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Circular

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Ministry of Land, Infrastructure, Transport and Tourism

Subject: Handling of Components etc. to be installed in Aircraft

Contents

1 Purpose

The purpose of this Circular is to specify the particulars of components and parts (hereinafter referred to as the "components etc.") to be installed on aircraft by users of aircraft which have airworthiness certification in accordance with Article 16, paragraph (2) of the Civil Aeronautics Act (Law No. 231 of 1952, hereinafter referred to as the "CAA").

2 Definitions, etc.

2-1 Definitions

The terms used in this circular are defined as follows.

(1) Component

"Component" means a finished product which is a parts-assembly intended for use for aircraft and which in itself performs a distinctive independent function.

(2) Part

"Part" means the smallest unit comprising aircraft or a component which in themselves does not have a distinctive independent function.

2-2 Relevant provisions

- Articles 16, 17, 19, and 19-2 of the CAA
- Articles 5-6, 23-18, 23-19, 24, and 151 of the Civil Aeronautics Regulations (CAR)
- Circular No.1-030 "Establishment of Validity Period of Airworthiness Certification for Aircraft Used for Aerial Work Services and Private Aircraft"
- Circular No.1-501 "Implementation of Maintenance and Alteration based on Article 16 of the CAA"
- Circular No.1-503 "Designation Guideline for Components, etc. Designed for Commercial Use, Military or R&D Purposes"
- Circular No.1-504 "Fabricating of Components etc. by Aircraft Users and its Approval Procedures"
- Circular No.2-001 "General Policy for Approved Organizations"
- Circular No.3-001 "Maintenance and Alteration of Aircraft"
- Circular No.3-006 "Maintenance and Management Program for Small Turbine Engines which have Module Structure"
- Circular No.3-008 "Maintenance and Alteration of Engine Sub-assemblies"
- Circular No.3-009 "Handling of PMA Parts"
- Circular No.3-010 "Standards and Inspection for Altimeters and Static Pressure Systems"
- Circular No.3-011 "Periodic Inspection for Secondary Radar Transponder Components"
- Circular No.3-013 "Inspection and Maintenance of Exhaust System of Small Aircraft"
- Circular No.3-018 "Manual of Installation and Inspection for Power Supplies for Radio Components installed in Gliders"
- Circular No.3-020 "Maintenance of Aged Piston Engines, Propellers and their Accessories"
- Circular No.3-023 "Inspection of Cockpit Voice Recorder (CVR)"
- Circular No.4-004 "Guidelines for Evaluating Maintenance Manuals & Detailed Implementation Procedure"

- Circular No.6-014 “Reporting of Suspected Unapproved Parts”
- Circular No.7-001 “Bilateral Agreements or Equivalent Arrangements on Aviation Safety with Foreign Countries”

2-3 References

- ICAO, Doc 9760 Airworthiness Manual
- 14 CFR Part 21 § 21.8 “Approval of articles” and § 21.9 “Replacement and Alteration articles”
- FAA AC 20-154 “Guide for Developing a Receiving Inspection System for Aircraft Parts and Materials”
- FAA AC 20-62E “Eligibility, Quality, & Identification of Aeronautical Replacement Parts”
- FAA AC 43.13-1B “Acceptable Methods, Techniques, and Practices - Aircraft Inspection and Repair”
- EASA Part M Subpart E Components (M.A.501)
- EASA AMC1 M.A.501(a)(1) - (5), GM1M.A.501(a)(2), M.A.501(a)(2), 501(b), GM2 501(b)

3 Meaning etc. of Article 16, paragraph (2) of the CAA

3-1 Meaning of the CAA amendment in 2019

Since the establishment of the CAA (1952), there had been a Spare Parts Certification system in which the national government certified the airworthiness of “Critical Parts,” components that were critical to ensure the safety of aircraft such as engines and propellers. For major repairs carried out using components etc. (referring to components and parts; the same shall apply hereinafter) that had a Spare Parts Certification, the aircraft had been exempted to take inspection for repair and alteration by the national government. Components etc. other than critical parts had been equipped to the aircraft under the responsibility of the aircraft users.

Under these circumstances, the CAA has been amended in June 2019, and the Spare Parts Certification system and the concept of Critical Parts has been abolished. Under the provisions of Article 16, paragraph (2) of the amended CAA, aircraft users could equip the components etc. to the aircraft, that have been confirmed to be airworthy, and this rule is applied for all components etc. in principle.

3-2 Significance of Authorized Release Certificates

According to Article 16, paragraph (2) of the CAA, any aircraft user shall, with the exception of some components etc., equip the said aircraft with components etc. whose airworthiness has been confirmed by approved organizations whose abilities are approved by the national government (hereinafter referred to as "Approved Organization") in accordance with the provisions of Article 20, paragraph (1) of the CAA.

Approved Organization shall issue Authorized Release Certificates for components etc. which have been confirmed that they comply with the standards under Article 10, paragraph (4), item (i) of the CAA.

This Authorized Release Certificate is regarded as a document for the user of the aircraft who obtained components etc. for the purpose to judge whether the components etc. fall under any of the following.

- Components etc. were properly manufactured according to approved designs and its airworthiness was confirmed
- Components etc. were repaired according to appropriate methods and its airworthiness was confirmed (return to service)

For example, when a user of aircraft purchases newly manufactured components etc. from a manufacturer, etc. or contracts to repair components etc. with a maintenance organization, the user itself does not perform the actual work. Therefore, it is impossible to judge whether or not components etc. have been properly manufactured or repaired, etc. without necessary certificates. For this reason, a person who has actually manufactured or repaired the components etc. is required to issue Authorized Release Certificates in order to demonstrate to the aircraft user that they have performed the said work in accordance with approved designs or appropriate methods and confirmed the airworthiness of

components etc.

On the other hand, when aircraft users themselves repair components etc., as a part of aircraft maintenance, based on the maintenance manuals (AMMs, SRMs) and SBs (including CMM called from these technical documents) issued by the aircraft designer, they may, in principle, not be required to issue Authorized Release Certificates because they repair components etc. and confirm their airworthiness at the user's own responsibility.

In addition, for standard parts or some components designed for commercial use, confirmation of airworthiness is not required by approved organizations, but the basic concept is as described above. Therefore, aircraft users must confirm certifications etc., which ensure that components etc. have been manufactured in accordance with the approved design or have been repaired in accordance with the appropriate methods.

3-3 Handling of Prescribed Emergency Components etc.

3-3-1 Prescribed Emergency Components

In accordance with the ministerial ordinance for partial amendment of the CAR and Regulation for Enforcement of Law Concerning the Operation of Nationally Managed Airports, etc. Utilizing the Capabilities of the Private Sector (Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism No. 5 of 2021), the provisions pertaining to the inspection of emergency signaling light, lifejackets or equivalent emergency equipment, lifeboats, emergency locator transmitter and parachutes (hereinafter referred to as "Specified Emergency Components") by the Minister of Land, Infrastructure, Transport and Tourism pursuant to Article 152 of the previous CAR (Ordinance of the Ministry of Transport No. 56 of 1952; hereinafter referred to as "CAR") were deleted and Specified Emergency Components became to be recognized as components etc. in Chapter 3 of the CAR.

For this reason, Annex No.1 pursuant to the provisions of Article 14, paragraph (1) of CAR or specifications approved by the Minister of Land, Infrastructure, Transport and Tourism are applied as the airworthiness standards to Specified Emergency Components. When Specified Emergency Components are manufactured, repaired or altered, Authorized Release Certificates or foreign certificates that are recognized as having the same effect as the Authorized Release Certificate (hereinafter referred to as the "Authorized Release Certificate or foreign certificate recognized as equivalent thereto") are required in accordance with this Circular pursuant to the provisions of Article 16, paragraph (2) of the CAA.

3-3-2 Emergency Components etc. other than Specified Emergency Components

For emergency components other than Specified Emergency Components, such as portable lights, waterproof portable lights, first-aid kits, emergency rations, emergency floats, medicines, medical

equipment, etc.), the airworthiness standards specified in Article 14, Paragraph 1 of the CAR and provisions in Article 16 Paragraph 2 in the CAA shall not be applied. Therefore, no Authorized Release Certificate or foreign certificate recognized as equivalent thereto is required even when manufacturing, repairing, or altering those emergency components. Provided, however, that those emergency components are contained in the design approved in Type Certificate or Supplemental Type Design Approval, it shall be confirmed that Authorized Release Certificates or foreign certificate recognized as equivalent are attached to the emergency components in accordance with this Circular.

3-3-3 Radio Components of Radio Stations Subject to the Application of Radio Law

Radio components of radio stations to which Radio Law is applied falls under components etc. of Section 3 of the CAR, and therefore, when they are manufactured, repaired or altered, Authorized Release Certificates or foreign certificates recognized as equivalent thereto shall be required, in principle, in accordance with this circular.

In view of the fact that the intent of the provision of the Radio Law and the CAA is different, when inspections (periodic inspections, etc.) required under the provisions of the Radio Law are conducted, certificates, such as Authorized Release Certificates, pursuant to the provisions of Article 16, paragraph (2) of the CAA are not required.

4 Concept of Maintenance and Alteration for Components etc. to be installed in Aircraft

4-1 Relation between Aircraft Design Approval and Components etc. to be installed in Aircraft

Any component etc. installed in aircraft shall be component etc. which are permitted to be installed in the aircraft in the design approved by the Civil Aviation Bureau (including designs approved by the aviation authority of the State of Design or State of Manufacture for the aircraft or component etc. based on standards and procedures equivalent to those of our country; hereinafter referred to as "Designs approved by the national government").

Designs approved by the Civil Aviation Bureau mainly refer to the following.

- Airworthiness Certification [Article 10 of the CAA]
- Type Certification [Article 12 of the CAA]
- Approval for Supplemental Type Design [Article 13-2, paragraph (1) of the CAA]
- Inspection for Repair and Alteration [Article 17 of the CAA]
- Repair and Alteration Design Approval [Article 18, paragraph (1) of the CAA]
- Type or Specification Approved [Article 14 paragraph (1) of the CAR]
- Repair and Alteration Design Approval for Components etc. [Article 20, paragraph (3), item (i) of the CAR]

These components etc. are indicated in parts catalogues (IPCs), Service Bulletins (SBs), design drawings and maintenance procedures (including Instructions for continued airworthiness: ICA; the same shall apply hereinafter) issued by designers etc. (persons who have obtained Type Certification, Approval for Supplemental Type Design, Repair and Alteration Design Approval) of aircraft or components etc., design drawings, maintenance procedures for aircraft that have passed the inspection for repair and alteration, and so on that they can be installed in the aircraft.

4-2 Obligation to Maintain Airworthiness of Aircraft and Concept of Maintenance and Alteration of Components etc.

As described in 4-1, any component etc. installed in aircraft shall be permitted to be installed in the aircraft.

The basic concepts for the obligation to maintain airworthiness of aircraft and maintenance and alteration of components etc. to be installed in aircraft are as follows.

(1) Pursuant to Article 16, paragraph (1) of the CAA, aircraft users (including the trustee of maintenance management, if commissioned; hereinafter the same shall apply in this Circular) shall properly maintain and alter the aircraft with valid airworthiness certification (including components etc.) in order to comply with the standards under Article 10, paragraph (4) of the CAA.

(2) When replacing, repairing, or altering components etc. already installed during the process

of maintenance or alteration for aircraft, the aircraft user shall, in accordance with Article 16, paragraph (2) of the CAA, equip the aircraft with components etc. (newly manufactured components, repaired components, etc.) whose function, performance, etc. have been confirmed to conform to the standards under Article 10, paragraph (4), item (i) of the CAA.

(3) Subject to the provisions (2), any aircraft user shall, with the exception of some components etc., equip the aircraft with components etc. accompanied by the required certificates, etc., in accordance with paragraph 5.

(4) Any aircraft user shall, in order to ensure that the aircraft is in a safe condition for operation after equipping the aircraft with components etc., confirm or obtain confirmation that the aircraft conforms to the standards under Article 10, paragraph (4) of the CAA in accordance with the confirmation under provisions of Article 19 or 19-2 of the CAA, or through inspection for repair or alteration.

5-1 Overview

5-1-1 Newly manufactured components etc.

When equipping aircraft with newly manufactured components etc., the aircraft users shall confirm that components etc. are manufactured in accordance with design approved by the national government by confirming the certificates corresponding to the category of components etc. listed in the following table.

Certificates must be original in principal, except for the case specified in 5-1-3.

In principle, an Authorized Release Certificate or a foreign certificate recognized as equivalent should be accompanied for every single component etc., except when the airworthiness of multiple pieces of components etc., is certified by a single certificate.

(Example)

• In case of aircraft repair or alteration based on approval for Supplemental Type Design or based on SB issued by the holder of the aircraft design certificate, an Authorized Release Certificate or a foreign certificate recognized as equivalent thereto may be attached to a group of components etc. (hereinafter referred to as “kit items”). In such cases, it is not necessary that an Authorized Release Certificate or foreign certificate recognized as equivalent is attached to every individual components etc., provided that the certificate certifies the airworthiness of all components etc. in kit items. For example, this is the case when multiple items of component etc. are listed on the certificate.

	Category of newly manufactured components etc.	Required certificates	Applicable provisions
(a)	Components etc. other than (b) to (j)	Authorized Release Certificates or foreign certificates recognized as equivalent (FAA Form 8130-3, EASA Form 1, etc.)	5-2 5-3
(b)	Parts that conform to the standardized specifications	Certificates issued by the manufacturer, such as Certificate of Conformity (C of C) (hereinafter referred to as “C of C”)	5-4
(c)	Components etc. designed for commercial use that are found to have no safety impact	Certificates issued by the manufacturer, such as C of C.	5-5-1
(d)	Parts manufactured under the direction of the holder of aircraft design certificate	Certificates of in-house passing certificate, etc. (Certificates may be substituted for the maintenance record in accordance with 5-5-2-1)	5-5-2-1

(e)	Components etc. manufactured by aircraft users to whom the Maintenance Manuals or maintenance standards are applied	Certificates of in-house passing certificate, etc.	5-5-3
(f)	Components etc. designed for military use that are found to have no safety impact	Certificates issued by the manufacturer, such as C of C.	5-5-4
(g)	Components etc. installed in aircraft as part of test flights, etc. for R&D and deemed to have no impact on safety	Certificates issued by the manufacturer, such as C of C.	5-5-5
(h)	Unit Load Device, such as cargo containers, and galley carts etc.	Authorized Release Certificates or foreign certificates recognized as equivalent (FAA Form 8130-3, EASA Form 1, etc.)	5-5-6
(i)	Components etc. to be installed for the first time on an aircraft of the type concerned (in the case of inspection for repair and alteration, on the aircraft concerned) in Supplemental Type Design Approval or Inspection for Repair and Alteration etc., which doesn't have Type Approval or Specification Approval (including approval by foreign authorities recognized as equivalent to Type Approval or Specification Approval)	Certificates issued by the manufacturer, such as C of C	<u>5-5-7</u>
(j)	Components to be used for service trials (components etc. to be installed in aircraft	<u>Certificates issued by the manufacturer, such as C of C</u>	<u>5-5-8</u>

	experimentally to conduct assessments in normal operation prior to obtaining of the approval for design change of the Type Certification or change of the Supplemental Type Design, etc.,)		
(k)	Other components etc. that are considered to be as safe as the level required in (a) to (k)	Certificates issued by the manufacturer, such as C of C	<u>5-5-9</u>

5-1-2 Repaired or Altered Components etc.

When equipping aircraft with repaired or altered components etc., the aircraft users shall confirm that components etc. have been properly repaired or altered by confirming the certificates corresponding to the category of components etc. listed in the following table.

Certificates must be original in principal, except for the cases specified in 5-1-3.

	Category of repaired or altered components etc.	Required certificates	Applicable provisions
(a)	Components etc. other than (b) to (g)	Authorized Release Certificates or foreign certificates recognized as equivalent	5-2 5-3
(b)	Components etc. designed for commercial use that are found to have no safety impact	Certificates issued by the person who performs the work, such as C of C	5-5-1
(c)	Components etc. to be repaired or altered based on the maintenance manuals, etc., of the designer of aircraft	Certificates of In-house Passing Certificate, etc. (certificates may be substituted by the maintenance record in accordance with 5-5-2-2)	5-5-2-2
(d)	Components etc. designed for military use that are found to have no safety impact	Certificates issued by the person who performs the work, such as C of C	5-5-4

(e)	Components etc. installed in aircraft as part of test flights, etc. for R&D that are found to have no impact on safety	Certificates issued by the person who performs the work, such as C of C	5-5-5
(f)	Unit Load Device, such as cargo containers, and galley carts etc.	Authorized Release Certificates or foreign certificates recognized as equivalent	5-5-6
(g)	Components to be used for service trials (Components etc. to be installed in aircraft experimentally to conduct assessments in normal operation prior to obtaining of the approval for design change of the Type Certificate, change of the Supplemental Type Design, etc.,)	Certificates issued by the person who performs the work, such as C of C	5-5-8
(h)	Components etc. that are considered to be as safe as those required in (a) to (g)	Certificates issued by the person who performs the work, such as C of C.	5-5-9

5-1-3 Copies of the original certificates that can be recognized as originals

In principle, the certificates specified in 5-1-1 and 5-1-2 must be original, but this shall not apply in the following cases.

- (a) To receive in an electromagnetic way, in compliance with Circular No.6-018 "General Standards for Electronic Signatures and Electronic Records"
- (b) When a copy of the original document is attached and the person who retains the original certificate certifies in writing that it is the same as the original copy (including the name of the person and name of department which they belong to, and date of certification). In this case, such proof may be deemed to be an original document of the certificate.
- (c) Where the treatment is specified in a regulation established by the exporting country's authority in force at the time of issuance of the certificate and is subject to such treatment.

For example, in the United States, FAA Order 8130.21 specifies same handling as (b).

In the case of Canada, while the name of the person who retains the original certificate and the name of department which they belong to, etc. are not required, the copy must be a certified true copy

issued by from the production organization approved by the Canadian authorities (TCCA). If there is any doubt as to whether the product is a certified true copy, be sure to confirm with the issuer of the certificate (approved production organization)

In the case of Europe, although there are no requirements for handling copies of certificates, it is necessary to confirm the copy is identical to the original certificate. When there is any doubt about the authenticity, contact the issuer of the certificate (approved by EASA).

5-2 Components etc. to which Authorized Release Certificates are attached.

Any user of aircraft may, in accordance with the provisions of Article 16, paragraph (2) items (i) through (iii) of the CAA, equip the aircraft with components etc. that fall under any of the following:

5-2-1 Components etc. that a person who has obtained the certification of capability under Article 20, paragraph (1), item (vi) of the CAA (Approved Production Organization for Aircraft parts) has confirmed that they conform to the standards under Article 10, paragraph (4), item (i) (Article 16, paragraph (2), item (i) of the CAA).

Components etc. manufactured by an Approved Production Organization for Aircraft parts in accordance with design approved by the national government and accompanied by Authorized Release Certificates

5-2-2 Components etc. that a person who has obtained the certification of capability under Article 20, paragraph (1), item (ii) of the CAA (Approved Production Organization for Aircraft) has confirmed that they conform to the standards under Article 10, paragraph (4), item (i) (Article 16, paragraph (2), item (ii) of the CAA)

This component, is one in which the Approved Production Organization for Aircraft has confirmed that it conforms to the standards under Article 10, paragraph (4), item (i) of the CAA and an Authorized Release Certificate is attached.

5-2-3 Components etc. where a person who has obtained the certification of capability under Article 20, paragraph (1), Item (vii) of the CAA (Approved Maintenance Organization for Aircraft parts) has confirmed that they conform to the standards under Article 10, paragraph (4), item (i) of the CAA (Article 16, paragraph (2), item (iii) of the CAA)

(1) This is a component in which an Approved Maintenance Organization for Aircraft parts has properly repaired or altered in accordance with the method designated by the designer etc. of the component, and an Authorized Release Certificate is attached. The general handling for parts which constitute the components etc. shall be as described in (2).

(2) Where a repaired or altered component is obtained and the component is constituted of a number of parts, Authorized Release Certificates or foreign certificates recognized as equivalent must be attached to the parts.

5-3 Components etc. accompanied by foreign certificates which are found to have the same effect as Authorized Release Certificates

Any Component that falls under any of the following may be installed in aircraft because it is accompanied by a certificate that is deemed to have the same effect as an Authorized Release Certificate.

5-3-1 Components etc. that any foreign state, a Contracting State to the Convention on International Civil Aviation, granted certification approval or performed other acts for the airworthiness thereof (Article 23-19, item (I) of the CAR)

Components etc. (a newly manufactured component, a repaired component, an altered component, etc.) that a foreign state that is a Contracting State to the Convention on International Civil Aviation certified or performed other acts for the airworthiness (an act equivalent to certification, such as authentication or approval, etc.; in the case of repaired or altered components, proof of availability or otherwise) in accordance with the International Standards and Recommended Practices for Airworthiness of Aircraft adopted and amended by the International Civil Aviation Organization, as the responsibility of a Contracting State to the Convention on International Civil Aviation.

These components etc. shall be accompanied by certificates issued by a foreign state that is a Contracting State as having the same effect as Authorized Release Certificates.

The foreign state that is a Contracting State usually refers to the aviation authority of the foreign state, but also includes representatives who are authorized by the aviation authority to perform certification or other acts on behalf of the aviation authority.

For reference, the United States, the European EASA Member States and Brazil have the following links to the application of this section.

(1) FAA in the U.S.

In the U.S., this section applies when the FAA or a representative authorized by the FAA to act on its behalf confirms the airworthiness of components etc. and FAA Form 8130-3 are attached. This section is also applicable when FAA or representative authorized by the FAA issue a left-signed FAA Form 8130-3 (*1) for overhauled components etc. In this case, it is also necessary to check a right-signed FAA Form 8130-3 (*2) issued by the authorized repair station for overhauled component etc.

-Designated Manufacturing Inspection Representative (DMIR)

-Designated Airworthiness Representative-manufacturing (DAR-F)

-Designated Airworthiness Representative-maintenance (DAR-T)

In the case of confirmation by a representative, the wording of DAR or DMIR may appear at the beginning of the Authorization No. in block 13c of FAA Form 8130-3.

*1: Certificate with the necessary information in Block 13 and stating “Approved design data 1-502 (16)

and are in a condition for safe operations” in Block 13a

*2: Certificate with the necessary information in Block 14

(2) EASA

In Europe, this section does not apply to both newly manufactured and repaired components, as they are not normally certified by the national government, but are accompanied by an EASA Form 1 from an EASA-approved organization.

(3) Brazil (ANAC)

In Brazil, when ANAC has confirmed the airworthiness of the engine or propeller as an export certificate of airworthiness and issued ANAC Form-F-100-12, this section applies.

5-3-2 Components etc. that a person who obtained the certification and other acts by relevant standards and procedures manufactured, repaired or alternated and confirmed the airworthiness thereof in a foreign state that has been certified by the Minister of Land, Infrastructure, Transport and Tourism as having equal or better standards and procedures than those of Japan with regard to certification and other acts for capabilities of manufacture, repair or alteration of components etc. (Article 23-19, item (2) of the CAR).

These are components etc. manufactured, repaired or altered and confirmed the airworthiness (for repaired or altered components, confirmation for usable is acceptable) by an approved organization in a foreign state that has been certified by the Minister of Land, Infrastructure, Transport and Tourism as having equal or better organization approval systems and standards and procedures for the approval than those of Japan.

These components etc. shall be accompanied by certificates issued by the organization in the foreign state concerned as having the same effect as Authorized Release Certificate.

The determination that the standards and procedures for organization approval are equivalent or superior to those of our country and the application of this provision shall be made by concluding the necessary arrangements, etc. based on the coordination between the aviation authorities in principle. These arrangements are broadly divided into the field of airworthiness for newly manufactured components and the field of maintenance for repaired or altered components. The specific components etc. that fall under this paragraph are as follows. (Refer to Circular No.7-001 "Bilateral Agreements or Equivalent Arrangements on Aviation Safety with Foreign Countries" for more information on the arrangement.)

(1) Newly Manufactured Components

Components etc. listed in the following table fall under this paragraph.

In the bilateral agreements etc. for airworthiness, if airworthiness of components etc. has been

confirmed by an organization approved by a contracting state, it may be accepted regardless of the location of the approved organization.

Parties to a bilateral agreement etc.	Applicable components etc.	Certificates, etc.
United States (FAA)	Newly manufactured components	[Certificate] FAA Form 8130-3(*1) [Issuer] FAA- production approved persons (Production Approval Holders: PAHs) or suppliers who obtained Direct Shipment Authorization from PAHs(*2)
	Rebuilt engines(*3)	The following two certificates are required. [Certificate] FAA Form 8130-3 (with necessary information in Block 14 and stating in Block 11 or Block12 that the engine has been rebuilt) [Issuer] Engine manufacturer with FAA production approval (PAH) [Certificate] FAA Form 8130-3(*1) [Issuer] FAA or representatives authorized by the FAA
Europe (EASA) (NOTE) Including	Newly manufactured components	[Certificate] EASA Form 1(*1) [Issuer] EASA-approved production organization

Iceland, Norway and Switzerland which are not members of the European Union.		(Production Organization Approval: POA)
Canada (TCCA)	Newly manufactured components	[Certificate] TCCA Form One(*1) [Issuer] TCCA- approved production organization
Brazil (ANAC)	Newly manufactured component (including Newly Overhauled components)	[Certificate] ANAC Form SEGV00 003(*1) [Issuer] ANAC- approved production organization
UK (CAA)	Newly manufactured components	[Certificate] CAA Form 1(*1) [Issuer] CAA- approved production organization (POA)
Russia (FATA)	Newly manufactured components ※Limited to those to be installed in Kamov Ka-32A11BC aircraft	[Certificate] FATA E-02(*1) [Issuer] Russian FATA-approved production organization

*1 Limited to cases where conformity with approved design data and proof of safe operation have been confirmed. For example, in the case of FAA Form 8130-3 and EASA Form 1, necessary information shall be stated in Block 13, and it shall be stated that “Approved design data and are in a condition for safe operations” in Block 13a. For prototype components etc. in the United States (including prepositioned article), this section applies if all of the following conditions are met.

-The form has been issued, based on the applicable regulations (FAA Order 8130.21 etc.) in effect when the form was issued

-After obtaining Type Certificate or Supplemental Type Design Approval, it is confirmed that the components etc. conforms to the approved design data and that they can be operated in safe condition

*2 For Form 8130-3, confirming the PAH number written in Block4 (issuer of the tag), it can be recognized that the tag was issued by the PAH. For Direct Shipment Authorization, this would be indicated in Remarks column of Block12.

*3 In accordance with the Bilateral Aviation Safety Agreement with the U.S. in the area of airworthiness, the rebuilt components etc. that can be accepted as newly manufactured components are only the engines rebuilt by the engine manufacturer. Any other rebuilt components, etc. shall be treated as repaired components. Refer to Circular No.7-001 "Bilateral Agreements or Equivalent Arrangements on Aviation Safety with Foreign Countries" for details of handling of rebuilt components.

(2) Repaired or Altered Components

Components etc. listed in the following table fall under this paragraph.

In terms of the bilateral agreement etc. for maintenance with Canada, Singapore and Australia if an organization (including satellites) is located in a country (a third country) other than the contracting state, components etc. of which airworthiness was confirmed by the organization cannot be accepted, even the organization has been approved by the contracting state. For this reason, it should be kept in mind that the organization is required to obtain an organization approval of Japan.]

Parties to a bilateral agreement etc.	Applicable components etc.	Certificates, etc.
Canada (TCCA)	Repaired or altered components	[Certificate]

	(including overhauled components)	TCCA Form One [Issuer] An organization located in Canadian territory who has been approved by TCCA (limited to components whose airworthiness has been confirmed after the date of approval for JCAB Supplement by TCCA)(*1)
Singapore (CAAS)	Repaired or altered components (including overhauled components)	[Certificate] CAAS Form(AW) 95 [Issuer] An organization located in the territory of Singapore who has been approved by CAAS (limited to components whose airworthiness has been confirmed after the date of approval for Maintenance Organization Exposition or appropriate Supplement by CAAS)(*2)
Russia (FATA)	Repaired or altered components (including overhauled components) * Limited to those to be installed in Kamov Ka-32A11BC aircraft	[Certificate] FATA E-02 [Issuer] FATA-approved organization
Australia (CASA)	Repaired or altered components (including overhauled components)	[Certificate] CASA Form 1 [Issuer] An organization located in the territory of Australia who has been approved by CASA (limited to components whose airworthiness has been confirmed after the date of approval for appropriate Supplement by CASA)(*3)

(NOTE) In addition to the foreign aviation authorities listed in the table, Japan is discussing or will discuss the conclusion of the bilateral aviation safety agreements for maintenance etc. with the United States (FAA), Europe (EASA. Iceland, Norway, and Switzerland which are not members of the European Union are included.), and the United Kingdom (CAA). As soon as the bilateral agreement etc. is concluded, it will be stated in the table. Until the conclusion of the

agreement, the Supplementary Provisions of this Circular should be referred to for the handling.

*1 The name of the Approved Maintenance Organization for Aircraft parts which has been approved by TCCA of Canada and also which was approved as satisfying the JCAB special requirements and the date of approval are available on

<https://wwwapps.tc.gc.ca/saf-sec-sur/2/CAS-SAC/aooh.aspx?lang=eng&lang=eng> based on the Technical Arrangement for Maintenance between the Civil Aviation Bureau, Ministry of Land, Infrastructure, Transport and Tourism of Japan and Transport Canada Civil Aviation (Technical Arrangement for Maintenance: TA-M).

*2 The name of the Approved Maintenance Organization for Aircraft parts which has been approved by Singapore CAAS and also which was approved as satisfying the requirements of Appendix 1 of the Technical Arrangements with Singapore and the date of approval are available on the website

<https://www.caas.gov.sg/operations-safety/aircraft/maintenance-repair-overhaul> based on the "Technical Arrangements on Aviation Maintenance between the Civil Aviation Authority of Singapore and the Civil Aviation Bureau, the Ministry of Land, Infrastructure, Transport and Tourism of Japan" (Technical Arrangement on Aviation Maintenance: TA-M). In the remarks column of CAAS Form (AW) 95 issued by the above Approved Maintenance Organization for Aircraft parts, the statement of "Released under the terms of the CAAS and JCAB TA-M" is written based on the CAAS AC 145-13.

*3 The name of the Approved Maintenance Organizations for Aircraft parts which has been approved by Australia CASA, and also which was approved as satisfying the requirements of Appendix 1 of the Technical Arrangements with Australia and the date of approval are available in AC145-06 on CASA website

(<https://www.casa.gov.au/search-centre/rules/part-145-casr-continuing-airworthiness-approved-maintenance-organisations>) based on the "Technical Arrangements on Aviation Maintenance between the Civil Aviation Safety Authority and the Civil Aviation Bureau, the Ministry of Land, Infrastructure, Transport and Tourism of Japan" (Technical Arrangement on Aviation Maintenance: TA-M)". In the remarks column of CASA Form 1 issued by the above Approved Maintenance Organization for Aircraft parts, the statement of "Released under the provisions of the TA-M between JCAB and CASA " is written based on the CASA AC 145-06.

5-4 Parts that conform to the standardized specifications (Standard Parts) (Article 23-19, item (iii) of the CAR)

- (1) Any user of aircraft may equip aircraft with parts manufactured in accordance with 1-502 (22)

specifications (including requirements for design, manufacturing and identification of the uniformity) approved by industry, Japan Civil Aviation Bureau, foreign aviation authorities, or other governmental organizations (hereinafter referred to as "Standard Parts"). The specifications for Standards Parts shall meet all of the following requirements.

- (a) All information required to manufacture the parts and to confirm the conformity to the specifications must be included.
- (b) The specifications have been published to enable any person to manufacture the parts.

Examples of specifications that meet the above criteria include the following. The specifications that fall under the standard Parts may also be indicated in the parts catalogues etc. issued by the designer of airplane.

- Japanese Industrial Standards (JIS)
- National Aerospace Standards (NAS)
- Army-Navy Aeronautical Standard (AN)
- Society of Automotive Engineers (SAE)
- SAE Sematec
- Joint Electron Device Engineering Council
- Joint Electron Tube Engineering Council
- American National Standards Institute (ANSI)
- EN Specifications
- Aerospace Standard (AS)
- Military Standard (MS)
- Semitec
- American Electronics Association
- DIN LN

Parts of which specifications are established by the holder of aircraft design certificate shall not fall under the Standard Parts except in the following cases.

- i) The specifications of parts are confirmed to conform to the above specifications by the information (Cross Reference) provided by the holder of aircraft design certificate or by the inquiries to the holder of aircraft design certificate.
- ii) The authority of State of Design and Manufacture acknowledges that the requirements of this paragraph have been met.

In Europe, it may be treated as Standard Parts if parts of which specifications designated by the holder of aircraft design certificate in Europe are approved as standard parts (parts that satisfy the

requirements of this paragraph) by EASA.

For example, parts may be treated as Standard Parts if it is shown in a standard parts manual etc. issued by the designer of aircraft with the approval of EASA that parts meet all of the requirements of (a) and (b) above and are designated as standard parts, or if the specifications that meet all of the requirements (a) and (b) above are specified in the Parts Catalog and parts which conform to the specifications are designated as Standard Parts by the designer of aircraft in Europe. If it is unclear whether these requirements are met or not, make an inquiry to the holder of aircraft design certificate.

In the United States, parts of which specifications are originally specified by the holder of aircraft design certificate, do not fall under the Standard Parts. However, parts conforming to FAA TSO-C148 (fasteners), TSO-C149 (bearings) and TSO-C150 (seals) are treated as Standard Parts in this section, considering the treatment of other countries.

(2) Authorized Release Certificates or any certificates of foreign country recognized as equivalent would not be attached to the Standard Parts. Therefore, the user of aircraft shall confirm that those are Standard Parts which conform to the specifications specified by the holder of aircraft design certificate by confirming the following items when obtaining the Standard Parts. In principle, it is necessary to confirm these items with the C of C issued by the manufacturer, but these items may also be confirmed with other certificates issued by the manufacturer.

- Specifications applied to the parts

- Conformity to the specifications (e.g., C of C. Serviceable tags when it is confirmed that those tags have traceability for their certificates.)

- Batch number (if attached), etc.

As it is absolutely unavailable to obtain certificate that indicates conformity to the standards for unavoidable reasons, such as for parts described as "local supply" in parts catalogs and maintenance manuals (e.g. Clock battery) whose certificate stating conformity to standards is not available when procuring them in Japan, it is necessary to confirm that parts meet the standards specified by the holder of aircraft design certificate and the manufacturer of the parts by checking the markings or the packaging of the parts.

(3) In principle, the C of C the manufacturer issues for standard parts must be the original. On the other hand, for standard parts, there are some cases where it may be difficult to obtain the

originals of C of C because more than one part is manufactured at once. In such cases, notwithstanding the provisions of 5-1-3, a copy of the original document is permitted to use for confirmation of paragraph (2) only if the following requirements are met.

(a) The characters on the C of C must be clear and not distorted or faded.

(b) Aircraft users inquire with the manufacturer if there is any doubt about the reliability or authenticity of the C of C. In addition, aircraft users need to obtain documents which include contact information of manufacturer so that inquiries can be made.

5-5 Other Components etc. specified by the Minister of Land, Infrastructure, Transport and Tourism (Article 23-19, item (4) of the CAR)

In addition to components etc. listed in the preceding paragraph, aircraft users may equip aircraft with the following components etc.

5-5-1 Components etc. designed for commercial use that are found to have no safety impact

(1) Components etc. designed for commercial use that are found to have no safety impact (hereinafter referred to as "commercial parts") are components etc. that meet all of the following requirements.

(a) Components etc. that are not specially designed or manufactured for use as components etc. for aircraft

(b) Components etc. that do not affect the safety of the flight of aircraft.

(c) Components etc. that are manufactured in accordance with the specifications specified by the manufacturer and appropriately labeled by the manufacturer, etc.

(2) Refer to Circular No.1-503 "Designation Guideline for Components, etc. Designed for Commercial Use, Military or R&D Purposes" for detailed requirements of (1) and procedures for designation as commercial parts.

(3) The user of aircraft may determine whether components etc. are designated as commercial parts by referring to the list of commercial parts in Document for Maintenance Procedure or List of Design Change Inspection prepared in the application for Approval for Supplemental Type Design, Inspection for Repair and Alteration, etc.

(4) Components etc. designated as commercial parts would not be accompanied by Authorized Release Certificates or any certificates of foreign country recognized as equivalent. Therefore, the user of aircraft shall confirm that components etc. fall under commercial parts listed in the list of commercial parts by confirming the following items when obtaining the components etc. In principle, it is necessary to confirm these items with the C of C issued by the manufacturer or the

person who performs the work, but these items may also be confirmed with other certificates issued by the manufacturer or the person who performs the work.

- the manufacturer
- Conformity to specifications (C of C etc.)
- Batch number (if attached) etc.

(5) In design changes approved by foreign authorities (including representative authorized by foreign authorities; hereinafter the same shall apply in this section) or design changes approved by organizations who obtained approval from foreign authorities, which are acceptable based on bilateral agreements, there are some cases where the approval holder of the design change designates commercial parts, etc. in ICA (Instructions for Continued Airworthiness), or creates a Commercial Parts List.

In this case, if either of the following (a) or (b) applies, the commercial parts, etc. designated in the ICA or the components etc. listed in the Commercial Parts List in the ICA may be treated as the components etc. designated as the Commercial Parts under the provisions of this section.

(a) When a foreign authority approves design changes, etc., including the Commercial Parts List the holder of design approval creates or the Commercial Parts etc. the holder of design approval designates

(b) When an organization who has been approved by a foreign authority (e.g., Design Organizations Approvals (DOA) approved by EASA) designates Commercial Parts, etc., and approves design changes, etc., based on the approval of the foreign authority.

In the United States, only the above case (a) is applicable because the Commercial Parts List must be approved by the FAA. In Europe, both cases (a) and (b) are applicable. In Europe, component etc. other than Commercial Parts may be designated in the ICA if component etc. whose malfunction does not affect the flight safety of the aircraft. In this case, these components shall also be treated as component etc. designated as Commercial Parts under the provisions of this section.

Examples of design changes that can be accepted based on bilateral agreements, etc. are as follows. For details, refer to Circular No.7-001 "Bilateral Agreements or Equivalent Arrangements on Aviation Safety with Foreign Countries".

(Example)

- Non-significant STCs and minor changes approved by EASA
- Minor changes approved by DOA of EASA
- Minor changes approved by FAA

5-5-2 Components etc. fabricated, preserved, repaired or altered as part of maintenance or alteration of the aircraft.

5-5-2-1 Parts fabricated by aircraft users as part of maintenance and alteration of aircraft in accordance with the instructions of aircraft designers.

These are parts fabricated by aircraft users (including the maintenance organization who is entrusted with maintenance of aircraft by an aircraft user, if the maintenance of the aircraft is outsourced) as part of maintenance and alteration of aircraft in accordance with instructions which are included in the Maintenance Manual (AMMs, SRMs), SBs, design drawings, etc. issued by the designer of aircraft.

This section shall also include parts of which fabricating methods are not specified in the AMMs or SRMs and fabricated as part of maintenance and alteration after having authorization from the designer of aircraft by contacting them individually.

Examples of the fabrication of parts in this section are works that make them attachable to aircraft after processing materials, as follows.

(Examples)

- Fabrication of doublers and tubes for structural repairs
- Fabrication of bushings, sleeves or shims
- Fabrication of structural members of the secondary structure of aircraft
- Preparation of control cable (e.g. cutting to specified length)
- Fabrication of electrical cable sheathing
- Fabrication of parts for which Local Manufacturing is allowed in the parts catalog

When parts in this section are manufactured, it shall be performed in accordance with the following. In addition, the parts shall be installed in aircraft after the aircraft users (including the maintenance organization who is entrusted with maintenance of aircraft by an aircraft user, if the maintenance of the aircraft is outsourced) properly performed the work and confirmed the conformity to the airworthiness standards by themselves.

- (1) To properly fabricate the parts in accordance with the maintenance manual (AMMs, SRMs), SBs, design drawings, etc. issued by the designer of aircraft.
- (2) Parts shall be fabricated by qualified maintenance technicians or by Approved Maintenance Organization for Aircraft (including cases where it is fabricated by a contractor under the quality control system and contractor control of the Approved Maintenance Organization for Aircraft) or by a maintenance mechanic appointed as a person with appropriate skill, qualifications, experience, etc. based on their approved Maintenance

Manuals or their approved maintenance standards (limited to air carriers or an aerial work service operator).

(3) In cases where parts are fabricated as part of major repairs or alterations, approval for the design of the work shall be obtained from the national government (approval for change of Type Design, approval for Supplemental Type Design or Repair and Alteration Design Approval) or from a foreign authority (including representatives) acceptable under bilateral aviation safety agreements etc. or from an organization who has obtained approval for the capability of design from the authority.

(4) No parts fabricated shall be installed in any aircraft other than those owned or operated by the user of aircraft. It also shall not be assigned to others.

(5) Records Control and creation of in-house passing certificate pertaining to the fabrication of parts

After parts has been fabricated, documents (in-house passing certificate etc.) containing at least the following items shall be prepared and attached to the components etc. or such documents shall be properly retained in order to indicate that the said works have been properly carried out and that the parts are capable to be installed in aircraft. Instead of making in-house passing certificate, to describe following items in a maintenance record is permitted.

(a) Date of parts fabrication

(b) Type, parts number, etc. of parts fabricated (limited to cases where said number exists for parts number)

(c) Signature or seal of a qualified maintenance technician etc. who has confirmed the airworthiness of the parts (signet etc. are acceptable because the purpose is to identify the person who has confirmed the airworthiness).

In principle, the person who confirms the airworthiness shall be a qualified maintenance technician of the aircraft concerned or a certifying staff of an Approved Maintenance Organization for Aircraft. In the case of an air carrier or an aerial work service operator, it includes maintenance technician who is appointed as persons with appropriate skills, qualifications, experience, etc. based on their approved Maintenance Manuals or their approved maintenance standards, and in the case of an Approved Maintenance Organization for Aircraft, it includes maintenance technician who is appointed as persons with appropriate skills, qualifications, experience, etc. based on their approved organization exposition.

(6) When storing fabricated parts, those parts shall be stored in appropriate way that does not cause deterioration of quality and function or any damage to parts.

(7) When fabricated parts are installed in aircraft, it shall be inspected if Inspection for Repair and Alteration is required or confirmed in accordance with Article 19-2 of the CAA according to the Category of Work for Maintenance and Alteration.

(8) Items etc. to be confirmed when being installed in aircraft

When fabricated parts is to be attached to aircraft, the following procedures shall be applied.

(a) Confirm the airworthiness of parts by documents check etc.

(b) The following matters shall be entered in the aircraft flight logbook (which may be substituted for the maintenance record):

i) Date of installation

ii) Type, parts number, etc. of the parts (with regard to parts number, limited to cases where said number exists)

iii) Control number of the document that was created to manage the attached parts

(c) Change components list etc., of the relevant aircraft as needed to appropriately manage the components etc. of the aircraft.

(9) For users of aircraft to whom the Maintenance Manuals (including the Maintenance Manuals approved pursuant to the provisions of Article 14-2 of the CAA; the same shall apply hereinafter) or the maintenance standards are applied, the fabrication methods and management measures for the parts pursuant to this paragraph shall be stipulated in the Maintenance Manuals or the maintenance standards (including appendixes, respectively; the same shall apply hereinafter).

5-5-2-2 Components etc. preserved, repaired or altered by aircraft users as part of maintenance or alteration of the aircraft in accordance with the maintenance manuals etc. issued by the aircraft designer

These are components etc. appropriately preserved, repaired or altered by aircraft users (including the maintenance organization who is entrusted with maintenance of aircraft by an aircraft user, if the maintenance of the aircraft is outsourced) as part of maintenance and alteration of the aircraft based on the maintenance manuals (AMMs, SRMs), SBs, etc.

(including CMMs called from these technical documents) issued by the aircraft designer. For example, components etc. repaired by themselves to deal with following situations fall under

this section. In addition to repairs etc. to components etc. unloaded from aircraft, repairs etc. to items held as spare parts are also included. However, in cases where maintenance is outsourced, only the spare parts owned by the aircraft user are included, and the spare parts of the outsourced maintenance company are not included.

(Examples)

- Dealing with defects
- Dealing based on TCDs, SBs, etc.

When components etc. are to be repaired in accordance with this section, it shall be performed in accordance with the following. In addition, the aircraft shall be equipped with the components etc. after having been properly worked by the aircraft user (including the maintenance organization who is entrusted with maintenance of aircraft by an aircraft user, if the maintenance of the aircraft is outsourced) and having confirmed the conformity to the airworthiness standards by themselves.

In addition, when the maintenance work for components etc. or spare parts removed from the aircraft is correspond to minor preservation, the said components etc. may be installed on the aircraft, regardless of the provisions of this section.

- (1) Preservation (excluding minor preservation. The same shall apply in 5-5-2-2 below), repair or alteration shall be made in accordance with the maintenance manual (AMMs, SRMs), SBs (including CMMs called from these technical documents), etc. issued by the designer of the aircraft, maintenance methods (circulars, TCDs) designated by the Japan Civil Aviation Bureau, etc.
- (2) Confirm that components etc. have been unloaded from aircraft with a valid airworthiness certification (except for repairs, etc. of spare parts). However, when all of the following requirements are met, components etc. removed from an aircraft whose airworthiness certificate has temporarily expired may be used.
 - (a) Components etc. removed for maintenance of the aircraft prior to inspection for airworthiness certificate.
 - (b) At the time of removal of the components etc. from the aircraft, the application for an airworthiness certification inspection of that aircraft has been filed.
 - (c) Do not store the components etc. that has been preserved, repaired or altered, and reinstall them on the unloaded aircraft.
- (3) Preservation, repair or alteration of components etc. shall be carried out by an appropriately qualified maintenance technician, by an Approved Maintenance Organization

for Aircraft corresponding to the Category of Work or by a maintenance mechanic appointed as a person with appropriate skill, qualifications, experience, etc. based on their approved Maintenance Manuals or their approved maintenance standards (limited to air carriers or an aerial work service operator).

(4) In cases where the repair or alteration of components etc. is carried out as part of a major repair or alteration, the design of the work shall be approved by the national government (approval for type design changes, approval for Supplemental Type Design or Repair and Alteration Design Approval), or a foreign authority (including representatives) acceptable under bilateral aviation safety agreements etc. or an organization who has obtained approval for the capability of design from the said authority.

(5) While components etc. are being preserved, repaired or altered, clearly indicate that the said components etc. cannot be installed in aircraft by attaching a document stating thereof to components etc.

(6) Creation of in-house passing certificate and record-keeping of preservation, repair or alteration of components etc.

After preservation, repairs or alterations, documents (in-house passing certificate etc.) containing at least the following items shall be prepared and attached to components etc. or such documents shall be properly retained in order to indicate that works were properly performed and components etc. are capable of being installed in aircraft (in the case of repair or alteration for spare parts, items (a) and (b) are excluded). Instead of making in-house passing certificate, it is permitted to describe following items in a maintenance record.

- (a) Information on the aircraft of which components etc. were unloaded (nationality, registration mark, etc.)
- (b) Date of unloading
- (c) The type, parts number and serial number of the unloaded components etc. (limited to cases where the serial number exists)
- (d) Total hours of use (hours, days, cycles) of components etc. (limited to components etc. with life limit. Those information may be managed by computers etc.)
- (e) Description of defects of components etc. (limited to repairs)
- (f) The date on which the components etc. is preserved, repaired, or altered.
- (g) Contents of preservation, repairs or alterations made to components etc.
- (h) Referred technical materials (AMMs, SRMs, SBs, etc.) used for the preservation, repair or alteration work
- (i) Signature or seal of a qualified maintenance technician etc. who has confirmed the

airworthiness of components etc. (signature etc. may be acceptable because the purpose is to identify the person who has confirmed the airworthiness).

In principle, the person who confirms the airworthiness shall be a qualified maintenance technician of the aircraft concerned or a certifying staff of an Approved Maintenance Organization for Aircraft. In the case of an air carrier or an aerial work service operator, it includes maintenance mechanic who is appointed as persons with appropriate skills, qualifications, experience, etc. based on their approved Maintenance Manuals or their approved maintenance standards. And in the case of an Approved Maintenance Organization for Aircraft, it includes maintenance mechanic who is appointed as persons with appropriate skills, qualifications, experience, etc. based on the approved organization exposition.

(j) Document control number (for the purpose of ensuring traceability)

(7) When the preserved, repaired or altered components etc. are stored, they should be stored appropriately in a method that does not cause deterioration in quality or function, or damage.

(8) Entry etc. of aircraft flight logbook for aircraft of which components etc. were unloaded

Of the above (6), the matters listed in (b) to (e) shall be entered in the aircraft flight logbook for aircraft of which components etc. were unloaded (which may be substituted for the maintenance record) (excluding repairs, etc. for spare parts). In addition, components list of the aircraft concerned shall be revised and components etc. of the aircraft shall be appropriately managed as necessary.

(9) No preserved, repaired or altered components etc. shall be installed in any aircraft other than the following: They also shall not be assigned to others.

(a) Aircraft which the said components etc. were unloaded

(b) Other aircraft subject to the same Maintenance Manuals or maintenance standards as the aircraft from which the components etc. was removed

(c) Other aircraft owned by the user of the aircraft (limited to aircraft the same maintenance organization manages)

(d) Aircraft to which the same maintenance manuals as those of unloaded aircraft are applied under the entrusting/entrusted operational control for maintenance work pursuant to the provisions of Article 113-2 of the CAA.

(e) In the case that repairs, etc., are carried out on spare parts that have been stored and not installed on the aircraft after aircraft users obtain, the aircraft owned by the aircraft user (limited to aircraft the same maintenance organization manages)

(10) When repaired or altered components etc. are installed in aircraft, it shall be inspected if Inspection for Repair and Alteration is required or be confirmed in accordance with Article 19-2 of the CAA, according to the Category of Work for Maintenance and Alteration.

(11) Items etc. to be confirmed when being installed in aircraft, etc.

When preserved, repaired or altered components etc. are to be installed in aircraft, the following procedures shall be followed.

(a) Confirm the airworthiness of components etc. by confirming the documents etc.

(b) The following matters shall be entered in the aircraft flight logbook (which may be substituted for the maintenance record) (excluding the items (i) when installing spare parts that have been repaired, etc., in accordance with this section on the aircraft):

i) Information on the aircraft of which components etc. were unloaded (nationality, registration mark, etc.)

ii) Date of installation

iii) The type, parts number and serial number of installed components etc. (limited to cases where the serial number exists);

iv) Total hours of use (hours, days, cycles) of components etc. (limited to components etc. with life limit. Those information may be managed by computers etc.)

v) Control number of the document that was prepared to manage the installed components etc.

(c) Change components list etc., of the aircraft concerned and properly manage components etc. of the aircraft as necessary.

(d) For components etc. of which maintenance interval are specified as maintenance items, the interval until the next maintenance may change as a result of replacement. For this reason, appropriate management shall be implemented, such as updating the interval until the next maintenance on the aircraft to which the components etc. are installed, so as not to exceed the specified interval.

(12) For aircraft users to whom Maintenance Manuals or maintenance standards are applied, the procedures of preservation, repair or alteration and management measures for components etc. pursuant to this paragraph shall be stipulated in the Maintenance Manuals or maintenance standards.

5-5-3 Components etc. fabricated by aircraft users to whom the Maintenance Manuals or maintenance standards are applied.

(1) The fabrication of components etc. by aircraft users shall, in principle, be made in
1-502 (33)

accordance with the maintenance manuals (AMMs, SRMs), SBs, design drawings, etc. issued by the designer and manufacturer of the aircraft, provided that the fabrication of components etc. is instructed as part of the maintenance of the aircraft. In this case, the parts shall be properly fabricated in accordance with 5-5-2-1.

(2) This section describes on components etc. fabricated, other than methods described in 5-5-2-1, by users of aircraft who are subject to the Maintenance Manuals or maintenance standards for the purpose to repair or alter aircraft that they own or operates in accordance with the approved Maintenance Manuals or maintenance standards. This section also applies in cases where if maintenance management is entrusted pursuant to the provisions of Article 113-2 of the CAR, the trustee of maintenance management fabricates components etc. for the repair or alteration of aircraft, which settlor owns or operates, in accordance with the trustee's Maintenance Manual by a means other than that specified in 5-5-2-1.

For example, the following fabrications fall under the category of fabrication in this section.

(Examples)

- With regard to seat covers, carpets, and curtains, the materials specified by the designer of the aircraft shall be obtained and only the sewing work is contracted.
- With regard to decals, the materials specified by the designer of the aircraft shall be obtained, and the fabrication shall be performed only by contracting the cutting-off work.

(3) Any components etc. fabricated under this paragraph must be responsible for the quality of such components etc. by the aircraft users themselves. For this reason, the type of components etc. to be fabricated and the quality control standards for the relevant components etc. shall be stipulated in the Maintenance Manuals or the maintenance standards, and those Manuals shall be approved (in case of maintenance standards, submit to the competent authority for examination).

(4) Refer to Circular No.1-504 "Fabricating of Components etc. by Aircraft Users and its Approval Procedures" for detailed requirements for fabricating components etc. and procedures for approval of Maintenance Manuals or maintenance standards.

5-5-4 Components etc. designed for military use that are found to have no safety impact
Aircraft users may equip the aircraft with components etc. designed for military use, depending on the type of aircraft used

(1) Components etc. designed for military use that are found to have no safety impact (hereinafter referred to as "Military parts") are components etc. that meet all of the following requirements.

- (a) Components etc. shall be designed for military use.
 - (b) It has been confirmed that the safety of aircraft is ensured even when the said components etc. is installed in the aircraft.
 - (c) The components etc. shall be manufactured in accordance with the specifications specified by the manufacturer of components etc. and appropriately labeled by the manufacturer, etc.
- (2) Refer to Circular No.1-503 "Designation Guideline for Components, etc. Designed for Commercial Use, Military or R&D Purposes" for detailed requirements of (1) and procedures for designation as Military parts.
- (3) Aircraft users may determine whether components etc. have been designated as Military parts by referring to the list of Military parts in the Document for Maintenance Procedure or the List of Design Change Inspection prepared in the application for approval for Supplemental Type Design or Inspection for Repair and Alteration, etc.
- (4) Aircraft users shall confirm the following matters when they obtain the components etc. and confirm that those components etc. fall under the category of special components listed in the list of Military parts. While, in principle, it is necessary to confirm these items with the C of C issued by the manufacturer or the person/organization who performs the work, these items may also be confirmed with other certificates issued by the manufacturer or the person/organization who performs the work.
- Manufacturer
 - Conformity to specifications (C of C etc.)
 - Batch number (if attached) etc.

5-5-5 Components etc. designed for R&D that are found to have no safety impact

Aircraft users may equip the aircraft with components etc. designed for R&D.

- (1) Components etc. designed for R&D that are found to have no safety impact (hereinafter referred to as "R&D parts") are components etc. that meets all of the following requirements.
- (a) Components etc. shall be designed for R&D.
 - (b) It has been confirmed that the safety of aircraft is ensured even when the said components etc. are installed in the aircraft.
 - (c) The components etc. shall be manufactured in accordance with the specifications specified by the manufacturer of components etc. and appropriately labeled by the manufacturer, etc.
- (2) Refer to Circular No.1-503 "Designation Guideline for Components, etc.
1-502 (35)

Designed for Commercial Use, Military or R&D Purposes" for detailed requirements of (1) and procedures for designation as R&D parts.

(3) Aircraft users may determine whether components etc. have been designated as R&D parts by referring to the list of R&D parts in the Document for Maintenance Procedure or the List of Design Change Inspection prepared in the application for approval for Supplemental Type Design or Inspection for Repair and Alteration, etc.

(4) Aircraft users shall confirm the following matters when they obtain the components etc. and confirm that those components etc. fall under the category of R&D parts listed in the list of R&D parts. In principle, it is necessary to confirm these items with the C of C issued by the manufacturer or the person/organization who performs the work, but these items may also be confirmed with other certificates issued by the manufacturer or the person/organization who performs the work.

-Manufacture

-Conformity to specifications (C of C etc.)

-Batch number (if attached) etc.

5-5-6 Unit Load Device, such as cargo containers etc., and galley carts and standard units that have been confirmed to be safe.

Unit Load Device (hereinafter referred to as "ULD"), such as cargo containers, pallets, gallery carts and standard units may not be included in Type Certifications or approvals for Supplemental Type Design, but must have adequate fire resistance and strength. For this reason, those shall be handled as aircraft parts as follows.

(1) When accepting a newly manufactured or repaired ULD, gallery cart or standard units, confirm that it is accompanied by an Authorized Release Certificate, or a foreign certificate recognized as equivalent and install it in aircraft.

(2) When loading and unloading ULD, galley carts or standard units of (1), inspect the appearance to confirm that there are no damages, etc. In this case, Authorized Release Certificates or foreign certificates recognized as equivalent are not required.

5-5-7 Components etc. to be installed for the first time on an aircraft of the type concerned (in the case of inspection for repair and alteration, on the aircraft concerned) and not received Type or Specification Approval (including corresponding approval by foreign authorities that can be deemed to obtain Japanese Type or Specification Approval)

There are some cases where aircraft users apply for Supplemental Type Design Approval, Repair and Alteration Design Approval, and Inspection for Repair and Alteration to install the components etc. for the first time on the aircraft of that type (in the case of inspection for repair

and alteration, on the aircraft concerned) according to the type of the operation of their aircraft. In addition, such components etc. might be installed on aircraft for the first time, when the holder of Type Certificate of that type of aircraft or manufacturer, based on requests from aircraft users, apply for Type Design Changes for that type of aircraft. In this case, if the components etc. has Type or Specification Approval, or corresponding approval by a foreign authority (TSOA, PMA, ETSOA, etc.) that can be regarded as Type or Specification Approval (hereinafter referred to as "Type or Specification Approval, etc."), an Authorized Release Certificate or a foreign certificate recognized as equivalent is required. On the other hand, in the following cases, design approval for compatibility with aircraft would not be issued, when undergoing inspection for Supplemental Type Design Approval, Repair and Alteration Design Approval, Type Design Changes, or Inspection for Repair and Alteration.

(a) Applying for Supplemental Type Design Approval, Repair and Alteration Design Approval, or Type Design Change for component etc. that doesn't have Type or Specification Approval, etc. in order to install the component etc. on the aircraft of the type concerned for the first time, or

(b) Applying for an inspection for repair or alteration for component etc. that doesn't have type or specification approval, etc. or Supplemental Type Design Approval, etc., in order to install the component etc. on the aircraft concerned for the first time

For this reason, prior to undergoing the inspection, the holder of design approval or manufacturer pertaining to the Supplemental Type Design Approval or Repair and Alteration Design Approval, the holder of design approval or manufacturer of the aircraft, or the holder of design approval or manufacturer of the component etc. is not capable of issuing an Authorized Release Certificate or foreign certificate recognized as equivalent.

In this case, components etc. of the test model to be installed on the aircraft falls under this section.

The components etc. in this section shall be installed on the aircraft in accordance with the following. The FAA and EASA has been treated these components as prototype components etc. and FAA Form 8130-3 or EASA Form1 states "Prototype" in "status/work" column of Block 11 and states "Non-approved design data specified in Block 12" in Block 13a.

(1) Make sure that the certificate such as C of C the manufacturer issues is attached.

(2) Receive confirmation by the Civil Aviation Bureau that the component etc. to be installed in the inspection pertaining to Supplemental Type Design Approval, Repair or Alteration Design Approval, or Type Design Change, or Inspection for Repair and Alteration conforms to the design pertaining to the application for the said inspection.

5-5-8 Components, etc. installed in aircraft experimentally to conduct assessments in normal operations prior to obtaining of the approval for design change of the Type Certificate or change of the Supplemental Type Design, etc. (service trial)

Aircraft used by specified Japanese air carriers (Article 240, paragraph (1), item (ii) of the CAR) may be equipped with components etc. other than components etc. manufactured based on design approved by the national government in order to improve their safety, convenience, and economics. This section describes on components etc. which are installed in aircraft experimentally for evaluation (practical evaluation) in normal operation prior to the approval of the design change of the Type Certificate or change of Supplemental Type Design and are used limitedly (service trial).

When the said components etc. are installed in aircraft, the following shall be observed:

(1) Applicable cases

This section applies to limited use by the following air carriers:

- (a) Specified Japanese air carrier
- (b) Any air carrier other than those mentioned in (a) above who has obtained a license under Article 100, paragraph (1) of the CAA prior to the enforcement of the Act for Partial Revision of the CAA (Act No. 72 of June 11, 1999).

This section cannot be applied when it is not necessary to carry out a practical evaluation by installing the components on a trial basis.

(2) Development of plans and monitoring programs

Any air carrier intending to make limited use of components etc. shall, in advance, prepare a monitoring program for conducting a practical assessment based on a plan for said limited use and a quality control system pertaining to safety, and obtain the approval of the Director of the Air Transport Safety Unit (or Chief Air carrier Airworthiness Engineer in the case of a Regional Civil Aviation Bureau). In this case, the air carrier concerned shall attach a control number to each plan of limited use based on this Circular in order to contribute to the management of the status of limited use.

(3) Requirements for limited use

Limited use of components etc. shall meet the following requirements:

- (a) Limited use shall meet the purpose of this paragraph.
- (b) Even in the event that a defect that is expected to occur in components etc. concerned occurs, there is no fear that the safe operation of the aircraft will be hindered.

(4) Requirements for components etc.

Components etc. shall have adequate strength, structure and performance in light of its functions to be performed and shall not adversely affect other parts of the aircraft to be

installed. For this reason, components etc. shall satisfy any of the following requirements. In addition, confirm the certificate such as C of C when receiving the components etc.:

(a) Procedures for design change of Type Certificate (Article 13, Paragraph (1) of the CAA), change of Supplemental Type Design (Article 13-2, Paragraph (1) of the CAA) or repair and alteration design (Article 18, Paragraph (1) of the CAA) have been commenced and substantive examination of components etc. (excluding those related to practical assessment for the purpose of the said limited use) has been completed. Provided, however, that in the case of aircraft stipulated in Article 10 paragraph (5) item (ii) of the CAA, the aviation authority of the State of Design and Manufacture shall have approved or performed other acts in regard to the relevant components etc. In the case of aircraft for which Type Certification has been granted pursuant to the provisions of Article 18 paragraph (2) item (i) or paragraph (3) of the CAR, the aeronautical authorities of the State of Design and Manufacture shall have approved or performed other acts in regard to the relevant components etc.

(b) When components etc. designed and manufactured in our country are installed and used limitedly, the type approval/specification approval or equivalent procedures have been completed with regard to the said components etc.

(5) Procedures for installation

Any air carrier shall, when installing components etc. in aircraft, undergo an examination for the conformity (excluding, however, an examination for the practical assessment for the purpose of said limited use), and shall be subject to an inspection for repair and alteration or confirmation by Approved Maintenance Organization in accordance with the content thereof.

(6) Reporting

Upon completion of the monitoring program as described in (2) above, components etc. concerned shall be unloaded from the aircraft and the results of the practical evaluation shall be reported to the authorities.

5-5-9 Other components etc. deemed to have equivalent safety as those required in 5-5-1 to 5-5-8.

Those are components etc. other than components etc. listed in 5-5-1 to 5-5-8, which are considered to be sufficiently safe by proper certification, proper control, etc. other than Authorized Release Certificates or foreign country certificates deemed equivalent thereto, taking into account the kind and characteristics of components etc. and the effect on safety of the aircraft. Components etc. that meet all of the following criteria fall within this section in principle, but components etc. which are considered safe by other equivalent methods when

some of the requirements are not applicable also fall within this section.

(1) Components etc. shall be installed in aircraft to which the Maintenance Manuals or maintenance standards are applied.

(2) The aircraft users shall specify the following matters in the Maintenance Manuals or the maintenance standards and submit them to the competent authority mentioned in (5) for approval (in case of maintenance standards, submit to the competent authority for examination):

(a) Name and kind of components etc.

It is also permitted to provide for in-house manuals (including management by computers etc.). In addition, if it is difficult to specify in advance, it may be stipulated promptly after the fact in the Maintenance Manuals, maintenance standards, or in-house manuals. It should be kept in mind that such components etc. are required to be managed appropriately under this section.

(b) Methods to ensure adequate safety, taking into account the kind and characteristics of components etc. and the effect on safety of the aircraft.

i) In the case of newly manufactured components, at least the following matters shall be stipulated.

a. Limited to consumable parts (parts (piece parts) that are replaced with new ones for each use). For example, bolts, nuts, washers, screws, etc. (excluding the standard parts in 5-4) are applicable.

b. Main reason why the aircraft must be equipped with the parts

ii) In the case of repaired components, at least the following matters shall be stipulated.

a. Replace the components etc. with other components etc. which are accompany by Authorized Release Certificates or foreign certificates recognized as equivalent within six months from the date of installation on the aircraft. However, this shall not apply to cases where it is difficult to obtain components etc. which are accompany by Authorized Release Certificates or foreign certificates recognized as equivalent due to discontinuation of manufacturing, etc.

b. Conduct on-site or documentary audits for components etc. suppliers, as appropriate. In particular, persons who supply components etc. with serviceable tags which have traceability to certificates such as FAA Form 8130-3, EASA Form 1 rather than certificates such as FAA Form 8130-3, EASA Form 1, should be checked by periodic auditing to ensure traceability.

c. Main reason why the aircraft must be equipped with components etc.

The following cases are assumed, but are not limited to these.

1. Cases where it is unavoidable to procure or lease components etc. (which are not accompanied by Authorized Release Certificates) owned by foreign air carriers or leasing companies due to unanticipated failures at the destination.

2. Cases where it is necessary to obtain components etc. (which are not accompanied by Authorized Release Certificates) that are already on the market due to discontinuation of manufacturing, etc.

(c) Certificate attached to components etc.

Stipulate the relevant certificates to be applied, such as C of C, FAA Form 8130-3 issued by organizations located outside the territory of the United States, and EASA Form 1 issued by organizations located outside the territory of the European Union.

(d) Matters listed in (3) and (4) below

(e) Management methods for components etc.

Stipulate management methods for components etc. that fall under this section separately from other components etc.

(f) Preparation of maintenance records regarding installation of components etc. in aircraft

In principle, the maintenance record shall be prepared in accordance with the following:

However, when other management methods are used to identify which aircraft was equipped with the components etc., such methods may be substituted for the preparation of maintenance records.

a. The matters listed in (4) (c) shall be stated. Attachment of certificates etc., containing the same information may be substituted.

b. Ensure traceability by attaching certificates of components etc., (C of C, FAA Form 8130-3, EASA Form 1, etc.) to maintenance records.

c. Maintenance records shall be kept in an organized manner so that they can be confirmed as necessary.

(g) Recording and Management of Defect Information, etc.

Recording and Management shall be performed for defects, etc., that occur during the acquisition of components etc. and operation of aircraft. Provided, however, that this shall not apply to cases in which it is not clear whether or not the relevant failure was caused by the relevant parts.

(h) List of components etc. suppliers

It is also permitted to stipulate in in-house manuals. In addition, if it is difficult to specify in advance, it may be stipulated promptly after the fact in the Maintenance Manuals, maintenance standards, or in-house manuals.

- (3) Matters to be confirmed when obtaining components etc.
- (a) A detailed visual inspection of components etc. shall be carried out to ensure that there is no cracking, strain, deformation, discoloration, corrosion, wear, breakage, indentation, separation of weld zones (if applicable), reduction in wall thickness of the joints (if applicable), or loosening of the fastening (if applicable).
 - (b) Ensure that certificates such as C of C, FAA Form 8130-3, EASA Form 1 (serviceable tags which are confirmed to have traceability with these certificates are also acceptable) are attached to components etc.
 - (c) Confirm that appropriate identification and labeling, including the following items, are provided through certificates, delivery slips, etc. of components etc.
 - a. The name, model, parts number, and serial number of components etc. (with respect to the serial number, limited to cases where said serial number exists);
 - b. Total hours of use (hours, days, cycles) of components etc. (limited to components etc. for which the life limit is specified)
 - (d) Confirm the following maintenance records, etc. concerning components etc.
 - a. Status of repair or alteration for components etc. (application status of SBs etc.)
 - b. Implementation status of TCDs, ADs, etc.
 - c. Other relevant maintenance records of components (records of rebuilt, overhaul, inspections, repairs, etc.)
- (4) Items to be Confirmed when components etc. are installed in aircraft
- (a) Inspect the appearance of components etc. to ensure that there are no problem.
 - (b) Perform functional inspections after equipping the aircraft and confirm that there are no problem as a result of such functional inspections (limited to those functional inspections are required).
 - (c) In principle, the following matters shall be entered in the aircraft flight logbook (which may be substituted for maintenance records): Provided, however, when other management methods are used to identify which aircraft was equipped with the components etc., such methods may be substituted for the preparation of maintenance records.
 - a. Date of installation
 - b. The type, parts number and serial number of components etc. to which it was installed (with respect to the serial number, only if such number exists);
 - c. Total hours of use (hours, days, cycles) of components etc. (limited to components etc. with life limit. That information may be managed by computers etc.)
- (5) The competent authority shall be as follows:

- (a) Air Carrier: Authority that approved the Maintenance Manuals
- (b) Aerial work service operator: Authority that examined the maintenance standards.
- (c) Private aircraft operators: Authority that have approved Maintenance Manuals

(6) Components etc. shall be appropriately managed in accordance with the provisions of this section because the status of the use of components etc. falling under this paragraph may be required to be reported at regular meetings for air carriers and at inspections for airworthiness certification for other aircraft users. In addition, it should be kept in mind that the users of aircraft equipped with the relevant components etc. may be requested to submit a report if the authority determines that there is a risk of safety issues with regard to components etc. in this section, in accordance with the provisions of Article 134 of the CAA.

5-5-10 Components etc. to re-use as good products

This section applies to components etc. that are temporarily unloaded from the aircraft and re-installed by the aircraft user, and to component parts that are unloaded from components etc. and re-installed. These components etc. and their component parts may be installed in aircraft if properly managed in accordance with this section.

In addition, when the components etc. are removed as part of maintenance work on the aircraft or as to search for defects of other components etc., the said component etc. may be reinstalled on the aircraft notwithstanding the provisions of this section except if it is found that the components etc. are not related to the malfunction and those are not stored. When aircraft users reuse components etc. and install the components etc. on an aircraft based on this section, that reuse shall be performed on the premise that the aircraft user shall confirm whether the components etc. removed from the aircraft have been damaged or not, manage records of them, and take responsibility of the airworthiness of the components etc. For this reason, in principle, when outsourcing maintenance work such as pre-airworthiness inspection or heavy maintenance to an approved maintenance organization, it is not possible to reinstall the components etc. that the maintenance organization has removed from the aircraft and checked for damage, etc. by applying the provisions of this section. However, if it falls under any of the following, components etc. may be installed on the aircraft.

- (a) When aircraft users confirm the absence of damage, etc. and manage records of the components etc. removed from the aircraft based on this section and properly maintains them, the aircraft users provide that components to maintenance organization and the maintenance organization install components etc. on the aircraft in accordance with 5-5-10-4.

(b) With instructions from the aircraft user, the Approved Maintenance and Alteration Organization for Aircraft manages and reuses the components etc. in accordance with the method specified in the Maintenance Manuals or maintenance standards of the aircraft user according to the provisions of "(6) Quality control system" in Part IV 3-1 of Circular No.2-001 and install the components etc. on the aircraft.

In addition, if the outsourced maintenance organization only unloads the components etc. from the aircraft, and after that, the aircraft user performs the required confirmation and record management, including confirmation of the absence of damage of the said components based on this section when unloading the said components, the said components can be reused as non-defective products because the aircraft user confirmed the airworthiness of the said components.

5-5-10-1 Components etc. to be unloaded in the course of searching for defects in aircraft
Any aircraft users may unload and temporarily store components etc. for the purpose of finding defects in the aircraft. These components etc. fall under this section.

Such components etc. shall be stored and managed in accordance with the following,
Notwithstanding the provisions of this section, aircraft may be equipped with components etc. that have been unloaded in connection with the search for defects in other components etc. or maintenance of aircraft and that are not related to defects in aircraft.

(1) Clearly indicate that the unloaded components etc. cannot be installed temporarily due to defect search by attaching a document stating that fact to components etc. and store them appropriately.

(2) Depending on whether or not the defect in the Aircraft is caused by a defect in the unloaded components etc. as a consequence of the search for defects in the Aircraft, the required measures shall be taken as follows:

(a) In the event it is confirmed that the cause of the failure of the aircraft is other than components etc. concerned and that the cause of the failure has not affected components etc. concerned.

Such components etc. may be treated as non-defective (referring to components etc. that can be re-installed in aircraft; hereinafter the same shall apply in this Circular). When it is used as non-defective components, it shall be appropriately managed in accordance with 5-5-10-4.

(b) In the event it is confirmed that the failure of the aircraft was caused by the failure of components

Such components etc. shall not be treated as non-defective. For this reason, clearly indicate that the aircraft cannot be equipped again by attaching a document stating that fact to components etc., etc., and perform repairs, etc. appropriately.

5-5-10-2 Components etc. to be unloaded from aircraft for other purposes.

Aircraft users may unload components etc. for purposes of time-management or parts control and store them as spare parts without repair or alteration to components etc. In addition, in accordance with Circular No.3-010 "Standards and Inspection of Altimeters and Static Pressure Systems" and Circular No.3-011 "Regular Inspection of Secondary Radar and Transponder Equipment," components etc. may be unloaded for inspection equivalent to preservation, and the inspection may be carried out by contractors, and the components etc. may be installed in aircraft or stored as spare parts after inspection.

Components etc. in these cases fall under this section. Components etc. may be treated as non-defective components when it is found that repair or alteration work is not necessary, after the appearance inspection is carried out after unloading or maintenance work and no damages etc. are confirmed.

When it is used as non-defective components, it shall be appropriately managed in accordance with 5-5-10-4.

5-5-10-3 Component parts to be unloaded from components etc.

Aircraft users may unload and utilize parts from components etc. of other aircraft or from components etc. stored as spare parts when there is no inventory of parts required for maintenance.

These component parts fall under this section.

Examples of component parts include the following.

(Examples)

- Fuel pumps, oil pumps, governors and gearboxes of engine or APU
- Link of landing gear assembly
- Cartridge in a fire bottle assembly
- Air filter in a valve assembly
- loudspeakers, oxygen generators in a Passenger Service Unit Panel

There are two main cases where component parts of components etc. are utilized.

- (1) In the case where component parts are unloaded from components etc. unloaded

from aircraft and are utilized

(2) In the case where component parts are unloaded from components etc. that are stored as spare parts which are accompanied by certificates such as Authorized Release Certificates etc.

The above cases shall be appropriately managed in accordance with (a) or (b) below, respectively.

(a) In the case of (1), the component parts may be treated as non-defective parts if the component parts are not the cause to unload components etc. from aircraft, and the components parts are inspected externally, damage, etc. are not confirmed, and maintenance work, etc. are deemed unnecessary.

When it is used as non-defective parts, it shall be appropriately managed in accordance with 5-5-10-4.

(b) In the case of (2), the airworthiness of component parts has been confirmed. Therefore, the component parts may be treated as non-defective parts.

When it is used as non-defective parts, it shall be appropriately managed in accordance with 5-5-10-4. The confirmations described in 5-5-10-4-(2) and (5) are not required because they are not unloaded from aircraft.

5-5-10-4 Requirements when they are managed and utilized as non-defective components

(1) Scope of aircraft that can be equipped with non-defective components

Aircraft users may, by properly managing components etc. unloaded from the aircraft in accordance with 5-5-10-1 or 5-5-10-2 as non-defective components, install them in the following aircraft:

Component parts unloaded in accordance with 5-5-10-3 may also be installed in the following aircraft by properly managing them as non-defective parts in accordance with this section.

Components etc. in this paragraph shall not be transferred to others.

(a) Aircraft which has unloaded the said components etc. or its component parts

(b) Other aircraft that the same Maintenance Manuals or maintenance standards had been applied as the aircraft from which the said components etc. or its component parts were removed.

(c) Other aircraft owned by the aircraft user (limited to aircraft for which same maintenance manager is responsible)

(d) Aircraft to which the same maintenance manuals as those of unloaded aircraft are applied under the entrusted/entrusting operational control of maintenance pursuant to the

provisions of Article 113-2 of the CAA.

(2) Items to be confirmed when unloading components etc.

When unloading components etc. (including its component parts; hereinafter the same shall apply in (2)) from aircraft, the aircraft user shall confirm at least the following matters:

- (a) Components etc. have been unloaded from aircraft with a valid airworthiness certification.
- (b) No defects, etc., affecting the safety of components etc. concerned have occurred while the components etc. are installed in the aircraft.
- (c) The compliance status for the airworthiness directives shall be appropriate.
(excluding cases in which compliance status is managed as aircraft)
- (d) Whether or not the required maintenance items for components etc. have been established and the status of implementation
- (e) The compliance status for SBs (excluding cases in which compliance status is managed as aircraft)
- (f) In components etc. where the life limits (hours, days or cycles) are specified, the said life limits shall not be exceeded.

(3) Additional items etc. to be confirmed when unloading the component parts

When unloading component parts from components etc., the following conditions shall be fulfilled in addition to the confirmation in (2).

- (a) The removal and installation of the component parts shall be clearly indicated in the maintenance manuals (AMMs, SRMs), SBs, etc. issued by the designer of the aircraft, and the removal and installation of the component parts by the aircraft user shall be permitted in those technical materials.
- (b) The work relating to the removal and installation of the component parts shall be categorized as minor repair or less.
- (c) Component parts that do not require special adjusting operations, function confirmation, etc. (excluding leaking check or confirmation work based on the self-diagnosis functions such as simple self-test functions, BITE functions, etc.) when the component parts are installed in the components etc. again.
- (d) If the component part is an engine accessory, confirmation by a test run on the test bed shall not be required after installing it in the engine body.
- (e) The component parts shall be identifiable by parts number, serial number, etc.(with respect to the serial number, limited to the case where said serial number exists)
- (f) When the component part of an engine or a propeller is removed or installed, enter

the required items (parts number, serial number, etc.) in the engine or propeller logbook as required in accordance with the provisions of Article 142, paragraph (2) of the CAR.

(g) Components etc. of which some component parts have been removed, shall be clearly indicated that it cannot be used for air navigation until it is equipped with the said component parts (limited to component parts with Authorized Release Certificates or foreign certificates deemed equivalent, or parts which are being managed as non-defective parts) by attaching a document to components etc., and stored appropriately. In addition, when components etc. equipped with the components parts are used as non-defective components, it shall be appropriately managed and utilized in accordance with this section.

(h) In order to properly maintain and manage the component parts, the maintenance records, etc. shall be prepared, and usage hours (TTs, TSOs, etc.) and the past maintenance records (including information on components etc. and aircraft equipped with the relevant component parts from the past to the present) shall be appropriately managed for each component part. (It is permitted to manage these matters by a computer, etc.)

(4) Record-keeping for unloaded components etc.

When unloaded components etc. (including its component parts; hereinafter the same shall apply in (4)) are used as non-defective components, documents containing at least the following matters shall be prepared and attached to the components etc. or such documents shall be appropriately retained in order to indicate that they are capable of being installed in aircraft.

Provided, however, that this shall not apply to the case where components etc. are unloaded for the purpose of finding defects, no defects are found, and the components etc. are re-installed in the same aircraft without being stored.

- (a) Information on aircraft of which components etc. were unloaded (nationality, registration mark, etc.)
- (b) Information on components etc. of which component parts were removed (model, parts number, serial number, etc.) (limited to cases where components parts are removed)
- (c) Date of unloading
- (d) Type, parts number and serial number of the unloaded components etc. (limited to cases where the serial number exists);
- (e) Total hours of use (hours, days, cycles) of components etc. (limited to components etc. of which life limits are specified. Management by computers etc. is acceptable.)

(f) Reasons for unloading

(g) Signature or seal of a qualified maintenance technician etc. who has confirmed the airworthiness of components etc. (signet etc. are acceptable because the purpose is to identify the person who has confirmed the airworthiness).

In principle, the person who confirms the airworthiness shall be a qualified maintenance technician of the aircraft concerned or a certifying staff of an Approved Maintenance and Alteration Organization for Aircraft. In the case of an air carrier or an aerial work service operator, it includes maintenance technician who is appointed as persons with appropriate skills, qualifications, experience, etc. based on the Maintenance Manuals or the maintenance standards.

(h) Document control number (for the purpose of ensuring traceability)

(5) Entry, etc. in the flight logbook of aircraft of which components etc. were unloaded Of the above (4), the matters listed in (c) to (f) shall be entered in the flight logbook of aircraft of which components etc. were unloaded (which may be substituted for the maintenance record). In addition, components listings of the aircraft concerned shall be amended as necessary and components etc. of the aircraft shall be appropriately managed.

(6) When storing components etc., store them appropriately in methods that do not cause deterioration in their quality/function or damage.

Components etc. requiring time control or shelf-life control should be managed individually for their usage and shelf-life.

(7) Items to be confirmed when installing component parts in components etc.

When component parts managed as non-defective parts are installed in components etc., follow the instructions below.

(a) Confirm by documents that the airworthiness of the component parts are confirmed.

(b) Confirm that no repairs or alterations have been made after removing the component parts.

(c) In the case of component parts in which life limits are specified, time management shall be appropriately carried out in components etc. where the component parts are installed.

(d) After installation of the component parts, components etc. shall be installed in aircraft in accordance with paragraph (8).

(8) Items to be confirmed when components etc. are installed in aircraft

When components etc. managed as non-defective components (including its component parts; hereinafter the same shall apply in (8)) are installed in aircraft, the following

procedures shall be followed.

When components etc. are installed in aircraft after component parts that are managed as non-defective parts have been installed in the components etc., the following procedures shall also be followed.

- (a) Confirm the airworthiness of components etc. by means of documents, etc.
- (b) Confirm that no repairs or alterations have been made after unloading the components etc.
- (c) The following matters shall be entered in the flight logbook (which may be substituted for the maintenance record):
 - a. Information on aircraft of which components etc. were unloaded (nationality, registration mark, etc.)
 - b. Date of installation
 - c. Type, parts number and serial number of components etc. installed (with respect to the serial number, only if such number exists);
 - d. Total hours of use (hours, days, cycles) of components etc. (limited to components etc. with life limit. Management by computers etc. is acceptable.)
 - e. Control number of the document that was created to manage the installed components etc.
- (d) Change components list etc., of the aircraft concerned as necessary and properly manage the components etc. of aircraft.
- (e) For components etc. of which maintenance interval are specified as maintenance items, the interval until the next maintenance may change as a result of replacement. For this reason, appropriate management shall be implemented, such as updating the interval until the next maintenance on the aircraft to which the components etc. are installed, so as not to exceed the specified interval.
- (9) For users of aircraft to whom Maintenance Manuals or maintenance standards are applied, the procedures for using non-defective components and the methods of control for non-defective components shall be stipulated in the Maintenance manuals or maintenance standards.

5-5-11 Components etc. unloaded from aircraft without a valid airworthiness certification and re-used

Aircraft users may re-use components etc. unloaded from aircraft without a valid airworthiness certification.

These components etc. fall under this section.

Components etc. can be broadly divided into the following two cases.

- (1) Components etc. unloaded from aircraft, etc., which are not planned to be used for air navigation
- (2) Components etc. unloaded from aircraft damaged by accidents/incidents

In each case, aircraft may be equipped with components etc. in accordance with the Airworthiness Manual (Doc 9760) issued by the International Civil Aviation Organization and by taking the required measures in accordance with (a) or (b) below.

- (a) When components etc. unloaded from aircraft, etc., which is not planned to be used for air navigation, is to be reused

For components etc. of aircraft that are not planned to be used for air navigation due to retirement etc., or components etc. of aircraft that have temporarily lost airworthiness certification, proper maintenance and preservation may not be carried out. As a result, the function of components etc. may be affected by the storage environment and storage period.

Therefore, when these components etc. are to be re-used, necessary measures shall be taken in accordance with the following and the conformity to the airworthiness standards shall be confirmed by Approved Maintenance Organization for Aircraft parts etc.

- i) When removing components etc. installed in aircraft, perform the work appropriately in accordance with the maintenance manuals (AMMs, SRMs), SBs, etc. issued by the designer of the aircraft.
 - ii) Confirm the following maintenance records, etc., at the time of unloading.
 - a. Used hours of the components etc. (TTs, TSOs, etc.)
 - b. Status of repair and alteration for the components etc. (status of application of SBs etc.)
 - c. Implementation status of TCDs, ADs, etc.
 - d. Failure events such as hard landing and lightning strikes
 - e. Other related matters
 - iii) Functional inspections, etc. (required from general appearance inspections to overhaul as required) shall be conducted in accordance with the maintenance records, etc. confirmed in (b) above in order to confirm the function of components etc. at Approved Maintenance Organization for Aircraft parts or organizations etc. approved by foreign aviation authorities.
 - iv) Confirm that an Authorized Release Certificate or a foreign certificate recognized as equivalent is attached after the functional inspection, etc. described in iii) above
- (b) Re-use of components etc. unloaded from damaged aircraft due to accidents etc.

When unloading components etc. installed in aircraft damaged or affected by accident, etc., and re-using them for aircraft used for air navigation, the effects shall be accurately grasped.

If the impact load caused by the accident exceeds the certified load of the components etc., the strength may decrease, function may decrease, or cracks may occur if the distortions remain.

It is also considered that the strength may decrease due to the change of metal characteristics due to the influence of fire, etc.

Therefore, when components etc. are to be re-used, it must be confirmed by Approved Maintenance Organizations for Aircraft parts etc., which it complies with the airworthiness standards after assessing the impact of cracks, distortions, fires, etc., as follows.

- i) When removing components etc. from aircraft, perform the work appropriately in accordance with the maintenance manuals (AMMs, SRMs), SBs issued by the designer of the aircraft.
- ii) Confirm the maintenance records, etc. of components etc. related to the items in (a) ii) above.
- iii) Conduct the following assessments for the airworthiness of components etc.
 - a. Conduct visual or non-destructive inspections or other necessary inspections to evaluate the crack conditions.
 - b. Dimensional inspections shall be performed to confirm the effect of distortion etc. When the dimensions etc. of the original design of components etc. are unclear and difficult to evaluate, it shall not be re-used.
 - c. When assessing significant changes in metal characteristics due to fire or other effects, assessments shall be conducted at the testing institution, etc. as necessary.
 - d. Other necessary evaluations shall be conducted.
- iv) After the evaluation pursuant to (b) iii) above, the maintenance records, etc. pursuant to b. and c. above shall be confirmed and functional inspections etc. (required from general appearance inspections to overhaul operations, as appropriate) shall be conducted in accordance with the evaluation of airworthiness at Approved Maintenance Organizations for Aircraft parts or organizations etc. approved by foreign aviation authorities in order to confirm the function of components etc.
- v) Confirm that an Authorized Release Certificate or a foreign certificate recognized as equivalent is attached after conducting the functional tests, etc. described in (b) vi)

(c) Re-use of components etc. unloaded from damaged aircraft due to accidents etc. When unloading components etc. installed in aircraft damaged or affected by accident, etc., and re-using them for aircraft used for air navigation, the effects shall be accurately grasped.

If the impact load caused by the accident exceeds the certified load of the components etc., the strength may decrease, function may decrease, or cracks may occur if the distortions remain.

It is also considered that the strength may decrease due to the change of metal characteristics due to the influence of fire, etc.

Therefore, when components etc. are to be re-used, it must be confirmed by Approved Maintenance Organizations for Aircraft parts etc., which it complies with the airworthiness standards after assessing the impact of cracks, distortions, fires, etc., as follows.

vi) When removing components etc. from aircraft, perform the work appropriately in accordance with the maintenance manuals (AMMs, SRMs), SBs issued by the designer of the aircraft.

vii) Confirm the maintenance records, etc. of components etc. related to the items in (a) ii) above.

viii) Conduct the following assessments for the airworthiness of components etc.

e. Conduct visual or non-destructive inspections or other necessary inspections to evaluate the crack conditions.

f. Dimensional inspections shall be performed to confirm the effect of distortion etc. When the dimensions etc. of the original design of components etc. are unclear and difficult to evaluate, it shall not be re-used.

g. When assessing significant changes in metal characteristics due to fire or other effects, assessments shall be conducted at the testing institution, etc. as necessary.

h. Other necessary evaluations shall be conducted.

ix) After the evaluation pursuant to (b) iii) above, the maintenance records, etc. pursuant to b. and c. above shall be confirmed and functional inspections etc. (required from general appearance inspections to overhaul operations, as appropriate) shall be conducted in accordance with the evaluation of airworthiness at Approved Maintenance Organizations for Aircraft parts or organizations etc. approved by foreign aviation authorities in order to confirm the function of components etc.

x) Confirm that an Authorized Release Certificate or a foreign certificate recognized

as equivalent is attached after conducting the functional tests, etc. described in (b) vi)

5-5-12 Newly manufactured Components etc., to be installed on gliders, which is deemed not to have a significant impact on the safety of the aircraft considering their type, characteristics, etc.

Components etc. that satisfy all of the following requirements fall under this section.

(1) Components etc. do not fall under any of the following.

(a) Life-limited parts

Life-limited parts are usually listed in the AMM or AFM's ALS (Airworthiness Limitation Section).

(b) Components etc. of the primary structure

Refer to documents the design approval holder of the aircraft issues (SB, IPC, maintenance manual, TC, STC, etc.).

(c) Components etc. of the flight control system, etc.

(2) The aircraft to be equipped with the components etc. is specified.

(3) A certificate such as C of C the manufacturer of the components etc. issues shall be attached, and the following items shall be stated on the certificate. In addition, in order to ensure compatibility with the design approved by the civil aviation authority, be sure to obtain components etc. directly from the manufacturer specified by the part number and Vendor Code described in IPC, CMM, SB, etc.

(a) The name and part number of the components etc.

(b) The compatibility of the components etc. with the design approved by the civil aviation authority

(c) Date of issue of the certificate

(4) Aircraft users shall confirm conformity with requirements (1) to (3) and shall be responsible for the conformity.

(5) When the aircraft users install the component etc. that falls under this section on the glider with, the aircraft users shall fill "Maintenance Record for Component (Form I)" with the necessary information and submit it to the airworthiness inspector and need to obtain approval.

(6) If the airworthiness inspector confirms that the requirements of this section are met, the airworthiness inspector shall approve by stating the necessary matters in the entry column for airworthiness inspector of "Maintenance Record for Component (Form I)". After approval, the airworthiness inspector shall return the original to the aircraft user and send a copy to the Flight Standards Division, Safety Department, Civil Aviation Bureau of

Japan.

6 Components etc. whose safety is recognized to be secured by alternative methods.

Aircraft users with an airworthiness certificate shall not install components etc. not conforming to this Circular on an aircraft. However, components etc. which does not fall under Section 5 of this Circular and related supplementary provisions but meets all the following requirements are treated as falling under 5-5-9 of this Circular and can be installed on aircraft.

- (1) In principle, the component etc. shall not be life-limited parts, the component etc. of the primary structure, or the component etc. of the flight control system.
- (2) The components etc. shall be deemed to have a sufficient reason to apply this section and shall be components whose safety are deemed to be ensured by an alternative method.
- (3) Aircraft users shall confirm its conformity to the requirements of (1) and (2) and shall be responsible for the conformity.
- (4) After confirming that the requirements of (1) and (2) are met, aircraft users shall fill “Application for Approval of Component (Form II)” with the necessary information and, in principle, shall submit it for approval to the competent Airworthiness Inspector's Office (in the case of gliders, submit to airworthiness inspector) of the stationary location for the aircraft. In addition, an on-site inspection shall be conducted if deemed necessary by the Civil Aviation Bureau (airworthiness inspector in the case of gliders) in consideration of the type and characteristics of the component etc. and the impact on the safety of the aircraft.
- (5) If the Airworthiness Inspector's Office (airworthiness inspector in the case of gliders) confirms that the requirements of this section are met, the Airworthiness Inspector's Office shall approve by stating the necessary matters in the entry column for the Airworthiness Inspector's Office of “Application for Approval of Component”. After approval, the Airworthiness Inspector's Office shall return the original to the aircraft user and retain a copy in the Airworthiness Inspector's Office. If airworthiness inspector approves, airworthiness inspector shall return the original to the aircraft user and send a copy to the Flight Standards Division, Safety Department, Civil Aviation Bureau of Japan.

7 Materials

(1) Since materials do not fall under the category of components etc., they are not subject to Article 16, paragraph (2) of the CAA and do not need to be accompanied by Authorized Release Certificates or equivalent foreign certificates.

On the other hand, as they are critical to maintaining the airworthiness of aircraft, aircraft users shall use materials that conform to the specifications in accordance with the design approved by the national government.

Therefore, the operator users shall confirm the following matters etc. when obtaining the materials.

- (a) Specifications applied to the material
 - (b) Conformity to the specifications
 - (c) Batch number (if provided)
 - (d) Storage conditions or life limit (if applicable)
- (2) Examples of the material include the following.

(Examples)

- Consumable materials

Lubricants, cements, compounds, paints, chemical dyes, sealants, etc., which are used only once.

- Raw materials

Metals, plastics, wood, fabrics, and other items that need to be processed to become aircraft components etc.

8 Confirmation of components etc. when they are obtained.

When components etc. are obtained, aircraft users shall confirm that the relevant components etc. conforms to the design approved by the national government and that they are accompanied by certificates and technical documents, etc. which show that they conform to the airworthiness standards, in accordance with this Circular.

In such confirmation, in addition to Authorized Release Certificates, foreign certificates (FAA Form 8130-3, EASA Form 1, etc.) that are deemed to be equivalent thereto, or certificates of C of C, etc., indications of design approval or work records shall also be confirmed referring to the following table subject to the components etc. in accordance with the provisions of this Circular. For users of aircraft to whom the Maintenance Manuals or maintenance standards are applied, confirmation may be made in accordance with the standards for acceptance inspections specified in the Maintenance Manuals or maintenance standards.

Kind of components	Contents of confirmation	Examples of concrete items to be confirmed
Newly manufactured components	Conformity to design standards	Following indications are applicable. <ul style="list-style-type: none"> • Design approval that the components etc. have (type or specification approval, TSOA, PMA, ETSOA, EPA, etc.) • Name and address of the manufacturer • Name, model, parts number, serial number, etc. • Date of manufacture
Newly manufactured components	Quality assurance for manufacturing Confirmation of airworthiness	Following documents issued by the manufacturer of components etc. are applicable. <ul style="list-style-type: none"> • Certificates for compliance with airworthiness standards (Form 8130-3, Form1) etc. [For components etc. delivered under Direct Ship Authorization] <ul style="list-style-type: none"> • A statement such as "Airworthiness approval – Direct shipment authorization" etc. should be included in FAA Form 8130-3 to show that the components etc. were delivered under Direct Ship Authorization by the PAHs (Production Approval Holder) of the FAA. • For components etc. obtained from EASA POAs (Production Organization Approval), it may be considered that they were delivered under Direct Delivery Authorization.
Repaired components	Quality assurance of repair work etc. Confirmation of Airworthiness	Following documents etc. issued by organizations for components etc. repair are applicable. <ul style="list-style-type: none"> • Certificates for compliance with airworthiness standards (Form 8130-3, Form 1) • Records for contents of work related to components etc. such as rebuilt, overhaul, inspections, alterations, repairs, etc. • Records regarding the replacement of component parts in components etc. • Maintenance manuals referred in the maintenance

		<p>procedures</p> <ul style="list-style-type: none"> • Approval of the repair or alteration design for components etc. (when applicable)
Newly manufactured or repaired components	Confirmation of the current condition	<p>Following records of the current condition for components etc. are applicable.</p> <ul style="list-style-type: none"> • Complying status for airworthiness directives (TCDs, ADs) • Complying status for SBs • Total usage time (hours, days, cycles)/elapsed time (days, cycles) from overhaul (limited to components etc. with life limit) • Shelf-life data

9 Handling of metal plates, etc. for stamping registration marks and software

9-1 Handling of the metal plate on which the registration mark is stamped and the identification plate

The metal plate on which the registration mark is stamped under Article 11 of the CAR (hereinafter referred to as the "stamped plate") and the identification plate according to Article 141 of the CAR are, in principle, not included in the component etc. of Chapter 3 of the CAA.

Therefore, An Authorized Release Certificate or a foreign certificate recognized as equivalent pursuant to the provisions of Article 16, Paragraph 2 of the CAA, are not required to install them on the aircraft. However, in the case where a stamped plate and identification plate are included in a design that has been approved by the government, such as Type Certification or Supplemental Type Design Approval, an Authorized Release Certificate or a foreign certificate recognized as equivalent shall be confirmed to be attached to the stamped plate and identification plate.

Even in this case, it is not necessary to attach an Authorized Release Certificate or a foreign certificate recognized as equivalent when stamping the registration mark on the stamped plate.

9-2 Handling of software installed on aircraft whose airworthiness classification is Air Transport T

Aircraft are equipped with a variety of software, and large aircraft in particular are installed with a lot of software. This section should be used as a reference for software installed on aircraft whose airworthiness classification is Air Transport T.

Software is roughly divided into the following three types (see ARINC667). Aircraft users should confirm that the necessary certificates, etc. are attached based on this section. In addition, if it is unclear to which type the software corresponds, confirm with the holder of Type Certification or Supplemental Type Design Approval.

- (a) Loadable Software Aircraft Parts (LSAP)
- (b) Operationally Approved Software
- (c) Aircraft Support Data (ASD)

9-2-1 Loadable Software Aircraft Part (LSAP)

LSAP is software included in the design that has been approved by the government, such as Type Certification and Supplemental Type Design Approval, and is subject to the airworthiness standards in Article 10, Paragraph 4, Item 1 of the CAA.

LSAP needs a Type or Specification Approval or a Design Approval such as TSOA, ETSOA, etc. according to technical standards such as RTCA DO-178. In addition, since it is manufactured based on the design approved by the national government, an Authorized Release Certificate or a foreign certificate recognized as equivalent shall be confirmed to be attached to

the software.

For example, software related to Air Data Module (ADM), Electronic Flight Instrument System (EFIS), Primary Flight Computer (PFC), TCAS, etc. corresponds to LSAP. In addition, LSAP is subdivided as follows.

(a) Supplier Controlled SW

Software manufactured by organizations who have obtained design approval such as Type Certification, Type or Specification Approval (including approval by foreign authorities that may be deemed to have Type or Specification Approval).

(b) User Certified SW (UCS)

This software is manufactured by partially modifying Supplier Controlled SW according to the needs of aircraft users. When manufacturing UCS, aircraft users must obtain a Supplemental Type Design Approval, etc. in cooperation with designer and manufacturer of Supplier Controlled SW.

Examples of UCS include:

(Example)

- Software related to the configuration database of the cabin management system used to reconfigure the lighting control of the cabin as the seating arrangement of the cabin changes.

9-2-2 Operationally Approved Software

While Operationally Approved Software does not require design approval such as Type Certification or Supplemental Type Certificate, it needs approval from the authorities, such as operational approval, approval of operations manuals or maintenance manuals.

Software that does not require any of these approvals does not fall under Operationally Approved Software in principle, but can be treated as Operationally Approved Software at the discretion of the aircraft user.

Operationally Approved Software is the software that does not require governmental design approval, so it does not require an Authorized Release Certificate or foreign certificate recognized as equivalent.

As an example, the following softwares fall under Operationally Approved Software (be noted that softwares which doesn't require operational approval, approval of operation manuals or maintenance manuals are included in following softwares.

(Example)

- User Modifiable Software, which does not affect airworthiness even if the aircraft user repaired or altered the software, and does not require government design approval.

Note: The Type Certificate or Supplemental Type Design Approval holder performs safety assessment of software and specifies User Modifiable Software. Aircraft users should confirm with holders of Type Certificates and Supplemental Type Design Approval which software is User Modifiable Software.

- EFB software, which aircraft users obtain approval to use based on the circular "Approval Standards for Aircraft Operation Using EFB"
- Navigation database
- Software for viewing technical data related to maintenance, which aircraft users manage based on approved Maintenance Manuals or maintenance standards

9-2-3 Aircraft Support Data (ASD)

ASD refers to software that does not require design approval, nor does it require approval from the authorities, such as operational approval, approval of operation manuals, or Maintenance Manuals. Since ASD is software that does not require design approval, it does not require an Authorized Release Certificate or foreign certificate recognized as equivalent.

For example, ASD include:

(Example)

- Files of in-flight entertainment
- List of airline duty-free shops and hotels

10 Handling when aircraft users entrust non-destructive inspection of components etc. to a repair organization

Non-destructive inspection falls under minor repairs according to the provisions of Circular No.3-001 "Maintenance and Alteration of Aircraft". When an aircraft user entrusts the repair of component etc. to a repair organization, in principle, an Authorized Release Certificate or a foreign certificate recognized as equivalent is required. However, non-destructive inspection is often performed as part of maintenance process, and is performed not only for component etc., but also for the airframe structure (e.g., the outer plate of the aircraft, Wing structure, the joint between Wing strut / Wing spar and the fuselage, etc.), and so it is different in nature from general component repair work. For this reason, entrustment of non-destructive inspection of component etc. shall be treated as follows, taking into consideration the treatment in other countries.

(1) When aircraft users perform aircraft maintenance or alteration and non-destructive inspection of component etc. is performed as a part of the aircraft maintenance or alteration process, the said non-destructive inspection is entrusted to a repair organization

If aircraft users (including the maintenance organization who is entrusted with maintenance of aircraft by an aircraft user, if the maintenance of the aircraft is outsourced)(if the maintenance of the aircraft is outsourced, the term contains entrusted maintenance organization. The same shall apply in (1) below.) repairs component etc. as part of the maintenance and alteration of the aircraft based on the maintenance manuals (AMM, SRM) the aircraft designer etc. issues, and entrusts a non-destructive inspection of the said components to the repair organization as part of the repair process, 5-5-2-2 may be applied to the said component etc., only when the aircraft user performs quality control of the repair work including the non-destructive inspection, and confirms the conformity to the airworthiness standards before installing it on the aircraft. In this case, it is not required to issue an Authorized Release Certificate or a foreign certificate recognized as equivalent for the non-destructive inspection. Special process work (welding, heat treatment, etc.) is treated in the same way.

Even in this case, non-destructive inspection must be conducted by a qualified person based on Circular No.3-002 "Inspection for Special Processes etc."

(2) When non-destructive inspection is performed as maintenance work for component etc., the non-destructive inspection is entrusted to a repair organization

When component etc. removed from an aircraft is shipped to a repair organization, and the repair organization performs non-destructive inspection based on the CMM as maintenance work for the

component etc., an Authorized Release Certificate or a foreign certificate recognized as equivalent shall be issued. Aircraft users should confirm that the certificate is attached to the component etc.

Note: When an Approved Repair and Alteration Organization for Components etc. repairs or alters component etc., and entrusts non-destructive inspection or special process work as part of the repair or alteration process to another repair organization, the organization who entrusts shall perform quality control of all repair work including the non-destructive inspection entrusted. After completing the entire process of repair or alteration, the organization shall confirm conformity with airworthiness standards and issue an Authorized Release Certificate. Therefore, it is not required to issue an Authorized Release Certificate or a foreign certificate recognized as equivalent for non-destructive inspections or special processes.

11 Handling when multiple certificates are attached to repaired component etc.

When aircraft users entrust repair of components etc. to an organization located in a foreign country, there are some cases where repair is performed as following.

- (a) Aircraft users entrust the manufacturer of the aircraft or the repair organization for components etc. (= organization A) to repair the component etc.
- (b) Organization A entrusts another repair organization for components etc. (= organization B) to repair the components etc.
- (c) Organization B performs repair and ships the component etc. to organization A (organization B issues FAA Form 8130-3, EASA Form 1, etc.)
- (d) After organization A performs a visual inspection of the component etc., organization A ships the component etc. to the aircraft users (organization A issues FAA Form 8130-3, EASA Form 1, etc.)
- (e) The aircraft users receive two certificates issued by organization A and B
An Authorized Release Certificate, FAA Form 8130-3, EASA Form 1, etc. for the repaired or altered component etc. is that the organization issues when that organization perform repair or alteration by itself and guarantees that the organization performed that repair or alteration by a means of proper method.

In the above case, if the organization B has issued a certificate stating "repaired" or "overhauled" in the "Status/Work" column of Block 11 in (c) above, the required repair work was performed by the organization B based on CMM, etc., including functional inspection, etc.

For this reason, the certificate issued by organization B after performing repairs based on CMM, etc. must be an Authorized Release Certificate or a foreign certificate recognized as equivalent (certificates in accordance with this Circular). .

Even if the certificate is issued by an organization which does not perform repair (organization A), that certificate does not guarantee that the component etc. has been properly repaired. The same applies when organization A performs an inspection based on CMM, etc. and issues a certificate stating "inspected" or "tested" in the "Status/Work" column of Block 11. Unless the certificate issued by organization B is an Authorized Release Certificate or a foreign certificate recognized as equivalent, that component etc. shall not be installed on an aircraft.

The same concept applies when aircraft users purchase component etc. from component distributors or entrust foreign repair organizations for components to repair its component etc. directly.

For example, if aircraft users procure component etc. repaired by an organization that has not been approved by Japan (=organization C) and the component etc. does not accompany an Authorized Release Certificate or a foreign certificate recognized as equivalent, such component etc. cannot

be installed on the aircraft even if after procurement aircraft users request the Approved Repair and Alteration Organization for Components etc. (=organization D) to inspect the component etc. and the inspection is performed based on the CMM, etc.. This is because organization D cannot guarantee that organization C has performed the repair work properly. Also in the above cases, the certificate issued by the organization C after repair work must be an Authorized Release Certificate or a foreign certificate recognized as equivalent.

Be noted that if aircraft users remove components from an aircraft for the purpose of dealing with troubleshooting and ship that components to an Approved Repair and Alteration Organization for Components etc. in order to perform inspection based on CMM, and that organization performs inspection and issues an Authorized Release Certificate, the component etc. may be installed on the aircraft based on this Circular.

12 Components etc. that do not comply with the standards set forth under Article 10, paragraph (4) of the CAA

Aircraft users shall comply with Circular No.6-014 "Reporting of Suspected Unapproved Parts," when they determine that components etc. may not comply with the standards set forth under Article 10, paragraph (4), item (i) of the CAA.

Supplementary Provisions

1. This Circular shall be effective as of June 18, 2022.

However, for the time being, it shall not be necessary to attach Authorized Release Certificates or foreign certificates deemed equivalent thereto to component parts for the purpose of applying the provisions of paragraph 5-2-3 (2) in relation to the component parts constituting components etc.

In addition, for the time being, it shall not be necessary to attach Authorized Release Certificates or foreign certificates deemed equivalent thereto to Unit Load Devices such as cargo containers or galley carts as set forth in Article 5-5-6, paragraph 1.

2. Any operator of aircraft with airworthiness certification may, as of June 18, 2022, equip the aircraft with components etc. that are currently equipped with an airworthiness certificate (Supplementary Provisions Article 5, item (i) of the Law for Partial Amendment of the CAA and Law for Establishment of the Japan Transport Safety Board (Act No. 38 of 2019; hereinafter referred to as the "Amended Law")).

3. Any operator of aircraft with airworthiness certification may install spare parts-certified components etc. on or after June 18, 2022, as of June 18, 2022 (Article 5, item (ii) of the Supplementary Provisions of the Amended Law).

4 • 5 [...]

6. Upon the enforcement of this Circular, the following circular shall be abolished.

- Circular No.3-008 "Maintenance and Alteration of Engine Sub-assemblies"

- Circular No.3-025 "Components etc. unloaded from aircraft without a valid airworthiness certification and re-used"

- Circular No.4-015 "Replacing Critical parts without Spare Parts Certification for Aircraft used for International Air Transport Service"

- Circular No.4-019, "Limited use of Components, Parts, etc. (service trial) by air carriers"

Supplementary Provisions (April 1, 2022)

1. This Circular shall apply from June 18, 2022.

2. Paragraph 1 of the Supplementary Provisions of "Handling of Components etc. to be installed in Aircraft" enacted on July 30, 2021 (Kokkokuki No. 384) shall be revised as follows.

1. This Circular shall be effective as of June 18, 2022.

However, for the time being, it shall not be necessary to attach Authorized Release Certificates or foreign certificates deemed equivalent thereto to component parts for the purpose of applying the provisions of paragraph 5-2-3 (2) in relation to the component parts constituting components etc.

In addition, for the time being, it shall not be necessary to attach Authorized Release Certificates or foreign certificates deemed equivalent thereto to Unit Load Devices such as cargo containers, galley carts or standard units as set forth in Article 5-5-6, paragraph 1.

3. Paragraph 4 of the Supplementary Provisions of "Handling of Components etc. to be installed in Aircraft" enacted on July 30, 2021 (Kokkokuki No. 384) shall be revised as follows.

4. Any operator of aircraft with airworthiness certification may, only in cases where components etc. manufactured, repaired or altered by June 17, 2022 (excluding components etc. subject to spare part certification and components etc. that fall under Article 5 of the Supplementary Provisions) are appropriately managed in accordance with the following, equip the aircraft for a period designated in the public notice by the Minister of Land, Infrastructure, Transport and Tourism pursuant to the provisions of Article 2 of the Supplementary Provisions of the ministerial ordinance for partial amendment of the CAR and Regulation for Enforcement of Law Concerning the Operation of Nationally Managed Airports, etc. Utilizing the Capabilities of the Private Sector (Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism No. 5 of 2021; hereinafter referred to as the "Amended Ministerial Ordinance") even if it is not accompanied by an Authorized Release Certificate or a foreign certificate deemed equivalent thereto.(Article 2 of the Supplementary Provisions of Amended Ministerial Ordinance)

Components etc. to which this Supplementary Provision applies include the following:

- (1) Newly manufactured components
 - Components etc. with only C of C
 - (2) Repaired or altered components
 - Components etc. with Form 8130-3 issued by repair stations approved by the FAA located outside the territory of the United States
 - Components etc. with EASA Form 1 issued by organizations approved by EASA located outside the territory of the European Union
 - Components etc. accompanied by certificates issued by organizations approved by countries that have not concluded bilateral aviation safety agreement, etc. pertaining to maintenance fields with Japan
 - Components etc. repaired or altered by domestic organizations which have not been approved by the national government
- (a) Matters to be confirmed when obtaining components etc.
- i) Conduct a detailed visual inspection when obtaining components etc. to ensure that there are no cracks, strain, deformation, discoloration, corrosion, wear, breakage, dents, separation of weld zones (if applicable), reduction in wall thickness (if applicable), or loosening of fastening (if

applicable) on components etc.

- ii) Confirm that certificates (FAA Form 8130-3, EASA Form 1, C of C, etc.) issued by the manufacturer of components etc. or the person who performed the repair or alteration are attached, except for the cases that no certificate is attached.
- iii) Confirm that appropriate identification and labeling, including the following items, are provided through components etc. certificates and delivery slips, except for the cases that no certificate is attached.
 - a. The name, model, parts number, and serial number of components etc. (with respect to the serial number, limited to cases where said serial number exists);
 - b. Total hours of use (hours, days, cycles) of components etc. (limited to components etc. for which the life time is specified)
- iv) Confirm the following maintenance records, etc. concerning components etc. Provided, however, that this shall not apply to the case where there is no maintenance records, etc.
 - a. Status of repair or alteration for components etc. (status of application for SBs etc.)
 - b. Implementation status for TCDs, ADs, etc.
 - c. Other useful maintenance records (records of rebuilt, overhaul, inspections, repairs, etc.) of components etc.

NOTE: Components etc. obtained prior to the implementation of this Circular may be confirmed prior to the installation of components etc. in aircraft. In addition, if components etc. obtained prior to the enforcement of this Circular have already been confirmed in accordance with the Maintenance Manuals or maintenance standards (including the appendixes, respectively; the same shall apply hereinafter) (approved organization exposition, in cases where the Approved Maintenance and Alteration Organization for Aircraft obtained component etc. by itself), it shall not be necessary to confirm such matters again.

- (b) Items etc. to be confirmed when installation in aircraft, etc.
 - i) Inspect the appearance of components etc. to ensure that there are no problems.
 - ii) Perform functional inspections after equipping the aircraft to confirm that there are no problems (limited to those requiring functional inspections).
 - iii) In principle, the following matters shall be entered in the aircraft flight logbook (which may be substituted for maintenance records): Provided, however, that when the other method manages which aircraft components etc. were installed in, such management may be substituted for the preparation of maintenance records, etc.
 - a. Date of installation
 - b. The type, parts number and serial number of components etc. to which it was installed (with respect to the serial number, only if such number exists);

c. Total hours of use (hours, days, cycles) of components etc. (limited to components etc. with life limits. Those information may be managed by computers etc.)

(c) Preparation of maintenance records regarding installation of components etc. to aircraft
In principle, the maintenance record shall be prepared in accordance with the following: However, when other method manages which aircraft components etc. were installed in, such management may be substituted for the preparation of maintenance records.

i) The matters listed in (b) iii) shall be stated. Attachment of a certificate containing the same information may be substituted.

ii) Ensure the traceability by attaching certificates of components etc. (FAA Form 8130-3, EASA Form 1, C of C, etc.) to maintenance records or managing certificates by computer, etc.. In addition, components etc. falling under this section shall be distinguishable from other components etc.

iii) Maintenance records shall be kept in an organized manner so that they can be inspected as necessary.

(d) For aircraft users to whom Maintenance Manuals or maintenance standards are applied, management methods for components etc. pursuant to this paragraph shall be stipulated in the Maintenance Manuals or maintenance standards.

(e) To report to the competent authorities on the type and approximate number of the items in stock falling under this paragraph annually in the case of air carriers and at the time of airworthiness certification inspection in the case of other aircraft users.

(f) When an Approved Maintenance and Alteration Organization for Aircraft is entrusted to perform maintenance of an aircraft from an aircraft user, and in the maintenance, install components etc. that falls under this section owned by the organization on the aircraft, based on the instruction of the aircraft user, the said component etc. shall be notified to the user of the aircraft in order for the report pursuant to (e) above.

NOTE: Due regard shall be paid to the fact that collection of reports and on-site inspections may be conducted to ensure the enforcement of these Supplementary Provisions in accordance with the provisions of Article 134 of the CAA, and that, if aircraft is equipped with components etc. of this section without following this provision, it may not pass the inspection for airworthiness certification.

4. Paragraph 5 of the Supplementary Provisions of "Handling of Components etc. to be installed in Aircraft" enacted on July 30, 2021 (Kokkokuki No. 384) shall be revised as follows.

5. Japan has been negotiating or is planning to negotiate with authorities of the United States (FAA), Europe (EASA including Iceland, Norway and Switzerland which are not members of the
1-502 (71)

European Union; hereinafter the same in this paragraph), and the United Kingdom (CAA) in order to conclude bilateral aviation safety agreements etc. for maintenance. However, it is assumed that the conclusions of the agreements have not been completed as of June 18, 2022. For this reason, if users of aircraft with airworthiness certification appropriately manage components etc., which were repaired or altered by organizations located in the territory of the United States, Europe, or the United Kingdom (excluding satellites located outside the territory) and of which airworthiness was confirmed, in accordance with the following, those components etc. is deemed to fall components etc. under 5-5-9 of this Circular and may be installed on an aircraft for the time being until the bilateral aviation safety agreements etc. are concluded with the United States, Europe, or the United Kingdom for the maintenance field (if the required procedures for supplement applications, etc. by organizations are stipulated in accordance with the content of the bilateral aviation safety agreements, etc., the time required for such procedures shall also be taken into account).

Components etc. to which this Supplementary Provision is applied are as follows:

[Repaired or altered components]

- Components etc. accompanied by Form 8130-3 issued by FAA-approved repair stations located within the territory of the United States.
- Components etc. accompanied by EASA Form 1 issued by EASA approved organizations located within the territory of Member States (limited to organizations approved under Part 145 and excluding organizations approved under Part M (*)).

* In the case of EASA Form 1 issued by an organization approved under EASA Part-M, "MF" is stipulated after the country code (e.g. DE) in Block 14c "Certificate/Approval Number". On the other hand, in the case of EASA Form 1 issued by an organization approved under Part 145, "145" is stipulated after the country code.

- Components etc. accompanied by UKCAA Form 1 issued by UKCAA-approved organizations located in the territory of the United Kingdom

(1) Matters to be confirmed when accepting components etc.

- (a) Conduct a detailed visual inspection when obtaining components etc. to ensure that there are no cracks, strain, deformation, discoloration, corrosion, wear, breakage, dents, separation of weld zones (if applicable), reduction in wall thickness (if applicable), or loosening of fastening (if applicable) on components etc.
- (b) Confirm that components etc. are accompanied by certificates (FAA Form 8130-3, EASA Form 1, UKCAA Form 1) which show that the components etc. were appropriately repaired or altered.
- (c) Confirm that appropriate identification and labeling, including the following items, are

provided through components etc. certificates and delivery slips.

- a. The name, model, parts number, and serial number of components etc. (with respect to the serial number, limited to cases where said serial number exists);
 - b. Total hours of use (hours, days, cycles) of components etc. (limited to components etc. for which the life limit is specified)
- (d) Confirm the following maintenance records, etc. concerning components etc.
- a. Status of repair and alteration for components etc. (status of application for SBs etc.)
 - b. Implementation status for TCDs, ADs, etc.
 - c. Other useful maintenance records (records of rebuilt, overhaul, inspections, repairs, etc.) for the components etc.

NOTE: Components etc. obtained prior to the implementation of this Circular may be confirmed prior to the installation of components etc. in aircraft. In addition, in the event components etc. accepted prior to the enforcement of this Circular has already been confirmed in accordance with the Maintenance Manuals or maintenance standards (in cases where the Approved Maintenance and Alteration Organization for Aircraft obtained component etc. by itself, approved organization exposition), it shall not be necessary to confirm such matters again.

- (2) Items to be confirmed when installing in aircraft
 - (a) Inspect the appearance of components etc. to ensure that there are no problems.
 - (b) After installing components in aircraft, perform functional inspections to confirm that there are no problems (limited to those functional inspections are required).
- (3) For aircraft users to whom Maintenance Manuals or maintenance standards are applied, management methods for components etc. pursuant to this paragraph shall be stipulated in the Maintenance Manuals or maintenance standards.

5. Upon the enforcement of this Circular, the following circular shall be abolished.

- TCL-68A-90 "Creation of parts list for spare parts certification"
- TCL-1300A-90 "Parts List for Spare Parts Certification"

Form I "Maintenance Record for Component"

Maintenance Record for Component				
Registration symbol:		Aircraft type:		Reference number:
Date:				
Equipment name	Part number	Quantity	Certificate number attached to component etc.	Signature of aircraft user
Reasons for applying the provisions of paragraph 5-5-12 of Circular No.1-502				
<p>I have confirmed that the aircraft component etc. that I have signed above meets the requirements listed in paragraph 5-5-12 of Circular No. 1-502 "Handling of Components etc. to be installed in Aircraft".</p> <p>yyyy/mm/dd</p> <p>Name or designation of the user of the aircraftzz</p>				
<p>[Entry column for airworthiness inspector]</p> <p style="text-align: right;">Approval number No.</p> <p>It is acknowledged that the above component etc. conforms to the requirements listed in paragraph 5-5-12 of Circular No. 1-502 "Handling of Components etc. to be installed in Aircraft".</p> <p>yyyy/mm/dd</p> <p>Airworthiness inspector name:</p>				

Form II "Application for Approval of Component"

Application for Approval of Component

Registration symbol:	Aircraft type:	Reference number:
Date:		

Component etc. name	Part number	Serial number	Quantity	Certificate number attached to equipment, etc.	Signature of aircraft user

Reasons for applying the provisions of paragraph 6 of Circular No. 1-502:

Methods for ensuring safety by alternative methods:

Reason for judging that the alternative method is appropriate as a method to ensure safety:

I have confirmed that the aircraft component etc. for which I signed the table above satisfies the requirements listed in Section 6 of Circular No.1-502 "Handling of Components etc. to be installed in Aircraft".

yyyy/mm/dd

Name or designation of the user of the aircraft:

[Entry column for the Civil Aviation Bureau (or airworthiness inspector)]

Approval number No.

It is acknowledged that the above component etc. conforms to the requirements listed in paragraph 6 of Circular No. 1-502 "Handling of Components etc. to be installed in Aircraft ".

yyyy/mm/dd

Airworthiness inspector's office (airworthiness inspector's name):