

CHAPTER 3

LIFE-LIMITED COMPONENTS

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CHAPTER 3

LIFE-LIMITED COMPONENTS

3.100 Life-Limited Components3.110 Time-In-Service Records

It is the operator's responsibility to maintain a record of time in service for the airframe, engine, and life-limited components. An hourmeter activated by engine oil pressure is standard equipment on earlier R44 helicopters. Later helicopters are equipped with an hourmeter activated by a combination of oil pressure and up collective; the hourmeter will record time only when engine oil pressure exists and the collective is raised. Either hourmeter is an acceptable means of recording time in service (refer to § 1.007).

Calendar time in service for the airframe and engine begins on the date of the original RHC-issued Export (or Standard) Certificate of Airworthiness for the helicopter. For spares without a storage limit specified in § 1.160, calendar time in service begins on the date of the RHC-issued Airworthiness Approval Tag (Authorized Release Certificate) issued with the invoice.

If a component or an inspection is scheduled for hourly and calendar intervals, comply with whichever requirement comes first, then reset interval unless otherwise specified.

When installing a life-limited part or a part with an overhaul requirement, record in the helicopter maintenance record the installation date, part number, part name, serial number, helicopter total time, and time in service accumulated by part since new or since last overhaul, as applicable.

WARNING

Components with mandatory overhaul times or life limits whose time in service is not reliably documented cannot be considered airworthy and must be removed from service.

3.120 Fatigue Life-Limited Parts

The Airworthiness Limitations section lists the mandatory replacement schedule for fatigue life-limited parts.

If a part is fatigue life-limited or has a mandatory overhaul requirement and is interchanged between an R44 and an R66 helicopter, and if the part life-limit or overhaul requirement is different between an R44 and an R66 helicopter, the shorter life-limit or overhaul requirement must be used. If a part is fatigue life-limited or has a mandatory overhaul requirement, and the accumulated cycles and/or time-in-service are known but the helicopter type is unknown, the shorter life-limit or overhaul requirement must be used.

Listed items must be removed from the helicopter at the specified intervals and permanently retired from service by destroying or damaging each part so it cannot inadvertently be returned to service.

3.200 Type Certificate Data Sheet (TCDS)

| TCDS H11NM is available at FAA Dynamic Regulatory System website: <https://drs.faa.gov>.

3.300 Airworthiness Limitations

The Airworthiness Limitations Section is FAA approved and specifies inspections and other maintenance required under 14 CFR §§ 43.16 and 91.403, unless an alternative program has been FAA approved.

There are two lists for fatigue life-limited parts. List A is applicable to all R44 and R44 II helicopters. List B provides increased service lives which may be used for the two-seat R44 Cadet configuration (R44 serial numbers 30001 through 39999).

A. R44 and R44 II Fatigue Life-Limited Parts

<u>Part Number</u>	<u>Description</u>	<u>Maximum Service Life</u>
C023-1	Tailcone Assembly, Rev M & Prior	2000 Hours
C016-2 ⁴ & -5 ⁴	Main Rotor Blade	2200 Hours or 12 years ¹
C016-7	Main Rotor Blade, Rev AJ & Prior	2200 Hours or 12 years ¹
C016-7	Main Rotor Blade, Rev AK & Subsequent	2200 Hours or 15 years ¹
C020-1 & -2	Upper Frame	2200 Hours
C029-1, -2, & -3	Tail Rotor Blade, Rev Q & Prior	2200 Hours or 12 years ¹
C029-3	Tail Rotor Blade, Rev R & Subsequent	2200 Hours or 15 years ¹
C030-1	Tail Rotor Hub	2200 Hours
C044-1	Horizontal Stabilizer, Rev L & Prior	2200 Hours ²
C146-1 & -5	Gear Set, Main Gearbox	2200 Hours
C146-2	Pinion, Main Gearbox	2200 Hours
C154-1	Main Rotor Hub	2200 Hours ²
C158-1	Main Rotor Spindle	2200 Hours ²
C196-1	Tail Rotor Drive Shaft	2200 Hours
C263-1 & -2	Sump, Main Gearbox	2200 Hours
C264-1 & -2	Housing, Main Gearbox	2200 Hours
C545-1	Gear Set, Tail Gearbox	2200 Hours ²
C545-2	Pinion, Tail Gearbox	2200 Hours ²
C647-12	Bearing Set, C017-6 Swashplate	2200 Hours ²
D062-2	Tail Rotor Hub	2200 Hours
D079-1	Tail Rotor Guard	2200 Hours ²
G062-2	Tail Rotor Hub	2200 Hours ²
A756-6 ⁴	Cyclic Grip	4400 Hours
C023-1	Tailcone Assembly, Rev N & Subsequent	4400 Hours
C023-2, -3, -4, -14, & -15	Tailcone Assembly	4400 Hours
C044-1	Horizontal Stabilizer, Rev M & Subsequent	4400 Hours ²
C198-1 & -2	Lower Swashplate	4400 Hours
C251-1	Main Rotor Shaft	4400 Hours

¹ Whichever limit occurs first. Calendar time starts on date of original RHC-issued Airworthiness Approval.

² Maximum service life is 2000 hours if part is, or ever has been, installed on an R66 helicopter.

³ Maximum service life is 4000 hours if part is, or ever has been, installed on an R66 helicopter.

⁴ Obsolete due to FAA AD 2014-23-16.

3.300 Airworthiness Limitations (continued)

A. R44 and R44 II Fatigue Life-Limited Parts (continued)

<u>Part Number</u>	<u>Description</u>	<u>Maximum Service Life</u>
C319-3 ⁴	Cyclic Torque Tube	4400 Hours
C320-1 ⁴	Cyclic Stick	4400 Hours
C337-1 ⁴	Jackshaft	4400 Hours
D196-1	Tail Rotor Drive Shaft	4400 Hours ²
F050-2	Horizontal Stabilizer	4400 Hours ³

¹ Whichever limit occurs first. Calendar time starts on date of original RHC-issued Airworthiness Approval.

² Maximum service life is 2000 hours if part is, or ever has been, installed on an R66 helicopter.

³ Maximum service life is 4000 hours if part is, or ever has been, installed on an R66 helicopter.

⁴ Obsolete due to FAA AD 2014-23-16.

B. R44 Cadet Fatigue Life-Limited Parts

The following service lives may be used for parts installed on R44 helicopter serial numbers 30001 through 39999. The service lives from List A must be used if the part is, or ever has been, installed on any R44 helicopter other than serial numbers 30001 through 39999.

<u>Part Number</u>	<u>Description</u>	<u>Maximum Service Life</u>
C016-7	Main Rotor Blade, Rev AF thru Rev AJ	2400 Hours or 12 years ¹
C016-7	Main Rotor Blade, Rev AK & Subsequent	2400 Hours or 15 years ¹
C020-1 & -2	Upper Frame	2400 Hours
C029-3	Tail Rotor Blade, Rev Q & Prior	2400 Hours or 12 years ¹
C029-3	Tail Rotor Blade, Rev R & Subsequent	2400 Hours or 15 years ¹
C146-2	Pinion, Main Gearbox	2400 Hours
C146-5	Gear Set, Main Gearbox	2400 Hours
C154-1	Main Rotor Hub	2400 Hours
C158-1	Main Rotor Spindle	2400 Hours
C263-2	Sump, Main Gearbox	2400 Hours
C264-2	Housing, Main Gearbox	2400 Hours
C545-1	Gear Set, Tail Gearbox	2400 Hours
C545-2	Pinion, Tail Gearbox	2400 Hours
C647-12	Bearing Set, C017-6 Swashplate	2400 Hours
D079-1	Tail Rotor Guard	2400 Hours
G062-2	Tail Rotor Hub	2400 Hours
C023-1, -14, & -15	Tailcone Assembly, Rev AQ & Subsequent	4800 Hours
C044-1	Horizontal Stabilizer, Rev P & Subsequent	4800 Hours
D196-1	Tail Rotor Drive Shaft	4800 Hours
F050-2	Horizontal Stabilizer	4800 Hours

¹ Whichever limit occurs first. Calendar time starts on date of original RHC-issued Airworthiness Approval.

3.300 Airworthiness Limitations (continued)

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FAA Approved: Pages 3.3, 3.4, and 3.5 constitute the Airworthiness Limitations Section in its entirety, are considered segregated from the rest of the document, and set forth the FAA-approved mandatory replacement times for fatigue life-limited parts.

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