TYPE-CERTIFICATE

DATA SHEET

No. IM.R.121

for

R44

Type Certificate Holder

Robinson Helicopter Company

2901 Airport Drive

Torrance, CA 90505

U.S.A.

For Models: R44, R44 II

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I. General

1.	Type/ Model/ Variant	
	1.1 Type	R44
	1.2 Model	R44
2.	Airworthiness Category	Small Rotorcraft
3.	Manufacturer	Robinson Helicopter Company 2901 Airport Drive Torrance, California 90505, USA
4.	Type Certification Application Date	to FAA: 4 March 1987 to ENAC: 29 September 1993
5.	State of Design Authority	FAA
6.	Type Certificate Date	by FAA: 10 December 1992 by ENAC: not recorded
7.	Type Certificate n°	by FAA: H11NM by ENAC: A320
8.	Type Certificate Data Sheet n°	by FAA: H11NM by ENAC: A320
9.	EASA Type Certification Date	28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2nd bullet, 2nd indented bullet.

II. Certification Basis

1.	Reference Date for determining the applicable requirements	12 November 1989
2.	Airworthiness Requirements	14 CFR Part 27, dated 1 February, 1965, including Amdts. 27-1 through 27-24. For the symmetrical horizontal stabilizer installation: 14 CFR Part 27 Amdt. 27-26: § 27.613, § 27.629, § 27.663. 14 CFR Part 27 Amdt. 27-34: § 27.391. 14 CFR Part 27 Amdt. 27-27: § 27.427. 14 CFR Part 27 Amdt. 27-44: § 27.49, § 27.71, § 27.75. CS-27 Amdt. 8, dated 14 June 2021: CS 27.173; CS 27.175; CS 27.177; CS 27.351; CS 27.571.
3.	Special Conditions	FAA Special Condition No. 27-033-SC Robinson Model R44 and R44 II Helicopters, Installation of HeliSAS Autopilot and Stabilization Augmentation System (AP/SAS)
4.	Exemptions	- FAA Exemption No. 5473, dated 2 July 1992, to § 27.955(a)(7) and § 27.1305(q) - FAA Exemption No. 6692, dated 17 October 1997 to § 27.695.
5.	Deviations	None

6.	Equivalent Safety Findings	FAA ELOS No. TD10352LA-R/S-1 to 14 CFR Part 27, § 27.1401(d), Anticollision Light System
7.	Requirements elected to comply	None
8.	Environmental Protection Requirements	
	8.1 Noise Requirements	See TCDSN EASA.IM.R.121
9.	Operational Suitability Data (OSD)	see SECTION 4 below

III. Technical Characteristics and Operational Limitations

1.	Type Design Definition	Robinson Helicopter Company Drawing C001, Robinson Technical Report RTR 540 R44 EASA Type Design Definition.
2.	Description	Main rotor: 2-blade, free to teeter and cone, rigid in-plane Tail rotor: 2-blade, free to teeter, rigid in-plane Fuselage: Riveted aluminium sheet and welded steel tube for primary structure, fiberglass & thermoplastic for secondary structure. Seats integral to cabin structure. Landing gear: Aluminium skids Powerplant: Single normally-aspirated reciprocating engine Avionics: Analogue or EFIS
3.	Equipment	Basic equipment must be installed and operational prior to registration of the helicopter. Optional equipment per RHC drawing C025.
4.	Dimensions	
	4.1 Fuselage	Length: 11.66 m Width hull: 1.28 m Height: 3.28 m
	4.2 Main Rotor	Diameter: 10.06 m
	4.3 Tail Rotor	Diameter: 1.47 m
5.	Engine	
	5.1 Model	Lycoming Engines 1 x Model O-540-F1B5
	5.2 Type Certificate	FAA TCDS No: E-295 EASA Engine TCDS No: none
	5.3 Limitations	

5.3.1 Installed Engine Limitations

	Power Limit [BHP]	RPM [%]
TOP (5 min)	225	102
MCP	205	102

- See RFM for maximum manifold pressure corresponding to 225 BHP

5.3.2 Transmission Torque Limits

	Max. TQ [Nm]	Engine RPM [%]
TOP (5 min)	581	102
MCP	530	102

6. Fluids (Fuel/ Oil/ Additives)

6.1 Fuel — 100 LL aviation gasoline
100/130 aviation gasoline

6.2 Oil — See R44 RFM (RTR 461), Section 8.

6.3 Additives — none

7. Fluid capacities

7.1 Fuel

	Capacity [litres]	Usable [litres]
Tank	Tanks without bladders	
Main	120	116
Auxiliary	70	69
Tank	Tanks with bladders	
Main	115	112
Auxiliary	65	64

7.2 Oil

Engine: 9.00 qt (8.52 litres)
Main Rotor Transmission: 2.00 qt (1.89 litres)
Tail Rotor Transmission: 0.11 qt (0.10 litres)
Hydraulic Reservoir: 0.65 qt (0.62 litres)

8. Air Speed Limitations

TO Gross Weight [kg]	PWR-on V_{NE} [KIAS]	PWR-off V_{NE} [KIAS]
Less than 998	130	100
998 to 1 089, or Fixed Floats version less than 998	120	100
Fixed Floats version 998 to 1 089	110	100

Notes:
- MSL V_{NE} values shown above.
- For reduction of V_{NE} with altitude and temperature, see R44 RFM (RTR 461).
- Airspeed limit at power settings above MCP is 100 KIAS.
- Airspeed limit with inflated pop-out floats is 80 KIAS.
- Airspeed limit for any combination of 'Doors Off' is 100 KIAS.

9. Rotor Speed Limitations

Condition	Minimum		Maximum	
	[rpm*]	[%]	[rpm*]	[%]
Power-on	396	99	408	102
Power-off	360	90	432	108
Note: *Main Rotor				

10. Maximum Operating Altitude and Temperature

10.1 Altitude — 14 000 ft (4 270 m)

Maximum altitude above ground level is 9 000 ft (2 700 m) to allow landing within 5 minutes in case of fire.

10.2 Temperature — Maximum ambient temperature limited only by engine operating temperature limits

11. Operating Limitations — VFR day and night
Non-icing conditions

12. Maximum Mass — 1 089 kg

13. Centre of Gravity Range

Gross weight [kg]	Longitudinal C.G.	
	FWD limit [mm]	AFT limit [mm]
703	2 337	2 604
907	2 337	2 604
998	2 337	2 546
1 089	2 362	2 489

Longitudinal C.G. [mm]	Lateral C.G.	
	Left limit [mm]	Right limit [mm]
2 337	-76	+76
2 540	-76	+76
2 604	-38	+38

Note: Straight line variation between points shown.

14. Datum — Longitudinal:
the datum plane (STA 0) is located at 2 540 mm (100 in) forward of main rotor centreline.
Lateral:
fuselage median plane.

15. Levelling Means — Refer to R44 Maintenance Manual and Instructions for Continued Airworthiness (RTR 460)

16. Minimum Flight Crew — 1 pilot (right seat)

17. Maximum Passenger Seating Capacity — 3

18. Passenger Emergency Exit — 4, two on each side of the passenger cabin (intended for normal use)

19. Maximum Baggage/ Cargo Loads — Maximum mass: 23 kg (50 lb)
For any seat location, the maximum combined weight of the load on the seat (e.g. occupant) plus the weight of stowed items and any installed equipment in the baggage compartment is 136 kg (300 lb).

20. Rotor Blade Control Movement — Main Rotor:

Collective pitch	12.5° ± 0.5° total travel	
Cyclic pitch	forward	13.50° to 14.25°
	aft	13.50° to 14.25°
	left	7.5° to 8.5°
	right	6.0° to 7.0°

Tail Rotor:

Collective pitch	right pedal	15.5° to 16.5°

	left pedal	18.5° to 19.0°

21. Auxiliary Power Unit (APU) — none

22. Life-limited Parts — See Robinson Maintenance Manual and Instructions for Continued Airworthiness (RTR 460).
Retirement times are listed in the approved "Airworthiness Limitations" section" of Chapter 3.

IV. Operating and Service Instructions

1. Flight Manual — Robinson Helicopter Company R44 Rotorcraft Flight Manual, RTR 461, dated 10 December 1992, with revisions through 20 April 2007, or later.
2. Maintenance Manual — R44 Maintenance Manual and Instructions for Continued Airworthiness (RTR 460 Volume I).
3. Structural Repair Manual — none
4. Weight and Balance Manual — none
5. Illustrated Parts Catalogue — R44 Illustrated Parts Catalog (RTR 460 Volume II)
6. Service Letters and Service Bulletins — R44 Service Letters and Service Bulletins as published by Robinson Helicopter Company.
7. Required Equipment

   The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification, or as required by the Master Minimum Equipment List. In addition, the approved Rotorcraft Flight Manual is required (see IV.1. Flight Manual)

V. Notes

1. Manufacturer's eligible serial numbers:
   0002, 0004 through 9999, except 1140.
2. Designation:
   'R44 Astro' is used as a marketing designation for the R44 with electric trim system (without hydraulic controls).
   'R44 Raven' or 'R44 Raven I' is used as a marketing designation for the R44 with hydraulic controls.
   'R44 Clipper' or 'R44 Clipper I' is used as a marketing designation for the R44 with fixed or pop-out floats installed.
3. The initially certified noise level of model R44 can be further reduced by installation of the optional large muffler P/N C169-35 (see TCDSN EASA.IM.R.121).

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SECTION 2: R44 II

I. General

1.	Type/ Model/ Variant	
	1.1 Type	R44
	1.2 Model	R44 II
2.	Airworthiness Category	Small Rotorcraft
3.	Manufacturer	Robinson Helicopter Company 2901 Airport Drive Torrance, California 90505, USA
4.	Type Certification Application Date	to FAA: 15 September 2001 to ENAC: 23 July 2002
5.	State of Design Authority	FAA
6.	Type Certificate Date	by FAA: 3 October 2002 by ENAC: not recorded
7.	Type Certificate n°	by FAA: H11NM by ENAC: A320
8.	Type Certificate Data Sheet n°	by FAA: H11NM by ENAC: A320
9.	EASA Type Certification Date	28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2nd bullet, 2nd indented bullet.

II. Certification Basis

1.	Reference Date for determining the applicable requirements	12 November 1989
2.	Airworthiness Requirements	14 CFR Part 27, dated 1 February 1965, including Amdts. 27-1 through 27-24. For the symmetrical horizontal stabilizer installation: 14 CFR Part 27 Amdt. 27-26: § 27.613, § 27.629, § 27.663. 14 CFR Part 27 Amdt. 27-34: § 27.391. 14 CFR Part 27 Amdt. 27-27: § 27.427. 14 CFR Part 27 Amdt. 27-44: § 27.49, § 27.71, § 27.75. CS-27 Amdt. 8, dated 14 June 2021: CS 27.173; CS 27.175; CS 27.177; CS 27.351; CS 27.571.
3.	Special Conditions	FAA Special Condition No. 27-033-SC Robinson Model R44 and R44 II Helicopters, Installation of HeliSAS Autopilot and Stabilization Augmentation System (AP/SAS).
4.	Exemptions	FAA Exemption No. 6692, dated 17 October 1997 to § 27.695.
5.	Deviations	none

6.	Equivalent Safety Findings	FAA ELOS No. TD10352LA-R/S-1 to 14 CFR Part 27, § 27.1401(d), Anticollision Light System
7.	Requirements elected to comply	none
8.	Environmental Protection Requirements	
	8.1 Noise Requirements	See TCDSN EASA.IM.R.121
9.	Operational Suitability Data (OSD)	see SECTION 4 below

III. Technical Characteristics and Operational Limitations

1.	Type Design Definition	Robinson Helicopter Company Drawing C001, Robinson Technical Report RTR 540 R44 EASA Type Design Definition.
2.	Description	Main rotor: 2-blade, free to teeter and cone, rigid in-plane Tail rotor: 2-blade, free to teeter, rigid in-plane Fuselage: Riveted aluminium sheet and welded steel tube for primary structure, fiberglass & thermoplastic for secondary structure. Seats integral to cabin structure. Landing gear: Aluminium skids Powerplant: Single normally-aspirated reciprocating engine Avionics: Analogue or EFIS
3.	Equipment	Basic equipment must be installed and operational prior to registration of the helicopter. Optional equipment per RHC drawing C025.
4.	Dimensions	
	4.1 Fuselage	Length: 11.66 m Width hull: 1.28 m Height: 3.28 m
	4.2 Main Rotor	Diameter: 10.06 m
	4.3 Tail Rotor	Diameter: 1.47 m
5.	Engine	
	5.1 Model	Lycoming Engines 1 x Model IO-540-AE1A5
	5.2 Type Certificate	FAA TCDS No: 1E4 EASA Engine TCDS No: none
	5.3 Limitations	

5.3.1 Installed Engine Limitations

	Power Limit [BHP]	RPM [%]
TOP (5 min)	245	102
MCP	205	102

- See RFM for maximum manifold pressure corresponding to 245 BHP

5.3.2 Transmission Torque Limits

	Max. TQ [Nm]	Engine RPM [%]
TOP (5 min)	633	102
MCP	530	102

6. Fluids (Fuel/ Oil/ Additives)

6.1 Fuel — 100 LL aviation gasoline
100/130 aviation gasoline

6.2 Oil — See R44 II Rotorcraft Flight Manual (RTR 462), Section 8.

6.3 Additives — none

7. Fluid capacities

7.1 Fuel

	Capacity [litres]	Usable [litres]
Tank	Tanks without bladders	
Main	120	116
Auxiliary	70	69
Tank	Tanks with bladders	
Main	115	112
Auxiliary	65	64

7.2 Oil

Engine: 9.00 qt (8.52 litres)
Main Rotor Transmission: 2.00 qt (1.89 litres)
Tail Rotor Transmission: 0.11 qt (0.10 litres)
Hydraulic Reservoir: 0.65 qt (0.62 litres

8. Air Speed Limitations

TO Gross Weight [kg]	PWR-on V_{NE} [KIAS]	PWR-off V_{NE} [KIAS]
Less than 998	130	100
998 to 1 134, or Fixed Floats version less than 998	120	100
Fixed Floats version 998 to 1 134	110	100

Notes:
- MSL V_{NE} values shown above.
- For reduction of V_{NE} with altitude and temperature, see R44 II Rotorcraft Flight Manual (RTR 462).
- Airspeed limit at power settings above MCP is 100 KIAS.
- Airspeed limit with inflated pop-out floats is 80 KIAS.
- Airspeed limit for any combination of 'Doors Off' is 100 KIAS.

9. Rotor Speed Limitations

Condition	Minimum		Maximum	
	[rpm*]	[%]	[rpm*]	[%]
Power on	404	101	408	102
Power off	360	90	432	108

Note: *Main Rotor

10. Maximum Operating Altitude and Temperature

10.1 Altitude

14 000 ft (4 270 m)
Maximum altitude above ground level is 9 000 ft (2 700 m) to allow landing within 5 minutes in case of fire.

10.2 Temperature

Maximum ambient temperature limited only by engine operating temperature limits.

11. Operating Limitations

VFR day and night
Non-icing conditions

12. Maximum Mass

- 1 134 kg
- 1 089 kg for intentional water landings with fixed or pop-out floats.

13. Centre of Gravity Range

Gross weight [kg]	Longitudinal C.G.	
	FWD limit [mm]	AFT limit [mm]
726	2 337	2 604
953	2 337	2 604
1 043	2 337	2 546
1 134	2 362	2 489

Longitudinal C.G. [mm]	Lateral C.G.	
	Left limit [mm]	Right limit [mm]
2 337	-76	+76
2 540	-76	+76
2 604	-38	+38

Note: Straight line variation between points shown.

14. Datum

Longitudinal:
the datum plane (STA 0) is located at 2 540 mm (100 in) forward of main rotor centreline.
Lateral: fuselage median plane.

15. Levelling Means

Refer to R44 Maintenance Manual and Instructions for Continued Airworthiness (RTR 460)

16. Minimum Flight Crew

1 pilot (right seat)

17. Maximum Passenger Seating Capacity

3

18. Passenger Emergency Exit

4, two on each side of the passenger cabin (intended for normal use)

19. Maximum Baggage/ Cargo Loads

Maximum mass: 23 kg (50 lb)
For any seat location, the maximum combined weight of the load on the seat (e.g. occupant) plus the weight of stowed items and any installed equipment in the baggage compartment is 136 kg (300 lb).

20. Rotor Blade Control Movement

Main Rotor:

Collective pitch	12.5° ± 0.5° total travel	
Cyclic pitch	forward	13.50° to 14.25°
	Aft	13.50° to 14.25°
	left	7.5° to 8.5°
	right	6.0° to 7.0°

Tail Rotor:

Collective pitch	right pedal	15.5° to 16.5°
	left pedal	18.5° to 19.0°

21. Auxiliary Power Unit (APU) — none

22. Life-limited Parts — See Robinson Maintenance Manual and Instructions for Continued Airworthiness (RTR 460).
Retirement times are listed in the approved "Airworthiness Limitations" section of Chapter 3.

IV. Operating and Service Instructions

1. Flight Manual — Robinson Helicopter Company R44 II Rotorcraft Flight Manual, RTR 462, dated 3 October 2002, with revisions through 20 April 2007, or later.

2. Maintenance Manual — R44 Maintenance Manual and Instructions for Continued Airworthiness (RTR 460 Volume I).

3. Structural Repair Manual — none

4. Weight and Balance Manual — none

5. Illustrated Parts Catalogue — R44 Illustrated Parts Catalogue (RTR 460 Volume II)

6. Service Letters and Service Bulletins — R44 Service Letters and Service Bulletins as published by Robinson Helicopter Company.

7. Required Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification, or as required by the Master Minimum Equipment List. In addition, the -approved Rotorcraft Flight Manual is required (see Flight Manual)

V. Notes

1. Manufacturer's eligible serial numbers:
1140, 10001 and subsequent.

2. Designation:
'R44 Raven II' is used as a marketing designation for the R44 II.
'R44 Clipper II' is used as a marketing designation for the R44 II with fixed or pop-out floats installed.

3. The initially certified noise level of model R44 II can be further reduced by installation of the optional large muffler P/N C169-37 (see TCDSN EASA.IM.R.121).

* * *

SECTION 3: R44 (s/n 30001 and subsequent)

I. General

1.	Type/ Model/ Variant	
	1.1 Type	R44
	1.2 Model	R44
2.	Airworthiness Category	Small Rotorcraft
3.	Manufacturer	Robinson Helicopter Company 2901 Airport Drive Torrance, California 90505, USA
4.	Type Certification Application Date	to FAA: 4 March 1987 to ENAC: 29 September 1993
5.	State of Design Authority	FAA
6.	Type Certificate Date by NAA	by FAA: 10 December 1992 by ENAC: not recorded
7.	Type Certificate n°	by FAA: H11NM by ENAC: A320
8.	Type Certificate Data Sheet n°	by FAA: H11NM by ENAC: A320
9.	EASA Type Certification Date	28 September 2003, in accordance with CR (EU) 1702/2003, Article 2, 3., (a), (i), 2nd bullet, 2nd indented bullet.

II. Certification Basis

1.	Reference Date for determining the applicable requirements	12 November 1989
2.	Airworthiness Requirements	14 CFR Part 27, dated 1 February 1965, including Amdts. 27-1 through 27-24 For the symmetrical horizontal stabilizer installation: 14 CFR Part 27 Amdt. 27-26: § 27.613, § 27.629, § 27.663. 14 CFR Part 27 Amdt. 27-34: § 27.391. 14 CFR Part 27 Amdt. 27-27: § 27.427. 14 CFR Part 27 Amdt. 27-44: § 27.49, § 27.71, § 27.75. CS-27 Amdt. 8, dated 14 June 2021: CS 27.173; CS 27.175; CS 27.177; CS 27.351; CS 27.571.
3.	Special Conditions	FAA Special Condition No. 27-033-SC Robinson Model R44 and R44 II Helicopters, Installation of HeliSAS Autopilot and Stabilization Augmentation System (AP/SAS).
4.	Exemptions	FAA Exemption No. 5473, dated 2 July 1992, to § 27.955(a)(7) and § 27.1305(q) FAA Exemption No. 6692, dated 17 October 1997 to § 27.695.

5.	Deviations	none
6.	Equivalent Safety Findings	FAA ELOS No. TD10352LA-R/S-1 to 14 CFR Part 27, § 27.1401(d), Anticollision Light System
7.	Requirements elected to comply	none
8.	Environmental Protection Requirements	
	8.1 Noise Requirements	See TCDSN EASA.IM.R.121
9.	Operational Suitability Data (OSD)	see SECTION 4 below

III. Technical Characteristics and Operational Limitations

1.	Type Design Definition	Robinson Helicopter Company Drawing C001, Robinson Technical Report RTR 540 R44 EASA Type Design Definition.
2.	Description	Main rotor: 2-blade, free to teeter and cone, rigid in-plane Tail rotor: 2-blade, free to teeter, rigid in-plane Fuselage: Riveted aluminium sheet and welded steel tube for primary structure, fiberglass & thermoplastic for secondary structure. Seats integral to cabin structure. Landing gear: Aluminium skids Powerplant: Single normally-aspirated reciprocating engine Avionics: Analogue or EFIS
3.	Equipment	Basic equipment must be installed and operational prior to registration of the helicopter. Optional equipment per RHC drawing C025.
4.	Dimensions	
	4.1 Fuselage	Length: 11.66 m Width hull: 1.28 m Height: 3.28 m
	4.2 Main Rotor	Diameter: 10.06 m
	4.3 Tail Rotor	Diameter: 1.47 m
5.	Engine	
	5.1 Model	Lycoming Engines 1 x Model O-540-F1B5
	5.2 Type Certificate	FAA TCDS No: E-295 EASA Engine TCDS No: none

5.3 Limitations

5.3.1 Installed Engine Limitations

	Power Limit [BHP]	RPM [%]
TOP (5 min)	210	102
MCP	185	102

- See RFM for maximum manifold pressure corresponding to 210 BHP

5.3.2 Transmission Torque Limits

	Max. TQ [Nm]	Engine RPM [%]
TOP (5 min)	543	102
MCP	478	102

6. Fluids (Fuel/ Oil/ Additives)

6.1 Fuel — 100 LL aviation gasoline
100/130 aviation gasoline

6.2 Oil — See R44 Cadet Rotorcraft Flight Manual (RTR 463), Section 8.

6.3 Additives — none

7. Fluid capacities

7.1 Fuel

	Capacity [litres]	Usable [litres]
Tank	Tanks without bladders	
Main	120	116
Auxiliary	70	69
Tank	Tanks with bladders	
Main	115	112
Auxiliary	65	64

7.2 Oil

Engine: 9.00 qt (8.52 litres)
Main Rotor Transmission: 2.00 qt (1.89 litres)
Tail Rotor Transmission: 0.11 qt (0.10 litres)
Hydraulic Reservoir: 0.65 qt (0.62 litres

8. Air Speed Limitations

PWR-on V_{NE} [KIAS]	PWR-off V_{NE} [KIAS]
120	100

Notes:
- MSL V_{NE} values shown above.
- For reduction of V_{NE} with altitude and temperature, see R44 Cadet RFM (RTR 463).
- Airspeed limit at power settings above MCP is 100 KIAS.
- Airspeed limit with inflated pop-out floats is 80 KIAS.
- Airspeed limit for any combination of 'Doors Off' is 100 KIAS.

9. Rotor Speed Limitations

Condition	Minimum		Maximum	
	[rpm*]	[%]	[rpm*]	[%]
Power on	396	99	408	102
Power off	360	90	432	108
Note: *Main Rotor				

10. Maximum Operating Altitude and Temperature

10.1 Altitude — 14 000 ft (4 270 m)
Maximum altitude above ground level is 9 000 ft (2 700 m) to allow landing within 5 minutes in case of fire.

10.2 Temperature — Maximum ambient temperature limited only by engine operating temperature limits.

11. Operating Limitations

VFR day and night
Non-icing conditions

12. Maximum Mass

998 kg

13. Centre of Gravity Range

Gross weight [kg]	Longitudinal C.G.	
	FWD limit [mm]	AFT limit [mm]
703	2 337	2 604
907	2 337	2 604
998	2 362	2 546

Longitudinal C.G. [mm]	Lateral C.G.	
	Left limit [mm]	Right limit [mm]
2 337	-76	+76
2 540	-76	+76
2 604	-38	+38

Note: Straight line variation between points shown

14. Datum

Longitudinal:
the datum plane (STA 0) is located at 2 540 mm (100 in) forward of main rotor centreline.
Lateral:
fuselage median plane.

15. Levelling Means

Refer to R44 Maintenance Manual and Instructions for Continued Airworthiness (RTR 460)

16. Minimum Flight Crew

1 pilot (right seat)

17. Maximum Passenger Seating Capacity

1

18. Passenger Emergency Exit

2, one on each side of the passenger cabin (intended for normal use)

19. Maximum Baggage/ Cargo Loads

Maximum mass under seats: 23 kg (50 lb)
For any seat location, the maximum combined weight of the load on the seat (e.g. occupant) plus the weight of stowed items and any installed equipment in the baggage compartment is 136 kg (300 lb). Maximum mass on aft deck is 23 kg (50 lb) each side and maximum mass in each compartment under aft deck is 23 kg (50 lb).

20. Rotor Blade Control Movement

Main Rotor:

Collective pitch	12.5° ±0.5° total travel	
Cyclic pitch	forward	13.50° to 14.25°
	Aft	13.50° to 14.25°
	left	7.5° to 8.5°
	right	6.0° to 7.0°

Tail Rotor:

Collective pitch	right pedal	15.5° to 16.5°
	left pedal	18.5° to 19.0°

21. Auxiliary Power Unit (APU)

none

22. Life-limited Parts

See Robinson Maintenance Manual and Instructions for

		Continued Airworthiness (RTR 460). Retirement times are listed in the approved "Airworthiness Limitations" section of Chapter 3.

IV. Operating and Service Instructions

1.	Flight Manual	Robinson Helicopter Company R44 Cadet Rotorcraft Flight Manual, RTR 463, dated 29 April 2016, or later
2.	Maintenance Manual	R44 Maintenance Manual and Instructions for Continued Airworthiness (RTR 460 Volume I)
3.	Structural Repair Manual	none
4.	Weight and Balance Manual	none
5.	Illustrated Parts Catalogue	R44 Illustrated Parts Catalogue (RTR 460 Volume II)
6.	Service Letters and Service Bulletins	R44 Service Letters and Service Bulletins as published by Robinson Helicopter Company

7. Required Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification, or as required by the Master Minimum Equipment List. In addition, the -approved Rotorcraft Flight Manual is required (see IV.1 Flight Manual)

V. Notes

1. Manufacturer's eligible serial numbers:
   30001 and subsequent.
2. Designation:
   'R44 Cadet' is used as a marketing designation for the two-seat version of the R44.

* * *

SECTION 4: OPERATIONAL SUITABILITY DATA (OSD)

The OSD elements listed below are approved by the European Aviation Safety Agency as per Commission Regulation (EU) 748/2012, as amended by Commission Regulation (EU) No 69/2014.

I. OSD Certification Basis

I.1 Reference Date for determining the applicable OSD requirements

For all models: 12 August 2014

I.2 MMEL - Certification Basis

For all models: Special Condition SC-CS-GEN-MMEL-H, Initial Issue

I.3 Flight Crew Data - Certification Basis

For R44 with symmetrical horizontal stabilizer: CS-FCD, issue 2.
For all other R44: CS-FCD, Initial Issue.

II. OSD Elements

II.1 MMEL

For all models:
EASA MMEL for R22, R44, and R66, Appendix 1 to RTR 666, dated 17 November 2015, or subsequent approved revisions.

II.2 Flight Crew Data

RTR 465, EASA Operation Suitability Data, Flight Crew Data, Initial OSD Issue, or subsequent approved revisions.

SECTION: NOTES PERTINENT TO ALL MODELS

1. A current weight and balance report, including a list of equipment included in the certificated empty weight, and loading instructions when necessary, must be provided for each aircraft at the time of original airworthiness certification and at all times thereafter, except in the case of operators having an approved weight control system.

2. The following placard must be installed in clear view of the pilot:

   "THIS ROTORCRAFT IS APPROVED FOR DAY AND NIGHT VFR OPERATIONS"

   For additional placards, see the Rotorcraft Flight Manual. All placards required in the approved Rotorcraft Flight Manual must be installed in the appropriate locations.

3. Information essential to the proper maintenance of the helicopter, including retirement time of critical components, is contained in the Robinson R44 Maintenance Manual and Instructions for Continued Airworthiness (RTR 460). Retirement times are listed in the approved "AIRWORTHINESS LIMITATIONS" section.

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SECTION: ADMINISTRATIVE

I. Acronyms and Abbreviations

AFT	Aft	n/a	not applicable
BHP	Brake Horsepower	OSD	Operational Suitability Data
CFR	Code of Federal Regulations	P/N	Part Number
C.G.	Centre of Gravity	PWR	Power
CS	Certification Specification	qt	quarts
EFIS	Electronic Flight Information System	RHC	Robinson Helicopter Company
ELOS	Equivalent Level of Safety	RFM	Rotorcraft Flight Manual
ENAC	Ente Nazionale per l'Aviazione Civile (Civil Aviation Authority of Italy)	RPM	Revolutions Per Minute
FAA	Federal Aviation Administration	RTR	Robinson Technical Report
FCD	Flight Crew Data	s/n	Serial Number
FWD	Forward	SC	Special Condition
ICAO	International Civil Aviation Organization	STA	Station
KIAS	Knots Indicated Air Speed	TCDSN	Type Certificate Data Sheet for Noise
Max.	Maximum	TOP	Take-Off Power
MCP	Maximum Continuous Power	TQ	Torque
MMEL	Master Minimum Equipment List	VFR	Visual Flight Rules
MR	Main Rotor	V_{NE}	Never Exceed Speed
MSL	Mean Sea Level		

II. Type Certificate Holder Record

Type Certificate Holder	Period
Robinson Helicopter Company 2901 Airport Drive Torrance, California 90505, USA	since 10 December 1992

III. Change Record

Issue	Date	Changes	TC issue
Issue 01	17 Aug 2007	Initial issue of EASA TCDS	Initial Issue, 12 December 2007
Issue 02	18 Jan 2010	Replaced JAA validation data with ENAC, Bladder fuel tank data added.	- - -
Issue 03	21 Apr 2010	Corrected description of main rotor.	- - -
Issue 04	15 Dec 2015	OSD section added; and updated format and content.	- - -
Issue 05	19 Apr 2016	Correction of technical data (mass, MR speed, RFM) in Section 1, III.22., Section 2, III.8., 9., 12., 13., 22., IV.1., V.1.	- - -
Issue 06	28 Feb 2017	Section 3 added for R44 s/n 30001 and subsequent; I.2. of Section 1 and 2 corrected; Special Condition 27-033-SC added to II.3 of Section 1 and 2; RTR 540 added to III.1 of Section 1 and 2; for optional noise reduction, see Note 3, Section 1 and 2; Section 'NOTES PERTINENT TO ALL MODELS' added and Note 3 thereof clarified.	- - -

Issue	Date	Changes	TC issue
Issue 07	8 Jan 2025	Sections 1, II; 2, II; 3, II, 4, I.3 : certification basis updated for symmetrical horizontal stabilizer. Section 3, II corrected previous omission of exemption. Sections 1, 2, 3, removed I.1.3, II.8.2 and III.7.3, III.7.2 updated, III.13 note added. Section 3, II.4: completion of the certification basis All sections: Editorial updates	

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