

JUT2A5ABCT





Learn more about the registration system and remote ID!

## Handbook for Unmanned Aircraft Registration

2022 Version



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## Use of Unmanned Aircraft

Based on the revised Civil Aeronautics Act of 2020, registration of Unmanned Aircraft has been mandated. This handbook provides background information on the registration system, remote ID, and notification of test flights.

We hope you will find this handbook useful in understanding the registration system for Unmanned Aircraft.

> Acceptance of pre-registration From Dec. 20, 2021 Mandatory registration From Jun. 20, 2022



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# Chapter

## Registration System for Unmanned Aircraft



# 01 Background of the system development

The registration system for Unmanned Aircraft has been established to ensure safety and security in the expanded use of Unmanned Aircraft.



Chapter

Inappropriate flight incidents where the owner of the aircraft could not be identified





Use of Unmanned Aircraft to create business models in areas such as logistics, security, surveying, and research

#### See here for details

The problem currently occurring with inappropriate flights by drones and other Unmanned Aircraft is that the owner of the aircraft cannot be identified and appropriate measures cannot be taken when necessary safety measures need to be taken against the owner of the aircraft.

In recent years, the use of Unmanned Aircraft has been on the rise due to such factors as the growing shortage of personnel in the logistics and security industries, increasing demand for survey and investigation flights over wide areas, and the creation of business models that utilize drones in remote islands and depopulated mountainous regions, making it extremely important to know who the owner of the Unmanned Aircraft is.

In light of this background, a registration system for Unmanned Aircraft has been established to ensure safety and security in the expanded use of Unmanned Aircraft.

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### 02 Outlin regist

Chapter

## Outline of the registration system

Based on the amendment to the Civil Aeronautics Act in 2020, unregistered Unmanned Aircraft flights will be banned. From June 20, 2022, Unmanned Aircraft will have to be marked with a registration ID to identify them and be fitted with a Remote ID function.



#### See here for details

In accordance with the Civil Aeronautics Act as amended in 2020, no Unmanned Aircraft shall be used for aviation unless it is registered in the Register of Unmanned Aircraft, and the owner of an Unmanned Aircraft shall, upon receiving notification of a registration ID, display the relevant registration ID on the relevant Unmanned Aircraft or take other measures to identify the registration ID on the relevant Unmanned Aircraft without delay pursuant to the provisions of the Ordinance of the Ministry of Land, Infrastructure, Transport and Tourism.

## Chapter 1

## Scope of application of the registration system

The exclusion for Unmanned Aircraft was changed from "those weighing less than 200g" to "those weighing less than 100g." This means that all Unmanned Aircraft of 100g or more are subject to registration.



#### See here for details

Even Unmanned Aircraft weighing less than 200 grams, which are not regulated by the Civil Aeronautics Act, have improved performance, and some of them can fly stably outdoors. In anticipation of further increase of such Unmanned Aircraft in the future, in line with the enforcement of the registration system, the category of aircraft that does not fall under the category of Unmanned Aircraft as stipulated in Article 5-2 of the Ordinance for Enforcement of the Civil Aeronautics Act (Ordinance of the Ministry of Transport No. 56 of 1952) will be changed from "those weighing less than 200g" to "those weighing less than 100g."

All Unmanned Aircraft, including multi-copters, rotary-wing and fixed-wing, except those that do not fall under the category of Unmanned Aircraft, are subject to registration which also includes information on their owners and users.



## Unmanned Aircraft that are not eligible for registration

In order to ensure the safety of the aircraft, which is the minimum requirement for the registration of Unmanned Aircraft,

registration cannot be allowed if any of the following applies.



Unmanned Aircraft that have been notified in advance by the Minister of Land, Infrastructure, Transport and Tourism that they cannot be registered, such as aircraft that have been recalled by the manufacturer due to safety concerns, or aircraft that have been involved in a number of accidents

registered in the Register of Unmanned Aircraft



Unmanned Aircraft with unnecessary protrusions, etc. on the surface that could significantly impair safety in the event of a collision with a person, etc. on the ground

See here for details

In accordance with the Civil Aeronautics Act as amended in 2020, no Unmanned Aircraft shall be used for aviation unless it is



Unmanned Aircraft for which it is extremely difficult to control the flight by remote control or autopilot

Chapter 05

### How to register

### Unmanned Aircraft registration requires the following three steps:

### 01

Application

You can apply online or by submitting necessary documents. Enter/complete the information such as the name and address of the owner and the user of the Unmanned Aircraft, as well as their manufacturer and model in your application.

For paper-based applications, please refer to the Unmanned Aircraft Registration Web Portal.





After your registration application is approved, you will be asked to pay your registration fee. Please see page 12 for details of the fee and how to pay.





STEP

03

Issuance of a

registration ID

Once you have completed all

registration procedures, a

registration ID for each will

be issued for the Unmanned

Aircraft. Please see page 10

for details of how to display

the registration ID.

See here for details

Unmanned Aircraft Registration



https://www.mlit.go.jp/koku/drone/en







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### Modifications of Unmanned Aircraft

If you want to register a modified Unmanned Aircraft, it is necessary to declare the outline and scale of the modification.



See here for details

When applying for registration of Unmanned Aircraft, it is necessary to declare the outline and scale of modifications, depending on whether or not they affect the functions and flight performance of the aircraft. Examples of modifications include the installation of parts not specified by the aircraft manufacturer and the restoration or repair of damaged parts, resulting in a certain level of change in the airframe weight, maximum takeoff weight, and dimensions of the airframe.

For more information, please refer to Civil Aviation Bureau's Unmanned Aircraft Registration System web page: https://www.mlit.go.jp/koku/koku\_ua\_registration.html

## Chapter 1

## How to display the registration ID

The registration ID must be clearly visible on the Unmanned Aircraft with marker and stickers. The font height must be 25mm or more for aircraft weighing 25kg or more, and 3mm or more for aircraft weighing less than 25kg.



#### See here for details

When the Unmanned Aircraft is registered by the government, it is given a registration ID. The registration ID must be clearly displayed in a durable manner on an easily visible external part of the Unmanned Aircraft that cannot be easily removed.

Examples of durable methods are permanent marker and stickers.

The letters of the registration ID should be the following character height according to the weight category of the aircraft (less than 25kg/25kg or more), and should be displayed in a color that can be clearly distinguished from the ground color to be displayed.

Less than 25kg: 3mm or more 25kg or more: 25mm or more

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## Items required for identity verification

The registration of Unmanned Aircraft is subject to strict identification of the owner.

For your convenience,

you can complete the identification process online or by mail.

#### In case the owner is an individual:

•For online identity verification: Individual Number Card, driver's license, or passport

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•For identity verification by mail:

A certificate of entry in the certificate of residence (photocopies are not acceptable), or copies (photocopies) of any two of the following: health insurance card, driver's license, or any other document that verifies the name, address, and date of birth of the owner.

## 2 In case the owner is a corporation or an organization:

•For online identity verification (available for corporations only): gBizID

#### •For identity verification by mail:

Either a certificate of registered matters or a certificate of seal impression

In case the owner is a foreigner who does not own a residence in Japan:

•A copy of the passport of the owner plus a copy of a document issued by a public institution that verifies the name, address, and date of birth of the owner

#### In case of application by proxy:

 In addition to the identification documents 1) through 3) above, a document evidencing the right of representation (power of attorney, etc.)



# Registration fee and its payment method

The registration fee must be paid at the time of application for new registration or renewal, and the amount varies depending on the method of application and identity verification.



#### Application method and fees

Application method	First aircraft	Second or more aircraft (when applying at the same time as the first aircraft
Online application using your Individual Number Card or gBizID	900 yen	890 yen/aircraft
Online application using other means of identification such as a driver's license and a passport	1,450 yen	1,050 yen/aircraft
Paper-based application	2,400 yen	2,000 yen/aircraft

#### See here for details

The registration fee must be paid at the time of application for new registration or renewal, and the amount varies depending on the method of application and identity verification. Payment of the registration fee can be made online by credit card. You can also pay electronically through Internet banking or at an ATM of financial institutions. In this case, enter the fee payment number provided by the government.

## 10 Summary

The registration system for Unmanned Aircraft will come into effect on June 20, 2022.

Registration of Unmanned Aircraft will be mandatory from this date.

All types of Unmanned Aircraft weighing 100g or more are subject to registration.

If the safety of the Unmanned Aircraft cannot be guaranteed, you will not be able to register it.

Any modified Unmanned Aircraft must be declared at the time of application for registration, including the outline and scale of modification.

The registration ID must be clearly displayed on the Unmanned Aircraft and the Unmanned Aircraft must be fitted with a remote ID function that transmits identification information.

Identity verification is required to register Unmanned Aircraft.

There is a fee for registering Unmanned Aircraft. The fee and payment method depend on the method of application and identity verification.

Registration can be done through the following DIPS 2.0 web dashboard. https://www.ossportal.dips.mlit.go.jp/portal/top/?lang=en



## 11

Chapter

# Provision of information on defects in Unmanned Aircraft

In the event of an aircraft malfunction or crash during a flight,

the Japan Civil Aviatio

Bureau

please report it to the Japan Civil Aviation Bureau and provide information to the manufacturer of the Unmanned Aircraft in question or to their authorized agent in Japan.



#### See here for details

Unmanned Aircraft that do not meet the requirements for registration pursuant to the provisions of Article 131-5 of the Act cannot be registered. In the event of a malfunction or a crash of aircraft during flight, please report it to the Civil Aviation Bureau and provide the pertinent information to the manufacturer of the Unmanned Aircraft concerned or to an authorized agent of the manufacturer in Japan.

# Chapter **Z**

## Remote ID



### What is remote ID?

With the mandatory registration of Unmanned Aircraft, in addition to the physical display of the registration ID on the aircraft, the aircraft must be equipped with a remote ID (RID) function that transmits identification information remotely via radio waves.



#### However, the following flights are exempted from installing RID equipments, etc.

- Unmanned Aircraft for which registration procedures are carried out during the pre-registration period from December 20, 2021 until the registration system comes into effect
  Flights over a specific area notified in advance to the government, with necessary measures taken such as assignment of assistants to monitor the flight of Unmanned Aircraft and clarification of the perimeter of the area
  Flights conducted by mooring with a sufficiently strong string, etc. (not exceeding 30 m in length)
  Flights conducted by the National Police Agency, Prefectural Police,
  - or Japan Coast Guard for security or other operations requiring special confidentiality

### Basics of RID equipments, etc.

The RID function for remotely transmitting identification information via radio waves is classified into a built-in type and an external type.



#### See here for details

The RID function for remotely transmitting identification information via radio waves is classified into a built-in type and an external type. In some cases, the external type is provided by the aircraft manufacturer, while in other cases it is sold as a stand-alone product. In any case, those equipments must be developed and manufactured in accordance with the RID Standard and must be notified to the Civil Aviation Bureau.

RID Standard is based on the U.S. ASTM F3411-19 and has been developed through public-private consultations. The remotely transmitted radio waves are transmitted by direct broadcasting method using Bluetooth 5.x Bluetooth LE Long Range, Wi-Fi Neighbor Awareness Networking or Wi-Fi Beacon.

Chapter 2

## What kind of information will be transmitted?

The RID contains static information such as the serial number and a registration ID of the Unmanned Aircraft, and dynamic information such as location, speed, altitude, and time, and the transmission cycle is once every second. It does not include information about the owner or user.



Chapter 2

01



# Chapter 3

## **Remote ID Specific Area**



Chapter 3

### RID specific area 🚺

RID equipment is not required if the boundaries of the flight area that was notified to the Minister of Land, Infrastructure, Transport and Tourism are clearly marked and safety measures are taken, such as deployment of an assistant.



See here for details

This is an area that is exempt from installing RID equipment by notifying the area in advance to the Minister of Land, Infrastructure, Transport and Tourism. You need to specify the range of the flight and the date and time for the flight, and take measures to ensure safety by clearly indicating the perimeter of the flight area and assigning assistants to monitor for preventing Unmanned Aircraft from flying outside the flight area.



The following measures shall be taken to ensure safety in the RID specific area.

#### Assignment of assistants to monitor the flight of Unmanned Aircraft and other measures:



Assistants shall monitor Unmanned Aircraft flying over the specific area, guide to prevent the aircraft from flying outside the specific area, and suspend the flight as needed.

#### Installation of signs necessary to specify the perimeter of the specific area and other measures:



Please mark the perimeter of the specific area on the ground with signs, colored cones, etc. to make it clearly identifiable.

#### Suspension of a flight in the event that an unregistered Unmanned Aircraft flies over:

Suspend a flight when it is difficult to distinguish between oneself and others according to the guide of assistants.

Chapter 03

### Points to note

Even if you have notified the government of a RID specific area, you must check that there is no risk to the safety of people or property on the ground or on the water before flying. You should also be able to present your notification details and notification number during the flight.





#### See here for details

Even if you have submitted a notification of the RID specific area, be sure to check before flying because the permission of Article 132, paragraph 2, item 2 of the Act and the provisions of Article 132-2, paragraph 2, item 2 of the Act may be required. A person who flies an Unmanned Aircraft that has been notified of the RID specific area should carry one of the following media so that the contents of the notification and the notification number can be shown.

Terminal displaying the contents of the notification to the notification system and the notification number, or a printed matter thereof
 A copy of the original notification form with the notification number returned from the government

• Terminal displaying a copy of the submitted notification form and the notification number returned from the notification system, or a printed matter thereof



# Chapter 4

## Notification of Test Flights



### What is the notification of test flights?

In order not to impede the research and development activities of Unmanned Aircraft, you may not need to make a registration by notifying the Minister of Land, Infrastructure, Transport and Tourism of the necessary matters such as flight area and aircraft information flying over the area in advance.







Notify the Minister of Land, Infrastructure, Transport and Tourism

Ensure the safety of the flight area sm

Test flight for research and development, etc.

### What safety measures are required?

In the notification of test flights, the following safety measures must be taken to ensure the safety of persons and objects in the vicinity of the area to be flown.

- Measures to prevent Unmanned Aircraft from flying outside the test flight area Assistants shall alert the operator to suspend flights as needed and prevent Unmanned Aircraft from flying outside the test flight area by mooring the aircraft using a sufficiently strong string, etc.
- Controlling the entry of third parties into the test flight area The entry of third parties shall be controlled by enclosing the perimeter of a test flight notification area with a wall or fence and indicating as restricted area.



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### Points to note

Even if a test flight is conducted after notification, a pre-flight inspection must be conducted to ensure that there is no risk to the safety of persons or property on the ground or on the water. The aircraft must also be marked with the registration number and a sign displaying "under test flight."





See here for details

Even in the case of test flights to be made without registration in the area notified under the proviso of Article 131-4 of the Civil Aeronautics Act, be sure to check before flying because the permission under Article 132, paragraph 2, item 2 of the Act and the provisions of Article 132-2, paragraph 2, item 2 of the Act may apply.

When flying an Unmanned Aircraft that has been notified in the test flight notification, please display the notification number provided by the government after the notification and indicate on the airframe that it is "under test flight," and also carry a copy of the notification with you.

### **Unmanned Aircraft Registration Web Portal**

Various information regarding registration will be updated from time to time.

Unmanned Aircraft Registration



https://www.mlit.go.jp/koku/drone/en

### **Drone/UAS Information Platform System 2.0**

Registration can be completed at the following website:

https://www.ossportal.dips.mlit.go.jp/portal/top/?lang=en





