

CHAPTER 4

AIRWORTHINESS LIMITATIONS

<u>Section</u>	<u>Title</u>	<u>Page</u>
4-10	Life-Limited Components	4.1
4-11	Time-in-Service Records	4.1
4-12	Fatigue Life-Limited Parts	4.2
4-20	Type Certificate Data Sheet (TCDS)	4.2
4-30	Airworthiness Limitations	4.3

Intentionally Blank

CHAPTER 4

AIRWORTHINESS LIMITATIONS

4-10 Life-Limited Components4-11 Time-In-Service Records

It is the operator's responsibility to maintain a record of time in service for the engine, airframe, and all life-limited components, as well as the number of start cycles for the engine. Two hourmeters are provided: the hourmeter on the console records all run time including ground idle and is provided for reference. The hourmeter located outboard of the pilot's seat is collective-activated and records run time only when the collective is raised off the down stop. Both hourmeters are connected to main rotor gearbox oil-pressure switch. The collective-activated hourmeter may be used to determine time in service for maintenance purposes, including time in service for all life-limited components.

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 § 10-20, 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.

Engine life is limited by engine time in service and accumulated start cycles. The engine is equipped with an electronic Engine Monitoring Unit (EMU), which may be used to verify time in service and accumulated start cycles. An official, independent record of start cycles must be maintained by the operator.

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.

4-12 Fatigue Life-Limited Parts

The Airworthiness Limitations Section (ref. § 4-30) 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 (ref. § 4-30) must be removed from the helicopter at the specified intervals and permanently retired from service, preferably by destroying or damaging each part so it cannot inadvertently be returned to service.

4-20 Type Certificate Data Sheet (TCDS)

| TCDS R00015LA is available at FAA Dynamic Regulatory System website: <https://drs.faa.gov>.

4-30 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.

R66 Fatigue Life-Limited Parts

<u>Part Number</u>	<u>Description</u>	<u>Maximum Service Life</u>
C023-21, -24, -34, & -35	Tailcone Assembly, Rev AV & Prior	2000 Hours
C044-1 & -2	Horizontal Stabilizer	2000 Hours
C154-1	Main Rotor Hub	2000 Hours
C158-1	Main Rotor Spindle	2000 Hours
C251-3	Main Rotor Shaft	2000 Hours
C545-1	Gear Set, Tail Gearbox	2000 Hours
C545-2	Pinion, Tail Gearbox	2000 Hours
C647-12	Bearing Set, Swashplate	2000 Hours
D079-1	Tail Rotor Guard	2000 Hours
D196-1	Tail Rotor Drive Shaft	2000 Hours
F016-2	Main Rotor Blade	2000 Hours or 12 years ¹
F020-1	Upper Frame	2000 Hours
F029-1 & -2	Tail Rotor Blade	2000 Hours or 12 years ¹
F143-1	Pinion, Main Gearbox	2000 Hours
F146-1	Pinion, Main Gearbox	2000 Hours
F195-1	Yoke, Tail Rotor Drive Shaft	2000 Hours
F235-13	Strut, Upper Frame	2000 Hours
F252-1	Strut, Upper Frame	2000 Hours
F263-1	Housing, Main Gearbox	2000 Hours
F270-1	Cartridge, Main Gearbox	2000 Hours
G062-2	Tail Rotor Hub	2000 Hours
G201-1	Frame, Servo Support	2000 Hours
G950-2	Stabilizer, Pop-out Floats	2000 Hours
C023-21, -24, -34, & -35	Tailcone Assembly, Rev AW & Subsequent . .	4000 Hours
F050-2	Horizontal Stabilizer	4000 Hours

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

Approved By: **Maureen Moreland** Digitally signed by Maureen Moreland
 Date: 2023.08.16 06:57:44 -07'00' Date: 16 Aug 2023
 For **Manager, Federal Aviation Administration**
West Certification Branch, AIR-770

FAA Approved: This page constitutes the Airworthiness Limitations Section in its entirety, is considered segregated from the rest of the document, and sets forth the FAA-approved mandatory replacement times for fatigue life-limited parts.

Intentionally Blank