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Concepts of aviation security and aviation safety in air law

In the paper concepts of aviation security and aviation safety in Air Law have been investigated. The author analyses the mentioned above categories according to their theoretical-legal understanding on the level of international and national legislation.

Aviation sphere is very much developed nowadays. Transportations by air are rather popular. Whilst air transport is the safest means of transportation in the world, its security has always been at the heart of the aviation industry's concerns [1]. It is comfortable to transfer passengers, luggage and cargo using aviation transport. At the same time, traveling by air needs special conditions to ensure sufficient operation of every aircraft in its flight and the total protection of people and their things before, during this flight and after the lending. Thus, it is important to investigate the categories that serve the mentioned above. We mean that the understanding of aviation safety and security is a rather relevant theme because those two definitions are used every day in real life. Also, they are connected not just with aviation but with a system of legal rules (Law) and documents in which those norms are determined (legislation) concerning legal regulation of safety and security by legal mechanisms of every country in the world.

The notions of safety and security are very similar. At the same time, they mean totally different things in the aviation sphere. Those terms are used by technical and service personnel in airports and in aircraft. But for specialists in the sphere of law, it is very important to understand the difference between them. If lawyers deal with the defence of rights and freedoms of passengers protecting their interests because of some harm caused to their health, luggage or cargo of national and international legal entities, such a specialist has to differentiate the investigating categories for the practical purpose. Just, in this case, his work will be efficient and his help will useful.

According to the Air Code of Ukraine, state regulation of activities in the aviation industry and the use of Ukraine's airspace is aimed at ensuring safe aviation, providing for the interests of the state, national security, and the needs of the society and the economy for air transportation and aviation works [2].

Our national legislator in the part 1 of article 10 of the Air Code of Ukraine determined that aviation safety consists of flight safety, aviation security, environmental safety, economic safety and informational safety [2]. So, aviation security is an integral part of aviation safety. It means that aviation safety contains aviation security, so those two categories are different but, at the same time, the first one is completed just with the sufficient operation of the second. To realize this conclusion it is needed to investigate the exact meaning of those two concepts.

According to the item 20 of the part 1 of the 1 article of the Air Code of Ukraine, aviation safety is the *state of the civil aviation industry*, where the risk of causing damage to people or property is reduced to an acceptable level as a result of a continuous process of determining and controlling the level of danger and maintained at that level, or decreases further, in the areas of flight safety, aviation security, environmental safety, economic security and informational safety.

So, in this case, we are talking about all measures by all excised and acceptable legal, technical and so on means in creating sufficient conditions to ensure an acceptable and controllable level of protection in several spheres such as flights, environment, economy, information and prevention of illegal interference to aviation transportations. Id est aviation safety is a complicated category that describes a real state of the civil aviation industry. To make good aviation safety in every country in the world, containing Ukraine, has to regulate all those integral parts that are contained in the investigated concept.

Aviation safety relates to protection against all accidents, errors or unintentional defects in the design, construction, maintenance and operation of aircraft [1].

As the structural part of aviation safety, aviation security deals with everything to prevent offences before, during flight and after lending.

According to the item 2 of the part 1 of the 1 article of the Air Code of Ukraine, aviation security is the *protection of civil aviation from acts of unlawful interference*, which is provided by a complex of measures involving human and material resources [2].

Aviation security is the set of measures and resources implemented to prevent malicious acts (terrorism) targetting aircraft, their passengers and crew members. One measure involves the notion of deliberate human intervention. For example, X-ray and explosives trace-detection portal machines in airports contribute to security [1].

According to Article 86 of the Code, an act of unlawful interference into civil aviation activity is:

- unlawful takeover of an airborne aircraft;

- unlawful takeover of an aircraft on land;

- hostage taking on board of an aircraft, on an airfield or in an airport;

- forced entry on board of an aircraft, into a limited access area of an airport (airfield) or to locations of ground communication, navigation and surveillance means;

- placement of weapons, dangerous devices or materials that may create potential threat to the safety of civil aviation, on board of an aircraft, in an airport or in a limited access area;

- providing false information that threatens the safety of passengers or crew of an aircraft that is airborne or on land, or of personnel in an airport or on an airfield [2].

A strong legal mechanism consisting of the list of International conventions made by the uninterrupted activity of the International Civil Aviation Organization (ICAO) regulates the questions of aviation in the whole worlds in different directions, including aviation security. Established in 1947 as a specialised agency of the United Nations, ICAO creates regulations and international standards for aviation safety, security, efficiency and the environmental protection in the aviation sphere.

The beginnings of inflight security is connected with the Convention on Offences and Certain Other Acts Committed on Board Aircraft (*Tokyo Convention*) that was signed on 14 September 1963. It was basic in nature and addressed incidents and acts that occur inflight which jeopardise the safety of an aircraft and of persons and property on board, with specific focus on unruly passengers. The defining of hijacking the menkind got after creation of the Hague and the Convention for the Suppression of Unlawful Seizure of Aircraft (*Hague Convention*) was signed on 16 December 1970. The Convention for the Suppression of Unlawful Acts against the Safety of Civil Aviation (*Montreal Convention*), which was signed on 23 September 1971 criminalised placing on board any device that might jeopardise the safety of that aircraft inflight; destroying or damaging air navigation facilities that might jeopardise the safety of an aircraft inflight; and communicating false information to jeopardise flight safety [3].

In 1974 Annex 17 to the Convention on International Civil Aviation, Security-Safeguarding International Civil Aviation Against Acts of Unlawful Interference was adopted and detailed understanding of acts of unlawful interference that became the legal "fundament" for their definition by national air legislation in the whole world, including Ukraine, as it was mentioned above.

Those are acts or attempted acts such as to jeopardize the safety of civil aviation, including but not limited to:

- unlawful seizure of aircraft;

- destruction of an aircraft in service;

- hostage-taking on board aircraft or on aerodromes;

- forcible intrusion on board an aircraft, at an airport or on the premises of an aeronautical facility;

- introduction on board an aircraft or at an airport of a weapon or hazardous device or material intended for criminal purposes;

- use of an aircraft in service for the purpose of causing death, serious bodily injury, or serious damage to property or the environment;

- communication of false information such as to jeopardize the safety of an aircraft in flight or on the ground, of passengers, crew, ground personnel or the general public, at an airport or on the premises of a civil aviation facility [4].

Conclusions

Aviation safety and aviation security are the different concepts with their own meaning. The second one is an integral part of the first one. Aviation safety characterizes the state of the aviation industry, containing the areas of flight safety, aviation security, environmental safety, economic security and informational safety. At the same time, aviation security is the protection of civil aviation from acts of unlawful interference.

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