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MINISTERE DE L'EQUIPEMENT, DU LOGEMENT,
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DIRECTION GENERALE DE L'AVIATION CIVILE

**SERVICE**
**DE LA FORMATION AERONAUTIQUE**
**ET DU CONTROLE TECHNIQUE**

DIVISION **AERONEFS**

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Docket Management
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**Objet : Docket number FAA-2000-8017 - NPRM on safe disposition of life limited aircraft parts.**

Sir,

I am pleased to provide, herewith attached, some comments on the above referenced NPRM.

The DGAC « engine certification office » concurs with the intent to preclude installation of critical parts having reached their life limit, especially the high energy engine rotating parts whose failure could hazard the aircraft.

With my best regards

L'Ingénieur en Chef de l'Armement
Chef du Bureau "Moteurs, hélices et équipement"

Francis FAGEGALTIER

Comments to docket FAA-2000-8017
Safe disposition of life limited aircraft parts

Proposed §45.14

The first sentence is almost the same as current §45.14 with the exception of the word « must » used in place of « shall ». This seems not to be consistent with other sections of FAR 43 or FAR 45.

The second sentence implies that the « person who produces » has the adequate expertise to assess the parameters compromising the integrity of the part. On a general basis this is probably a wrong assumption because only the type certificate holder (or holder of the design approval) has this knowledge. Especially on life limited parts such as high energy engine rotating parts which can fail in a hazardous manner, because, in order to assess the effect on integrity, there is a need to know the stress levels achieved in operation. This proposal is not adequate in that it does not refer to the holder of the design approval.

This raises another issue, valid against this proposal as well as against the current §45.14. After checking the Webster dictionary, it is difficult to see a real difference between a « person who produces » (« producer : one that produces ; especially one that manufactures crude material into articles of use ») and a « manufacturer » (« to manufacture : to produce according to an organised plan »). The type certificate holder is the one who publishes the Instructions for Continued Airworthiness. The « producer » or « manufacturer » is the one who changes raw material into something useable. They are not necessarily the same. The first sentence of the proposed §45.14 should be improved, may be in a manner similar to the proposed §43.10 (a) (which is not yet perfect : an APU can have a critical or life limited part but has no type certificate).

The title of § 45.14 addresses « critical components ». The equivalent JAA requirements are contained in JAR 21.805 which addresses « critical parts ». Contrary to FAR which does not define « critical components », JAR-1 defines « critical parts ». It might be argued that the first sentence of the proposed §45.14 is some kind of definition : it is not obvious that all critical components/parts are covered by the proposed wording as it is not obvious that all parts meeting the proposed wording are critical. The proposed §45.14 should be revised to be clear and consistent with its title.

An harmonisation project was initiated between FAA and JAA for engine critical parts. It would be useful to harmonise the subject of critical parts on a general basis.

Proposed §43.1 (c)

The overall logical consistency of §43.1 is not clear. Paragraph (a) states that the « part prescribes rules governing the maintenance .... of... aircraft » : this is related to « actions ». Paragraph (b) states that the « part does not apply to .... aircraft » : this is related to « products ». The fitting of paragraph (c), which states that the « part applies

to .. person », into this §43.1 is not obvious. The applicability should be clarified. Should we read §43.1 (a) or (c), §43.1 (a) and (c) or else ?

Proposed §43.10

In (a), the reference to the type certificate holder is not appropriate : an APU can have a critical or life limited part but has no type certificate (see also comment above on § 45.14).

An explanation of what could be « any other mandatory replacement time », if this is not hours or cycles, would be welcome.

The paragraph 43.10 (b)(1)(ii) is wrong. It is called by the first sentence of 43.10 (b) which addresses life limited parts at any time in their life (this sentence does not address parts having reached their life limit). A part which has not yet reached its life limit is serviceable by principle : how can it be « stored separately from serviceable parts » ? A part may be removed from an aircraft for any reason before reaching its life limit : why is there a requirement to « preclude its installation on a type-certificated product » ?

Paragraph 43.5

Because the intent of this NPRM is to prevent installation on an aircraft of life limited parts after having reached their life limit, there should be a requirement in §43.5 preventing such installation. May be a new 43.5 (d) as follows : (d) The records for life limited parts show that any such part is serviceable and the remaining life before retirement is identified.