#### «ҚАЗАҚСТАННЫҢ АВИАЦИЯЛЫҚ ӘКІМШІЛІГІ» АКЦИОНЕРЛІК ҚОҒАМЫ

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# AVIATION ADMINISTRATION OF KAZAKHSTAN JOINT STOCK COMPANY

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#### БҰЙРЫҚ

ПРИКАЗ № 06/1198 1 Дч. 10. Дэдч

город Астана Республика Казахстан ORDER

Astana city Republic of Kazakhstan

# On approval of the Safety report of the Republic of Kazakhstan for 6 months 2024

In accordance with paragraph 47 of the Flight Safety Program in the field of civil aviation, approved by Decree of the Government of the Republic of Kazakhstan dated March 11, 2016, No. 136, **I ORDER**:

- 1. Approve the attached "Safety report of the Republic of Kazakhstan for 6 months 2024".
- 2. Senior Director of the Department of Safety Management, Quality, Strategy and Compliance:
- 1) Ensure the publication of the Safety report of the Republic of Kazakhstan for 6 months 2024 on the Internet resource of the JSC "Aviation Administration of Kazakhstan";
- 2) Communicate the Safety report of the Republic of Kazakhstan for 6 months 2024 to civil aviation organizations.
  - 3. I reserve control over the execution of this order.
  - 4. This order comes into force from the date of its signing.

Acting Director General

Zh. Abdugalimov



# SAFETY REPORT OF THE REPUBLIC OF KAZAKHSTAN FOR 6 MONTHS 2024



# Safety Report of the Republic of Kazakhstan for 6 months 2024

#### LIST OF CONTENTS

Date: October 2024

LIST	OF CONTENTS	2
ACR(	ONYMS	3
	ATISTICAL DATA ON SAFETY IN CIVIL AVIATION OF THE REPUBLIC OF	
KAZA	AKHSTAN	7
3. AN	ALYSIS OF SAFETY PERFORMANCE INDICATORS	8
3.1	Analysis of aviation accidents	8
3.1.1	Summary of aviation accidents for 6 months 2024	12
3.2.	Analysis of serious incidents and incidents	13
4. SA	FETY REPORTING SYSTEM ANALYSIS	15
5. RE	SULTS OF THE SAFETY OVERSIGHT PROGRAM	20
6. SAl	FA INSPECTIONS RESULTS	21
7. RE	GULATIONS IMPROVEMENT	22



# Safety Report of the Republic of Kazakhstan for 6 months 2024

#### **ACRONYMS**

Date: October 2024

AA	Aviation accident
AAK	Aviation Administration of Kazakhstan
ACFT	Aircraft
ADREP	ICAO ADREP Taxonomy
ADRM	Occurrences involving aerodrome design, service, or
	functionality issues
AI	Aviation incident
ATO	Approved training organization
ATC	Air Traffic Control
ATM	Air Traffic Management
BIRD	Occurrences involving collisions / near collisions with birds
CABIN	Miscellaneous occurrences in the passenger cabin of
	transport category aircraft
CFIT	Inflight collision or near collision with terrain, water, or
	obstacle without indication of loss of control
DG	Dangerous Goods
DMT	Design-manufacturing trouble
ENV	Environment
FUEL	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
F-NI	Fire or smoke in or on the aircraft, in flight or on the
	ground, which is not the result of impact
HF	Human Factor
LOC-I	Loss of aircraft control while or deviation from intended
	flightpath inflight
MAC	Airprox, ACAS alerts, loss of separation as well as near
	collisions or collisions between aircraft in flight
MTOW	Maximum certificated take-off weight
OTHR	Any occurrence not covered under another category
RAMP	Occurrences during (or as a result of) ground-handling
	operations
RE	Runway Excursion
RI	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
RK	Republic of Kazakhstan
SAFA	Safety Assessment of Foreign Aircraft
SCF-NP	Failure or malfunction of an aircraft system or component -



# Safety Report of the Republic of Kazakhstan for 6 months 2024

	other than the powerplant
SCF-PP	Failure or malfunction of an aircraft system or component -
	related to the powerplant
SEC	Criminal/Security acts which result in accidents or incidents
SMS	Safety Management System
UP	Unruly passenger



### Safety Report of the Republic of Kazakhstan for 6 months 2024

#### **Preamble**

Date: October 2024

This analysis has been compiled by the Safety Management, Quality, Strategy and Compliance Department of JSC "Aviation administration of Kazakhstan" (hereinafter - AAK) in accordance with the:

- The Law of the Republic of Kazakhstan No. 339-IV dated July 15, 2010 "On the use of air space of the Republic of Kazakhstan and aviation activities"
- Government Decree of the Republic of Kazakhstan No. 136 dated 11
   March 2016, "On the approval of the Safety Program in the field of civil aviation".
- Order of the Minister for Investment and Development of the Republic of Kazakhstan dated July 27, 2017, No. 505, "On approval of the Rules for the Submission of Data and Investigation of Aviation Accidents and Incidents in Civil and Experimental Aviation".
- Order of the Minister of Investment and Development of the Republic of Kazakhstan dated March 20, 2015, No. 307, "On Approval of the Rules for Organization of Flight Work in Civil Aviation of the Republic of Kazakhstan".

The analysis was carried out to assess the status and further improve the level of flight safety in the field of civil aviation of the Republic of Kazakhstan, as well as to implement the provisions of ICAO Annex 19 to the Convention on the International Civil Aviation Organization and ICAO Doc 9859 "Safety Management Manual".

### Safety Report of the Republic of Kazakhstan for 6 months 2024

#### 1. KAZAKHSTAN AVIATION SAFETY PLAN FOR 2024-2027

The KASP is developed in accordance with the International Civil Aviation Organization (ICAO) Global Aviation Safety Plan (GASP, Doc 10004), the EUR Regional Aviation Safety Plan 2023-2025 (EUR RASP), State Safety Program of Kazakhstan (Decree of the Government of the Republic of Kazakhstan dated March 11, 2016 No. 136) and Concepts for the development of transport and logistics potential of the Republic of Kazakhstan until 2030 (Decree of the Government of the Republic of Kazakhstan dated December 30, 2022 No. 1116).

Kazakhstan is committed to enhancing aviation safety and to the resourcing of supporting activities. The purpose of this Kazakhstan aviation safety plan (hereinafter - KASP) is to continually reduce fatalities, and the risk of fatalities, through the development and implementation of a national aviation safety strategy

In accordance with the Kazakhstan aviation Safety Plan 2024–2027, 5 categories of high-risk events in the civil aviation sector of the Republic of Kazakhstan were selected as the highest priority due to the high level of fatalities and risk of fatalities associated with such aviation occurrences. They were identified based on the analysis of the system of mandatory reports and investigation reports on aviation accidents and incidents. These categories include:

- 1) Loss of control in-flight (LOC-I)
- 2) Controlled flight into terrain (CFIT)
- 3) Mid-air collision (MAC)
- 4) Runway excursion (RE)
- 5) Runway incursion (RI)

Date: October 2024

More detailed information about the Kazakhstan Aviation Safety Plan for 2024-2027 can be found on the AAK website: <a href="mailto:caa.gov.kz/en/kazakhstan-aviation-safety-plan">caa.gov.kz/en/kazakhstan-aviation-safety-plan</a>



# 2. STATISTICAL DATA ON SAFETY IN CIVIL AVIATION OF THE REPUBLIC OF KAZAKHSTAN

In civil aviation, for 6 months of 2024, there was an increase in flights by 7% compared to the same period in 2023. (6M 2023-68 366, 6M 2024-73 533).

Types of operating / Flights	6M 2023	6M 2023
Commercial aviation	51 882	57 749
Aerial work	15 995	15 226
General aviation	489	558
Total flight hours	68 366	73 533

<b>General indicators</b>	6M 2023	6M 2023
Absolu	ite safety indicators	
Aviation accidents	2	3
Aviation incidents	29	41
Relati	ve safety indicators	
NAA	0.29	0.41
N <sub>AI</sub>	4.24	5.57

Table 2 COMMON INDICATORS per 10,000 flights

Commercial aviation	6M 2023	6M 2023
Absolute	e safety indicators	
Aviation accidents	0	0
Aviation incidents	23	38
Relative s	afety indicators	
N <sub>AA</sub>	0.00	0.00
Nai	4.43	6.58

Table 3 COMMERCIAL AVIATION. Safety indicators per 10,000 flights

Aerial work	6M 2023	6M 2023						
Absolute safety indicators								
Aviation accidents	2	3						
Aviation incidents	6	3						
Relative s	afety indicators							
NAA	1.25	1.97						
N <sub>AI</sub>	3.75	1.97						

Table 4 AVIATION WORKS. Safety indicators per 10,000 flights

As can be seen from the information provided, the relative safety indicators for aviation accidents (hereinafter - AA) for operators performing aviation work are

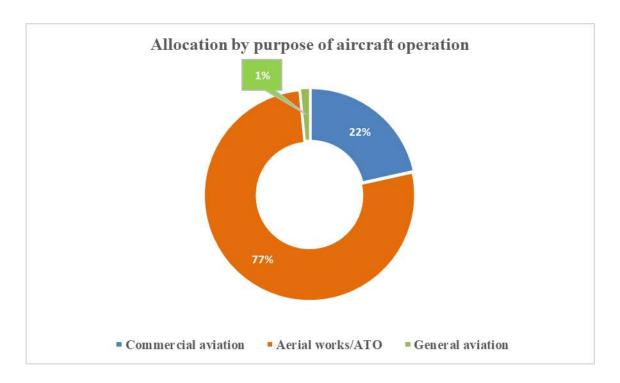


higher than for commercial aviation operators. Such statistics indicate an insufficient level of preventive work on the part of the management and personnel of operators performing aviation work, i.e. a low level of work to identify dangerous factors. Thus, actions aimed at preventing and preventing dangerous factors from such operators require closer attention when exercising supervision and control by the inspecting aviation inspector of JSC Aviation Administration of Kazakhstan (hereinafter - AAK).

#### 3. ANALYSIS OF SAFETY PERFORMANCE INDICATORS

#### 3.1 Analysis of aviation accidents

Over 12.5 years, 65 aviation accidents have occurred in the Republic of Kazakhstan, 25 of them with fatal accidents, in which 86 fatalities and 40 without fatal accidents.



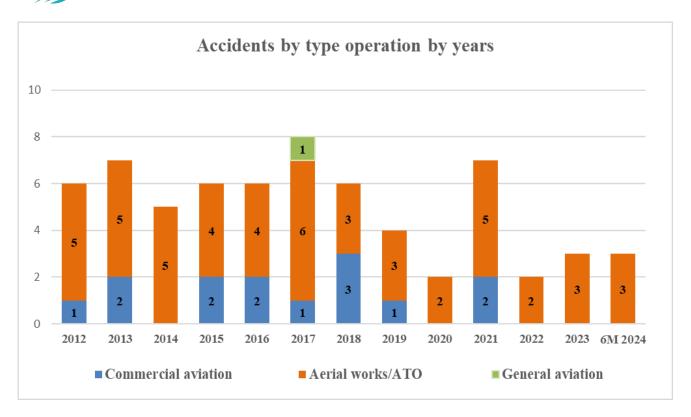
#### AA by type of **activity**:

Date: October 2024

- Commercial aviation operators accounted for 22% (14 AA) of the total number of accidents.
- Operators performing aerial works, including aviation training centres
   77% (50 AA) of the total number of accidents.
  - General aviation -1% (1 AA) of the total number of accidents.



## Safety Report of the Republic of Kazakhstan for 6 months 2024

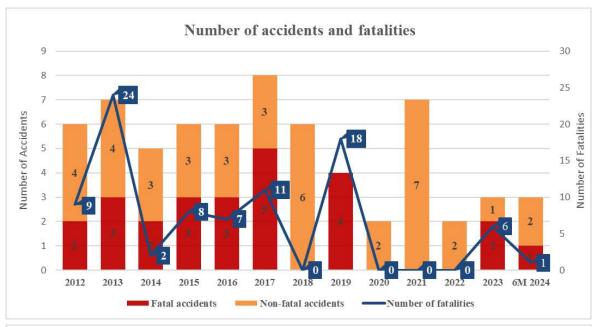


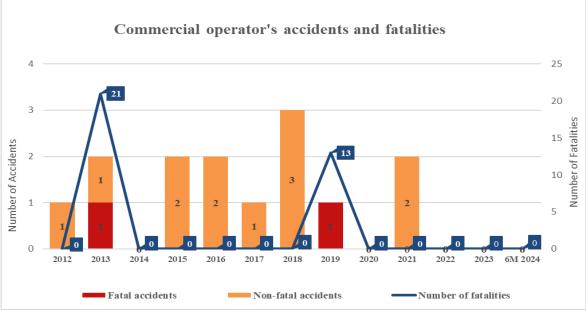
According to the information provided of the Department for the Investigation of accidents and incidents in transport of the Ministry of transport of the Republic of Kazakhstan, materials and flight safety analyses of operators and civil aviation organizations of the Republic of Kazakhstan for 6 months 2024 were 3 AAs occurred on the territory of the Republic of Kazakhstan - with 1 fatal accident and 41 AIs.

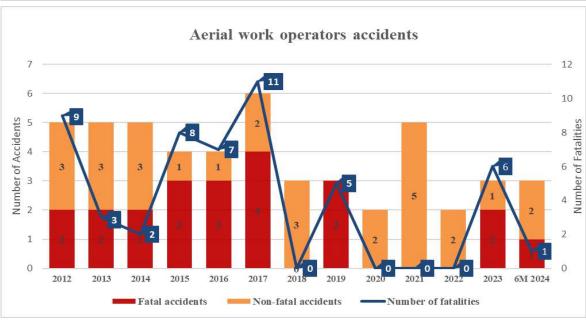
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	6M 2024
Fatal accidents	2	3	2	3	3	5	0	4	0	0	0	2	1
Non-fatal accidents	4	4	3	3	3	3	6	0	2	7	2	1	2
Total	6	7	5	6	6	8	6	4	2	7	2	3	3
Number of deaths	9	24	2	8	7	11	0	18	0	0	0	6	1

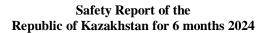


## Safety Report of the Republic of Kazakhstan for 6 months 2024



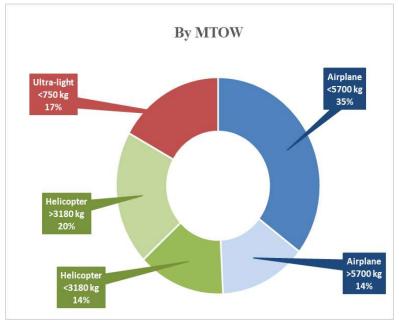


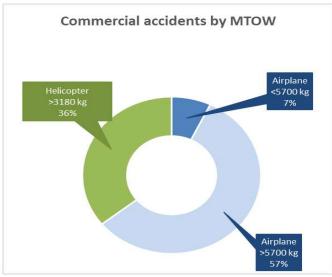




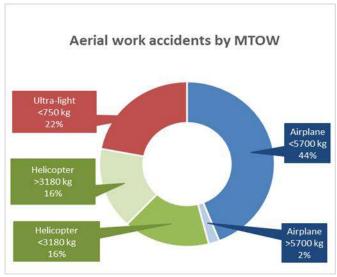


The statistics for the AA are presented below, depending on the maximum certificated take-off weight of the aircraft and the types of work performed.





Date: October 2024



Thus, a greater number of AA occurred with operators performing aerial work, including aviation training centers (flight schools). In this regard, civil Aviation entities of the Republic of Kazakhstan performing aerial work need to pay increased attention to identifying hazards and maintaining risks at an acceptable level, it is recommended to take proactive measures and analyze the effectiveness of the measures taken. Aircraft operators performing aerial work are recommended to implement SMS in order to improve flight safety. Aviation inspectors of the AAK, when supervising and controlling operators performing aerial work, pay close attention to activities aimed at improving flight safety and preventing accidents in the future.





#### 3.1.1 Summary of aviation accidents for 6 months 2024

- 1. **03.05.2024** The An-2 aircraft of "Navigator" LLP, when performing a medical flight after takeoff, carried out pitching-up (a sharp decrease in altitude) and moved onto a reservoir (meltwater). There were 2 crew members and 3 service passengers on board the aircraft.
- 2. **21.06.2024** The An-2 aircraft of "SAMGAU AGRO" LLP made a hard landing near the village of Madeniyet in the Zhalagash district of the Kyzylorda region. There are no casualties.
- 3. **22.06.2024** The aircraft hand glider of "SAMGAU AGRO" LLP crashed in the Mugalzharsky district near the village of Zharyk while performing aviation and chemical work. The pilot perished.



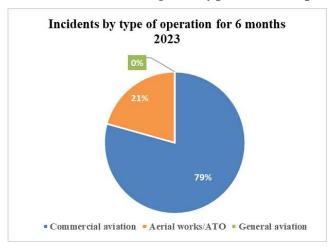
#### 3.2. Analysis of serious incidents and incidents

The total number of serious incidents and incidents in 6 months of 2024 amounted to 41 (2 of them serious incidents). Compared to the same period in 2023, the number increased by 29% (the total number is 29, of which 2 are serious incidents).

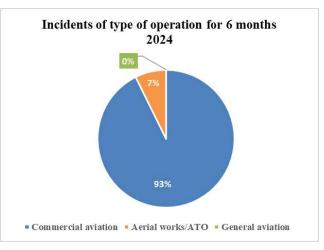
Distribution of aviation incidents in CA RK by causes:

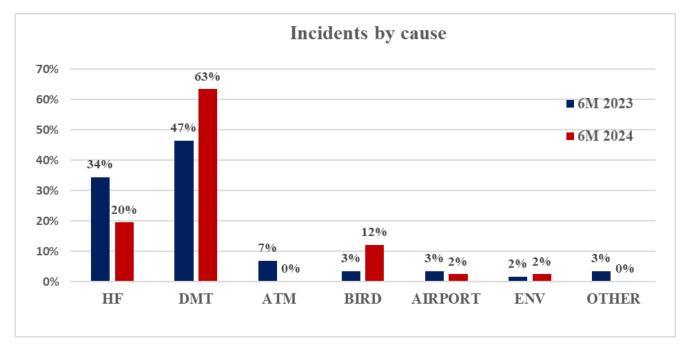
Period	Total	Causes								
		HF	DMT	ATM	Bird	Environment	Other			
6M 2023	29	10	13.5	2	1	1	0.5	1		
6M 2024	41	8	26	0	5	1	1	0		

The percentage of incidents in 6 months of 2024, compared to the same period in 2023, considering the type of work performed:



Date: October 2024





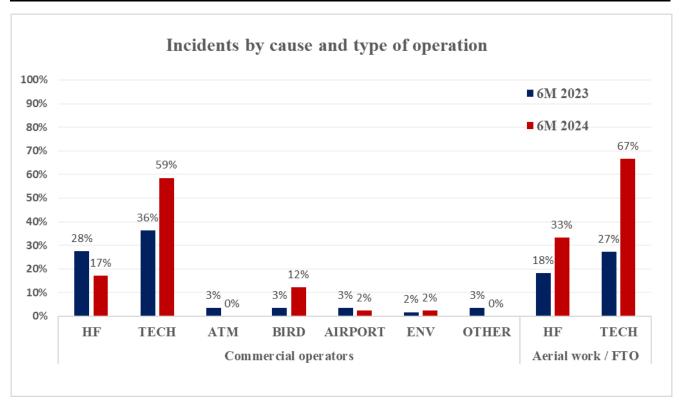
From the graph above, it can be seen that the largest number of incidents in 2023 occurred due to technical factors, due to the influence of the human factor and due to collisions of aircraft with birds, which led to damage to the ACFT.



## Safety Report of the Republic of Kazakhstan for 6 months 2024

#### Distribution of AIs by type of work performed:

Period	Commercial aviation	Aerial works / ATO	General aviation
6M 2023	23	6	0
6M 2024	38	3	0

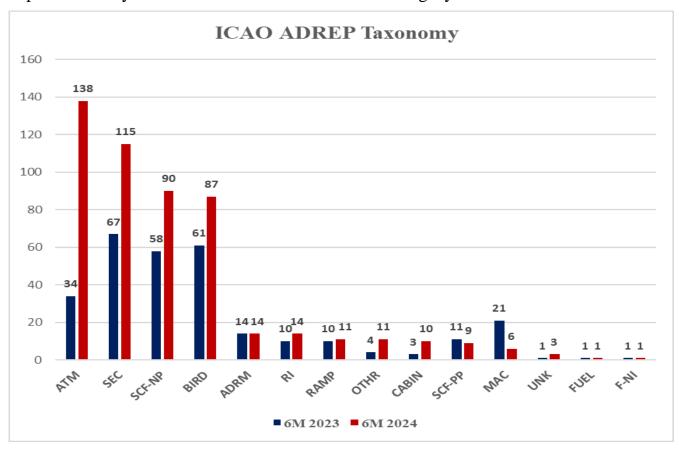




#### 4. SAFETY REPORTING SYSTEM ANALYSIS

For 6 months 2024, the AAK's Operation Center received and registered in the Access Database **510** messages on aviation occurrences. The messages were received from organization of civil aviation according to the notification scheme through SMS alerts, incoming telegrams via the Operation Center AFTN channel, messages from civil aviation organizations and messages from AAK departments. Compared to the same period in 2023, **306** aviation occurrence reports were registered and entered the AAK's database.

The Operation Center registers report on aviation events, assigns them a category in accordance with the ICAO ADREP taxonomy and sends information about the event to the Director of the relevant AAK department or a specialized expert for analysis and determination of the risk category.



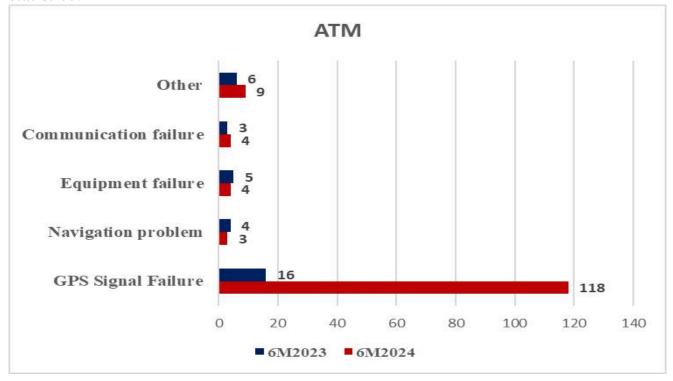
The following categories are selected for further analysis:

- **ATM** Occurrences involving Air traffic management or communications, navigation, or surveillance service issues.
- **SEC** Criminal acts, actions in the field of aviation security that lead to accidents or incidents.
- **SCF-NP** Failure or malfunction of an aircraft system or component other than the powerplant.
  - **BIRD** Occurrences involving collisions / near collisions with birds.

Date: October 2024

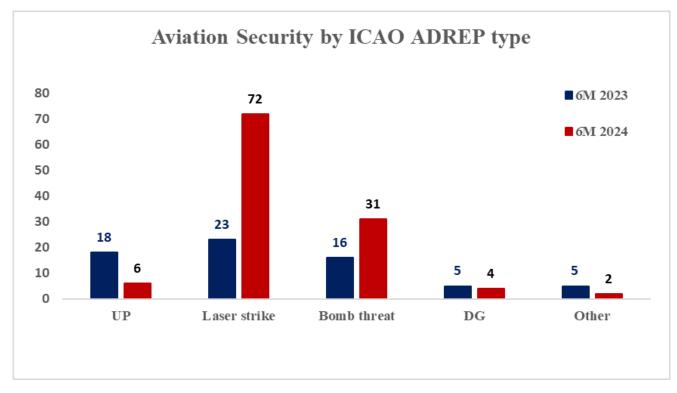


Analysis of the events included in the **ATM** category showed the following statistics:



To mitigate the consequences of GPS/GNSS failures, the Aviation Administration of Kazakhstan issued information on flight safety GNSS 2024-0001 dated 07/05/2024, which was sent to operators and ATM/ANO organizations.

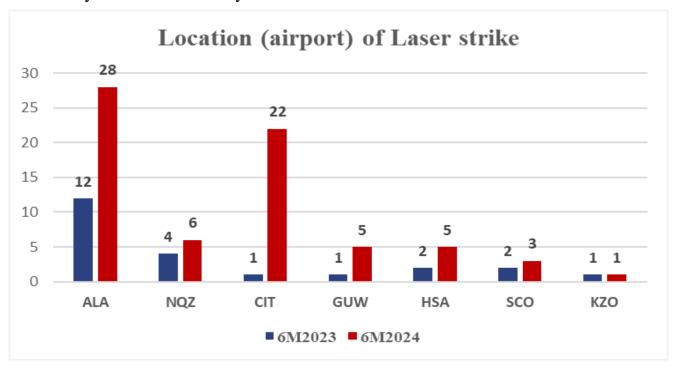
Analysis of the events included in the **SEC** category showed the following statistics:



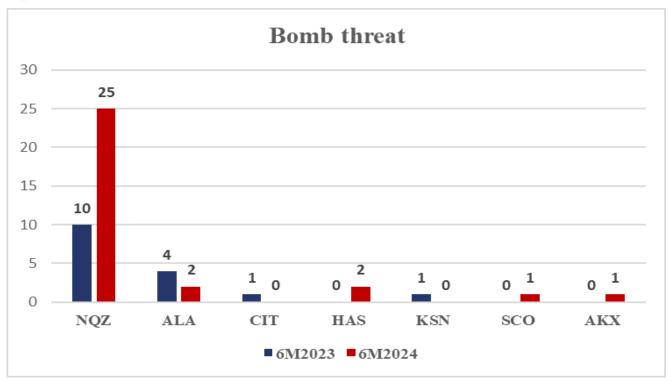


The number of reports related laser strike in relation to aircraft has increased. A total of **72** messages were received, which is more than three times more than in the same period of 2023.

Additionally, information on the location (airport) where laser attacks were most likely to occur was analysed:

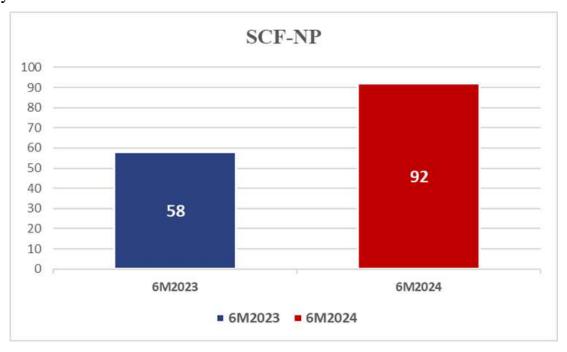


Information about the location (airport) was additionally analyzed, where reports of an bomb threat were most often received.



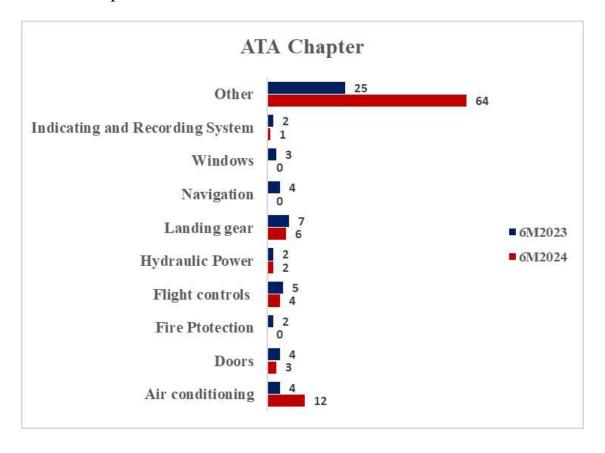


The next category that was analysed is related to the messages of the SCF-NP category.



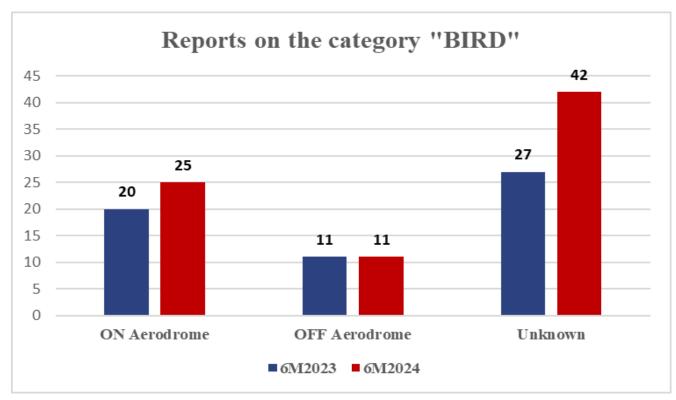
According to the above statistics, for 6 months of 2024, the number of reports of failure or malfunction of an aircraft system or component - other than the powerplant (SCF-NP) amounted to **92** messages.

The events included in the SCF-NP category were analysed in accordance with the ATA chapters.

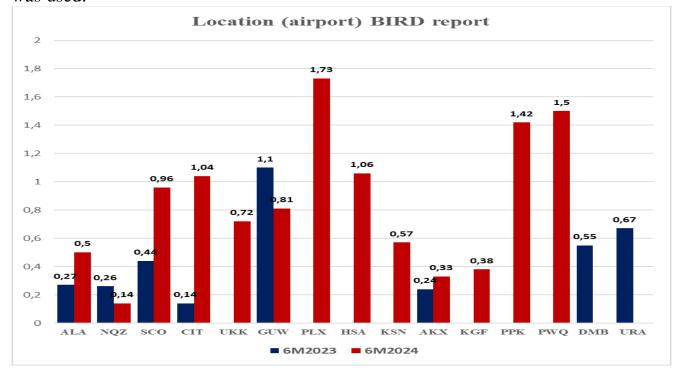




The next category that was analyzed is related to the **BIRD** category. This category was divided into three groups depending on the location of the collision: at the airfield, outside the airfield and unknown. In 6 months of 2024, **87** reports were received on birds, including **9** reports of collisions with birds outside the Republic of Kazakhstan:



The information was also analysed depending on the airport where the collision occurred, and the coefficients for airports are shown below. When calculating the coefficients, the ratio of bird reports per 1000 take-offs and landings was used.





#### 5. RESULTS OF THE SAFETY OVERSIGHT PROGRAM

In 6 months of 2024, in order to improve flight safety and risk assessment, the AAK inspected the entities of the industry of the RK following the Safety Oversight Program for 2024.

Inspections carried out (inspections/certifications)	6M 2024
Flight operation	77
Airworthiness	251
Air navigation	15
Medical Services	32
Aerodromes and ground handling services	44
Licensing	20
Aviation security	37
Unmanned aircraft systems	1
Total	477

Licenses/certificates issued	6M 2024
Flight operation	8
Certificate of Airworthiness (C of A)	92
Certificate of the State registration of civil aircraft (C of R)	68
Certificate of Aircraft Maintenance Organization (AMO)	14
Air Navigation	1
Medical Services	0
Aerodromes and ground handling services	7
Certification of approved aviation training organization	7
Issuance of certificates of aviation personnel	148
Aviation security	2
Unmanned aircraft systems (issued certificates of remote pilots/UAS operators)	157
Unmanned aircraft systems related permits (issued permits)	56
Total	560



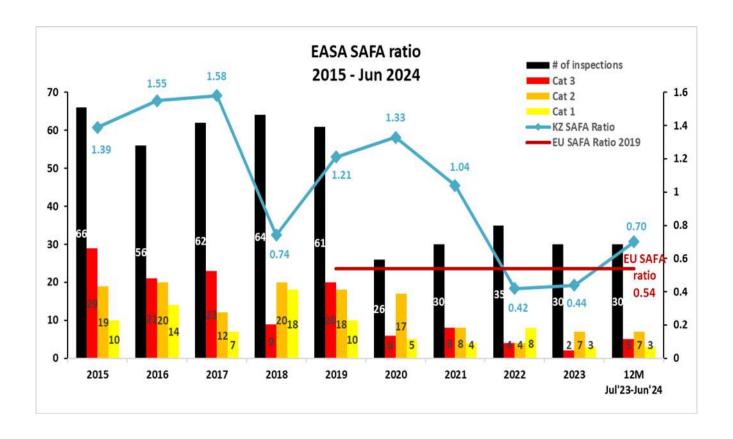
#### 6. SAFA INSPECTIONS RESULTS

In 6 months 2024, the Kazakhstani ACFT passed 12 SAFA inspections (Safety Assessment of Foreign Aircraft), verified by members of the EASA.

- 4 Kazakhstani airlines were checked, as a result, it was revealed:
- 3 discrepancies of category 3;
- 4 discrepancies of category 2;
- 1 discrepancies of category 1.

The comments received were answered with the application of evidence-based information on their elimination and prevention of recurrence in the future.

To check the flight safety status of the aircraft fleet, the SAFA inspection program has developed a safety factor. The value of this coefficient for the results of 12 months (July 1, 2023 – June 30, 2024) for the Kazakhstani ACFT was 0.70.





### Safety Report of the Republic of Kazakhstan for 6 months 2024

#### 7. REGULATIONS IMPROVEMENT

AAK in accordance with subparagraph 3) Paragraph 2 of Article 16-9 of the Law "On the Use of the Airspace of the Republic of Kazakhstan and Aviation Activities" dated July 15, 2010, No. 339-IV, work is underway on an ongoing basis to develop draft regulations in the field of civil aviation.

By Order of the General Director of the AAK dated January 9, 2024, No. -06/152, the Plan for the Development of draft subordinate regulations in JSC Aviation Administration of Kazakhstan for 2024 (hereinafter referred to as the Plan) was approved. The Plan includes 43 draft subordinate legislation in the field of civil aviation, of which 24 draft subordinate legislation was developed and sent to the Civil Aviation Committee in 6 months of this year, and 3 draft subordinate legislation was sent unscheduled. The projects were developed to bring the aviation legislation of the Republic of Kazakhstan into line with international standards and recommended practices of ICAO

The AAJI has also prepared and sent proposals to the Ministry of Transport of the Republic of Kazakhstan to the Regulatory Policy Advisory Document of the draft Law of the Republic of Kazakhstan "On Amendments and Additions to Certain Legislative Acts of the Republic of Kazakhstan on reforming the transport sector" regarding amendments to the Law of the Republic of Kazakhstan "On the Use of the Airspace of the Republic of Kazakhstan and Aviation Activities".