



U.S. Department
of Transportation
Federal Aviation
Administration

Advisory Circular

Subject: Eligibility, Quality, and Identification
of Aeronautical Replacement Parts

Date: 12/23/10

AC No: 20-62E

Initiated by: AFS-300

Change:

1. PURPOSE. This advisory circular (AC) provides information and guidance for use in determining the quality, eligibility and traceability of aeronautical parts and materials intended for installation on U.S. type-certificated (TC) products and articles, and to enable compliance with the applicable regulations.

2. CANCELLATION. AC 20-62D, Eligibility, Quality, and Identification of Approved Aeronautical Replacement Parts, dated May 24, 1996, is canceled.

3. RELATED CFR PARTS. Title 14 of the Code of Federal Regulations (14 CFR) parts 1, 21, 39, 43, 45, 91, 119, 121, 125, 129, 135, and 145.

4. DEFINITIONS. The following definitions apply to this AC:

a. Federal Aviation Administration (FAA)-Approved Parts. Under part 21, § 21.8, articles produced under an FAA-approved production system and which conform to FAA-approved data, may be approved under the following:

- (1) A Parts Manufacturer Approval (PMA) issued under part 21 subpart K.
- (2) A Technical Standard Order Authorization (TSOA) issued under part 21 subpart O.

(3) In conjunction with type certification procedures for a product. In any manner approved by the Administrator, such as part 21 subpart F and G. In addition, part 21 subpart N provides for the acceptance of a new part produced in a country or jurisdiction with which the United States has an agreement for the acceptance of parts for export and import. The part is approved when the country of manufacture issues a Certificate of Airworthiness for export of the part.

b. Acceptable Parts. The following parts may be found to be acceptable for installation on a TC'd product:

- (1) Standard parts (such as nuts and bolts) conforming to an established industry or U.S. specification.
 - (2) Parts produced by an owner or operator for maintaining or altering their own product and which are shown to conform to FAA-approved data.
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(3) Parts for which inspections and tests have been accomplished by appropriately certificated persons authorized to determine conformity to FAA-approved design.

(4) Parts fabricated by an appropriately rated certificate holder with a quality system and consumed in the repair or alteration of a product or article in accordance with part 43.

(5) A commercial part as defined in § 21.1.

c. Article. Means a material, part, component, process, or application.

d. Commercial Part. An article that is listed on an FAA-approved Commercial Parts List included in a design approval holder's (DAH) instructions for continued airworthiness (ICA).

e. Product. A complete aircraft, aircraft engine, or propeller that has been TC'd in accordance with the applicable regulations, and for which Federal aviation specifications or Type Certificate Data Sheets (TCDS) have been issued.

f. Standard Part. Is a part manufactured in complete compliance with an established U.S. Government or industry-accepted specification, which includes design, manufacturing, and uniform identification requirements. The specification must include all information necessary to produce and conform to the part. The specification must be published so that any party may manufacture the part. Examples include, but are not limited to, National Aerospace Standard (NAS), Air Force/Navy (AN) Aeronautical Standard, Society of Automotive Engineers (SAE), Aerospace Standard (AS), Military Standard (MS), etc.

g. New. A product, accessory, part, or material that has no operating time or cycles.

NOTE: There could be time/cycles on a newly TC'd product (i.e., use of a manufacturer's test cell or certification requirements).

h. Surplus. Describes a product, assembly, part, or material that has been released as surplus by the military, manufacturers, owners/operators, repair facilities, or any other parts supplier. These products should show traceability to an FAA-approved manufacturing procedure.

i. Overhauled. Describes an airframe, aircraft engine, propeller, appliance, or component part using methods, techniques, and practices acceptable to the Administrator, which has undergone the following:

(1) Has been disassembled, cleaned, inspected, repaired when necessary, and reassembled to the extent possible.

(2) Has been tested in accordance with approved standards and technical data, or current standards and technical data acceptable to the Administrator (i.e., manufacturer's data), which have been developed and documented by the holder of one of the following:

- TC,
- Supplemental Type Certificate (STC), or article approval under § 21.8, or
- PMA.

j. Rebuilt. Describes an aircraft, airframe, aircraft engine, propeller, or appliance, using new or used parts that conform to new part tolerances and limits or to approved oversized or undersized dimensions that has undergone the following:

- (1) Has been disassembled, cleaned, inspected, repaired as necessary, and reassembled to the extent possible.
- (2) Has been tested to the same tolerances and limits as a new item.

k. Return to Service Inspection Records. The person approving or disapproving for return to service a TC'd product must ensure that the required maintenance record entries comply with part 43, and therefore must include the following information:

- Type of inspection and a brief description of the extent of the inspection,
- Date,
- Product hours, cycles, or life limits as applicable,
- Signature, certificate number, and kind of certificate held by the person approving or disapproving for return to service, and
- The appropriate certifying statement that the product or part thereof is approved or disapproved for return to service, as applicable.

l. As Is. Describes any airframe, aircraft engine, propeller, appliance, component part, or material, the condition of which is unknown.

m. Appropriately Certificated Person. As related to return to service after maintenance, preventive maintenance, rebuilding, or alteration, it can include the holder of a:

(1) **Mechanic Certificate.** May perform maintenance, preventive maintenance, and alterations as provided in 14 CFR part 65.

(2) **Inspection Authorization (IA).** May inspect and approve for return to service any aircraft or related part or appliance (except aircraft maintained in accordance with a Continuous Airworthiness Maintenance Program (CAMP) under part 121 or 135) after a major repair or alteration as provided in part 43 if the work was done in accordance with technical data approved by the Administrator. Perform an annual inspection, or supervise a progressive inspection according to part 43, §§ 43.13 and 43.15.

(3) **Repair Station Certificate Under Part 145.** May perform maintenance, preventive maintenance, or alterations as provided in part 145.

(4) **Air Carriers.** Air carriers operating may perform maintenance, preventive maintenance, or alterations as provided under part 119, 121, 129, or 135.

(5) **Private Pilot Certificate (for Preventive Maintenance).** May perform preventive maintenance described in part 43 appendix A on any aircraft operated by the pilot except, those aircraft operated under part 119, 121, 125, 129, or 135.

(6) Manufacturer's TC or Production Certificate (PC). May rebuild or alter any aircraft, aircraft engine, or propeller, or appliance manufactured by him under a TSOA, PMA, or product or parts specification, or perform any inspection required under part 91 or 125 while currently operating under a PC or approved production inspection system.

n. Owner/Operator Produced Part. Parts that were produced by an owner/operator for installation on their own aircraft (i.e., by a certificated air carrier). An owner/operator is considered a producer of a part, if the owner participated in controlling the design, manufacture, or quality of the part. Participating in the design of the part can include supervising the manufacture of the part or providing the manufacturer with the following: the design data, the materials with which to make the part, the fabrication processes, assembly methods, or the quality control (QC) procedures.

o. Time-limited Part. Means any part for which a mandatory replacement limit is specified in the type design, the ICA, or the maintenance manual.

5. RELATED READING MATERIALS. You can find this AC on the MyFAA employee Web site at https://employees.faa.gov/tools_resources/orders_notices. Inspectors can access this AC through the Flight Standards Information Management System (FSIMS) at <http://fsims.avs.faa.gov>. Operators and the public may find this information at <http://fsims.faa.gov>.

- AC 00-56, Voluntary Industry Distributor Accreditation Program.
- AC 21-2, Complying with the Requirements of Importing Countries or Jurisdictions When Exporting U.S. Products, Articles, or Parts.
- AC 21-6, Production Under Type Certificate Only.
- AC 21-13, Standard Airworthiness Certification of Surplus Military Aircraft and Aircraft Built from Spare and Surplus Parts.
- AC 21-18, Bilateral Airworthiness Agreements.
- AC 21-20, Supplier Surveillance.
- AC 21-23, Airworthiness Certification of Civil Aircraft, Engines, Propellers, and Related Products Imported to the United States.
- AC 21-29, Detecting and Reporting Suspected Unapproved Parts.
- AC 43-9, Maintenance Records.
- AC 43.13-1, Acceptable Methods, Techniques and Practices—Aircraft Inspection and Repair.
- AC 43.13-2, Acceptable Methods, Techniques and Practices—Aircraft Alterations.
- AC 43-18, Fabrication of Aircraft Parts by Maintenance Personnel.
- FAA Order 8120.2, Production Approval and Certificate Management Procedures.
- FAA Order 8120.16, Processing Reports of Suspected Unapproved Parts.
- FAA Order 8130.21, Procedures for Completion and Use of the Authorized Release Certificate, FAA Form 8130-3 Airworthiness Approval Tag.

6. DISCUSSION. The FAA continues to receive reports of replacement parts being offered for sale as aircraft quality when the quality and origin of the parts are unknown or questionable. Such parts may be advertised or presented as unused, like new, or remanufactured. These imply

that the quality of the parts is equal to an acceptable part. Purchasers of these parts may not be aware of the potential hazards involved with replacement parts for which acceptability for installation on a TC'd product has not been established.

a. Replacement of Parts and Materials. The performance rules for replacement of parts and materials used in the maintenance, preventive maintenance, and alteration of aircraft that have (or have had) a U.S. airworthiness certificate, and components thereof, are specified in § 43.13 and part 145, § 145.201. These rules require that the installer of a part use methods, techniques, and practices acceptable to the FAA. Additionally, the installer of a part must accomplish the work in such a manner and use materials of such quality that the product or appliance worked on will be at least equal to its original or properly altered condition with respect to the qualities affecting airworthiness.

b. Replacement of Articles. The continued airworthiness of an aircraft, which includes the replacement of articles, is the responsibility of the owner/operator, as specified in parts 91, 119, 121, 125, and 135; and §§ 91.403, 121.363, 125.243 and 135.413. These rules require that the installer determine that an article is eligible for installation on a product or component prior to returning that product or component to service with the part installed. Those rules also require that the installation of a part must be accomplished in accordance with data approved by the FAA, if the installation constitutes a major repair or alteration.

c. Conforming to Regulations. As part of determining whether installation of an article conforms with all applicable regulations, the installer should establish that the article was manufactured under a production approval pursuant to part 21, that an originally acceptable part has been maintained in accordance with part 43, or that the part is otherwise eligible for installation (i.e., has been found to conform to data approved by the FAA). This AC addresses means to help the installer make the required determinations.

7. IDENTIFICATION OF REPLACEMENT PARTS. Acceptable replacement articles should be identified using one of the following methods:

a. Airworthiness Approval Tag. FAA Form 8130-3, Airworthiness Approval Tag, identifies a part or group of parts for export approval and conformity determination from production approval holders. It also serves as approval for return to service after maintenance or alteration by an authorized part 145 repair station, or a U.S. air carrier having an approved CAMP under parts 121 and 135.

b. Foreign Manufactured Replacement Parts. New foreign manufactured parts for use on U.S. TC'd products may be imported when there is a Bilateral Airworthiness Agreement (BAA) between the country of manufacture and the United States, and the part meets the requirements under § 21.502.

(1) The certification may be verified on a form similar to the FAA Form 8130-3 (i.e., European Aviation Safety Agency (EASA), EASA Form One), used by European member countries of the EASA with which the United States has a BAA. The EASA is an organization of European member nations that has the responsibility to develop EASA regulations and policy.

The procedures and the countries with which the United States has BAA and the condition of the agreements, are contained in AC 21-23.

(2) Used parts may be identified by the records required for approval for return to service as set forth in § 43.9. FAA Form 8130-3 may be used for this purpose if the requirements of § 43.9 are contained in or attached to the form and approved for return to service by a U.S. FAA-certificated repair station or U.S. air carrier under the requirement of their CAMP. There is no set format or form required for a maintenance or alteration record. However, the data or information used to identify a part must be traceable to a person authorized to perform and approve for return to service maintenance and alterations under part 43. The records must contain a minimum that data set forth in § 43.9.

(3) The use of an authorization tag does not approve the installation of a part on a TC'd product. Additional substantiated authorization for compliance with part 43 and the FAA-approved data for major repairs and alterations may be required for installation on a TC'd product.

c. FAA Technical Standard Order (TSO) Markings. A TSOA is issued under § 21.611 and marked in accordance with part 45, § 45.15. A TSOA must be permanently and legibly marked with the following:

- Name and address of the manufacturer,
- The name, type, part number, or model designation of the article,
- The serial number or the date of manufacture of the article, or both, and
- The applicable TSO number.

d. FAA-PMA Symbol. An FAA-PMA is issued under § 21.9. Each PMA part should be marked with the letters, "FAA-PMA," in accordance with § 45.15:

- The name,
- Trademark or symbol,
- Part number, and
- Name and model designation of each certificated product on which the part is eligible for installation.

NOTE: Parts that are too small or otherwise impractical to be marked may, as an alternative, be marked showing the above information on an attached tag or labeled container. If the marking on the tag is too extensive to be practical, the tag attached to a part or container may refer to a readily available manual or catalog for part eligibility information. Under a licensing agreement, when the applicant has been given the right to use the TC holder's design, which includes the part number, and a replacement part is produced under that agreement, the part number may be identical to that of the TC holder, provided that the PMA holder includes the letters, FAA-PMA, and the PMA holder's identification symbol on the part. In all other cases, the PMA holder's part number must be different from that of the TC holder.

e. Production Approval Holder's (PAH) Documents or Markings. Documents or markings such as shipping tickets and invoices may provide evidence that a part was produced by a manufacturer holding an FAA-approved manufacturing process.

f. Direct Ship Authority. In order for U.S. manufactured parts with direct ship authority to be recognized as being produced under a manufacturer's FAA production approval, the manufacturer must specifically authorize the shipping supplier, in writing, and must establish procedures to ensure that the shipped parts conform to the approved design and are in condition for safe operation. A statement to the supplier from the certificate holder authorizing direct shipment and date of authorization should be included on the shipping ticket, invoice, or other transfer document. It should contain a declaration that the individual part was produced under a PC.

g. Maintenance Release Document. A release, signed by an appropriately certificated person, qualified for the relevant function that signifies that the item has been returned to service after maintenance or test function has been completed. This type of documentation could be in the form of a repair station tag containing adequate information (§ 43.9); work order, FAA Form 337, Major Repair and/or Major Alteration; FAA Form 8130-3; or a maintenance record entry, which must include an appropriate description of the maintenance work performed, including the recording requirements of § 43.9 and part 43 appendix B.

h. Identification of Critical Components. Each person who produces a part for which there is a replacement time or an inspection interval must mark the part in accordance with § 45.14.

i. Marking of Life-Limited Parts. The TC or design holder must provide a means of marking a life-limited part when requested by a person to comply with § 43.10.

NOTE: When a noncertificated person certifies that they are shipping the correct part ordered, the only thing they are stating is that the part number agrees with the purchase order, not the status of FAA-acceptability of the part.

8. INFORMATION RELEVANT TO USED PARTS. The following information may be useful when assessing maintenance records and part status.

a. Documentation. If the part has been rebuilt, overhauled, inspected, modified, or repaired, the records should include a maintenance release, return to service tag, repaired parts tag, or similar documentation from an FAA-certificated person. Documentation describing the maintenance performed and parts replaced must be made for the part (i.e., FAA Form 8130-3 or FAA repair station work order). (Reference § 43.9 and part 43 appendix B.)

b. Information to Obtain. The records should include information, either directly or by reference, to support documentation that may be helpful to the user or installer in making a final determination as to the airworthiness and eligibility of the part. Listed are examples of information one should obtain, as applicable:

- (1) Airworthiness Directives (AD) status.

(2) Compliance or noncompliance with Service Bulletins (SB).

(3) Life-cycle-limited parts status (i.e., time, time since overhaul, cycles, history) should be substantiated. If the part is serialized and life-limited, then both operational time and/or cycles (where applicable) must be indicated. Historical records that clearly establish and substantiate time and cycles must be provided as evidence.

(4) Shelf-life data, including manufacturing date or cure date.

(5) Return to service date.

(6) Shortages applicable to assemblies or kits.

(7) Import or export certification documents.

(8) The name of the person who removed the part.

(9) FAA Form 337.

(10) Maintenance manual standards used for performing maintenance.

c. Unusual Circumstances. If a particular part was obtained from any of the following, then it should be so identified by some type of documentation (i.e., maintenance record entries, removal entries, overhaul records).

(1) Noncertificated aircraft (aircraft without airworthiness certificate; i.e., public use, non-U.S., and military surplus aircraft).

(2) Aircraft, aircraft engines, propellers, or appliances subjected to extreme stress, sudden stoppage, heat, major failure, or accident.

(3) Salvaged aircraft or aircraft components.

d. Seller's Designation. The seller may be able to provide documentation that shows traceability to an FAA-approved manufacturing procedure for one of the following:

(1) Parts produced by an FAA-PAH by TC, PC, PMA, TSOA.

(2) Parts produced by a foreign manufacturer (in accordance with part 21 subpart N).

(3) Standard parts produced by a named manufacturer.

(4) Parts distributed with direct ship authority.

(5) Parts produced, for the work being accomplished, by a repair station to accomplish a repair or alteration on a specific TC'd product.

(6) Parts produced by an owner or operator for installation on the owner's or operator's aircraft (i.e., by a certificated air carrier).

(7) Parts with removal records showing traceability to a U.S.-certificated aircraft, signed by an appropriately certificated person.

e. Manufactured. The manufacturer of the part should be identified; if not identified it may be difficult to prove that the part is acceptable for installation on a TC'd product.

f. Certificates and Approvals Held.

(1) **Manufacturers.** The certificate or approval held by the manufacturer, TC, PC, TSOA, or PMA may be listed; if not known, state as unknown.

(2) **Air Agencies.** The certificate held by the air agencies. Part 145 may be listed. If not known, state as unknown.

(3) **Air Operator.** The certificate held by air operators, parts 119, 121, 125, and 135.

g. Part Description. Indicate the part's physical description for positive identification.

h. Part Number. Document the manufacturer's part number or, if the part has been modified, the amended part number.

i. Serial Number. Document the specific part's serial number, if so marked. Determine if serialized part has any life or overhaul limitations.

j. Disposition of Life-Limited Aircraft Parts. After April 15, 2002 each person who removes a life-limited part from a TC'd product must ensure that the part is controlled in accordance with § 43.10.

9. SURPLUS. Many materials, parts, appliances, and components that have been released as surplus by the military service or by manufacturers may originate from obsolete or overstocked items. Parts obtained from surplus sources may be used, provided it is established that they meet the standards to which they were manufactured, interchangeability with the original part can be established, and they are in compliance with all applicable ADs. Such items, although advertised as remanufactured, high quality, like new, unused, or looks good, should be carefully evaluated before they are purchased. The storage time, storage conditions, or shelf life of surplus parts and materials are not usually known.

10. CONDITION FOR SAFE OPERATION. Parts and materials should be properly stored, protected, and maintained to ensure airworthiness. The following factors should be considered when determining airworthiness:

a. Composite Materials. Generally, most composite materials (thermoset polymers) have a refrigeration shelf life recommended by the manufacturer. Composite materials must be kept refrigerated in accordance with the manufacturer's recommended temperature range and out of refrigeration time (out time) limitations. Records must be maintained of the cumulative total of material out time to prevent exceeding shelf-life.

b. Anti-friction Bearings. Anti-friction bearings that have been in storage for a long period of time or that have been improperly stored are subject to the deteriorating effects of time and elements, unless they were hermetically sealed. Such parts should be completely inspected and lubricated before being placed in service.

c. Aircraft Fabric. Fabric and prefabricated covers should be used only if they are identifiable as meeting aircraft standards. All fabric should be examined or tested for freedom from deterioration, as determined by an appropriately certificated person.

d. Dope, Paint, Sealants, and Adhesives. These items advertised as aircraft quality may have deteriorated due to age or environmental conditions, while in storage, and may require testing before use.

e. Parts with Internal Seals. Internal seals on parts such as pumps, valves, actuators, motors, generators, and alternators are subject to deterioration from long-term storage and are susceptible to early failure in service. A procedure should be established for control of shelf-life items in order to prevent possible premature failures of the parts/components, unless other preventive procedures are in place.

f. Rotating Components. Rotating components, such as propellers, engine parts, and rotor blades, may have a life-limit or retirement life. Maintenance records should reflect a complete continuity of service time and repair history. Information that indicates whether the component has exceeded the life limit may, in some cases, be obtained from the manufacturer or from an FAA-approved repair station that may have affixed a logo, decal, or some other identification.

g. Heat and Fire. Parts that may have been exposed to heat or fire can be seriously affected and are likely unserviceable.

h. Corrosives. Foreign or corrosive liquids can also be detrimental on aircraft parts. Parts, appliances, and components that have been submerged in salt water may be unserviceable parts.

i. Manufacturing Rejects. The manufacturers may offer parts that failed the manufacturers' quality assurance (QA) inspection criteria for conformity to type design, for sale as scrap without being mutilated or destroyed rendering them unusable, and are unacceptable for installation.

j. Damaged Aircraft. Parts removed from an aircraft involved in an accident may have been subjected to undue stresses that may have seriously effected structural integrity and rendered them permanently unusable.

k. Rebuilt Engines. Only engines that are rebuilt by a manufacturer holding an FAA production approval, an agency approved by the PAH, or an appropriately rated FAA-certificated agency can be considered as zero timed. (Reference § 91.421.)

11. ELECTRICAL PARTS AND INSTRUMENTS.

a. Electronic Kits. Kits assembled by noncertificated individuals are not eligible for installation on TC'd aircraft until the part is certified as airworthy and found eligible for

installation in accordance with parts 21 and 43. During and after assembly, these kits should receive documented conformity inspections by properly certificated persons to ensure that they meet all applicable airworthiness requirements for use on the specific aircraft on which they are to be installed. The installation of these approved units should be accomplished by or under the supervision of a properly certificated person or agency in accordance with parts 21 and 43. When the installation is a major alteration, the kit data and the data used for the alteration of the product must be approved by a representative of the Administrator. An appropriately certificated person must complete the maintenance records to ensure that the aircraft is approved and airworthy for return to service.

b. Discrete Electrical and Electronic Component Parts. Electrical and electronic parts, such as resistors, capacitors, diodes, and transistors, if not specifically marked by the equipment manufacturer's part number or marking scheme, may be substituted or used as replacement parts, provided that such parts are tested or it is determined that they meet their published performance specifications and do not adversely affect the performance of the equipment or article into or onto which they are installed. The performance of such equipment or article must be equal to its original or properly altered or repaired condition. Integrated circuits such as hybrids, large scale integrated circuits (LSIC), programmable logic devices, gate arrays, application specific integrated circuits (ASIC), memories, CPU's etc., are not included because their highly specialized functionality does not readily lend itself to substitution.

c. Aircraft Instruments. Instruments advertised as high quality, looks good, or remanufactured or that were acquired from aircraft involved in an accident should not be put in service unless they are inspected, tested, and/or overhauled as necessary, by an appropriately rated FAA-certificated repair station, and the installer establishes that (for the aircraft in which) the instrument installed will comply with the applicable regulations.

NOTE: Instruments are highly susceptible to hidden damage caused by rough handling or improper storage conditions; therefore, instruments that have been sitting on a shelf for a period that cannot be established should be tested by an appropriately rated FAA-certificated person.

12. KNOW YOUR SUPPLIERS.

a. Used and Repaired Parts. In addition to unapproved parts, used or repaired parts may be offered for sale as like new, near new, and remanufactured. Such terms do not aid the purchaser in positively determining whether the part is acceptable for installation on a TC'd product and do not constitute the legal serviceability and condition of aircraft parts.

b. Caution. It is the installer's responsibility to ensure airworthiness. Aircraft parts distributors, aircraft supply companies, or aircraft electronic parts distributors, unless they are a PAH, cannot certify the airworthiness of the parts they advertise and/or sell; therefore, it is the installer's responsibility to request documentation establishing traceability to a PAH.

13. REPORTING SUSPECTED UNAPPROVED PARTS (SUP).

a. SUPs. SUPs are parts, components, or materials that may not be approved or acceptable, as described in paragraphs 4a and b. Some appear to be as good as the part manufactured from an

FAA-approved source; however, there may be manufacturing processes that were not performed in accordance with FAA-approved data or possibly not performed at all, and that would not be readily apparent to the purchaser (i.e., heat treating, plating, or various tests and inspections).

b. How to Report SUPs. Persons with possible knowledge of safety violations or other circumstances that may affect aviation safety are encouraged to report them in accordance with AC 21-29. This AC includes procedures for referral of such reports to the appropriate FAA office. Reports may be filed by using FAA Form 8120-11, Suspected Unapproved Parts Notification, or by calling the toll free FAA Aviation Safety Hotline at 1-(800)-255-1111.

14. SUMMARY. The approval for return to service after maintenance of aircraft, engines, propellers, appliances, and materials and parts thereof is the responsibility of the person who performs the maintenance and who signs the record for approval for return to service. The owner/operator (as noted in paragraph 6b) is responsible for the continued airworthiness of the aircraft. To ensure continued safety in civil aviation, it is essential that appropriate data is used when inspecting, testing, and determining the acceptability of all parts and materials. Particular caution should be exercised when the origin of parts, materials, and appliances cannot be established or when their origin is in doubt.

ORIGINAL SIGNED BY

/s/ Raymond Towles for

John M. Allen

Director, Flight Standards Service