The Use Of The Profiling Method In The Investigation Of Criminal Offenses Related To Air Transport Security Breaches

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Abstract. The article is dedicated to the study of the issue of air transport security and the investigation of crimes involving its breaches. The author of the research paper points out that efficient investigation and detection of criminals are crucial in such situations. One of the innovative approaches studied in the article is criminal profiling. This method stems from the analysis of behavioral, psychological, and other characteristics of criminals. It allows constructing an effective organizational-tactical model of the pre-trial investigation of criminal offenses involving air transport security breaches.

The paper delves into the structure of criminal profiling which comprises of three analysis levels: operational, tactical, and strategic. The importance of ensuring air transport security and the necessity of efficiently investigating associated crimes are outlined. The application of criminal profiling, particularly through operational, tactical, and strategic analysis, can serve as a valuable tool in uncovering and preventing criminal offenses posing a threat to air transport security.

Key words: criminal profiling, operational analysis, tactical analysis, strategic analysis, offender profile, air transport security.

Research Problem Formulation. Air transport security is one of the most critical priority areas that requires constant support and protection. Crimes related to breaching air transport security can result in severe consequences and be life-threatening. In such situations, efficient investigation and detection of criminals is of paramount importance.

The majority of means, forms and methods used in crime detection and investigation are traditional in content; however, adequate, preventive measures are necessary in combating modern crime. After all, it is only through tactical means that we can expose the criminal actions of individuals who can easily be replaced by other subjects within the criminal environment. Efficient countermeasures against modern crime require a deeply thought-out and persistent study of the entire “body” of criminal formation, along with modeling options for its countermeasures.

One of the innovative approaches that has been widely applied in criminal investigation is the method of criminal profiling. This crime investigation method is based on analyzing behavioral, psychological, and other characteristics of criminals to create a profile that assists in identifying their motives, objectives, and peculiarities. The use of criminal profiling can be increasingly valuable when investigating criminal offenses aimed at breaching air transport security.

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Contributors

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Declaration of Competing Interest

The author declare that they have no conflict of interest.

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Analysis of Essential Researches and Publications. Recent studies and publications indicate that the use of profiling for the investigation of crimes is a relevant topic, but this issue is still underdeveloped. There are many important progressive approaches and methods of profiling. At the same time, many aspects still need more thorough research.


Given the complexity and multifaceted nature of this issue, there arises a need for further development of the scientific bases of using criminal profiling, taking into account the demands of practice.

The Article Purpose is to determine the efficiency of using criminal profiling in the investigation of criminal offenses involving air transport security breaches. The article focuses on demonstrating that traditional investigation methods require improvement and adoption of new approaches for efficient counteraction to contemporary crime. The application of criminal profiling in this area can provide a valuable tool for identifying criminals, their motives, and objectives, thereby enhancing air transport security.

Main Content Presentation. Profiling is one of the means of ensuring security, as it enables the prevention of unlawful actions by identifying potentially dangerous situations and persons. An example of a potentially threatening situation is unattended luggage, items (objects), or present unclaimed belongings. To identify potentially dangerous persons, special technologies are used that rely on a comprehensive analysis of appearance, behavior, documents, belongings, etc.²

Profiling can play a crucial role in shaping criminal investigative tactics, guiding investigators towards specific aspects of physical evidence and suggesting directions for subsequent investigation.

Ways in which profiling can influence investigative tactics:

Determination of potential physical evidence. Profiling can provide markers for the search of evidence and traces at a crime scene. This information assists criminals in focusing on significant elements that may be associated with the offender’s profile.

Testing Hypotheses. Assisting in developing hypotheses regarding peculiarities of a crime and personality of the offender. These hypotheses can be used for posing certain questions to witnesses or suspects during interrogation. It may help obtain crucial information that aligns with the offender’s profile.

Communication improvement. Profiling serves as a bridge of communication between participants in a criminal proceeding, facilitating the exchange of information and coordination of efforts.

Criminal Profiling allows for the development of forensic tactics aimed at the efficient investigation of criminal offenses.

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Criminal profiling is the process of analyzing evidence left by criminals at a crime scene to create a psychological and behavioral profile of the perpetrator. It is used to determine the typical and characteristic features of a criminal offense, a criminal's personality, his/her motives, behavior, and other traits that might be useful for identifying and locating suspects. It stems from the analysis of psychological, social, and forensic data, such as the criminal's modus operandi, victim selection, crime patterns, and other factors.

The structure of criminal profiling comprises of the following levels of analysis:

1. Operational: it involves the work on criminal cases concerning specific persons or criminal groups, aiming to test hypotheses about their probable criminal activities. It seeks to establish connections, the structure of criminal groups, the roles of individual participants, including their social and economic statuses. This level involves the analysis of relationships, phone calls, routes, events, comparative case analysis, and flow analysis. It is crucial for crime detection and investigation.

2. Tactical: it is the analysis of the crime rate in a specific territory over a short period of time, according to a particular type of crime or unlawful activity of a certain group, etc. It presupposes identifying locations with high crime occurrence, establishing profiles of the suspect and the victim, crime trends, as well as making decisions regarding the allocation of forces and resources and performing operational analysis.

3. Strategic: it involves the analysis of information aimed at identifying trends, regularities, and forecasting development over an extended period. During the strategic analysis, the risks of a criminal situation's development and strategic management decisions are identified.

Forensic tactics, on the other hand, entails the use of specialized methods and techniques for collecting, analyzing, and interpreting physical evidence left at a crime scene. Forensic tactics is focused on examination of traces, DNA, fingerprints, ballistic evidence, reference substances, and other physical evidence that can help establish the facts of a crime.

Forensic tactics is a branch of forensic science that represents a system of provisions and practical guidelines on the organization and planning of investigations. It determines the optimal course of action for persons conducting the investigation, taking into account their relationships and interactions with other participants in the investigation, based on the norms and principles of criminal procedure. Thus, forensic tactics delves into the tactics of all investigation participants: the investigator, prosecutor, inquiry officers, judge, specialist, forensic expert, public assistants, the accused, suspect, victim, witness, and others.

Profiling creates the basis for ensuring security in aviation and other types of transportation, protected facilities, and territories, relying on typical behavioral features of specific groups of criminals. Within its framework, applied psychology methods are used, as a special emphasis is placed on interpersonal interaction processes, on the capabilities of human perception in processing external and internal information, and on the development of qualities such as observance, insight, and the communicability of law enforcement and flight security personnel.

As the practice of countering crime demonstrates, the precondition for creating a psychological portrait (profile) is information sourced from...
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various resources. Typically, profilers and forensic experts are interested in traces (both tangible and intangible) that serve as an important source of forensic information. Specifically due to physical and ideal evidence, it is possible to solve a crime as these pieces of evidence, in their totality, allow us to determine the crime's commission scenario. Creating a psychological portrait of a person is no exception. Based on tangible and intangible traces, conclusions can be drawn about the nature of their actions, their behavior, and the characteristics inherent to them, which distinguish them from others.

In order to compile a psychological profile of a potentially dangerous airplane passenger, monitoring and preliminary examination of characteristic features (behavioral traits, psychological state, appearance, communication, previous incidents, documentation, and identification) are performed.

Compiling a profile based on the features identified during monitoring and diagnostics involves a comprehensive evaluation of an individual, taking into account the domain and environment in which they are or may potentially be found. In this context, the profile is created using the mosaic picture method. This method involves assembling and summarizing both actual and potential threat traits that define the person under investigation. The goal is to profile and assess the individual's potential threat or contribution to the security of air transport and the airport overall.

The second stage is forecasting potential negative/destructive actions (or inactions) regarding air transport.

The risk forecasting stage for air transport security involves analyzing and assessing potential threats that may arise in airspace or affect the security of aviation operations. This stage helps identify possible hazardous situations and take measures to prevent them. The key aspects of the risk forecasting stage for air transport security are as follows:

Analysis of Potential Threats. A systematic analysis of potential threats that may occur in air transport is performed. These can include terrorist acts, cyberattacks, misuse of aircraft, or internal crimes. The history of events is analyzed, the threat level is assessed, and the likelihood of these threats is established.

Assessment of Vulnerabilities. An evaluation of vulnerabilities of the air transport system is carried out, including airports, aircraft, communication, and navigation systems. Weak points that could be exploited for an attack or security breach are identified.

Forecasting Potential Scenarios. Potential event scenarios that might negatively impact air transport security are developed. Various factors are considered, including attacks, locations where they might occur, and potential consequences. This helps prepare for possible situations and develop strategies to overcome them.

Implementing profiling in aviation security encounter various theoretical, organizational, and legal challenges.

Theoretical Challenges:

Insufficient scientific basis. In individual cases, there may be a lack of reliable data or empirical studies that validate the efficiency of profiling within the context of aviation security.

Discrepancies in approaches. Different researchers and forensic experts may propose varied approaches to profiling that may result in inconsistencies in methodologies and outcomes.

Organizational Challenges:

Human Resources. Implementing profiling requires the presence of experienced psychologists and profilers who can analyze information and

dénouére sur les crimes modernes. Afin de lutter efficacement contre la criminalité, il est nécessaire d'introduire des moyens et des méthodes stratégiques dans les activités répressives, en tenant compte de l'évolution de la situation.

Mots-clés : profilage criminel, analyse opérationnelle, analyse tactique, analyse stratégique, profil criminel, sécurité du transport aérien.

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EINSATZ DER PROFILING-METHODE BEI DER UNTERSUCHUNG VON STRAFTATEN IM ZUSAMMENHANG MIT VERSTÖSSEN GEGEN DIE SICHERHEIT IM LUFTVERKEHR


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Schlüsselwörter: Kriminalitätsprofilerstellung, operative Analyse, taktische Analyse, strategische Analyse, Kriminalitätsprofil, Luftverkehrsicherheit.

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STOSOWANIE METODY PROFLOWANIA W SLEDZTWIE PRZESTĘPSTW ZWIĄZANYCH Z NARUSZENIAMI BEZPIECZENSTWA TRANSPORTU LOTNICZEGO.

Der Artikel poświęcony jest badaniu problemu bezpieczeństwa transportu lotniczego oraz ściąganiu przestępstw związanych z jego naruszeniem. Autor artykułu zauważa, że w takich sytuacjach kluczowe znaczenie ma skuteczne dochodzenie i identyfikacja przestępców. Jednym z innowacyjnych podejść omawianych w artykule jest profilowanie kryminalne. Methode ta opiera się na analizie cech behawioralnych, psychologicznych i innych przestępców. Pozwala na zbudowanie efektywnego modelu organizacyjno-taktycznego postępowania przygotowawczego w sprawie przestępstw związanych

develop criminal profiles. Acquiring and maintaining such human resources can be a complex task for aviation organizations.

Confidentiality and Data Protection. Collection and processing of personal data for profiling can raise concerns about confidentiality, privacy, and the protection of passenger data.

Legal Challenges:

Legislative Framework. Conducting profiling must comply with national and international legal standards concerning protection of privacy, human rights, as well as presuppose restrictions on profiling without proper justification and based on racial traits.

Discrimination. There is a risk that profiling may lead to discrimination against certain groups of people based on ethnicity and racial background.

Monitoring and Supervision. The use of profiling might require additional monitoring and supervision of passengers who become suspects on the basis of their profile. This can result in delays and inconveniences for passengers, along with unfair accusations.

It is universally recognized that there is a need to balance aviation security with the protection of fundamental rights and freedoms of passengers. Implementing profiling in aviation security necessitates a thorough analysis and resolution of these theoretical, organizational, and legal issues, thereby ensuring a corresponding level of security and adherence to passengers’ rights.

Conclusions. Thus, the need to address pressing forensic challenges requires theoretical rethinking and a scientific approach. The changing nature of crimes and the professionalism of criminals present law enforcement agencies with the task of refining tactics for the detection, cessation, disclosure, and investigation of modern crimes. In order to successfully counteract criminality, it is vital to integrate strategic tools and methods into law enforcement activities, taking into account the evolving situation. This requires:

1. New approaches to training the staff within the crime detection and investigation divisions of law enforcement agencies. It involves fostering not only tactical and operational thinking but also strategic thinking. The profiling method should be the foundation for such strategic mindset.

2. Modernization of Internal Affairs Bodies Information Systems. Creating a single information database is one of the priority directions of using the psychological-forensic portrait of a person who has committed a crime. This database would include information on psychological-forensic profiles of persons who have been subject to criminal prosecution.

3. Compiling a psychological-forensic portrait of suspects (accused) during investigation of criminal proceedings and entering this data into automated information systems will enable the efficient use of obtained information in case these persons are again brought to criminal liability.

4. Development on the basis of typical criminal profiles of the methodological use of profiling during preventive measures aimed at identifying persons who pose potential threats to aviation-space complex facilities in general and civil aviation facilities in particular.

5. In order to form a theoretical basis for the methodology of using profiling in combating crimes that pose security threats to civil aviation facilities, implement a comprehensive program in this area.

Only under such conditions can we achieve optimal use of profiling and improve the efficiency of measures aimed at preventing criminal offenses and neutralizing threats to the normal operation of infrastructure facilities in the Ukrainian aviation and space industry.

8 Шинкаренко І. Р., Шинкаренко І. І. Профайлінг як метод забезпечення об’єктів авіаційної інфраструктури. Актуальні проблеми експертного забезпечення досудового розслідування:
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z naruszeniami bezpieczeństwa transportu lotniczego. W artykule zbadano strukturę profilowania kryminalnego, która składa się z trzech poziomów analizy: operacyjnego, taktycznego i strategicznego. Podkreślono znaczenie zapewnienia bezpieczeństwa transportu lotniczego i potrzebę skutecznego ścigania przestępstw z nim związanych. Stosowanie profilowania kryminalnego, w szczególności poprzez analizy operacyjną, taktyczną i strategiczną, może być cennym narzędziem wykrywania i zapobiegania przestępstwom zagrażającym bezpieczeństwu transportu lotniczego. Celem artykułu jest określenie efektywności stosowania profilowania kryminalnego w postępowaniu karnym w sprawie przestępstw mających na celu naruszenie bezpieczeństwa transportu lotniczego. Artykuł ma na celu pokazanie, że tradycyjne metody śledcze wymagają udoskonalenia i zastosowania nowych podejść, aby skutecznie zwalczać współczesną przestępczość. Wykorzystanie profilowania kryminalnego w tym obszarze może stanowić cenne narzędzie identyfikacji przestępców, ich motywów i celów, co przyczyni się do poprawy bezpieczeństwa transportu lotniczego. Wnioski. Zatem potrzeba rozwiązania aktualnych problemów kryminalistycznych wymaga przemyslenia teoretycznego i podejścia naukowego. Zmieniający się charakter przestępstw i profesjonalizm przestępców stawia przed organami ścigania zadań doskonalenia taktyki wykrywania, powstrzymywania, odkrywania i prowadzenia dochodzeń w sprawie współczesnych przestępstw. Aby skutecznie zwalczać przestępczość, konieczne jest wprowadzenie do działań organów ścigania strategicznych środków i metod, biorąc pod uwagę zmieniającą się sytuację. Ślowa kluczowe: profilowanie kryminalne, analiza operacyjna, analiza taktyczna, analiza strategiczna, profil przestępczy, bezpieczeństwo transportu lotniczego.