

AIRWORTHINESS LIMITATIONS

1. Scope

- A. This chapter gives the mandatory replacement times and inspection intervals for components and structures that are life-limited. The section also gives the scheduled inspection requirements for structural and fatigue components that are considered a part of the certification process.

NOTE: The Airworthiness Limitations section is FAA-Approved and gives specified inspection and maintenance necessary under Parts 43.16 and 91.409 of Title 14 of the Code of Federal Regulations, unless an alternative program has been approved by the FAA.

NOTE: For EASA certified airplanes, the Airworthiness Limitations section is applicable to airplanes with less than 50,000 flight hours. Flight beyond 50,000 flight hours is prohibited until new or revised EASA-approved Airworthiness Limitations are obtained.

NOTE: For airplanes registered in the Ukraine, the supplemental inspections defined by the Listing of Supplemental Inspections (5-14-00) are mandatory. Extension of the thresholds and intervals of these supplemental inspections is prohibited.

NOTE: For IAC AR certified airplanes, the Airworthiness Limitation section is applicable to airplanes with less than 50,000 flight hours. Flight beyond 50,000 flight hours is prohibited.

2. Definition

- A. This chapter has three sections.

- (1) Typical Inspection Time Limits (4-10-00). This section gives the systems and components that must be inspected at specified intervals for typical operations. The intervals are the maximum time permitted between inspections.
- (2) Severe Inspection Time Limits (4-10-01). This section gives the systems and components that must be inspected at specified intervals for severe operations. The intervals are the maximum time permitted between inspections.
- (3) Replacement Time Limits (4-11-00) This section gives the life limited components which must be replaced at a specific time.

- B. Operational Inspection Times.

- (1) You must first find the category of your airplane's operation based on average flight length.
- (2) You must also find the number of hours and number of landings on the airplane, then find the average flight length based on the formulas found below. You must use whichever number is less.

$$\frac{\text{Number of Flight Hours}}{\text{Number of Flights}} = \text{Average Flight Length}$$

or

$$\frac{\text{Number of Flight Hours}}{\text{Number of Landings}} = \text{Average Flight Length}$$

- (3) If the average flight length is less than or equal to thirty-five minutes, then you must use the inspection times found in section 4-10-01, Severe Inspection Time Limits.
- (4) For airplanes with an average flight length greater than thirty-five minutes, you must find the severity of the operating environment. If the airplane operates thirty percent or more of its flight time in severe environments, you must use the severe operation inspection times found in section 4-10-01, Severe Inspection Time Limits. Examples of severe environments would include floatplane operations, flight operations at low altitude (i.e., less than 5,000 ft. above ground level) such as pipeline patrol, sightseeing, training flights, traversing mountainous terrain or flying near coastal areas identified in section 51-12-00, Corrosion Severity Maps - Description and Operation.

(a) For the corrosion severity map for North America, refer to Figure 1.

(b) For the corrosion severity map for South America, refer to Figure 2.

(c) For the corrosion severity map for Africa, refer to Figure 3.

(d) For the corrosion severity map for Asia, refer to Figure 4.

(e) For the corrosion severity map for Europe and Asia Minor, refer to Figure 5.

(f) For the corrosion severity map for the South Pacific region, refer to Figure 6.

- (5) For all other operating environments, inspections should be conducted using the typical operation inspection times in section 4-10-00, Typical Inspection Time Limits.
- (6) After the operating environment is known, make an airplane logbook entry that states which inspection schedule (Typical or Severe) is being used.
- (7) If an operator is currently following the "Typical" operation inspection time limits (Section 4-10-00) and determines that, based on the requirements above, they should follow the "Severe" operation inspection time limits (Section 4-10-01), the operator must comply with any inspection that is past due under the "Severe" operation inspection time limits within 200 hours of operation.