

November 29, 2000

U.S. Department of Transportation Dockets  
Docket No. [FAA-2000-8017]  
400 Seventh Street, SW  
Room Plaza 401  
Washington, DC 20590-0001

**Subject: Docket No. FAA-2000-8017; Notice No. 00-11; RIN 2120-AH11, 14CFR PARTS 43 and 45 Review: Safe Disposition of Life-Limited Aircraft Parts**

Dear Ladies and Gentlemen:

Global Quality Assessors (GQA) has, over the last 12 years, represented 1,125 clients who repair, modify, and overhaul aircraft, engines, avionics and appliances. In addition, GQA clients also operate airport fixed-base operations, airline/charter operations and JAA accepted/approved maintenance facilities across this Nation and the world. GQA has reviewed the Federal Aviation Administration's (FAA) Notice of Proposed Rulemaking (NPRM) 00-11 to revise the regulations FAR Part 43 and 45 - and appreciates the opportunity to provide comments to this proposed rule change.

FAR Part 43's and 45's revision, as proposed, is confusing and does not add to the control of "Life-limited aircraft parts"; as required by Parts 119, 121, 135 and 145. As written, it does not provide increased assurance that "Life-limited aircraft parts" are controlled and are safe for operation. In GQA's opinion - the proposed changes degrades the current level of controls being utilized by the aviation industry.

In reviewing this initiative, GQA has reviewed the proposed regulations and has identified some issues that are cause for concern. Comments and recommendations are organized on the following pages by paragraph numbers and their headings, with overall and section-by-section comments.

GQA appreciates the opportunity to provide comments on this important rulemaking proposal. Please feel free to contact me with any questions in regard to these comments at 703-729-5058.

Sincerely,

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## OVERALL COMMENTS

### Proposed Rule Is Redundant

This proposed rulemaking establishes requirements for non-certificated personnel which must be developed and integrated into the operations of every certificate holder; which are redundant. In general, the proposed controls already exist in the daily operation of Air Carriers operating under Parts 119, 121 and 135, and Air Agencies (Repair Stations) under Part 145. If the FAA enforced existing requirements/programs (i.e., quality assurance, self-evaluation, contract/ supplier surveillance, initial/recurrent training, Operations Specifications, etc.) which are contained in current operating manuals and encapsulate the proposed revisions, would have the potential to maintain or improve the current level of safety the industry has achieved.

### Regulatory Evaluation - Economic Analyses

As proposed, it is not possible to assess the costs associated with the undefined changes.

### Electronic Media and Other Systems

Most certificate holders utilize FAA approved computerized record systems to track, control, review and dispose of "Life-limited aircraft parts". Those with or without a computerized system utilize a Material Review Board (MRB) system to evaluate and dispose of "Life-limited aircraft parts". No where in this NPRM does it acknowledge that these functional control systems currently exist and preclude the reinstallation of a previously removed life-limited part that has reached its life limit. What is the need to establish control of items that are already under control? See Pages No. 5 to 8 for an example of an existing MRB Program used by repair stations.

## **SECTION-by-SECTION COMMENTS OF DISAGREEMENT, BY GQA**

The following pages organize GQA's comments by-section. Only those sections for which GQA has specific comments to offer are included. The FAA's proposed language for each section is shown and GQA's recommended changes are highlighted directly within the text. Strikethrough (~~striketrough~~) formatting represents deleted text and bold (**bold**) formatting represents inserted text.

**GQA agrees with the comments submitted by the Aeronautical Repair Station Association and wishes to be recognized as supporting those comments.**

## General

### § 43.1 Applicability.

§ 43.1(c) This part applies to each person who removes, segregates, or dispositions a life-limited part from a type-certificated product as provided in **§ 43.10**.

**COMMENTS:** Application is not defined nor well thought out. Part 43 prescribes rules governing the *maintenance, preventive maintenance, rebuilding, and alteration of aircraft having a U.S. Airworthiness certificate and others*. Part 43 is not for controlling parts that cannot be made airworthy and returned to service (i.e., non-maintenance functions). The segregation and disposition of a life limited part are not within the purview of Part 43 - for these are administrative tasks that are accomplished after the determination has been made that the removed item has in-fact reached its life limit. How this determination is made varies per air-carrier rules (i.e., 119, 121 125, 135) and General Aviation rules (i.e., 91).

In an air carrier operation the determination of life limit is not the task of the removing mechanic. In most cases, this is an administrative function of a records clerk and/or a maintenance planner. It is agreed that the *first - Part 43 tangible link in the chain* is the “removing” person who in commercial aviation is usually a certificated mechanic (i.e., A&P or Repairman); but not always. The “removing” person can be a non-certificated mechanic who accomplishes the removal task, while under supervision of their employer’s certificate. All other functions associated with the “applicability” of the proposed rule are usually accomplished by persons - other than mechanics who will be bound by the proposed § 43.1(c) and 43.10, which is not practical or feasible.

In air carrier operations the determination of the actual life-limit of a part is beyond the operational scope and physical capability of the “removing” mechanic due to the centralization of aircraft records and the logistics involved. This task is deferred to the air-carrier’s record keeping group and/or an approved repair agency that can be internal or external to the air-carrier.

Only the General aviation mechanic, that has access to the total set of aircraft/component records and the associated current CMM and/or OEM’s maintenance program, could comply with the proposed rule.

GQA does not believe that the FAA intends to make these administrative functions into mechanic responsibilities; therefore GQA Recommends that this NPRM be abandoned and if the Administrator wishes to pursue additional rule making that it be included in Parts 91, 119 and 145.

If the foregoing recommendation is not accepted GQA has commented on the proposed subparts as

follows.

**§ 43.10 Disposition of life-limited aircraft parts.**

**§ 43.10(a)**

- NOTE: GQA supports the inclusion of definitions in this Part to the extent that they are exclusive to this Part. In addition, GQA recommends that definitions should be added to FAR Part 1 to ensure that they are consistently applied throughout the Federal Aviation Regulations.
- NOTE: The term “Critical Component” is utilized in **§ 45.14** but nowhere in the regulation does it equate “Critical Component” to a “life limited aircraft part” in **§ 43 or in § 45**.

**§ 43.10(b)(1)(i)** Keeping a record of the **part’s part number**, serial number and current life status of the part, and

**§ 43.10 (b)(1)(ii)** Ensuring the part, **that has reached its life limit at the time of being stored**, is stored separately (**i.e., physically segregated**) from **like** serviceable parts **and can only be accessed by authorized personnel**.

GQA strongly opposes the proposed language and recommends the highlighted (**bold**) changes identified above.

- Reason: GQA supports the concept of a part’s record but it must be identifiable to a specific part numbered item, to be meaningful. Also when storing an item that has reached its life limit the term “separately” is not adequate. To ensure control it must be “physically segregated” from all like items and preferably accessed only by authorized personnel. The term “segregated” is used in subsequent paragraph 43.10(c) but is not defined.

**§ 43.10(b)(2) and (4)**

**COMMENT:** GQA found these paragraphs, as written, to be redundant. **GQA Recommends** the retention of paragraph **§ 43.10(b)(2)** and renumbering as required of the subsequent paragraphs 5 and 6 to 4 and 5 respectively.

**§ 43.10(c)** Each **authorized** person who removes a life-limited part from segregation as identified in paragraph (b)(1) of this section, ~~other than for immediate installation on a type-certificated product,~~ must ensure that the part is controlled using one of the methods in paragraphs (b)(2) through (?).

- Reason: GQA supports the concept that - a part’s record that must be identifiable to a specific part numbered and serialized item, up to and including the point of installation and subsequent records updating. This includes record retention for a prescribed time after installation, no matter when or where it happens. As GQA previously stated, to ensure control it must be accessed only by persons

so authorized.

**EXAMPLE MRB PROGRAM**  
**TITLE: MATERIAL REVIEW BOARD -**  
**REJECTED PARTS AND MATERIAL MANAGEMENT**  
**FAR 145.35 (d), CASE STANDARD 1A**

**MATERIAL REVIEW BOARD (MRB)**

Defective parts, both repairable and expendable, removed from products or articles and undergoing overhaul or repair shall normally be disposed of as follows:

1. Upon Owner/Operator request, parts shall be returned to the Owner/Operator at the time and in the manner requested. While at the repair station they are to be segregated and stored securely from all serviceable parts.
2. Absent a specific Owner/Operator request to return defective **repairable** parts replaced for whatever reason during the overhaul or repair process, all such parts shall be considered condemned and will be mutilated by the Material Manager in such a manner to make them unfit for aircraft use; see AC 21-38 for guidance. The «TitleChiefInsp» or designee will certify the mutilation of such parts by signing the back of the Red (REJECTED OR CONDEMNED) Tag («rejtagnum»). The Material Manager will maintain a record of the part's mutilation for a period of 2 years. **Expendable** parts that are not classified as hazardous waste material will be disposed of in shop trash containers without further action. If any part is classified as hazardous waste material it will be shipped to the owner or OEM for disposal.
3. Contractors - all defective parts removed from units let out to contractors, are to be returned to the repair station by the contractor. These parts will be segregated in a secure area by the Material Manager until such time that they are shipped back to the Owner/Operator or are disposed of locally after being mutilated, at the Owner/Operators request. Mutilation, certification and records will be handled as in the preceding paragraph number 2.

Parts received from suppliers/vendors which were purchased as new or serviceable used parts, which upon examination or test are determined to be defective shall be tagged with a RECEIVING INSPECTION REJECTION FORM/TAG «insprejformno») and be set aside in a segregated and secure area in the Material Department while the supplier is contacted regarding disposition.

Upon resolution the parts will be returned to the supplier/vendor or shall be disposed of locally as instructed by the supplier/vendor. If returned, a form titled RETURN AUTHORIZATION REPORT FORM («RETAauthno») will be filled out. Instructions for use and an example of the form is in Section XI of this manual. If disposed of by the repair station they shall be handled in accordance with preceding paragraph number two.

**EXAMPLE MRB PROGRAM**  
**TITLE: MATERIAL REVIEW BOARD -**  
**REJECTED PARTS AND MATERIAL MANAGEMENT**  
**FAR 145.35 (d), CASE STANDARD 1A**

**MATERIAL REVIEW BOARD (MRB)** *(continued)*

Articles and those with potential salvageable parts - will be managed by a Material Review Board that will be conducted in accordance with the following procedures to assure the most economical, legal and practical disposition of:

- Components and assemblies which the Owner/Operator has deemed to be currently beyond economical repair (BER) and has transferred ownership to the repair station.
- Articles (new and used) in the possession of and owned by the repair station which are currently lacking certification or traceability documentation to a PAH or approval for return to service documentation by a certificate holder; searches are in process or an FAA approved plan is in place to approve the item(s) return to service.
- Inventory items with life limits and/or limited shelf life, which shelf life has expired.
- Other parts in possession of the repair station.

At «CoNameuplo», only the MRB can label an article as a SUP (suspected unapproved part) using AC 21-29 as guidance. When the MRB determines that a received article, intended to be used on a FAA type certificated product, is considered - by a majority opinion of the MRB to be a SUP, the so labeled part will be reported using the procedures in AC 21-29 and the owner/supplier of the article will also be advised of the SUP report.

The MRB will consist of the following personnel assigned to these positions:

- Material Manager
- Quality System Manager
- Chief Inspector
- Other repair station personnel, as required
- OEM Engineering, as required

**EXAMPLE MRB PROGRAM**  
**TITLE: MATERIAL REVIEW BOARD -**  
**REJECTED PARTS AND MATERIAL MANAGEMENT**  
**FAR 145.35 (d), CASE STANDARD 1A**

**MATERIAL REVIEW BOARD (MRB)** *(continued)*

The MRB will meet and elect a Chairman who will develop agendas and conduct the meetings; a secretary that will take and publish meeting minutes for each meeting; both positions will serve for a period of 6 months, at which time another election will be held.

The MRB will meet once per month, or at such other frequency as may be required to adequately deal with the backlog of items requiring disposition as identified by being tagged with a RECEIVING INSPECTION REJECTION FORM/TAG («insprejformno») and are being held in the segregated and secure storage area in the stockroom.

Prior to each meeting of the MRB, copies of the agenda will be distributed to the members of the MRB. Members of the MRB will be free to examine the material held for review at any time. The MRB will meet at the time and place designated by the Chairman. Evaluation of the material will be made in accordance with the following guidelines.

Items determined by their previous owners to be BER. The following questions will be answered

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Based on answers to the following questions is it probable that the unit will remain BER given various assumptions about the future of the aircraft from which it was removed, alternatives to the unit and criticality of the unit to the aircraft?

1. Is the repair station capable of repairing and certifying as airworthy the unit regardless of the economics of the repair?
2. What is the present new replacement cost and market value of a used but serviceable unit?
3. How much of a factor is replacement lead time for the component and or required replacement parts?
4. What are the estimated materials and labor cost necessary to return the unit to an airworthy state?
5. If returned to an airworthy state what are the prospects for the sale

of the repaired item?

**EXAMPLE MRB PROGRAM**  
**TITLE: MATERIAL REVIEW BOARD -**  
**REJECTED PARTS AND MATERIAL MANAGEMENT**  
**FAR 145.35 (d), CASE STANDARD 1A**

**MATERIAL REVIEW BOARD (MRB)** *(continued)*

In the event that the foregoing analysis results in a MRB opinion that it is probable that the unit will always be beyond economic repair the following questions should be answered:

1. Can any approved parts be salvaged from the basic assembly at a practical cost for use in the repair of a like item at a later date and traceability be maintained?
2. Can any parts or the unit, in non-repaired condition be useful in non-aircraft applications?
3. Can the non-repaired unit be used for training purposes or as a shop repair fixture?

For items with expired life limits or items lacking certification and/or traceability:

1. Are there any procedures (i.e., life extensions, derate, etc) by which these items may be tested and/or recertified by the OEM or other authority which would allow them to be used in a certificated aircraft application?
2. Are there any parts which have value and can safely be used in non-aircraft related applications?
3. Are there any approved methods, treatments, testing, etc. that would restore the items life for a reasonable period?

MRB recommendations will be summarized by the MRB secretary and then submitted to the «TITLEaccmgr» for his approval. Approved minutes will be forwarded to the Material Manager for disposition of the material in accordance with the accepted recommendations. All actions taken on approved recommendations will be documented by the Material Manager on the hard copy of the «insprejformno» and verified by the «TitleChiefInsp» with a signature on the back of the hard copy of the «insprejformno». The Material Manager will maintain a copy of the meeting minutes and the hard copy of Form/Tag «insprejformno» for a period of 2 years.

- END -