

Received: 19.02.2023  
Accepted: 14.04.2023  
Published: 30.06.2023

Roczniki Administracji i Prawa  
Annals of The Administration and Law  
2023, XXIII, z. 2: s. 65-73  
ISSN: 1644-9126  
DOI: 10.5604/01.3001.0053.6785  
<https://rocznikiadministracjiiprawa.publisherspanel.com>

Sabina Kubas\*  
Nr ORCID: 0000-0002-6581-7105

## CONSEQUENCES OF UNLAWFUL USE OF AIRSPACE BY UNMANNED AERIAL VEHICLES

### SKUTKI BEZPRAWNEGO WYKORZYSTANIA PRZESTRZENI POWIETRZNEJ PRZEZ BEZZAŁOGOWE STATKI POWIETRZNE

**Summary:** The use of airspace by unmanned aerial vehicles is associated with the need to adapt to an increasing number of legal regulations. International and Polish regulations introduce legal consequences, but also administrative and technical ones, which prevent the operation of UAVs. Therefore, the analysis and interpretation of prohibited acts related to the use of UAVs, as well as the sanctions provided for by the regulations, seemed appropriate. The jurisprudence of judicial authorities is also of great importance, as it indicates how legal regulations should be understood, as well as what types of sanctions should be applied so that they bring a result proportionate to the previously committed unlawful act.

**Keywords:** unmanned aerial vehicle, drone, aviation

**Streszczenie:** Wykorzystanie przestrzeni powietrznej przez bezzałogowe statki powietrzne łączy się z koniecznością dostosowania się do coraz większej ilości regulacji prawnych. Przepisy międzynarodowe, a także polskie wprowadzają konsekwencje prawne, ale też administracyjno-techniczne, które uniemożliwiają eksploatację BSP. W związku z tym odpowiednia wydała się analiza i interpretacja czynów zabronionych związanych z korzystaniem z BSP, a także sankcji, które przepisy przewidują. Istotne znaczenia posiada także orzecznictwo organów sądowych, które wskazuje, jak należy rozumieć unormowania prawne, a także jakiego rodzaju sankcje należy stosować, tak aby przyniosły proporcjonalny rezultat do wcześniej dokonanego bezprawnego czynu.

**Słowa kluczowe:** bezzałogowy statek powietrzny, dron, lotnictwo

---

\* dr; Uniwersytet Rzeszowski, Instytut Nauk Prawnych, Zakład Prawa Międzynarodowego i Prawa Europejskiego. Źródła finansowania publikacji: środki własne autorki; e-mail: sabinakubas@interia.pl

## INTRODUCTION

The importance of unmanned aerial vehicles is constantly increasing. The number of reported UAV operations and registered drone operators is increasing. Their appropriate use is the implementation of legal regulations, both those of international and regional scope.

The term “unmanned aerial vehicle” first appeared in the early 1990s in the dictionary of military abbreviations and expressions. It indicated that the UAV is “a *powered aircraft that does not have a man-operator on board, uses lift to stay in the air, can fly autonomously according to a pre-deployment program or be remotely controlled, can be used or reused and carries weapons or other equipment*”<sup>1</sup>. In addition, the term “aircraft without a pilot” was also used in the Paris Convention of 1919 as amended by the Protocol of 1929<sup>2</sup>. This concept is repeated in the Chicago Convention in Art. 8, which indicates “*aircraft capable of being flown without a pilot*”<sup>3</sup>. The International Civil Aviation Organization (ICAO) and specialized agencies of the European Union (EU) such as the European Aviation Safety Agency (EASA) introduced the term “remotely piloted aircraft” (RPA), which is the basic element of the remotely piloted air system (RPAS). From a practical point of view, the terms “unmanned aerial system” and “remotely piloted aircraft system”, as well as “unmanned aerial vehicle” and “remotely piloted aircraft” can be used synonymously, respectively<sup>4</sup>.

The purpose of this study is to present the causes and effects that may occur on the part of entities using UAVs in violation of the law. This study uses the analytical and legal method as well as the legal and comparative method, which enabled the appropriate interpretation of international and regional regulations and the drawing of conclusions on their application.

## CLASSIFICATION OF UNMANNED AERIAL VEHICLES

Unmanned aerial vehicles can be divided according to various criteria. The first is the method of flight control, which allows to distinguish between remotely controlled unmanned system/aircraft and autonomous aircraft. The criterion of the type of operations performed indicates line-of-sight operations, out-of-sight operations, and first-person operations. Due to the criterion of the use of the UAV, we can distinguish a flying model/aircraft model and a UAV. In turn, the operating weight

<sup>1</sup> Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms 2009, p. 577.

<sup>2</sup> Convention governing air navigation of 13 October 1919, Journal of Laws 1929.6.54.

<sup>3</sup> Convention on International Civil Aviation of December 7, 1944, Journal of Laws 1959.35.212 as amended.

<sup>4</sup> T. Zieliński, *Funkcjonowanie bezzałogowych systemów powietrznych w sferze cywilnej*, Poznań 2014, p. 34.

criterion defines a BSP below 600 g, a BSP below 25 kg and a BSP above 25 kg and below 150 kg<sup>5</sup>.

The range of unmanned aerial vehicles allows us to distinguish HALE (high flight altitude, long-term mission performance), MALE (medium flight altitude, long-term mission performance), TUAV (medium-range or tactical purpose), Close-Range UAV (close-range, used by mobile teams of company and battalion, and for various civilian applications), MUAV (UAV less than 20 kg), MAV (wing-span less than 15 cm), NAV (grain size)<sup>6</sup>.

In turn, the criterion of the maximum take-off weight and the practical ceiling allows us to distinguish Class I, which includes unmanned aerial vehicles with a take-off weight of less than 150 kg, among which we can distinguish the micro, mini and small categories. Class II includes UAVs with a maximum take-off weight of 150 - 600 kg, of medium size, launched with the use of a catapult. Class III includes UAVs over 600 kg, having the greatest range and durability of the tasks performed. As a rule, they require properly prepared airports (airfields) for take-offs and landings<sup>7</sup>.

## PRINCIPLES OF FLIGHTS BY UNMANNED AERIAL VEHICLES

Operations using an unmanned aerial vehicle system are performed in accordance with the rules set out in Regulation (EU) No 2018/1139 of the European Parliament and of the Council of 4 July 2018 on common rules in the field of civil aviation and establishing a European Union Aviation Safety Agency and amending Regulations of the European Parliament of the European Parliament and of the Council No. 2111/2005, No. 1008/2008, No. 996/2010, No. 376/2014 and Directives of the European Parliament and of the Council 2014/30/EU and 2014/53/EU, as well as repealing Regulation No. 552 of the European Parliament and of the Council /2004 and No. 216/2008 and Council Regulation (EEC) No. 3922/91<sup>8</sup>. The EU Commission Delegated Regulation No. 2019/945 of March 12, 2019 on unmanned aircraft systems and operators of unmanned aircraft systems from third countries<sup>9</sup>, EU Commission Implementing Regulation No. 2019/947 of May 24, 2019 is also of fundamental importance in this respect<sup>10</sup>. On regulations and procedures concerning the operation of unmanned aerial vehicles, the Act of July 3, 2002 - Aviation

<sup>5</sup> A. Konert, *Terminologia oraz klasyfikacja bezałogowych statków powietrznych*, [in:] A. Konert (ed.), *Prawne aspekty użytkowania bezałogowych statków powietrznych*, Warszawa 2021, p. 14.

<sup>6</sup> T. Zieliński, *Funkcjonowanie...*, p. 40-41.

<sup>7</sup> Ibidem, p. 42-43. See also: Strategic Concept of Employment for Unmanned Aircraft Systems in NATO, The Joint Air Power Competence Centre, Kalkar 2010.

<sup>8</sup> Journal device EU. L 212, 22/08/2018, p. 1.

<sup>9</sup> Journal device EU L 152 of 11/06/2019, p. 1, as amended.

<sup>10</sup> Journal device EU L 176 of 05/06/2020, p. 13.

Law<sup>11</sup> and the Act of December 8, 2006 on the Polish Air Navigation Services Agency<sup>12</sup>. Guidelines No. 7 of the President of the Civil Aviation Office of June 9, 2021 on the methods of performing operations using unmanned aerial vehicle systems in connection with the entry into force of the provisions of Commission Implementing Regulation (EU) No. 2019/947 of May 24, 2019 are also of great importance. on the regulations and procedures for the operation of unmanned aerial vehicles<sup>13</sup> and Guidelines No. 24 of the President of the Civil Aviation Authority of December 30, 2020 on determining geographical zones for unmanned aircraft systems<sup>14</sup>.

Problems related to violations of the above-mentioned regulations usually relate to restrictions on UAV flights over military units, training grounds, seaports, power plants, water intakes and sewage treatment plants, flights without a Check-In or mission in PansaUTM, flights above the permitted altitudes or in zones no flights. However, the most common case of breaking the law in this area is an unauthorized flight in the flight restriction zone and flights above the flight altitude limit of 120m AGL<sup>15</sup>.

The Polish Air Navigation Services Agency recommends taking several actions to guarantee safe and lawful use of airspace by unmanned aerial vehicles. These include thorough checking of airspace zones and limitations in the mobile application (DroneRadar), checking the available maps for training grounds or military units in the planned location, checking the area over which the flight will be performed, keeping the UAV within the visual range of its or observer, not to fly over seaports, power plants, water intakes and sewage treatment plants, military units and training grounds without the consent of the facility manager<sup>16</sup>.

The Act - Aviation Law in art. 126 regulates the conditions for unmanned aircraft flights. According to par. 2 of this provision, “*An unmanned aerial vehicle (UAV) must be equipped with the same flight, navigation and communication facilities as a manned aircraft performing visual flight (VFR) or instrument flight (IFR) in a specific class of airspace. The derogations applicable to manned aircraft in this respect shall apply equally to unmanned aerial vehicles (UAVs)*” (Article 126(2)). “*Flights of unmanned aerial vehicles equipped in accordance with para. 2 may be performed on the basis of a submitted flight plan, in the manner and in accordance with the conditions referred to in sec. 5, subject to Art. 149*” (Article 126(3)). “*Flights of unmanned aerial vehicles without equipment referred to in par. 2, may be performed in zones separated from the airspace open to aviation, taking into account the regulations issued on the basis of Art. 121 sec. 5*” (Article 126(4)). Therefore, this provision lays down a general rule that unmanned

<sup>11</sup> Journal of Laws 2021.784 and 847.

<sup>12</sup> Journal of Laws 2021.260.

<sup>13</sup> Journal of Laws 2021.35.

<sup>14</sup> Journal of Laws 2020.78.

<sup>15</sup> <http://pansa.pl> [access: 19.01.2023].

<sup>16</sup> <https://gospodarka.sos.pl/co-moze-grozic-za-violanie-przepisow-okreslajacych-zasady-wykonowania-lotow-dronami-1032892.html> [access: 19.01.2023].

aerial vehicles without a special, individual permit are allowed to fly in Polish airspace. What is important, however, is the appropriate equipment, the submission of the flight plan and the performance of the flight in the manner and in accordance with the conditions set out in the regulations issued on this basis<sup>17</sup>.

## CONSEQUENCES OF UNLAWFUL UAV FLIGHT OPERATIONS

The consequences of violating the law related to the operation of unmanned aerial vehicles are reflected in Art. 211 and 212 of the Aviation Law. The first of these indicates that “*whoever, contrary to Art. 97 of the Act, performs a flight or other aviation activities without a valid license or qualification certificate, shall be subject to a fine, restriction of liberty or imprisonment for up to one year*” (Article 211.1.5). The second, in turn, indicates that misconduct occurs when “*air traffic regulations in force in the area where the flight takes place*” (point 1(a)) are violated, and a state border is crossed “*without the required permission or with violation of the conditions of the permit*” (point 1 letter b), are violated “*issued on the basis of art. 119 sec. 2 of the Act, bans or restrictions on flights in Polish airspace introduced due to military necessity or public safety*” (point 1 letter c), there is a failure to comply with “*orders of the authorities of the state in which the flight takes place, as well as commands received from his state-owned aircraft, ordering landing at a designated airport or other conduct by the crew*” (point 1(d)), “*contrary to Art. 116 sec. 1, firearms, gas weapons or explosives are carried or used on board the aircraft*” (item 2), “*against Art. 125 sec. 1 of the Act, signs and signals applicable in air traffic are used for purposes unrelated to this traffic or in a manner that may mislead air traffic service authorities or aircraft crews*” (point 3), “*contrary to Art. 125 sec. 2, radio transmitting devices operating in the frequency bands and designated pursuant to the provisions of Art. 111 sec. 3 of the Act of 16 July 2004 - Telecommunications Law for air communications and radiolocation and air navigation*” (point 4), *an airport or air traffic facilities located on or outside the airport are damaged or rendered “incapable of use”* (point 5), “*any devices, substances or weapons are used, non-operating aircraft at the airport are destroyed or seriously damaged, or the operation of this airport is interrupted, threatening the safety of this airport*” (point 6). The acts indicated in this provision constitute crimes and are subject to the provisions of the general part of the Penal Code.

Act under Art. 212 sec. 1 point 1 lit. a is a formal offense and may be committed by act or omission at the moment of violating an air traffic regulation. The modal circumstances of the act include committing the act while performing a flight with an aircraft.

<sup>17</sup> W. Dzienkiewicz, Art. 126, [in:] M. Żylicz (ed.), *Prawo lotnicze. Komentarz*, Warszawa 2016, p. 156. See also: W. Jaszczur, S. Łukasik, *Wybrane aspekty szkolenia na pilotów dronów*, [in:] R. Kamprowski, M. Skarżyński (ed.), *Wykorzystanie dronów i robotów w systemach bezpieczeństwa. Studia interdyscyplinarne*, Poznań 2021, p. 27.

It is punishable to violate only the law in force in the area where the flight takes place. The deed from point 1 lit. b is also a formal offense and may be committed by action at the moment of crossing the border. The modal circumstances are similar to those indicated in point 1 lit. a. Another act indicated in point c is also a formal offense and may be committed when a flight ban or restriction is violated. Modal circumstances include committing an act during a flight using an aircraft, only in Polish airspace. Another act of this regulation is also a formal offense and may also be committed by action or omission. The modal circumstances are also analogous. The act presented in point 2 is a formal crime, but it can only be committed by action. The act in point 3 is also a formal offense and may be committed at the moment of unauthorized use of signs or signals. sec. 1 point 4 defines another formal offense and it may be committed when radio devices are used against the prohibition of art. 125 sec. 2. The act of para. 1 point 5 is a material crime by action. The criminalization of this act constitutes the fulfillment of the obligation under Art. 1 sec. 1 lit. d and sec. 1 bis of the 1971 Montreal Convention as amended by the 1988 Protocol<sup>18</sup>. The last point of paragraph 1 defines two material offenses from the action. In both cases, the means of action of the perpetrator can be any devices, substances or weapons. The criminalization of these acts constitutes the fulfillment of the obligation under Art. 1 sec. 1 encore of the 1971 Montreal Convention. Article 212 sec. 2, on the other hand, introduces the basic type of crime consisting in allowing the commission of the acts specified in par. 1<sup>19</sup>.

Offenses under Art. 212 sec. 1 and 2 are punishable by imprisonment of up to 5 years, and crimes under Art. 212 sec. 3 are punishable by a fine, restriction of liberty or imprisonment for up to one year. All offenses under this provision are common and are prosecuted ex officio. Deeds from sec. 1 and 2 may be committed intentionally with a direct or potential intention, and those from sec. 3 unintentionally.

Moreover, Art. 126a sec. 1 of the Aviation Law provides for far-reaching consequences for the entity using unmanned aerial vehicles in an unlawful manner. If the course of the flight or operation of the UAV *threatens the life or health of a person, poses a threat to protected facilities, devices or areas, disrupts the course of a mass event or threatens the safety of its participants, creates a reasonable suspicion that it may be used as a means of a terrorist attack, performs a flight in the airspace in the part where flight restrictions have been introduced or located over the territory of the Republic of Poland, where the flight of an aircraft is prohibited from the ground level to a certain height*, then such an aircraft may be destroyed, disabled or its flight may be taken over control. It is worth noting, therefore, that violation of the provisions of Polish law in the field of UAV flights may result in a very severe sanction in the form of preventing its operation.

<sup>18</sup> Protocol on Suppression of Unlawful Acts of Violence at Airports Serving International Civil Aviation of February 24, 1988, supplementing the Convention on Suppression of Unlawful Acts Against the Security of Civil Aviation of September 23, 1971, Journal of Laws 2006.48.348.

<sup>19</sup> J. Walulik, Art. 212, [in:] M. Żylicz (ed.), *Prawo...*, p. 199.

It is also worth noting that the unlawful use of BSP may result in imprisonment for a period of 25 years or life imprisonment. According to Art. 156§1 of the Penal Code, “*whoever causes grievous bodily harm (...) shall be punishable by imprisonment for a period of not less than 3 years.*” “*If the act specified in §1 results in the death of a person, the perpetrator shall be subject to the penalty of deprivation of liberty for 5 years, the penalty of deprivation of liberty for 25 years or the penalty of deprivation of liberty for life*” (Article 156§3 of the Penal Code)<sup>20</sup>. The act indicated in this provision constitutes causing grievous bodily harm, which may be committed in the form of an act or omission. It is a common crime, and therefore one that can be committed by any person, including the operator of an unmanned aerial vehicle<sup>21</sup>.

Unauthorized use of an unmanned aerial vehicle may also cause impairment of bodily functions or health disorders. Then the Polish legislator provides for a penalty of imprisonment from 3 months to 5 years (Article 157§1 of the Penal Code). If the indicated violation lasts no longer than 7 days, then a fine, restriction of liberty or imprisonment for up to 2 years is provided for (Article 157§2 of the Penal Code). On the other hand, if the act was unintentional, in such a situation the legislator provides, in addition to a fine and restriction of liberty, also a penalty of imprisonment of up to one year (Article 157§3 of the Penal Code). The act under this article constitutes an offense of medium or slight bodily injury. It can be committed by action or omission. The subject that may be the perpetrator of an act is any person, including the one who has been authorized to use UAV<sup>22</sup>.

In addition to the above-mentioned legal provisions, the Penal Code also regulates the issues of causing a catastrophe in air traffic (Article 173 of the Penal Code), imminent danger of causing it (Article 174 of the Penal Code), violation of safety rules in air traffic (Article 177 of the Penal Code), as well as being intoxicated or under the influence of a narcotic substance, driving a motor vehicle in the airspace (Article 178a of the Penal Code). Each of these acts is a common crime. Anyone who disrupts the functioning of the airspace may be an entity taking actions contrary to the law.

The Code of Offenses<sup>23</sup> also introduces the consequences of unlawful use of unmanned aerial vehicles. An example may be a disturbance of peace or public order under Art. 51 of the KW, performance of activities by a person incapable of doing so (Article 70 of the KW), driving a vehicle while under the influence of alcohol (Article 87 of the KW), as well as malicious harassment of another person (Article 107 of the KW). These regulations provide for imprisonment, restriction of liberty, fine or reprimand.

<sup>20</sup> Journal of Laws 2022.1138, i.e.

<sup>21</sup> J. Giezek, Art. 156, [in:] D. Gruszecka, K. Lipiński, G. Łabuda, A. Muszyńska, T. Razowski, J. Giezek (ed.), *Kodeks karny. Część szczególna. Komentarz*, Warszawa 2021, p. 243.

<sup>22</sup> J. Giezek, Art. 157, [in:] D. Gruszecka, K. Lipiński, G. Łabuda, A. Muszyńska, T. Razowski, J. Giezek (ed.), *Kodeks...*, p. 244.

<sup>23</sup> Journal of Laws 2022.2152, i.e.

Current jurisprudence on the misuse of unmanned aerial vehicles usually provides for a fine, although not always. In the judgment of the District Court in Skierniewice of December 7, 2021, for the actions of the UAV pilot consisting in flying in violation of the air traffic regulations in force in the area, as well as the flight rules regarding the lack of consent of the facility manager and flying over a closed area, the court imposed a penalty of 10 months restriction of freedom, consisting in the obligation to perform unpaid, controlled work for social purposes for 20 hours a month. The court also awarded a cash benefit of PLN 1,500 to the Victims' Assistance Fund and Post-penitentiary Assistance, forfeiture of a memory card to the State Treasury, and PLN 250 for court costs<sup>24</sup>.

In the judgment of the District Court in Skierniewice of August 3, 2022, for flying in the area of a military unit without the required consent of the facility manager, the court imposed a fine of 100 daily fines, making the judgment public for a period of 1 month, and PLN 70 for to the State Treasury as expenses of the proceedings and the amount of PLN 200 as a fee<sup>25</sup>.

In turn, in the judgment of the District Court in Skierniewice of September 30, 2022, for performing a flight with an unmanned aerial vehicle in a military area without the required consent of the facility manager, the court imposed a daily fine of PLN 150, forfeiture of material evidence and PLN 70 for the benefit of the State Treasury as expenses of the proceedings and the amount of PLN 300 as a fee<sup>26</sup>.

As the examples of Polish court judgments above show, violation of legal provisions concerning the use of airspace by unmanned aerial vehicles in a manner contrary to the law usually results in a financial penalty within the limits provided for by the legislator. An important consequence of such conduct is also the forfeiture of things, including the drone and its components.

## SUMMARY

The use of unmanned aerial vehicles nowadays is used in many areas of life, e.g. medicine, public safety, science, environmental protection<sup>27</sup>. However, it should be remembered that their operation of such devices requires the application of appropriate regulations in this regard. In a situation where the actions or omissions of the UAV operator are unlawful, specific sanctions provided for by the legislator should be expected. As the jurisprudence on this subject shows, one should expect fines or forfeiture of things, less often imprisonment.

<sup>24</sup> Judgment of the District Court in Skierniewice of December 7, 2021, file ref. Act. II K 748/21.

<sup>25</sup> Judgment of the District Court in Skierniewice of August 3, 2022, file ref. Act. II K 358/22.

<sup>26</sup> Judgment of the District Court in Skierniewice of September 30, 2022, file ref. Act. II K 509/22.

<sup>27</sup> M.J. Dougherty, *Drony*, Warszawa 2015, p. 8.



---

## References

Dougherty M.J., *Drony*, Warszawa 2015.

Dzienkiewicz W., Art. 126, [in:] M. Żylicz (ed.), *Prawo lotnicze. Komentarz*, Warszawa 2016.

Giezek J., Art. 156, [in:] D. Gruszecka, K. Lipiński, G. Łabuda, A. Muszyńska, T. Razowski, J. Giezek (eds.), *Kodeks karny. Część szczególna. Komentarz*, Warszawa 2021.

Jaszczur W., Łukasik S., *Wybrane aspekty szkolenia na pilotów dronów*, [in:] R. Kamprowski, M. Skarżyński (eds.), *Wykorzystanie dronów i robotów w systemach bezpieczeństwa. Studia interdyscyplinarne*, Poznań 2021.

Konert A., *Terminologia oraz klasyfikacja bezzałogowych statków powietrznych*, [in:] A. Konert (ed.), *Prawne aspekty użytkowania bezzałogowych statków powietrznych*, Warszawa 2021.

Zieliński T., *Funkcjonowanie bezzałogowych systemów powietrznych w sferze cywilnej*, Poznań 2014.