

Radosław Gross, MA

WSB University in Dąbrowa Górnicza

e-mail: radoslaw.gross@wsb.edu.pl

ORCID: 0000-0002-0915-4263

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USE OF UNMANNED AERIAL VEHICLES IN THE POLICE FORCE

Abstract

Until recently unmanned aerial vehicles, popularly known as drones, were associated solely with fun and recreation. However, with the development of technology and their increasing popularity as well as the very approach to the subject, the situation has changed dramatically. In a fairly short period of time, the general perception of unmanned aerial vehicles has changed, as has the perception of operators who can use unmanned aircraft as a tool for implementation of their statutory tasks. Currently, the use of unmanned aerial vehicles is associated with the performance of many other serious tasks that are sometimes highly important for society as a whole. UAVS have become the perfect tool for the uniformed services, whose primary task is to ensure the safety of citizens and maintain public order. Developments in technology and engineering have naturally resulted in unmanned aerial vehicles to becoming standard equipment used by law enforcement agencies. The change in awareness and the introduction of innovative solutions has also contributed to a significant reduction in the costs of the tasks imposed on the police. The use of UAVs in ongoing police operations has also resulted in a direct increase in the uncovering of crimes and offences. They also contribute to an overall increase in safety.

Keywords

Unmanned aerial vehicles, drones, police, public safety

Introduction

Until recently, the term unmanned aerial vehicles appeared quite rarely in security and defence studies. Only in the early 1990s. Since the 1990s, foreign-language literature has increasingly considered various aspects related to the use of such technologies¹. Unmanned aerial vehicles, commonly referred to as drones, have been developed to meet a number of needs; personal safety, the size of the flying craft, increased capability of operating conditions, range, multifunctionality etc.² With the development of various technologies, the Police – as a uniformed and armed force – should use the most modern tools for the effective and at the same time economical implementation of its activities. One such tool are Unmanned Aerial Vehicles. However, the use of this originally military technology without appropriate regulation may contribute to the excessive militarisation of the police and activities exceeding the powers granted to the police force, and thus become a threat to citizens³. It should be noted that it is a constitutional principle that all police actions must be supported by the law⁴.

It is worth recalling at this point that the basic tasks of the police include⁵:

- the protection of human life and health and of property against unlawful attacks violating these goods,
- the protection of public safety and order, including ensuring peace and quiet in public places and on public transport and communications, in traffic and on waterways intended for public use,
- initiating and organising activities aimed at preventing the committing of crimes and offences and criminogenic phenomena, and cooperating in this respect with state and local government bodies and social organisations,
- conducting counter-terrorist operations⁶,
- the detection and prosecution of offences,
- the protection of premises constituting the seats of the members of the Council of Ministers, excluding premises serving the Minister of National Defence and the Minister of Justice, as designated by the Minister responsible for internal affairs,
- supervision over specialised armed protection forces within the scope defined in separate regulations,
- control of compliance with order and administrative regulations related to public activities or in force in public places,
- cooperation with police forces of other countries and their international

¹ See: J. Chojnacki, D. Pasek, *International Security Yearbook*, „Rocznik Bezpieczeństwa Międzynarodowego” 2017, vol. 11, no. 1.

² P. Bukowski, G. Szala, *Advances in Mechanical Engineering*, “Journal of Science and Technology” 2018, 11(6)/2018, 5-19.

³ *Project of the Department of Sociology of Law*, Jagiellonian University, project leader – A. Dziura, National Science Centre, 2018/N.HS5/01999.

⁴ R. Kocharczyk, *UAVs in the search for missing persons by police. Monograph the use of unmanned aerial platforms for National Security*, 2019, p. 61.

⁵ Compiled on the basis of Par.1 – Act of 6 April 1990 on Police, Journal of Laws 2021.0.1882.

⁶ In accordance with the Act of 10 June 2016 on anti-terrorist activities Journal of Laws 2019, item 796 and 2021, items 464 and 815.

organisations, as well as with bodies and institutions of the European Union on the basis of international agreements and accords and separate regulations,

- processing of criminal information, including personal data,
- maintaining data sets containing information collected by authorised authorities on fingerprints of persons, unidentified latent prints from crime scenes and the results of deoxyribonucleic acid (DNA) analysis.

In addition, the Police shall perform tasks arising from other Acts, from the provisions of the law of the European Union and from international agreements and accords on the principles and within the scope specified therein⁷ as well as those specified in the Act on the system of monitoring road and rail transport of goods and trade in heating fuels⁸.

Methodological and methodical assumptions

The purpose of the article is to present the possibilities of using the Unmanned Aerial Vehicles in the work of the Police.

The article defines the basic concepts related to the use of the Unmanned Aerial Vehicles, defines their functions, and presents the most important legal acts regulating their use.

The research problem boils down to the question: what are the possibilities of

using the Unmanned Aerial Vehicles in the police work?

In order to solve the research problem indicated above, the authors used theoretical and empirical methods, techniques and research tools.

The hypothesis of the text in question was formulated as follows: the tasks that can be carried out with the help of the Unmanned Aerial Vehicles of the Police are:

- supporting search operations for missing persons,
- support for pursuit activities,
- support for mobile command posts,
- detection of sources of pollution of facilities, land and water,
- monitoring of rescue operations in conditions harmful to officers,
- traffic supervision,
- tracking moving targets,
- supervision of the movement of participants in mass events,
- room penetration,
- pyrotechnical reconnaissance,
- neutralisation of suspicious cargo,
- site reconnaissance and observation,
- documentation of sites following disasters and technical outages,
- direct support during training and combat operations,
- surveillance of areas with high concentrations of people,
- reconstruction of road traffic incidents,
- conducting intelligence operations,

⁷ Regulation of the European Parliament and of the Council (EU) 2016/399 of 9 March 2016 on an EU Code on the rules governing the movement of persons across borders (Schengen Borders Code) – Official Journal of the EU L 77 of 23 March 2016; Regulation (EU) 2015/2219 of the European Parliament and of the Council of 25 November 2015 on the European Union Agency for Law Enforcement Training (CEPOL) replacing and repealing Council Decision 2005/681/JHA – Official Journal (EU) of 4 December 2015.

⁸ Act of 9 March 2017 on the monitoring system for road and rail transport of goods and trade in heating fuels, consolidated text Journal of Laws of 2018, item 2332.

- covert observation of land and people,
 - patrolling and supervising terrain,
 - monitoring of border zones,
 - analysis of crime scenes.
- rules for the recording of Unmanned Aerial Vehicles in the Police;
 - principles for dealing with emergencies involving UAVs.

Rules for the use of Unmanned Aerial Vehicles in the Police

In view of the need to standardise and unify the rules for the use of UAVs by the Police, the Chief Constable of the Police issued orders constituting the said rules. Hitherto, there has been almost complete freedom in the use of these devices, limited only to a small extent by aviation legislation. The rules on the use of UAVs in the Police are set out in exactly two regulations of the Chief of Police, that is: Order No. 63 of the Commander-in-Chief of the Police of 7 October 2019 on the detailed rules for the use of Unmanned Aerial Vehicles in the Police⁹ and Order No. 75 of the Chief Constable of Police amending the Order on detailed rules for the use of Unmanned Aerial Vehicles in the Police Force¹⁰. Order No. 75 can be described as adapting the nomenclature used previously to the one currently in force, due to the entry into force of the Commission Regulation EU 2019/947 of 24 May 2019 on rules and procedures for the operation of unmanned aerial vehicles¹¹.

The regulations specify:

- rules for the use of Unmanned Aerial Vehicles in the Police;
- principles for the supervision of tasks related to the use of Unmanned Aerial Vehicles in the Police;

Several definitions were introduced by the regulation:

1. Unmanned Aerial Vehicle (UAV) – an aircraft that does not require a crew present on board for flight and does not have the capacity to carry passengers, whether remotely piloted or flying autonomously, hereinafter referred to as “UAV”.

In the case of this definition, it is noteworthy that the Chief of Police, in the absence of a legal definition at the statutory level, was tempted to introduce his own complementary definition of an Unmanned Aerial Vehicle. The most important element of this is that it specifies that a UAV does not have the capacity to take passengers on board. This conflicts with research work aimed at producing an Unmanned Aerial Vehicle capable of carrying passengers, if only to transport an injured person in an accident.

2. Police unmanned aerial vehicle – UAV in service police unmanned aerial vehicle, hereinafter referred to as “PUAV”.
3. PUAV Pilot – a police officer or police employee holding a valid UAV pilot licence in the ‘special’ category, in accordance with EU Commission Regulation 2019/947 of 24 May 2019 on the rules and procedures for the operation of Unmanned Aerial Vehicles

⁹ Official Journal KGP, 2019.106 of 22 October 2019.

¹⁰ Official Journal KGP 2022.191 of 17 May 2022.

¹¹ Commission Regulation EU 2019/947 of 24 May 2019 on rules and procedures for the operation of Unmanned Aerial Vehicles (Official Journal EU L 152, 11.6.2019, p. 45, as amended) of 24 May 2019 on regulations and procedures for the operation of unmanned aerial vehicles, Official Journal of the European Union L 152 of 11 June 2019.

- (Official Journal EU L 152, 11.6.2019, p. 45, as amended. 1), hereinafter referred to as “Regulation 2019/947”, and entered in the register of PUAV pilots kept by the national coordinator for Unmanned Aerial Vehicles.
4. Instructor – a PUAV pilot holding an instructor’s qualification in UAV pilot training.
At this point, it is worth noting that in the field of police operations with the use of Unmanned Aerial Vehicles, the concept of Instructor was introduced directly. This enables in-house training and means that the police do not need to use external specialised providers, but have operator status themselves.
 5. PUAV observer – a police officer or a police employee holding a PUAV pilot’s licence, and in the course of the performance of activities using a PUAV, assisting a PUAV pilot, in particular in determining the position of the PUAV in airspace and in ensuring a safe distance from other aircraft and obstacles.
 6. National Coordinator for Unmanned Aerial Vehicles – the person responsible for coordinating the use of PUAV in the Police, hereinafter referred to as the “National Coordinator”.
 7. Provincial Coordinator for Unmanned Unmanned Aerial Vehicles – the person responsible for the coordination of the use of PUAV in the area of operation of the relevant Voivodship Police Headquarters, hereinafter referred to as the “Voivodship Coordinator”.
 8. Instruction flight – a flight performed during the training process under the supervision of an instructor.
 9. Training flight – a flight performed by a PUAV operator as part of self-development.
 10. Police organisational unit – the police organisational unit using the PUAV.
 11. Organisational unit of the Police Headquarters – an organisational unit of the Police Headquarters, hereinafter referred to as “PH”, which uses the PUAV.
 12. Technical (test, control) flight – a flight performed in order to check the general technical efficiency of the of the UAV and its individual components.
- In the definition of the PUAV pilot in the regulation, it is important to draw attention to several essential elements. Firstly, it is necessary for the pilot of an Unmanned Aerial Vehicle to hold a minimum licence i.e. at least a special category licence. This category is intended for operations of medium risk, i.e. those with flight parameters beyond the ‘open’ category. In some cases, the approval of the President of the Civil Aviation Authority is required for such flights. Secondly, in order to be recognised as a PUAV pilot, a pilot must be entered on the list of PUAV pilots maintained by the National Coordinator. Their status therefore depends directly on the constitutive decision on their entry into the register in question¹².

¹² More: A. Śliwska, *Zagrożenia dla praw człowieka będące następstwem użytkowania bezzałogowych statków powietrznych*, „Młody Jurysta” 2019, nr 3

There are two types of persons involved in operations using Police UAVs. These are the pilot and the observer. Both the pilot and the observer can be an officer, but also a police employee. This is different to the use of UAVs by other uniformed services.¹³ As an example, the standard introduced by the Commander-in-Chief of the Border Guard stipulates that the pilot of an Unmanned Aerial Vehicle of the Border Guard can only be an officer of the Border Guard¹⁴.

Police Unmanned Aerial Vehicles (UAVs) are used to carry out official police tasks. However, it is also permissible to use them as support for other entities in carrying out their tasks. Such use of UAVs is based on separately concluded contracts and agreements.

It is worth emphasising here that only a police officer has the right to operate a Police Unmanned Aerial Vehicle when it is used to carry out statutory police tasks.

In carrying out operations involving the use of an Unmanned Aerial Vehicle, the pilot shall divide the tasks between themselves and the observer. The regulations introduce a number of obligations imposed on the pilot and observer. These obligations can be divided into mandatory and optional. It is mandatory to check the flight capabilities of the UAV, in particular – weather conditions, terrain, operational limitations

of the UAV and airspace availability.¹⁵ Optional duties include the use of Police UAVs in accordance with their instructions, i.e. – diligent and timely performance of maintenance activities included in the instructions for use of the respective UAV model, using materials in accordance with the manufacturer's recommendations for the respective UAV model, carrying out activities in accordance with the Act, the instructions and the regulation, as well as performing only such flight operations for which the pilot or observer is qualified, and to notify the appropriate police station in terms of its location, i.e. the district, city or police headquarters where the flight is performed.

Drone operators are responsible for the decision to fly, the correctness of the flight and maintaining the safety of flight operations. They can also be held civilly liable for damage resulting from the flight, for breaches of data protection legislation during the collection of personal data during the flight, as well as criminally liable for breaches of aviation law¹⁶.

Optional duties do not have to be performed in the case of operational and exploratory activities. The most debatable fact – in terms of optional duties – is that a pilot or operator can be given authority to perform flights for which they do not hold a licence. This is in conflict with other generally applicable regulations and may

¹³ See: S. Wieteska, *Możliwości zastosowania bezzałogowych statków powietrznych; Możliwości zastosowania bezzałogowych statków powietrznych w likwidacji szkód ubezpieczeniowych upraw rolnych w Polsce*, „Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach” 2017, Nr 331.

¹⁴ Regulation No. 49 of 10 April 2018 on the use of Unmanned Aerial Vehicles of Straż Graniczna (Border Guards), Official Journal KGSG.2018.54, Order No. 47 of the Commander-in-Chief of the Border Guard of 26 July 2019 amending the Regulation on the use of Unmanned Aerial Vehicles of the Border Guard, Official Journal KGSG.2019.43.

¹⁵ More: N. Tuśnio, A. Nowak, J. Tuśnio, *Bezzałogowe statki powietrzne w działaniach Państwowej Straży Pożarnej*, „Zeszyty Naukowe SGSP” 2016, nr 58, tom 1/2/2016

¹⁶ K. Bolz, *Correlation of Benefits and Risks of UAV use*, DOI: <https://doi.org/10.37055/sbn/144273> (dostęp: 22.09.2022 r.).

expose the pilot or observer to a number of sanctions related to flying in excess of their own authority. Indeed, other universally applicable regulations have introduced a number of sanctions for pilots or observers who overstep their authority, and the regulation – as a lower-order act – should not allow violations of higher-ranking regulations. On the one hand, it is understandable that a flight should be authorised in excess of privileges if this is dictated by the sensitivity of the operation in question. On the other hand, it is possible to take a negative view of the authorisation of a breach of the rules, especially one that is shared by an authority obliged to control the legality of actions.¹⁷

Supervision and coordination of activities within the scope governed by the regulation is exercised by the head of the organisational unit of the PH competent for staff matters. In order to monitor the proper use of the PUAV, the Commander-in-Chief of the Police – on the motion of the head of the organisational unit of the PH in charge of staff matters – appoints, as the national coordinator, a person who has a state PUAV operator licence and who is distinguished by their knowledge, experience and skills in the use of the PUAV.¹⁸

With regard to the use of Unmanned Aerial Vehicles by the Police, I would

distinguish several functions: the reconnaissance function, the detection function, the evidential function and the preventive function.¹⁹

Within the reconnaissance function, we can speak of field reconnaissance, environmental reconnaissance, problem reconnaissance and personal reconnaissance. Reconnaissance – which is an extremely important element of the activities carried out by police officers – involves taking such actions which provide officers with relevant and necessary information for their work.²⁰

Within the detection function, we distinguish between several phases of action: the search phase, the revealment phase and the discovery phase. In the above cases – i.e. for both the reconnaissance function and the detection function – highly effective are UAVs with cameras, thermal imaging cameras or other recording devices.²¹

Evidential functions include such work of Police Unmanned Aerial Vehicles in which registration is made of the material acquired, e.g. in the form of recordings. In this case, the Police UAV should be equipped with a module for recording and documenting an event involving an offence or crime.²²

In terms of the preventive function, unmanned aerial vehicles with a

¹⁷ See: J. Kasperkiewicz, *Bezzałogowe statki powietrzne (drony) i najnowsze projekty regulacji prawnych dotyczące ich wykorzystywania*, „Przegląd Prawniczy Uniwersytetu Warszawskiego” 2015, Rok XIV, nr 1.

¹⁸ See: M. Gregorski, *Regulacje dotyczące bezzałogowych statków powietrznych w prawie Unii Europejskiej w kontekście międzynarodowym*, „Studia Europejskie” 2017, nr 2.

¹⁹ See: M. Feltynowski, *Systemy bezzałogowych statków powietrznych w ochronie przeciwpożarowej i ratownictwie pożarowym*, Warszawa 2022.

²⁰ See: Drass D., Wilk T., Biernikowicz W., *Możliwości wykorzystania bezpilotowych statków powietrznych (BSP) w środowisku cywilnym i wojskowym*, „Zeszyty naukowe ruchu studenckiego” 2016, nr 2.

²¹ More: K. Siadkowska, *Prawne aspekty eksploatacji dronów*, „Studia Iuridica Lublinensia” 2017, vol. XXVI, nr 3.

²² See: Banaszek A., Banaszek S., Żarnowski A., *Wykonywanie lotów bezzałogowymi statkami powietrznymi na potrzeby pozyskiwania danych przestrzennych – ramy prawne*, „Acta Scientiarum Polonorum. Administratio Locorum” 2016, 15/2, 7-19.

megaphone mounted on them are of particular use, for example, for crowd control during demonstrations.

Based on my own research, on the literature related to the topic and on the basis of the tasks of the Police defined in the Police Act, as well as bearing in mind the functions of Unmanned Aerial Vehicles in Police operations, the following tasks can be distinguished that can be carried out with the help of Police Unmanned Aerial Vehicles:

1. Supporting search operations for missing persons.
2. Support for pursuit activities.
3. Support for mobile command posts.
4. Detection of sources of pollution of facilities, land and water.
5. Monitoring of rescue operations in conditions harmful to officers.
6. Traffic supervision.
7. Tracking moving targets.
8. Supervision of the movement of participants in mass events.
9. Room penetration.
10. Pyrotechnical reconnaissance.
11. Neutralisation of suspicious cargo.
12. Site reconnaissance and observation.
13. Documentation of sites following disasters and technical outages.
14. Direct support during training and combat operations.
15. Surveillance of areas with high concentrations of people.
16. Reconstruction of road traffic incidents.
17. Conducting intelligence operations.
18. Covert observation of land and people.
19. Patrolling and supervising terrain.
20. Monitoring of border zones.
21. Analysis of crime scenes.

Discussion of selected uses of unmanned aerial vehicles

Re 1. Supporting search operations for missing persons.

Both the police and many other services use UAVs when conducting searches for missing persons. In 2013, the CPOZ (Centre for the Search for Missing Persons) was established in the Department of Search and Identification of Persons of the Criminal Bureau of the National Police Headquarters. The scope of tasks and activities to be performed by the Police during the search for missing persons is set out in Regulation No. 48 of the Police Chief Commander of 19 July 2018. One of the first actions carried out by the search commander is to order a search of the area of the last known location of the missing person. Police UAVs, from the perspective of officers involved in the search for a missing person, are in this case an alternative form of support and particularly useful for hard-to-reach areas. The use of Police UAVs in search operations provides many benefits. This is because an operation carried out using a PUAV enables a rapid commencement of actions and an increase in the area of action compared to searches carried out in traditional forms, i.e. teams moving in the formation of so-called fast threes or an extended line, or searches carried out using helicopters. Unmanned Aerial Vehicles (UAVs) offer the possibility of on-going recording of activities and the possibility of discounting an area where the person sought is not present, creating a particular kind of map of an area already searched. The use of Police Unmanned Aerial Vehicles also contributes to

reducing the cost of the search operation itself, both in terms of personnel and equipment. In cases where people are being searched for, UAVs are equipped with high-resolution cameras, infrared cameras and megaphones used to call out to the missing persons. The UAV also makes it possible to quickly deliver first aid items to where they are needed.

In addition, the use of drones with advanced functionality in the form of daytime or high-frequency thermal cameras allows accurate analysis and presents an overview of the situation. The footage from the flight in question may be forwarded to the relevant institution, which will use the material for the appropriate purposes²³.

Re 2. Support for pursuit activities.

When conducting operations to apprehend suspected criminals, it very often turns out that they are hiding in places with limited visibility for the coordinators of the operation. An aerial view provides excellent support for operations, both for the coordinators and for front-line officers. In such cases, UAVs equipped with video streaming recording devices are ideal, where a direct view of the incident site reaches remote coordinators in real time. This type of solution makes the UAV itself not only a surveillance device, but it can also be considered as a separate support system for the action being undertaken.

Re 6. Traffic supervision.

Re 16. Reconstruction of road traffic incidents.

The possibility of using UAVs to record offences committed by drivers is

explicitly set out in Article 2 point. 59 of the Traffic Law Act. According to its provisions, recording equipment constitutes a stationary, mobile or vehicle- or aircraft-mounted device that reveals and records, by means of image-recording techniques, violations of traffic regulations and the drivers of vehicles.

At the same time, it is worth noting that the police are not obliged to inform road users of the use of an Unmanned Aerial Vehicle for their operations. What is important about this type of action, however, is that if a PUAV pilot does not have the status of an officer he or she is not in a position to punish a traffic participant who breaks the rules. In this case, it is necessary for the pilot to have the status of an officer, or to cooperate with a police patrol with a police Officer who can issue the driver with a punishment.

The role of the pilot and observer in such situations is to draw up documentation of the offence committed and the offender, and then hand it over to the patrol, which will carry out the punishment. Unmanned Aerial Vehicles (UAVs) equipped with cameras with multiple zoom and a recording function, essential for evidential purposes, are used in this type of situation.

Another example of the use of UAVs in the day-to-day work of the police in traffic surveillance is analysis of road accidents. Using a PUAV, it is possible to take both photographs and videos of the scene, as well as create more complex 3D models that are fully measurable and able to represent the possible course of events. In such situations, PUAVs with

²³ See: R. Parczewski, M. Radwan, A. Chomacki, E. Jankiewicz, *Drony w procesie bezpieczeństwa państwa*, "Scientific Bulletin of Chełm, Section of Pedagogy" 2021, No 1/2021, p. 9-31.

a high-resolution camera mounted on them are used along with a device to create 3D models. Both the maps created and the 3D models can be used in subsequent actions as material evidence, saved on appropriate media and attached to the case file. The analysis of road accidents using UAVs significantly speeds up field work and does not cause obstructions to traffic. In addition, this avoids any potential danger to officers caused by traffic being held up for the duration of the work of experts operating at the scene.

Re 7. Tracking moving targets.

Unmanned Aerial Vehicles has the ability to carry out unrestricted movements. This feature is extremely beneficial when tracking a moving target, for example by fitting a camera with face recognition software, a person can be continuously observed from a long distance. This enables better coordination of activities and the use of fewer personnel to carry them out.

Re 8. Supervision of the movement of participants in mass events.

During mass gatherings, concerts or football matches, the use of Police UAVs allows the event to be controlled without officers being in the crowd itself. This provides the opportunity for wider and more area-wide crowd surveillance.

Previously it was therefore not known in advance who exactly would be observed, what suspicions there might be about specific individuals, what the observation would reveal, what acts²⁴. The use of UAVs makes it possible to immediately identify violent persons

and to document the course of an incident in real time. Images taken from the air also allow for monitoring of the directions in which both the entire crowd and the individuals of interest to the officers are moving. In addition to the monitoring function, images from Police Unmanned Aerial Vehicles allows for the verification of incidents and for confirmation that none of the people in the crowd are in need of assistance or injured, and that rapid intervention by officers is not required. Using the aerial view, it is also possible to give orders for specific behaviour, direction movement or instructional commands to the officers present. Unmanned Aerial Vehicles (UAVs) equipped with multiple zoom recording devices and megaphones are ideal for crowd monitoring.

Re 10. Pyrotechnical reconnaissance.

Re 11. Neutralisation of suspicious cargo.

In previous police practice, it was officers who carried out pyrotechnic reconnaissance. This unfortunately resulted in risk to the health and life of the officer performing the task. Through the use of Police Unmanned Aerial Vehicles, targets and suspicious cargo can be identified with a high degree of accuracy and then neutralised from the air. Unmanned Aerial Vehicles (UAVs) with cameras, including infrared cameras, and at the same time equipped to launch a neutralising charge or transport a dangerous cargo to a remote location, are highly useful in such situations.

²⁴ J. Kociubiński, *Wykorzystywanie danych personalnych zgromadzonych przypadkowo podczas operacji bezzałogowych statków powietrznych w świetle standardów prawa do prywatności gwarantowanego w Europejskiej Konwencji o Ochronie Praw Człowieka – zarys problemu*, "Studies in Authoritarianism and Totalitarianism" 2021, „Acta Universitatis Wratislaviensis” 2021, No 4054.

Re 21. Analysis of crime scenes.

An extremely important element when analysing crime scenes is proper preparation. Unmanned Aerial Vehicles can assist, for example by mapping the terrain. Within a short period of time after an aerial operation using a UAV, a very accurate map can be prepared that can be used effectively due to the complete and correct mapping of the terrain. A map created in this way is fully measurable and allows for free movement on the ground during the intervention. The footage also offers the possibility to zoom in, which is much easier and better than relying on traditional maps and satellite images, which can be inaccurate and often already outdated. In such cases, Police Unmanned Aerial Vehicles with specialised geo-mapping equipment mounted on them are ideal.

Conclusions

On the basis of the research and an assessment of the actual situation regarding the use of UAVs by the police, it can be concluded that they have become a permanent fixture on the list of equipment used by the police to carry out their activities.

Everyday life has shown that it is only by keeping up with technological developments and introducing technological innovations into the day-to-day work of the police that we both facilitate the execution of tasks and contribute to a significant increase in the safety of citizens. Unmanned aerial vehicles have come to play a supporting role in almost every aspect of police operations.

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About the Authors

Radosław Gross, PhD student, Member of the Management Board of the company Aviacom Project sp. z o.o., Pilot UAP, Pilot UAVO.