

## CHAPTER 1

## GENERAL

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## CHAPTER 1

## GENERAL

1-10 Introduction

The R66 Maintenance Manual contains instructions necessary for proper maintenance, servicing, and handling of the R66 helicopter. The R66 Instructions for Continued Airworthiness (ICA) include the R66 Maintenance Manual (MM), R66 Illustrated Parts Catalog (IPC), R66 Pilot's Operating Handbook (POH), R66 Service Bulletins (SB), R66 Service Letters (SL), RR300 Series Operation and Maintenance Manual (OMM), applicable Rolls-Royce technical publications, and applicable component manufacturer technical publications.

Service Bulletins may be issued by Robinson Helicopter Company (RHC), Rolls-Royce, or component manufacturers. Service Bulletin compliance is mandatory. RHC technical publications are available on the internet at: [www.robinsonheli.com/support.htm](http://www.robinsonheli.com/support.htm). Rolls-Royce technical publications are available on the internet at: <https://fast.aeromanager-online.com>.

The R66 Maintenance Manual is formatted in Air Transport Association of America Specification No. 100 (ATA-100). Style, content, and structure deviates from ATA-100 when necessary for clarity, and for logic of presentation. A list of chapters, and a complete list of contents is located in the *Introduction*. Chapters are separated by tab dividers; chapter contents are listed in the chapter front pages.

**CAUTION**

Always read instructions completely before performing a task.

1-20 R66 Maintenance Manual Revisions

Before using the R66 Maintenance Manual, verify it consists of effective pages. A complete list of effective pages is located in the Revision Log in Chapter 100. When a new manual is purchased, complete and submit the Subscription Service Form located in the *Introduction*. Subscription owners receive publication revisions for a one-year period. Renew subscriptions annually. The revision status for all RHC technical publications is available on the internet at: [www.robinsonheli.com/pubupdts.htm](http://www.robinsonheli.com/pubupdts.htm).

1-30 R66 Maintenance Authorization

Only appropriately certificated mechanics who have successfully completed a R66 factory-sponsored maintenance course, or are under direct supervision of the above-stated mechanic, are authorized to perform maintenance, repairs, or inspections on the R66 Turbine helicopter. Annual inspections of U.S.-registered light helicopters must be performed by holders of an Inspection Authorization (IA) certificate or by repair stations certificated by the Federal Aviation Administration (FAA). The daily preflight and some preventive maintenance may be performed by the above-stated mechanics, or by the pilot/owner after receiving appropriate instruction in accordance with the R66 Pilot's Operating Handbook and applicable aviation regulations.

1-40 R66 Component Overhaul Authorization

Only appropriately certificated mechanics who have successfully completed a R66 factory-sponsored component overhaul course, and who possess special tools and technical data supplied by RHC, are authorized to disassemble and overhaul or repair specific components.

## 1-50 Notations

The following notations will be found throughout the manual:

**NOTE**

A NOTE provides emphasis or supplementary explanation.

**CAUTION**

Equipment damage can result if a **CAUTION** is not followed.

**WARNING**

**Personal injury or death can result if a WARNING is not followed.**

## 1-60 Definitions and Abbreviations

Refer to R66 Pilot's Operating Handbook (POH) Section 1 for additional definitions and abbreviations.

### **A. Definitions**

*12 years:*

With respect to a 12 year inspection or life-limit, *12 years* means 12 years from the date of the factory-issued airworthiness certificate.

*Annually:*

With respect to an annual inspection, *annually* means within the preceding 12 calendar months.

*Datum:*

An imaginary vertical plane from which all horizontal measurements are taken for balance purposes with the aircraft in level flight attitude. Refer to Section 6-20 for R66 datum location.

*Empty Weight:*

Empty Weight includes the weight of the airframe, powerplant, required and installed equipment, fixed ballast, hydraulic fluid, unusable fuel, and gearbox oil. Refer to R66 Turbine Type Certificate Data Sheet (TCDS) in Section 4-20. Refer to Equipment List/Weight and Balance Data Sheet (RF 134) and Weight and Balance Record in R66 POH Section 6 for installed equipment.

*Life-Limited Part:*

Refer to Section 4-10. Any part for which a mandatory replacement limit is specified in the type design, the Instructions for Continued Airworthiness, or the maintenance manual.

*Time in Service:*

With respect to maintenance time records, *time in service* means the time from the moment an aircraft leaves the surface of the earth until it touches it at the next point of landing.

1-60 Definitions and Abbreviations (continued)**B. Abbreviations**

*14 CFR:* Title 14 of the Code of Federal Regulations. The Federal Aviation Regulations (FARs) are part of the CFR.

*AOG:* Aircraft on Ground

*ATA-100:* Air Transport Association of America Specification No. 100

*BL:* Butt Line Station locations

*CO:* Carbon Monoxide

*CRA:* Component Return/Authorization

*ELT:* Emergency Locator Transmitter

*EMU:* Engine Monitoring Unit

*FCU:* Fuel Control Unit

*FS:* Fuselage Station locations

*GCU:* Generator Control Unit

*HID:* High Intensity Discharge

*LBL:* Left Butt Line Station locations

*LED:* Light Emitting Diode

*MRDS:* Main Rotor Driveshaft

*MRGB:* Main Rotor Gearbox

*OEM:* Original Equipment Manufacturer

*PTG:* Power Turbine Governor

*R66 IPC:* R66 Illustrated Parts Catalog

*R66 MM:* R66 Maintenance Manual

*R66 POH:* R66 Pilot's Operating Handbook

*RHC:* Robinson Helicopter Company

*RR300 Series OMM:* Rolls-Royce RR300 Series Operation and Maintenance Manual

*SB:* Service Bulletin

*SL:* Service Letter

*TCDS:* Type Certificate Data Sheet

*TRDS:* Tail Rotor Driveshaft

*TRGB:* Tail Rotor Gearbox

*TS:* Tailcone Station locations

*WL:* Water Line Station locations

1-70 Service Directory

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