

FLIGHT CARD

Cheonho-dong, Gangdong-gu, Séoul - (KR)



GPS coordinates: Latitude : 37.5519947714076, Longitude : 127.121515274048

Date: 01/06/2020

Submitted by: Akira Matsuda

Flight ceiling: 100 m. max.

Type: Not specified

Accessibility: Access by foot < 1 000 m.

Notes: Hangang Drone Park est un parc de Séoul où les drones sont autorisés

Check list

- Authorized area,
- Up-to-date firmwares (drone, remote, application, ...)
- Correct weather conditions,
- Visual inspection of the drone and propellers,
- Removal of protections (gimbal, camera, ...),
- SD card inserted, correct storage space,
- Correct state of the camera lens (cleaning if necessary, ...),
- Peripherals loaded and connected (remote control, smartphone, tablet, ...),
- Drone battery charged and correctly inserted,
- Correct calibration (compass, horizon, ...),
- Minimum altitude for return home (RTH),
- Maximum flight altitude,
- Number of locked satellites,
- Takeoff area clear,
- Home point correctly registered,

...

New Korean drone laws

Icarus in Greek mythology has long symbolized mankind's longing for the sky. Mankind finally accessed it thanks to the Wright brothers' Kitty Hawk in North Carolina. Today the development of drones enables ordinary people with little or no expertise to access the skies.



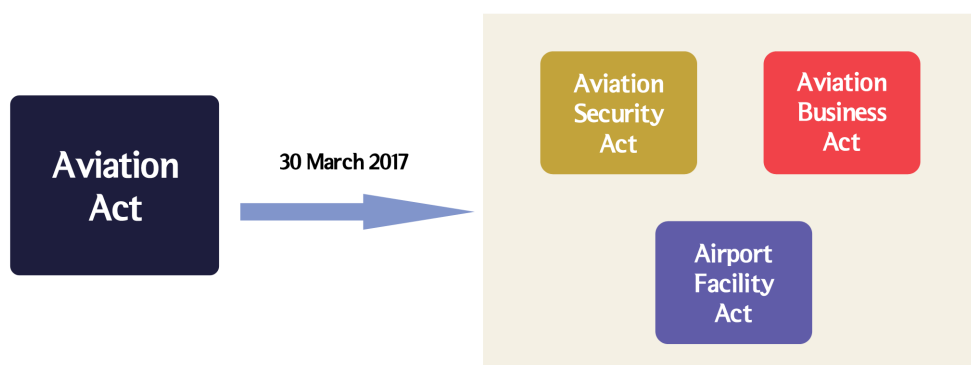
With the explosion of online shopping and home shopping in Korea, traditional methods of delivery of products is being constantly challenged.

As with other jurisdictions, the development of drones has raised a number of issues under law. The new Korean legislation aims to tackle some of these issues, however, many issues remain either unaddressed or unclear. The following is a look at some of these issues.

1. Applicable laws

Currently, drones are regulated as an 'ultra-light plane' under the Aviation Act.

With effect as of 30 March 2017, the Aviation Act will be abolished and replaced with the Aviation Security Act, the Aviation Business Act and the Airport Facility Act.



Relevantly, ultra-light planes will, in the main be regulated by the Aviation Security Act and the Aviation Business Act. Accordingly, we will briefly examine the provisions on the use of drones for business purposes under such legislation. Importantly, this new legislation is subject to the ‘devil in the detail’ that will be set out in enforcement decrees and rules that are subordinate to these Acts and are yet to be fully developed. In this regard, the following will need to have regard to these subordinate regulations in due course.

The following summarises the flow of applications that may need to be made, to operate an ultra-light plane business.



2. Registration of an ultra-light plane business



A person intending to run an ultra-light plane business must apply for registration with the Minister of Land, Infrastructure and Transport.¹ An ultra-light plane business means:

‘the business of commercially performing tasks designated by the Minister of Land, Infrastructure and Transport using unmanned aerial vehicles to meet others’ demands.’²

The requirements to be satisfied for registration include:

- **SAFETY** - the operation of the business must not threaten public safety or national security;
- **MINIMUM CAPITAL** - for corporate applicants, their capital must be at least KRW 30 million. There is no minimum capital requirement where only unmanned aerial vehicles with the maximum takeoff weight of 25kgs or less are used; and
- **INSURANCE** - personal injury insurance coverage of at least KRW 150 million and property insurance with coverage of at least KRW 20 million.

There are issues arising from a prudential perspective for a corporate applicant that has a large scale

¹ Article 48 of the Aviation Business Act.

² Article 2 of the Aviation Business Act.

operation using drones. Further, as discussed in more detail below, the insurance requirement seems insufficient for larger businesses.

Under Article 2 of the Aviation Business Act, ultra-light plane businesses must be limited to 'commercial' businesses to meet the demand of 'others.' Using drones wholly for personal and using drones for one's own business would seem to fall outside the ambit of Article 2. However, what is meant by meeting the demand of others? According to the relevant authority, the use of drones by an agricultural business operator to dust agricultural chemicals over his/her farmland does not constitute a ultra-light plane business as it is not considered to meet the demand of 'others.' On the other hand, products delivered to purchasers by drones with no additional delivery charge may be deemed to constitute 'commercial' transportation to meet the demand of 'others.' Further, guidance will be required with respect to this requirement.

3. Reporting requirement



A person who owns or has the right to use an ultra-light plane shall report to the Minister of Land, Infrastructure and Transport the type, usage, name of the owner, etc. of such plane and whether personal information can be collected.³ Safety certification must be obtained from the Korea Transportation Safety Authority for a drone with the maximum takeoff weight of 25kg or more.

No report need to be filed for a drone weighing 12kg or less used as a hobby, however, if such drone is used for a ultra-light plane business, it must be reported even if it weighs 12kg or less. It would seem that there is quite a lot of flexibility given to those who fly drones as a hobby. However, in practice, given the restrictions in terms of the areas in which the drones, even for hobby purposes, may be flown, approval for such drones is often required from the relevant Ministry.

4. Flight approval

Flight approval is not required for a drone weighing 12kg or less.

However, flight approval is required for drones intended to be flown in aerial zones, including controlled areas surrounding airfields, prohibited flight areas and areas at an altitude of 150 metres or higher. Such zones can be searched by the 'Ready to Fly' application developed jointly by the Ministry of Land,



3. Article 122 of the Aviation Security Act.



Infrastructure and Transport and the Korea Drone Association. The Ministry of Land, Infrastructure and Transport has developed a one-stop approval system where applications for flight approval can be obtained more easily.

As of 1 January 2017, this one-stop approval system can be used to apply for flight approvals from the Ministry of National Defense for aerial filming and for drones that fly military aerial zones, such as areas “near” an Airforce airfield.

Relevant to logistics companies using drones, flight approval is not required for indoor flight within a completely closed space such as a warehouse. For example, the use of drones in a warehouse as used in the “Automated Stock Management System” (US 9,216,857) which Amazon patented in 2015 would not require flight approval.



5. Operation license



A person who obtains flight approval can fly the relevant drone. Under the draft Enforcement Decree of the Aviation Security Act operator certification will be required for a drone that weighs 12kg or more that is used for an ultra-light plane business. Drones used for personal purposes, including leisure activities, regardless of weight and drones used for business purposes weighing less than 12kg may be flown without such operator certification.

The Enforcement Decree of the Aviation Security Act provides for various matters to be observed by drone operators, including, prohibition of:

- dropping of falling objects likely to endanger human lives or property;
- flight in a manner likely to endanger human lives or property in the sky above densely populated or crowded areas;
- night time flight;
- flight under the influence of alcohol or drugs; and
- operation of drones within a range they cannot be identified with the naked eye.



6. Potential issues and outlook



While markets are currently developing drones for disaster monitoring, safety inspection, etc., drones are already been used for various business sectors, including delivery. They remain in the test phase in Korea, but no doubt will be implemented in the market with time. However, the current regulations that require drone operation within the range of visibility and prohibiting night time flight, may prevent such uses as envisaged by the relevant industries in the near future. With the importance placed on the developments in drones by the Korean government, it has already announced plans to pair back the restrictions on nighttime flight and range of visibility.

One issue that requires further consideration is the requirement that a person wanting to run an ultra-light plane business is required only to take out coverage for KRW 150 million for personal insurance injury and KRW 20 million for property damage. This requirement seems low for a business that is operating thousands of drones. We believe that the insurance requirement should be based on a per drone basis, or there should be a ladder coverage based on number of drones used in the business. No doubt, the development of insurance products and the pricing of insurance in the short to long term will take time to develop. However, it is clearly an area that needs more thought.



Another issue that is particularly relevant within the context of drones is privacy. The Korean privacy laws are one of the strictest around the world. Issues arising from invasion of privacy and individuals' right to refuse interaction with drones remains a vexed issue.

Under the Aviation Security Act, personal information and personal location information shall be governed by the Personal Information Protection Act and the Act on the Protection, Use, etc. of Location Information.

A shot filmed during the flight of a drone which contains an identifiable image of a person (information with which an individual can be identified) constitutes personal information under the Personal Information Protection Act. Such information if saved with information about a place where an individual exists or has existed at a certain time and which is collected by telecommunication equipment will constitute location information under the Act on the Protection, Use, etc. of Location Information. This type of information raises issues as to whether it is appropriate to regulate the

relevant acts pursuant to which such information is collected even though it was not intended to collect such information. There are certain exceptions under the relevant laws however, none of them appear to particularly practical or feasible, such as the exception that requires prior consent of the relevant individual. Some commentators argue that the focus should be more on regulating the use and leakage of the relevant information.

A social consensus needs to be reached about the regulation regarding the issues above after extensive discussion. Hand in hand with privacy are data security issues relating to hacking or seizure of drones. It remains an issue that requires discussion in fora comprised of the relevant interest groups.

For the time being in an effort to promote developments in drone technology, the Korean government has taken steps to provide some flexibility in the laws that apply to drones. Maintaining a balance between supporting technological advances and attending to consumer desires with protection of safety and individual's rights remains an issue that requires further monitoring and debate.

If you have any questions or need assistance in relation to the subject of this newsletter, please contact:

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