



**I. Model R44 (Normal Category Rotorcraft), Approved December 10,1992, (cont'd)**

## Airspeed Limits

S/Ns below 10000:

$V_{NE}$  (never exceed speed) at sea level is 130 KIAS (120 KIAS with fixed floats) for takeoff gross weights of 2200 lbs. or less.  $V_{NE}$  at sea level is 120 KIAS (110 KIAS with fixed floats) for takeoff gross weights over 2200 lbs.

S/N 30001 and subsequent:

$V_{NE}$  (never exceed speed) at sea level is 120 KIAS for all takeoff weights with or without fixed floats.

For all S/Ns:

Power Off (Autorotation)  $V_{NE}$  at sea level is 100 KIAS.

For reduction of  $V_{NE}$  with altitude and temperature, see appropriate Rotorcraft Flight Manual.

Airspeed limit at power settings above Maximum Continuous Power is 100 KIAS.

Airspeed limit with inflated pop-out floats is 80 KIAS.

Airspeed limit for any combination of Doors Off is 100 KIAS.

## Center of Gravity (C.G.) Range

S/Ns below 10000:

Longitudinal C.G. Range			Lateral C.G. Range		
Gross Weight (lbs.)	Forward (in.)	Aft (in.)	Long. C. G. (in.)	Left (in.)	Right (in.)
1550	92.0	102.5	92.0	-3.0	+3.0
2000	92.0	102.5	100.0	-3.0	+3.0
2200	92.0	100.25	102.5	-1.5	+1.5
2400	93.0	98.0			

Note: Straight line variation between points shown

S/N 30001 and subsequent:

Longitudinal C.G. Range			Lateral C.G. Range		
Gross Weight (lbs.)	Forward (in.)	Aft (in.)	Long. C. G. (in.)	Left (in.)	Right (in.)
1550	92.0	102.5	92.0	-3.0	+3.0
2000	92.0	102.5	100.0	-3.0	+3.0
2200	93.0	100.25	102.5	-1.5	+1.5

Note: Straight line variation between points shown

## Empty Weight C.G. Limit

For all S/Ns, Empty weight C.G. must be such that calculated C.G. with 150 lb. pilot and full fuel is at STA 102.5 or forward.

## Maximum Weight

S/Ns below 10000:

2400 lb.

S/N 30001 and subsequent:

2200 lb.

**I. Model R44 (Normal Category Rotorcraft), Approved December 10,1992, (cont'd)**

Minimum Crew 1 pilot at right side control station

Number of Seats S/Ns below 10000:  
4 (3 for Police and ENG Version)

Seat Locations: Pilot and Forward Passenger at STA 49.5  
Aft Passengers at STA 79.5

S/N 30001 and subsequent:  
2

Seat Locations: STA 49.5

Maximum Baggage 50 pounds of baggage and installed equipment in any baggage compartment. For any seat location, the maximum combined weight of the seat load, baggage, and installed equipment is 300 lbs.

For S/N 30001 and subsequent, maximum load on aft deck is 50 lbs each side, and maximum load in each compartment under aft deck is 50 lb.

Fuel Capacity

Tank	Tanks Without Bladders		Tanks With Bladders		Location (STA)
	Capacity (gal.)	Usable (gal.)	Capacity (gal.)	Usable (gal.)	
Main	31.6	30.6	30.5	29.5	106.0
Auxiliary	18.5	18.3	17.2	17.0	102.0

Oil Capacity

Component	Capacity (qt.)	Location (STA)
Engine	9	110.0
Main Rotor Transmission	2	100.0
Tail Rotor Transmission	0.11	327.0
Hydraulic Reservoir (if installed)	0.65	117.0

Maximum Operating Altitude

Density Altitude Limit 14,000 ft.  
Maximum altitude above ground level is 9000 ft. to allow landing within 5 minutes in case of fire.

Manufacturer's Serial Numbers

0002, 0004 thru 9999 except 1140, 30001 and subsequent.

Certification Basis

14 CFR Part 27, dated February 1, 1965, including Amendments 27-1 through 27-24, Exemption No. 5473 dated July 2, 1992, to §27.955(a)(7) and 27.1305(q), and Exemption No. 6692 dated October 17, 1997 to §27.695.

14 CFR Part 36 Amendment 36-20.

Equivalent Safety Finding:

Number TD10352LA-R/S-1  
14CFR Part 27.1401(d), Anticollision Light System

Special Condition:

No. 27-033-SC Robinson Model R44 and R44 II Helicopters, Installation of HeliSAS Autopilot and Stabilization Augmentation System (AP/SAS).



**II. Model R44 II (Normal Category Rotorcraft), Approved October 3,2002, (cont'd)**

Center of Gravity (C.G.) Range

Gross Weight (lbs.)	Longitudinal C.G. Range		Lateral C.G. Range		
	Forward (in.)	Aft (in.)	Long. C. G. (in.)	Left (in.)	Right (in.)
1600	92.0	102.5	92.0	-3.0	+3.0
2100	92.0	102.5	100.0	-3.0	+3.0
2300	92.0	100.25	102.5	-1.5	+1.5
2500	93.0	98.0			

Note: Straight line variation between points shown

Empty Weight C.G. Limit

Empty weight C.G. must be such that calculated C.G. with 150 lb. pilot and full fuel is at STA 102.5 or forward.

Maximum Weight

2500 lb.  
2400 lb. for intentional water landings with fixed or pop-out floats.

Minimum Crew

1 pilot in forward right seat.

Number of Seats

4 (3 for Police and ENG Versions)  
Seat Locations: Pilot and Forward Passenger at STA 49.5  
Aft Passengers at STA 79.5

Maximum Baggage

50 pounds of baggage and installed equipment in any baggage compartment. For any seat location, the maximum combined weight of the seat load, baggage, and installed equipment is 300 lbs.

Fuel Capacity

Tank	Tanks Without Bladders		Tanks With Bladders		Location (STA)
	Capacity (gal.)	Usable (gal.)	Capacity (gal.)	Usable (gal.)	
Main	31.6	30.6	30.5	29.5	106.0
Auxiliary	18.5	18.3	17.2	17.0	102.0

Oil Capacity

Component	Capacity (qt.)	Location (STA)
Engine	9	110.0
Main Rotor Transmission	2	100.0
Tail Rotor Transmission	0.11	327.0
Hydraulic Reservoir	0.65	117.0

Maximum Operating Altitude

Density Altitude Limit - 14,000 ft.  
Maximum altitude above ground level is 9000 ft. to allow landing within 5 minutes in case of fire.

Manufacturer's Serial Numbers

1140, 10001 thru 29999

Certification Basis

14 CFR Part 27, dated February 1, 1965, including Amendments 27-1 through 27-24, and Exemption No. 6692 dated October 17, 1997 to §27.695.

14 CFR Part 36 Amendment 36-24.

Equivalent Safety Finding:

Number TD10352LA-R/S-1

14CFR Part 27.1401(d), Anticollision Light System

Special Condition:

No. 27-033-SC Robinson Model R44 and R44 II Helicopters, Installation of HeliSAS Autopilot and Stabilization Augmentation System (AP/SAS).



NOTE 5. R44 Rotorcraft Flight Manual Supplement 10 dated June 10, 1999, or later revision is required when emergency (pop-out) floats are installed.

NOTE 6. R44 Rotorcraft Flight Manual with revisions through November 5, 1999, or later revision is required when hydraulically-boosted main rotor flight controls are installed.

NOTE 7. Deleted as of April 29, 2016.

NOTE 8. Deleted as of April 29, 2016.

NOTE 9. Deleted as of February 13, 2015.

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