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LEGAL AND REGULATORY ASPECTS OF DRONE SELLING AND BUYING TRANSACTIONS IN INDONESIA

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Abstract

This research was conducted using normative juridical methods to determine the regulations and limitations on the use of drones in Indonesia, as well as various strategies for preventing security risks from the use of drones in public spaces. This is because there have been various cases of drone use in Indonesia and internationally which are detrimental to public security and safety. The results of this research are that regulations on the use of drones in Indonesia are regulated in two Minister of Transportation Regulations which contain restrictions on air space, time, height, and various prohibitions on the use of drones. To minimize the security risks of drone use, four prevention strategies should be employed. First, regulate the use of drones through legislation. Second, set restrictions that the use of drones is prioritized using VLOS rules so that the drones used can be seen directly in the airspace by remote pilots. Third, the use of drones in residential areas must meet the requirements of safe altitude, remote pilot liability for compensation, availability of emergency landing areas, understanding of obstacles, drone operating capabilities, and flight paths approved by the Director General of Transportation RI. Fourth, it regulates the limitation that drones can only be used during the day, if used at night it must have approval from the Director General of Transportation.

Keywords: Drones, Civil Society, Criminal Technology.

INTRODUCTION

People's lives in today's modern era certainly cannot be separated from the help of technology. In fact, the development of the times is influenced by technological developments. Technology plays a very important role in every aspect of community activities and activities. As is the case now that many people recognize and use a technology in the form of unmanned aircraft. There are several foreign terms for unmanned aircraft, one of the most famous is Unmanned Aerial Vehicle (UAV). Meanwhile, in Indonesia itself, unmanned aircraft are often referred to as 'drones' (Nugraha, 2016).

Based on its history, drones themselves have been created and used since the days of World War I, when Austria used drones for war purposes against Italy in 1984. At that time, drones were still a technology in the form of air balloons filled with explosives. Then as it developed, drones were created with more sophisticated technology, so that their functions and uses were not only for war or military purposes, but more than that.

Drones have now been widely used by the public, especially for several sectors such as the creative industry sector, commercial, to the extent of entertainment or hobbies. With the existence of drones, people can save time, money, and energy to do certain things that are

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mainly difficult to reach by the community itself. However, although drones have helped many people's lives, drones can also be detrimental to the wider community, especially those affected by the use of drones (third parties). This is because drones themselves can threaten public security and safety.

In several cases abroad, such as in the United States in 2015, a drone lost control, causing it to fall on the front lawn of the White House in Washington DC. In addition, in 2018 in the United States there was also a drone that caused a helicopter that was passing in the air to have to make an emergency landing. Then, in the end, due to the many drone cases that occurred, now the United States has drone regulations at all levels of government, one of which at the federal level there are laws or guidelines for drones used for commercial and entertainment (Nelson and Gorichanaz, 2019).

Next, there was also a case in Germany where a drone used to record the training of the Bayern Munich soccer team suddenly fell into a tree. Of course, with the drone accident case, Germany is like America, which makes rules for the use of drones in the form of drone use must be based on Commission Delegated Regulation (EU) 2019/945 and Commission Implementing Regulation (EU) 2019/947 (Drone Laws, 2021) In addition, there was a case of drones used in the London Gatwick Airport area and resulted in 140,000 passengers from a thousand existing flights having to be canceled (futureneeds.eu, n.d).

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In addition, there was a case of drones used in the London Gatwick Airport area and resulted in 140,000 passengers from a thousand existing flights having to be canceled.

Finally, a case that occurred in California in 2017, where a drone lost control while filming a bicycle race, then fell and the fragments were caught in the front wheel of one of the cyclists. It should also be noted, that California itself has become a state with drone cases that have continued to increase significantly in recent years. Therefore, California now has many regulations related to the use of drones, such as the passing of AB 856 which is the first anti-paparazzi law of 2015 and various other regulations related to the use of drones in California (Xiangyu Li and Jae Hong Kim, 2022).

As for Indonesia itself, there are also several drone cases that have occurred. Among them is the case of a drone used by a man named Onix in 2015 that crashed into the BCA tower building in Central Jakarta and after being examined that the drone contained a video of the Embassy building which is a vital object building in Thamrin. Next is the case of a drone that crashed into the Palembang Ampera bridge pole in 2016, the drone also hit a woman until she fainted (Respati and Irwansyah, 2020). Then also the Ministry of Transportation recorded 4 cases of drones entering the airport area in 2018. And finally, the most saddening incident was when an ITB student died during a drone test in preparation for a competition in June 2023(Siswadi,

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2023). From some of the drone cases above, both those that occurred abroad and Indonesia prove that the use of drones can really threaten public security and safety, especially privacy issues.

The Indonesian Constitution has mandated that everyone has the right to personal protection and the right to security (as stipulated in Article 28G of the 1945 Constitution of the Republic of Indonesia), especially security from the use of drones. Given that drones are also now in great demand by various circles of society. This is evidenced by the increasing population of drones in Indonesia, especially those used for entertainment or hobbies, which has increased by 30% from the original 60,000 drones to 90,000 drones as of August 2021. Of course, this population will continue to increase in connection with its function which is also developing to become more sophisticated so that it can further assist people in carrying out their daily activities. The development of drone technology is also the result of individual creative works of society that cannot be stopped and should be developed and supported by the government along with the times, because after all it has become the human right of every human being to continue to develop ideas and ideas related to technological progress (as stipulated in Article 28C of the 1945 Constitution of the Republic of Indonesia).

However, looking at the fact that drones are not always used properly or negligently, causing harm to every individual in society, especially the issue of individual privacy and freedom of movement in public spaces. In fact, not only third parties can be threatened, but it can also threaten the drone user (remote pilot) itself. So, this is an urgency for the government in every country, especially Indonesia, which has a society with a high level of drone use, it is necessary to make a regulation or regulation to control the use or use of drones by the community, such as the United States, Germany, and also California, which of course aims to protect every community from the dangers of using drones.

Based on Article 1 paragraph (3) of the 1945 Constitution of the Republic of Indonesia, Indonesia is a state of law, therefore the use of drones in Indonesia has also been regulated in legislation. This is evidenced by the existence of several laws and regulations currently in force related to regulating the use of drones for the sake of public safety and security. Therefore, this research was conducted to find out the current regulations and restrictions on the use of drones in public spaces and to find out the strategies for preventing security risks in the use of drones by civil society based on the regulation of the use of drones in Indonesia. With this research, it is hoped that the public can understand the rules in using drones, so that they can help the government or fellow citizens in protecting the security and safety of drone use.

RESEARCH METHODS

This research method is carried out using normative juridical research methods, namely research conducted using the approach of applicable laws and regulations related to the discussion in this study (Benuf and Azhar, 2020). Primary legal materials used in this research are various regulations related and relevant to the use of drones, as well as secondary legal materials used from literature studies, in the form of books and / or e-books, journal articles and / or e-journals, other internet sources that can be accounted for.

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RESEARCH RESULTS AND DISCUSSION

1. Regulations and Limitations of Drone Use in Public Spaces

Ubi Societas Ibi Ius, where there is society there is law. The rule of law has an important role in controlling every movement of people's lives for their protection and also to create an order, especially in using a drone. This is in line with the Psychological Zwang Theory proposed by Anselen won Feurbach, that the rule of law has the working power (motivarende werking) to control society in the form of prevention and action, because according to him the law affects the psychology of society (Ali, 2009). Regulation of the use of drones is needed as a government effort so that people can be orderly and safe in using drones in public spaces.

The use of drones has actually been regulated in international law, namely in the 1944 Chicago Convention which regulates it not specifically. This is because a country has its own sovereignty over its airspace, so that the regulation of the use of drones in a country is returned to each country concerned (Ruhaeni et al.,2015). Article 8 of the 1944 Chicago Convention stipulates that the use of drones can only be carried out within the territory of the country and must not pass through the airspace of other countries (participating states) unless permission has been obtained from the concerned country and adequate supervision is in place. This is aimed at preventing the risk of accidents in drone use.

Indonesia itself is a participating state in the 1944 Chicago Convention (Nurlely Darwis, 2015), therefore, Indonesia is instructed to make regulations regarding the use of drones by civilians as much as possible in accordance with the 1944 Chicago Convention. Consequently, the Indonesian government has issued several regulations regarding the use of drones. Two of the regulations currently in force are Minister of Transportation Regulation (Permenhub) Number PM 37 of 2020 concerning the Use of Unmanned Aircraft in Indonesian Airspace and Minister of Transportation Regulation (Permenhub) Number PM 63 of 2021 Regarding PKPS Part 107 on Unmanned Aircraft Systems.

Minister of Transportation Regulation (Permenhub) Number PM 37 of 2020 is a regulation that generally governs matters related to the use of drones, as well as supervision and sanctions that can be imposed on remote pilots. This regulation also classifies drones into two types, namely drones with a maximum weight of 55 lbs (small unmanned aircraft) and drones with a minimum weight of 55 lbs (unmanned aircraft) (Gita, G. Nainggolan, and Karamoy, 2021). Both types of drones can be used for various purposes, but prior approval from the Director General of Transportation of Indonesia is required depending on their purpose. For example, small unmanned aircraft intended for commercial purposes must first undergo safety assessment. Similarly, unmanned aircraft for research and development purposes must first obtain an experimental certificate (Sumendap and Waworga, 1994).

As a regulation that governs matters related to the use of drones in general, Minister of Transportation Regulation (Permenhub) Number PM 37 of 2020 sets various limitations for individuals in society who intend to use drones. First, it sets limits on the airspace that drones can use but must be approved by the Director General of Transportation of Indonesia. These include Controlled Airspace, Uncontrolled Airspace with an altitude of more than 400 feet

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above ground level, drones used in the airport KKOP area within a radius of 3 Nautical Miles from the helipad coordinate point located outside the airport KKOP area, and drones used in Prohibited Areas and Restricted Areas. Second, it stipulates that the use of drones should prioritize Visual Line of Sight (VLOS) rules so that the drone being used can be directly seen in the airspace by the remote pilot. However, drones can also be used with Beyond Visual Line of Sight (BVLOS) rules on the condition that the drone has Detect and Avoid (DAA) and Tracking System capabilities to prevent accidents (Sumendap and Waworga, 1994).

Third, it sets limitations and requirements that must be met if drones are to be used in residential areas, including ensuring a safe altitude that does not endanger people/property below, requiring the remote pilot to provide third-party liability insurance, having an area for emergency landing, knowledge of obstacles/obstructions, drone operation capability, and following designated flight paths approved by the Director General of Transportation of Indonesia. Fourth, it limits drone usage to daytime only; if used at night, approval from the Director General of Transportation of Indonesia is required. Fifth, it regulates drone usage requiring approval from the relevant authorities depending on its function, especially for drones used for aerial surveys, mapping, and/or aerial photography in specific areas, which must have security clearance (Gamin, 2021).

The existence of rules regarding limitations on drone usage, whether for small unmanned aircraft or unmanned aircraft, aims to ensure that the use of drones by civilians in public spaces is safe, orderly, and does not endanger the safety of other people or the property of others below the drones being used. Especially for the use of small drones for hobby and recreational purposes, as these are most commonly used by civilians in public spaces, there is a greater potential for harm to others. Therefore, the government has enacted Minister of Transportation Regulation (Permenhub) Number PM 63 of 2021 concerning Civil Aviation Safety Regulations Part 107 on Unmanned Aircraft Systems, which specifically regulates the use of drones for hobby and recreational purposes. Minister of Transportation Regulation (Permenhub) Number PM 63 of 2021 was established to strengthen the regulations set forth in Minister of Transportation Regulation (Permenhub) Number PM 37 of 2020. This regulation was created as an effort to control and supervise the use of drones specifically for hobby or recreational purposes. Of course, Minister of Transportation Regulation (Permenhub) Number PM 63 of 2021 also sets limitations on the use of drones for hobby and recreational purposes firstly, it regulates all types of unmanned aircraft weighing the same or less than 55 lbs (25 kilograms) that have been registered with the Directorate General. It also governs everything inside the aircraft. In its usage, unmanned aircraft can only be operated by individuals certified as remote pilots. If operated by someone uncertified, there must be direct supervision by a remote pilot to take immediate control in case of any problems. Secondly, a remote pilot must be in good physical condition and not under the influence of alcohol or drugs during drone operation, to avoid reckless behavior that could endanger lives or other people's property (Rahman Amin et al., 2022). Thirdly, drone usage is not permitted when on moving objects such as aircraft or vehicles moving on land or water. Drones must be used in locations away from other civilian populations unless those individuals are directly aware of the drone's use or are inside enclosed buildings or vehicles. Fourthly, there are prohibitions on using drones for hobby and

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recreational purposes, including: (1) not using them at night; (2) not operating more than one drone simultaneously; (3) not carrying hazardous items on the drone; (4) not flying drones in aircraft flight paths as it may endanger passing aircraft; (5) not using them around airports and restricted areas unless permission is obtained from the relevant authorities (Rahman Amin et al., 2022).

Fifth, the speed limit when flying a drone must not exceed 87 knots or 100 miles per hour. During flight, the drone must also not fly higher than 400 feet or about 120 meters above ground level, unless the remote pilot is flying the drone above a building within a radius of 400 feet (120 meters) from the building and not more than 400 times the vertical (120 meters) above the highest limit of the nearest building. Additionally, the minimum visibility distance during usage should not be less than 3 miles (4.8 kilometers) from the ground control station, and the minimum distance of the drone from clouds should not be less than 500 feet (150 meters) below the clouds and 2000 feet (600 meters) horizontally away from the clouds.

After the government establishes regulations and limitations, those who violate them will face appropriate sanctions, such as involvement with alcohol, narcotics, or illegal drugs, or engaging in actions prohibited by PKPS regulations. This may result in the rejection of applications for remote pilot certificates for one year, or suspension or revocation of the remote pilot certificate. Nonetheless, one of the requirements for individuals in civilian society who wish to use drones is to first obtain a remote pilot certificate. Besides, civilians must not commit violations as mentioned earlier, and there are other requirements to obtain a remote pilot certificate. These include being an Indonesian citizen, being at least 17 years old, proficient in English, having stable physical or mental conditions, and passing the basic aeronautical knowledge test or already having a remote pilot certificate and meeting the flight review requirements stipulated in PKPS (Permenhub RI, 2021).

2. Strat Security Risk Prevention Strategy in the Use of Drones by Civil Society

Indonesian society is known for its quick adaptation to the changing times and technology. As a result, many people in Indonesia already own and use drones. Despite the existence of Minister of Transportation Regulation (Permenhub) Number PM 37 of 2020 and Minister of Transportation Regulation (Permenhub) Number PM 63 of 2021, which restrict the use of drones by remote pilots, this does not immediately ensure the safe use of drones. Normative rules alone are not sufficient to address all security risks that may arise from drone usage. Efforts in prevention need to be firm, concrete, and sustainable to ensure that drone users comply with the regulations in place.

Registration of drones and remote pilots is an essential step in preventing security risks associated with drone usage by civilians. This is because through registration, operational permits for drones are issued. Therefore, if drones and pilots have passed registration and have been issued certificates, they can be deemed fit for operation. Drone registration can be done online or offline. However, online registration is more effective as approvals can be given through the integrated SIDOPI-GO and SIPUDI applications developed by the Ministry of Transportation of Indonesia. This enables a faster process, easy access from anywhere,

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transparency, and real-time monitoring (Prayoga, Parmono, and Siboy, 2023). Apart from registration, prevention efforts can also be undertaken through surveillance. According to the social control theory, community surveillance over activities within its environment is crucial to prevent crimes or other detrimental occurrences in the future (Hagan, 2013). However, according to Minister of Transportation Regulation (Permenhub) Number PM 37 of 2020, surveillance efforts regarding drone usage are conducted by the government based on complaints from the public. Therefore, surveillance in this regard is a collaborative effort between the government and the public. Without complaints from the public, the government will not conduct intensive surveillance over drone usage in the community. Nevertheless, the public remains the most vulnerable party affected by drone usage, especially when drones are utilized by fellow individuals in public spaces.

To encourage the public to actively monitor the use of drones in public spaces, the public must first have knowledge and understanding regarding drone usage as regulated by current legislation. To achieve this, government-led awareness campaigns are necessary to inform the public about the regulations governing drone usage. Indeed, public awareness campaigns serve as preventive measures to ensure that the public can safely and orderly use drones and remain aware of drone usage by other civilians. Furthermore, imposing strict penalties on those who violate rules or misuse drones for criminal activities is crucial as a preventive measure, especially when drones are used for criminal purposes.

Therefore, individuals who misuse drones can face criminal penalties, which, according to Minister of Transportation Regulation (Permenhub) Number 37 of 2020, are among the sanctions applicable to drone users committing crimes. Imposing clear criminal penalties on drone users who have demonstrably misused drones for criminal activities or harmed others aligns with the views of Prof. Wirjono Projodikoro, who states that one of the objectives of criminal law is both general deterrence (to prevent others from committing the same act) and specific deterrence (to prevent the perpetrator from repeating the offense) (Nasution and Akmal, 2021).

Fundamentally, criminal law regarding the misuse of drones for criminal activities is not yet explicitly and clearly regulated juridically, similar to the Electronic Information and Transactions Law (UU ITE). Thus far, penalties for drone users who misuse drones for criminal activities or violations are imposed according to the criminal acts committed. For example, if someone uses a drone for voyeurism (unauthorized and clandestine photography or recording of someone undressing inside their home), they can be penalized for indecent exposure as stipulated in the Criminal Code (KUHP). Furthermore, misuse of drones by flying them over the presidential palace grounds, which are restricted areas, may lead to imprisonment for a maximum of 9 months or a fine of up to Rp. 4,500,000 (four million five hundred thousand Indonesian Rupiah) as regulated in Article 167 of the Criminal Code (KUHP).

Although there is no legal void for imposing penalties on drone users intentionally engaged in criminal activities or violations, it is the author's opinion that any misuse of drones for criminal purposes constitutes a crime or violation. Thus, those who engage in such activities may face different criminal penalties than those associated with the motives behind the drone misuse.

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This perspective is reflected in other countries such as Florida, where specific criminal penalties for drone violations are regulated under the law, namely Florida Statute Part 330.41. This law outlines drone violations, such as operating a drone in a facility with clear signs indicating that drone flights are prohibited, which may result in criminal fines and imprisonment (Pumphrey, 2023).

In Indonesia itself, drones are regulated under Ministerial Regulations and not specifically governed by laws as in Florida. This is what makes misuse of drones not classified as a crime, as ministerial regulations cannot include criminal provisions. Therefore, it is crucial for drone usage regulations to be enacted in the form of laws to ensure comprehensive and clear regulation, considering the increasing interest of the public in drone usage and the high security and safety threats associated with drone operation.

CONCLUSION

Unmanned aerial vehicles, commonly referred to as drones, have their regulations in Indonesia outlined in Minister of Transportation Regulation (Permenhub) Number PM 37 of 2020 concerning the Use of Unmanned Aircraft in Indonesian Airspace and Minister of Transportation Regulation (Permenhub) Number PM 63 of 2021 Regarding PKPS Part 107 on Small Unmanned Aircraft Systems.

Permenhub Number PM 37 of 2020 sets out five limitations on drone usage, including the requirement for remote pilots to obtain permission to use drones in specific airspace, at night, in residential areas, and for specific purposes such as aerial surveying. Additionally, it stipulates that drone operations must adhere to Visual Line of Sight (VLOS) principles.

As for Ministerial Regulation Number PM 63 of 2021, it governs the use of drones for hobby and recreational purposes, with its content not significantly different from previous regulations. However, it is noted that certification is required for drones used for hobby and recreational purposes.

Additionally, they are not allowed to be used at night, carry hazardous or government-prohibited items, among other restrictions. Besides regulations, various strategies are implemented to prevent security risks associated with drone usage in public spaces.

These include registering drones and remote pilots, government surveillance alongside public vigilance, conducting public awareness and education campaigns regarding drone usage, and having specific laws that comprehensively regulate drone usage, including criminal provisions for misuse, as seen in Florida.

Thus, with the limitations outlined in the Minister of Transportation Regulation and preventive strategies implemented by the government, it is hoped that civil society can use drones in an orderly and safe manner, thereby minimizing misuse that may jeopardize the safety and security of other civilians in public spaces.

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