

# The Liabilities of the Drone Operators on the Loss of the Third Parties Based on Indonesian Regulation

by  
**Amad Sudiro**

(Dean Faculty of Law University of Tarumanagara)  
(email: [ahmads@fh.untar.ac.id](mailto:ahmads@fh.untar.ac.id))

**Naomi Jesica**

(Undergraduate Student Faculty of Law University of Tarumanagara)  
(email: [naomihartanto@yahoo.com](mailto:naomihartanto@yahoo.com))

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## ABSTRACT

*Air transport has experienced many developments; now air transport can be controlled remotely and being called drones. In practice, the operation of the drone can bring harm to the third party. The reason why the author chose the topic is because of the attractiveness of technological developments affecting air transport. The author would like to find out more about the liability of the operators of drones against the damage of the third party. The research questions in this paper related to the legal status of the drone as an aircraft according to Indonesian national regulation and the liability of the operators of drone against the losses of the third party. The method research in this paper using qualitative normative research methods that are supported by the data of the interview. Data research results indicate that drone could be considered as an aircraft, but drones as the aircraft included in model aircraft. The liability of the operators of drones against the damage of the third party using the system of strict liability where it is not needed any proof, absolute liability system is regulated in Law No. 1 of 2009 concerning Aviation. The author recommends the regulations for drone has to be clarified and regulated more specifically about the drone operator's liability towards third parties, a quantity of insurance, and legal status as an aircraft.*

**Keywords:** *drone; operator; third party liability; Indonesia regulations*

## 1. Introduction

Indonesia is an archipelagic country with a geographically located between islands, and other islands are far apart. Indonesia has a very strategic geographical location. Recognizing Indonesia's prominent position in relations between nations, the country

needs an activity to support this need by using transportation.<sup>1</sup> Transportation is not required only in relations between countries, but also very much needed in connections between regions at the national level. The mode of transportation that is now preferred and often used is air transportation by using an aircraft, which is considered faster and much more efficient. An aircraft has essential and unique characteristics, such as being able to reach their destination in quick time, using high technology, cross-border country transportation, having a higher level of security and more safety compared to other modes of transportation. In Indonesia, the use of aircraft is regulated in Law Number 1 of 2009 concerning Aviation (Aviation Law), which governs a number of matters relating to aviation, from sovereignty in the airspace, aircraft production, aircraft operation and airworthiness to aviation safety and security, aircraft procurement, flight insurance, independence of accident investigations aircraft, and licensing aviation professionals.<sup>2</sup> The Aviation Law also regulates schedules and unscheduled air transportation, company capital, aircraft ownership, aircraft rentals, tariffs, airline obligations, air navigation facilities, airport authorities and services, and air-related law enforcement.<sup>3</sup>

Furthermore, nowadays, technological development is increasing rapidly. It affects almost all aspects of life and community activities including aircraft. Now aircraft has grown so far that it can be flown remotely, or better known as drones or Unmanned Aerial Vehicle (UAV). Drone presents an aircraft control system that uses an external pilot method (a computer system programmed to regulate drones).<sup>4</sup> With

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<sup>1</sup> Amad Sudiro, “Kajian Penyelesaian Santunan Terhadap Pengguna Jasa Angkutan Udara Nasional yang Menderita Kerugian”, *Warta Penelitian Perhubungan*, Volume 23, Number 6 (2011):1, <[www.litbangdanpustaka-dephub.go.id](http://www.litbangdanpustaka-dephub.go.id)>, visited 4 Oktober 2018.

<sup>2</sup> Amad Sudiro dan K. Martono, “National and International Air Transport Regulations in Indonesia”, *IOSR Journal of Applied Chemistry (IOSRJ-JAC)*, Volume 9, Issue 2, Ver II (Feb 2016): 7, <<http://www.iosrjournals.org/iosr-jac/papers/vol9-issue3/Version-1/B0903010722.pdf>>, visited 4 Oktober 2018.

<sup>3</sup> *Ibid.*

<sup>4</sup> Michael Nas. (2008). *Pilots by Proxy: Legal Issues Raised*, United Kingdom: Development of Unmanned Aerial Vehicles, p.1.

the support of technological advancements, these crewless aircraft (drones) can be used for various purposes, including UAVs that are capable of carrying cameras, certain sensors, communication equipment and several other types of cargo.<sup>5</sup> Drone has now been developed in various parts of the world, especially in the military field with multiple purposes, for example, to shoot enemy territory, conflict areas or to spy on enemies. In addition to military purposes, drone can also be used for civilian purposes such as mapping remote areas, monitoring volcanoes, monitoring traffic or shooting post-disaster areas. Moreover, drone can also be used to carry the missiles for the military purposes. It is closely related to the only purpose of the missile, which is to deliver a warhead to damage the target.<sup>6</sup>

The drone in carrying out military duties has great advantages rather than other military aircraft technology, namely as surveillance equipment, hunting suspected militants, carrying out missions in dangerous areas, and conducting routine security patrols and assisting in police duties. In practice, it is more used as military tools. By using it, the risk is smaller in carrying out dangerous missions. Moreover, the main reason why the drone is in high demand in the military is that it has a high level of efficiency of use and lower production costs compared to human-crewed aircraft. These advantages also cause unmanned aircraft to be widely used and developed in various country. Currently, the drone is not only used for military purposes but also has been used for shooting, filmmaking, and others. However, the Aviation Law has no arrangement regarding drone specifically. It is precisely regulated in the Minister of Transportation Regulation Number 180 of 2015 and Minister of Transportation Regulation Number 47 of 2016. Such regulations restrict in which areas that the drones cannot be used. Article 2 Paragraph 2 of the Regulation of the Minister of Transportation Number 180 of 2015 states that:

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<sup>5</sup> Chappy Hakim. (2010). *Berdaulat di Udara 21C*, Jakarta: Kompas, p.18.

<sup>6</sup> Amad Sudiro. (2018). "Regulating Ballistic Usage for Ensuring Civil Aviation Safety: As a Matter of Urgency". *Journal of East Asia and International Law*, Volume 11, Issue 2, P.461

*"A system of unmanned aircraft may not be operated in the following areas:*

- a. Prohibited area.*
- b. Limited air area (restricted area).*
- c. Flight Operations Safety Zone of an airport."*

Although the drone only can be flown in a certain area, the remote-pilot system in drone could potentially be causing accidents or damages, especially for third parties. For comparison, airplane accidents could be occurred by various factors, such as human (human) error, aircraft engines (machine/technical), and weather.<sup>7</sup> Of the three factors, the study shows that about 55% of aircraft accidents are caused by pilot captain errors, while the remaining 45% are caused by other things that support the flight captain's fault.<sup>8</sup> Therefore, the remote-pilot system in drone which put an operator as a primary player could also have a high risk in causing the accident if compared to the case of an airplane. In Indonesia, the drone accident has occurred. In March 2016, the drone that was operated by a resident of Palembang (South Sumatra) was flying into the Ampera Bridge and fell into another resident.<sup>9</sup>

The case shows that clear regulation on the drone is needed to govern the widespread use of the drone. The drone has explicitly not been regulated regarding its status as airplanes according to Indonesian national laws. Therefore there is no clarity regarding the status of drone if it is considered an airplane, of course, the drone must have certificates like what every airplane has. The second problem is how to measure the liability of the drone operator to the third parties' damage. This kind of problem has not been explicitly regulated in the Indonesian Aviation Law as well as the

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<sup>7</sup>) Amad Sudiro, "Product Liability" Dalam Penyelenggaraan Penerbangan", Jurnal Hukum & Pembangunan, Volume 41, Number 1 (2011): 187,<  
<http://jhp.ui.ac.id/index.php/home/article/view/237>> visited 7 October 2018,

<sup>8</sup>) Jack W. London. 2003. "General Aviation Crash Course: The First 15 Days", America: 39 Trial Lawyers of America 56, p.2.

<sup>9</sup>) Yayan\_Harian Indo, "Kecelakaan Drone Terjadi Ketika Warga Palembang Saksikan Gerhana Matahari" 30 Juli 2018, hal.1. <[www.harianindo.com/2016/03/09/89035/kecelakaan-drone-terjadi-ketika-warga-palembang-saksikan-gerhana-matahari](http://www.harianindo.com/2016/03/09/89035/kecelakaan-drone-terjadi-ketika-warga-palembang-saksikan-gerhana-matahari)> visited 12 February 2019.

Minister of Transportation Regulation No. 180 of 2015 and Minister of Transportation Regulation No. 47 of 2016. The absence of specific regulation for the liability of drone operator, of course, will cause legal uncertainty. Therefore, in the presence of an accident that has been caused by a drone against a third party, according to the author, it is necessary to discuss this topic farther.

Based on the description above, the author raises two research questions to be discussed in this paper. The research questions are, as follows: (1) What is the legal status of a drone as an airplane according to Indonesian national regulations? (2) What is the liability of the drone operator for third party losses based on Indonesian national regulations?

## **2. Discussion**

### **2.1. Legal Status of Drone as Aircraft According to Indonesian National Regulations**

Article 1 paragraph 3 Law Number 1 of 2009 concerning Aviation states, "Aircraft is any machinery or equipment that can fly in the atmosphere because of the lift force from an air reaction, but not because of the reaction of air to the surface of the earth used for flight." Based on the definition of aircraft, there are two opinions regarding the status of drone. First opinion states that the drone should be considered as the type of aircraft because it is kind of the mode of transportation that uses air space. The drone itself is defined in the Minister of Transportation Regulation Number 180 of 2015 namely "An unmanned Aircraft is a flying machine that functions with remote control by a pilot or is able to control itself using the law of aerodynamics."

The second opinion argues Aviation Law has not explicitly stated that drone falls into the definition of aircraft, so all provisions in the Aviation Law could not be applied to drone. If the drone is felt into the definition of aircraft, then indeed the provisions in Aviation Law is also applicable to all drones. The debate of these two

opinions creates the lack of clarity about the legal status of the drone as an aircraft. It creates legal uncertainty, whereas the law should provide legal certainty because legal certainty is one of the objectives of the law itself. To avoid such debate, the law should provide a clear provision about the status of the drone as the type of aircraft.

If we look into international regulation, the use of drone could fall into a term of “pilotless aircraft” as mentioned in Article 8 the Convention on International Civil Aviation of 1944 (known as the Chicago Convention of 1944). The article states:

*“No aircraft capable of being flown without a pilot shall be flown without a pilot over the territory of a contracting State without special authorization by that State and in accordance with the terms of such authorization. Each contracting State undertakes to ensure that the flight of such aircraft without a pilot in regions open to civil aircraft shall be so controlled as to obviate danger to civil aircraft.”*

The Chicago Convention created a special United Nations Agency called the International Civil Aviation Organization (ICAO). The agency develops international air navigation techniques and principles as well as fosters international air transport planning and development to ensure planned and safe growth. The ICAO issued a regulation concerning drones namely ICAO Cir 328 AN/190 concerning Unmanned Aerial System and ICAO 10019 AN / 507 concerning Manual on Remotely Piloted Aircraft Systems (RPAS). The ICAO is established to harmonize the existing rules regarding drones, or in ICAO this is called unmanned aerial vehicle. The ICAO Cir 328 AN / 190 clearly stated "Unmanned aircraft (UA) are, indeed, aircraft; therefore, existing SARP applies to a very great extent. The complete integration of UAS-specific SARPs to supplement those already existing." Although the ICAO is not a binding convention and should be mandatorily followed by Indonesia, the country has used the ICAO regulation as a reference from making national law related to aviation.

Drone commonly referred to in Indonesia with unmanned aircraft is regulated in the three of Minister of Transportation Regulation, as follows:

- a. The Minister of Transportation Regulation Number 180 of 2015 concerning Operation Control of Unmanned Aircraft Systems in Indonesian Airspace;
- b. The Minister of Transportation Regulation Number 47 of 2016 concerning Amendments to Regulation of the Minister of Transportation Number PM 180 of 2015 on Operation Control of Unmanned Aircraft System in Indonesian Airspace; and
- c. Minister of Transportation Regulation Number 163 of 2015 concerning Civil Aviation Safety Regulations Section 107 (Civil Aviation Safety Regulations Part 107) concerning Small Unmanned Aerial Aircraft Systems (Small Unmanned Aircraft System).

In all three Ministerial Transportation Regulations it has been regulated regarding essential documents needed for the operation of drones, prohibited areas that cannot be crossed by drones, insurance, and also sanctions. Both the Minister of Transportation Regulation Number 180 of 2015 and the Minister of Transportation Regulation Number 47 of 2016 regulates the drone under the weight of 55 lbs and above 55 lbs. For drone under the weight of 55 lbs, it is regulated in the Minister of Transportation Regulation Number 163 of 2015.

In practice, there are several types of aircraft, namely civil aircraft, state aircraft, and model aircraft. The Aviation Law describes the state aircraft as, "*State Aircraft is an aircraft used by the Indonesian National Army, Indonesian National Police, customs, and other government agencies to carry out the functions and authorities of law enforcement and other duties in accordance with regulation.*" Moreover, the Article 1 Number 8 stated, "*Civil Aircraft is an aircraft used for the benefit of commercial and non-commercial air transport.*" However, the model aircraft is not defined and regulated in the Indonesian Aviation Law. The model aircraft is known in

the ICAO Cir 328 AN / 190 that described the model aircraft as, "*In the broadest sense, the introduction of UAS does not change any existing distinctions between model aircraft and aircraft. The aircraft model is generally recognized as a recreational purpose only, outside the provisions of the Chicago Convention, being exclusively the subject of relevant.*"

The regulation of civil aircraft is regulated in various international conventions, including the Chicago Convention, while state aircraft are not restricted in international conventions. The state aircraft, as well as the model aircraft, should follow the national law itself. It is because the state aircraft cannot fly over other countries, except with relevant state agreements or authorizations. The model aircraft should also be governed by national law. In the opinion of the authors, the drone could be classified as the mode aircraft because until now there have been no drones in Indonesia that are used as transportation to deliver an item or someone. The usefulness of drones in Indonesia is only for monitoring, shooting, surveying and commercial and non-commercial purposes. Based on the results of the study, it was also found that the Ministerial Regulation on drone did not include the arrangement of the drone as civil aircraft. Therefore, the drone is not subject to the provisions of the Chicago and ICAO Conventions governing the Unmanned Aerial System, namely ICAO Circular 328-AN / 190 because the drone is included in the model aircraft where the drone is used for recreational purposes only, and there is no drone being used for civil purposes.

However, even though in theory, the drone could be classified as a model aircraft, Indonesia does not regulate such things in its regulation strictly. It has an implication to the legal certainty regarding the arrangement of drone in Indonesia, because in both the Minister of Transportation Regulation Number 180 Year 2015 and Minister of Transportation Regulation Number 47 Year 2016 not yet entirely regulated all arrangements regarding drones, for example, regarding insurance

documents, such as what kind of insurance is needed for drone or also regarding the system of liability used in the operation of the drone itself. For example, the Aviation Law has recognized the various method of liability, namely absolute liability, the presumption of liability, and based on fault. If the Aviation Law affirms the legal status of the drone as an aircraft, it means that all provision regarding liability and other matters also apply to drone and of course it will provide legal certainty, which is in accordance with the theory of legal certainty that the law no longer raises various interpretations.

## **2.2. Liabilities of Drone Operators for Third Party Losses Based on National Regulations**

The rise of the use of drones in Indonesia for various purposes has led to the need to regulate the liabilities of the drone operators. The operation of the drone can certainly harm third parties if the operator controlling the drone does not have sufficient skills. However, there are no explicit provisions regarding the liabilities of the drone operator to third parties if they experience losses caused by the operation of the drone they control.

Based on the descriptions of the theory of liability applied in the Aviation Law, according to the authors' research and interpretation, the system of the liability of the drone operator to the loss of third parties could fall into the absolute liability. It requires the drone operator to be responsible for third party losses caused by the operation of the drone without having to prove it. In a system of absolute (strict) liability, there is no burden of proof because the drone operator is assumed to be always responsible, but there are exceptions regarding his responsibilities, such as force majeure or extraordinary circumstances. The extraordinary situation is a situation that cannot be prevented which is beyond human control, for example, natural disasters.

However, absolute or strict liability is not stated explicitly in the minister of transportation regulations regarding drones, but the Minister of Transportation Regulation Number 47 of 2016 Sub-Section 5.4 regulates, "*Unmanned aircraft operators that operate unmanned aircraft as referred to in Sub Section 5.1 letter b is subject to administrative sanctions in the form of:*

- a. *Warning;*
- b. *Freezing of licenses;*
- c. *Revocation of permission;*
- d. *Administrative fines."*

Sub Section 5.4. gives administrative sanctions if the drone operator violates the provision. Therefore, it can be concluded that the system of liability used is an absolute (strict liability) because the operator is directly subject to sanctions if they are violating. The analogy of the absolute liability in administrative sanction can be applied to the compensation of the loss of third parties caused by the operator of the drone. In this case, the person in charge is the drone operator who controls the drone, but the regulations in Indonesia regarding the drone itself has not been regulated and explicitly explained who the party must be liable. However, in the authors' opinion, the drone operator, of course, must be liable because the drone operator holds full control of the operation of the drone. If the accident is indeed not due to an error from the drone operator, but due to extraordinary circumstances, the drone operator is not liable.

In regulating liability for the drone's operator of the loss of third parties, Article 3 paragraph 11k the Minister of Transportation Regulation Number 47 of 2016 governs insurance by stating the license application should be included " the insurance documents that may occur the losses from third parties caused by failure of unmanned aircraft systems." Therefore, based on the provisions above, the owner of the drone must ensure his or her own drone for the sake of the drone itself or the loss

of a third party. However, the Regulation is not mentioned the amount of insurance that should be paid. The provision is only stated that insurance documents must be submitted to obtain permission. Moreover, the provision can be interpreted that there is more than one type of insurance, not just insurance against third party losses.

Based on research conducted by the author, there is an insurance company that provides insurance for drones. The insurance company is PT Asuransi MSIG Indonesia. The company offers coverage to guarantee the risk of legal liability to the third parties, including bodily injury or property damage arising during the use of the drone. In addition, the insurance also guarantees the risk of theft or loss, as well as the damage of the drone. By using the insurance, the liability or responsibility of the drone operator could be switched to the insurance company in the limited loss as mentioned in the insurance agreement, and the rest of it still on the drone operator's responsibility. If the insurance does not cover all compensation for the loss of third parties, they could file a civil lawsuit to seek full compensation or claim to the drone operator. The lawsuit could be submitted using Article 1365 of the Indonesian Civil Code, which states a party who commits an unlawful act which causes damage to another party shall be obliged to compensate therefor. According to the doctrine, the unlawful acts could be classified as the violation of the law, decency, and also public order. The penalty for such actions is the obligation for a drone operator to pay compensation to the loss of the third parties.

The concept of liability above could be applied to some real drone cases that occur in Indonesia, as follows:

- a. The drone accident occurred in Palembang, South Sumatera, on Wednesday, March 9, 2016, at 14.11 WIB. At that time, some people were watching the phenomenon of the Total Solar Eclipse (GMT) in Palembang centred on the Ampera Bridge. After watching the event, one of the drones that was taking pictures from the crowd of people suddenly crashed into the ridge pole. As a

result, the drone fell and hit a woman right below it. The fall of the drone that weighed more than one kilo made the woman stagger and fainted.

- b. The drone accident occurred on the Tepian Teratai, Jalan Derawan Island, Tanjung Redeb on Monday, April 10, 2017, at 16:48 WIB. At that time, a family consisting of a father, mother and two daughters was on the Edge of the Lotus. There was a drone that was flying and then it lost the control by the owner who played it. So, the drone hit a 7-year-old girl who was relaxing with her parents. As a result, the child's right finger must be treated with several stitches.

According to the real cases above, it could be concluded that the drone operator who controls the drone must be entirely liable for the losses caused by the operation of the drone. For example in the case when the woman becomes unconscious, and there is a child who is injured so they have to get several stitches, so the drone operator must provide compensation in the form of compensation in accordance with the losses suffered by third parties such as the hospital fees needed. In the ministerial regulation regarding the drone itself, it has been regulated regarding the importance of entering the drone into the insurance so that the insurance company can pay the loss of the third party. The drone operator is still liable, but the insurance company bears his liability as the result of the insurance that has been made by the drone owner or operator.

Furthermore, the liability of the drone operator for the loss of third parties based on Aviation uses a system of absolute liability where the drone operator is considered to be always liable. The liability given is in the form of compensation in the number of losses suffered by third parties. There is an obligation to ensure the drone, so the liability of the drone operator can be switched to the insurance limited to the things borne by the insurance, but the rest remains the liability of the drone operator itself. However, if further noted in Sub-Section 5.1 in the Minister of Transportation

Regulation Number 47 of 2016 states that "*The operation of aircraft without a crew in the area as referred to in sub-section 2.2 or air space as referred to in sub-section 2.3. with the following conditions:*

- a. Do not have a permit;*
- b. Operate not in accordance with the permit granted;*
- c. In certain emergency conditions, there is a change in priority schedule for the use of airspace with the same time as the Drone operation.*

*Will be given the firm action by the authorities in the form of coercion to leave the area or airspace or to drop an unmanned aircraft in a safe area."*

Analyzing from the action by the authorities, the nature of the provision is a preventive action. It is because the context of the violations mentioned is only predictable operational, technical nature. The action is a good thing, but unfortunately, the Minister of Transportation Regulation does not provide repressive action if the damage on land and in the air occurs. In addition, what if there is negligence by a third party or operational failure due to the UAV system, whether the liability remains absolute or there will be specific considerations. Insurance can indeed be used as a solution in this context, but the absence of further provision regarding the amount of coverage makes this arrangement blurred and does not fulfil its purpose of providing legal certainty. The provision is necessary for the stronger the rule, and to create the legal certainty of the liability of third parties' damage will be guaranteed.

### **3. Closing**

#### **3.1. Conclusion**

From the results of the research and interviews conducted by the author and based on the analysis of the discussion of this study, the authors obtain some conclusions, as follows:

- a. The drone could be classified as an aircraft based on its definition as stipulated in Article 1 paragraph 3 Indonesian Aviation Law. The provision states, " Aircraft is any machinery or equipment that can fly in the atmosphere because of the lift force from an air reaction, but not because of the reaction of air to the surface of the earth used for flight. " Moreover, after included to the definition of the aircraft, the done could also be classified as a mode of transportation that uses air space as well as it could also be referred to as unmanned aircraft which has a definition in Minister of Transportation Regulation No. 180 of 2015. It states, "Unmanned Aircraft is a flying machine function with the remote control by the pilot (pilot) or be able to control himself by using the law of aerodynamics." The drone falls into the concept of model aircraft type, so it should be felt into the scope of national laws and is not subject to the Chicago Convention. However, the ICAO but can be used as a benchmark for national law because the Aviation Law does not specify drone as aircraft which creates legal uncertainty.
- b. The liability of the drone operator for third parties is not explicitly mentioned in the Minister of Transportation Regulation regarding Drones or Law Number 1 of 2009 concerning Aviation, but it is regulated in the Minister of Transportation Regulation Number 47 of 2016 Sub-Section 5.4, that could be concluded that the system of liability that could be used is a system of absolute liability. It means the liability occurs where there is no burden of proof, and the drone operator is always liable for the loss of third parties. Although the Minister of Transportation Regulation has no specifically mentioned the system of liabilities, it has been regulated regarding the insurance documents needed to obtain the permit to operate the drone. The insurance is not explicitly regulated regarding the amount and what insurance is, but there is already insurance that provides insurance for drones, namely PT Asuransi MSIG Indonesia. Since the drone has been registered for the insurance, if there is a loss to a third party, the compensation provided can be paid by the coverage according to the limits, but outside of it, is still the

liability of the drone operator. A dispute regarding a drone if taken to court can be filed through a civil claim based on Article 1365 of the Civil Code.

### **3.2. Suggestions**

From the conclusion above, some suggestions have been made by the authors, as follows:

- a. The drone operators in Indonesia should comply with existing regulations regarding permits needed because the operation of the drone could be dangerous and can cause various losses for third parties. It is essential for drone operators to comply with existing regulations.
- b. The government should pay more attention to the regulations regarding drones that have not been explicitly regulated because it creates legal uncertainty, which creates a terrible condition for the development of law in Indonesia. Therefore, the government should regulate matters regarding drones more clearly and explicitly, especially regarding the legal status of drones as aircraft the existing Aviation Law as well as the system of liability of the drone operator itself.