UDC 343.98(043.2)

Grekova L., Senior Lecturer,
Tyubay A., seeker for higher education,
of the first (bachelor`s) level,
National Aviation University, Kyiv, Ukraine

AVIATION ADVENTURE INVESTIGATION ORGANIZATION. TYPICAL FORENSIC VERSIONS

Every aviation event is subject to mandatory investigation by the state (part one of Article 119 of the Air Code of Ukraine). In Ukraine, the rules and procedure of the investigation are established by regulatory legal acts, in particular: the Air Code of Ukraine (AC of Ukraine) (Chapter XVII "Investigation of Aviation Events"), the Resolution of the Cabinet of Ministers of Ukraine "On Approving the Rules and Procedure for the Technical Investigation of Aviation Events and Incidents in Civil Aviation ", the Convention on International Civil Aviation of 1944, and government commissions may be established to investigate individual aviation events.

Establishing the causes of the plane crash is possible only after investigating all the circumstances of the event by organizing an investigation. In criminalistics, the organization of an investigation is understood as the actions of all subjects involved in the process of investigating criminal offenses for the effective prevention and investigation of criminal offenses [2, p. 136]. Of course, not every aviation event is the result of a criminal offense, but the very tactics and procedure of the accident investigation are generally the same. We consider it appropriate to note that the technical investigation of an aviation incident must be conducted separately from the investigations related to establishing guilt and bringing the guilty to justice (part four of Article 119 of the AC of Ukraine). The primary stage of the organization of the investigation is planning, which includes specific elements that are correlated depending on the specifics of the aviation event. Common planning elements include: advanced versions; circumstances to be established; procedural actions and organizational measures; information about specific performers and performance deadlines; material and technical support, etc. [2, p. 141].

The formulation of forensic versions begins from the moment of receiving information about an aviation event. In order to obtain such information, it is necessary to perform the following tasks: 1) obtain information about the aviation accident from the victims after their identification; 2) determine and outline the boundaries of the plane crash

area on the ground and establish the procedure for their inspection; 3) to remove the topographic characteristics of the area; 4) to identify, investigate and (if necessary) preserve traces and objects that contain and/or may contain traces that are important for establishing the causes of an aviation event [1, p. 130]. It should be noted that measures to preserve the life and health of the victims are taken even if there is a risk of destruction and/or damage to traces that are important for establishing the causes of the aviation accident [1, p.129].

Of course, upon arriving at the scene of the aviation event, the representatives of the authorized investigative body already have probable versions of the aviation adventure. The data obtained and analyzed in the course of the above activities are intended to confirm or refute them.

In the course of the study, forensic versions of the collision of two L-39 aircraft in Zhytomyr Region [3] and the EC 225 LP helicopter crash that occurred on January 18, 2023 in Brovary [4] were analyzed. From the analysis of the data on the mentioned aviation events, we can single out the most typical forensic versions, including: 1) technical malfunction of the aircraft or its components; 2) mistakes of pilots, other crew members, controllers; 3) violation of rules when organizing flights; 4) adverse weather conditions; 4) intentional actions of crew members, controllers, passengers or other persons aimed at disabling the aircraft or destroying it.

Each forensic version is verified. Verification of forensic versions is an activity aimed at establishing factual circumstances that confirm or refute the assumptions that make up the content of the version [2, p. 134]. We consider it reasonable to identify the forensic versions, which were confirmed and explained the reasons for the aviation accident. For example, Nicolae MĂRGĂRIT singles out the following most common causes of plane crashes: 1) technical malfunctions; 2) navigation errors and errors in piloting the aircraft; 3) accidental or intentional fires and explosions on board an aircraft [1, p. 130]. As you can see, the specified causes of the plane crash can be perceived as typical forensic versions that can be put forward by the investigative authorities even before its actual start.

Therefore, the organization of the investigation of an aviation incident is a complex process that consists of a number of elements. Such elements include the forensic version, which is put forward on the basis of data about the aviation event and is verified during the investigation. If such a version is confirmed by the results of the inspection, it automatically reveals the main cause of the aviation accident.

Literature

1. Nicolae MĂRGĂRIT “CRIMINALISTICS TACTICS IN CASE OF CATASTROPHIC PLANE DISASTER”. Bucharest: Nicolae Titulescu University Editorial House. Bucharest (2019): 128-137 URL: https://www.proquest.com/openview/36c74f2753bd79ce3ec03adeea74e189/1?pq-origsite=gscholar&cbl=2036059 (last access: 23.10.2023).
2. Криміналістична техніка, тактика і методика: навч. посіб. / В.В. Копча, Н.В. Копча. Одеса: Видавничий дім «Гельветика», 2022. 286 с.
3. Авіакатастрофа на Житомирщині: слідство розглядає три версії трагедії. Радіо Свобода. URL: https://www.radiosvoboda.org/a/news-katastrofa-zhytomyrshchyna-slidstvo-versiyi/32567938.html (last access: 24.10.2023).
4. Комісія з розслідування трагедії в Броварах має звітувати про результати до 18 лютого – уряд. Радіо Свобода. URL: https://www.radiosvoboda.org/a/news-komisia-rozsliduvannia-brovary-zvit/32232823.html (last access: 24.10.2023).
5. Повітряний кодекс України від 19 трав. 2011 р. № 3393-VI. URL: https://zakon.rada.gov.ua/laws/show/3393-17#n1143 (last access: 23.10.2023).

УДК 34:351.814.2+004.8(043.2)

Ковтун О.І., здобувач вищої освіти
третього (освітньо-наукового) рівня,
Національний авіаційний університет, м. Київ, Україна

МОЖЛИВОСТІ ВИКОРИСТАННЯ ШТУЧНОГО ІНТЕЛЕКТУ У СФЕРІ АВІАЦІЙНОЇ БЕЗПЕКИ В УКРАЇНІ

У сучасному світі авіація відіграє надзвичайно важливу роль у глобальній транспортній системі. В той же час, авіаційна безпека є одним з найважливіших аспектів авіаційної галузі. Тисячі літаків щодня здійснюють польоти по всьому світу, вони перевозять мільйони пасажирів та вантажів, тому забезпечення безпеки в авіації є одним з пріоритетних завдань. Сьогодні, використання штучного інтелекту (ШІ) у різних сферах стає все більш актуальним, включаючи авіаційну безпеку. У сфері авіаційної безпеки ШІ може бути застосований для покращення безпекових заходів, виявлення загроз, запобігання можливим аваріям та правопорушенням.

В Україні визначення ШІ, на даний момент, надається тільки у «Концепції розвитку штучного інтелекту в Україні», схваленої розпорядженням Кабінету Міністрів України від 2 грудня 2020 р.