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Circular

Director  
Airworthiness Division  
Aviation Safety and Security Department  
Japan Civil Aviation Bureau  
Ministry of Land, Infrastructure, Transport and Tourism

Subject: Procedures for UAS Type Certification for unmanned aircraft systems

Note: It is noted that if there is a translation difference between the two languages, then Japanese should be the official language to refer to.

## 1. Applicability

The Circular summarizes inspection operations by the related Civil Aviation Bureau or Registered Unmanned Aircraft Inspection Organization (the “Inspection Body”) and procedures to be followed by the applicant from application to issuance of UAS type certificates in connection with inspections pertaining to UAS type certification under Article 132-16 of the Civil Aeronautics Act (Act No. 231 of 1952) (hereinafter referred to as the “Act”) and UAS type design change under Article 132-17 of the Act (hereinafter collectively referred to as “Type Certification, etc.”), and relevant persons shall be required to carry out procedures in accordance with the Circular in principle.

## 2. Application

### 2-1 Preliminary Arrangements

#### 2-1-1 UAS Type Certification

Inspection shall be started upon an application made by a person seeking UAS Type Certification.

A person planning to obtain class I UAS Type Certification may notify the Japan Civil Aviation Bureau to that effect and request preliminary arrangements at a stage suitable for realization of the content of the relevant application. The purpose of the preliminary arrangements for class I UAS Type Certification shall be to smoothly promote the inspection pertaining to UAS Type Certification after the application, by agreeing on general business matters in connection with implementation of the inspection and coordinating on the design concept of the airframe, standards to be used, an outline of specifications of an unmanned aircraft system and policies for certification of conformity to Safety and Uniformity Standards.

#### 2-1-2 UAS type design changes

The provisions of Section 2-1-1 shall apply mutatis mutandis to a person planning to change the design or manufacturing process of an unmanned aircraft system for which UAS Type Certification has already been obtained.

#### 2-1-3 Procedures and content of preliminary arrangements

For the purpose of preliminary arrangements, the applicant shall submit the following documents to the Japan Civil Aviation Bureau for explanation and adjustment. Documents may be added or omitted according to the nature of the case.

[1] Overview of the applicant

- i Experience related to UAS Type Certification
- ii Scope and procedures for outsourcing operations
- iii The prospective applicant’s systems for communicating with the Authority and for solving any problem that may occur in the process of the inspection

[2] Overview of the assumed timeline up to acquisition of UAS Type Certification

- i Timeline including milestones

[3] Concept of Operations (CONOPS)

- i A draft of 001 Concept of Operations (CONOPS) which includes information necessary to determine

values and scopes of test and operational limits as set forth in Circular No.8-001 “ UAS Airworthiness Inspection Manual (hereinafter referred to as "UAS AIM") for inspections of unmanned aircraft systems against Safety and Uniformity Standards for UAS Type Certification, etc..” (first issue on September 7, 2022: KOKU-KU-KI-456)

[4] Identification of critical problems

Ex. Unprecedented design, recent technologies, special conditions, design requiring similar safety and exemption measures

[5] Plans for establishing certification basis

Ex. Evidence of necessity and appropriateness in cases where special conditions and similar safety and exemption measures are needed

[6] Draft of certification basis and a certification plan

i A list of applicability to Safety Standards set forth in Circular No.8-001 “UAS AIM for inspections of unmanned aircraft systems against Safety and Uniformity Standards for UAS Type Certification, etc..” (first issue on September 7, 2022: KOKU-KU-KI-456), and a draft of the certification plan , including options of analysis and demonstration relative to each standard set forth in paragraph 1) of Section 5-1-3 of this Circular

[7] Major issues (major challenges)

i Issues that may affect the timeline overview in the application or hamper acquisition of certification are summarized.

[8] Draft of application for UAS Type Certification

i Entries in the application, payment of fees under Section 2-3 of this Circular, and matters to be determined for identification are planned.

[9] Records of adjustment

Minutes of the adjustment, which include matters that are agreed on during the adjustment and issues requiring measures, are prepared, specifying persons in charge.

If the prospect applicant anticipates the existence of [4] critical problems to be identified and [7] major issues (major challenges), he/she/it shall consult the Japan Civil Aviation Bureau for responses before making application.

## 2- 2 Application

### 2-2-1 UAS Type Certification

Pursuant to Article 236-22, paragraph (1) of the Regulation for Enforcement of the Civil Aeronautics Act (Order of the Ministry of Transport No. 56 of 1952) (hereinafter referred to as the “Regulation”), a person who intends to apply for UAS Type Certification shall submit an application for UAS Type Certification along with accompanying documents prior to the prescribed time set forth in paragraph (2) of the same Article. The accompanying documents shall be as follows. Notwithstanding the provisions below, the documents pertaining to an unmanned aircraft system that has already been manufactured at the time of the application shall be submitted at the time of the application.

(a) Design plan (submission time: at the early stage of design)

The following items shall be stated.

- a. Outline of design (including a draft of the concept of operations (CONOPS))
- b. Outline of the propulsion system
- c. Outline of performance (outline of estimated performance, stability, maneuverability, etc. for takeoff, landing, ascent, descent, cruising, etc.)
- d. Outline of the structure
- e. Outline of main equipment ((communication System, propulsion System, Electrical Power System, and GNC (Guidance, Navigation, and Control) system)

[Note] The purpose of the design plan is to let the Inspection Body know the outline of the design of an unmanned aircraft system to which the application pertains, before the actual inspection took place. It is preferable to submit the entire plan at once, but it is acceptable to submit the plan part by part, upon completion of each part. The actual design may deviate from the plan described in this document as the design development progresses, but this document need not be revised as long as the Inspection Body is notified of any deviation from the plan in some way.

(b) Design documents (submission time: before commencement of production)

Materials including explanation, calculation and others for demonstrating conformity to the certification basis are categorized as design documents. The design documents shall include the following items.

- a. Weight calculation, center of gravity calculation
- b. Performance calculation
- c. Stability and maneuverability calculation
- d. Fatigue strength calculation
- e. Specifications for motors and ESCs or engines and propellers (rotors)
- f. Design Documents for main equipment for Communication System, Propulsion System, Electrical Power System, and GNC (Guidance, Navigation, and Control system (including load analysis, strength analysis, performance analysis and block diagram)

Of the design documents above, those based on an airframe-level evaluation may be submitted.

- g. Design materials of a special structure or equipment, etc. that is different from what is generally used, if such an item is used

(c) Drawing list (submission time: before commencement of production)

The drawing list centrally manages drawings necessary to manage the type specifications of the unmanned aircraft system for which UAS Type Certification is sought.

The list shall include all drawing numbers, names and revision codes related to the design of the type of the unmanned aircraft system for which UAS Type Certification is sought.

If the applicant, who has a drawing management system in place, provides necessary explanation to the

Inspection Body and obtains approval, the complete version of the list needs not be submitted until the final review meeting.

(d) Design drawing (submission time: before commencement of production)

The design drawing shall be a three-view drawing. In addition to three views, the approximate dimensions, specifications, parts that are used and assembly methods of the unmanned aircraft system shall be preferably included as well.

(e) Parts list (submission time: before commencement of production)

The parts list shall be created by equipment/part so that the type (components) of the unmanned aircraft system may be identified.

The name, model number, manufacture name, quantity, etc. of all equipment and some parts (which fall under Flight Essential Parts identified in the certification of Section 135 of Part II “Safety Standards” of Circular No.8-001) constituting the type of the unmanned aircraft system shall be specified. The equipment mentioned above shall include optional equipment installed by the user of the unmanned aircraft system according to the operational method, etc.

The list need not include drawings or be so detailed as a parts catalog distributed by the applicant to users, but may be merely a list, as long as it can show specifications of the unmanned aircraft system by equipment/part.

Optional equipment (excluding equipment using electric or electronic technologies) may be managed in a separate list different from the parts list with the consent of the Inspection Body, as long as it does not interfere with the flight characteristics of the unmanned aircraft system subject to certification.

(f) Manufacturing plan (submission time: before commencement of production)

The following items shall be stated.

- a. The place of manufacturing the unmanned aircraft system to which the application pertains and its components, and the names of main subcontractors
- b. Written procedures to be used for the production process, inspection records, and other regulations related to manufacturing methods or management methods and systems that are applied to the production process and are not specified in drawings.

(g) A document certifying that the uniformity of the type is ensured (submission time: before commencement of production)

Processes (mechanism and structure) and systems related to quality control are specified in this document so that conformity to Uniformity Standards may be ensured not only at the times of application and acquisition of certification but also after acquisition of certification. A draft of Manufacture Management Guidelines, which shall be submitted as a separate volume of Appendix 12-8 of this Circular, falls under this document.

(h) Specifications (submission period: before implementation of an inspection of the current situation)

Specification is a documents for managing the type specifications of the unmanned aircraft system and shall generally describe the main specifications. The following items shall be stated in the written specifications.

- a. Type of the unmanned aircraft system to which the application pertains
- b. Name and quantity of motors, ESCs or engines and propellers (rotors)
- c. Name and address of the manufacturer of the unmanned aircraft system to which the application pertains (if the manufacturer is a juridical person, the name and the location of its principal office)
- d. The revision number and the date of compliance of the “UAS AIM for inspections of unmanned aircraft systems against Safety and Uniformity Standards for UAS Type Certification, etc.” (first issue on September 7, 2022: KOKU-KU-KI-456)
- e. Principal specifications of the type of unmanned aircraft system to which the application pertains
- f. Explanation and necessary diagrams concerning the weight, the weight distribution, and the location of the center of gravity, such as the maximum take-off weight and the allowable range of the center of gravity
- g. Operating limitations (groundspeed limits/airspeed limits, wind speed limits, altitude limits, rainfall limits, and temperature limits)
- h. Output or thrust, the rotation speed of rotor blades in case of a rotary-wing type unmanned aircraft system, and specifications concerning the operation of the propulsion system in case of an unmanned aircraft system equipped with engines (such as air temperature in which the engines can operate effectively)
- i. Fuel grade and standards for lubricating oil in case of an unmanned aircraft system equipped with engines (including power generators)
- j. Total capacity and unusable amount of fuel, lubricant, etc. in case of unmanned aircraft system equipped with engines (including power generators)
- k. Name, quantity, and usage method of optional equipment and various limits when it is mounted
- l. Types of equipment and parts (names and standards or specifications of standard equipment and optional equipment)
- m. Relevant serial number

(i) UAS Flight Manual (submission period: before implementation of an inspection of the current situation) Matters listed in paragraph (3), Article 236-12 of the Regulation shall be stated. Specific provisions of the Manual shall be prepared in accordance with “200 Flight Manual” of the Circular No.8-001 “UAS AIM for inspections of unmanned aircraft systems against Safety and Uniformity Standards for UAS Type Certification, etc.” (first issue on September 7, 2022: KOKU-KU-KI-456).

The UAS Flight Manual shall include comprehensive information that is necessary for the pilot to conduct safe flights. In cases where the Registered Unmanned Aircraft Inspection Organization inspects the UAS Flight Manual, it shall be noted that an approval by the Japan Civil Aviation Bureau is required after the Registered Unmanned Aircraft Inspection Organization provides a notice of inspection results for UAS Type Certification under paragraph (3), Article 6 of the Ministerial Ordinance concerning Registered Unmanned Aircraft Inspection Organizations (Order of the Ministry of Land, Infrastructure, Transport and Tourism

No.57 of 2022) to the Japan Civil Aviation Bureau.

(j) Maintenance Manual for the unmanned aircraft system (submission period: before implementation of an inspection of the current situation)

Matters listed in paragraph (4), Article 236-12 of the Regulation shall be stated. Such a Manual shall be composed of a document for inspection and maintenance procedures for unmanned aircraft systems (“ICA”) and a document specifying methods for renewal inspections for UAS Certification. Matters concerning renewal inspections for UAS Certification may be included in ICA at the discretion of the applicant.

Specific provisions of ICA shall be prepared in accordance with “205 ICA” of the Circular No.8-001 “UAS AIM for Inspections of Unmanned Aircraft Systems against Safety and Uniformity Standards for UAS Type Certification, etc.” (first issue on September 7, 2022: KOKU-KU-KI-456).

ICA shall include information necessary for the user to appropriately inspect and maintain the unmanned aircraft system, its equipment, components, parachutes, and associated systems (“AEs”). In cases where the Registered Unmanned Aircraft Inspection Organization inspects ICE, it shall be noted that an approval by the Japan Civil Aviation Bureau is required after the Registered Unmanned Aircraft Inspection Organization provides a notice of inspection results for UAS Type Certification under paragraph (3), Article 6 of the Ministerial Ordinance concerning Registered Unmanned Aircraft Inspection Organizations (Order of the Ministry of Land, Infrastructure, Transport and Tourism No.57 of 2022) to the Japan Civil Aviation Bureau.

(k) Documents describing matters necessary for calculating the weight and center of gravity of the unmanned aircraft system (submission period: before implementation of an inspection of the current situation)

The following items shall be stated unless they are already stated in the UAS Flight Manual.

- a. Weight and center of gravity of the unmanned aircraft system
- b. Name, weight and location of the center of gravity of the equipment, etc.
- c. Usable volume and location of the center of gravity of the fuel tank in case of an unmanned aircraft system equipped with engines (including power generators)
- d. Others

Appropriate information shall be provided so that the pilot can perform a safe flight.

(l) Other documents containing reference information (submission period: before implementation of an inspection of the current situation)

Other documents containing reference information shall refer to the following:

- a. Management plan to ensure safety
- b. Other required materials deemed necessary by the Inspection Body

The management plan to ensure safety shall be submitted by the appropriate time in accordance with instructions of the Japan Civil Aviation Bureau. Other required materials deemed necessary by the Inspection Body shall be also submitted by the appropriate time in accordance with instructions of the Inspection Body.

2-2-2 UAS type design changes

A person who intends to change part of the design or manufacturing process of an unmanned aircraft system of a type that has obtained UAS Type Certification (including the addition of an unmanned aircraft system of a type belonging to the same series as the type of an unmanned aircraft system that has obtained UAS Type Certification) shall submit an application for change of the type design & manufacture process and accompanying documents in a manner similar to the procedures for acquisition of UAS Type Certification, in accordance with the provisions of Article 236-29 of the Regulation. Application for change of UAS Type Certification may be submitted only by the UAS Type Certification holder for the relevant type.

It shall be noted that application for new UAS Type Certification, instead of application for change of UAS Type Certification, may be required in the event of a design change that involves major changes in the form or structure of the unmanned aircraft system, or in specifications or other matters on which UAS Type Certification was based.

Examples of such a design change are as follows:

- A design change that involves a major change in the form or structure of the unmanned aircraft system, such as an increase of the number of the rotors from four to six in a multi-rotor type aircraft; and
- A design change that involves a major change in specifications of the unmanned aircraft system or other matters on which UAS Type Certification was based, such as a change of a helicopter type aircraft driven by engines and a fuel system into a hybrid aircraft, through addition of a battery.

## 2-3 Fees and procedures for application

### \* Fees

The amount of the fee for application pertaining to UAS Type Certification when the national government conducts an inspection shall be as set forth in the Order on Fees Relating to the Civil Aeronautics Act (Cabinet Order No.284 of 1997) and the Regulation on Fees Relating to the Civil Aeronautics Act (Order of the Ministry of Transport No.58 of 1997).

When an inspection is conducted overseas in connection with application pertaining to UAS Type Certification, the amount equivalent to travel expenses determined in accordance with the number of inspectors and days, on the basis of business travel matters, the destination and duration of the business travel, and other necessary matters under the Order on Fees Relating to the Civil Aeronautics Act and the Regulation on Fees Relating to the Civil Aeronautics Act shall be paid. If it becomes necessary to additionally pay the amount equivalent to travel expenses after application, the additional fee shall be paid.

Procedures for application by using the Drone/UAS Information Platform System (“DIPS”) will be described below.

#### [1] Identity verification

Application can be made on the basis of one of the identity verification methods below.

- (1) By logging in to your gBizID account
- (2) By sending an identity verification document by mail

#### [2] Outline of application entries

The class of UAS Type Certification, type name, flights in no-fly air space, flight methods, etc. shall be



entered on the system, and accompanying documents that are needed at the time of application shall be uploaded.

### [3] Procedures for paying the fee

After entering such information and submitting such documents as are necessary for application in [2] above, the applicant shall pay the fee in accordance with a notice from DIPS in any of the following methods.

(1) By credit card (excluding cases where identity verification documents are sent by mail)

(2) By Pay-easy: Payment can be made from bank ATMs or via online banking.

### [4] Procedures in the event of inspection by the Registered Unmanned Aircraft Inspection Organization

When the Registered Unmanned Aircraft Inspection Organization conducts inspection, the applicant shall pay the fee stipulated by the Registered Unmanned Aircraft Inspection Organization, without relying on the provisions of this Section.

## 2-4 Change of the content of application

In the event of any change in the content of application (such as the addition of matters related to design), a notification of the change in the content of the application shall be submitted, and shall be received by the office specified as “where to submit application” in Section 2-5.

## 2-5 Where to submit application

### 2-5-1 In case of class I UAS Type Certification, etc.

Toyoba, Toyoyama-cho, Nishikasugai-gun, Aichi Prefecture (Administration Building of Prefectural Nagoya Airport)

Aircraft Engineering and Certification Center

Airworthiness Division, Aviation Safety and Security Department, Japan Civil Aviation Bureau, Ministry of Land, Infrastructure, Transport and Tourism

Phone: +81-568-29-1985 E-mail: cab-aecc-drone-tcq@gxb.mlit.go.jp

### 2-5-2 In case of class II UAS Type Certification, etc.

Toyoba, Toyoyama-cho, Nishikasugai-gun, Aichi Prefecture (Administration Building of Prefectural Nagoya Airport)

Aircraft Engineering and Certification Center

Airworthiness Division, Aviation Safety and Security Department, Japan Civil Aviation Bureau, Ministry of Land, Infrastructure, Transport and Tourism

Phone: +81-568-29-1985 E-mail: cab-aecc-drone-tcq@gxb.mlit.go.jp

## 3. Certification Basis

### 3-1 Certification Basis

Standards that are applied to UAS Type Certification to which application pertains shall be the following standards as set forth in Articles 236-15 and Article 236-24 of the Regulation.

- (1) “Standards concerning Strength, Structure and Performance to Ensure Safety” (related to Article 236-15 of the Regulation)
- (2) “Standards for Specifying as those Necessary to Ensure Uniformity” (related to Article 236-24 of the Regulation)

### 3-2 Manuals or methods for proving conformity to the certification basis

#### 3-2-1 UAS Type Certification

As the manuals and methods for proving conformity to the certification basis in UAS Type Certification, Circular No.8-001 “UAS AIM for inspections of unmanned aircraft systems against Safety and Uniformity Standards for UAS Type Certification, etc.” current as of the date of receipt of application for the relevant UAS Type Certification shall apply. Notwithstanding the foregoing, if it is difficult or unreasonable to apply all or part of said UAS Airworthiness Inspection Manual due to adoption of new technologies or a new design in the design of the unmanned aircraft system, special conditions, exemptions or equivalent level of safety may be established.

For the purpose of this Circular, the applicable inspection manuals in Circular No.8-001, special conditions, exemptions or equivalent level of safety shall be collectively referred to as “Inspection Manuals, etc.”, as manuals and methods for proving conformity to the certification basis. If any special requirement, exemption or equivalent level of safety need be established, the applicant shall consult the Japan Civil Aviation Bureau to determine its details.

In the following cases, the inspection manuals or methods revised after receipt of application shall apply:

When the applicant wishes to apply the latest standards, or after a lapse of three years from the receipt of application (except if the applicant indicates at the time of application that a period of more than three years is required for design, development, testing, etc., and obtains an approval from the Japan Civil Aviation Bureau). In the latter case, in order to make a change under Article 132-17 of the Act, inspection manuals which were effective at any point (which the applicant may select) during the three years preceding the date of issuance of the UAS type certificates shall apply.

#### 3-2-2 UAS type design changes

A person who intends to change UAS Type Certification (including the addition of an unmanned aircraft system of a type belonging to the same series as the type of an unmanned aircraft system that has obtained UAS Type Certification) shall conduct inspection on parts where the design or manufacturing process is changed and parts which are affected by such a change, in accordance with the manuals and methods which were applied when inspection was conducted to obtain the UAS Type Certification. Alternatively, the latest inspection manuals current as of the date of application for the change may be applied.

#### 3-2-3 Special conditions, exemptions and equivalent level of safety

If especially new technology is introduced into the design, or if new standards or methods to prove conformity to the standards are required to be additionally applied in order to ensure safety, special conditions may be established as a standard for inspection relating to UAS Type Certification, in addition to the inspection

manuals. If application of part of the standards is considered to be unnecessary, or it is considered more appropriate to use another method, due to the unique design, such an unnecessary part may be omitted (exemption) or replaced (equivalent level of safety).

#### 3-2-4 Determination and modification of standards, etc.

Certification basis to be applied to UAS Type Certification shall, as a usual procedure, be examined in the first UAS Type Certification Review Board meeting pertaining to the relevant type with the participation of the applicant, and an original draft shall be prepared as Issue Paper (G-1).

As for application of special conditions, exemptions and equivalent level of safety, the Japan Civil Aviation Bureau shall take similar procedures.

Basically, similar procedures shall be taken in connection with determination and notification of certification basis to be applied to UAS type design changes, but all or part of the procedures may be omitted as appropriate, with the content and scope of the design (changes) taken into consideration.

#### 3-3 Issue Paper

As for matters whose details it is judged to be necessary for the applicant to understand, such as interpretation of certification basis, certification policies, and methods for setting up analysis and tests, the Japan Civil Aviation Bureau shall issue an Issue Paper in order to make clear its opinion on such matters.

The form for Issue Paper shall be as shown in Attachment 1 (Form: JCAB FORM 8-002-1).

There are no particular restrictions on subjects on which the Japan Civil Aviation Bureau is required to issue a Statement of Opinions, but the following items shall require issuance of a Statement of Opinions in principle, in connection with UAS Type Certification, etc. Notwithstanding the foregoing, in cases where the applicant applies the latest inspection manuals current as of the date of receipt of application to an unmanned aircraft system of a type seeking class II UAS Type Certification, no Issue Paper (G-1) needs to be issued. In addition, in the event of any change in UAS Type Certification (regardless of class), no opinion of conformity (G-1) needs to be issued, whether the latest inspection manuals current as of the date of receipt of application are applied or the inspection manuals applied when the UAS Type Certification was obtained are applied. If the applicant proposes establishment of a special requirement, exemption or equivalent level of safety during certification activities after application for UAS Type Certification or changes in UAS Type Certification is received (regardless of class), the relevant Issue Paper (G-1) shall be issued.

- [1] Certification basis (G-1)
- [2] Establishment of special conditions
- [3] Establishment of equivalent level of safety
- [4] Establishment of exemptions
- [5] When it is otherwise deemed necessary

### 4. UAS Type Certification Review Board

#### 4-1 UAS Type Certification Review Board

The UAS Type Certification Review Board shall be established by the Inspection Body to examine the overall

status of certification activities for each UAS Type Certification, etc. Review Board meetings shall be held at important points during UAS Type Certification, etc., such as the initial review meeting and the final review meeting.

The UAS Type Certification Review Board shall not be necessary for an unmanned aircraft system seeking class II UAS Type Certification with the maximum take-off weight less than 25 kg.

#### 4-2 Holding UAS Type Certification Review Board meetings

The objectives of review meetings and matters to be examined shall include, but are not limited to, the following items.

- (1) Initial review meeting (which shall be preferably held before commencement of production)
  - (a) Dissemination of the overall inspection plan pertaining to UAS Type Certification
  - (b) Exchange of opinions on design details and technical issues or challenges
  - (c) Preparation of (draft) certification basis
  - (d) Discussion on how to deal with the technical issues or challenges
  - (e) Establishment of the schedule up to acquisition of UAS Type Certification
- (2) Final review meeting (before issuance of the type certificate)
  - (a) Finalization of (draft) certification basis and inspection manuals
  - (b) Final inspection of documents to be submitted, conformity to Safety and Uniformity Standards, test results, etc.
  - (c) Inspection of unresolved issues that may affect the possibility of issuance of the type certificate

#### 4-3 Preparation of minutes

Each Board shall prepare minutes for each review meeting. The prepared minutes shall be organized and stored, along with documents to be submitted, by the applicant.

### 5. Inspections

Inspections pertaining to UAS Type Certification shall include the inspection of the design, the inspection of the manufacturing process, the inspection of the current state, and the inspection of quality control and the quality control system. Their outline shall be as follows.

#### 5-1 Inspection of the design

The inspection of the design shall take the form of an inspection of analysis documents or an inspection of verification. Its outline shall be as follows.

The applicant shall conduct an analysis or test based on the certification plan approved by the Inspection Body, and shall be inspected by the Inspection Body for conformity to the certification basis. If materials related to the design are found to indicate compliance with the standards as a result of the inspection, the Inspection Body shall issue a Statement of Compliance to confirm the status of conformity with the certification basis.

### 5-1-1 Records of inspections

Records of inspections related to UAS Type Certification shall be as follows.

#### 1) Statement of Compliance

Conformity to the certification basis shall be checked through inspections of documents related to certification, such as drawings, specifications, analysis documents, calculations, test plans, test reports, the UAS Flight Manual and a draft ICA, and inspections by a ground test, a flight test, etc. When conformity with the certification basis is confirmed through the inspections, a Statement of Compliance shall be issued as a material indicating the status of conformity. The form for Statements of Compliance shall be as shown in Attachment 2 (Form: JCAB FORM 8-002-2).

If a Statement of Compliance is required, the applicant shall submit a draft statement of compliance to the Inspection Body by the end of examination of the applicable certification documents.

#### 2) Minutes

If an inspection is conducted, the applicant shall prepare minutes and both parties shall examine their contents, for the purpose of clarifying details of the inspection, what is pointed out in the inspection and corrective measures therefor, matters to investigate and problems and share the understanding.

Although there is no specific form for the minutes, an example of the form for minutes is provided in Attachment 3 (Form: JCAB FORM 8-002-3).

#### 3) Integrated Statement of Compliance

The Integrated Statement of Compliance shall be issued to confirm compliance with all the certification basis, and summarize all the past documents including the Statement of Compliance. The form for Integrated Statement of Compliance shall be as shown in Attachment 4 (Form: JCAB FORM 8-002-4).

If the Integrated Statement of Compliance is required, the applicant shall submit a draft integrated statement of compliance to the Inspection Body by the end of examination of the applicable certification documents.

### 5-1-2 Implementation of inspections

Before the inspections, it shall be confirmed through the certification plan whether the applicant's certification plan covers all the contents necessary to prove conformity to the standards, and the understanding of the certification status and the progress of the inspections shall be managed through the Compliance Check List.

### 5-1-3 Inspection of (conformity) certification methods

#### 1) Certification plan

The applicant for UAS Type Certification, etc. shall prepare a certification plan specifying the timing of implementation of inspection as well as methods for certifying conformity, including design drawings, analysis and evaluation, and selection of flight tests (for example, conformity shall be certified through "analysis and evaluation" for 110 Software, through "design drawings" for 200 Flight Manual, and through "flight tests" for 300 Durability and Reliability in the inspection manuals of Circular No. 8-001) and obtain

an approval of the Inspection Body. The Inspection Body shall start inspections after agreeing to said plan in principle. The approved certification plan may be revised as the project progresses. If the plan agreed to by the Inspection Body needs to be changed, the consent of the Inspection Body shall be obtained for the change.

## 2) Compliance Check List

The Compliance Check List shows the status of certification for each item of the certification basis.

The Inspection Body shall use the Compliance Check List to manage the status of conformity to the certification basis in accordance with the certification plan prepared by the applicant.

### 5-1-4 Inspection of analysis documents

#### - Drawings, analysis documents, and study documents

Confirmation of conformity by drawings shall be carried out by checking whether the specifications of the unmanned aircraft system defined by drawings conform to requirements required by applicable items. However, it is generally difficult to certify all the applicable items only with drawings, so supplementary materials may be inspected as necessary. Confirmation of conformity by analysis documents shall be carried out by checking whether the analysis (calculation, comparative study, etc.) performed by the applicant has obtained results that show conformity to the requirements required by the applicable items without error, using an appropriate analysis method.

A study document is a type of analysis document prepared by the applicant, and checks whether the design conforms to the requirements required by the applicable items by inspecting the applicant's study (misappropriation of other data, etc.). The UAS Flight Manual and ICA shall require prescribed procedures including separately obtaining an approval from the Japan Civil Aviation Bureau (it shall be noted that the Registered Unmanned Aircraft Inspection Organization is not authorized to grant the approval).

### 5-1-5 Inspection of demonstration

#### 1) Approval of test plan and test report

Tests for UAS Type Certification shall be mainly conducted to directly certify the applicable items.

Test results to be used for conformity certification shall be obtained on the basis of a test plan approved by the Inspection Body in principle (the existence of such approval shall be demonstrated in the Statement of Compliance).

For this reason, the test plan shall include all the information, conditions and specifications necessary for implementation of tests, which shall include test specimen drawings, test set-up drawings, etc. Similarly, the test report to be used for conformity certification shall also be approved by the Inspection Body. In the report, the Inspection Body shall inspect the conformity of test specimens, test set-up, etc. to the approved test plan.

#### 2) Confirmation of test specimens, test equipment, and test records (including jigs, tools, test set-up, etc.)

Test specimens, test set-up, etc. for UAS Type Certification tests shall be in principle inspected by the Inspection Body for conformance to the test plan that is approved in advance ("conformity inspection").

The applicant shall be notified of test specimens, test equipment and test set-up that require on-site inspection

by the Inspection Body. On-site inspection shall not be conducted for all tests. The Inspection Body shall consult the applicant and consider the content of tests to conduct an on-site inspection for tests to be witnessed by the Inspection Body. For example, a test case in which limitations of the unmanned aircraft system are confirmed through a flight test is assumed to be witnessed by the Inspection Body. While being witness to a test, the Inspection Body shall confirm that test specimens and test set-up whose conformity is to be confirmed by the conformity inspection are used in the test to produce procedures set forth in the test plan and the data to be obtained without any defects or damage that may deviate from the test plan.

The notification mentioned above shall be made by the Inspection Body through the issuance of a Request for Conformity/Test Witnessing (“RFC/W”) (Form: JCAB FORM 8-002-5). The applicant shall prepare a draft of RFC/W and submit it to the Inspection Body for consent, with enough time before implementation of conformity inspections. The RFC/W form and instructions for filling in the form are shown in Attachment 5. In the case of an unmanned aircraft system seeking class II UAS Type Certification with maximum take-off weight less than 25 kg, the procedure for issuing an RFC/W may be omitted only if the inspection and test witnessing by the Inspection Body are clearly specified in the approved certification plan, etc.

The applicant who intends to undergo said inspection shall check the conformity of the relevant test specimens, test equipment and test set-up to the test plan in advance, and issue the Statement of Conformity (“SOC”) (Form: JCAB FORM 8-002-6) to prove the conformity. The SOC form and instructions for filling in the form are shown in Attachment 6.

After confirming the contents of said Statement, the Inspection Body shall confirm on site that the status of production and preparation of the test specimens, etc. is compliant with specifications specified in the test plan. The Inspection Body shall record results of said inspection in the Conformity Inspection Record (“CIR”) (Form: FORM 8-002-7), keep the original of CIR and deliver a copy of CIR to the applicant. The CIR form and instructions for filling in the form are shown in Attachment 7. In the case of an unmanned aircraft system seeking class II UAS Type Certification with maximum take-off weight less than 25 kg, the procedure for issuing a CIR may be omitted only if inspection results can be summarized in a Test Witnessing Record (TWR) as a final record.

In particular, with regard to test specimens, considering that the specimens may be transferred after confirmation (in the event of a remote test site) or that it may take time for the test to take place, issuance of a Conformity Inspection Tag (“CIT”) (Form: JCAB FORM 8-002-8) and attachment thereof to the actual specimens under instructions by the Inspection Body may prove that a conformity inspection has already been conducted on the relevant specimens by the Inspection Body, if the applicant so desires. The CIT form and instructions for filling in the form are shown in Attachment 8.

In principle, if there is any deviation from the test plan, or if a failure occurs, such as damage to the test specimen or test equipment, or inability to perform the test under the conditions set forth in the test plan, the test shall be suspended immediately. If there is failure, it shall be corrected or an approval of modification of the test plan shall be sought in principle. However, if it is difficult to conduct the test again or to suspend the test during the formal procedure for obtaining the approval, the applicant may resume the test under his/her/its

responsibility without an approval for correction or modification of the test plan and evaluate the validity of the test afterwards, by notifying a person responsible for said correction or modification of the test plan. In this case, the applicant may resume the test by preparing a Deviation Sheet which specifies details of deviation and includes the applicant's judgment of validity and obtaining the consent of the Inspection Body. In the case of an unmanned aircraft system seeking class II UAS Type Certification with maximum take-off weight less than 25 kg, the applicant may resume the test under his/her/its responsibility, and subsequently prepare the Deviation Sheet and obtain the consent of the Inspection Body.

For Deviation Sheets, the provisions of 4) of this Section shall apply.

### 3) Test witnessing

Tests related to UAS Type Certification shall be conducted in the presence of the Inspection Body if necessary. For example, a test case in which limitations of the unmanned aircraft system are confirmed through a flight test is assumed to be witnessed by the Inspection Body. When witnessing a test, the Inspection Body shall confirm that the test is conducted in accordance with the test plan and that the data obtained from the test is properly recorded, and issue a Test Witnessing Record ("TWR") (Form: JCAB FORM 8-002-9). In this case, the original TWR shall be attached to a report of the test, and a copy of TWR shall be retained by the Inspection Body. The TWR form and instructions for filling in the form are shown in Attachment 9.

### 4) Deviation Sheets

Any form selected by the applicant may be used for Deviation Sheets, but the following items shall be included.

- i) Deviation Sheet control number (including revision number)
- ii) Control number (including revision number) of the corresponding design data, test plan, etc.
- iii) Overview of the relevant deviation
- iv) Impact of the relevant deviation on the design data
- v) Any other information deemed necessary
- vi) Date of issuance of the Deviation Sheet
- vii) Signature of the person responsible for issuing the Deviation Sheet
- viii) Fields for the consent of the Inspection Body and the date of the consent

### 5) Inspections and tests by the applicant only

When test results are used for conformity certification, the applicant shall confirm that the test is conducted in accordance with the test plan and that data obtained from the test is properly recorded, and prepare inspection and test records for all the tests, even if the Inspection Body does not witness the test. Such records may be prepared in any format, but shall include the same contents as TWR.

#### 5-2 Inspection of the manufacturing process

The purpose for inspecting the manufacturing process shall be to check whether each step in the manufacturing process is intelligently designed to embody the design.



For inspection of the manufacturing process, any one airframe or multiple airframes manufactured before issuance of the type certificate may be inspected. The scope of said inspection shall include all the stages from the level of components constituting an aircraft to the finished aircraft, and shall cover all the manufacturing methods applied to the manufacturing process of the aircraft (including each step), inspection methods (including special processes), and systems for managing jigs and tools and for assuring/controlling quality (including worker/inspector education and outsourcing management). Said scope shall cover subcontractors if all or part of manufacture is subcontracted to personnel, facilities or equipment controlled by any external entity.

#### 5-2-1 Inspection of the manufacturing steps

The inspection of steps shall cover the entire manufacturing process.

In the inspection of steps, documentary inspection shall be conducted to confirm the status of setup of documents for stipulating methods for implementation of work (“work instructions, etc.”) and documents such as inspection records shall be inspected to confirm that all the steps from acceptance of parts, processing, assembly, inspection to delivery and products to which said steps apply are implemented in accordance with processing methods specified by design drawings associated with UAS Type Certification and that the assembly step is implemented in accordance with the work instructions, etc. In addition, on-site inspections shall be conducted to confirm that said steps are implemented in accordance with the procedure set forth in the work instructions, etc. at actual manufacturing sites. Documents, etc. stipulating manufacturing steps shall be inspected.

##### - Documentary inspection

1. Confirmation of the appropriateness of worksheets, etc. that are set
2. Review of manufacturing records after production

##### - Method for conducting on-site attendance confirmation (including inspection to confirm the current situation through operation tests, etc.)

#### 5-2-2 Notification to the applicant

When the inspection of the manufacturing process includes on-site attendance, the Inspection Body shall prepare and issue a Notice for Witnessing Inspection of Manufacturing Process (Form: JCAB FORM 8-002-10) and notify the applicant. The form for the Notice for Witnessing Inspection of Manufacturing Process is shown in Attachment 10.

#### 5-2-3 Record of the inspection of manufacturing steps

The Inspection Body shall record items on which inspection is conducted in a Record of Witnessing Inspection of Manufacturing Process (Form: JCAB FORM 8-002-11) and keep it. The form for the Record of Witnessing Inspection of Manufacturing Process is shown in Attachment 11.

If any deviation from the design data is detected (such as processing of defects in the manufacturing process), its correction shall be requested in principle. However, a change of the test plan may be also possible if personnel of the applicant responsible for correction of the deviation or the change of the test plan is notified.

In this case, a Deviation Sheet which specifies details of deviation and includes the judgment of validity by the applicant's personnel responsible for the correction or changes of the test plan shall be prepared, and shall be agreed to or confirmed by the Inspection Body before resumption. If a modification method that exceeds the scope of design data for UAS Type Certification is applied, conformity shall be certified again by using the design data, or procedures for changing the UAS Type Certification shall be taken.

For Deviation Sheets, the provisions of 4) of Section 5-1-5 shall apply.

#### 5-2-4 Inspection of quality control and quality control system

The conformity to "Standards for Specifying as those Necessary to Ensure Uniformity" (Article 236-24 of the Regulation) (the "Uniformity Standards") shall be confirmed as a confirmation of establishment of manufacture and inspection systems suitable for manufacturing aircraft satisfying the design for the type (aircraft compliant with Safety Standards) in a uniform manner.

#### 5-2-5 Submission of Manufacture Management Guidelines and quality control system

- a. The applicant shall prepare the Manufacture Management Guidelines based on the inspection manuals according to Circular No. 8-001 and submit it to the Inspection Body. The Manufacture Management Guidelines shall be prepared on the basis of the Uniformity Standards.
- b. The applicant shall submit Attachment 12 "Material Explaining the Quality Control System" (Form: JCAB FORM 8-002-12) ("Quality Control Material"), which is required for inspection of the quality control system, to the Inspection Body with enough time before commencement of manufacture and explain the contents of the Material.

#### 5-2-6 Inspection methods for quality control and quality control system

The inspection of the quality control system shall take the following procedure to confirm that manufactured products subject to the inspection of the manufacturing process have a system for assuring compliance with design drawings and specifications which conform to Safety Standards and satisfy the Uniformity Standards.

- a. The Inspection Body shall check an outline of the applicant's quality control system on the basis of the Quality Management Material required in Attachment 12 of this Circular to confirm that the system can satisfy the Uniformity Standards.
- b. The Inspection Body shall inspect the Manufacture Management Guidelines submitted as a separate volume of Attachment 12-8 of this Circular to confirm that the applicant's quality control system satisfies the Uniformity Standards. As specific measure for said inspection, documentary inspection and on-site inspection shall be conducted to confirm that systems for maintaining and managing equipment, workplaces, facilities, organization and personnel to be used for Manufacture and Other Activities, and methods for performing operation are properly documented, and that the systems stipulated in said documents are applied to manufactured products. (For example, the statuses of defect handling, management of work cards, implementation of education and training, and implementation of qualification management shall be inspected to determine whether they are appropriate in accordance with the prescribed procedures and methods.)

The inspection of quality control and quality control system may be conducted in conjunction with the inspection of manufacturing steps during the inspection of the manufacturing process under Section 5-2.

#### 5-2-7 Record of quality control and quality control system

Inspection results shall be announced through Attachment 13 “Notice of Confirmation of Quality Management System” (Form: JCAB FORM 8-002-13) and a report of corrective measures shall be requested through Attachment 14 “Report on Details of Measures” (Form: JCAB FORM 8-002-14) if any default is detected.

#### 5-3 Inspection of the actual status

The actual status of one of the unmanned aircraft systems pertaining to which application is made shall be inspected under the provisions of Article 236-23 of the Regulations.

The inspection of the actual status shall be designed to secure the contents of inspections of the design and the manufacturing process by confirming that specifications defined by the design are realized in an unmanned aircraft system, which is the deliverable of the design and the manufacturing process.

In addition, the inspection of the actual status may be combined with an individual confirmation test during manufacture, an inspection under paragraph (2), Article 132-18 of the Act, an inspection of specifications, etc., a conformity inspection, a ground test and a flight test during the inspection of the design, and confirmations during the inspection of the manufacturing process.

### 6. Management of UAS Type Certification, etc.

UAS Type Certification, etc. shall not be finished only by demonstrating appropriateness of design data, but shall be properly managed so that all operations, including necessary procedures, related to UAS Type Certification, etc. are finished.

When data is created, maintained or stored by electromagnetic means, Circular No. 6-018 “General Standards for Electronic Signatures and Electromagnetic Records” shall be followed.

#### 6-1 UAS Type Certification Documents

Necessary management of documents, etc. necessary for the management of certification (“UAS Type Certification Documents”) shall be conducted so that the design data confirmed by the conformity certification may be accurately reflected.

With regard to an unmanned aircraft system of a type that has already obtained UAS Type Certification, etc., if there is any change in the contents of UAS Type Certification Documents, the UAS Type Certification holder for the relevant type shall promptly notify the Japan Civil Aviation Bureau of details of the change and apply for approval of the change of UAS Type Certification.

Changes that involve a change in UAS Type Certification Documents shall require approval for a change in UAS Type Certification in principle. The categories and description of UAS type design changes shall be as set forth in the table below.

| Category of the change           | Description of the change   |
|----------------------------------|---|
| Other changes<br>(Major changes) | Changes other than those listed below   |
| Minor changes                    | Change in the painting of an unmanned aircraft system of the relevant type, or other similar changes in the design or manufacturing process that will not affect the safety or uniformity |

The provision of the scope of minor changes in the table above is designed to cover what is a change in the design or manufacturing process but does not exceed the scope for which UAS Type Certification has been obtained (the maximum take-off weight, and performance and capability of the unmanned aircraft system of the relevant type, such as speed and use environments).

In order to change provisions of the UAS Flight Manual and ICA other than those concerning items requiring approval of the Japan Civil Aviation Bureau, only notification to the Japan Civil Aviation Bureau shall be required. However, in the event of any change in other items such as operating procedures in the UAS Flight Manual or inspection and maintenance procedures in ICA, which involves a design change or a substantial change in the procedure (except for correction of errors or clarification of wording), conformity to the Safety Standards shall be certified. Details of changes in the UAS Flight Manual and ICA shall be confirmed in connection with approval for changes under Article 132-17 of the Act.

Based on the intent above, examples of minor changes shall include the following:

- Changes of the supplier of equipment (lights and optional equipment), and changes into substitute parts due to the depletion of the existing parts
- Changes of the camera attached to the unmanned aircraft system (limited to changes within the scope compliant with the Safety Standards; including the case where a camera of 2.0 kg is changed into a camera of 1.5 kg without changing the attachment position)
- Changes of the Manufacture Management Guidelines in the form of changes of the number of personnel within the scope not affecting Manufacture and Other Activities, change of the names of organizations (limited to names), correction of errors (without any change in the contents), and formal corrections, such as formats (without any change in the contents)

Examples of other changes (major changes) shall be as follows:

- Design changes to change the cargo loading mechanism for logistics into a mechanism for pesticide spraying
- Changes in the manufacturing process for unmanned aircraft systems through establishment of a new plant and introduction of new equipment and a storage facility for parts
- Attempts to change the limits set forth in the UAS Flight Manual by conducting additional flight tests (to expand the operational range)
- Design changes of parts that are selected in 135 Flight Essential Parts of the inspection manuals of

Circular No.8-001, which involve any change in provisions of the chapter for inspection and maintenance of ICA that are indispensable for securing the safety of unmanned aircraft systems (excluding correction of errors in said provisions)

- Changes that require any change in the applicable standards established at the time of acquisition of UAS Type Certification (including additional establishment of special conditions, equivalent level of safety and exemptions)
- Attempts to change the means of compliance that is approved at the time of acquisition of UAS Type Certification or to establish the new means of compliance
- Software version upgrades that add new functions
- Changes to the organization or contractor responsible for final assembly, which is an important process in manufacturing
- Change to the organization or contractor responsible for inspections pursuant to Article 132-18 of the Act
- Changes in the authority or responsibility of any unit in the organization responsible for Manufacture and Other Activities (excluding mere changes of unit names)
- Integration of the UAS Type Certification holder or an organization responsible for Manufacture and Other Activities (including cases where it is acquired by another company)

If, during an inspection for UAS Type Certification, part of the contents of an analysis document, etc. for which a Statement of Compliance has been issued needs to be changed, the inspection shall be carried out again and a new Statement of Compliance shall be obtained. In this case, the Statement of Compliance for the analysis document, etc. before the change shall become invalid.

## 6-2 UAS Type Certification Data Sheet

### 6-2-1 Outline of UAS Type Certification Data Sheets

UAS Type Certification Data Sheets (“TCDS”) indicates the status of compliance with the inspection manuals, as part of UAS Type Certification.

In addition, TCDS officially indicates details (which shall include limits required by UAS Type Certification (such as speed limits, weight limits, and power limits) and various information) of unmanned aircraft systems of a type for which UAS Type Certification is granted in Japan. The applicant shall prepare a TCDS on the basis of the UAS Type Certification Data Sheet (Japanese) of Attachment 15 (Form: JCAB FORM 8-002-15) or the UAS Type Certification Data Sheet (English) of Attachment 16 (Form: JCAB FORM 8-002-16).

### 6-3 Quality control in UAS Type Certification, etc.

Quality control in UAS Type Certification, etc. shall be such that basic data including drawings, etc. for defining the form of the aircraft, etc., design materials for certifying conformity to technical standards, the manufacturing process shown by the inspection of the manufacturing process, and data obtained from the inspection of quality control and quality control system are correctly reflected on all subjects to which standards apply, from test specimens to mass-produced aircrafts. Especially in the phase of maintenance and management of the type after acquisition of UAS Type Certification, it shall be ensured that quality control

in UAS Type Certification, etc. functions properly, because a dedicated department of the applicant alone takes charge in some cases.

#### 6-3-1 Technical control / quality assurance

In various tests to be conducted in connection with UAS Type Certification, etc., requirements necessary for certification shall be reliably fulfilled, and the tests shall be properly recorded to make clear such fulfillment.

#### 6-3-2 Production control / quality assurance

During manufacture of unmanned aircraft systems for which UAS Type Certification, etc. is acquired, the design data confirmed for conformity by the conformity certification shall be managed so that it is accurately reflected on manufactured aircraft (a test model and mass-produced aircraft). Specifically, data management shall be such that the design data (drawings, specifications, etc.) presented by the design department is accurately reflected on manufacturing instructions / procedures of the manufacturing department. Especially if the designer and the manufacturer are different, the responsibilities and authorities of the designer and the manufacturer shall be made clear, and appropriate production management and quality control shall be performed (including maintenance and management of the type after acquisition of UAS Type Certification).

#### 6-4 Display on the unmanned aircraft system

With regard to unmanned aircraft systems for which UAS Type Certification, etc. is obtained, the proof of inspection at the time of manufacture shall be displayed on each unmanned aircraft system. A UAS Type Certification, etc. holder shall clearly display the fact that the unmanned aircraft system for which UAS Type Certification, etc. has been obtained has been inspected by a person who holds UAS Type Certification, in a durable manner. The display may be in the form specified by the designer, but shall include information such as the UAS Type Certificate number, type and serial number of the unmanned aircraft system.

### 7. UAS Type Design Changes

In the event of application for UAS type design changes to the Japan Civil Aviation Bureau, UAS type certificates shall be issued on a per-application basis. (Article 236-31 of the Regulation)

If multiple change cases are included in one application form, type certificates shall be issued after all of the cases are completed. Thus, the applicant shall be careful at the stage of application, because multiple cases are not handled individually even if early issuance of a type certificate is desired for some of the multiple change cases.

### 8. Measures to ensure safety

Matters concerning this Section shall be included in the “Management plan to ensure safety” mentioned in Section 2-2-1 (1) a. of this Circular. The management plan to ensure safety which is prepared shall be inspected for conformity by the Japan Civil Aviation Bureau at the time of acquisition of UAS Type Certification. Although no particular form is specified for the plan, the revision history shall be maintained and the plan shall include at least the following items.

- 1) Responsibilities of the UAS Type Certification, etc. holder
- 2) The designer's name, the manufacturer's name, model name and serial number
- 3) The responsible department and the responsible person in the applicant's company
- 4) Methods for controlling users (operators) of the unmanned aircraft system, etc.
- 5) Methods for regularly collecting the operation status (including the occurrence of breakdowns, malfunctions and defects)
- 6) Methods for collecting information on accidents of aircraft of other types and other incidents in the applicant's company
- 7) Analysis and evaluation flows, responsible departments, and methods for reflecting on the type-certified form in connection with the information obtained in 5) and 6) above (including quality control and quality control system)
- 8) Provision of technical information to users
- 9) Reporting to the Japan Civil Aviation Bureau
- 10) Other matters required by the Japan Civil Aviation Bureau

#### 8-1 Failure monitoring and analysis

In order to ensure continuous compliance with the safety standards set forth in paragraph (3), Article 132-16 of the Act, a person who has obtained UAS Type Certification shall, pursuant to the purpose of Article 132-21 of the Act, monitor and collect information related to aviation safety, including the status of operation and occurrence of malfunction of unmanned aircraft systems of the relevant type, and incident information, and analyze and evaluate the obtained information, thereby improving the safety of the unmanned aircraft system of the relevant type.

#### 8-2 Provision of technical information to users

Technical information is a means of conveying technical information from the UAS Type Certification holder to users and other related persons. The UAS Type Certification holder shall disclose technical information showing points, timing, and implementation methods for maintenance of unmanned aircraft systems of the type for which the UAS Type Certification is obtained to users on the website and use other measures to make the technical information easily available to the users, in order to secure the safety of unmanned aircraft systems. In addition, as for unmanned aircraft systems of a type for which class I UAS Type Certification is obtained, the UAS Type Certification, etc. holder shall not only make technical information easily available to users, but also establish methods for enabling the users to obtain the information in a reliable manner, such as transmission of e-mail to the users and display on the Control Station or an application, thereby providing the technical information to the users.

Technical information shall be appropriately prepared and provided by the UAS Type Certification holder, so the applicant for the UAS Type Certification shall receive explanation on the management plan to ensure safety, and shall be inspected for conformity at the time of acquisition of the UAS Type Certification. In addition, any revision of the procedure up to provision of said information shall be approved by the Japan Civil Aviation Bureau, from the standpoint of appropriate continuance of the safety of aircraft. With the

agreed matters recorded in the minutes, any change to the management plan to ensure safety shall also be inspected in connection with an approval of the next change in the design or manufacturing process.

### 8-3 Report of aviation accidents, etc.

#### 8-3-1 Criteria for accident reporting

The UAS Type Certification holder shall establish a system for collecting from users, organizing, and analyzing information on aviation accidents, etc. that involve unmanned aircraft systems of the type for which the UAS Type Certification is obtained, and shall report the following events that are caused or are suspected of being caused by the design or manufacturing process under the provisions of Article 132-21 of the Act and Article 236-37 of the Regulation. Methods for collecting information on aviation accidents, etc. may include, without limitation, the provisions in an instruction manual or other documents issued by the UAS Type Certification holder which require users to notify the UAS Type Certification holder in case of an aviation accident, etc. and specify the contact information and points to be reported for the purpose of said notification.

- (1) Accidents listed in the items of paragraph (1), Article 132-90 of the Act
  - Death or injury, or property damage caused by an unmanned aircraft system
  - Collision or contact with an aircraft
- (2) Situations mentioned in Article 132-91 of the Act
  - When it is recognized that there was a risk of collision or contact with an aircraft
  - Human injury caused by an unmanned aircraft system (excluding accidents that involve human death or injury as mentioned above)
  - A situation in which the control of an unmanned aircraft system is lost
  - A situation in which an unmanned aircraft system ignited (limited to ignition during flight)
- (3) In addition to those listed in (1) and (2), the following situations recognized by the Minister of Land, Infrastructure, Transport and Tourism as being the ones in which an unmanned aircraft system does not conform, or may cease to conform, to the Safety Standards
  - Damage, malfunction or defect of the control system of the propeller (rotor)
  - Structural damage to the hub or blade of the propeller (rotor)
  - Damage to the motor, or damage to the engine (including engine generator) in an unmanned aircraft system equipped with the engine (including engine generator)
  - Damage, malfunction or defect of the structure, the propulsion system such as a speed controller, navigation and guidance systems such as a gyroscope, the communication system such as a receiver, and the automatic control system such as a flight controller, which impairs the normal operation or flight maneuverability of an unmanned aircraft system
  - Other situations that require reporting to ensure safety

#### 8-3-2 Contents of accident reports

Upon becoming aware of the occurrence of an aviation accident, etc. of an unmanned aircraft system of a type for which UAS Type Certification is obtained, the UAS Type Certification holder shall report the



following items to such a party in such a manner as is stipulated in Section 8-3-3 prior to the due date stipulated in Section 8-3-4.

- (1) Names
- (2) Registration number, UAS type certificate number, type and serial number of the unmanned aircraft system
- (3) Date, time and place of occurrence of the event pertaining to the report
- (4) Outline of the situation pertaining to the report
- (5) Other matters for reference

In addition, if the cause of the event pertaining to the report is deemed to lie in the design or manufacturing process, the UAS Type Certification holder shall report necessary corrective measures to the Minister of Land, Infrastructure, Transport and Tourism, and shall also submit documents specifying matters necessary for technical verification to determine appropriateness of the corrective measures.

#### 8-3-3 Reporting method and destination

A report to the Japan Civil Aviation Bureau shall be transmitted to the following destination by e-mail.  
Aircraft Engineering and Certification Center, Airworthiness Division, Aviation Safety and Security Department, Japan Civil Aviation Bureau, Ministry of Land, Infrastructure, Transport and Tourism  
Nagoya Airport, Toyoba, Toyoyama-cho, Nishikasugai-gun, Aichi Prefecture 480-0202  
Phone: +81-568-29-1985  
E-mail : cab-aecc-drone-tcq@gxb.mlit.go.jp

#### 8-3-4 Time to report

The report shall be submitted as soon as possible within ten days after a defect which meets the reporting criteria in Section 8-3-1 is detected, or after the occurrence of an aviation accident, etc. of the unmanned aircraft system is known.

#### 8-3-5 Storage of records

When information is collected, organized, or analyzed, a document or electromagnetic record describing or recording the results shall be prepared and preserved.

### 9. Miscellaneous

#### 9-1 Handling by other means

Notwithstanding the provisions of this Circular, UAS Type Certification, etc. of unmanned aircraft systems may be handled by other means if deemed necessary by the Director of the Aircraft Engineering and Certification Center.

### 10. Transitional measures for revision of the Act

#### 10-1 Handling of test data obtained before the enforcement of the Act Partially Amending the Civil

## Aeronautics Act (Act No.65 of 2021)

With regard to test data obtained for acquisition of UAS Type Certification, the relevant test needs to be conducted in accordance with a test plan whose conformity has been certified in order to determine the validity of the test, so the test shall be conducted after application for UAS Type Certification in principle. However, test data that is already obtained when the revised Act comes into effect on December 5, 2022 may be treated as valid test data (hereinafter referred to as “Past Data”) in UAS Type Certification if it satisfies the certain conditions mentioned below.

### (1) Tests from which Past Data may be obtained

Past Data may be obtained only from tests which are categorized as the ones that do not require attendance of the Inspection Body under Section 5-1-5 2) of this Circular after application.

### (2) Conditions for treating test data as Past Data

[1] At an appropriate stage prior to application, the prospective applicant shall notify the Japan Civil Aviation Bureau of his/her/its intention to use test data obtained before the application as Past Data, and shall explain the appropriateness and effectiveness of the test data.

[2] In order to ensure the appropriateness of the test, the prospective applicant shall demonstrate that the obtained test data comes from a test model which is manufactured in the same manufacturing process as mass-manufactured aircraft and matches the type design. The prospective applicant shall also demonstrate that documents including the test plan and the test report are prepared, inspected, approved within the company, issued, revised, managed and stored in an appropriate manner whose quality is controlled by the prospective applicant.

[3] The test plan that is actually used for the test shall comply with Circular No.8-001 “UAS AIM for inspections of unmanned aircraft systems against Safety and Uniformity Standards for UAS Type Certification, etc.”, shall include all the information, conditions and specifications necessary for implementation of the test, and shall clearly explain the details of the test. The test plan shall be inspected for conformity after application.

[4] The test report shall show that the test was conducted in accordance with the test plan, shall appropriately record the test data that should be recorded, and shall evaluate the validity of the test. Test data shall be recorded with the type, accuracy, and frequency to ensure the validity of the test. The test report shall be inspected for conformity after application.

### (3) Acceptability of Past Data

Comprehensively considering the situation of the application as well as matters related to (1) and (2) above, the Japan Civil Aviation Bureau shall determine whether the obtained test data may be treated as Past Data or not. At an appropriate stage prior to application, the determination result as to which test data may be treated as Past Data shall be recorded in the minutes, etc. so that both the prospective applicant and the Japan Civil Aviation Bureau may share recognition and form agreement.

Supplementary Provision (December 2, 2022)

1. The Circular shall come into effect as of December 5, 2022.

If you have any questions or comments regarding this Circular, please contact the following.

Aircraft Engineering and Certification Center, Airworthiness Division, Aviation Safety and Security  
Department, Japan Civil Aviation Bureau, Ministry of Land, Infrastructure, Transport and Tourism

Nagoya Airport, Toyoba, Toyoyama-cho, Nishikasugai-gun, Aichi Prefecture 480-0202

Phone: +81-568-29-1985

E-mail [cab-aecc-drone-tcq@gxb.mlit.go.jp](mailto:cab-aecc-drone-tcq@gxb.mlit.go.jp)

Project:

Item:

Stage:

Date:

Page: 1/XX

# Issue Paper

Project: ①

Item: ⑤

Stage: ⑥

Related regulations: ②

Date: ⑦

Related Circular ③

Status: ⑧

Article name: ④

Due date: ⑨

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Issuance of Issue Paper ⑩

Discussion ⑪

Background

Inspector's opinion (date)

Applicant's opinion (date)

Conclusion (date) ⑫

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Inspector's affiliation (JCAB or name of Registered Unmanned Aircraft Inspection Organizations)

Inspector's name

Contact information

JCAB FORM 8-002-1

## Guidelines for Filling Out the Issue Paper

Considering the variety of matters related to UAS Type Certification pertaining to which the issue paper is issued, and the variety of circumstances where it is issued, the guidelines and format for filling in the issue paper shall be established as follows in order to secure effective management.

### 1 Matters to be stated

- ① Applicant's name, model name  
Ex. ABC Co., Ltd.  
Model type: ABC type DEF model
- ② Related regulations/guidelines (including special conditions, equivalent level of safety, and exemptions)  
Ex. Section 300 of "Standards concerning Strength, Structure, and Performance to Ensure Safety"
- ③ Related Circulars, etc.  
Ex. Circular No.8-001
- ④ Article name  
Ex. ABC type unmanned aircraft
- ⑤ Identification codes (such as G-1, A-2, P-5, etc.)  
G—:General (guidelines of the Japan Civil Aviation Bureau concerning operations of all the projects)  
A—: Structure of unmanned aircraft  
S—: Systems and equipment  
P—: Power system  
E—: External environments (lightning-proof, HIRF, etc.)  
F—: Flight tests  
Q—: Quality assurance and uniformity  
The inspector shall allot numbers after the dash (—).
- ⑥ Stage  
Stage 1: Drafting phase (The background for drafting the issue paper shall be recorded)  
Stage 2: Discussion phase (The inspector's opinion shall be recorded)  
Stage 3: Inspection phase (The applicant's opinion shall be recorded and the inspector's opinion shall be revised)  
Stage 4: Final phase (conclusion)
- ⑦ Date  
Date of issuance of the issue paper
- ⑧ Status  
Whether the issue paper is open or closed shall be specified.  
If reconsideration is required after closing, please write "reopened".
- ⑨ Due date  
The due date for processing shall be specified.  
Ex. "By agreement on Approved Compliance Plan", "By the final review meeting of the UAS Type Certification Review Board"
- ⑩ The background to the drafting of the issue paper  
Write briefly, in an easily understandable manner.
- ⑪ The background, the inspector's opinion, and the applicant's opinion  
Write briefly, in an easily understandable manner.
- ⑫ The conclusion of the discussion in Item ⑪ shall be recorded here briefly at the early stage of the drafting phase, but it may be modified depending on inspection results by the UAS Type Certification Review Board. The status in Item ⑧ shall be open until this Item is finalized.

|  |          |   |
|--|----------|---|
| 適合性判定書<br>STATEMENT OF COMPLIANCE  |          | 発行番号 Issue No.  |
| 申請者名 NAME OF APPLICANT   |          |   |
| 無人航空機の詳細 UNMANNED AIRCRAFT IDENTIFICATION  |          |   |
| 製造者 MANUFACTURER   | 型式 MODEL | 種類 TYPE   |
| 資料一覧 LIST OF DATA  |          |   |
| 資料番号<br>IDENTIFICATION   | 改訂符 REV. | 資料名 TITLE   |
|  |          |   |
| 資料の対応する基準項目等 APPLICABLE REQUIREMENTS(List specific sections)   |          |   |
| <p>判定 JUDGEMENT</p> <p>上記資料が基準の該当項目に適合していると認める。<br/>Data listed above and attached sheet have been examined in accordance with established procedure and found to comply with applicable requirement of the regulation(s).</p> |          |   |
| 判定コメント等 COMMENT etc.   |          |   |
| 航空局の署名/日付<br>SIGNATURE OF JCAB/DATE  |          | 登録検査機関名<br>NAME OF REGISTERED UNMANNED AIRCRAFT<br>INSPECTION ORGANIZATIONS |
|  |          | 検査者の署名/日付<br>SIGNATURE OF INSPECTOR / DATE                                  |
|  |          |   |

| 型式認証業務名、 議事録<br>PROJECT name、 The Minutes |   |                             |  |
|---|---|-----------------------------|--|
| 日時<br>Date                                |   | 場所<br>Place                 |  |
| 出席者<br>Attendance                         | 航空局/登録検査機関<br>Member of Authority/<br>Registered Unmanned<br>Aircraft Inspection<br>Organizations | 申請者<br>Member of Applicants |  |
|   |   |                             |  |
| 業務概要<br>Business<br>Outline               |   |                             |  |
| 指摘事項<br>・<br>調整事項<br>等<br>Finding<br>Item |   |                             |  |
| 備考<br>Remarks                             |   |                             |  |

JCAB FORM 8-002-3

|   |           |  |                        |
|---|-----------|--|------------------------|
| 総合判定書 INTEGRATED STATEMENT OF COMPLIANCE  |           |  | 発行番号 ISSUE No.         |
| 無人航空機の詳細 UNMANNED AIRCRAFT IDENTIFICATION   |           |  |                        |
| 製造者 MANUFACTURER  | 型式名 MODEL | 種類 TYPE(Helicopter, Multirotor, Fixedwing etc.)                          | 申請者名 NAME OF APPLICANT |
| 申請項目の名称 NAME OF APPLICATION   |           | 適合性証明計画 APPROVED COMPLIANCE PLAN   |                        |
| 部品番号 PARTS NUMBER   |           | 変更の有無 DOCUMENTS CHANGE NECESSITY   |                        |
| 適合性検査表No. COMPLIANCE CHECK LIST No.   |           | 仕様書 SPECIFICATIONS : 有 YES 無 NO  |                        |
| 適合性判定書No. STATEMENT OF COMPLIANCE No.   |           | 部品表 PARTS LIST : 有 YES 無 NO  |                        |
|   |           | 図面目録 DWG. LIST : 有 YES 無 NO  |                        |
|   |           | 整備手順書 MAINTENANCE MANUAL : 有 YES 無 NO                                    |                        |
|   |           | 飛行規程 FLIGHT MANUAL : 有 YES 無 NO  |                        |
| 判定 JUDGEMENT  |           |  |                        |
| 上記の適合性証明計画に記載された全ての検査が終了したことを確認した。<br>It has been confirmed that all of the inspection indicated by the compliance plan above had been completed.   |           |  |                        |
| 申請者コメント APPLICANT COMMENT   |           | 申請者署名 SIGNATURE OF APPLICANT   |                        |
|   |           | 日付 DATE _____ 署名 SIGNATURE _____   |                        |
| 判定 FOUND  |           |  |                        |
| 上記の申請項目に掲げられた設計及び製造過程（設計又は製造過程の変更後の設計及び製造過程）が航空法第 132 条の 16 第 4 項の基準を満足しているものと判定する。<br>It has been found that the application above complies with the standard of prescribed in the Article 132-16 Paragraph 4 of the Civil Aeronautics Law of Japan. |           |  |                        |
| 航空局コメント JCAB COMMENT  |           | 登録検査機関コメント REGISTERED UNMANNED AIRCRAFT INSPECTION ORGANIZATIONS COMMENT |                        |
| 航空局署名 SIGNATURE OF JCAB   |           | 検査者署名 SIGNATURE OF INSPECTOR   |                        |
| 所属 ORGANIZATION & TITLE _____   |           |  |                        |
| 日付 DATE _____ 署名 SIGNATURE _____  |           | 日付 DATE _____ 署名 SIGNATURE _____   |                        |

JCAB FORM 8-002-4





## 適合検査／試験立会要求書（続き）

## Request for Conformity/Test Witnessing (Continuation sheet)

2. 発行番号 Tracking No. :

Rev.

4. ページ Page :

of

## Instructions for Filling Out the Request for Conformity/Test Witnessing

JCAB FORM 8-002-5 “Request for Conformity/Test Witnessing” shall be filled out in Japanese or English, in the manner described below.

### Item 1: Inspector or requested party

Enter the name of the inspector who conducts the inspection, or the name of the party from which the inspection is requested, that is, either the Japan Civil Aviation Bureau or a Registered Unmanned Aircraft Inspection Organization.

### Item 2: Tracking number

Obtain and enter the tracking number from the issuance ledger prepared by the issuing organization. Enter the following letter(s) at the top of the issue number.

MLIT: “本” (“AECC” in the event of Aircraft Engineering and Certification Center), Registered Unmanned Aircraft Inspection Organizations: the registration number for such organizations

Ex. If the Registered Unmanned Aircraft Inspection Organization Registration Number is 9999, write “9999” at the top of the issue number.

### Item 3: Date of issue

Enter the date of issue.

### Item 4: Page

Enter the total number of pages of the Request for Conformity/Test Witnessing.

### Item 5: Request for conformity inspection / test witnessing

Check the box for the applicable item. If “Other” is checked, specify the name of the inspection subject in the parentheses part.

Ex. Unmanned aircraft system for flight tests (P/N: 1234-5678, S/N: 9876-54321)

### Item 6: Applicant

Enter the name and address of the applicant for UAS Type Certification.

### Item 7: Manufacturer

Enter the name and address of the manufacturer of the inspection subject.

### Item 8: Time to conduct the inspection

Enter the scheduled date of the inspection.

Ex. From [month, day, year] to [month, day, year]

### Item 9: Necessity to contact the inspector

If the applicant is requested to adjust the schedule, etc. with the inspector (responsible person from the Japan Civil Aviation Bureau or the Registered Unmanned Aircraft Inspection Organization), enter the contact information (such as the Japan Civil Aviation Bureau) in the parentheses of this item, and check the box of the applicable item.

### Item 10: Subject to be inspected

Enter the name, part number, etc. that will be subject to inspection.

Ex. (In the event of a flight test using an existing aircraft) Model name of the unmanned aircraft system (P/N: 1234-5678, S/N: 9876-54321)

- For reference only. Use Japanese format for submission. -

Item 11: Type of the relevant unmanned aircraft system

Enter the unmanned aircraft system on which the conformity inspection, etc. will be conducted. If the aircraft is to be used for testing purposes only, write “Test only”.

Item 12: Quantity

Enter the quantity of the inspection subjects.

Item 13: Design data

Enter the name, revision code and date of issue of the design data (drawings, test plans, etc.) to be applied.

Ex. Section 300 Flight Test Plan XXX-XXX Rev. C [month, day, year]

Item 14: Special instructions

If necessary, describe special instructions such as matters to be checked.

Ex. Dimensional inspection shall be carried out on-site on all three of the specimens concerned.

Item 15: Contact information of the applicant

Enter the name of the person in charge the inspection, the department to which the person belongs, and the contact information.

Ex. [Name], Conformity Inspection Section, Technical HQ Phone: 0000-00-0000

Item 16: Remarks

Enter information other than the above that is necessary for implementation of the inspection.

Items 17-20:

Check the box for reports, etc. to be issued at the time of the inspection.

Item 21: Responsible officer of the Japan Civil Aviation Bureau

Enter the affiliation and contact information of the officer responsible for issuing the Request for Conformity/Test Witnessing at the Japan Civil Aviation Bureau.

Ex. Aircraft Engineering and Certification Center Phone: 0000-00-0000 [name]

Item 22: Inspector of the Registered Unmanned Aircraft Inspection Organizations

Enter the affiliation, contact information and signature of the inspector responsible for issuing the Request for Conformity/Test Witnessing at the Registered Unmanned Aircraft Inspection Organization.

Ex. \*\*\* Division, \*\*\* Association Phone: 0000-00-0000 [Signature]

Item 23: Notes

Enter matters to bear in mind when conducting the inspection.

Ex. The conformity inspection record pertaining to the conformity inspection conducted by this RFC/W shall be submitted prior to [month, date, year].

|   |                                 |  |       |
|---|---------------------------------|--|-------|
| <p style="text-align: center;">適合報告書<br/>Statement of Conformity</p>                              |                                 | 1.発行番号 Issue No.:                                |       |
|   |                                 | 2.適合検査依頼書番号 RFC No.:                             | Rev.  |
| 3. <input type="checkbox"/> 無人航空機 Unmanned Aircraft   |                                 |  |       |
| 1)製造者 Manufacturer :  |                                 | 2)型式 Model :                                     |       |
| 3)製造番号 Serial No.:  |                                 | 4)無人航空機登録番号 Registration No.:                    |       |
| 4. <input type="checkbox"/> 発動機又はモーター Engine or Motor   |                                 |  |       |
| 1)製造者 Manufacturer :  |                                 | 2)名称 Name :                                      |       |
| 3)製造番号 Serial No.:  |                                 |  |       |
| 5. <input type="checkbox"/> プロペラ又はローター Propeller or Rotor   |                                 |  |       |
| 1)製造者 Manufacturer :  |                                 | 2)名称 Name :                                      |       |
| 3)ブレード及びハブの名称 Blade and Hub Name :  |                                 | 4)ブレード及びハブの製造番号 Blade and Hub Serial No. :       |       |
| Blade :   | Hub :                           | Blade :  | Hub : |
| 6. <input type="checkbox"/> 部品 Part   |                                 |  |       |
| 1)製造者 Manufacturer :  |                                 | 2)名称 Name :                                      |       |
| 3)部品等の番号 Part(s) No. :  |                                 | 4)部品等の製造番号 Serial No. :                          |       |
| 7. <input type="checkbox"/> 供試体 Article   |                                 | 8. <input type="checkbox"/> 試験セットアップ Test Set-up |       |
| 1)製造者 Manufacturer _____  |                                 | 9. <input type="checkbox"/> その他 Other            |       |
| 2)部品等の番号 Part(s) No. _____  |                                 | (  |       |
| 3)部品等の製造番号 Serial No. _____   |                                 | )  |       |
| 10.設計データ (図面及び試験方案等 (改訂符号、発行日を含む。))   |                                 |  |       |
| Design data(Drawing, Test Plan, etc) (with Revision / Date)                                       |                                 |  |       |
| 上記対象供試体等は、10. 項の設計データに適合するものであることを確認した。   |                                 |  |       |
| This conforms that the specimen, etc. above conform(s) to the applicable design data in block 12. |                                 |  |       |
| 11.Deviation :  |                                 |  |       |
| 12.確認日 Date   | 13.確認者署名 Signature of Certifier | 14.所属 Organization                               |       |

## Guidelines for Filling Out the Statement of Conformity

JCAB FORM 8-002-6 “Statement of Conformity” shall be filled out in Japanese or English, in the manner described below.

### Item 1: Issue number

Obtain and enter the issue number from the issuance ledger prepared by the applicant.

### Item 2: RFC number

Enter the issue number of RFC/W or the document number of CP agreed instead of RFC/W, and the revision code.

### Items 3-6: Type, etc. of the relevant unmanned aircraft system

If an unmanned aircraft system, an engine or motor, a propeller or rotor is specified in the item for relevant unmanned aircraft system, etc. in RFC/W, check the box for the applicable item and enter the name of the manufacturer, the type or name, the part number and the serial number. If nothing is specified, write “N/A”.

If there is no Unmanned Aircraft System Registration Number, write “N/A” in Item 5.4).

### Item 7: Article (test specimens)

If the words “Test only” are written in the item for relevant unmanned aircraft system, etc. in RFC/W, check the box of the applicable item and enter the name of the manufacturer, the part number and the serial number. If nothing is applicable, write “N/A”.

### Item 8: Test set-up

If test set-up is requested in RFC, etc., check the box of the applicable item.

### Item 9: Others

If “Others” is requested in RFC, etc., check the box of the applicable item and enter the name, etc. of the inspection subject.

Ex. Unmanned aircraft system for flight tests TEST JIG (P/N: 1234-5678, S/N: 9876-54321)

### Item 10: Design data

Enter the name, revision code and date of issue of the design data (drawings, test plans, etc.).

### Item 11: Deviations

Enter all the deviations that are detected as of the date of issuance of the Statement of Conformity.

Enter the outline, management number and date of issue of the deviations. If there are no deviations, write “None”.

### Item 12: Date of certification

Enter the date of certification.

### Item 13: Signature of the certifier

Enter the name and signature of the responsible person at the applicant.

### Item 14: Organization

Describe the organization to which the certifier belongs, starting with the company name.

Ex. \*\*\* Section, Unmanned Aircraft Business Department, \*\*\* Inc.

| <b>適合検査記録書</b><br><b>Conformity Inspection Record</b> |                            | 1.発行番号 Issue No. :      |   |  | 3.シート Sheet of sheets<br>1 of |                   |
|---|----------------------------|-------------------------|---|--|-------------------------------|-------------------|
|   |                            | 2.適合検査依頼書番号 RFC No. :   |   |  |                               |                   |
| 4.型式 Model  |                            |                         |   |  |                               |                   |
| 5.申請者 Applicant                                       |                            | 6.製造者 Manufacturer      |   | 7.検査期間 Period covered by this inspection                                 |                               |                   |
|   |                            |                         |   | 検査開始日 Beginning Date   |                               | 検査完了日 Ending Date |
| 8.航空局 JCAB  |                            |                         |   | 9. 登録検査機関 Registered Unmanned Aircraft Inspection Organizations          |                               |                   |
| 所属 Organization : _____                               |                            |                         |   | 登録検査機関登録番号 Registered Unmanned Aircraft Inspection Organizations No. : _ |                               |                   |
| 担当官署名 Signature of JCAB : _____                       |                            |                         |   | 検査者署名 Signature of Inspector : _____                                     |                               |                   |
| 10.項番<br>Item No.                                     | 11.検査項目<br>Inspection Item | 12.設計データ<br>Design Data | 13.改訂符号<br>及び日付<br>Revision and<br>Date | 14.判定数量<br>No. of Item Determined  |                               | 15.備考<br>Comments |
|   |                            |                         |   | 適合<br>SAT.   | 不適合<br>UNSAT.                 |                   |
|   |                            |                         |   |  |                               |                   |
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| 適合検査記録書<br>Conformity Inspection Record |                            | 1.発行番号 Issue No. :      |   |                                   | 3.シート Sheet of sheets<br>of |                   |
|---|----------------------------|-------------------------|---|-----------------------------------|-----------------------------|-------------------|
|   |                            | 2.適合検査依頼書番号 RFC No. :   |   |                                   |                             |                   |
| 10.項番<br>Item No.                       | 11.検査項目<br>Inspection Item | 12.設計データ<br>Design Data | 13.改訂符号<br>及び日付<br>Revision and<br>Date | 14.判定数量<br>No. of Item Determined |                             | 15.備考<br>Comments |
|   |                            |                         |   | 適合<br>SAT.                        | 不適合<br>UNSAT.               |                   |
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|   |                            |                         |   |                                   |                             |                   |

Form for page 2 and thereafter

JCAB FORM 8-002-7



## Guidelines for Filling Out the Conformity Inspection Record

JCAB FORM 8-002-7 “Conformity Inspection Record” shall be filled out in Japanese or English, in the manner described below.

**Item 1: Issue number**

Obtain and enter the issue number from the issuance ledger prepared by the issuing government office. Enter the following letters at the top of the issue number.

MLIT: “本-CIR” (“AECC-CIR” in the event of Aircraft Engineering and Certification Center), Registered Unmanned Aircraft Inspection Organizations: the registration number for such organizations

Ex. If the Registered Unmanned Aircraft Inspection Organization Registration Number is 9999, write “9999CIR” at the top of the issue number.

**Item 2: RFC number**

Enter the number of the RFC.

**Item 3: Sheet of sheets**

Write the page number of the relevant page before “of”, and the total number of pages after “of”. Ex. For the 2nd page out of three pages, “2 of 3”

**Item 4: Model**

Enter the model of the unmanned aircraft system, etc. on which the conformity inspection is to be conducted. If the aircraft is to be used for testing purposes only, write “Test only”. No entry is necessary for set-up, etc. of the test equipment.

**Items 5-6: Applicant and manufacturer**

Enter the names of the applicant and the manufacturer. If the applicant is also the manufacturer, enter the same name for both items.

**Item 7: Period covered by this inspection**

Beginning Date shall be the date when the conformity inspection is started. Ending Date shall be the date when the conformity inspection is finished.

**Item 8: Signature of JCAB**

**Item 9: Signature of the inspector of the Registered Unmanned Aircraft Inspection Organization**

**Item 10: Item number**

Enter the serial numbers.

**Item 11: Inspection item**

Enter the name of the unmanned aircraft system, etc. on which the conformity inspection is to be conducted, and titles such as test set-up.

**Item 12: Design data**

Enter the design data (drawings, test plans, etc.) applied to the conformity inspection.

**Item 13: Revision code and date**

Enter the revision code and date of issue of the document specified in Item 12.

**Item 14: Number of items determined**

Enter the number of the unmanned aircraft system on which the conformity inspection is to be conducted in each of the “satisfactory” and “unsatisfactory” columns. As for unmanned aircraft systems, etc. which are found “unsatisfactory” as a result of the conformity inspection, enter the reason for rejection in the “remarks” column and have the inspector, etc. sign there. If the unsatisfactory condition is subsequently corrected, the inspection shall be conducted again. If conformity with the relevant design data is determined, enter the fact in the “remarks” column of Item 15, and change “unsatisfactory” into “satisfactory” by crossing off.

**Item 15: Remarks**

Provide specific details of the conducted conformity inspection for each item in Item 11 (e.g., method of inspection, status of conformity, corrective action and rationale, serial number, limitations, special inspection, explanation of individual certification documents checked, and abbreviations used, etc.).

| 適合検査票<br>Conformity Inspection Tag  |                  |                 |            | 1.発行番号 Issue No. :   |                       |              |
|---|------------------|-----------------|------------|--|-----------------------|--------------|
| 3.申請者 Applicant   |                  |                 |            | 4.製造者 Manufacturer   |                       |              |
|   |                  |                 |            | 5.設計データ (図面及び試験方案等 (改訂符号、発行日を含む。))<br>Design data (Drawing, Test Plan, etc) (with Revision / Date)   |                       |              |
| 6.項番<br>Item No.  | 7.名称 Description | 8.部品番号 Part No. | 9.型式 Model | 10.数量 Qty.   | 11.製造番号<br>Serial No. | 12.状況 Status |
|   |                  |                 |            |  |                       |              |
| 13.備考 Remarks   |                  |                 |            |  |                       |              |
| 14.上記の供試体が、欄13に記載されている事項を除き、欄5の設計データに適合することを確認した。<br>This conforms that the specimen identified above, except as otherwise specified in block13 conform(s) to the applicable design data in block5. |                  |                 |            |  |                       |              |
| 15.航空局 Signature JCAB<br>所属Organization and Title _____<br><br>発行日付 Issue Date _____<br><br>担当官署名Signature of JCAB_____   |                  |                 |            | 16. 登録検査機関 Registered Unmanned Aircraft Inspection Organizations<br>登録検査機関登録番号 Registered Unmanned Aircraft Inspection<br>Organizations No. : _____<br><br>発行日付 Issue Date : _____<br><br>検査者署名 Signature of Inspector : _____ |                       |              |

JCAB FORM 8-002-8

## Guidelines for Filling Out the Conformity Inspection Tag

JCAB FORM 8-002-8 “Conformity Inspection Tag” shall be filled out in Japanese or English, in the manner described below.

**Item 1: Issue number**

Obtain and enter the issue number from the issuance ledger prepared by the issuing organization. Enter the following letters at the top of the issue number.

MLIT: “本-CIT” (“AECC-CIT” in the event of Aircraft Engineering and Certification Center), Registered Unmanned Aircraft Inspection Organizations: the registration number for such organizations

Ex. If the Registered Unmanned Aircraft Inspection Organization Registration Number is 9999, write “9999CIT” at the top of the issue number.

**Item 2: RFC number**

Enter the issue number of RFC/W.

**Items 3-4: Applicant and manufacturer**

Enter the names of the applicant and the manufacturer. If the applicant is also the manufacturer, enter the same name for both items.

**Item 5: Design data**

Enter the name, revision code and date of issue of the design data (drawings, test plans, etc.).

**Item 6: Item number**

Enter the serial numbers

**Item 7: Description**

Enter the name (which shall be the one written in the design data) of the unmanned aircraft system, etc. on which the conformity inspection is to be conducted.

**Item 8: Part number**

Enter the part number of the unmanned aircraft system, etc. on which the conformity inspection is to be conducted.

**Item 9: Model**

Enter the model of the unmanned aircraft system, etc. on which the conformity inspection is to be conducted. If the aircraft is used for testing purposes only, write “Test only”.

**Item 10: Quantity**

Enter the quantity of unmanned aircraft systems, etc. on which the conformity inspection is to be conducted.

**Item 11: Serial number / Batch number**

Enter the serial number or batch number of the unmanned aircraft system, etc. on which the conformity inspection is to be conducted. For an aircraft, etc. without a serial number or a batch number, write “None”.

**Item 12: Status**

Enter the status of the unmanned aircraft system, etc. on which the conformity inspection is to be conducted. Examples of entries shall include “Manufactured” and “Used”. In the event of “Used”, enter necessary information (such as total hours of use, total cycles of use) in the “Remarks” column in Item 13.

**Item 13: Remarks**

Enter necessary information other than the above.

**Item 15: Signature of JCAB**

**Item 16: Signature of the inspector of the Registered Unmanned Aircraft Inspection Organization**

- For reference only. Use Japanese format for submission. -



## Guidelines for Filling Out the Test Witnessing Record

JCAB FORM 8-002-9 “Test Witnessing Record” shall be filled out in Japanese or English, in the manner described below.

**Item 1: Issue number**

Obtain and enter the issue number from the issuance ledger prepared by the applicant.

**Items 2-3: Applicant and manufacturer**

Enter the names of the applicant and the manufacturer. If the applicant is also the manufacturer, enter the same name for both items.

**Item 4: RFC/W number**

Enter the number of the RFC/W.

**Item 5: Model**

Enter the model of the unmanned aircraft system, etc. on which the conformity inspection was conducted. If the aircraft was used for testing purposes only, write “Test only”.

**Items 6-7: Part No. and Serial No.**

Enter the part number and serial number of the unmanned aircraft system, etc. on which the test was witnessed. For an aircraft, etc. without a part number or a serial number, write “N/A”.

**Item 8: Test title**

Enter the test title specified in the test plan.

**Item 9: Test plan No.**

Enter the number of the test plan.

**Item 10: Period covered by this testing**

Beginning Date shall be the date when the conformity inspection is started. Ending Date shall be the date when the conformity inspection is finished.

**Item 11: Location of testing**

Enter the place where the test was conducted. (Ex. \*\*\* Testing Ground, \*\*\* Plant, \*\*\* Inc.)

**Item 12: JCAB/ Registered Unmanned Aircraft Inspection Organizations Comment, etc.**

Enter any special notes for witnessing the test.

**Items 13-14: Signatures of responsible person and witness**

The responsible person shall be the person who assumes responsibility for the test. The witness shall be the applicant’s witness (the person who issued the SOC at the time of the conformity inspection that was conducted before the relevant test). The responsible person may also be the witness.

**Item 15: Signature of JCAB**

**Item 16: Signature of the inspector of the Registered Unmanned Aircraft Inspection Organization**

|   |   |  |
|---|---|--|
| <b>Notice for Witnessing Inspection of Manufacturing Process</b>  |   | Issue No. (arbitrary number of the JCAB or the Registered Unmanned Aircraft Inspection Organization) |
| 1: Type of the unmanned aircraft system   | 2. Name of applicant  |  |
| (Example of entry)<br>ABC type DEF model  | (Example of entry)<br>*** Inc.                                      |  |
| 3. Description of items   | (Example of entry)<br>Manufacture of the existing unmanned aircraft |  |
| <p>4. Manufacturing process inspection items (As for inspection items, specify the items and methods for inspection.)</p> <p>(Example of entry)</p> <ul style="list-style-type: none"> <li>- Confirmation (witnessing) of the assembly process to be performed in the work sheet No. ***</li> <li>- Confirmation regarding PIR No. *** (document inspection)</li> <li>- Witnessing the operational test set forth in PIR No. *** (witness inspection)</li> <li>- Confirmation of the assembly equipment (Inspection of the quality control system)(document and on-site)</li> </ul> |   |  |
| 5. Inspectors' names  | Minamiko Nishigawa<br>Kitao Minamigawa                              |  |
| <p>Inspection will be conducted on the "Manufacturing process inspection items" mentioned in Item 4 above. As for details, coordinate with the inspector.</p> <p>[Month, date, year]</p> <p>(JCAB or the name of the Registered Unmanned Aircraft Inspection Organization)</p> <p style="text-align: right;">Nishiko Higashigawa, Inspector _____</p>   |   |  |

JCAB FORM 8-002-10

|  |  |   |
|--|--|---|
| <b>Record of Witnessing Inspection of Manufacturing Process</b>  |  | Issue number: the same number as Notice |
| 1: Type of the unmanned aircraft system  | 2. Name of applicant   |   |
| (Example of entry)<br>ABC type DEF model   | (Example of entry)<br>*** Inc.   |   |
| 3. Description of items  | (Example of entry)<br>Manufacture of the existing unmanned aircraft system |   |
| <p>4. Manufacturing process inspection items</p> <p>(Example of entry)</p> <ul style="list-style-type: none"> <li>- Confirmation (witnessing) of the assembly process to be performed in the work sheet No. ***</li> <li>- Confirmation regarding PIR No. *** (document inspection)</li> <li>- Witnessing the operational test set forth in PIR No. *** (witness inspection)</li> <li>- Confirmation of the assembly equipment (Inspection of the quality control system)(document and on-site)</li> </ul> |  |   |
| <p>I hereby report that inspection was conducted on the “Manufacturing process inspection items” mentioned in Item 4 above.</p> <p>[Month, date, year]</p> <p>(JCAB or the name of the Registered Unmanned Aircraft Inspection Organization)</p> <p style="text-align: right;">Minamiko Nishigawa, Inspector</p>   |  |   |
| <p>I confirmed that the “Manufacturing process inspection items” mentioned in Item 4 above were appropriate.</p> <p>[Month, date, year]</p> <p>(JCAB or the name of the Registered Unmanned Aircraft Inspection Organization)</p> <p style="text-align: right;">Nishiko Higashigawa, Inspector</p>   |  |   |

JCAB FORM 8-002-11

(The following format is an example and shall only contain similar information)

To (Japan Civil Aviation Bureau of the name of the Registered Unmanned Aircraft Inspection Organization)

(Name of applicant, Internal Document Control Number, and Date of Issue)

## Document describing the quality control system

|   |  |
|---|--|
| 1. Name of applicant  | *** Inc.   |
| 2. Applicant's location   | [Nagoya Airport, Nishikasugai-gun, Aichi Prefecture]   |
| 3. Outline of the project   | [UAS Type Certification for *** type A184 aircraft]  |
| 4. Inspection organization in charge  | [Aircraft Engineering and Certification Center]  |
| 5. Affiliation and name of the contact person of the applicant                              | [Quality Control Group, Quality Assurance Division<br>Tsuguo Tawa]   |
| 6. Affiliation and name of the person supervising the quality control system                | [Quality Inspection Group, Quality Assurance Division<br>Takeshige Hamai]  |
| 7. Information on the applicant's past achievements, experience, and quality control system |  |
| [1] Achievements and experience   | [Describe past achievements and experiences in connection with the Japan Civil Aviation Bureau or the Registered Unmanned Aircraft Inspection Organization.]<br>Ex.<br>- Underwent an inspection of the manufacturing process and obtained UAS Type Certification in connection with the *** type A184 aircraft. |
| [2] Quality control system  | [Describe certification, etc. obtained from third-party organizations.]<br>Ex.<br>- Obtained international standards related to quality management systems specific to the aerospace and defense industries, such as JIS Q 9100.   |
| [3] Others  | [Otherwise describe past achievements and experiences, as well as the status of approval for the quality control & assurance system, in connection with the Japan Civil Aviation Bureau or the Registered Unmanned Aircraft Inspection Organization.]  |



#### 8. Quality control system applicable to aircrafts with UAS Type Certification

[The quality control system that is applied to aircrafts with UAS Type Certification shall be as follows.

Documents including at least the content corresponding to Circular No.8-001 “UAS Airworthiness Inspection Manual (hereinafter referred to as "UAS AIM") for inspections of unmanned aircraft system against Safety and Uniformity Standards for UAS Type Certification, etc.” shall be compiled into a separate volume “Manufacture Management Guidelines for the \*\*\* type A184 aircraft” and submitted.

The structure of this separate volume shall not be composed only of the names of internal regulations and references to items thereof.

If a list of reference presentation materials in Item 9 (including the document number, revision code, document title and date of establishment) is not included in the document mentioned above, the list shall be compiled into a separate-volume supplement and submitted.]

#### 9. Reference presentation materials

[The minimum documents to be presented during the quality control system inspection shall be as follows:

- Internal regulations related to the separate volume mentioned above
- Process specifications for each special process applied to the aircraft with UAS Type Certification]

(Document number)

| Notice of Confirmation of Quality Management System   |          |                        |
|---|----------|------------------------|
| 1. Name of the applicant for inspection for UAS Type Certification, and the type name<br>Name of applicant:<br>Type name:   |          |                        |
| 2. Purpose of Notice<br><input type="checkbox"/> Quality control inspection<br>( <input type="checkbox"/> Document inspection <input type="checkbox"/> On-site inspection)<br><input type="checkbox"/> Inspection of changes to quality control regulations<br>( <input type="checkbox"/> Document inspection <input type="checkbox"/> On-site inspection)  |          |                        |
| 3. Inspection results<br><input type="checkbox"/> No findings<br><input type="checkbox"/> Findings are as follows   |          |                        |
| No.   | Findings | Compliance items, etc. |
|   |          |                        |
| 4. I hereby inform you that results of confirmation of your quality control system are as set forth in Item 3.<br><br><div style="text-align: center; margin-top: 20px;">                         [Month, date, year]                     </div> <div style="text-align: right; margin-top: 20px;">                         (JCAB or the name of the Registered Unmanned Aircraft Inspection Organization)<br/>                         Nishiko Higashigawa, Inspector                     </div> |          |                        |

(Reporter Document Number)

| <h2>Report on Details of Measures</h2>  |                |                       |
|---|----------------|-----------------------|
| 1. Name of the applicant for inspection for UAS Type Certification, and the type name<br>Name of applicant:<br>Type name:   |                |                       |
| 2. Document number, date of issue and classification of the remark<br>Document number and date of the remark: (As of [month, date, year])<br><input type="checkbox"/> Quality control inspection<br>( <input type="checkbox"/> Document inspection <input type="checkbox"/> On-site inspection)<br><input type="checkbox"/> Inspection of changes to quality control regulations<br>( <input type="checkbox"/> Document inspection <input type="checkbox"/> On-site inspection) |                |                       |
| 3. Action details   |                |                       |
| No.   | Action details | Scheduled action date |
|   |                |                       |
| 4. I hereby report that details of the action taken against the remark are as set forth in Item 3.<br><br><div style="display: flex; justify-content: space-between; margin-top: 20px;"> <span>[Month, date, year]</span> <span>Reporter's name</span> </div>   |                |                       |

Attachment 15 is omitted because it is a Japanese version of Attachment 16.

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- 
- (14) Empty Weight.
  - (15) C2 Link Frequencies.
  - (16) FPV Frequency.
  - (17) Software.
  - (18) Minimum Crew for Operation and their Roles.
  - (19) Maximum Payload Weight.
  - (20) Variable Pitch Movements (or Control Surface Movements).
  - (21) Maximum Operation Altitude.
  - (22) Available Time (or Flight Endurance).
  - (23) Flight Limitations.
  - (24) Manufacturer's Part Numbers and Serial Numbers.
  - (25) Manufacturer's Part Numbers and Serial Numbers of AE (Controller, C-2 Link, Launcher etc...).
  - (26) Document number and revision number of Manufacture Control Manual
  - (27) Certification Basis.
  - (28) Notes.