

ORDER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

8120.11

2/12/96

SUBJ: Disposition of Scrap or Salvageable
Aircraft Parts and Materials

1. PURPOSE. This order provides guidance to all Federal Aviation Administration (FAA) personnel regarding the control, distribution, sale, maintenance, or disposal of scrap or salvageable aircraft engines, aircraft propellers, and aircraft parts and materials. This order is intended to prevent these items from being distributed and sold as serviceable products. It directs actions to be taken by FAA personnel when scrap or salvageable parts and materials are found. Compliance with this order will reduce the potential for marketing of suspected unapproved aircraft parts and materials.

2. DISTRIBUTION. This order is distributed to Washington headquarters branch levels of the Aircraft Certification Service, Flight Standards Service, and the Office of Aviation System Standards; to the branch level in the regional Flight Standards Divisions and Aircraft Certification Directorates; to all Flight Standards District and Satellite Offices; to all Aircraft Certification Offices and Aircraft Certification Field Offices; to the Flight Standards Branch at the FAA Academy; to the Brussels Aircraft Certification Division and Flight Standards Staff; and to all International Aviation Field Offices.

3. BACKGROUND. It is common practice for possessors of aircraft parts to dispose of scrap parts and materials by selling, discarding, or transferring such items. Improper control of these items could allow them back into the active parts inventories of the aviation community. Misrepresenting the status of aviation parts and materials and the practice of making such items appear serviceable could result in their use on certificated aircraft. Manufacturers could end up repurchasing their own parts and materials that they have deemed scrap if the parts and materials are not destroyed beyond use as recommended by paragraph 7 of this order. Lacking the proper controls, parts can be copied or repaired and reintroduced into the market and represented as approved parts. This practice can have serious implications and incur liabilities on the production approval holder (PAH), certificate holder, or the repair facility. Advisory Circular (AC) 21-38, Disposition of Unsalvageable Aircraft Parts and Materials, also provides information and guidance to the public and suggests methods to prevent unsalvageable aircraft parts and materials from being sold and reinstalled on certificated aircraft as serviceable parts and materials.

Distribution: A-W (IR/FS/VN) -3; A-X (CD/FS) -3
A-FFS-7 (MAX) A-FAC-3,4 (STD);
AMA-250 (50 copies);
AFS-641 (100 copies); AEU-100/200

Initiated By: AIR-200

4. DEFINITIONS. The following definitions were defined by the Suspected "Unapproved Parts" Program Plan dated October 6, 1995.

a. Scrap. Parts the owner has decided to dispose of because he/she considers them to be of relatively little value and unusable for any other reason. Scrap parts may be considered in different categories:

- (1) Parts which have no value except for the base material;
- (2) Parts that are typically used in safety critical aviation applications and may have future use in non-aviation applications;
- (3) Parts that are typically used in aviation applications that have relatively low safety impacts if they fail; and
- (4) Parts whose misuse in aviation poses an insignificant safety risk.

b. Salvageable. Aviation parts that are unserviceable (or of unknown status) from an economic point of view, have potential value in an aviation use. Salvageable parts may be considered in different categories:

- (1) Non-airworthy parts which may be worth storing until restored to an airworthy condition, or until they are shown to be airworthy with adequate documentation and/or testing; and
- (2) Parts that cannot be found airworthy at the time they are stored; but, there is reason to believe that they are likely to have future aviation value. For example, a part that has reached its present life limit may be stored in an area in anticipation of an increase in that limit based on in-service experience and analysis, or a part that requires repair for which there is currently no approved process may be stored in anticipation of a new approved process.

5. ACTION. All FAA inspectors should be alert to the activities of operators, repair stations, and manufacturing facilities that dispose of scrap parts and materials. Inspectors should advise persons disposing of scrap aircraft parts and materials of the possibility that the parts and materials may later be misrepresented and sold as serviceable unless appropriate controls are established. Title 14 CFR part 21 requires the approval holder to have a system for the disposition of non-conforming materials. Air carriers and certificated repair stations are required under parts 121, 125, 135, and 145 to maintain manuals that include inspection and maintenance procedures. The part disposition process becomes regulatory and enforceable if the process is included in the FAA-approved manuals. Those manuals should include procedures that ensure the types of parts and materials listed in paragraph 6 below, are disposed of in a manner that DOES NOT ALLOW THEIR RETURN TO SERVICE.

6. TYPES OF SCRAP PARTS AND MATERIALS THAT MAY BE MISREPRESENTED. Examples include but are not limited to the following:

- a. Parts with known non-repairable defects, whether visible or not;
- b. Parts that are not within the specifications set forth by the approved design, and that cannot be brought into conformance with applicable specifications;
- c. Parts and materials for which further processing or rework cannot make them eligible for certification under a recognized certificate holder's system;
- d. Parts subjected to unacceptable modification or rework that is irreversible;
- e. Parts and materials that were scrapped by the Material Review Board, which did not meet specifications of the PAH;
- f. Parts transferred to a company or repair station with no traceability back to the PAH, to be reworked and tagged as OVERHAULED;
- g. Life-limited parts that have reached or exceeded their life limits, or have missing or incomplete records;
- h. Parts that cannot be returned to an airworthy condition due to exposure to extreme forces or heat;
- i. Principal structural elements removed from a high-cycle aircraft for which conformity cannot be accomplished by complying with the applicable aging aircraft airworthiness directives;
- j. Parts with no traceability to the PAH;
- k. Parts imported without proper approval documentation; and
- l. Used parts with no maintenance history.

7. PREVENTING MISREPRESENTATION OF SCRAP PARTS AND MATERIALS.

All FAA inspectors should recommend to persons disposing of scrap aircraft parts and materials that these parts and materials be mutilated prior to release. The inspector should encourage the development of procedures describing the methods of mutilation.

a. Mutilation should be accomplished in such a manner that the parts become unusable for their original intended use. Mutilated parts should not be able to be reworked or camouflaged to provide the appearance of being serviceable such as, re-plating, shortening and re-threading long bolts, welding, straightening, machining, cleaning, polishing, or repainting.

(1) Mutilation may be accomplished by one or a combination of the following procedures, but is not limited to:

- (a) Grinding.
- (b) Burning.
- (c) Removal of a major integral feature.
- (d) Permanent distortion of parts.
- (e) Cutting a significant size hole with a cutting torch or saw.
- (f) Melting.
- (g) Sawing into many small pieces.
- (h) Removing manufacturers identification, part, lot, batch, and serial numbers.

(2) The following procedures are examples of mutilation that are often less successful because they may not be consistently effective:

- (a) Stamping (such as a stamped "R" on a part).
- (b) Spraying with paint.
- (c) Hammer marks.
- (d) Identification by tag or markings.
- (e) Drilling small holes.
- (f) Removal of a lug or other integral feature.
- (g) Sawing in two pieces.

NOTE: Persons who rework scrap parts and materials may be highly skilled technicians. They have been known to rejoin parts cut in two pieces in such a manner that the mutilation proves difficult to detect.

b. Persons disposing of scrap aircraft parts and materials may choose to release those parts for legitimate non-flight uses, such as for training and education, research and development, or for non-aviation applications. In such instances, mutilation may not be appropriate. The following methods should be used to prevent misrepresentation:

(1) PERMANENTLY AND CLEARLY marking or stamping the parts, subparts, and material as "NOT FOR AVIATION USE" and "NOT SERVICEABLE." (Ink stamping is not an acceptable method).

(2) Removing part number identification.

(3) Removing identification plate and marking.

(4) Maintaining a tracking or accountability system, by serial number or other individualized data, to record transferred scrap aircraft parts and materials.

(5) Including written quality assurance procedures concerning disposition and disposal of such parts and materials in any agreement or contract transferring such parts and material.

NOTE: Certificated operators, repair stations, and manufacturers should be encouraged not to release scrap parts and materials to any person or organization who may end up placing the parts and materials back in actual use, due to the criticality of the part or possible material failure and the potential threat to safety.

(6) Securing a signed certification statement from the purchaser indicating that "the purchaser will not use or convey these parts for use in aviation products."

c. Organizations handling salvageable parts and materials should be encouraged to establish secure areas in which to segregate such items from active serviceable inventories and to prevent unauthorized access. Furthermore, organizations should develop procedures to retain records which indicate the status of parts which exceed current repair criteria or life limits and are being held while new repair procedures are being developed, or being held in anticipation of future extensions of the part's life limit. For items which the organization has determined to be scrap and not for further use as an aircraft part, the organization should develop procedures to require documentation, such as a written contract from scrap dealers indicating their intent to properly dispose of all aircraft parts and materials received.

d. Manufacturers producing approved aircraft parts should maintain records of serial numbers for scrapped life-limited or other critical parts. In such cases, the owner who mutilates applicable parts is encouraged to provide the original manufacturer with the data plate and/or serial number and final disposition of the part.

e. The FAA inspector should encourage all purchasers of aircraft parts and materials to develop procedures to prevent receipt of misrepresented scrap parts and materials into their inventory. The following are examples of conditions to be alert for when receiving parts:

(1) "New" parts showing signs of reword.

(2) Used parts showing signs of unapproved or inappropriate repair.

(3) Parts with poor workmanship or signs of rework in the area of the part number or serial number inscription.

(4) Used parts lacking verifiable documentation of history and FAA approval.

(5) Parts with prices "too good to be true."

(6) Questionable part numbers, fraudulent or suspicious Technical Standard Order or FAA-Parts Manufacturer Approval markings and/or re-identification, stamp-overs or vibro-etching on the data plate.

(7) Parts delivered with altered photocopies or missing maintenance release tags.

(8) Parts with a finish that is inconsistent with industry standards (e.g., discoloration, inconsistencies, resurfacing).

(9) New parts sold with maintenance release tags reflecting a status other than new.

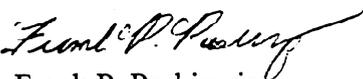
(10) Parts with poor documentation exhibiting incomplete or inconsistent part identity information.

(11) Intact scrap parts offered in bulk weight for prices HIGHER than for mutilated parts with identical weight and content.

8. SUSPECTED UNAPPROVED PARTS (SUP). If the FAA finds or is notified that scrap or salvageable aircraft parts or materials are suspected to have entered the serviceable inventory an investigation shall be initiated. The guidance set forth in FAA Order 8120.10, Suspected Unapproved Parts Program, and FAA Order 2150.3, Compliance and Enforcement Program, shall be followed when conducting an investigation. Appropriate action shall be taken in all cases to ensure those parts or materials are found and permanently removed from service. All suspected unapproved parts shall be reported, using FAA Form 8120-11, SUP Notification, or the Aviation Safety Hotline toll free number, (1-800-255-1111), as referenced in AC 21-29, Detecting and Reporting Suspected Unapproved Parts.

9. COORDINATION. This order has been coordinated with the Flight Standards Service.

10. INFORMATION CURRENCY. Any deficiencies found, clarification needed, or improvements to be suggested regarding the content of this order should be forwarded to the Aircraft Certification Service, Automated Systems Branch, AIR-520, Attention: Directives Management Officer, for consideration. Your assistance is welcome. Federal Aviation Administration Form 1320-19, Directive Feedback Information, is located on the last page of this order for your convenience. If an interpretation is urgently needed, you may contact the Production and Airworthiness Certification Division, AIR-200, but you should also use FAA Form 1320-19 as a follow-up to verbal conversation.



Frank P. Paskiewicz
Acting Manager, Production
and Airworthiness Certification Division



U.S. Department
of Transportation
**Federal Aviation
Administration**

Directive Feedback Information

Please submit any written comments or recommendations for improving this directive, or suggest new items or subjects to be added to it. Also, if you find an error, please tell us about it.

Subject: Order _____

To: Directive Management Officer, AIR-520 _____

(Please check all appropriate line items)

An error (procedural or typographical) has been noted in paragraph _____ on page _____.

Recommend paragraph _____ on page _____ be changed as follows:
(attach separate sheet if necessary)

In a future change to this directive, please include coverage on the following subject
(briefly describe what you want added):

Other comments:

I would like to discuss the above. Please contact me.

Submitted by: _____ Date: _____

FTS Telephone Number: _____ Routing Symbol: _____

