

THE VALIDATION OF TYPE CERTIFICATE DATA SHEET

日期/Data: 2019-12-04

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第1部分 型号认可证概述

SECTION 1 GENERAL OF VTC

1. CAAC 认可数据单和型号合格证数据单

CAAC Validation Data Sheet and Type Certificate Data Sheet

	中国民用航空局认可数据单号、版次和颁发日期 CAAC Validation Data Sheet Number, Revision and issuance date			型号合格证数据单号、版次和颁发日期 Type Certificate Data Sheet Number, Revision and issuance date		
当前 Current	R44	VTC084A Revision 1	2019-12-04	R44	H11NM Revision 9	2018-06-26
	R44 II	VTC084A Revision 1	2019-12-04	R44 II	H11NM Revision 9	2018-06-26
历史 History	R44	VTC084A Revision 0	2015-09-25	R44	H11NM Revision 7	2015-04-21
	R44 II	VTC084A Revision 0	2015-09-25	R44 II	H11NM Revision 7	2015-04-21
	R44 II	VTC084A	2004-11-03	R44 II	H11NM Revision 3	2002-10-10
	R44	VTC084A	1999-09-18	R44	H11NM Revision1	1996-09-23

2. 认可当局/Validation Authority: 中国民用航空局/CAAC
 审定当局/Certifying Authority: 美国联邦航空局 /FAA

3. 型号合格证 Type Certificate Number: H11NM
 型号合格证持有人/Type Certificate Holder:
 Robinson Helicopter Company
 2901 Airport Drive
 Torrance, California 90505

4. 进口要求/Import Requirement

为具备在中国运行的资格，按本型号认可证制造的每架航空器必须具有一份出口适航证，其上签注有出口国适航当局的审定声明，即：本架航空器符合 CAAC 所批准的型号设计，并处于可安全运行的状态。

To be considered eligible for operation in China, each aircraft manufactured under this Validation of Type Certificate must be accompanied by a certificate of airworthiness for export endorsed by Export Authority which states (in English language): This aircraft conforms to its CAAC type design and is in a condition for safe operation.

第2部分 型号数据

SECTION 2 TYPE DATA

I. 型别: R44

MODEL NUMBER: R44

R44 型直升机序列号在 10000 以下的为 4 个座位构型, 序列号为 30001 及之后的为 2 个座位构型。如下所示, 一些限制是特定于构型的。飞行手册也是特定于构型的, 且制造商文件编号 RTR 461 为 4 座位构型而 RTR 463 是针对 2 个座位构型。

Model R44 helicopters with serial numbers below 10000 are configured with four seats. Model R44 helicopters with serial number 30001 and subsequent are configured with two seats. Some limitations are configuration-specific as indicated below. The Rotorcraft Flight Manual is also configuration-specific and has manufacturer's document number RTR 461 for the four seat configuration and RTR 463 for the two seat configuration.

一、产品型别和批准日期/THE PRODUCT MODEL AND APPROVAL DATE

CAAC 认可日期 2019-12-04

CAAC Validated Date

1. 型号合格证数据单号 H11NM

Type Certificate Data Sheet No.

2. 型号、衍生型或型别

Type / Variant or Model

(a) 型号/Type R44

(b) 衍生型或型别

Variant or Model:

3. 适航类别 正常类旋翼航空器

Airworthiness Category Normal Category Rotorcraft

4. 型号合格证持有人 Robinson Helicopter Company

Type Certificate Holder: 2901 Airport Drive

Torrance, California 90505

5. 国外适航当局申请日期 4 MARCH 1987

Foreign Authority Application

Date:

6. 国外适航当局型号审定日期 10 DECEMBER 1992

Foreign Authority Type

Certification Date:

二、合格审定基础和生产依据 CERTIFICATION BASIS AND PRODUCTION BASIS

CAAC 型号认可审定基础 CAAC 型号认可审定基础定义如下:

CAAC Validation Certification 1 FAA 审定基础。

Basis

2 CAAC 附加技术条件/ CAAC Additional Technical Requirement :

交付到中国的每一架 R44 直升机还必须满足下列专用附加技术条件;

(1) 必须满足中国民用航空局的运行要求,包括中文标记标牌要求;

CAAC validation basis was defined as follows:

1 FAA Certification Basis.

2 CAAC Additional Technical Requirement :

Each R44 helicopter delivered to China shall meet the following additional technical requirements:

(1) The operational requirements of CAAC must be met, including Chinese markings and placards.

CAAC 型号认可证申请日期 1995-03-21
CAAC Validation of Type
Certificate Application Date

(1). FAA 审定基础
FAA Certification Basis: FAR 27 部, 1965 年 2 月 1 日, 第 27-1 至第 27-24 修正案
1992 年 7 月 2 日发布的 No.5473 号豁免报告,对 FAR27.955(a)(7) 和 27.1305(q) 予以豁免
FAR36 部 36-20 修正案

等效安全:

编号 TD10352LA-R/S-1

FAR 27.1401(d), 防撞灯系统

编号 AT16516LA-R-S-1

FAR 27.695(a)(1), 动力助力和带动力操作的操纵系统 (见注释11)

专用条件:

No. 27-033-SC 罗宾逊型别 R44 和 R44 II 直升机, 安装 HeliSAS 自驾和增稳系统 (AP/SAS)

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),
14 CFR Part 36 Amendment 36-20.

Equivalent Safety Finding:

Number TD10352LA-R/S-1

14CFR Part 27.1401(d), Anticollision Light System

Number AT16516LA-R-S-1

14 CFR part 27.695(a)(1), Power boost and power-operated control system. (see Note 11)

Special Condition:

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

生产基础 Production Basis	生产许可证 编号:424WE, 1993 年 2 月 11 日 Production Certificate No. 424WE dated February 11, 1993.
三、 型号设计定义 Type Design Definition:	技术特性和使用限制/TECHNICAL CHARACTERISTICS AND OPERATIONAL LIMITATIONS R44 主图纸清单 2016 年 8 月 8 日。 MASTER DRAWING LIST 0044 (8 August 2016).
中文标牌和标识 Chinese Placards and marking	中文标牌和标识包含在图纸 B842 (E 版) 或 CAAC 批准的更新版本中。 Chinese Placards and markings are included in drawing B842 (Revision E) or later revisions CAAC approved.
发动机 Engine	一台莱康明 O-540-F1B5 发动机, 型号合格证编号 E-295 One Lycoming O-540-F1B5, Type Certificate number E-295 型号认可证编号: VTC047E, 认可 FAA 数据单 E-295 版次 12。 Validation Type Certificate No.VTC047E, validated data sheet revision E-295 Rev. 12 issued by FAA.
燃油 Fuel	参见旋翼航空器飞行手册 (RFM) See Rotorcraft Flight Manual (RFM)
发动机限制 Engine Limits	<u>序列号低于 10000:</u> 最大连续功率: 205 马力 在 2718 rpm (102%) 起飞功率 (5 分钟): 225 马力 在 2718 rpm (102%) <u>序列号为 30001 及之后:</u> 最大连续功率: 185 马力 在 2718 rpm (102%) 起飞功率 (5 分钟): 210 马力 在 2718 rpm (102%) <u>对所有序列号:</u> 参阅相适用的直升机飞行手册了解马力限制对应的最大进气压力 <u>S/Ns below 10000:</u> Maximum continuous: 205 hp at 2718 rpm (102%) Takeoff (5 minute): 225 hp at 2718 rpm (102%) <u>S/N 30001 and subsequent:</u> Maximum continuous: 185 hp at 2718 rpm (102%) Takeoff (5 minute): 210 hp at 2718 rpm (102%) <u>For all S/Ns:</u> See appropriate Rotorcraft Flight Manual for manifold pressure settings corresponding to horsepower limits.

旋翼速度限制 Rotor Speed Limits	<table> <tr> <td>无动力 (旋翼转速表) Power Off (Rotor Tach)</td><td>有动力(旋翼转速表) Power On(Rotor Tach)</td></tr> <tr> <td>最大 Maximum: 432 rpm (108%)</td><td>最大 Maximum: 408 rpm (102%)</td></tr> </table>	无动力 (旋翼转速表) Power Off (Rotor Tach)	有动力(旋翼转速表) Power On(Rotor Tach)	最大 Maximum: 432 rpm (108%)	最大 Maximum: 408 rpm (102%)
无动力 (旋翼转速表) Power Off (Rotor Tach)	有动力(旋翼转速表) Power On(Rotor Tach)				
最大 Maximum: 432 rpm (108%)	最大 Maximum: 408 rpm (102%)				

最小 Minimum: 360 rpm (90%)	最小 Minimum: 404 rpm (101%)*
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*早期的R44s转速表上发动机功率显示的绿色弧线范围为99%至102%，最低有动力旋翼转速为396转/分。

* Earlier R44s with tachometers showing an engine green arc range of 99% to 102% have a minimum power-on rotor speed of 396 rpm.

空速限制

Airspeed Limits

序列号低于 10000:

起飞重量不超过 2200 磅时，海平面 V_{NE} 为 130KIAS（带浮筒时为 120KIAS），起飞重量超过 2200 磅时，海平面 V_{NE} 为 120KIAS（带浮筒时为 110KIAS）

序列号为 30001 及之后:

所有起飞重量状态，海平面 V_{NE} 为 120KIAS（带或不带浮筒）。

对所有序列号:

无动力（自转）海平面 V_{NE} 为 100KIAS。

参阅相适用的直升机飞行手册了解 V_{NE} 随高度和温度变化情况。

动力设置大于最大连续功率的空速限制为 100 KIAS。

充气式浮筒展开时空速限制为 80KIAS。

任何舱门拆除时的空速限制为 100KIAS。

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.

重心范围

Center of Gravity (C.G.) Range

序列号低于 10000 S/Ns below 10000:

纵向重心范围 Longitudinal C.G. Range			横向重心范围 Lateral C.G. Range		
总重 Gross Weight (lbs.)	前 Forward (in.)	后 Aft (in.)	纵向重心 Long. C. G. (in.)	左 Left (in.)	右 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			

注：点与点之间直线变化

Note: Straight line variation between points shown

序列号为 30001 及之后 S/N 30001 and subsequent:

纵向重心范围 Longitudinal C.G. Range			横向重心范围 Lateral C.G. Range		
总重 Gross Weight (lbs.)	前 Forward (in.)	后 Aft (in.)	纵向重心 Long. C. G. (in.)	左 Left (in.)	右 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

注：点与点之间直线变化

Note: Straight line variation between points shown

空重重心范围

Empty Weight C.G. Limit

对所有系列号，以 150 磅驾驶员和满油状态计算的空重重心应该在 STA102.5 或前方。

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.

最大重量

Maximum Weight

序列号低于 10000:

2400 磅.

序列号为 30001 及之后:

2200 磅.

S/Ns below 10000:

2400 lb.

S/N 30001 and subsequent:

2200 lb.

最小机组

Minimum Crew

一位驾驶员坐在右侧操纵位置

1 pilot at right side control station

座椅数量

Number of Seats

序列号低于 10000:

4 座 (警用型 3 座)

座椅位置：驾驶员和前座乘员在 STA 49.5

后座乘员在 STA79.5

序列号为 30001 及之后:

2座

座椅位置: 在 STA 49.5

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

最大行李重量

Maximum Baggage

每个行李舱内最大承载50磅行李或设备。对任何座椅位置, 座椅承载及行李和设备的最大合计重量不得超过300磅。

序列号为30001及之后的, 后部地板的最大承载为每侧50磅, 后部地板下方每个舱室的最大承载为50磅。

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.

燃油容量

Fuel Capacity

油箱 Tank	非软囊油箱 Tanks Without Bladders		软囊油箱 Tanks With Bladders		位置 Location (STA)
	容量 /Capacity (gal.)	可用量 /Usable (gal.)	容量 /Capacity (gal.)	可用量 /Usable (gal.)	
主油箱 Main	31.6	30.6	30.5	29.5	106.0
辅助油箱 Auxiliary	18.5	18.3	17.2	17.0	102.0

滑油容量

Oil Capacity

部件 Component	容量/Capacity (qt.)	位置Location (STA)
发动机/Engine	9	110.0
主旋翼传动/ Main Rotor Transmission	2	100.0
尾旋翼传动/ Tail Rotor Transmission	0.11	327.0
液压油池(如果安装)/ Hydraulic Reservoir (if installed)	0.65	117.0

最大运行高度

Maximum Operation Altitude

密度高度限制 14,000 英尺。

最大离地高度为 9000 英尺。以备在失火时能够在 5 分钟内着陆。

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

生产商产品序列号
Manufacturer's Serial Numbers 0002, 0004 至 9999, 不包括 1140, 30001 及之后的
0002, 0004 thru 9999, except 1140, 30001 and subsequent.

设备
Equipment 适用的适航规章（参阅审定基础）中要求的基本设备必须在直升机上安装以达到审定要求，此外，如下FAA批准的直升机飞行手册必须具备：
序列号低于10000：
1992年12月10日或更新版的R44直升机飞行手册（RTR461）（参见注释4,5和6）。
序列号为30001及之后：
2016年4月29日或更新版的R44 Cadet 型直升机飞行手册（RTR463）。

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. In addition, the following FAA-approved Rotorcraft Flight Manual is required:
S/Ns below 10000:
R44 Rotorcraft Flight Manual (RTR 461) dated December 10, 1992, or later revision (See NOTES 4, 5, & 6).
S/N 30001 and above:
R44 Cadet Rotorcraft Flight Manual (RTR 463) dated April 29, 2016, or later revision.

四、 使用 and 维修技术资料/Operating and Service Instructions

1. 飞行手册文件号
Rotorcraft Flight Manual,
Document No 序列号低于10000 S/Ns below 10000:
RTR461
序列号为 30001 及之后 S/N 30001 and subsequent:
RTR463

2. 维护手册文件号
Maintenance Manual,
Document No: 所有序列号 For all S/Ns:
RTR460 Volume 1.

II .型别: R44 II

MODEL NUMBER: R44 II

一、 产品型别和批准日期/THE PRODUCT MODEL AND APPROVAL DATE

CAAC 认可日期 2019-12-04
CAAC Validated Date

1. 型号合格证数据单号
Type Certificate Data Sheet No. H11NM

2. 型号、衍生型或型别
Type / Variant or Model

(a) 型号/Type R44 II
(b) 衍生型或型别
Variant or Model:

3. 适航类别 正常类旋翼航空器
Airworthiness Category Normal Category Rotorcraft

4. 型号合格证持有人
Type Certificate Holder: Robinson Helicopter Company
2901 Airport Drive
Torrance, California 90505

5. 国外适航当局申请日期 15 SEPTEMBER 2001
Foreign Authority Application
Date:

6. 国外适航当局型号审定日期 10 OCTOBER 2002
Foreign Authority Type
Certification Date:

二、 合格审定基础和生产依据 CERTIFICATION BASIS AND PRODUCTION BASIS

CAAC 型号认可审定基础 CAAC 型号认可审定基础定义如下:

CAAC Validation Certification Basis 1 FAA 审定基础。

2 CAAC 附加技术条件/ CAAC Additional Technical Requirement :
交付到中国的每一架 R44 直升机还必须满足下列专用附加技术条件;
(1) 必须满足中国民用航空局的运行要求,包括中文标记标牌要求;

CAAC validation basis was defined as follows:

1 FAA Certification Basis.

2 CAAC Additional Technical Requirement :

Each R44 helicopter delivered to China shall meet the following additional technical requirements:

(1) The operational requirements of CAAC must be met, including Chinese markings and placards.

CAAC 型号认可证申请日期 2004-06-17
CAAC Validation of Type
Certificate Application Date

(1). FAA 审定基础 FAR 27 部, 1965 年 2 月 1 日, 第 27-1 至第 27-24 修正案
FAA Certification Basis: FAR36 部 36-24 修正案

等效安全:
编号 TD10352LA-R/S-1

FAR 27.1401(d), 防撞灯系统
编号 AT16516LA-R-S-1
FAR 27.695(a)(1), 动力助力和带动力操作的操纵系统（见注释11）

专用条件:
No. 27-033-SC 罗宾逊型别 R44 和 R44 II 直升机, 安装 HeliSAS
自驾和增稳系统 (AP/SAS)

14 CFR Part 27, dated February 1, 1965, including Amendments 27-1 through 27-24,
and
14 CFR Part 36 Amendment 36-24.

Equivalent Safety Finding:
Number TD10352LA-R/S-1
14CFR Part 27.1401(d), Anticollision Light System
Number AT16516LA-R-S-1
14 CFR part 27.695(a)(1), Power boost and power-operated control system.
(see Note 11)

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

生产基础	生产许可证 编号: 424WE, 1993 年 2 月 11 日
Production Basis	Production Certificate No. 424WE dated February 11, 1993.

三、 技术特性和使用限制/TECHNICAL CHARACTERISTICS AND OPERATIONAL LIMITATIONS

型号设计定义	R44 主图纸清单 2016年8月8日。
Type Design Definition:	MASTER DRAWING LIST 0044 (8 August 2016).

中文标牌和标识	中文标牌和标识包含在图纸 B842 （E 版 ）或 CAAC 批准的更新版本中。
Chinese Placards and marking	Chinese Placards and markings are included in drawing B842 （Revision E ） or later revisions CAAC approved.

发动机	一台莱康明 IO-540-AE1A5, 型号合格证号 1E4
Engine	One Lycoming IO-540-AE1A5, Type Certificate number 1E4 型号认可证编号: VTC025E, 认可数据单版次 3。 Validation Type Certificate No.VTC025E, VTCDS revision 3.

燃油	参见旋翼航空器飞行手册（RFM）
Fuel	See Rotorcraft Flight Manual (RFM)

发动机限制	最大连续功率: 205 马力 在 2718 rpm (102%)
Engine Limits	起飞功率（5分钟）: 245 马力 在2718 rpm (102%) 参阅旋翼航空器飞行手册, 了解马力限制对应的进气压力设置。

Maximum continuous: 205 hp at 2718 rpm (102%)

Takeoff (5 minute): 245 hp at 2718 rpm (102%)

See Rotorcraft Flight Manual for manifold pressure settings corresponding to horsepower limits.

旋翼转速限制
Rotor Speed Limits

无动力（旋翼转速表） Power Off (Rotor Tach)	有动力(旋翼转速表) Power On(Rotor Tach)
最大/Maximum: 432 rpm (108%)	最大/Maximum: 408 rpm (102%)
最小/Minimum: 360 rpm (90%)	最小/Minimum: 404 rpm (101%)

空速限制
Airspeed Limits

起飞重量不超过 2200 磅时，海平面 V_{NE} 为 130KIAS（带浮筒时为 120KIAS），
起飞重量超过 2200 磅时，海平面 V_{NE} 为 120KIAS（带浮筒时为 110KIAS）

无动力（自转）海平面 V_{NE} 为 100KIAS。

参阅旋翼航空器飞行手册了解 V_{NE} 随高度和温度变化情况。

动力设置大于最大连续功率的空速限制为 100 KIAS。

充气式浮筒展开时空速限制为 80KIAS。

任何舱门拆除时的空速限制为 100KIAS。

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.

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

For reduction of V_{NE} with altitude and temperature, see 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.

重心范围
Center of Gravity (C.G.) Range

纵向重心范围 Longitudinal C.G. Range			横向重心范围 Lateral C.G. Range		
总重/Gross Weight (lbs.)	前/Forward (in.)	后/Aft (in.)	纵向/Long. C. G. (in.)	左/Left (in.)	右/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			

注：点与点之间直线变化

Note: Straight line variation between points shown

空重重心范围
Empty Weight C.G. Limit

空重重心必须以 150 磅驾驶员和满油状态计算，空重重心应该在 STA102.5 或前方。

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.

最大重量
Maximum Weight

2500 磅。使用固定或充气浮筒在执行水面降落时为 2400 磅。
2500 lb. 2400 lb. for intentional water landings with fixed or pop-out floats.

最小机组
Minimum Crew

右前座一位驾驶员。
1 pilot in forward right seat.

座椅数量
Number of Seats

4 座(警用型 3 座)
座椅位置: 驾驶员和前座乘员在 STA 49.5
后座乘员在 STA79.5

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

最大行李重量
Maximum Baggage

每个行李舱内最大承载50磅行李或设备。对任何座椅位置, 座椅承载及行李和设备的最大合计重量不得超过300磅。
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.

燃油容量
Fuel Capacity

油箱 Tank	非软囊油箱 Tanks Without Bladders		软囊油箱 Tanks With Bladders		位置 Location (STA)
	容量/Capacity (gal.)	可 用 量 /Usable (gal.)	容 量 /Capacity (gal.)	可 用 量 /Usable (gal.)	
主 油 箱 /Main	31.6	30.6	30.5	29.5	106.0
辅助油箱 Auxiliary	18.5	18.3	17.2	17.0	102.0

滑油容量
Oil Capacity

部件/Component	容量Capacity (qt.)	位置Location (STA)
发动机/Engine	9	110.0
主旋翼传动/ Main Rotor Transmission	2	100.0
尾旋翼传动/ Tail Rotor Transmission	0.11	327.0
液压油池/Hydraulic Reservoir	0.65	117.0

最大运行高度
Maximum Operation

密度高度限制- 14,000 英尺。
最大离地高度为 9000 英尺。以备在失火时能够在 5 分钟内着陆。

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.
生产商产品序列号 Manufacturer's Serial Numbers	1140, 10001至29999 1140, 10001 thru 29999
设备 Equipment	适用的适航规章（参阅审定基础）中要求的基本设备必须在直升机上安装以达到审定要求，此外，如下FAA批准的直升机飞行手册必须具备 2002年10月3日或更新版的R44直升机飞行手册（RTR462）（参见注释7和8） The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. In addition, the following FAA-approved Rotorcraft Flight Manual is required: R44 II Rotorcraft Flight Manual (RTR 462) dated October 3, 2002, or later revision (See NOTES 7 & 8).

四、 使用和维修技术资料/Operating and Service Instructions

- | | |
|--|------------------|
| 1. 飞行手册文件号
Rotorcraft Flight Manual,
Document No | RTR462 |
| 2. 维护手册文件号
Maintenance Manual, Document
No: | RTR460 Volume 1. |

第3部分 所有型号相关数据

SECTION 3 DATA PERTINENT TO ALL MODELS

基准	主轴中心线之前100 英寸		
Datum	100 in. forward of main rotor centerline.		
水平测量方法	参阅R44维护手册和持续适航文件(RTR 460)。		
Leveling Means	Refer to the R44 Maintenance Manual and Instructions for Continued Airworthiness (RTR 460).		
旋翼桨叶及操纵运动	主旋翼桨叶角度测量位置为半径75%处：		
Rotor Blade and	总距：	12.5° ±1.0° 总行程	
Control Movements	注：按照维护手册及持续适航文件（RTR460）建立低总距以获得正确的自转转速。		
	周期变距/Cyclic Pitch:		
	前	13.50°至	14.25°
	后	13.50°至	14.25°
	左	7.5° 至	8.5°
	右	6.0° 至	7.0°
	尾桨桨叶角度测量位置为半径75%处：		
	总距/Collective Pitch:		
	右满舵	15.5°至16.5°	
	左满舵	18.5°至19.0°	
	Main Rotor blade angles at 75% radius:		
	Collective Pitch: 12.5° ±1.0° total travel		
	Note: Collective low pitch to be established in accordance with the Maintenance Manual and Instructions for Continued Airworthiness (RTR 460) procedures to obtain proper autorotation RPM.		
	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 blade angles at 75% radius:		
	Collective Pitch: Full right pedal	15.5° to 16.5°	
	Full left pedal	18.5° to 19.0	

第 4 部分 注释

SECTION 4 NOTES

注释 1 现行的重量和平衡报告，包括审定空重中的设备清单和装载指令（必要时），必须在初始适航
NOTE 1 审查时和此后的任何时候提供给每架飞机，除了运营商已有批准的重量控制系统。

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.

注释 2 下面的标牌必须安装在驾驶员清晰的视野内：

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

"THIS ROTORCRAFT APPROVED FOR DAY AND NIGHT VFR OPERATIONS"

有关更多的标牌，参阅直升机飞行手册，飞行手册中要求的所有标牌必须安装在适当位置。

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

注释 3 直升机正确维护的重要信息，包括关键部件退役时间，在罗宾逊R44维护手册及持续适航文件
NOTE 3 （RTR460）中列出。退役时间在“适航限制”章节中列出。

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 "AIRWORTHINESS LIMITATIONS" section.

注释 4 安装了浮筒起落架时，必须使用1996年7月17日发布的R44直升机飞行手册增补5或更新版本。
NOTE 4 R44 Rotorcraft Flight Manual Supplement 5 dated July 17, 1996, or later revision is required when float landing gear is installed.

注释 5 安装了应急充气应急浮筒时，必须使用 1999 年 6 月 10 日发布的 R44 直升机飞行手册增补 10 或
NOTE 5 更新版本

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

注释 6 安装了旋翼飞行操纵系统液压助力装置时，必须使用R44直升机飞行手册1999年11月5日版本，
NOTE 6 或之后更新版本。

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

注释 7 安装了固定浮筒起落架时，必须使用2002年10月3日发布的R44II直升机飞行手册固定浮筒增补页
NOTE 7 或更新版本。

R44 II Rotorcraft Flight Manual Fixed Floats Supplement dated October 3, 2002, or later revision is required when fixed-float landing gear is installed.

注释 8 安装了充气浮筒时，必须使用2002年10月3日发布的R44II直升机飞行手册充气浮筒增补页或更新

- NOTE 8 版本。
R44 II Rotorcraft Flight Manual Pop-Out Floats Supplement dated October 3, 2002, or later revision is required when pop-out floats are installed.
- 注释 9 2015 年 4 月 21 日删除
NOTE 9 Deleted as of April 21, 2015.
- 注释 10 中文标牌和标识包含在图纸 B842 (E 版) 或 CAAC 批准的更新版本中。
NOTE 10 Chinese Placards and markings are included in drawing B842 (Revision E) or later revisions CAAC approved.
- 注释 11 2017 年 7 月 17 日 Robinson 直升机的关于 14CFR§27.695 (a)(1)等效安全的备忘录
NOTE 11 AT16516LA-R-S-1 被批准。FAA 的结论是，控制阀的设计提供了与法规要求相同的安全水平。1997 年 10 月 17 日的第 6692 号豁免已被取消。该豁免在无需考虑将动力飞行控制系统中的阻塞或控制阀作为可能的单一故障的条件下，允许 RHC 获得设计更改的批准。已经交付使用的 R44 直升机没有受到影响。
Robinson Helicopter Company was granted AT16516LA-R-S-1 Equivalent Level of Safety (ELOS) finding to CFR §27.695(a)(1), dated July 17, 2017. The FAA concluded that the control valve design provided equivalent level of safety to the requirement intended by the regulation. Exemption No. 6692, dated October 17, 1997, has been removed. This exemption allowed RHC to obtain certification of the design change without considering the jamming or a control valve in the powered flight control system as a possible single failure. There is no impact to R44 helicopters that have been delivered are in service.

- THE END -