Circular No. 1-001

General Policy and Procedures for Certification / Inspection

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Purpose

The purpose of this Circular is to provide details of the general policy and procedures for Certification / Inspection of aircraft and aircraft parts.

This Circular also provides details of the procedures and standards based on Article 10 and Article 12 etc. of the Civil Aeronautics Law (Law No. 231 of 1952; hereinafter referred to as the "Law"), and related persons are required to undertake procedures etc. in accordance with this Circular, in principle.

According to the amendment of the Law in May 1996, the Airworthiness Certificate, Type Certificate system, etc. have been significantly revised. Therefore, the "Guidance of new aircraft inspection systems" was created and informed to users and others about the contents of the new system and its operation. Now, taking into account the firm establishment of these systems, this circular was established based on the contents of "Guidance of new aircraft inspection systems."

Furthermore, in the setting of this circular, corresponding to the law amendment of June 1999 and the subsequent revision of the Civil Aeronautics Regulations (hereinafter referred to as the "Regulations") (Ordinance of the Ministry of Transport No. 25 of 1999, Ordinance of the Ministry of Transport No. 40 of 1999 and Ordinance of the Ministry of Transport No. 1 of 2000) of 1999, we reviewed some parts of existing circular and incorporated those contents into this circular.

I. Airworthiness Certification

1. Introduction

This part is to provide guidance with regard to the general policy for airworthiness certification, procedures for an application and development of documents such as Flight Manual etc.

(Note) The contents of the inspection standards and procedures of exporting states, which are equal or higher than that of Japan will be described in bilateral agreements/arrangements between aeronautical authority of Japan and foreign states. Circular No. 7-001 "Bilateral Agreements or Equivalent Arrangements on Aviation Safety with Foreign States" needs to be referred.

2. Documents for Submission according to the Classification of an Application for Airworthiness Certification and Outline of Inspection

Documents for submission according to the classification of an application for airworthiness certification and outline of inspection shall be referred to the reference paragraph listed in the table below according to the item to be applied.

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</table>

ASC = Aircraft Statement of Conformity
EAC = Export Airworthiness Certificate
AOAPI = Approved Organization for Aircraft Production and Inspection
AOAMI = Approved Organization for Aircraft Maintenance and Inspection
***** = Whole or a part of inspection can be omitted.
○ = Inspection shall be performed thoroughly without omission.

2-1 Initial Inspection for Airworthiness Certification for Aircraft which is manufactured in Japan.

(1) An aircraft type-certificated by Authority which is manufactured and inspected after completion of manufacture and determined compliance with the standards by any Approved Organization for Aircraft Production and Inspection (AOAPI) (aircraft listed under Article 10, paragraph 6-(1) of the Law.

(a) Outline of Inspection

The said aircraft has undergone the design inspection required for type certification performed by Authority and has been properly manufactured by the approved organization under the design in compliance with the standards for the type certification and after completion of manufacture has been certified to be in compliance with the standards through the ground test, flight test, etc. Accordingly, the practical inspection of aircraft basically shall not be performed, instead, check of the Aircraft Statement of Conformity (hereinafter refer to as "ASC") and other documents issued by the approved organization as an evidence of certification shall be performed by Authority.

Therefore, this paragraph, specifying omission of the practical inspection shall not be applied, if any alteration should be made between the date of issue of the ASC and the date of delivery of an airworthiness certificate.

However, this paragraph shall be applied in a case where the alteration works have been made before the date of issue of ASC and approved by Authority as the type design change or supplemental type design and as part of business of the approved organization.

As the ASC shall be issued as a document as evidence of certification by the approved organization, an aircraft may not be used for air navigation unless it holds a valid airworthiness certificate.

The proposed date of inspection (the same date as the application date is permissible) for airworthiness certification must be within 15 days from the date of issue of the ASC concerned.

(b) The documents for submission

Documents under Article 12-(2), paragraph 2 of the Regulations	Contents of documents and drawings, etc. in the left column	
	Items to be submitted	Items to be shown
1. Aircraft Statement of Conformity (ASC)	An ASC (The date of its issue must be within 15 days)	
2. Flight Manual	Flight Manual (If it is the same type of Flight Manual approved by Authority, showing the Manual or submitting a copy of cover page of original Manual	

	and Supplemental Manual, etc. shall be also allowed) (Refer to Attachment I-2, 5-2.)	
3. Documents describing items for computing weight and center of gravity of the aircraft	Following items (except items which are not changed from the type-certificated configuration) shall be described in the documents: (1) Weight and center of gravity of airframe (2) Name, weight and center of gravity of each equipment (3) Useable capacity and center of gravity of each fuel tank (4) Others However, the Flight Manual may be a substitute for the documents when above-mentioned items are described in the Flight Manual.	
4. Documents describing reference materials in addition to those listed in the preceding each item	(1) Copy of Registration Certificate (2) Table of aircraft current condition (Form I-1) (3) Table of aircraft history (Form I-2) (4) TCD (Airworthiness Directive) compliance records (Form I-3) (5) Flight Manual records(Form I-4) (6) Table of operating method limitation and condition of radio navigation equipment installation (Form I-5)	

(2) An aircraft which is manufactured in Japan and type-certificated by Authority and not specified under the preceding paragraph (1). (An aircraft specified under Article 10, paragraph 5-(1), excluding the aircraft specified under the same Article, paragraph 6-(1) of the Law)

(a) Outline of Inspection

An inspection for airworthiness certification for an aircraft shall be performed through checking the submitted documents, the practical inspection of aircraft such as ground test and flight test, etc.

However, when the change of design will be made, the said type design change or supplemental type design shall be approved prior to the airworthiness certification.

(b) Documents for submission

Documents under Article 12-2, paragraph 2 of the Regulations	Contents of documents and drawings, etc. in the left column	
	Items to be submitted	Items to be shown
1. Manufacturing plan	Outline of manufacturing	
2. Flight Manual	Flight Manual (If it is the same type of Flight Manual approved by Authority, showing the Manual or submitting a copy of cover page of original Manual and Supplemental Manual, etc. shall be also allowed) (Refer to Attachment I -2, 5-2.)	
3. Documents describing items for computing weight and center of gravity of the aircraft	Following items (except items which are not changed from the type-certificated configuration) shall be described in the documents: (1) Weight and center of gravity of airframe (2) Name, weight and center of gravity of each equipment (3) Useable capacity and center of gravity of each fuel tank (4) Others However, the Flight Manual may be a substitute for the documents when above-mentioned items are described in the Flight Manual.	
4. Documents describing reference materials in addition to those listed in the preceding each item	(1) Table of aircraft current condition etc. • Table of aircraft current condition (Form I -1) • Table of aircraft history (Form I -2) • TCD (Airworthiness Directive) compliance records (Form I -3) • Flight Manual records (Form I -4) • Table of operating method limitation and condition of radio navigation equipment installation (Form I -5) (2) Production record PIR (PRODUCTION INSPECTION RECORD) BOOK (or its equivalents) shall be limited to change or supplement among materials which were submitted at the time of inspection for manufacturing process which was performed for type certification. (3) Records of corrective actions adopted for malfunctions during production process Material which records major malfunctions and corrective actions adopted (4) Measurement records Measured record of weight and center of gravity (5) List of applied TCD (Airworthiness Directive), EO (Engineering Order), SB (Service Bulletin) or modification orders.	

	(6) Total operational test, ground test and flight test specifications. Shall be limited to change or supplement among materials which were submitted at the time of inspection for manufacturing process which was performed for type certification. (7) List of manufacturing which was consigned to subcontractors. Shall be limited to the one for change or supplement among materials which were submitted at the time of inspection for manufacturing process which was performed for type certification. (8) List of specialized services inspection status Shall be limited to the one for change or supplement among materials which were submitted at the time of inspection for manufacturing process which was performed for type certification. (9) List of procedures for quality control Shall be limited to the one for change or supplement among materials which were submitted at the time of inspection for manufacturing process which was performed for type certification. (10) Major equipment records In principle, shall apply to parts time controlled parts. The items listed below must be clearly recorded: type, part number, serial number, TT, TSO, TSC and retirement of life specified in Maintenance Procedure Manual, maintenance manual and others. (11) Material describing compliance with the noise standards and emission control standards for engine exhaust (if applicable) Schematics describing measures for noise reduction and exhaust fuel emission around engine or nacelle section, etc. (12) Records of in-house ground test and corrective actions adopted for malfunctions (a) The in-house ground test record: confirmed by qualified mechanic (b) Record of corrective actions adopted for malfunctions during in-house ground test: Record describing condition of corrective actions adopted for malfunctions discovered during in-house ground test (13) Records of in-house flight test and corrective actions adopted for malfunctions	In addition to the list on the left, with regard to components for which inspection intervals are instructed by designers of aircraft or components, inspection list or other documents that record management of the interval. (If managed by electronic records, presenting the records may be acceptable.)

	(a) Record of in-house flight test: confirmed by the qualified mechanic with comments by pilot in-charge. (b) Record of corrective actions adopted for malfunctions during in-house flight test: Record describing condition of corrective actions adopted for malfunctions discovered during in-house flight test (14) Records of ground test and corrective actions adopted for malfunctions at official inspection (a) Record of ground test at official inspection (b) Record of corrective actions adopted for malfunctions during ground test at official inspection: Record describing condition of corrective actions adopted for malfunctions discovered during ground test at official inspection. (15) Records of flight test and corrective actions adopted for malfunctions at official inspection (a) Record of flight test at official inspection (b) Record of corrective actions adopted for malfunctions during flight test at official inspection: Record describing condition of corrective actions adopted for malfunctions discovered during flight test at official inspection.	

2-2 Initial Inspection for Airworthiness Certification for Imported Aircraft

(1) An imported aircraft which is type-certificated by Japanese Authority and has been certificated by a foreign state under their standards and procedures which is recognized as having equivalent to or more level than that of Japan. (The said foreign state and the said aircraft are specified by conclusion of a bilateral agreement or equivalent arrangement.) (An aircraft specified under Article 10, paragraph 6-(2) of the Law)

(a) Outline of Inspection

The aircraft concerned has already completed inspections on the design through type certification performed by Japanese Authority. Additionally the aircraft has undergone inspection by the exporting state under the standards at a level equivalent to or more than that of Japan and was determined compliance with the standards. Accordingly, inspection for airworthiness certification by Japanese Authority shall be performed through confirming Export Certificate of Airworthiness and other documents issued by the exporting state. The practical inspection of Certification of Airworthiness shall be omitted, in principle.

Therefore, when any type of alteration, with the exception of the items described below, is conducted between the date of issue of Export Certificate of Airworthiness and the date of delivery of airworthiness certificate, this regulation omitting the practical inspection by Authority shall not be applied.

1) Alteration for transporting the aircraft (Installation or removal of auxiliary fuel tank for ferry flight, or disassembly and assembly for transport by sea, etc.)
2) Maintenance accompanied by ferry flight or above work. (shall be limited to preservation, slight repair or minor repair)
3) Maintenance accompanied by acceptance inspection (ground inspection and in-flight inspection) (shall be limited to preservation, slight repair or minor repair).

The works above-mentioned 1), 2) and 3) shall be performed by qualified mechanic, Approved Organization for Aircraft Maintenance and Alternation (AOAMI, refer to Circular No.2-001), or specific person designated by Authority.

However, if alteration has been made before Export Certificate of Airworthiness was issued and the said alteration shall be the work for which Japanese Authority has approved change of type design, supplemental type design or repair and alteration design, this regulation shall be applied (treatment of such alterations only approved by the exporting state will be subject to the bilateral agreements/arrangements concluded between Japan and foreign countries.).

Proposed date of inspection shall be within two (2) months from the date of issue of the said Export Certificate of Airworthiness, in principle.

(b) Documents for submission

Documents under Article 12-2, paragraph 2 of the Regulations	Contents of documents and drawings etc. in the left column	
	Items to be submitted	Items to be shown
1. Flight Manual	Flight Manual (If it is the same type of Flight Manual approved by Authority, showing the Manual or submitting a copy of cover page of original Manual and Supplemental Manual, etc. shall be also allowed) (Refer to Attachment I-2, 5-2.)	
2. Documents issued by the government of the manufacturing state certifying airworthiness, noise and engine emissions of the aircraft	Export Airworthiness Certificate (Date of issue of Export Certificate of Airworthiness shall be within two (2) months. However, this shall not be applied when Authority permits the case separately.)	

3. Technical records relating to maintenance or alteration and documents describing total flying time and flying time since last overhaul inspection, in the case of used aircraft	Historical records (list of periodic time check since manufactured (shall be limited to inspection at a level comparable to that of inspection required when operating time shall be over 500 hours), large scale repair and alteration in which date of performance, contents of maintenance, repair or alteration, name of the qualified mechanic, TT (Total Time), TSO (Time Since Overhaul), etc.	Logbook of the aircraft, the engine and the propeller, currently installed
4. Documents describing items for computing weight and center of gravity of the aircraft	Following items (except items which are not changed from the type-certificated configuration) shall be described in the documents: (1) Weight and center of gravity of airframe (2) Name, weight and center of gravity of each equipment (3) Useable capacity and center of gravity of each fuel tank (4) Others However, the Flight Manual may be a substitute for the documents when above-mentioned items are described in the Flight Manual.	
5. Documents describing reference materials in addition to those listed in the preceding each item	(1) Copy of Registration Certificate (2) Table of aircraft current condition (Form I-1) (3) Table of aircraft history (Form I-2) (4) TCD (Airworthiness Directive) compliance records (Form I-3) (5) Flight Manual records (Form I-4) (6) Table of operating method limitation and condition of radio navigation equipment installation (Form I-5) (7) Report of current condition on initial import aircraft (including Export Certificate of Airworthiness and matters in relation to work after issuance of Export Certificate of Airworthiness and report on current condition by qualified mechanic or Approved Organization for Aircraft Maintenance and Alteration (Form I-6))	

(2) An imported aircraft certificated by any foreign state which is a Contracting State to the Convention on International Civil Aviation (excluding the imported aircraft listed in (1)) (An aircraft described under Article 10, paragraph 5-(2) but excluding an aircraft described under Article 10, paragraph 6-(2) of the Law)

(a) Outline of Inspection

An Inspection for airworthiness certification for such aircraft shall be performed through checking the submitted documents, the practical inspection of aircraft such as ground test and flight test, etc.

(b) Documents for submission

When the aircraft which has been type-certificated or the same type of aircraft which has been airworthiness-certificated by Japanese Authority undergoes inspection for initial airworthiness certification, a copy of the documents of 1. (11), (c) & (d), 2. and 3. and a part of 1.(6), as well as the documents prescribed in 4., 6. and 7. shall be submitted. However, a copy of documents of 1. and 5. shall be required in case of the same type with different specification.

Documents under Article 12-2, paragraph 2 of the Regulations	Contents of documents and drawings, etc. in the left column	
	Items to be submitted	Items to be shown
1. Documents and drawings which adequately substantiate compliance with the standards under Article 10 paragraph 4 of the Law	(1) A copy of type certificate for an aircraft concerned. (2) A copy of STC (Supplemental Type Certificate) (if applicable) (3) The approved specification of aircraft, engine and propeller (TC data sheet etc.) and inspection standards for type certification (including special conditions or exemptions) (4) Materials describing technical explanation of aircraft (including design concept and necessary drawings) (5) Certification compliance table which shall be applied to aircraft, engine and propeller. (6) Practical test of material for major structure members including load analysis or calculations to substantiate strength and documents on electric load analysis (7) Materials to substantiate following items relating to engine (shall be applied only to turbine engine): (a) Stress level (b) Low cycle fatigue (c) Endurance (d) Icing (e) Ingestion (f) Blade containment	

	(8) General system schematics of aircraft, description and materials for failure analysis (9) Type flight test report (10) The minutes of evaluation committee for type certification and issue papers (11) Materials describing compliance with the noise standards and emission control standards for engine exhaust (if applicable) (a) Materials describing noise level and value of engine emissions (b) Materials describing measurement, analysis and calculation related to noise and engine emissions levels. (c) Schematics describing measures for reduction of noise and exhaust fuel emission levels around engine and nacelle section, etc. (d) Technical records related to repair or alteration affecting noise and engine emissions (12) Other materials necessary for type design	
2. Flight Manual	Flight Manual (If it is the same type of Flight Manual approved by Authority, showing the Manual or submitting a copy of cover page of original Manual and Supplemental Manual, etc. shall be also allowed) (Refer to Attachment I-2, 5-2.)	
3. Documents issued by the government of the manufacturing state certifying airworthiness, noise and engine missions of the aircraft.	(1) Export Airworthiness Certificate of aircrafts (2) Materials substantiating compliance with noise standards and emission control standards for engine exhaust (Documents describing compliance with the standards of Annex 16 to the Convention on International Civil Aviation, if applicable)	
4. Technical records related to maintenance or alteration and documents describing total flying time and flying time since last overhaul inspection, in the case of used aircraft	Historical records (list of implementation status of periodic time check since manufactured (shall be limited to inspection at a level comparable to that of inspection required when operating time shall over 500 hours) and alteration in which date of performance, contents of maintenance or alteration, name of the qualified mechanic, TT (Total Time), TSO (Time Since Overhaul), etc.).	Logbook of the aircraft, the engine and the propeller, currently installed
5. Maintenance Procedure Manual	Maintenance manual etc. (Refer to Attachment I-3.)	
6. Documents describing items for	Following items shall be described in the documents: (1) Weight and center of gravity of airframe	

computing weight and center of gravity of the aircraft	(2) Name, weight and center of gravity of each equipment (3) Useable capacity and center of gravity of each fuel tank (4) Others However, the Flight Manual may be a substitute for the documents when above-mentioned items are described in the Flight Manual.	
7. Documents describing reference materials in addition to those listed in the preceding each item	(1) Table of aircraft current condition (Form I-1) (2) Table of aircraft history (Form I-2) (3) TCD (Airworthiness Directive) compliance records (Form I-3) (4) Flight Manual records (Form I-4) (5) Table of operating method limitation and condition of radio navigation equipment installation (Form I-5) (6) Outline of maintenance works performed for preparation for inspection: Documents describing outline of major works performed for preparation of inspection (7) Records of corrective actions adopted for malfunctions Records describing major malfunctions discovered during preparation for inspection and status of corrective actions adopted (8) Measurement records Measured record of weight and center of gravity (9) List of TCD and performance records (List of applicable TCD) Shall be divided into airframe, engine, propeller and equipment and following items must be clearly entered into the list above: issue number, date of issue, effective date, time of implementation, outline of contents, applicability, reference material number, date of implementation and others.	(a) Registration Certificate Matters relating to the inspection performed this time in accordance with checklist etc. Contents of corrective actions adopted for malfunctions during preparation for inspection List of service bulletin (SB) etc. and implementation records (List of applicable SB etc.) Shall be divided into airframe, engine and propeller (equipment, if necessary) and following items must be clearly entered into the list above: issue number, date of

		issue, effective date, time of implementation, compliance, compliance category, outline of contents, applicability, reference material number, date of implementation.
	However, as for items entered into the checklists among items for which repetitive inspection is required, it shall be acceptable to only enter date of initial implementation, checklist number concerned and date of entry.	However, as for items entered into the checklists among items for which repetitive inspection is required, it shall be acceptable to only enter date of initial implementation, checklist number concerned and date of entry. (For an aircraft for air transport use, it is not necessary to show above, provided above-mentioned managements of SB, etc. are performed under its maintenance manual.).
	(10) Major equipment records In principle, shall apply to parts time controlled parts. The items listed below must be clearly recorded: type, part number, serial number, TT, TSO, TSC and retirement of life specified in Maintenance Procedure Manual, maintenance manual, and others. (11) Others (a) Parts catalog, operating manual, maintenance manual, overhaul manual, repair manual, and service bulletins of aircraft, engine, propeller and major parts (shall not be applied to type-certificated aircraft and to the same type of aircraft) (b) Procedures for production flight test including tolerance (shall be applied to type-certificated aircraft and to same type of aircraft, only when any change has been made from the last aircraft)	In addition to the list on the left, with regard to components for which inspection intervals are instructed by designers of aircraft or components, inspection list or other documents that record management of the interval. (If managed by electronic records, presenting the records may be acceptable.)

	(12) Records of in-house ground test and corrective actions adopted for malfunctions (a) The in-house ground test record: confirmed by the qualified mechanic (b) Record of corrective actions adopted for malfunctions during in-house ground test: Record describing condition of corrective actions adopted for malfunctions discovered during in-house ground test. (13) Records of in-house flight test and corrective actions adopted for malfunctions (a) Record of in-hose flight test: confirmed by the qualified mechanic with comments of the pilot in charge. (b) Record of corrective actions adopted for malfunctions during in-house flight test: Record describing condition of corrective actions adopted for malfunctions discovered during in-house flight test (14) Records of ground test and corrective actions adopted for malfunctions at official inspection (a) Record of ground test at official inspection (b) Record of corrective actions adopted for malfunctions during ground test at official inspection: Record describing condition of corrective actions adopted for malfunctions discovered during ground test at official inspection (15) Records of flight test and corrective actions adopted for malfunctions at official inspection (a) Record of flight test at official inspection (b) Record of corrective actions adopted for malfunctions during flight test at official inspection: Record describing condition of corrective actions adopted for malfunctions discovered during flight test at official inspection.	

2-3 Inspection for Renewal of Airworthiness Certification

(1) An aircraft which an approved organization for A/C maintenance and inspection (AOAMI) has been found in compliance with the standards after the organization performed its maintenance and inspection (ground test, flight test, etc.)
(The inspection performed by the approved organization shall be performed in accordance with the standards equivalents to those specified by FAR PART 43, Appendix D (hereinafter referred to as "annual inspection") or in accordance with a higher standards. (An aircraft listed under Article 10, paragraph 6-(3) of the Law).

(a) Outline of Inspection

The approved organization concerned performed annual inspection on structure and conditions of parts and systems installed on the said aircraft and then performed ground test and flight test, etc. after completion of such maintenance, and finally has certified that aircraft to be in compliance with standards. Therefore inspection for airworthiness certification by Japanese Authority shall be performed through checking the aircraft statement of conformity (ASC) as evidence for the certification or other documents issued by the approved organization, without practical inspection of the aircraft concerned, in principle.

As the approved organization has responsibility to perform inspection, ground test and flight test concerned and to confirm that there exist no nonconformity items to the standards by itself, it cannot omit a part of the inspection nor tests even if the identical inspection or tests were previously performed by any other person.

Although ASC shall be issued by the approved organization as evidence for certification, this ASC does not constitute permission for air navigation. However, as far as the old airworthiness certificate is still valid, air navigation shall be permitted all the while application for the issuance of a new airworthiness certificate is submitted after the issuance of ASC and new one is on hand.

When the new airworthiness certificate is issued, the old one shall be returned.

The proposed date of inspection (the same date of application date is permissible) for airworthiness certification must be within 15 days after the date when the said ASC is issued.

(b) Documents for submission

Documents under Article 12-2, paragraph 2 of the Regulations	Contents of documents and drawings, etc. in the left column	
	Items to be submitted	Items to be shown
1. Aircraft Statement of Conformity (ASC)	An ASC (The date of its issue must be within 15 days before the proposed date of inspection)	
2. Flight Manual	Flight Manual (If it is the same type of Flight Manual approved by Authority, showing the Manual or submitting a copy of approval of original Manual and Supplemental Manual shall be also allowed)	
3. Documents describing items for computing weight and center of gravity of the aircraft	Following items (except items which are not changed from the type-certificated configuration) shall be described in the documents: (1) Weight and center of gravity of airframe (2) Name, weight and center of gravity of each equipment (3) Useable capacity and center of gravity of each	

	fuel tank (4) Others However, the Flight Manual may be a substitute for the documents when above-mentioned items are described in the Flight Manual.	
4. Documents describing reference materials in addition to those listed in the preceding each item	(1) Copy of Registration Certificate (2) Copy of old Airworthiness Certificate (3) Copy of old Designation for operating limitations and categories (4) Table of aircraft current condition (Form I-1) (5) Table of aircraft history (Form I-2) (6) TCD (Airworthiness Directive) compliance records (Form I-3) (7) Flight Manual records (Form I-4) (8) Table of operating method limitation and condition of radio navigation equipment installation (Form I-5)	

(2) An aircraft other than specified in (1)
(An aircraft described under Article 10, paragraph 5-(3), excluding the aircraft specified under the same Article paragraph 6-(3) of the Law)

(a) Outline of Inspection

An inspection for airworthiness certification for the aircraft shall be performed through checking the submitted documents, the practical inspection of aircraft such as ground test and flight test, etc.

When the practical inspection of an aircraft shall be taken by Authority, prior to the inspection, annual inspection or equivalent or higher level of maintenance (refer to Attachment I-3, paragraph 3), corrective actions adopted for malfunctions, ground test and flight test shall be required to perform by the examinee.

(b) Documents for submission

Documents under Article 12-2, paragraph 2 of the Regulations	Contents of documents and drawings, etc. in the left column		
	Items to be submitted	Items to be shown	Remarks
1. Flight Manual	Flight Manual (If it is the same type of Flight Manual approved by Authority, showing the Manual or submitting a copy of cover page of original Manual		

	and Supplemental Manual, etc. shall be also allowed) (Refer to Attachment I-2, 5-3.)		
2. Technical records related to maintenance or alteration and documents describing total flying time and flying time since last overhaul inspection	(1) Historical records List of implementation of periodic time check, large scale repair and alteration performed since last inspection for airworthiness certification describing the time interval of 50 hours, 100 hour, 1000 hour, etc. inspection and date of implementation, name of the qualified mechanic, TT (Total Time), TSO (Time Since Overhaul, TSC (Time Since Check), etc.	Historical records (a) Records of the periodic time check performed since last inspection for airworthiness certification (b) Logbook of the said aircraft, engine and propeller, currently installed	Note 1
	(2) Records of corrective actions adopted for malfunctions since last inspection for airworthiness certification. Documents describing major malfunctions and corrective actions adopted for malfunctions since last inspection for airworthiness certification	Documents describing contents of corrective actions adopted for malfunctions since last inspection for airworthiness certification	Note 1
	(3) Records of major equipment replacement since last inspection for airworthiness certification (including parts replacement) Documents describing TT, TSO, TSC, etc., and certificate number of an authorized release certificate or certificate of conformity issued by a foreign authority which is recognized as equivalently effective to an authorized released certificate	Records of major equipment replacement since last inspection for airworthiness certification (including parts replacement) (a) Certification documents of replaced parts, authorized release certificate, etc. (b) Records of operational test etc.	Note 1
	(Note 1) In case of an aircraft which holds continued airworthiness certification, records for previous one year before the inspection may be satisfactory.		
3. Documents describing the preventive maintenance during the suspension of use	Documents describing date of implementation of preventive maintenance and name of the qualified mechanic. (May be included into 2. (2))	Records of preventive maintenance performed	
4. Documents describing items for	Following items (except items which are not changed from the		

computing weight and center of gravity of the aircraft	type-certificated configuration) shall be described in the documents: (1) Weight and center of gravity of airframe (2) Name, weight and center of gravity of each equipment (3) Useable capacity and center of gravity of each fuel tank (4) Others However, the Flight Manual may be a substitute for the documents when above-mentioned items are described in the Flight Manual		
5. Documents describing reference materials in addition to those listed in the preceding each item	(1) Copy of Registration Certificate (2) Copy of old Airworthiness Certificate (3) Copy of old Designation for operating limitations and categories (4) Table of aircraft current condition (Form I-1) (5) Table of aircraft history (Form I-2) (6) TCD (Airworthiness Directive) compliance records (Form I-3) (7) Flight Manual records (Form I-4) (8) Table of operating method limitation and condition of radio navigation equipment installation (Form I-5)		
	(9) Outline of maintenance works performed for preparation for inspection: Documents describing outline of measurement and other major works performed as preparation for inspection	Matters relating to the inspection and measurement performed this time in accordance with checklist etc.	
	(10) Records of corrective actions adopted for	Contents of corrective actions adopted for	

		malfunctions Records describing major malfunctions discovered during preparation for inspection and status of corrective actions taken	malfunctions during preparation for inspection	
	(11)	List of TCD and implementation records (List of TCD issued and performed since last inspection for airworthiness certification. However, reason must be described for TCD not performed)	List of TCD issued past and implementation records: Shall be divided into airframe, engine and propeller and equipment and following items must be clearly entered into the list above: issue number, date of issue, effective date, time of implementation, outline of contents, applicability, reference material number, date of implementation and others. However, as for items entered into the checklists among items for which repetitive inspection is required, it shall be acceptable to only enter date of initial implementation, checklist number concerned and date of entry. List of service bulletin (SB) issued in the past and implementation records. Shall be divided into airframe, engine, propeller (equipment, if necessary) and following items must be clearly entered into the list above: issue number, date of issue, effective date, time of implementation, compliance, compliance category, outline of contents, applicability, reference material number, date of implementation. However, as for items entered into the	Note 2

		checklists among items for which repetitive inspection is required, it shall be acceptable to only enter date of initial implementation, checklist number concerned and date of entry. (For an aircraft for air transport use, it is not necessary to show above, provided above-mentioned managements of SB, etc. are performed under its maintenance manual.)	
	(Note 2) In case of an aircraft which holds the continued airworthiness certification, records for previous one year before the inspection shall be satisfactory.		
	(12) Major equipment record In principle, shall be applied to parts requiring time-controlled parts. The items listed below must be clearly recorded: type, part number, serial number, TT, TSO, TSC, retirement of life specified in Maintenance Procedure Manual, maintenance manual, and others.	In addition to the list on the left, with regard to equipment, etc., for which inspection intervals are instructed by designers of aircraft or equipment, etc., inspection list or other documents which record management of the interval. (If managed by electronic records, presenting the records may be acceptable.)	
	(13) Materials describing compliance with noise standards and emission control standards for engine exhaust (if applicable) (a) Technical records related to repair or alteration affecting noise and engine emissions. (b) Schematics describing measures for reduction of noise and exhaust fuel emission levels around engine and nacelle section		
	(14) Record of in-house ground test and corrective actions adopted for malfunctions (a) The in-house ground test records: confirmed by the qualified mechanic (b) Records of corrective actions adopted for		

	malfunctions during in-house ground test: Record describing condition of corrective actions adopted for malfunctions discovered during in-house ground test (15) Records of in-house flight test and corrective actions adopted for malfunctions (a) Records of in-house flight test: confirmed by the qualified mechanic with comments of the pilot in charge (b) Records of corrective actions adopted for malfunctions during in-house flight test: Records describing condition of corrective actions adopted for malfunctions discovered during in-house flight test (16) Records of ground test and corrective actions adopted for malfunctions at official inspection. (a) Record of ground test at official inspection (b) Record of corrective actions adopted for malfunctions during ground test at official inspection: Record describing condition of corrective actions adopted for malfunctions discovered during ground test at official inspection (17) Records of flight test and corrective actions adopted for malfunctions at official inspection. (a) Record of flight test at official inspection (b) Record of corrective actions adopted for malfunctions during flight test at official inspection: Record describing condition of corrective actions adopted for malfunctions discovered during flight test at official inspection		

3. Procedures for Airworthiness Certification

3-1 Instructions for completing application form and for submitting the completed form and documents

(1) Instructions for completing application form for airworthiness certification

(a) Address or location of a head office of the applicant, and name or firm of applicant
In principle, the applicant shall be the user of the aircraft for which the application is submitted. However, such person as the owner of the said aircraft, the organization responsible for inspection and their representatives shall be acceptable. (Refer to CircularNo.1-017.)

(b) Name or firm and address of the owner
Name and address of the owner who actually owns the said aircraft at the time of application shall be entered.

(c) Classification, nationality and registration marks, registry number, type of the aircraft, type certificate number, serial number, date of manufacture, maximum take-off weight, airworthiness category, standards of Article 10 paragraph 4 which is applied to the aircraft, name of manufacturer or firm, address of manufacturer, number and the term of validity of airworthiness certificate which is currently held, regarding the aircraft
The matters described above shall be consistent with the documents to be submitted during inspection.
For aircraft that have been subjected to type certificate, airworthiness certification, or, type certificate or other action taken by a foreign state which is a Contracting State to the Convention on International Civil Aviation prior to the enforcement of the CAR on March 31, 2021 (CAR No.13 of 2021; hereinafter referred to as the “CAR Partial amendment of 2021”), and its airworthiness category is “Airplane, normal N” provided byAnnex I to the Regulations after amendment on CAR Partial amendment of 2021 shall apply as “Airplane, normal N” even if airworthiness category on the TCDS is “Airplane, acrobatic A,” “Airplane, utility U,” “Airplane, normal N” or “Airplane, transport C.” In such cases, JCAB shall issue airworthiness certificate as “Airplane, normal N.”

(d) Classification of fee
The classification of fee specified under the Cabinet Order shall be entered.

(e) Applicability for inspections on measurement of noise or engine emissions
When the practical measurement of noise or engine emissions shall be required on the said inspection, “YES” shall be entered and the necessary items of measurement (such as “noise level”, “engine emissions (excluding carbon dioxide),” or “engine emissions (limited to carbon dioxide)”) shall be clearly entered.

(f) The proposed location of inspection by an applicant
The proposed location of inspection by an applicant shall be entered.
As for an aircraft specified in Article 10 paragraph 6-(1) and (3) of the Law, an applicant

shall enter as follows and as for an aircraft specified in Article 10 paragraph 6-(2) of the Law, no entry is required.

a. If an applicant wants to receive an airworthiness certification from Operation Division, Regional Civil Aviation Bureau, the name of Inspectors Office of Regional Civil Aviation Bureau responsible for the inspection shall be entered.

b. If an applicant wants to receive airworthiness certification from the following Airport Inspectors Office, its name shall be entered.

(i) Haneda Airport Inspectors Office
East Japan Civil Aviation Bureau
3-3-1 Haneda-Airport Ota-ku Tokyo, 144-0041.
Tel. 03-5757-3000

(ii) Narita Airport Inspectors Office
East Japan Civil Aviation Bureau
133 Furugome Azakomemae Narita Tokyo, 282-8602.
Tel. 0476-30-2177

(iii) Sendai Airport Inspectors Office
East Japan Civil Aviation Bureau
Simomasuda Azaminamihara Natori Miyagi, 989-2401.
Tel. 022-383-1381

(iv) Nagoya Airport Inspectors Office
West Japan Civil Aviation Bureau
Toyoyama-cho Toyoba Nishikasugai-gun Aichi, 480-0202.
Tel. 0568-29-1985, 1986

(v) Yao Airport Inspectors Office
West Japan Civil Aviation Bureau
2-12 Yao-Airport Osaka, 581-0043.
Tel. 0729-92-7983

(g) The proposed date of inspection by an applicant
The proposed date of inspection by an applicant shall be entered. In addition, the same date of application date may be entered as for an aircraft specified in Article 10 paragraph 6 of the Law (limited to the case of receiving an airworthiness certification from Operations Division, Regional Civil Aviation Bureau).

(h) Remarks
Contact details (name, telephone number, etc.) of applicant shall be entered. Applicant's request for delivery of the Airworthiness Certificate by mail shall be also clarified, as necessary.

Applicable article, paragraph and item shall be entered in Remarks, as for an aircraft specified in Article 10 paragraph 5 and 6 of the Law (For example: “The Aircraft specified in Article 10 paragraph 6-(3) of the Law”)

(2) Instructions for submitting the completed form and documents

(a) In case of the inspection of new type of aircraft not type-certificated, or if proposing a foreign State as an inspection location, the address shall be;

Airworthiness Engineer, Airworthiness Division, Aviation Safety and Security Department,
Civil Aviation Bureau, Ministry of Land, Infrastructure and, Transport and Tourism
2-1-3 Kasumigaseki, Chiyoda-ku, Tokyo
Tel 03-5253-8735

(b) If the proposed location of inspection is located in Niigata, Nagano, Shizuoka and the eastward, the address shall be:

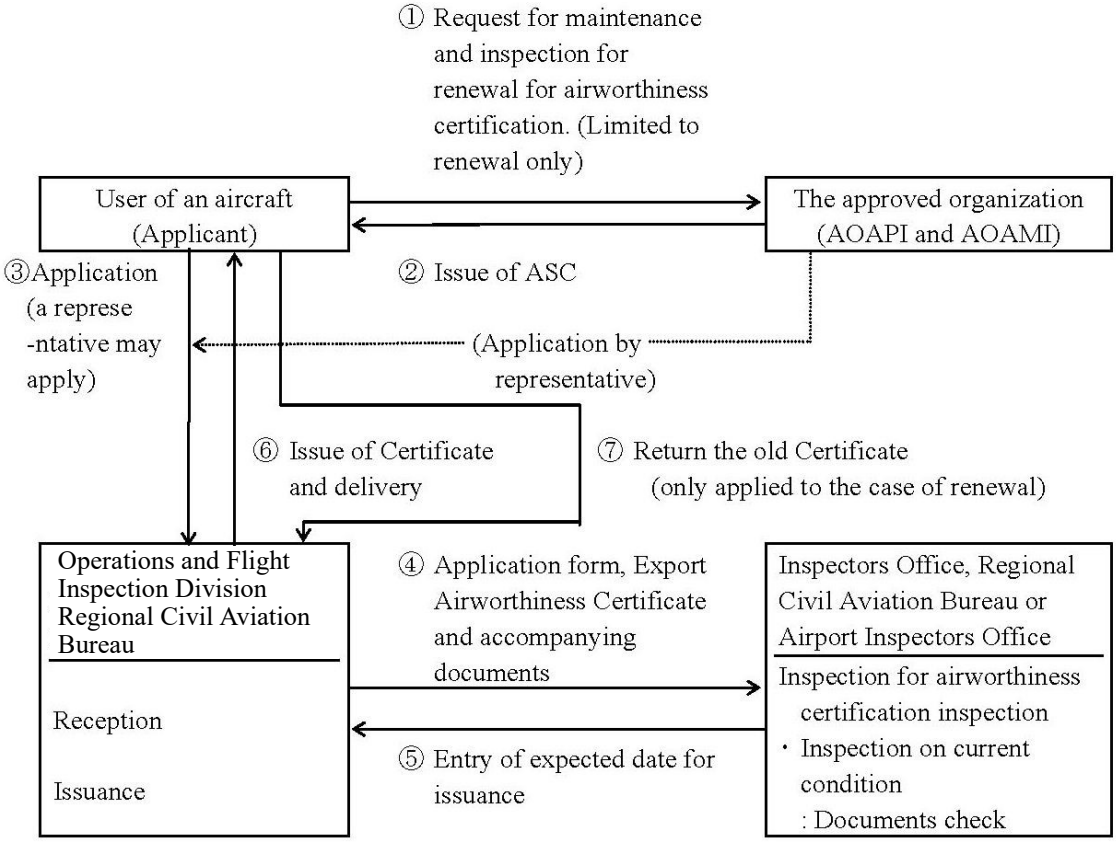
Inspection and Crew Section, Operations Division,
Air Traffic Service and Safety Department,
East Japan Civil Aviation Bureau
Kudan Daini Godochosha
1-1-15 Kudan-Minami, Chiyoda-ku, Tokyo, 102-0074
TEL 03-5275-9292

(c) If the proposed location of inspection is located in Toyama, Gifu, Aichi and westward, the address shall be:

Inspection and Crew Section, Operations Division,
Air Traffic Service and Safety Department,
West Japan Civil Aviation Bureau.
No.4 Building of Osaka Godochosha
4-1-76 Otemae, Chuo-Ku, Osaka-shi, Osaka-fu, 540-8559
TEL 06-6949-6211

3-2 The flow chart regarding inspection and issuance of Airworthiness Certificate.

(1) In case of initial inspection for an aircraft manufactured in Japan for which the inspection for current condition shall be omitted (an aircraft specified under Article 10, paragraph 6-(1) of the Law) or inspection for renewal (aircraft specified under Article 10, paragraph 6-(3) of the Law).



(a) The proposed date of inspection (In the case of receiving an airworthiness certification from Operations Division, Regional Civil Aviation Bureau, the same date of application date is permissible) must be within 15 days after the date of issuance of ASC.

(b) The approved organization may act as a representative for submitting application. (refer to CircularNo.1-017)

(c) If any applicant wants to have the airworthiness certificate delivered by mail, it must be clearly described in the remarks column on application form. In addition to this, an envelope with address clearly written and stamps equal to the registered mail fee shall accompany the application documents. (The envelope shall be the size capable of enclosing A5 sized paper specified by Japanese Industrial Standards.)

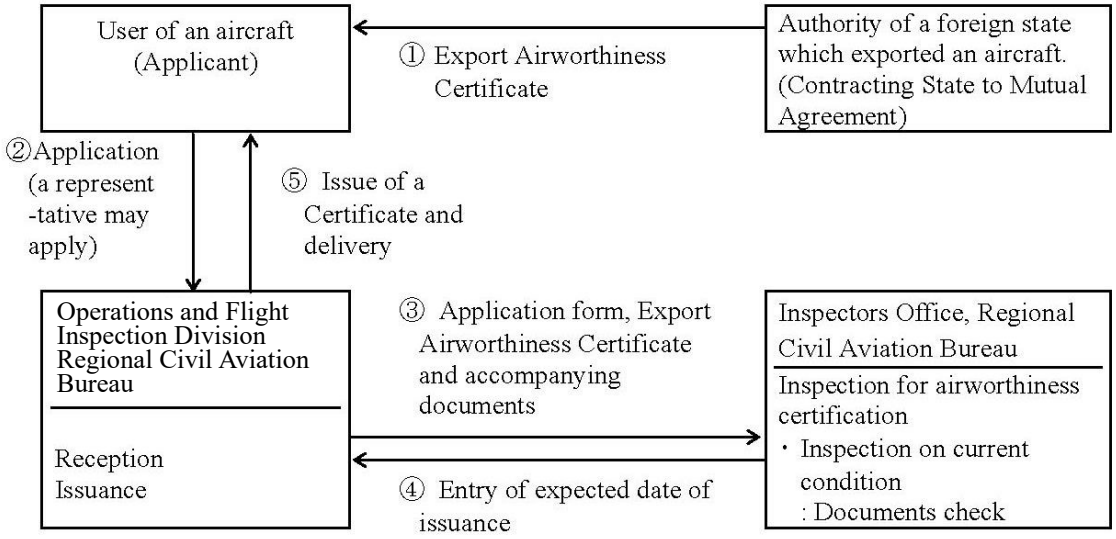
(d) The user of an aircraft shall enter the date of issue and airworthiness certificate number in an aircraft logbook.
(Article 58 of the Law, Article 142 of the Regulations)

(e) In the case of renewal, user of an aircraft shall return the old certificate without delay when the said user received the new airworthiness certificate.
(Article 16-3 of the Regulations)

(f) If an applicant (or a representative) wants to receive an airworthiness certificate from

Airport Inspectors Office regarding “Issue of Certificate” in the above figure, he/she shall coordinate the date of the inspection with the Office on “Application” to Operations Division, Regional Civil Aviation Bureau in the above figure.

(2) In case of new inspection for an imported aircraft for which inspection for current condition shall be omitted. (An aircraft specified under Article 10, paragraph 6-(2) of the Law)



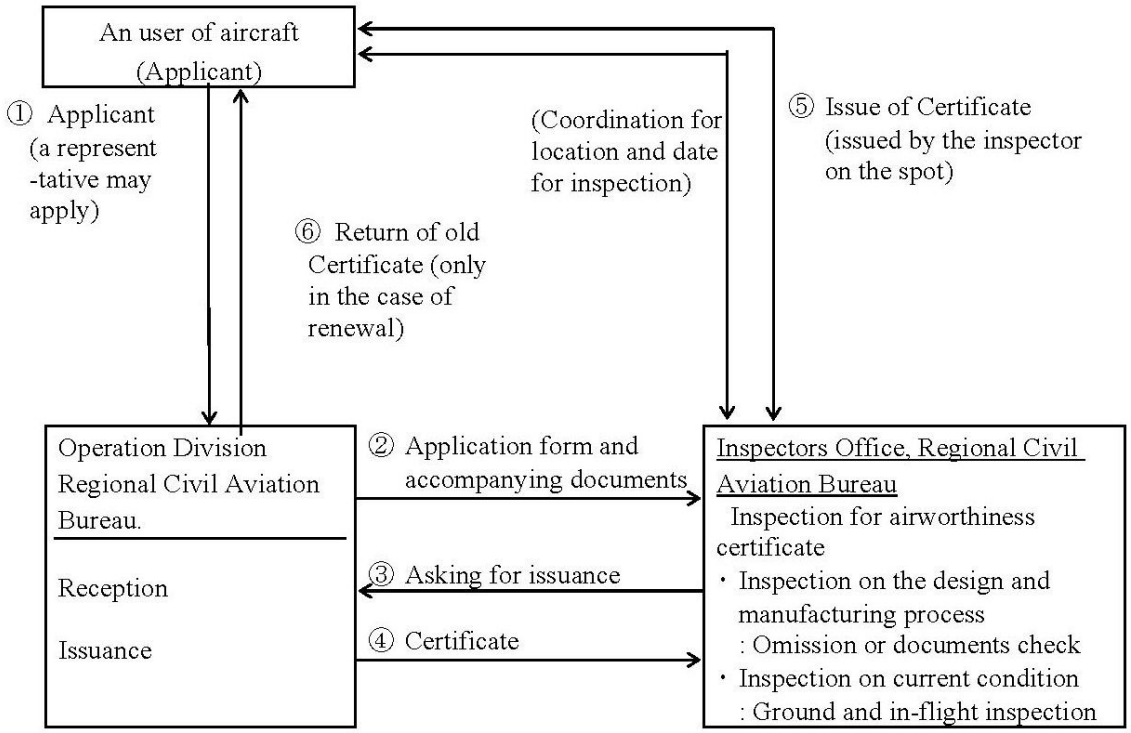
(a) Export Certificate of Airworthiness shall have been issued within two (2) months before the proposed date of inspection (the same date of application date is permissible). However, this shall not be applied when the authority specially permits taking the time for transportation into consideration.

(b) An application by a representative such as an operator who is responsible for inspection is permitted. (Refer to Circular No.1-017.)

(c) If any applicant wants to have an airworthiness certificate delivered by mail, it must be clearly described in the remarks column on application form. In addition to this, an envelope with address clearly written and stamps equal to the registered mail fee shall accompany the application documents. (The envelope shall be the size capable of enclosing A5 sized paper specified by Japanese Industrial Standards)

(d) The user of an aircraft shall enter the date of issue and airworthiness certificate number in an aircraft logbook.
(Article 58 of the Law, Article 142 of the Regulations)
If the aircraft logbook is one available in the market and the space for entry the above matters shall be limited or none, above matters shall be written on another paper to attach to the said logbook.

(3) In case of an aircraft for which inspection for current condition shall not be omitted.
(An aircraft specified under Article 10, paragraph 5 and excluding an aircraft specified under same Article, paragraph 6 of the Law)



(a) An application by a representative such as an operator who is responsible for inspection is permitted. (Refer to Circular No.1-017.)

(b) In a case that the aircraft does not comply with the standards related to the Civil Aeronautics Law and the airworthiness is not confirmed as a result of airworthiness certification inspection, it shall be treated as “inspection pending.”

In the event that there is no possibility of conformity to the standards within three months after the implementation of the inspection, the Regional Airworthiness Engineer’s Office shall issue an Airworthiness Certification Inspection Non-Conformity Notice (Form I-7) to the applicant.
However, this provision shall not apply in a case a person who received the Airworthiness Certification Inspection Non-Conformity Notice can show the plan to prove conformity to the standards in coordination with the relevant Airworthiness Engineer's Office.
In a case a person who has been issued an airworthiness certification inspection non-conformity notice applies for airworthiness certification again, the said airworthiness certification inspection non-conformity notice shall be submitted in addition to the documents specified in Part I, paragraph 2.

3-3 Procedures for Reissuance of Airworthiness Certificates

(1) Application destination
Who intends to apply for re-issuance of an airworthiness certificate in accordance with Article

16-2 of the Regulation shall submit an application for re-issuance of an airworthiness certificate with necessary items described therein and an airworthiness certificate (except in cases of loss) to the following office.

In a case that the applicant wishes to receive an airworthiness certificate by mail, the applicant shall clearly indicate that in the remarks column of the application and shall also attach an envelope with postage stamp corresponding to the registered mail (the envelope must be able to enclose a form of which size is Japanese Industrial Standards A5).

(a) Cases where the issuer of the Airworthiness Certificate is the Minister of Land, Infrastructure, Transport and Tourism
Airworthiness Engineer, Airworthiness Division, Aviation Safety and Security Department, Civil Aviation Bureau, Ministry of Land, Infrastructure and, Transport and Tourism of Japan
2-1-3 Kasumigaseki, Chiyoda-ku, Tokyo
Tel 03-5253-8735

(b) Cases where the issuer of Airworthiness Certificate is the Director-General of the East Japan Civil Aviation Bureau
Inspection and Crew Section, Operations Division, Air Traffic Service and Safety Department, East Japan Civil Aviation Bureau
Kudan Daini Godochosha
1-1-15 Kudan-Minami, Chiyoda-ku, Tokyo
TEL 03-5275-9292

(c) Cases where the issuer of Airworthiness Certificate is the Director-General of the West Japan Civil Aviation Bureau
Inspection and Crew Section, Operations Division, Air Traffic Service and Safety Department, West Japan Civil Aviation Bureau
No.4 Building of Osaka Godochosha
4-1-76 Otemae, Chuo-Ku, Osaka-shi, Osaka-fu
TEL 06-6949-6211

(2) Documents to be Submitted to change the entries.
Who intends to change the entry on the airworthiness certificate regarding following matters shall also submit the following documents in accordance with the respective matter as proof of the reason for the change.
In principle, changes stated in the airworthiness certificate other than matters listed below shall not be permitted.

(a) Name of Type or Airworthiness Category (limited to the case where the Name of Type or Airworthiness Category has been changed as a result that Approved Maintenance and Organization performed the alteration for an aircraft which has an airworthiness certificate and confirmed the compliance with the standards stipulated in Article 10 paragraph 4 of the Law in accordance with Article 19-2 of the regulation.)

Documents to be submitted:

① A copy of the relevant part of the onboard aeronautical logbook signed or registered and sealed by certifying staff who has confirmed the alteration.

② A copy of the change examination table made at the time of implementation of such alteration.

(b) Airworthiness certification validity period (limited to the case where the name of the person who has established maintenance manuals applicable to the aircraft of which airworthiness certification is valid continuously has been changed (excluding the case where the contacted person has been changed))

Documents to be submitted: a document evidencing the fact of such change.
examples: certificate of the registered matters (for a corporation), abstract of family register or copy of the residence certificate (for an individual), etc.

3-4 Procedures for Reissuance of Designation for operational limitation, etc.

(1) Application destination

In a case of apply for reissuance due to loss, breakage, or contamination of the Designation for operational limitation, etc. issued in accordance with Article 13 of the Regulations, submit the application for reissuance of the Designation for operational limitation, etc. (Form I-8) with the Designation for operational limitation, etc. (excluding cases where such Designation has been lost) to the persons listed below.

If the applicant wishes to receive a Designation for operational limitation, etc. by mail, he/she shall clearly indicate that in the remarks column of the application and shall also attach an envelope with postage stamp corresponding to the registered mail (the envelope must be able to enclose a form of which size is Japanese Industrial Standards A5).

(a) Cases where the Issuer of the Airworthiness Certificate is the Minister of Land, Infrastructure, Transport and Tourism

Aircraft Engineer, Airworthiness Division, Aviation Safety and Security Department, Civil Aviation Bureau, Ministry of Land, Infrastructure, Transport and Tourism of Japan
2-1-3 Kasumigaseki, Chiyoda-ku, Tokyo
TEL 03―5253―8735

(b) Cases where the Issuer of Airworthiness Certificate is the Director-General of the East Japan Civil Aviation Bureau

Inspection and Crew Section, Operations Division, Air Traffic Service and Safety Department, East Japan Civil Aviation Bureau
Kudan Dini Godochosha
1-1-15 Kudan-Minami, Chiyoda-ku, Tokyo
TEL 03-5275-9292

(c) Cases where the Issuer of Airworthiness Certificate is the Director-General of the West

Japan Civil Aviation Bureau
Inspection and Crew Section, Operations Division, Air Traffic Service and Safety Department, West Japan Civil Aviation Bureau.
No.4 Building of Osaka Godochosha
4-1-76 Otemae, Chuo-Ku, Osaka-shi, Osaka-fu
TEL 06-6949-6211

(2) Documents to be submitted to change the entries.
Any person who intends to change the entries of the Designation for operational limitation, etc. due to changing the name of type or the airworthiness category stipulated in paragraph 3-3(2)(a) shall also submit the following documents.

Documents to be submitted:

① A copy of the relevant part of the onboard aeronautical logbook signed or registered and sealed by certifying staff who has confirmed the alteration.

② A copy of the change examination table made at the time of implementation of such alteration.

4. Interim Measures

An aircraft with an airworthiness certificate under the former Law, which was amended by Law for amendment of a part of Law (Law No. 35, 1996), on the time when the Regulation revised by Ministerial Ordinance for revision of a part of the Regulations, Ordinance No. 24, 1997 shall be enforced (October 1st 1997), and to which the new environmental standards shall be applied, but shall be recognized by the Minister of Land, Infrastructure, Transport and Tourism as having difficulty to comply with the new standards, shall be certificated for airworthiness, in its current condition without compliance with environmental standards.

様式Ⅰ-1(Form Ⅰ-1)

航 空 機 現 況 表
Table of Aircraft Current Condition

1	登　　録 Registration	（登録記号）ＪＡ Nationality mark	（登録記号） Registration mark	（登録年月日） Date of registration
2	耐空証明 Airworthiness Certificate	（旧耐空証明書番号） Former Airworthiness Certificate number	（旧耐空証明書有効期間） Duration of former Airworthiness Certificate	
3	（欠　　番） Blank			
4	運用限界 Operating limitation	（旧運用限界等指定書発行年月日） Issue date of former Designation for Operating Limitation	（飛行規程） Flight Manual　章 Chapt.　章 Chapt.　章 Chapt.　章 Chapt.　追加□ Supplemental　その他□ Others	
5	定置上・検査実施検査官室等 Home base of aircraft・Inspection office	（定置場） Home base of aircraft	（検査実施検査官室） Office of inspection in charge	（検査場所） Inspection location
6	検査・事業区分 Category of inspection・aircraft use	（検査区分）　新規□ Initial　定期□ Periodic　修改□ Repair and alteration Category of inspection		
7	作業内容 Contents of work	（官検前作業内容） Contents of work performed before official inspection		
8	指導者等 User	（航空機使用者） Aircraft user	（日常整備担当者） Person in charge of regular maintenance	
9	作業者 Person in charge	（官検前作業実施者） Person in charge of work before official inspection		
10	機体 Airframe　型　式 Type of aircraft			
11	機体 Airframe　耐空類別 Category of airworthiness certification			
12	機体 Airframe　製造番号・年月日 Serial number・date	（製造番号） Serial number of aircraft	（製造年月日） Manufacturing date	
13	機体 Airframe　最大重量 Maximum weight	（最大離陸重量）　Kg Maximum takeoff weight	（最大着陸重量）　Kg Maximum landing weight	
14	機体 Airframe　使用時間 Operating hours	（T. T.）　hr	（T. S. C.）　hr　（点検の種類）Kind of inspection　（実施年月日）Date of performance	

15	発動機 Engines	No.1	型式・製造番号 Type・serial number	(型式名) Type of engine		(製造番号) Manufacturing serial number	
16			使用時間 Operating hours	(T. T.) hr		(T. S. O.) hr	
17		No.2	型式・製造番号 Type・serial number	(型式名) Type of engine		(製造番号) Manufacturing serial number	
18			使用時間 Operating hours	(T. T.) hr		(T. S. O.) hr	
19		No.3	型式・製造番号 Type・serial number	(型式名) Type of engine		(製造番号) Manufacturing serial number	
20			使用時間 Operating hours	(T. T.) hr		(T. S. O.) hr	
21		No.4	型式・製造番号 Type・serial number	(型式名) Type of engine		(製造番号) Manufacturing serial number	
22			使用時間 Operating hours	(T. T.) hr		(T. S. O.) hr	
23	騒音基準 Noise standards			(ICAO Annex16 Vol.1 該当章) Applicable chapter of ICAO Annex16, Vol.1		章 Chapt.	
24	プロペラ/ローター Propeller/Rotor			(プロペラ/メインローター型式) Type of propeller/main rotor			
25	騒音 Noise	騒音値 Noise values		(離陸) takeoff	(側方) sideline	(進入) approach	(上空通路) flyover
26		基準値 Standard values		(離陸) takeoff	側方) sideline	(進入) approach	(上空通路) flyover
27	発動機排出物 Emission control standards			(排出燃料規制) Fuel venting emission standards	適用有 □ applied	(排出ガス規制) Exhaust emission standards	適用有 □ applied
28	申請者氏名又は名称・作成年月日 Name or firm of applicant・date			(申請者氏名又は名称) Name of applicant or firm		(作成年月日) Date of preparation	

室コード Office code　本省１、 Head office　東京２、 Tokyo　羽田３、 Haneda　調布４、 Chofu　成田５、 Narita　大阪６、 Osaka　名古屋７、 Nagoya　八尾８、 Yao　仙台９ Sendai

様式Ⅰ－2 (Form I-2)

JA

航 空 機 経 歴 表

Table of Aircraft History

番号 No.	合格年月日 Date of pass	検査区分 Inspection category	耐空（騒音）証明番号 Airworthiness (Noise) Certificate number	T. T. (hr)	作業内容 Contents of work

検査区分コード
Inspection category code

1：新規耐空証明検査
Initial inspection for airworthiness certification

2：定期耐空証明検査
Periodic inspection for airworthiness certification

3：修理改造検査
Inspection for repair and alteration

（4：新規騒音基準適合証明検査）
Initial inspection for noise standards compliance certificate

（5：定期騒音基準適合証明検査）
Periodic inspection for noise standards compliance certificate

（6：騒音関係修理改造検査）
Inspection for noise related repair and alteration

様式Ⅰ－3 (Form I-3)

JA

耐空性改善通報実施状況
TCD (Airworthiness Directive) Compliance Records

項　/ Page number

Date　年　月　日　現在 as of

番号 No.	該当 TCD 番号 Applicable TCD No.	処置終了 finished	初回処置 Initial action		繰返処置 Repetitive action		適用区分 Category of articles	備考 Remarks
			未実施 not finished	（実施何月日） Date of performance	有 yes	終了処置（実施年月日） Date of performance of terminated action		
		☐	☐		☐			
		☐	☐		☐			
		☐	☐		☐			
		☐	☐		☐			
		☐	☐		☐			
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		☐	☐		☐			
		☐	☐		☐			
		☐	☐		☐			

適用区分コード Code of category of articles　A：機体 airframe　E：発動機 engine　P：プロペラ propeller　C：その他 others

注：前回提出からの追加分及び前回提出から実施状況に変更のあったものについて記入又は訂正すること。
Note: Both additional applicable TCDs other than those previously submitted and TCDs of which performance status have been changed from previously submitted shall be entered.

JA

運用様式限界及び無線航法機器等装備状況表
Table of Operating Method Limitation and Condition of Radio Navigation Equipment Installation

運用様式限界
Operating method limitation

□計器飛行方式 Instrument flight rules	□有視界飛行 Visual flight	□高高度飛行 High altitude operations
□計器飛行 Instrument flight	□昼間 Day operations	□着氷気象状態 Icing meteorological condition
□計器航法 Instrumental navigation	□夜間 Night operations	□その他 Others

無線航法機器等装備状況
Condition of radio navigation equipment

VHF COM :	HF COM :	ELT :	ACARS :	SATCOM :
ADF :	VOR/LOC :	DME :	G/S :	M/B :
LORAN(A) :	LORAN(C) :	OMEGA :	GPS :	INS/IRS :
T/P(A) :	T/P(C) :	T/P(S) :	E/ALT :	TCAS :
RADIO ALT :	WXRADER :	A/PILOT :	GPWS :	FMS :
CVR :	FDR :	CPDLC :	EFIS :	

新規輸入航空機現状報告書
Report of Current Condition on Initial Import Aircraft

航空機 Aircraft

国籍記号及び登録記号 Nationality and registration mark	JA	製造番号 Serial number of aircraft	
航空機型式及び製造者 Type of aircraft and manufacturer			
所有者氏名又は名称 Name of owner or firm			

輸出耐空証明 Export Airworthiness Certificate

発行番号 Issue number		発行日 Issue date	西暦　　年　　月　　日 year/month/day

輸出耐空証明に含まれる追加型式設計（ＳＴＣ）による改修
Alterations implemented by Supplemental Type Certificate included in the Export Airworthiness Certificate

外国の証明番号 Number of Certificate of foreign state	我が国の承認番号 Number of Approval of Japanese Authority	表　　題 Title

（注）１．原則として検査希望時期は輸出耐空証明書の発行日から２ヶ月以内であること。
Note　In principle, proposed inspection date shall be within 2 months after the issue date of Export Airworthiness Certificate.

２．ＳＴＣについては、必ず我が国の承認を受けていること。受けていない場合は、国の実験検査を省略する申請区分の適用は受けられない。
STCs shall be approved by the Japanese Authority. Otherwise, inspection category with omission of a part of practical inspection on aircraft shall not be applied.

輸出耐空証明書発行後の作業記録 Work records which were performed after issue of Export Airworthiness Certificate

次の①、②及び③の作業が実施された場合はそれについての記録を記載すること（同内容の記録を添付してもよい）。実施されていない場合は「なし」と記載すること。
Work records shall be entered (or attach the records) with regard to ①, ② and ③ below. If any of them was not performed, enter “none”.

①、②及び③以外の作業が実施されている場合は、原則として国の実機検査を省略する申請区分の適用は受けられない。
If works other than specified in ①, ② and ③, inspection category with omission of a part of practical inspection on aircraft shall not be applied, in principle.

① 航空機の輸送のための改修（空輸のための燃料増槽タンクの取付け・取外し、海上輸送のための分解・組立等）
Alteration for transporting the aircraft (Installation or removal of auxiliary fuel tank for ferry flight ,or disassembly and assembly for transport by sea, etc.)

② 空輸又は上記作業に伴い発生した整備作業（保守、軽微は修理又は小修理に限る。）
Maintenance accompanied by ferry flight or above work (limited to preservation, slight repair or minor repair)

③ 領収検査（地上検査及び飛行検査）に伴い発生した整備作業（保守、軽微な修理又は小修理に限る）
Maintenance accompanied by acceptance inspection (ground inspection and in-flight inspection) (limited to preservation, slight repair and minor repair)

作業年月日 / 場所 Date of performance/location	作業概要 / 準拠書類等 / 作業確認者又は組織 / その他 Outline of work/basis of work documents/certifying staff or organization/others
添付書類の有無 Accompanying documents	有 / 無 yes / no

上記の航空機について、輸出耐空証明書発行後実施された作業は適切なものであること及び現状は特に不具合ないことを報告する。

I hereby inform that the works performed after issuance of Export Airworthiness Certificate are adequate and current condition has no discrepant matters on the aircraft mentioned above.

西暦　　年　　月　　日　　氏名又は名称

year/month/day　　Name or firm

（当該航空機の有資格整備士又は整備改造認定事業場）

Qualified mechanic in charge of this aircraft or Approved Organization for AMA

Form I-7

as of Month Day, Year

Attention (Users of Aircraft)

- Airworthiness Division, Civil Aviation Bureau, Ministry of Land, Infrastructure, Transport and Tourism
- Airworthiness Engineer, East Tokyo Regional Civil Aviation Bureau
- Airworthiness Engineer, West Japan Civil Aviation Bureau

Notice of Non-Conformity to Airworthiness Certification Inspection

In the airworthiness certification inspection for aircraft JA○○○○ filed on MM DD, YYYY, we will notify you of a failure to pass the inspection because it does not show compliance with the standards related to the Civil Aeronautics Law and because there is no prospect to prove compliance with the standards.

When you want receive the airworthiness certification inspection again, you need to apply for airworthiness certification again.
The reasons for the nonconformity are as follows.

-
-
-
-

Form I-8

Application for Reissuance of Designation of Operational Limits, etc.

Attention (Minister of Land, Infrastructure,
Transport and Tourism/Director-General of
the Regional Civil Aviation Bureau)

MM DD, YYYY

Address or the location of the principal office
Name

I would like to receive the re-issuance of the operation limit etc. for the following aircraft, so I would like to apply for it.

Category		the country of registration and registration marks	JA
Type of the aircraft		Production Number	No.
Airworthiness category		Airworthiness Certification Number	No.
Name of manufacturer			
Reason for Reissuance			
Remarks			

NOTE
He/she may sign in lieu of stating his/her name and affixing his/her seal.

Attachment I-1

Instructions for Completing the Table of Aircraft Current Condition etc.

1. Introduction

As for the table of aircraft current condition etc. to be submitted upon application for airworthiness certification inspection etc., document form and applicability shall be provided in paragraph 2 and entry instructions shall be provided in paragraph 3.

2. Applicability

2-1 Table of aircraft current condition (Form I-1)

This document shall be submitted upon inspection for airworthiness certification and upon inspection of repair or alteration.

2-2 Table of aircraft history (Form I-2), TCD (Airworthiness Directive) compliance records (Form I-3), Flight Manual records (Form I-4) and table of operating method limitation and condition of radio navigation equipment installation (Form I-5)

These documents shall be submitted together with the table of aircraft current condition upon application for airworthiness certification inspection.

2-3 Report of current condition on initial import aircraft (Form I-6)

This document shall be submitted upon application for initial airworthiness certification inspection with omission of a part of current inspection, which shall be conducted on the imported aircraft applicable to the provision of Article 10, paragraph 6-(2) of the Law.

3. Entry instructions

3-1 General

(1) Date shall be entered in Christian era, like “2000/02/01” for year/month/day.

(2) Operating hour shall be entered with inserting + mark between hour and minute, like “400+05” for 400 hours and 5 minutes.

(3) Check mark shall be entered into the applicable box in the selection format.

(4) Space for items not applicable on the concerned aircraft shall be remained blank.

3-2 Table of aircraft current condition (Form I-1)

(1) Registration and airworthiness certificate (nationality and registration mark, date of registration, former airworthiness certificate number and duration of former airworthiness certificate)

These data shall be entered in comparing with registration certificate and airworthiness certificate.

(2) Operating limitation (issue date of former designation for operating limitation, and Flight Manual)

In the column of Flight Manual, applicable chapter numbers shall be entered to which are specified as operating limitation based on the designation for operating limitation. In a case that a part or all of Supplemental Flight Manual shall be specified as operating limitation, a check mark shall be entered in the relevant column of “Supplemental,” and in a case that supplements other than basic Flight Manual and Supplemental Flight Manual shall be specified as operating

limitation, a check mark shall be entered in the relevant column of "Others".

(3) Home base of aircraft・inspection office (home base of aircraft, office of inspection in charge, inspection location)
Name of airport etc. shall be entered for home base of aircraft and for inspection location. Office code (refer in the lower margin of the form I-1) of the office of inspection in charge shall be entered. The inspection for airworthiness certification with omission of a part of current inspection under the Article 10, paragraph 6 shall be conducted only by either Regional Office of Civil Aviation Bureau in Tokyo (Kudan-Minami) or in Osaka (Otemae).

(4) Category of inspection・aircraft use (category of inspection and category of aircraft use)
Check mark shall be entered in the applicable boxes.

(5) Contents of work (contents of work performed before inspection)
Kind of inspection and maintenance or title, etc. (annual inspection, 100 hour inspection, B-check, etc.) performed just before the inspection as preparation and related work for the inspection. In case of work intended for inspection of repair or alteration, title of work shall be entered in order of major work within this frame, like "installation of DME".

(6) User etc. and person in charge (aircraft user, person in charge of regular maintenance and person in charge of the work before official inspection)
Each applicable name or firm shall be entered.

(7) Type of aircraft, category of airworthiness certification and serial number of aircraft・date (serial number of aircraft and manufacturing date)
These data shall be consisted with ones indicated in the onboard documents.

(8) Maximum weight and operating hours (maximum takeoff weight, maximum landing weight, T.T., T.S.C. and kind of inspection and date of implementation)
Weight shall be entered in kg, and only integer after round-off of one decimal place, like "5320" for 5320.3 kg.
Operating hour for T.S.C shall be the accumulated flight hour since the latest C-check was performed.

(9) Type of engine・manufacturing serial number and operating hours (type of engine, manufacturing serial number, T.T. and T.S.O.)
Data upon application shall be entered.

(10) Noise standards (applicable chapter of ICAO Annex 16, Vol.1)
If noise standards shall be applied under the Appendix No.2 of the Regulations, applicable chapter of the ICAO Annex 16 Vol.1 shall be entered.

(11) Propeller/Rotor (Type of propeller/ main rotor)
Applicable name of type shall be entered.

(12) Noise values and standard values (takeoff, side line, approach and flyover)
Noise values specified in Flight Manual and standard values specified in Appendix No.2 (ICAO Annex 16, Vol.1) shall be entered. Value shall be rounded-off two decimal places, like "90.3" for 90.25 EPNdB.

(13) Emission control standards (fuel venting emission standards, exhaust emission standards and CO_2 emission standards)
If fuel venting emission standards and exhaust emission standards shall be applied under the Appendix No.3 of the Regulations, check mark shall be entered in the applicable box for fuel venting emission and exhaust emission respectively.
If CO_2 emission standards shall be applied under the Appendix No.4 of the Regulations (ICAO

annex 16 vol. 3), for the time being, "(applicable to CO_2 emission standards)" shall be entered in the box of "(9) Type and Serial number of Engines" column.

(14) Name or firm of applicant・date

Name or firm of applicant shall be consistent with one specified in the application form. Date of preparation shall be the date on which this table was prepared.

3-3 Table of aircraft history (Form I-2)

(1) Registration mark

Registration mark shall be entered in the right most upper column by referring paragraph 3-2(1).

(2) Number, date of pass, category of inspection, airworthiness (noise) certificate number, T.T. and contents of the work

As for the official inspections (inspection for airworthiness certification, inspection of repair or alteration, inspection for noise standards compliance certification, or inspection of repair or alteration related to noise taken prior to enforcement of amendment of the Law (Amendment No.35 in year 1996), these items of passing date, code of inspection category (refer codes in the lower margin of the form), airworthiness (noise) certificate number, T.T. and contents of the work shall be entered for each inspection in the order of passing date from initial to last inspection in comparing with the aircraft logbook etc.

Entry instructions for each item shall be based on the paragraph 3-2. If definite history data are not available, they may not be entered. If the form has not enough column to entry all of necessary items, addition of pages shall be acceptable.

3-4 TCD (Airworthiness Directive) compliance records (Form I-3)

(1) Registration mark

Registration mark shall be entered in the right most upper column by referring paragraph 3-2(1).

(2) Number, applicable TCD number and "finished" status

All of applicable TCDs to that aircraft shall be entered. In principle, entry order shall be in TCD number. Check mark shall be entered in the box of "finished" column, if the concerned TCD has been finished including initial action and repetitive action.

(3) Initial action

Check mark shall be entered in the box of "not finished" column, if the initial action on the concerned TCD has not finished upon application due to the designation of the compliance timing specified in that TCD etc.

The last date of implementation as the initial action shall be entered in the column of "date of implementation", if all of actions have been finished including the case that plural actions are specified as the initial action.

(4) Repetitive action

Check mark shall be entered in the box of "yes" column, if the concerned TCD specifies repetitive action, and date shall be entered in the "date of implementation of terminated action", if the terminated action for the repetitive action for that TCD has been finished.

(5) Category of articles and remarks

Category code shall be entered in the column of "category of articles" in comparing with the cords in the lower margin of the form I-3, and if special notice such as compliance date for the initial action or intervals of repetitive action are specified, these notices shall be entered in the "remarks" column.

(6) Others

If form shall consist of plural pages, page number shall be entered in the "page" column, like page number "1/2".

3-5 Flight Manual records (Form I-4)

(1) Registration mark

Registration mark shall be entered in the right most upper column by referring paragraph 3-2(1).

(2) Date of approval of the basic Flight Manual and kind of the said Flight Manual

Date of approval of the basic Flight Manual for that aircraft shall be entered, and if the said Flight Manual shall come under Flight Manual for type certification or original Flight Manual, check mark shall be in the concerned box.

(3) Number, date of approval (or installation) of Supplemental Flight Manual, kind of the said Flight Manual and name of the Supplemental Flight Manual

If the Supplemental Flight Manuals applicable to that aircraft has been issued, date of approve and title of the manuals shall be entered in order of approved date.

If each Supplemental Flight Manual shall come under Flight Manual for type certification, Flight Manual for supplemental type certificate or original Flight Manual, check mark shall be entered in the concerned box.

3-6 Table of operating method limitation and condition of radio navigation equipment installation (Form I-5)

(1) Registration mark

Registration mark shall be entered in the right most upper column by referring paragraph 3-2(1).

(2) Operating method limitation

Check mark shall be entered in the all applicable boxes. Checked marks shall be consistent with the provisions in the Flight Manual.

(3) Condition of radio navigation equipment installation

Installation number of equipment shall be entered on all applicable radio navigation equipment installed on that aircraft.

3-7 Report of Current Condition on Initial Import Aircraft (Form I-6)

(1) Nationality mark, registration mark, serial number of aircraft, type of aircraft and manufacturer, name of owner or firm

These data shall be entered by referring the registration certificate.

(2) Issue number and issue date of Export Certificate of Airworthiness

Issue number and issue date specified in that certificate issued from the authority of foreign state shall be entered.

In order to take official inspection for initial airworthiness certification with omission of a part of current inspection for the imported aircraft under the Article 10, paragraph 6-(2) of the Law, proposed inspection date (same date as the date of application is permissible) shall be the date within 2 months since the issue date of Export Certificate of Airworthiness, in principle.

(3) Alteration implemented by the supplemental type certificate (STC) including in the export airworthiness certificate

As for the alteration performed on that aircraft by the STC including in the export airworthiness certificate, original STC number, approval number of Japan and title on each applicable

alteration shall be entered.

If the alteration has been performed by the STC which has not been approved by Japanese Authority, the application category that the official inspection with omission of a part of current inspection shall not be available.

(4) Work records which were performed after issue of Export Certificate of Airworthiness

As for the works performed in the period between issue of Export Certificate of Airworthiness and application for airworthiness certification in Japan, which are regarded as work record specified in the concerned column of Form I-6, date of implementation, location, outline of the work, basis of work documents, name of certifying staff or organization and other special notices for each work shall be entered. If the Form I-6 has not enough space to enter all of necessary items, remaining items shall be entered in separate A4 format with same record column and attached. Otherwise, copy of the concerned pages of aircraft logbook may be attached with description as “you will see from the attached copy of aircraft logbook pages”, if applicant has the aircraft logbook pages recorded with the concerned work.

If any such work shall not be performed, description of “none” shall be entered in that column.

(5) Existence of accompanying documents

Circle shall be marked as applicable for the accompanying documents.

(6) Name or firm who prepared this report

In order to take official inspection for the initial airworthiness certification with omission of a part of current inspection for the imported aircraft under the Article of 10, paragraph 6-(2) of the Law, a person who prepares this report shall be a qualified mechanic pertinent to this aircraft or approved organization for AOAMA (Approved Organization for Aircraft Maintenance or Alteration) (otherwise, a person authorized by Authority).

Attachment I-2

Guidelines on Preparation and Administration of Flight Manual

1. Purpose

Flight Manual is one of the documents for submission together with application for airworthiness certification, inspection of repair or alteration, type certification, supplemental type design approval or repair and alteration design approval (Article 12-2 paragraph 2, Article 17 paragraph 2, Article 23 paragraph 2, Article 25, Article 26-3 paragraph 2 of the Regulation) and Article 5-4, of the Regulations specifies matters to be prepared. This circular provides details with regard to preparation, administration, procedure for approval, etc. of the Flight Manual.

In case of repair and alteration design approval for components, Flight Mnual is not required because the design approval is for components.

2. Kinds of Flight Manual and personnel responsible for preparation and administration thereof (hereinafter referred to as "administration personnel")

Flight Manual shall be accompanied with each aircraft and its contents shall be approved by Authority. However, because contents of the basic part of the Flight Manual is identical for the aircraft of same type or model, approval activity by the Authority shall be made effectively by dividing the Flight Manual by kind mentioned below and by specifying the preparation and administration personnel for the manuals.

2-1 Flight Manual for type certification (Flight Manual for the aircraft of a type which has been certificated under Article 12, paragraph 1, and is prepared (or revised; hereinafter the same) and administrated by a person who has obtained the said type certification for that aircraft. (hereinafter referred to as "TC Flight Manual")).

For the aircraft of a type which has been certificated, a person who has obtained the said certification shall prepare and administrate the Flight Manual.

2-2 Original Flight Manual (Flight Manual for the imported aircraft of which type has not been certificated, and is prepared and administrated by the specific administration personnel for the aircraft of same type)

Even if the aircraft of a type which has not been certificated, it happens that contents of its Flight Manual gets to be same as of those for the same type of aircraft. In this case, the import agent or its equivalents shall be able to prepare and administrate that Flight Manual.

2-3 Individual Flight Manual (Flight Manual which is prepared and administrated individually for the aircraft inapplicable to the TC Flight Manual nor original Flight Manual)

For the Flight Manual inapplicable to the provision of paragraph 2-1 nor 2-2, each aircraft user etc. shall prepare and administrate it.

2-4 Flight Manual for supplemental type design approval (Flight Manual with related to the supplemental type design approval under Article 13-2, paragraph 1 of the Law (hereafter referred to as "STC Flight Manual"))

For the aircraft of a type which has been certificated, revision of the said TC Flight Manual may be required as a result of approval of the supplemental type design. Usually in this case, TC Flight Manual itself shall not be revised, and instead, another Flight Manual with description of necessary part for revision only (Supplemental Flight Manual mentioned later) shall be prepared. As for the STC Flight Manual for the concerned aircraft, a person who obtained the supplemental type design approval shall prepare and administrate the concerned Flight Manual, in principle.

2-5 Flight Manual for Approval of Repair and Alteration Design (Flight Manual for Approval of Repair and Alteration Design of Article 18 paragraph (1) of the Act; hereinafter referred to as "Repair and Alteration Design Flight Manual")

For airworthiness certificate aircraft, changes for the above-mentioned TC flight manual, original flight manual, or individual flight manual may be required by the approval of repair and alteration design.

Normally, in such cases, the flight manuals themselves will not be changed, but the flight manuals (supplemental flight manuals described later) will be established describing only the parts that need to be changed.

In principle, a person who has been approved for repair and alteration design shall establish and control of the flight manual.

3. Composition of Flight Manual

3-1 Basic Flight Manual

Flight Manual for the aircraft furnished with standard equipment shall be called as basic Flight Manual. Composition of the basic Flight Manual is as follows:

(1) Cover pages etc.

In order to clarify composition, approval status etc., following pages with specified formatting shall be arranged at the beginning. However, this arrangement shall not necessarily involved, provided equivalent contents can be indicated with other arrangement in the TC Flight Manual etc. for imported aircraft.

(a) Title page (Form I-2-1)

Type of aircraft etc. shall be entered. (For individual Flight Manual, nationality and registration mark shall be entered of the applicable aircraft.)

For TC Flight Manual and original Flight Manual, the name of the holder of type certificate or responsible person for administration of original Flight Manual shall be entered in the lower portion as the name of the administration personnel.

(b) Approval of the Fight Manual (Form I-2-2)

Approval of the Flight Manual issued in accordance with paragraph 5 or the document representing approval of the said Flight Manual (As for the Flight Manual applicable to paragraph 5-1(3), document representing that it has been approved by the authority of the state in which aircraft or components relating to the said Flight Manual were designed.). As for the revisions of the Flight Manual, only the one approved most recently shall be filed.

(c) Log of pages (Form I-2-3)

The log of pages is to be composed of all pages without a title page, and approval of the Flight Manual, table of contents by chapter, text pages, etc. shall be clarified in it. The date

of approval for each page shall be entered in the column of "Date of approval". For pages not requiring approval, revision dates shall be entered together with the statement “not applicable” in the column of “Date of approval.”

(Note) Regarding the Flight Manual for imported aircraft written in Japanese, the revision number of the latest Flight Manual etc. approved by the authority of the State of Design of the said aircraft on which the said Flight Manual based shall be indicated in the log of pages. (Otherwise, indication in the log of revisions may be acceptable.)

(d) Table of TCD Insertion Status (Form I-2-8)

Status of insertion/deletion of applicable TCD which directed revision of Flight Manual (paragraph 5-6(2)) shall be entered. This table itself does not require approval. This table shall be established and distributed by the time when the first revision of Flight Manual directed by the TCD after Nov. 1 of 2001 is made.

(2) Text

Following matters prescribed in the provision of Article 5- 4 of the Regulations shall be entered and approved. However, with regard to matters entered in the Flight Manual for imported aircraft (excluding matters regarding limitations of aircraft, aircraft noise and engine emissions), related matters which have not been approved by the authority of the State of Design of the said aircraft among related matters which are mentioned in the Flight Manual etc. on which the said Flight Manual based shall not require approval.

Chapter 1. General description of aircraft
Chapter 2. Limitations of aircraft
Chapter 3. Emergency procedures (operation of various systems and other actions required in emergency)
Chapter 4. Normal procedures (procedures associated with various systems that are functioning in their usual manner)
Chapter 5. Performance of aircraft
Chapter 6. Matters relating to aircraft noise
Chapter 7. Matter relating to engine emissions

(Note 1) File separator with title shall be inserted between chapters

(Note 2) Aircraft type and approval date shall be entered in each page (Revision date shall be entered in the pages not requiring approval). However, for the Flight Manual for the imported aircraft applicable to paragraph 4-2(2), approval date may be the date of approval by the authority of the State of Design of the said aircraft. (Form I-2-4: As for the Flight Manual in this case, the form approved by the said State of Design may be acceptable.)

(Note 3) In a case that “Abnormal procedures” or “Non-normal procedures” are specified, those procedures shall be entered into the chapter of emergency procedures or normal procedures with another separation in those chapters, otherwise entered into separate chapters.

(Note 4) Conformity to the standards for aircraft noise prescribed in Annex 2 of the Regulations and the standards for engine emissions (excluding carbon dioxide) prescribed in Annex 3 of the said Regulations and the standards for engine emissions (limited to carbon dioxide) prescribed in Annex 4 of the Regulations, as well as the entry

concerning noise values shall be included.

(Note 5) "Matters relating to aircraft noise" and "Matters relating to engine emissions" may be included in the chapter of "Performance of aircraft".

(Note 6) As for the Flight Manual for the aircraft applicable to paragraph 4-2(2), for the purpose of satisfying the requirements in Japan,

- A part or whole of "General description of aircraft" may be prepared in other chapter or established as Supplemental Flight Manual.
- A part of "Limitations of aircraft", "Emergency procedures", "Normal procedures", "Performance of aircraft", "Matters relating to aircraft noise", "Matters relating to engine emissions" may be established as Supplemental Flight Manual.

3-2 Supplemental Flight Manual

Supplemental Flight Manual is the manual which provides matters supplement to or revision of basic Flight Manual due to installation of special equipment or optional equipment or its equivalents, and is formed complete Flight Manual with basic Flight Manual. (In foreign state, there are many instances that Flight Manual is composed of "Supplemental Flight Manual", "Appendix", etc.) In principle, Supplemental Flight Manual shall be established for each purpose for installation of special equipment or optional equipment.

When supplemental type design approval requires the revision of Flight Manual, Supplemental Flight Manual shall be established. (Refer to paragraph 2-4.)

Supplemental flight manuals shall be established even if changes to the flight manuals are required by the approval of repair and alteration design.(2-5 Reference)

The composition of Supplemental Flight Manual shall be as follows:

(1) Table of Supplemental Flight Manuals (Form I-2-5)

This table shall be prepared to clarify Supplemental Flight Manuals which are actually applied to respective aircraft.

Qualified mechanic or certifying staff of the approved organization shall first select and check the Supplemental Flight Manual applicable to the concerned aircraft from among all Supplemental Flight Manuals delivered by the administration personnel (including publicized on websites), and then enter number of Supplemental Flight Manual applicable to the concerned aircraft, title and date of installation and put seal (or signature). Date of installation shall be the date of pass of the repair or alteration inspection related to the said Supplemental Flight Manual (in a case such inspection is not required, date when certification was performed in accordance with Article 19 or Article 19- 2 shall be entered).

As for Supplemental Flight Manual to which the aircraft shall be applicable with performance of alteration or its equivalents, it shall be added in the Flight Manual and certified after the concerned alteration was performed. (When the applicable Flight Manual for the said aircraft is TC Flight Manual or original Flight Manual, and even if the Supplemental Flight Manual which is not applicable to the said aircraft is delivered by the administration personnel, the column for date of installation in this table shall be kept blank and the said Supplemental Flight Manual itself shall be excluded from the Flight Manual.)

(2) Cover page etc.

In order to clarify composition, approval status, etc., following pages with specified formatting shall be arranged at the beginning. However, this arrangement shall not necessarily involved, provided equivalent contents can be indicated with other arrangement, such as the TC Flight Manual for the imported aircraft.

(a) Title page (Form I-2-6)

Aircraft type etc. shall be entered. (As for individual Flight Manual, nationality 49 and registration mark of the applicable aircraft shall be entered.)

If any title (for instance, the name of equipment) is specified in the Supplemental Flight Manual, that title shall be entered.

Name of holder of the type certificate, approval of supplemental type design, repair and alteration design approval, or a responsible person for administration of original Flight Manual shall be entered as the name of the administration personnel at the lower portion of the TC Flight Manual, STC Flight Manual, Repair and Alteration Flight Manual or original Flight Manual respectively.

(b) Approval of the Flight Manual (Form I-2-2)

Approval of the Flight Manual issued to each Supplemental Flight Manual in accordance with paragraph 5 or the document indicating approval of the said Flight Manual (As for the Flight Manual applicable to paragraph 5-1(3), document representing that it has been approved by the authority of the state in which aircraft or components relating to the said Flight Manual were designed) As for the revisions of the Flight Manual, only the one approved most recently shall be filed.

(c) Log of pages (Form I-2-3)

The log of pages is to be composed of all pages without a title page, and approval of the Flight Manual, table of contents by chapter, text pages, etc. shall be clarified in it. The date of approval for each page shall be entered in the column of “Date of approval”. For pages not requiring approval, revision dates shall be entered together with “not applicable" in the column of “Date of approval.”

(Note) Regarding the Supplemental Flight Manual written in Japanese relating to supplemental type design approval by an imported aircraft manufacturer or component manufacturer in foreign state etc. the revision number of the latest Flight Manual etc. approved by the authority of the State of Design of the said aircraft or component on which the said Flight Manual based shall be indicated in the log of pages. (Otherwise, indication in the log of revisions may be acceptable.)

(3) Text

As for the matters prescribed in the provision of Article 5-4 of the Regulations, revision or supplement of the contents described in the basic Flight Manual shall be entered.

However, with regard to matters entered in the Supplemental Flight Manual pertaining to supplemental type design approval of an imported aircraft manufacturer or component manufacturer in a foreign state etc. (excluding matters regarding limitations of aircraft, aircraft noise and engine emissions), related matters which have not been approved by the authority of the State of Design of the said aircraft among related matters which are mentioned in the Flight Manual etc. on which the said Flight Manual based shall not require approval.

(Note 1) File separator may be omitted between chapters.

(Note 2) Aircraft type (limited to the case where the type can be specified) and approval date shall be entered in each page (Revision date shall be entered in the pages not requiring approval). However, as for the Supplemental Flight Manual for imported aircraft applicable to paragraph 4-2(2), approval date may be the date of approval by the authority of the State of Design of the said aircraft. (Form I-2-4: As for the Supplemental Flight Manual in this case, the form approved by the said State of Design may be acceptable.)

(Note 3) In a case that "Abnormal procedures" or "Non-normal procedures" are specified, those procedures shall be entered into the chapter of emergency procedures or normal procedures with another separation in those chapters, otherwise entered into separate chapters.

(Note 4) Conformity to the standards for aircraft noise prescribed in Annex 2 of the Regulations and the standards for engine emissions (excluding carbon dioxide) prescribed in Annex 3 of the said Regulations and the standards for engine emissions (limited to carbon dioxide) prescribed in Annex 4 of the Regulations, as well as the entry concerning noise values shall be included.

(Note 5) "Matters relating to aircraft noise" and "Matters relating to engine emissions" may be included in the chapter of "Performance of aircraft."

3-3 Various examples of construction of Flight Manuals

Flight Manual is constructed by the combination of basic Flight Manual and Supplemental Flight Manual as described in paragraph 3-2. In addition to above, combination with kinds of Flight Manual and administration personnel makes construction as follows:

(1) The aircraft of a type which has been certificated

TC basic Flight Manual

+ TC Supplemental Flight Manual (in a case that Supplemental Flight Manual exists for the basic configuration)

+ STC Flight Manual (in a case that alteration by supplemental type design approval was performed)

+ Repair and Alteration Design Flight Manual (in a case that repair was performed under repair and alteration design approval)

(+original Supplemental Flight Manual (in a case that alteration etc. by the source other than supplemental type design approval and administration personnel of Flight Manual exists))

+ individual Supplemental Flight Manual (in a case that original alteration has been performed)

(Note) When any person shall conduct alteration by the source other than type design change to the aircraft type-certificated, it is recommended that he or she shall basically obtain supplemental type design approval for the said alteration.

(2) In a case that the aircraft of a type which has not been certificated, and administration personnel of Flight Manual for the basic configuration exists

Original basic Flight Manual

+ original Supplemental Flight Manual (in a case that Supplemental Flight Manual for the basic configuration or alteration was performed, and administration personnel of Flight Manual

exists)
+ Repair and Alteration Design Flight Manual (in a case that repair was performed under repair and alteration design approval)
+ individual Supplemental Flight Manual (in a case that original alteration has been performed)

(3) In a case that the aircraft of a type which has not been certificated and administration personnel of Flight Manual for the basic configuration does not exist or original alteration to which shall not be applied basic Flight Manual above has been performed.
individual basic Flight Manual
+ Repair and Alteration Design Flight Manual (in a case that repair was performed under repair and alteration design approval)
+ individual Supplemental Flight Manual (in a case that original alteration has been performed)

4 Guidelines on Preparation of Flight Manual

4-1 Requirements

Flight Manual shall be prepared in compliance with the Airworthiness Inspection Manual applicable to the said aircraft type and the requirements prescribed in Circulars etc. on operation-related approvals.

In the case of the Flight Manual pertaining to supplemental type design approval or repair and alteration design approval of an imported aircraft or component manufacturer in a foreign state etc. which is to be prepared in Japanese, the latest Flight Manual etc. approved by the State of Design shall be referred to.

Contents of the Flight Manual shall be consist with specification of the aircraft, pilot operating handbook, placards and markings attached on the aircraft etc.

Markings etc. that need to be notified only trained aircrew shall be indicated in Japanese or English.

For markings etc. relating to emergency evacuation and safety equipment etc. which are to be indicated in Japanese, Circular No.1-008 shall be referred to.

4-2 Language

(1) Flight Manual shall be prepared in Japanese or English based on an application by the administration personnel of the Flight Manual.

(Note 1) The language to be used shall be Japanese or English irrespective of the types of the Flight Manual shown in paragraphs 2-1 to 2-4 and whether the aircraft is a domestic one or an imported one.

(Note 2) For the Flight Manual in Japanese for the aircraft for air transport use by air carrier, items set forth in paragraphs 4-3 (1)(b) and (d), and (6)(a) through (c) shall be prepared together with English.

(2) Flight Manual for imported aircraft which is prepared in English as selected by the administration personnel of the Flight Manual (hereinafter referred to as the “Flight Manual in English”) shall basically be composed of the Flight Manual etc. (including Supplemental Flight Manual, Appendix etc.; hereinafter the same) approved by the State of Design of the said aircraft etc. and the Supplemental Flight Manual for satisfying the requirements for Flight Manuals in Japan (hereinafter referred to as the “JCAB Supplement”), and must be approved by the Civil

Aviation Bureau. Details shall be as described in paragraphs 7-2 and 7-3.

4-3 Matters to be described in Flight Manual

Flight Manual shall contain following matters. However, due to characteristics in design or other, there may be cases that some matters are not necessary or additional matters are necessary to prepare among the matters below.

(1) General description of aircraft

Following matters regarding the general description of aircraft shall be mentioned:

(a) Name of aircraft designer/manufacturer

If the designer/manufacturer is a company, name of the company shall be entered. However, if the name of the designer/manufacturer or the company is indicated in the cover page etc., the name may be omitted here.

(b) Applicable aircraft serial number

(c) Airworthiness category

(d) Type of engine and propeller, provided they are installed

If it is specified in the limitations section, no longer required.

(e) Definition of the words used in the said Flight Manual, and necessary conversion table or chart to support understanding of the said Flight Manual

(2) Limitations of aircraft

For the limitations of aircraft, necessary matters for the said aircraft as well as matters specified in the Airworthiness Inspection Manual and following matters shall be provided:

(a) Allowable operating methods out of the following as a result of the judgment based on the attached judgment table for operating method limitation shall be specified as "Operating method limitation", and the forgoing remarks shall be added, stating "The following operating methods are eligible when appropriate instruments and equipment required by the airworthiness and operating requirements are installed on this aircraft". When attaching the said judgment table for operating method limitation to the Flight Manual, unnecessary items shall be deleted based on the results of the judgment.

Flight under instrument flight rules (Flight under instruction of air traffic control at all times)
Instrument flight (Flight in instrument meteorological conditions)
Flight under instrumental navigation (Flight over cloud or over water beyond the distance or time specified in Article 66 of the Regulations under visual meteorological conditions)
Visual flight other than flight under instrumental navigation
Night operations
Day operations
Flight under icing meteorological conditions (as approved in type certification)
High altitude operations (3,000 meters and above of altitude)

For the glider, tow operations such as tow flight with winch, tow flight with airplane etc. and allowable flight method (acrobatic flight etc.) shall be entered.

(b) Placards pertaining to the "Operating method limitation" which comply with the airworthiness certification standard applicable to the aircraft (Airworthiness Inspection Manual etc.) shall be prepared and mounted to the said aircraft. (It should be noted that requirements differ by the airworthiness category.) Placards shall be prepared in Japanese or English (or in both). However, as operating methods for imported aircraft are not always the same as those applicable in Japan, allowable items mentioned in (a) above shall be indicated on placards. The contents in the parentheses in (a) above may be omitted on placards.

(c) Approved maximum passengers, number of seats or seat arrangement drawing (only drawing number is acceptable) for the transport T category aircraft, and approved number of occupant for the aircraft category other than transport shall be entered as limitation for occupancy. However, if identical description to the above is available in another document which provides necessary matters to calculate the weight and center of gravity of the aircraft, quotation from this document shall be acceptable. If there is restriction for location occupied, it shall be added here.

(3) Emergency procedures (operation procedures of various systems and other actions required in emergency)

As emergency procedures, necessary matters for the aircraft as well as the matters specified in Airworthiness Inspection Manual shall be provided.

(4) Normal procedures (procedures associated with various systems that are functioning in their usual manner)

As normal procedure, necessary matters for the aircraft as well as matters specified in Airworthiness Inspection Manual shall be provided.

(5) Performance of aircraft

As performance of aircraft, necessary matters for the aircraft as well as matters specified in Airworthiness Inspection Manual shall be provided.

(6) Matters relating to aircraft noise (limited to the aircraft applicable to the Annex 2 to the Regulations)

Following matters shall be mentioned:

(a) The category of standards specified in Annex 16, Volume 1 of the Convention on International Civil Aviation that shall be applied to said aircraft.

(b) Noise levels measured by the method specified in Annex 16, Vol. 1 of the Convention on International Civil Aviation

(c) If alteration has been performed to comply with the applicable standards, outline of the said alteration shall be mentioned.

(d) As for the rotorcraft, velocity at which noise level was measured at the measuring point of flyover shall be entered. (Measuring basis of maximum horizontal speed or never exceed speed shall be specified.)

In addition, as for aircraft engaged in international operation, above-mentioned matters shall be described in accordance with the following format which is based on “Format for Nose Certification Documentation” specified in Attachment G of ICAO Annex 16, Vol. 1 (hereinafter referred to “ICAO format”). (Regardless of aircraft which is not engaged in international operation, the above-mentioned matters are allowed to be described in accordance with the following format.)

Though the format may be altered if necessary (For example, In the case that multiple maximum take-off weights (A B and C value) are established for aircraft for the use of air transportation service, each noise level corresponding to each maximum take-off weight shall be described.), the matters shall be written in both Japanese and English and shall be numbered in the same way of the following format in order to clarify that the format is based on the ICAO format.

The template to be contained in the flight manual based on the ICAO

この騒音に関する文書は、国際民間航空条約の附属書16第1巻ATTACHMENT Gの規定（以下「ICAO書式」という。）に従い作成したものであり、日本国として、飛行規程の一部として承認したものである。
日本国においては、騒音基準への適合性は耐空証明の一部として実施しており、騒音証明書は発行しておらず、騒音に関する事項は飛行規程に記載していることから、この騒音に関する文書も飛行規程に取り入れることとした。
従って、ICAO書式で記載が求められているものの、飛行規程に取り入れる上で適当でない項目１８「国際民間航空条約の附属書16第1巻の適合に関する声明」、項目１９「発行年月日」及び項目２０「署名」は削除している。
また、飛行規程が型式として管理されている場合には、項目４「国籍及び登録記号」及び項目６「航空機製造番号」の記入が省略されている場合がある。
This Noise Document is made pursuant to Annex 16, Volume I, Attachment G to the Convention on International Civil Aviation (hereinafter referred to as "ICAO Format") and approved as a part of Aircraft Flight Manual.
In Japan, Compliance to the Noise Requirement is certified as a part of Airworthiness Certification. Noise Certificate is not issued and Noise Characteristics are described in Aircraft Flight Manual. Therefore, Japan determined to incorporate this Noise Document into the Aircraft Flight Manual.
Accordingly, Item 18 "Statement of Compliance", Item 19 "Date of Issuance" and Item 20 "Signature", which are parts of "ICAO Format" but not appropriate for inclusion in the Aircraft Flight Manual, are deleted.
In respect of the Aircraft Flight Manual which is published and managed by Aircraft Type, it may be a case that Item 4 "Nationality and Registration Marks" and Item 6 "Aircraft Serial Number" are blank.

<table>
<tr><td colspan="3">１　登録国
State of Registry
日本国(Japan)

２　騒音に関する文書
NOISE DOCUMENT</td><td>3.文書番号（必要な場合）
Document Number(if necessary)</td></tr>
<tr><td>４　国籍及び登録番号
Nationality and registration marks (if necessary)</td><td>５　航空機型式及び製造者
Manufacturer and manufacturer's designation of aircraft:</td><td colspan="2">６　航空機製造番号
Aircraft serial number:</td></tr>
<tr><td colspan="2">７　発動機
Engine:</td><td colspan="2">８　プロペラ＊　Propeller:＊</td></tr>
<tr><td>９　最大離陸重量
Maximum take-off mass:</td><td>１０　最大着陸重量*
Maximum landing mass:*</td><td colspan="2">１１　騒音証明基準
Noise certification standard:</td></tr>
<tr><td colspan="4">１２　適用を受ける騒音証明基準に適合する目的で行われた追加の改造
Additional modifications incorporated for the purpose of compliance with the applicable noise certification Standards:</td></tr>
<tr><td>１３　側方測定点における離陸中の騒音値*
Lateral/full-power noise level:*</td><td>１４　進入測定点における着陸中の騒音値*
Approach noise level:*</td><td>１５　離陸測定点における離陸中の騒音値*
Flyover noise level:*</td><td>１６　上空通過測定点における通過中の騒音値*
Overflight noise level:*</td><td>１７　離陸測定点における離陸中の騒音値*
Take-off noise level:*</td></tr>
<tr><td colspan="5">備考
Remarks:</td></tr>
</table>

＊この欄は騒音証明基準によっては省略することが可能。

*These boxes may be omitted depending on noise certification Standard.

In addition, the detailed instructions to entry in the format are as follows.

1 登録国(State of registry)
"Japan" shall be described in item 1.

2 騒音に関する文書(NOISE DOCUMENT)
"NOISE DOCUMENT" shall be described in item 2.

3 文書番号（Document Number）
If necessary, a document number shall be described in item 3. If not necessary, "NA" shall be described.

4 国籍及び登録記号(Nationality and Registration Marks)
The nationality（"JA"）and registration marks shall be described in item 4. However, as for the flight manual prepared for aircraft type, it may be blank.

5 航空機型式及び製造者(Manufacturer and manufacturer's designation of aircraft)
The type and manufacturer of the subject aircraft shall be described in item 5.

6 航空機製造番号(Aircraft Serial Number)
The aircraft serial numbers shall be described in item 6. However, as for the flight manual prepared for aircraft type, it may be blank.

7 発動機(Engine)
Engine manufacturer, type and model shall be described in item 7.

8 プロペラ(Propeller)
As per the propeller-driven airplane, Propeller manufacturer, type and model of propeller shall be described in item 8. As per other aircraft, "NA" shall be described.

9 最大離陸重量(Maximum take-off mass)
Maximum take-off mass in kilograms (acceptable to write with lbs) shall be described in item 9.

10 最大着陸重量(Maximum landing mass)
As per the aircraft applied to ICAO Annex 16, Vol. 1, Chapter 2, 3, 4 or 5, maximum landing mass in kilograms (acceptable to write with lbs) shall be described in item 10. As per other aircraft, "NA" shall be described.

11 騒音証明基準(Noise Certification Standards)
The chapter of ICAO Annex 16, Vol. 1 applied to the subject aircraft shall be described in item 11. For Chapters 2, 8, 10 and 11, the section specified the noise limits shall also be included. Concretely speaking, follow the arrows one by one written in the Attachment 1 "Applicability of Noise Certificate Standards for Propeller-Driven Airplanes", Attachment 2 "Applicability of Noise Certification Standards for

Helicopters" or Attachment 3 "Applicability the Noise Certification Standards for aircraft equipped with turbojet engines or turbofan engines," then write the figure of section written in the final square box. For example, in the case that a propeller driven-airplane is with maximum take-off mass 8,618kg, that the application for certificate of airworthiness etc. of its prototype was not accepted after October 6, 1977 and that its certificate of airworthiness was issued on or after November 26, 1981, "2.4.1" shall be described. As for the aircraft which does not applied to noise certification standards, "NA" shall be described.

12 適用を受ける騒音証明基準に適合する目的で行われた追加の改造
(Additional modifications incorporated for the purpose of compliance with the applicable noise certification standards)
Additional modifications incorporated for the purpose of compliance with the applicable standards specified in the above item 11 shall be described in item 12. If no additional modifications are incorporated, "NA" shall be described.

13 側方測定点における離陸中の騒音値(Lateral/full-power noise level)
As per aircraft applied to ICAO Annex 16, Vol. 1, Chapter 2, 3, 4, 5 or 14, the lateral/full-power noise level in EPNdB etc. shall be described in item 13. As per other aircraft, "NA" shall be described.

14 進入測定点における着陸中の騒音値(Approach noise level)
As per aircraft applied to ICAO Annex 16, Vol. 1, Chapter 2, 3, 4, 5, 8 or 14, the approach noise level in EPNdB etc. shall be described in item 14. As per other aircraft, "NA" shall be described.

15 離陸測定点における離陸中の騒音値(Flyover noise level)
As per aircraft applied to ICAO Annex 16, Vol. 1, Chapter 2, 3, 4, 5 or 14, the flyover noise level in EPNdB etc. shall be described in item 15. As per other aircraft, "NA" shall be described.

16 上空通過測定点における通過中の騒音値(Overflight noise level)
As per aircraft applied to ICAO Annex 16, Vol. 1, Chapter 6, 8 or 11, the overflight noise level in EPNdB or dB(A) etc. determined in the relative chapter shall be described in item 16. As per other aircraft, "NA" shall be described.

17 離陸測定点における離陸中の騒音値(Take-off Noise Level)
As per aircraft applied to ICAO Annex 16, Vol. 1, Chapter 8 or 10, the take-off noise level in EPNdB or dB(A) etc. shall be described in item 17. As per other aircraft, "NA" shall be described.

(7) Matters relating to engine emissions

Following matters shall be mentioned:

(a) Compliance with standards for engine venting fuel specified in Annex 16, Vol. 2 of the Convention on International Civil Aviation

(b) Compliance with numerical standards for smoke index specified in Annex 16, Vol. 2 of the Convention on International Civil Aviation

(c) Compliance with numerical standards for hydrocarbon, carbon monoxide and nitrogen oxide specified in Annex 16, Vol. 2 of the Convention on International Civil Aviation

(d) Compliance with numerical standards for non-volatile particulate matter specified in Annex 16, Vol. 2 of the Convention on International Civil Aviation

(e) If alteration has been performed to comply with the applicable standards, outline of the said alteration shall be mentioned.

(f) Rated thrust or power of the engine

(g) Compression ratio of the engine

(h) Compliance with numerical standards for CO_2 emission specified in Annex 16, Vol. 3 of the Convention on International Civil Aviation

(Note) Item (a) shall be applicable to the aircraft to which the provision of Chapter 1 in Annex 3 to the Regulations is applied. Items (b) through (f) shall be applicable to the aircraft to which the provision of Chapter 2 in Annex 3 to the Regulations is applied. Item (h) shall be applicable to the aircraft to which the provision of Annex 4 to the Regulations is applied.

4-4 Supplemental Flight Manual

At the beginning of Supplemental Flight Manual (in front of "general description of aircraft", in principle), the following shall be entered: "The basic Flight Manual shall be applied, except for matters revised or supplemented by this Supplemental Flight Manual."

5. Approval Procedures for Flight Manual

5-1 Approval procedures for type certification or type design change approval (in a case that it requires revision of Flight Manual), supplemental type design approval or supplemental type design change approval (in a case that it requires revision of Flight Manual), repair and alteration design approval or repair and alteration design change approval (in a case that requires revision of Flight Manual)

Applicant who intends to obtain above certification or approval shall submit Flight Manual as one of documents for submission under the provisions of Article 17, paragraph 2, Article 20, paragraph 1, Article 23, paragraph 2 or Article 23-4, paragraph 1, Article 26-3, paragraph 2, or Article 26-7, paragraph 1 of the Regulations respectively.

For revisions to the Flight Manual accompanying type design change approval, supplemental type design change approval and repair and alteration design approval, it is not necessary to submit an application for revision of the Flight Manual (Form I-2-7) because an application is filed for the relevant design change.

Upon type certification or type design change approval, or supplemental type design approval or supplemental type design change approval or repair and alteration design approval or repair and alteration design change approval by the Minister of Land, Infrastructure, Transport and Tourism, the relevant Flight Manual is also approved (approval of the Flight Manual is granted by the Director of Airworthiness Division; hereinafter the same). Upon supplemental type design approval or supplemental type design change approval by the Director General of Regional CAB Office, the relevant Flight Manual is also approved (approval of the Flight Manual is granted by the Chief Airworthiness Engineer; hereinafter the same).

The certification of approval of Flight Manual is issued together with type certificate, supplemental type certificate or repair and alteration design approval. In addition to the above, as for TC Flight Manual for imported aircraft and Flight Manual related to STC, and repair and alteration design Flight Manual by a component manufacture etc. in foreign state, following procedures shall be taken:

(1) In the case of design changes subject to this Circular Chapter II "Type Certification" 5-1(1)(b) b. and c., and Chapter III "Supplemental Type Certificate" 4-1(b) b. and c. that require revision of the Flight Manual, approval of the said Flight Manual shall be obtained by submitting an application for revision of Flight Manual (Form I-2-7).

(2) When the Flight Manual is approved, the certification of approval of Flight Manual or other letter which confirms the approval of the said Flight Manual shall be issued or,

(3) In a case where the requirements and approval procedures for the said Flight Manual have been agreed on in advance between the Japanese Authority and the authority of the State of Design of the said aircraft or the components pertinent to the said STC or repair and alteration design, the Flight Manual does not need approval by the Japanese Authority for the type of aircraft whose Flight Manual has been approved by the authority of the said state. The types of aircraft applicable to this provision shall be specified in Circular No.7-003 "List of aircraft types to which Flight Manuals not requiring Japanese approval are applied."

5-2 Initial airworthiness certification

User of aircraft must submit Flight Manual under the provision of Article 12-2, paragraph 2 of the Regulations. However, following approval procedures shall be taken according to the kinds of Flight Manual:

(1) As for TC Flight Manual or basic Flight Manual already approved

It is acceptable to present the Flight Manual or to submit a copy of whole pages of "items (a) through (c) of the cover pages etc." described in paragraphs 3-1(1) and 3-2(2), because the contents of Flight Manual have been virtually examined.

Director-General of Regional CAB Office must confirm the said Flight Manual is TC Flight Manual or original Flight Manual already approved upon airworthiness certification. The said Flight Manual shall be regarded as approved by this confirmation. In this case, the approval of Flight Manual shall not be issued.

(2) Original Flight Manual or individual Flight Manual not yet approved

Flight Manual shall be submitted.

Upon airworthiness certification by the Minister of Land, Infrastructure, Transport and Tourism or by Director-General, the Regional Civil Aviation Bureau, the said Flight Manual shall be also

approved.
The approval of Flight Manual shall be issued together with airworthiness certificate.

(Note) In case of application for TC (or original) Flight Manual already approved in addition to individual Supplemental Flight Manual not yet approved, it is acceptable to present the Flight Manual or to submit a copy of applicable pages as described in (1) above of the Flight Manual approved. Individual Supplemental Flight Manual not yet approved shall be submitted for approval.
The approval of Flight Manual shall be issued for only the said Supplemental Flight Manual.

5-3 Renewal of airworthiness certification
User of aircraft must submit Flight Manual for approval in accordance with the provision of Article 12-2, paragraph 2 of the Regulations. However, following approval procedures shall be taken according to existence of revision in the Flight Manual or not:

(1) If there exists none of revision in Flight Manual or revision is in TC Flight Manual, STC Supplemental Flight Manual or original Flight Manual all of which were already approved, it is acceptable to present Flight Manual or to submit a copy of whole pages of "items (a) through (c) of cover pages etc." described in paragraphs 3-1(1) and 3-2(2), because another examination is no longer required.
The Minister of Land, Infrastructure, Transport and Tourism or Director-General of Regional Civil Aviation Bureau Office must confirm the said Flight Manual has been already approved upon airworthiness certification. The said Flight Manual shall be regarded as approved by this confirmation. In this case, the approval of Flight Manual shall not be issued.

(2) If Flight Manual is revised and that revision exists in individual Flight Manual, Flight Manual shall be submitted for approval.
The Minister of Land, Infrastructure, Transport and Tourism or Director-General of Regional Civil Aviation Bureau Office shall approve the Flight Manual upon airworthiness certification.
The approval of Flight Manual shall be issued together with airworthiness certificate.

5-4 Inspection of repair or alteration (with revision of Flight Manual)
An applicant who intends to take inspection of repair or alteration must submit Flight Manual in accordance with the provision of Article 25 of the Regulations, if revision of Flight Manual exists. In this case, following approval procedures shall be taken according to the kinds of Flight Manual:

(1) In a case that Flight Manual of the said revision comes under TC Flight Manual, STC Supplemental Flight Manual, repair and alteration design Flight Manual or original Flight Manual all of which have been already approved.
It is acceptable to present the Flight Manual or to submit a copy of whole pages of "items (a) through (c) of the cover pages etc." described in paragraphs 3-1(1) and 3-2(2), because the contents of Flight Manual have been already examined. Director-General of Regional Civil

Aviation Bureau Office must confirm the said Flight Manual is TC Flight Manual, STC Supplemental Flight Manual, repair and alteration design Flight Manual or original Flight Manual all of which have been already approved upon determining success in the inspection of repair or alteration. The said Flight Manual shall be regarded as approved by this confirmation. In this case, the approval of Flight Manual shall not be issued.

(2) In a case that Flight Manual of the said revision comes under original Flight Manual or individual Flight Manual all of which have not been approved, the Flight Manual shall be submitted.
Director-General of Regional Civil Aviation Bureau Office shall approve the Flight Manual upon determining success in the inspection of repair or alteration. The approval of Flight Manual shall be issued.

5-5 Revision of Flight Manual accompanied with alteration etc. certified by approved organization for AMA (AOAMA)
When AOAMA intends to certify alteration etc., it must submit the application for revision of Flight Manual (Form I-2-7) together with revised portion of the said Flight Manual etc. to Chief Airworthiness Engineer of the inspection office in charge and obtain approval, except for the case Flight Manual related to the said alteration comes under TC Flight Manual, STC Supplemental Flight Manual, repair and alteration design Flight Manual or original Flight Manual all of which have been approved.
Certifying staff of AOAMA shall adequately add Supplemental Flight Manual already approved, and enter necessary matters into the table of Supplemental Flight Manual and sign its name, upon certifying that alteration etc. (Refer to paragraph 3-2(1).) (In case of basic Flight Manual, it shall be replaced adequately.)
In this case, approval procedures to Authority are not required.

5-6 Revision of Flight Manual by other reasons
When Flight Manual is intended to revise by the reason other than above, the application for revision of Flight Manual (Form I-2-7) shall be submitted together with revised portion of the Flight Manual for approval. Following approval procedures shall be taken: (Application shall be made on each item of basic Flight Manual and Supplemental Flight Manual.)

(1) With regard to the imported aircraft of which type is not certificated by Japanese Authority, in a case that revision of the original document of the Flight Manual has been approved by the authority of the State of Design of the said aircraft:
Administration personnel of Flight Manual described in paragraph 2 shall submit the application for revision of Flight Manual (Form I-2-7) without delay together with revised portion of the Flight Manual to Chief Airworthiness Engineer of the inspection office in charge for approval. The approval of Flight Manual shall be issued.
Aircraft users who use original Flight Manual shall replace adequately with revised Flight Manual approved which was sent from the administration personnel of the Flight Manual.
(In a case that the said revision is related to the inspection of repair or alteration, procedures described in paragraph 5-4(1) shall be taken.)

(2) Revision of Flight Manual base on the airworthiness directives (TCD)

When TCD directed revision of Flight Manual, copy of the said TCD shall be inserted into the Flight Manual in accordance with Circular No.3-003 and direction of each TCD, and the record of said TCD shall be entered into the table of TCD insertion status (Form I-2-8). Administration personnel of Flight Manual described in paragraph 2 shall submit the application for revision of Flight Manual (Form I-2-7) without delay together with revised portion of the Flight Manual to Chief Airworthiness Engineer of inspection office in charge to obtain approval by the target date directed in the said TCD.

The approval of Flight Manual shall be issued. In this case, matters of compliance with the TCD shall be mentioned in the said approval such as "complied with TCD-xxxx-xxxx" etc.

Aircraft users who use TC Flight Manual, STC Flight Manual or original Flight Manual shall adequately replace with the revised Flight Manual approved which was delivered by the administration personnel of the Flight Manual.

Copy of TCDs inserted shall adequately be deleted in accordance with Circular No.3-003 and enter the date of deletion into the table of TCD insertion status. However, if TCD indicates another direction, obey it.

(In a case that the said revision is related to the inspection of repair or alteration, procedures described in paragraph 5-4(1) shall be taken after the above.)

5-7 Flight Manual issued on provisional basis

In a case that provisional Flight Manual is intended to issue to insert into the particular portion of the text section etc., this type of Flight Manual shall also be approved with submitting the approval of (revision of) Flight Manual with the said text section of the Flight Manual. In this case, description of provisional Flight Manual shall be entered into the column of basic or supplemental of "category of construction" in the said approval.

5-8 Documents to be submitted upon preparation or revision of Flight Manual

In cases mentioned in paragraphs 5-1 through 5-6 above, when approval is required for the preparation or revision of the Flight Manual, documents necessary for showing the appropriateness of the content shall be submitted.

The following are examples of documents to be submitted in relation to Flight Manuals in Japanese. Details of the documents to be submitted shall be determined through coordination with the Civil Aviation Bureau upon filing an application.

(1) When preparing Flight Manual

・Draft of the Flight Manual (Pages not requiring approval shall be presented as necessary.)

・Comparison table of the draft and the original Flight Manual etc. on which the draft is based

・Other technical documents for reference

(2) When revising Flight Manual

・Draft of the revised Flight Manual (Pages not requiring approval shall be presented as necessary.)

・Comparison table of the draft of the revised Flight Manual and the original Flight Manual etc. on which the draft is based

・Comparison table of the Flight Manual before and after the revision*

・Comparison table of the original Flight Manual etc. on which the draft is based, before and

after the revision*

・Other technical documents for reference

(Note) The above comparison tables shall clarify not only the revised parts but also parts close to those revised parts and pages not requiring approval so that the appropriateness of the revised parts can be explained (the context can be understood).

6. Administration of Flight Manual

6-1 TC Flight Manual (administration personnel: holder of type certificate)

(1) Providing Flight Manual to aircraft users

The applicant shall provide approved TC Flight Manual to any users of said aircraft. In this case, the approval of Flight Manual described in paragraph 3-1(1)(b) or 3-2(2)(b) means a copy of the approval issued under paragraph 5-1, a copy of a letter representing that the Flight Manual has been approved under paragraph 5-1(2), or a copy of a document representing that Flight Manual which shall be applicable to the provision of paragraph 5-1(3) has been approved by the authority of the State of Design of the said aircraft.

(2) Administration of revision of Flight Manual

In revising TC Flight Manual, application for type design change shall be made, and the revision approval of the said TC Flight Manual shall be obtained together with the approval of type design change, except for the cases that the application is made in accordance with the provision of Chapter II titled “Type Certification”, paragraph 5-1(1)(b) b. and c. of this Circular and the case applicable to the provision of Chapter I titled “Airworthiness Certification”, paragraph 5-1(2). In addition, in cases involving change in type design subject to the Chapter II titled “Type Certification”, paragraph 5-1(1) (b)-b. and c. and in cases involving the intention to revise the TC Flight Manual, an application for revision of the Flight Manual shall be made and approval shall be obtained for the revision of the said TC Flight Manual.

The written applications shall be made to Director, Airworthiness Division, Aviation Safety and Security Department, Civil Aviation Bureau.

When obtained approval, the applicant shall send revised portion of the TC Flight Manual approved and a copy of related approval of Flight Manual or document representing that the said Flight Manual was approved to aircraft users. (If each aircraft must be taken inspection of repair or alteration by the revision of the said Flight Manual, notification shall also be made of it.)

(3) Submitting Flight Manual to the Civil Aviation Bureau together with the certificate of approval or other document which confirms the approval of the said Flight Manual

The applicant shall submit the approved TC Flight Manual (as for revision, revised portion) to Airworthiness Division, Aviation Safety and Security Department, Civil Aviation Bureau together with the distribution list of the Flight Manual.

6-2 Original Flight Manual (administration personnel: the personnel who prepares and administrates the original Flight Manual)

(1) Providing Flight Manual to the aircraft users

The administration personnel shall provide original Flight Manual approved to the aircraft users

who have agreement for providing. The approval of Flight Manual described in paragraph 3-1(1) (b) or 3-2(2) (b) means a copy of the approval of Flight Manual under paragraphs 5-2(2) and 5-6(1).

(2) Administration of revision of Flight Manual

The administration personnel shall receive information of the revision status of the original document of said Flight Manual from the designer (personnel who prepared the original document of the Flight Manual etc.) of the said aircraft promptly, and when revision of the original Flight Manual is required, an application for revision shall be made for approval.

The address for application shall be the inspection office of the Regional Civil Aviation Bureau Office which is in charge of said original Flight Manual. When approval is obtained, the administration personnel shall send the revised portion of the original Flight Manual approved with a copy of related approval of Flight Manual or document representing that said Flight Manual has been approved for the aircraft users.

(If each aircraft must be subject to inspection of repair or alteration by the revision of said Flight Manual, related notification shall also be made.)

(3) Submitting Flight Manual to Civil Aviation Bureau

The administration personnel shall submit the approved original Flight Manual (as for revision, revised portion) to the inspection office of Regional Civil Aviation Bureau Office in charge of the said original Flight Manual with users list of the manual.

6-3 Individual Flight Manual (administration personnel: each aircraft user)

(1) Preparation of Flight Manual as aircraft user

The approval of Flight Manual described in paragraph 3-1(1) (b) or 3-2(2) (b) means the original document or copies of the approval of Flight Manual issued under paragraphs 5-2(2), 5-3(2), and 5-6(1). When loading a copy on the aircraft, the original document shall be properly administered by the aircraft user.

(2) Administration of revision of Flight Manual

The said user shall receive information of revision status of the original of the said Flight Manual from the designer (personnel in charge of the original of the Flight Manual) of the aircraft. If revision is required with the inspection of repair or alteration, application for inspection of repair or alteration shall be made for approval. And if revision is required without inspection of repair or alteration, application for revision of Flight Manual shall be made for approval.

(3) Submitting Flight Manual to Civil Aviation Bureau

Not required.

6-4 STC Flight Manual (administration personnel: holder of approval of supplemental type design)

(1) Providing Flight Manual to aircraft users

The applicant shall provide approved STC Flight Manual to aircraft users who intend to make a change in accordance with the said supplemental type design approval.

In this case, the approval of Flight Manual described in paragraph 3-1(1)(b) or 3-2(2)(b) means a copy of the approval of Flight Manual issued under paragraph 5-1(1) or document representing that the said STC Flight Manual has been approved, or document representing that the said STC Flight Manual which shall be applicable to the provision of paragraph 5-1(2) has been approved by the authority of the State of Design of the said components.

(2) Administration of revision of Flight Manual

In revising STC Flight Manual, application for supplemental type design change shall be made, and approval of the said STC Flight Manual shall be obtained together with the approval of supplemental type design change, except for the cases that the application is made in accordance with the provision of Chapter III titled "Supplemental Type Certificate", paragraph 4-1(b) b. and c. of this Circular and the case applicable to the provision of Chapter I titled "Airworthiness Certification", paragraph 5-1(2) of this Circular.

Furthermore, in cases where supplemental type design changes are applied to the provision of Chapter III titled "Supplemental Type Certificate", paragraph 4-1(b)-b. and c. of this Circular and TC Flight Manual is to be revised, application using STC Flight Manual change application form shall be made and the approval of the revision for the said STC Flight Manual shall be obtained.

When obtained approval, the applicant shall send revised portion of the STC Flight Manual approved and a copy of related approval of Flight Manual or document representing that the said Flight Manual has been approved to aircraft users. (If each aircraft must be inspected for repair or alteration due to the revision of the said Flight Manual, notification shall also be made of it.)

(3) Submitting Flight Manual to Civil Aviation Bureau

The administration personnel shall submit the approved STC Flight Manual (as for revision, revised portion) to the inspection office of Regional Civil Aviation Bureau Office in charge of the said supplemental type design with users list of the manual.

6-5 Repair and Alteration Design Flight Manual (administration personnel: holder of the repair and alteration design approval)

(1) Provision of flight manuals to aircraft users

Any operator of an aircraft who intends to make a change due to the said approval of repair and alteration design shall be provided with the approved repair and alteration design flight manual. In this case, the flight manual approval document of 3-1(1)(b) or 3-2(2)(b) may be a copy of the approval document issued pursuant to 5-1(1) or the document indicating that the relevant repair and alteration design flight manual has been approved, or a copy of the document indicating that the relevant repair and alteration design flight manual in the case where 5-1(2) is applicable has been approved by the design state authority of the component, etc. pertaining to the relevant repair and alteration design.

(2) Management of Changes to Flight Manuals

When intending to make changes to the repair and alteration flight manuals, an application for a change of the repair and alteration design shall be filed and the approval for the change of the relevant repair and alteration flight manuals shall be obtained in conjunction with the approval for the change of the repair and alteration design.

The application shall be made to the Regional Civil Aviation Bureau, Airworthiness Engineers' office in charge of the repair and alteration design concerned.
Upon obtaining the approval, the administration personnel shall distribute to the user a copy of the revised part of the approved flight manual and the relevant flight manual approval document or the document indicating that the relevant flight manual has been approved.
(If it is necessary to have individual aircraft undergo a repair and alteration inspection in accordance with the change of the flight manuals, notice to that effect shall also be given.)

(3) Submission of Flight Manuals to Civil Aviation Bureau

Related to domestically produced aircraft

Submit the said approved repair and alteration design flight manual (the modified part if the change is made) and the list of users to be distributed to the Aircraft Engineering and Certification Center, Airworthiness Division, Aviation Safety and Security Department, Civil Aviation Bureau

Pertaining to imported aircraft

Submit the said approved repair and alteration design flight manual (the modified part if the change is made) and the list of users to be distributed to the Airworthiness Division, Aviation Safety and Security Department, Civil Aviation Bureau

7. Others

7-1 Flight Manual for imported aircraft written in Japanese

Upon type certification or airworthiness certification for the said aircraft in Japan, when the Flight Manual in Japanese has been approved under the provision of paragraph 4-2(1), the said Flight Manual in Japanese shall be administrated in the following manner:

(1) Aircraft of a type which is type-certificated

Regarding the Flight Manual in Japanese of such aircraft approved together with type certification, responsibility for administration shall belong to the holder of the said type certificate. It is permissible to entrust translation into Japanese to a trading company etc. in Japan, but responsibility for administration of the said Flight Manual cannot be changed over.
When the holder of type certificate of the aircraft intends to export the said aircraft to Japan, the said holder must provide the Flight Manual in Japanese of the said aircraft to the aircraft user.

(2) Aircraft of a type which is not type-certificated

Responsibility for administration for the Flight Manual in Japanese of such aircraft shall belong to each aircraft user who is an applicant of airworthiness certification. In a case that original Flight Manual is prepared and administrated for the aircraft of the said type, it is considered that the administration personnel of the said original Flight Manual administrates it as a substitute of each aircraft user. Therefore, when a person has purchased such aircraft and intends to obtain the original Flight Manual, the person needs to have another agreement with the administration personnel of the said original Flight Manual. An aircraft user should obtain the said original Flight Manual from the administration personnel of the original Flight Manual as far as possible.

7-2 Flight Manual for imported aircraft written in English

Almost all Flight Manuals for imported aircraft are prepared by designers/manufacturers in

English. Therefore, Flight Manual in English shall basically be composed of the Flight Manual etc. and the JCAB Supplement as specified in paragraph 4-2(2).
Circular No.1-027 “Guidance on preparation of JCAB Supplement in relation to Flight Manual in English” shall be referred to.

(1) Composition of Flight Manual in English

Composition of the Flight Manual shall be as specified in paragraphs 3-1 and 3-2, even if it is in English. However, this does not apply for TC Flight Manual for imported aircraft that indicates equivalent contents with other form.
The Table of TCD Insertion Status prescribed in paragraph 3-1(1)(d) and the Table of Supplemental Flight Manuals prescribed in paragraph 3-2(1) may be included in the JCAB Supplement.

(2) JCAB Supplement

In accordance with paragraph 3-1(2), the JCAB Supplement shall contain matters necessary for satisfying the requirements for Flight Manuals in Japan, concerning “general description of aircraft”, “limitations of aircraft”, “emergency procedures”, “normal procedures”, “performance of aircraft”, “matters relating to aircraft noise”, and “matter relating to engine emissions.”

Additionally, a list of the Flight Manuals etc. (including Supplemental Flight Manual and Appendix, etc.) approved by the Civil Aviation Bureau for the said type of aircraft and the JCAB Supplement (falling under “Appendix A” in the above-mentioned guidance) shall be included. The list shall contain numbers and titles, the dates of approval by the State of Design, revision numbers and the dates of approval in Japan of each Flight Manuals. This list requires approval. An aircraft user shall confirm that the Flight Manual etc. and the JCAB Supplement sent by the administration personnel of the Flight Manual have been approved by the Civil Aviation Bureau, based on the above-mentioned list, and apply them to (load them on) the said aircraft.

(Note 1) A copy of the approval of the JCAB Supplement shall be arranged at the beginning. It is permissible to administrate the status of approval by the Civil Aviation Bureau based on the above-mentioned list rather than to include copies of approval of respective Flight Manuals or other letters showing that Flight Manuals have been approved, other than the JCAB Supplement, in the Flight Manual in English.

(Note 2) The Table of TCD Insertion Status (Form I-2-8) and the Table of Supplemental Flight Manuals (Form I-2-5) may be included in the JCAB Supplement.

(Note 3) Out of placards described in the chapter “Limitation” in the Flight Manual etc., those to be written in Japanese (including written together with English) shall be prescribed in the JCAB Supplement. For markings etc. relating to emergency evacuation and safety equipment and their equivalents which are to be indicated in Japanese, Circular No.1-008 shall be referred to.
Other placards in Japanese may also be prescribed in the JCAB Supplement.
When there is any document compiling placards in Japanese including the above and the said document can be provided upon request of an aircraft user etc., that document may be cited instead.

7-3 Procedures etc. for approval of Flight Manual for imported aircraft written in English

Upon type certification and airworthiness certification, etc. for the said aircraft in Japan, procedures for approval of the Flight Manual in English and the administration of the approved Flight Manual under paragraph 4-2(2) shall be undertaken as follows.

The Civil Aviation Bureau shall approve either of the Flight Manual in Japanese or the Flight Manual in English that was submitted upon application.

When a Flight Manual in Japanese already approved is maintained and administrated, there is no need to replace it with a Flight Manual in English. However, when a person intends to replace a Flight Manual in Japanese with a Flight Manual in English, the person shall prepare the latest Flight Manual etc. and the JCAB Supplement and shall be approved by the Civil Aviation Bureau based on application.

(1) Application procedures

The procedures set forth in paragraph 5 shall be followed.

(2) Approval procedures

The Civil Aviation Bureau confirms that the Flight Manual etc. prepared by the designer/manufacturer in English satisfies the requirements for Flight Manuals in Japan and grants approval.

The Flight Manual etc., as they are, usually fail to satisfy the requirements for Flight Manuals in Japan. Therefore, the administration personnel of the Flight Manual shall prepare the JCAB Supplement to complement the Flight Manual etc. The Civil Aviation Bureau shall confirms the JCAB Supplement, together with the above-mentioned Flight Manual etc., and approve them if they satisfy the said requirements.

Regarding revisions (including temporary revisions) of the Flight Manual etc. and the JCAB Supplement as well, the Civil Aviation Bureau shall confirm that the revisions satisfy the requirements for Flight Manuals in Japan and grant approval. In this case, the certification of approval of Flight Manual or other letter to prove the fact of granting approval shall be issued for the Flight Manual etc., together with the certification of approval of Flight Manual for the JCAB Supplement.

(3) Administration personnel of the Flight Manual

In the case of TC Flight Manual, responsibility for administration for the Flight Manual in English, including the JCAB Supplement, approved by the Japanese Authority shall belong to the designer/manufacturer, who is the administration personnel of the Flight Manual shown in paragraph 6-1. It is permissible to entrust approval procedures for the Flight Manual in English to a trading company etc. in Japan, but responsibility for administration of the said Flight Manual cannot be changed over.

In the case of original Flight Manual, responsibility for administration for the Flight Manual in English, including the JCAB Supplement, approved by the Japanese Authority shall belong to the administration personnel of the Flight Manual shown in paragraph 6-2, and the import agent etc. of the said type of aircraft shall be able to prepare and administrate that Flight Manual.

In the case of individual Flight Manual, responsibility for administration for the Flight Manual in English, including the JCAB Supplement, approved by the Japanese Authority shall belong to each aircraft user, who is the administration personnel of the Flight Manual shown in

paragraph 6-3.

When intending to export the said aircraft to Japan, the administration personnel must provide the Flight Manual in English, including the JCAB Supplement, approved by the Japanese Authority to the aircraft user.

(4) Others

When the Civil Aviation Bureau has approved the Flight Manual in English, the administration personnel of the Flight Manual may prepare and deliver a Japanese translation of the said Flight Manual in English on the personnel's discretion based on the circumstances of aircraft users (in the case of mostly using the aircraft for personal operations within Japan, for example) to help them understand the said Flight Manual.

However, even in such cases, aircraft users must comply with the approved Flight Manual in English, and shall use a Japanese translation with the full understanding that it is merely a reference.

A Japanese translation is not positioned as a Flight Manual and is out of the scope of approval by the Civil Aviation Bureau. That fact must be described in a Japanese translation.

7-4 Exemption for composition of Flight Manual

Composition, form, etc. of the Flight Manual is specified in paragraph 3. However, another version of these due to special situations may be approved as far as not against to the spirit of that provision.

8. Interim Measures

8-1 The content stipulated in paragraph 4-2(1), 4-3(6)(c) and (d) may not be required to be incorporated for one year after the effective date of this Circular.

8-2 With regard to the list of pages specified in paragraph 3-1(1)(c) and 3-2(2)(c) as well as the matters concerning engine emissions specified in paragraph 4-3(7), the provisions then in force shall remain applicable for one year after the effective date of this Circular.

8-3 Addition of the format based on “Format for Nose Certification Documentation” specified in Attachment G of ICAO Annex 16, Vol. 1

8-3-1 As for aircraft engaged in international operation, in principle, the format shall be incorporated in the flight manual pursuant to the provision of paragraph 4-3(6) by the following period. However, it may not be applied in such a case that further time will be needed for aircraft manufacturer to amend its flight manual.

① As for aircraft engaged in international operation of which a new airworthiness certificate will be issued on or after 24 November 2005, at the issuance of the new airworthiness certificate.

② As for aircraft engaged in international operation which was certified before 24 November 2005, at the first international operation after November 24, 2005.

③ Not applicable for aircraft which is not engaging in the international flight.
(However, application for incorporating the format into the flight manual will be

acceptable.)

8-3-2 Instructions for incorporating the format into flight manual are as follows:

① In the case that the matters related to aircraft noise have been incorporated in the flight manual by the manufacturer and that the flight manual has been approved by the State of Manufacture, in principle, the matters incorporated by the manufacturer shall be replaced with the format required in the provision of paragraph 4-3(6) in the flight manual. However, if the manufacturer has no intention to accept the replacement, it is allowed to add the format required in the provision of paragraph 4-3(6) to the matters incorporated by the manufacturer in the flight manual.

② In the case that the matters related to aircraft noise have not been incorporated in the flight manual by the manufacturer, in principle, the format required in the provision of paragraph 4-3(6) shall be incorporated into the flight manual. However, in the case that the manufacturer accepts the incorporation, the format required in the provision of paragraph 4-3(6) shall be incorporated into the matters relating to aircraft noise established by the manufacturer additionally.

8-3-3 In the case that the flight manual is required to incorporate the format based on “Format for Nose Certification Documentation” specified in Attachment G of ICAO Annex 16, Vol. 1, its administration personnel shall apply for amendment of the flight manual to JCAB with the application (Form I-2-7) together with the revised part of the flight manual and documents which demonstrate that the amendment complies with the requirement. When the amendment is approved, the Approval of the Aircraft Flight Manual will be issued.

様式　I-2-1（Form I-2-1）

☆☆☆☆式〇〇〇〇型

(Name of manufacturer)(Name of type)

飛行規程

Flight Manual

型式証明飛行規程（管理責任者：〇〇〇〇〇株式会社）
TC Flight Manual(Administration personnel : Name of company)
又は、
or
原飛行規程（管理責任者：□□□□□会社）
Original Flight Manual (Administration personnel : Name of company)
又は、
or
個別飛行規程（JA◇◇◇◇）
Individual Flight Manual (Registration mark)

（上記のうち該当するものを記載する。）
Applicable Flight Manual shall be entered.

様式 I-2-2 (Form I-2-2)

第　　（番号 Number）　　号

飛行規程承認書

Approval of Flight Manual

航空機 Aircraft	種類 Classification	Airplane/ Rotorcraft		
	型式 Type and Model	(Manufacturer) Model ***		
	適用 Applicability			
	型式証明番号 Type Certificate Number	No.		
	国籍記号及び登録記号 Nationality and Registration mark	JA	製造番号 Aircraft Serial Number	
飛行規程 Flight Manual	管理責任者 Administration personnel			
	管理責任者による種類 Classification by administration personnel	□TC　□原 Original　□個別 Individual　□STC		
	構成による区分 Category by construction	□基本 Basic (Status: Initial / Revision / Temporary)		
		□追加 Supplement No.○○ (表題 Title　　) (Status: Initial / Revision / Temporary)		
	承認事由 Approval reason	□型式証明 Type Certificate (TC)　□型式設計変更 Amendment TC □追加型式設計承認 Supplemental Type Certificate (STC)　□追加型式設計変更承認 Amendment STC □耐空証明（新規） Airworthiness Certificate (Initial)　□耐空証明（更新） Airworthiness Certificate (Renewal) □修理改造検査 Inspection for repair and alteration　□その他 Others		

上記の航空機の飛行規程について承認する。
Flight Manual for the above-mentioned aircraft is hereby approved.

航 空 機 安 全 課 長
Director, Airworthiness Division
先 任 航 空 機 検 査 官
Chief Airworthiness Engineer

印

承認年月日：　　年　　月　　日
Date of approval：(Month) (Day), (Year)

様式 I-2-3 (Form I-2-3)

☆☆☆☆式○○○○型 (Name of manufacturer) (Name of type)

頁　一　覧　表 Log of page		
頁　年　月　日 Page　Date	頁　年　月　日 Page　Date	頁　年　月　日 Page　Date

様式 I-2-4 (Form I-2-4)

☆☆☆☆式○○○○型
(Name of manufacturer) (Name of type)
航　空　局　承　認
Approved by JCAB
年　　月　　日
Date

（当該頁が承認頁の場合のみ
航空局承認と記入する。）
The words “approved by JCAB” shall be entered, only if the concerned pages shall come under the pages required JCAB approval.

様式 I-2-5 (Form I-2-5)

☆☆☆☆式○○○○型 (Name of manufacturer) (Name of type)

追　加　飛　行　規　程　一　覧　表

Table of Supplemental Flight Manual

JA◇◇◇◇

Registration mark

番号 No.	表　題 Title	装着年月日 Date of installation	確認印 Signature

様式　I-2-6（Form I-2-6）

☆☆☆☆式○○○○型

(Name of manufacturer)(Name of type)

追加飛行規程○

Supplemental Flight Manual

（追加飛行規程の番号。追加飛行規程一覧表の番号と一致させること。）

The number of Supplemental Flight Manual.
The corresponding number in the
Table of Supplemental Flight Manual shall be entered.

★★★★★装置

(Name of equipment)

（型式等を含む表題を記載する。）

(Title contained name of type etc. shall be entered.)

型式証明追加飛行規程
（管理責任者：○○○○○株式会社）
TC Supplemental Flight Manual
(Administration personnel : Name of company)
又は、
or
追加型式設計承認追加飛行規程
（追加型式設計承認書番号：第 STC－○○○－XXX 号）
（管理責任者：○○○○○株式会社）
STC Supplemental Flight Manual
(Approval Number: STC-○○○-XXX)
(Administration personnel : Name of company)
又は、
or
修理改造設計承認書番号：第 RAD－○○○－XXX 号
（管理責任者：○○○○○株式会社）
Repair and Alteration Design Approval Number RAD-○○○-XXX
(Administration personnel : Name of company)
又は、
or
原追加飛行規程
(管理責任者：□□□□□会社)
Original Supplemental Flight Manual
(Administration personnel : Name of company)
又は、
or
個別追加飛行規程（JA◇◇◇◇）
Individual Supplemental Flight Manual (Registration mark)

（上記のうち該当するものを記載する。）
Applicable Flight Manual shall be entered.

様式 I-2-7
(Form I-2-7)

飛 行 規 程 変 更 申 請 書
(Application for change of Aircraft Flight Manual)

年　　月　　日
(Date)

航空機安全課長　　殿　　or
(To Director of Airworthiness Division, JCAB)

先任航空機検査官　　殿
(To Chief Airworthiness Engineer, JCAB)

住所又は主たる事務所の所在地
(Applicant's address)

氏名又は名称　　印
(Applicant's name)　(Seal)

下記の航空機の飛行規程変更について承認を受けたいので、関係書類を添えて申請します。
(I apply for an approval for change of Aircraft Flight Manual to the following aircraft with documents attached hereto.)

航空機 (Aircraft)	種　　類 (Classification)			
	型　　式 (Type and Model)			
	適　　用 (Applicability)			
	型式証明番号 (Type Certificate Number)	No.		
	国籍記号及び登録番号 (Nationality and Registration marks)	JA	製造番号 (serial number)	
飛行規程 (Flight Manual)	管理責任者 (Administration personnel)			
	管理責任者による種類 (Classification by administration personnel)	□TC　□原 (common)　□個別 (Individual)　□STC		
	構成による区分 Category by construction	□基本(Basic) □追加(Supplement)　（表題　(Title_____))		
	変更事由 (Reason of change)	□型式証明 Type Certificate (TC) □追加型式設計承認 Supplemental Type Certificate (STC) □修理改造設計承認 Repair and Alteration Design □耐空証明（新規） Airworthiness Certificate (Initial) □修理改造検査 Inspection for repair and alteration □型式設計変更 Amendment TC □追加型式設計変更承認 Amendment STC □修理改造設計変更承認 Amendment of the repair and Alteration Design □耐空証明（更新） Airworthiness Certificate(Renewal) □その他 Others		
	変更の内容（別紙でも良い。） (Description of change : Appendix acceptable)	□整備改造認定事業場による改造等 (Alteration conducted by AMO) □製造者による原本の変更 (Amended by the manufacturer) □耐空性改善通報(TCD)による改訂指示 (Airworthiness directive) □その他（　　） (others)		
備　　考 (Remarks)				

注　押印することに代えて、署名することができる。
(Note: Signature of a person in charge is acceptable instead of a seal.)

様式 I-2-8 (Form I-2-8)

ＴＣＤ挟み込み状況表
Table of TCD Insertion Status

ＴＣＤ番号 TCD number	挟み込み日 Date of insertion	担当者 Personnel in charge	除去日 Date of deletion	担当者 Personnel in charge	備考 Remarks （除去の根拠等） Reason of deletion, etc.

Judgment table for operating method limitation (Required equipments, etc. on each operating method)

Equipments, etc.	Minimum quantity	Operating method							
		A	B	C	D	E	F	G	H
Gyroscopic attitude indicator	1 (Note 2)	○	○						
Gyroscopic directional indicator	1	○	○						
Gyroscopic turn indicator	1 (Note 3)	○	○						
Slip indicator	1	○	○						
Precision altimeter	1 (Note 2)	○	○						Note 8 ○
Rate of climb indicator	1	○	○						
Airspeed indicator with anti-icing device	1 (Note 2)	○	○						
Ambient air temperature indicator	1	○	○	○					
Clock with second indication	1	○	○	○					
Airborne DME	1 (Note 4)	○	○	○					
Direction finder, VOR receiver Airborne TACAN receiver	1 (Note 2)	Note 5 ○	Note 6 ○	Note 6 ○					
Navigation lights						○			
Anti-collision lights						Note 7 ○			
Anti-icing device								○	
Oxygen supply system (Note 1)									○

In addition to the equipments, etc. listed above, it shall be necessary to obey the requirements for equipment specified in the Civil Aeronautics Regulations, etc.

Category of Operating Methods

A Flight under instrument flight rules (Flight under instruction of air traffic control at all times)

B Instrument flight (Flight in instrument meteorological conditions)

C Flight under instrumental navigation (Flight over cloud or over water beyond the distance and time specified in Article 66 of the Regulations under visual meteorological conditions)

D Visual flight other than flight under instrumental navigation

E Night operations

F Day operations

G Flight under icing meteorological conditions (as approved in type certification)

H High altitude operations (above 3,000 meters of altitude)

(Note 1) Oxygen supply system with following capacity

(1) Aircraft without cabin pressurization system

(a) When flight is conducted at altitude between 3,000 and 4,000 meters, necessary oxygen quantity shall be as much as for all occupants to use for the flight time equal to flight time related to the said flight minus 30 minutes.

(b) When flight is conducted at altitude beyond 4,000 meters, necessary oxygen quantity shall be as much as for all occupants to use for flight time related to the said flight.

(2) Aircraft with cabin pressurization system

As long as flight is conducted at altitude beyond 3,000 meters, necessary oxygen quantity shall be as much as for all occupants to use for flight time which takes from maximum planned altitude related to the flight to altitude of 3,000 meter. (If flight must be continued at altitude beyond 4,000 meters for safe flight, necessary oxygen quantity shall be total amount of above quantity added as much as for all occupants to use for flight time of the flight continued beyond 4,000 meters.)

(Note 2) Minimum quantity on aircraft for air transport use, of which maximum takeoff gross weight is more than 5,700 kg shall be two.

(Note3) Aircraft equipped with gyroscopic attitude indicator which is able to indicate every attitude of aircraft may not be equipped.

(Note 4) Aircraft other than the aircraft for air transport use, of which maximum takeoff gross weight is more than 5,700 kg (limited to the aircraft which must be equipped with VOR receiver) may not be equipped.

(Note 5) Either of direction finder, VOR receiver, and onboard TACAN equipment will receive radio signals which are dependent on air route related to the flight from NDB, VOR or TACAN stations which exist compose air route. However, a direction finder may be replaced with a satellite navigation system.

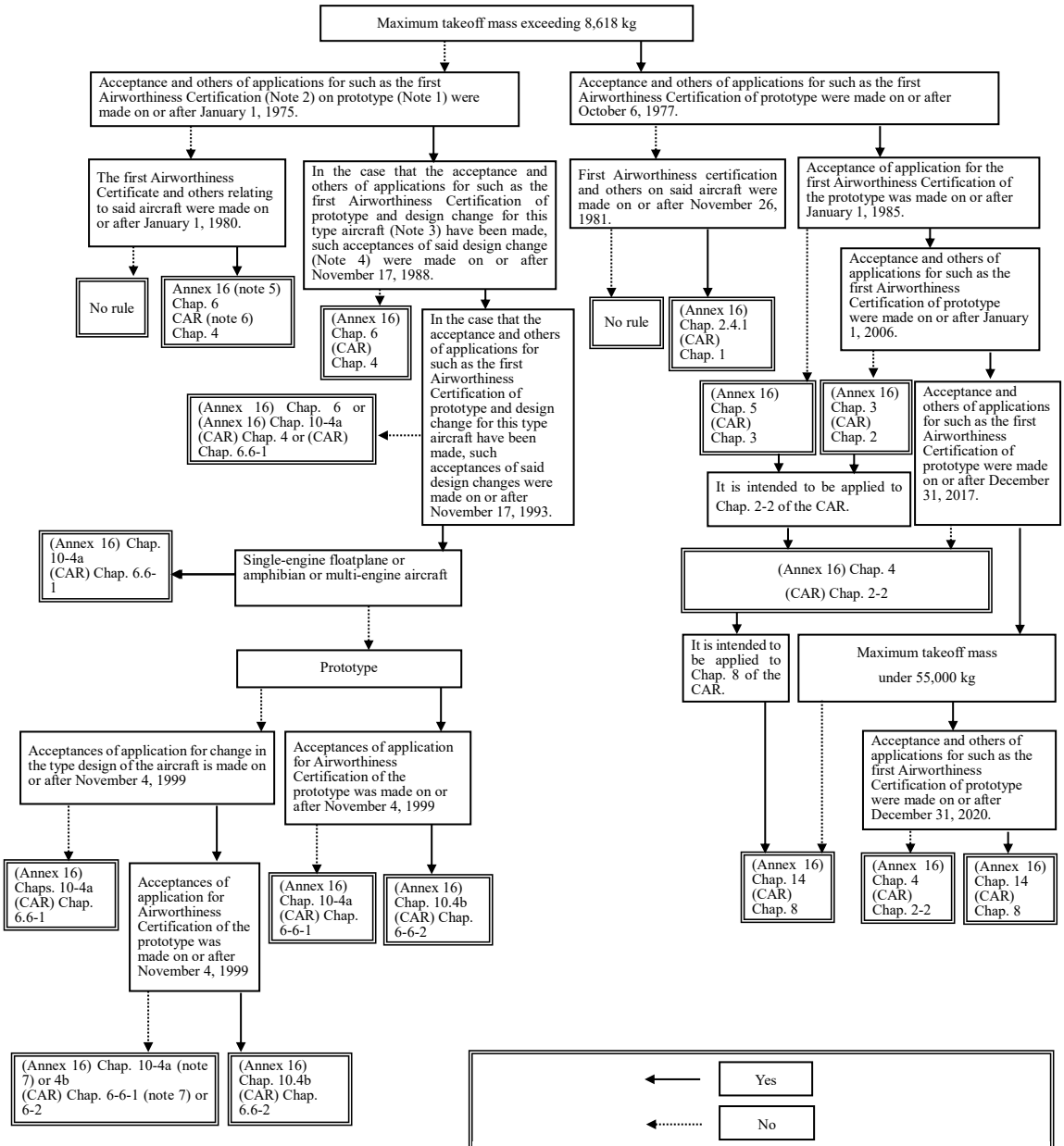
(Note 6) Either of direction finder, VOR receiver, onboard TACAN receiver be able to receive radio signals all through the flight from NDB, VOR or TACAN stations. However, a direction finder may be replaced with a satellite navigation system.

(Note 7) Aircraft of which maximum takeoff weight is equal and more than 5,700 kg, and aircraft of which maximum takeoff gross weight is less than 5,700 kg and obtains initial airworthiness certification after January 17, 2003 must be equipped.

(Note 8) Required for the flight at altitude of 16,000 ft or more under the Notice of the Director-General of Civil Aviation Bureau, KUUKOU No.551 dated December 9 of 1971, “Specification of Altimeters”.

Attachment 1

Applicability of Noise Certificate Standards for Propeller-Driven Airplanes



In addition to the part of annotations, following notes relate to the entire Attachment 1.

(Note 1) Prototype

The first aircraft to the same series of said aircraft made for acceptance of application to Airworthiness Certificate and other acts.

(Note 2) Airworthiness Certificate and others

It refers to Airworthiness Certificate to the provisions of Article 10 paragraph 1 of the Act and Airworthiness Certificate and other acts by a foreign state which are contracting states of the Convention on International Civil Aviation.

Other acts include Type Certificate to the provisions of Article 12 paragraph 1 of the Act and Type certificate by a foreign state which are contracting states of the Convention on International Civil Aviation.

(Note 3) Change of design

It refers to any increase in noise values exceeding 0.1dB (A). However, when the cumulative increase in noise values from the prototype is apparent, said accumulation is limited to more than 0.3dB (A).

(Note 4) Acceptance of applications for changes of design etc.

It refers to the acceptance of applications for design changes to the provisions of Article 13 paragraph 1 of the Act and the acceptance of application and other acts for the design change by a foreign state which are contracting states of the Convention on International Civil Aviation.

Other acts include the acceptance of application for Supplemental Type Design to the provisions of Article 13-2 paragraph 1 of the Act, the acceptance of application for approval of Supplemental Type Design Change under the provisions of Article 13 paragraph 3 of the Act and the acceptance of application on Inspection for Repair and Alteration under the provision of paragraph 1 of Article 16 of the Act.

(Note 5) Annex 16

It refers to Annex 16 Vol. 1 Amendment 9 of the Convention on International Civil Aviation (effected on November 20, 2008.)

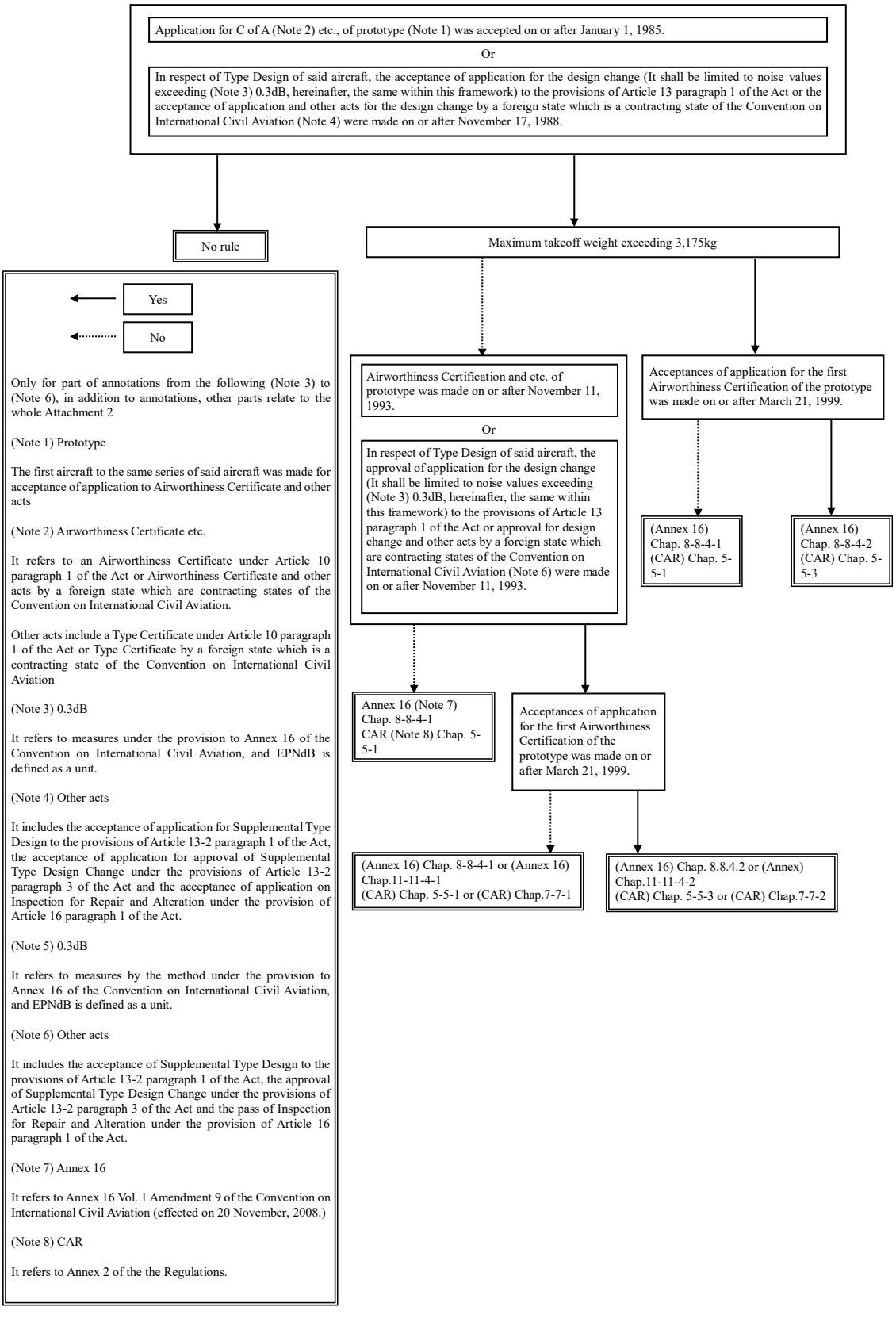
(Note 6) CAR

It refers to Annex 2 of the the Regulations.

(Note 7) Acceptances of application for the design changes shall be made on before November 4, 2004, and limited to those not conforming to the noise standards of CAR Chapter 6 Table 6-2.

Attachment 2

Applicability of Noise Certificate Standards for Helicopters



Only for part of annotations from the following (Note 3) to (Note 6), in addition to annotations, other parts relate to the whole Attachment 2

(Note 1) Prototype

The first aircraft to the same series of said aircraft was made for acceptance of application to Airworthiness Certificate and other acts

(Note 2) Airworthiness Certificate etc.

It refers to an Airworthiness Certificate under Article 10 paragraph 1 of the Act or Airworthiness Certificate and other acts by a foreign state which are contracting states of the Convention on International Civil Aviation.

Other acts include a Type Certificate under Article 10 paragraph 1 of the Act or Type Certificate by a foreign state which is a contracting state of the Convention on International Civil Aviation

(Note 3) 0.3dB

It refers to measures under the provision to Annex 16 of the Convention on International Civil Aviation, and EPNdB is defined as a unit.

(Note 4) Other acts

It includes the acceptance of application for Supplemental Type Design to the provisions of Article 13-2 paragraph 1 of the Act, the acceptance of application for approval of Supplemental Type Design Change under the provisions of Article 13-2 paragraph 3 of the Act and the acceptance of application on Inspection for Repair and Alteration under the provision of Article 16 paragraph 1 of the Act.

(Note 5) 0.3dB

It refers to measures by the method under the provision to Annex 16 of the Convention on International Civil Aviation, and EPNdB is defined as a unit.

(Note 6) Other acts

It includes the acceptance of Supplemental Type Design to the provisions of Article 13-2 paragraph 1 of the Act, the approval of Supplemental Type Design Change under the provisions of Article 13-2 paragraph 3 of the Act and the pass of Inspection for Repair and Alteration under the provision of Article 16 paragraph 1 of the Act.

(Note 7) Annex 16

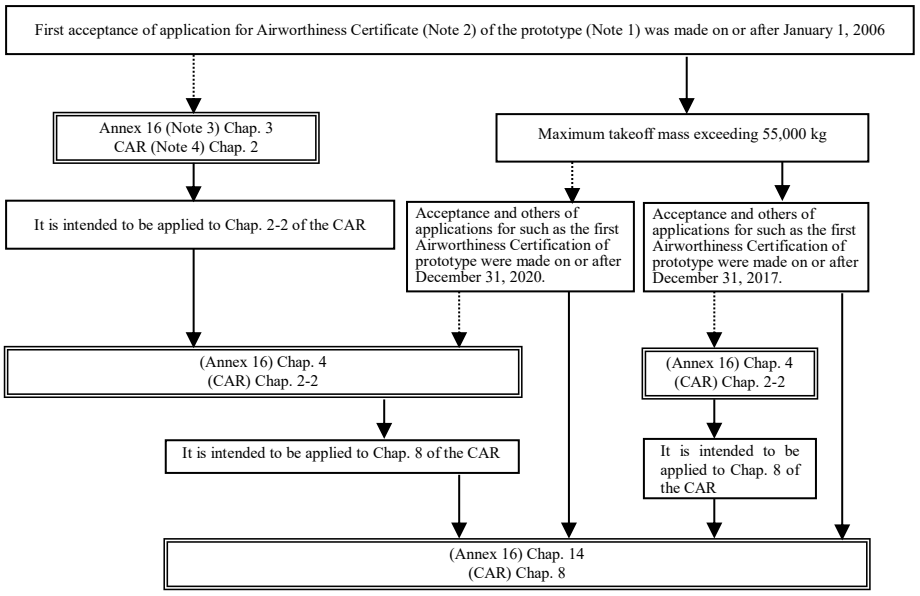
It refers to Annex 16 Vol. 1 Amendment 9 of the Convention on International Civil Aviation (effected on 20 November, 2008.)

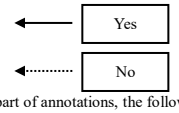
(Note 8) CAR

It refers to Annex 2 of the the Regulations.

Attachment 3

Application of Noise Standards for Aircraft Equipped with Turbojets or Turbofan Engines





In addition to the part of annotations, the following notes relate to the entire Attachment 3.

(Note 1) Prototype

The first aircraft to the same series of said aircraft was made for acceptance of application to Airworthiness Certificate and other acts.

(Note 2) Airworthiness Certificate

It refers to Airworthiness Certificate under Article 10 paragraph 1 of the Act or Airworthiness Certificate and other acts by a foreign state which are contracting states of the Convention on International Civil Aviation.

Other acts include Type Certificate under Article 12 paragraph 1 of the Act or Type Certificate by a foreign state which are contracting states of the Convention on International Civil Aviation.

(Note 3) Annex 16

It refers to Annex 16 Vol. 1 Amendment 9 of the Convention on International Civil Aviation (effected on November 20, 2008.)

(Note 4) CAR

It refers to Annex 2 of the the Regulations.

Attachment I-3

Maintenance Procedure Manual

1. Purpose

A "Maintenance Procedure Manual" which shall be one of accompanying documents to the application for airworthiness certification, inspection of repair, alteration, type certification or supplemental type certificate, repair and alteration design approval or repair and alteration design approval for components shall provide the fundamental guideline for the aircraft user to perform maintenance of the aircraft, and shall contain the following matters as specified in the Article 5-5 of the Regulations:

(1) Explanation of structures, parts and systems of aircraft
(2) Methods of periodic inspections, methods involved in the implementation of corrective actions against malfunctions and other issues related to maintenance
(3) Retirement of the life of engines, propellers and other parts prescribed in Article 31, paragraph 1 of the Regulations
(4) Other necessary items

This attachment is to clarify inspection items etc. as basis on the methods for annual inspection or its equivalents, especially required for renewal of airworthiness certification of aircraft, regarding the contents mentioned above.

With regards to requirements for Maintenance Procedure Manual regarding application for repair and alteration design approval for components, refer to Chapter IV 3 (1) as well as this attachment.

2. Matters of description on each items specified in Article 5-5 of the Regulations

2-1 Explanation of structures, parts and systems of aircraft

This is the explanation for general matters necessary to perform maintenance of the aircraft (so-called maintenance manual), and shall contain the following matters:

(1) Explanation regarding specification, performance and other necessary information for maintenance of the aircraft
(2) General description regarding structures, parts and systems of aircraft
(3) Explanation of operation and function regarding the parts and systems (including particular procedure and limitation)
(4) Explanation regarding points for preservation/inspection and servicing, tank capacity, kind of hydraulic oil, operating pressure on each system, location of access panels, lubrication points and lubricant, equipment for preservation/inspection and servicing, towing, mooring, lifting and leveling

2-2 Methods of periodic inspections, methods involved in the implementation of corrective actions against malfunctions and other issues related to maintenance

This is the provisions regarding the methods of maintenance (so-called, maintenance instructions), and shall contain following matters:

(1) Explanation of maintenance requirements and methods of maintenance

(a) Explanation regarding maintenance requirements and their interval for cleaning, check, adjustment and test, and lubrication etc., degree of inspection, wear limit and recommended action for that wear, explanation regarding complicated components which require special skill and test equipment on maintenance shall be referred to the information from the manufacturer of the concerned parts. Explanation shall contain inspection program in which contains recommended overhaul interval, chapter described limitations to be referred, inspection frequency and degree of inspection on each aircraft.

(b) Explanation of trouble-shooting procedures including matters of probable malfunction, method of its awareness, corrective action against malfunction

(c) Explanation of procedures for removal and replacement of the components or parts and of necessary cautions

(d) Explanation of procedures for engine test run on the ground, balancing check, measurement of weight and center of gravity, lifting, restraining and limitation for storage etc.

(2) Explanation regarding location chart for access plates and method to gain access without access plate

(3) Explanation of specialized inspection method including radioactive inspection, ultra sonic testing etc.

(4) Explanation regarding corrosion prevention for structure members taken after inspection

(5) Explanation of identification, disposal criteria, fastening torque etc. regarding the fasteners for structure use

(6) List of special tools and equipment

3. Method of annual inspection or its equivalents required upon taking renewal inspection for airworthiness certification

Upon taking practical inspection of aircraft for renewal of airworthiness certification, inspection regarding the conditions of structures, parts and systems of aircraft (hereinafter referred to as "annual inspection") specified in paragraph 3-1 shall be performed immediately before the inspection for airworthiness certification, in principle.

However, on the aircraft to which the maintenance equivalent to or more than the annual inspection specified in paragraph 3-2 has been performed, another annual inspection may not be performed.

3-1 Annual inspection

(1) Preparation

Preparation contains to remove necessary inspection panel, access door, fairing and cowling or to make access hole for inspection and to perform necessary cleaning of whole aircraft and engines.

(2) Components of the fuselage and hull

(a) Fabric and skin: for deterioration, distortion, other evidence of failure, and defective or

insecure attachment of fittings.

(b) Systems and components: for improper installation, apparent defects, and unsatisfactory operation.

(c) Envelope, gas bags, ballast tanks, and related parts: for poor condition (such as leakage, clogging of vent).

(3) Components of the cabin and cockpit

(a) Generally: for uncleanliness and loose equipment that might foul the controls.

(b) Seats and safety belts: for poor condition and apparent defects (such as loose threads).

(c) Windows and windshields: for deterioration and breakage.

(d) Instruments: for poor condition, mounting, marking, and (where practicable) improper operation.

(e) Flight and engine controls: for improper installation (poor cable condition, safe tying) and improper operation.

(f) Batteries: for improper installation and improper charge.

(g) All systems: for improper installation, poor general condition, apparent and obvious defects, and insecurity of attachment.

(4) Components of the engine and nacelle

(a) Engine section: for visual evidence of excessive oil, fuel, or hydraulic leaks, and sources of such leaks.

(b) Studs and nuts: for improper torqueing and obvious defects.

(c) Internal engine: for cylinder compression and for metal particles or foreign matter on screens and sump drain plugs. If there is weak cylinder compression, for improper internal condition and improper internal tolerances. (For reciprocating engine)

(d) Engine mount: for cracks, looseness of mounting, and looseness of engine to mount.

(e) Flexible vibration dampeners: for poor condition and deterioration.

(f) Engine controls: for defects, improper travel, and improper safe tying.

(g) Lines, hoses, and clamps: for leaks, improper condition and looseness.

(h) Exhaust stacks: for cracks, defects, and improper attachment.

(i) Accessories: for apparent defects in security of mounting.

(j) All systems: for improper installation, poor general condition, defects, and insecure attachment.

(k) Cowling: for cracks, and defects.

(5) Components of the landing gear

(a) All units: for poor condition and insecurity of attachment.

(b) Shock absorbing devices: for improper oleo fluid level.

(c) Linkages, trusses, and members: for undue or excessive wear fatigue, and distortion.

(d) Retracting and locking mechanism: for improper operation.

(e) Hydraulic lines: for leakage, and rubbing

(f) Electrical system: for chafing and improper operation of switches.

(g) Wheels: for cracks, defects and condition of bearings.

(h) Tires: for wear and cuts.

(i) Brakes: for improper adjustment.

(j) Floats and skis: for insecure attachment and obvious or apparent defects.

(6) All components of wing and center section assembly: for general condition, fabric or skin deterioration, distortion, evidence of failure, and insecurity of attachment.

(7) All components and systems that make up the complete empennage assembly: for poor general condition, fabric or skin deterioration, distortion, evidence of failure, insecure attachment, improper component installation, and improper component operation.

(8) Components of propeller
(a) Propeller assembly: for cracks, nicks, binds, and oil leakage.
(b) Bolts: for improper torqueing and lack of safe tying.
(c) Anti-icing devices: for improper operations and obvious defects.
(d) Control mechanisms: for improper operation, insecure mounting, and restricted travel.

(9) Components of the radio
(a) Radio and electronic equipment: for improper installation and insecure mounting.
(b) Wiring and conduits: for improper routing, insecure mounting, and obvious defects.
(c) Bonding and shielding: for improper installation and poor condition.
(d) Antenna including trailing antenna: for poor condition, insecure mounting, and improper operation.

(10) Each installed miscellaneous item that is not otherwise covered by this listing: for improper installation and improper operation.

(11) As for rotorcraft, following inspection shall be performed in accordance with the procedures specified by the manufacturer:
(a) Drive shaft or similar system
(b) Transmission
(c) Main rotor
(d) Tail rotor

3-2 Maintenance equivalent to or more than the annual inspection

(1) Maintenance system based on the maintenance program (continuous airworthiness inspection program or its equivalents) which the aircraft manufacturer recommends as maintenance system to maintain airworthiness based on the design of the aircraft

As this maintenance system has been approved by Authority, maintenance based on this system shall be regarded as maintenance equivalent to or more than the annual inspection described in paragraph 3-1, provided the said maintenance has been performed for the past one year continuously. To put it concretely, following aircraft shall be regarded as the aircraft on which the maintenance equivalent to or more than the annual inspection has been performed.

① The aircraft which has established the said maintenance system in its approved maintenance manual, and which has adequately performed the said maintenance for the past one year continuously on that aircraft

② In a case that the air carrier has established the said maintenance system, the approved organization for AMI (under Article 20, paragraph 1-(2)) which is contracted by the air

carrier to maintain their aircraft has established the said maintenance system in the approved exposition and has adequately performed the said maintenance for the past one year continuously on that aircraft

(2) Maintenance system based on the progressive inspection program that executes the annual inspection by dividing into some parts

As this maintenance system has been approved by Authority, the maintenance based on this system shall be regarded as maintenance equivalent to or more than the annual inspection described in paragraph 3-1, provided all items of annual inspection have been adequately performed based on this system for the past one year continuously. To put it concretely, the organization mentioned in ① or ② above has established this maintenance system in the approved maintenance manual or the exposition respectively and adequately performs the said maintenance on that aircraft.

(3) Other maintenance system approved by Authority

The last maintenance based on the (1) and (2) shall be performed within 90 days before the date of inspection.

II. Type Certification

1. Introduction

This part is to provide guidance with regard to the general policy, procedures for an application, documents for submission etc. for inspection for type certification specified in Article 12 of the Law and type design change specified in Article 13 of the Law.
In addition, Circular No.1-003 ”Procedures for Type Certification of Japanese Manufactured Aircraft” provides detailed procedures regarding type certification of Japanese manufactured aircraft.
Refer to the above Circular No.1-003 and Circular No.2-001 ” General Policy for Approved Organizations” about detailed requirements and procedures with which approved organization for the capability specified in Article 20 paragraph 1-(1) of the Law shall comply.

2. Definition

The scope of type certificate includes the following:

(1) Drawings, specifications and their list required to define the characteristics of the configurations and designs of aircraft etc. shown as conforming to the applicable standards
(2) Materials, processing and manufacturing processes/inspection procedures required to comply with the configurations of the defined aircraft
(3) Necessary parts to prove conformity to the applicable standards on the maintenance instructions specified in Article 5-5 of the Regulations (Instructions for continued airworthiness required by Chapter 7 of the Airworthiness Inspection Manual)
(4) All other matters necessary to ensure airworthiness and environmental compatibility

“Type certificate” includes the design of type certificate, operating limits, TC data sheet and applicable standards.

3. Meaning of Type Certification

For airworthiness certification on an aircraft type-certificated, a part of the inspection on the design and manufacturing process shall be omitted out of inspections on the design, manufacturing process and current condition.

Additionally, for an aircraft manufactured in Japan, when an approved organization for Aircraft Production and Inspection (AOAPI) has manufactured and inspected the aircraft after completing manufacture or, for an imported aircraft, when a foreign state has certified the aircraft under the standards and procedures for inspection which shall be recognized as having equivalent to or more level than that of Japan, a part of the inspection on current condition shall also be omitted in addition to partial omission of the inspection on the design and manufacturing process.

(Note) 1. If the airworthiness certification is accepted in Japan for the first time, type certificate shall be obtained, in principle.

2. Refer to Chapter I titled “Airworthiness Certification” for the detailed description of omission of inspection for the airworthiness certification.
3. The contents of the inspection standards and procedures equivalent or superior to Japan in exporting states shall depend on the bilateral agreement/arrangement relating to the certificate of such aircraft to be concluded between Japanese authority and the exporting state. In regard to the bilateral agreement/arrangement concluded between Japan and foreign authorities, refer to the ‘Concerning about bilateral agreement/arrangement on Circular No. 7-001

4. Documents for Submission according to the Classifications of an Application for Type Certification and Outline of Inspection

4-1 An aircraft manufactured in Japan and its equivalents
(Including an imported aircraft which has not been type-certificated by a foreign state or for which has no plan for type certification)

(1) Documents for submission

The contents of documents accompanied with application form for type certification shall be specified as follows:

(a) Design plan
The design plan shall refer to the documents describing the following items.
a. Outline
b. Power plant related matters
c. Performance related matters
d. General descriptions of primary structure.
e. Equipment related matters
f. Description of special manufacturing methods, if any.
g. Test related matters

(b) List of design documents
The list of design documents shall refer to the documents described below.
a. Calculation of weight and center of gravity
b. Calculation of performance
c. Calculation of stability and controllability
d. Calculation of basic load and basic load strength
e. Calculation of fatigue load and fatigue load strength
f. Calculation of extent of noise level and engine emissions
g. Specification of engine, propeller and other major parts
h. Design materials such as load analysis, strength calculation, performance calculation, main block diagram, specification, failure analysis and others in respect to various systems (flight control, operation, electronics/electricity, instrument, inlet and exhaust, cooling, fuel, lubricant oil, hydraulic oil, air pressure, vacuum, air-conditioning, anti-icing/deicing, fire extinguishing, oxygen, radio, navigation equipment and others).

i. Materials for design if any unique structure or parts are used.
j. Documents describing plans, data and results of tests and measurements (strength tests, fatigue tests, ground tests, flight tests, noise measurements, emission measurements and others).

(c) Drawing list

The drawing list shall be a list including every drawing number, title and others related to the type design of the said aircraft under application.

(d) Drawings

The drawing shall be a three-dimensional drawing.

(e) Parts list

The parts list shall be the list which contains the name of parts, type of parts, name of manufacturers, weight, position of center of gravity to the datum line of aircraft, name of approved standards, and others on individual part in respect to all standard parts installed and optional parts installed by an aircraft user according to operation mode and others, which are included in the type design of the aircraft.

(f) Manufacturing plan

The manufacturing plan shall be the documents described below.

a. Location of manufacturing plant and name of the main subcontract manufacturer related to the aircraft under application
b. Schedule of manufacture related to the said aircraft

(g) Specification

The specification shall be the documents described below.

a. Classification, class and type of an aircraft under application
b. Type and number of engine, propeller or rotor blade
c. Name and address of manufacturer of an aircraft under application. (in case of corporation, its name and location of a head office)
d. Airworthiness category, the standards specified under Article 10, paragraph 4 of the Law (including provisions according to Article 10-2, paragraph 2) and the issue date of the Airworthiness Inspection Manual on which design was based
e. The main dimensions of the aircraft under application including the range of deflection of angle of the control surfaces
f. Description and the necessary charts related to weight and location of center of gravity such as maximum take-off weight, maximum landing weight, allowable range of center of gravity, weight distribution, floor load strength and related matters
g. Limit load factor
h. Limitations related to airspeed such as never exceed speed, normal operating limit speed, landing gear operating speed and others
i. Acrobatic flight such as spiral and other peculiar flight characteristics allowable for the aircraft under application
j. Maximum operating altitude or maximum altitude of auto rotation landing

k. Specifications and necessary charts related to engine operation such as power or thrust, engine rev speed, rotor speed of rotorcraft, atmospheric temperature at which engine can be operated efficiently and others
l. Grade of fuel, and lubricant oil standard
m. Total capacity of fuel tanks and oil tanks, unusable capacity
n. Type, number, method of usage of special equipment. Limitations and necessary charts, when these are installed.
o. Kind of equipment and parts (Name and standard or specification of standard and optional equipment)
p. Limit of cross wind
q. Minimum crew, maximum passengers
r. Water limitation
s. Manufacturer serial number of applicable aircraft
t. Necessary signs and placards
u. Safe life of structure members
v. Noise level.
w. Level of engine exhaust emissions

(Note) Class of aircraft means classification of aircraft as single engine land, multi-engine land, single engine water and multi-engine water.

(h) Flight Manual
Flight Manual shall contain matters specified under Article 5-4 of the Regulations. Refer to Attachment I-2 to Chapter I of this Circular for guidelines on preparation.

(i) Maintenance Procedure Manual
Maintenance Procedure Manual shall contain matters specified under Article 5-5 of the Regulations. Refer to Attachment I-3 to Chapter I of this Circular for guidelines on preparation.

(j) Documents describing items for computing weight and center of gravity of the aircraft
Following items shall be described in the documents. However, the Flight Manual may be a substitute for the documents when these items are described in the Flight Manual.
a. Weight and center of gravity of airframe
b. Name, weight and center of gravity of each equipment
c. Useable capacity and center of gravity of each fuel tank
d. Others

(k) Documents certifying the completion of inspection stipulated by Article 39-4 paragraph 1 (applicable only for aircraft described in Article 18 paragraph 2 subparagraph 2)

(l) Documents describing reference materials in addition to those listed in each of the preceding

(2) Summary of Inspection

(a) Application

In accordance with Article 17 Paragraph (2) Category 2 of the Regulations, the applicant shall submit attached documents of the type certificate application form to the Airworthiness Division, Aviation Safety and Security Department, Civil Aviation Bureau, Ministry of Land, Infrastructure and, Transport and Tourism (Kasumigaseki) by a given time

(b) Type certificate standards

The standard applied to the type certificate for which an application was submitted is the following standard prescribed in Appendix No. 1, 2, 3 and 4 of the Regulations.

For procedures or methods to prove suitability to the standards of Appendix No. 1 of the Regulations, in principle, when acceptance for the application of said type certificate, apply the efficient Airworthiness Inspection Manual.

However, there are cases of adoption etc. of new technology or special designs for the designs of said type aircraft, in a case where application of the whole or part of said procedures may be difficult or irrational, special conditions, exemption or equivalent level of safety may be established.

In addition, as required to prove suitability to safety standards, it is possible to apply the latest procedures or methods revised after receiving of the application form on another occasion.

4-2 An imported aircraft (an aircraft which has been type-certificated or for which any other approval for type design has been granted by state which is a Contracting State to the Convention on International Civil Aviation)

In case of an aircraft for which an application for type certificate or its equivalent has been submitted to a foreign state which is a Contracting State to the Convention on International Civil Aviation such as joint development of aircraft with Japan or its equivalents, any supplemental documents shall be requested to submit to those described in paragraph 3-1 as necessary, as a result of coordination between JCAB and the authority of the said foreign state.

(1) Documents for submission

The contents of documents accompanying application form for type certification shall be;

(a) Documents and drawings which adequately substantiates compliance with standards for airworthiness, noise standards and emission control standards for engine exhaust under Article 10 paragraph 4 of the Law.

a. “Means of Compliance”, “Compliance Check List” and other documents which certify the compliance with the applicable standards of Japanese Authority” (including any special conditions, additional special requirements, exemption and equivalent level of safety.”
b. Test plan and test report
c. Flight test plan and flight test report
d. System Safety Assessment Report

(Note) From b to d shall be specified by the Validation Item to be set in section 4-2 (2) (c).

e. Reports indicating compliance with noise standards, those including the following:
   (i) Maximum noise value demonstrated based on Annex 2 of the Regulations
   (ii) Measurement method and analysis method of noise including correction method
   (iii) Description of the additional alteration made to comply with the noise certificate standards to be applied
f. Reports shall indicate compliance with the criteria of the fuel venting standards required by the Annex 3 of the Regulations. (only for aircraft equipped with turbine engines)
g. Report shall indicate compliance with the standards on exhaust emissions as required by the Annex 3 of the Regulations. (only for turbojet or turbofan engines)
   (i) Exhaust gas value certified based on Annex 3 of the Regulations.
      (Note) According to the measurement or calculation method complying with Annex 3 of the Regulations, values of smoke hydrocarbons, nitrogen oxides, carbon monoxide and non-volatile particulate matter shall be attached.
   (ii) Description of the additional alteration made to comply with the emission standards to be applied.
h. Report shall indicate compliance with the standards on CO_2 emissions as required by the Annex 4 of the Regulations.
   (i) CO_2 value certified based on Annex 4 of the Regulations.
      (Note) Value of CO_2 based on the measurement or calculation method complying with Annex 4 of the Regulations shall be attached.
   (ii) Description of the additional alteration made to comply with the CO_2 emission standards to be applied.
i. Minutes of the Type Certificate Board of the authority of the State of Design
j. Issue Papers issued by the authority of the State of Design
k. Drawing or design documents relating to the placard in Japanese

(b) Certification documents to be issued by government organizations of said states, a type certificate and other acts made by said states.

(c) Drawing lists

(d) Parts lists

For (d) or (c), the Master Drawing List describing the necessary matters may be submitted.

(e) Specifications
   a. An outline of the design “including standards for airworthiness, noise and emission for engines special condition, additional special requirement, equivalent safety, exemption, possible operation form and operating limits applied by said authority.”
   b. Type certificate data sheet for said authority
   c. Overview of new technology or specific design

(f) Flight Manual

Flight Manual shall contain matters specified under Article 5-4 of the Regulations. Refer to Attachment I-2 to Chapter I “Airworthiness Certification” for guidelines on preparation.

(g) Document for maintenance procedure: Instructions for Continued Airworthiness
Instructions for keeping airworthiness

(h) Documents describing the necessary matters to calculate the weight and position of the center of gravity of the aircraft.

(i) Documents describing other relevant references

a. Documentation on manufacturing

(i) Production Flight Test Procedure

b. Following technical data

(i) Operating Manual

(ii) Parts catalog

(iii) List and summary of the service bulletin applied to aircraft, engines or components and their main components

(iv) The list and a summary of (Airworthiness Directive) applied for aircraft, engine or components and their main components

c. Documents shall demonstrate how to provide electronic data of the latest version of the technical data to the Civil Aviation Bureau.

(2) Outline of Inspection etc.

(a) Application

a. An applicant shall be a person who is the holder of the original type certificate or a person who shall submit a new application for an original type certification. Procedures may be undertaken by the agent, but the person mentioned above shall be subject to the inspection.

b. An applicant shall be responsible for type design of the subject type of aircraft.

c. In principle, an application shall be submitted through an authority of the state where the aircraft was designed.

d. Documents accompanied with an application shall be written in Japanese or English.

e. For Flight Manuals, Attachment I-2 to Chapter I "Airworthiness Certification" shall be referred to.

f. Desired time to obtain type certificate of Japan and plans to import to Japan shall be described. (if possible, specific names of clients and expected configuration to Japan shall be included)

(b) Type certification basis

a. An applicant shall explain overview of the pertinent aircraft, procedure for substantiation, special remarks on design. As necessary, meetings which consist of the authority of the State of Design, the Civil Aviation Bureau and the applicant, shall be held to discuss the certification procedures, applicable standards, new technology and specific design. Based on the above-mentioned meetings, the Civil Aviation Bureau will decide the type certification team.

b. In principle, certification basis for airworthiness shall be the airworthiness standards in Japan that was effective at the time when the state of original design accepted an application for type certification for the aircraft.

When it is deemed necessary to establish special conditions and additional special requirements by Authority, they shall be determined after consultation between Authority, the authority of the State of Design and the applicant.

"Special Conditions" means the airworthiness requirements added to the standards of importing country or change to them for novel or unusual features of the aircraft design

to ensure safe condition.

"Additional Special Requirements" means the airworthiness and environmental requirements added to the standards or specification of exporting country or change to them to comply with the standards of importing country when there are differences in standards between the importing and exporting countries.

c. The environmental standards (noise and emission control for engine exhaust) shall be as described in Annexes 2, 3 and 4 of the Regulations.

d. Markings etc. that need to be notified only among trained aircrew shall be indicated in Japanese or English. For markings etc. relating to emergency evacuation and safety equipment and their equivalents which are to be indicated in Japanese, Circular No.1-008 shall be referred to.

However, in case of an aircraft operated by air carrier for a scheduled air transport service under the provisions of the former Law amended by the Law for amendment of the said Law (Law No. 72, 1999), English is acceptable except on emergency evacuation and safety equipment and their equivalents.

e. For items of the type certificate standards in Japan, special import requirements, means of compliance, equivalent level of safety, special conditions, special additional requirements and exemptions, the Civil Aviation Bureau shall publish the Issue Papers, and shall notify the applicant through the State of Design, as required, after coordinating with the authority of the State of Design (see Circular No. 1-304). However, if the Civil Aviation Bureau and the authority of the State of Design have the same understanding, the Issue Papers issued by the authority of the State of Design can be utilized.

(c) Outline of inspection

The inspection shall be conducted by utilizing the certification by the authority of the State of Design and a part of the inspection may be omitted corresponding to the requirements or the contents of inspection of the said state. If necessary, the Civil Aviation Bureau shall issue Papers for "Validation Item" about reports, tests and areas of concern which the Civil Aviation Bureau will conduct specific examination in the area for new technology or the special design and means of compliance etc. and shall notify the applicant through the State of Designs of this issuance. For inspections relating to compliance with the environmental standards (noise and engine emissions,) based on the witnessed tests conducted according to the test plan approved by Japan, all data submitted through the State of Designs, review and approval of reports for actual proof of compliance and Compliance Statements, the Civil Aviation Bureau shall certify compliance with Annexes 2, 3 and 4 of the Regulations.

a. Evaluation of design

- Substantiation status for compliance with the applicable requirements shall be evaluated by review of the compliance checklist.
- The materials related to TC Board minutes, issue paper, Flight Manual, airworthiness limitation and its equivalents which have been used for certification by the State of Design shall be checked.
- Substantiation materials of the authority of the State of Design shall be evaluated by review of compliance checklist.

b. Inspection of the manufacturing process
   - The concrete method of the participation to the manufacturing process by the authority of the State of Manufacture, manufacturing methods by the manufacturer, inspection methods (including special processes), management of tool and quality assurance shall be reviewed.
   - The inspection requirements of the manufacturer and the authority of the State of Manufacture for export to Japan shall be reviewed.
   - Observation of manufacturing site etc. is conducted, if necessary.

c. Inspection on current condition after production
   General condition check, ground test and flight test shall be conducted on an aircraft of the said type. The necessary items of PFTP (Production Flight Test Procedure) shall be conducted by utilizing the certification of the State of Design.

d. Others
   Type certification data sheet shall be prepared.
   The contents of Flight Manual submitted shall be confirmed and approved.

(d) Issuance of type certificate
The Civil Aviation Bureau shall forward the type certificate and type certificate data sheet to the authority of the State of Design, where the following is confirmed:

a. The applicant has demonstrated the compliance with the applicable standards of the type certification of Japanese authority.
b. The authority of the State of Design have certified compliance with the applicable standards in Japan to the Civil Aviation Bureau, including the additional materials required by the Civil Aviation Bureau.
c. The State of Design have issued the type certificate.

(e) Evaluation of aircraft operations and maintenance requirements
Concerning aircraft operations and maintenance requirements, where the Civil Aviation Bureau conducts an independent evaluation, an applicant shall provide information on the following matters:

a. Maintenance Review Board Report (MRBR)
b. Requirements for examination, testing, training for pilots
c. Master Minimum Equipment List (MMEL)
d. Report indicating that the equipment required by the Regulations has been installed.

4-3 An imported aircraft of which the type has been airworthiness-certificated by Japanese Authority

(1) Documents for submission
The documents described in paragraph 3-2 (1) shall be submitted. However, the documents, except drawing list, parts list, specification, Flight Manual and placards in Japanese language, are not required to submit again, provided the same type of documents were submitted at the time of application for airworthiness certification for the said aircraft.

(2) Outline of Inspection etc.

(a) Application

Shall be same as described in paragraph 3-2 (2) (a)

(b) Type certification basis

a. Certification basis are airworthiness standards to which Japanese Authority applied for the relevant type of aircraft at the time of airworthiness certification.

b. Standards relating to the environment (aircraft noise and engine emission) shall be those of noise, fuel venting from aircraft engines, engine, exhaust emissions and engine CO_2 emissions on the provision of Annexes 2, 3 and 4 of the Regulations.

(c) Outline of inspection

a. Evaluation of design

Shall be same as described in paragraph 3-2 (2) (c) a. However, the inspection on the design shall be omitted, which has been confirmed at the time of inspection for airworthiness certification for the said aircraft.

b. Inspection on manufacturing process

Shall be same as described in paragraph 3-2 (2) (c) b.

However, the inspection of manufacturing process shall be omitted, which has been confirmed at the time of inspection for airworthiness certification for the said aircraft.

c. Inspection on current condition after manufacture

Shall be same as described in paragraph 3-2 (2) (c) c

However, the inspection for current condition shall be omitted, which has been confirmed at the time of inspection for airworthiness certification for the said aircraft.

d. Others

Shall be same as described in paragraph 3-2 (2) (c) d.

(d) Issuance of Certificate

Shall be the same as described in paragraph 4-2(d)

(e) Evaluation of aircraft operations and maintenance requirements

It shall be the same to the evaluation 4-2 (e). However, items which have already been evaluated by the Civil Aviation Bureau at the time of inspection of airworthiness certificate of the said aircraft shall be omitted.

(Reference 1) Evaluations on engine and propeller at the time of type certification

(1) Handling Guidance

Under the Law of Japan, engine and propeller shall not be the object of type certification but type approval under Article 14 of the Regulations.

The inspection on engine and propeller for compliance with the said applicable standards (airworthiness standards and emission control standards for engine exhaust, if applicable) shall be required in order to obtain type certification for the aircraft concerned. However, as a type approval, including engine and propeller, shall not be obliged to be obtained under the Law, either way described below shall be implemented in evaluation. An applicant for type certification of the aircraft and designer of engines and propellers must determine the procedures for evaluation after mutual consultation.

(a) A designer of engines or propellers shall apply separately for type approval.
A designer of aircraft shall obtain type certification of the aircraft which is equipped with type-approved engines and propellers.

(b) A designer of aircraft shall apply for type certification of the aircraft including engines and propellers to be equipped on the said aircraft.
In this case, an applicant for type certification of the aircraft shall submit substantiation documents necessary to evaluate engines and propellers.

(2) Documents for submission

When (a) described above is selected, substantiation documents prescribed in paragraph 4 with regards to compliance of the engine or propeller is not required.

(Note) 1. When engine and propeller have been manufactured in Japan, a type approval shall be obtained, in principle.
2. Procedures for type approval shall be referred to the Circular No. 1-004.

(Reference 2) Type certification of an aircraft manufactured under licensing agreement

(1) Guidelines on evaluation

When manufacturer in Japan shall establish a contract of licensed manufacture with a foreign designer and manufacture the aircraft which has been designed by the said designer, procedures for type certification may be selected from among those described below.

However, prior consultation shall be required between the person concerned, because the selection shall be made after reviewing the contents of the contract between manufacturer in Japan and designer in a foreign state and responsibility of the authority between Japan and a foreign state on the certification.

(a) To obtain type certification as an imported aircraft

The said designer in foreign state shall be the applicant and obtain type certification from Japanese Authority as imported aircraft.

In a case that manufacturer in Japan changes a part of type design, the said manufacturer shall obtain supplemental type certificate for the said design change.

(b) To obtain type certification for an aircraft manufactured in Japan

The said manufacturer in Japan shall be the applicant and obtain type certification from Japanese Authority as an aircraft manufactured in Japan.

(2) Documents for submission

Paragraph 3-1 or 3-2 shall be applied according to above selection.

(Note) The current procedures shall be applied to an aircraft which has been type-certificated in Japan and is manufactured under license.

5. Type Design Change

5-1 Procedures for type design change

Any holder of a type certificate shall, when it intends to change the design of a type-certificated aircraft, obtain approval from the Minister of Land, Infrastructure, Transport and Tourism. (Article 13 of the Law)

Classification and approval of type design change are as follows:

Furthermore, type design change means the changes relating to the some parts included in the scope of type certification written in section 2 “Definition” and changes or addition regarding aircraft specification, operational limitation, configuration including equipment etc. are included. Changes of documents accompanied with application form for type certification and changes of the manufacturing process inspected at the inspection for type certification are considered as type design change.

(1) Approval for type design change

Approval for a change in type design shall be made in accordance with the following: When a change in type design is made on a newly manufactured aircraft, approval must be obtained by the time of completion of inspection for airworthiness certification.

(a) An aircraft manufactured in Japan and its equivalents

Both major and minor change shall be approved.

However, change certified by an approved organization for the capability specified in Article 20 paragraph 1-(1) of the Law is not subject to additional inspection since the certification is regarded as approval of Minister of Land, Infrastructure, Transport and Tourism under Article 13 paragraph 4 of the Law.

(b) Imported aircraft

The authority of the State of Design (including those having been delegated) has approved or must approve the said type design change. And then, according to the effect of design changes on airworthiness and environmental compatibility, they shall be categorized into “Design changes which must be approved by the Civil Aviation Bureau”, “Design changes which must be notified to the Civil Aviation Bureau” or “Design changes which need not to be notified to the Civil Aviation Bureau”

(Note) When in determining the extent of the contents of design changes under Procedure 2 of Section 4 concerning Circular No. 1-302 “Guidelines for Airworthiness Inspection Manual,” if “Apparent Substantial Change” is applied, the application of a type certificate as new type shall be necessary.

a. Design changes which must be approved by the Civil Aviation Bureau.

Other than design changes which need not to be notified to the Civil Aviation Bureau, for those listed below shall have approval obtained. The applicant shall apply for type design changes through the authority of the State of Design.

(I) Key Major Change

i. Change of operating limitations specified in Flight Manual
ii. Change of the contents of the airworthiness limitations (including Certification Maintenance Requirement) in the instructions for continued airworthiness (except correcting errors of description)
iii. Change of TC data sheet (except addition of serial numbers)
iv. Design changes affecting the Master Minimum Equipment List (MMEL) and Configuration Deviation List
v. Need to change the established certification basis when certifying type (including when establishing newly Special Conditions, special additional requirements, Equivalent Level of Safety and Exemptions)
vi. Change of (Means of Compliance) approved when type certificate or establishing of new Means of Compliance.
vii. Falling under "Significant Change" indicated in Procedure 4 of Section 4 concerning Circular No. 1-302 "Guidelines for Airworthiness Inspection Manual."

(ii) Specified items by the Civil Aviation Bureau.
i. Design Changes affecting approved items specified by the Civil Aviation Bureau when type certificate.
ii. Design Changes falling under "noise and emissions standards" of Article 22-2, paragraph 1, item (1) or (2) of the Regulations.
iii. Significant changes for cabin specifications below:
- For markings and placards in Japanese attached to the cabin corresponding to Circular No. 1-008 shall be changed.
- Change of the cabin configuration excepting for
  1) installation, relocation and removal of cabin equipment, galley equipment and other small items which don't affect the emergency escape and the safety of passengers and crew,
  2) change in cabin interior without changing materials,
  3) changes in entertainment system software and
  4) changes in marking and placards do not fall under Circular No. 1-008.

b. Design changes which must be notified to the Civil Aviation Bureau
For design changes falling under neither a. nor c. (including changes to the Instructions for Continued Airworthiness for Electrical Wiring Interconnection System (hereinafter referred to as "EWIS-ICA")), outline of design changes and compliance with standards of said state and Japan must be notified from the authority of the State of Design to the Civil Aviation Bureau. However, if no questions arise, approval shall be considered to have been granted by the Civil Aviation Bureau, in principle.

c. Design changes need not to be notified to the Civil Aviation Bureau
For changes (excluding changes to EWIS-ICA),which do not have a significant effect on the airworthiness including weight, strength, function of the power unit, flight performance and so on, notification to the Civil Aviation Bureau from authority of the State of Design shall not be required. Approval shall be considered to have been granted by the Civil Aviation Bureau, in principle.

5-2 Documents for submission

Documents for submission with regard to the said design change and design of aircraft affected by the said change shall correspond to the case of type certification.

5-3 Outline of Inspection etc.

(1) Application

(a) An applicant shall be the holder of a type certificate for the type of aircraft concerned. An application may be submitted by a representative.

(b) In principle, application on an imported aircraft shall be submitted through the authority of the State of Design.

(c) Application form and accompanying documents shall correspond to the case for type certification.

(2) Certification basis for change in type design

For the design changes to a previously type certified product, including the type certification of the aircraft which falls under the existing aircraft model, the latest Airworthiness Inspection Manual at the amendment level in effect on the date of application for that change shall be applied.

However, in cases where the design change is to add a derivative of the existing aircraft and so forth, the application of the latest provisions of Airworthiness Inspection Manual associated with the components or the areas directly affected by that change shall be determined after the consultation with the applicants and the state of design (for imported aircraft).

(3) Outline of inspection

Shall correspond to the case for type certification. In the case of imported aircraft, inspection shall involve checking of documents, in principle. Then, if necessary, practical inspection of aircraft will be performed.

In a case that Flight Manual is revised, the contents of the Flight Manual submitted shall be confirmed and approved.

(4) Issuance of certificate etc.

When the type design change is approved, type certificate shall be issued in accordance with the following: (Article 22 of the Regulations)

(a) An aircraft manufactured in Japan

A new type certificate shall be issued to the applicant.

(b) For imported aircraft

a. For design changes for which approval required by the Civil Aviation Bureau

A new type certificate shall be issued for the applicant. However, except where any addition or change is made to the type certificate, such as when the change in said type design corresponds to adding a derived type aircraft etc., a letter informing approval of type design changes shall be sent to the applicant.

b. For design changes requiring notice to the Civil Aviation Bureau

The applicant shall not be issued with a new type certificate.

c. For design changes required no notice to the Civil Aviation Bureau
The applicant shall not be issued with a new type certificate.

5-4 Handling of the Service Bulletin (SB)
SB for the type of aircraft which is type-certificated by Japanese Authority shall be handled in accordance with the following:

(1) An aircraft manufactured in Japan
The subject for approval shall be determined in accordance with Circular No. 1-013.

(2) Imported aircraft
SB of the imported aircraft shall be treated as a type design change, the approval of SB by itself shall not be applied.

6. Procedures for Type Certification

6-1 Instructions for completing application form for type certification, change of type design and notification form for type design change, and for submitting the completed form and documents

(1) Instructions for completing application form

(a) Application form for type certification

a. Address of applicant or location of a head office, and name or firm of applicant
Those of holder of original type certificate (TC) or an applicant for an original TC shall be entered.
In case of an application by a representative, the above items pertinent to the representative shall also be entered.

b. Classification, type, serial number, airworthiness category of the aircraft, applicable standards under Article 10, paragraph 4 of Law, name or firm of the designer, address of the designer, name or firm of the manufacturer and address of the manufacturer
The above items must be consistent with the aircraft to be inspected and the items described in the documents to be submitted during inspection.

(b) Application form for type design change and notification form for type design change

a. Address of applicant or location of head office, and name or firm of the applicant
Those of holder of an original type certificate shall be entered. In case of an application by a representative, the above items pertinent to the representative shall also be entered.

b. Classification, type, type certificate number, serial number, airworthiness category of the aircraft, applicable standards under Article 10, paragraph 4 of the Law, name or firm of the designer, address of the designer, name or firm of the manufacturer and address of the manufacturer
The above items must be consistent with the aircraft to be inspected and the items described in the documents to be submitted during inspection.

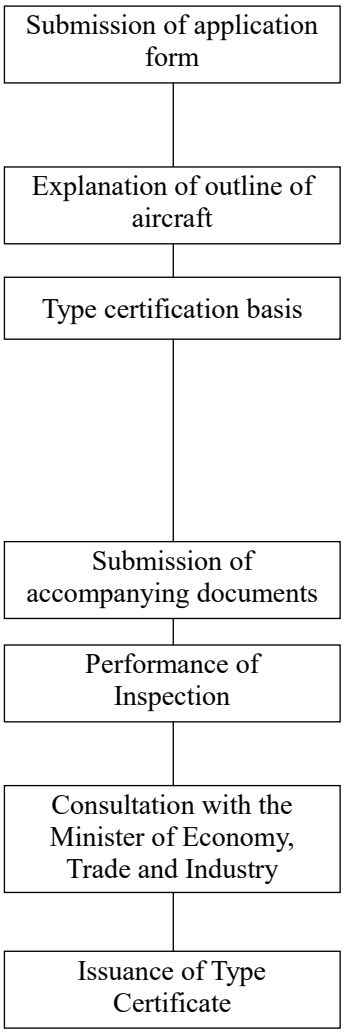
c. Reason(s) for change

Reason(s) for design change shall be entered.

(2) Location where applications should be submitted
Airworthiness Division, Aviation Safety and Security Department, Civil Aviation Bureau, Ministry of Land, Infrastructure, Transport and Tourism
2-1-3 Kasumigaseki, Chiyoda-ku, Tokyo
TEL: 03-5253-8735

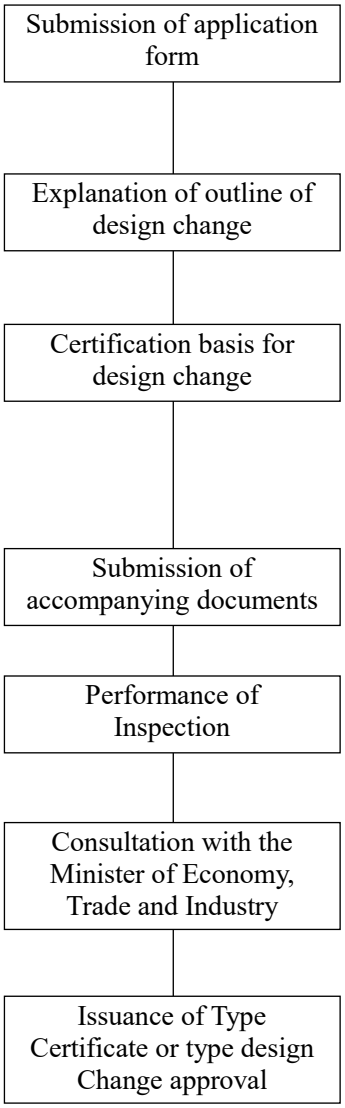
6-2 The flow chart regarding submission of application form and documents, inspection and issuance of type certificate

(1) Type certification



- The accompanying documents shall not always be required to submit at this time.
- The schedule for inspection shall be also coordinated with inspector in charge of Japanese Authority.
- Type certification basis, including special conditions and others, shall be established after consultations between Authority, the applicant and the authority of the State of Design. (when type-certificated by foreign state)
- The documents shall be submitted according to the schedule coordinated.
- The document check, surveillance inspection and practical inspection of aircraft shall be performed.
- Flight Manual shall also be approved.

(2) Type design change



- The accompanying documents shall not always be required to submit at this time.
- The schedule for inspection shall be also coordinated with inspector in charge of Japanese Authority.
- When the design change comes under a derivative type aircraft, certification basis shall be established after consultations between Authority, the applicant and the authority of the State of Design.
- The document shall be submitted according to the schedule coordinated.
- The documents check shall be performed. Surveillance inspection and practical inspection of aircraft shall be also performed, if necessary.
- When Flight Manual is revised or SB is prepared, Flight Manual and SB shall also be approved.

7. Other Necessary Activities charged to the Holder of Type Certificate

The holder of type certificate needs to:

(1) Obtain approval for change in type design. (Article 13 of the Law)

(2) Collect information on malfunctions and its equivalents on the aircraft under flight operation and provide those information to the authority. (Article 13-4 of the Law)

(3) Implement corrective action such as engineering activities for malfunctions caused by defects in design and manufacture. (Article 13-4 of the Law)

(4) Maintain and keep data (design data, drawings, test reports, inspection records of aircraft products). (Article 13-4 of the Law)

(5) Produce, update and maintain manuals and provide to aircraft users

(6) Continue airworthiness (including to provide and update the maintenance procedures concerning instructions for continued airworthiness) (Article 13-4 of the Law)

(7) If the technical documentation (Aircraft Flight Manual, Aircraft Maintenance Manual, Master Minimum Equipment List, Maintenance Review Board Reports, Scheduled Maintenance Requirements, Fault Isolation Manual, Wiring Diagram Manual, Standard Wiring Practices Manual and Structural Repair Manual) are revised, electronic media shall be provided to the Civil Aviation Bureau immediately. The means of provision should preferably be listed on the web site and accessible online for the Civil Aviation Bureau, but shall also be available in paper media or electronic form such as CD-ROMs.

III. Supplemental Type Certificate

1. Introduction

This part is to provide guidance with regard to the general policy, procedures for an application, documents for submission etc. for supplemental type certificate (Hereinafter referred to as "STC") specified in Article 13-2 of the Law.

Circular No.1-003 "Procedures for Type Certification of Japanese Manufactured Aircraft" provides detailed procedures for STC pertaining to an aircraft manufactured in Japan.

In addition, the above Circular No.1-003 applies mutatis mutandis to inspection, etc. pertaining to supplemental type design which has not been approved by a foreign country which is a Contracting State to the Convention on International Civil Aviation (Refer to Section 3-1); however, a part or all of the procedures may be omitted as necessary based on the contents, extent, etc. of design changes.

2. Scope of Application for STC and Its Meaning

2-1 Scope of application

When any person changes type design for the type-certificated aircraft, he or she may apply for STC regardless of the extent of the change.

2-2 Meaning

An aircraft which was changed under STC shall be privileged same as the design of aircraft which have obtained type certification. In other words, with regard to an aircraft of the said type design for which supplemental type certificate has been granted and changed under that STC, a part of the inspection on the design and manufacturing process shall be omitted among the inspection of repair or alteration or inspections on the design related to the said design change, manufacturing process and current condition at the inspection for airworthiness certification.

In addition, for an aircraft manufactured in Japan, when an manufacturer which has been approved by Japanese Authority as to the capability of aircraft production and inspection including works under the STC concerned manufactured and performed inspection after completion of manufacture, and for an imported aircraft, when a foreign state has approved for the said supplemental type design under the standards and procedures for inspection which is recognized as having equivalent to or more level than that of Japan, a part of the inspection on current condition shall be omitted in addition to the inspection on the design and manufacturing process.

Also, the modification under STC shall be privileged same as the modification under service bulletin of type certificate holder. In other words, the approved organization shall be permitted to perform and certify the modification under the STC. When it takes inspection of repair or alteration, inspection on the plan shall be omitted. Also, when that modification is classified as minor, it shall be treated as minor repair. (Refer to Chapter IV, paragraph 2-2 (2) (d) for treatment as minor repair)

(Note) The contents of the inspection standards and procedures in exporting States, which are acceptable for Japan shall be stipulated in the bilateral agreement/arrangement relating to the

certificate of such aircraft to be concluded between Japanese authority and the exporting state. In regard to the bilateral agreement/arrangement concluded between Japan and foreign authorities, refer to the 'Concerning about bilateral agreement/arrangement on Circular No. 7-001

3. Documents for Submission According to the Classification of Supplemental Type Certificate and Outline of Inspection

3-1 An aircraft which has not been approved for supplemental type design nor for which any other approval has been granted by a foreign state which is a Contracting State to the Convention on International Civil Aviation (Normally, this shall come under a supplemental type design which has been designed by the organization in Japan)

(1) Documents for submission

The contents of documents which accompany application form for a supplemental type certificate shall correspond to those in the case of original type certification and are described below.

(a) Design plan concerning supplemental type design

The design plan shall refer to the documents describing the following items:

a. Purpose, use, characteristics and their equivalent for supplemental type design
b. Airworthiness category, type, and serial number of the aircraft to which the supplemental type design shall be applied
c. Name of designer in charge of the supplemental type design and name of coordinator in charge to liaise with the authority with regard to the design
d. Estimated schedule for design, manufacture and modification etc.
e. Major parts and name of manufacturer of them
f. General description of the supplemental type design
g. Description of special manufacturing methods, if any
h. Test related matters

Description about strength test, functional test, flight test, measurement of noise level, measurement of engine emissions and others including locations, facilities, test equipment, schedule and others

(Note) The design plan for supplemental type design facilitates disclosure of the outline of the design to Authority concerned before the inspection. Though it is recommended to submit a complete set of documents at an early stage, submission of documents one by one upon completion will be accepted.

When any contents shall be changed as the design is being fixed, the revision of contents in the design plan is not forced as long as the matter has been informed to the authority by some means.

(b) List of design documents

Among items described below, items which shall affect the type design of the aircraft concerned under the supplemental type design shall be prepared and submitted. When data

from a manufacturer of an aircraft etc. shall be utilized for preparation, the source of data shall be clarified.

a. Calculation of weight and center of gravity
b. Calculation of performance
c. Calculation of stability and controllability
d. Calculation of basic load and basic load strength
e. Calculation of fatigue load and fatigue load strength
f. Calculation of extent of noise level and engine emissions
g. Specification of parts relating to the supplemental type design
h. Design materials such as load analysis, strength calculation, performance calculation, main block diagram, specification, failure analysis, and others in respect to various systems (flight control, operation, electronics/electricity, instruments, inlet and exhaust, cooling, fuel, lubricant oil, hydraulic oil, air pressure, vacuum, air-conditioning, anti-icing/deicing, fire extinguishing, oxygen, radio, navigation equipment and others)
i. Materials for design if any unique structure or parts are used.

(c) Drawing list

The drawing list shall be a list including every drawing number, title and others relating to the supplemental type design concerned.

(d) Drawings

Drawings shall refer to the drawings relating to the supplemental type design concerned.

(e) Parts list

Name of parts, part numbers, manufacturer name of parts which are included in the supplemental type design shall be listed. Name of manufacturer for standard parts shall be excluded.

(f) Manufacturing plan

The manufacturing plan shall be the documents described below.

a. Location where parts have been manufactured and name of main manufacturer
b. Schedule of manufacture

(g) Specification

Among items described below, items which shall affect the type design of the aircraft concerned under the supplemental type design shall be prepared and submitted. The word “no change” shall be entered for items not affected by the supplemental type design concerned.

a. Type and serial number of the aircraft to which the supplemental type design is applied
b. Type and number of engine, propeller or rotor blade
c. Name and address of designer and manufacturer of the supplemental type design (in case of corporation, its name and location of a head office)
d. Airworthiness category and applicable standards
e. The main dimensions of the aircraft including the range of deflection of angle of the control surfaces

f. Weight and center of gravity
g. Limit load factor
h. Air speed limitation
i. Allowable flight characteristics peculiar to the aircraft
j. Maximum operating altitude or maximum altitude of autorotation landing
k. Specifications and necessary charts related to engine operation
l. Grade of fuel, lubricant oil standard.
m. Total capacity of fuel tanks and oil tanks, unusable capacity
n. Kind of equipment and parts (matters concerning the supplemental type design)
o. Limit of cross wind
p. Minimum crew, maximum passengers
q. Water limitation
r. Necessary signs and placards
s. Safe life of structure members
t. Noise level
u. Level of engine emissions

(h) Flight Manual
Flight Manual shall contain matters specified under Article 5-4 of the Regulations. Refer to Attachment I-2 to Chapter I "Airworthiness Certification" for guidelines on preparation. The matters to be changed or supplemented by the supplemental type design approval concerned shall be entered.

(i) Maintenance Procedure Manual (limited to the part revised)
Maintenance Procedure Manual shall contain matters specified under Article 5-5 of the Regulations. Refer to Attachment 1-3 to Chapter I of this Circular for guidelines on preparation.
The matters to be changed or supplemented by the supplemental type design concerned shall be entered.

(j) Documents describing items for computing weight and center of gravity of the aircraft
Among the items below, items to be changed or added by supplemental type design concerned shall be described in the documents. However, the Flight Manual may be a substitute for the documents when these items are described in the Flight Manual.
a. Weight and center of gravity of airframe
b. Name, weight and center of gravity of each equipment
c. Useable capacity and center of gravity of each fuel tank
d. Others

(k) Documents certifying the completion of inspection stipulated by Article 39-4 paragraph 1 (applicable only for aircraft described in Article 23-2 paragraph 2 subparagraph 2)

(l) Documents describing reference materials in addition to those listed in each of the preceding
These shall be the documents describing below.

The documents “a” through “l” among the documents described below shall be prepared and submitted when the supplemental type design concerned affects the type design of the aircraft. When data from a manufacturer of an aircraft etc. shall be utilized for preparation, the source of data shall be clarified.

a. Compliance checklist plan
b. Aerodynamics and hydrodynamics test plan
c. Partial load test plan
d. Static load test plan
e. Fatigue load test plan
f. Dynamic load test plan
g. Vibration test plan
h. Various functional test plan
i. Flight test plan
j. Noise measurement plan
k. Measurement plan for engine emissions
l. Instructions for publishing service bulletin and related material
   Refer to Circular TCL-62C or latest revision.
m. Test plan, test reports and other materials designated as necessary by an appointed inspector in charge. An original draft of Minimum Equipment List and Configuration Deviation List, if these documents will be developed.
n. Alteration (repair) procedure manual

(Note) Alteration (repair) procedures shall be referred to documents showing the procedures of alteration/repair work instructed by a person having obtained the supplemental type design certification to a person conducting alteration/repair work. It shall be equivalent to the Manufacturing and Installation on Instruction Drawings in the supplemental type design certification in foreign countries.

(2) Outline of inspection etc.

(a) Application

a. An applicant shall be limited to the designer of the supplemental type design who is not the holder of type certificate for the type of aircraft concerned.
b. An applicant shall have responsibility for the supplemental type design concerned.

(b) Certification basis of supplemental type design

a. An applicant shall submit the design plan for supplemental type design at an early stage of the design and explain the outline of the supplemental type design, procedures for substantiation, special remarks regarding design and substantiation.
b. Certification basis for supplemental type design shall be the certification basis to which has been applied upon type certification for the aircraft concerned by Japanese Authority.
   However, when the supplemental type design shall seriously affect airworthiness, the certification basis shall be determined after discussing the possibility of practical application of the latest requirements directly related to the parts or area affected by the changes between Authority, the applicant and the authority of the State of Design (for

an imported STC). When the special conditions, exemption and substantiation of equivalent safety shall be prescribed, they shall be determined after discussing with Authority, the applicant and the authority of the State of Design (for an imported STC).

(c) Outline of inspection

Procedures for substantiation, documents for submission and timing for submission, attendance to the test, necessity of ground test and flight test, schedule and others shall be decided after advance coordination regarding the inspection with inspector in charge.

a. Evaluation of design
   - Compliance with the applicable standards shall be examined by checking documents submitted.
   - The inspector in charge shall attend to the tests, as necessary. Examples of test are static load test, flammability test, fire containment test, EMI flight test and ground test, measurement of level of noise or engine emissions and others.

b. Inspection on manufacturing process
   - Manufacturing and conformity inspection of parts, inspection on alteration process, and inspection of method of quality control system shall be conducted, as necessary.

c. Inspection on current condition
   - Inspection on the configuration of product after completion, and ground test and flight test shall be conducted, as necessary.

d. Others
   - In a case that Flight Manual is revised, the contents of the revision in Flight Manual submitted shall be examined and approved.

(Note) When the supplemental type design is applicable to one or more types of aircraft, substantiation for compliance with the applicable standards through documents or tests, and inspection on manufacturing process and current condition after completion shall be required for each type, if necessary.

(d) Issuance of certificate

When the supplemental type design is determined compliance with the applicable standards, supplemental type certificate shall be issued to the applicant.

A term may be attached to the approval to the effect that the relevant change must be notified to the authority (the person who issued the approval document) in the event of minor changes that are not likely to affect airworthiness, such as the following cases in which approval under Article 13-2 paragraph 3 of the Law is not required.

[Example of minor change]

(1) Installation, relocation, and removal of cabin equipment, galley equipment, and other small items that do not affect emergency escapes and safety for crew and passengers
(2) Changing cabin interiors without changing materials
(3) Changes to entertainment system software
(4) Marking and Placard changes not applicable to Circular No. 1-008
(5) Correction of obvious errors in the attached drawings, addition of annotations, clarification of work procedures, etc.

3-2 An aircraft which has been approved for supplemental type design or for which any other approval has been granted by any foreign state which is a Contracting State to the Convention on International Civil Aviation

(Normally, this shall come under the supplemental type design which has been designed by a foreign person and approved by the authority of the foreign state concerned)

(1) Documents for submission

(a) Documents and drawings which adequately substantiate that the aircraft altered under the supplemental type design approval concerned comply with the standards under Article 10 paragraph 4 of the Law (such as airworthiness, noise, emission control for engine exhaust standards). (Limited to the part to be altered.)

a. Means of Compliance, Compliance Check List (including related Compliance Check List, if the STC number is called) and other document which shows the compliance with applicable standards (including special condition, special additional requirements, equivalent level of safety and exemption) in Japan.

b. Test plan and reports

c. Test flight plan and flight test reports

d. Reports on the system safety assessment

e. Reports shall indicate compliance with noise standards, including the following matters:

(i) The maximum noise level which was demonstrated on the basis of Annex 2 of the Regulations

(ii) Measurement method and analysis method of noise, including the method of correction

(iii) Description of additional alteration made to comply with the noise certificate standards to be applied

f. Reports which indicate compliance with the criteria of the fuel venting standards required by the Annex 3 of the Regulations. (only for aircraft equipped with turbine engines)

g. Reports which indicate compliance with the standards on exhaust emissions as required by the Annex 3 of the Regulations. (only for turbojet or turbofan engines)

(i) Exhaust gas value certified based on Annex 3 of the Regulations.

(Note) According to the measurement or calculation method complying with Annex 3 of the Regulations, values of smoke, hydrocarbons, nitrogen oxides and carbon monoxide and non-volatile particulate matter shall be attached.

(ii) Description of the additional alteration required to comply with the emission standards to be applied.

h. Report shall indicate compliance with the standards on CO_2 emissions as required by the Annex 4 of the Regulations.

(i) CO_2 value certified based on Annex 4 of the Regulations.

(Note) According to the measurement or calculation method complying with Annex 4 of the Regulations, value of CO_2 shall be attached.

(ii) Description of the additional alteration made to comply with the standards on CO_2 emissions to be applied.

i. Issue Papers issued by the authority of the State of Design
j. Drawing or design documents relating to the placard in Japanese

(b) Certification documents to be issued by government organizations of said states, the type certificate and other acts were made by said states.
(c) Drawing lists
(d) Parts lists
For (c) or (d), the Master Drawing List describing the necessary matters may be submitted.
(e) Specifications
a. Outlines of design (including the contents of design changes, manufacturers and types, standards of airworthiness, noise and engine emissions which have been applied by said states, special conditions, equivalent level of safety and exemptions.)
b. Overview of new technology or specific design
(f) Flight Manual
Flight Manual shall contain matters specified under Article 5-4 of the Regulations. Refer to Attachment I-2 to Chapter I "Airworthiness Certification" for guidelines on preparation. The part where any change or addition is made under the supplemental type design approval shall be entered.
(g) Maintenance procedures
a. Instructions for keeping airworthiness (Maintenance/Repair Manual, Supplement etc.)
(h) Documents describing the necessary matters to calculate the weight and the position of the center of gravity of the aircraft.
(i) Documents describing other reference matters (If applicable)
a. Report indicating fitting of the components required by the Regulations
b. Documentation on the manufacturing
(i) Production Flight Test Procedure
(ii) Manufacturing and Installation Instruction Drawing
c. Technical documents below:
(i) Operating Manual
(ii) Parts catalog
(iii) List and summary of the service bulletin applied for aircraft, engine or components and their main components.
(iv) The List and a summary of (Airworthiness Directive) applied for aircraft, engine or components and their main components.
d. Document shall demonstrate how to provide the electronic data of the latest version of the technical materials to the Civil Aviation Bureau.
e. Documents related to a cooperative system with the type certificate holders, or documents to demonstrate the ability of self-design, if necessary.

(2) Outline of Inspection etc.
(a) Application
a. The applicant shall be a person other than the holder of the type certificate of said type aircraft and the holder of supplemental type design approval. Procedures may be undertaken by the agent, but the person mentioned above shall be subject to the inspection.

b. An applicant shall have responsibility for the supplemental type design approval concerned.
c. In principle, an application shall be submitted through an authority of the State of Design.
d. Documents accompanied with an application shall be written in Japanese or English.
e. For Flight Manual, Attachment I-2 to Chapter I "Airworthiness Certification" shall be referred to.

(b) Certification basis of supplemental type design

a. An applicant shall explain the outline of the supplemental type design, procedures for substantiation, special remarks on design or substantiation.
b. Certification basis for supplemental type design shall be airworthiness standards in Japan, which were effective, when the original State of Designs had accepted the application for said supplemental type design, in principle.

However, when the supplemental type design seriously affects airworthiness, the certification basis shall be reconsidered after discussing the possibility of practical application of the latest requirements which directly relate to the parts or area affected by the changes between Authority, the applicant and the authority of the State of Design.
The special conditions, additional special requirements, exemption and equivalent level of safety shall be imposed by Civil Aviation Bureau after discussing with Authority, the applicant and the authority of the State of Design.
c. Markings etc. that need to be notified only among trained aircrew shall be indicated in Japanese or English. For markings etc. relating to emergency evacuation and safety equipment and their equivalents which are to be indicated in Japanese, Circular No.1-008 shall be referred to.

However, in case of an aircraft operated by air carrier for a scheduled air transport service under the provisions of the former Law amended by the Law for amendment of the said Law (Law No. 72, 1999), English is acceptable except on emergency evacuation and safety equipment and their equivalents.

(c) Outline of inspection

The outline of procedures for inspection for a supplemental type design shall be described below.
Procedures for substantiation, documents for submission and timing for submission, attendance to the test, necessity of ground test and flight test, schedule and others shall be decided after advance coordination regarding the inspection with inspector in charge.

a. Evaluation of design

The certificate or approval (STC or its equivalents) issued by a foreign state or compliance checklist, and other documents submitted shall be examined to confirm substantiation status for compliance with the requirements.
b. Inspection of the manufacturing process
   - The concrete method of the participation to the manufacturing process by the authority of the State of Manufacture, manufacturing methods by the manufacturer, inspection methods (including special processes), management of tool and quality

assurance shall be reviewed.

- The inspection requirements of the manufacturer and the authority of the State of Manufacture for export to Japan shall be reviewed.

(Note) Airworthiness tags (FAA Form 8130-3, EASA Form 1 and their equivalents) designated by the State of Manufacture shall be attached to the parts to be used.

c. Inspection on current condition

Inspection on configuration after completion, ground test and flight test shall be conducted, as necessary.

d. Others

In a case that Flight Manual is revised, the contents of the revision in Flight Manual submitted shall be examined and approved.

(Note) When the supplemental type design is applicable to one or more types of aircraft, substantiation for compliance with the applicable standards through documents or tests, and inspection for manufacturing process and current condition after completion shall be required for each type, if necessary.

(d) Issuance of certificate

When the supplemental type design is deemed compliant with the applicable standards, a supplemental type certificate shall be sent to the authority of the State of Design by the Civil Aviation Bureau.

a. An applicant has demonstrated conformity to the applicable standards in Japan.
b. The authority of the State of Design have, to the Civil Aviation Bureau, certified conformity to the applicable standards of our country, by attaching the documents additionally required by the Civil Aviation Bureau.
c. The authority of the designing country have issued an additional type design approval.

Following matters shall be entered in remarks column of the certificate.

a. Classification of work for aircraft modification by supplemental type design concerned (minor repair, minor alteration or major alteration)
b. Certificate number of the foreign state concerned, if the supplemental type design is certificated by a foreign state.
c. Other necessary matters

4. Change of Supplemental Type Design

4-1 Procedures for change of supplemental type design

(a) Supplemental type design change of which approval and other acts have not been granted by a foreign state which is a contracting state of the Convention on International Civil Aviation (Generally, changes of STC designed by domestic organization by themselves shall fall under this article.)

Any person who has obtained a supplemental type certificate shall, when he or she intends to change the certificated design concerned, obtain approval from the Minister of Land, Infrastructure, Transport and Tourism. (Article 13-2, paragraph 3 of the Law)

(b) Supplemental type design change of which approval and other acts have been granted by a foreign state which is a contracting state of the Convention on International Civil Aviation

(Generally, changes of STC designed by foreign organization by themselves and its approval has already accepted by said foreign government shall fall under this article.)

The authority of the State of Design (including those having been delegated) has approved or must approve the said supplemental type design change. And then, according to the effect of supplemental type design changes on airworthiness and environmental compatibility, they shall be categorized into "Supplemental type design changes which must be approved by the Civil Aviation Bureau", "Supplemental type design changes which must be notified to the Civil Aviation Bureau" or "Supplemental type design changes which need not to be notified to the Civil Aviation Bureau"

(Note) When in determining the extent of the contents of design changes under Procedure 2 of Section 4 concerning Circular No. 1-302 "Guidelines for Airworthiness Inspection Manual," if "Apparent Substantial Change" is applied, the application of a type certificate as new type design shall be necessary.

a. Supplemental type design changes which must be approved by the Civil Aviation Bureau

Design changes excluding supplemental type design changes which need not to be notified to the Civil Aviation Bureau and those listed below shall have approval obtained. The applicant shall apply for supplemental type design changes through the authority of the State of Design.

(i) Key Major Change

i. Change of operating limitations specified in Flight Manual
ii. Change of the contents of the airworthiness limitations (including Certification Maintenance Requirement) in the instructions for continued airworthiness (except correcting errors of description)
iii. Change of TC data sheet (except addition of serial numbers)
iv. Design changes affecting the Master Minimum Equipment List (MMEL) and Configuration Deviation List
v. Need to change the established certification basis when certifying supplemental type design (including when establishing newly Special Conditions, special additional requirements, Equivalent Level of Safety and Exemptions)
vi. Change of Means of Compliance approved when supplemental type certificate or establishing of new Means of Compliance.
vii. Falling under "Significant Change" indicated in Procedure 4 of Section 4 concerning Circular No. 1-302 "Guidelines for Airworthiness Inspection Manual."

(ii) Specified items by the Civil Aviation Bureau

i. Design Changes affecting approved items specified by the Civil Aviation Bureau when supplemental type certificate.
ii. Supplemental Type Design Changes falling under noise and emissions standards of Article 22-2, paragraph 1, item (1) or (2) of the Regulations.

iii. Significant changes for cabin specifications below:
- For markings and placards in Japanese attached to the cabin corresponding to Circular No. 1-008 shall be changed.
- Change of the cabin configuration excepting for
  1) installation, relocation and removal of cabin equipment, galley equipment and other small items which don't affect the emergency escape and the safety of passengers and crew,
  2) change in cabin interior without changing materials,
  3) changes in entertainment system software and
  4) changes in marking and placards do not fall under Circular No. 1-008.

b. Supplemental Type Design changes which must be notified to the Civil Aviation Bureau
For supplemental type design changes falling under neither a nor c (including changes to the Instructions for Continued Airworthiness for Electrical Wiring Interconnection System (hereinafter referred to as "EWIS-ICA")), outline of supplemental design changes and compliance with standards of said state and Japan must be notified from the authority of the State of Design to the Civil Aviation Bureau. However, if no questions arise, approval shall be considered to have been granted by the Civil Aviation Bureau, in principle.

c. Supplemental Type Design changes need not to be notified to the Civil Aviation Bureau
For changes (excluding changes to EWIS-ICA) which do not have a significant effect on the airworthiness including weight, strength, function of the power unit, flight performance and so on, notification to the Civil Aviation Bureau from authority of the State of Design shall not be required. Approval shall be considered to have been granted by the Civil Aviation Bureau, in principle.

4-2 Submitted documents

The documents of matters which shall be affected by the change concerned shall be submitted according to paragraphs 3-1 (1) and 3-2 (1).

4-3 Outline of inspection etc.

(1) Application

An application shall be made according to paragraphs 3-1 (2) (a) and 3-2 (2) a.

(2) Certification basis

The standards applied to the change concerned shall be the same as that applied to the supplemental type certificate concerned.

(3) Outline of inspection

The area which is affected by the change concerned shall be inspected according to paragraphs 3-1 (2) (c) and 3-2 (2) (c).

(4) Issuance of certificate

When the change of the supplemental type design is determined compliance with the applicable standards, new supplemental type certificate shall be issued to the applicant.

5. Procedures for Supplemental Type Certificate

5-1 Instructions for completing application forms for supplemental type certificate and for change of supplemental type design and submission forms for change of supplemental type design, and for submitting the completed form and documents

(1) Instructions for completing application forms etc.

(a) Application form for supplemental type certificate

a. Address of applicant or location of a head office, and name or firm of applicant. The above items shall be entered about a person who intends to obtain the supplemental type certificate concerned.
In case of an application by a representative, the above items pertinent to the representative shall also be entered.

b. Classification, type, type certificate number, serial number, airworthiness category of the aircraft, applicable standards under Article 10, paragraph 4 of the Law, name or firm of the designer, address of the designer, name or firm of the manufacturer, address of the manufacturer
The above items must be consistent with the aircraft to be inspected and the items described in the documents to be submitted during inspection.

c. Name or firm of the designer who performs the supplemental type design, address of the designer, name or firm of the manufacturer and address of the manufacturer
The above items must be consistent with the said supplemental type design and items described in the documents to be submitted during inspection.

d. Contents of supplemental type design
The contents of the supplemental type design shall be described simply.

e. Proposed location of inspection
Proposed location of inspection should be written in the remarks column.

f. Proposed time to obtain supplemental type certificate of Japan
Enter the time when the applicant wishes to obtain the supplemental type certificate in the relevant remarks column.

(b) Application form for change of supplemental type design
The form shall be prepared and submitted according to (a) above.

(c) Submission form for change of supplemental type design

a. Address or location of a head office, and name of applicant

b. Classification, type, type certificate number, serial number and airworthiness category of the aircraft, applicable standards under Article 10 paragraph 4 of the Law, name and address of the designer of the aircraft and name and address of the manufacturer of the aircraft

c. Name and address of the designer and manufacturer who performs the change of supplemental type design

d. Reason of change
The reason that the change of supplemental type design is necessary shall be described.

e. Contents of change
The contents of the change of the supplemental type design and the reason why the

application is not required shall be described.

(2) Instructions for submitting the completed forms and documents

(a) If the proposed location of inspection is located in foreign state, the address shall be:
Airworthiness Engineer, Airworthiness Division, Aviation Safety and Security Department,
Civil Aviation Bureau, Ministry of Land, Infrastructure, Transport and Tourism
2-1-3 Kasumigaseki, Chiyoda-ku, Tokyo
TEL: 03-5253-8735

(b) If the proposed location of inspection is located in Niigata, Nagano, Shizuoka and eastward, the address shall be:
Inspection and Crew Section, Operations Division,
Air Traffic Service and Safety Department,
East Japan Civil Aviation Bureau
Kudan Daini Godochosha
1-1-15 Kudan-Minami, Chiyoda-ku, Tokyo, 102-0074
TEL: 03-5275-9292

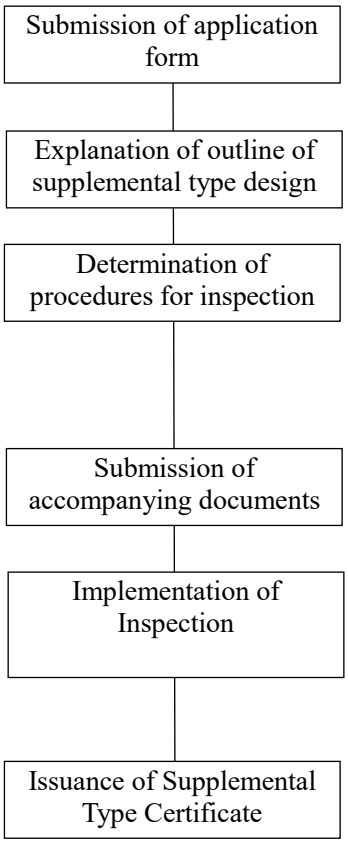
(c) If the proposed location of inspection is located in Toyama, Gifu, Aichi and westward, the address shall be:
Inspection and Crew Section, Operations Division,
Air Traffic Service and Safety Department,
West Japan Civil Aviation Bureau
No.4 Building of Osaka Godochosha
4-1-76 Otemae, Chuo-ku, Osaka-shi, Osaka-fu, 540-8559
TEL: 06-6949-621

(Note) In principle, an application form and a submission form for change of supplemental type design shall be submitted to Regional Civil Aviation Bureau Office where an application form of original supplemental type design was submitted.

(Note) Concerning the application for which a supplemental type design certification has been obtained and granted by a foreign government which are contracting states of the Convention on International Civil Aviation, it shall be the addressee from (a) to (c) having jurisdiction over the proposed location of inspection, and it shall be submitted to the Airworthiness Engineer, Airworthiness Division, Aviation Safety and Security Department, Civil Aviation Bureau, Ministry of Land, Infrastructure, Transport and Tourism through the authority of said foreign country.

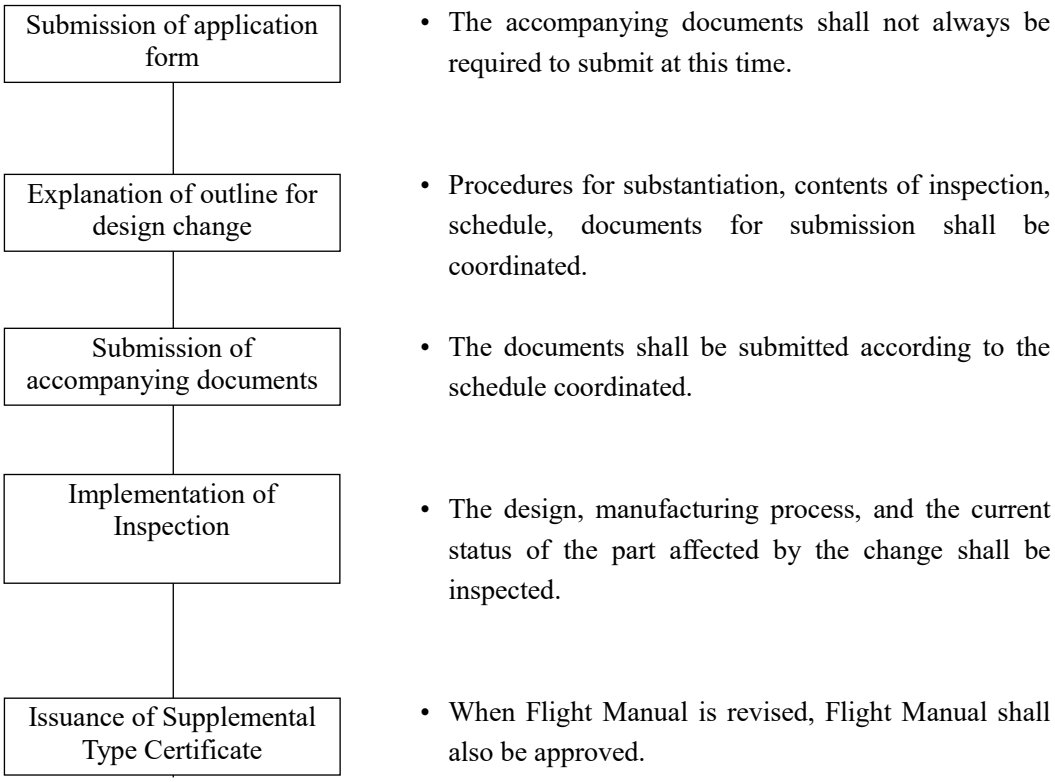
5-2 Flow chart regarding submission of application form and documents, inspection and issuance of supplemental type certificate

(1) Supplemental type certificate



- The accompanying documents shall not always be required to submit at this time.
- The schedule for inspection shall also be coordinated with the inspector in charge of Japanese Authority.
- The standards applied to the supplemental type design concerned shall be confirmed, and procedures for substantiation, contents of inspection, and documents to be submitted and others shall be coordinated.
- The documents shall be submitted according to the schedule coordinated.
- The design, manufacturing process, and the current status shall be inspected.
- When Flight Manual is revised, Flight Manual shall also be approved.

(2) Approval for change of supplemental type design



6. Other Necessary Activities charged to the Holder of a Supplemental Type Certificate

The holder of a supplemental type certificate needs to:

(1) Obtain approval for change of supplemental type design. (Article 13-2 of the Law)

(2) Collect information on malfunctions and its equivalents relating to the area concerned to which alteration had been made and provide those information to the relevant authorities. (Article 13-4 of the Law)

(3) Implement corrective action such as engineering activities for malfunctions and its equivalents caused by defect in design and manufacture. (Article 13-4 of the Law)

(4) Maintain and keep data (design data, drawings, test reports, inspection records for aircraft products). (Article 13-4 of the Law)

(5) Produce, update and maintain manuals and provide to aircraft users (Article 13-3 of the Law)

(6) Continue airworthiness (including to provide and update the maintenance procedures concerning instructions for continued airworthiness) (Article 13-4 of the Law)

(7) Provision of the procedure manual for alteration (repair) to users (Article 13-3 of the Law)

(8) Methods to provide technical documents should preferably be listed on the web site which enables access online by the Civil Aviation Bureau, and can also enable provision by print or electronic media such as CD-ROMs.

IV. Inspection of Repair or Alteration

1. Introduction

This part is to provide guidance with regard to the general policy, procedures for an application, documents for submission etc. for inspection of repair or alteration specified in Article 17 of the Law.

2. Scope of the Inspection of Repair or Alteration.

If repair or alteration specified in Article 24 of the Regulations is carried out on aircraft with airworthiness certificate under Article 10 paragraph 1 or Article 10-2 paragraph 1, the aircraft shall be inspected under Article 17 paragraphs 1 and 2 of the Law (Inspection of Repair or Alteration). The following is a guidance about the scope of repair or alteration subject to the above inspection. If it is not clear whether the work would be subject to the inspection or not, inquire JCAB in advance.

2-1 Scope of Repair or Alteration to be inspected and the applicable standard (Article 24 and 26-2 of the Regulations)

Scope of Repair or Alteration to be inspected under Article 17 of the Law and the standards applicable to the inspection are specified in the following Table.

Aircraft	Scope of Repair or Alteration to be inspected	Applicable Standards
1. Aircraft under Article 19 paragraph 1 of the Law (Note)	a. Alteration specified in the table under Article 5-6 of the Regulations (except b. and c.)	The standards under Article 10, paragraph 4-(1) of the Law.
	b. Alteration which may affect noise of aircraft	The standards under Article 10, paragraph 4-(1) and (2) of the Law.
	c. Alteration which may affect engine emissions	The standards under Article 10, paragraph 4-(1) and (3) of the Law.
2. Other aircraft	a. Major repair or alteration (as for gliders, major repair or major alteration) specified in the table under Article 5-6 of the Regulations (except b. and c.)	The standards under Article 10, paragraph 4-(1) of the Law.
	b. Repair or alteration which may affect noise of aircraft	The standards under Article 10, paragraph 4-(1) and (2) of the Law.
	c. Repair or alteration which may affect engine emissions	The standards under Article 10, paragraph 4-(1) and (3) of the Law.

(Note) "Aircraft under the Article 19 paragraph 1 of the Law" means airplane and helicopter for use of air transportation service with more than 60 passenger seats or with maximum take-off weight over 27,000 kg (After March 30, 2008, airplane and helicopter for use of air transportation service with more than 30 passenger seats or with maximum take-off weight over 15,000 kg), which is specified in Article 31-2 of the Regulations.

When AOAMA performs the above repair or alteration, AOAMA can conduct the certification under Article 19-2 of the Law without the Inspection of Repair or Alteration.

Generally, determination whether AOAMA may conduct the certification on repair or alteration under Article 19-2 of the Law or not shall depend on the extent of effect of said repair or alteration on the airworthiness or the environmental requirements and on the existence of approval by Authority for a plan or design.

(Note) "Approval by Authority" includes;

- type certification;

- approval for change of type design (in case of minor change of type design on imported aircraft, approval issued by the State of Manufacture can be recognized as approved by Japanese Authority. Refer to Chapter II, titled "Type Certification" of this Circular for details)., Also, as for an imported aircraft of the type which has not yet obtained approval for type certification from Japanese Authority, any minor design change on such aircraft concerned performed by the manufacturer shall be recognized as approved by Japanese Authority, provided the State of Manufacture approved the said change;

- approval for supplemental type design (STC);
- repair and alteration design approval (with regard to the design for repair for imported aircraft, if the design is approved by the Stated of Design or by a person approved by the State of Designee based on standards and procedures equivalent to or higher than those of Japan, and the airworthiness, noise, or emissions of the engine are confirmed by them, it shall be deemed to have been approved for repair and alteration design in Japan (for details, refer to 3 -2);

- repair and alteration design approval for components (if the design of the component is approved by the Stated of Design or by a person approved by the State of Design based on standards and procedures equivalent to or higher than those of Japan, and the airworthiness are confirmed by them, the part shall be deemed to have been approved for repair and alteration design in Japan (for details, refer to 3 -5));

- type and specification approval (if type and specification of an component (excluding engines and propellers) of which approval and other acts have been granted by a foreign state which is a contracting state of the Convention on International Civil Aviation, based on standards and procedures equivalent to or higher than those of Japan, the component shall be deemed to have obtained type or specification approval in Japan (ex. FAA TSOA、PMA、

EASA ETSOA)); and

- approval of Approved Organization Expositions. of approved organizations.

2-2 Major repair and alteration specified in the table under Article 5-6 of the Regulations (as for gliders, major repair and major alteration

Major repair and alteration is classified as repair or alteration having effect not less than a certain level on compliance with the standards to ensure the safety (airworthiness), and contents of works applicable to major repair and alteration are specified in the table under Article 5-6 of the Regulations.
The examples for contents of the respective work in each classification shall refer to Circular 3-001 “Maintenance and Alteration of Aircraft”.

(1) Classification of repair
Major repair to be inspected is specified in the table under Article 5-6 of the Regulations as follows:

Repair which has a significant effect on airworthiness of aircraft such as weight, balance, strength, function of powerplant, flight characteristics, etc. .

With regard to the above, the basic concept for the classification of repair that can be certified by an approved organization is described below.

(a) Major repair (Certification by AOAMA under Article 19-2 of the Law is not acceptable.)
Repair which has a significant effect on the airworthiness of an aircraft, and has not been approved by Authority.

(b) Major repair (Certification by AOAMA under Article 19-2 of the Law is acceptable)
Repair which has a significant effect on the airworthiness of an aircraft, and has been approved by Authority..

(2) Classification of alteration (relationship between modification work accompanying design change and alteration)
The alteration (as for gliders, major alteration) to be inspected is specified in the table under Article 5-6 of the Regulations as follows:

(Minor alteration) Alteration other than major alteration (Major alteration) Alteration which has a significant effect on airworthiness of aircraft such as weight, balance, strength, function of powerplant, flight characteristics, etc..

With regard to the above, the basic concept for the classification of alteration that can be certified by AOAMA is described below.
Also, alteration based on a design which has not been approved by Authority cannot be certified by AOAMA and is required to take an inspection of repair or alteration,

(a) Major alteration (Certification by AOAMA under Article 19-2 of the Law is not acceptable.)
Alteration accompanied by any design change having significant effect on airworthiness of an aircraft, and based on a design which has not been approved by Authority

(b) Major alteration (Certification by AOAMA under Article 19-2 of the Law is not acceptable.)
Alteration accompanied by any design change having significant effect on airworthiness of an aircraft, and based on a design which has been approved by Authority

(c) Minor alteration (Certification by AOAMA under Article 19-2 of the Law is not acceptable.)
Alteration accompanied by any design change not having significant effect on airworthiness of an aircraft, and based on a design which has been approved by the Authority

(d) Works recognized as minor repair (Inspection of repair or alteration is not required)
Items listed below.
(These shall not be recognized as alteration.)
(i) Modification accompanied by any design change not having significant effect on airworthiness of an aircraft, based on a design which has been approved by the Authority, and performed by simple methods without any special techniques or devices
(ii) Change of configuration of the said aircraft to the any configuration which has passed inspection (for airworthiness certification, of repair or alteration, and certification by the approved organization) in the past.

(Note) Relationship between classification in this paragraph and classification of type design change in type certification
"Major change" and "Minor change" specified in type design change shall basically be categorized as "Major alteration" and "Minor alteration (or "Minor repair"), respectively.

2-3 Repair or alteration which may affect noise of the aircraft under Article 10 paragraph 4-(2) of the Law

Examples of repair or alteration which may affect noise and which are to be inspected are specified in the table under Article 24 of the Regulations as follows:

a. Repair or alteration accompanied by the change of configuration of the nacelle and/or other major change of configuration of an aircraft

b. Repair or alteration accompanied by alteration of the engines or parts (limited to the acoustic material and their parts which shall affect the noise of aircraft)
c. Repair or alteration accompanied by a major change in performance of take-off and landing

By taking the above provisions into consideration, the basic concept of classification of repair or alteration including acceptability of certification by AOAMA under Article 19-2 of the Law shall be described below.

(1) Repair which may affect noise

(a) Repair on which certification by AOAMA under Article 19-2 of the Law is not acceptable

(i) Repair without an established method (any repair procedure which is not specified in either the maintenance manual, service bulletin or other public standards which are generally recognized, and which has not been approved by Authority)

(ii) Repair of which the noise level after the completion has not been approved by Authority

(b) Repair on which certification by AOAMA under Article 19-2 of the Law is acceptable
Repair whose method is established and of which the noise level after the completion has also been approved by Authority

(c) Repair not subject to the repairs which may affect noise
Repair whose method is established and of which it has been approved by Authority that the noise level is not changed after the completion

(Note) The above is prescribed about the cases in which the inspection of repair or alteration relating to noise is not required. Paragraph 2-2 shall be referred to determine whether the works shall be included or not in the scope of inspection of repair or alteration required with regard to safety.

(2) Alteration which might affect noise

(a) Alteration on which certification by AOAMA under Article 19-2 of the Law is not acceptable

(i) Alteration by which the design change has not been approved by Authority

(ii) Alteration of which the noise level after completion has not been approved by Authority

(b) Alteration on which certification by AOAMA under Article 19-2 of the Law is acceptable
Alteration by which the design change has been approved by Authority and of which the noise level after completion has also been approved by Authority

(c) Alteration not subject to the alterations which may affect noise (Inspection of repair or alteration with regard to noise is not required)

(i) Alteration by which the design change has been approved by Authority and of which it has been also approved that the noise level is not changed after the completion

(ii) Alteration to configuration such as aircraft for agricultural use and a fire fighting use to which aircraft noise regulations are not applicable
Example is shown that: alteration from the standard configuration to the configuration involving the installation of aerial spray equipment on the exterior for agricultural

chemicals (for agricultural operation).

(iii) Alteration with minor changes to the configuration of fuselage of a small aircraft, a powered glider or a helicopter

Since the air speed of the aircraft described above is so low that the level of noise created by their configuration change shall be relatively low, partial change of the configuration of fuselage by installation and removal of the external equipment shall not come under the alteration which might affect noise level.

Example is shown that: alteration by additional installation of external devices for reporting news.

(iv) Change of configuration of the said aircraft to the any configuration which has been approved in the inspection (for airworthiness certification, of repair or alteration, and certification by the approved organization) in the past.

(Note) The above is prescribed about the cases in which the inspection of repair or alteration relating to noise is not required. Paragraph 2-2 shall be referred to determine whether the works shall be included or not in the scope of inspection of repair or alteration required with regard to safety.

2-4 Repair or alteration which may affect engine emissions on the aircraft under Article 10 paragraph 4-(3) of the Law

Examples of repair or alteration which may affect engine emissions and which are to be inspected are specified in the Table under Article 24 of the Regulations as follows:

a. Repair or alteration accompanied by alteration of air intake configuration of engines
b. Repair or alteration accompanied by alteration of the engine, fuel system and their parts (limited to the combustion chamber and other parts which shall affect engine emissions)
c. Repair or alteration accompanied by a major alteration in engine performance

By taking the above provisions into consideration, the basic concept for classification of repair or alteration including acceptability of certification by AOAMA under Article 19-2 of the Law shall be described below.

(1) Repair which may have affect engine emissions

(a) Repair on which certification by AOAMA under Article 19-2 of the Law is not acceptable

(i) Repair without an established method (any repair procedure which is not specified in either the maintenance manual, service bulletin or other public standards which are generally recognized, and which has not been approved by Authority)

(ii) Repair of which the level of engine emissions after completion has not been approved by Authority

(b) Repair on which certification performed by AOAMA under Article 19-2 of the Law is acceptable

Repair whose method is established and of which the level of engine emissions after

completion has also been approved by Authority

(c) Repair not subject to repairs which may affect engine emissions
Repair whose method is established and of which it has been approved by Authority that the level of engine emissions is not changed after the completion

(Note) The above is prescribed about the cases in which the inspection of repair or alteration relating to engine emissions is not required. Paragraph 2-2 shall be referred to determine whether the works shall be included or not in the scope of inspection of repair or alteration required with regard to safety.

(2) Alteration which might affect engine emissions

(a) Alteration on which certification by AOAMA under Article 19-2 of the Law is not acceptable

(i) Alteration by which the design change has not been approved by Authority

(ii) Alteration of which the level of engine emissions after completion has not been approved by Authority

(b) Alteration on which certification by AOAMA under Article 19-2 of the Law is acceptable
Alteration by which the design change has been approved by Authority and of which the level of engine emissions after completion has also been approved by Authority

(c) Alteration not subject to alterations which may affect engine emissions (Inspection of repair or alteration with regard to the engine emissions is not required)

(i) Alterations by which the design change has been approved by Authority and of which it has been approved by Authority that the level of engine emissions is not changed after completion

(ii) Change of configuration of the said aircraft to the any configuration which has been approved in the inspection (for airworthiness certification, of repair or alteration, and certification by the approved organization) in the past.

(Note) The above is prescribed about the cases in which the inspection of repair or alteration relating to engine emissions is not required. Paragraph 2-2 shall be referred to determine whether the works shall be included or not in the scope of inspection of repair or alteration required with regard to safety.

3. Documents for Submission and Outline of Inspection

Refer to the relevant classification item according to the application category in the table below. As indicated on the note 2-1, components with TSOA and PMA by FAA or ETSOA by EASA can be recognized as having a type/specification approval of Japan. Namely, with regard to inspection of repair or alteration for such component, its design shall be treated as conforming to the standards under Article 10, paragraph 4-(1) of the Law

Availability of design approval	Conducting inspections				classification item
	Design	Planning (other than	Process of work	Current condition	

		design)			
Design Approval for Repair and Alteration or Design statement of conformity issued by Approved Design Organization	×	○	○	○	3-1
Approval certificate issued by the State of Design or a document certifying that the approval of repair and alteration design for aircraft has been confirmed by an approved organization in the State of Design (*Refer to 3-2 for details).	×	○	○	○	3-2
Type Certificate or Supplemental Type Certificate	×	○	*	○	3-3
Design Approval for Repair and Alteration of components or Design statement of conformity issued by Approved Design Organization	*	○	○	○	3-4
Approval certificate issued by the State of Design or a document certifying that the approval of repair and alteration design for components has been confirmed by an approved organization in the State of Design (*Refer to 3-5 for details).	*	○	○	○	3-5
No approval on design	○	○	○	○	3-6

×=inspection omitted, *=inspection partially omitted, ○=inspection not omitted

When there are multiple repairs or alterations to be carried out and they span multiple classifications in the table, the documents to be submitted for each repair or alteration shall be submitted for the corresponding classification item.

3-1 Documents for submission

Aircraft to be repaired or altered based on a design approved for repair or alteration design specified in Article 18 paragraph 1 of the Law or approved for the change of repair or alteration design specified in Article 18 paragraph 3 of the Law, or a design confirmed by an approved

design organization specified in Article 18 paragraph 2 or 4 of the Law

(a) Overview of the inspection

As the aircraft falling under this paragraph has already been inspected for conformity to standards based on the approval of repair and alteration designs by the government or the confirmation by an approved design organization, the government shall not, in principle, conduct another inspection of the design of the aircraft for repair and alteration, but will conduct the inspection by confirming a copy of the repair and alteration design approval issued pursuant to the provisions of Article 26-5 or Article 26-9 of the Regulations or the Design statement of conformity issued pursuant to the provisions of Article 41, paragraph 1 of the Regulations.

(b) Documents for submission (Article 25, paragraph 2, classification 1 of the Regulations)

Attached Documents stipulated by Article 25 of the Regulations	Contents of documents specified in the left column		Remarks
	Items to be submitted	Items to be shown	
1. A copy of the repair and alteration design approval issued pursuant to the provisions of Article 26-5 of the Regulations, or a Design statement of conformity issued pursuant to the provisions of Article 41, paragraph 1 of the Regulations	A copy of the repair and alteration design approval or a Design statement of conformity		
2. Plans for repair or alteration (except for the part pertaining to the design for repair or alteration for aircraft.	Work implementation plan (including documentation showing that work based on the approved design can be properly performed on the aircraft, and whether or not it is likely to affect noise or engine emissions		
3. Flight Manual (limited to cases where there is a change).	Revised or added parts	Currently approved Flight Manual	
4. Document for Maintenance procedure	Revised or added parts	Currently approved Document for Maintenance	

(limited to the part related to the change)		procedure	
5. Documents describing items for computing weight and center of gravity of the aircraft	Revised or added parts in the following items shall be described. (1) Weight and center of gravity of airframe (2) Name, weight and center of gravity of each equipment (3) Useable capacity and center of gravity of each fuel tank (4) Others However, the Flight Manual may be a substitute for the documents when above-mentioned items are described in the Flight Manual.		
6. Additional references	(1) List of aircraft current condition (same as form I-1 in Chapter I "Airworthiness Certification") (2) Specifics of the work Specifics of the work which comes under the items requiring inspection of repair or alteration (3) Records of corrective actions adopted for malfunctions Record describing condition of corrective actions adopted for malfunctions discovered during the work which comes under items requiring inspection of repair or alteration (4) Study documents for repair or alteration work List of design change inspection (List of compliance inspection, as required) (5) Records of measurement Records of measurement of weight and center of gravity	Registration Certificate, Airworthiness Certificate, and aircraft logbook held on the time of inspection Checklist or its equivalent for the work which comes under items requiring inspection of repair or alteration Record describing contents of malfunctions discovered during the work which comes under the items requiring inspection of repair or alteration Drawings, etc. for confirming the configuration, etc. (limited to cases where necessary) Records of measurement specially performed for the work which	

		comes under the items requiring inspection of repair or alteration	
	(6) Records of in-house ground test and corrective actions adopted for malfunctions (a) The in-house ground test record: confirmed by the qualified mechanic (b) Record of corrective actions adopted for malfunctions during in-house ground test: Record describing condition of corrective actions adopted for malfunctions discovered during in-house ground test. (7) Records of in-house flight test and corrective actions adopted for malfunctions (a) Record of in-house flight test: confirmed by the qualified mechanic with comments of the pilot in charge (b) Records of corrective actions adopted for malfunctions during in-house flight test: Record describing condition of corrective actions adopted for malfunctions discovered during in-house flight test (8) Records of ground test and corrective actions adopted for malfunctions at official inspection (a) Record of ground test at official inspection (b) Record of corrective actions adopted for malfunctions during ground test at official inspection: Record describing condition of corrective actions adopted for malfunctions discovered during ground test at official inspection (9) Records of flight test and corrective actions adopted for malfunctions at official inspection (a) Record of flight test at official inspection (b) Record of corrective actions adopted for malfunctions during flight test at official inspection: Record describing condition of corrective actions adopted for malfunctions discovered during flight		

	test at official inspection		

3-2 Aircraft to be repaired or altered based on Design for repair or alteration of imported aircraft specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism under Article 17 paragraph 1 of the Law

With regard to the inspection for repair and alteration for aircraft to be repaired or altered based on design for repair or alteration of imported aircraft specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism (Article 24-3 of the Regulations) under Article 17 paragraph 1 of the Law, the inspection for design is omitted.

3-2-1 Design for repair or alteration of aircraft for which the Minister of Land, Infrastructure, Transport and Tourism deems that a foreign state as a contracting state to the Convention on International Civil Aviation has approved or otherwise acted in accordance with standards and procedures equivalent to or higher than those of Japan with regard to airworthiness, noise or emissions from engines (Article 24 item 1 of the Regulations)

It is a repair and alteration design that approval or other action (an act equivalent to the approval, such as certification or authentication, etc.) for airworthiness, noise or engine emissions was carried out by a foreign authority which the Minister of Land, Infrastructure, Transport and Tourism deems that a foreign state has standards and procedures equivalent to or higher than those of Japan with regard to airworthiness, noise or emissions from engines (approval under Article 18 paragraph 1 of the Law)

In principle, determination whether standards and procedures for approval are equivalent to or higher than those of Japan and application of this provision shall be done in accordance with the conclusion of necessary implementation arrangements based on the coordination between aviation authorities.

Specifically, the design of aircraft or components listed below shall be treated as it falls under this section.

(1-1) Design for repairs approved (accepted in the case of minor repairs or below) by the FAA or its representatives (Design Engineering Representative (hereinafter referred to as "DER")

(1-2) With regard to aircraft which has not obtained the type certificate from Japan, minor changes of design for alteration made by said aircraft manufacturer and accepted by the FAA

(2-1) Designs for repairs approved by EASA (excluding Significant Major Change of designs defined by the Bilateral Aviation Safety Agreement (BASA) with the EU).

(2-2) With regard to aircraft which has not obtained the type certificate from Japan, designs for alteration made by said aircraft manufacture and approved by EASA (excluding Significant Major Change of designs defined by the Bilateral Aviation Safety Agreement with EU).

(3-1) Designs for repairs approved by the TCCA

(3-2) With regard to aircraft which has not obtained the type certificate from Japan, minor changes of design for alteration made by said aircraft manufacturer and approved by the TCCA

(4-1) Designs for repairs approved by ANAC or its representatives

(4-2) With regard to aircraft which has not obtained the type certificate from Japan, minor changes of design for alteration made by said aircraft manufacturer and approved by ANAC

3-2-2 In a foreign country recognized by the Minister of Land, Infrastructure, Transport and Tourism as having standards and procedures equivalent to or higher than those of Japan with regard to approval or other actions concerning the design capability of aircraft, design for repair or alteration that a person, who has obtained such approval or other actions in accordance with the relevant standards and procedures, designed and confirmed the airworthiness, noise or engine emissions. (Article 24-3 item 2 of the Regulations)

It is a repair and alteration design that design and confirmation for airworthiness, noise or engine emissions were carried out in accordance with the approval of organization by a foreign organization approved by a foreign country which the Minister of Land, Infrastructure, Transport and Tourism deems that a foreign country has approval system for aircraft design organization, and standards and procedures for the approval equivalent to or higher than those of Japan with regard to organization approval for aircraft design (Article 20, paragraph 1-(1) of the Law)

In principle, determination whether standards and procedures for approval are equivalent to or higher than those of Japan and application of this provision shall be done in accordance with the conclusion of necessary implementation arrangements based on the coordination between aviation authorities.

Specifically, the design of aircraft or components listed below shall be treated as it falls under this section.

(1) Design for repairs of which airworthiness, noise or engine emissions were confirmed by Organization Designation Authorization (hereinafter referred to as "ODA") approved by the FAA.
(2) Design for repairs of which airworthiness, noise or engine emissions were confirmed by Design Organization Approvals (hereinafter referred to as "DOA") approved by EASA (limited to Minor Repair defined in the BASA with the EU).
(3) Design for repairs of which airworthiness, noise or engine emissions were confirmed by Organizations approved by the TCCA.
(3) Design for repairs of which airworthiness, noise or engine emissions were confirmed by Organizations approved by ANAC.

3-2-3 Overview of the inspection

Aircraft falling under this paragraph are considered that the inspection for the compliance with standards for repair and alteration design was completed based on the standards and procedures which are equal to or higher than those of Japan by a foreign authority or an organization approved by a foreign authority as having the design capability. Therefore, the inspection for the design in the inspection for repair and alteration by the government should not be done again in principle. Instead, confirmation for a document certifying that a foreign country has approved, or a document certifying that an organization has confirmed (see 3-2-4) shall be conducted.

3-2-4 Documents to be Submitted (Article 25, paragraph 2, classification 2 of the Regulations)

Attached document stipulated in Article 25 of the	Contents of the document in the left column		Remarks
	Those that require submission	Those that require showing	

Regulations			
1. A document certifying that approval or otherwise act stipulated in Article 24-3 of the Regulations was given, or a document certifying that confirmation stipulated in Article 24-3 item 2 of the Regulations was done	Either of the following documents which is applicable (1)In the case that it was approved by the FAA or confirmed by a person approved by the FAA A document certifying designs have been approved, such as Form 8110-3, Form 8100-9 or Form 337 (block 3) (2) In the case that it was approved by EASA or confirmed by a person approved by EASA A document certifying designs have been approved (3) In the case that it was approved by the TCCA or confirmed by a person approved by the TCCA A document certifying designs have been approved (4) In the case that it was approved by ANAC or confirmed by a person approved by ANAC A document certifying designs have been approved, such as Form F-200-06, etc.		(Note 1) (Note 2) (Note 3) (Note 2) (Note 3) (Note 2) (Note 3) (Note 4) (Note 2) (Note 3)

2. Plans for repair or alteration (except for the part pertaining to the design for repair or alteration of aircraft)	Work implementation plan (materials which show that work based on the approved design can be performed appropriately for the aircraft, and matters identifying whether it may be affect to noise or engine emissions, should be included.)		
3. Flight Manual (limited to the part pertaining to changes)	Parts to be changed or added	Flight Manual which is currently approved.	
4. Document for Maintenance Procedure (limited to the part pertaining to the changes)	Parts to be changed or added	Document for Maintenance Procedure which is currently approved.	
5. Documents that state necessary matters for computing the weight and the center of gravity of an aircraft	Write the parts to be changed or added within the following items. (1) Weight and center of gravity of airframe (2) Name, weight and center of gravity of each equipment (3) Useable capacity and center of gravity of each fuel tank (4) Others However, if said matters are already written in the Flight Manual, the said documents may be substituted by the Flight Manual.		
6. Documents describing reference materials in addition to those listed in the preceding each item	(1) Table of aircraft current condition (same as Form I -1 in Chapter I Airworthiness Certification) (2) Specifics of the work Specifics of the work which comes under the items requiring inspection of repair or alteration	Registration Certificate, Airworthiness Certificate, and aircraft logbook held on the time of inspection Checklist or its equivalent for the work which comes under items requiring inspection of repair or alteration	

	(3) Records of corrective actions adopted for malfunctions Record describing condition of corrective actions adopted for malfunctions discovered during the work which comes under items requiring inspection of repair or alteration	Record describing contents of malfunctions discovered during the work which comes under the items requiring inspection of repair or alteration	
	(4) Study documents for repair or alteration work List of design change inspection (List of compliance inspection, as required)	Drawing or its equivalent to confirm the configuration, etc. (limited to the case where it is necessary)	
	(5) Records of measurement Records of measurement of weight and center of gravity	Records of measurement specially performed for the work which comes under the items requiring inspection of repair or alteration	
	(6) Records of in house ground test and corrective actions adopted for malfunctions (a)The in house ground test record: confirmed by the qualified mechanic (b) Record of corrective actions adopted for malfunctions during in house ground test: Record describing condition of corrective actions adopted for malfunctions discovered during in house ground test.		
	(7) Records of in house flight test and corrective actions adopted for malfunctions (a) Record of in house flight test: confirmed by the qualified mechanic with comments of the pilot in charge (b) Records of corrective actions adopted for malfunctions during in house flight test: Record describing condition of corrective actions adopted for malfunctions discovered during in house flight test		

	(8) Records of ground test and corrective actions adopted for malfunctions at official inspection (a) Record of ground test at official inspection (b) Record of corrective actions adopted for malfunctions during ground test at official inspection: Record describing condition of corrective actions adopted for malfunctions discovered during ground test at official inspection (9) Records of flight test and corrective actions adopted for malfunctions at official inspection (a) Record of flight test at official inspection (b) Record of corrective actions adopted for malfunctions during flight test at official inspection: Record describing condition of corrective actions adopted for malfunctions discovered during flight test at official inspection		

(Note 1) For details of the form of documents certifying that Repair Design has been approved by the U.S. FAA, see Circular No.3-026 "Handling of Repair Design Data Approved by the U.S. Federal Aviation Administration", Section 3.

(Note 2) Methods instructed by designers showing that they have received approval, etc. (such as Maintenance Manual, etc.) are also included.

3-3 Aircraft to be repaired or altered based on Design approved by type design change under Article 13 paragraph 1 of the Law or by supplemental type design under Article 13-2 paragraph 1 of the Law

(a) Overview of the inspection

With regard to aircraft falling under this paragraph, inspection of conformity to the standards for the designs has already been completed based on the approval of type design change, approval of supplemental type design or confirmation by the Approved Design Organization (Article 12-2 paragraph 4 of the Law). Therefore, inspection for repair and alteration by the government is carried out based on the confirmation of a copy of the type certificate issued by provision of Article 22 of the Regulations, a copy of the supplemental type design approval issued by provision of Article 23-3 or 23-6 or design statement of conformity issued by provision of Article 41 paragraph 1 of the Regulations without having to inspect the designs again in principle

(b) Documents to be Submitted (Aircraft specified in Article 26, Paragraph 2 based on the Classification 3 under Article 25, Paragraph 2 of the Regulations)

Documents to be attached by provision of Article 25 of the Regulations	Contents of the document in the left column		Remarks
	Those that require submission	Those that require	

		showing	
1. A copy of a type certificate issued pursuant to the provisions of Article 22, a copy of a written acknowledgment of supplemental type design issued pursuant to the provisions of Article 23-3 or Article 23-6, or a copy of a design statement of conformity issued pursuant to the provisions of Article 41, paragraph 1	A copy of a type certificate, a copy of a written acknowledgment of supplemental type design or a copy of a design statement of conformity		
2. Plans for repair or alteration (excluding the part pertaining to the design for repair or alteration of aircraft)	Work implementation plan (matters identifying whether it may be affect to noise or engine emissions should be included.)		
3. Flight Manual (limited to the part pertaining to changes)	Parts to be changed or added	Flight Manual which is currently approved.	
4. Document for Maintenance Procedure (limited to the part pertaining to the changes)	Parts to be changed or added	Document for Maintenance Procedure which is currently approved.	
5. Documents that state necessary matters for computing the weight and the center of gravity of an aircraft	Write the parts to be changed or added within the following items. However, if said matters are already written in the Flight Manual, the said documents may be substituted by the Flight Manual. (1) Weight an d center of gravity of airframe (2) Name, weight and center of gravity of each equipment (3) Useable capacity and center of gravity of each fuel tank (4) Others		
6. Documents that state reference matters	(1) Table of aircraft current condition (same as Form I -1 in Chapter I Airworthiness Certification)	Registration Certificate, Airworthiness Certificate, and aircraft	

		logbook held on the time of inspection	
	(2) Specifics of the work Specifics of the work which comes under the items requiring inspection of repair or alteration	Checklist or its equivalent for the work which comes under items requiring inspection of repair or alteration	
	(3) Records of corrective actions adopted for malfunctions Record describing condition of corrective actions adopted for malfunctions discovered during the work which comes under items requiring inspection of repair or alteration	Record describing contents of malfunctions discovered during the work which comes under the items requiring inspection of repair or alteration	
	(4) Study documents for repair or alteration work List of design change inspection (List of compliance inspection, as required)	Drawing or its equivalent to confirm the configuration, etc. (limited to the case where it is necessary)	
	(5) Records of measurement Records of measurement of weight and center of gravity	Records of measurement specially performed for the work which comes under the items requiring inspection of repair or alteration	
	(6) Records of in house ground test and corrective actions adopted for malfunctions (a)The in house ground test record: confirmed by the qualified mechanic (b) Record of corrective actions adopted for		

	malfunctions during in house ground test: Record describing condition of corrective actions adopted for malfunctions discovered during in house ground test. (7) Records of in house flight test and corrective actions adopted for malfunctions (a) Record of in house flight test: confirmed by the qualified mechanic with comments of the pilot in charge (b) Records of corrective actions adopted for malfunctions during in house flight test: Record describing condition of corrective actions adopted for malfunctions discovered during in house flight test (8) Records of ground test and corrective actions adopted for malfunctions at official inspection (a) Record of ground test at official inspection (b) Record of corrective actions adopted for malfunctions during ground test at official inspection: Record describing condition of corrective actions adopted for malfunctions discovered during ground test at official inspection (9) Records of flight test and corrective actions adopted for malfunctions at official inspection (a) Record of flight test at official inspection (b) Record of corrective actions adopted for malfunctions during flight test at official inspection: Record describing condition of corrective actions adopted for malfunctions discovered during flight test at official inspection		

3-4 Aircraft to be repaired or altered with components which have been repaired or altered based on a design approved for repair or alteration design for components specified in Article 26 paragraph 3-1 of the Regulations or a design approved for the change of repair or alteration design for components specified in Article 26 paragraph 13-10 of the Regulations, or a design confirmed by an approved design organization specified in Article 26 paragraph 7 or 15 of the Regulations

(a) Overview of the inspection

As the aircraft falling under this paragraph has already been inspected for conformity to standards based on the approval of repair and alteration designs by the government or the confirmation by an approved design organization, the government shall not, in principle, conduct another inspection of the design of the component for repair and alteration but will conduct the inspection by confirming a copy of the repair and alteration design approval for components issued pursuant to the provisions of Article 26-13 paragraph 6 or 14 of the Regulations, or the Design statement of conformity issued pursuant to the provisions of Article 41, paragraph 1 of the Regulations.

On the other hand, for other components, inspections shall be conducted on the plan (including those designs) for the repair or alteration, the process, and the current status after completion of the work.

The applicant shall make advance coordination regarding the inspection with inspector in charge and decide procedures for substantiation, documents for submission and timing for submission, attendance to the test, necessity of ground test and flight test, schedule,etc.

(b) Documents for submission (Aircraft specified in Article 26, Paragraph 3 based on the Classification 3 under Article 25, Paragraph 2 of the Regulations)

With regard to the inspection of the design, the content of the documents to be attached for the inspection for repair and alteration shall be as follows, in principle, by applying mutatis mutandis the type certification

Attached Documents stipulated by Article 25 of the Regulations	Contents of documents specified in the left column		Remarks
	Items to be submitted	Items to be shown	
1. A copy of the repair and alteration design approval issued pursuant to the provisions of Article 26-13 paragraph 6 or 14 of the Regulations, or a Design statement of conformity for components issued pursuant	A copy of the repair and alteration design approval for components or a Design statement of conformity		

to the provisions of Article 41, paragraph 1 of the Regulation			
2. Design plan (excluding components regarding Articla 26 paragraph 3 of the Regulations; hereinafter, the same for 3 to 6 in this table.)	Documents describing the items below (excluding components to be repaired or altered based on a design approved for repair or alteration design for components, or a design confirmed its conformity to the standards by an approved design organization; hereinafter, the same for 3 to 6 in this table. a. Purpose, use, characteristics, etc. of the design b. Airworthiness category, type and model, and serial number of the aircraft to which the design shall be applied c. Name of designer in charge of the design and name of coordinator in charge to liaise with the authority with regard to the design d. Estimated schedule for design, manufacture and repair and alteration etc. e. Major parts and name of manufacturer of them, and schedule of manufacture f. General description of the design g. Description of special manufacturing methods, if any. h. Test related matters Description about strength test, functional test, flight test, measurement of noise level, measurement of engine emissions and others including locations, facilities, test equipment, schedule and others (Note) The design plan for the design facilitates disclosure of the outline of the design to Authority concerned before the inspection. Though it is recommended to submit a complete set of documents at an early stage, submission of documents one by one up on completion will be accepted. When any contents shall be changed as the design is being fixed, the revision of contents in the design plan is not forced as long as the matter has been informed to		

	the authority by some means.		
3. Design document.	Among items described below, items which shall affect the type design of the aircraft concerned under the design shall be prepared and submitted. When data from a manufacturer of an aircraft etc. shall be utilized for preparation, the source of data shall be clarified. a. Calculation of weight and center of gravity b. Calculation of performance c. Calculation of stability and controllability d. Calculation of basic load and basic load strength e. Calculation of fatigue load and fatigue load strength f. Calculation of extent of noise level and engine emissions g. Specification of parts relating to the design h. Design materials such as load analysis, strength calculation, performance calculation, main block diagram, specification, failure analysis, etc. for various systems (flight control, operation, electronics/electricity, instruments, inlet and exhaust, cooling, fuel, lubricant oil, hydraulic oil, air pressure, vacuum, air conditioning, anti-icing/deicing, fire extinguishing, oxygen, radio, navigation equipment and others) i. Materials for design if any unique structure or parts are used.		
4. Drawing list	The drawing list shall be a list including every drawing number, title and others relating to the design concerned.		
5. Drawings	Drawings shall refer to the drawings relating to the design concerned.		
6. Parts list	Name of parts, part numbers, manufacturer name of parts which are included in the design shall be listed. Name of manufacturer for standard parts shall be excluded.		
7. A plan for repair and alteration (excluding the part related to the repair and alteration design for aircraft)	Work Implementation Plan		
8. Flight Manual	Revised or added parts	Currently approved Flight Manual	
9. Maintenance Procedure	Revised or added parts	Currently approved Document for	

Manual (limited to the part revised		Maintenance procedure	
10. Documents describing items for computing weight and center of gravity of the aircraft	Among the items below, items to be changed or added by the design concerned shall be described in the documents. However, the Flight Manual may be a substitute for the documents when these items are described in the Flight Manual. a. Weight and center of gravity of airframe b. Name, weight and center of gravity of each equipment c. Useable capacity and center of gravity of each fuel tank d. Others		
11. Other reference materials	The documents “a” through “l” of (1) shall be prepared and submitted when the design concerned affects the type design of the aircraft. When data from a manufacturer of an aircraft etc. shall be utilized for preparation, the source of data shall be clarified. (1) a. Compliance check list plan b. Aerodynamics and hydrodynamics test plan c. Partial load test plan d. Static load test plan e. Fatigue load test plan f. Dynamic load test plan g. Vibration test plan h. Various functional test plan i. Flight test plan j. Noise measurement plan k. Measurement plan for engine emissions l. Instructions for publishing service bulletin and related material Refer to Circular No. 1-013. m. Test plan, test reports and other materials designated as necessary by an appointed inspector in charge. An original draft of Minimum Equipment List and Configuration Deviation List, if these documents will be developed (2) Table of aircraft current condition (same as Form I-1 in Chapter I "Airworthiness Certification") (3) Specifics of the work Specifics of the work which comes under the items requiring inspection for repair and	Registration Certificate, Airworthiness Certificate, and aircraft logbook held on the time of inspection Checklist or its equivalent for the work which comes	

		alteration	under items requiring inspection of repair or alteration		
		(4) Records of corrective actions adopted for malfunctions Record describing condition of corrective actions adopted for malfunctions discovered during the work which comes under items requiring inspection for repair and alteration	Record describing contents of malfunctions discovered during the work which comes under the items requiring inspection of repair or alteration		
		(5) Study documents for repair or alteration work List of design change inspection (List of compliance inspection, as required)	Drawing or its equivalent to confirm the configuration, etc. (limited to the case where it is necessary)		
		(6) Records of measurement Records of measurement of weight and center of gravity (7) Records of in house ground test and corrective actions adopted for malfunctions (a)The in house ground test record: Record confirmed by the qualified mechanic (b) Record of corrective actions adopted for malfunctions during in house ground test: Record describing condition of corrective actions adopted for malfunctions discovered during in house ground test. (8) Records of in house flight test and corrective actions adopted for malfunctions (a) Record of in house flight test: Record confirmed by the qualified mechanic with comments of the pilot in charge (b) Records of corrective actions adopted for malfunctions during in house flight test: Record describing condition of corrective actions adopted for malfunctions discovered during in house flight test (9) Records of ground test and corrective actions adopted for malfunctions at official inspection (a) Record of ground test at official inspection (b) Record of corrective actions adopted for malfunctions during ground test at official inspection: Record describing condition of corrective	Records of measurement specially performed for the work which comes under the items requiring inspection of repair or alteration		

	actions adopted for malfunctions discovered during ground test at official inspection (10) Records of flight test and corrective actions adopted for malfunctions at official inspection (a) Record of flight test at official inspection (b) Record of corrective actions adopted for malfunctions during flight test at official inspection: Record describing condition of corrective actions adopted for malfunctions discovered during flight test at official inspection		

3-5 Aircraft to be repaired or altered with components to be repaired or altered based on Design for repair or alteration specified in Article 26 paragraph 30-2 or 30-3 of the Regulations.

With regard to the inspection for repair and alteration for aircraft to be repaired or altered with components repaired or altered based on Design for repair or alteration specified in Article 26 paragraph 30-2 or 30-3 of the Regulations, the inspection for design for the component is omitted.

3-5-1 Design for repair or alteration of aircraft for which the Minister of Land, Infrastructure, Transport and Tourism deems that a foreign state as a contracting state to the Convention on International Civil Aviation has approved or otherwise acted in accordance with standards and procedures equivalent to or higher than those of Japan with regard to airworthiness (Article 26 paragraph 3-2 of the Regulations)

It is a repair and alteration design that approval or other action (an act equivalent to the approval, such as certification or authentication, etc.) for airworthiness was carried out by a foreign authority which the Minister of Land, Infrastructure, Transport and Tourism deems that the foreign state has standards and procedures equivalent to or higher than those of Japan with regard to airworthiness (under Article 26 paragraph 3 and 13 of the Regulations)

In principle, determination whether standards and procedures for approval are equivalent to or higher than those of Japan and application of this provision shall be done in accordance with the conclusion of necessary implementation arrangements based on the coordination between aviation authorities.

Specifically, design of components listed below shall be treated as it falls under this section.

(1-1) Design for repairs approved (accepted in the case of minor repairs or below) by the FAA or its representatives (DER)
(1-2) Minor changes of design for alteration of components made by said component designer/manufacturer and accepted by the FAA

(2-1) Designs for repairs approved by EASA (excluding Significant Major Change of designs

defined by the Bilateral Aviation Safety Agreement (BASA) with the EU).

3-5-2 In a foreign country recognized by the Minister of Land, Infrastructure, Transport and Tourism as having standards and procedures equivalent to or higher than those of Japan with regard to approval or other actions concerning design and inspection capability of components, a design for repair or alteration that a person, who has obtained such approval or other actions in accordance with the relevant standards and procedures, designed and confirmed the airworthiness. (Article 26 paragraph 3-3 of the Regulations).

It is a repair and alteration design for components that design and confirmation for airworthiness was carried out in accordance with the approval of organization by a foreign organization approved by a foreign country which the Minister of Land, Infrastructure, Transport and Tourism deems that a foreign country has approval system for aircraft design organization, and standards and procedures for the approval equivalent to or higher than those of Japan with regard to organization approval for aircraft design (Article 20, paragraph 1-(5) of the Law)

In principle, determination whether standards and procedures for approval are equivalent to or higher than those of Japan and application of this provision shall be done in accordance with the conclusion of necessary implementation arrangements based on the coordination between aviation authorities.

Specifically, the design of components listed below shall be treated as it falls under this section.
(1) Design for repair of which airworthiness were confirmed by ODA approved by the FAA.
(2) Design for repair of which airworthiness, noise or engine emissions were confirmed by DOA approved by EASA (limited to Minor Repair defined in the BASA with the EU).

3-5-3 Overview of the inspection

As the aircraft falling under this paragraph has already been inspected for conformity to standards by an approval of repair and alteration designs for components by the government or the confirmation by an approved design organization, the government shall not, in principle, conduct another inspection of the design of the components for repair and alteration, but will conduct the inspection by confirming a copy of the repair and alteration design approval issued pursuant to the provisions of Article 26-13 paragraph 6 or 14 of the Regulations or the Design statement of conformity issued pursuant to the provisions of Article 41, paragraph 1 of the Regulations. On the other hand, for other components, inspections shall be conducted on the plan (including those designs) for repair or alteration, the process, and the current status after completion of work.

The applicant shall make advance coordination regarding the inspection with inspector in charge and decide procedures for substantiation, documents for submission and timing for submission, attendance to the test, necessity of ground test and flight test, schedule,etc.

3-5-4 Documents for submission (Aircraft specified in Article 26, Paragraph 3 based on the Classification 3 under Article 25, Paragraph 2 of the Regulations)

Attached document stipulated in Article 25 of the Regulations	Contents of the document in the left column		Remarks
	Those that require submission	Those that require showing	
A document certifying that approval or otherwise act stipulated in Article 26 paragraph 3-2-(i) of the Regulations was given, or a document certifying that confirmation stipulated in the Article 24-3 paragraph 3-2-(ii) of the Regulations was done	Either of the following documents which is applicable (1)In the case that it was approved by the FAA or confirmed by a person approved by the FAA A document certifying designs have been approved, such as Form 8110-3, Form 8100-9 or Form 337 (block 3) (2) In the case that it was approved by EASA or confirmed by a person approved by EASA A document certifying designs have been approved		(Note 1) (Note 2) (Note 2) (Note 3)
2. Design plan (excluding components regarding Article 26 paragraph 3 of the Regulations; hereinafter, the same for 3 to 6 in this table.)	Documents describing the items below (excluding components to be repaired or altered based on a design approved for repair or alteration design for components, or a design confirmed its conformity to the standards by an approved design organization; hereinafter, the same for 3 to 6 in this table. a. Purpose, use, characteristics, etc. of the design b. Airworthiness category, type and model, and serial number of the aircraft to which the design shall be applied c. Name of designer in charge of the design and name of coordinator in charge to liaise with the authority with regard to the design d. Estimated schedule for design, manufacture and repair and alteration etc. e. Major parts and name of manufacturer of them, and schedule of manufacture		

	f. General description of the design g. Description of special manufacturing methods, if any. h. Test related matters Description about strength test, functional test, flight test, measurement of noise level, measurement of engine emissions and others including locations, facilities, test equipment, schedule and others (Note) The design plan for the design facilitates disclosure of the outline of the design to Authority concerned before the inspection. Though it is recommended to submit a complete set of documents at an early stage, submission of documents one by one up on completion will be accepted. When any contents shall be changed as the design is being fixed, the revision of contents in the design plan is not forced as long as the matter has been informed to the authority by some means.		
3. Design document.	Among items described below, items which shall affect the type design of the aircraft concerned under the design shall be prepared and submitted. When data from a manufacturer of an aircraft etc. shall be utilized for preparation, the source of data shall be clarified. a. Calculation of weight and center of gravity b. Calculation of performance c. Calculation of stability and controllability d. Calculation of basic load and basic load strength e. Calculation of fatigue load and fatigue load strength f. Calculation of extent of noise level and engine emissions g. Specification of parts relating to		

	the design h. Design materials such as load analysis, strength calculation, performance calculation, main block diagram, specification, failure analysis, etc. for various systems (flight control, operation, electronics/electricity, instruments, inlet and exhaust, cooling, fuel, lubricant oil, hydraulic oil, air pressure, vacuum, air conditioning, anti-icing/deicing, fire extinguishing, oxygen, radio, navigation equipment and others) i. Materials for design if any unique structure or parts are used.		
4. Drawing list	The drawing list shall be a list including every drawing number, title and others relating to the design concerned.		
5. Drawings	Drawings shall refer to the drawings relating to the design concerned.		
6. Parts list	Name of parts, part numbers, manufacturer name of parts which are included in the design shall be listed. Name of manufacturer for standard parts shall be excluded.		
7. A plan for repair and alteration (excluding the part related to the repair and alteration design for aircraft)	Work Implementation Plan		
8. Flight Manual	Revised or added parts	Currently approved Flight Manual	
9. Maintenance Procedure Manual (limited to the part revised	Revised or added parts	Currently approved Document for Maintenance procedure	
10. Documents describing items for computing weight and center of gravity of the aircraft	Among the items below, items to be changed or added by the design concerned shall be described in the documents. However, the Flight Manual may be a substitute for the documents when these items are described in the Flight Manual. a. Weight and center of gravity of airframe		

	b. Name, weight and center of gravity of each equipment c. Useable capacity and center of gravity of each fuel tank d. Others		
11. Other reference materials	The documents “a” through “l” of (1) shall be prepared and submitted when the design concerned affects the type design of the aircraft. When data from a manufacturer of an aircraft etc. shall be utilized for preparation, the source of data shall be clarified. (1) a. Compliance check list plan b. Aerodynamics and hydrodynamics test plan c. Partial load test plan d. Static load test plan e. Fatigue load test plan f. Dynamic load test plan g. Vibration test plan h. Various functional test plan i. Flight test plan j. Noise measurement plan k. Measurement plan for engine emissions l. Instructions for publishing service bulletin and related material Refer to Circular No. 1-013. m. Test plan, test reports and other materials designated as necessary by an appointed inspector in charge. An original draft of Minimum Equipment List and Configuration Deviation List, if these documents will be developed (2) Table of aircraft current condition (same as Form I-1 in Chapter I "Airworthiness Certification")	Registration Certificate, Airworthiness Certificate, and aircraft logbook held on the time of inspection	
	(3) Specifics of the work Specifics of the work which comes under the items requiring inspection for repair and alteration	Checklist or its equivalent for the work which comes under items requiring inspection of repair or alteration	
	(4) Records of corrective actions adopted for malfunctions Record describing condition of corrective actions adopted for malfunctions discovered during the	Record describing contents of malfunctions discovered during the work which	

	work which comes under items requiring inspection for repair and alteration	comes under the items requiring inspection of repair or alteration	
	(5) Study documents for repair or alteration work List of design change inspection (List of compliance inspection, as required)	Drawing or its equivalent to confirm the configuration, etc. (limited to the case where it is necessary)	
	(6) Records of measurement Records of measurement of weight and center of gravity (7) Records of in house ground test and corrective actions adopted for malfunctions (a)The in house ground test record: Record confirmed by the qualified mechanic (b) Record of corrective actions adopted for malfunctions during in house ground test: Record describing condition of corrective actions adopted for malfunctions discovered during in house ground test.	Records of measurement specially performed for the work which comes under the items requiring inspection of repair or alteration	
	(8) Records of in house flight test and corrective actions adopted for malfunctions (a) Record of in house flight test: Record confirmed by the qualified mechanic with comments of the pilot in charge (b) Records of corrective actions adopted for malfunctions during in house flight test: Record describing condition of corrective actions adopted for malfunctions discovered during in house flight test		
	(9) Records of ground test and corrective actions adopted for malfunctions at official inspection (a) Record of ground test at official inspection (b) Record of corrective actions adopted for malfunctions during ground test at official inspection: Record describing condition of corrective actions adopted for		

	malfunctions discovered during ground test at official inspection		
	(10) Records of flight test and corrective actions adopted for malfunctions at official inspection (a) Record of flight test at official inspection (b) Record of corrective actions adopted for malfunctions during flight test at official inspection: Record describing condition of corrective actions adopted for malfunctions discovered during flight test at official inspection		

(Note 1) For details of the form of documents certifying that Repair Design has been approved by the U.S. FAA, see Circular No.3-026 "Handling of Repair Design Data Approved by the U.S. Federal Aviation Administration", Section 3.

(Note 2) Methods instructed by designers showing that they have received approval, etc. (such as Maintenance Manual, etc.) are also included.

3-6 Aircraft other than those listed in 3-1～3-3 (the case where repair or alteration design approval has not been obtained)

(a) Overview of the inspection

Since the design of aircraft falling under this paragraph has not been approved by the JCAB or State of Design, inspections for plans of repair or alteration (including design), processes, and current conditions after completion of works shall be performed without omission.

Applicants coordinate with inspector in charge in advance regarding the inspection and shall decide the certification method for the conformity of the design standards, documents for submission and timing for submission, attendance to the test, necessity of ground test and flight test, schedule and others.

(i) Inspection of the plan

- Compliance with the applicable standards shall be examined by check king documents submitted.
- The inspector in charge shall attend to the tests, as necessary. Examples of test are static load test, flammability test, fire containment test, EMI flight test and ground test, measurement of level of noise or engine emission s and others.
- With regard to the personnel, tools, work plans, etc., the state if the work can be commenced shall be examined by checking documents submitted.

(ii) Inspection of the process

- Inspection of the actual work process based on the plan inspected above shall be conducted.
- Inspection for manufacturing and conformity inspection of parts, and inspection for method of quality control shall be conducted, as necessary.

(iii) Inspection on current condition after completion of work

- Visual inspection after completion, and ground test and flight test shall be conducted, as necessary.

(iv) Other

・In a case that Flight Manual is revised, the contents of the revision in Flight Manual submitted shall be examined and approved.

(b) Documents to be Submitted ("Aircraft other than those specified in paragraph (2) of the following article" in Classification 3 under Article 25 paragraph 2 of the Regulations)

(1) Before starting work

With regard to the inspection of the design, the content of the documents to be attached for the inspection for repair and alteration shall be as follows, in principle, by applying mutatis mutandis the type certification.

1. Design plan (initial stage of design)

Following matter shall be described.

a. Purpose, use, characteristics, etc. of the design

b. Airworthiness category, type and model, and serial number of the aircraft to which the design shall be applied

c. Name of designer in charge of the design and name of coordinator in charge to liaise with the authority with regard to the design

d. Estimated schedule for design, manufacture and repair and alteration etc.

e. Major parts and name of manufacturer of them, and schedule of manufacture

f. General description of the design

g. Description of special manufacturing methods, if any.

h. Test related matters

Description about strength test, functional test, flight test, measurement of noise level, measurement of engine emissions and others including locations, facilities, test equipment, schedule and others

(Note) The design plan for the design facilitates disclosure of the outline of the design to Authority concerned before the inspection. Though it is recommended to submit a complete set of documents at an early stage, submission of documents one by one up on completion will be accepted. When any contents shall be changed as the design is being fixed, the revision of contents in the design plan is not forced as long as the matter has been informed to the authority by some means.

2. Design document

Among items described below, items which shall affect the type design of the aircraft concerned under the design shall be prepared and submitted. When data from a manufacturer of an aircraft etc. shall be utilized for preparation, the source of data shall be clarified.

a. Calculation of weight and center of gravity

b. Calculation of performance

c. Calculation of stability and controllability

d. Calculation of basic load and basic load strength

e. Calculation of fatigue load and fatigue load strength

f. Calculation of extent of noise level and engine emissions

g. Specification of parts relating to the design

h. Design materials such as load analysis, strength calculation, performance calculation, main block diagram, specification, failure analysis, etc. for various systems (flight control,

operation, electronics/electricity, instruments, inlet and exhaust, cooling, fuel, lubricant oil, hydraulic oil, air pressure, vacuum, air conditioning, anti icing/deicing, fire extinguishing, oxygen, radio, navigation equipment and others)

i. Materials for design if any unique structure or parts are used.

3. Drawing list

The drawing list shall be a list including every drawing number, title and others relating to the design concerned.

4. Drawings

Drawings shall refer to the drawings relating to the design concerned.

5. Parts list

Name of parts, part numbers, manufacturer name of parts which are included in the design shall be listed. Name of manufacturer for standard parts shall be excluded.

6. A plan for repair and alteration (excluding the part related to the repair and alteration design for aircraft)

Work Implementation Plan

7. Flight Manual

Flight Manual shall contain matters specified under Article 5-4 of the Regulations. Refer to Attachment I-2 to Chapter I "Airworthiness Certification" for guidelines on preparation. The matters to be changed or added by the design approval concerned shall be entered.

8. Maintenance Procedure Manual (limited to the part revised

Maintenance Procedure Manual shall contain matters specified under Article 5-5 of the Regulations. Refer to Attachment 1-3 to Chapter I "Airworthiness Certification" for guidelines on preparation. The matters to be changed or added by the design concerned shall be entered.

9. Documents describing items for computing weight and center of gravity of the aircraft

Among the items below, items to be changed or added by the design concerned shall be described in the documents. However, the Flight Manual may be a substitute for the documents when these items are described in the Flight Manual.

a. Weight and center of gravity of airframe

b. Name, weight and center of gravity of each equipment

c. Useable capacity and center of gravity of each fuel tank

d. Others

10. Documents describing reference materials in addition to those listed in each of the preceding

These shall be the documents describing below.

The documents “a” through “l” among the documents described below shall be prepared and submitted when the design concerned affects the type design of the aircraft. When data from a manufacturer of an aircraft etc. shall be utilized for preparation, the source of data shall be clarified.

a. Compliance check list plan
b. Aerodynamics and hydrodynamics test plan
c. Partial load test plan
d. Static load test plan
e. Fatigue load test plan
f. Dynamic load test plan
g. Vibration test plan
h. Various functional test plan
i. Flight test plan
j. Noise measurement plan
k. Measurement plan for engine emissions
l. Instructions for publishing service bulletin and related material
Refer to Circular No. 1-013.
m. Test plan, test reports and other materials designated as necessary by an appointed inspector in charge. An original draft of Minimum Equipment List and Configuration Deviation List, if these documents will be developed
n. Table of aircraft current condition (same as Form I-1 in Chapter I "Airworthiness Certification")
o. Specifics of the work
Specifics of the work which comes under the items requiring inspection for repair and alteration
p. Records of corrective actions adopted for malfunctions
Record describing condition of corrective actions adopted for malfunctions discovered during the work which comes under items requiring inspection for repair and alteration
q. Study documents for repair or alteration work
List of design change inspection (List of compliance inspection, as required)
r. Records of measurement
Records of measurement of weight and center of gravity
t. Records of in house ground test and corrective actions adopted for malfunctions
(a)The in house ground test record:
Record confirmed by the qualified mechanic
(b) Record of corrective actions adopted for malfunctions during in house ground test:
Record describing condition of corrective actions adopted for malfunctions discovered during in house ground test.
u. Records of in house flight test and corrective actions adopted for malfunctions
(a) Record of in house flight test:
Record confirmed by the qualified mechanic with comments of the pilot in charge
(b) Records of corrective actions adopted for malfunctions during in house flight test:
Record describing condition of corrective actions adopted for malfunctions discovered during in house flight test
v. Records of ground test and corrective actions adopted for malfunctions at official inspection
(a) Record of ground test at official inspection
(b) Record of corrective actions adopted for malfunctions during ground test at official inspection:
Record describing condition of corrective actions adopted for malfunctions discovered

during ground test at official inspection

w. Records of flight test and corrective actions adopted for malfunctions at official inspection

(a) Record of flight test at official inspection

(b) Record of corrective actions adopted for malfunctions during flight test at official inspection:

Record describing condition of corrective actions adopted for malfunctions discovered during flight test at official inspection

4. Procedures for Inspection of Repair or Alteration

4-1 Instructions for completing application form and for submitting the completed form and documents

(1) Instructions for completing application form for inspection of repair or alteration

(a) Address of applicant or location of a head office, and name or firm of applicant

In principle, the applicant shall be the user of the aircraft for which the application is submitted.

However, an owner of the aircraft, a person involved in the repair or alteration work concerned and others who shall be recognized as a representative may also submit an application. (Refer to Circular No.1-017.)

(b) Classification, nationality mark and registration mark, type of the aircraft, type certificate number, serial number, manufacturing date, maximum takeoff weight, airworthiness category, applicable standards of Article 10, paragraph 4 of Law, airworthiness certificate number, the term of validity for the airworthiness certificate

These matters described above shall be consistent with the accompanying documents to be submitted at the time of inspection.

(c) Classification of fee

The classification of the fee concerned specified under the Cabinet Order shall be entered.

(d) Applicability for inspections for measurement of level of noise or engine emissions

When the actual measurement of noise levels and engine emissions shall be required on the inspection concerned, matters shall be clarified as the following examples: “noise measurement is required”, “Measurement of engine emissions (excluding carbon dioxide) is required” or “measurement of noise levels and engine emissions (limited to carbon dioxide) are required”, otherwise “not required”.

(e) Proposed location and date of inspection by an applicant

The location and date proposed by an applicant may be entered into an application form. However, as the location and date proposed may not be available sometimes, the location and the date shall be coordinated with the inspector in charge prior to the inspection.

(f) Reason for repair or alteration

Applicable classification specified under Article 24 of the Regulations shall be entered as the following examples: “Major repair and noise related repair” or “Minor repair, noise

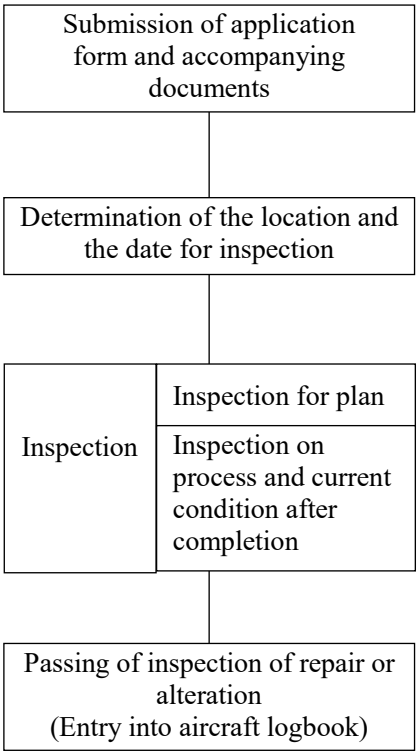
related alteration and engine emissions related alteration" etc.

(2) Instructions for submitting the completed form and documents

(a) If the proposed location of inspection is located in Niigata, Nagano, Shizuoka and eastward, the address shall be:
Inspection and Crew Section, Operations Division,
Air Traffic Service and Safety Department,
East Japan Civil Aviation Bureau
Kudan Daini Godochosha
1-1-15 Kudan-Minami, Chiyoda-ku, Tokyo, 102-0074
TEL: 03-5275-9292

(b) If the proposed location of inspection is located in Toyama, Gifu, Aichi and westward, the address shall be:
Inspection and Crew Section, Operations Division,
Air Traffic Service and Safety Department,
West Japan Civil Aviation Bureau
No.4 Building of Osaka Godochosha
4-1-76 Otemae, Chuo-ku, Osaka-shi, Osaka-fu, 540-8559
TEL: 06-6949-6211

4-2 The flowchart regarding submission of application form and documents, inspection and issuance of approval



- The accompanying documents (excluding other reference materials) shall be attached to the application form.
- Coordination shall be made on the matters with inspector in charge.
- Permission for commencement of work shall be obtained.
- Other reference materials shall be submitted.

Attachment IV-1 Fees for inspection for repair and alteration

1. Overview

Based on the Cabinet Order to amend Order for Civil Aeronautics Law (CAL) Related Fees and Order for Enforcement of Act for Establishment of the Japan Transport Safety Board partially (Cabinet Order No. 166 of 2020), the Order for Civil Aeronautics Law Related Fees was amended. As a result, fees for inspection for repair and alteration are reduced when repair or alteration is performed based on the following designs (hereafter referred to as "approved design."

(1) Design approved under Article 13 paragraph 1, Article 13-2 paragraph 1 or 3, or Article 18 paragraph 1 of the CAL

(2) Design for repair or alteration of aircraft for which the Minister of Land, Infrastructure, Transport and Tourism deems that a foreign state as a contracting state to the Convention on International Civil Aviation has approved or otherwise acted in accordance with standards and procedures equivalent to or higher than those of Japan with regard to airworthiness, noise or emissions from engines

(3) In a foreign country recognized by the Minister of Land, Infrastructure, Transport and Tourism as having standards and procedures equivalent to or higher than those of Japan with regard to approval or other actions concerning the design capability of aircraft, design for repair or alteration that a person, who has obtained such approval or other actions in accordance with the relevant standards and procedures, designed and confirmed the airworthiness, noise or engine emissions.

This attachment provides examples of cases where the fee for inspection for repair and alteration shall be reduced. However, in the event of a reduction, cases are not limited to written in this attachment. You should consult with the airworthiness engineer's office if you are not sure whether the design falls under any case of the above (1) to (3).

2. Cases where fees are reduced when major repairs or alterations of aircraft are performed and Documents to be attached under Article 25, paragraph 2 of the Regulations

2-1 Aircraft obtained type certification in our country (excluding imported aircraft).

	Approved design of which inspection fee can be reduced	Documents to be attached
Major repair	• A design approved for repair and alteration design (or its change) under Article 18 paragraph 1 or 3 of the CAL	A copy of the Repair and Alteration Design Approval
	• A repair design confirmed by an Approved Design Organization for Aircraft under Article 18 paragraph 2 or 4 of the CAL	Design statement of conformity
Alteration	• A design obtained the type design change approval under Article 13 paragraph 1 of the CAL	A copy of the type certificate
	• A design obtained the supplemental type design (or its change) approval under Article 13-2 paragraph 1 or 3 of the CAL	A written acknowledgment of supplement type design

	• A design confirmed by an Approved Design Organization for Aircraft under Article 13 paragraph 4 or Article 13-2 paragraph 4 of the CAL	Design statement of conformity

2-2 Aircraft obtained type certification in our country (Imported aircraft)

	Approved design of which inspection fee can be reduced	Documents to be attached
Major repair	• A design approved for repair and alteration design (or its change) under Article 18 paragraph 1 or 3 of the CAL	A copy of the Repair and Alteration Design Approval
	• A repair design confirmed by an Approved Design Organization for Aircraft under Article 18 paragraph 2 or 4 of the CAL	Design statement of conformity
(Aircraft imported from the US)	• A repair design approved or performed other acts by the FAA or DER	FAA Form 8100-3 ("Approve these data" must be checked in the certification column) or FAA Form 337
	• A repair design approved or performed other acts by ODA approved by the FAA	FAA Form 8100-9 ("Approve these data" must be checked in the certification column)
(Aircraft imported from Europe)	• A repair design approved or performed other acts by EASA • A repair design approved or performed other acts by an organization approved by EASA	Since there is no unified forms made by EASA, judgment shall be made on a case-by-case basis.
(Aircraft imported from Canada)	• A repair design approved or performed other acts by Canada TCCA • A repair design approved or performed other acts by an organization approved by Canada TCCA	Since there is no unified forms made by TCCA, judgment shall be made on a case-by-case basis.
(Aircraft imported from Brazil)	• A repair design approved or performed other acts by Brazil ANAC • A repair design approved or performed other acts by an organization approved by Brazil ANAC	ANAC Form F-200-06
Alteration	• A design obtained the type design change approval under Article 13 paragraph 1 of the CAL	A copy of the type certificate
	• A design obtained the supplemental type design (or its change) approval under Article 13-2 paragraph 1 or 3 of the CAL	A written acknowledgment of supplement type design
	• A design confirmed by an Approved Design Organization for Aircraft under Article 13 paragraph 4 or Article 13-2, paragraph 4 of the CAL	Design statement of conformity

2-3 Aircraft which has not obtained type certification in our country (Imported aircraft)

	Approved design of which inspection fee can be reduced	Documents to be attached
Major repair (Aircraft imported from the US)	• A design approved for repair and alteration design (or its change) under Article 18 paragraph 1 or 3 of the CAL	A copy of the Repair and Alteration Design Approval
	• A repair design confirmed by an Approved Design Organization for Aircraft under Article 18 paragraph 2 or 4 of the CAL	Design statement of conformity
	• A repair design approved or performed other acts by the FAA or DER	FAA Form 8100-3 ("Approve these data" must be checked in the certification column) or FAA Form 337
	• A repair design approved or performed other acts by ODA approved by the FAA	FAA Form 8100-9 ("Approve these data" must be checked in the certification column)
(Aircraft imported from Europe)	• A repair design approved or performed other acts by EASA • A repair design approved or performed other acts by an organization approved by EASA	Since there is no unified forms made by EASA, judgment shall be made on a case-by-case basis.
(Aircraft imported from Canada)	• A repair design approved or performed other acts by Canada TCCA • A repair design approved or performed other acts by an organization approved by Canada TCCA	Since there is no unified forms made by TCCA, judgment shall be made on a case-by-case basis.
(Aircraft imported from Brazil)	• A repair design approved or performed other acts by Brazil ANAC • A repair design approved or performed other acts by an organization approved by Brazil ANAC	ANAC Form F-200-06
Alteration	- A design approved for repair and alteration design (or its change) under Article 18 paragraph 1 or 3 of the CAL	A copy of the Repair and Alteration Design Approval
	- Minor changes of design made by said aircraft manufacturer and accepted by the State of Manufacturing	Documents which prove the approval of the State of Manufacturing

(Note) Methods instructed by the designer which show that it has been approved as attached documents for imported aircraft (such as Maintenance Manuals, etc.) are acceptable.

V. Repair and Alteration Design Approval

1. Overview

This Chapter V describes on the general policy, application procedures and documents to be submitted with regard to the repair and alteration design approval stipulated in Article 18 of the CAL.

Circular 1-003 "Procedures for Type Certification of Japanese Manufactured Aircraft" describes the details work for the repair and alteration design for the Japanese manufactured aircraft.

In addition, inspection for repair and alteration design for imported aircraft which has not been approved or performed other acts by a foreign country which has a bilateral agreement, etc. with Japan is pursuant to above Circular 1-003.

Repair and alteration design of imported aircraft listed in Part IV, 3-2 is treated as having been approved by our country in the inspection for repair and alteration, etc., and therefore, it is not required to obtain the repair and alteration design approval again.

2. Applicable scope of repair and alteration design, and its meaning

2-1 Scope of Application

(a) Design for repair

When some design changes are made for the repair of airworthiness certified aircraft, an application for repair and alteration design approval may be submitted regardless of the degree of change,.

With regard to a partial design change for repair that occurred on aircraft which has foreign airworthiness certification, an application for repair and alteration design approval may be submitted limited to types of aircraft which were designed and manufactured in Japan.

Also, an application for repair and alteration design approval for Structural Repair Manual (SRMs) may be submitted.

(b) Design for alteration

Design changes for alteration applicable to aircraft which have obtained the type certificate in our country are approved by type design change or supplemental type design.

When design changes for alteration of aircraft which have not obtained the type certificate in our country is performed, an application for repair and alteration design approval may be submitted regardless of the degree of change. In this case, if the said alteration is applied for the first time, an application for inspection for repair and alteration must be submitted at the same time.

2-2 Meaning

Inspection for design is omitted in the inspection for repair and alteration for aircraft of which design was changed based on the repair and alteration design approval.

In addition, the work of repair and alteration based on the repair and alteration approval can be carried out and confirmed by approved organizations.

In cases where such repair and alteration are slight, it shall be handled as minor repair.

(For handling as minor repair, see Chapter IV paragraph 2 item 2-2(2) (d))

It is also possible to obtain repair and alteration design approval for multiple aircraft. When repair and alteration design for airframe subjected is inspected, the inspection for planning can be omitted partially if the design is based on this repair and alteration design approval.
Since inspection for repair and alteration is an inspection to confirm the conformity with the standards for one aircraft in the application, inspection for the design in the inspection for repair and alteration cannot be omitted when design that has passed an inspection for repair and alteration is applied to another aircraft
If you want to apply the design to multiple aircraft, you must obtain the repair and alteration design approval.

3. Documents to be submitted for repair and alteration design approval and outlines of the inspection

(1) Documents to be submitted

The content of the documents to be attached for the application for repair and alteration design approval shall be as follows, in principle, by applying mutatis mutandis the type certification.

(a) Design plan for the repair and alteration design

Following matter shall be described.

a. Purpose, use, characteristics, etc. of the repair and alteration design
b. Airworthiness category, type and model, and serial number of the aircraft to which the repair and alteration design shall be applied
c. Name of designer in charge of the repair and alteration design and name of coordinator in charge to liaise with the authority with regard to the design
d. Estimated schedule for design
e. Major parts and name of manufacturer of them, and schedule of manufacture
f. General description of the repair and alteration design
g. Description of special manufacturing methods, if any.
h. Test related matters

Description about strength test, functional test, flight test, measurement of noise level, measurement of engine emissions and others including locations, facilities, test equipment, schedule and others

(Note) The design plan for the repair and alteration design facilitates disclosure of the outline of the design to Authority concerned before the inspection. Though it is recommended to submit a complete set of documents at an early stage, submission of documents one by one up on completion will be accepted.

When any contents shall be changed as the design is being fixed, the revision of contents in the design plan is not forced as long as the matter has been informed to the authority by some means.

(b) Design document

Among items described below, items which shall affect the type design of the aircraft concerned under the repair and alteration design shall be prepared and submitted.

When data from a manufacturer of an aircraft etc. shall be utilized for preparation, the source of data shall be clarified.

a. Calculation of weight and center of gravity

b. Calculation of performance
c. Calculation of stability and controllability
d. Calculation of basic load and basic load strength
e. Calculation of fatigue load and fatigue load strength
f. Calculation of extent of noise level and engine emissions
g. Specification of parts relating to the repair and alteration design
h. Design materials such as load analysis, strength calculation, performance calculation, main block diagram, specification, failure analysis, etc. for various systems (flight control, operation, electronics/electricity, instruments, inlet and exhaust, cooling, fuel, lubricant oil, hydraulic oil, air pressure, vacuum, air conditioning, anti icing/deicing, fire extinguishing, oxygen, radio, navigation equipment and others)
i. Materials for design if any unique structure or parts are used.

(c) Drawing list

The drawing list shall be a list including every drawing number, title and others relating to the repair and alteration design concerned.

(d) Drawings

Drawings shall refer to the drawings relating to the repair and alteration design concerned.

(e) Parts list

Name of parts, part numbers, manufacturer name of parts which are included in the repair and alteration design shall be listed. Name of manufacturer for standard parts shall be excluded.

(f) Specification

Among items described below, items which shall affect the type design of the aircraft concerned under the repair and alteration design shall be prepared and submitted.

The word "no change" shall be entered for items not affected.

a. Type and serial number of the aircraft to which the repair and alteration design is applied
b. Type and number of engine, propeller or rotor blade
c. Name and address of designer and manufacturer of the repair and alteration design (in case of corporation, its name and location of a head office)
d. Airworthiness category and applicable standards
e. The main dimensions of the aircraft including the range of deflection of angle of the control surfaces
f. Weight and center of gravity
g. Limit load factor
h. Air speed limitation
i. Allowable flight characteristics peculiar to the aircraft
j. Maximum operating altitude or maximum altitude of autorotation landing
k. Specifications and necessary charts related to engine operation
l. Grade of fuel, lubricant oil standard.
m. Total capacity of fuel tanks and oil tanks, unusable capacity
n. Kind of equipment and parts (matters concerning g the repair and alteration design)
o. Limit of cross wind

p. Minimum crew, maximum passengers
q. Water limitation
r. Necessary signs and placards
s. Safe life of structure members
t. Noise level
u. Level of engine emissions

(g) Flight Manual

Flight Manual shall contain matters specified under Article 5-4 of the Regulations. Refer to Attachment I-2 to Chapter I "Airworthiness Certification" for guidelines on preparation.

The matters to be changed or added by the repair and alteration design approval concerned shall be entered.

(h) Maintenance Procedure Manual (limited to the part revised

Maintenance Procedure Manual shall contain matters specified under Article 5-5 of the Regulations.

Refer to Attachment 1-3 to Chapter I "Airworthiness Certification" for guidelines on preparation.

The matters to be changed or added by the repair and alteration design concerned shall be entered.

(i) Documents describing items for computing weight and center of gravity of the aircraft

Among the items below, items to be changed or added by the repair and alteration design concerned shall be described in the documents.

However, the Flight Manual may be a substitute for the documents when these items are described in the Flight Manual.

a. Weight and center of gravity of airframe
b. Name, weight and center of gravity of each equipment
c. Useable capacity and center of gravity of each fuel tank
d. Others

(j) A document certifying that the inspection has been confirmed in accordance with provision of Article 39-4 paragraph 1 of the Regulations. (Limited to aircraft listed in Article 26-4 paragraph 2 of the Regulations.)

(k) Documents describing reference materials in addition to those listed in each of the preceding

These shall be the documents describing below.

The documents "a" through "l" among the documents described below shall be prepared and submitted when the repair and alteration design concerned affects the type design of the aircraft.

When data from a manufacturer of an aircraft etc. shall be utilized for preparation, the source of data shall be clarified.

a. Compliance check list plan
b. Aerodynamics and hydrodynamics test plan
c. Partial load test plan
d. Static load test plan

e. Fatigue load test plan
f. Dynamic load test plan
g. Vibration test plan
h. Various functional test plan
i. Flight test plan
j. Noise measurement plan
k. Measurement plan for engine emissions
l. Instructions for publishing service bulletin and related material
Refer to Circular No. 1-013.
m. Test plan, test reports and other materials designated as necessary by an appointed airworthiness engineer in charge. An original draft of Minimum Equipment List and Configuration Deviation List, if these documents will be developed
n. Repair (Alteration) procedure manual
(Note) Repair (Alteration) Procedures refers to a document which shows the procedure on the repair and alteration prepared by a person who has obtained the repair and alteration design approval for a person who performs the repair and alteration work.
It corresponds to Manufacturing and Installation Instruction Drawings in Supplemental Type Certification approval in foreign countries.

(2) Outline of inspection etc.
(a) Application
a. An applicant shall be limited to the designer of the repair and alteration design.
b. An applicant shall have responsibility for the repair and alteration design concerned.
(b) Certification basis of repair and alteration design
a. An applicant shall submit the design plan for repair and alteration design at an early stage of the design and explain the outline of the repair and alteration design, procedures for substantiation, special remarks regarding the design and substantiation.
b. Certification basis for repair and alteration design shall be the certification basis to which has been applied upon type certification for the aircraft concerned by Japanese Authority. However, when the repair and alteration design shall seriously affect airworthiness, the certification basis shall be determined after discussing the possibility of practical application of the latest requirements directly related to the parts or area affected by the changes between Authority and applicant. When the special conditions, exemption and substantiation of equivalent safety shall be prescribed, they shall be determined after discussing with Authority and applicant.
For details on the certification basis, see Circular 1-302 “Policy for Establishing Certification Basis.”
(c) Outline of inspection
Procedures for substantiation, documents for submission and timing for submission, attendance to the test, necessity of ground test and flight test, schedule and others shall be decided after advance coordination regarding the inspection with airworthiness engineer in charge.
a. Evaluation of design
- Compliance with the applicable standards shall be examined by checking documents submitted.

- The airworthiness engineer in charge shall attend to the tests, as necessary. Examples of test are static load test, flammability test, fire containment test, EMI flight test and ground test, measurement of level of noise or engine emission s and others.

b. Others

- In a case that Flight Manual is revised, the contents of the revision in Flight Manual submitted shall be examined and approved.

(Note) When the repair and alteration design is applicable to one or more types of aircraft, substantiation for compliance with the applicable standards through documents or tests shall be required for each type, if necessary.

(d) Issuance of approved certificate

When the repair and alteration design is determined compliance with the applicable standards, the certificate of repair and alteration design approval shall be issued to the applicant.

(1) The language to be used for approved certificate shall be Japanese. If the applicant wishes the approved certificate in English, a tentative translation is attached.

(2) Descriptions of "Remarks" in the approved certificate

Matter described in the "Remarks" of the certificated of repair and alteration design approval is shown below, but not limited to them.

a. Overview of the damage

b. Outline of the repair and alteration design

c. Description about equivalent means of compliance for TCD (Japanese AD) (if necessary)

d. Limitations

However, if the judgement of compliance needs to be done step-by-step due to the reasons such as necessary substantiation for repair and alteration, e.g., evaluation of damage tolerance, cannot be completed, the approval may be issued with the conditions regarding operational limitation or implementation time limit.

Examples of limitation imposed when repair and alteration design is approved with some conditions are shown below, but not limited to them.

Submit matters on necessary aircraft configuration, flight conditions and flight limitation etc. required for the flight, if it is obvious that the next flight after temporary repair applies the provision in the proviso of article 11 of the CAL.The aircraft user or owner must obtain the permission under the proviso of Article 11 of the CAL. In addition, in cases where it is an aircraft registered in foreign country and it is obvious that flight with special flight permit, etc. of the State of Operator will be carried out, similar measures are necessary.

(a) In cases where repair and alteration related to structures that require a fatigue and damage tolerance evaluation, the evaluation must be completed and the repair and alteration design approval must be obtained within 12 months from the date of the limited repair and alteration design approval of which evaluation for static strength has been completed.

(b) With regard to the interim repair on structures related to equivalent means of compliance for TCD (Japanese AD), it must have at least twice as much durability as

the inspection intervals for said structures. However, it should not below 18 months in view of the operational status of the aircraft,

(c) For the interim repair on structures related to equivalent means of compliance for TCD (Japanese AD), it shall be replaced by a permanent action by the next inspection for the structure concerned. However, it must not exceed 24 months.

e. Information on aircraft or components (serial number and use time of the relevant aircraft or components (including cycles))

f. Documents subject to be approved

g. Items subject to the Airworthiness Inspection Manual

h. Handling of the sale of aircraft or equipment

(3) The reverse side of the approved certificate

If there is not enough margin in the "Remarks" of the approved certificate, the reverse side of the certificate can also be used.

(4) When an approval is issued, a condition that the approval holder shall notify the authority (the person who issued the approved certificate) of the changes when they perform the slight design changes which don't affect the airworthiness and of which approval under Article 13-2 paragraph 3 of the CAL are not required, such as following examples, may be added.

[Examples of slight change]

(a) Installation, relocation and removal of cabin equipment, galley equipment and other small items which don't affect the emergency escape and the safety of passengers and crew.

(b) Change in cabin interior without changing materials.

(c) Changes in entertainment system software.

(d) Change s in marking and placard s do not fall under Circular No. 1 008.

(e) Correction of obvious errors in the attached drawings, addition of annotations, clarification of work procedures, etc.

4. Change of repair and alteration design

4-1 Procedures for change for repair and alteration design

Any person who has obtained a repair and alteration approval shall, when he or she intends to change the approved design concerned, obtain approval from the Minister of Land, Infrastructure, Transport and Tourism. (Article 18, paragraph 3 of the CAL)

4-2 Documents to be submitted

The documents of matters which shall be affected by the change concerned shall be submitted according to paragraph 3-1 (1).

In the case where a design which was confirmed by an approved design organization for aircraft is changed, documents which were used for the said confirmation shall also be submitted if necessary.

4-3 Outline of inspection, etc.

(1) Application

An application shall be made according to paragraph 3-1 (2) (a).

In the case of an application for approval for a change for repair and alteration design, a person who obtained the repair and alteration design approval or an approved design organization for

aircraft who confirmed the conformity with the standards for the repair and alteration design can make the application. (Article 18, paragraph 3 of the CAL)

(2) Certification basis

The standards applied to the change concerned shall be the same as that applied to the repair and alteration design approval.

(3) Outline of inspection

The area which is affected by the change concerned shall be inspected according to paragraph 3-1 (2) (c).

(4)Issuance of approved certificate

When the change for repair and alteration design is determined compliance with the applicable standards, new certificate of the repair and alteration design approval shall be issued to the applicant.

5 Procedures for repair and alteration design approval

5-1 Instructions for completing application form for repair and alteration design approval and application form for change for repair and alteration design, and for submitting the completed form and documents

(1) Instructions for completing application forms etc.

(a) Application form for repair and alteration design approval

a. Address of applicant or location of a head office, and name or firm of applicant

The above items shall be entered about a person who intends to obtain the repair and alteration design approval concerned. In case of an application by a representative, the above items pertinent to the representative shall also be entered.

b. Aircraft category, type and model, type certificate n umber, serial number, airworthiness category of the aircraft, applicable standards under Article 10, standards to be applied under Article 10 paragraph 4 of the CAL, name or firm of the designer, address of the designer, name or firm of the manufacturer, address of the manufacturer

c. Name or firm of the designer who performs the repair and alteration design and address of the designer

d. Contents of repair and alteration design

The contents of the repair and alteration design shall be described simply.

e. Proposed location of inspection

Proposed location of inspection should be written in the remarks column.

f. Proposed time to obtain repair and alteration design of Japan

Enter the time when the applicant wishes to obtain the repair and alteration design approval in the remarks column

(b) Application form for change for repair and alteration design

In accordance with paragraph (a), application form shall be completed and submitted.

(2) Instructions for submitting the completed form

(a) In the case of an application for a repair and alteration design pertaining to a domestically produced aircraft

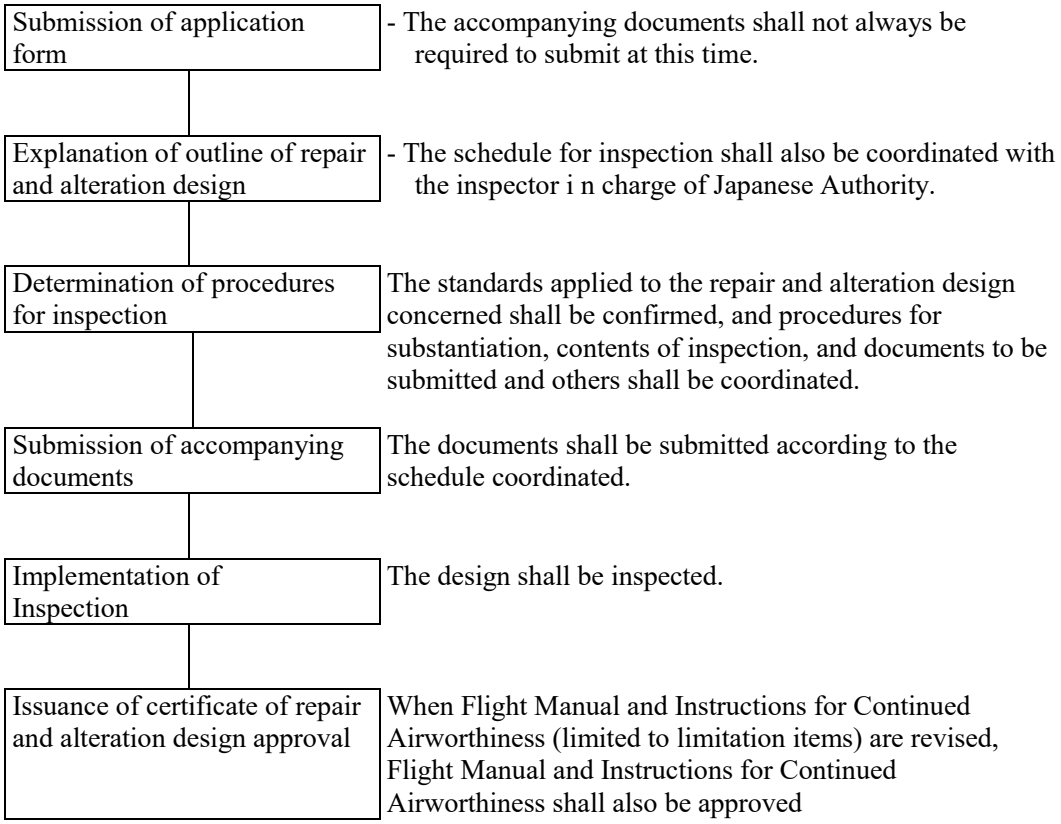
Aircraft Engineering and Certification Center, Airworthiness Division, Aviation Safety and Security Department, Civil Aviation Bureau, Ministry of Land, Infrastructure, Transport and Tourism of Japan

Ohaza Toyoba, Toyoyama-cho, Nishikasugai-gun, Aichi Prefecture (in the Prefectural Nagoya Airport Administrative Building)
TEL 0568-29-1985

(b) In the case of an application for a repair and alteration design pertaining to an imported aircraft
Aircraft Engineer, Airworthiness Division, Aviation Safety and Security Department, Civil Aviation Bureau, Ministry of Land, Infrastructure, Transport and Tourism of Japan
2-1-3 Kasumigaseki, Chiyoda-ku, Tokyo
TEL 03-5253-8735

5-2 Flow chart regarding submission of application form and documents, inspection and issuance of certificate of repair and alteration design approval

(1) Repair and alteration design approval



(2) Approval of change for repair and alteration design

Submission of application form for change	- The accompanying documents shall not always be required to submit at this time.
Explanation of outline for design change	Procedures for substantiation, contents of inspection, schedule, documents for submission shall be coordinated.
Submission of accompanying documents	The documents shall be submitted according to the schedule coordinated.
Implementation of Inspection	The design area which is affected by the change shall be inspected.
Issuance of certificate of repair and alteration design approval	When Flight Manual and Instructions for Continued Airworthiness (limited to limitation items) are revised, Flight Manual and Instructions for Continued Airworthiness shall also be approved.

6. Other Necessary Activities charged to the Holder of a Repair and Alteration Design Approval

The holder of a repair and alteration design approval needs to:

(1) Obtain approval for change for repair and alteration design. (Article 18 of the CAL)

(2) Collect information on malfunctions and its equivalents relating to the area concerned to which alteration had been made and provide those information to the relevant authorities. (Article 13-4 of the CAL)

(3) Implement corrective action such as engineering activities for malfunctions and its equivalents caused by defect in design and manufacture. (Article 13-4 of the CAL)

(4) Maintain and keep data (design data, drawings, test reports, inspection records for aircraft products). (Article 13-4 of the CAL)

(5) Produce, update and maintain manuals and provide to aircraft users. (Article 13-3 of the CAL)

(6) Continue airworthiness (including to provide and update the document for maintenance procedure concerning instructions for continued airworthiness).

(7) Provide the procedure manual for alteration (repair) to users.

(8) Methods to provide technical documents should preferably be listed on the web site which enables access online by the Civil Aviation Bureau. However, providing by print or electronic media such as CD ROMs are also acceptable.

For item from (2) to (4) and (6), they must comply with Circular 1-028 "Establishment of Continuous Operational Airworthiness System and Operational Safety Planning Document to be established by design approval holders for domestically manufactured aircraft, etc. under Article 13-4 of the CAL."

VI. Repair and Alteration Design Approval for Components

1. Overview

This Chapter VI describes on the general policy, application procedures and documents to be submitted with regard to the repair and alteration design approval for components stipulated in Article 26-13 of the CAR.

Circular 1-003 "Procedures for Type Certification of Japanese Manufactured Aircraft" describes the details work for the repair and alteration design for the Japanese manufactured aircraft.

In addition, inspection for repair and alteration design for imported aircraft which has not been approved or performed other acts by a foreign country which has a bilateral agreement, etc. with Japan is pursuant to above Circular 1-003.

Repair and alteration design of imported aircraft listed in Part IV, 3-2 is treated as having been approved by our country in the inspection for repair and alteration, etc., and therefore, it is not required to obtain the repair and alteration design approval again.

2. Applicable scope of repair and alteration design, and its meaning

2-1 Scope of Application

(1) With regards to components with a type/specification approval by Japanese Authority, a partial change of the design for repair or alteration will be treated as follows:

①When a design change is performed by a type or specification approval holder

The change will be approved by a change of type or specification approval. (Refer to Circular No.1-004 "General Policy for Approval of Types and Specifications of Appliances.")

②If a design change is performed by a person other than a type or specification approval holder,

The change will be approved by an approval of the repair and alteration design for components.

(2) When the design change for repair or alteration of components which have not obtained the type/specification approval by Japanese Authority is performed, an application for repair and alteration design approval for components may be submitted regardless of the degree of change.

In addition, when a component repaired or altered based on a design with a repair and alteration design approval for components is installed to aircraft, depending on classification of work, an inspection for repair and alteration or confirmation by an approved organization in accordance with Article 19-2 of the CAL may be necessary.

2-2 Meaning

Inspection for design is omitted in the inspection for repair and alteration for aircraft with components repaired or altered based on a design with repair and alteration design approval.

In addition, the work of repair and alteration for components based on the repair and alteration approval for components can be carried out and confirmed by approved maintenance organizations for parts.

It is also possible to obtain repair and alteration design approval for the same type of components for multiple aircraft. The inspection for planning can be omitted partially if the design of the components is based on this repair and alteration design approval.

Since inspection for repair and alteration is an inspection to confirm the conformity with the standards for one aircraft in the application, inspection for the design in the inspection for repair and alteration cannot be omitted when design that has passed an inspection for repair and alteration is applied to another aircraft
If you want to apply the design of the components to multiple aircraft, you must obtain the repair and alteration design approval.

3. Documents to be submitted for repair and alteration design approval for components and outlines of the inspection

(1) Documents to be submitted

The content of the documents to be attached for the application for repair and alteration design approval for components shall be as follows in principle.

(a) Design plan for the repair and alteration design for components

Following matter shall be described.

a. Purpose, use, characteristics, etc. of the repair and alteration design for components
b. Kinds or name, type and serial number of the component to which the repair and alteration design for components shall be applied
c. Airworthiness category, type and model, and serial number of the aircraft which the component with the repair and alteration design for components will be installed (Describe the aircraft that is supposed to equipped the component at the time of application)
d. Name of designer in charge of the repair and alteration design for components and name of coordinator in charge to liaise with the authority with regard to the design
e. Estimated schedule for design
f. Major parts and name of manufacturer of them, and schedule of manufacture
g. General description of the repair and alteration design
h. Description of special manufacturing methods of components, if any.
i. Test related matters

Description about strength test, functional test, flight test, measurement of noise level, measurement of engine emissions and others including locations, facilities, test equipment, schedule and others

(Note) The design plan for the repair and alteration design for components facilitates disclosure of the outline of the design to Authority concerned before the inspection. Though it is recommended to submit a complete set of documents at an early stage, submission of documents one by one up on completion will be accepted.
When any contents shall be changed as the design is being fixed, the revision of contents in the design plan is not forced as long as the matter has been informed to the authority by some means.

(b) Design document

Among items described below, items which shall affect the design of the component concerned under the repair and alteration design for components shall be prepared and submitted.
When data from a manufacturer of an aircraft etc. shall be utilized for preparation, the source of data shall be clarified.

a. Calculation of weight and center of gravity of the component
b. Specification of components relating to the repair and alteration design for components
c. Design materials such as load analysis, strength calculation, performance calculation, failure analysis, etc. for the component
d. Materials for design if any unique structure or components or parts are used.

(c) Drawing list

The drawing list shall be a list including every drawing number, title and others relating to the repair and alteration design for components concerned.

(d) Drawings

Drawings shall refer to the drawings relating to the repair and alteration design for components concerned.

(e) Parts list

Name of parts, part numbers, manufacturer name of parts which are included in the repair and alteration design shall be listed. Name of manufacturer for standard parts shall be excluded.

(f) Specification

Among items described below, items which shall affect the type design of the aircraft concerned under the repair and alteration design shall be prepared and submitted.
The word "no change" shall be entered for items not affected.

a. Kinds or name, type, serial number and number of the component to which the repair and alteration design for components shall be applied
b. Airworthiness category, type and model, and serial number of the aircraft which the component with the repair and alteration design for components will be installed (Describe the aircraft that is supposed to equipped the component at the time of application)
c. Name and address of designer and manufacturer of the repair and alteration design (in case of corporation, its name and location of a head office)
d. Applicable standards
e. Standards applied
f. Weight and center of gravity of the component
g. Limit load factor
h. Specifications and necessary charts related to engine operation (limited to engine operation)

(g) Maintenance Procedure Manual (limited to the part revised

As necessary items for maintenance of the components, the following matters shall be stated in addition to the matters pertaining to the relevant components among the matters listed in Appendix I-3 of Part I "Airworthiness Certification,"

・Storage (location, period), packaging, transportation and installation (mounting method) of the component.
・Maintenance procedure required to ensure proper functioning after installation
・Adjustment, inspection (including type of inspection, inspection intervals, repair and standards for availability of use) during operation and method of minor disassembly.

The matters to be changed or added by the repair and alteration design for components concerned may be entered.

(h) A document certifying that the inspection has been confirmed in accordance with provision of Article 39-4 paragraph 1 of the Regulations. (Limited to aircraft listed in Article 26-13 paragraph 5 of the Regulations.)

(u) Documents describing reference materials in addition to those listed in each of the preceding
These shall be the documents describing below.
The documents "a" through "l" among the documents described below shall be prepared and submitted when the repair and alteration design for components concerned affects the design of the component. When data from a manufacturer of the component etc. shall be utilized for preparation, the source of data shall be clarified.
a. Compliance check list plan
b. Aerodynamics and hydrodynamics test plan
c. Partial load test plan
d. Static load test plan
e. Fatigue load test plan
f. Dynamic load test plan
g. Vibration test plan
h. Various functional test plan
i. Instructions for publishing service bulletin and related material
Refer to Circular No. 1-013.
j. Test plan, test reports and other materials designated as necessary by an appointed airworthiness engineer in charge. An original draft of Minimum Equipment List and Configuration Deviation List, if these documents will be developed
k. Repair (Alteration) procedure manual
(Note) Repair (Alteration) Procedures refers to a document which shows the procedure on the repair and alteration of the component prepared by a person who has obtained the repair and alteration design approval for a person who performs the repair and alteration work.
It corresponds to Manufacturing and Installation Instruction Drawings in Supplemental Type Certification approval in foreign countries.

(2) Outline of inspection etc.
(a) Application
a. An applicant shall be limited to the designer of the repair and alteration design for components.

b. An applicant shall have responsibility for the repair and alteration design for components concerned.

(b) Certification basis of repair and alteration design for components

a. An applicant shall submit the design plan for repair and alteration design for components at an early stage of the design and explain the outline of the repair and alteration design for components, procedures for substantiation, special remarks regarding the design and substantiation.

b. Certification basis for the repair and alteration design for components shall be the certification basis to which has been applied upon type or specification approval by Japanese Authority, or the certification basis to which has been applied upon type certification (or airworthiness certificate) for the aircraft with the component concerned by Japanese Authority.

However, when the repair and alteration design for the component shall seriously affect airworthiness, the certification basis shall be determined after discussing the possibility of practical application of the latest requirements directly related to the parts or area affected by the changes between Authority and applicant. When the special conditions, exemption and substantiation of equivalent safety shall be prescribed, they shall be determined after discussing with Authority and applicant.

For details on the certification basis, see Circular 1-302 “Policy for Establishing Certification Basis.”

(c) Outline of inspection

Procedures for substantiation, documents for submission and timing for submission, attendance to the test, necessity of ground test and flight test, schedule and others shall be decided after advance coordination regarding the inspection with airworthiness engineer in charge.

a. Evaluation of design

- Compliance with the applicable standards shall be examined by checking documents submitted.
- The airworthiness engineer in charge shall attend to the tests, as necessary. Examples of test are static load test, flammability test, fire containment test, EMI flight test and ground test and others.

b. Others

- In a case that Flight Manual is revised, the contents of the revision in Flight Manual submitted shall be examined and approved.

(Note) When the repair and alteration design for components is applicable to one or more types of aircraft, substantiation for compliance with the applicable standards through documents or tests shall be required for each type, if necessary.

(d) Issuance of approved certificate

When the repair and alteration design is determined compliance with the applicable standards, the certificate of repair and alteration design approval for components shall be issued to the applicant.

(1) The language to be used for approved certificate shall be Japanese. If the applicant wishes the approved certificate in English, a tentative translation is attached.

(2) Descriptions of "Remarks" in the approved certificate

Matter described in the "Remarks" of the certificated of repair and alteration design approval is shown below, but not limited to them.

a. Overview of the damage on the component

b. Outline of the repair and alteration design for the component

c. Description about equivalent means of compliance for TCD (Japanese AD) (if necessary)

d. Information on components (serial number and use time of the relevant components (including cycles))

e. Documents subject to be approved

f. Items subject to the Airworthiness Inspection Manual (if applicable)

g. Handling of the sale of component

(3) The reverse side of the approved certificate

If there is not enough margin in the "Remarks" of the approved certificate, the reverse side of the certificate can also be used.

(4) When an approval is issued, a condition that the approval holder shall notify the authority (the person who issued the approved certificate) of the changes when they perform the slight design changes which don't affect the airworthiness and of which approval under Article 13-2 paragraph 3 of the CAL are not required, such as following examples, may be added.

[Examples of slight change]

(a) Change in cabin interior without changing materials.

(b) Changes in entertainment system software.

(c) Change s in marking and placard s do not fall under Circular No. 1 008.

(d) Correction of obvious errors in the attached drawings, addition of annotations, clarification of work procedures, etc.

4. Change of repair and alteration design for components

4-1 Procedures for change for repair and alteration design for components

Any person who has obtained a repair and alteration approval for components shall, when he or she intends to change the approved design concerned, obtain approval from the Minister of Land, Infrastructure, Transport and Tourism. (Article 26-13, paragraph 10 of the CAR)

4-2 Documents to be submitted

The documents of matters which shall be affected by the change concerned shall be submitted according to paragraph 3-1 (1).

In the case where a design which was confirmed by an approved design organization for components is changed, documents which were used for the said confirmation shall also be submitted if necessary.

4-3 Outline of inspection, etc.

(1) Application

An application shall be made according to paragraph 3(2) (a).

In the case of an application for approval for a change for repair and alteration design for components, a person who obtained the repair and alteration design approval for components or an approved design organization for components who confirmed the conformity with the standards for the repair and alteration design for components can make the application. (Article 26-13, paragraph 10 of the CAR)

(2) Certification basis

The standards applied to the change concerned shall be the same as that applied to the repair and alteration design approval.

(3) Outline of inspection

The area which is affected by the change concerned shall be inspected according to paragraph 3 (2) (c).

(4)Issuance of approved certificate

When the change for repair and alteration design is determined compliance with the applicable standards, new certificate of the repair and alteration design approval shall be issued to the applicant.

5 Procedures for repair and alteration design approval for components

5-1 Instructions for completing application form for repair and alteration design approval for components and application form for change for repair and alteration design for components, and for submitting the completed form and documents

(1) Instructions for completing application forms etc.

(a) Application form for repair and alteration design approval for components

a. Address of applicant or location of a head office, and name or firm of applicant

The above items shall be entered about a person who intends to obtain the repair and alteration design approval for components concerned. In case of an application by a representative, the above items pertinent to the representative shall also be entered.

b. Component category, type, type/specification approval number (if applicable), standards to be applied under Article 10 paragraph 4 of the CAL, name or firm of the designer, address of the designer, name or firm of the manufacturer, address of the manufacturer

c. Name or firm of the designer who performs the repair and alteration design for components and address of the designer

d. Contents of repair and alteration design for components

The contents of the repair and alteration design shall be described simply.

e. Proposed location of inspection

Proposed location of inspection should be written in the remarks column.

f. Proposed time to obtain repair and alteration design for components of Japan

Enter the time when the applicant wishes to obtain the repair and alteration design approval for components in the remarks column

(b) Application form for change for repair and alteration design for components

In accordance with paragraph (a), application form shall be completed and submitted.

(2) Instructions for submitting the completed form

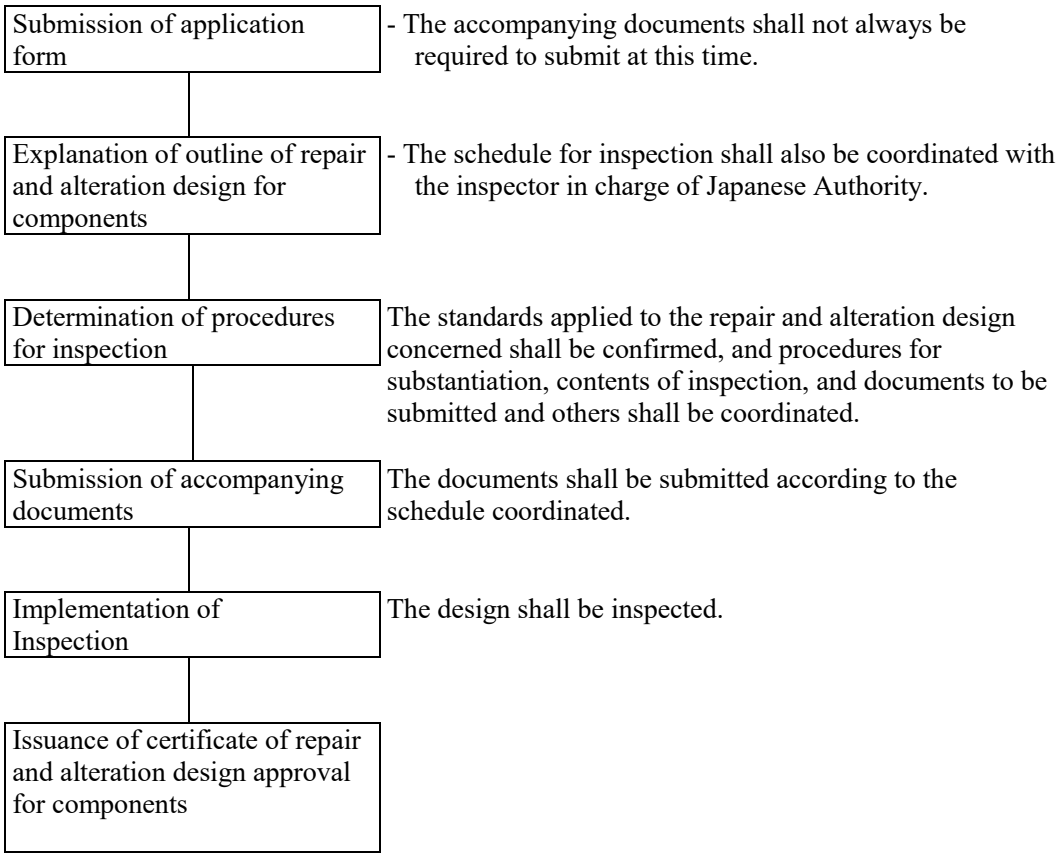
(a) In the case of an application for a repair and alteration design for components with type/specification approval

Aircraft Engineer, Airworthiness Division, Aviation Safety and Security Department, Civil Aviation Bureau, Ministry of Land, Infrastructure, Transport and Tourism of Japan
2-1-3 Kasumigaseki, Chiyoda-ku, Tokyo
TEL 03-5253-8735

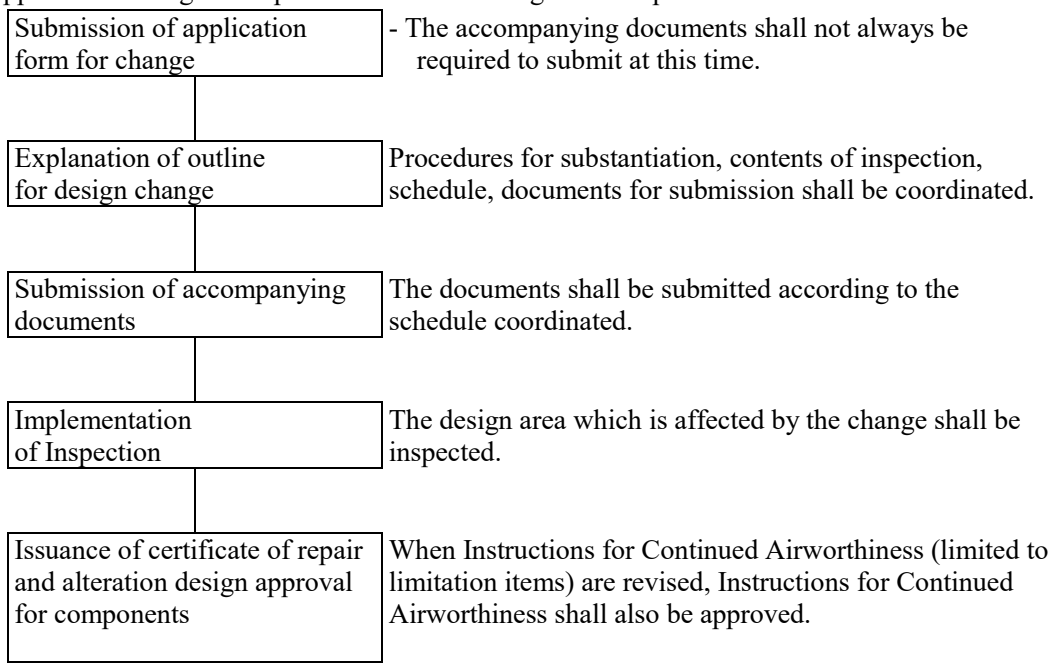
(b) In the case of an application for a repair and alteration design for components other than (a)
Aircraft Engineering and Certification Center, Airworthiness Division, Aviation Safety and Security Department, Civil Aviation Bureau, Ministry of Land, Infrastructure, Transport and Tourism of Japan
Ohaza Toyoba, Toyoyama-cho, Nishikasugai-gun, Aichi Prefecture (in the Prefectural Nagoya Airport Administrative Building)
TEL 0568-29-1985

5-2 Flow chart regarding submission of application form and documents, inspection and issuance of certificate of repair and alteration design approval for components

(1) Repair and alteration design approval for components



(2) Approval of change for repair and alteration design for components



6. Other Necessary Activities charged to the Holder of a Repair and Alteration Design Approval for Components

The holder of a repair and alteration design approval for components needs to:

(1) Obtain approval for change for repair and alteration design for components. (Article 26-13 paragraph 10 of the CAR)

(2) Collect information on malfunctions and its equivalents relating to the area concerned to which alteration had been made and provide those information to the relevant authorities. (Article 26-13 paragraph 18 of the CAR)

(3) Implement corrective action such as engineering activities for malfunctions and its equivalents caused by defect in design and manufacture. (Article 26-13 paragraph 18 of the CAR)

(4) Maintain and keep data (design data, drawings, test reports, inspection records for aircraft products). (Article 26-13 paragraph 18 of the CAR)

(5) Continue airworthiness (including to provide and update the document for maintenance procedure concerning instructions for continued airworthiness). (Article 13-4 of the CAL)

(6) Methods to provide technical documents should preferably be listed on the web site which enables access online by the Civil Aviation Bureau. However, providing by print or electronic media such as CD ROMs are also acceptable.

For item from (2) to (5), they must comply with Circular 1-028 "Establishment of Continuous Operational Airworthiness System and Operational Safety Planning Document to be established by design approval holders for domestically manufactured aircraft, etc. under Article 13-4 of the CAL."

Supplementary Provisions

1. This Circular shall be enforced on December 1, 2000.
2. Circulars TCL-123A-1-93 “Documents needed for the time of the inspections of airworthiness certificate and repair or alteration,” TCM-50-004D-1-91 “Creating and handling procedures of flight manuals,” TCM-21-002B-74 “Documents needed for the type certificate” and TCM-21-003 “Documents needed for the type certificate of an aircraft manufactured based on the licensing agreement” shall be superseded by this Circular.

Supplementary Provisions (July 25, 2000)

1. This Circular shall be enforced on July 25, 2000. However, as for the revision related to the operating method limitation prescribed in Attachment I-2, descriptions made under the former rules may be accepted by the date of one year later since the date of enforcement of this Circular or date of next revision of Flight Manual, which comes later.

Supplementary Provisions (November 29, 2000)

1. This Circular shall be enforced on November 29, 2000.

Supplementary Provisions (January 29, 2001)

1. This Circular shall be enforced on January 29, 2001.

Supplementary Provisions (October 10, 2001) - Amendment relating to Flight Manual revision which shall be reflected by TCD

1. This Circular shall be enforced on November 1, 2001.

Supplementary Provisions (June 30, 2004) - Amendment relating to submitting for change of supplemental type design change

1. This Circular shall be enforced on June 30, 2004.

Supplementary Provisions (March 17, 2005) - Amendment relating to Spare Part Certification for Imported Parts

1. This Circular shall be enforced on March 17, 2005.

Supplementary Provisions (September 30, 2005) - Amendment relating to Type Certification for the aircraft manufactured in Japan etc. and the capability to design aircraft and conduct the inspection

1. This Circular shall be enforced on October 1, 2005.

Supplementary Provisions (November 9, 2005) - Amendment relating to the standard format for the noise of the International Civil Aviation Organization

1. This Circular shall be enforced on November 9, 2005.

Supplementary Provisions (December 28, 2006) - Amendment relating to Procedure of Airworthiness Certificate

1. This Circular shall be enforced on January 1, 2007.

Supplementary Provisions (March 28, 2007) - Amendment relating to the Scope of Inspection of Repair or Alteration

1. This Circular shall be enforced on March 30, 2007.

Supplementary Provisions (October 31, 2008) - Amendment relating to Spare Part Certification for Imported Parts

1. This Circular shall be enforced on October 31, 2008.

Supplementary Provisions (July 15, 2010) - Amendment relating to aircraft noise and emissions of engines

1. This Circular shall be enforced on July 15, 2010

Supplementary Provisions (June 30, 2011)

1. This Circular shall be enforced on July 1, 2011

Supplementary Provisions (March 26, 2012) - Amendment related to the conclusions of the BASA IPA with U.S. and WA with EASA

1. This Circular shall be enforced on March 26, 2012.

Supplementary Provisions (March 30, 2012)

1. This Circular shall be enforced on March 30, 2012.

Supplementary Provisions (December 20, 2017)

1. This Circular shall be enforced on December 31, 2017.

Supplementary Provisions (January 26, 2018)

1. This Circular shall be enforced on February 3, 2018.

Supplementary Provisions (November 29, 2018)

1. This Circular shall be enforced on November 29, 2018. However, with regard to the amendment pertaining to Attachment I-2, 4-2 to Chapter I, when the Flight Manuals for type certification of domestic aircraft written in Japanese and in English have respectively been approved as of the time of the enforcement of this Circular, descriptions made under the former rules may be accepted.

Supplementary Provisions (March 28, 2019)

1. This Circular shall be enforced on March 28, 2019.

Supplementary Provisions (June 28, 2019)

1. This Circular shall be enforced on June 28, 2019.

Supplementary Provisions (December 13, 2019)

1. This Circular shall be enforced on December 13, 2019. However, in the cases where standards for non-volatile particulate matter and standards for carbon dioxide are not applied, descriptions made under the former rules may be accepted by December 31, 2-¥019.

Supplementary Provisions (March 30, 2020)

1. This Circular shall be enforced on May 11, 2020.

Supplementary Provisions (June 17, 2020)

1. This Circular shall be enforced on June 18, 2020.
2. In the cases where the provision of Part III paragraph 4-1(a) is applied when supplemental type approval has been obtained before implementation of this circular, descriptions made under the former rules may be accepted.
3. Circular TCL-164-98 "Approval for partial design change of aircraft which has not obtained the type certificate" shall be superseded by this Circular.
4. A design which has obtained the approval for partial design change of aircraft which has not obtained the type certificate based on the Circular TCL-164-98 before implementation of this circular is regarded as one which has obtained the repair and alteration design approval.
5. Certificates of approval issued based on the Circular TCL-164-98 before implementation of this circular is regarded as certificates of repair and alteration design approval.
6. Approval for aircraft flight manual regarding the approval for partial design change of aircraft which has not obtained the type certificate issued based on the Circular TCL-164-98 before implementation of this circular is regarded as approval of aircraft flight manual for repair and alteration design.
7, Circular No. 4-016 "Handling of Engineering Orders Issued by Air Carriers" shall be superseded by this Circular.
8. In the cases where engineering orders have already obtained approvals when this circular is implemented, those are regarded as ones which have obtained repair and alteration approvals when approved air carriers perform repair and alteration, etc., for its aircraft and equipment, etc.

Supplementary Provisions (December 23, 2020)

1. This Circular shall be enforced on January 1, 2021.

Supplementary Provisions (December 24, 2020)

1. This Circular shall be enforced on January 1, 2021.

Supplementary Provisions (March 31, 2021)

1. This Circular shall be enforced on March 31, 2021.

Supplementary Provisions (June 10, 2021)

1. This Circular shall be enforced on June 10, 2021.

CAA Form 1 tags issued after confirming the airworthiness by Organizations approved by UK CAA shall be considered valid if issued on or after January 1, 2021.

In addition, FATA E-02 tags issued after confirming the airworthiness by Organizations

approved by Russian Federation FATA shall be considered valid if issued on or after November 30, 2020.

Supplementary Provisions July 30, 2022)

1. This Circular shall be enforced on June 18, 2022.

For questions and comments about this circular, please contact the following:

Airworthiness Engineer, Airworthiness Division, Aviation Safety and Security Department,
Civil Aviation Bureau, Ministry of Land, Infrastructure and, Transport and Tourism
2-1-3 Kasumigaseki, Chiyoda-ku, Tokyo, 100-8918
Tel 03-5253-8735
Fax 03-5253-1661