

METHODS FOR DETERMINING THE LEVEL OF AVIATION SECURITY

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Abstract: this article is devoted to aviation security and methods for determining its level. Every day, 100000 people use the services of civil aviation, which is a potential target for terrorism and other forms of crime due to the huge number of people in one place. The main objective in the field of organizing and ensuring aviation security is to formulate a system of measures to protect civil aviation from external threats and, above all, from terrorist and other acts of unlawful interference in the activities of aviation.

Keywords: Aviation security, inspection, terrorism, act of unlawful interference.

МЕТОДЫ ОПРЕДЕЛЕНИЯ УРОВНЯ АВИАЦИОННОЙ БЕЗОПАСНОСТИ

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Аннотация: данная статья посвящена авиационной безопасности и методам определения ее уровня. Ежедневно услугами гражданской авиации пользуются 100000 человек, что является потенциальной мишенью для терроризма и других форм преступности из-за огромного количества людей в одном месте. Основной задачей в области организации и обеспечения авиационной безопасности является формирование системы мер по защите гражданской авиации от внешних угроз и, прежде всего, от террористических и иных актов незаконного вмешательства в деятельность авиации.

Ключевые слова: авиационная безопасность, досмотр, терроризм, акт незаконного вмешательства.

Assembly Declaration on Aviation Security

Recognizing the value of joint declarations on aviation security adopted during regional conferences that are held with the aim of expanding international cooperation, hereby calls upon Member States to take the following actions to enhance international cooperation in order to counter threats to civil aviation:

1. Expand and promote the effective application of ICAO Standards and Recommended Practices, with particular attention to Annex 17 – Aviation Security, and develop strategies to counter existing and new threats.
2. Strengthen security screening procedures, improve the skills of personnel and use modern technologies to detect prohibited items; support research and development of technologies for detecting explosive devices, weapons and prohibited items in order to prevent acts of unlawful interference in the activities of civil aviation.
3. Develop enhanced aviation security measures to protect airport facilities and improve flight safety, including appropriate improvements in technology and personnel training.
4. Develop and implement enhanced and harmonized measures and best practices in the field of air cargo security, taking into account the need to ensure the protection of all elements of the cargo delivery chain on board.
5. Promote methods of enhanced document protection and verification of their authenticity using the ICAO Public Key Directory (PKD) together with biometric information; set the task for responsible persons to regularly submit data on lost and stolen passports to the Interpol Database of Lost and Stolen Travel Documents in order to prevent the use of such documents to commit acts of unlawful interference in the activities of civil aviation.
6. To increase the ability of Member States to eliminate deficiencies identified during the Universal Aviation Security Audit Program (USAP) by providing Member States with adequate access to audit results, which will make it possible to provide targeted assistance and technical assistance to individual States.
7. Provide technical assistance to States in need, including financing, capacity-building and technology transfer, in order to effectively counter threats to civil aviation, in cooperation with other States, international organizations and industry partners.
8. Promote the widespread use of cooperation mechanisms among Member States and the aviation industry in order to exchange information on aviation security measures in order to avoid duplication of efforts, as well as for early detection and dissemination of information on threats to the safety of civil aviation, including the collection and transmission of preliminary passenger information (API) and passenger registration detain (PNR) as an additional tool for ensuring aviation security, while respecting the right to personal integrity and civil liberties of passengers.

9. Exchange best practices and information in a wide range of key areas, such as: inspection and screening methods, including assessment of advanced technologies for screening for weapons and explosives; verification of documents and their authenticity; methods for identifying signs of dangerous behavior and risks based on threat analysis; methods for screening airport employees; compliance with the rights of inviolability and dignity of the personality of passengers; ensuring safety on board the aircraft.

The economic concept in determining the level of aviation security has two important meanings here. The main goal in ensuring aviation security is the rational allocation of resources in order to reduce the likelihood of a successful attack on civil aviation to an acceptable level. Firstly, resources allocated to defense activities of any kind (including aviation security) do not directly increase economic well-being (rather, such activities serve to prevent a potential decline in well-being). When we are forced to expend resources for self-defense, we reduce the resources available for investment in capital goods and technologies, as well as for the production and consumption of goods and services. Secondly, given the limited budget allocated to the general activities of national defense, the resources allocated to aviation security represent a reduction in the resources available to protect non-aviation purposes. In addition, the problem of resource allocation is complicated by the fact that such decisions are strategic in nature.; the risks to aviation security do not coincide with the risks of natural disasters. For example, if we decide to allocate more resources to ensure the earthquake resistance of buildings, it will not change the probability of an earthquake. However, if we allocate relatively more resources to one measure of aviation security (and relatively less to another), we change the expected benefits for terrorists and, thus, potentially change the probabilities and methods of attack.

If we take world statistics for example, throughout the entire period, civil aviation has been a visible target for acts of violence and terrorism. Figure 10 shows the total number of attacks inside aircraft worldwide by type of attack over the four decades from 1980 to 2015, as well as the percentage of attacks in each decade accounted for by each type of attack.

In the 1970s, attacks on aircraft were heavily skewed towards hijacking, but this method of attack has declined both in number and in relative importance over time. This figure also shows a sharp increase in the number of bomb explosions that occurred in the 1980s, and their repeated decline in the following decades. Thus, these data reflect the evolutionary nature of aviation security; As the authorities take security measures to nullify a particular method of attack, terrorists adapt their strategies and the preferred method of attack develops. Overall, the total number of attacks has decreased significantly over time from 111 attacks in the 1970s, but only 21 attacks between 2000 and 2015. As for fatalities, a total of 557 people died as a result of all attacks inside aircraft in the 1970s. This number rose to 1,115 in the 1980s mainly as a result of a small number of attacks that resulted in a large number of casualties, including Air India flight 182 in 1985 (329 fatalities) and Pan Am flight 103 in 1988 (270 fatalities). In the 1980s, targets for attacking aircraft evolved from seeking attention through prolonged media coverage of hijacking to shock and terror caused by the sudden and unexpected mass murder of innocent civilians. By the 1990s, aviation security had reacted and evolved into a complex (and expensive) system combining intelligence services, airport security personnel, and investments in scanning equipment to detect bombs, weapons, and prohibited items. In the 1990s, the total number of deaths as a result of all terrorist attacks inside airplanes dropped to 160, but the next decade will forever be defined by 2,938 deaths as a result of the attacks in New York and Washington on September 11, 2001. With the exception of the 9-11 terrorist attacks, only 94 people died worldwide as a result of terrorist attacks inside airplanes between 2000 and 2015.

Over the past 45 years, the world's trade, technology and economic growth have created an era of globalization in which the well-being of people, firms and countries are becoming increasingly interconnected. During this period, civil aviation has evolved from a tightly regulated system of national airlines and State-owned airports into a much larger and more competitive global industry in which private airlines and airports compete alongside government partners and hybrid organizations under various regulatory regimes.

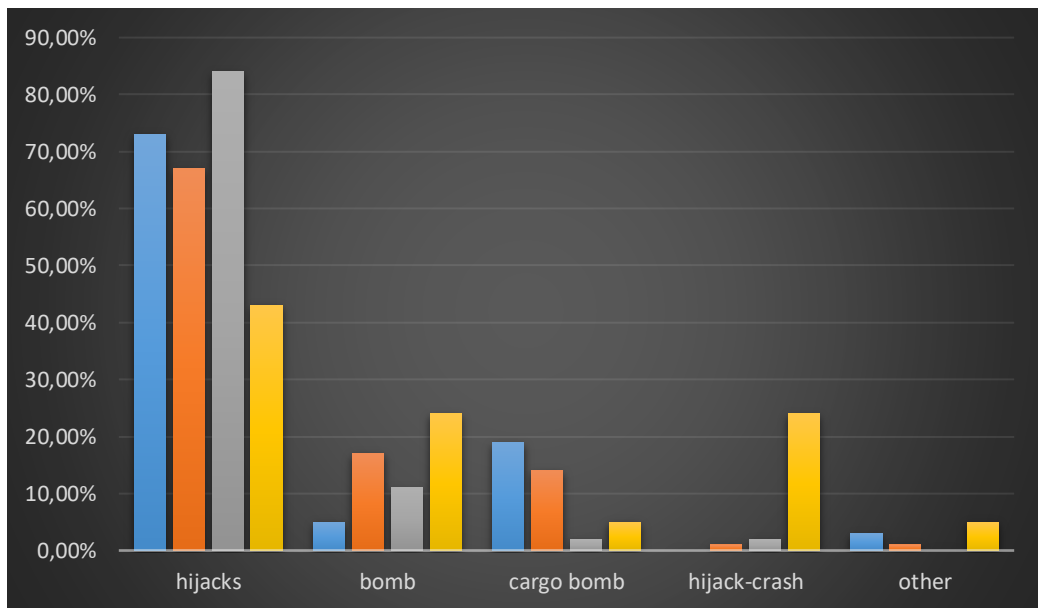


Fig. 1. Passenger growth over 40 years

Figure 1 shows a significant increase in the number of global air passengers over the past 40 years, which is a long-term trend that largely defies the negative shocks associated with macroeconomic downturns, health crises, military conflicts and acts of terror.



Fig. 2. Suicide bombers hijacking planes, September 11, 2001

The events of September 11, 2001 represent by far the biggest and most shocking awareness of the ever-evolving threat of terrorist attacks on aviation. In particular, these attacks demonstrated how civilian aircraft can be used as weapons to destroy large numbers of civilians and destroy property on the ground. The attack caused a massive panic about the vulnerability of the civil aviation system and led to radical and significant changes in the design, provision and financing of aviation security worldwide. Since 2001, the U.S. government has created new organizations to implement airport security systems, and major investments have been made both in technology and in the hiring and training of security personnel. As a result of all these changes and increased security costs, airports and airlines have faced new challenges in managing passenger traffic, minimizing delays and negative passenger experiences as a result of increased security. Both direct and indirect economic costs associated with these investments are borne by both the general public and travelers.

Conclusion

Doesn't matter how high the current level of flight safety, there is still much that can be improved. Aircraft facilities continue to be targets for merciless acts of terrorism. Our planet has faced unprecedented environmental challenges. In this context, and assuming as a fact that evolving technologies and innovations now allow states and industry partners to collaborate more closely than ever before, the Assembly confirmed the enormous potential for further achievements.

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