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Docket Management System
U.S. department of Transportation
Room Plaza Level 401
400 Seventh Street, SW
Washington, DC 20590

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Re: Docket number "FAA-2000-8017"
Notice No. 00-11

Safe Disposition of Life-Limited Aircraft Parts

Electronically submitted

Dear Sir or Madam:

Schweizer Aircraft corp. is a manufacturer of small helicopters and other aircraft.

Most helicopters incorporate a number of life-limited components. These parts are for the most part relatively easy to remove and interchange between aircraft. In fact to keep a fleet of helicopters flying and producing revenue interchange of parts is a common practice. To maintain oversight and control of these parts most manufacturers have devised some type of historical record card for each of these life-limited parts. These records have taken various forms but all have common part related information, including the life-limit, part number and serial number, and number of hours or cycles used. The card also includes aircraft information, filled in by the user, including the operational time of installation and removal, number of cycles and total time the component was installed on this aircraft. This method is convenient and well understood. It has proven to be capable of keeping life-limited parts controlled and removed from service upon reaching life-limit. This method complies with the requirements of FAR 91.417 (a)(2)(ii) and (iii).

We agree with the intent of this proposed rule and believe that Life-Limited parts that have reached life-limit should be removed from service and should not be allowed to return to service. Unfortunately the practical application of the Proposed Rules will force a significant change in the way life limited parts are controlled and unduly complicate the documentation and oversight required. The language of the proposed rule does not agree with the intent stated in the Preamble of the NPRM. Explanations of each area of concern and possible changes are given below.

- A. Paragraph **43.1 Applicability** (c) implies 43.10 cover all life-limited parts including those that are still airworthy. Whereas in Sec. 44725 (d) the last line reads "...nor shall any such rule forbid the installation of an otherwise airworthy life-limited part." While not directly forbidding it, including airworthy parts in a rule dealing with non-airworthy parts may result in the actual practice of restricting airworthy parts usage. If **43.10** addressed next is clarified as suggested this paragraph may be acceptable.
- B. In the proposed paragraph **43.10 Disposition of life-limited aircraft parts** the title is misleading as it implies this paragraph applies to all life-limited parts whether they are airworthy or time expired. In the body of the paragraph specifically paragraph (b) the first sentence implies all, including airworthy

parts must now meet new requirements. The second sentence appears to require additional requirements for those parts that have reached their life-limit. If this is the case then this rule will force significant changes on the manufacturers of life-limited parts by requiring some method of recording the life used directly on the part. This would eliminate the current recording method in the helicopter industry that uses a component history card, which provides space for the operators to record times and events when the parts are removed from or installed on the aircraft. And would force redesign of existing parts and research into new technology to accurately record life without impacting the airworthiness (structural strength etc.) of the part.

I suggest that the intent may be clearer if a separate paragraph were added to 43.10, which would separately address airworthy life-limited parts. *“Life-limit and life status documentation and records must be made available to the installer and must be maintained to comply with FAR 91.417 (a)(2) (ii) and (iii).”* This would alleviate the misleading inferences of the paragraph title. As a continuation the existing paragraph (b) should be revised to make it clear that (b)(1) through (6) apply to those parts that have reached the established life-limit. Such as *“...each person who removes a life-limited part that has reached its life-limit from a type-certificated...”*

- C. If the intent is to remove from service un-airworthy parts there is a discontinuity of concepts between **43.10** and paragraph **45.14 Identification and disposition of critical components**. This discontinuity is that the manufacturers will be required to provide a marking method for life-limited parts that have reached life-limit that does not compromise the part’s integrity. If the intent is to remove from service parts that have reached life-limit why should we be concerned with the integrity of the part? It should be rendered UNAIRWORTHY.
- D. Paragraphs **(b)(2)** and **(b)(4)** appear to be the same. It is unclear what the difference in intent is between these paragraphs. The requirement to permanently mark the part while it is still airworthy will compromise the integrity of most helicopter parts. If an integral time recording system is the intent this will impact other rules involving certification. Not to mention the excessive design and research burden placed on the manufactures.
- E. Paragraph **(b)(1)(ii)** requires segregation of parts that fall under **43.10** if this includes airworthy parts it will require a new inventory system including rooms or buildings, by operators to segregate used airworthy life-limited parts. These airworthy parts are currently inventoried with the other new and serviceable used parts and when properly identified with component historical record do not pose a risk to air safety. Changes to **43.10** that clearly indicates which sections apply to parts that have reached life-limit and those that are still airworthy may make this paragraph acceptable as is.
- F. Paragraph **(c)** seems to indicate that part with an expired life-limit can be returned to service from segregation. This paragraph may make more sense if the intent of the whole paragraph is clarified.

Any rule should be clear and unambiguous to the persons actually affected by it. This proposed rule seems to mix requirements for life-limited parts that are airworthy and those that have reached life-limit. It also appears to impose new requirements and associated costs. There are several areas that imply actions depending upon the interpretation of preceding text. This is a Rule and the actions should be spelled out clearly. The intent of the Rule and subject of its requirements should be clearly identified in **43.1 Applicability**, if there is a possibility of confusing the subjects (airworthy or time expired parts) of the Rule they should be clearly differentiated in the Rule language.

We must object to the issuance and enforcement of this rule as it is written. It is true that industry good practice already complies with the intent of the law but the language of the proposed amendment confuses and eviscerates that “good practice” with confusing and misleading wording.

Regards,

Steve Gleason

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