



AERODROME SAFETY REPORT 2024



Pokhara International Airport
Civil Aviation Office
Pokhara, Kaski



Publication

©2024, Pokhara International Airport Civil Aviation Office

April 2025

Pokhara International Airport Civil Aviation Office

Pokhara, Kaski, Nepal

Tel.: +977- 061-597018

Website: <https://pia.caanepal.gov.np>

NOTE:

Any comments and suggestions regarding the report should be directed to:

Aerodrome Safety Office

Pokhara International Airport Civil Aviation Office

Phone: +977 061597036

Email: aerodromesafety.pia@caanepal.gov.np

FOREWORD

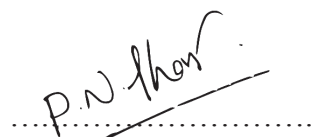
The primary objective of the establishment of the Civil Aviation Authority of Nepal (CAAN) is to ensure that the operation of national and international flights, air communication, air navigation, and air transportation services is safe, regular, standardized, and efficient. Accordingly, the Pokhara International Airport Civil Aviation Office (PIACAO) has been certified under Rule 4 of the Airport Certificate Regulation (ACR)-2004 (First Amendment 2016) and Paragraph 1.4 of the Civil Aviation Requirements (CAR)-14, Aerodrome Design and Operations, from January 1st, 2023, to the present.

PIACAO is publishing the Aerodrome Safety Report (ASR) as part of the safety communication initiative under the Safety Promotion component of the PIACAO Safety Management System (SMS) Manual, in support of its safety objectives. This ASR is an effort to promote safety through the sharing of the aerodrome operator's safety information. It also reflects PIACAO's strong commitment to safety promotion and enhancement.

This 2024 Safety Report is the first edition of the Aerodrome Safety Report, marking the beginning of an annual publication starting this year. It provides a summary of aerodrome safety activities, initiatives, and updates on safety indicators, including both reactive and proactive safety information, as well as safety promotional activities. The report is based on aerodrome safety data—both mandatory and voluntary—collected by the PIA Aerodrome Safety Office from internal safety reporting, the Airside Management Section, Civil Engineering Section, Electro-Mechanical Section, ATS Section, aircraft operators, and other stakeholders within PIACAO. It also illustrates the implementation status of the PIACAO SMS.

I would like to express my gratitude to the Aerodrome Safety Office team at PIACAO for his initiative and dedicated efforts in publishing this safety report.

I hope this report will effectively fulfill the purpose of its publication and play a significant role in fostering a strong safety culture among aviation stakeholders at PIACAO.



Mr. Prem Nath Thakur
General Manager

TABLE OF CONTENTS

	EXECUTIVE SUMMARY	1
Chapter- One	Airlines in Operations	2
Chapter- Two	Air Traffic Movement	3
Chapter- Three	Taxonomy of Hazard/Occurrence Category	4
Chapter- Four	Hazard and occurrences categories, Current Risk and Future Risk	7
Chapter- Five	Month wise analysis	11
Chapter- Six	Safety Performance Indicators (SPIs) and Safety Performance Target (SPTs) for 2025	19
Chapter- Seven	Photo Gallery	20



EXECUTIVE SUMMARY

The Pokhara International Airport Civil Aviation Office (PIACAO) is located in a mountainous region at an altitude of 803.89 meters above mean sea level, in the Pokhara Valley—approximately 200 kilometers west from Nepal’s capital city, Kathmandu. The airport is situated at the center of Pokhara Metropolitan City, the capital of Gandaki Province. Pokhara is one of Nepal’s most popular tourist destinations and capital of tourist.

It is the second busiest airport in Nepal, with a total of 16,670 domestic and international flights recorded in the year 2024.

All results and trends presented in this report should be interpreted with consideration of the aforementioned geographic and operational context. Hazard and occurrence reporting is one of the primary sources of safety information. Based on such reporting, PIACAO identified twelve categories of occurrences and two categories of hazards in the year 2024. Safety performance indicators and targets for 2025 have been set accordingly.

A total of 55 occurrences were reported as incidents/accidents. Additionally, 69 aborted takeoffs and go-arounds were reported, categorized under the recovery barrier of occurrences (BIRD). Furthermore, 893 hazards were recorded in the office database.

By analyzing the types and severities of these hazards and occurrences, the top seven significant risks identified for 2024 are: ADRM, BIRD, SCF-NI, WSTRW, TURB, FUEL, and F-NI. Based on hazard reporting trends, two additional occurrence categories—RAMP and WILD—will be included in the current risk profile for 2025.

Continuous efforts have led to gradual improvements in the safety reporting culture, including an increase in voluntary reporting of hazards, occurrences, and incidents. These improvements are the result of various initiatives conducted by different sections and the Aerodrome Safety Office. Moreover, regular inspections, as well as scheduled and follow-up safety meetings, are being held in coordination with relevant units and stakeholders.

Airlines in Operations

Total two airlines are operating international flights from PIACAO including Nepalese and foreign registered airline companies. And, 3 airline companies are operating as domestic operations in PIACAO. Below is the list of both categories of airline company currently operating in PIACAO.

International- 2

Himalaya Airlines
Sichuan Airlines

Domestic- 3

Buddha Air
Shree Airlines
Yeti Airlines



Air Traffic Movement

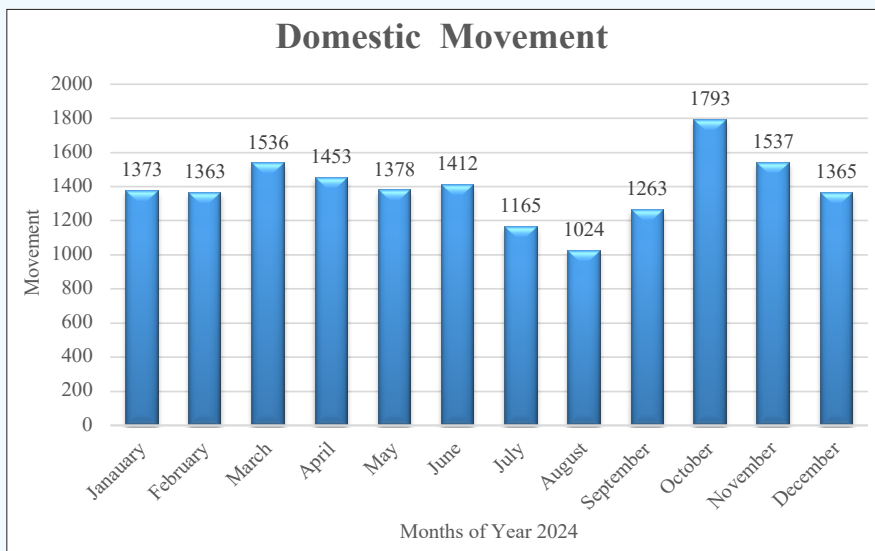
International

In this category, the total air traffic movement at PIACAO was only 8 in the year 2024. The low figure is primarily due to the airport being newly constructed and the fact that scheduled flights had not yet been approved during that year.



Domestic

On the domestic side, the total air traffic movements recorded over the 12 months of 2024 amounted to 16,662. As shown in the chart below, October recorded the highest number of air traffic movements, while August had the lowest.



Taxonomy of Hazard/Occurrence Category

Taxonomy of Occurrence Category

The occurrences (i.e. incidents, serious incidents, accidents and others) occurred in PIACAO in 2024 are classified in accordance with Commercial Aviation Safety Team (CAST)/ICAO Common Taxonomy Team.

Following tables shows the taxonomy, Occurrence Categories with its description for better understanding of data analysis of the year 2024.

S.N.	Taxonomy	Occurrences Category	Description
1	ADRM	Aerodrome	Occurrences involving aerodrome design, service, or functionality
2	ARC	Abnormal runway contact	Any landing or take-off involving and abnormal runway or landing surface contact
3	ATM	ATM/CNS	Occurrences involving Air traffic management (ATM) or communications, navigation, or surveillance (CNS) service issues.
4	BIRD	Bird Strike	Occurrences involving collision/near collisions with birds
5	CABIN	Cabin safety events	Miscellaneous occurrences in the passenger cabin of transport category aircraft.
6	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
7	FUEL	Fuel related	One or more power plants experienced reduced or no power output due to fuel exhaustion, fuel starvation/ mismanagement, fuel contamination/ wrong fuel, or carburetor and/or induction icing

S.N.	Taxonomy	Occurrences Category	Description
8	NAV	Navigation error	Occurrences involving the incorrect navigation of aircraft on the ground or in the air
9	RAMP	Ground Handling	Occurrences during ground handling operations
10	RI	Runway incursion	Any occurrences 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 takeoff of aircraft
11	SCF-NP	System/ component failure or malfunction (non- power plant)	Failure or malfunction of aircraft system or component other than the power plant
12	SCF-PP	System/ component failure or malfunction (power plant)	Failure or malfunction of aircraft system or component related to power plant
13	TURB	Turbulence	Inflight turbulence encounter
14	WSTRW	Wind shear or thunder-storm	Flight into wind shear or thunderstorm
15	OTHR	other	Any occurrence not covered under another category

Taxonomy of Hazard Category

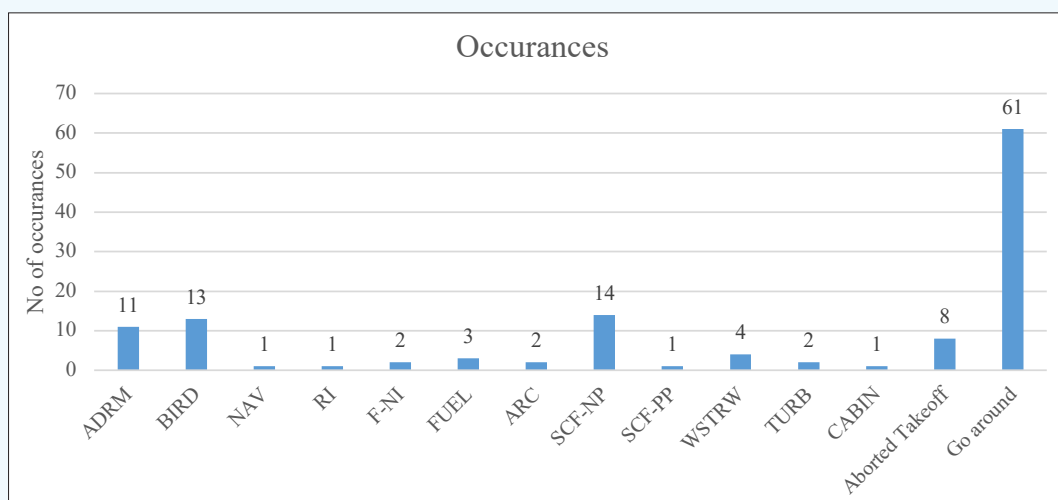
PIACAO has adopted Hazard Taxonomy which are taken from Safety management International Collaboration Group (SM ICG). The aerodrome safety office had been reported major two categories of hazards i.e. Environment and Technical in the year 2024.

Type of hazard	Type of activity/ infrastructure/ system	Examples of Hazards
Environment	Weather	Thunderstorms and lightning
		Heavy rain
		Fog (reduced visibility)
		Wind shear
		Excessive or cross winds
	Wildlife	Wildlife on airfield (Animal)
		Flying wildlife (Bird)
Technical	Airfield Apron Operation Airfield Apron Operation	Improper fuel or hazardous material spill containment and cleanup
		Lack of, or improper foreign object debris (FOD) control
		Lack of, limited or incorrect type of aircraft parking
	Airside Vehicle Operations	Improper parking
		Erratic driving or not complying with flight line driving regulations
		Poor radio or communication equipment condition
	Facilities	Faulty electrical power supply systems on airport or navigational aids (radars, satellites, very high frequency (VHF) omni-directional radio range (VOR), Automatic Dependent Surveillance - Broadcast (ADS-B), etc.)
		Faulty, incorrect or incomplete airfield markings/lighting (especially in movement areas)
		Issues that attract wildlife (high grass, proximity of landfills, nearby water bodies)
		Insufficient equipment, radios, infrastructure, or personnel
		Poor condition or inappropriate movement surface

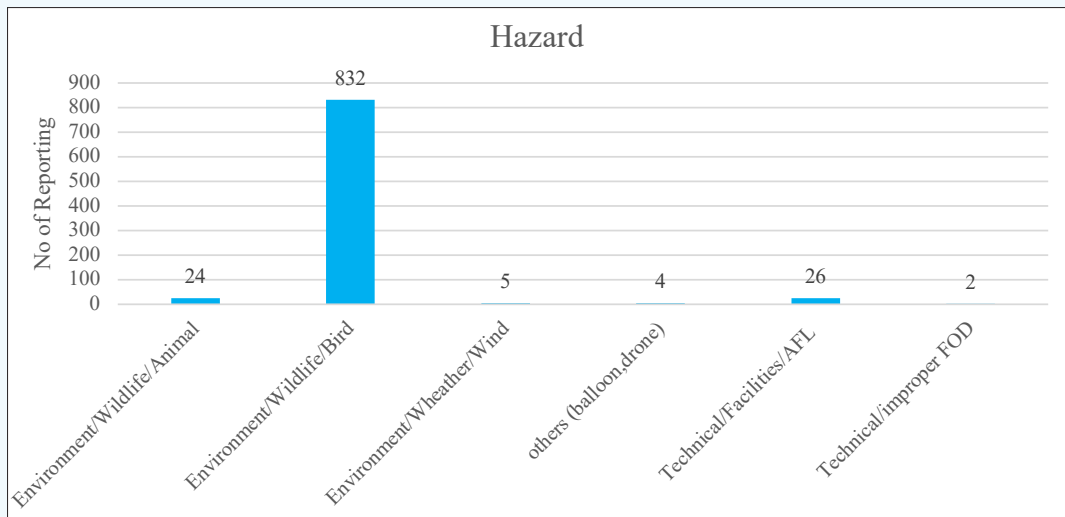
Hazard and occurrences categories, Current Risk and Future Risk

PIACAO identified twelve categories of occurrences reported in 2024. A total of 55 occurrences were collected, as documented in the incident/accident reports. Aborted takeoffs and go-arounds were also reported to the office and are categorized under the recovery barrier of occurrences (BIRD). The details of these occurrences are illustrated in the figure below.

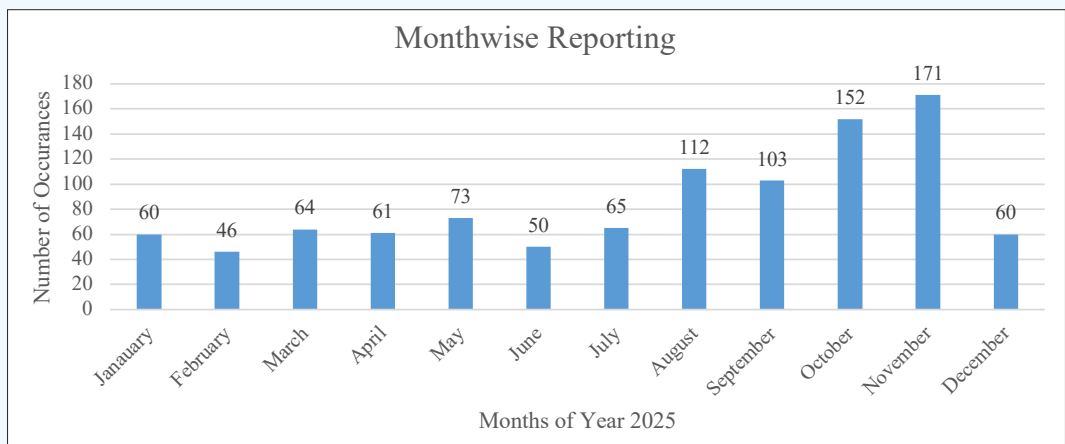
The PIA Aerodrome Safety Office received occurrence information through the internal reporting system, as well as from aircraft operators and other stakeholders within PIACAO. Internal reports were primarily submitted by the ATS Section, Airside Management Section, Electro-Mechanical Section, Civil Engineering Section, Rescue and Fire-Fighting Section, and other related stakeholders.



PIACAO has identified two categories of hazard reported in 2024. PIACAO has collected 893 report of hazard in the year 2024. The Major hazard were 832 from Environment/wildlife/bird and 26 from technical/facilities/AFL. The lowest one is two from Technical/improper FOD.



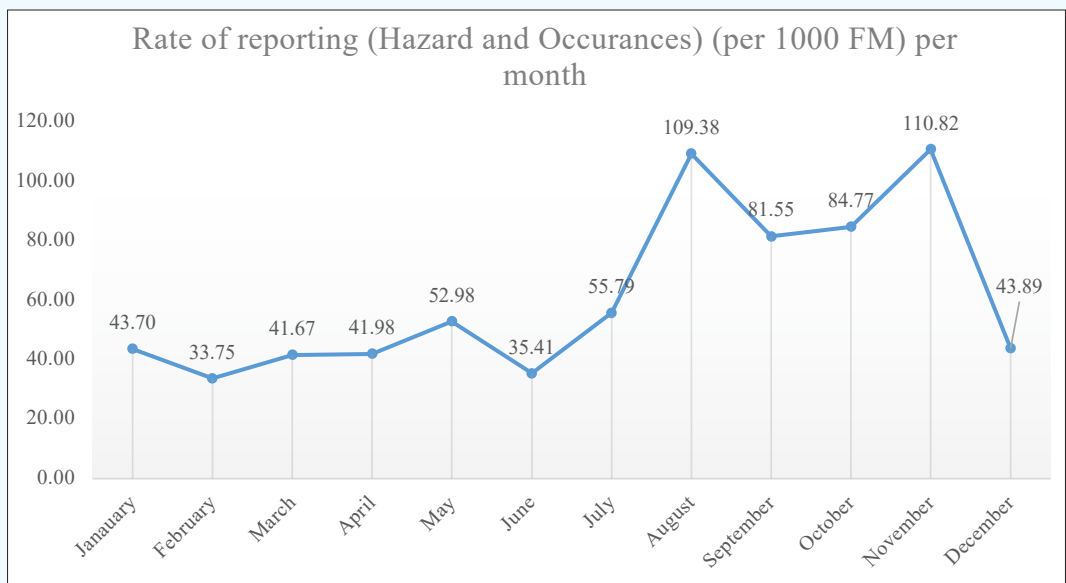
Followings are month wise reporting of hazard and occurrence. The chart below reveals that November has highest number of reporting and February has lowest number of reporting.



Followings are total flight movements of PIACAO in the year 2024.

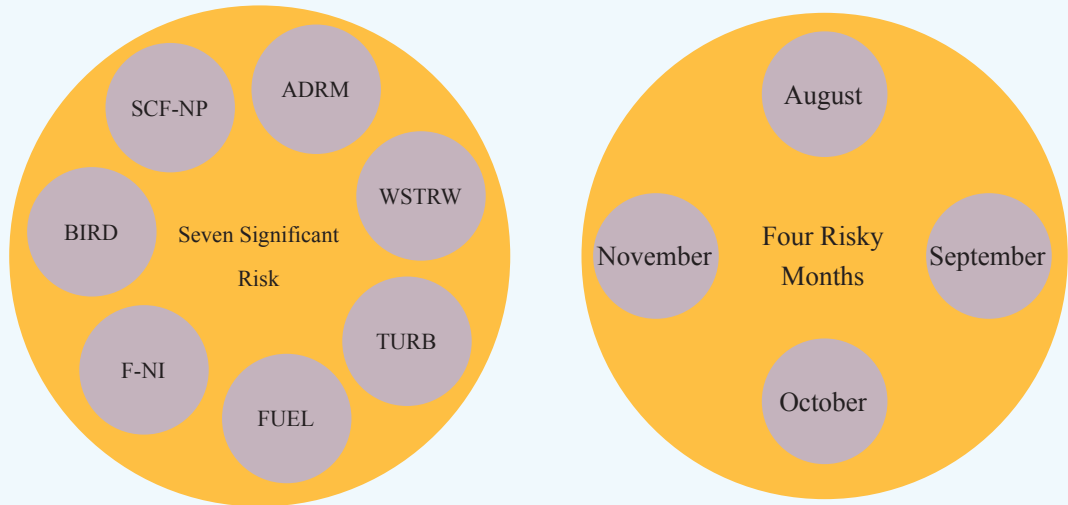


Following chart depicts rate of hazard and occurrences reporting per 1000 flight movement (FM) per month.



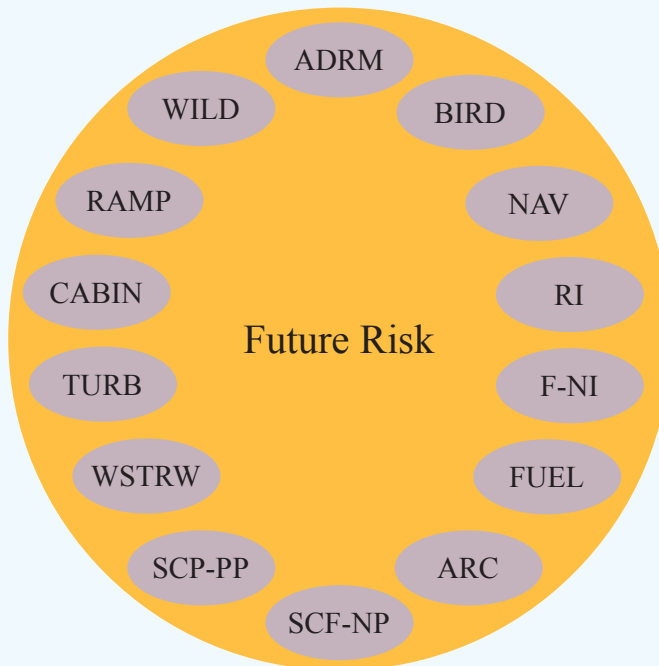
Current Risk

Considering the occurrences reported in 2024, PIACAO has identified top seven Significant risks and top 4 risky months.



Future Risk

Considering the hazards reported in 2024, PIACAO has identified two Significant safety risks added in current risk for the future. i.e RAMP, WILD

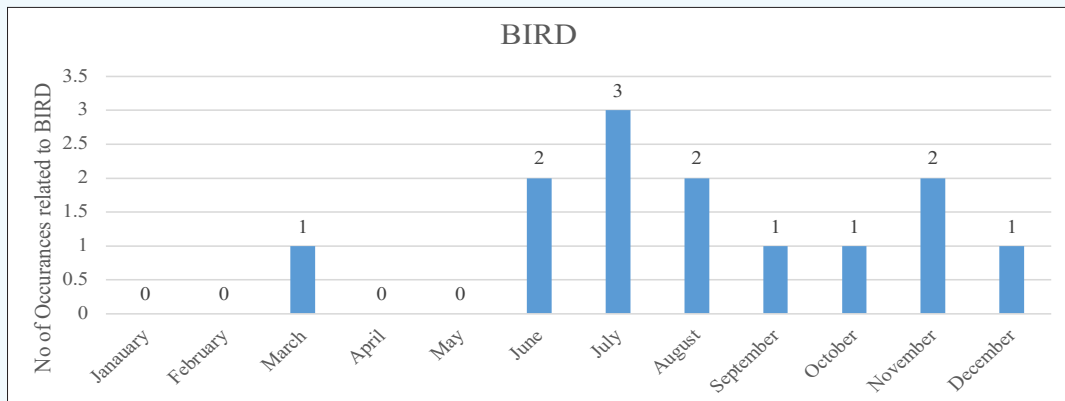


Month wise analysis

1. Occurrences

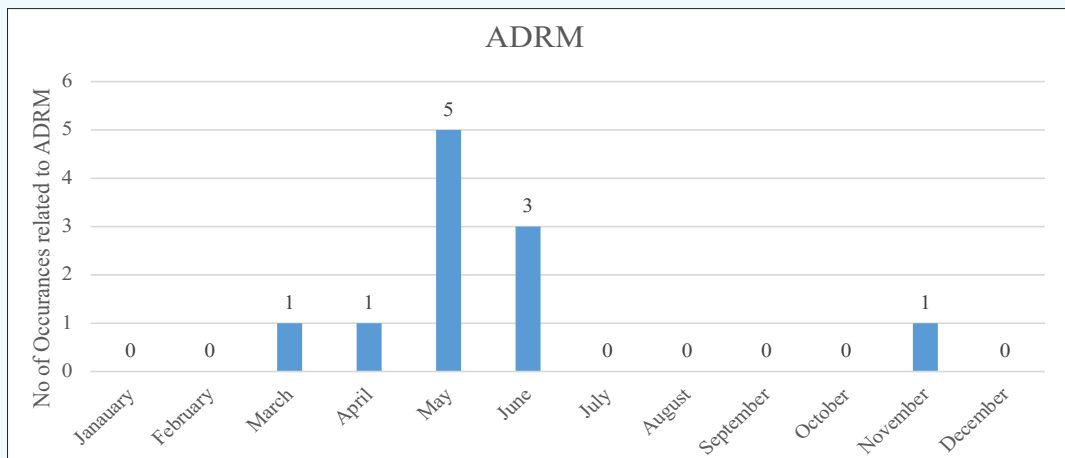
BIRD

PIACAO has collected the log of bird strike which were stroke at aircraft movement area; approach, landing and take - off paths of an aircraft. The data related to BIRD have been presented in the following chart. This chart indicates that the month of July is having highest number of bird activities.



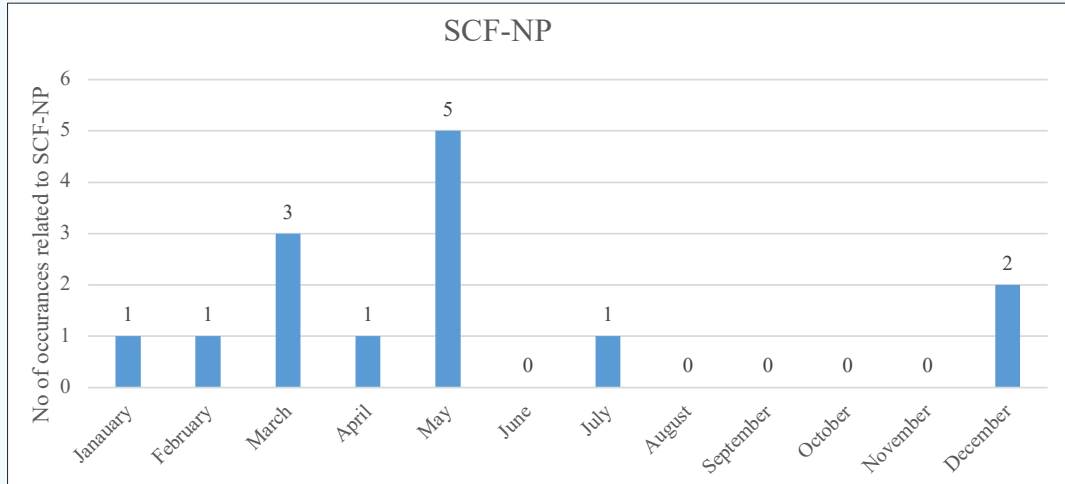
ADRM

PIACAO has collected the log of occurrences related to ADRM presented in the following chart. This chart indicates that the month of May has occurred highest number of occurrences related to ADRM.



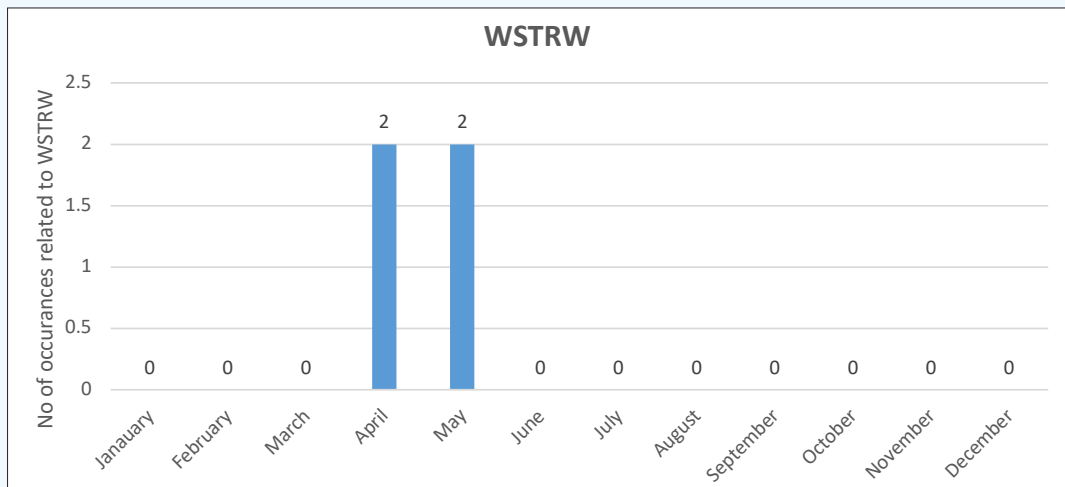
SCF-NP

PIACAO has collected the log of occurrences related to SCF-NP presented in the following chart. This chart indicates that the month of May has occurred highest number of occurrences related to SCF-NP.



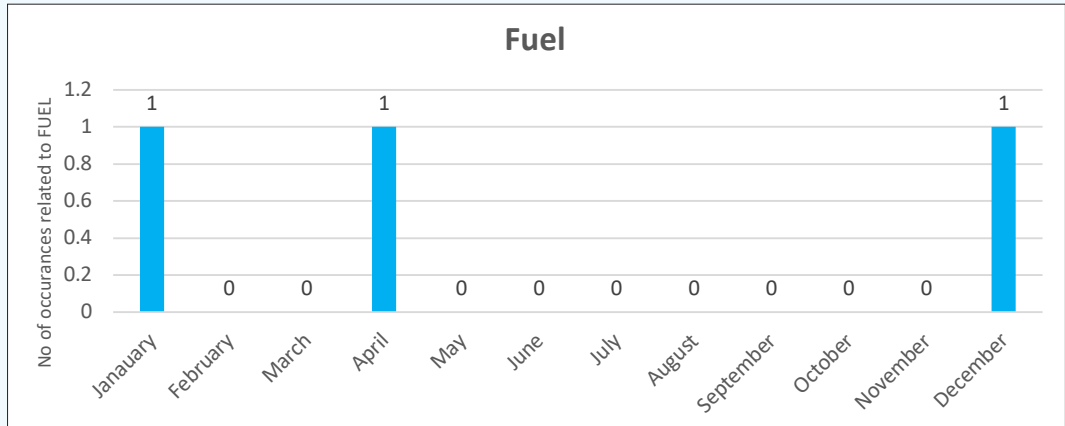
WSTRW

PIACAO has collected the log of occurrences related to WSTRW presented in the following chart. This chart indicates that the month of April & May has occurrences related to SCF-NP.



FUEL

PIACAO has collected the log of occurrences related to FUEL presented in the following chart. This chart indicates that the month of January & April has occurrences related to FUEL.



NAV

PIACAO has recorded one occurrence related to NAV at May of the year 2024.

RI

PIACAO has recorded one occurrence related to RI at May of the year 2024.

F-NI

PIACAO has recorded two occurrences related to F-NI at January and March of the year 2024.

ARC

PIACAO has recorded two occurrences related to F-ARC at September and October of the year 2024.

CABIN

PIACAO has recorded only one occurrence related to CABIN at March of the year 2024.

SCF-PP

PIACAO has recorded only one occurrence related to SCF-PP at September of the year 2024.

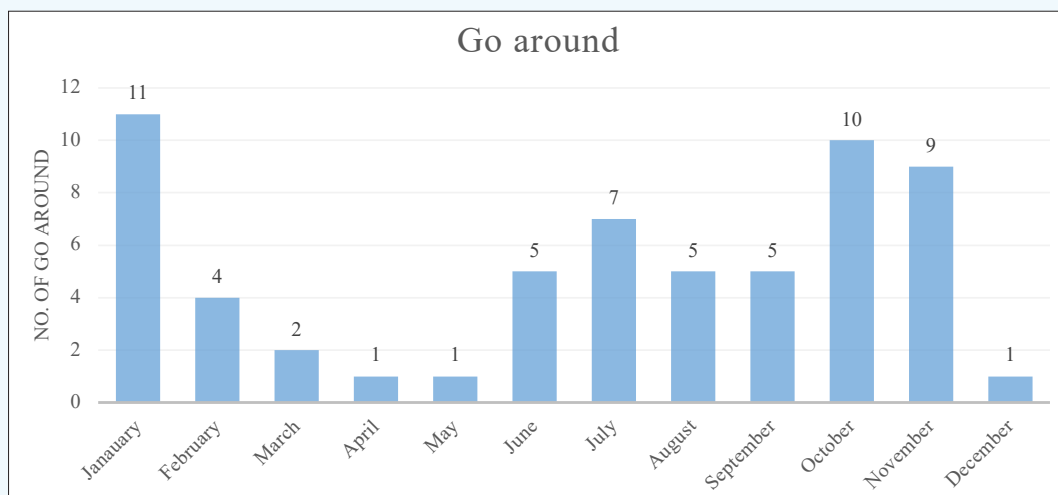
TURB

PIACAO has recorded two occurrences related to TURN at March and June of the year 2024.

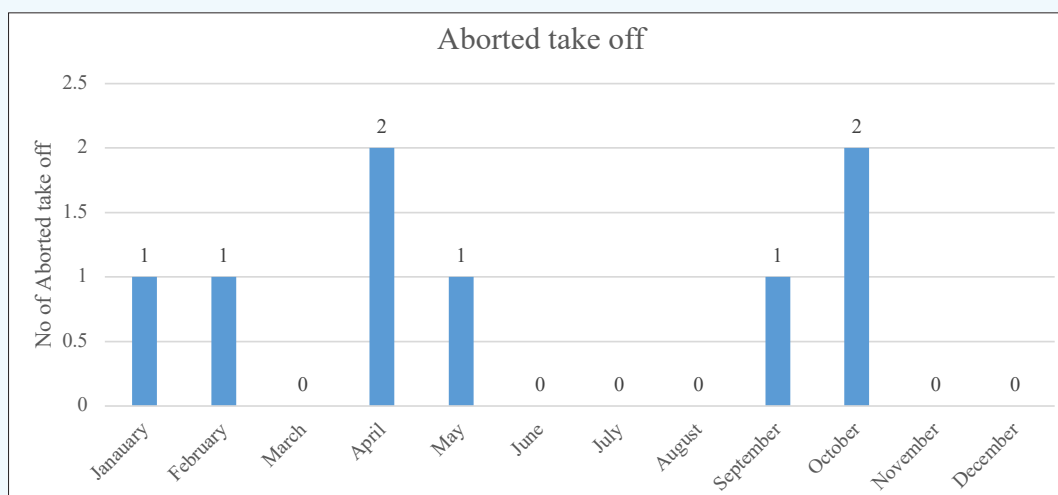
2. Recovery Barriers

PIACAO has also collected the records of Go around and Aborted takeoff that was carried out in the year 2024. Those recovery barriers were carried out mainly due to wildlife (Bird/Animal) activities on approach path, runway incursion etc. The data related to Go around and aborted takeoff have been presented in the following chart. The chart indicates that the month of January and October has highest number of Go around and two aborted takeoff at months of April and October.

Go around



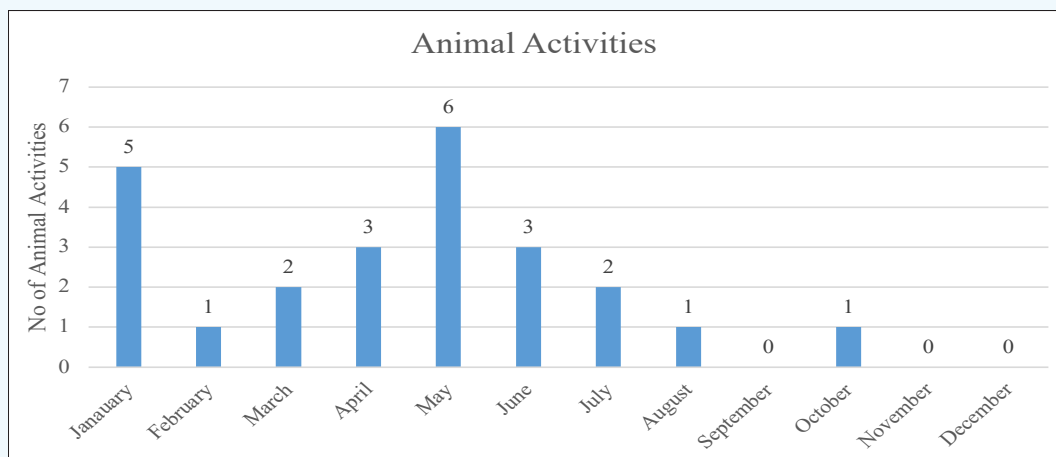
Aborted take off



3. Hazards

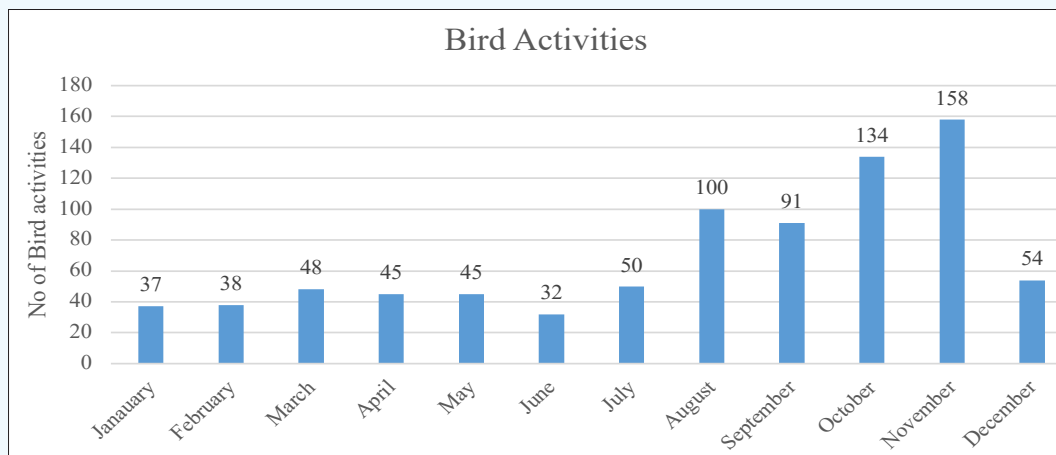
Environment/Wildlife/Animal

PIACAO has collected log of Environment/Wildlife/Animal at movement area; approach, landing and take - off path of an aircraft. Mostly Jackals is observed as per record of airside management section. The data related to animal activities are presented in the chart below. This chart indicates that the month of May is having highest number of Animal activities.



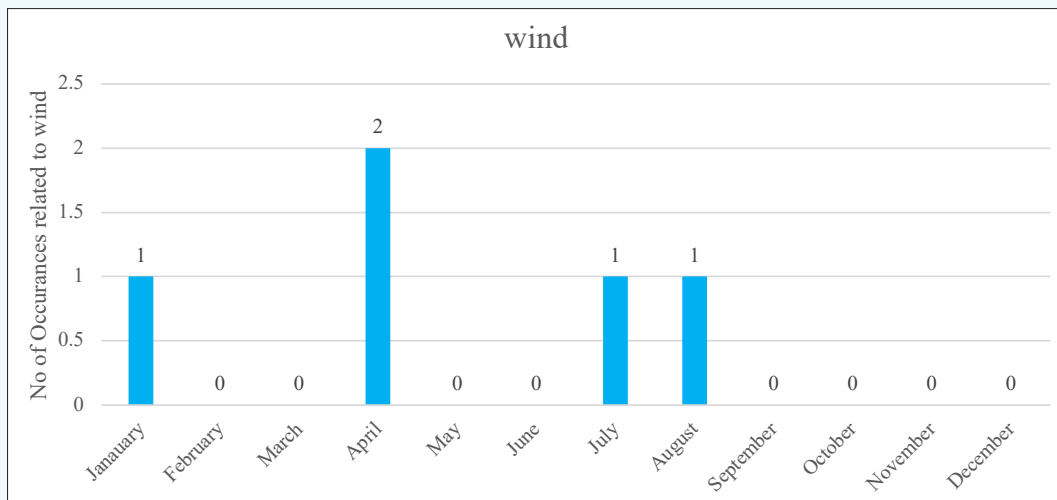
Environment/Wildlife/Bird

PIACAO has collected log of Environment/Wildlife/Bird at movement area; approach, landing and take - off path of an aircraft. Crow, Eagle, Vulture and sometimes duck are recorded in airside management section. These Bird activities are recorded and reported to Aerodrome Safety Office. The data related to bird activities are presented in the chart below. This chart indicates that the month of November is having highest number of bird activities.



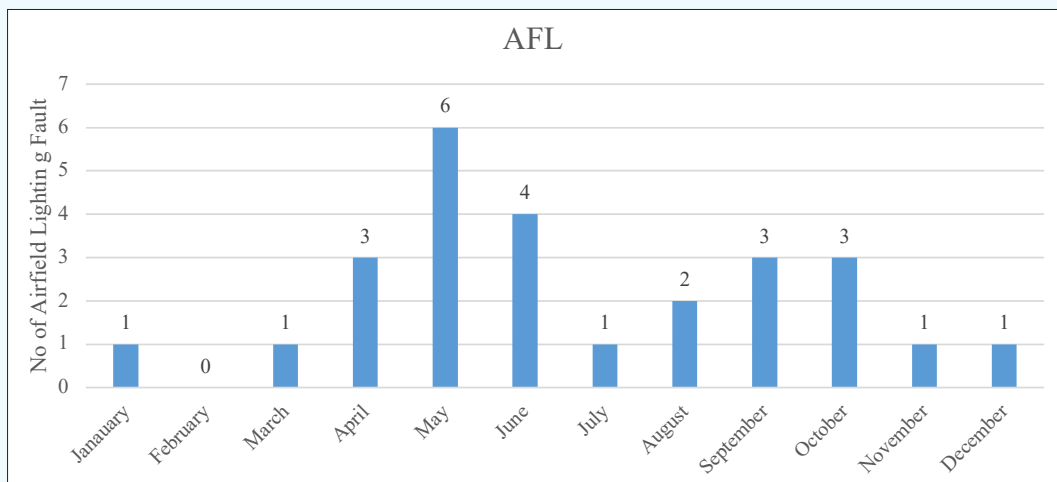
Environment/Whether/Wind

PIACAO has recorded of Environment/Whether/Wind. Data related to Wind have been presented in the following chart. As the chart below indicates there are 5 number of such incidents recorded in the year 2024. The month of April has highest number of reporting.



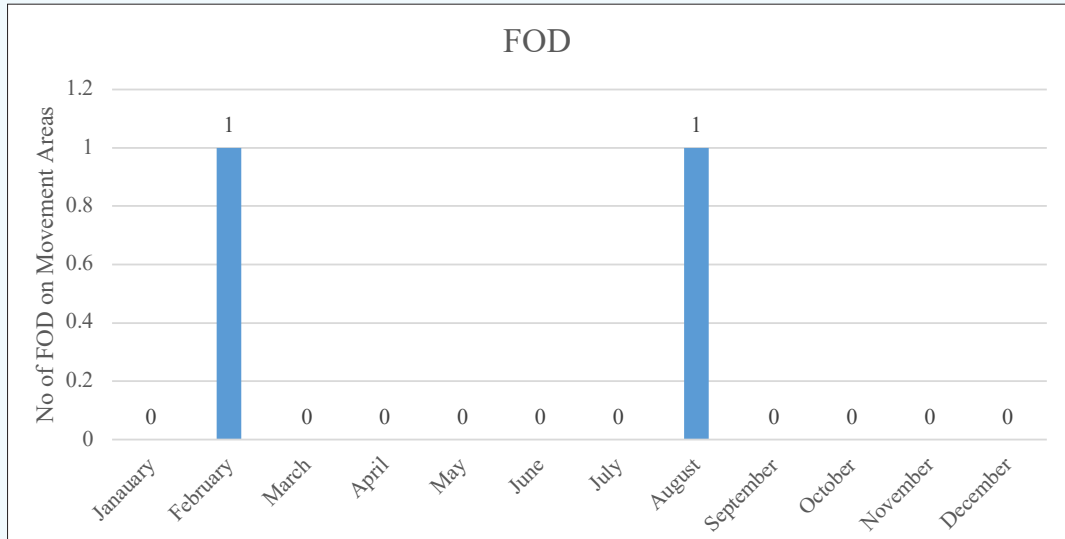
Technical/Facilities/AFL

PIACAO has collected records of Technical/Facilities/AFL (Airfield Lighting). Data related to airfield lighting fault have been presented in the following chart. As the chart below indicates there are 26 number of such incidents recorded in the year 2024. The month of May has highest number of reporting.



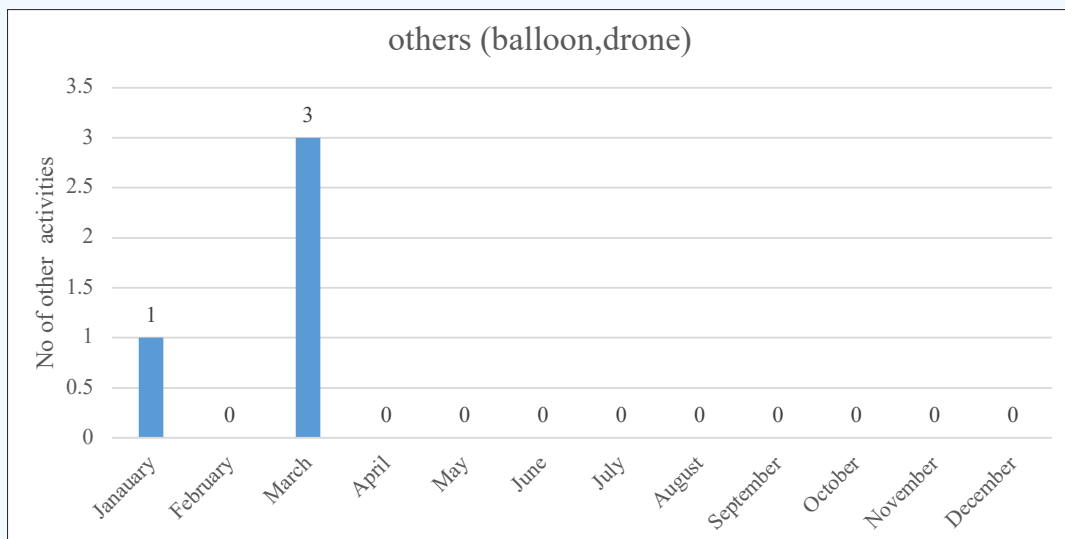
Technical/improper FOD

PIACAO has collected log of FOD from Movement Area. The airport is newly constructed so there is no more significant FOD found on Movement areas. The chart below indicates managed FOD found on movement area.



Others (balloon, drone)

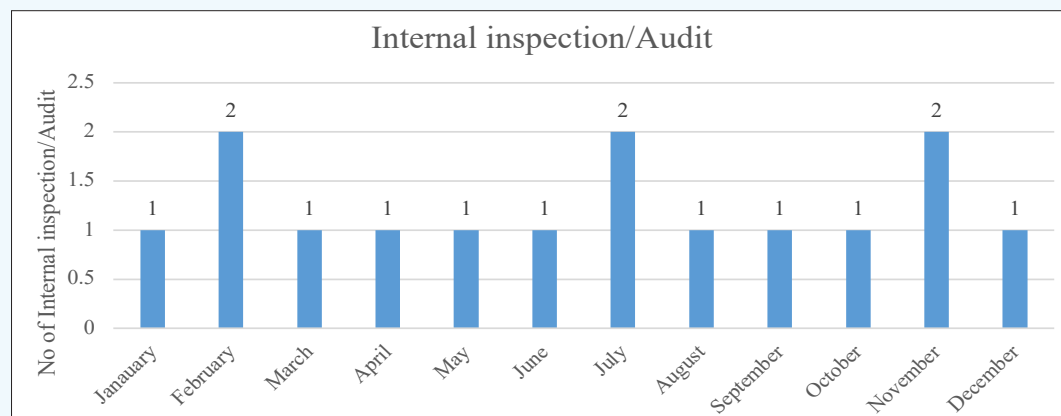
PIACAO facing this category of safety challenges particularly of three kinds-Laser, Balloon and drone activities. It has been revealed that these activities are occurring due to curiosity and lack of knowledge of its harmful effect and observed especially during festive and film shooting seasons.



4. Internal inspection and safety meeting

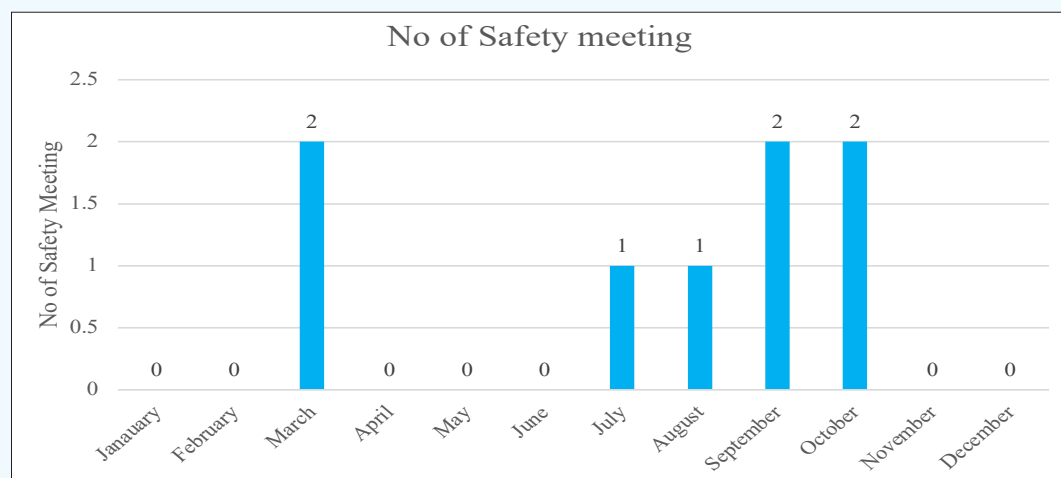
Internal Inspection/Audit

Inspection/audit like activities has visible effect on incidents or accidents. Generally, Internal Inspection/ Audit is carried out by Airside Management Section, Civil Engineering Section, Electromechanical Section and obviously, by Aerodrome Safety Office. It also includes scheduled audit from Aerodrome Safety Standard Department. Data related to Internal Inspection/Audit have been presented in the following chart.



Safety meeting

PIACAO Aerodrome Safety Management Manual has prescribed different kinds and levels of safety committees and their meetings; and they are Safety Action Group; Runway Safety Team; Safety Review Board etc. Hence, PIACAO has maintained records of safety meetings being conducted for aerodrome safety purposes. In the year 2024, TIACAO has conducted 8 numbers of such meetings. Data related to safety meetings in have been presented in the following chart.



Safety Performance Indicators (SPIs) and Safety Performance Target (SPTs) for 2025

A. Lagging Indicators

S.N.	Indicators	Targets
1.	No. of ADRM related occurrences per 10000 Flight movement	Reduce by 10 % over the value of 2024
2.	No. of BIRD related occurrences per 10000 Flight movement	Reduce by 30 % over the value of 2024
3.	No. of NAV related occurrences per 10000 Flight movement	Reduce by 10 % over the value of 2024
4.	No. of F-NI related occurrences per 10000 Flight movement	Reduce by 10 % over the value of 2024
5.	No. of FUEL related occurrences per 10000 Flight movement	Reduce by 20 % over the value of 2024
6.	No. of Environment/Wildlife/Bird related hazards per 10000 Flight movement	Reduce by 20 % over the value of 2024
7.	No. of Environment/Wildlife/Animal related hazards per 10000 Flight movement	Reduce by 20 % over the value of 2024
8.	No. of Technical/Facilities/AFL related hazards per 10000 Flight movement	Reduce by 10 % over the value of 2024
9.	No. of Technical/improper FOD related hazards per 10000 Flight movement	Reduce by 10 % over the value of 2024

B. Leading Indicators

S.N.	Indicators	Targets
1.	Number of inspection/audits per year	Increase by 20 % over the value of 2024
2.	Number of safety meeting per year	Increase by 20 % over the value of 2024
3.	Number of aerodrome safety training/ Orientation/workshop programme per year	Increase by 20 % over the value of 2024

Photo Gallery



Aerodrome safety awareness



Wildlife risk assesssment seminar



Rump safety training



Full scale emergency exercise



Emergency exercise pre-metting



Fire prevention training



GPU charging port inauguration



CAAN anniversary



Plantation



PPM training





<https://pia.caanepal.gov.np>

Aerodrome Safety Office
Pokhara International Airport Civil Aviation Office

Pokhara, Kaski, Nepal, Tel.: +977- 061-597018

Website: <https://pia.caanepal.gov.np>

Email: aerodromesafety.pia@caanepal.gov.np