kW)

6. Propellers:

Make	Model	∅	Number of blades	Minimum static RPM at sea level
Légère	2102 RA (pitch – 0.5)	1.80 m	2	2350 rpm
Légère	2102 RA (pitch - 0°)	1.80 m	2	2300 rpm
Mac Cauley	1B90ECM7250	1.83 m	2	2250 rpm
Jodel Evra	D11-28-7C	1.76 m	2	2250 rpm
Ratier	FH-110R (pitch-3)	1.74 m	2	2300 rpm
Ratier	FH110 (cal-3)	1.85 m	2	2300 rpm

7. Fluids:

7.1 Fuel: 80/87 octane, minimum aviation grade gasoline.

7.2 Engine Oil:

Temperature	Aviation grade	SAE grade	Multi-viscosity
below 40°F (5°C)	65	30	10W-30 / 15W-50 / 20W-50
above 40°F (5°C)	80	50	15W-50 / 20W-50 / 20W-60

8. Fluid capacities:

8.1 Fuel: Main fuel tank capacity: ..... 110 litres
Usable:.. the last 5 litres are only usable during level flight

Supplemental fuel tank capacity: ..... 50 litres

8.2 Oil: Oil sump capacity ..... 5.7 litres (6 U.S. quarts)

9. Air speeds:

V_{NE} .....270 km/h (146 knots IAS)
V_{NO} .....210 km/h (113 knots IAS)
V_A .....170 km/h (92 knots IAS)
V_{FE} .....150 km/h (81 knots IAS)
V_C .....210 km/h (113 knots IAS)

10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.
. In Normal Category, all aerobatic manoeuvres, including spins, are forbidden.

12. Maximum Masses:

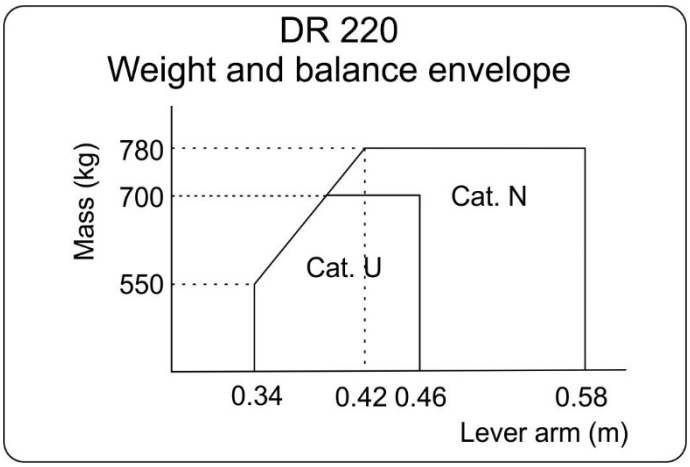
Normal Category Take-Off .....780 kg
Landing .....741 kg

Utility category T/O & Ldg.....700 kg

13. Centre of Gravity Range:

Normal category
Forward limit (19.9 % ref.): . 0.34 m aft of datum at 550 kg
Intermediate limit (24.5 % ref.):0.42 m aft of datum at 780 kg
Aft limit (33.9 % ref.): ..... 0.58 m aft of datum at 780 kg

Utility categories
Forward limit (19.9 % ref.): . 0.34 m aft of datum at 550 kg
Intermediate limit (22.8 % ref.):0.39 m aft of datum at 700 kg
Aft limit (26.9 % ref.): ..... 0.46 m aft of datum at 700 kg



14. Datum:

Leading edge of the rectangular part of the wing.
Chord length at reference section: 1.71 m.

15. Load factor (n) at maximum weight:

Normal Category:
Flaps up.....+ 3.8
Flaps up.....- 1.52
Flaps down .....+ 2

Utility Category:
Flaps up .....+ 4.4
Flaps up.....- 1.76
Flaps down .....+ 2

16. Levelling Means:

Horizontal reference upper fuselage spar

17. Minimum Flight Crew:

1 (pilot) at 1 at 0.43 ±0.05 m aft of datum

18. Maximum Passenger Seating Capacity: .....

1 at 0.43 ±0.05 m and 2 (maximum 90kg) at 1.22m aft of datum

The rear seats can be used only if seat belts are provided and if weight and balance are respected.

Rear seats must not be used in utility category.

19. Wheels and Tires

Main gear track.....2.59 m (ft)
Wheel tire size main gear wheel:.....380 x 150
tail wheel: .....6 x 2
Tire pressure.....Refer to the maintenance manual

20. Control surface movements:

Elevator: up ..... 9°30' (+0°; -0°30')
down ..... 12° (+0°; -0°30')

Ailerons: up ..... 12° (+0°; -0°30')
down ..... 12° (+0°; -0°30')
neutral: trailing edge aligned on flaps

Rudder L & R: .....28° (0°; +2°)
before differential braking.....15° (0°; +2°)

Elevator anti tab:
Elevator up
Tab down position: ..... 28°
Tab up position: ..... 6°30'
Elevator down
Tab down position: ..... 12°30'
Tab up position: ..... 16°30'

Wing Flaps: 1st notch .....20° ± 2°
2nd notch .....60° ± 2°

21. (Reserved)

B.IV Operating and Service Instructions

Airplane Flight Manual.....Refer to latest amendment of service letter n°6
Airplane Maintenance Manual.....Refer to latest amendment of service letter n°6
Airplane Major Inspection Schedule.....Refer to latest amendment of service letter n°6

B.V Note:

(Reserved)

Section C: DR 220 A

C.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 220 A
2.	Airworthiness Category:	Normal and Utility Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification Date:	January 4, 1967
7.	EASA Type Certification Date:	Transferred by Commission Regulation (EC) No. 1702/2003
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 40.	

C.II Certification Basis

1.	Reference Date for determining the applicable requirements:	15 November 1965
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment May 1st 1965
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	None
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	None

C.III Technical Characteristics and Operational Limitations

1.	Type Design Definition	Refer to the CEAPR document 1003343
2.	Description:	Single-engine, four-seat, low-wing airplane, wooden 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. Stall warning system “Safe Flight” n°164 must be installed.

4. Dimensions:

Span ..... 8.72 m (28.6 ft)
Height ..... 1.90 m (6.2 ft)
Length ..... 6.80 m (22.3 ft)
Wing Area ..... 13.60 m² (146.4 ft²)

5. Engines: Continental (or Rolls Royce) O-200A

The EASA type certification standard includes that of FAA TC E-252, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum Continuous Power: 2750 rpm (100 HP, 74.5 kW)

6. Propellers:

Make	Model	∅	Number of blades	Minimum static RPM at sea level
Jodel Evra	D11-28-7C	1.76 m	2	2250 rpm
Légère	2102RA (pitch - 0°)	1.80 m	2	2300 rpm
Mac Cauley	1B90ECM7250	1.83 m	2	2250 rpm
Ratier	FH-110R (pitch - 3)	1.74 m	2	2300 rpm
Ratier	FH110 (cal - 3)	1.85 m	2	2300 rpm

7. Fluids:

7.1 Fuel: 80/87 octane, minimum aviation grade gasoline.

7.2 Engine Oil:

Temperature	Aviation grade	SAE grade	Multi-viscosity
below 40°F (5°C)	65	30	10W-30 / 15W-50 / 20W-50
above 40°F (5°C)	80	50	15W-50 / 20W-50 / 20W-60

8. Fluid capacities:

8.1 Fuel: Main fuel tank capacity: ..... 110 litres
Usable:.. the last 5 litres are only usable during level flight

Supplemental fuel tank capacity: ..... 50 litres

8.2 Oil: Oil sump capacity ..... 5.7 litres (6 U.S. quarts)

9. Air speeds:

V_{NE} ..... 290 km/h (157 knots IAS)
V_{NO} ..... 216 km/h (117 knots IAS)
V_A ..... 190 km/h (103 knots IAS)
V_{FE} ..... 150 km/h (81 knots IAS)
V_C ..... 216 km/h (117 knots IAS)

10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.
. In Normal Category, all aerobatic manoeuvres, including spins, are forbidden.

12. Maximum Masses:

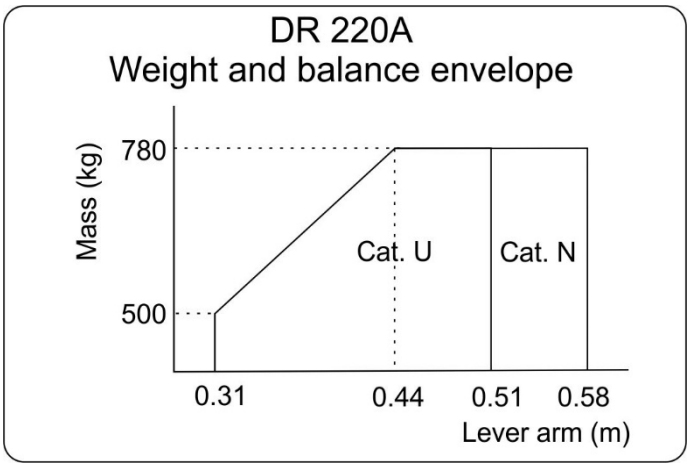
Normal Category Take-Off .....780 kg
Landing .....780 kg

Utility category T/O & Ldg.....780 kg

13. Centre of Gravity Range:

Normal category
Forward limit (18.1 % ref.): . 0.31 m aft of datum at 500 kg
Intermediate limit (25.7 % ref.):0.44 m aft of datum at 780 kg
Aft limit (33.9 % ref.): ..... 0.58 m aft of datum at 780 kg

Utility categories
Forward limit (18.1 % ref.): . 0.31 m aft of datum at 500 kg
Intermediate limit (25.7 % ref.):0.44 m aft of datum at 780 kg
Aft limit (29.8 % ref.): ..... 0.51 m aft of datum at 780 kg



14. Datum:

Leading edge of the rectangular part of the wing.
Chord length at reference section: 1.71 m.

15. Load factor (n) at maximum weight:

Normal Category:
Flaps up.....+ 3.8
Flaps up.....- 1.52
Flaps down .....+ 2

Utility Category:
Flaps up .....+ 4.4
Flaps up.....- 1.76
Flaps down .....+ 2

16. Levelling Means:

Horizontal reference upper fuselage spar

17. Minimum Flight Crew:

1 (pilot) at 0.43 ±0.05 m aft of datum

18. Maximum Passenger Seating Capacity:

1 at 0.43 ±0.05 m and 2 (maximum 110kg) at 1.22m aft of datum

The rear seats can be used only if seat belts are provided and if weight and balance are respected.

Rear seats must not be used in utility category.

19. Wheels and Tires

Main gear track.....2.59 m (ft)
Wheel tire size main gear wheel:.....380 x 150
tail wheel: .....6 x 2
Tire pressure.....Refer to the maintenance manual

20. Control surface movements:

Elevator: up ..... 9°30 (+0°; -0°30')
down ..... 12° (+0°; -0°30')

Ailerons: up ..... 12° (+0°; -0°30')
down ..... 12° (+0°; -0°30')
neutral: trailing edge aligned on flaps

Rudder L & R: .....28° (0°; +2°)
before differential braking.....15° (0°; +2°)

Elevator anti tab:
Elevator up
Tab down position: ..... 28°
Tab up position: ..... 6°30
Elevator down
Tab down position: ..... 12°30
Tab up position: ..... 16°30

Wing Flaps: 1st notch .....20° ± 2°
2nd notch .....60° ± 2°

21. (Reserved)

C.IV Operating and Service Instructions

Airplane Flight Manual.....Refer to latest amendment of service letter n°6
Airplane Maintenance Manual.....Refer to latest amendment of service letter n°6
Airplane Major Inspection Schedule.....Refer to latest amendment of service letter n°6

C.V Note:

1. This model is identical to DR220 except wing structure and landing gear.

Section D: DR 220 B

D.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 220 B
2.	Airworthiness Category:	Normal and Utility Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification Date:	July 20, 1968
7.	EASA Type Certification Date:	Transferred by Commission Regulation (EC) No. 1702/2003
8.	The EASA type Certificates replaces	DGAC-France Type Certificate no. 40.

D.II Certification Basis

1.	Reference Date for determining the applicable requirements:	15 November 1965
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment May 1st 1965
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	None
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	None

D.III Technical Characteristics and Operational Limitations

1.	Type Design Definition	Refer to the CEAPR document 1003343
2.	Description:	Single-engine, four-seat, low-wing airplane, wooden 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. Stall warning system “Safe Flight” n°164 must be installed.

4. Dimensions:

Span .....8.72 m (28.6 ft)
Height .....1.90 m (6.2 ft)
Length.....6.80 m (22.3 ft)
Wing Area .....13.60 m² (146.4 ft²)

5. Engines: Continental (or Rolls Royce) O-200A

The EASA type certification standard includes that of FAA TC E-252, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum Continuous Power: 2750 rpm (100 HP, 74.5 kW)

6. Propellers:

Make	Model	∅	Number of blades	Minimum static RPM at sea level
Légère	2102 RA (pitch - 0,5)	1.80 m	2	2350 rpm
Légère	2102 RA (pitch - 0°)	1.80 m	2	2300 rpm
Mac Cauley	1B90ECM7250	1.83 m	2	2250 rpm
Jodel Evra	D11-28-7C	1.76 m	2	2250 rpm
Ratier	FH-110R (pitch-3)	1.74 m	2	2300 rpm
Ratier	FH110 (cal-3)	1.85 m	2	2300 rpm

7. Fluids:

7.1 Fuel: 80/87 octane, minimum aviation grade gasoline.

7.2 Engine Oil:

Temperature	Aviation grade	SAE grade	Multi-viscosity
below 40°F (5°C)	65	30	10W-30 / 15W-50 / 20W-50
above 40°F (5°C)	80	50	15W-50 / 20W-50 / 20W-60

8. Fluid capacities:

8.1 Fuel: Main fuel tank capacity: .....110 litres
Usable:.. the last 5 litres are only usable during level flight

Supplemental fuel tank capacity:.....50 litres

8.2 Oil: Oil sump capacity ..... 5.7 litres (6 U.S. quarts)

9. Air speeds:

V_{NE} .....270 km/h (146 knots IAS)
V_{NO} .....210 km/h (113 knots IAS)
V_A .....170 km/h (92 knots IAS)
V_{FE} .....150 km/h (81 knots IAS)
V_C .....210 km/h (113 knots IAS)

10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.
. In Normal Category, all aerobatic manoeuvres, including spins, are forbidden.

12. Maximum Masses:

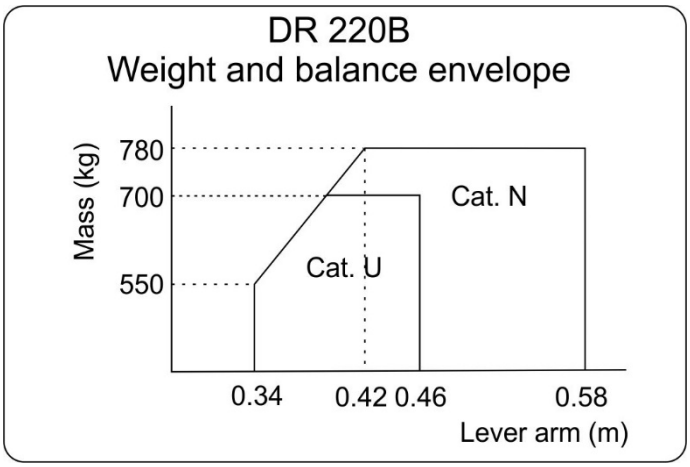
Normal Category Take-Off .....780 kg
Landing .....741 kg

Utility category T/O & Ldg.....700 kg

13. Centre of Gravity Range:

Normal category
Forward limit (19.9 % ref.): . 0.34 m aft of datum at 550 kg
Intermediate limit (25.6 % ref.):0.42 m aft of datum at 780 kg
Aft limit (33.9 % ref.): ..... 0.58 m aft of datum at 780 kg

Utility categories
Forward limit (19.9 % ref.): . 0.34 m aft of datum at 550 kg
Intermediate limit (22.8 % ref.):0.39 m aft of datum at 700 kg
Aft limit (26.9 % ref.): ..... 0.46 m aft of datum at 700 kg



14. Datum:

Leading edge of the rectangular part of the wing.
Chord length at reference section: 1.71 m.

15. Load factor (n) at maximum weight:

Normal Category:
Flaps up.....+ 3.8
Flaps up.....- 1.52
Flaps down .....+ 2

Utility Category:
Flaps up .....+ 4.4
Flaps up.....- 1.76
Flaps down .....+ 2

16. Levelling Means:

Horizontal reference upper fuselage spar

17. Minimum Flight Crew:

1 (pilot) at 0.43 ±0.05 m aft of datum

18. Maximum Passenger Seating Capacity:

1 at 0.43 ±0.05 m and 2 (maximum 90kg) at 1.22m aft of datum

The rear seats can be used only if seat belts are provided and if weight and balance are respected.

Rear seats must not be used in utility category.

19. Wheels and Tires

Main gear track.....2.59 m (ft)
Wheel tire size main gear wheel:.....380 x 150
tail wheel: .....6 x 2
Tire pressure.....Refer to the maintenance manual

20. Control surface movements:

Elevator: up ..... 9°30 (+0°; -0°30')
down ..... 12° (+0°; -0°30')

Ailerons: up ..... 12° (+0°; -0°30')
down ..... 12° (+0°; -0°30')
neutral: trailing edge aligned on flaps

Rudder L & R: .....28° (0°; +2°)
before differential braking.....15° (0°; +2°)

Elevator anti tab:
Elevator up
Tab down position: ..... 28°
Tab up position: ..... 6°30
Elevator down
Tab down position: ..... 12°30
Tab up position: ..... 16°30

Wing Flaps: 1st notch .....20° ± 2°
2nd notch .....60° ± 2°

21. (Reserved)

D.IV Operating and Service Instructions

Airplane Flight Manual.....Refer to latest amendment of service letter n°6
Airplane Maintenance Manual.....Refer to latest amendment of service letter n°6
Airplane Major Inspection Schedule.....Refer to latest amendment of service letter n°6

D.V Note:

1. This model is identical to DR220 except leading edge profile of trapezoidal wing part.

Section E: DR 220 AB

E.I General

1. a) Type:	DR 200, DR 300, and DR 400 series
b) Model:	DR 220 AB
2. Airworthiness Category:	Normal and Utility Category
3. Type Certificate Holder:	Refer to Note 2 Section PP
4. Manufacturer:	Refer to Note 3 Section PP
5. (Reserved)	
6. DGAC Type Certification Date:	July 20, 1968
7. EASA Type Certification Date:	Transferred by Commission Regulation (EC) No. 1702/2003
8. The EASA type Certificates replaces	DGAC-France Type Certificate no. 40.

E.II Certification Basis

1. Reference Date for determining the applicable requirements:	15 November 1965
2. (Reserved)	
3. (Reserved)	
4. Certification Basis:	France AIR2052
5. Airworthiness Requirements:	France AIR2052 amendment May 1st 1965
6. Requirements elected to comply:	None
7. EASA Special Conditions:	None
8. EASA Exemptions:	None
9. EASA Equivalent Safety Findings:	None
10. EASA Environmental Standards:	None

E.III Technical Characteristics and Operational Limitations

1. Type Design Definition	Refer to the CEAPR document 1003343
2. Description:	Single-engine, four-seat, low-wing airplane, wooden 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. Stall warning system “Safe Flight” n°164 must be installed.

4. Dimensions:

Span ..... 8.72 m (28.6 ft)
Height ..... 1.90 m (6.2 ft)
Length ..... 6.80 m (22.3 ft)
Wing Area ..... 13.60 m² (146.4 ft²)

5. Engines: Continental (or Rolls Royce) O-200A

The EASA type certification standard includes that of FAA TC E-252, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum Continuous Power: 2750 rpm – 100 HP (74.5 kW)

6. Propellers:

Make	Model	∅	Number of blades	Minimum static RPM at sea level
Légère	2102 RA (pitch - 0°)	1.80 m	2	2300 rpm
Mac Cauley	1B90ECM7250	1.83 m	2	2250 rpm
Jodel Evra	D11-28-7C	1.76 m	2	2250 rpm
Ratier	FH-110R (pitch-3)	1.74 m	2	2300 rpm
Ratier	FH110 (cal-3)	1.85 m	2	2300 rpm

7. Fluids:

7.1 Fuel: 80/87 octane, minimum aviation grade gasoline.

7.2 Engine Oil:

Temperature	Aviation grade	SAE grade	Multi-viscosity
below 40°F (5°C)	65	30	10W-30 / 15W-50 / 20W-50
above 40°F (5°C)	80	50	15W-50 / 20W-50 / 20W-60

8. Fluid capacities:

8.1 Fuel: Main fuel tank capacity: ..... 110 litres
Usable:.. the last 5 litres are only usable during level flight

Supplemental fuel tank capacity: ..... 50 litres

8.2 Oil: Oil sump capacity ..... 5.7 litres (6 U.S. quarts)

9. Air speeds:

V_{NE} ..... 290 km/h (157 knots IAS)
V_{NO} ..... 216 km/h (117 knots IAS)
V_A ..... 190 km/h (103 knots IAS)
V_{FE} ..... 150 km/h (81 knots IAS)
V_C ..... 216 km/h (117 knots IAS)

10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

In Normal Category, all aerobatic manoeuvres, including spins, are forbidden.

12. Maximum Masses:

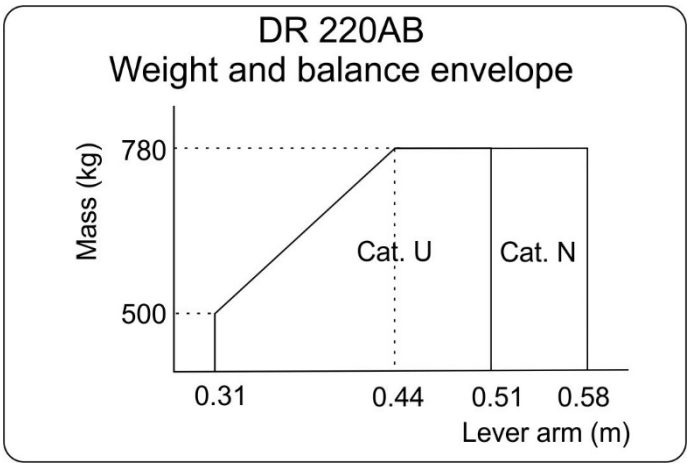
Normal Category Take-Off .....780 kg
Landing .....780 kg

Utility category T/O & Ldg.....780 kg

13. Centre of Gravity Range:

Normal category
Forward limit (18.1 % ref.): . 0.31 m aft of datum at 500 kg
Intermediate limit (25.7 % ref.):0.44 m aft of datum at 780 kg
Aft limit (33.9 % ref.): ..... 0.58 m aft of datum at 780 kg

Utility categories
Forward limit (18.1 % ref.): . 0.31 m aft of datum at 500 kg
Intermediate limit (25.7 % ref.):0.44 m aft of datum at 780 kg
Aft limit (29.8 % ref.): ..... 0.51 m aft of datum at 780 kg



14. Datum:

Leading edge of the rectangular part of the wing.
Chord length at reference section: 1.71 m.

15. Load factor (n) at maximum weight:

Normal Category:
Flaps up.....+ 3.8
Flaps up.....- 1.52
Flaps down .....+ 2

Utility Category:
Flaps up .....+ 4.4
Flaps up.....- 1.76
Flaps down .....+ 2

16. Levelling Means:

Horizontal reference upper fuselage spar

17. Minimum Flight Crew:

1 (pilot) at 0.43 ±0.05 m aft of datum

18. Maximum Passenger Seating Capacity:

1 at 0.43 ±0.05 m and 2 (maximum 110kg) at 1.22m aft of datum

The rear seats can be used only if seat belts are provided and if weight and balance are respected.

Rear seats must not be used in utility category.

19. Wheels and Tires

Main gear track.....2.59 m (ft)
Wheel tire size main gear wheel:.....380 x 150
tail wheel: .....6 x 2
Tire pressure.....Refer to the maintenance manual

20. Control surface movements:

Elevator: up ..... 9°30 (+0°; -0°30')
down ..... 12° (+0°; -0°30')

Ailerons: up ..... 12° (+0°; -0°30')
down ..... 12° (+0°; -0°30')
neutral: trailing edge aligned on flaps

Rudder L & R: .....28° (0°; +2°)
before differential braking.....15° (0°; +2°)

Elevator anti tab:
Elevator up
Tab down position: ..... 28°
Tab up position: ..... 6°30
Elevator down
Tab down position: ..... 12°30
Tab up position: ..... 16°30

Wing Flaps: 1st notch .....20° ± 2°
2nd notch .....60° ± 2°

21. (Reserved)

E.IV Operating and Service Instructions

Airplane Flight Manual.....Refer to latest amendment of service letter n°6
Airplane Maintenance Manual.....Refer to latest amendment of service letter n°6
Airplane Major Inspection Schedule.....Refer to latest amendment of service letter n°6

E.V Note:

1. This model is identical to DR220A except leading edge profile of trapezoidal wing part.

Section F: DR 221

F.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 221
2.	Airworthiness Category:	Normal Category and Utility Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification Date:	April 25, 1967
7.	EASA Type Certification Date:	Transferred by Commission Regulation (EC) No. 1702/2003
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 40.	

F.II Certification Basis

1.	Reference Date for determining the applicable requirements:	24 march 1967
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment May 1st 1965
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	None
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	None

F.III Technical Characteristics and Operational Limitations

1.	Type Design Definition	Refer to the CEAPR document 1003343
2.	Description:	Single-engine, four-seat, low-wing airplane, wooden 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. Stall warning system “Safe Flight” n°164 must be installed.
4.	Dimensions:	Span .....8.72 m (28.6 ft) Height .....1.90 m (6.2 ft) Length.....6.80 m (22.3 ft) Wing Area .....13.60 m² (146.4 ft²)
5.	Engines:	Lycoming O-235-C2A The EASA type certification standard includes that of FAA TC E-223, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS

standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Takeoff (max 5 minutes): 2800 rpm – 115 HP (85 kW)
Maximum Continuous power: 2600 rpm – 108 HP (79.5 kW)

6. Propellers:

Make	Model	∅	Number of blades	Minimum static RPM at sea level
Mac Cauley	1A105BCM7056	1.78 m	2	2400 rpm (Note 1)
Jodel Evra	88-75-34-F	1.76 m	2	2250 rpm

Note 1: Maximum RPM: 2600 rpm

7. Fluids:

7.1 Fuel: 80/87 octane, minimum aviation grade gasoline.
Refer to latest revision of Service Instruction Lycoming No. 1070.

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel: Main fuel tank capacity: .....110 litres
Usable:.. the last 5 litres are only usable during level flight

Supplemental fuel tank capacity: .....50 litres

8.2 Oil: Oil sump capacity ..... 6 U.S. quarts (5.7 litres)
Usable..... 4 U.S. quarts (3.8 litres)

9. Air speeds: V_{NE} .....290 km/h (157 knots IAS)
V_{NO} .....216 km/h (117 knots IAS)
V_A .....190 km/h (103 knots IAS)
V_{FE} .....150 km/h (81 knots IAS)
V_C .....216 km/h (117 knots IAS)

10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.
. In Normal Category, all aerobatic manoeuvres, including spins, are forbidden.

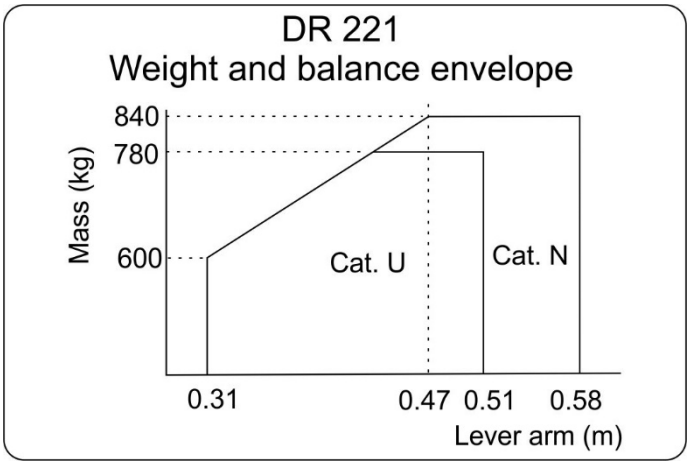
12. Maximum Masses: Normal Category Take-Off .....840 kg
Landing .....840 kg

Utility category T/O & Ldg.....780 kg

13. Centre of Gravity Range: <u>Normal category</u>
Forward limit (18.1 % ref.): . 0.31 m aft of datum at 600 kg
Intermediate limit (27.5 % ref.):0.47 m aft of datum at 840 kg

Aft limit (33.9 % ref.): ..... 0.58 m aft of datum at 840 kg

Utility categories
Forward limit (18.1 % ref.): . 0.31 m aft of datum at 600 kg
Intermediate limit (25.1 % ref.):0.43 m aft of datum at 780 kg
Aft limit (29.8 % ref.): ..... 0.51 m aft of datum at 780 kg



14. Datum: Leading edge of the rectangular part of the wing.
Chord length at reference section: 1.71 m.

15. Load factor (n) at maximum weight: Normal Category:
Flaps up.....+ 3.8
Flaps up.....- 1.52
Flaps down .....+ 2

Utility Category:
Flaps up .....+ 4.4
Flaps up.....- 1.76
Flaps down .....+ 2

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.43 ±0.05 m aft of datum

18. Maximum Passenger Seating Capacity:

1 at 0.43 ±0.05 m and 2 (maximum 120kg) at 1.22m aft of datum

The rear seats can be used only if seat belts are provided and if weight and balance are respected.

Rear seats must not be used in utility category

19. Wheels and Tires: Main gear track.....2.59 m (ft)
Wheel tire size main gear wheel:.....380 x 150
tail wheel: .....6 x 2
Tire pressure.....Refer to the maintenance manual

20. Control surface movements:

Elevator: up ..... 9°30 (+0°; -0°30')
down ..... 12° (+0°; -0°30')

Ailerons: up ..... 12° (+0°; -0°30')
down .....12° (+0°; -0°30')
neutral: trailing edge aligned on flaps

Rudder L & R: .....28° (0°; +2°)
before differential braking.....15° (0°; +2°)

Elevator anti tab:
Elevator up
Tab down position: ..... 29°30
Tab up position: .....10°
Elevator down
Tab down position: ..... 8°30
Tab up position: ..... 13°30

Wing Flaps: 1st notch .....20° ± 2°
2nd notch .....60° ± 2°

21. (Reserved)

F.IV Operating and Service Instructions

Airplane Flight Manual.....Refer to latest amendment of service letter n°6
Airplane Minor inspection Schedule.....Refer to latest amendment of service letter n°6
Airplane Major inspection Schedule.....Refer to latest amendment of service letter n°6

F.V Note:

1. This model is identical to DR220A except power plant and pitch tab deflection.

Section G: DR 221 B

G.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 221 B
2.	Airworthiness Category:	Normal and Utility Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification Date:	July 20, 1968
7.	EASA Type Certification Date:	Transferred by Commission Regulation (EC) No. 1702/2003
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 40.	

G.II Certification Basis

1.	Reference Date for determining the applicable requirements:	24 march 1967
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052, amendment May 1st 1965
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	None
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	None

G.III Technical Characteristics and Operational Limitations

1.	Type Design Definition	Refer to the CEAPR document 1003343
2.	Description:	Single-engine, four-seat, low-wing airplane, wooden 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. Stall warning system “Safe Flight” n°164 must be installed.
4.	Dimensions:	Span .....8.72 m (28.6 ft) Height .....1.90 m (6.2 ft) Length.....6.80 m (22.3 ft) Wing Area .....13.60 m² (146.4 ft²)
5.	Engines:	Lycoming O-235-C2A The EASA type certification standard includes that of FAA TC E-223, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS

standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Takeoff (max 5 minutes): 2800 rpm – 115 HP (85 kW)
Maximum Continuous Power: 2600 rpm – 108 HP (79.5 kW)

6. Propellers:

Make	Model	∅	Number of blades	Minimum static RPM at sea level
Mac Cauley	1A105BCM7056	1.78 m	2	2400 rpm (Note 1)
Jodel Evra	88-75-34-F	1.76 m	2	2250 rpm

Note 1: Maximum RPM: 2600 rpm

7. Fluids:

7.1 Fuel: 80/87 octane, minimum aviation grade gasoline.
Refer to latest revision of Service Instruction Lycoming No. 1070.

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel: Main fuel tank capacity: .....110 litres
Usable:.. the last 5 litres are only usable during level flight
Supplemental fuel tank capacity: .....50 litres

8.2 Oil: Oil sump capacity ..... 6 U.S. quarts (5.7 litres)
Usable..... 4 U.S. quarts (3.8 litres)

9. Air speeds: V_{NE} .....290 km/h (157 knots IAS)
V_{NO} .....216 km/h (117 knots IAS)
V_A .....190 km/h (103 knots IAS)
V_{FE} .....150 km/h (81 knots IAS)
V_C .....216 km/h (117 knots IAS)

10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

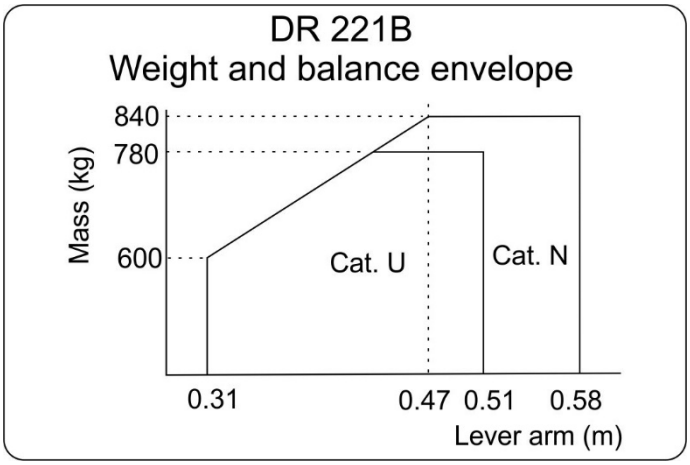
In Normal Category, all aerobatic manoeuvres, including spins, are forbidden.

12. Maximum Masses: Normal Category Take-Off .....840 kg
Landing .....840 kg
Utility category T/O & Ldg.....780 kg

13. Centre of Gravity Range: <u>Normal category</u>

Forward limit (18.1 % ref.): . 0.31 m aft of datum at 600 kg
Intermediate limit (27.5 % ref.):0.47 m aft of datum at 840 kg
Aft limit (33.9 % ref.): ..... 0.58 m aft of datum at 840 kg

Utility categories
Forward limit (18.1 % ref.): . 0.31 m aft of datum at 600 kg
Intermediate limit (25.1 % ref.):0.43 m aft of datum at 780 kg
Aft limit (29.8 % ref.): ..... 0.51 m aft of datum at 780 kg



14. Datum: Leading edge of the rectangular part of the wing.
Chord length at reference section: 1.71 m.

15. Load factor (n) at maximum weight: Normal Category:
Flaps up.....+ 3.8
Flaps up.....- 1.52
Flaps down .....+ 2

Utility Category:
Flaps up .....+ 4.4
Flaps up.....- 1.76
Flaps down .....+ 2

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.43 ±0.05 m aft of datum

18. Maximum Passenger Seating Capacity:

1 at 0.43 ±0.05 m and 2 (maximum 120kg) at 1.22m aft of datum

The rear seats can be used only if seat belts are provided and if weight and balance are respected.

Rear seats must not be used in utility category

19. Wheels and Tires:
Main gear track.....2.59 m (ft)
Wheel tire size main gear wheel: .....380 x 150
tail wheel: .....6 x 2
Tire pressure.....Refer to the maintenance manual

20. Control surface movements:

Elevator: up..... 9°30 (+0°; -0°30')
down ..... 12° (+0°; -0°30')

Ailerons: up ..... 12° (+0°; -0°30')
down ..... 12° (+0°; -0°30')
neutral: trailing edge aligned on flaps

Rudder L & R: .....28° (0°; +2°)
before differential braking.....15° (0°; +2°)

Elevator anti tab:
Elevator up
Tab down position: ..... 29°30
Tab up position: .....10°
Elevator down
Tab down position: ..... 8°30
Tab up position: ..... 13°30

Wing Flaps: 1st notch .....20° ± 2°
2nd notch .....60° ± 2°

21. (Reserved)

G.IV Operating and Service Instructions

Airplane Flight Manual.....Refer to latest amendment of service letter n°6
Airplane Minor inspection Schedule.....Refer to latest amendment of service letter n°6
Airplane Major inspection Schedule.....Refer to latest amendment of service letter n°6

G.V Note:

1. This model is identical to DR221 except leading edge profile of trapezoidal wing part.

Section H: DR 250

H.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 250
2.	Airworthiness Category:	Normal Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification Date:	May 25, 1965
7.	EASA Type Certification Date:	Transferred by Commission Regulation (EC) No. 1702/2003
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 34.	

H.II Certification Basis

1.	Reference Date for determining the applicable requirements:	18 May 1965
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment May 1st 1965
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	None
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	None.

H.III Technical Characteristics and Operational Limitations

1.	Type Design Definition	Refer to the CEAPR document 1003344
2.	Description:	Single-engine, four-seat, low-wing airplane, wooden 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. Stall warning system “Safe Flight” n°164 must be installed.
4.	Dimensions:	Span .....8.72 m (28.61 ft) Height .....1.86 m (6.10 ft) Length.....6.98 m (22.90 ft) Wing Area .....14.15 m² (152.31 ft²)
5.	Engines:	Lycoming O-320 E2A (150 HP) The EASA type certification standard includes that of FAA TC E-274, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS

standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum Continuous Power:2700 rpm (152 HP, 112 kW)

6. Propellers:

Manufacturer	Model	∅	Number of blades	Minimum static RPM at sea level
HOFFMANN Croisière	FH2/LC23 180 155-6.5R	1.80 m	2	2150 rpm
HOFFMANN	FH2/LC23 180-140-6,5 R	1.80 m	2	2250 rpm
JODEL EVRA	91-78-34	1.84 m	2	2250 rpm
SENSENICH	M74 DMS-2-64	1.83 m (*)	2	2150 rpm
SENSENICH	74 DM 6S5-2-64	1.83 m (*)	2	2150 rpm
SENSENICH	M74 DMS-0-64	1.88 m	2	2200 rpm
SENSENICH	74 DM 6S5-0-64	1.88 m	2	2200 rpm

Remark: (*) no diameter reduction for repairs.

The EASA type certification standard includes that of FAA TC P-886, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

Manufacturer	Model	∅	Number of blades	Governor	Minimum static RPM at sea level
HARTZELL	HC-C2YL-1 7663-4	1.83 m	2	Hartzell H1	Constant speed

The EASA type certification standard includes that of FAA TC P-920, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 80/87 octane minimum aviation gasoline grade. Refer to latest revision of Service Instruction Lycoming No. 1070

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD)grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel: Wing tanks: .....2 x 40 litres
Main fuel tank capacity: .....70 litres
Usable:.. the last 7 litres are only usable during level flight

Supplemental fuel tank capacity: ..... 50 litres

8.2 Oil: Oil sump capacity ..... 8 U.S. quarts (7.6 litres)
Usable..... 6 U.S. quarts (5.7 litres)

9. Air speeds:

V_{NE} .....295 km/h (159 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_A .....186 km/h (100 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)
V_C .....260 km/h (140 knots IAS)

10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses: Take-Off: ..... 960 kg (2116.4 lb)
Landing: ..... 920 kg (2028.3 lb)

13. Centre of Gravity Range:

Forward limit (17 % ref.): ..... 0.29 m aft of datum
Aft limit (33 % ref.): ..... 0.565 m aft of datum

14. Datum: Leading edge of the rectangular part of the wing.
Chord length at reference section: 1.71 m.

15. Load factor (n) at maximum weight:

Flaps retracted positive n .....+ 3.8
Flaps retracted negative n.....- 1.52

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.42 ±0.05 m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.42 ±0.05 m and 2 at 1.16m aft of datum.

19. Baggage/cargo compartment: Maximum baggage compartment 40 kg at 1.90m aft of datum, within weight and balance limits. See note 1. “Supplementary rear fuel tank”.

20. Wheels and Tires: Main gear track ..... 2.59 m (ft)
Wheel tire size main gear wheel: .....380 x 150
tail wheel: .....6 x 2
Tire pressure..... Refer to the maintenance manual

21. Control surface movements:

Elevator: up ..... 9.5° ± 0.5°
down ..... 12° ± 0.5°

Ailerons: up ..... 12° ± 0.5°
down ..... 12° ± 0.5°

Rudder L & R: ..... 25° (+0°; -3°)
before differential braking..... right: 18°
left: 15°

Elevator trim tab (manual):
Elevator nose down
Tab down position: .....4° ± 1°
Tab up position: ..... 30° ± 1°
Elevator nose up
Tab down position: ..... - 11° ± 1°
Tab up position: ..... - 16° ± 1°

Wing Flaps: 1st notch .....20° ± 3°
2nd notch .....60° ± 3°

22. (Reserved)

H.IV Operating and Service Instructions

Airplane Flight Manual.....Refer to latest amendment of service letter n°6
Airplane Maintenance Manual.....Refer to latest amendment of service letter n°6
Airplane Major Inspection Schedule.....Refer to latest amendment of service letter n°6

H.V Note:

1. Supplementary rear fuel tank operation:

Always use first 50 litres of fuel from rear main tank (more or less 1h40min) then transfer fuel from the supplementary tank to the rear main tank (by pulling the valve control located on the instrument panel).

Balance limits with all 4 tanks full, load is generally limited to either:

- 0 kg in luggage compartment (normal load on rear seats: 154 kg)

Or

- 100 kg on rear seats (40 kg in luggage compartment).

FOR ALL LOADING, USE THE LOADING GRAPH

2. This model is identical to DR200 with Lycoming 0-320 E 2 A (150 HP) engine, longer and larger fuselage, flap defection up to 60°, fuel capacity increased (rear and supplemental tank).

Section I: DR 250 - 160

I.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 250 - 160
2.	Airworthiness Category:	Normal Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification Date:	September 09, 1965
7.	EASA Type Certification Date:	Transferred by Commission Regulation (EC) No. 1702/2003
8.	The EASA Type Certificates replaces DGAC-France Type Certificate no. 34.	

I.II Certification Basis

1.	Reference Date for determining the applicable requirements:	May 1965
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment May 1st 1965
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	None
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	None.

I.III Technical Characteristics and Operational Limitations

1.	Type Design Definition	Refer to the CEAPR document 1003344
2.	Description:	Single-engine, four-seat, low-wing airplane, wooden 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. Stall warning system “Safe Flight” n°164 must be installed.
4.	Dimensions:	Span .....8.72 m (28.61 ft) Height .....1.86 m (6.10 ft) Length.....6.98 m (22.90 ft) Wing Area .....14.15 m² (152.31 ft²)
5.	Engines:	Lycoming O-320 D2A (160 HP) The EASA type certification standard includes that of FAA TC E-274, based on individual EU member state acceptance or certification of this standard prior to 28

September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum Continuous Power:2700 rpm (162 HP, 119 kW)

6. Propellers:

Manufacturer	Model	∅	Number of blades	Minimum static RPM at sea level
HOFFMANN	FH2/LC23 180-155-6,5R	1.80 m	2	2250 rpm
HOFFMANN	FH2/LC23 180-140-6,5R	1.80 m	2	2350 rpm
SENSENICH	M74 DMS-0-64	1.88 m	2	2200 rpm
SENSENICH	74 DM 6S5-0-64	1.88 m	2	2200 rpm
SENSENICH	74 DM 6S5-2-64	1.83 m (*)	2	2150 rpm
SENSENICH	M74 DMS-2-66	1.83 m (*)	2	2150 rpm
SENSENICH	74 DM 6S5-2-66	1.83 m (*)	2	2150 rpm
JODEL EVRA	91-86-34 F	1.82 m	2	2250 rpm
JODEL EVRA	91-78-34 F	1.84 m	2	2300 rpm

Remark: (*) no diameter reduction for repairs.

The EASA type certification standard includes that of FAA TC P-886, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 91/96 octane minimum aviation gasoline grade. Refer to latest revision of Service Instruction Lycoming No. 1070.

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel: Wing tanks: ..... 2 x 40 litres
Main fuel tank capacity: ..... 70 litres
Usable:.. the last 7 litres are only usable during level flight

Supplemental fuel tank capacity: ..... 50 litres

8.2 Oil: Oil sump capacity ..... 8 U.S. quarts (7.6 litres)
Usable..... 6 U.S. quarts (5.7 litres)

9. Air speeds: V_{NE} .....295 km/h (159 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_A .....186 km/h (100 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)
V_C .....260 km/h (140 knots IAS)

10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses: Take-Off: ..... 960 kg (2116.4 lb)

Landing ..... 920 kg (2028.3 lb)

13. Centre of Gravity Range:

Forward limit (17 % ref.): ..... 0.29 m aft of datum
Aft limit (33 % ref.): ..... 0.565 m aft of datum

14. Datum: Leading edge of the rectangular part of the wing.
Chord length at reference section: 1.71 m.

15. Load factor (n) at maximum weight:

Flaps retracted positive n .....+ 3.8
Flaps retracted negative n.....- 1.52

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.42 ±0.05 m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.42 ±0.05 m aft and 2 at 1.16m aft of datum

19. Baggage/cargo compartment: Maximum baggage compartment 40 kg at 1.90m aft of datum, within weight and balance limits. See note 1. “Supplementary rear fuel tank”.

20. Wheels and Tires

Main gear track ..... 2.59 m (ft)
Wheel tire size main gear wheel: .....380 x 150
tail wheel: .....6 x 2
Tire pressure..... Refer to the maintenance manual

21. Control surface movements:

Elevator: up ..... 9.5° ± 0.5°
down ..... 12° ± 0.5°

Ailerons: up ..... 12° ± 0.5°
down ..... 12° ± 0.5°

Rudder L & R: ..... 25° (+0°; -3°)
before differential braking..... right: 18°
left: 15°

Elevator trim tab (manual):
Elevator nose down
Tab down position: .....4° ± 1°
Tab up position: ..... 30° ± 1°
Elevator nose up
Tab down position: ..... - 11° ± 1°
Tab up position: ..... - 16° ± 1°

Wing Flaps: 1st notch .....20° ± 3°
2nd notch .....60° ± 3°

22. (Reserved)

I.IV Operating and Service Instructions

Airplane Flight Manual.....Refer to latest amendment of service letter n°6
Airplane Maintenance Manual.....Refer to latest amendment of service letter n°6
Airplane Major Inspection Schedule.....Refer to latest amendment of service letter n°6

I.V Note:

1. Supplementary rear fuel tank operation:

   Always use first 50 litres of fuel from rear main tank (more or less 1h40min) then transfer fuel from the supplementary tank to the rear main tank (by pulling the valve control located on the instrument panel).

   Balance limits with all 4 tanks full, load is generally limited to either:

   - 0 kg in luggage compartment (normal load on rear seats: 154 kg)

   Or

   - 100 kg on rear seats (40 kg in luggage compartment).

   FOR ALL LOADING, USE THE LOADING GRAPH

2. This model is identical to DR250 with Lycoming 0-320 D 2 A (160 HP) engine.

Section J: DR 250 B

J.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 250 B
2.	Airworthiness Category:	Normal Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification Date:	July 20, 1968
7.	EASA Type Certification Date:	Transferred by Commission Regulation (EC) No. 1702/2003
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 34.	

J.II Certification Basis

1.	Reference Date for determining the applicable requirements:	May 1965
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment May 1st 1965
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	None
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	None.

J.III Technical Characteristics and Operational Limitations

1.	Type Design Definition	Refer to the CEAPR document 1003344
2.	Description:	Single-engine, four-seat, low-wing airplane, wooden 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. Stall warning system “Safe Flight” n°164 must be installed.
4.	Dimensions:	Span .....8.72 m (28.61 ft) Height .....1.86 m (6.10 ft) Length.....6.98 m (22.90 ft) Wing Area .....14.15 m² (152.31 ft²)
5.	Engines:	Lycoming O-320 E2A (150 HP) The EASA type certification standard includes that of FAA TC E-274, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS

standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum Continuous Power: 2700 rpm (152 HP, 112 kW)

6. Propellers:

Manufacturer	Model	∅	Number of blades	Minimum static RPM at sea level
HOFFMANN Croisière	FH2/LC23 180 155-6.5R	1.80 m	2	2150 rpm
HOFFMANN	FH2/LC23 180-140-6,5 R	1.80 m	2	2250 rpm
JODEL EVRA	91-78-34	1.84 m	2	2250 rpm
SENSENICH	M74 DMS-2-64	1.83 m (*)	2	2150 rpm
SENSENICH	74 DM 6S5-2-64	1.83 m (*)	2	2150 rpm
SENSENICH	M74 DMS-0-64	1.88 m	2	2200 rpm
SENSENICH	74 DM 6S5-0-64	1.88 m	2	2200 rpm

Remark: (*) no diameter reduction for repairs.

The EASA type certification standard includes that of FAA TC P-886, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

Manufacturer	Model	∅	Number of blades	Governor	Minimum static RPM at sea level
HARTZELL	HC-C2YL-1 7663-4	1.83 m	2	Hartzell H1	Constant speed

The EASA type certification standard includes that of FAA TC P-920, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 80/87 octane minimum aviation gasoline grade. Refer to latest revision of Service Instruction Lycoming No. 1070.

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel: Wing tanks: ..... 2 x 40 litres
Main fuel tank capacity: ..... 70 litres

Usable:.. the last 7 litres are only usable during level flight

Supplemental fuel tank capacity:.....50 litres

8.2 Oil: Oil sump capacity ..... 8 U.S. quarts (7.6 litres)
Usable..... 6 U.S. quarts (5.7 litres)

9. Air speeds:
V_{NE} .....295 km/h (159 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_A .....186 km/h (100 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)
V_C .....260 km/h (140 knots IAS)

10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses: Take-Off:..... 960 kg (2116.4 lb)
Landing ..... 920 kg (2028.3 lb)

13. Centre of Gravity Range:
Forward limit (17 % ref.): ..... 0.29 m aft of datum
Aft limit (33 % ref.): ..... 0.565 m aft of datum

14. Datum: Leading edge of the rectangular part of the wing.
Chord length at reference section: 1.71 m.

15. Load factor (n) at maximum weight:
Flaps retracted positive n .....+ 3.8
Flaps retracted negative n.....- 1.52

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.42 ±0.05 m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.42 ±0.05 m and 2 at 1.16m aft of datum.

19. Baggage/cargo compartment Maximum baggage compartment 40 kg at 1.90m aft of datum, within weight and balance limits. See note 1. “Supplementary rear fuel tank”.

20. Wheels and Tires
Main gear track.....2.59 m (ft)
Wheel tire size main gear wheel: .....380 x 150
tail wheel: .....6 x 2
Tire pressure.....Refer to the maintenance manual

21. Control surface movements:

Elevator: up..... 9.5° ± 0.5°
down ..... 12° ± 0.5°

Ailerons: up..... 12° ± 0.5°
down ..... 12° ± 0.5°

Rudder L & R:..... 25° (+0°; -3°)
before differential braking.....right: 18°
left: 15°

Elevator trim tab (manual):
Elevator nose down
Tab down position: .....4° ± 1°
Tab up position: ..... 30° ± 1°
Elevator nose up
Tab down position: ..... - 11° ± 1°
Tab up position: ..... - 16° ± 1°

Wing Flaps: 1st notch .....20° ± 3°
2nd notch .....60° ± 3°

22. (Reserved)

J.IV Operating and Service Instructions

Airplane Flight Manual.....Refer to latest amendment of service letter n°6
Airplane Maintenance Manual.....Refer to latest amendment of service letter n°6
Airplane Major Inspection Schedule.....Refer to latest amendment of service letter n°6

J.V Note:

1. Supplementary rear fuel tank operation:

   Always use first 50 litres of fuel from rear main tank (more or less 1h40min) then transfer fuel from the supplementary tank to the rear main tank (by pulling the valve control located on the instrument panel).

   Balance limits with all 4 tanks full, load is generally limited to either:

   - 0 kg in luggage compartment (normal load on rear seats: 154 kg)

   Or

   - 100 kg on rear seats (40 kg in luggage compartment).

   FOR ALL LOADING, USE THE LOADING GRAPH

2. This model is identical to DR250 except the leading edge profile of trapezoidal wing part.

Section K: DR 250 B - 160

K.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 250 B - 160
2.	Airworthiness Category:	Normal Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification Date:	July 20, 1968
7.	EASA Type Certification Date:	Transferred by Commission Regulation (EC) No. 1702/2003
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 34.	

K.II Certification Basis

1.	Reference Date for determining the applicable requirements:	May 1965
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment May 1st 1965
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	None
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	None

K.III Technical Characteristics and Operational Limitations

1.	Type Design Definition	Refer to the CEAPR document 1003344
2.	Description:	Single-engine, four-seat, low-wing airplane, wooden 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. Stall warning system “Safe Flight” n°164 must be installed.
4.	Dimensions:	Span .....8.72 m (28.61 ft) Height .....1.86 m (6.10 ft) Length.....6.98 m (22.90 ft) Wing Area .....14.15 m² (152.31 ft²)
5.	Engines:	Lycoming O-320 D2A (160 HP) The EASA type certification standard includes that of FAA TC E-274, based on individual EU member state acceptance or certification of this standard prior to 28

September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum Continuous Power:2700 rpm (162 HP, 119 kW)

6. Propellers:

Manufacturer	Model	∅	Number of blades	Minimum static RPM at sea level
HOFFMANN	FH2/LC23 180-155-6,5R	1.80 m	2	2250 rpm
HOFFMANN	FH2/LC23 180-140-6,5R	1.80 m	2	2350 rpm
SENSENICH	M74 DMS-0-64	1.88 m	2	2200 rpm
SENSENICH	74 DM 6S5-0-64	1.88 m	2	2200 rpm
SENSENICH	74 DM 6S5-2-64	1.83 m (*)	2	2150 rpm
SENSENICH	M74 DMS-2-66	1.83 m (*)	2	2150 rpm
SENSENICH	74 DM 6S5-2-66	1.83 m (*)	2	2150 rpm
JODEL EVRA	91-86-34 F	1.82 m	2	2250 rpm
JODEL EVRA	91-78-34 F	1.84 m	2	2300 rpm

Remark: (*) no diameter reduction for repairs.

The EASA type certification standard includes that of FAA TC P-886, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 91/96 octane minimum aviation gasoline grade. Refer to latest revision of Service Instruction Lycoming No. 1070.

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel:

Wing tanks: ..... 2 x 40 litres
Main fuel tank capacity: ..... 70 litres
Usable:.. the last 7 litres are only usable during level flight

Supplemental fuel tank capacity: ..... 50 litres

8.2 Oil:

Oil sump capacity ..... 8 U.S. quarts (7.6 litres)
Usable..... 6 U.S. quarts (5.7 litres)

9. Air speeds:

V_{NE} .....295 km/h (159 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_A .....186 km/h (100 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)
V_C .....260 km/h (140 knots IAS)

10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:

Take-Off: ..... 960 kg (2116.4 lb)
Landing ..... 920 kg (2028.3 lb)

13. Centre of Gravity Range:

Forward limit (17 % ref.): ..... 0.29 m aft of datum
Aft limit (33 % ref.): ..... 0.565 m aft of datum

14. Datum: Leading edge of the rectangular part of the wing.

15. Load factor (n) at maximum weight:

Flaps retracted positive n .....+ 3.8
Flaps retracted negative n.....- 1.52

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.42 ±0.05 m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.42 ±0.05 m and 2 at 1.16m aft of datum.

19. Baggage/cargo compartment: Maximum baggage compartment 40 kg at 1.90m aft of datum, within weight and balance limits. See note 1. “Supplementary rear fuel tank”.

20. Wheels and Tires:

Main gear track ..... 2.59 m (ft)
Wheel tire size main gear wheel: .....380 x 150
tail wheel: .....6 x 2
Tire pressure..... Refer to the maintenance manual

21. Control surface movements:

Elevator: up ..... 9.5° ± 0.5°
down ..... 12° ± 0.5°

Ailerons: up ..... 12° ± 0.5°
down ..... 12° ± 0.5°

Rudder L & R: ..... 25° (+0°; -3°)
before differential braking..... right: 18°
left: 15°

Elevator trim tab (manual):
Elevator nose down
Tab down position: .....4° ± 1°
Tab up position: ..... 30° ± 1°

Elevator nose up
Tab down position: ..... - 11° ± 1°
Tab up position: ..... - 16° ± 1°

Wing Flaps: 1st notch .....20° ± 3°
2nd notch .....60° ± 3°

22. (Reserved)

K.IV Operating and Service Instructions

Airplane Flight Manual.....Refer to latest amendment of service letter n°6
Airplane Minor inspection Schedule.....Refer to latest amendment of service letter n°6
Airplane Major inspection Schedule.....Refer to latest amendment of service letter n°6

K.V Note:

1. Supplementary rear fuel tank operation:

Always use first 50 litres of fuel from rear main tank (more or less 1h40min) then transfer fuel from the supplementary tank to the rear main tank (by pulling the valve control located on the instrument panel).

Balance limits with all 4 tanks full, load is generally limited to either:

- 0 kg in luggage compartment (normal load on rear seats: 154 kg)

Or

- 100 kg on rear seats (40 kg in luggage compartment).

FOR ALL LOADING, USE THE LOADING GRAPH

2. This model is identical to DR250/160 except the leading edge profile of trapezoidal wing part.

Section L: DR 253

L.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 253
2.	Airworthiness Category:	Normal Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification Date:	July 11, 1967
7.	EASA Type Certification Date:	Transferred by Commission Regulation (EC) No. 1702/2003
8.	The EASA type Certificates replaces DGAC-France Type Certificate no 42	

L.II Certification Basis

1.	Reference Date for determining the applicable requirements:	June 1966
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052.
5.	Airworthiness Requirements:	France AIR2052 amendment June 6th, 1966.
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	None
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	None.

L.III Technical Characteristics and Operational Limitations

1.	Type Design Definition	Refer to the CEAPR document 1003346
2.	Description:	Single-engine, four-seat, low-wing airplane, wooden construction, fixed tricycle 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. Stall warning Safe Flight n°164

4. Dimensions:

Span .....8.72 m (28.6 ft)
Height .....2.38 m (7.8 ft)
Length.....7.00 m (22.9 ft)
Wing Area .....14.20 m² (152.8 ft²)

5. Engines:

Lycoming O-360 A1A (variable-pitch propeller)
Lycoming O-360 A3A (Sensenich propeller)

The EASA type certification standard includes that of FAA TC E-286, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits:

Maximum Continuous Power:2700 rpm (133 kW, 183 HP)

6. Propellers:

Make	Model	∅	Number of blades	Minimum static RPM at sea level
SENSENICH	M 76 EMMS-0-64 76 EM8S5-0-64	1,93 m (76 in.)	2	2300 rpm

The EASA type certification standard includes that of FAA TC P4EA, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

Manufacturer	Model	∅	Number of blades	Governor	Minimum static RPM at sea level
HARTZELL	HC-C2YK 7666-2	1,88 m (74 in.)	2	Hartzell D 16 or F3	Constant speed low pitch: 12° high: 28° 8 (*)

Remark: (*) Continuous operation between 2000 and 2250 rpm must be avoided.

The EASA type certification standard includes that of FAA TC P-920, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel:

100/100LL octane minimum aviation grade gasoline.
Refer to latest revision of Service Instruction Lycoming No. 1070.

7.2 Engine Oil:

Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel:

Wing tank: ..... 40 litres in each tank

Fuselage tank: .....100 litres
(Note: The last 7 litres are usable only in horizontal flight attitude)

Auxiliary tank: (see note 1) .....50 or 60 litres

8.2 Oil:

Oil sump capacity ..... 8 U.S. quarts (7.6 litres)
Usable..... 6 U.S. quarts (5.7 litres)

9. Air speeds:

V_{NE} .....310 km/h (167 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_A .....203 km/h (109 knots IAS)
V_{FE} .....170 km/h (91.8 knots IAS)
V_C .....260 km/h (140 knots IAS)
Stall speed at maximum weight:
Flaps retracted: .....104 km/h (56 knots IAS)
Flaps extended: .....96 km/h (51.8 knots IAS)

10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

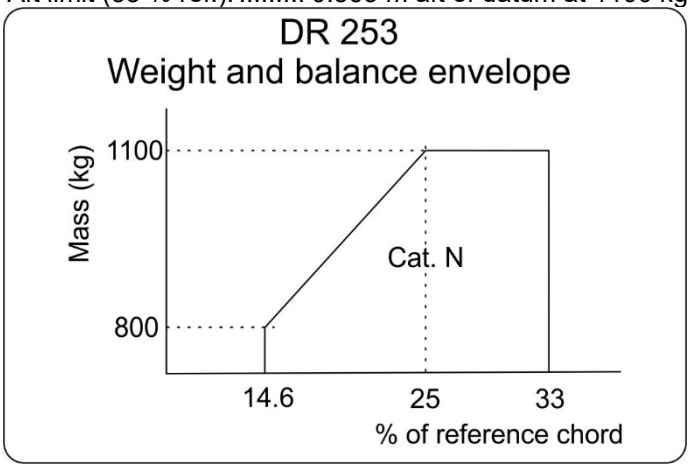
11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Mass:

take-off .....1100 kg
landing .....1045 kg

13. Centre of Gravity Range:

Normal category
Forward limit (14.6 % ref.): 0.250 m aft of datum at 800 kg
Intermediate limit (25 % ref.):0.430 m aft of datum at 1100 kg
Aft limit (33 % ref.): ..... 0.565 m aft of datum at 1100 kg



14. Datum: Wing leading edge of the rectangular part of wing. Cord length at reference section: 1.71 m.

15. Load factor (n) at maximum weight: Normal Category:
Flaps up.....+ 3.8
Flaps up.....- 1.52

16. Levelling Means: Horizontal reference upper fuselage spar.

17. Minimum Flight Crew: 1 (pilot) at 0.47 ±0.05 m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.47 ±0.05 m and 2 at 1.25m aft of datum

19. Baggage / Cargo Compartment: 40 kg within the limits of weight and balance authorized.
Lever arm: ..... + 2.10 m aft of datum

20. Wheels and tires: Main gear track ..... 2.58 m (8.46 ft)
Base width ..... 1.61 m (5.28 ft)

Wheel tire size .....420 x 150

..... 380 x 150 or 5.00-5 (See note 2)

Pressure ..... Refer to the maintenance manual

Front wheel movements (left and right): ..... 25° $^{+2°}_{-0°}$

21. Control surface movements: Elevator: ..... nose up: 13° $^{+0,5°}_{-0°}$

nose down: 6° $^{+0,5°}_{-0°}$

Ailerons: ..... up: 12° $^{-0°}_{+0,5°}$

down: 12° $^{-0°}_{+0,5°}$

Rudder: .....L & R: 25° $^{+0°}_{-3°}$

..... minimum before differential braking (L & R): 15°

Wing Flaps: 1st notch (T/O) ..... 15° $^{+0°}_{-5°}$

2nd notch (Ldg) ..... 60° $^{+0°}_{-5°}$

Elevator tab:

	Tab movements	
	Up	Down
Maximum “Nose up”	10°5	31°
Maximum “Nose down”	12°	3°

22. (Reserved)

L.IV Operating and service instructions

Airplane Flight Manual.....Refer to latest amendment of service letter n°6
Airplane Maintenance Manual.....Refer to latest amendment of service letter n°6
Airplane Major inspection schedule.....Refer to latest amendment of service letter n°6

L.V Note:

1. Supplementary rear fuel tank operation:

   Always use first 60 litres of fuel from rear main tank (more or less 1h30min) then transfer fuel from the supplementary tank to the rear main tank (by pulling the valve control located on the instrument panel).

   Balance limits with all 4 tanks full, load is generally limited to either:

   - 0 kg in luggage compartment (normal load on rear seats: 154 kg)

   Or

   - 100 kg on rear seats (40 kg in luggage compartment).

   FOR ALL LOADING, USE THE LOADING GRAPH

2. Alternative Oleo Strut and Tires:

   Tires size 380x150 or 5.00-5 can only be installed on the aircraft if the DR400 landing gear has been installed in accordance with the SB 160403.

Section M: DR 253 B

M.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 253 B
2.	Airworthiness Category:	Normal Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification Date:	July 20, 1968
7.	EASA Type Certification Date:	Transferred by Commission Regulation (EC) No. 1702/2003
8.	The EASA type Certificates replaces DGAC-France Type Certificate no 42	

M.II Certification Basis

1.	Reference date for determining the applicable requirements:	June 1966
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment June 6th, 1966.
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	None
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	None

M.III Technical Characteristics and Operational Limitations

1.	Type Design Definition	Refer to the CEAPR document 1003346
2.	Description:	Single-engine, four-seat, low-wing airplane, wooden construction, fixed tricycle 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. Stall warning Safe Flight n°164

4. Dimensions:

Span .....8.72 m (28.6 ft)
Height .....2.38 m (7.8 ft)
Length.....7.00 m (22.9 ft)
Wing Area .....14.20 m² (152.8 ft²)

5. Engines:

Lycoming O-360 A1A (variable-pitch propeller)
Lycoming O-360 A3A (Sensenich propeller)

The EASA type certification standard includes that of FAA TC E-286, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine limits:

Maximum Continuous Power:2700 rpm (133 kW, 183 HP)

6. Propellers:

Make	Model	∅	Number of blades	Minimum static RPM at sea level
SENSENICH	M 76 EMMS-0-64 76 EM8S5-0-64	1,93 m (76 in.)	2	2300 rpm

The EASA type certification standard includes that of FAA TC P4EA, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

Manufacturer	Model	∅	Number of blades	Governor	Minimum static RPM at sea level
HARTZELL	HC-C2YK 7666-2	1,88 m (74 in.)	2	Hartzell D 16 or F3	Constant speed low pitch: 12° high: 28° 8 (*)

Remark: (*) Continuous operation between 2000 and 2250 rpm must be avoided.

The EASA type certification standard includes that of FAA TC P-920, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel:

100/100LL octane minimum aviation grade gasoline.
Refer to latest revision of Service Instruction Lycoming No. 1070.

7.2 Engine Oil:

Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel:

Wing tank: ..... 40 litres in each tank

Fuselage tank: .....100 litres
(Note: The last 7 litres are usable only in horizontal flight attitude)

Auxiliary tank: (see note 1) .....50 or 60 litres

8.2 Oil:

Oil sump capacity ..... 8 U.S. quarts (7.6 litres)
Usable..... 6 U.S. quarts (5.7 litres)

9. Air speeds:

V_{NE} .....310 km/h (167 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_A .....203 km/h (109 knots IAS)
V_{FE} .....170 km/h (91.8 knots IAS)
V_C .....260 km/h (140 knots IAS)
Stall speed at maximum weight:
Flaps retracted: .....104 km/h (56 knots IAS)
Flaps extended: .....96 km/h (51.8 knots IAS)

10. Maximum operating altitude: Refer to approved aircraft flight manual.

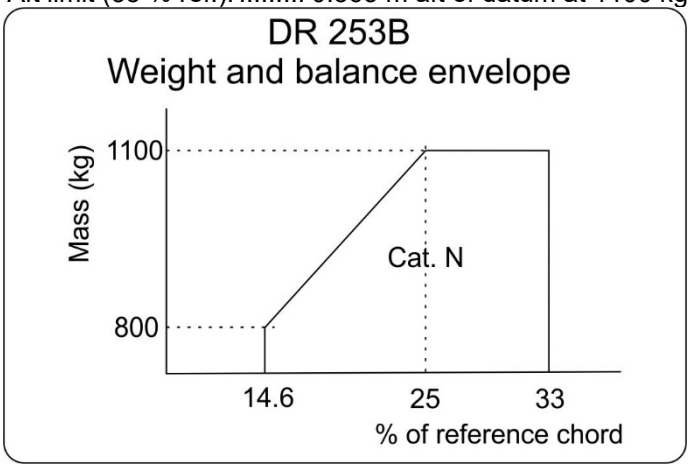
11. Operational capability: Refer to approved aircraft flight manual.

12. Maximum mass:

take-off .....1100 kg
landing .....1045 kg

13. Centre of gravity range:

Normal Category
Forward limit (14.6 % ref.): 0.250 m aft of datum at 800 kg
Intermediate limit (25 % ref.):0.430 m aft of datum at 1100 kg
Aft limit (33 % ref.): ..... 0.565 m aft of datum at 1100 kg



14. Datum: Wing leading edge of the rectangular part of wing. Cord length at reference section: 1.71 m.

15. Load factor (n) at maximum weight: Normal Category:
Flaps up.....+ 3.8
Flaps up.....- 1.52

16. Levelling means: Horizontal reference upper fuselage spar.

17. Minimum flight crew: 1 (pilot) at 0.47 ±0.05 m aft of datum

18. Maximum passenger seating capacity: 1 at 0.47 ±0.05 m and 2 at 1.25m aft of datum

19. Baggage / Cargo compartment 40 kg within the limits of weight and balance authorized.
Lever arm: ..... + 2.1 m aft of datum

20. Wheels and tires

Main gear track ..... 2.58 m (8.46 ft)
Base width ..... 1.61 m (5.28 ft)

Wheel tire size .....420 x 150

..... 380 x 150 or 5.00-5 (See note 3)

Pressure ..... Refer to the maintenance manual

Front wheel movements (left and right): ..... 25° $^{+2°}_{-0°}$

21. Control surface movements:

Elevator: ..... nose up: 13° $^{+0,5°}_{-0°}$

nose down: 6° $^{+0,5°}_{-0°}$

Ailerons: ..... up: 12° $^{-0°}_{+0,5°}$

down: 12° $^{-0°}_{+0,5°}$

Rudder: ..... L & R: 25° $^{+0°}_{-3°}$

..... minimum before differential braking (L & R): 15°

Wing Flaps: 1st notch (T/O) ..... 15° $^{+0°}_{-5°}$

2nd notch (Ldg) ..... 60° $^{+0°}_{-5°}$

Elevator tab:

	Tab movements	
	Up	Down
Maximum “Nose up”	10°5	31°
Maximum “Nose down”	12°	3°

22. (Reserved)

M.IV Operating and Service Instructions

Airplane Flight Manual ..... Refer to latest amendment of service letter n°6
Airplane Maintenance Manual ..... Refer to latest amendment of service letter n°6
Airplane Major inspection schedule ..... Refer to latest amendment of service letter n°6

M.V Note:

1. Supplementary rear fuel tank operation:

Always use first 60 litres of fuel from rear main tank (more or less 1h30min) then transfer fuel from the supplementary tank to the rear main tank (by pulling the valve control located on the instrument panel).

Balance limits with all 4 tanks full, load is generally limited to either:

- 0 kg in luggage compartment (normal load on rear seats: 154 kg)

Or

- 100 kg on rear seats (40 kg in luggage compartment).

FOR ALL LOADING, USE THE LOADING GRAPH

2. This model is identical to the DR 253 except the leading edge profile of trapezoidal wing part.

3. Alternative Oleo Strut and Tires:

Tires size 380x150 or 5.00-5 can only be installed on the aircraft if the DR400 landing gear has been installed in accordance with the SB 160403.

Section N: DR 340

N.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 340
2.	Airworthiness Category:	Normal and Utility Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification date:	May 21, 1968
7.	EASA Type Certification Date:	January28, 2013 (Type Certificate transfer)
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 45	

N.II Certification Basis

1.	Reference Date for determining the applicable requirements:	22 December 1967
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment June 6th, 1966
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	None
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	None

N.III Technical Characteristics and Operational Limitations

1.	Type Design Definition	Refer to the CEAPR document 1003349
2.	Description:	Single-engine, four-seat, low-wing airplane, wood construction, fixed tricycle 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. Stall warning system “Safe Flight” n°164 or APR 79.88.00 or approved equivalent must be installed.
4.	Dimensions:	Span .....8.72 m (28.61 ft) Height .....2.23 m (7.32 ft) Length.....6.96 m (22.83 ft) Wing Area .....14.20 m² (152.85 foot²)
5.	Engines:	Lycoming O-320-E2A The EASA type certification standard includes that of FAA TC E-274, based on individual EU member state acceptance or certification of this standard prior to 28

September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum continuous Power: ..... 2700 rpm

6. Propellers:

Manufacturer	Model	∅	Number of blades	Minimum static RPM at sea level
Sensenich	M 74 DMS-2-64 or M 74 DM-6S5-2-64	1.83 m (*)	2	2200 rpm
	M 74 DMS-0-64 or M 74 DM-6S5-0-64	1.88 m	2	

Remarks: (*) No acceptable diameter reduction for repair. The EASA type certification standard includes that of FAA TC P-886, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 80/87 octane minimum aviation grade gasoline. Refer to latest revision of Service Instruction Lycoming No. 1070

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel:

Main tank (litres)		RH wing tank (litres)		LH wing tank (litres)		Auxiliary tank (optional) (litres)	
Capacity	Usable	Capacity	Usable	Capacity	Usable	Capacity	Usable
75	65	40	40	40	40	50	50

8.2 Oil: Oil sump capacity ..... 8 U.S. quarts (7.57 litres)
Usable..... 6 U.S. quarts (5.68 litres)

9. Air speeds:

V_{NE} .....295 km/h (159 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_C .....260 km/h (140 knots IAS)
V_A .....200 km/h (108 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)

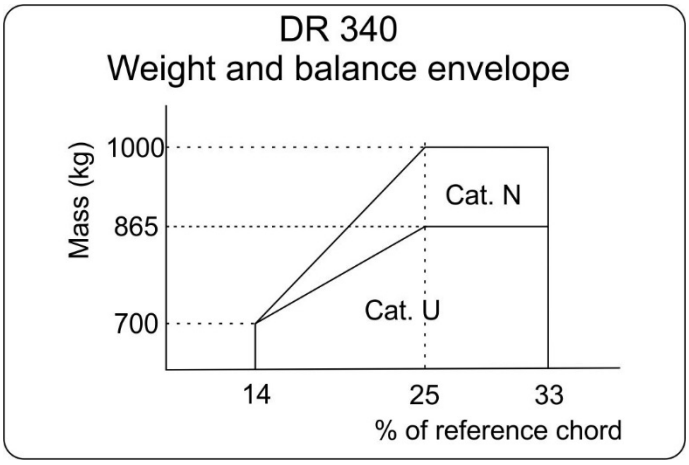
10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:

"N" Category		"U" Category
Take-off	Landing	
1000 kg (2205 lb)	950 kg (2094 lb)	865 kg (1907 lb)

13. Centre of Gravity Range:



Normal Category
Forward limit (14 % ref.): .. 0.240 m aft of datum at 700 kg
Intermediate limit (25 % ref.):0.427 m aft of datum at 1000 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 1000 kg

Utility Category
Forward limit (14 % ref.): .. 0.240 m aft of datum at 700 kg
Intermediate limit (25 % ref.):0.427 m aft of datum at 865 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 865 kg

14. Datum: Wing leading edge of the rectangular part of the wings. Cord length at reference section: 1.71 m (5.61 ft)

15. Load factor (n) at maximum weight: Normal Category:
Flaps up n..... + 3.8
Flaps up n..... - 1.9
Flaps down n ..... + 2
Flaps down n 0

Utility Category:
Flaps up n ..... + 4.4
Flaps up n..... - 2.2
Flaps down n ..... + 2
Flaps down n 0

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.41±0.05m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.41±0.05m aft of datum and 2 at 1.19m aft of datum.

19. Baggage / Cargo Compartment Maximum baggage compartment: 40 kg (88 lb) at 1.90m aft of datum

20. Wheels and Tires

Main gear track ..... 2.58 m (8.46 ft)
Wheel tire size ..... 380 x 150 or 5.00-5
Front gear angular movement ..... left: 27°
..... right: 27°
Tire pressure..... refer to the maintenance manual
Oleo strut pressure ..... refer to the maintenance manual

21. Control surface movements:

Elevator:..... up $9°30' \,^{+0°}_{-30'}$
..... down $12° \,^{+0°}_{-30'}$

Ailerons: Relative to the trailing edge of the wings
Refer to following table

up	neutral	down
16°30' 15°	2°30' 1°45'	11°10' 9°45'

Elevator tab:..... Elevator up: 25°30' ± 1°, 6° ± 1°
..... Elevator down: 10°30' ± 1°, 16°30' ± 1°
Flaps: ..... 1st notch: 15° ± 5°
..... 2nd notch: $60° \,^{+0°}_{-5°}$
Rudder: ..... $25° \,^{+3°}_{-0°}$

22. (Reserved)

N.IV Operating and Service Instructions

Airplane Flight Manual.....Refer to latest amendment of service letter n°6
Airplane Maintenance Manual.....Refer to latest amendment of service letter n°6

N.V Note:

1. This plane is identical to DR315 except:

- powerplant
- addition of leading edge fuel tanks and 75 litres rear fuel tank
- wings profile at rectangular part

Section O: DR 315

O.I General

1. a) Type:	DR 200, DR 300, and DR 400 series
b) Model:	DR 315
2. Airworthiness Category:	Normal and Utility Category
3. Type Certificate Holder:	Refer to Note 2 Section PP
4. Manufacturer:	Refer to Note 3 Section PP
5. (Reserved)	
6. DGAC Type Certification date:	June 24, 1968
7. EASA Type Certification Date:	January28, 2013 (Type Certificate transfer)
8. The EASA type Certificates replaces DGAC-France Type Certificate no. 45	

O.II Certification Basis

1. Reference Date for determining the applicable requirements:	22 December 1967
2. (Reserved)	
3. (Reserved)	
4. Certification Basis:	France AIR2052
5. Airworthiness Requirements:	France AIR2052 amendment June 6th, 1966
6. Requirements elected to comply:	None
7. EASA Special Conditions:	None
8. EASA Exemptions:	None
9. EASA Equivalent Safety Findings:	None
10. EASA Environmental Standards:	None

O.III Technical Characteristics and Operational Limitations

1. Type Design Definition	Refer to the CEAPR document 1003348
2. Description:	Single-engine, four-seat, low-wing airplane, wood construction, fixed tricycle 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. Stall warning system “Safe Flight” n°164 or APR 79.88.00 or approved equivalent must be installed.
4. Dimensions:	Span ..... 8.72 m (28.61 ft) Height ..... 2.23 m (7.32 ft) Length ..... 6.96 m (22.83 ft) Wing Area ..... 13.60 m² (146.39 foot²)
5. Engines:	Lycoming O-235-C2A or O-235-C2C The EASA type certification standard includes that of FAA TC E-223, based on individual EU member state acceptance or certification of this standard prior to 28

September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits:

Maximum Continuous Power:

Propeller Manufacturer	Model	Maximum Continuous Power RPM
Evra	88-75-34 F	2800
Mac Cauley	1 A 105 BCM 70-60	2600
	1 A 105 BCM 70-56	2600
	1 B 90 ECM 72-50	2800

6. Propellers:

Manufacturer	Model	∅	Number of blades	Minimum static RPM at sea level
Evra	88-75-34 F	1.76 m	2	2250
Mac Cauley	1 A 105 BCM 70-60	1.78 m	2	2250
	1 A 105 BCM 70-56	1.78 m	2	2250
	1 B 90 ECM 72-50	1.83 m	2	2300

The EASA type certification standard includes that of FAA TC P-918 and FAA TC P-842, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 80/87 octane minimum aviation grade gasoline. Refer to latest revision of Service Instruction Lycoming No. 1070.

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel:

Main tank (litres)		Auxiliary tank (optional) (litres)	
Capacity	Usable	Capacity	Usable
110	100	50	50

8.2 Oil: Oil sump capacity ..... 6 U.S. quarts (5.68 litres)
Usable..... 4 U.S. quarts (3.79 litres)

9. Air speeds:

V_{NE} .....295 km/h (159 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_C .....260 km/h (140 knots IAS)
V_A .....200 km/h (108 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)

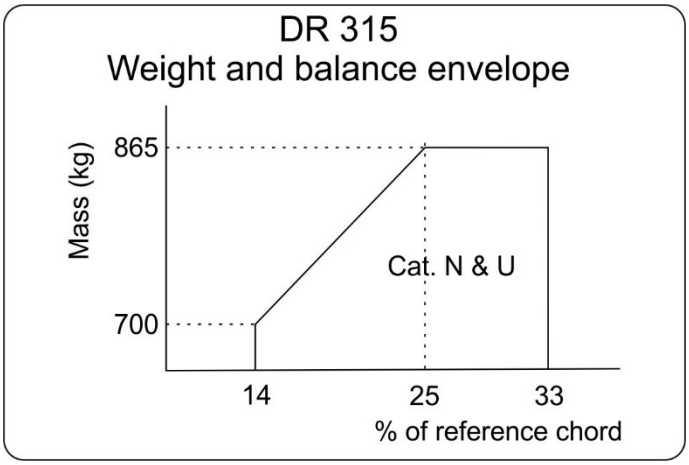
10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:

"N" Category		"U" Category
Take-off	Landing	
865 kg (1907 lb)	865 kg (1907 lb)	865 kg (1907 lb)

13. Centre of Gravity Range:



Normal and Utility Category
Forward limit (14 % ref.): .. 0.240 m aft of datum at 700 kg
Intermediate limit (25 % ref.):0.427 m aft of datum at 865 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 865 kg

14. Datum: Wing leading edge of the rectangular part of the wings. Cord length at reference section: 1.71 m (5.61 ft)

15. Load factor at maximum weight: Normal Category:
Flaps up n ..... + 3.8
Flaps up n..... - 1.9
Flaps down n ..... + 2
Flaps down n 0
Utility Category:
Flaps up n ..... + 4.4
Flaps up n..... - 2.2
Flaps down n ..... + 2
Flaps down n 0

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.41±0.05m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.41±0.05m aft of datum and 2 (maximum 120kg (265lb)) at 1.19m aft of datum.

19. Baggage / Cargo Compartment Maximum baggage compartment: 40 kg (88 lb) at 1.90m aft of datum

20. Wheels and Tires

Main gear track ..... 2.58 m (8.46 ft)

Wheel tire size ..... 380 x 150 or 500-5

Front gear angular movement ..... left: 27°

..... right: 27°

Tire pressure..... refer to the maintenance manual

Oleo strut pressure ..... refer to the maintenance manual

21. Control surface movements:

Elevator:..... up $9°30' \,^{+0°}_{-30'}$

..... down $12° \,^{+0°}_{-30'}$

Ailerons:..... Relative to the trailing edge of the wings

up	neutral	down
16°30' 15°	2°30' 1°45'	11°10' 9°45'

Elevator tab:

Elevator up: .....25°30' ± 1° 6° ± 1°
Elevator down: .....10°30' ± 1° 16°30' ± 1°

Flaps: 1st notch: .....15° ± 5°

2nd notch: .....$60° \,^{+0°}_{-5°}$

Rudder: ..... $25° \,^{+3°}_{-0°}$

22. (Reserved)

O.IV <u>Operating and Service Instructions</u>

Airplane Flight Manual .....Refer to latest amendment of service letter n°6
Airplane Maintenance Manual .....Refer to latest amendment of service letter n°6

O.V <u>Note:</u>

Section P: DR 360

P.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 360
2.	Airworthiness Category:	Normal and Utility Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification date:	July 19, 1968
7.	EASA Type Certification Date:	January28, 2013 (Type Certificate transfer)
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 45	

P.II Certification Basis

1.	Reference Date for determining the applicable requirements:	22 December 1967
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment June 6th, 1966
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	None
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	None

P.III Technical Characteristics and Operational Limitations

1.	Type Design Definition	Refer to the CEAPR document 1003350
2.	Description:	Single-engine, four-seat, low-wing airplane, wood construction, fixed tricycle 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. Stall warning system “Safe Flight” n°164 or APR 79.88.00 or approved equivalent must be installed.
4.	Dimensions:	Span ..... 8.72 m (28.61 ft) Height ..... 2.23 m (7.32 ft) Length ..... 7.08 m (23.23 ft) Wing Area ..... 14.20 m² (152.85 foot²)

5. Engines: Lycoming O-320-D2A

The EASA type certification standard includes that of FAA TC E-274, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum Continuous Power: 2700 rpm

6. Propellers:

Manufacturer	Model	∅	Number of blades	Minimum static RPM at sea level
Sensenich	M 74 DMS-2-66 or M 74 DM-6S5-2-66	1.83 m (*)	2	2150 rpm

Remarks: (*) No acceptable diameter reduction for repair.
The EASA type certification standard includes that of FAA TC P-886, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 91/96 or 100/130 octane minimum aviation grade gasoline.
Refer to latest revision of Service Instruction Lycoming No. 1070

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel:

Main tank (litres)		RH wing tank (litres)		LH wing tank (litres)		Auxiliary tank (optional) (litres)	
Capacity	Usable	Capacity	Usable	Capacity	Usable	Capacity	Usable
75	65	40	40	40	40	50	50

8.2 Oil: Oil sump capacity ..... 8 U.S. quarts (7.57 litres)
Usable..... 6 U.S. quarts (5.68 litres)

9. Air speeds: V_{NE} .....295 km/h (159 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_C.....260 km/h (140 knots IAS)
V_A .....200 km/h (108 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)

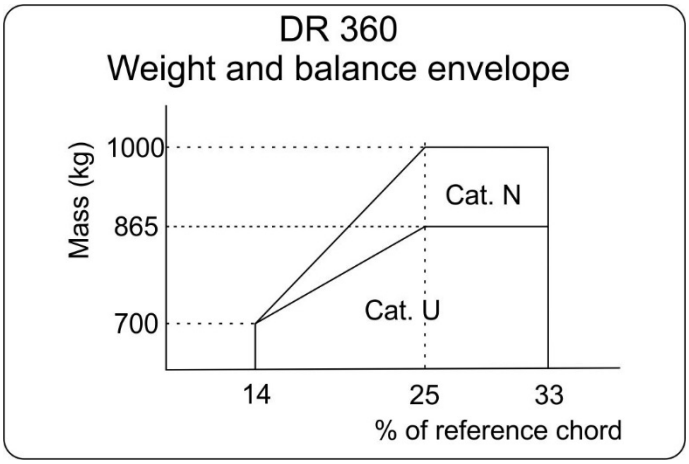
10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:

"N" Category		"U" Category
Take-off	Landing	
1000 kg (2205 lb)	950 kg (2094 lb)	865 kg (1907 lb)

13. Centre of Gravity Range:



Normal Category
Forward limit (14 % ref.): .. 0.240 m aft of datum at 700 kg
Intermediate limit (25 % ref.):0.427 m aft of datum at 1000 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 1000 kg

Utility category
Forward limit (14 % ref.): .. 0.240 m aft of datum at 700 kg
Intermediate limit (25 % ref.):0.427 m aft of datum at 865 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 865 kg

14. Datum: Wing leading edge of the rectangular part of the wings
Cord length at reference section: 1.71 m (5.61 ft)

15. Load factor at maximum weight: Normal Category:

Flaps up n ..... + 3.8
Flaps up n ..... - 1.9
Flaps down n..... + 2
Flaps down n.....0

Utility Category:

Flaps up n ..... + 4.4
Flaps up n ..... - 2.2
Flaps down n..... + 2
Flaps down n.....0

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.41±0.05m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.41±0.05m aft of datum and 2 at 1.19m aft of datum.

19. Baggage / Cargo Compartment Maximum baggage compartment: 40 kg (88 lb) at 1.90m aft of datum

20. Wheels and Tires

Main gear track ..... 2.58 m (8.46 ft)
Wheel tire size ..... 380 x 150 or 500-5
Front gear angular movement ..... left: 27°
..... right: 27°
Tire pressure ..... refer to the maintenance manual
Oleo strut pressure ..... refer to the maintenance manual

21. Control surface movements

Elevator: up ..... $9°30'^{+0°}_{-30'}$

down ..... $12°^{+0°}_{-30'}$

Ailerons: Relative to the trailing edge of the wings.

up	neutral	down
16°30' 15°	2°30' 1°45'	11°10' 9°45'

Elevator tab:

Elevator up: .....25°30' ± 1° 6° ± 1°
Elevator down: .....10°30' ± 1° 16°30' ± 1°

Flaps: 1st notch: .....15° ± 5°

2nd notch: ..... $60°^{+0°}_{-5°}$

Rudder: ..... $25°^{+3°}_{-0°}$

22. (Reserved)

P.IV Operating and Service Instructions

Airplane Flight Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Manual..... Refer to the latest amendment of Service Letter no. 6

P.V Note:

1. This plane is identical to DR 340 except powerplant.

Section Q: DR 380

Q.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 380
2.	Airworthiness Category:	Normal Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification date:	May 29, 1969
7.	EASA Type Certification Date:	January28, 2013 (Type Certificate transfer)
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 45	

Q.II Certification Basis

1.	Reference Date for determining the applicable requirements:	22 December 1967
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment June 6th, 1966
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	None
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	None

Q.III Technical Characteristics and Operational Limitations

1.	Type Design Definition	Refer to the CEAPR document 1003350
2.	Description:	Single-engine, four-seat, low-wing airplane, wood construction, fixed tricycle 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. Stall warning system “Safe Flight” n°164 or APR 79.88.00 or approved equivalent must be installed.
4.	Dimensions:	Span ..... 8.72 m (28.61 ft) Height ..... 2.23 m (7.32 ft) Length ..... 7.08 m (23.23 ft) Wing Area ..... 14.20 m² (152.85 foot²)
5.	Engines:	Lycoming O-360-A3A The EASA type certification standard includes that of FAA TC E-286, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS

standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum Continuous Power:..... 2700 rpm

6. Propellers:

Manufacturer	Model	∅	Number of blades	Minimum static RPM at sea level
Sensenich	76 EM 8S5-0-64 76 EM 8S5-0-68	1.93 m (1)	2	2250 (2)

Remarks:
(1) No acceptable diameter reduction for repair.
(2) Do not continuous operate between 2025 rpm and 2325 rpm.
The EASA type certification standard includes that of FAA TC P4EA, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 100/100LL octane minimum aviation grade gasoline. Refer to latest revision of Service Instruction Lycoming No. 1070

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel:

Main tank (litres)		RH tank (litres)		LH tank (litres)		Auxiliary tank (optional) (litres)	
Capacity	Usable	Capacity	Usable	Capacity	Usable	Capacity	Usable
75	65	40	40	40	40	50	50

8.2 Oil: Oil sump capacity ..... 8 U.S. quarts (7.57 litres)
Usable..... 6 U.S. quarts (5.68 litres)

9. Air speeds:

V_{NE} .....305 km/h (165 knots IAS)
V_{NO} .....270 km/h (146 knots IAS)
V_C.....270 km/h (146 knots IAS)
V_A .....200 km/h (108 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)

10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

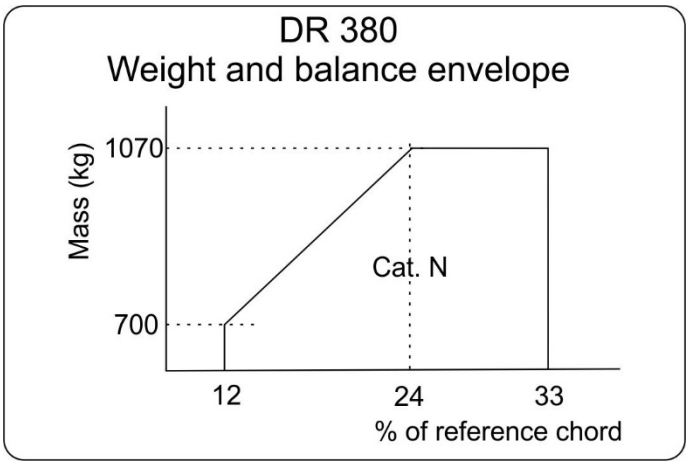
11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:

"N" Category	
Take-off	Landing

1070 kg (2359 lb)	1020 kg (2249 lb)

13. Centre of Gravity Range:



Normal category
Forward limit (12 % ref.): .. 0.205 m aft of datum at 700 kg
Intermediate limit (24 % ref.):0.410 m aft of datum at 1070 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 1070 kg

14. Datum: Wing leading edge of the rectangular part of the wings
Cord length at reference section: 1.71 m (5.61 ft)

15. Load factor at maximum weight: Normal Category:
Flaps up n ..... + 3.8
Flaps up n ..... - 1.9
Flaps down n..... + 2
Flaps down n.....0

16. Levelling means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.41±0.05m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.41±0.05m aft of datum and 2 at 1.19m aft of datum.

19. Baggage / Cargo Compartment Maximum baggage compartment: 60 kg (132 lb) at 1.90m aft of datum

20. Wheels and Tires

Main gear track .....2.58 m (8.46 ft)
Wheel tire size .....380 x 150 or 5.00-5
Front gear angular movement ..... left: 27°
..... right: 27°
Tire pressure ..... refer to the maintenance manual
Oleo strut pressure ..... refer to the maintenance manual

21. Control surface movements

Elevator: up ..... $9°30'^{+0°}_{-30'}$
down ..... $12°^{+0°}_{-30'}$

Ailerons: Relative to the trailing edge of the wings

up	neutral	down
16°30’ 15°	2°30’ 1°45’	11°10’ 9°45’

Elevator tab:
Elevator up: .....25°30’ ± 1° 6° ± 1°

Elevator down: .....10°30' ± 1° 16°30' ± 1°
Flaps: 1st notch: .....15° ± 5°
2nd notch: ..... 60° $^{+0°}_{-5°}$
Rudder: ..... 25° $^{+3°}_{-0°}$

22. (Reserved)

Q.IV Operating and Service Instructions

Airplane Flight Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Manual..... Refer to the latest amendment of Service Letter no. 6

Q.V Note:

1. This plane is identical to DR 340 except:

- Powerplant
- Structure
- Landing gears

Section R: DR 300/108

R.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 300/108
2.	Airworthiness Category:	Normal and Utility Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification date:	June 18, 1970
7.	EASA Type Certification Date:	January28, 2013 (Type Certificate transfer)
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 45	

R.II Certification Basis

1.	Reference Date for determining the applicable requirements:	22 December 1967
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment June 6th, 1966
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	None
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	ICAO Annex 16, Vol.1. Chap 6.

R.III Technical Characteristics and Operational Limitations

1.	Type Design Definition	Refer to the CEAPR document 1003347
2.	Description:	Single-engine, four-seat, low-wing airplane, wood construction, fixed tricycle 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. Stall warning system “Safe Flight” n°164 or APR 79.88.00 or approved equivalent must be installed.
4.	Dimensions:	Span ..... 8.72 m (28.61 ft) Height ..... 2.23 m (7.32 ft) Length ..... 6.96 m (22.83 ft) Wing Area ..... 13.60 m² (146.39 foot²)
5.	Engines:	Lycoming O-235-C2A or Lycoming O-235-C2C The EASA type certification standard includes that of FAA TC E-223, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS

standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum Continuous Power: 2600 rpm
Remark: Maximum continuous power limited by noise regulation.

6. Propellers:

Manufacturer	Model	∅	Number of blades	Minimum static RPM at sea level
Mac Cauley	1 A 105 BCM 70-56	1.78 m	2	2250 rpm (*)
	1 A 105 BCM 70-60	1.78 m	2	
	1 B 90 ECM 72-50	1.83 m	2	
Evra	88-75-34 F	1.76 m	2	

Remarks: (*) Maximum authorized RPM: 2600 rpm
The EASA type certification standard includes that of FAA TC P-918 and FAA TC P-842, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:
7.1 Fuel: 80/87 octane minimum aviation grade gasoline.
Refer to latest revision of Service Instruction Lycoming No. 1070

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel:

Main tank (litres)		Auxiliary tank (optional) (litres)	
Capacity	Usable	Capacity	Usable
110	100	50	50

8.2 Oil: Oil sump capacity ..... 6 U.S. quarts (5.68 litres)
Usable..... 4 U.S. quarts (3.79 litres)

9. Air speeds:

V_{NE} .....295 km/h (159 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_C.....260 km/h (140 knots IAS)
V_A .....200 km/h (108 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)

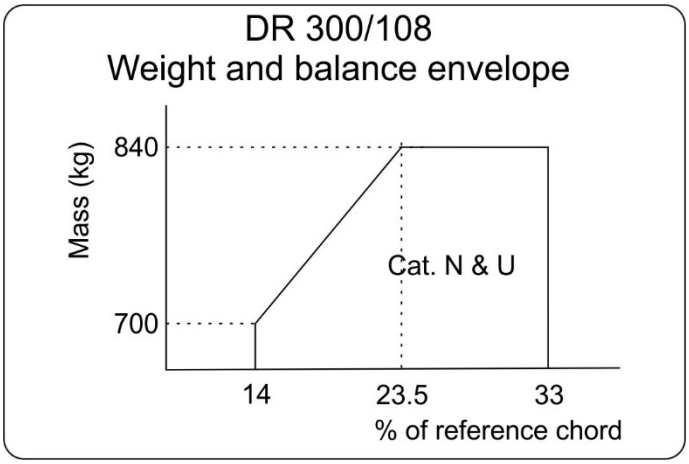
10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:

"N" Category		"U" Category
Take-off	Landing	
840 kg (1852 lb)	840 kg (1852 lb)	840 kg (1852 lb)

13. Centre of Gravity Range:



Normal and Utility Category
Forward limit (14 % ref.): .. 0.240 m aft of datum at 700 kg
Intermediate limit (23.5 % ref.):0.401 m aft of datum at 840 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 840 kg

14. Datum: Wing leading edge of the rectangular part of the wings. Cord length at reference section: 1.71 m (5.61 ft)

15. Load factor at maximum weight:

Normal Category: Flaps up n ..... + 3.8
Flaps up n ..... - 1.9
Flaps down n..... + 2
Flaps down n.....0

Utility Category: Flaps up n ..... + 4.4
Flaps up n ..... - 2.2
Flaps down n..... + 2
Flaps down n.....0

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.41±0.05m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.41±0.05m aft of datum and 2 (maximum 100kg (220lb)) at 1.19m aft of datum.

19. Baggage / Cargo Compartment: Not applicable

20. Wheels and Tires:

Main gear track ..... 2.58 m (8.46 ft)
Wheel tire size ..... 380 x 150 or 5.00-5
Front gear angular movement ..... left: 27°
..... right: 27°
Tire pressure ..... refer to the maintenance manual
Oleo strut pressure ..... refer to the maintenance manual

21. Control surface movements:

Elevator: up ..... $9°30' \,^{+0°}_{-30'}$

down ..... $12° \,^{+0°}_{-30'}$

Ailerons: Relative to the trailing edge of the wings

up	neutral	down
16°30' 15°	2°30' 1°45'	11°10' 9°45'

Elevator tab: Elevator up:.....25°30' ± 1°.....6° ± 1°
Elevator down:10°30' ± 1° 16°30' ± 1°

Flaps: 1st notch: .....15° ± 5°

2nd notch: ..... $60° \,^{+0°}_{-5°}$

Rudder: ..... $25° \,^{+3°}_{-0°}$

22. (Reserved)

R.IV Operating and Service Instructions

Airplane Flight Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Manual..... Refer to the latest amendment of Service Letter no. 6

R.V Note:

1. This plane is identical to DR 315 except cabin layout

Section S: DR 300/180 R

S.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 300/180 R
2.	Airworthiness Category:	Normal Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification date:	July 24, 1970
7.	EASA Type Certification date:	January28, 2013 (Type Certificate transfer)
8.	The EASA Type Certificates replaces DGAC-France Type Certificate no. 45	

S.II Certification Basis

1.	Reference Date for determining the applicable requirements:	22 December 1967
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment June 6th, 1966
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	None
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	None

S.III Technical Characteristics and Operational Limitations

1.	Type Design Definition	Refer to the CEAPR document 1003347
2.	Description:	Single-engine, four-seat, low-wing airplane, wood construction, fixed tricycle 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. Stall warning system “Safe Flight” n°164 or APR 79.88.00 or approved equivalent must be installed.
4.	Dimensions:	Span ..... 8.72 m (28.61 ft) Height ..... 2.23 m (7.32 ft) Length ..... 7.08 m (23.23 ft) Wing Area ..... 13.60 m² (146.39 foot²)
5.	Engines:	Lycoming O-360-A3A The EASA type certification standard includes that of FAA TC E-286, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS

standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum Continuous Power: 2700 rpm

6. Propellers:

Manufacturer	Model	∅	Number of blades	Minimum static RPM at sea level
Sensenich	76 EM 8S5-058	1.93 m (1)	2	2450 (2)
	76 EM 8S5-064		2	2250 (2)
	76 EM 8S5-054		2	2500 (2)
Hoffmann	HO4-27HM-170-128	1.70 m	4	2240 (2)

Remarks:
(1) No acceptable diameter reduction for repair.
(2) Do not continuous operate between 2150 rpm and 2350 rpm.
The EASA type certification standard includes that of FAA TC P4EA and P6NE, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 100/100LL octane minimum aviation grade gasoline.
Refer to latest revision of Service Instruction Lycoming No. 1070

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel:

Main tank (litres)		Auxiliary tank (optional) (litres)	
Capacity	Usable	Capacity	Usable
110	100	50	50

8.2 Oil: Oil sump capacity ..... 8 U.S. quarts (7.57 litres)
Usable..... 6 U.S. quarts (5.68 litres)

9. Air speeds:

V_{NE} .....305 km/h (165 knots IAS)
V_{NO} .....270 km/h (146 knots IAS)
V_C.....270 km/h (146 knots IAS)
V_A .....200 km/h (108 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)

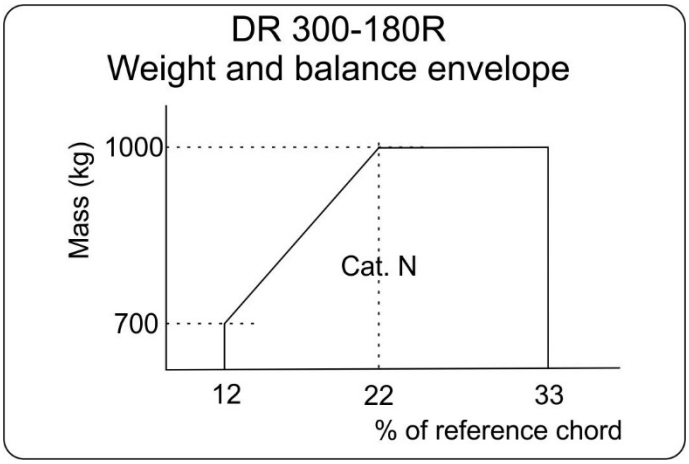
10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:

"N" Category	
Take-off	Landing
1000 kg (2205 lb)	950 kg (2094 lb)

13. Centre of Gravity Range:



Normal Category
Forward limit (12 % ref.): .. 0.205 m aft of datum at 700 kg
Intermediate limit (22 % ref.):0.376 m aft of datum at 1000 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 1000 kg

14. Datum: Wing leading edge of the rectangular part of the wings. Cord length at reference section: 1.71 m (5.61 ft)

15. Load factor at maximum weight:

Normal Category: Flaps up n ..... + 3.8
Flaps up n ..... - 1.9
Flaps down n..... + 2
Flaps down n.....0

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.41±0.05m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.41±0.05m aft of datum and 2 at 1.19m aft of datum.

19. Baggage / Cargo Compartment Maximum baggage compartment: 60 kg (132 lb) at 1.90m aft of datum

20. Wheels and Tires

Main gear track ..... 2.58 m (8.46 ft)
Wheel tire size ..... 380 x 150 or 5.00-5
Front gear angular movement ..... left: 27°
..... right: 27°
Tire pressure ..... refer to the maintenance manual
Oleo strut pressure ..... refer to the maintenance manual

21. Control surface movements

Elevator: up ..... $9°30' \,^{+0°}_{-30'}$
down ..... $12° \,^{+0°}_{-30'}$

Ailerons: Relative to the trailing edge of the wings

up	neutral	down
16°30' 15°	2°30' 1°45'	11°10' 9°45'

Elevator tab: Elevator up: .....25°30' ± 1°.....6° ± 1°
Elevator down: 10°30' ± 1° 16°30' ± 1°

Flaps: 1st notch: .....15° ± 5°
2nd notch: ..... $60° \,^{+0°}_{-5°}$

Rudder: ..... $25° \,^{+3°}_{-0°}$

22. (Reserved)

S.IV Operating and Service Instructions

Airplane Flight Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Manual..... Refer to the latest amendment of Service Letter no. 6

S.V Note:

1. This plane is identical to DR 315 except:
   - powerplant
   - structure
   - landing gears
   - towing ability

2. Glider and banner towing Refer to approved flight manual

Takeoff maximum mass: 720kg
Seaplane maximum mass towed: 550kg
Propeller approved for these operations: Sensenich 76 EM 8S5-058
Hoffmann H04-27HM-170-128

Section T: DR 300/140

T.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 300/140
2.	Airworthiness Category:	Normal and Utility Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification date:	February 22, 1971
7.	EASA Type Certification Date:	January28, 2013 (Type Certificate transfer)
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 45	

T.II Certification Basis

1.	Reference Date for determining the applicable requirements:	22 December 1967
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment June 6th, 1966
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	None
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	None

T.III Technical Characteristics and Operational Limitations

1.	Type Design Definition	Refer to the CEAPR document 1003347
2.	Description:	Single-engine, four-seat, low-wing airplane, wood construction, fixed tricycle 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. Stall warning system “Safe Flight” n°164 or APR 79.88.00 or approved equivalent must be installed.
4.	Dimensions:	Span ..... 8.72 m (28.61 ft) Height ..... 2.23 m (7.32 ft) Length ..... 6.96 m (22.83 ft) Wing Area ..... 13.60 m² (146.39 foot²)
5.	Engines:	Lycoming O-320-E2A The EASA type certification standard includes that of FAA TC E-274, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS

standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum continuous power: 2700 rpm

6. Propellers:

Manufacturer	Model	∅	Number of blades	Minimum static RPM at sea level
Sensenich	M 74 DMS-2-64	1.83 m (*)	2	2200 rpm
	74 DM 6S5-2-64		2	
	M 74 DMS-0-64	1.88 m	2	
	74 DM 6S5-0-64		2	

Remarks: (*) No acceptable diameter reduction for repair.

The EASA type certification standard includes that of FAA TC P-886, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 80/87 octane minimum aviation grade gasoline.
Refer to latest revision of Service Instruction Lycoming No. 1070

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel:

Main tank (litres)		Auxiliary tank (optional) (litres)	
Capacity	Usable	Capacity	Usable
110	100	50	50

8.2 Oil: Oil sump capacity ..... 8 U.S. quarts (7.57 litres)
Usable..... 6 U.S. quarts (5.68 litres)

9. Air speeds:

V_{NE} .....295 km/h (159 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_C.....260 km/h (140 knots IAS)
V_A .....200 km/h (108 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)

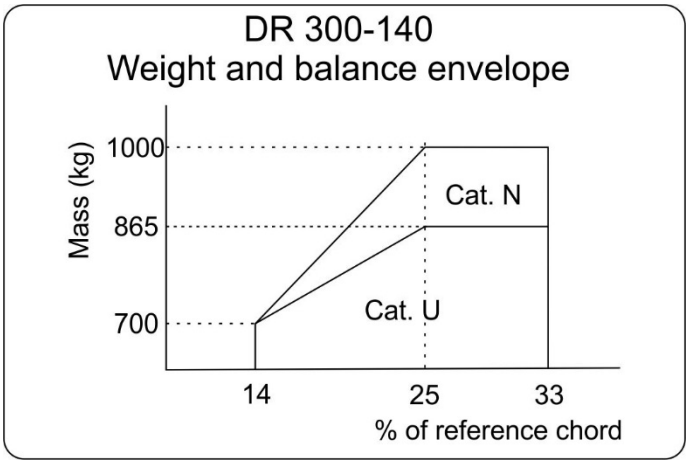
10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:

"N" Category		"U" Category
Take-off	Landing	
1000 kg (2205 lb)	950 kg (2094 lb)	865 kg (1907 lb)

13. Centre of Gravity Range:



Normal Category
Forward limit (14 % ref.): .. 0.240 m aft of datum at 700 kg
Intermediate limit (25 % ref.):0.427 m aft of datum at 1000 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 1000 kg

Utility Category
Forward limit (14 % ref.): .. 0.240 m aft of datum at 700 kg
Intermediate limit (25 % ref.):0.427 m aft of datum at 865 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 865 kg

14. Datum: Wing leading edge of the rectangular part of the wings. Cord length at reference section: 1.71 m (5.61 ft)

15. Load factor at maximum weight:

Normal Category: Flaps up n ..... + 3.8
Flaps up n ..... - 1.9
Flaps down n..... + 2
Flaps down n.....0

Utility Category: Flaps up n ..... + 4.4
Flaps up n ..... - 2.2
Flaps down n..... + 2
Flaps down n.....0

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.41±0.05m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.41±0.05m aft of datum and 2 at 1.19m aft of datum.

19. Baggage / Cargo Compartment: Maximum baggage compartment: 40 kg (88 lb) at 1.90m aft of datum

20. Wheels and Tires

Main gear track ..... 2.58 m (8.46 ft)
Wheel tire size ..... 380 x 150 or 5.00-5
Front gear angular movement ..... left: 27°
..... right: 27°
Tire pressure ..... refer to the maintenance manual
Oleo strut pressure ..... refer to the maintenance manual

21. Control surface movements

Elevator: up ..... $9°30' {}^{+0°}_{-30'}$

down ..... $12° \, ^{+0°}_{-30'}$

Ailerons: Relative to the trailing edge of the wings

up	neutral	down
16°30' 15°	2°30' 1°45'	11°10' 9°45'

Elevator tab: Elevator up: .....25°30' ± 1°.....6° ± 1°
Elevator down: 10°30' ± 1° 16°30' ± 1°

Flaps: 1st notch: .....15° ± 5°

2nd notch: ..... $60° \, ^{+0°}_{-5°}$

Rudder: ..... $25° \, ^{+3°}_{-0°}$

22. (Reserved)

T.IV Operating and Service Instructions

Airplane Flight Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Manual..... Refer to the latest amendment of Service Letter no. 6

T.V Note:

1. This plane is identical to DR 315 except powerplant

Section U: DR 300/125

U.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 300/125
2.	Airworthiness Category:	Normal and Utility Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification date:	May 11, 1971
7.	EASA Type Certification Date:	January28, 2013 (Type Certificate transfer)
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 45	

U.II Certification Basis

1.	Reference Date for determining the applicable requirements:	22 December 1967
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment June 6th, 1966
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	None
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	None

U.III Technical Characteristics and Operational Limitations

1.	Type Design Definition	Refer to the CEAPR document 1003347
2.	Description:	Single-engine, four-seat, low-wing airplane, wood construction, fixed tricycle 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. Stall warning system “Safe Flight” n°164 or APR 79.88.00 or approved equivalent must be installed.
4.	Dimensions:	Span ..... 8.72 m (28.61 ft) Height ..... 2.23 m (7.32 ft) Length ..... 6.96 m (22.83 ft) Wing Area ..... 13.60 m² (146.39 foot²)
5.	Engines:	Lycoming O-235-F2B or O-235-F2A or O-235-J2A The EASA type certification standard includes that of FAA TC E-223, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS

standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum Continuous Power: 2800 rpm

6. Propellers:

Manufacturer	Model	∅	Number of blades	Minimum static RPM at sea level
Mac Cauley	1 A 135 JCM 71-54	1.80 m	2	2300 rpm (*)

Remarks: (*) Do not continuous operate between 2025 rpm and 2325 rpm.

The EASA type certification standard includes that of FAA TC P-842, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 100/100LL octane minimum aviation grade gasoline. Refer to latest revision of Service Instruction Lycoming No. 1070

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel:

Main tank (litres)		Auxiliary tank (optional) (litres)	
Capacity	Usable	Capacity	Usable
110	100	50	50

8.2 Oil: Oil sump capacity ..... 6 U.S. quarts (5.68 litres)
Usable..... 4 U.S. quarts (3.79 litres)

9. Air speeds:

V_{NE} .....295 km/h (159 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_C.....260 km/h (140 knots IAS)
V_A .....200 km/h (108 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)

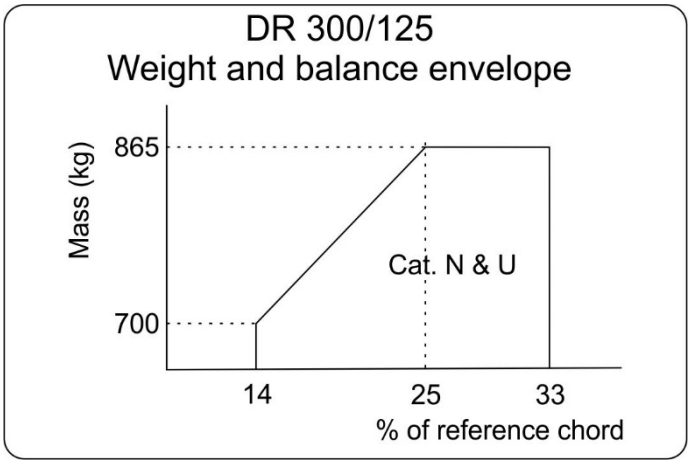
10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:

"N" Category		"U" Category
Take-off	Landing	
865 kg (1907 lb)	865 kg (1907 lb)	865 kg (1907 lb)

13. Centre of Gravity Range:



Normal and Utility Category
Forward limit (14 % ref.): .. 0.240 m aft of datum at 700 kg
Intermediate limit (25 % ref.):0.427 m aft of datum at 865 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 865 kg

14. Datum: Wing leading edge of the rectangular part of the wings. Cord length at reference section: 1.71 m (5.61 ft)

15. Load factor at maximum weight:

Normal Category:	Flaps up n	+ 3.8
	Flaps up n	- 1.9
	Flaps down n.....	+ 2
	Flaps down n.....	0
Utility Category:	Flaps up n	+ 4.4
	Flaps up n	- 2.2
	Flaps down n.....	+ 2
	Flaps down n.....	0

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.41±0.05m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.41±0.05m aft of datum and 2 (maximum 120kg (265lb)) at 1.19m aft of datum.

19. Baggage / Cargo Compartment Maximum baggage compartment: 40 kg (88 lb) at 1.90m aft of datum

20. Wheels and Tires

Main gear track ..... 2.58 m (8.46 ft)
Wheel tire size ..... 380 x 150 or 5.00-5
Front gear angular movement ..... left: 27°
..... right: 27°
Tire pressure ..... refer to the maintenance manual
Oleo strut pressure ..... refer to the maintenance manual

21. Control surface movements

Elevator: up ..... $9°30' {}^{+0°}_{-30'}$

down ..... $12° {}^{+0°}_{-30'}$

Ailerons: Relative to the trailing edge of the wings

up	neutral	down
16°30' 15°	2°30' 1°45'	11°10' 9°45'

Elevator tab: Elevator up: .....25°30' ± 1°.....6° ± 1°
Elevator down: 10°30' ± 1° 16°30' ± 1°

Flaps: 1st notch: .....15° ± 5°

2nd notch: ..... $60° {}^{+0°}_{-5°}$

Rudder: ..... $25° {}^{+3°}_{-0°}$

22. (Reserved)

U.IV Operating and Service Instructions

Airplane Flight Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Manual..... Refer to the latest amendment of Service Letter no. 6

U.V Note:

1. This plane is identical to DR 315 except powerplant

Section V: DR 300/120

V.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 300/120
2.	Airworthiness Category:	Normal and Utility Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification date:	February 11, 1975
7.	EASA Type Certification date:	January28, 2013 (Type Certificate transfer)
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 45	

V.II Certification Basis

1.	Reference Date for determining the applicable requirements:	3 February 1975
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment June 6th, 1966
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	None
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	None

V.III Technical Characteristics and Operational Limitations

1.	Type Design Definition	Refer to the CEAPR document 1003347
2.	Description:	Single-engine, four-seat, low-wing airplane, wood construction, fixed tricycle 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. Stall warning system “Safe Flight” n°164 or APR 79.88.00 or approved equivalent must be installed.
4.	Dimensions:	Span ..... 8.72 m (28.61 ft) Height ..... 2.23 m (7.32 ft) Length ..... 6.96 m (22.83 ft) Wing Area ..... 13.60 m² (146.39 foot²)
5.	Engines:	Lycoming O-235-L2A or O-235-K2A or O-235-K2B The EASA type certification standard includes that of FAA TC E-223, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS

standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum Continuous Power: 2800 rpm

6. Propellers:

Manufacturer	Model	∅	Number of blades	Minimum static RPM at sea level
Mac Cauley	1 A 135 JCM 71-47	1.80 m 1.77 m (1)	2	2200 (2)
Hoffmann	HO 14-178/115	1.78 m 1.73 m (1)	2	2250
Sensenich	72 CKS6-0-56	1.83 m (3)	2	2220
	72 CKS5-0-56		2	2220

Remarks:
(1) Minimum diameter after repair.
(2) Do not continuous operate between 2025 rpm and 2325 rpm.
(3) No acceptable diameter reduction for repair.

The EASA type certification standard includes that of FAA TC P-842 and FAA TC P-904, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 100/100LL octane minimum aviation grade gasoline. Refer to latest revision of Service Instruction Lycoming No. 1070

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel:

Main tank (litres)		Auxiliary tank (optional) (litres)	
Capacity	Usable	Capacity	Usable
110	100	50	50

8.2 Oil: Oil sump capacity ..... 6 U.S. quarts (5.68 litres)
Usable..... 4 U.S. quarts (3.79 litres)

9. Air speeds:

V_{NE} .....295 km/h (159 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_C.....260 km/h (140 knots IAS)
V_A .....200 km/h (108 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)

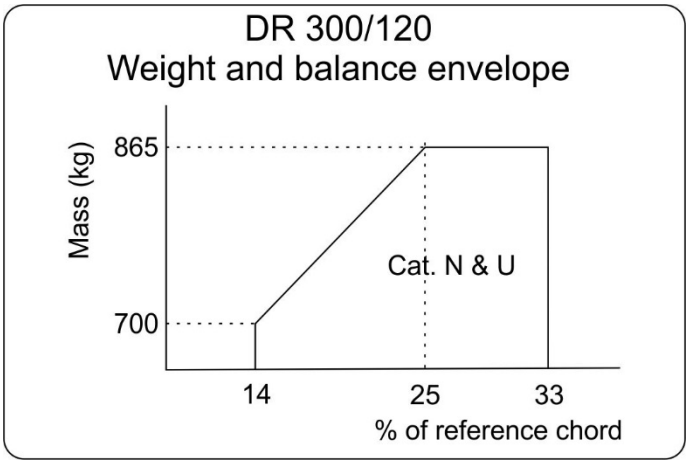
10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:

"N" Category		"U" Category
Take-off	Landing	
865 kg (1907 lb)	865 kg (1907 lb)	865 kg (1907 lb)

13. Centre of Gravity Range:



Normal and Utility Category
Forward limit (14 % ref.): .. 0.240 m aft of datum at 700 kg
Intermediate limit (25 % ref.):0.427 m aft of datum at 865 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 865 kg

14. Datum: Wing leading edge of the rectangular part of the wings. Cord length at reference section: 1.71 m (5.61 ft)

15. Load factor at maximum weight:

Normal Category: Flaps up n ..... + 3.8
Flaps up n ..... - 1.9
Flaps down n..... + 2
Flaps down n.....0

Utility Category: Flaps up n ..... + 4.4
Flaps up n ..... - 2.2
Flaps down n..... + 2
Flaps down n.....0

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.41±0.05m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.41±0.05m aft of datum and 2 (maximum 120kg (265lb)) at 1.19m aft of datum.

19. Baggage / Cargo Compartment Maximum baggage compartment: 40 kg (88 lb) at 1.90m aft of datum

20. Wheels and Tires

Main gear track ..... 2.58 m (8.46 ft)
Wheel tire size ..... 380 x 150 or 500-5
Front gear angular movement ..... left: 27°
..... right: 27°
Tire pressure ..... refer to the maintenance manual
Oleo strut pressure ..... refer to the maintenance manual

21. Control surface movements

Elevator: up ..... $9°30' \,^{+0°}_{-30'}$

down ..... $12° \,^{+0°}_{-30'}$

Ailerons: Relative to the trailing edge of the wings

up	neutral	down
16°30' 15°	2°30' 1°45'	11°10' 9°45'

Elevator tab: Elevator up:.....25°30' ± 1°.....6° ± 1°

Elevator down: 10°30' ± 1° 16°30' ± 1°

Flaps: 1st notch: .....15° ± 5°

2nd notch: ..... $60° \,^{+0°}_{-5°}$

Rudder: ..... $25° \,^{+3°}_{-0°}$

22. (Reserved)

V.IV Operating and Service Instructions

Airplane Flight Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Manual..... Refer to the latest amendment of Service Letter no. 6

V.V Note:

1. This plane is identical to DR 315 except powerplant

Section W: DR 400/125

W.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 400/125
2.	Airworthiness Category:	Normal and Utility Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification date:	May 10, 1972
7.	EASA Type Certification Date:	January28, 2013 (Type Certificate transfer)
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 45	

W.II Certification Basis

1.	Reference Date for determining the applicable requirements:	21 March 1971
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment June 6th, 1966 FAR part 23 as amended by amendment 7
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	Canopy emergency release system
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	None

W.III Technical Characteristics and Operational Limitations

1.	Type Design Definition:	Refer to CEAPR document n°1001131
2.	Description:	Single-engine, four-seat, low-wing airplane, wood construction, fixed tricycle 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. Stall warning system “Safe Flight” n°164 or APR 79.88.00 or approved equivalent must be installed..
4.	Dimensions:	Span .....8.72 m (28.61 ft) Height .....2.23 m (7.32 ft) Length.....6.96 m (22.83 ft) Wing Area .....13.60 m² (146.39 foot²)
5.	Engines:	Lycoming O-235-F2B or O-235-J2A The EASA type certification standard includes that of FAA TC E-223, based on individual EU member state acceptance or certification of this standard prior to 28

September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum Continuous Power: 2800 rpm

6. Propellers:

Manufacturer	Model	∅	Number of blades	Minimum static RPM at sea level
Mac Cauley	1 A 135 JCM 71-54	1.80 m	2	2300 rpm (*)

Remarks: (*) Do not continuous operate between 2025 rpm and 2325 rpm.

The EASA type certification standard includes that of FAA TC P-842, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 100/100LL octane minimum aviation grade gasoline. Refer to latest revision of Service Instruction Lycoming No. 1070.

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel:

Main tank (litres)		Auxiliary tank (optional) (litres)	
Capacity	Usable	Capacity	Usable
110	100	50	50

8.2 Oil: Oil sump capacity ..... 6 U.S. quarts (5.68 litres)
Usable..... 4 U.S. quarts (3.79 litres)

9. Air speeds:

V_{NE} .....308 km/h (166 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_C.....260 km/h (140 knots IAS)
V_A .....215 km/h (116 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)

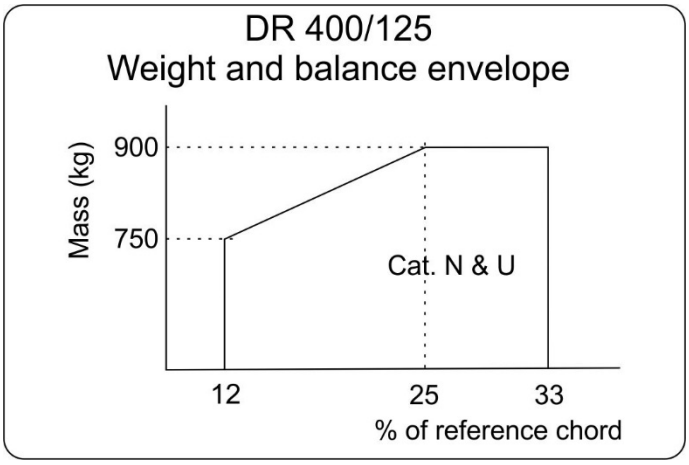
10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:

"N" Category		"U" Category
Take-off	Landing	
900 kg (1984 lb)	900 kg (1984 lb)	900 kg (1984 lb)

13. Centre of Gravity Range:



Normal and Utility Category
Forward limit (12 % ref.): .. 0.205 m aft of datum at 750 kg
Intermediate limit (25 % ref.):0.428 m aft of datum at 900 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 900 kg

14. Datum: Wing leading edge of the rectangular part of the wings. Cord length at reference section: 1.71 m (5.61 ft)

15. Load factor at maximum weight:

Normal Category: Flaps up n ..... + 3.8
Flaps up n ..... - 1.9
Flaps down n..... + 2
Flaps down n.....0

Category Utility: Flaps up n ..... + 4.4
Flaps up n ..... - 2.2
Flaps down n..... + 2
Flaps down n.....0

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.41±0.05m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.41±0.05m aft of datum and 2 at 1.19m aft of datum.

19. Baggage / Cargo Compartment Maximum baggage compartment: 40 kg (88 lb) at 1.90m aft of datum

20. Wheels and Tires:

Main gear track ..... 2.58 m (8.46 ft)
Wheel tire size ..... 380 x 150 or 500-5
Front gear angular movement ..... left: 27°
..... right: 27°
Tire pressure ..... refer to the maintenance manual
Oleo strut pressure ..... refer to the maintenance manual

21. Control surface movements

Elevator: up ..... 9°30' ± 30'
down ..... 12° ± 30'

Ailerons: Relative to the trailing edge of the wings

up	neutral	down
15°± 1°	2° ± 1°	10°± 1°

Elevator tab: Elevator up: .....25°30' ± 1°.....6° ± 1°
Elevator down: 10°30' ± 1° 16°30' ± 1°

Flaps: 1st notch: .....15° ± 5°
2nd notch: ..... $60°\ ^{+0°}_{-5°}$

Rudder: .....$25°\ ^{+3°}_{-0°}$ (1)

(1) For planes fitted with brakes controlled with rudder pedals:
16° (-0°, +2°) before operating drum brakes
20° (-0°, +3°) before operating disk brakes

22. (Reserved)

W.IV Operating and Service Instructions

Airplane Flight Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Schedule..... Refer to the latest amendment of Service Letter no. 6

W.V Note:

1. This plane is identical to DR 300/180R except:

- powerplant
- centre and front parts of the fuselage
- forward sliding canopy
- fuel circuit

Section X: DR 400/140

X.I General

1. a) Type:	DR 200, DR 300, and DR 400 series
b) Model:	DR 400/140
2. Airworthiness Category:	Normal and Utility Category
3. Type Certificate Holder:	Refer to Note 2 Section PP
4. Manufacturer:	Refer to Note 3 Section PP
5. (Reserved)	
6. DGAC Type Certification date:	December 01, 1972
7. EASA Type Certification Date:	January28, 2013 (Type Certificate transfer)
8. The EASA type Certificates replaces DGAC-France Type Certificate no. 45	

X.II Certification Basis

1. Reference Date for determining the applicable requirements:	21 March 1971
2. (Reserved)	
3. (Reserved)	
4. Certification Basis:	France AIR2052
5. Airworthiness Requirements:	France AIR2052 amendment June 6th, 1966 FAR part 23 as amended by amendment 7
6. Requirements elected to comply:	None
7. EASA Special Conditions:	Canopy emergency release system
8. EASA Exemptions:	None
9. EASA Equivalent Safety Findings:	None
10. EASA Environmental Standards:	None

X.III Technical Characteristics and Operational Limitations

1. Type Design Definition:	Refer to CEAPR document n°1001131
2. Description:	Single-engine, four-seat, low-wing airplane, wood construction, fixed tricycle 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. Stall warning system “Safe Flight” n°164 or APR 79.88.00 or approved equivalent must be installed.
4. Dimensions:	Span .....8.72 m (28.61 ft) Height .....2.23 m (7.32 ft) Length.....6.96 m (22.83 ft) Wing Area .....13.60 m² (146.39 foot²)
5. Engines:	Lycoming O-320-E2A

The EASA type certification standard includes that of FAA TC E-274, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum Continuous Power: 2700 rpm

6. Propellers:

Manufacturer	Model	∅	Number of blades	Minimum static RPM at sea level
Sensenich	M 74 DMS-2-64	1.83 m (*)	2	2200 rpm
	74 DM 6S5-2-64		2	
	M 74 DMS-0-64	1.88 m	2	
	74 DM 6S5-0-64		2	

Remarks: (*) No acceptable diameter reduction for repair.

The EASA type certification standard includes that of FAA TC P-886, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 80/87 octane minimum aviation grade gasoline.
Refer to latest revision of Service Instruction Lycoming No. 1070

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel:

Main tank (litres)		Auxiliary tank (optional) (litres)	
Capacity	Usable	Capacity	Usable
110	100	50	50

8.2 Oil: Oil sump capacity ..... 8 U.S. quarts (7.57 litres)
Usable..... 6 U.S. quarts (5.68 litres)

9. Air speeds:

V_{NE} .....308 km/h (166 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_C.....260 km/h (140 knots IAS)
V_A .....215 km/h (116 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)

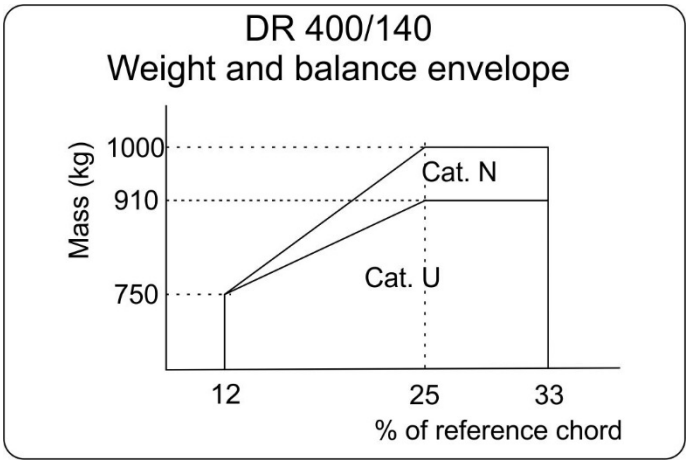
10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:

"N" Category		"U" Category
Take-off	Landing	
1000 kg (2205 lb)	1000 kg (2205 lb)	910 kg (2006 lb)

13. Centre of Gravity Range:



Normal Category
Forward limit (12 % ref.): .. 0.205 m aft of datum at 750 kg
Intermediate limit (25 % ref.):0.428 m aft of datum at 1000 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 1000 kg
Utility Category
Forward limit (12 % ref.): .. 0.205 m aft of datum at 750 kg
Intermediate limit (25 % ref.):0.428 m aft of datum at 910 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 910 kg

14. Datum: Wing leading edge of the rectangular part of the wings. Cord length at reference section: 1.71 m (5.61 ft)

15. Load factor at maximum weight:

Normal Category: Flaps up n ..... + 3.8
Flaps up n ..... - 1.9
Flaps down n..... + 2
Flaps down n.....0

Utility Category: Flaps up n ..... + 4.4
Flaps up n ..... - 2.2
Flaps down n..... + 2
Flaps down n.....0

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.41±0.05m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.41±0.05m aft of datum and 2 at 1.19m aft of datum.

19. Baggage / Cargo Compartment Maximum baggage compartment: 40 kg (88 lb) at 1.90m aft of datum

20. Wheels and Tires

Main gear track ..... 2.58 m (8.46 ft)
Wheel tire size ..... 380 x 150 or 5.00-5
Front gear angular movement ..... left: 27°

.....right: 27°
Tire pressure ..... refer to the maintenance manual
Oleo strut pressure ..... refer to the maintenance manual

21. Control surface movements

Elevator: up ..... 9°30' ± 30'
down ..... 12° ± 30'
Ailerons: Relative to the trailing edge of the wings

up	neutral	down
15°± 1°	2° ± 1°	10°± 1°

Elevator tab: Elevator up: .....25°30' ± 1°.....6° ± 1°
Elevator down: 10°30' ± 1° 16°30' ± 1°
Flaps: 1st notch: .....15° ± 5°
2nd notch: ..... 60° $^{+0°}_{-5°}$
Rudder: .....25° $^{+3°}_{-0°}$ (1)
(1) For planes fitted with brakes controlled with rudder pedals:
16° (-0°, +2°) before operating drum brakes
20° (-0°, +3°) before operating disk brakes

22. (Reserved)

X.IV Operating and Service Instructions

Airplane Flight Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Schedule..... Refer to the latest amendment of Service Letter no. 6

X.V Note:

1. This plane is identical to DR 400/125 except powerplant

Section Y: DR 400/160

Y.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 400/160
2.	Airworthiness Category:	Normal and Utility Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification date:	September 06, 1972
7.	EASA Type Certification Date:	January28, 2013 (Type Certificate transfer)
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 45	

Y.II Certification Basis

1.	Reference Date for determining the applicable requirements:	21 March 1971
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment June 6th, 1966 FAR part 23 as amended by amendment 7
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	Canopy emergency release system
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	ICAO Annex 16, Vol.1. Chap 6.

Y.III Technical Characteristics and Operational Limitations

1.	Type Design Definition:	Refer to CEAPR document n°1001131 for DR400 “STANDARD 88” (Refer to note 2) Refer to CEAPR document n°1001130 for DR400 “STANDARD 92” (Refer to note 2)
2.	Description:	Single-engine, four-seat, low-wing airplane, wood construction, fixed tricycle 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. Stall warning system “Safe Flight” n°164 or APR 79.88.00 or approved equivalent must be installed..
4.	Dimensions:	Span ..... 8.72 m (28.61 ft) Height ..... 2.23 m (7.32 ft) Length ..... 6.96 m (22.83 ft) - Round spinner ..... 7.10 m (23.29 ft) - Sharp spinner Wing Area ..... 14.20 m² (152.85 foot²)

5. Engines: Lycoming O-320-D2A

The EASA type certification standard includes that of FAA TC E-274, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum Continuous Power: 2700 rpm
Remarks: Maximum continuous power limited by noise regulation.

6. Propellers:

Manufacturer	Model	∅	Number of blades	Minimum static RPM at sea level
Sensenich	74 DM 6S5-2-66	1.83 m (*)	2	2150 rpm
	74 DM 6S5-2-64		2	2250 rpm

Remarks: (*) No acceptable diameter reduction for repair.

The EASA type certification standard includes that of FAA TC P-886, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 91/96 or 100/130 octane minimum aviation grade gasoline.
Refer to latest revision of Service Instruction Lycoming No. 1070

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel:

Main tank (litres)		RH tank (litres)		LH tank (litres)		Auxiliary tank (optional) (litres)	
Capacity	Usable	Capacity	Usable	Capacity	Usable	Capacity	Usable
110	100/109 (1)	40	40	40	40	50	50

(1) New standard called “Standard 92” from serial no. 2210, unusable quantity of fuel reduced from 10 litres to 1 litre, (Refer to note 2).

8.2 Oil: Oil sump capacity ..... 8 U.S. quarts (7.57 litres)
Usable..... 6 U.S. quarts (5.68 litres)

9. Air speeds:

V_{NE} .....308 km/h (166 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_C .....260 km/h (140 knots IAS)
V_A .....215 km/h (116 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)

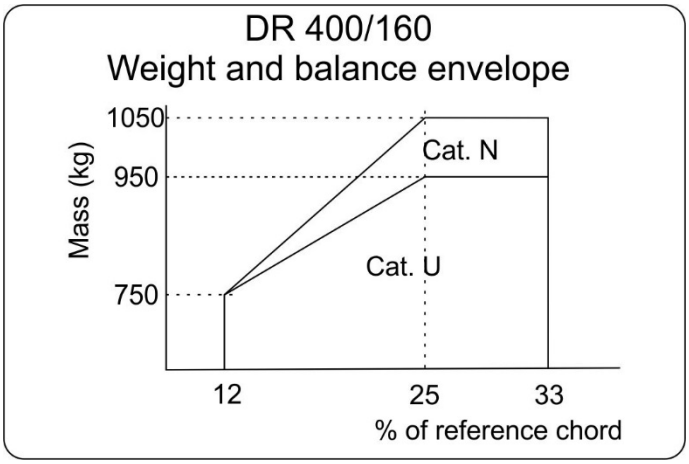
10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:

"N" Category		"U" Category
Take-off	Landing	
1050 kg (2315 lb)	1045 kg (2304 lb)	950 kg (2094 lb)

13. Centre of Gravity Range:



Normal Category
Forward limit (12 % ref.): .. 0.205 m aft of datum at 750 kg
Intermediate limit (25 % ref.):0.428 m aft of datum at 1050 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 1050 kg
Utility Category
Forward limit (12 % ref.): .. 0.205 m aft of datum at 750 kg
Intermediate limit (25 % ref.):0.428 m aft of datum at 950 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 950 kg

14. Datum: Wing leading edge of the rectangular part of the wings. Cord length at reference section: 1.71 m (5.61 ft)

15. Load factor at maximum weight:

Normal Category: Flaps up n ..... + 3.8
Flaps up n ..... - 1.9
Flaps down n..... + 2
Flaps down n.....0

Utility Category: Flaps up n ..... + 4.4
Flaps up n ..... - 2.2
Flaps down n..... + 2
Flaps down n.....0

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.41±0.05m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.41±0.05m aft of datum and 2 at 1.19m aft of datum.

19. Baggage / Cargo Compartment — Maximum baggage compartment: 40 kg (88 lb) at 1.90m aft of datum

20. Wheels and Tires

Main gear track ..... 2.58 m (8.46 ft)
Wheel tire size ..... 380 x 150 or 5.00-5
Front gear angular movement ..... left: 27°
..... right: 27°
Tire pressure ..... refer to the maintenance manual
Oleo strut pressure ..... refer to the maintenance manual

21. Control surface movements

Elevator: up ..... 9°30' ± 30'
down ..... 12° ± 30'

Ailerons: Relative to the trailing edge of the wings

up	neutral	down
15°± 1°	2° ± 1°	10°± 1°

Elevator tab: Elevator up: .....25°30' ± 1°.....6° ± 1°
Elevator down: 10°30' ± 1° 16°30' ± 1°

Flaps: 1st notch: .....15° ± 5°
2nd notch: ..... 60° $^{+0°}_{-5°}$

Rudder: .....25° $^{+3°}_{-0°}$ (1)

(1) For planes fitted with brakes controlled with rudder pedals:
16° (-0°, +2°) before operating drum brakes
20° (-0°, +3°) before operating disk brakes

22. (Reserved)

Y.IV Operating and Service Instructions

Airplane Flight Manual ..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Manual. Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance ScheduleRefer to the latest amendment of Service Letter no. 6

Y.V Note:

1. This plane is identical to DR 400/125 except:
   - powerplant
   - leading edge of centre part of the wings
   - leading edge fuel tanks
   - luggage compartment door

2. "Standard 92" models: Since February 1994 (from serial nr. 2220 included)

   "Standard 88" models: Before February 1994 (before serial nr.2220 excluded)

Section Z: DR 400/180

Z.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 400/180
2.	Airworthiness Category:	Normal and Utility Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification date:	May 10, 1972
7.	EASA Type Certification Date:	January28, 2013 (Type Certificate transfer)
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 45	

Z.II Certification Basis

1.	Reference Date for determining the applicable requirements:	21 March 1971
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment June 6th, 1966 FAR part 23 as amended by amendment 7
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	Canopy emergency release system
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	ICAO Annex 16, Vol.1. Chap 6.

Z.III Technical Characteristics and Operational Limitations

1.	Type Design Definition:	Refer to CEAPR document n°1001131 for DR400 “STANDARD 88” (Refer to note 2) Refer to CEAPR document n°1001130 for DR400 “STANDARD 92” (Refer to note 2)
2.	Description:	Single-engine, four-seat, low-wing airplane, wood construction, fixed tricycle 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. Stall warning system “Safe Flight” n°164 or APR 79.88.00 or approved equivalent must be installed.
4.	Dimensions:	Span ..... 8.72 m (28.61 ft) Height ..... 2.23 m (7.32 ft) Length ..... 6.96 m (22.83 ft) - Round spinner 7.10 m (23.29 ft) - Sharp spinner Wing Area ..... 14.20 m² (152.85 foot²)

5. Engines: Lycoming O-360-A3A or O-360-A1A or O-360-A1P (*)

(*) from serial nr 2207 included

The EASA type certification standard includes that of FAA TC E-286, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum Continuous Power: 2700 rpm

6. Propellers:

Manufacturer	Model	∅	Number of blades	Minimum static RPM at sea level
Sensenich	76 EM 8S5-0-54	1.93 m (1)	2	2500 rpm (3)
	76 EM 8S5-0-58		2	2500 rpm (3)
	76 EM 8S5-0-64		2	2200 rpm (3)
	76 EM 8S5-0-68		2	2250 rpm (3)
Hoffmann	HO 27 HM/180/160	1.80 m (2)	2	2350 rpm

Remarks:
(1) No acceptable diameter reduction for repair.
(2) When Hoffmann HO 27 installed, major change nr 35 must be applied.
(3) Do not continuous operate between 2150 rpm and 2350 rpm.
The EASA type certification standard includes that of FAA TC P4EA and FAA TC P3EU, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

Manufacturer	Model	∅	Number of blades	Governor	Minimum static RPM at sea level
Hoffmann	HO V 123 K/180R	1.80 m	3	Woodward B 210-689	Constant speed (4)

Remarks:
(4) Modification of engine from O-360-A3A to O-360-A1A
The EASA type certification standard includes that of FAA TC P5EU, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:
7.1 Fuel: Lycoming O-360-A3A or Lycoming O-360-A1A:
100/100LL octane minimum aviation grade gasoline.
Lycoming O-360-A1P:
91/96 octane minimum aviation grade gasoline.
Refer to latest revision of Service Instruction Lycoming No. 1070.

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel:

Main tank (litres)		RH tank (litres)		LH tank (litres)		Auxiliary tank (optional) (litres)	
Capacity	Usable	Capacity	Usable	Capacity	Usable	Capacity	Usable
110	100/109 (1)	40	40	40	40	50	50

(1) New standard called “Standard 92” from serial no. 2210, unusable quantity of fuel reduced from 10 litres to 1 liter, (refer to note 2).

8.2 Oil: Oil sump capacity ..... 8 U.S. quarts (7.57 litres)
Usable..... 6 U.S. quarts (5.68 litres)

9. Air speeds:

V_{NE} .....308 km/h (166 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_C.....260 km/h (140 knots IAS)
V_A .....215 km/h (116 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)

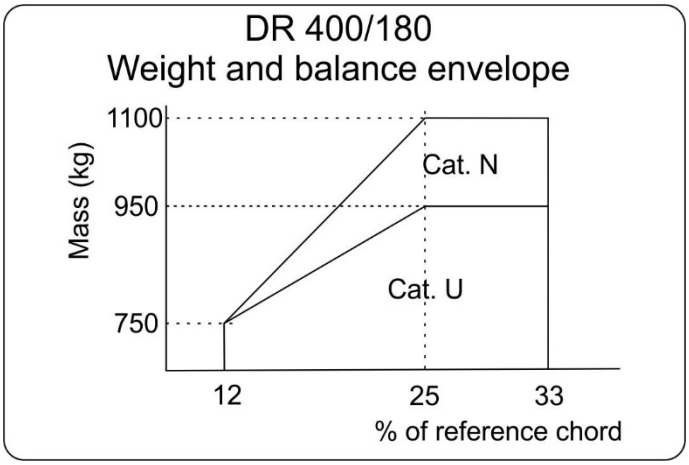
10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:

“N” Category		“U” Category
Take-off	Landing	
1100 kg (2425 lb)	1045 kg (2304 lb)	950 kg (2094 lb)

13. Centre of Gravity Range:



Normal Category
Forward limit (12 % ref.): .. 0.205 m aft of datum at 750 kg
Intermediate limit (25 % ref.):0.428 m aft of datum at 1100 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 1100 kg
Utility Category
Forward limit (12 % ref.): .. 0.205 m aft of datum at 750 kg
Intermediate limit (25 % ref.):0.428 m aft of datum at 950 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 950 kg

14. Datum: Wing leading edge of the rectangular part of the wings. Cord length at reference section: 1.71 m (5.61 ft)

15. Load factor at maximum weight:

Normal Category: Flaps up n ..... + 3.8
Flaps up n ..... - 1.9
Flaps down n..... + 2
Flaps down n.....0

Utility Category: Flaps up n ..... + 4.4
Flaps up n ..... - 2.2
Flaps down n..... + 2
Flaps down n.....0

16. Levelling means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.41±0.05m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.41±0.05m aft of datum and 2 at 1.19m aft of datum.

19. Baggage / Cargo Compartment: Maximum baggage compartment: 60 kg (132 lb) at 1.90m aft of datum

20. Wheels and Tires:
Main gear track ..... 2.58 m (8.46 ft)
Wheel tire size ..... 380 x 150 or 5.00-5
Front gear angular movement ..... left: 27°
..... right: 27°
Tire pressure ..... refer to the maintenance manual
Oleo strut pressure ..... refer to the maintenance manual

21. Control surface movements:

Elevator: up ..... 9°30' ± 30'
down ..... 12° ± 30'

Ailerons: Relative to the trailing edge of the wings

up	neutral	down
15°± 1°	2° ± 1°	10°± 1°

Elevator tab: Elevator up: .....25°30' ± 1°.....6° ± 1°
Elevator down: 10°30' ± 1° 16°30' ± 1°

Flaps: 1st notch: .....15° ± 5°
2nd notch: ..... 60° $^{+0°}_{-5°}$

Rudder: .....25° $^{+3°}_{-0°}$ (1)

(1) For planes fitted with brakes controlled with rudder pedals:
16° (-0°, +2°) before operating drum brakes
20° (-0°, +3°) before operating disk brakes

22. (Reserved)

Z.IV Operating and Service Instructions

Airplane Flight Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Schedule..... Refer to the latest amendment of Service Letter no. 6

Z.V Note:

1. This plane is identical to DR 400/160 except:
   - Powerplant
   - towing ability (if equipped with towing hook)
2. “Standard 92” models: Since October 1993 (serial nr. 2207 and from serial nr. 2216 included)

“Standard 88” models: Before October 1993 (serial nr.2207 excluded and before serial nr.2216 excluded)

Section AA: DR 400/180 R

AA.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 400/180 R
2.	Airworthiness Category:	Normal and Utility Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification date:	November 28, 1972
7.	EASA Type Certification Date:	January28, 2013 (Type Certificate transfer)
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 45	

AA.II Certification Basis

1.	Reference Date for determining the applicable requirements:	3 August 1972
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment June 6th, 1966 FAR part 23 as amended by amendment 7
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	Canopy emergency release system Airplane and towed sailplane maximum masses are limited considering the minimum climb performances required.
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	ICAO Annex 16, Vol.1. Chap 6.

AA.III Technical Characteristics and Operational Limitations

1.	Type Design Definition:	Refer to CEAPR document n°1001131 for DR400 “STANDARD 88” Refer to CEAPR document n°1001130 for DR400 “STANDARD 92”
2.	Description:	Single-engine, four-seat, low-wing airplane, wood construction, fixed tricycle 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. Stall warning system “Safe Flight” n°164 or APR 79.88.00 or approved equivalent must be installed.

4. Dimensions:

Span ..... 8.72 m (28.61 ft)
Height ..... 2.23 m (7.32 ft)
Length ..... 6.96 m (22.83 ft) - Round spinner
7.10 m (23.29 ft) - Sharp spinner
Wing Area ..... 13.60 m² (146.39 foot²)

5. Engines:

Lycoming O-360-A3A or Lycoming O-360-A1P (*)
(*) from serial nr 2207 included

The EASA type certification standard includes that of FAA TC E-286, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits:

Maximum Continuous Power: 2600 rpm
Remark: Maximum continuous power limited by noise regulation.

6. Propellers:

Manufacturer	Model	∅	Number of blades	Minimum static RPM at sea level
Sensenich	76 EM 8S5-0-54	1.93 m (*)	2	2500
	76 EM 8S5-0-58		2	2400
	76 EM 8S5-0-64		2	2300
Hoffmann	HO 27 HM/180/138	1.80 m	2	2400
Evra	TR5-180-102-140		3	

The EASA type certification standard includes that of FAA TC P4EA and FAA TC P3EU, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel:

Lycoming O-360-A3A: ..... 100/100LL octane minimum aviation
grade gasoline.
Lycoming O-360-A1P: ..... 91/96 octane minimum aviation grade
gasoline.
Refer to latest revision of Service Instruction Lycoming No. 1070.

7.2 Engine Oil:

Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel:

Main tank (litres)		Auxiliary tank (optional) (litres)	
Capacity	Usable	Capacity	Usable
110	100/109 (1)	50	50

(1) New standard called “Standard 92” from serial no. 2210, unusable quantity of fuel reduced from 10 litres to 1liter, (refer to note 2).

8.2 Oil: Oil sump capacity ..... 8 U.S. quarts (7.57 litres)
Usable..... 6 U.S. quarts (5.68 litres)

9. Air speeds:

V_{NE} .....308 km/h (166 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_C.....260 km/h (140 knots IAS)
V_A .....215 km/h (116 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)

10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

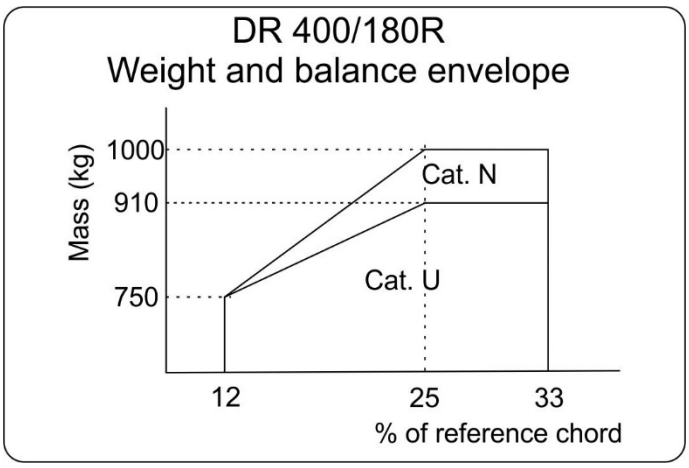
11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:

“N” Category		“U” Category
Take-off	Landing	
1000 kg (2205 lb)	1000 kg (2205 lb)	910 kg (2006 lb)

12.1 Towing mass limitations: Each maximum mass of the tug and of the towed glider is limited by the minimum climb performance.

13. Centre of Gravity Range:



Normal Category
Forward limit (12 % ref.): .. 0.205 m aft of datum at 750 kg
Intermediate limit (25 % ref.):0.428 m aft of datum at 1000 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 1000 kg
Utility Category
Forward limit (12 % ref.): .. 0.205 m aft of datum at 750 kg
Intermediate limit (25 % ref.):0.428 m aft of datum at 910 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 910 kg

14. Datum: Wing leading edge of the rectangular part of the wings. Cord length at reference section: 1.71 m (5.61 ft)

15. Load factor at maximum weight:

Normal Category: Flaps up n ..... + 3.8
Flaps up n ..... - 1.9
Flaps down n..... + 2
Flaps down n.....0

Category Utility: Flaps up n ..... + 4.4
Flaps up n ..... - 2.2
Flaps down n..... + 2
Flaps down n.....0

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.41±0.05m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.41±0.05m aft of datum and 2 at 1.19m aft of datum.

19. Baggage / Cargo Compartment: Maximum baggage compartment: 60 kg (132 lb) at 1.90m aft of datum

20. Wheels and Tires:

Main gear track .....2.58 m (8.46 ft)
Wheel tire size .....380 x 150 or 5.00-5
Front gear angular movement .....left: 27°
.....right: 27°
Tire pressure ..... refer to the maintenance manual
Oleo strut pressure ..... refer to the maintenance manual

21. Control surface movements:

Elevator: up ..... 9°30' ± 30'
down ..... 12° ± 30'

Ailerons: Relative to the trailing edge of the wings

up	neutral	down
15°± 1°	2° ± 1°	10°± 1°

Elevator tab: Elevator up: .....25°30' ± 1°.....6° ± 1°
Elevator down: 10°30' ± 1° 16°30' ± 1°

Flaps: 1st notch: .....15° ± 5°
2nd notch: ..... $60° \begin{smallmatrix}+0° \\ -5°\end{smallmatrix}$

Rudder: .....$25° \begin{smallmatrix}+3° \\ -0°\end{smallmatrix}$ (1)

(1) For planes fitted with brakes controlled with rudder pedals:
16° (-0°, +2°) before operating drum brakes
20° (-0°, +3°) before operating disk brakes

22. (Reserved)

AA.IV Operating and Service Instructions

Airplane Flight Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Schedule..... Refer to the latest amendment of Service Letter no. 6

AA.V Note:

1. This plane is identical to DR 400/125 except:
   - powerplant
   - towing ability
   - landing gears
   - rearview mirror and rear panoramic windows

2. “Standard 92” models: Since October 1993 (serial nr.2207 and from serial nr. 2216 included)

“Standard 88” models: Before October 1993 (serial nr. 2207 excluded and before serial nr.2216 excluded)

3. Glider and banner towing: Refer to approved flight manual.

Section BB: DR 400/2+2

BB.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 400/2+2
2.	Airworthiness Category:	Normal and Utility Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification date:	December 19, 1972
7.	EASA Type Certification Date:	January28, 2013 (Type Certificate transfer)
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 45	

BB.II Certification Basis

1.	Reference Date for determining the applicable requirements:	3 August 1972
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment June 6th, 1966 FAR part 23 as amended by amendment 7
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	Canopy emergency release system
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	ICAO Annex 16, Vol.1. Chap 6.

BB.III Technical Characteristics and Operational Limitations

1.	Type Design Definition:	Refer to CEAPR document n°1001131
2.	Description:	Single-engine, four-seat, low-wing airplane, wood construction, fixed tricycle 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. Stall warning system “Safe Flight” n°164 or APR 79.88.00 or approved equivalent must be installed..
4.	Dimensions:	Span ..... 8.72 m (28.61 ft) Height ..... 2.23 m (7.32 ft) Length ..... 6.96 m (22.83 ft) Wing Area ..... 13.60 m² (146.39 foot²)
5.	Engines:	Lycoming O-235-H2C or O-235-C2C The EASA type certification standard includes that of FAA TC E-223, based on individual EU member state acceptance or certification of this standard prior to 28

September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum Continuous Power: 2600 rpm
Remark: Maximum continuous power limited by noise regulation.

6. Propellers:

Manufacturer	Model	∅	Number of blades	Minimum static RPM at sea level
Mac Cauley	1 A 105 BCM 70-56	1.78 m	2	2250
	1 A 105 BCM 70-60	1.70 m	2	
	1 A 90 ECM 72-50	1.83 m	2	
Evra	88-75-34 F	1.76 m	2	

The EASA type certification standard includes that of FAA TC P-918 and FAA TC P-842, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 80/87 octane minimum aviation grade gasoline.
Refer to latest revision of Service Instruction Lycoming No. 1070

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel:

Main tank (litres)		Auxiliary tank (optional) (litres)	
Capacity	Usable	Capacity	Usable
110	100	50	50

8.2 Oil: Oil sump capacity ..... 6 U.S. quarts (5.68 litres)
Usable..... 4 U.S. quarts (3.79 litres)

9. Air speeds:

V_{NE} .....308 km/h (166 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_C.....260 km/h (140 knots IAS)
V_A .....215 km/h (116 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)

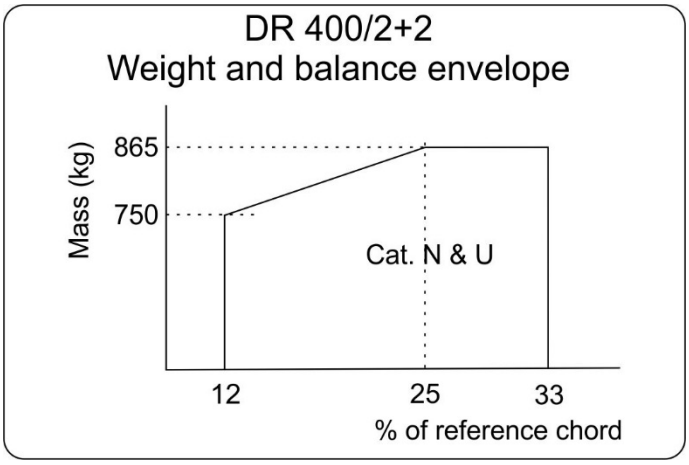
10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:

"N" Category		"U" Category
Take-off	Landing	
865 kg (1907 lb)	865 kg (1907 lb)	865 kg (1907 lb)

13. Centre of Gravity Range:



Normal and Utility Category
Forward limit (12 % ref.): .. 0.205 m aft of datum at 750 kg
Intermediate limit (25 % ref.):0.428 m aft of datum at 865 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 865 kg

14. Datum: Wing leading edge of the rectangular part of the wings. Cord length at reference section: 1.71 m (5.61 ft)

15. Load factor at maximum weight:

Normal Category: Flaps up n ..... + 3.8
Flaps up n ..... - 1.9
Flaps down n..... + 2
Flaps down n.....0

Utility Category: Flaps up n ..... + 4.4
Flaps up n ..... - 2.2
Flaps down n..... + 2
Flaps down n.....0

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.41±0.05m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.41±0.05m aft of datum and 2 at 1.19m aft of datum.

19. Baggage / Cargo Compartment None

20. Wheels and Tires:

Main gear track ..... 2.58 m (8.46 ft)
Wheel tire size ..... 380 x 150 or 5.00-5
Front gear angular movement ..... left: 27°
..... right: 27°
Tire pressure ..... refer to the maintenance manual
Oleo strut pressure ..... refer to the maintenance manual

21. Control surface movements:

Elevator: up ..... 9°30' ± 30'
down ..... 12° ± 30'

Ailerons: Relative to the trailing edge of the wings

up	neutral	down
15°± 1°	2° ± 1°	10°± 1°

Elevator tab: Elevator up: .....25°30' ± 1°.....6° ± 1°
Elevator down: 10°30' ± 1° 16°30' ± 1°

Flaps: 1st notch: .....15° ± 5°
2nd notch: ..... $60^{\circ}\ ^{+0^{\circ}}_{-5^{\circ}}$

Rudder: .....$25^{\circ}\ ^{+3^{\circ}}_{-0^{\circ}}$ (1)

(1) For planes fitted with brakes controlled with rudder pedals:
16° (-0°, +2°) before operating drum brakes
20° (-0°, +3°) before operating disk brakes

22. (Reserved)

BB.IV Operating and Service Instructions

Airplane Flight Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Schedule..... Refer to the latest amendment of Service Letter no. 6

BB.V Note:

1. This plane is identical to DR 400/125 except:
- powerplant
- luggage compartment removed
- rear seat

Section CC: DR 400/120

CC.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 400/120
2.	Airworthiness Category:	Normal and Utility Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification date:	February 11, 1975
7.	EASA Type Certification Date:	January28, 2013 (Type Certificate transfer)
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 45	

CC.II Certification Basis

1.	Reference Date for determining the applicable requirements:	18 September 1974
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment June 6th, 1966 FAR part 23 as amended by amendment 7
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	Canopy emergency release system
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	ICAO Annex 16, Vol.1. Chap 6.

CC.III Technical Characteristics and Operational Limitations

1.	Type Design Definition:	Refer to CEAPR document n°1001131 for DR400 “STANDARD 88” (Refer to note 2) Refer to CEAPR document n°1001130 for DR400 “STANDARD 92” (Refer to note 2)
2.	Description:	Single-engine, four-seat, low-wing airplane, wood construction, fixed tricycle 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. Stall warning system “Safe Flight” n°164 or APR 79.88.00 or approved equivalent must be installed..
4.	Dimensions:	Span ..... 8.72 m (28.61 ft) Height ..... 2.23 m (7.32 ft) Length ..... 6.96 m (22.83 ft) - Round spinner 7.10 m (23.29 ft) - Sharp spinner Wing Area ..... 13.60 m² (146.39 foot²)
5.	Engines:	Lycoming O-235-L2A or O-235-K2A or O-235-K2B

The EASA type certification standard includes that of FAA TC E-223, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum continuous Power: 2800 rpm

6. Propellers:

Manufacturer	Model	∅	Number of blades	Minimum static RPM at sea level
Mac Cauley	1 A 135 JCM 71-47	1.80 m	2	2220
Hoffmann	HO-14-178/115	1.78 m	2	2250
Sensenich	72CK-S6-0-56	1.83 m (*)	2	2220
	72CK-S5-0-56		2	2220
	72CK-S6-0-54	1.83 m	2	2300

Remark: (*) No acceptable diameter reduction for repair.

The EASA type certification standard includes that of FAA TC P-842 and FAA TC P-904, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 100/100LL octane minimum aviation grade gasoline. Refer to latest revision of Service Instruction Lycoming No. 1070.

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel:

Main tank (litres)		Auxiliary tank (optional) (litres)	
Capacity	Usable	Capacity	Usable
110	100/109 (1)	50	50

(1) New standard called “Standard 92” from serial number 2210, unusable quantity of fuel reduced from 10 litres to 1liter. (Refer to note 2)

8.2 Oil: Oil sump capacity ..... 6 U.S. quarts (5.68 litres)
Usable..... 4 U.S. quarts (3.79 litres)

9. Air speeds:

V_{NE} .....308 km/h (166 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)

V_C .....260 km/h (140 knots IAS)
V_A .....215 km/h (116 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)

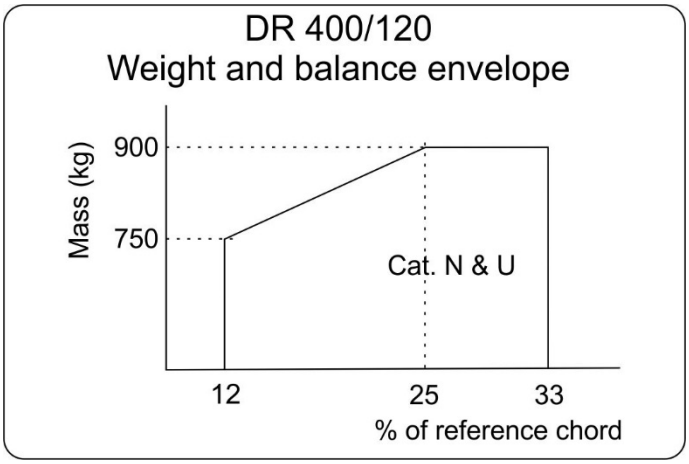
10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:

"N" Category		"U" Category
Take-off	Landing	
900 kg (1984 lb)	900 kg (1984 lb)	900 kg (1984 lb)

13. Centre of Gravity Range:



Normal and Utility Category
Forward limit (12 % ref.): .. 0.205 m aft of datum at 750 kg
Intermediate limit (25 % ref.):0.428 m aft of datum at 900 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 900 kg

14. Datum: Wing leading edge of the rectangular part of the wings. Cord length at reference section: 1.71 m (5.61 ft)

15. Load factor at maximum weight:

Normal Category: Flaps up n ..... + 3.8
Flaps up n ..... - 1.9
Flaps down n..... + 2
Flaps down n.....0

Utility Category: Flaps up n ..... + 4.4
Flaps up n ..... - 2.2
Flaps down n..... + 2
Flaps down n.....0

16. Levelling Means: Horizontal reference upper fuselage spar.

17. Minimum Flight Crew: 1 (pilot) at 0.41±0.05m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.41±0.05m aft of datum and 2 at 1.19m aft of datum.

19. Baggage / Cargo Compartment Maximum baggage compartment: 40 kg (88 lb) at 1.90m aft of datum

20. Wheels and Tires:

Main gear track .....2.58 m (8.46 ft)
Wheel tire size .....380 x 150 or 5.00-5
Front gear angular movement .....left: 27°
.....right: 27°

Tire pressure ..... refer to the maintenance manual
Oleo strut pressure ..... refer to the maintenance manual

21. Control surface movements:

Elevator: up ..... 9°30' ± 30'
down ..... 12° ± 30'

Ailerons: Refer to following table

up	neutral	down
15°± 1°	2° ± 1°	10°± 1°

Elevator tab: Elevator up: .....25°30' ± 1°.....6° ± 1°
Elevator down: 10°30' ± 1° 16°30' ± 1°

Flaps: 1st notch: .....15° ± 5°
2nd notch: ..... $60^{\circ}\ ^{+0^{\circ}}_{-5^{\circ}}$

Rudder: .....$25^{\circ}\ ^{+3^{\circ}}_{-0^{\circ}}$ (1)

(1) For planes fitted with brakes controlled with rudder pedals:
16° (-0°, +2°) before operating drum brakes
20° (-0°, +3°) before operating disk brakes

22. (Reserved)

CC.IV Operating and Service Instructions

Airplane Flight Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Schedule..... Refer to the latest amendment of Service Letter no. 6

CC.V Note:

1. This plane is identical to DR 400/125 except powerplant

2. "Standard 92" models: Since July 1993 (from serial nr. 2212 included)

"Standard 88" models: Before July 1993 (before serial nr.2212 excluded)

Section DD: DR 400/125i

DD.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 400/125i
2.	Airworthiness Category:	Normal and Utility Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification date:	September 25, 1975
7.	EASA Type Certification Date:	January28, 2013 (Type Certificate transfer)
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 45	

DD.II Certification Basis

1.	Reference Date for determining the applicable requirements:	18 September 1974
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment June 6th, 1966 FAR part 23 as amended by amendment 7
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	Canopy emergency release system
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	ICAO Annex 16, Vol.1. Chap 6.

DD.III Technical Characteristics and Operational Limitations

1.	Type Design Definition:	Refer to CEAPR document n°1001131
2.	Description:	Single-engine, four-seat, low-wing airplane, wood construction, fixed tricycle 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. Stall warning system “Safe Flight” n°164 or APR 79.88.00 or approved equivalent must be installed.
4.	Dimensions:	Span ..... 8.72 m (28.61 ft) Height ..... 2.23 m (7.32 ft) Length ..... 6.96 m (22.83 ft) Wing Area ..... 13.60 m² (146.39 foot²)
5.	Engines:	Continental IO-240 A, B The EASA type certification standard includes that of FAA TC E-7SO, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS

standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum continuous power: 2800 rpm

6. Propellers:

Manufacturer	Model	∅	Number of blades	Governor	Minimum static RPM at sea level
MT Propeller	MTV-7-D/170-09	1.70 m	3	Electrical variable pitch	Constant speed

The EASA type certification standard includes that of FAA TC P20BO, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 91/96 or 100/130 octane minimum aviation grade gasoline

7.2 Engine Oil: Teledyne Continental engine IO-240-B
(Refer to Continental specifications MHS24 or MHS-25 and SB M87-12R1)

Oil	Ashless dispersant (AD)	Straight mineral
All temperatures	SAE15W50 or 20W50	--------
Above +4°C (40°F)	SAE15W50 or 20W60	SAE50
Below +4°C (40°F)	10W30, 15W30, 20W50	SAE30

7.3 Coolant: Not Applicable

8. Fluid capacities:

8.1 Fuel:

Main tank (litres)		Auxiliary tank (optional) (litres)	
Capacity	Usable	Capacity	Usable
110	109	50	50

8.2 Oil:

maximum	minimum
5.7 litres	2.9 litres

9. Air speeds:

V_{NE} .....308 km/h (166 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_C.....260 km/h (140 knots IAS)
V_A .....215 km/h (116 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)

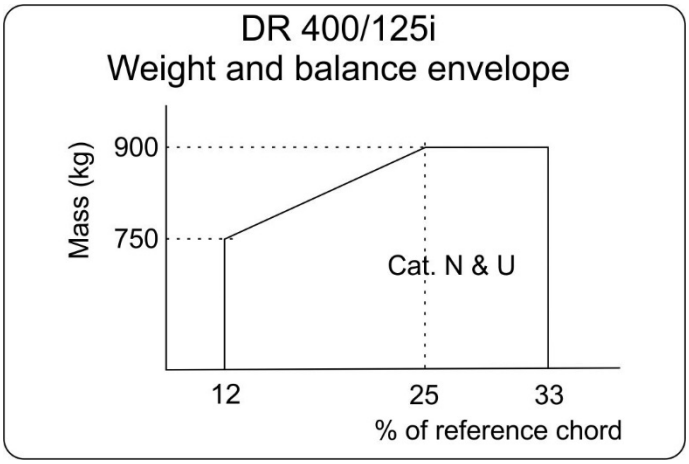
10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:

"N" Category		"U" Category
Take-off	Landing	
900 kg (1984 lb)	900 kg (1984 lb)	900 kg (1984 lb)

13. Centre of Gravity Range:



Normal and Utility Category
Forward limit (12 % ref.): .. 0.205 m aft of datum at 750 kg
Intermediate limit (25 % ref.):0.428 m aft of datum at 900 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 900 kg

14. Datum: Wing leading edge of the rectangular part of the wings. Cord length at reference section: 1.71 m (5.61 ft)

15. Load factor at maximum weight:

Normal Category: Flaps up n ..... + 3.8
Flaps up n ..... - 1.9
Flaps down n..... + 2
Flaps down n.....0

Utility Category: Flaps up n ..... + 4.4
Flaps up n ..... - 2.2
Flaps down n..... + 2
Flaps down n.....0

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.41±0.05m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.41±0.05m aft of datum and 2 at 1.19m aft of datum.

19. Baggage / Cargo Compartment: Maximum baggage compartment: 40 kg (88 lb) at 1.90m aft of datum

20. Wheels and Tires

Main gear track ..... 2.58 m (8.46 ft)
Wheel tire size ..... 380 x 150 or 5.00-5
Front gear angular movement ..... left: 27°
..... right: 27°
Tire pressure ..... refer to the maintenance manual
Oleo strut pressure ..... refer to the maintenance manual

21. Control surface movements

Elevator: up ..... 9°30' ± 30'
down ..... 12° ± 30'

Ailerons: Relative to the trailing edge of the wings

up	neutral	down
15°± 1°	2° ± 1°	10°± 1°

Elevator tab: Elevator up:.....25°30' ± 1°.....6° ± 1°
Elevator down: 10°30' ± 1° 16°30' ± 1°

Flaps: 1st notch: .....15° ± 5°
2nd notch: ..... 60° $^{+0°}_{-5°}$

Rudder:.....25° $^{+3°}_{-0°}$ (1)

(1) For planes fitted with brakes controlled with rudder pedals:
16° (-0°, +2°) before operating drum brakes
20° (-0°, +3°) before operating disk brakes

22. (Reserved)

DD.IV Operating and Service Instructions

Airplane Flight Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Schedule..... Refer to the latest amendment of Service Letter no. 6

DD.V Note:

1. This plane is identical to DR 400/120 except powerplant

Section EE: DR 400/140 B

EE.I General

1. a) Type:	DR 200, DR 300, and DR 400 series
b) Model:	DR 400/140 B
2. Airworthiness Category:	Normal and Utility Category
3. Type Certificate Holder:	Refer to Note 2 Section PP
4. Manufacturer:	Refer to Note 3 Section PP
5. (Reserved)	
6. DGAC Type Certification date:	November 09, 1975
7. EASA Type Certification Date:	January28, 2013 (Type Certificate transfer)
8. The EASA type Certificates replaces DGAC-France Type Certificate no. 45	

EE.II Certification Basis

1. Reference Date for determining the applicable requirements:	29 August 1975
2. (Reserved)	
3. (Reserved)	
4. Certification Basis:	France AIR2052
5. Airworthiness Requirements:	France AIR2052 amendment June 6th, 1966 FAR part 23 as amended by amendment 7
6. Requirements elected to comply:	None
7. EASA Special Conditions:	Canopy emergency release system
8. EASA Exemptions:	None
9. EASA Equivalent Safety Findings:	None
10. EASA Environmental Standards:	ICAO Annex 16, Vol.1. Chap 6.

EE.III Technical Characteristics and Operational Limitations

1. Type Design Definition:	Refer to CEAPR document n°1001131 for DR400 “STANDARD 88” (Refer to note 2) Refer to CEAPR document n°1001130 for DR400 “STANDARD 92” (Refer to note 2)
2. Description:	Single-engine, four-seat, low-wing airplane, wood construction, fixed tricycle 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. Stall warning system “Safe Flight” n°164 or APR 79.88.00 or approved equivalent must be installed.
4. Dimensions:	Span ..... 8.72 m (28.61 ft) Height ..... 2.23 m (7.32 ft) Length ..... 6.96 m (22.83 ft) - Round spinner 7.10 m (23.29 ft) - Sharp spinner Wing Area ..... 13.60 m² (146.39 foot²)

5. Engines: Lycoming O-320-D2A

The EASA type certification standard includes that of FAA TC E-274, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits:

Propeller Manufacturer	Model	Maximum Continuous Power RPM
Sensenich	74 DM 6S5-2-64	2700 rpm (1)
	74 DM 6S5-2-60	2500 rpm (1)

Remarks: (1) Maximum continuous power limited by noise regulation.

6. Propellers:

Manufacturer	Model	∅	Number of blades	Minimum static RPM at sea level
Sensenich	74 DM 6S5-2-64	1.83 m (1)	2	2200 rpm
	74 DM 6S5-2-60		2	2300 rpm

Remarks: (1) No acceptable diameter reduction for repair.

The EASA type certification standard includes that of FAA TC P-886, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 91/96 or 100/130 octane minimum aviation grade gasoline.
Refer to latest revision of Service Instruction Lycoming No. 1070

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel:

Main tank (litres)		Auxiliary tank (optional) (litres)	
Capacity	Usable	Capacity	Usable
110	100/109 (1)	50	50

(1) New standard called “Standard 92” from serial number 2210, unusable quantity of fuel reduced from 10 litres to 1 liter, (refer to note 2).

8.2 Oil: Oil sump capacity ..... 8 U.S. quarts (7.57 litres)
Usable..... 6 U.S. quarts (5.68 litres)

9. Air speeds:

V_{NE} .....308 km/h (166 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_C.....260 km/h (140 knots IAS)
V_A .....215 km/h (116 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)

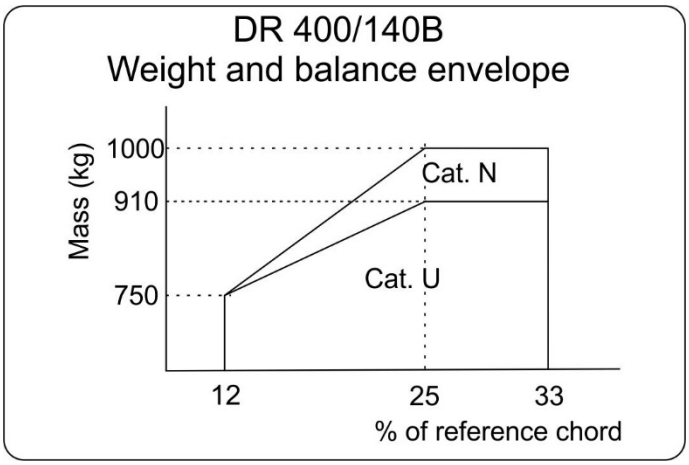
10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:

“N” Category		“U” Category
Take-off	Landing	
1000 kg (2205 lb)	1000 kg (2205 lb)	910 kg (2006 lb)

13. Centre of Gravity Range:



Normal and Utility Category
Forward limit (12 % ref.): .. 0.205 m aft of datum at 750 kg
Intermediate limit (25 % ref.):0.428 m aft of datum at 1000 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 1000 kg
Normal and Utility Category
Forward limit (12 % ref.): .. 0.205 m aft of datum at 750 kg
Intermediate limit (25 % ref.):0.428 m aft of datum at 910 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 910 kg

14. Datum: Wing leading edge of the rectangular part of the wings. Cord length at reference section: 1.71 m (5.61 ft)

15. Load factor at maximum weight:

Normal Category: Flaps up n ..... + 3.8
Flaps up n ..... - 1.9
Flaps down n..... + 2
Flaps down n.....0

Utility Category: Flaps up n ..... + 4.4
Flaps up n ..... - 2.2
Flaps down n..... + 2
Flaps down n.....0

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.41±0.05m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.41±0.05m aft of datum and 2 at 1.19m aft of datum.

19. Baggage / Cargo Compartment: Maximum baggage compartment: 40 kg (88 lb) at 1.90m aft of datum

20. Wheels and Tires:

Main gear track .....2.58 m (8.46 ft)
Wheel tire size .....380 x 150 or 5.00-5
Front gear angular movement .....left: 27°
.....right: 27°
Tire pressure ..... refer to the maintenance manual
Oleo strut pressure ..... refer to the maintenance manual

21. Control surface movements:

Elevator: up ..... 9°30' ± 30'
down ..... 12° ± 30'

Ailerons: Relative to the trailing edge of the wings

up	neutral	down
15°± 1°	2° ± 1°	10°± 1°

Elevator tab: Elevator up: .....25°30' ± 1°.....6° ± 1°
Elevator down: 10°30' ± 1° 16°30' ± 1°

Flaps: 1st notch: .....15° ± 5°
2nd notch: ..... $60°\ ^{+0°}_{-5°}$

Rudder: ..... $25°\ ^{+3°}_{-0°}$ (1)

(1) For planes fitted with brakes controlled with rudder pedals:
16° (-0°, +2°) before operating drum brakes
20° (-0°, +3°) before operating disk brakes

22. (Reserved)

EE.IV Operating and Service Instructions

Airplane Flight Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Schedule..... Refer to the latest amendment of Service Letter no. 6

EE.V Note:

1. This plane is identical to DR 400/140 except powerplant
2. “Standard 92” models: Since June 1993 (from serial nr 2211 included)
   “Standard 88” models: Before June 1993 (before serial nr.2211 excluded)

Section FF: DR 400/120A

FF.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 400/120 A
2.	Airworthiness Category:	Normal and Utility Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification date:	November 15, 1976
7.	EASA Type Certification date:	January28, 2013 (Type Certificate transfer)
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 45	

FF.II Certification Basis

1.	Reference Date for determining the applicable requirements:	28 June 1976
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment June 6th, 1966 FAR part 23 as amended by amendment 7
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	Canopy emergency release system
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	ICAO Annex 16, Vol.1. Chap 6.

FF.III Technical Characteristics and Operational Limitations

1.	Type Design Definition:	Refer to CEAPR document n°1001131
2.	Description:	Single-engine, four-seat, low-wing airplane, wood construction, fixed tricycle 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. Stall warning system “Safe Flight” n°164 or APR 79.88.00 or approved equivalent must be installed..
4.	Dimensions:	Span ..... 8.72 m (28.61 ft) Height ..... 2.23 m (7.32 ft) Length ..... 6.96 m (22.83 ft) Wing Area ..... 13.60 m² (146.39 foot²)
5.	Engines:	Lycoming O-235-L2A or O-235-K2A or O-235-K2B The EASA type certification standard includes that of FAA TC E-223, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS

standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum continuous power: 2800 rpm

6. Propellers:

Manufacturer	Model	∅	Number of blades	Minimum static RPM at sea level
Mac Cauley	1 A 135 JCM 71-50	1.80 m	2	2200 rpm (2)
		1.77 m (1)	2	
	1 A 135 JCM 71-47	1.80 m	2	
		1.77 m (1)	2	
Hoffmann	HO-14-178/115	1.78 m	2	2250 rpm
		1.73 m (1)	2	

Remarks:
(1) Minimum diameter after repair.
(2) Do not continuous operate between 2025 rpm and 2325 rpm.
The EASA type certification standard includes that of FAA TC P-842, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 100/100LL octane minimum aviation grade gasoline. Refer to latest revision of Service Instruction Lycoming No. 1070

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel:

Main tank (litres)		Auxiliary tank (optional) (litres)	
Capacity	Usable	Capacity	Usable
110	100	50	50

8.2 Oil: Oil sump capacity ..... 6 U.S. quarts (5.68 litres)
Usable..... 4 U.S. quarts (3.79 litres)

9. Air speeds:

V_{NE} .....308 km/h (166 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_C.....260 km/h (140 knots IAS)
V_A .....215 km/h (116 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)

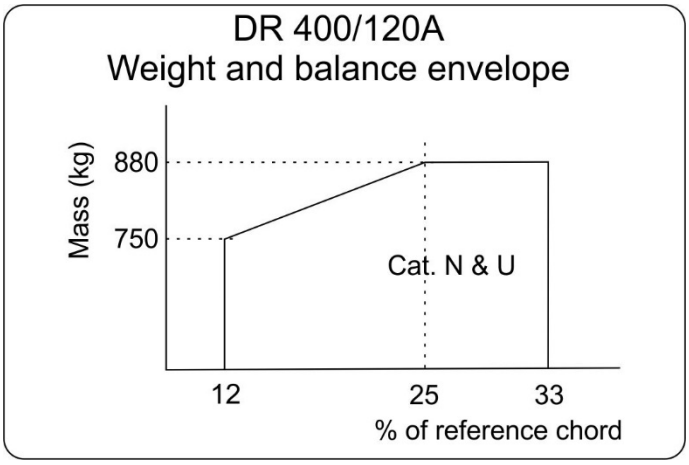
10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:

"N" Category		"U" Category
Take-off	Landing	
880 kg (1940 lb)	880 kg (1940 lb)	880 kg (1940 lb)

13. Centre of Gravity Range:



Normal and Utility Category
Forward limit (12 % ref.): .. 0.205 m aft of datum at 750 kg
Intermediate limit (25 % ref.):0.428 m aft of datum at 880 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 880 kg

14. Datum: Wing leading edge of the rectangular part of the wings. Cord length at reference section: 1.71 m (5.61 ft)

15. Load factor at maximum weight:

Normal Category: Flaps up n ..... + 3.8
Flaps up n ..... - 1.9
Flaps down n..... + 2
Flaps down n.....0

Utility Category: Flaps up n ..... + 4.4
Flaps up n ..... - 2.2
Flaps down n..... + 2
Flaps down n.....0

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.41±0.05m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.41±0.05m aft of datum and 2 at 1.19m aft of datum.

19. Baggage / Cargo Compartment Maximum baggage compartment: 40 kg (88 lb) at 1.90m aft of datum

20. Wheels and Tires:

Main gear track ..... 2.58 m (8.46 ft)
Wheel tire size ..... 380 x 150 or 5.00-5
Front gear angular movement ..... left: 27°
..... right: 27°
Tire pressure ..... refer to the maintenance manual
Oleo strut pressure ..... refer to the maintenance manual

21. Control surface movements

Elevator: up ..... 9°30' ± 30'
down ..... 12° ± 30'

Ailerons: Relative to the trailing edge of the wings:

up	neutral	down
15°± 1°	2° ± 1°	10°± 1°

Elevator tab: Elevator up: .....25°30' ± 1°.....6° ± 1°
Elevator down: 10°30' ± 1° 16°30' ± 1°

Flaps: 1st notch: .....15° ± 5°
2nd notch: ..... $60°\ ^{+0°}_{-5°}$

Rudder: .....$25°\ ^{+3°}_{-0°}$ (1)

(1) For planes fitted with brakes controlled with rudder pedals:
16° (-0°, +2°) before operating drum brakes
20° (-0°, +3°) before operating disk brakes

22. (Reserved)

FF.IV Operating and Service Instructions

Airplane Flight Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Schedule..... Refer to the latest amendment of Service Letter no. 6

FF.V Note:

1. This plane is identical to DR 400/120 except:
- propeller
- maximum mass

Section GG: DR 400/160D

GG.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 400/160 D
2.	Airworthiness Category:	Normal and Utility Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification date:	April 27, 1981
7.	EASA Type Certification date:	January28, 2013 (Type Certificate transfer)
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 45	

GG.II Certification Basis

1.	Reference Date for determining the applicable requirements:	21 March 1971
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment June 6th, 1966 FAR part 23 as amended by amendment 7
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	Canopy emergency release system
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	ICAO Annex 16, Vol.1. Chap 6.

GG.III Technical Characteristics and Operational Limitations

1.	Type Design Definition:	Refer to CEAPR document n°1001131
2.	Description:	Single-engine, four-seat, low-wing airplane, wood construction, fixed tricycle 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. Stall warning system “Safe Flight” n°164 or APR 79.88.00 or approved equivalent must be installed..
4.	Dimensions:	Span .....8.72 m (28.61 ft) Height .....2.23 m (7.32 ft) Length.....6.96 m (22.83 ft) - Round spinner 7.10 m (23.29 ft) - Sharp spinner Wing Area .....14.2 m² (152.85 foot²)
5.	Engines:	Lycoming O-320-D2A The EASA type certification standard includes that of FAA TC E-274, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS

standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum continuous Power: 2600 rpm
Remark: Maximum continuous power limited by noise regulation.

6. Propellers:

Manufacturer	Model	∅	Number of blades	Minimum static RPM at sea level
Sensenich	M74 DMS-2-66	1.83 m (1)	2	2150 rpm
	74 DM6S5-2-64		2	2250 rpm

Remark: (1) No acceptable diameter reduction for repair.

The EASA type certification standard includes that of FAA TC P-886, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 91/96 or 100/130 octane minimum aviation grade gasoline.
Refer to latest revision of Service Instruction Lycoming No. 1070.

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel:

Main tank (litres)		RH tank (litres)		LH tank (litres)		Auxiliary tank (optional) (litres)	
Capacity	Usable	Capacity	Usable	Capacity	Usable	Capacity	Usable
110	100/109 (1)	40	40	40	40	50	50

(1) New standard called “Standard 92” from serial number 2210, unusable quantity of fuel reduced from 10 litres to 1 liter (refer to note 2).

8.2 Oil: Oil sump capacity ..... 8 U.S. quarts (7.57 litres)
Usable..... 6 U.S. quarts (5.68 litres)

9. Air speeds:

V_{NE} .....308 km/h (166 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_C.....260 km/h (140 knots IAS)

V_A .....215 km/h (116 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)

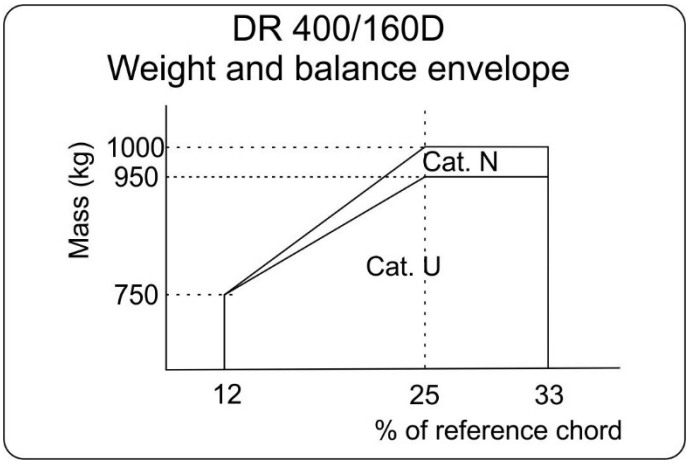
10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:

"N" Category		"U" Category
Take-off	Landing	
1000 kg (2205 lb)	1000 kg (2205 lb)	950 kg (2094 lb)

13. Centre of Gravity Range:



Normal Category
Forward limit (12 % ref.): .. 0.205 m aft of datum at 750 kg
Intermediate limit (25 % ref.):0.428 m aft of datum at 1000 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 1000 kg
Utility Category
Forward limit (12 % ref.): .. 0.205 m aft of datum at 750 kg
Intermediate limit (25 % ref.):0.428 m aft of datum at 950 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 950 kg

14. Datum: Wing leading edge of the rectangular part of the wings. Cord length at reference section: 1.71 m (5.61 ft)

15. Load factor at maximum weight:

Normal Category: Flaps up n ..... + 3.8
Flaps up n ..... - 1.9
Flaps down n..... + 2
Flaps down n.....0

Utility Category: Flaps up n ..... + 4.4
Flaps up n ..... - 2.2
Flaps down n..... + 2
Flaps down n.....0

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.41±0.05m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.41±0.05m aft of datum and 2 at 1.19m aft of datum.

19. Baggage / Cargo Compartment Maximum baggage compartment: 40 kg (88 lb) at 1.90m aft of datum

20. Wheels and Tires:

Main gear track ..... 2.58 m (8.46 ft)
Wheel tire size ..... 380 x 150 or 5.00-5
Front gear angular movement ..... left: 27°
..... right: 27°
Tire pressure ..... refer to the maintenance manual
Oleo strut pressure ..... refer to the maintenance manual

21. Control surface movements:

Elevator: up ..... 9°30' ± 30'
down ..... 12° ± 30'

Ailerons: Refer to following table

up	neutral	down
15°± 1°	2° ± 1°	10°± 1°

Elevator tab: Elevator up: .....25°30' ± 1°.....6° ± 1°
Elevator down: 10°30' ± 1° 16°30' ± 1°

Flaps: 1st notch: .....15° ± 5°
2nd notch: ..... 60° $^{+0°}_{-5°}$

Rudder: .....25° $^{+3°}_{-0°}$ (1)

(1) For planes fitted with brakes controlled with rudder pedals:
16° (-0°, +2°) before operating drum brakes
20° (-0°, +3°) before operating disk brakes

22. (Reserved)

GG.IV Operating and Service Instructions

Airplane Flight Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Schedule..... Refer to the latest amendment of Service Letter no. 6

GG.V<u>Note:</u>

1. This plane is identical to DR 400/160 except:
   - maximum continuous power rpm
   - maximum mass
2. “Standard 92” model: since November 1993

Section HH: DR 400/120 D

HH.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 400/120 D
2.	Airworthiness Category:	Normal and Utility Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification date:	April 28, 1981
7.	EASA Type Certification Date:	January28, 2013 (Type Certificate transfer)
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 45	

HH.II Certification Basis

1.	Reference Date for determining the applicable requirements:	28 June 1976
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment June 6th, 1966 FAR part 23 as amended by amendment 7
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	Canopy emergency release system
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	ICAO Annex 16, Vol.1. Chap 6.

HH.III Technical Characteristics and Operational Limitations

1.	Type Design Definition:	Refer to CEAPR document n°1001131
2.	Description:	Single-engine, four-seat, low-wing airplane, wood construction, fixed tricycle 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. Stall warning system “Safe Flight” n°164 or APR 79.88.00 or approved equivalent must be installed..
4.	Dimensions:	Span ..... 8.72 m (28.61 ft) Height ..... 2.23 m (7.32 ft) Length ..... 6.96 m (22.83 ft) Wing Area ..... 13.60 m² (146.39 foot²)
5.	Engines:	Lycoming O-235-L2A or O-235-K2A or O-235-K2B The EASA type certification standard includes that of FAA TC E-223, based on individual EU member state acceptance or certification of this standard prior to 28

September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits:

Maximum Continuous Power:

Propeller Manufacturer	Propeller model	Maximum Continuous Power RPM
Sensenich	72 CKS6-0-56	2600 (1)
Hoffmann	HO-14-178/115	2583 (1)

Remarks: (1) Maximum continuous power limited by noise regulation.

6. Propellers:

Manufacturer	Model	∅	Number of blades	Minimum static RPM at sea level
Sensenich	72 CK-S6-0-56	1.83 m (1)	2	2220
Hoffmann	HO-14-178/115	1.78 m	2	2220
		1.73 m (2)	2	2250

Remarks:
(1) No acceptable diameter reduction for repair.
(2) Minimum diameter after repair.

The EASA type certification standard includes that of FAA TC P-904, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 100/100LL octane minimum aviation grade gasoline. Refer to latest revision of Service Instruction Lycoming No. 1070.

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel:

Main tank (litres)		Auxiliary tank (optional) (litres)	
Capacity	Usable	Capacity	Usable
110	100	50	50

8.2 Oil: Oil sump capacity ..... 6 U.S. quarts (5.68 litres)
Usable..... 4 U.S. quarts (3.79 litres)

9. Air speeds:

V_{NE} .....308 km/h (166 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_C.....260 km/h (140 knots IAS)
V_A .....215 km/h (116 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)

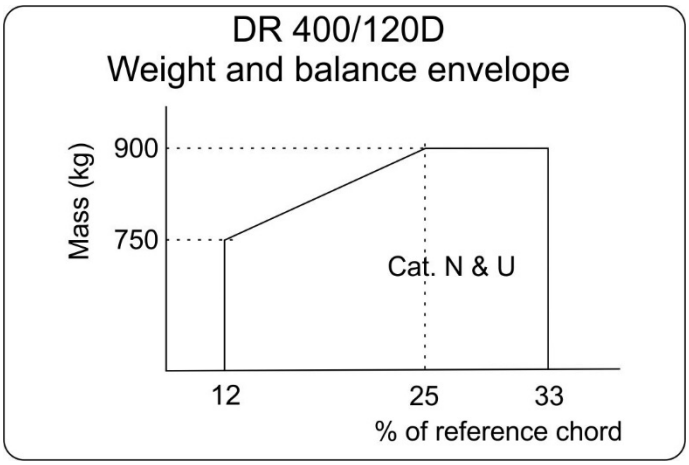
10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:

"N" Category		"U" Category
Take-off	Landing	
900 kg (1984 lb)	900 kg (1984 lb)	900 kg (1984 lb)

13. Centre of Gravity Range:



Normal and Utility Category
Forward limit (12 % ref.): .. 0.205 m aft of datum at 750 kg
Intermediate limit (25 % ref.):0.428 m aft of datum at 900 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 900 kg

14. Datum: Wing leading edge of the rectangular part of the wings. Cord length at reference section: 1.71 m (5.61 ft)

15. Load factor at maximum weight:

Normal Category: Flaps up n ..... + 3.8
Flaps up n ..... - 1.9
Flaps down n..... + 2
Flaps down n.....0

Utility Category: Flaps up n ..... + 4.4
Flaps up n ..... - 2.2
Flaps down n..... + 2
Flaps down n.....0

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.41±0.05m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.41±0.05m aft of datum and 2 at 1.19m aft of datum.

19. Baggage / Cargo Compartment Maximum baggage compartment: 40 kg (88 lb) at 1.90m aft of datum

20. Wheels and Tires

Main gear track ..... 2.58 m (8.46 ft)
Wheel tire size ..... 380 x 150 or 5.00-5
Front gear angular movement ..... left: 27°
..... right: 27°
Tire pressure ..... refer to the maintenance manual
Oleo strut pressure ..... refer to the maintenance manual

21. Control surface movements

Elevator:..... up ..... 9°30' ± 30'
down ..... 12° ± 30'
Ailerons:..... Relative to the trailing edge of the wings

up	neutral	down
15°± 1°	2° ± 1°	10°± 1°

Elevator tab:..... Elevator up: .....25°30' ± 1°.....6° ± 1°
Elevator down: 10°30' ± 1° 16°30' ± 1°
Flaps: ..... 1st notch: .....5° ± 5°
2nd notch: ..... $0°\ ^{+0°}_{-5°}$
Rudder: .....$25°\ ^{+3°}_{-0°}$ (1)

1) For planes fitted with brakes controlled with rudder pedals:

16° (-0°, +2°) before operating drum brakes

20° (-0°, +3°) before operating disk brakes

22. (Reserved)

HH.IV Operating and Service Instructions

Airplane Flight Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Schedule..... Refer to the latest amendment of Service Letter no. 6

HH.V Note:

1. This plane is identical to DR 400/120 except maximum continuous power rpm

Section II: DR 400/180 S

II.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 400/180S
2.	Airworthiness Category:	Normal and Utility Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification date:	February 11, 1985
7.	EASA Type Certification Date:	January28, 2013 (Type Certificate transfer)
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 45	

II.II Certification Basis

1.	Reference Date for determining the applicable requirements:	31 January 1985
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment June 6th, 1966 FAR part 23 as amended by amendment 7
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	Canopy emergency release system
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	ICAO Annex 16, Vol.1. Chap 6.

II.III Technical Characteristics and Operational Limitations

1.	Type Design Definition:	Refer to CEAPR document n°1001131
2.	Description:	Single-engine, four-seat, low-wing airplane, wood construction, fixed tricycle 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. Stall warning system “Safe Flight” n°164 or APR 79.88.00 or approved equivalent must be installed.
4.	Dimensions:	Span .....8.72 m (28.61 ft) Height .....2.23 m (7.32 ft) Length.....6.96 m (22.83 ft) - Round spinner .....7.10 m (23.29 ft) - Sharp spinner Wing Area .....14.2 m² (152.85 foot²)
5.	Engines:	Lycoming O-360-A3A The EASA type certification standard includes that of FAA TC E-286, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS

standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum continuous power: 2600 rpm
Remark: Maximum continuous power limited by noise regulation.

6. Propellers:

Manufacturer	Model	∅	Number of blades	Minimum static RPM at sea level
Sensenich	76 EM8S5-0-64	1.93 m (1)	2	2250 (2)

Remarks:
(1) No acceptable diameter reduction for repair.
(2) Do not continuous operate between 2150 rpm and 2350 rpm.

The EASA type certification standard includes that of FAA TC P4EA, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 100/100LL octane minimum aviation grade gasoline. Refer to latest revision of Service Instruction Lycoming No. 1070.

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel:

Main tank (litres)		RH tank (litres)		LH tank (litres)		Auxiliary tank (optional) (litres)	
Capacity	Usable	Capacity	Usable	Capacity	Usable	Capacity	Usable
110	100/109 (1)	40	40	40	40	50	50

(1) New standard called “Standard 92” from serial number 2210, unusable quantity of fuel reduced from 10 litres to 1 liter, (refer to note 2).

8.2 Oil: Oil sump capacity ..... 8 U.S. quarts (7.57 litres)
Usable..... 6 U.S. quarts (5.68 litres)

9. Air speeds:

V_{NE} .....308 km/h (166 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_C.....260 km/h (140 knots IAS)
V_A .....215 km/h (116 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)

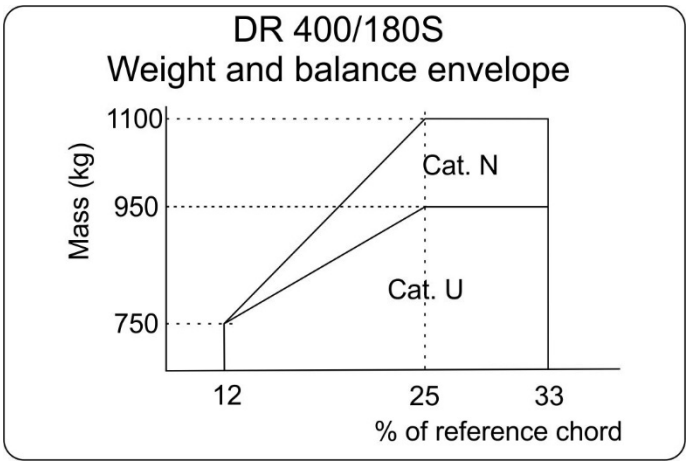
10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:

"N" Category		"U" Category
Take-off	Landing	
1100 kg (2425 lb)	1045 kg (2304 lb)	950 kg (2094 lb)

13. Centre of Gravity Range:



Normal Category
Forward limit (12 % ref.): .. 0.205 m aft of datum at 750 kg
Intermediate limit (25 % ref.):0.428 m aft of datum at 1100 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 1100 kg
Utility Category
Forward limit (12 % ref.): .. 0.205 m aft of datum at 750 kg
Intermediate limit (25 % ref.):0.428 m aft of datum at 950 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 950 kg

14. Datum: Wing leading edge of the rectangular part of the wings. Cord length at reference section: 1.71 m (5.61 ft)

15. Load factor at maximum weight:

Normal Category: Flaps up n ..... + 3.8
Flaps up n ..... - 1.9
Flaps down n..... + 2
Flaps down n.....0

Utility Category: Flaps up n ..... + 4.4
Flaps up n ..... - 2.2
Flaps down n..... + 2
Flaps down n.....0

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.41±0.05m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.41±0.05m aft of datum and 2 at 1.19m aft of datum.

19. Baggage / Cargo Compartment Maximum baggage compartment: 60 kg (132 lb) at 1.90m aft of datum)

20. Wheels and Tires:

Main gear track ..... 2.58 m (8.46 ft)
Wheel tire size ..... 380 x 150 or 5.00-5
Front gear angular movement ..... left: 27°
..... right: 27°
Tire pressure ..... refer to the maintenance manual
Oleo strut pressure ..... refer to the maintenance manual

21. Control surface movements

Elevator: up ..... 9°30' ± 30'
down ..... 12° ± 30'

Ailerons: Relative to the trailing edge of the wings

up	neutral	down
15°± 1°	2° ± 1°	10°± 1°

Elevator tab: Elevator up: .....25°30' ± 1°.....6° ± 1°
Elevator down: 10°30' ± 1° 16°30' ± 1°

Flaps: 1st notch: .....15° ± 5°
2nd notch: ..... 60° $^{+0°}_{-5°}$

Rudder: .....25° $^{+3°}_{-0°}$ (1)

(1) For planes fitted with brakes controlled with rudder pedals:
16° (-0°, +2°) before operating drum brakes
20° (-0°, +3°) before operating disk brakes

22. (Reserved)

II.IV Operating and Service Instructions

Airplane Flight Manual ..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Manual ..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Schedule ..... Refer to the latest amendment of Service Letter no. 6

II.V Note:

1. This plane is identical to DR 400/180 except:
- maximum continuous power rpm
- Sensenich 76 EM8S5-0-64 propeller only

2. "Standard 92" model

Section JJ: DR 400/100

JJ.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 400/100
2.	Airworthiness Category:	Normal and Utility Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification date:	November 06, 1987
7.	EASA Type Certification date:	January28, 2013 (Type Certificate transfer)
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 45	

JJ.II Certification Basis

1.	Reference Date for determining the applicable requirements:	13 April 1987
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment June 6th, 1966 FAR part 23 as amended by amendment 7
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	Canopy emergency release system
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	ICAO Annex 16, Vol.1. Chap 6.

JJ.III Technical Characteristics and Operational Limitations

1.	Type Design Definition:	Refer to CEAPR document n°1001131 for DR400 “STANDARD 88” (Refer to note 2) Refer to CEAPR document n°1001130 for DR400 “STANDARD 92” (Refer to note 2)
2.	Description:	Single-engine, two-seat, low-wing airplane, wood construction, fixed tricycle 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. Stall warning system “Safe Flight” n°164 or APR 79.88.00 or approved equivalent must be installed.
4.	Dimensions:	Span ..... 8.72 m (28.61 ft) Height ..... 2.23 m (7.32 ft) Length ..... 6.96 m (22.83 ft) - Round spinner ..... 7.10 m (23.29 ft) - Sharp spinner Wing Area ..... 13.60 m² (146.39 foot²)
5.	Engines:	Lycoming O-235-L2A

The EASA type certification standard includes that of FAA TC E-223, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum continuous power: 2600 rpm
Remark: Maximum continuous power limited by noise regulation.

6. Propellers:

Manufacturer	Model	∅	Number of blades	Minimum static RPM at sea level
Sensenich	72 CKS6-0-56	1.83 m (*)	2	2220 rpm

Remarks: (*) No acceptable diameter reduction for repair.

The EASA type certification standard includes that of FAA TC P-904, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 100/100LL octane minimum aviation grade gasoline. Refer to latest revision of Service Instruction Lycoming No. 1070.

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel:

Main tank (litres)		Auxiliary tank (optional) (litres)	
Capacity	Usable	Capacity	Usable
110	100/109 (1)	50	50

(1) New standard called “Standard 92” from serial number 2210, unusable quantity of fuel reduced from 10 litres to 1 liter, (refer to note 2).

8.2 Oil: Oil sump capacity ..... 6 U.S. quarts (5.68 litres)
Usable..... 4 U.S. quarts (3.79 litres)

9. Air speeds:

V_{NE} .....308 km/h (166 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_C.....260 km/h (140 knots IAS)
V_A .....215 km/h (116 knots IAS)

V_{FE} .....170 km/h (92 knots IAS)

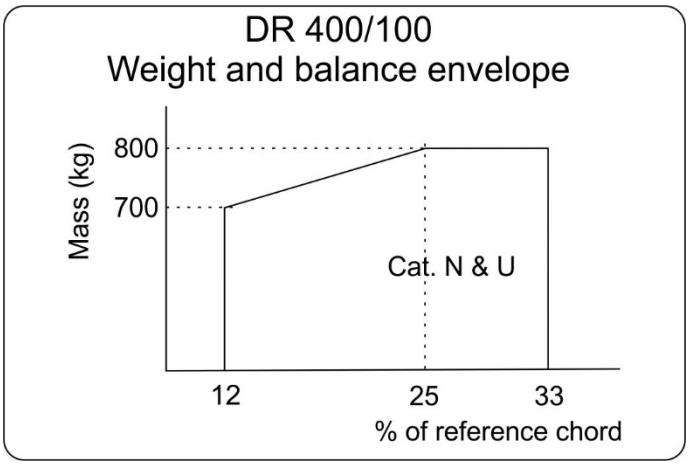
10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:

"N" Category		"U" Category
Take-off	Landing	
800 kg (1764 lb)	800 kg (1764 lb)	800 kg (1764 lb)

13. Centre of Gravity Range:



Normal and Utility Category
Forward limit (12 % ref.): .. 0.205 m aft of datum at 700 kg
Intermediate limit (25 % ref.):0.428 m aft of datum at 800 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 800 kg

14. Datum: Wing leading edge of the rectangular part of the wings. Cord length at reference section: 1.71 m (5.61 ft)

15. Load factor at maximum weight:

Normal Category: Flaps up n ..... + 3.8
Flaps up n ..... - 1.9
Flaps down n..... + 2
Flaps down n.....0

Utility Category: Flaps up n ..... + 4.4
Flaps up n ..... - 2.2
Flaps down n..... + 2
Flaps down n.....0

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.41±0.05m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.41±0.05m aft of datum

19. Baggage / Cargo Compartment Maximum baggage compartment: 40 kg (88 lb) at 1.10m aft of datum

20. Wheels and Tires:

Main gear track ..... 2.58 m (8.46 ft)
Wheel tire size ..... 380 x 150 or 5.00-5
Front gear angular movement ..... left: 27°
..... right: 27°
Tire pressure ..... refer to the maintenance manual
Oleo strut pressure ..... refer to the maintenance manual

21. Control surface movements

Elevator:..... up ..... 9°30' ± 30'
down ..... 12° ± 30'
Ailerons:..... Relative to the trailing edge of the wings

up	neutral	down
15°± 1°	2° ± 1°	10°± 1°

Elevator tab:..... Elevator up: .....25°30' ± 1°.....6° ± 1°
Elevator down: 10°30' ± 1° 16°30' ± 1°
Flaps: ..... 1st notch: .....15° ± 5°
2nd notch: ..... $60° \begin{smallmatrix}+0°\\-5°\end{smallmatrix}$
Rudder: .....$25° \begin{smallmatrix}+3°\\-0°\end{smallmatrix}$ (1)

(1) For planes fitted with brakes controlled with rudder pedals:
16° (-0°, +2°) before operating drum brakes
20° (-0°, +3°) before operating disk brakes

22. (Reserved)

JJ.IV Operating and Service Instructions

Airplane Flight Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Schedule..... Refer to the latest amendment of Service Letter no. 6

JJ.V Note:

1. This plane is identical to DR 400/120 D except:
- rear seats removed
- luggage compartment layout
- maximum weight
- brakes
- new instrument panel

2. "Standard 92" models: Since April 2017 (from serial nr 2703 included)

"Standard 88" models: Before April 2017 (before serial nr.2703 excluded)

Section KK: DR 400 RP

KK.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR400 RP
2.	Airworthiness Category:	Normal and Utility Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification date:	August 11, 1988
7.	EASA Type Certification date:	January28, 2013 (Type Certificate transfer)
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 45	

KK.II Certification Basis

1.	Reference Date for determining the applicable requirements:	January 1986
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment June 6th, 1966 FAR part 23 as amended by amendment 32
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	Canopy emergency release system
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	ICAO Annex 16, Vol.1. Chap 6.

KK.III Technical Characteristics and Operational Limitations

1.	Type Design Definition:	Refer to CEAPR document n°1001131
2.	Description:	Single-engine, four-seat, low-wing airplane, wood construction, fixed tricycle 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. Stall warning system “Safe Flight” n°164 or APR 79.88.00 or approved equivalent must be installed.
4.	Dimensions:	Span ..... 8.72 m (28.61 ft) Height ..... 2.23 m (7.32 ft) Length ..... 7.45 m (24.44 ft) Wing Area ..... 13.60 m² (146.39 foot²)
5.	Engines:	Porsche PFM 3200 N01
	5.1 Engine Limits:	Maximum Continuous Power:..... 2200 rpm
6.	Propellers:	

Manufacturer	Model	∅	Number of blades	Governor	Minimum static RPM at sea level
Hoffmann	HO V 123 F1/200 CQ	2.00 m	3	Woodward B 2109-681	Constant speed

The EASA type certification standard includes that of FAA TC P5EU, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 91/96 or 100/130 octane minimum aviation grade gasoline

7.2 Engine Oil: Only automotive type SAE 5W 30
SAE 5W 50
SAE 10W 30
SAE 15W 50 (*)
SAE 20W 50 (*)

(*) Do not use below -5°C (25°F) external on ground temperature

8. Fluid capacities:

8.1 Fuel:

Main tank (litres)		Auxiliary tank (optional) (litres)	
Capacity	Usable	Capacity	Usable
115	108	50	50

8.2 Oil: Refer to approved flight manual

9. Air speeds:

V_{NE} .....308 km/h (166 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_C.....260 km/h (140 knots IAS)
V_A .....215 km/h (116 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)

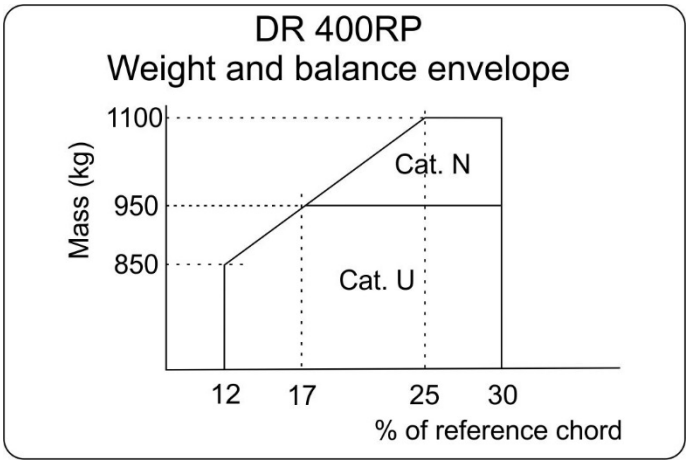
10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:

"N" Category		"U" Category
Take-off	Landing	
1100 kg (2425 lb)	1100 kg (2425 lb)	950 kg (2094 lb)

13. Centre of Gravity Range:



Normal category
Forward limit (12 % ref.): .. 0.205 m aft of datum at 850 kg
Intermediate limit (25 % ref.):0.428 m aft of datum at 1100 kg
Aft limit (30 % ref.): ..... 0.513 m aft of datum at 1100 kg
Utility category
Forward limit (12 % ref.): .. 0.205 m aft of datum at 850 kg
Intermediate limit (17 % ref.):0.294 m aft of datum at 950 kg
Aft limit (30 % ref.): ..... 0.513 m aft of datum at 950 kg

14. Datum: Wing leading edge of the rectangular part of the wings. Cord length at reference section: 1.71 m (5.61 ft)

15. Load factor at maximum weight:

Normal Category: Flaps up n ..... + 3.8
Flaps up n ..... - 1.9
Flaps down n..... + 2
Flaps down n.....0

Utility Category: Flaps up n ..... + 4.4
Flaps up n ..... - 2.2
Flaps down n..... + 2
Flaps down n.....0

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.41±0.05m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.41±0.05m aft of datum and 2 at 1.19m aft of datum.

19. Baggage / Cargo Compartment Maximum baggage compartment: 60 kg (132 lb) at 1.90m aft of datum

20. Wheels and Tires

Main gear track ..... 2.58 m (8.46 ft)
Wheel tire size ..... 380 x 150 or 5.00-5
Front gear angular movement ..... left: 27°
..... right: 27°
Tire pressure ..... refer to the maintenance manual
Oleo strut pressure ..... refer to the maintenance manual

21. Control surface movements

Elevator:..... up ..... 9°30' ± 30'
down ..... 12° ± 30'
Ailerons:..... Relative to the trailing edge of the wings

up	neutral	down
15°± 1°	2° ± 1°	10°± 1°

Elevator tab:..... Elevator up: .....25°30' ± 1°.....6° ± 1°
Elevator down: 10°30' ± 1° 16°30' ± 1°
Flaps: ..... 1st notch: .....15° ± 5°
2nd notch: ..... $60^{\circ}\ ^{+0^{\circ}}_{-5^{\circ}}$
Rudder: ..... $25^{\circ}\ ^{+3^{\circ}}_{-0^{\circ}}$

22. (Reserved)

KK.IV Operating and Service Instructions

Airplane Flight Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Schedule..... Refer to the latest amendment of Service Letter no. 6

KK.V Note:

1. This plane is identical to DR 400/180 R except:
   - powerplant
   - maximum weight

Section LL: DR 400 NGL

LL.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 400 NGL
2.	Airworthiness Category:	Normal Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification date:	February 19, 1991
7.	EASA Type Certification date:	January28, 2013 (Type Certificate transfer)
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 45	

LL.II Certification Basis

1.	Reference Date for determining the applicable requirements:	21 March 1971
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment June 6th, 1966 FAR part 23 as amended by amendment 7
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	Canopy emergency release system
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	ICAO Annex 16, Vol.1. Chap 10.

LL.III Technical Characteristics and Operational Limitations

1.	Type Design Definition:	Refer to CEAPR document n°1002197
2.	Description:	Single-engine, four-seat, low-wing airplane, wood construction, fixed tricycle 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. Stall warning system “Safe Flight” n°164 or APR 79.88.00 or approved equivalent must be installed.
4.	Dimensions:	Span .....8.72 m (28.61 ft) Height .....2.23 m (7.32 ft) Length.....7.10 m (23.29 ft) Wing Area .....14.20 m² (152.85 foot²)
5.	Engines:	Lycoming O-360-A3A The EASA type certification standard includes that of FAA TC E-286, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS

standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum Continuous Power: 2600 rpm

Remark: Maximum continuous power limited by noise regulation.

6. Propellers:

Manufacturer	Model	∅	Number of blades	Minimum static RPM at sea level
Sensenich	76 EM8S5-0-64	1.93 m (1)	2	2180 rpm (2)

Remarks:
(1) No acceptable diameter reduction for repair.
(2) Do not continuous operate between 2150 rpm and 2350 rpm.

The EASA type certification standard includes that of FAA TC P4EA, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 100/100LL octane minimum aviation grade gasoline. Refer to latest revision of Service Instruction Lycoming No. 1070.

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel:

Main tank (litres)		RH tank (litres)		LH tank (litres)		Auxiliary tank (optional) (litres)	
Capacity	Usable	Capacity	Usable	Capacity	Usable	Capacity	Usable
110	100	40	40	40	40	50	50

8.2 Oil: Oil sump capacity ..... 8 U.S. quarts (7.57 litres)
Usable..... 6 U.S. quarts (5.68 litres)

9. Air speeds:

V_{NE} .....308 km/h (166 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_C.....260 km/h (140 knots IAS)
V_A .....215 km/h (116 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)

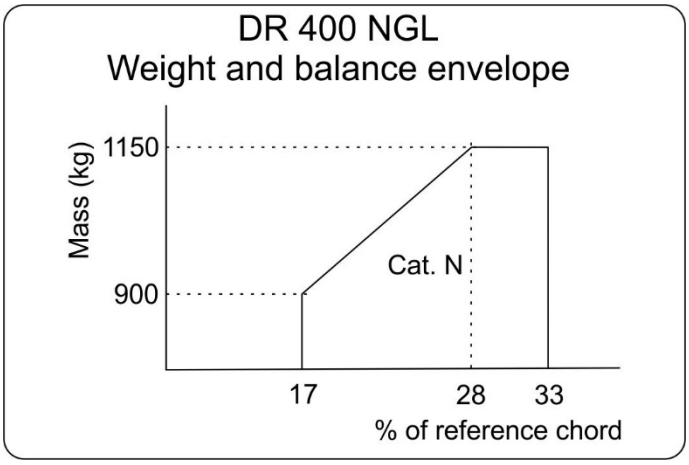
10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:

"N" Category	
Take-off	Landing
1150 kg (2535 lb)	1150 kg (2535 lb)

13. Centre of Gravity Range:



Normal Category
Forward limit (17 % ref.): .. 0.294 m aft of datum at 900 kg
Intermediate limit (28 % ref.):0.478 m aft of datum at 1150 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 1150 kg

14. Datum: Wing leading edge of the rectangular part of the wings. Cord length at reference section: 1.71 m (5.61 ft)

15. Load factor at maximum weight:

Normal Category: Flaps up n ..... + 3.8
Flaps up n ..... - 1.9
Flaps down n..... + 2
Flaps down n.....0

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.41±0.05m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.41±0.05m aft of datum and 2 at 1.19m aft of datum.

19. Baggage / Cargo Compartment Maximum baggage compartment: 60 kg (132 lb) at 1.90m aft of datum

20. Wheels and Tires:

Main gear track ..... 2.58 m (8.46 ft)
Wheel tire size ..... 380 x 150 or 5.00-5
Front gear angular movement ..... left: 27°
..... right: 27°
Tire pressure ..... refer to the maintenance manual
Oleo strut pressure ..... refer to the maintenance manual

21. Control surface movements

Elevator:..... up ..... 9°30' ± 30'
down ..... 12° ± 30'
Ailerons:..... Relative to the trailing edge of the wings

up	neutral	down
15°± 1°	2° ± 1°	10°± 1°

Elevator tab:..... Elevator up: .....25°30' ± 1°.....6° ± 1°
Elevator down: 10°30' ± 1° 16°30' ± 1°
Flaps: ..... 1st notch: .....15° ± 5°
2nd notch: ..... 60° $^{+0°}_{-5°}$
Rudder: ..... 25° $^{+3°}_{-0°}$

22. (Reserved)

LL.IV Operating and Service Instructions

Airplane Flight Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Schedule..... Refer to the latest amendment of Service Letter no. 6

LL.V Note:

1. This plane is identical to DR 400/180 except:
   - larger cabin
   - maximum weight
   - Sensenich 76 EM8S5-0-64 propeller only

Section MM: DR 400/200R

MM.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 400/200 R
2.	Airworthiness Category:	Normal and Utility Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification date:	December 11, 1992
7.	EASA Type Certification Date:	January28, 2013 (Type Certificate transfer)
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 45	

MM.II Certification Basis

1.	Reference Date for determining the applicable requirements:	3 August 1972
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment June 6th, 1966 FAR part 23 as amended by amendment 7
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	Canopy emergency release system Airplane and towed sailplane maximum masses are limited considering the minimum climb performances required.
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	ICAO Annex 16, Vol.1. Chap 10.

MM.III Technical Characteristics and Operational Limitations

1.	Type Design Definition:	Refer to CEAPR document n°1001131 for DR400 “STANDARD 88” Refer to CEAPR document n°1001130 for DR400 “STANDARD 92”
2.	Description:	Single-engine, four-seat, low-wing airplane, wood construction, fixed tricycle 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. Stall warning system “Safe Flight” n°164 or APR 79.88.00 or approved equivalent must be installed.

4. Dimensions:

Span ..... 8.72 m (28.61 ft)
Height ..... 2.23 m (7.32 ft)
Length ..... 7.22 m (23.69 ft)
Wing Area ..... 13.60 m² (146.39 foot²)

5. Engines: Lycoming IO-360-A1 B6

The EASA type certification standard includes that of FAA TC 1E10, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum Continuous Power: 2700 rpm

6. Propellers:

Manufacturer	Model	∅	Number of blades	Governor	Minimum static RPM at sea level
Hartzell	HC-C2YK-1BF/F7666A-2	1.88 m	2	Woodward B 2109-681	Constant speed (*)

Remarks: (*) Variable pitch from 14° to 29.2°

The EASA type certification standard includes that of FAA TC P-920, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 100/130 octane minimum aviation grade gasoline. Refer to latest revision of Service Instruction Lycoming No. 1070.

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel:

Main tank (litres)		Auxiliary tank (optional) (litres)	
Capacity	Usable	Capacity	Usable
110	109	50	50

8.2 Oil: Oil sump capacity ..... 8 U.S. quarts (7.57 litres)
Usable..... 6 U.S. quarts (5.68 litres)

9. Air speeds:

V_{NE} .....308 km/h (166 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_C.....260 km/h (140 knots IAS)
V_A .....215 km/h (116 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)

10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

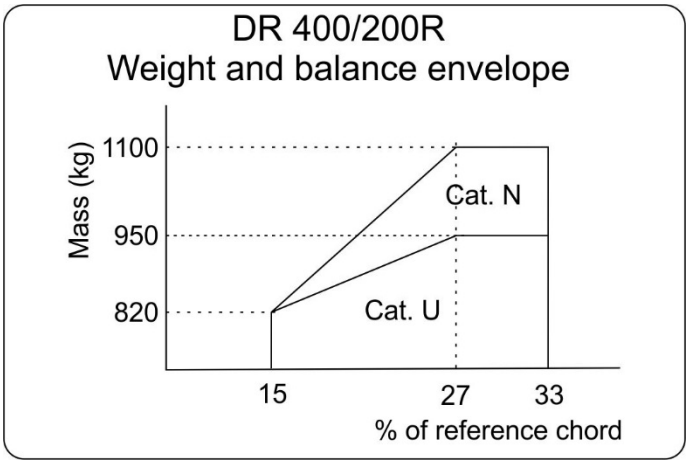
11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:

"N" Category		"U" Category
Take-off	Landing	
1100 kg (2425 lb)	1100 kg (2425 lb)	950 kg (2094 lb)

12.1 Towing mass limitations: Each maximum mass of the tug and of the towed glider is limited by the minimum climb performance.

13. Centre of Gravity Range:



Normal Category
Forward limit (15 % ref.): .. 0.257 m aft of datum at 820 kg
Intermediate limit (27 % ref.):0.462 m aft of datum at 1100 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 1100 kg
Utility Category
Forward limit (15 % ref.): .. 0.257 m aft of datum at 820 kg
Intermediate limit (27 % ref.):0.462 m aft of datum at 950 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 950 kg

14. Datum: Wing leading edge of the rectangular part of the wings
Cord length at reference section: 1.71 m (5.61 ft)

15. Load factor at maximum weight:

Normal Category: Flaps up n ..... + 3.8
Flaps up n ..... - 1.9
Flaps down n..... + 2
Flaps down n.....0

Utility Category: Flaps up n ..... + 4.4
Flaps up n ..... - 2.2
Flaps down n..... + 2
Flaps down n.....0

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.41±0.05m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.41±0.05m aft of datum and 2 at 1.19m aft of datum.

19. Baggage / Cargo Compartment: Maximum baggage compartment: 60 kg (132 lb) at 1.90m aft of datum

20. Wheels and Tires

Main gear track ..... 2.58 m (8.46 ft)
Wheel tire size ..... 380 x 150 or 5.00-5
Front gear angular movement ..... left: 27°
..... right: 27°
Tire pressure ..... refer to the maintenance manual
Oleo strut pressure ..... refer to the maintenance manual

21. Control surface movements

Elevator: ..... up ..... 9°30' ± 30'
down ..... 12° ± 30'

Ailerons: ..... Relative to the trailing edge of the wings

up	neutral	down
15°± 1°	2° ± 1°	10°± 1°

Elevator tab: ..... Elevator up: .....25°30' ± 1°.....6° ± 1°
Elevator down: 10°30' ± 1° 16°30' ± 1°

Flaps: ..... 1st notch: .....15° ± 5°
2nd notch: ..... $60° \begin{smallmatrix} +0° \\ -5° \end{smallmatrix}$

Rudder: ..... $25° \begin{smallmatrix} +3° \\ -0° \end{smallmatrix}$

22. (Reserved)

MM.IV Operating and Service Instructions

Airplane Flight Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Schedule..... Refer to the latest amendment of Service Letter no. 6

MM.V Note:

1. This plane is identical to DR 400/180 R except:
   - Powerplant
   - maximum weight

2. Glider and Banner towing: Refer to approved flight manual.

Section NN: DR 400/500

NN.I General

1.	a) Type:	DR 200, DR 300, and DR 400 series
	b) Model:	DR 400/500
2.	Airworthiness Category:	Normal Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	(Reserved)	
6.	DGAC Type Certification date:	March 10, 1998
7.	EASA Type Certification date:	January28, 2013 (Type Certificate transfer)
8.	The EASA type Certificates replaces DGAC-France Type Certificate no. 45	

NN.II Certification Basis

1.	Reference Date for determining the applicable requirements:	21 March 1971
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements:	France AIR2052 amendment June 6th, 1966 FAR part 23 as amended by amendment 7
6.	Requirements elected to comply:	None
7.	EASA Special Conditions:	Canopy emergency release system
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	ICAO Annex 16, Vol.1. Chap 10.

NN.III Technical Characteristics and Operational Limitations

1.	Type Design Definition:	Refer to CEAPR document n°1002197
2.	Description:	Single-engine, four-seat, low-wing airplane, wood construction, fixed tricycle 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. Stall warning system “Safe Flight” n°164 or APR 79.88.00 or approved equivalent must be installed.
4.	Dimensions:	Span .....8.72 m (28.61 ft) Height .....2.23 m (7.32 ft) Length.....7.22 m (23.69 ft) Wing Area .....14.20 m² (152.85 foot²)
5.	Engines:	Lycoming IO-360-A1 B6 The EASA type certification standard includes that of FAA TC 1E10, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS

standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum Continuous Power: 2700 rpm

6. Propellers:

Manufacturer	Model	∅	Number of blades	Governor	Minimum static RPM at sea level
Hartzell	HC-C2YK-1BF/F7666A-2	1.88 m	2	Woodward B 2109-681	Constant speed (*)

Remarks: (*) variable pitch from 14° to 29.2°

The EASA type certification standard includes that of FAA TC P-920, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

7. Fluids:

7.1 Fuel: 100/130 octane minimum aviation grade gasoline. Refer to latest revision of Service Instruction Lycoming No. 1070.

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel:

Main tank (litres)		RH tank (litres)		LH tank (litres)		Auxiliary tank (optional) (litres)	
Capacity	Usable	Capacity	Usable	Capacity	Usable	Capacity	Usable
105	104	40	40	40	40	50	50

8.2 Oil: Oil sump capacity ..... 8 U.S. quarts (7.57 litres)
Usable..... 6 U.S. quarts (5.68 litres)

9. Air speeds:

V_{NE} .....308 km/h (166 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_C.....260 km/h (140 knots IAS)
V_A .....215 km/h (116 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)

10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

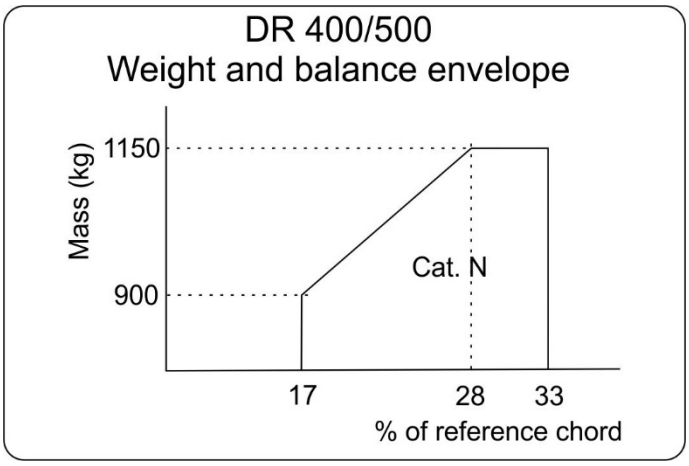
11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:

"N" Category	
Take-off	Landing

1150 kg (2535 lb)	1150 kg (2535 lb)

13. Centre of Gravity Range:



Normal Category
Forward limit (17 % ref.): .. 0.294 m aft of datum at 900 kg
Intermediate limit (28 % ref.):0.478 m aft of datum at 1150 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 1150 kg

14. Datum: Wing leading edge of the rectangular part of the wings. Cord length at reference section: 1.71 m (5.61 ft)

15. Load factor at maximum weight:

Normal Category: Flaps up n ..... + 3.8
Flaps up n ..... - 1.9
Flaps down n..... + 2
Flaps down n.....0

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.41±0.05m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.41±0.05m aft of datum and 2 at 1.19m aft of datum.

19. Baggage / Cargo Compartment Maximum baggage compartment: 60 kg (132 lb) at 1.90m aft of datum

20. Wheels and Tires:

Main gear track ..... 2.58 m (8.46 ft)
Wheel tire size ..... 380 x 150 or 5.00-5
Front gear angular movement ..... left: 27°
..... right: 27°
Tire pressure ..... refer to the maintenance manual
Oleo strut pressure ..... refer to the maintenance manual

21. Control surface movements

Elevator:..... up ..... 9°30' ± 30'
down ..... 12° ± 30'
Ailerons:..... Relative to the trailing edge of the wings

up	neutral	down
15°± 1°	2° ± 1°	10°± 1°

Elevator tab:..... Elevator up: .....25°30' ± 1°.....6° ± 1°
Elevator down: 10°30' ± 1° 16°30' ± 1°
Flaps: 1st notch: .....15° ± 5°
2nd notch: ..... 60° $^{+0°}_{-5°}$
Rudder: ..... 25° $^{+3°}_{-0°}$

22. (Reserved)

NN.IV Operating and Service Instructions

Airplane Flight Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Schedule..... Refer to the latest amendment of Service Letter no. 6

NN.V Note:

1. This plane is identical to DR 400 NGL except powerplant

Section OO: DR400 / 200 I

OO.I General

1.	a) Type :	DR 200, DR 300, and DR 400 series
	b) Model:	DR400 / 200 I
2.	Airworthiness Category:	Normal and Utility Category
3.	Type Certificate Holder:	Refer to Note 2 Section PP
4.	Manufacturer:	Refer to Note 3 Section PP
5.	EASA Type Certification Application Date :	26 April 2016
6.	(Reserved)	
7.	(Reserved)	
8.	EASA Type Certification Date:	25 September 2017

OO.II EASA Certification Basis

1.	Reference date for determining the applicable requirements:	3 August 1972
2.	(Reserved)	
3.	(Reserved)	
4.	Certification Basis:	France AIR2052
5.	Airworthiness Requirements :	France AIR2052 amendment June 6th, 1966 FAR part 23 as amended by amendment 7
6.	Requirement elected to comply:	None
7.	Special Conditions:	Canopy emergency release system
8.	EASA Exemptions:	None
9.	EASA Equivalent Safety Findings:	None
10.	EASA Environmental Standards:	ICAO Annex 16, Vol.1. Chap 10

OO.III Technical Characteristics and Operational Limitations

1.	Type Design Definition:	Refer to C.E.A.P.R. document 1001130
2.	Description:	Single-engine, four-seat, low-wing airplane, wood construction, fixed tricycle 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. Stall warning system “Safe Flight” n°164 or APR 79.88.00 or approved equivalent must be installed.

4. Dimensions

Span ..... 8.72 m (28.61 ft)
Height ..... 2.23 m (7.32 ft)
Length..... 7.10 m (23.29 ft)
Wing Area .... 14.20 m² (152.85 foot²)

5. Engine: Lycoming IO-360-A1 B6

The EASA type certification standard includes that of FAA TC 1E10, based on individual EU member state acceptance or certification of this standard prior to 28 September 2003. Other standards confirming to TC/TCDS standards certificated by individual EU member state prior to 28 September 2003 are also acceptable.

5.1 Engine Limits: Maximum Continuous Power: 2700 rpm

6. Propellers:

Manufacturer	Model	∅	Number of blades	Type Certificate	Sense of rotation
MT Propeller	MTV-12B/188-59b	1.88 m	3	EASA TC P 013	Clockwise (viewed in flight direction)

7. Fluids:

7.1 Fuel: 100/130 octane minimum aviation grade gasoline. Refer to latest revision of Service Instruction Lycoming No. 1070.

7.2 Engine Oil: Refer to latest revision of Service Instruction Lycoming No. 1014.

Air temperature	Ashless dispersant (AD) grades	Mineral grades
All temperature	SAE15W50 or SAE20W50	------
Above 80°F (+25°C)	SAE60	SAE60
Above 60°F (+15°C)	SAE40 or SAE50	SAE50
30°F to 90°F (O°C à +30°C)	SAE40	SAE40
0°F to 70°F (-15°C à +20°C)	SAE30, SAE40 or SAE20W40	SAE30
0°F to 90°F (-15°C à +30°C)	SAE20W50 or SAE15W50	SAE20W50
Below 10°F (-10°C)	SAE30 or SAE20W30	SAE20

8. Fluid capacities:

8.1 Fuel:

Main tank (litres)		RH tank (litres)		LH tank (litres)		Auxiliary tank (optional) (litres)	
Capacity	Usable	Capacity	Usable	Capacity	Usable	Capacity	Usable
110	109	40	40	40	40	50	50

8.2 Oil: Oil sump capacity ..... 8 U.S. quarts (7.57 litres)
Usable..... 6 U.S. quarts (5.68 litres)

9. Air speeds:

V_{NE} .....308 km/h (166 knots IAS)
V_{NO} .....260 km/h (140 knots IAS)
V_C.....260 km/h (140 knots IAS)
V_A .....215 km/h (116 knots IAS)
V_{FE} .....170 km/h (92 knots IAS)

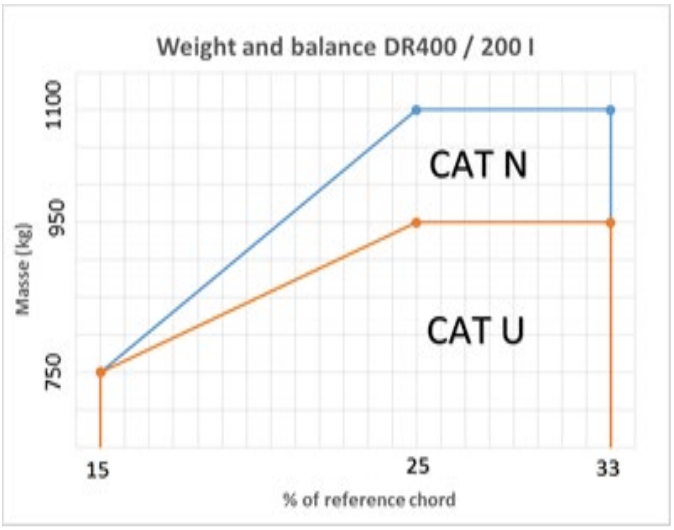
10. Maximum Operating Altitude: Refer to approved aircraft flight manual.

11. Operational Capability: Refer to approved aircraft flight manual.

12. Maximum Masses:

"N" Category		"U" Category
Take-off	Landing	
1100 kg (2425 lb)	1100 kg (2425 lb)	950 kg (2094 lb)

13. Centre of Gravity Range:



Normal Category
Forward limit (15 % ref.): ..... 0.257 m aft of datum at 750 kg
Intermediate limit (25 % ref.):0.427 m aft of datum at 1100 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 1100 kg
Utility Category
Forward limit (15 % ref.): ..... 0.257 m aft of datum at 750 kg
Intermediate limit (25 % ref.):. 0.427 m aft of datum at 950 kg
Aft limit (33 % ref.): ..... 0.564 m aft of datum at 950 kg

14. Datum: Wing leading edge of the rectangular part of the wings
Cord length at reference section: 1.71 m (5.61 ft)

15. Load factor at maximum weight:

Normal Category: Flaps up n ..... + 3.8
Flaps up n ..... - 1.9
Flaps down n..... + 2
Flaps down n.....0

Utility Category: Flaps up n ..... + 4.4
Flaps up n ..... - 2.2
Flaps down n..... + 2
Flaps down n.....0

16. Levelling Means: Horizontal reference upper fuselage spar

17. Minimum Flight Crew: 1 (pilot) at 0.41±0.05m aft of datum

18. Maximum Passenger Seating Capacity: 1 at 0.41±0.05m aft of datum and 2 at 1.19m aft of datum.

19. Baggage / Cargo Compartment — Maximum baggage compartment: 60 kg (132 lb) at 1.90m aft of datum

20. Wheels and Tires

Main gear track ..... 2.58 m (8.46 ft)
Wheel tire size ..... 380 x 150 or 5.00-5
Front gear angular movement ..... left: 27°
..... right: 27°
Tire pressure ..... refer to the maintenance manual
Oleo strut pressure ..... refer to the maintenance manual

21. Control surface movements

Elevator: ..... up ..... 9°30' ± 30'
down ..... 12° ± 30'
Ailerons: ..... Relative to the trailing edge of the wings

up	neutral	down
15°± 1°	2° ± 1°	10°± 1°

Elevator tab: ..... Elevator up: .....25°30' ± 1°.....6° ± 1°
Elevator down: 10°30' ± 1° 16°30' ± 1°
Flaps: ..... 1st notch: .....15° ± 5°
2nd notch: ..... $60^{\circ}\ ^{+0^{\circ}}_{-5^{\circ}}$
Rudder: ..... $25^{\circ}\ ^{+3^{\circ}}_{-0^{\circ}}$

22. (Reserved)

OO.IV Operating and Service Instructions

Airplane Flight Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Manual..... Refer to the latest amendment of Service Letter no. 6
Airplane Maintenance Schedule..... Refer to the latest amendment of Service Letter no. 6
Airplane Structural Repair Manual ..... Refer to the latest amendment of Service Letter no. 6
Illustrated Parts Catalogue ..... Refer to the latest amendment of Service Letter no. 6

OO.V Notes

1. This plane is identical to DR 400/180 except for:
   Powerplant installation which is identical to DR400/200R except for the propeller
   MT Propeller MTV-12B/188-59b
2. First model is serial number 2695.

Section PP: Common Notes

1. **Type transformation :**
Type transformation are only possible by the manufacturer.

DR 400 RP:
It is not authorized to transform a DR400/180R to a DR400 RP.

DR 400/200 R and DR 400/200 I:
It is not authorized to transform a DR 400/180R to a DR 400/200 R or a DR 400/200 I.

2. **Type Certificate Holder :**

C.E.A.P.R. (Centre Est Aéronautique Pierre Robin)
1 route de Troyes
21121 DAROIS
FRANCE

3. **Manufacturer:**
From October 1957 to August 1996

Centre Est Aéronautique
Boite Postale 40
21 DIJON
FRANCE

Avions P. Robin
21121 FONTAINE LES DIJON
FRANCE

From September 1996 to December 2003
C.A.B (Construction Aéronautique de Bourgogne)
1 route de Troyes
21121 DAROIS
FRANCE

From January 2004 to August 2008
APEX Industries
1 route de Troyes
21121 DAROIS
FRANCE

2011 : DR400-140B serial number 2650 only
Finch Aircraft
1 route de Troyes
21121 DAROIS
FRANCE

Since May 2011
Robin Aircraft
1b route de Troyes
21121 DAROIS
FRANCE

ADMINISTRATIVE SECTION

I. Acronyms & Abbreviations

II. Type Certificate Holder Record

Société Avions Pierre Robin
Société Avions Robin
ROBIN Aviation
APEX Aircraft
C.E.A.P.R.

III. Change Record

Issue 1	January 28, 2013	Initial issue on transfer of this Type Certificate to CEAPR	
Issue 2	September 25 ,2017	New model DR400 / 200 I (refer to section AB)	
Issue 3	December 2018	Merger with EASA.A.510 (DR 200 series)	
Issue 4	November 2nd, 2020	TC holder and manufacturer transferred to Section PP Note 2 and 3 Type Definition Design is added for each aircraft DR300 & DR400 series : wheel dimension 5.00-5 added DR400 series : Standard 92 and Standard 88 models definition added Section JJ : DR400/100 - Update Section NN : DR400/500 N.III.15 – Load Factor correction Section OO : DR400/200I - editorial change Section PP : Note 1;2 & 3 - update	
Issue 5	July 28th , 2023	DR200, DR300 & DR400 series : Oleo strut and tire pressure suppression DR253 series : Tire dimension 5.00-5 added + note addition.	

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