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Autoriteti i Aviacionit Civil i Kosovës
Autoritet Civilnog Vazduhoplovstva Kosova
Civil Aviation Authority of Kosovo

Occurrence Reporting Overview

2023

Autoriteti i Aviacionit Civil i Kosovës - Autoritet Civilnog Vazduhoplovstva Kosova - Civil Aviation Authority of Kosovo
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Introduction

The Occurrence Reporting System aims to improve aviation safety by ensuring that relevant safety information relating to civil aviation is reported, collected, stored, protected, exchanged, disseminated and analysed. The sole objective of occurrence reporting is the prevention of accidents and incidents and not to attribute blame or liability. The information collected is adequately protected from unauthorised use or disclosure, and it is used strictly for the purpose of maintaining and improving aviation safety.

Occurrence reporting in Kosovo is governed by CAA Regulation No. 09/2017 on the reporting, analysis and follow-up of occurrences in civil aviation, of 6 September 2017, which transposes into the internal legal order of the Republic of Kosovo Regulation (EU) No 376/2014 of the European Parliament and of the Council of 3 April 2014 on the reporting, analysis and follow-up of occurrences in civil aviation. CAA Regulation No. 09/2017 has repealed CAA Regulation 1/2009 on occurrence reporting in civil aviation, CAA Regulation No. 08/2010 laying down implementing rules for the integration into a central repository of information on civil aviation occurrences exchanged in accordance with Directive 2003/42/EC of the European Parliament and of the Council, and CAA Regulation 9/2010 laying down implementing rules for the dissemination to interested parties of information on civil aviation occurrences referred to in Article 7(2) of Directive 2003/42/EC of the European Parliament and of the Council.

Whereas, CAA Regulation No. 11/2017 laying down a list classifying occurrences in civil aviation to be mandatorily reported according to CAA Regulation No. 09/2017, which transposes into the internal legal order of the Republic of Kosovo Commission Implementing Regulation (EU) 2015/1018 of 29 June 2015 laying down a list classifying occurrences in civil aviation to be mandatorily reported according to Regulation (EU) No 376/2014 of the European Parliament and of the Council, sets out the list classifying occurrences to be referred to when reporting, under mandatory reporting systems, occurrences which may represent a significant risk to aviation safety and which fall within the categories of Article 4 (1.) of CAA Regulation No. 09/2017 and the occurrences applicable to aircraft other than complex motor-powered aircraft.

All the aviation occurrences referred to in Article 4 (1.) of CAA Regulation No. 09/2017 and in Annexes I to V to CAA Regulation No. 11/2017 shall be reported to the Civil Aviation Authority of the Republic of Kosovo (the CAA) by the natural persons listed in Article 4 (4.) of CAA Regulation No. 09/2017. This reporting contributes to the improvement of the safety of civil aviation through better understanding of these occurrences to facilitate analysis and trend monitoring so that appropriate and timely preventive action can be taken and aviation safety improved.

The CAA has published on its website (https://caa.rks-gov.net) the Guidance Material on Regulation (EU) No 376/2014, transposed in the Republic of Kosovo by REGULATION NO. 09/2017 ON THE REPORTING, ANALYSIS AND FOLLOW-UP OF OCCURRENCES IN CIVIL AVIATION and its practical implementation, which has been provided by the EU Aviation Safety Reporting Portal. This information and guidance material aims to explain the intended purpose of Regulation (EU) No 376/2014 provisions and its implementing regulations, and where relevant, possible means of compliance and examples of good practice, to contribute to a consistent implementation of Regulation 376/2014 and its implementing rules across the EU, which is also being used to contribute to a consistent implementation of CAA Regulation No. 09/2017 and its implementing rules in Kosovo.

The Occurrence Reporting System has been established in Kosovo in 2006. By strict application of rules on confidentiality, protecting the source of safety information and ensuring the confidence of staff working in occurrence reporting systems of civil aviation, the CAA has developed a relationship of trust with the reporters, and subsequently contributed to the improvement of the quality of occurrence reports. Furthermore, the operators have their own Safety Management Systems (SMS), which have advanced significantly in the recent years. The SMS usually integrates a component for treating and addressing reported occurrences, enabling the industry to contribute directly to the collection and analysis of safety-related occurrences.

The CAA stores occurrence reports drawn up on the basis of details of occurrences collected in accordance with Articles 4 and 5 of Regulation No. 09/2017 in its ECCAIRS Database (the CAA National Database), as prescribed in Article 6 (5.), by using the ECCAIRS (European Coordination Centre for Aviation Incident Reporting Systems) software platform developed by the European Union (EU). Also, the reports of accidents and serious incidents, including the safety recommendations, issued by the Aeronautical Accident and Incident Investigations Commission of the Republic of Kosovo (AAIIC) will be stored in the CAA National Database. Also, the reports of the security related occurrences issued by the Ministry of Internal Affairs of the Republic of Kosovo (MIA) can be stored in the CAA National Database, in addition to the laser attack occurrences that are being handled by the CAA, subject to future arrangements between the CAA and the MIA.

The CAA is looking forward, in agreement with the European Commission, to update the European Central Repository (EU ECCAIRS Central Database) by transferring to it all information relating to safety stored in the CAA National Database as prescribed in Article 8 (2.) of Regulation No. 09/2017.

This Occurrence Reporting Overview contains a description of the occurrence classes and categories, an analysis of the 2023 occurrence reports data and statistics, detailed information on the coded categories of the occurrences reported in 2023, lists with headlines and determined classes of all the occurrences, and a brief description of the most significant occurrences reported in 2023.

Occurrence Classes

The CAA uses the ADREP (Accident/Incident Data Reporting) occurrence class taxonomy to classify occurrences by severity i.e. in terms of safety risk. The ADREP 2000 occurrence class taxonomy is a set of terms used by ICAO and it is part of the ICAO ADREP System.

The ADREP occurrence class taxonomy enables the identification of any rapid action needed when looking at high-risk individual safety occurrences and also enables key risk areas to be identified from aggregated information. This taxonomy helps the relevant entities, and in this case the CAA, in their assessment of occurrences and in determining where best to focus their efforts. It facilitates an integrated and harmonised approach to risk management and thus enables the relevant entities, including the CAA, to focus on safety improvement efforts in a harmonised manner.

Accident

An occurrence associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time it comes to rest at the end of the flight and the primary propulsion system is shut down, in which:

a) a person is fatally or seriously injured as a result of:
   - being in the aircraft, or
   - direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or
   - direct exposure to jet blast, except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew;

b) the aircraft sustains damage or structural failure which:
   - adversely affects the structural strength, performance or flight characteristics of the aircraft, and
   - would normally require major repair or replacement of the affected component, except for engine failure or damage, when the damage is limited to the engine, its cowlings or accessories; or for damage limited to propellers, wing tips, antennas, tires, brakes, fairings, small dents or puncture holes in the aircraft skin;

c) the aircraft is missing or is completely inaccessible.

Serious incident

An incident involving circumstances indicating that an accident nearly occurred.

Note:
- The difference between an accident and a serious incident lies only in the result.
- Examples of serious incidents can be found in Attachment C of ICAO Annex 13 and in the ICAO Accident/Incident Reporting Manual (ICAO Doc 9156).

Incident

An occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation.

Note: The type of incidents which are of main interest to the International Civil Aviation Organization for accident prevention studies are listed in the ICAO Accident/Incident Reporting Manual (ICAO Doc 9156) and ICAO Annex 13.

Occurrence without safety effect (Eurocontrol). A possibly safety related occurrence (not meeting the reporting requirements).

Eurocontrol: An incident which has no safety significance.

Note: This appears to be a contradiction with the ICAO definition of an incident: An occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation.

A possibly safety related occurrence not meeting the reporting requirements. This could be e.g. the result of downgrading the incident after review.

Observation

The observation of a potential safety issue or hazard that, if not rectified could cause or have caused an incident. The date and time of occurrence for an observation is that when it was first observed for the purposes of reporting and not an assessment of how long the safety issue might have been present.

Not determined

The class of the occurrence has not been determined.

Occurrence Categories

The CAA uses the ADREP occurrence category taxonomy to categorize occurrences (i.e. accidents and incidents) and analyse safety trends within these categories. The ADREP 2000 occurrence category taxonomy is a set of terms used by ICAO and it is part of the ICAO Accident/Incident Data Reporting (ADREP) System.

As listed below, each category has a unique name and identifier to permit common coding in accident/incident systems, and a text definition. Each category has also usage notes to clarify the category and aid in coding occurrences, but these notes are not presented here due to space constraints.

ADRM	Aerodrome (Occurrences involving aerodrome design, service, or functionality issues.)
AMAN	Abrupt manoeuvre (The intentional abrupt manoeuvring of the aircraft by the flight crew.)
ARC	Abnormal runway contact (Any landing or take-off involving abnormal runway or landing surface contact.)
ATM	ATM/CNS (Occurrences involving Air traffic management (ATM) or communications, navigation, or surveillance (CNS) service issues.)
BIRD	Birdstrike (Occurrences involving collisions/near collisions with birds.)
CABIN	Cabin safety events (Miscellaneous occurrences in the passenger cabin of transport category aircraft.)
CFIT	Controlled flight into or toward terrain (In-flight collision or near collision with terrain, water, or obstacle without indication of loss of control.)
CTOL	Collision with obstacle(s) during take-off and landing (Collision with obstacle(s), during take-off or landing whilst airborne.)
EVAC	Evacuation (Occurrence where either; (a) person(s) are injured during an evacuation; (b) an unnecessary evacuation was performed; (c) evacuation equipment failed to perform as required; or (d) the evacuation contributed to the severity of the occurrence.)
EXTL	External load related occurrences (Occurrences during or as a result of external load or external cargo operations.)
F-NI	Fire/smoke (non-impact) (Fire or smoke in or on the aircraft, in flight or on the ground, which is not the result of impact.)
F-POST	Fire/smoke (post-impact) (Fire/Smoke resulting from impact.)
FUEL	Fuel related (One or more powerplants experienced reduced or no power output due to fuel exhaustion, fuel starvation/mismanagement, fuel contamination/wrong fuel, or carburettor and/or induction icing.)
GCOL	Ground Collision (Collision while taxiing to or from a runway in use.)
GTOW	Glider towing related events (Premature release, inadvertent release or non-release during towing, entangling with towing, cable, loss of control, or impact into towing aircraft / winch.)
ICE	Icing (Accumulation of snow, ice, freezing rain, or frost on aircraft surfaces that adversely affects aircraft control or performance.)
LA[1]	Laser attack

[1] Laser attacks do not have a specific category as per the ICAO ADREP 2000 Taxonomy, they are included in the SEC (security related) category.

LALT	Low altitude operations (Collision or near collision with obstacles/objects/terrain while intentionally operating near the surface (excludes take-off or landing phases).)
LOC-G	Loss of control - ground (Loss of aircraft control while the aircraft is on the ground.)
LOC-I	Loss of control - inflight (Loss of aircraft control while or deviation from intended flightpath inflight.)
LOLI	Loss of lifting conditions en-route (Landing en-route due to loss of lifting conditions.)
MAC	Airprox/ ACAS alert/ loss of separation/ (near) midair collisions (Airprox, ACAS alerts, loss of separation as well as near collisions or collisions between aircraft in flight.)
MED	Medical (Medical – occurrences involving illness of persons on board the aircraft.)
NAV	Navigation error (Occurrences involving the incorrect navigation of aircraft on the ground or in the air.)
RAMP	Ground Handling (Occurrences during (or as a result of) ground handling operations.)
RE	Runway excursion (A veer off or overrun off the runway surface.)
RI-A	Runway incursion - animal (Collision with, risk of collision, or evasive action taken by an aircraft to avoid an animal on a runway or on a helipad/helideck in use.)
RI-VAP	Runway incursion - vehicle, aircraft or person (Any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and take-off of aircraft.)
SCF-NP	System/component failure or malfunction [non-powerplant] (Failure or malfunction of an aircraft system or component - other than the powerplant.)
SCF-PP	Powerplant failure or malfunction (Failure or malfunction of an aircraft system or component - related to the powerplant.)
SEC[2]	Security related (Criminal/Security acts which result in accidents or incidents (per International Civil Aviation Organization [ICAO] Annex 13).)
TURB	Turbulence encounter (In-flight turbulence encounter.)
UIMC	Unintended flight in IMC (Unintended flight in Instrument Meteorological Conditions (IMC).)
USOS	Undershoot/overshoot (A touchdown off the runway surface.)
WILD	Collision Wildlife (Collision with, risk of collision, or evasive action taken by an aircraft to avoid wildlife on a runway or on a helipad/helideck in use.)
WSTRW	Wind shear or thunderstorm. (Flight into wind shear or thunderstorm.)
OTHR	Other (Any occurrence not covered under another category.)
UNK	Unknown or undetermined (Insufficient information exists to categorize the occurrence.)

An important element of the occurrence category design is that it permits the association of multiple categories with an occurrence. Meaning, for example, if an engine failure occurred, and loss of control followed, the occurrence would be coded in both categories. Multiple coding supports the primary focus of the CAA - accident prevention - in which every pertinent element is investigated, recorded, and analysed.

[2] The Ministry of Internal Affairs (MIA) has been designated to handle independently the collection, evaluation, processing, analysis and storage of details of the security related occurrences. However, the CAA remains responsible to handle independently the laser attack occurrences, which are included in the SEC category.

Statistical Data Analysis

As shown in the Figure below, during the year 2023 the CAA has received reports for a total of 338 occurrences in civil aviation, which is a significant increase compared to previous years.

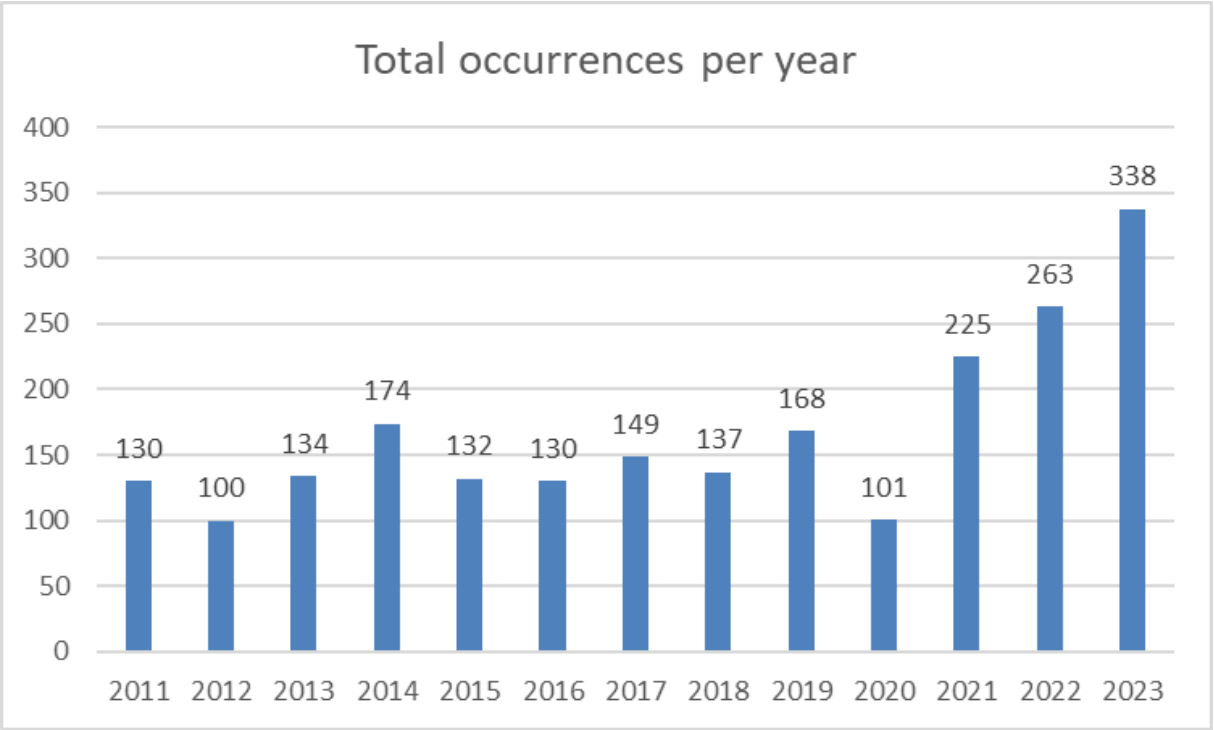

Figure 1. Number of occurrences reported over the years: 2011- 2023

The number of 338 occurrences reported in 2023 is higher by 202.5 occurrences or 67% than the average of 135.5 occurrences of the previous 12 years, 2011 - 2022. Whereas the total number of occurrences reported to the CAA, from 2006 (when the occurrence reporting system was established in Kosovo) to the end of 2023, reached a total of 2445 occurrences.

The increase in the number of the occurrence reports received in 2023 corresponds to an increased number of aircraft activities at Prishtina International Airport “Adem Jashari” (PIA).

Figure 2 below displays the number of flights that departed per year from PIA “Adem Jashari”, the only operational airport in Kosovo, over the years: 2007 - 2023. The displayed numbers include scheduled, non-scheduled (charter) and ad-hoc commercial flight departures.

While, Figure 3 shows the number of occurrences that occurred per month during the last five years (2019-2023) and that were received by the CAA. The figure shows that the year 2023 had an average number of 28.16 occurrences per month. The year began with 15 occurrences occurred in January, which increased by 11 in February and again by another 3 in March. The number decreased to 21 in April. In June and July, the number of reposts was increased to 36,37 and the peak on reports is reached in September, with 45 reports that surged to a record level. In October the number dropped to 30, almost the same in November to close the year with December receiving 16 reports.

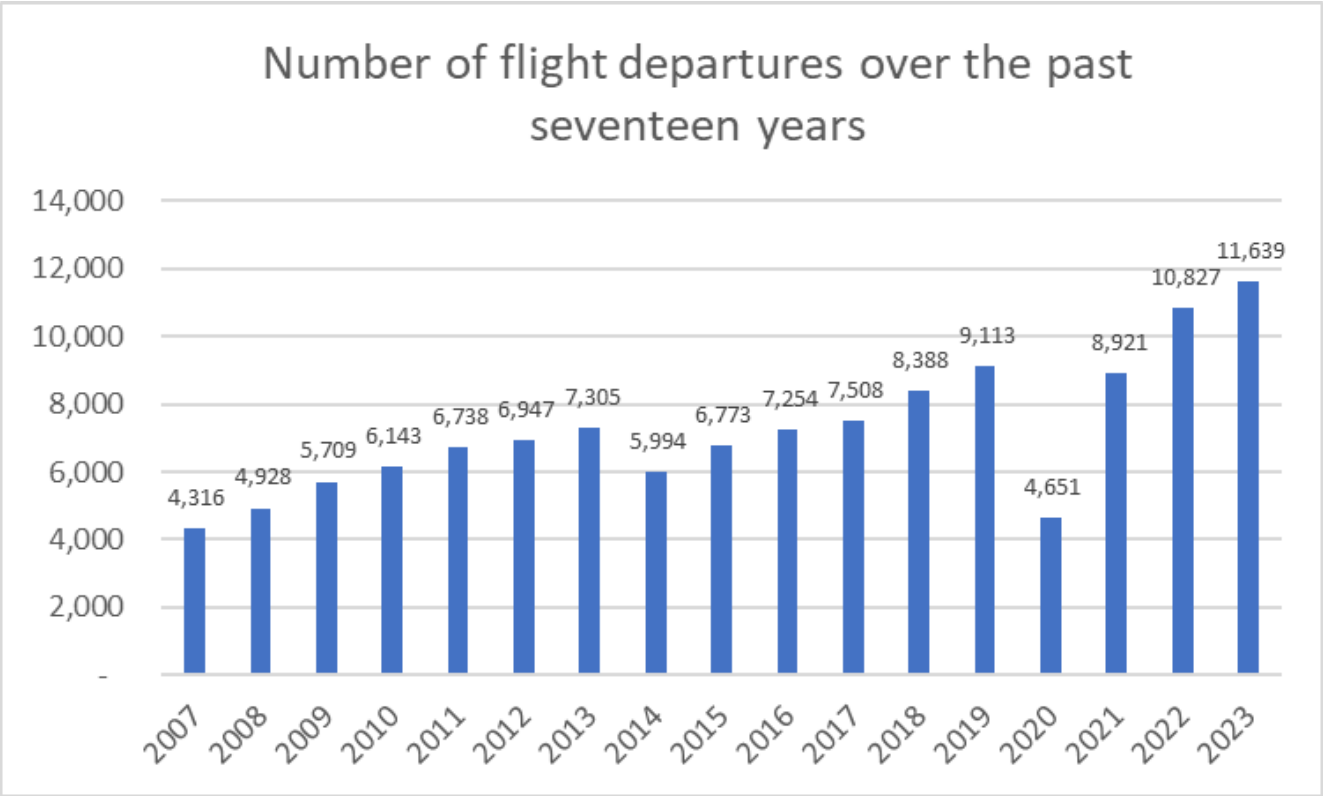

Figure 2. Number of flight departures over the years: 2007 – 2023

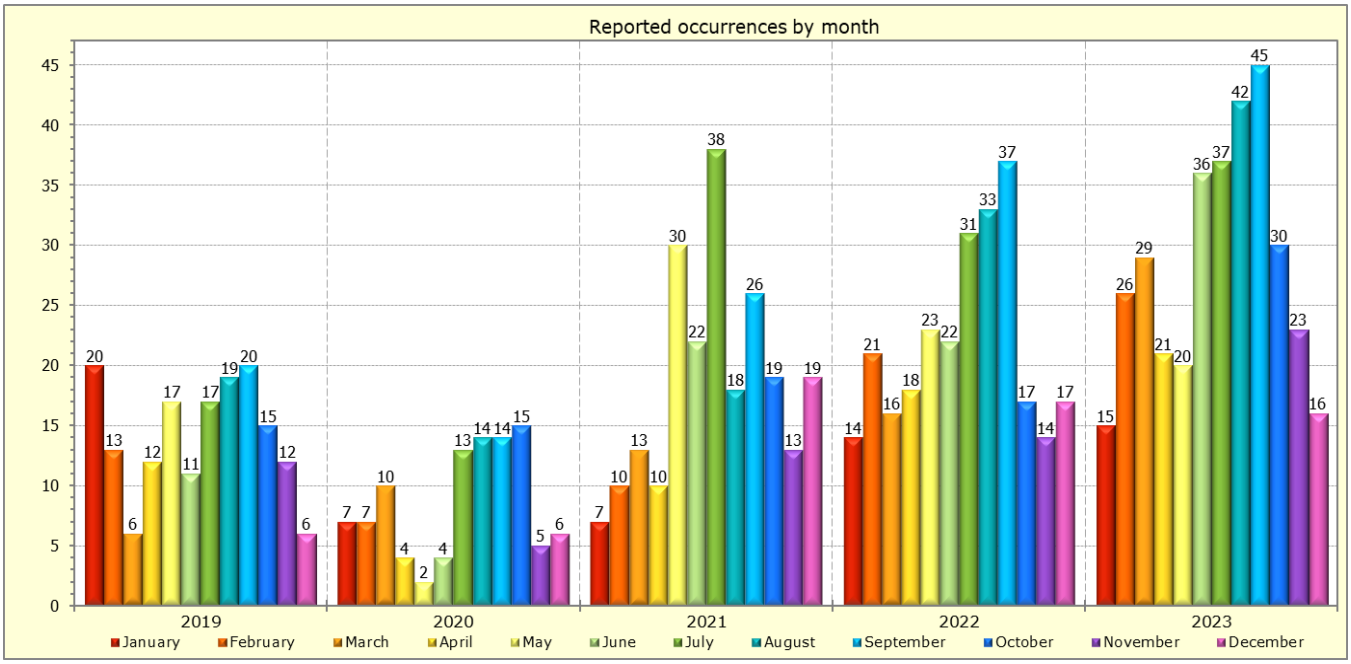

Figure 3. Occurrences that occurred per month during the years: 2019-2023 and that were received by the CAA

A higher number of occurrences during the warmer months of the year, from May to September, can be attributed to the higher number of aircraft movements during those months at PIA, the high season in Kosovo, as well as a higher number of bird strikes during the months of May and September. As usual, traffic was lower during the colder months of the year, especially from February to April, which was reflected in the lower number of occurrences. This pattern was repeated during the last three colder months of the year when traffic was relatively high and the

number of occurrences was higher compared to the colder months at the beginning of the year. However, it can be concluded that the overall trend of occurrences is increasing.

The occurrences reported in 2023 have been classified into different classes based on the severity of their effect on the safe operations of aircraft and occupants, and on the ability to provide safe ATM and aerodrome services. These classes, along with the classes of the occurrences reported over the previous four years, are shown in Figure 4 below.

As shown in Figure 4, out of the 338 occurrences received by the CAA during 2023, 43 occurrences (12% of the total number of occurrences) were classified as “Occurrences without safety effect”, 78 occurrences (23% of the total number of occurrences) were classified as “Incidents”, 1 occurrence was classified as “Significant incidents”, 218 occurrences (64% of the total number of occurrences) were classified as “Not determined”.

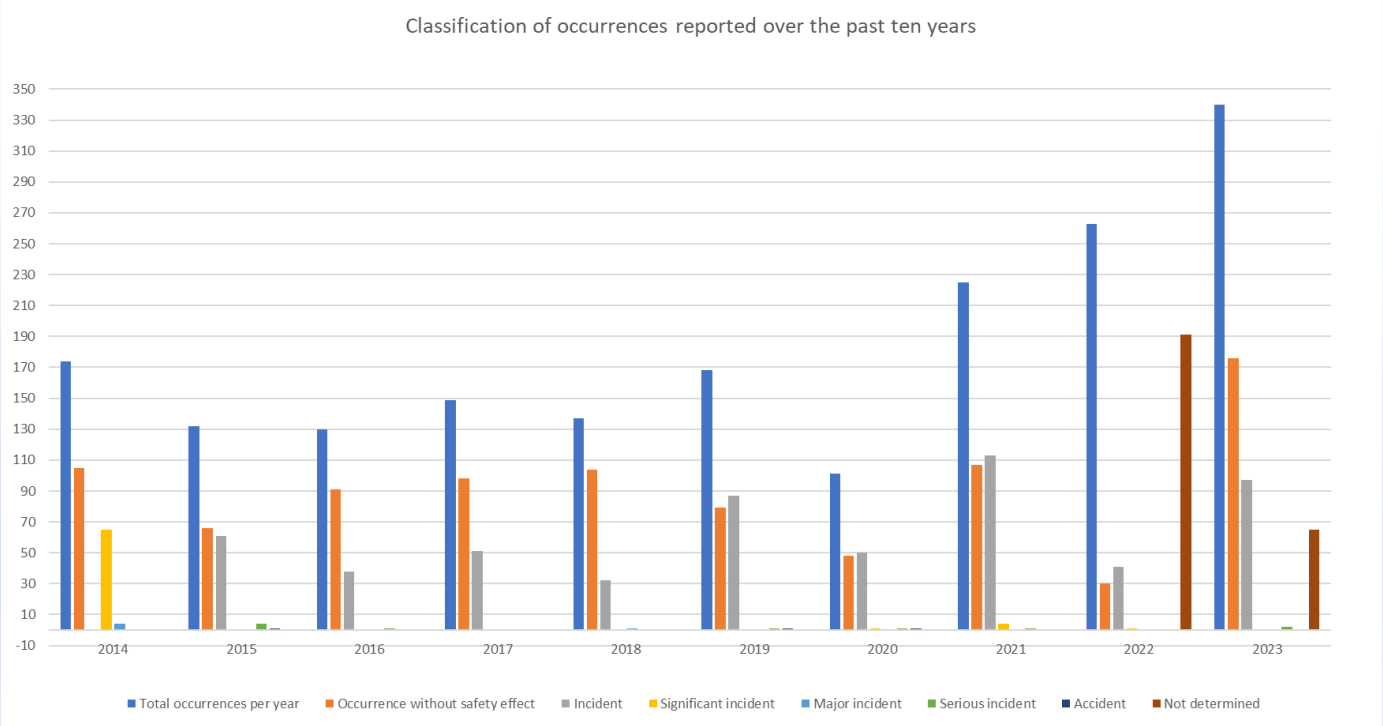

Figure 4. Classification of occurrences reported over the past years: 2014 - 2023

As mentioned above, in addition to being classified, the occurrences reported in 2023 have also been coded into different categories, according to the aviation elements pertinent to these occurrences. These categories, along with the categories of the occurrences reported over the previous two years, are presented in Figure 5 below.

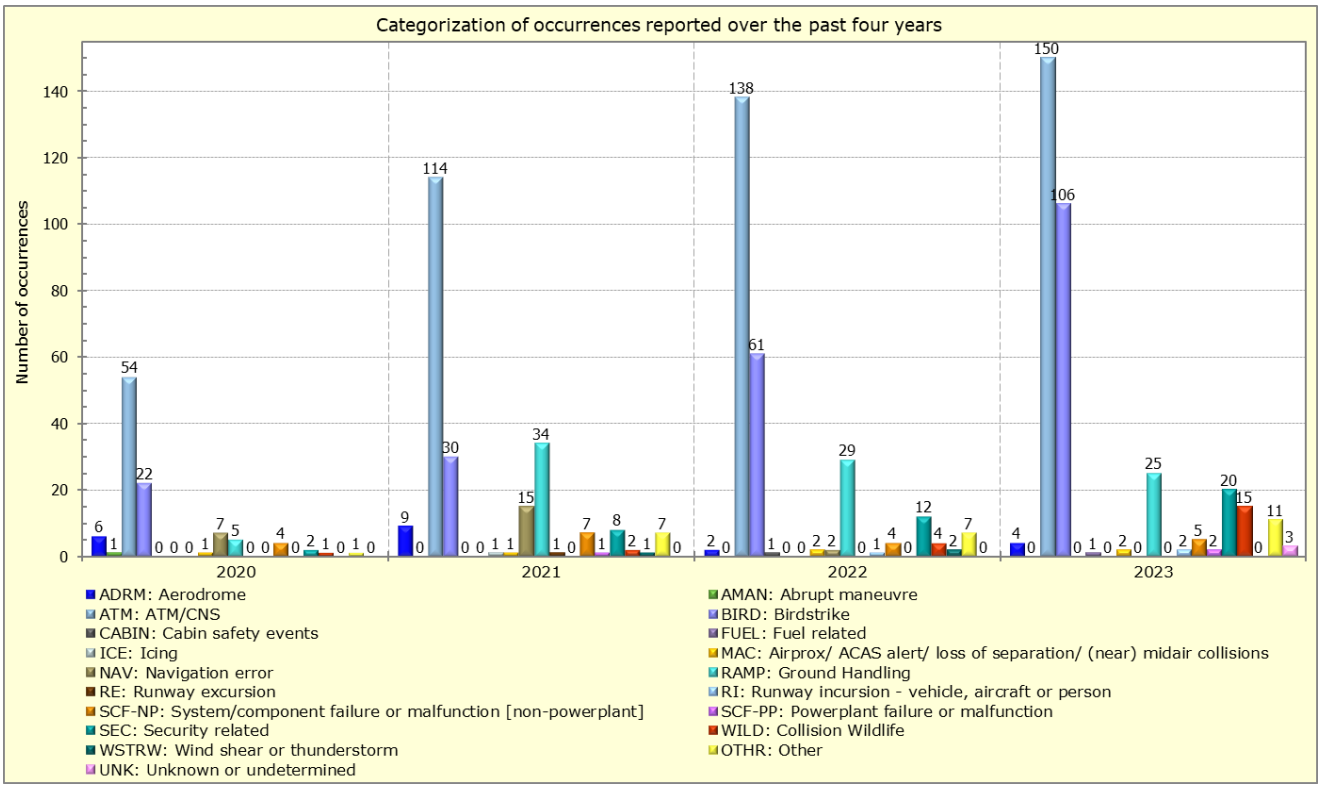

Figure 5. Categorization of occurrences reported over the years 2020, 2021, 2022 and 2023

The total number of occurrences reported to CAA, from 2006 to the end of 2023, reached a total of 2445 incidents. There is no significant increase in the number of incident reports compared to the number of flights and this indicates the level of awareness of participants in the aviation industry and their commitment to reporting, and may indicate the satisfactory level of safety in civil aviation.

The reported occurrences are coded into different categories according to the aviation elements involved in these incidents and together with the categories of occurrences of the previous three years are presented in the chart in Figure 5., which is based on the data extracted from the database of CAA on the software platform ECCAIRS 5 (European Coordinating Center for Accident and Incident Reporting Systems).

From the graph in Figure 5., it can be observed that compared to the categories of events of 2020, 2021 and 2022, the categories of 2023 which have increased, some of which are more significant, and have influenced the increase in the total number of events are:

• ATM (air traffic management/communication, navigation and surveillance);
• BIRD (bird strike);
• SEC (related to insurance, which contains the subcategory of events related to laser attacks);
• WILD (collision wildlife);
• RI (entering the runway - of the vehicle, aircraft or person);
• ADRM (aerodrome)

The categories of occurrences of the year 2023 that have experienced a decrease in comparison to 2022 are:

- ✈ RAMP: Ground Handling.
- ✈ NAV: Navigation error

The categories of occurrences that have experienced an increase in 2023 are:

- ADRM: Aerodrome;
- ATM: ATM/CNS (Air traffic management or communications, navigation, or surveillance);
- BIRD: Birdstrike;
- RI: Runway incursion;
- SEC: Security related (which contains the Laser attack sub-category);
- WILD: Collision Wildlife;

Coded Occurrence Categories

This section provides detailed information on the coded categories of the occurrences reported in 2023. It lists the headlines of all the occurrences, along with their determined classes, and provides a brief description of the most significant occurrences reported in 2023.

ADRM: Aerodrome. Occurrences involving aerodrome design, service, or functionality issues. This category includes deficiencies/issues associated with runways, taxiways, ramp area, parking areas, buildings and structures, Crash/Fire/Rescue (CFR) services, obstacles on the Aerodrome property, power supply, lighting, markings, signage, procedures, policies, and standards. Occurrences of this category do not necessarily involve an aircraft.

As listed below, four (4) of the occurrences reported during 2023 were coded in the ADRM category, all classified as incidents:

File Number(s)	Headline of Occurrence	Number of Occurrences	Occurrence Class
003	FOD on the Taxiway	1	Incident
017	Missed approach due to FOD in bad weather	1	Incident
199	FOD on the RWY	1	Incident
278	Go-Around due to Suspected FOD	1	Incident

All reported occurrences in this category were related to Foreign Object Debris (FOD) at Prishtina International Airport "Adem Jashari". FOD refers to any object found in an inappropriate location at an aerodrome that has the potential to damage equipment or injure personnel. Despite the presence of FOD in these incidents, it's important to note that none of them resulted in any impact on the safety of flight. While the occurrences themselves highlight the importance of vigilance in ensuring aerodrome safety and the prevention of FOD-related incidents, swift responses by airport personnel ensured that the safety of aircraft, occupants, and personnel was maintained throughout these events.

BIRD: Birdstrike. Occurrences involving collisions/near collisions with birds. Unconfirmed birdstrikes are also included in this category.

As listed below, during 2023 there were 106 reported birdstrikes, 75 of which were classified as incidents and the other 31 as occurrences without safety effect. Starting from 2019 and onwards, every confirmed birdstrike is classified as an incident, except when the results of the investigation suggest otherwise.

File Number(s)	Headline of Occurrence	Number of Occurrences	Occurrence Class
068, 073, 074, 079, 095, 098, 103, 110, 116, 144, 154, 169, 175, 178, 188, 198, 208, 225, 228, 253, 260, 261, 264, 267, 272, 274, 279, 281, 298 337, 339	Bird Strike	31	Occurrence without safety effect
038, 042, 045, 047, 069, 072, 078, 089, 090, 092, 097, 102, 118, 129, 132, 135, 141, 143, 147, 149, 151, 152, 157, 158, 161, 162, 166, 168, 170, 177, 182, 185, 187, 189, 192, 195, 196, 197, 202, 204, 205, 206, 207, 212, 213, 214, 224, 227, 229, 231, 232, 235, 240, 241, 242, 252, 257, 270, 271, 280, 291, 293, 294, 303, 306, 307, 308, 314, 332, 333, 334, 335, 336, 338, 340	Bird Strike	75	Incident

Figure 06 below shows the trend of the reported birdstrikes per each month during 2023.

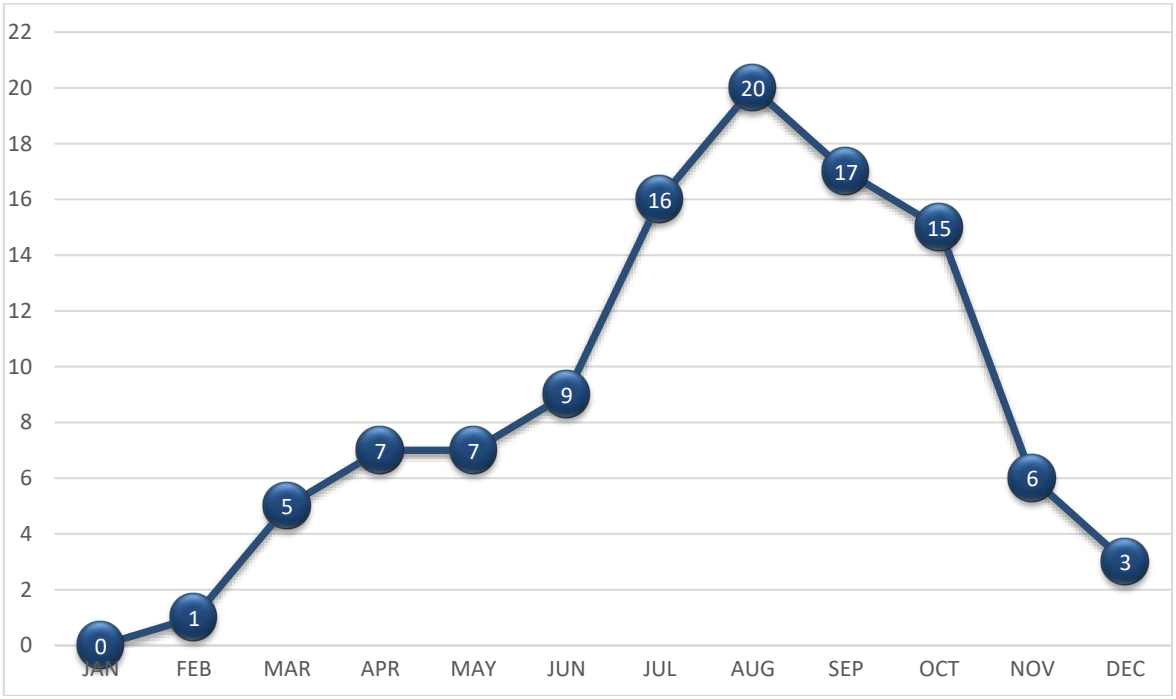

Figure 06. Birdstrikes reported during 2023

Based on the best practice standards produced by the International Bird Strike Committee (IBSC) and those adopted by the International Federation of Air Line Pilots' Associations (IFALPA), a confirmed or unconfirmed birdstrike occurrence has been standardised as follows:

> Confirmed birdstrike: Any reported collision between a bird and an aircraft for which evidence, in the form of a carcass, or other remains, is found on the ground; or damage and/or other evidence is found on the aircraft. Bird remains or complete carcass found on an aerodrome where there is no other obvious cause of death should be treated as a confirmed strike and reported as such accordingly.
>
> Unconfirmed birdstrike: Any reported collision between a bird/wildlife and an aircraft for which no physical evidence is found (i.e. no damage to the aircraft is evident upon inspection, and no bird remains, carcass or blood smears are evident on the airframe).

Of the total birdstrike incidents reported in 2023, 73 were confirmed birdstrikes, indicating the presence of tangible evidence. 29 cases from the total number of confirmed birdstrikes involved only blood marks on the aircraft without physical evidence of bird remains or carcasses found on PIA runway, suggesting that these confirmed birdstrikes occurred outside the airport's boundaries.

The increased number of reported bird strikes correlates a significant increase in air traffic during 2023. Apart from the high number of aircraft movements during the summer season, several other factors, such as weather conditions, bird migration and the harvesting season nearby the airport boundaries, may have contributed to the higher number of reported birdstrikes during that period.

Notably, the kestrel emerged as the most involved species in these incidents. The kestrel, a small to medium-sized bird of prey belonging to the falcon family, is recognized for its distinctive hovering flight pattern while hunting for small mammals and insects. These birds often inhabit open landscapes such as grasslands, meadows, and agricultural areas, where they actively hunt by diving from perches or hovering in the air before striking their prey.

The aerodrome operator has prepared the Annual Report on the management of wildlife risk at PIA "Adem Jashari," including an analysis of reports from the year 2023. This document evaluates various factors contributing to the presence of birds and proposes additional risk management measures, which will be implemented during 2024.

WILD: Collision Wildlife. Collision with, risk of collision, or evasive action taken by an aircraft to avoid wildlife on a runway or on a helipad/helideck in use.

This category encompasses encounters with wildlife on any movement area of the aerodrome, including runways, and also accounts for instances where evasive action taken by the flight crew leads to consequences such as gear collapse or collisions off the movement area. WILD incidents may occur at controlled or uncontrolled airports, as well as on unprepared or natural landing sites. Notably, WILD excludes bird strikes, which are separately coded as Bird (BIRD).

As listed below, 14 of the occurrences reported in PIA during 2023 were coded into the WILD category and were classified as incidents.

File Number(s)	Headline of Occurrence	Number of Occurrences	Occurrence Class
056, 065, 106, 211, 234, 255, 256, 259	Dog Crossing Runway	8	Incident
109, 156, 243, 245, 246	Wildlife Strike (rabbit)	5	Incident
165	Wildlife Strike (fox)	1	Incident

The presence of wildlife on the aerodrome and its vicinity poses a serious threat to safe flight operations. In order to manage the wildlife and to minimize the likelihood of collisions between wildlife and aircraft, LKIA has developed a Wildlife Risk Management Program (WRMP), which has been reviewed and approved by the CAA.

To enhance wildlife management effectiveness, particularly considering reported occurrences involving dogs, the aerodrome operator has increased on-site inspections, specifically targeting identified problematic areas of the security perimeter fence, showcasing its commitment to minimizing the recurrence of such incidents.

RAMP: Ground Handling. Occurrences during (or as a result of) ground handling operations, which include collisions that occur while servicing, boarding, loading, and deplaning the aircraft also during boarding and disembarking while helicopter is hovering, injuries to people from propeller/main rotor/tail rotor/fan blade strikes, push-back/power-back/towing events, jet blast and prop/rotor down wash, aircraft external preflight configuration errors that lead to subsequent events, and all parking areas (ramp, gate, tiedowns).

During 2023 there were 25 occurrences reported during (or as a result of) ground handling operations; five were analysed by aerodromes inspectors, one was analysed by flight safety inspector. The rest of the RAMP occurrences are still being analysed by the relevant inspectors.

File Number(s)	Headline of Occurrence	Number of Occurrences	Occurrence Class
051	2 Buses in Apron collide	1	Incident
084, 093	Broken tow bar shear pin	2	Incident
112	Injury of Ground Handling Personnel	1	Incident
219	Undeclared Loading	1	Incident

283	Injury of Ground Handling Personnel	1	Occurrence without safety effect

As shown above, 5 occurrences in this category were classified as incidents and one as a “Occurrence without safety effect”.

Two occurrences were attributed to a technical malfunction related to the tow bar shear pin. In response, the operator swiftly initiated immediate corrective measures by discontinuing the use of towbars manufactured by the same supplier. Subsequently, the operator presented substantiating evidence to validate the operational integrity and dependability of the towbars implicated in the incidents, confirming their functionality and serviceability prior to deployment.

One incident occurred at apron, involving a bus transporting passengers from an incoming flight colliding with another bus parked nearby. As a result of the investigation and following the assessments, the operator took corrective measures, including installing additional lights on each side of the bus and issuing a Safety Bulletin to reinforce safety protocols for bus drivers. These actions were aimed at enhancing visibility and reducing the risk of similar accidents in the future.

One incident occurred with undeclared loading in compartment 2, which were not declared in LDM (Load Distribution Message) nor in LS (Load sheet). As a result of the investigation and following the assessments, the operator took corrective measures.

Another occurrence was reported involving an injury to a ground handling services staff member when a stairs platform unexpectedly and uncontrolled descended and made contact, resulting in minor injury. In response, expedited measures were taken to promptly issue and distribute safety instructions tailored for third-party users, aimed at prevent the reoccurrence of such incidents in the future.

RI: Runway incursion – vehicle, aircraft or person. Any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and take-off of aircraft.

During 2023 there were 2 occurrences reported as runway incursion.

One occurrence was categorised in this category as RI, and it was classified as incident.

File Number(s)	Headline of Occurrence	Number of Occurrences	Occurrence Class
153	Wildlife unit not following ATC instructions	1	Incident

The incident occurred due to miscommunication between the vehicle operator and the Air Traffic Control (ATC) controller, resulting in the vehicle's unauthorized presence on the runway. This incursion did not impact aircraft operations.

Another occurrence was categorised as Runway Incursion/Security, and it was classified as incident.

File Number(s)	Headline of Occurrence	Number of Occurrences	Occurrence Class
174	Unauthorized drone activity around the airfield	1	Incident

The incident occurred due to unauthorized drone activity around the airfield. The helicopter crew called TWR with information regarding 2 small drones overflying their hangar. First drone continued towards the RWY and the second drone towards the south of the airfield. The airport police were informed.

SEC: Security related. Criminal/Security acts which result in accidents or incidents (per International Civil Aviation Organization [ICAO] Annex 13. Examples include: a) hijacking and/or aircraft theft; b) interference with a crewmember (e.g., unruly passengers); c) flight control interference; d) ramp/runway/taxiway security; e) sabotage; f) suicide; and g) acts of war.

File Number(s)	Headline of Occurrence	Number of Occurrences	Occurrence Class
018, 019, 063, 082	Bomb Threat	4	Incident

Out of 19 security-related occurrences reported during 2023, four were reported involving bomb threats at PIA "Adem Jashari". In accordance with the Airport Emergency Plan, the Kosovo Police acted as the Lead Agency after declaring an emergency, managing the situation throughout. Fortunately, aside from delays, there were no further consequences for any flights.

As listed below, during 2023 there were 13 occurrences related to laser attacks LA (pointing a laser at an aircraft in flight) reported to the CAA, and all of them were classified as incidents. These incidents involved laser attacks on 11 (eleven) civil aircraft during the critical phases of flight – approach and landing, and 2 (two) during departure phase. One incident was reported by Military Authorities (KFOR) reporting a drone activity over military air base (Camp Bondsteel). The Airport Police was informed about such attacks, and the investigations are ongoing.

File Number(s)	Headline of Occurrence	Number of Occurrences	Occurrence Class
155, 160, 163, 173, 181, 190, 193, 220, 236, 237, 251, 265, 328	Laser Attacks	13	Incident

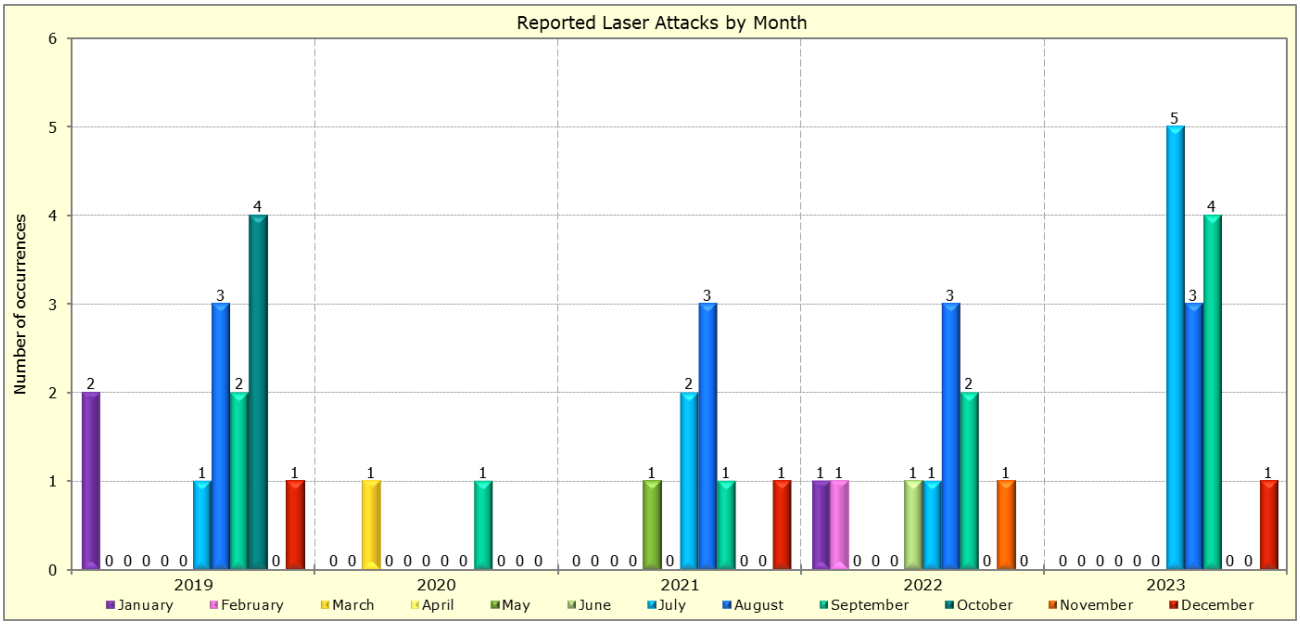

Figure 07 Reported Laser Attacks by Month (2019-2023)

MAC: Airprox/ ACAS alert/ loss of separation/ (near) midair collisions (Airprox, ACAS alerts, loss of separation as well as near collisions or collisions between aircraft in flight.)

During 2023 there was one occurrence reported as an AIRPROX. This occurrence involved a civil aircraft and military helicopter. The traffic information was passed to both aircraft by ATC. The civil aircraft informed tower he is going around and it was triggered by the helicopter. This occurrence was transferred also to the Military Authorities for their internal investigation.

File Number(s)	Headline of Occurrence	Number of Occurrences	Occurrence Class
044	AIRPROX	1	Serious Incident

SCF-NP: System/component failure or malfunction [non-powerplant] (Failure or malfunction of an aircraft system or component - other than the powerplant.)

In 2023 there were four (4) occurrences reported as system/component failure or malfunction [non-powerplant] SCF-NP, and one (1) occurrence was reported as SCF-NP/FUEL

File Number(s)	Headline of Occurrence	Number of Occurrences	Occurrence Class
010	Pressurization problem	1	Incident
124	Open door indication	1	Incident
210	Pressurization problem	1	Incident
299	Electrical problem	1	Incident

The occurrence reported as system/component failure or malfunction [non-powerplant] (Failure or malfunction of an aircraft system or component - other than the powerplant.) SCF-NP/FUEL was related to the fuel leak reported by the PRN ground staff, the information was processed to the airline which confirmed that fuel leak is within limit and no further maintenance action is required.

File Number(s)	Headline of Occurrence	Number of Occurrences	Occurrence Class
039	Fuel leak	1	Incident

SCF-PP: Powerplant failure or malfunction (Failure or malfunction of an aircraft system or component - related to the powerplant.)

Two (2) occurrences were reported and categorised as powerplant failure or malfunction (Failure or malfunction of an aircraft system or component - related to the powerplant.)

File Number(s)	Headline of Occurrence	Number of Occurrences	Occurrence Class
076	Engine shutdown	1	Incident

096	Engine problems due to bird strike	1	Incident

The first occurrence (File No. 076) involved a military transport aircraft reporting engine shutdown. At 15:59 UTC, while climbing to cruising level, military flight (Lockheed C-130 Hercules, four-engine turboprop military transport aircraft), heading to SJJ reported engine malfunction and requested left orbits. At 16:03 UTC, the pilot cancelled the holding and declared PAN PAN PAN, reporting that it had shut down its left engine and requested to divert to LTBU [Military] Turkey. The pilot requested to proceed to XAXAN. According to RDR controller, the PLN controller coordinated with SKJ and the aircraft was transferred to SKJ at 16:07 UTC. According to data from flightradar24.com, the aircraft has landed at LTAU [Military] Turkey, at 18:41 UTC.

The second occurrence (File No. 096) was categorised as an incident and involved a commercial airline declaring PAN PAN PAN after departure due to Bird Strike. After departure at RWY17 the crew of A320, informed tower ATCO (06:50Z) that will report PAN PAN PAN due to issues with one of the engines. The crew made its initial contact with APP unit and they reported PAN PAN PAN and reported issues with right hand engine, also explained intentions and requested to climb to altitude 6000 feet and join PRN holding. A/C joined holding, where it performed checks and then performed ILSZ app for RWY17. A/C landed at BKPR at time 0718.

ATM: ATM/CNS. Occurrences involving Air traffic management (ATM) or communications, navigation, or surveillance (CNS) service issues.

The table below and Figure 08 show that during 2023, occurrences concerning ATM systems and procedures (including Aeronautical Information and Meteorological Services) accounted for 44% of the total occurrences reported during the year. This percentage does not show that the safety was compromised, since for those systems there are backup systems. To this end, this percentage shows the positive culture of the reporting system by the ANSP personnel.

Occurrences covering ATM technical failures or defects, mainly related to communication, navigation, surveillance, meteorological equipment, aeronautical information systems, etc. are coded under this category, as well as any other occurrence pertaining to or involving ATM procedures and systems. ATM related occurrences are classified according to the effect they have on safety, and categorized according to the service/system they affect.

As listed below, 150 occurrences reported during 2023 were coded in the ATM category:

File Number(s)	Headline of Occurrence	Number of Occurrences	Occurrence Class
	AFTN Problems	5	OWSE
006, 008, 012, 013, 020, 027, 037, 041, 059, 115, 172, 233, 305, 311, 323, 324, 331	Problems with MET Forecasting Systems	17	OWSE

005, 014, 015, 016, 024, 032, 035, 036, 040, 043, 049, 050, 053, 055, 058, 060, 064, 066, 080, 081, 086, 087, 088, 104, 111, 113, 114, 119, 123, 125, 128, 130, 133, 134, 137, 139, 140, 179, 184, 209, 217, 221, 223, 226, 239, 248, 250, 273, 286, 295, 300, 309, 326, 327, 329	Problems with Surveillance Systems	55	OWSE
099, 127, 131, 138, 282	Problems with Radio Communications	5	OWSE
025	Working condition	1	Incident
011, 021, 075, 120, 180, 191, 284, 289, 302, 316, 317, 318, 319, 322	Problems with Automatic Weather Observing System and its Sensors	14	OWSE
029, 054	Internet failure	2	OWSE
023, 107, 150, 159, 167, 186, 230, 249, 266, 287, 288, 296, 310, 321	Problems with Direct Phone Lines	14	OWSE
061, 067, 070, 148, 176, 312, 313, 315, 325	Navigation system	9	OWSE
001, 002, 091, 108, 215, 258, 290	Aeronautical Information	7	OWSE
007, 022, 028, 030, 031, 033, 052, 071, 076	Radar Data processing	9	OWSE
009	ATC Procedure	1	Incident
201, 262, 268, 269, 275, 285,	Problems with Surveillance Systems - Gjakova	6	OWSE
034	TCAS Resolution Advisory Warning Triggered	1	Incident
057, 238, 263	Coordination with Adjacent ATC Units	3	OWSE
254	Other	1	OWSE

From the table above and the Figure 08, occurrences with the surveillance systems, communication systems and meteorological equipment were the most prominent during 2023, accounting for 42%, 17% and 20%, respectively, of the overall ATM occurrences. From the total of 42% of occurrences

related to the surveillance systems, 36% were related to the failure of Controller Working Position (CWP), frozen of CWP, and reset or shut down of the CWP by itself, and 6% were related to problems regarding radar data processing. From 17% of occurrences of the communication systems, 3% were related to the radio, interference in different frequencies respectively and, 14% were related to other communication tools such as AFTN, communication lines, internet failure etc.

In terms of their effect on safety, 98% of the ATM related occurrences were classified as occurrences without safety effect (OWSE) and 2% as incidents.

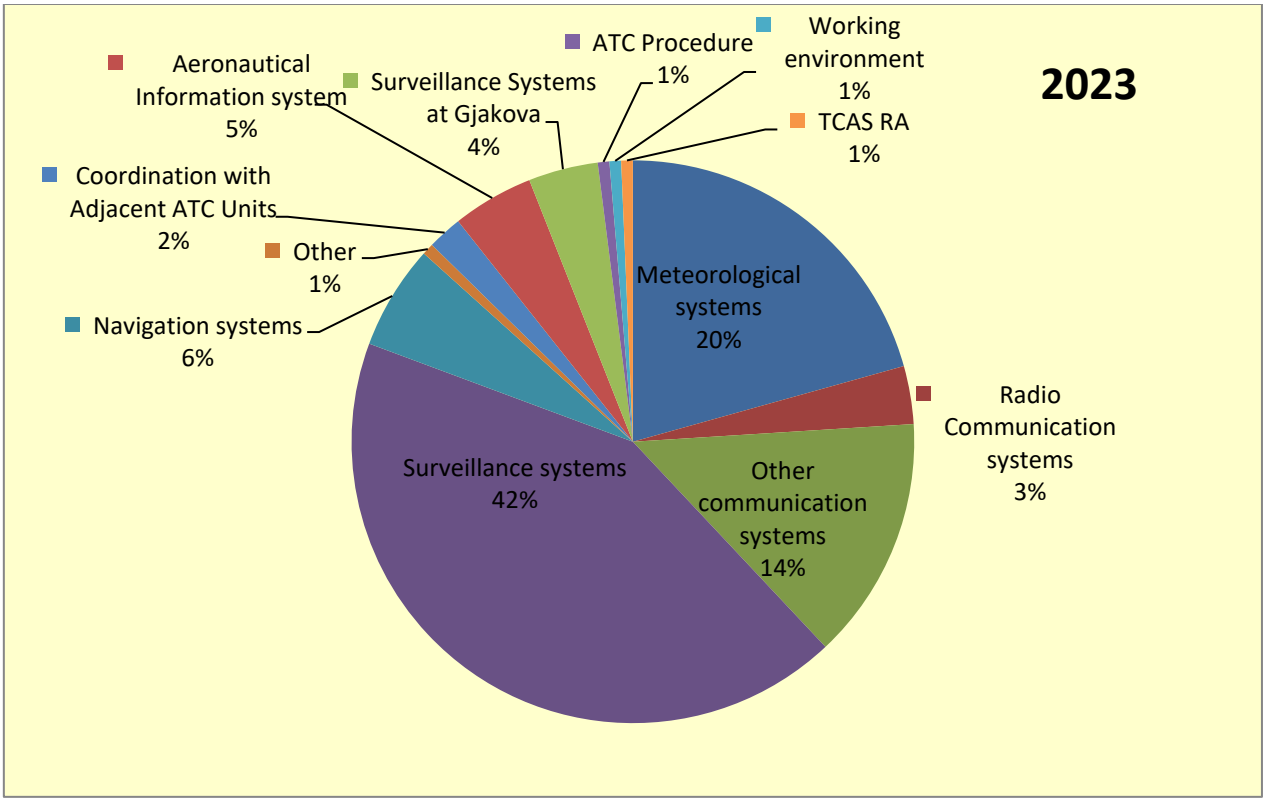

Figure 08. A breakdown of the ATM occurrences into sub-categories

Furthermore, the Figure 09 shows graphically sub-categories of the ATM related occurrences according to their severity classification.

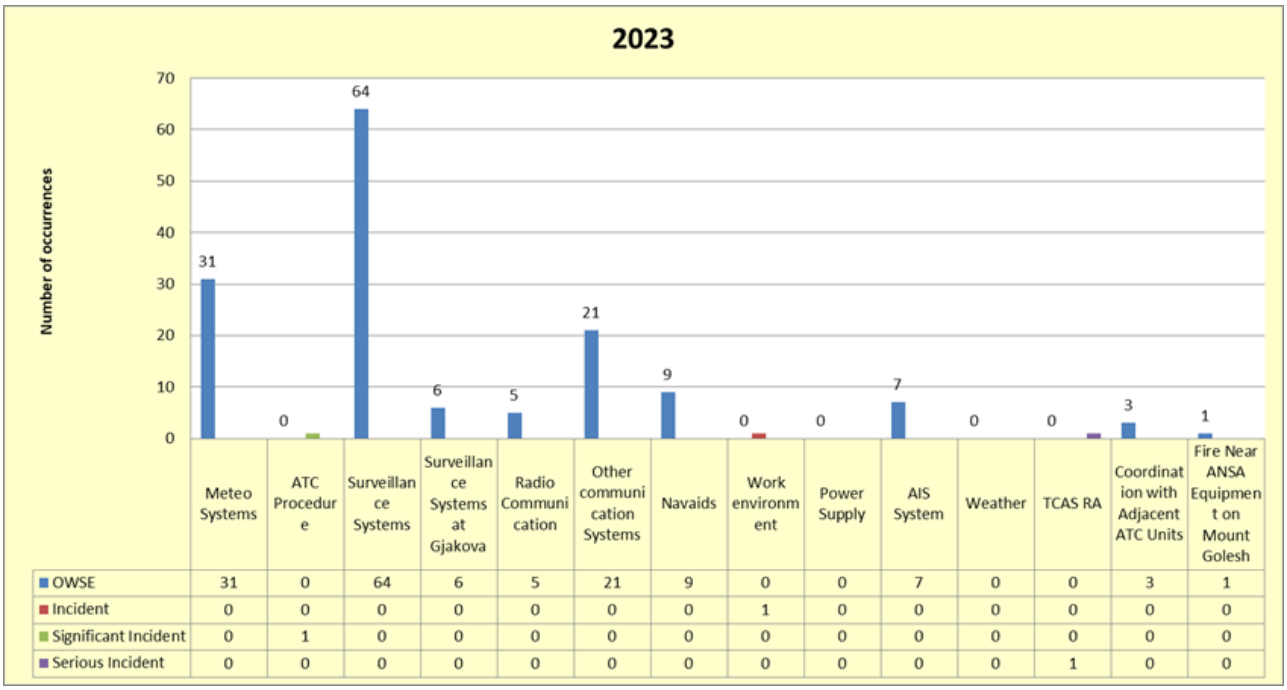

Figure 09. ATM occurrences according to their severity classification

A summary of the ATM related occurrences according to their sub-categories is provided below.

Radio and other communication systems:

There were 26 reported occurrences which were related to the radio communication systems and all of them were classified as occurrences without safety effect (OWSE). While, 14 of these occurrences were related to problems with Direct Phone Lines Communications. When these occurrences were investigated it turned out that the problem did not lie with ANSA. For communication, there were used alternative means.

As far as other communication systems are concerned, there were 12 reported occurrences, involving mainly Aeronautical Fixed Telecommunication Network (AFTN), internet and interference on frequency. These occurrences were classified as occurrences without safety effect.

There were no occurrences linked directly with the VCSS system.

Figure 10. ATC tower, the premises of ANSA and PIA "Adem Jashari"

Meteorological systems:

There were 31 reported occurrences, which were related to the meteorological observation and forecasting systems, where all of them were classified as occurrence without safety effect.

From the overall occurrences, 14 were related to the Automated Weather Observing System (AWOS) and 17 to the MET Forecasting Systems.

It should be noted that problems related to RVR were reduced, in comparison to previous years, to only 4 reported occurrences, since new systems were implemented in 2022, raising the category of operation in CAT IIIB.

For occurrences related to MET Forecasting Systems, since the system is under guaranty and the manufacturer was informing to address presented problems. Also, for providing meteorological services and products, there are back-up systems used.

Surveillance (radar) systems:

There were 64 reported occurrences related to the surveillance systems. Out of these 64, 55 were related to the failure of CWP, restarting of CWP by itself, shutting down and frozen of CWP etc, and 9 were related to the radar targets. Occurrences were classified without safety effect because measures have been taken by ANSA, including the issuance of a directive to not use surveillance system when such irregularities occur and to use procedural service in all such cases. All such occurrences are classified as occurrences without safety effect.

Data processing system of the Radar is very old, and this is the cause of the most occurrences in this category. With installation of the new ATM system, the nature of these occurrences is expected to

be reduced. The contract with a company to provide the installation of the ATM system has been signed.

Navigation Systems (NAVAID)

There were 9 occurrences categorized in the sub-category NAVAID. All occurrences had no effect on safety.

The navigation system at Pristina International Airport has been upgraded from ILS CAT II, in ILS CAT IIIB, enabling aircraft to land in very poor visibility conditions assisted by meteorological system (AWOS).

UNK: Unknown or undetermined (Insufficient information exists to categorize the occurrence.)

There were three (3) occurrences reported and categorised as unknown.

File Number(s)	Headline of Occurrence	Number of Occurrences	Occurrence Class
077	Flight problems	1	Incident
171	Paragliding activities	1	Incident
200	Drone operations	1	Incident

First occurrence reported (File No. 077) categorised as unknown was with the flight TDR2504 (A320) being returned to PRN due to technical problem. TDR2504 after departure returned to land due tech problem. No further information was provided.

Second occurrence reported (File No. 171) categorised as unknown was with paragliding activity without permission - At time 08:03, J3 Air called CAA via mobile phone and informed that they had a call from helicopter pilot at Peja city, informing them for paragliding activity without permission. Police was informed.

Third occurrence reported (File No. 200) categorised as unknown was the lost link with the drone - Around time 16:30 the pilot of REMIX34 called on radar PABX and informed that they lost link with the drone. Pilot confirmed that if they can't establish link with REMIX34 they will return to base at time 16:50 maintaining FL200. At time 16:51 RCF indicated on radar screen and REMIX34 started their turn inbound LONTA. Skopje ACC informed in a timely manner.

Other occurrences:

Other reported occurrences were categorized in other sub-categories including problems with work environment, aeronautical information services, TCAS RA, Coordination with Adjacent ATC Units and Fire Near ANSA Equipment on Mount Golesh. In total there are 12 occurrences, 9 of them classified as occurrence with no impact on safety, one as incident and two as serious incidents.

First occurrence classified as incident is linked with keyboard and loudspeaker that were out of service on Radar CWP at Tower Unit. Because the system is very old, finding spare parts is very difficult. These parts will be replaced when the new ATM System will be implemented.

Second incident (serious) is linked with separation loss. While on diverging tracks, the minimum horizontal separation went below the standard. For this OR, an investigation report has been

undergone by ANSP, and after having received this report and considered for the measures to be satisfactory, the occurrence has been closed.

Third incident (serious) is linked with activation of TCAS Resolution Advisory Warning Triggered between two aircraft. Due to severity of the incident the AAIIC was informed and subsequently started its investigation on the occurrence. However, CAAK has requested from ANSP to conduct its own internal investigation in order to identify weaknesses that contributed to the incident as per requirements derived from legislation in force. The preliminary report from ANSP was received by CAA on 04.03.2023. On 06 April 2023, CAAK received the final internal investigation report from ANSP. The report was accepted by the CAAK and concluded that the ANSP investigation report has generally addressed the case in comprehensive and in objective manner. On 27 April 2023, ANS Department in CAAK has finalised its own report with 8 recommendations that shall be implemented by ANSP, in order to prevent these occurrences happening again in the future.

Other reports were related to occurrences with no effect on safety.

April 2024

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