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Interpretation of regulations concerning Unmanned Aircraft System / UAS

1. Regarding Article 2, paragraph (22) of the Civil Aeronautics Act

(1) Unmanned Aircraft System / UAS

The Act Partially Amending the Civil Aeronautics Act (Act No. 67 of September 11, 2015) newly added the definition of "Unmanned Aircraft System / UAS" as follows:

Unmanned Aircraft System / UAS: airplanes, rotorcraft, glider, airship, and other equipment specified by Cabinet Order(*) that can be used for air navigation and that cannot be boarded by persons structurally, those that can be flown by remote active control or autopilot (which refers to automatic control by a program) (excluding those specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism / MLIT as those whose flight are, in consideration of their weight and other reasons, not likely to compromise the safety of aircraft navigation and the safety of persons and properties on land and water.)

* Currently, there is no equipment specified by Cabinet Order.

Here, the above interpretation is as follows.

- "Equipment that cannot be boarded by persons structurally" refers to equipment that has been judged to fall under this category based on a review of its structure, performance, etc. including its general size and potential capabilities.
- "Remote active control" refers to the operation of ascending, hovering, level flight, descending, etc. in the air using a control device such as a proportional controller.
- "Autopilot" refers to the automatic control by a program built into the device. Specifically, there are those that can be flown along a predetermined flight path and those that fly completely autonomously from takeoff to landing without human intervention during the flight.

(2) Those that are excluded from Unmanned Aircraft System / UAS

Pursuant to Article 5-2 of the Regulation for Enforcement of the Civil Aeronautics Act, those whose weight is less than 100 grams are excluded from the scope of Unmanned Aircraft System / UAS as having no risk of impairing the safety of aircraft navigation and the safety of persons and objects on land and water.

Here, the “weight” refers to the sum of the weight of the main body of the Unmanned Aircraft System / UAS and the weight of the battery, and does not include the weight of removable accessories other than the battery.

2. Relevant to Article 132-85 of the Civil Aeronautics Act (Flight-prohibited airspace)

- (1) In areas densely populated with people or houses (hereinafter referred to as "densely inhabited district"), it is prohibited to fly an Unmanned Aircraft System / UAS over such areas pursuant to Article 132-85, paragraph (1), item (ii) of the Civil Aeronautics Act, because there is a high probability that an Unmanned Aircraft System / UAS will cause harm to people and objects on land and water if it falls owing to malfunction, etc.

However, even in densely inhabited districts, areas designated by the Minister of Land, Infrastructure, Transport and Tourism in a public notice (*) shall be excluded from areas densely populated with people or houses if it is deemed that there is no risk of impairing the safety of people and objects on land and water in light of the actual conditions of the areas and various needs for Unmanned Aircraft System / UAS.

In addition, even if the aircraft flies over private land in densely inhabited districts, it is assumed that it may be blown to an unexpected place owing to strong winds, etc., so as long as it is in densely inhabited districts, it falls under the flight-prohibited airspace.

* At present, there are no areas specified by public notice as areas excluded from areas densely populated with people or houses.

- (2) The airspace within 30 m of objects on the ground or water is excluded from the flight-prohibited airspace at a height of 150 m or more above the ground or water. For example, in an airspace within 30 meters of the walls or rooftops of high-rise buildings in an area that does not fall under any of the vicinity of an airport, etc., an emergency response airspace, or a densely inhabited district, you can fly an Unmanned Aircraft System / UAS without permission even if the airspace is 150 meters or higher. Therefore, in the case of a flight over an airspace within 30 m of the object concerned, it is either a flight by the person concerned with the object concerned based on this exception provision or a flight for which approval under Article 132-86 paragraph (3) or (5), item (ii) of the Civil Aeronautics Act is obtained for the flight not by the method stipulated in Article 132-86 paragraph (2), item (iii) of the Civil Aeronautics Act (keeping a distance of 30 m from a third party).

In addition, since transmission lines, etc., which connect tall structures are also objects, airspace within 30 m from such transmission lines, etc. is also excluded.

Since the target object is not limited to 150 m or more, if there is a flight-prohibited airspace with a height of 150 m or more above the ground or water surface within 30 m of the object, such airspace is excluded.

If the airspace is over a densely inhabited district, permission for flight under Article 132-85, paragraph (1), item (ii) of the Civil Aeronautics Act is required.

3. Relevant to Article 132-86 of the Civil Aeronautics Act (Mode of the flight)
- (1) Prohibition of flight while normal flight may not be possible owing to influence of alcohol, etc.

When ingesting alcohol, etc., attention and judgment may be impaired, and normal flight of an Unmanned Aircraft System / UAS may be affected; therefore, Article 132-86, paragraph (1), item (i) of the Civil Aeronautics Act prohibits flights while normal flight may not be possible owing to the influence of alcohol or drugs.

The term "alcohol" refers to alcoholic beverages and foods containing alcohol.

Since the effect of alcohol on the body varies depending on the constitution of the individual and the physical condition of the day, even a small amount of alcohol in the body may affect the normal flight of an Unmanned Aircraft System / UAS. For this reason, you shall not fly an Unmanned Aircraft System / UAS with alcohol in your body regardless of the degree of alcohol concentration in your body.

"Drugs" are not limited to controlled substances such as narcotics and stimulants, but also include medicinal drugs.

Furthermore, flying an Unmanned Aircraft System / UAS in a public place in violation of the provisions of Article 132-86, paragraph (1), item (i) of the Civil Aeronautics Act is subject to imprisonment with work for not more than 1 year or a fine of not more than 300,000 yen, and the term "public place" here means a place that the public, that is, many and unspecified people can freely use or enter, and it can include roads, parks, squares, stations, etc.

- (2) Flight after confirming that necessary preparations for flight are completed.

In order to prevent falling due to failures by conducting inspections of the aircraft prior to flight, the aircraft shall be flown after confirming that the necessary preparations for flight have been completed pursuant to Article 132-86, paragraph (1), item (ii) of the Civil Aeronautics Act. In addition, the matters to be confirmed stipulated in Article 236-77 of the Regulation for Enforcement of the Civil Aeronautics Act and specific examples of the matters are as follows.

- 1) Conduct daily inspection such as external inspection and operational inspection required by Article 236-75 of the Regulation for Enforcement of the Civil Aeronautics Act of the relevant Unmanned Aircraft System / UAS and record it in the daily inspection records referred to in the "Procedures for Handling the Flight Logbook of Unmanned Aircraft System / UAS" (MLIT JCAB UAS Division No. 236963 dated December 1, 2022). If the contents and frequency of daily inspections, including removable accessories such as devices with remote ID functions, are specified in the instruction manual of the designer, etc., follow these instructions.
- 2) Confirm the conditions of the airspace in which you fly the Unmanned Aircraft System / UAS and its surrounding space.
Example: Confirm that no aircraft or other Unmanned Aircraft System / UAS are in the flight route.
Confirm that there is no third party directly under the flight route and in the drop dispersion area in the vicinity.

- 3) Confirm weather information necessary for the flight.
Specific example: Confirm that the wind speed is within the operating limit.
Regarding the wind speed, confirm the ground wind at the takeoff and landing site and the wind direction and wind velocity fluctuation at each altitude zone along the flight route.
Confirm that the temperature is within the operating limit.
Confirm that any rainfall is within the operating limit.
Confirm that sufficient visibility has been secured.

- 4) Confirm the amount of fuel loaded or the remaining battery level.
Specific example: Confirm the sufficiency of fuel or remaining battery level.

- (3) Flight in a manner to prevent collision with an aircraft or another Unmanned Aircraft System / UAS.

In order to prevent a collision with an aircraft or another Unmanned Aircraft System / UAS, Article 132-86, paragraph (1), item (iii) of the Civil Aeronautics Act stipulates that you shall fly an Unmanned Aircraft System / UAS by methods such as making the aircraft descend to the ground depending on the surrounding conditions. The methods for preventing collisions stipulated in Article 236-78 of the Regulation for Enforcement of the Civil Aeronautics Act and specific examples of the methods are as follows.

- 1) Any person flying an Unmanned Aircraft System / UAS (hereinafter referred to as "pilot") shall check for aircraft in flight on its flight route and in the airspace around it, and when it is judged that there is a risk of collision, he/she shall take appropriate measures such as making the relevant Unmanned Aircraft System / UAS descend to the ground.
- 2) When a pilot has confirmed another Unmanned Aircraft System / UAS in flight on the flight route of the Unmanned Aircraft System / UAS or in the airspace around it, the pilot shall fly the Unmanned Aircraft System / UAS securing a safe distance from the other Unmanned Aircraft System / UAS, or if it is judged that there is a risk of collision, the pilot shall take appropriate measures such as making the Unmanned Aircraft System / UAS descend to the ground.

Here, "take appropriate measures" means to fly an Unmanned Aircraft System / UAS in a direction other than the direction in which it may collide, and may include stopping in mid-air.

- (4) Prohibition of flight in a manner that causes trouble to others

The act of making noise or making a sudden descent unnecessarily not only causes discomfort to those around, but also can be dangerous. Therefore, Article 132-86, paragraph (1), item (iv) of the Civil Aeronautics Act prohibits flying in a manner that causes trouble to others.

The provisions of Article 132-86, paragraph (1), item (iv) of the Civil Aeronautics Act are intended to prevent the safe navigation of aircraft and the safety of persons and objects on the ground from being impaired owing to dangerous flights.

Therefore, the term "a manner that causes trouble to others" refers to the act of bringing an Unmanned Aircraft System / UAS very close to a person and the like.

(5) Day (daytime) flight

At night, it becomes difficult to ascertain not only the position and attitude of the Unmanned Aircraft System / UAS but also surrounding obstacles, etc., and improper control of the Unmanned Aircraft System / UAS may lead to a crash, etc. Therefore, Article 132-86, paragraph (2), item (i) of the Civil Aeronautics Act stipulates that flights are limited to day (daytime) flights (the period from sunrise to sunset) only.

Here, "the period from sunrise to sunset" refers to the period from the time of sunrise to the time of sunset announced by the National Astronomical Observatory of Japan. Therefore, "sunrise" and "sunset" indicate different times depending on the area.

When a pilot flies multiple Unmanned Aircraft System / UAS simultaneously (hereinafter referred to as "Simultaneous Multi-UAS Operation"), the user or pilot of the Unmanned Aircraft System / UAS should refer to the "Guidelines for the Safe Simultaneous Operation of multiple UAS" (established in March 2025) and voluntarily ensure that the safety of the aircraft and persons or objects on the land or water are not compromised.

(6) Flight within visual range

Article 132-86, paragraph (2), item (ii) of the Civil Aeronautics Act stipulates that flights are limited to those under constant monitoring by visual confirmation in order to ascertain the position and attitude of an Unmanned Aircraft System / UAS and to ensure that there are no persons or obstacles in the vicinity.

Here, "visual confirmation" means that the pilot himself or herself sees with his or her own eyes. Therefore, visual confirmation by an assistant does not meet the definition, and viewing the flight situation exclusively with a monitor or with binoculars, cameras, etc. does not meet the definition of "visual confirmation" because the field of view is limited.

The act of taking your eyes off the Unmanned Aircraft System / UAS temporarily to check the monitor, etc. for the purpose of checking the remaining battery level for safe flight falls within the scope of visual confirmation flight.

(7) Flight maintaining a certain distance from persons or objects on the ground or water.

In order to prevent an Unmanned Aircraft System / UAS from colliding with people or objects on the ground or water, Article 132-86, paragraph (2) item (iii) of the Civil Aeronautics Act stipulates that a certain distance (30 m) shall be secured between the Unmanned Aircraft System / UAS and them during the flight.

The provisions of Article 132-86, paragraph (2), item (iii) of the Civil Aeronautics Act are intended to protect persons or objects from collision with an flying Unmanned Aircraft System / UAS, and therefore, persons or objects from which a certain distance (30 m) should be kept are interpreted as follows:

- "Person" refers to a person other than the pilot and his or her related persons

(persons directly or indirectly involved in the flight of an Unmanned Aircraft System / UAS) (third party).

- "Object" refers to the following objects other than those owned or managed by the pilot and his or her related persons (persons directly or indirectly involved in the flight of an Unmanned Aircraft System / UAS) (objects of third parties).
 - a) Machine in which people are expected to be present (vehicles, etc.)
 - b) Buildings and other structures with similar size

As specific examples, the following objects fall under the objects in this regulation.

Vehicles: automobiles, railway vehicles, track vehicles, ships, aircraft, construction machinery, port cranes, etc.

Structures: buildings, dwellings, factories, warehouses, bridges, elevations, floodgates, substations, steel towers, utility poles, electric wires, traffic lights, streetlights, etc.

* In light of the purpose of this regulation, the following objects do not fall under the category of objects from which a distance should be kept in this regulation.

- a) Land (including fields and paved land (road surfaces, etc.), embankments, railway tracks, etc., which are integrated with land.)
- b) Natural objects (trees, weeds, etc.), etc.

- (8) Flight in an airspace other than sky above an event site where a large number of people gather.

Under Article 132-86, paragraph (2), item (iv) of the Civil Aeronautics Act, flights are limited to airspace other than sky above an event site where a large number of people gather temporarily, because there is a high probability of injury to people if an Unmanned Aircraft System / UAS flying over an event where a large number of people gather falls owing to a failure.

In light of the purpose of preventing people on land from being harmed when an Unmanned Aircraft System / UAS flying in the sky above an event site falls, an "event site where a large number of people gather" shall be comprehensively determined, taking into account not only the number and density of the people gathering, but also whether the event is held at a specific place, date and time, the intention of the organizers, etc.

Regardless of whether flight permission or approval is obtained, when it becomes clear that an unexpected "event site where a large number of people gather" will be held under the planned flight route and when it is confirmed that a third party enters the flight site or is likely to enter the flight site, the flight of the Unmanned Aircraft System / UAS shall be stopped immediately, and necessary measures shall be taken such as changing the flight route, landing at a place where there is no risk of impairing the safety of aircraft navigation and the safety of persons and objects on land and water.

Specific examples are as follows.

- Examples of cases which meet the definition:

In addition to festivals, fairs, and exhibitions specified in Article 132-86, paragraph (2), item (iv) of the Civil Aeronautics Act, professional sports games, sports tournaments, athletic meets, outdoor events such as concerts, drone shows (excluding prior training and filming for distribution to companies in places where it is obvious that third party entry control measures have been taken, such as company premises and unmanned stadiums), fireworks displays, Bon Odori festivals, marathons, street parades, outdoor speeches for elections, and demonstrations, etc.

○ Examples of cases which do not meet the definition:

Flights in the sky above an event site in which only those involved referred to in "6. Matters relating to third parties" participate, spontaneous events (for example, crowds due to congestion, waiting at a traffic light), etc.

Since the form of flight differs from case to case, even if it does not meet the definition of an event site where a large number of people gather in the above cases, it may meet the definition of an "event site where a large number of people gather" when dozens of people gather at a specific time and place.

(9) Prohibition of transport of hazardous materials

Some Unmanned Aircraft Systems / UAS already have capabilities of transporting objects weighing several kilograms to 10 kilograms and are fully capable of transporting hazardous materials such as explosives, high-pressure gas, flammable liquids, etc., and if an Unmanned Aircraft System / UAS that transports such objects crashes or leaks such objects during transportation, it may cause injury to people or damage to other objects due to the scattering of such materials to the surroundings or the explosion of the aircraft. Therefore, Article 132-86, paragraph (2), item (v) of the Civil Aeronautics Act prohibits the transport of hazardous materials.

Hazardous materials whose transport by an Unmanned Aircraft System / UAS is prohibited are specified in Article 236-80 of the Regulation for Enforcement of the Civil Aeronautics Act and the "Public Notice Specifying Objects, etc. whose Transportation by an Unmanned Aircraft System / UAS is Prohibited" (Public Notice No. 1142 of the Ministry of Land, Infrastructure, Transport and Tourism / MLIT dated November 17, 2015).

Furthermore, objects that are indispensable for the relevant flight and are always transported as one body with the aircraft during the flight shall be deemed as objects to be transported for the flight of the Unmanned Aircraft System / UAS under Article 236-80, paragraph (2) of the Regulation for Enforcement of the Civil Aeronautics Act and not be included in the objects whose transportation is prohibited.

Specifically, the following objects fall under the category:

- Fuel and batteries necessary for the flight of an Unmanned Aircraft System / UAS
- Batteries used in professional equipment (cameras, etc.)

- Explosives and high-pressure gas needed to open the parachute as safety equipment, etc.

(10) Prohibition of object drop

Dropping objects from an Unmanned Aircraft System / UAS during a flight may cause injury to people on the ground and it may interfere with proper control of the Unmanned Aircraft System / UAS such as losing the balance of the aircraft; therefore, Article 132-86, paragraph (2), item (vi) of the Civil Aeronautics Act prohibits object drops.

Here, the act of spraying liquid such as water or agricultural chemicals falls under the category of object drop, and the act of handing over a target object to personnel on the ground without dropping it on the ground surface and the act of placing the transported object on the ground do not fall under the category of object drop.

4. Flights that do not require permission or approval if conditions are met.

By mooring an Unmanned Aircraft System / UAS on the ground or a fixed object with a sufficiently strong string, etc. (within 30 m in length), it is physically possible to prevent it from flying outside the length of the string, etc., thereby eliminating the need for the following individual permissions and approvals.

- Flights in the airspace over densely inhabited districts. (Article 132-85, paragraph (1), item (ii) of the Act)
- Night flight (Article 132-86, paragraph (2), item (i) of the Act)
- Flights beyond visual line of sight (Article 132-86, paragraph (2), item (ii) of the Act)
- Flights within 30 m of a third party (Article 132-86, paragraph (2), item (iii) of the Act)
- Object drop (Article 132-86, paragraph (2), item (vi) of the Act)

In particular, aerial spraying of agricultural chemicals that fall under the category of hazardous materials continues to require approval for flights for transport of hazardous materials (Article 132-86, paragraph (2), item (v) of the Act).

Specific examples of third party entry control measures within the area where the flight of an Unmanned Aircraft System / UAS is restricted by assistant placement and mooring it as prescribed in Article 236-76, item (iv) of the Regulation for Enforcement of the Civil Aeronautics Act include monitoring by assistants, verbal warnings, and signs or cones to restrict entry by persons other than those concerned. In addition, in preparation for unforeseen situations, the contact information with which the pilot can always be contacted shall be clearly indicated at the Unmanned Aircraft System / UAS, the mooring point, and the outer edge where entry control measures have been taken. In addition, in order to prevent problems from occurring, activities shall be implemented to ensure smooth operation, such as efforts to gain the understanding of those around them as necessary.

When it is confirmed that the entry control measures, etc. taken do not function and that a person enters or is likely to enter the space under an Unmanned Aircraft System / UAS, the flight of the Unmanned Aircraft System / UAS shall be stopped immediately, and necessary measures shall be taken such as changing the flight route or landing at a place where there is no risk of impairing the safety of aircraft navigation and the safety of persons and objects on land and water. In addition, if the entry control does not

function, it is not deemed that the measures stipulated in Article 236-76, item (iv) of the Regulation for Enforcement of the Civil Aeronautics Act are taken appropriately. Therefore, even if a mooring is in place, the aircraft cannot be flown without the necessary permission and approval in accordance with the airspace and method of flight.

When an Unmanned Aircraft System / UAS is moored with a connecting cable connecting a main cable, guide rails, etc. arranged along objects, etc., the flight range is physically limited to 30 m or less from the objects. Therefore, it is recognized as moored in light of the purpose. In this case the upper limit of 30 m applies only to the connecting cable. Regardless of the length of the connecting cable, the Unmanned Aircraft System / UAS shall not be allowed to stray 30 m or more from the object by bending the main cable, etc.

Fixing connecting cables to vehicles, aircraft, etc., falls under the category of towing and is not generally recognized as mooring.

Flights stipulated in Article 236-6, paragraph (2), item (ii) of the Regulation for Enforcement of the Civil Aeronautics Act (flight conducted after restricting the flight range of an Unmanned Aircraft System / UAS by mooring it with strings, etc. having sufficient strength (not more than 30 m in length)) are also interpreted in accordance with this paragraph.

5. Matters relating to entry control measures

Article 132-85, paragraph (1) of the Civil Aeronautics Act stipulates that "entry control measures are measures to control the entry of persons other than the pilot and his or her assistant under the flight route of an Unmanned Aircraft System / UAS and are specified by Ordinances of the Ministry of Land, Infrastructure, Transport and Tourism / MLIT," and Article 236-70 of the Regulation for Enforcement of the Civil Aeronautics Act prescribes it in detail as "appropriate measures, such as assistant placement and the establishment of entry restricted areas." The roles of assistants include monitoring and verbal warning, for example, and in addition, in the establishment of areas to restrict the entry of third parties (entry control areas), the range of drop dispersion of flying Unmanned Aircraft System / UAS must be taken into consideration, and it is necessary to install signs, etc. necessary to clearly indicate the range of such areas, but it is also necessary to take measures such as signs, cones, etc. to restrict the entry of persons other than those concerned. In addition, based on the Examination Guidelines for Permissions and Approvals for Flights of Unmanned Aircraft Systems / UAS (Category II Flights) (MLIT JCAB Flight Standards Division No. 684 and MLIT JCAB Airworthiness Division No. 923 enacted on November 17, 2015, hereinafter referred to as the "Examination Guidelines") 5-4 (1) d) C) (iii), in the case of flights beyond visual line of sight without any assistant using a camera installed on the aircraft (this includes cases where a person with a competence certificate flies an aircraft with UAS Certification and performs an equivalent flight without approval from the Minister of Land, Infrastructure, Transport and Tourism), it is deemed that entry control measures are implemented by confirming that no third party enters directly under or around the flight route in the direction of travel using a camera installed on the aircraft.

6. Matters relating to third parties

(1) About third parties

The definition of "third party" specified in Article 132-87 of the Civil Aeronautics Act, etc. is as follows:

"Third party" refers to a person who is not directly or indirectly involved in the flight of an Unmanned Aircraft System / UAS. The following persons are directly or indirectly involved in the flight of an Unmanned Aircraft System / UAS and do not fall under the category of "third party":

- 1) A person who is directly involved in the flight of an Unmanned Aircraft System / UAS

A person who is directly involved (hereinafter referred to as "person directly involved") refers to the pilot, a person who is not actually piloting the aircraft but may pilot it, assistant, and other personnel necessary to ensure the flight safety of the Unmanned Aircraft System / UAS.

- 2) A person who is indirectly involved in the flight of an Unmanned Aircraft System / UAS

A person who is indirectly involved (hereinafter referred to as "person indirectly involved") refers to a person who has a common understanding with the pilot regarding the purpose of flight and falls under all of the following.

- a) The pilot judges that the person indirectly involved is involved in all or part of the flight purpose of the Unmanned Aircraft System / UAS.
- b) The person indirectly involved has received clear instructions and safety precautions from the operator to follow in the event of unplanned behavior of the Unmanned Aircraft System / UAS. The person indirectly involved is expected to follow the instructions and safety precautions, and the pilot should confirm that the instructions and safety precautions are properly understood.
- c) The person indirectly involved may decide for themselves whether they will be involved in all or part of the flight purpose of the Unmanned Aircraft System / UAS.

Example: Actors and staff in aerial photography of movies, students in aerial photography of human letters at schools, etc.

- (2) About airspace above a third party

"Airspace above a third party" refers to the airspace above the "third party" described in (1), and includes the airspace above a moving vehicle, etc. (which refers to vehicles, etc. as exemplified in 3. (7). The same shall apply hereinafter.) in which the third party is aboard. In this case, "airspace above" does not only refer to airspace directly above a "third party," but the Unmanned Aircraft System / UAS is also deemed to be above the third party if a third party exists in an area where the Unmanned Aircraft System / UAS may fall taking into account the falling distance of the Unmanned Aircraft System / UAS (the falling distance guaranteed by the manufacturer, etc. from the outer circumference of the flight range).

In addition, until the completion of the flight of an Unmanned Aircraft System / UAS, such Unmanned Aircraft System / UAS shall not be deemed to be above a third party if the condition of the person who is not involved in the flight of the Unmanned Aircraft System / UAS ("third party" in (1)) and the mode of flight fall under any of the following:

- 1) If the third party is covered with a shield and the third party is protected in the event that an Unmanned Aircraft System / UAS collides with the shield (the third party is indoors or inside a vehicle (except a moving one), etc.)
- 2) When a third party is inside a moving vehicle, etc. (limited to cases where the third party is protected in the event that an Unmanned Aircraft System / UAS collides with the vehicle, etc.) and an Unmanned Aircraft System / UAS meets the necessary requirements and temporarily flies above the moving vehicle, etc. as a Level 3.5 flight as specified in the Examination Guidelines 5-4 (3) c) (F) (iii).

However, it should be kept in mind that the Unmanned Aircraft System / UAS is deemed to be above the third party if the third party is not covered by any shields and is not protected from a collision of an Unmanned Aircraft System / UAS.

(3) About measures to be taken in the event of third party entry

(2) A case in which an Unmanned Aircraft System / UAS temporarily crosses over an airspace above a moving vehicle, etc. pursuant to 2) (except when the third party is no longer protected by the vehicle, etc.) does not fall under "when it is confirmed that a person enters or is likely to enter the space under the Unmanned Aircraft System / UAS during specific flight" prescribed in Article 132-87 of the Civil Aeronautics Act.

7. Matters relating to the roles of assistants, etc.

Regarding the roles of assistants prescribed in Article 236-75 of the Regulation for Enforcement of the Civil Aeronautics Act, as a premise, the pilot needs to concentrate on the movement and maneuvering of the aircraft. It is difficult to manage the flight route, including the takeoff and landing area, at the same time as controlling the aircraft. Therefore, the assistant should mainly perform flight preparation, safety management of the flight route, and third party entry control. In addition to confirming the safety of the ground and airspace around the take-off and landing sites and the flight route, the assistant shall carry out work in accordance with the procedures to deal with obstacles, etc. identified in the pre-flight confirmation and shall constantly monitor the flight status of the Unmanned Aircraft System / UAS and changes in the surrounding weather conditions, etc.

The assistant shall communicate with the pilot using predetermined means and also provide warning of danger prediction, guidance to the emergency landing site, and assistance in recovery of the aircraft after landing and safety inspection.

Depending on the flight route and range of the Unmanned Aircraft System / UAS, it is necessary to determine the number and arrangement of assistants, the scope and role of each assistant, and how to respond to abnormal operations.

8. Special provisions for search, rescue, etc.

Article 132-92 of the Civil Aeronautics Act aims to accelerate search and rescue operations, etc. by excluding the application of provisions concerning the flight-prohibited airspace for Unmanned Aircraft System / UAS under Article 132-85 of the Civil Aeronautics Act and the provisions concerning the mode of the flight under Article 132-86 of the Civil

Aeronautics Act so as not to hinder the search and rescue operations, etc. because the search and rescue operations, etc. of human life in the event of an accident or disaster are extremely urgent and highly public.

This special provision is applicable to the following persons pursuant to Article 236-88 of the Regulation for Enforcement of the Civil Aeronautics Act.

- The national government or a local government
- A person who conducts a search or rescue at the request of the national government or a local government

Article 236-89 of the Regulation for Enforcement of the Civil Aeronautics Act stipulates that the purpose specified by the Ordinance of the Ministry of Land, Infrastructure, Transport and Tourism / MLIT is "search and rescue." However, "search and rescue" in this provision refers to measures to avoid danger to human life or damage to property (including the implementation of surveys, inspections, investigations, etc.) when there is a risk of imminent danger to human life or property in the event of an accident or disaster, and this special provision applies to flights where there is an urgency to take such measures(*).

(*) Urgent situation means that there is no means or time to apply to the counter for application for permission or approval of flight.

Especially in the event of a large-scale disaster, there is the possibility that many roads will be severed and communities will be isolated. Therefore, the flights shall be treated as those which fall under Article 132-92 of the Civil Aeronautics Act as measures to avoid danger to human life or damage to property, including transportation of daily necessities such as medicine, sanitary goods, foodstuffs, and drinking water to isolated areas in disaster-stricken areas, investigation and inspection in dangerous areas, and flight of Unmanned Aircraft Systems / UAS for crime prevention measures for houses and areas after evacuation of residents.

Needless to say, it is necessary to ensure flight safety even for flights that are subject to the special provisions; therefore, the user or pilot of an Unmanned Aircraft System / UAS is required to voluntarily ensure the safety so that the safety of aircraft navigation and the safety of persons and objects on land and water are not impaired by referring to the Operation Guideline for Flying an Unmanned Aircraft System / UAS under Article 132-92 of the Civil Aeronautics Act (MLIT JCAB Flight Standards Division No. 687 and MLIT JCAB Airworthiness Division No. 926 dated November 17, 2015).

9. Indoor flights of Unmanned Aircraft System / UAS

Regulations under the Civil Aeronautics Act are not applicable to indoor flights such as inside buildings. Flights in the space described in (1) and (2) are regarded as indoor flights, and acts described in (3) are not regarded as outdoor flights. When an indoor flight path approaches an opening, necessary measures shall be taken to deter the Unmanned Aircraft System / UAS from unintentionally flying from indoors to outdoors. If the aircraft deviates from the planned route and flies outdoors, immediately terminate the flight or take measures to return it indoors.

<p>It should be fully noted that there is the possibility of a violation of the Civil Aeronautics Act, etc. in the case of allowing an aircraft to fly outdoors</p>

without performing the procedures for approval of flight permission required for outdoor flight.

- (1) A space with an opening but with a clear distinction between the interior and the exterior.
Example: Inside tunnels, underground passages, inside chimneys, buildings with open windows and doors, etc.
- (2) A space surrounded by nets, wire netting, etc., which is finer than the scale of an Unmanned Aircraft System / UAS and designed to prevent the Unmanned Aircraft System / UAS from deviating from its flight range.
- (3) In the vicinity of an opening, an act of levitating at a low altitude near the pilot once in order to check the behavior before flight, and then immediately entering into the space after that.