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ACTIONS OF THE BORDER GUARD IN THE EVENT OF A TERRORIST ATTACK AT THE AIRPORT

DZIAŁANIA STRAŻY GRANICZNEJ NA WYPADEK ATAKU TERRORYSTYCZNEGO W PORCIE LOTNICZYM

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Abstract. The tasks of the Border Guard include combating many threats. Nowadays, we observe their dynamics and evolution, including terrorist attacks that have severe consequences. Terrorist threats disrupt the functioning of state institutions and have a negative impact on the safety of citizens and social order, including safety in civil aviation. Due to the increase in international conflicts, there is a growing need to strengthen the potential of services and formations dealing with combating threats affecting the level of international security. The purpose of this article is to identify the role of the Border Guard in the event of a terrorist attack at an airport. The first part of the article characterizes the formation and describes its place in the Polish counterterrorism system. The elements of airport protection against terrorist threats are presented in turn. The main part describes contemporary challenges for airports in the context of the terrorist threat, with particular emphasis on the types of threats related to airport critical infrastructure. It was hypothesized that the Border Guard is well prepared to respond to terrorist attacks at airports. Border Guard plans and procedures are constantly updated and improved. Border guards are regularly trained on how to deal with such incidents. The research problem was formulated: What role does the Border Guard play in protecting the airport against a terrorist attack? Obtaining an answer to the above question required the use of research methods. For the purposes of the research, the method of analyzing literature, legal acts and the synthesis method was used, and the authors' previous knowledge and experience in this field were also taken into account.

Keywords: security, airport, Border Guard, attack, terrorism

Abstrakt. W zadaniach Straży Granicznej znajduje się zwalczanie wielu zagrożeń. W obecnym czasach obserwujemy ich dynamike oraz ewolucje, wśród których są ataki terrorystyczne, które niosą za sobą dotkliwe skutki. Zagrożenia terrorystyczne zakłócają funkcjonowanie instytucji państwowych, a także negatywnie oddziałują na bezpieczeństwo obywateli oraz porządek społeczny, w tym również na bezpieczeństwo w lotnictwie cywilnym. Ze wzgledu na wzrost konfliktów o charakterze międzynarodowym, narasta potrzeba wzmocnienia potencjału służb i formacji zajmujących się zwalczaniem zagrożeń wpływających na poziom bezpieczeństwa międzynarodowego. Celem niniejszego artykułu jest identyfikacja roli Straży Granicznej na wypadek ataku terrorystycznego w porcie lotniczym. W pierwszej części artykułu dokonano charakterystyki formacji oraz opisano miejsce w polskim systemie przeciwdziałania terroryzmowi. Kolejno przedstawiono elementy ochrony portu lotniczego przed zagrożeniami terrorystycznymi. W głównej części opisano współczesne wyzwania dla portów lotniczych w kontekście zagrożenia terrorystycznego z szczególnym uwzględnieniem rodzajów zagrożeń dotyczących lotniskowej infrastruktury krytycznej. Postawiono hipotezę, iż Straż Graniczna jest dobrze przygotowana do reagowania na ataki terrorystyczne w portach lotniczych. Plany i procedury SG są stale aktualizowane i doskonalone. Strażnicy graniczni są regularnie szkoleni w zakresie postępowania w przypadku takich zdarzeń. Problem badawczy sformułowano: Jaką rolę odgrywa Straż Graniczna w ochronie portu lotniczego przed atakiem terrorystycznym? Uzyskanie odpowiedzi na powyższe pytanie wymagało zastosowania metod badawczych. Na potrzeby badań posłużono sie metoda analizy literatury, aktów prawnych oraz metoda syntezy a także uwzgledniono także dotychczasowa wiedze i doświadczenie autorów w zakresie tej problematyki. Słowa kluczowe: bezpieczeństwo, port lotniczy, Straż Graniczna, atak, terroryzm

Introduction

In today's fast-paced world, there are no longer as great space constraints as there used to be, and it is soon easy and accessible to everyone to cover long distances. Aviation is one of the safest ways to get around, but there are plane crashes and accidents caused not only by human error or aircraft breakdowns, but also by terrorists. The ever-increasing number of passengers is becoming a challenge in the area of safety, but the rapid development of technology allows for an increasingly effective response. Terrorist attacks at airports pose a serious threat to national and international security. Therefore, the Border Guard (SG) has developed detailed plans and procedures to deal with such incidents. The aim of these measures is to ensure the safety of travelers, airport staff and airport infrastructure. Due to the increase in international conflicts, there is a need to strengthen the potential of services and formations dealing with combating threats affecting the level of international security, including the Border Guard. Although the Border Guard is well prepared to respond to terrorist attacks at airports, plans and procedures need to be constantly updated, and border guards should be regularly trained on how to deal with new scenarios. Thanks to this, the Border Guard will be able to increase the level of security at the airport.

Research on this issue focuses on the analysis of the structure and function of the Border Guard in the Polish anti-terrorist system and understanding the challenges it faces in the context of airport security. There is also a lot of interest in the procedures, plans and trainings that the Border Guard uses to prepare for possible terrorist attacks at airports. Currently, technologies and methods of risk analysis are also developing dynamically, supporting the activities of the Border Guard in identifying potential threats and implementing effective preventive measures.

In addition, understanding the role of the Border Guard in protecting airports from terrorist attacks is crucial for the development of security policy and strategic planning in counter-terrorism at the national and international levels.

Assessment of the state of knowledge

Knowledge about the actions of the Border Guard in the event of a terrorist attack is based on the analysis of terrorist threats, risk assessments and the exchange of information with other security authorities and special services. Close cooperation between different agencies and regular training and simulations allow for continuous improvement of procedures and responses to potential threats. In addition, the SG can learn from international aviation safety standards and from the experience of other countries in responding to terrorist attacks at airports. Constant assessment of the security situation and adaptation to changing threats and technologies are an important element of updating the state of knowledge about the Border Guard's actions in the event of terrorist attacks.

The current state of knowledge about the role of the Border Guard in the protection of airports against terrorist attacks is developed and based on empirical research and practical experience in the field of aviation security and counter-terrorism.

Research Methodology

The researchers used the method of literature and legal act analysis to gather information on the role and activities of the Border Guard in the Polish anti-terrorist system. By reviewing existing scientific literature, reports, official documents and other sources, important data on border formation and function in the context of airport safety and security were identified. The analysis of legal acts concerning anti-terrorist activities at airports allowed us to understand the specificity of the Border Guard's tasks in this area. The synthesis method was used to integrate the collected information from the analysis of literature and legal acts. By organizing and synthesizing the data, the researchers were able to identify patterns, trends, and key findings about the role of the Border Patrol in protecting airports from terrorist attacks. In addition, the researchers took into account their previous knowledge and experience in the field of airport security and counter-terrorism.

The purpose of this article is to identify the role of the Border Guard in the event of a terrorist attack at an airport. The first part of the article characterizes the formation and describes its place in the Polish counterterrorism system. The elements of airport protection against terrorist threats are presented in turn. The main part describes contemporary challenges for airports in the context of the terrorist threat, with particular emphasis on the types of threats related to airport critical infrastructure. It was hypothesized that the Border Guard is well prepared to respond to terrorist attacks at airports. Border Guard plans and procedures are constantly updated and improved. Border guards are regularly trained on how to deal with such incidents. The research problem was formulated: What role does the Border Guard play in protecting the airport against a terrorist attack? When formulating the research problem, they focused on precisely defining the role of the Border Guard in the context of protecting airports against terrorist attacks.

The Border Guard in the Polish counter-terrorism system

The Border Guard is a uniform, uniformed and armed formation designed to protect the state border, control border traffic and prevent and counteract illegal migration. It was established by the Act of 12 October 1990. Pursuant to Article 1(2) of the Act, its tasks in the field of border protection of the Republic of Poland and counteracting cross-border threats include:

- protection of the state border;
- organising and carrying out border traffic controls;
- preventing and countering irregular migration;
- issuing permits to cross state borders, including visas;
- identifying, preventing and detecting crimes and offences and prosecuting their perpetrators within the competence of the Border Guard;
- ensuring security in international communication and public order within the territorial range of the border crossing, and within the competence of the Border Guard also in the border zone;
- protection of the state border in the airspace of the Republic of Poland by conducting observations of aircraft and flying objects flying across the state border at low altitudes and informing the relevant units of the Polish Air Force about these flights;
- preventing the transport of waste, harmful chemicals, nuclear and radioactive materials across the state border of the Republic of Poland without the required permit, as well as preventing pollution of border waters;
- preventing the movement of narcotic drugs and psychotropic substances across the state border of the Republic of Poland without the required permit, including weapons, ammunition, explosives and precursors of explosives subject to restrictions (Border Guard Act, 1990).

In order to ensure effective protection of the state border, the Border Guard is constantly adapting to changing security threats. In connection with the threats related to the development of international terrorism, the tasks of the Border Guard have been extended to include activities aimed at identifying and counteracting terrorist threats, activities related to preventing people suspected of terrorist activity from entering the territory of Polish, as well as intercepting transports of harmful chemical substances, ammunition, weapons and explosives (Elak, 2018, p. 122). Analysing the tasks of the Border Guard aimed at preventing terrorist activities, Mr Elak found that combating terrorist threats includes the following activities:

- collecting and analysing information relating to citizens of so-called highrisk countries crossing the border at designated border crossing points, as well as attempting to cross it illegally outside border crossing points;
- issuing opinions on the granting of visas by Polish consular offices to citizens of the so-called high-risk countries;
- monitoring of people and communities from the so-called high-risk countries;
- supervision and control of the transport of large sums of money across the state border;
- exchange of information with the Internal Security Agency, the Intelligence Agency, the Intelligence Service, the Military Counterintelligence Service, the Police, as well as the authorities and institutions of neighbouring countries in the field of counteracting terrorist threats;
- conducting an analysis of threats to the security of the state border;
- managing activities in the field of state border protection and border traffic control (Elak 2018, pp. 122-123).

After Polish joined the Schengen area and the abolition of controls on persons at internal land and sea borders on 21 December 2007, and also at air borders on 30 March 2008, airports took over the function of the external border, and the Border Guard, as part of specific tasks, began to carry out ongoing monitoring of Muslim communities consisting in obtaining, processing and using information regarding:

- legal and illegal ways of crossing the border of the Republic of Poland by foreigners from high-risk countries who were suspected of contacts with terrorist groups;
- foreigners from high-risk countries, both in public and private schools of any type;
- business entities with the participation of Islamic capital;
- the transport of large sums of money across national borders by foreigners from high-risk countries;
- Polish citizens planning to marry, as well as those who have married people from high-risk countries and persons who have converted to Islam;

- contacts between Polish citizens and citizens of Muslim countries during tourist and business trips;
- hotel bases used by foreigners from high-risk countries;
- persons suspected of illegal possession of firearms, explosives, radioactive substances and poisons;
- relevant data on the security of border crossing points;
- metastasis channels and other categories of threats (Sareło-Janiak 2015, p. 85).

A key role in the structure of the Border Guard in the field of identification and counteracting terrorist threats is played by the Operational and Investigative Directorate of the Border Guard Headquarters, supported by local units and units. In addition to analytical activities, it also performs a coordinating and auxiliary function in contacts with Liaison Officers of other countries, officials of diplomatic and consular missions and the Anti-Terrorist Center of the Internal Security Agency – responsible for the effective integration of activities undertaken by units responsible for the anti-terrorist protection of Polish (Wawrzusiszyn 2013, p. 160)

In addition, the Border Guard has at its disposal specialized mining and pyrotechnic teams established at air border crossings. These teams are in charge of recognizing and neutralizing bomb threats at airports. They are equipped with high-end specialist equipment used to identify and neutralise devices and explosives (Rydz, 2018, p. 195).

In order to improve their competences and effectiveness in counteracting terrorist threats, Border Guard officers undergo specialist training. The efficiency of the Polish anti-terrorist system depends on the level of training of the Border Guard officers and employees of the Polish anti-terrorist system, as well as the effectiveness of cyclical exercises and training in the field of responding to terrorist threats, including the use of chemical, biological and radiation agents, and the implementation of conclusions and recommendations developed after their implementation. The exercises should be used not only to check the possibility of neutralizing a given factor or minimizing the potential escalation of a crisis situation, but also to concern the method and speed of information flow between their participants or to check the decision-making process and providing possible support.

Protecting the airport from terrorist threats

According to the Crisis Management Act, critical infrastructure includes *sys*tems and functionally related facilities, including buildings, equipment, installations, services crucial for the security of the state and its citizens and for ensuring the efficient functioning of public administration bodies, as well as institutions and entrepreneurs. Critical infrastructure is a key element of the national economy and plays a key role in the functioning of the state and the lives of its citizens. Airports are one of the most important facilities where the highest level of security must be ensured. Airports are strategic facilities, the security of which is not only of interest to the bodies managing them or entities using them but must also be an important factor in the security policy of the state authorities. Every airport must be prepared for a potential terrorist attack. To this end, states must develop appropriate programs to protect the airport from acts of unlawful interference (Zajac 2022, p. 80).

The legal act regulating the safety and security of airport facilities is the Aviation Law. In Article 186a, the legislator emphasised that the air carrier is responsible for the protection of civil aviation against acts of unlawful interference threatening the safety of aviation and the safety of persons and property in connection with its activities, and in the event that it performs flights defined by the President of the Office as high-risk flights, it is obliged to ensure a protective guard performed by Border Guard officers on board the aircraft (the Aviation Law Act).

Each airport is protected around the clock by specialized services and must have an airport security plan in place. Common basic standards for the protection of civil aviation against acts of unlawful interference threatening civil aviation safety are set out in the Annex to Regulation No 300/2008/EC. They concern, among others: airport security, including airport design requirements, access control, security and handling of items for persons other than passengers, vehicle inspections and surveillance, patrols and other physical checks carried out. Further guidelines relate to dedicated areas at airports, aircraft security, passenger security checks and protections, cabin baggage and checked baggage, and cargo and mail security controls (Regulation No 300/2008/EC).

The safety and security of airport facilities are also issues related to the cybersecurity of information systems, in accordance with the Act on the National Cybersecurity System, airports have been recognized as an operator of an essential service and constitute an important element of the national cybersecurity system. Therefore, it is necessary to systematically assess and manage the risk of an incident, implement appropriate and proportionate technical and organizational measures, collect information on cyber threats, manage incidents, and apply measures to prevent and limit the impact of incidents on the security of the information system used to provide the essential service. (Zając 2022, p. 85, Act on the National Cybersecurity System).

The primary goal of airport security after the September 2001 attacks was to prevent terrorists from boarding planes. Despite the special protection of airports, they are still dangerous areas (Kozak, 2018, p. 198) and are still threatened by terrorist attacks. An airport has its own characteristics, so it is not possible to develop a unified prevention system. Nevertheless, the readiness of the relevant services to counteract threats

in this area should be based on the improvement of existing procedures and the implementation of existing and breakthrough technologies that will allow to minimize risks (Zieliński, 2022, p. 11), as well as make employees aware of the shared responsibility for ensuring security at the airport. In particular, these activities include: protection of the airport area, ensuring high readiness of airport rescue forces and means, continuous improvement of management processes and security procedures, rational management of the company based on economic calculation, and systematic training of personnel in the field of aviation security against attacks of unlawful interference and airport rescue (Sikora, Fiszer 2013, p. 55).

The territorial scope of the air border crossing is the zones of the airport where border control and security control of persons, luggage, goods and aircraft is carried out. Public or restricted areas of the airport are determined by the locally competent voivode in consultation with the airport manager and the competent commander of the Border Guard unit (Truchan, 2016, p. 61). In the Border Guard posts, which are located at the airports, there are Flight Safety Groups, which include Security Control Supervision Teams. Their tasks include the implementation of tasks related to the supervision of security control in air transport carried out by services subordinate to airport managers (Urban, 2020, p. 145). Within the territorial range of airports, Border Guard officers in Specialist Control Teams perform tasks related to counteracting the illegal transport of weapons, ammunition and explosives across the state border with the use of service dogs. In addition, they carry out radiometry and radiation protection inspections. On the other hand, in Special Intervention Teams, border officers undertake pyrotechnic reconnaissance of luggage left unattended at the airport and unidentified objects. They also neutralize detected equipment, explosives, and airport facilities, including aircraft, in the event of a bomb threat (Urban 2020, p. 147).

Taking into account the activities carried out at airports, the goal of every person working in the airport area is safety and immediate response to behavior or situation that may violate it. Airport employees and persons staying at the airport are obliged to immediately notify the security services in a situation where they notice:

- unattended luggage;
- a person without a pass in the restricted area;
- a driverless car parked in an unauthorised place;
- a person exhibiting unusual behaviour at the airport (Żmigrodzka, Krakowiak 2018, p. 101)

As a result of the far-reaching computerization and automation of security screening processes, every single piece of equipment used today for passenger screening is a computer in itself or is directly connected to a central control unit. In order to increase the level of security, airports use electronic systems to support the protection and operation of operational services, enabling them to effectively counteract potential threats (Nowacki, Paszukow, 2020, p. 8).

Every airport must be prepared for a potential terrorist attack. To this end, states must develop appropriate aviation protection programs against acts of unlawful interference (Zając, 2022, p. 84). In order to ensure the protection and safety of airports, the international community has defined the concept of acts of unlawful interference, including: • the use of violence against a person on board an aircraft in flight:

- destroying or causing damage to an aircraft in flight that renders flight impossible or may pose a threat to the safety of that aircraft during flight;
- placing on board an aircraft, an object, device or substance that may endanger the health or life of passengers or crew or destroy the aircraft or cause damage to it, which may render it impossible to fly or pose a threat to safety during flight;
- hijacking an aircraft, with or without crew and passengers on board, including for the purpose of using the aircraft as a tool of air attack;
- destruction, damage to ground or on-board equipment, disruption of their operation, in the event that this poses a threat to the safety of the aircraft;
- the use of devices, substances, dangerous objects, weapons causing destruction or damage to equipment at an aerodrome or aircraft (Sikora, Fiszer 2013, pp. 53-54, 1963 Convention, 1970 Convention, 1971 Convention).

Due to the variety of threats, many ways of using modern technical equipment to ensure security have been developed, including those related to passenger control, cabin baggage and checked baggage (Magniszewski 2020, p. 189). The following control systems are usually included in this type of equipment:

- safety of staff, passengers and baggage;
- cargo, mail and courier security;
- access to the area of facilities and aircraft;
- production of identifiers;
- CCTV;
- anti-burglary and anti-robbery;
- protection of the place of aircraft;
- detection of chemical, radiation and biological hazards (Żmigrodzka, Krakowiak 2018, p. 102).

In the Act on the Protection of Persons and Property, airports are recognized as objects subject to mandatory protection due to the economic interest of the state. They must be protected by specialized armed security formations, and also have, due to the specific nature of their operation, appropriate technical protection (Act on the Protection of Persons and Property, 1997). The security of the airport is carried out by the airport security service, which cooperates with other authorities or institutions, including the Police and the Border Guard, in the performance of its tasks. On the basis of a confidentiality clause, voivodes keep records of facilities subject to mandatory protection, including airports, located in a given voivodeship (Zając 2022, p. 85).

According to the authors, inadequate management of individual elements of critical infrastructure, lack of appropriate mechanisms, lack of synchronization and an appropriate level of coordination activities (Żurawski, Ciekanowski 2018, p. 90) may result in terrorist incidents and threats.

Security control at airports is a fundamental element of civil aviation security, and its purpose is to detect prohibited and dangerous items that can cause damage both on the ground after entering the restricted zone and during the flight (Magniszewski 2020, p. 189). Therefore, the technical protection system of a critical infrastructure facility can be considered as a cooperation of 3 systems:

- perimeter protection system and the open area of the facility;
- property protection system and control of the movement of people within the building;
- video surveillance system for publicly accessible airport terminal facilities and car parks (Żmigrodzka, Krakowiak 2018, p. 103).

Gate systems are often used at many airports for facial recognition and fingerprint identification. Facial recognition systems operate on the basis of cameras installed in airport terminals and car parks, and increasingly on access roads and motorways. Modern checkpoints divide passengers into three categories:

- green harmless,
- yellow suspicious,
- red dangerous.

Classification of a passenger to one of these groups differs in the intensity of the inspection, e.g. in green – the control will be superficial, and in yellow – the control will be performed thoroughly (Magniszewski 2020, p. 189). According to J. Skorupski, there are four basic factors that have a decisive impact on the security of the airport. These are the baggage control system, the person screening system, external security, and the safety culture" (Skorupski 2014, p. 115).

The assessment of the effectiveness of the checked baggage screening system depends on two factors: the effectiveness of the X-ray machines used to screen the contents of baggage and the effectiveness of the control performed at the security checkpoint, in particular with the participation of security control operators (Skorupski, Uchroński, 2015, p.110). On the other hand, in the case of cargo and mail security checks, a distinction is made between shipments exempt from security checks (e.g. diplomatic mail) and high-risk cargo or mail (HRCM). HRCM may constitute consignments: appearing to have been tampered with by third parties to an extent that could allow the inclusion of prohibited items. The last two categories of security checks are the security checks on board and airport supplies. On-board

supplies are all items that are intended to be taken on board an aircraft for use, consumption or purchase by passengers or crew during the flight, other than air carrier mail and air carrier materials, cabin baggage and items and baggage carried by non-passengers. Airport supplies, on the other hand, are defined as any articles intended to be made available, used or sold for any purpose or activity in restricted areas, other than "items carried by non-passengers" (Szymankiewicz 2018, pp. 77-78).

Another controversial solution to improve the functioning of airports is the use of body scanners during security checks. At airports, in addition to gates detecting metals, X-ray scanners to scan luggage or dogs looking for prohibited materials, so--called full-body scanners are gradually being implemented (Bogusz, 2023, p. 148). A full-body scanner is a device that uses electromagnetic millimeter waves, enabling the detection of objects carried under clothing (Wróbel 2017, p. 83). A number of forms of radiation are used to detect prohibited items, which differ in wavelength and emitted energy. Body scanners are a precision technology in contrast to metal detector gates because they can identify metallic and non-metallic objects, which also include plastic and liquid explosives. Scanners use one of three technologies, i.e., passive and active millimeter waves, X-ray backscattering, or imaging using X-ray transmission (Siadkowski 2020, p.25).

Contemporary challenges for airports in the context of the terrorist threat

Terrorists are constantly improving their activities and using more and more advanced means of warfare that they are able to produce, especially since they have newer and newer technologies at their disposal. The possession of new skills by terrorists, including the operation, use and even production of advanced unmanned aerial vehicles and systems (UAVs), is an extremely serious threat to transport infrastructure, including airport infrastructure. This is especially true for airports and logistics bases located in troubled areas (Marszałkiewicz 2017, p. 2).

Cyber threats are also a significant threat and challenge to airport security related to the use of new technologies. In particular, remotely targeted smart systems (biometric systems, robotic systems, etc.), IoT devices (sensors, actuators, etc.), and cloud systems are particularly targeted. The main systems that are often exposed to cyber threats in the aviation industry are:

- aircraft flight IP networks,
- digital air traffic control (ATC) and traffic management systems;
- systemy Flight By Wire,
- in-flight interface devices,
- flight history servers,
- fleet and route planning systems,

- passenger reservation systems and loyalty or loyalty programs;
- ticket booking portals,
- handling and shipping of cargo,
- access, departure and passport control systems,
- cabin crew equipment,
- internal threats (Dzido 2023, p. 20).

Aviation organizations should implement comprehensive cybersecurity strategies, including elements such as risk assessments, more detailed security checks, specialized training for personnel, and updated and tailored incident response plans. It is also important to work with government authorities and other aviation companies to share information and best practices on cybersecurity.

Cybersecurity is a key challenge for the aviation industry. Cyber threats can have serious consequences, such as flight delays, flight cancellations, and even plane crashes. Therefore, it is important for aviation companies to take appropriate steps to protect their systems from cyberattacks.

In recent years, cybersecurity incidents in the aviation area have been reviewed in the context of events monitored by Eurocontrol. Eurocontrol (the pan-European civil-military organisation dedicated to supporting European aviation) publishes the EATM-CERT (European Air Traffic Management Computer Emergency Response Team) Aviation Cyber Event Map. The data on this map led to the following findings and graphs:

- 52 attacks were reported in 2020, 48 in 2021 and 50 attacks by the end of August 2022; thus, cyber incidents in 2022 reached the 2020 and 2021 average of just eight months;
- the most commonly observed types of attacks over the past three years (2020, 2021, and 2022) were ransomware (22 percent), data breaches (18.6 percent), phishing (15.3 percent), and DDoS (7.3 percent); a different/ unknown type of attack was indicated by 16 percent;
- in addition to civil aviation attacks, eight military incidents were reported; some of these attacks were aimed at cyber-espionage and data theft; two of these attacks were carried out using ransomware, two using malware, and one using a backdoor; it is not known how three of them were carried out (Dzido, 2023, p. 21).

Today, cyberspace has become a major battleground for criminal groups and terrorists seeking to disrupt airport operations and threaten civil aviation security. Unlike in the past, where a physical intrusion was necessary to carry out an attack, cybercriminals can now achieve the same results remotely using the internet and information technology. Airport factors that determine the type and manner of a terrorist attack include:

- a large area, extremely difficult to isolate and control;
- a large number of personnel;

- a very large flow of people and luggage from different directions of the world, a constant, high density of people;
- air traffic safety dependence on technology, safety equipment and power supply;
- storage of a huge amount of explosive substances and the ease of planting an explosive charge in a public area where you can get in without going through any control.

It should be assumed, however, that the most sensitive point in which terrorists will take action is the so-called operational area of the airport. This is the area around which airport services and other entities provide assistance to aircraft in distress. This is usually a very large stop, giving a lot of leeway to potential terrorists. In the operational area of the airport, various means may be used to cause an attack, from small arms to man-portable anti-aircraft missile systems, anti-aircraft mines or unmanned aerial systems (Ogonowski 2019, pp. 5-6).

The essence of terrorist groups or individuals is to act by surprise, i.e. in a situation where no one expects an attack and the reaction time is extended. A terrorist usually does not have the pressure to die if he fails, because he decides when and where to attack. The increasing number of acts of violence directed at aviation infrastructure forces the international community to take action to continuously modernize the level of civil aviation safety (Ogonowski 2019, p.7).

The current situation in Ukraine is a source of international concern, as it is not really known in what direction the hostilities will develop. The unpredictability and the very close presence of the threat should motivate us to consider the security of the state as a key concern today. The current hostilities in Ukraine show that the massive attacks of the Russian Federation are also directed at places where there are large concentrations of civilians. Thus, not only military facilities or important elements of critical infrastructure, but also airports are already threatened by Russian attacks (Druszcz 2023, p. 222).

In the face of the armed conflict in Ukraine, the security of airports is a key commitment of the state today. The unpredictability of the actions taken by the Russian Federation continues to raise concerns. The analysis of threats to airports presented above allows us to believe that the threats to modern airports in the context of the war taking place behind our eastern border can be divided into:

- strictly military threats, including those involving drones;
- biological hazards;
- terrorist threats;
- cyber-terrorism threats.

Terrorist attacks are very often ideologically motivated or carried out on commission. A situation may arise in which fanatics of imperial Russia and supporters of Putin will undertake actions similar to those carried out, for example, by al--Qaeda. They can recruit their supporters in the Polish or recruit them from among the Ukrainians, who will then be transferred to Polish to carry out an attack. As the society and state institutions, not only in Poland, have already found out, at any moment there may also be a cyberattack from a side that is able to completely paralyze air traffic. The targets of cyberattacks are mainly operating systems that control the operation of devices that are part of the airport infrastructure (Druszcz 2023, p. 230). Examples of elements that are part of critical infrastructure may be:

- passenger terminal and other terminals;
- air traffic control tower;
- power generators;
- fuel and lubricant warehouses;
- air conditioning and ventilation systems;
- railway sidings;
- water intakes;
- aprons;
- sheds;
- other devices or facilities recognized by the President of the Civil Aviation Authority or the airport manager as being of key importance for the protection of civil aviation against acts of unlawful interference (Wójcicka 2023, p. 272).

A very important strategic element of the airport's infrastructure is also the supply of electricity, water, fuels from the outside and the ICT network providing the possibility of communication. Supplies to the airport and the internal distribution network of electricity, water, fuel and ICT signals are protected by protecting the entire area, but special programs are also used to automatically track the operation of the equipment and enable immediate response in the event of any change (Wójcicka 2023, p. 277).

Another threat that carries a very high danger is the possibility of using a laser. That is why protection zones are designated at airports:

- Laser Radiation Free Flight Zone (LFFZ);
- Laser Critical Flight Zone (LCFZ);
- Laser Sensitive Flight Zone (LSFZ) 463.

The use of the laser can be treated as an attempted terrorist attack. Blinding the pilot may cause him to react in such a way that he may change the flight parameters, improper use of electronic equipment, and, as a result, cause a threat in air transport (Wójcicka, 2023, p. 277).

Airport infrastructure is constantly exposed to terrorist attacks. It is important that airports have appropriate security measures in place, work closely with security authorities and raise public awareness of the threat of terrorism. It is only through joint efforts that the safety of civil aviation can be ensured. Airports bring together a large number of people in one place and are also an important part of the transport infrastructure. An attack on an airport could therefore have far-reaching consequences, both in human and economic terms.

The results of research on the role of the Border Guard in the protection of airports against terrorist attacks indicate that cooperation and coordination between different security authorities is crucial for effective protection. The use of advanced technologies can significantly improve the ability to detect threats. Regular staff training is essential to maintain a high level of operational readiness. In addition, international cooperation plays an important role in the exchange of experience and best practices. A balanced approach to aviation safety is necessary to minimise the risk of terrorist attacks. The results of the study indicate the need for continuous improvement of strategies, procedures and the use of modern technologies in order to effectively protect airports and passengers from terrorist threats.

Discussion

The discussion about the role of the Border Guard in protecting airports from terrorist attacks leads to a number of interesting issues.

First, it is important to understand that airports are key targets for potential terrorists due to their strategic importance and large passenger numbers. Therefore, effective protection of these facilities requires the cooperation of various security authorities, including the Border Guard, police, intelligence services and airport staff.

Secondly, the role of the Border Guard is not limited to border control, but also includes a wide range of activities related to airport security, such as patrolling the area, checking people and baggage, monitoring air traffic and responding to emergencies.

Thirdly, it is important to continuously improve procedures, plans and training for responding to terrorist attacks. The Border Guard must be constantly prepared to act quickly and effectively in the event of an emergency, which is why regular training and simulations are crucial to maintain a high level of operational readiness.

However, as the tactics and technologies used by terrorists evolve, the Border Guard must also adapt its security strategies and measures. This includes the use of advanced surveillance technologies, explosive detection systems, and data analysis to identify potential threats and prevent attacks. Finally, an important element of the discussion is the balance between ensuring security and maintaining the free movement of people and goods at airports. The Border Guard must operate within the framework of a balanced security strategy that minimises the risk of terrorist attacks without infringing on the rights and freedoms of passengers and without disrupting the normal functioning of civil aviation.

Conclusions

The global nature of the above-mentioned threats requires continuous analysis and mobility. The threats can be counteracted by law enforcement agencies, special services and border guards. The organizational structures of the Border Guard are able to provide protection against terrorism and the activities of organized crime groups of a cross-border nature.

The Border Patrol plays a key role in ensuring the security of airports from terrorist attacks. The SG has detailed plans and procedures in place to deal with such incidents, which include:

- prevent attacks: The Border Patrol carries out preventive measures, such as screening travelers and luggage, monitoring the airport and its surroundings, and cooperating with other security services;
- responding to an attack: In the event of an attack, the SG is responsible for securing the scene, evacuating travelers and airport staff, as well as apprehending the perpetrators;
- infrastructure protection: BG protects airport infrastructure from terrorist attacks, including runways, hangars, and terminals;
- cooperation with other services: The Border Guard works closely with other security services, such as the Police, the Internal Security Agency and the Polish Army, to ensure an effective response to a terrorist attack.

The Border Guard is well equipped to respond to terrorist attacks at airports. BG's plans and procedures are constantly updated and improved, which confirms the assumed research hypothesis.Border guards are regularly trained on how to deal with such cases. It is important that the BG continuously cooperates with other security services to exchange information and best practices in responding to terrorist attacks. However, it is important to note that the list of BG activities is not exhaustive. Depending on the specifics of the attack, the PCs may take other actions that are not listed. It is important that the Border Patrol continuously improves its skills and procedures for responding to terrorist attacks in order to be able to ensure the safety of travelers and airport staff.

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