

# AVIATION SAFETY REPORT 2025



Civil Aviation Authority of Nepal

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### Note:

This report contains safety data of Nepali-Registered Aeroplanes & Helicopters only.

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# Foreword



The primary objective of the Civil Aviation Authority of Nepal (CAAN) is to ensure the safe, regular, standard, and efficient operation of national and international flights, air communications, air navigation, and air transport services. Safety remains the fundamental and highest priority in aviation, as every flight involves human lives.

Nepal, along with 192 other member states of the International Civil Aviation Organization (ICAO), is committed to achieving the global safety target of zero fatalities by 2030. This effort includes strengthening regulatory capabilities and implementing a range of programs focused on global aviation safety planning, oversight, and risk mitigation.

In alignment with these goals, CAAN publishes the *Aviation Safety Report* annually to support and promote aviation safety. This ninth edition of the report, covering the year 2024, reflects CAAN's strong commitment to enhancing safety through transparency and information sharing.

The *Aviation Safety Report, 2025* provides an overview of safety activities and initiatives, along with updates on key safety indicators. It includes both reactive and proactive safety information, promotional efforts, and progress on the implementation of the National Aviation Safety Plan (NASP) 2023–2025. The report is based on safety data collected from both mandatory and voluntary reporting systems, ICAO's Universal Safety Oversight Audit Programme (USOAP) reports, and accident investigation reports of the Aircraft Accident Investigation Commissions (AAICs).

Additionally, the report presents the status of Safety Management System (SMS) implementation by airline operators, Nepal's performance in the latest ICAO USOAP audit, and developments in the implementation of the State Safety Programme (SSP).

I trust that this report will effectively serve its purpose and contribute meaningfully to fostering a robust safety culture among all aviation stakeholders in Nepal.

A handwritten signature in black ink, appearing to read 'Pradeep Adhikari', written over a horizontal line.

**Er. Pradeep Adhikari**  
Director General





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# EXECUTIVE SUMMARY

As of 2025, Nepal's aviation sector comprises 5 international fixed-wing operators, 9 domestic fixed-wing operators, and 12 helicopter operators providing both scheduled and chartered services. Aircraft movement has significantly rebounded post-COVID-19, indicating a revival in both domestic and international air travel.

Due to the geographical complexity of Nepal and the limitations on aircraft types permitted at Short Takeoff and Landing (STOL) airfields; primarily due to maneuvering constraints-air operations vary in complexity across different regions. The Civil Aviation Authority of Nepal (CAAN) suspended single-engine aircraft operations after the crash on 2018, citing safety risks in Nepal's challenging terrain. Helicopter operations remain essential and frequent, especially in remote areas, driven by demand for rescue, relief, and medical evacuation services. These unique operational demands have led to a highly heterogeneous fleet in Nepal's airspace.

In terms of safety performance, there has been a slight increase in airplane accident and fatality rates, on the other hand, helicopter operations have shown an encouraging decline in those rates compared to the previous year.

Loss of Control In-Flight (LOC-I) and Controlled Flight Into Terrain (CFIT) remain the leading risk categories in Nepal.

Over the past decade:

- Aeroplanes: LOC-I (64%) and CFIT (34%) of total fatalities
- Helicopters: LOC-I (21%) and CFIT (72%) of total fatalities

In 2024, 349 occurrences were reported, a decline from 579 in 2023. These included 2 accidents, 16 serious incidents, and 331 incidents.

Analysis of occurrences identified the top eight risk areas:

1. CFIT
2. LOC-I
3. System Component Failure-Non-Powerplant (SCF-NP)
4. System Component Failure-Powerplant (SCF-PP)
5. Mid-Air Collision (MAC)
6. Fire/Smoke-Non-Impact (F-NI)
7. Ground Collision (GCOL)
8. Runway Excursion (RE)

On the proactive safety front, Nepal has made substantial progress, especially in voluntary hazard reporting. Initiatives such as Safety Management System (SMS) audits, safety awareness campaigns, and collaboration with stakeholders have enhanced reporting culture. Consequently, the number of reported hazards increased from 1688 in 2023 to 1825 in 2024.



Nepal's first five-year safety plan, initiated in 2018, was aligned with the Global Aviation Safety Plan and Regional Aviation Safety Plan (RASP). The current National Aviation Safety Plan (NASP) 2023–2025 is now under active implementation. The plan identifies seven key operational safety risk areas:

- Controlled Flight Into Terrain (CFIT)
- Loss of Control In-flight (LOC-I)
- Mid-Air Collision (MAC)
- Runway Incursion (RI)
- Runway Excursion (RE)
- Wildlife Strike (WS)
- Abnormal Runway Contact (ARC)

The CAAN continues to monitor the implementation of the Safety Enhancement Initiatives (SEIs) outlined in the NASP to ensure timely and effective execution.

Since 2018/2019, CAAN has assessed SMS implementation maturity levels among airline operators. Audit findings show consistent improvement across the industry.

Nepal's Effective Implementation (EI) rate during the latest USOAP audit in April 2022 was 70.11%. Furthermore, Nepal is actively implementing its State Safety Programme (SSP), having achieved 92.9% completion of Level 3 implementation, as reflected in the ICAO iSTARS Safety Briefing App.

CAAN has also been diligently tracking the implementation of safety recommendations issued by the Government of Nepal following investigations since 2008. For the ten-year period from 2015 to 2024, 85% of recommendations were fully implemented, 6% partially implemented and 9% remain non-compliant.

In 2024, CAAN conducted various initiatives aimed at enhancing aviation safety and fostering a robust safety culture. These included several safety promotional activities carried out independently and in collaboration with aviation stakeholders.





## Chapter 1

# Aircraft Operations in Nepal

Air Transport Management in Nepal largely depends upon its geography and meteorological conditions. With the limitations regarding types of aircraft to be operated in most of the STOL airfields subjected to manoeuvring restrictions especially due to the high terrain with rugged mountains, the operations in different regions of Nepal pose different levels of complexity.

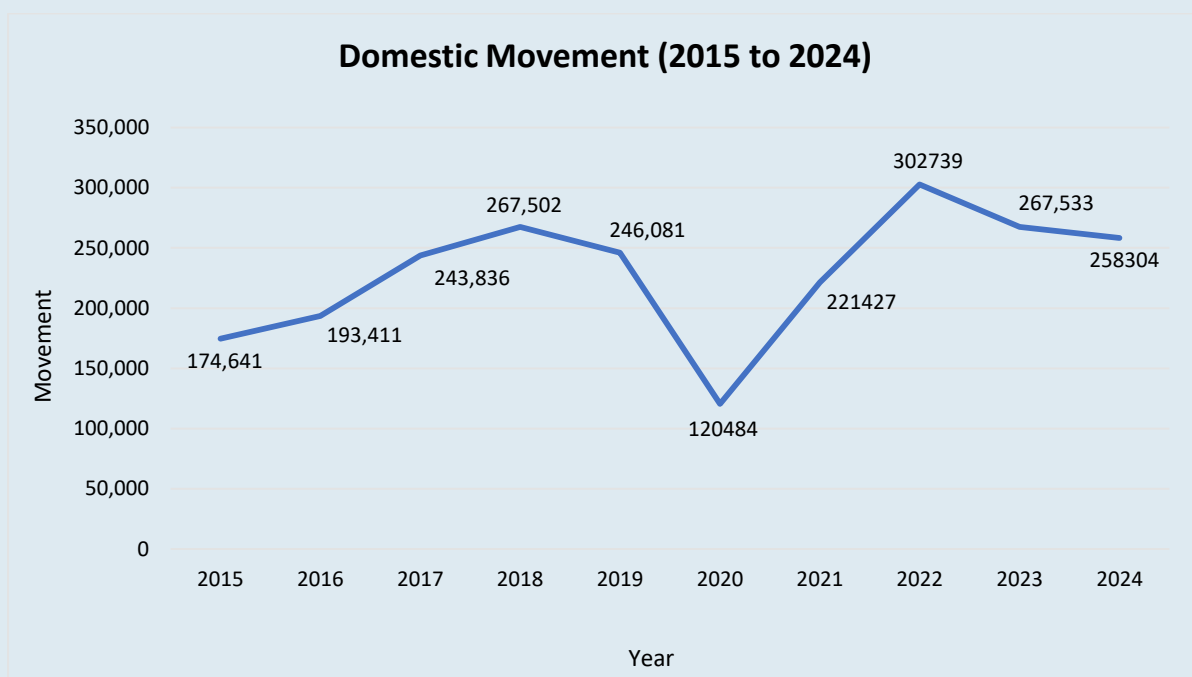
As of date of publication of this report, total 21 airline operators are into operation with 9 of them operating fixed wing aircrafts, 12 operating rotor wing aircraft. Out of 21 operators, 1 is operating a mixed fleet of fixed wing and rotor wing aircrafts. Helicopter operators in Nepal are involved in chartered as well as rescue and relief flights. Of the 9 fixed wing operators, 1 is an exclusive international operator, 3 are into both domestic and international operations and the remaining are involved in domestic operations.

## Aircraft Operations in Nepal

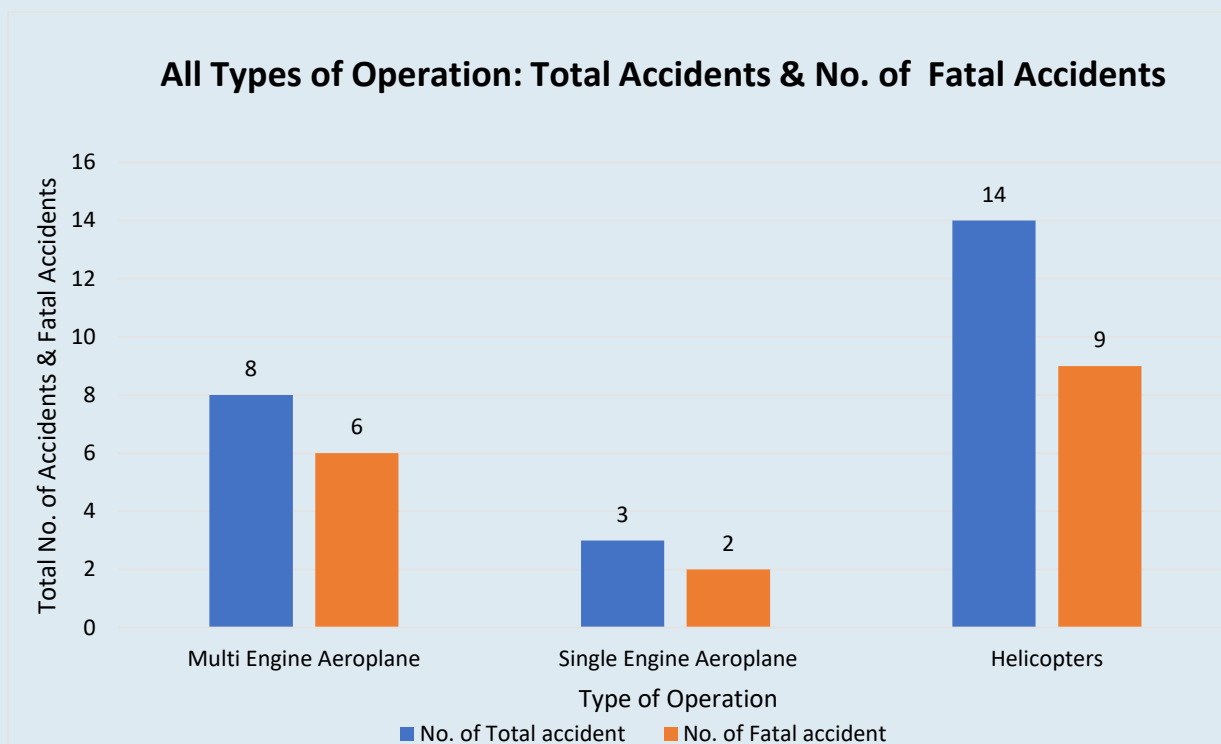


## Chapter 2

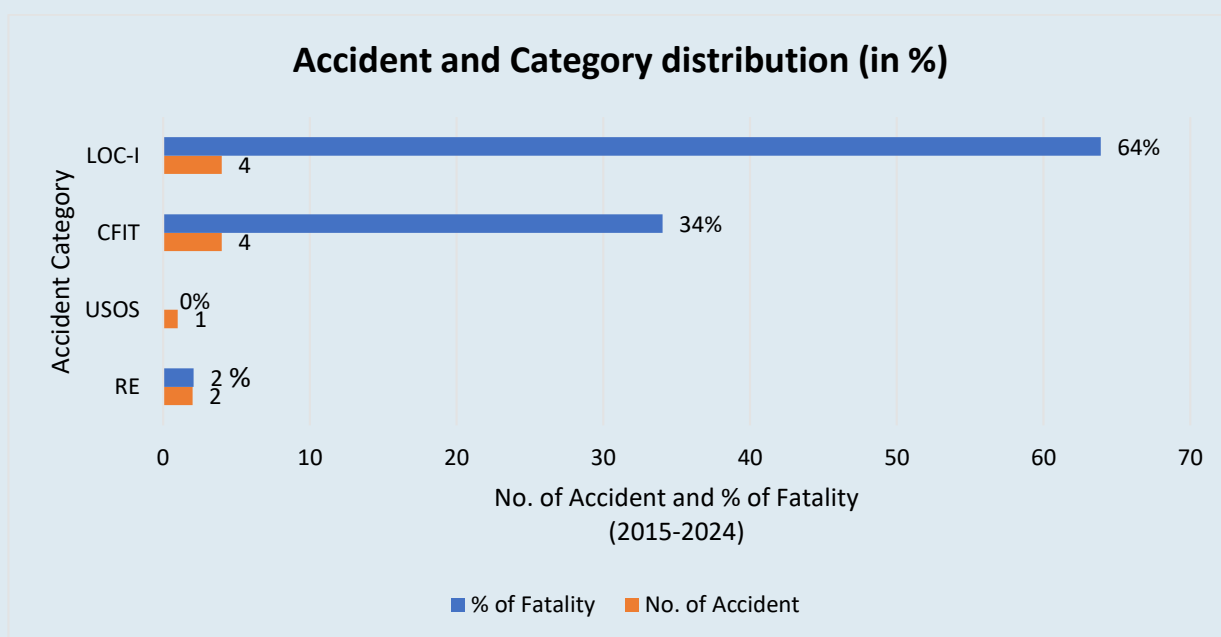
# Air Traffic Movement in Nepal (2015 to 2024)

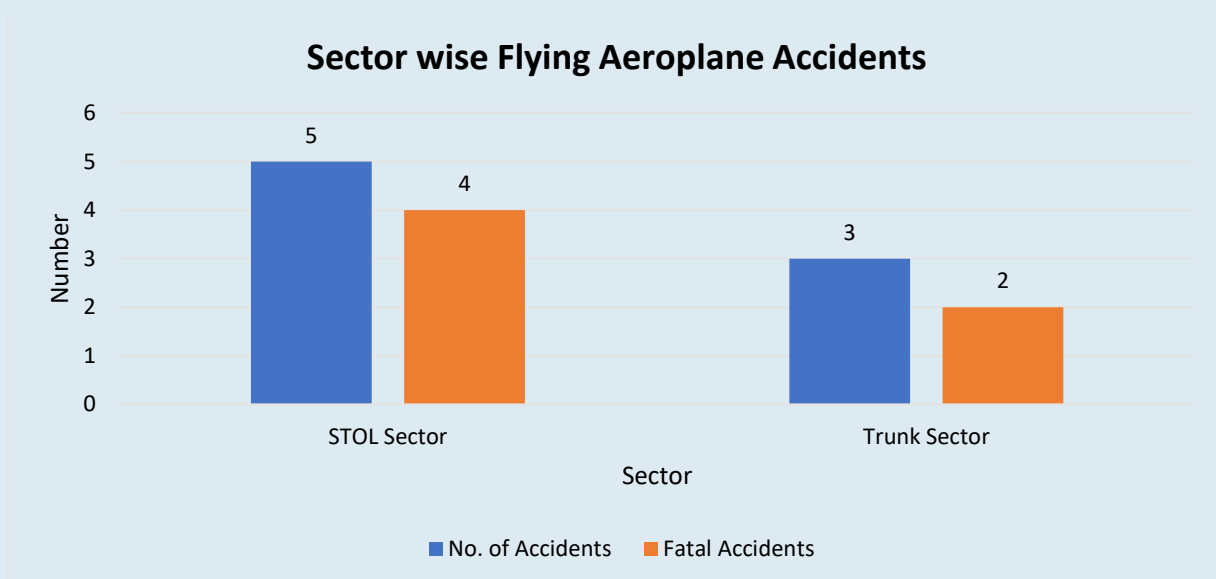
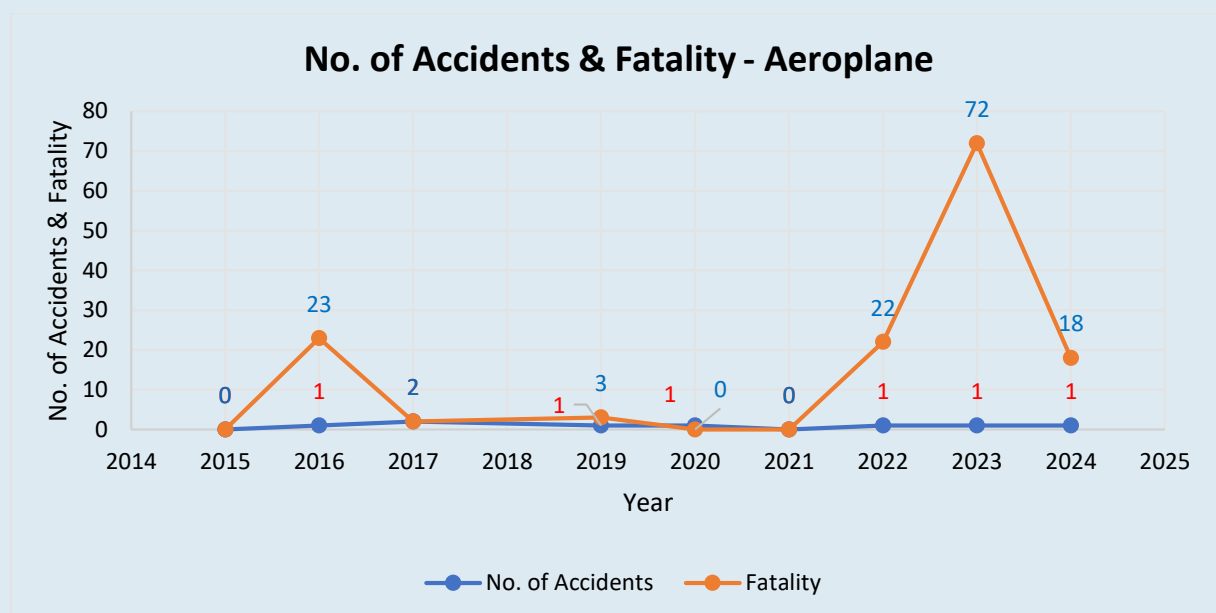
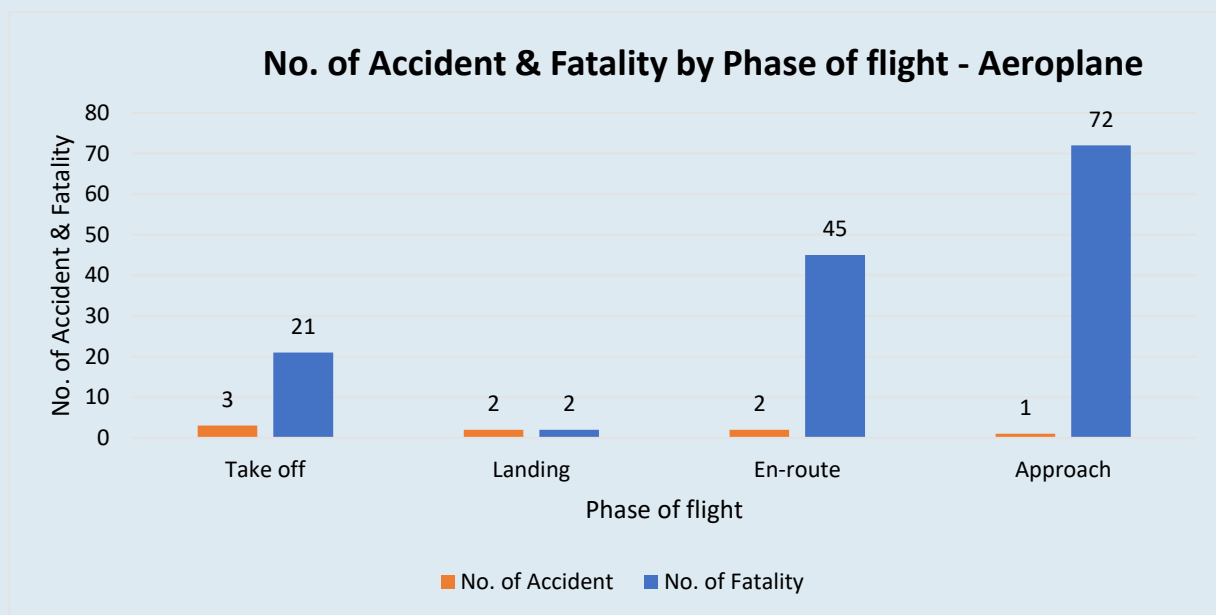


# Aircraft Accident in Nepal (2015 to 2024)

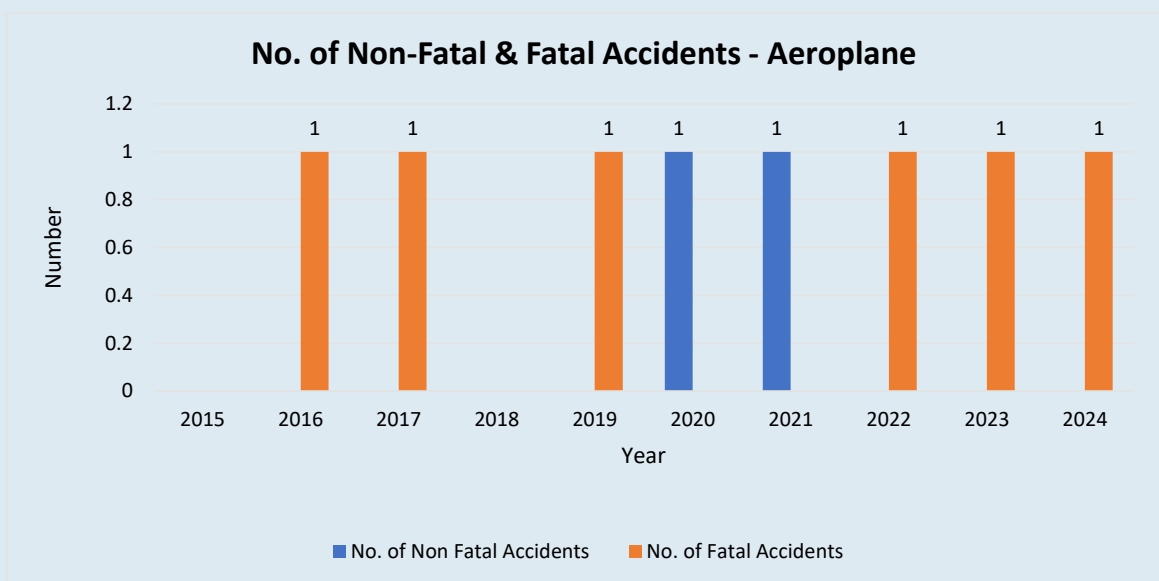
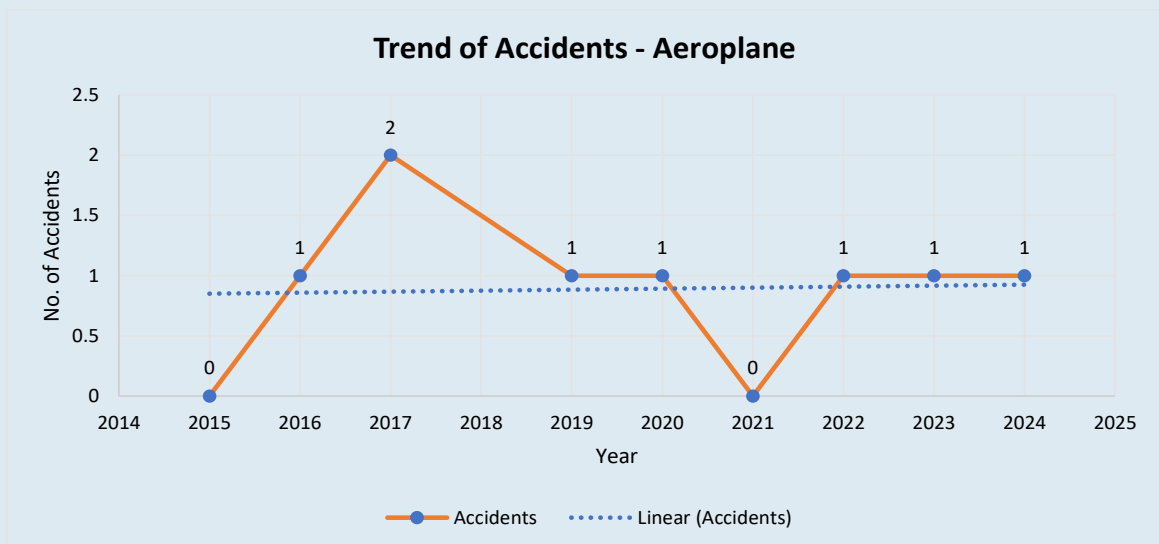
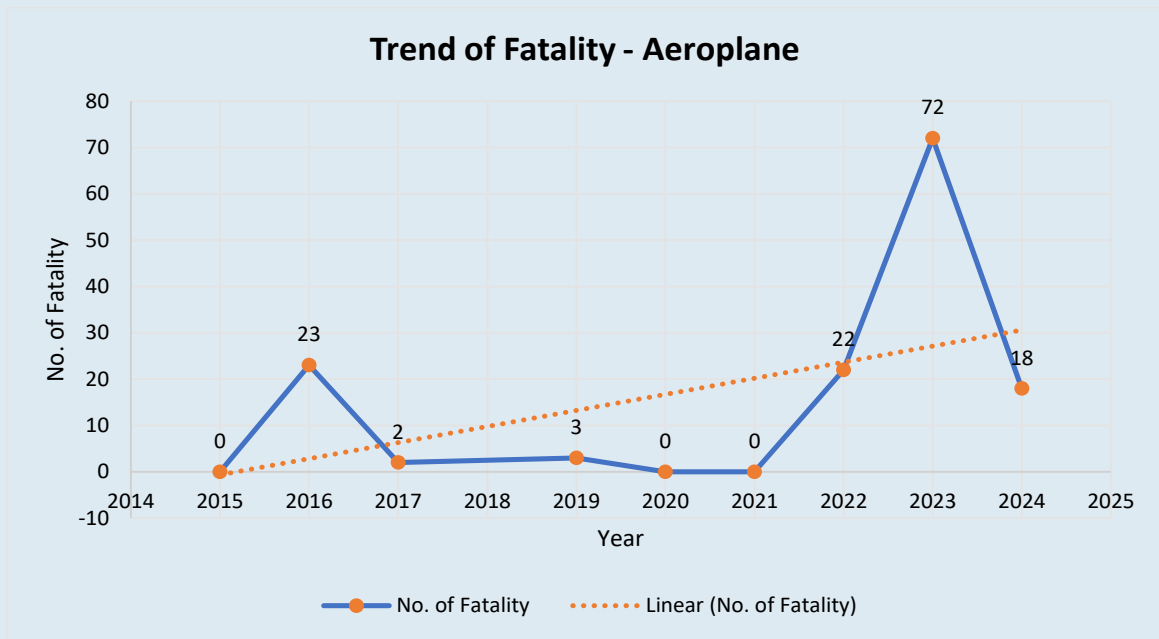


## A. Aeroplane accident in Nepal (2015-2024)

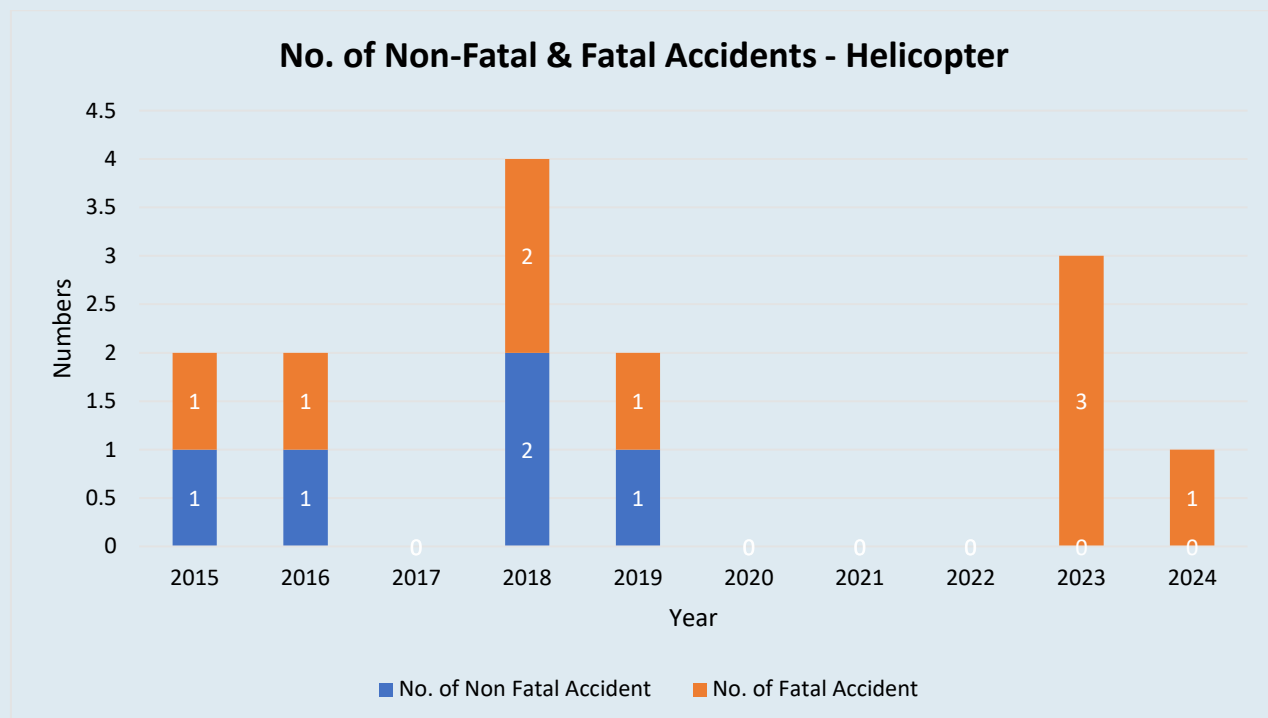
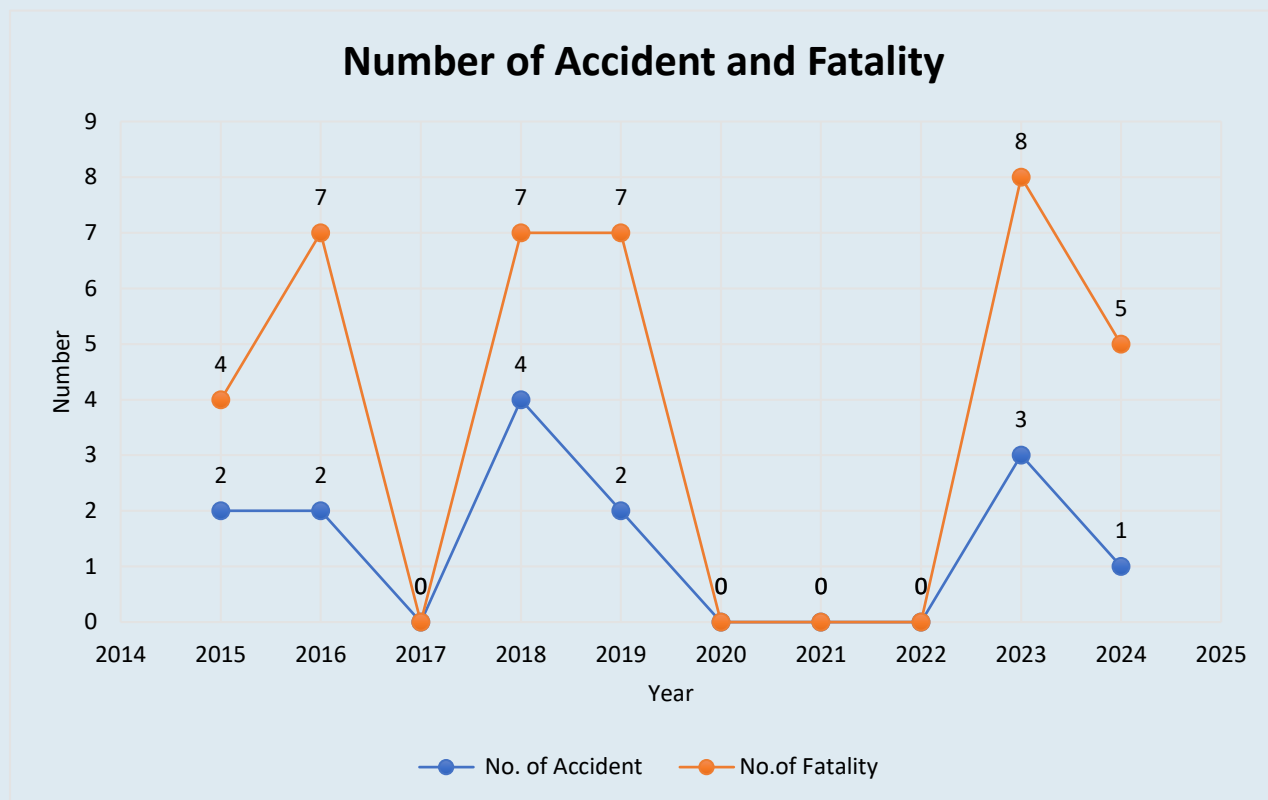


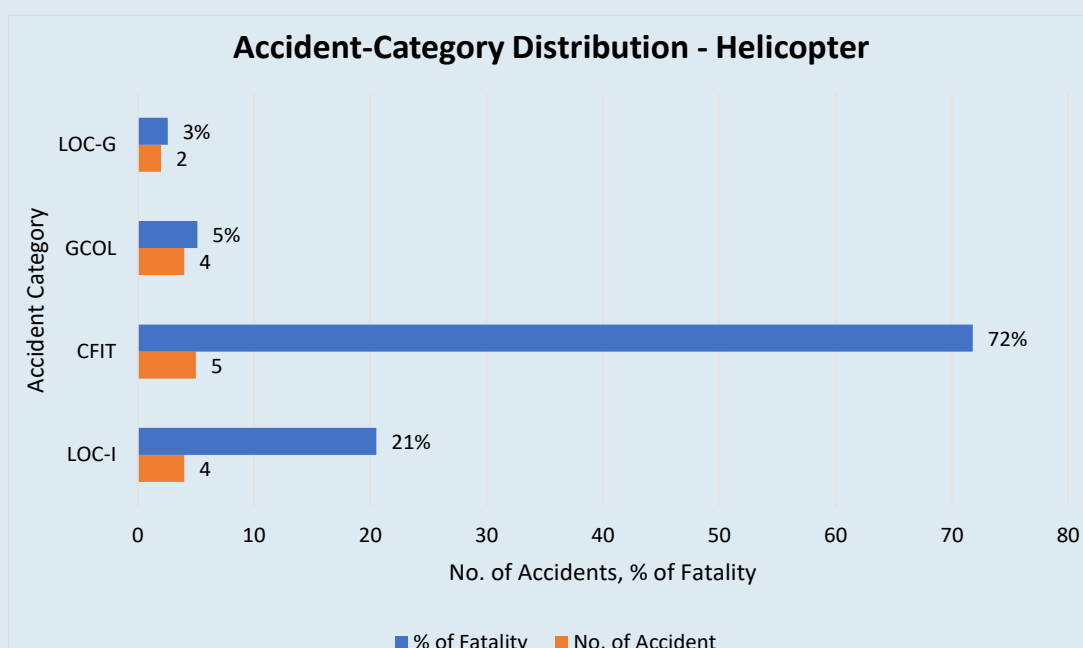
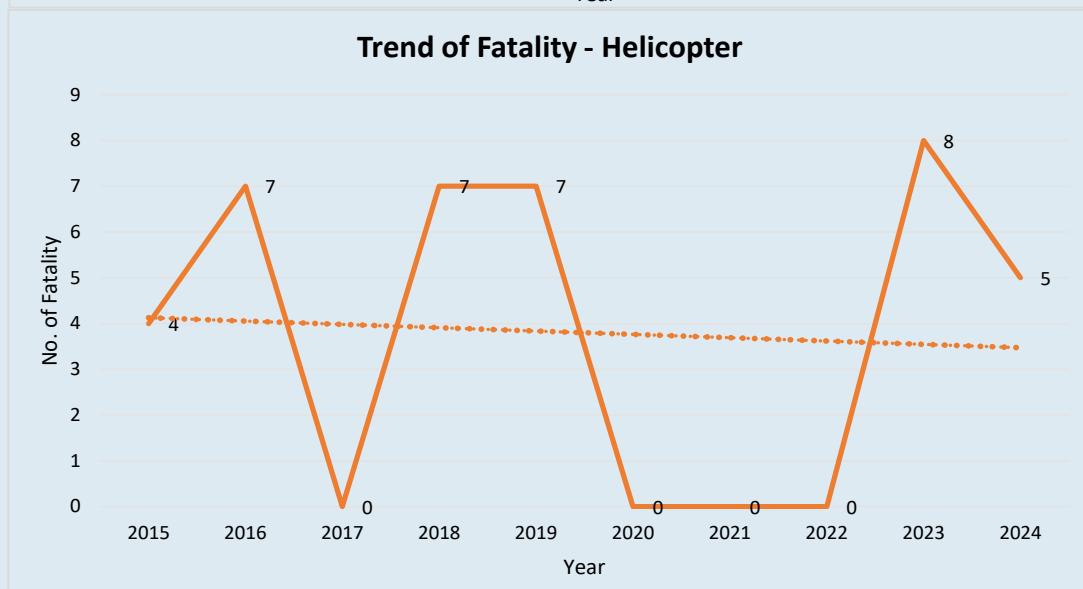
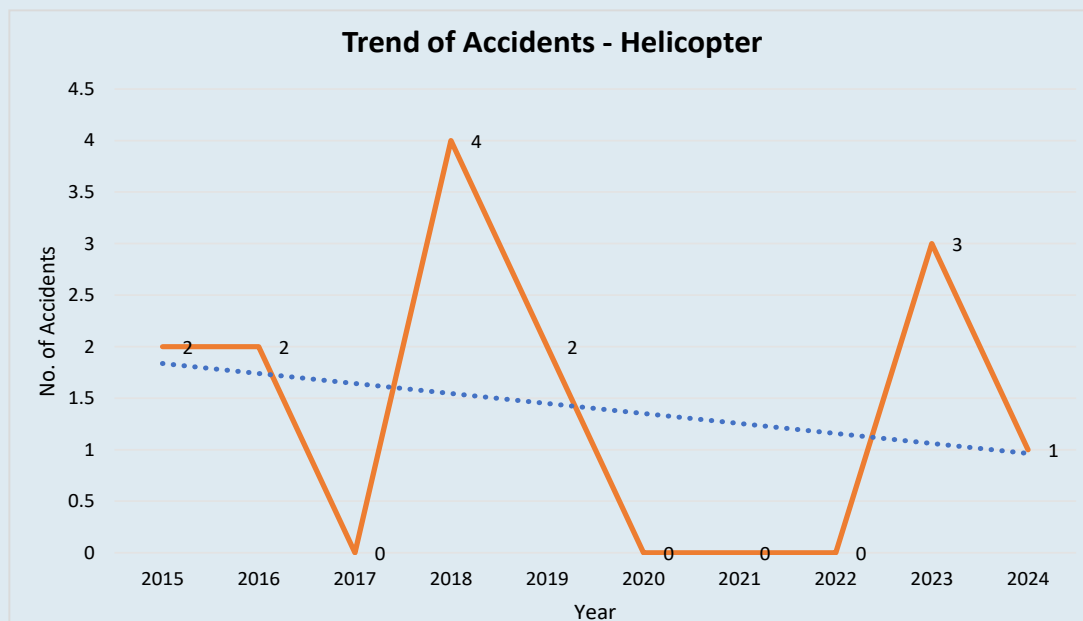






## B. Helicopter Accident in Nepal (2015-2024)





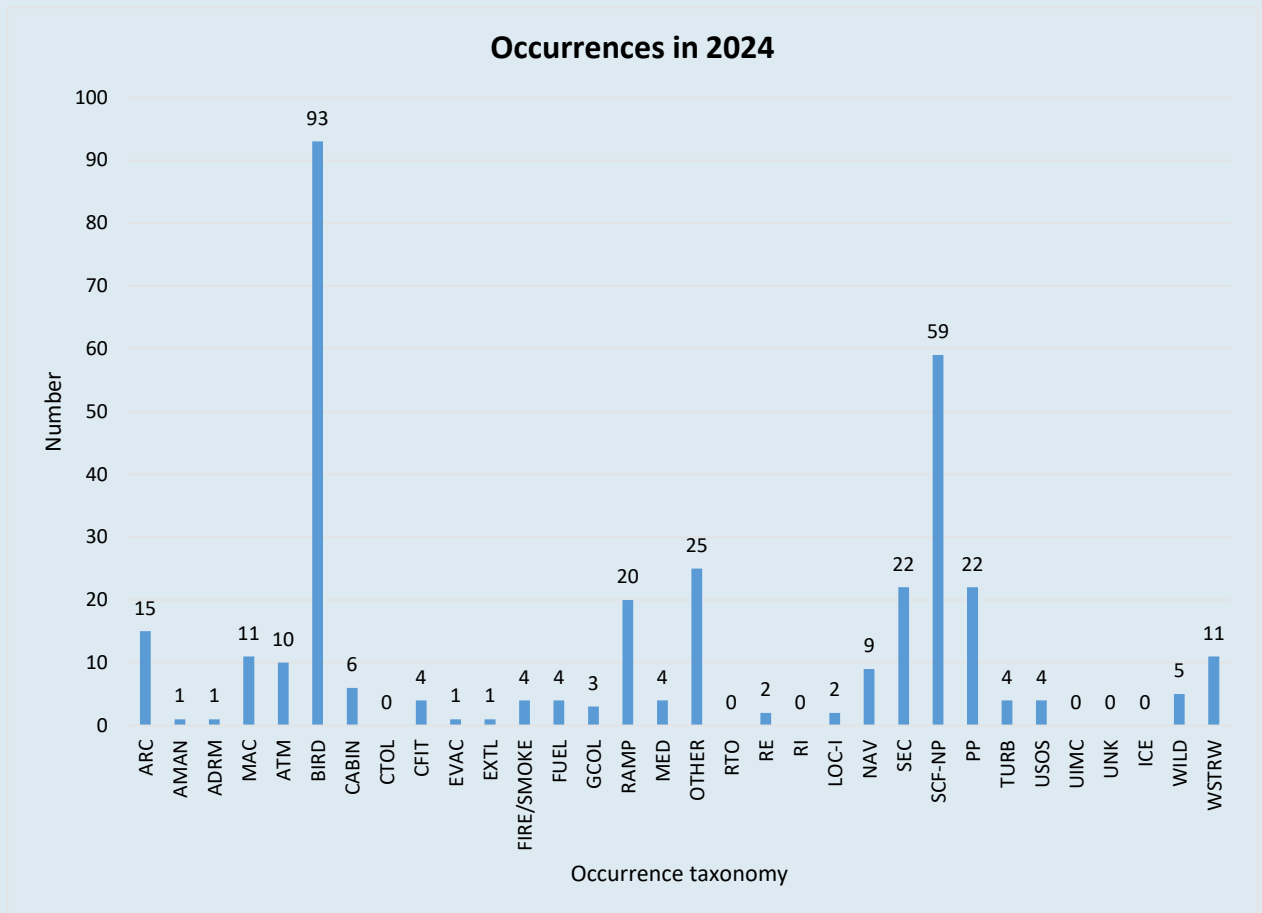
# Occurrence Reporting in 2024

The Taxonomy adopted for the purpose of deriving information related to mandatory and voluntary occurrences was developed by CICTT. The CICTT includes experts from several air carriers, aircraft manufacturers, engine manufacturers, pilot associations, regulatory authorities, transportation safety boards, ICAO, and members from Canada, the European Union, France, Italy, Japan, the Netherlands, the United Kingdom, and the United States.

The taxonomy for occurrences has been given below:

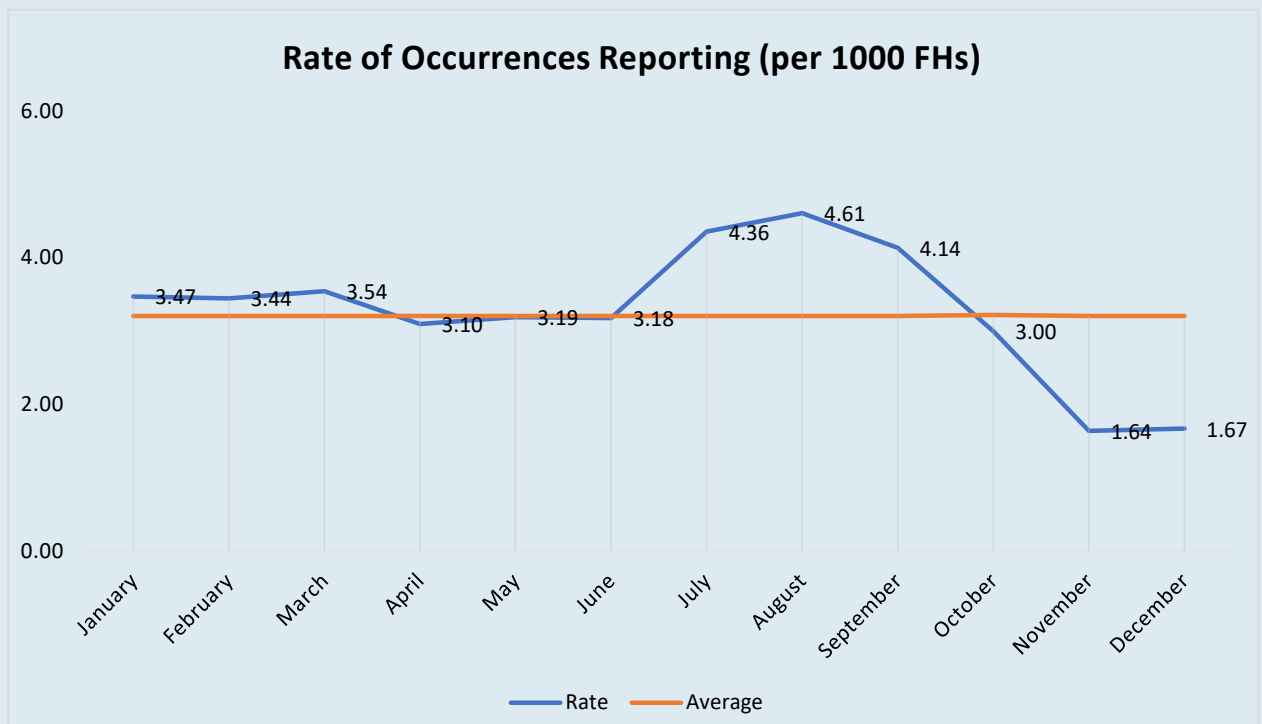
## ICAO/CAST Taxonomy for Occurrences

Abnormal Runway Contact (ARC)	Loss of Control-Ground (LOC-G)
Abrupt Maneuver (AMAN)	Loss of Control-In Flight (LOC-I)
Aerodrome (ADRM)	Loss of Lifting condition en route (LOLI)
Airpox, Mid Air Collision (MAC)	Low Altitude Operations (LALT)
ATM/CNS(ATM)	Medical (MED)
Bird Strike (BIRD)	Navigation (NAV)
Cabin Safety Events(CABIN)	Other (OTHR)
Collision with obstacle(s) during take off and landing (CTOL)	Runway excursion (RE)
Controlled flight into terrain(CFIT)	Runway incursion (RI)
Evacuation (EVAC)	Security related (SEC)
External Load Related (EXTL)	System/Component Failure or Malfunction (SCF-NP)
Fire/Smoke (Non- Impact) (F-NI)	System/Component Failure or Malfunction (SCF-PP)
Fire/Smoke (Post- Impact) (F-Post)	Turbulence encounter (TURB)
Fuel Related (FUEL)	Undershoot/overshoot (USOS)
Glider Towing Related Events (GTOW)	Unintended flight in IMC (UIMC)
Ground Collision (GCOL)	Unknown or undetermined (UNK)
Ground Handling (RAMP)	Wildlife (WILD)
Icing (ICE)	Windshear or Thunderstorm (WSTRW)

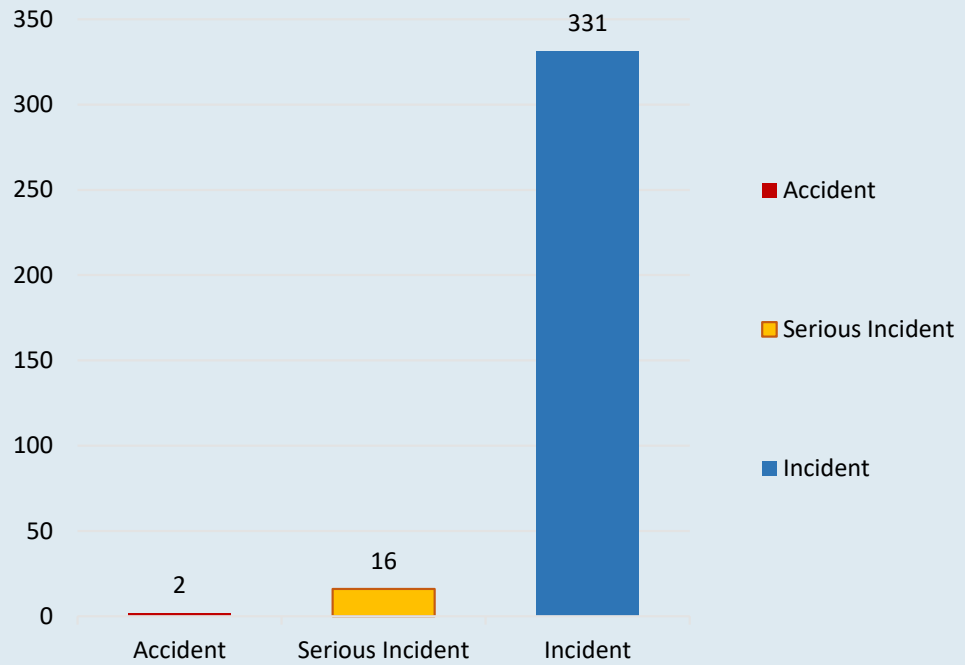


Total number of occurrences reported in 2024 were 349 against the 579 in 2023.

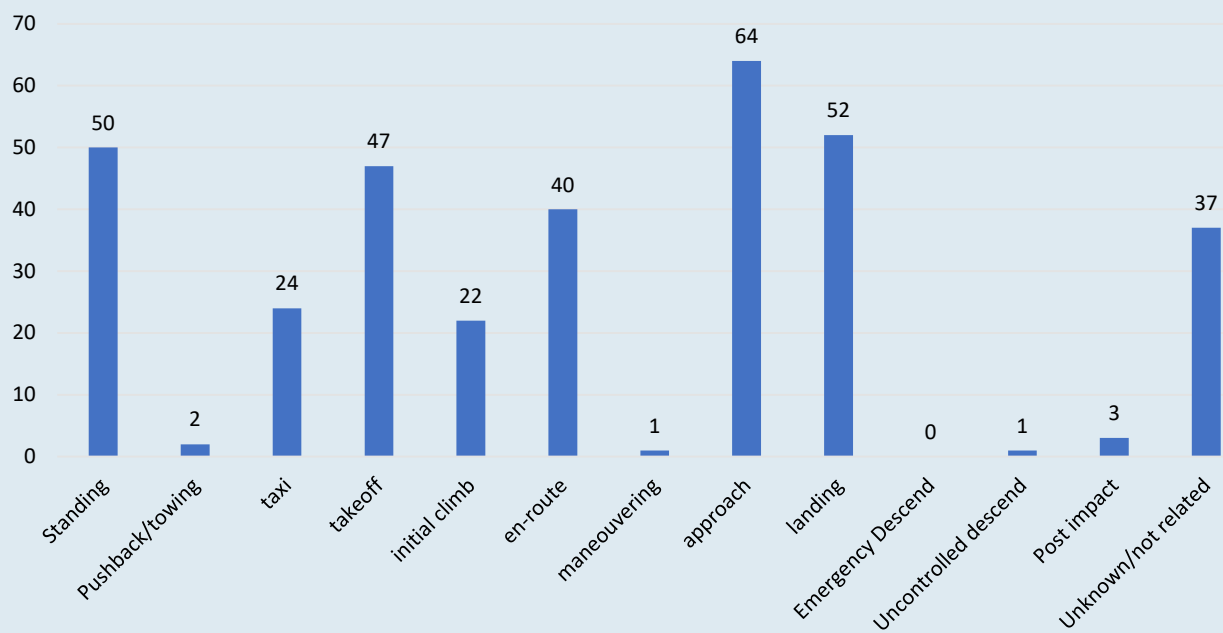
The 25 occurrences that have fallen in category “OTHER” are not directly related to any category defined in the CAST/ICAO Common Taxonomy Team (CICTT) Taxonomy.

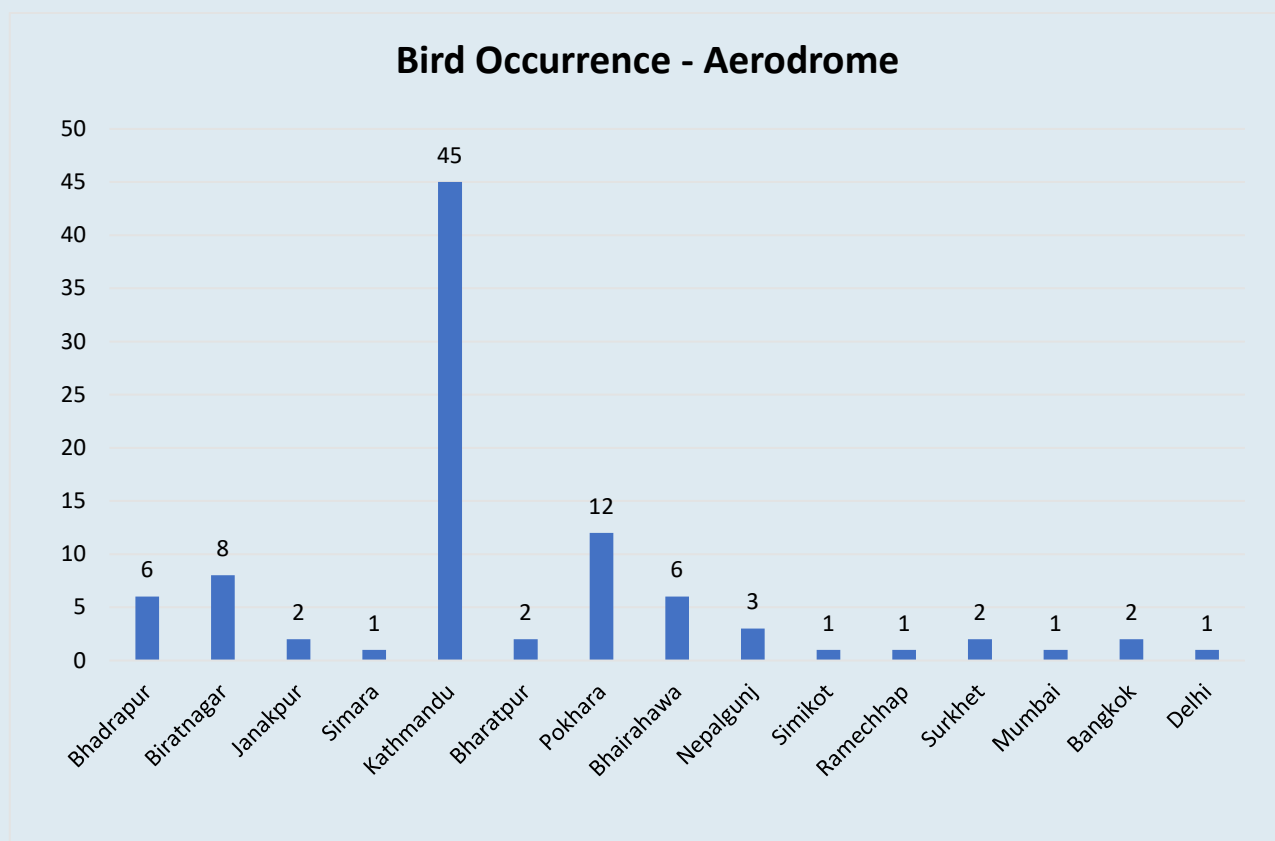
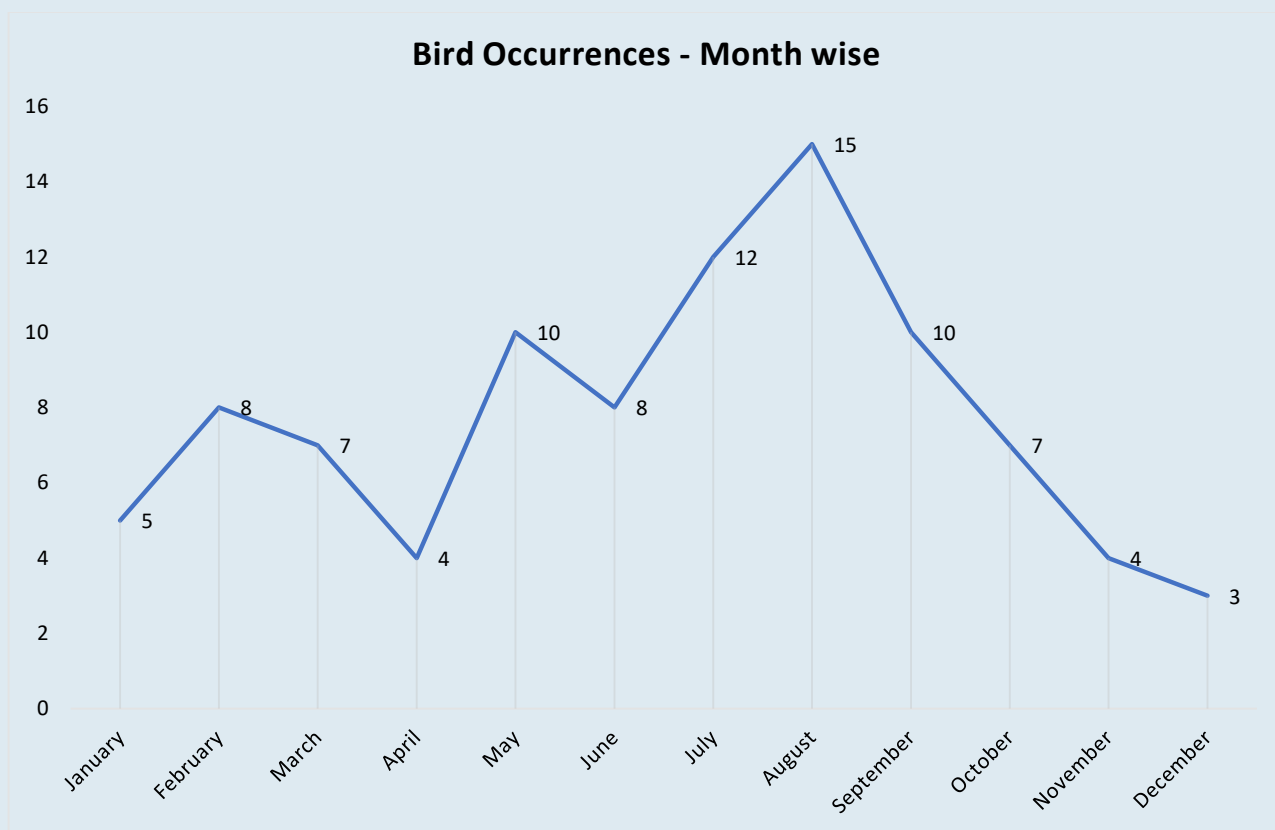


### Types of Occurrences

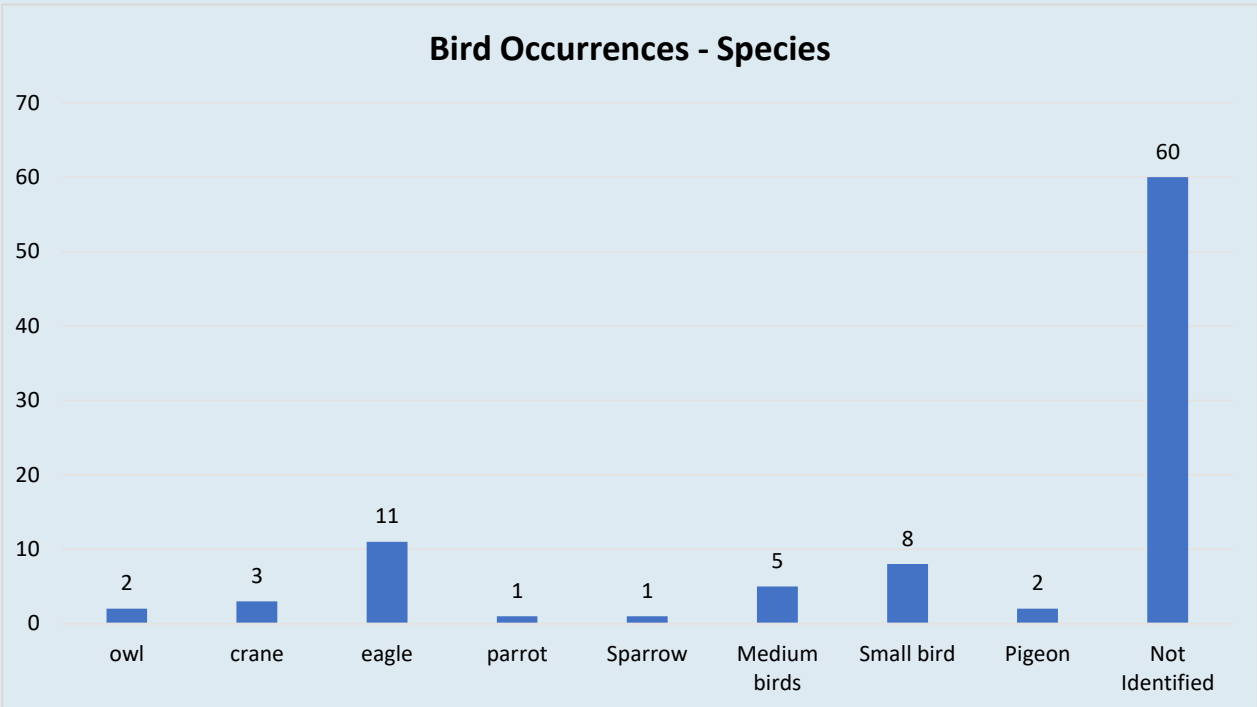
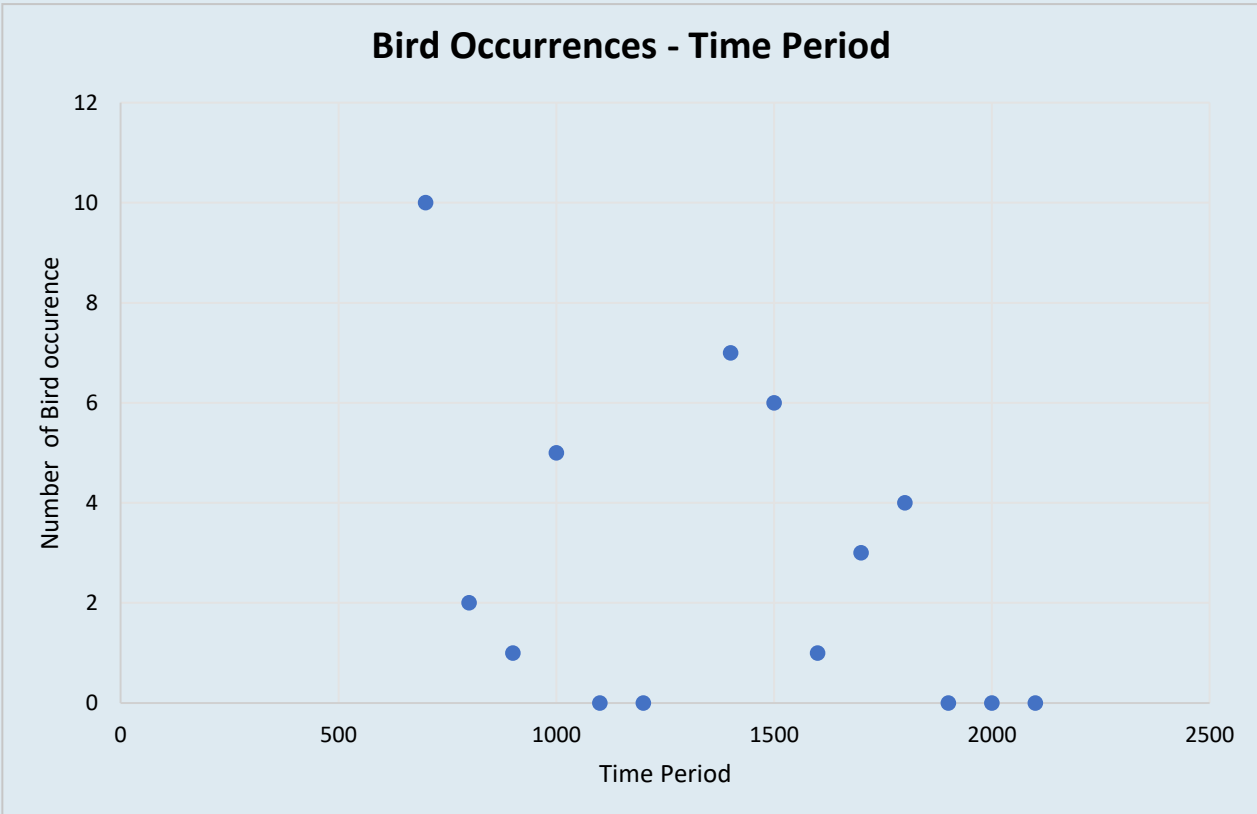


### Occurrences - Phase of Flight

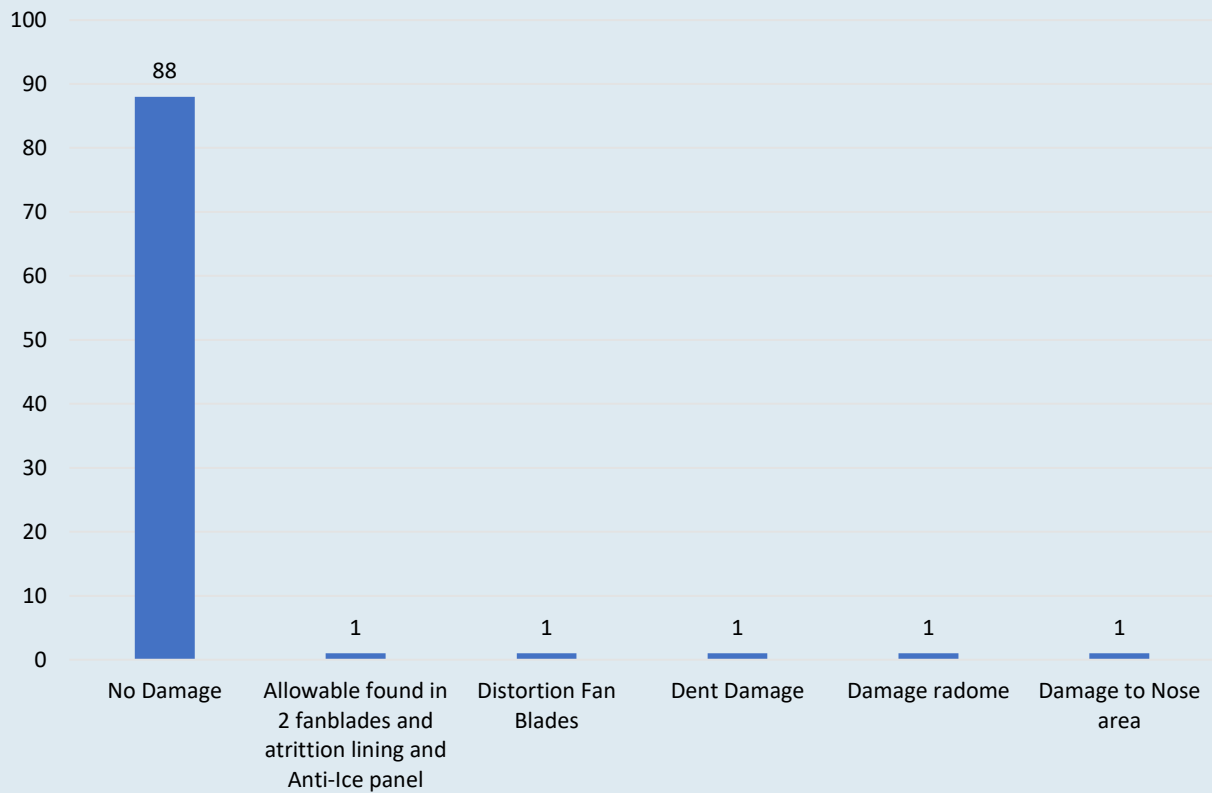




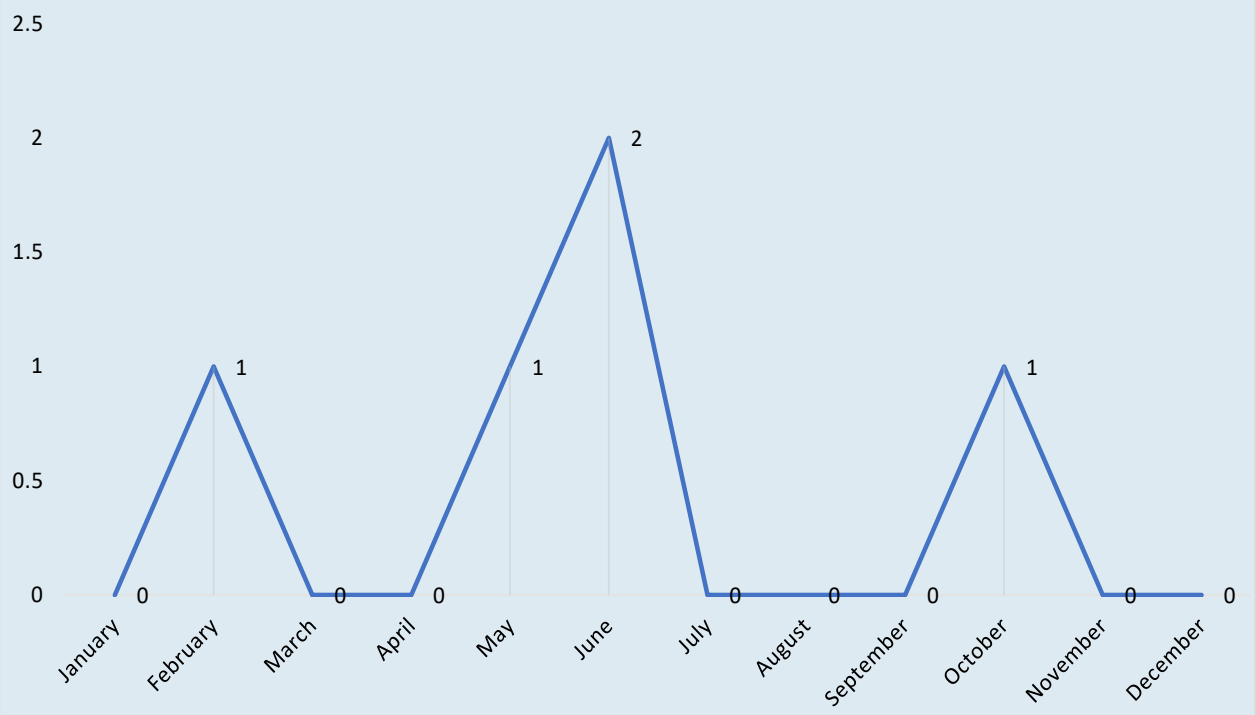




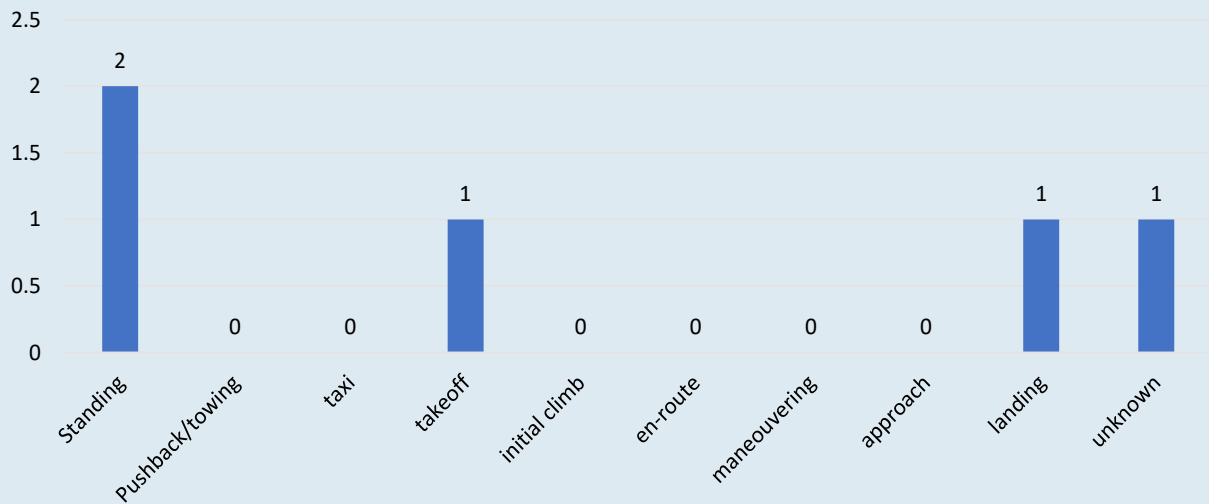
## Bird Occurrence - Consequence



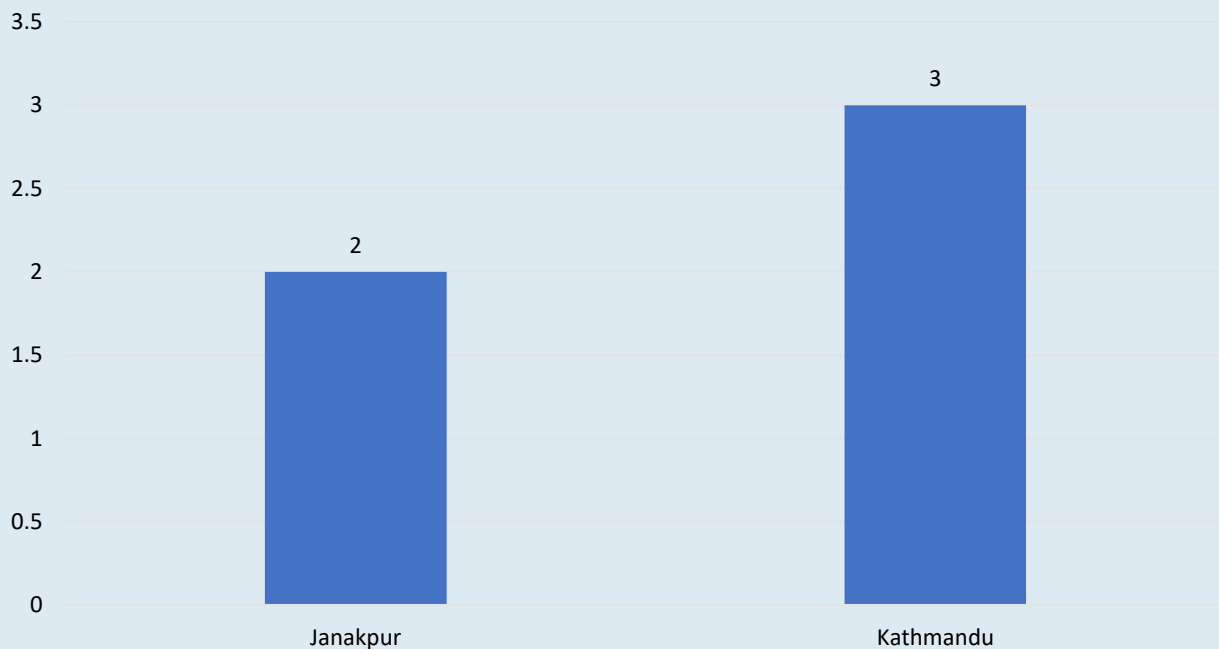
## Animal Occurrences - Month wise

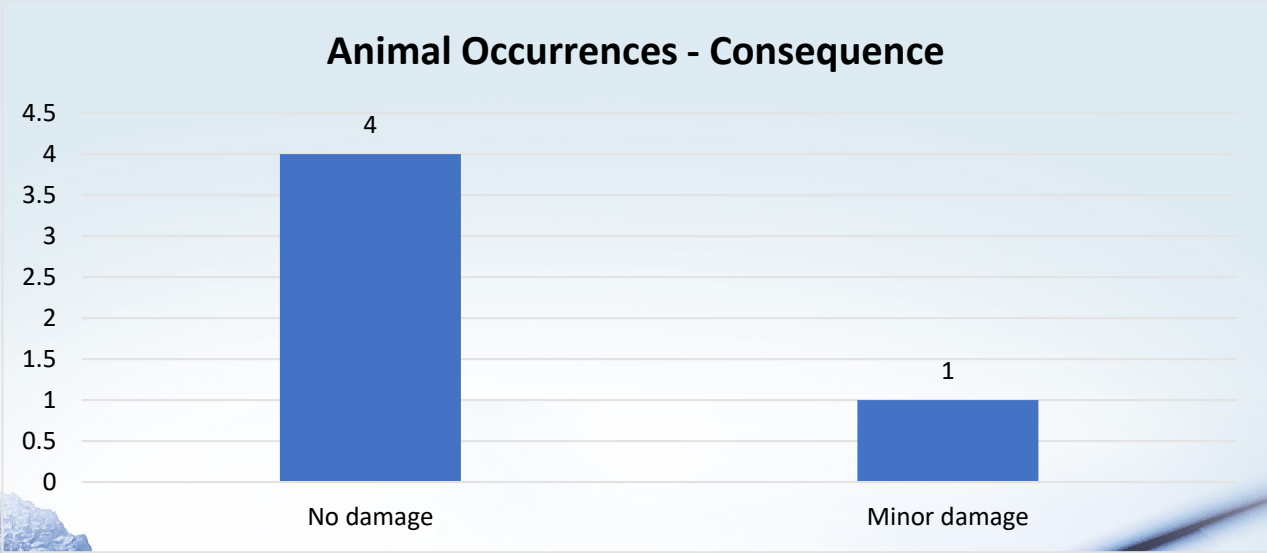
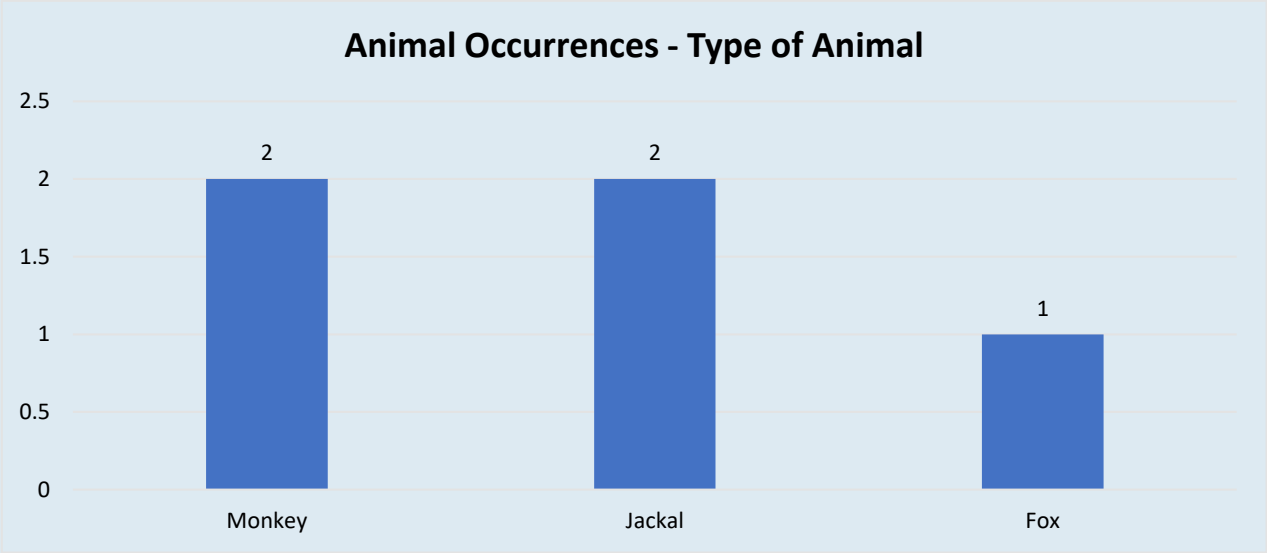


### Animal Occurrences - Phase of flight



### Animal Occurrence - Aerodrome

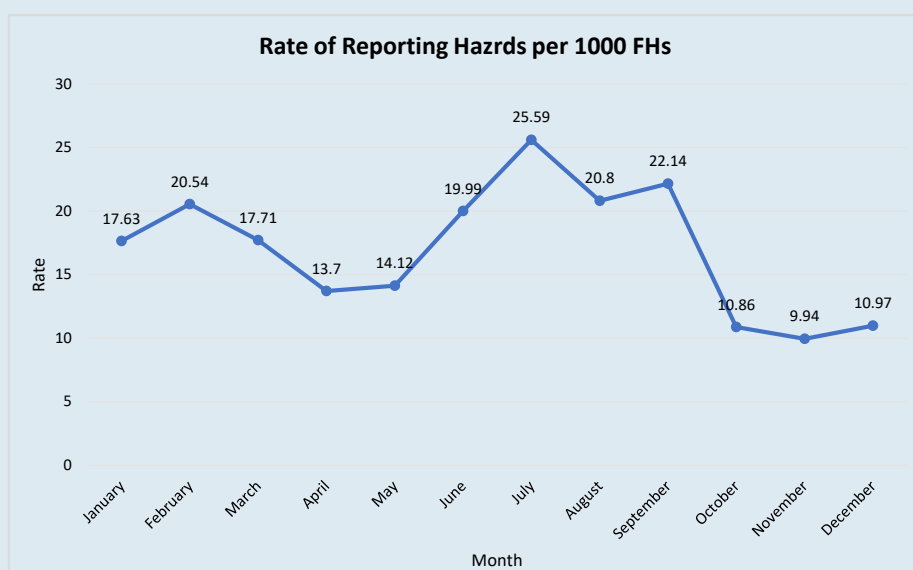
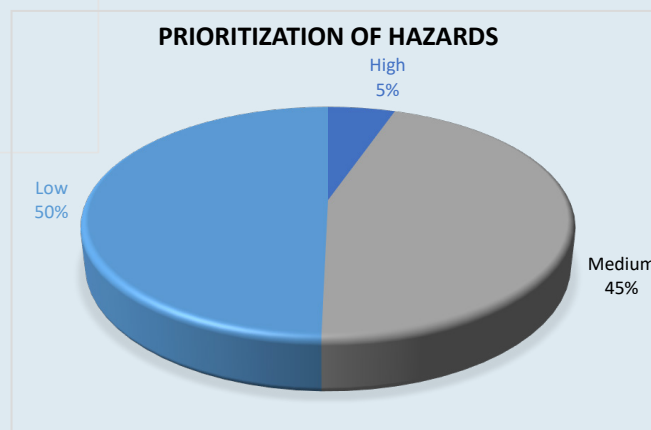
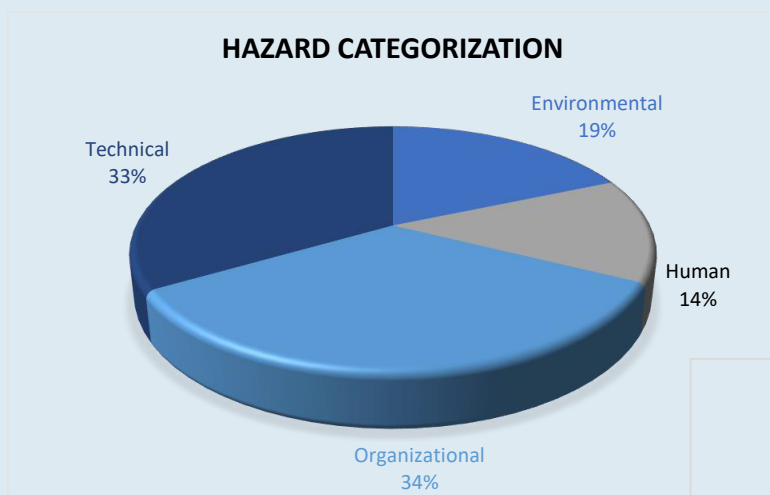




# Voluntary Information Reporting

## Hazard Reported in 2024

Out of total 1825 hazards reported in the year 2024, highest number of reports were related to the organization factors (34%) whereas the lowest number were associated to the Human factors (14%).

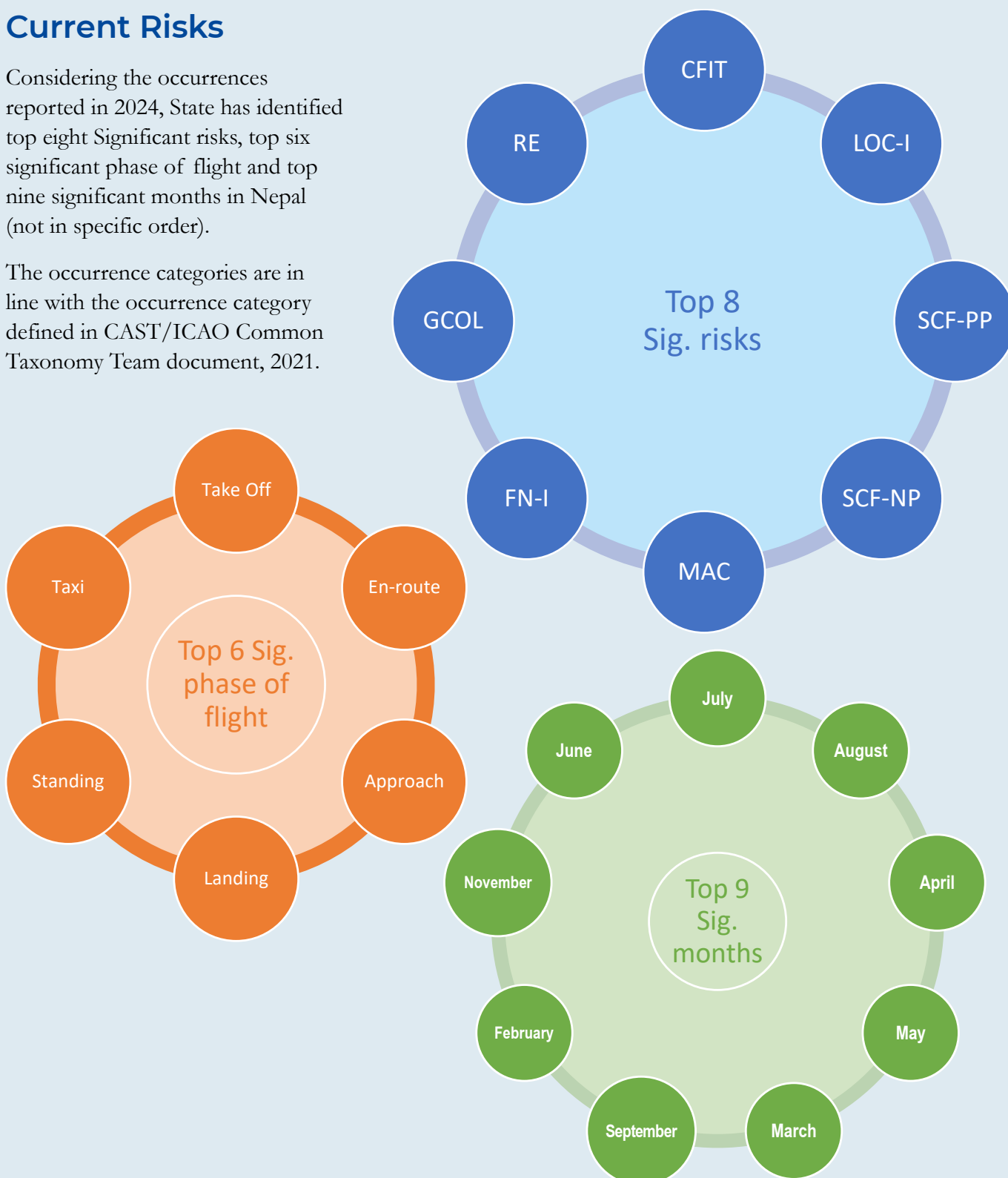


# State Significant Safety Risks for 2025

## Current Risks

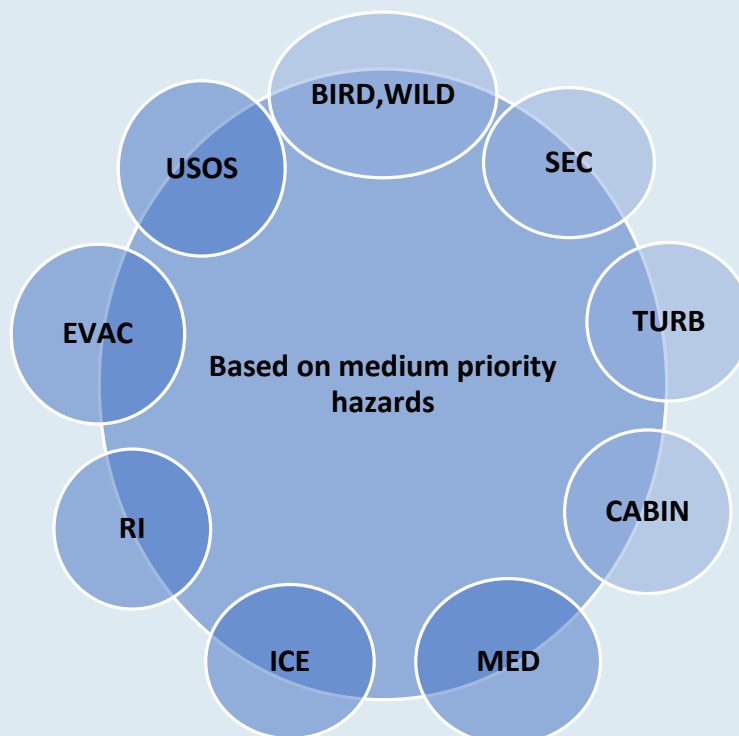
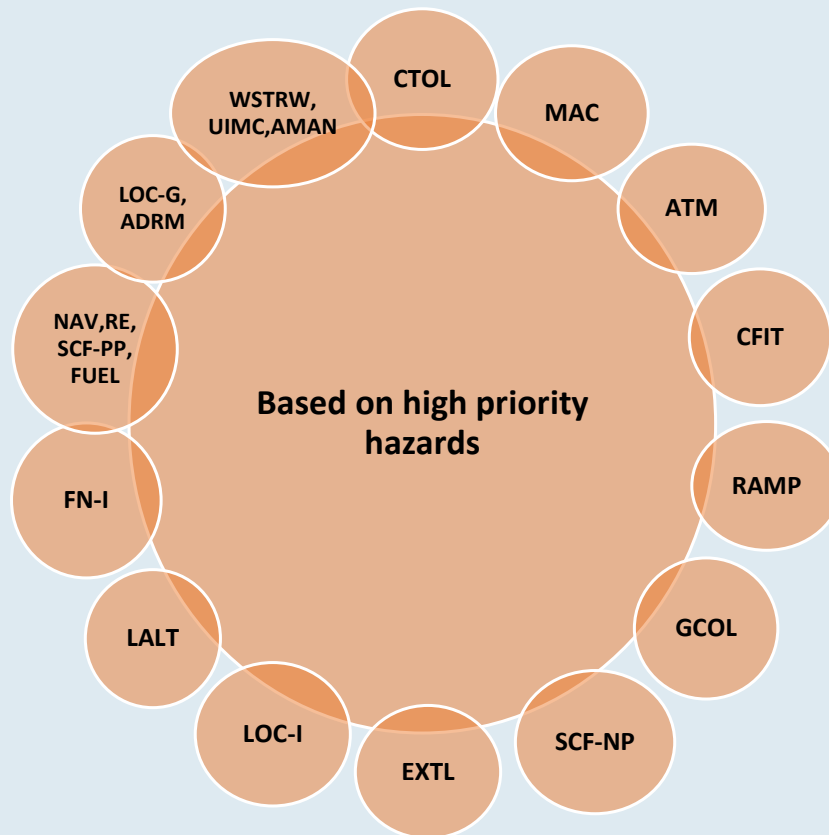
Considering the occurrences reported in 2024, State has identified top eight Significant risks, top six significant phase of flight and top nine significant months in Nepal (not in specific order).

The occurrence categories are in line with the occurrence category defined in CAST/ICAO Common Taxonomy Team document, 2021.



## Future Risks

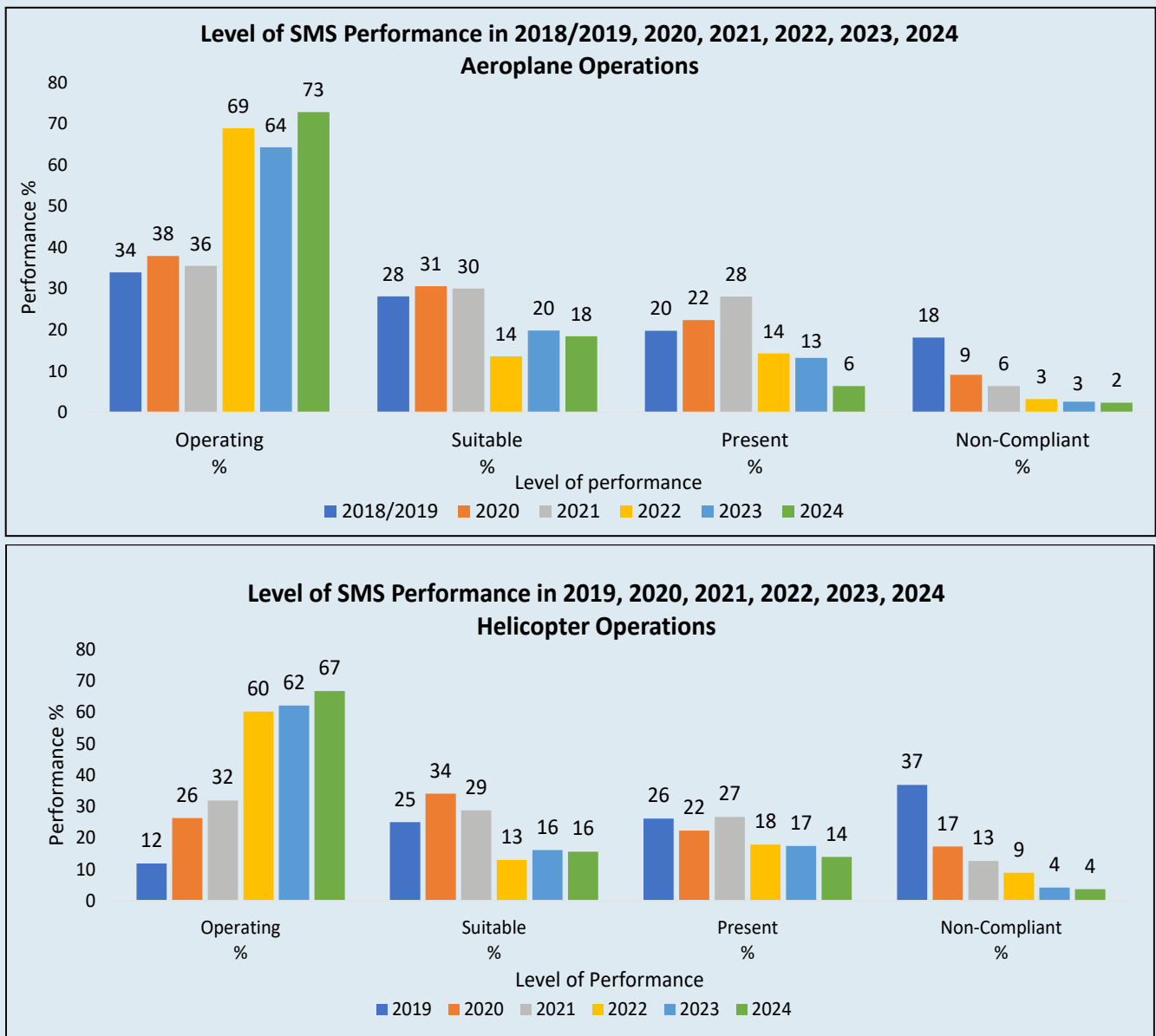
Considering the hazards reported in 2024, State has identified Significant future safety risks (not in specific order) for the future.





# Status of Safety Management System Implementation

SMS performance of the operators in last six years (2018/19, 2020, 2021, 2022, 2023 and 2024) was analyzed basically on their SMS audit reports.



**Non-compliant:** There is evidence that the ‘marker’ is not documented within the organization’s SMS or MS Documentation.

**Present:** There is evidence that the ‘marker’ is clearly visible and is documented within the organization’s SMS or MS Documentation.

**Suitable:** The marker is suitable based on the size, nature, complexity and the inherent risk in the activity.

**Operating:** There is evidence that the marker is in use and an output is being produced.

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

## Safety Performance Indicators and Targets for 2025

### A. Lagging Indicators

#### 1. Aircraft Accidents (Fatal and Non - Fatal)

SPI: Number of Accident in a year.

SPT: the number accident maintain to zero.

#### 2. Aircraft Serious Incidents

SPI: Number of serious incidents per 1000 FHs.

SPT: Reduce the annual average rate of serious incidents by 50% over the annual average rate of 2024.

### B. Indicators identified through reactive and proactive approaches

#### 1. Bird Strikes and Bird activities resulting occurrences (BIRD)

SPI: Number of incidents related to BIRD per 1000 FHs.

SPT for 2025: Reduce the number of occurrences related to BIRD by 15% over the value of 2024.

#### 2. System Component Failure or Malfunction (Non - Power plant) related occurrences (SCF-NP)

SPI: Number of occurrences related to SCF-NP per 1000 FHs.

SPT for 2025: Reduce the number of occurrences related to SCF-NP by 10% over the value of 2024.

#### 3. System Component Failure or Malfunction (Power - plant) related occurrences (SCF-PP)

SPI: Number of occurrences related to SCF-PP per 1000 FHs.

SPT for 2025: Reduce the number of occurrences related to SCF-PP by 10% over the value of 2024.

#### 4. Wildlife (WILD)- ASSD

SPI: Number of occurrences related to WILD per 1000 FHs.

SPT for 2025: Reduce the number of occurrences related to WILD by 15% over the value of 2024.

#### 5. Fire/Smoke (NON-IMPACT (F-NI)

SPI: Number of occurrences related to F-NI per 1000 FHs.

SPT for 2025: Reduce the number of occurrences related to F-NI by 10% over the value of 2024.

## **6. Fuel (FUEL)**

SPI: Number of occurrences related to FUEL per 1000 FHs.

SPT for 2025: Reduce the number of occurrences related to FUEL by 20% over the value of 2024.

## **7. Windshear and Thunderstorm (WSTRW)**

SPI: Number of occurrences related to WSTRW per 1000 FHs.

SPT for 2025: Reduce the number of occurrences related to WSTRW by 10% over the value of 2024.

## **8. Ground Handling (RAMP)**

SPI: Number of occurrences related to RAMP per 1000 FHs.

SPT for 2025: Reduce the number of occurrences related to RAMP by 15% over the value of 2024.

## **9. Abnormal Runway Contact (ARC)**

SPI: Number of occurrences related to ARC per 1000 FHs.

SPT for 2025: Reduce the number of occurrences related to ARC by 10% over the value of 2024.

## **10. Abrupt Manoeuvre (AMAN)**

SPI: Number of occurrences related to ARC per 1000 FHs.

SPT for 2025: Reduce the number of occurrences related to ARC by 10% over the value of 2024.

## **11. Aerodrome (ADRM)**

SPI: Number of occurrences related to ADRM per 1000 FHs.

SPT for 2025: Reduce the number of occurrences related to ADRM by 15% over the value of 2024.

## **12. AIRPROX/TCAS alert/Loss of Separation/Near Midair Collision/Midair Collision (MAC)**

SPI: Number of occurrences related to MAC per 1000 FHs.

SPT for 2025: Reduce the number of occurrences related to MAC by 20% over the value of 2024.

## **13. Medical (MED)**

SPI: Number of occurrences related to MED per 1000 FHs.

SPT for 2025: Reduce the number of occurrences related to MED to zero.

## **14. CNS / ATM (ATM)**

SPI-1: Number of occurrences related to controller errors and deviations in traffic controlling yearly.

SPI-2: Number of occurrences related to communication yearly.

SPI-3: Number of occurrences related to navigation yearly.

SPI-4: Number of occurrences related to surveillance yearly.

SPT for 2025: Reduce the number of occurrences related to ATM and CNS as were in 2024.

## **15. Security (SEC)**

SPI: Number of occurrences related to SEC per 1000 FHs.

SPT for 2025: Reduce the number of occurrences related to SEC by 50% over the value of 2024.

## **16. Ground Collision (GCOL)**

SPI: Number of occurrences related to GCOL per 1000 FHs.

SPT for 2025: Reduce the number of occurrences related to GCOL by 10% over the value of 2024.

## **17. Cabin Safety (CABIN)**

SPI: Number of occurrences related to GCOL per 1000 FHs.

SPT for 2025: Reduce the number of occurrences related to CABIN by 15% over the value of 2024.

## **18. Runway Incursion (RI)**

SPI: Number of occurrences related to RI per 1000 FHs.

SPT for 2025: Reduce the number of occurrences related to RI by 15% over the value of 2024.

## **19. Turbulence (TURB)**

SPI: Number of occurrences related to TURB per 1000 FHs.

SPT for 2025: Reduce the number of occurrences related to TURB by 10% over the value of 2024.

## **20. Loss of Control- in Flight (LOC-I)**

SPI: Number of occurrences related to LOC-I per 1000 FHs.

SPT for 2025: Reduce the number of occurrences related to LOC-I by 10% over the value of 2024.

## **21. Runway Excursion (RE)**

SPI: Number of occurrences related to RE per 1000 FHs.

SPT for 2025: Reduce the number of occurrences related to RE by 15% over the value of 2024.

## **22. Low Altitude Operations (LALT)**

SPI: Number of occurrences related to LALT per 1000 FHs.

SPT for 2025: Reduce the number of occurrences related to LALT by 10 % over the value of 2024.

## **23. Collision with Obstacles during Take off and Landing (CTOL)**

SPI: Number of occurrences related to CTOL per 1000 FHs.

SPT for 2025: Reduce the number of occurrences related to CTOL by 10% over the value of 2024.

## **24. CFIT**

SPI: Number of occurrences related to CFIT per 1000 FHs.

SPT for 2025: Reduce the number of occurrences related to CFIT by 50% over the value of 2024.

## **25. LOC-G**

SPI: Number of occurrences related to LOC-G per 1000 FHs.

SPT for 2025: Reduce the number of occurrences related to LOC-G by 50% over the value of 2024.

## **26. UIMC**

SPI: Number of occurrences related to UIMC per 1000 FHs.

SPT for 2025: Reduce the number of occurrences related to UIMC by 10% over the value of 2024.

## **27. NAV**

SPI: Number of occurrences related to NAV per 1000 FHs.

SPT for 2025: Reduce the number of occurrences related to NAV by 10% over the value of 2024.

## **28. USOS**

SPI: Number of occurrences related to USOS per 1000 FHs.

SPT for 2025: Reduce the number of occurrences related to USOS by 10% over the value of 2024.

# **C. Leading Indicators**

## **1. Number of hazards**

SPI: Number of Hazards from multiple sources including surveillance activities.

SPT for 2025: Increase the hazards reporting over the value of 2024.

## **2. Safety awareness workshops and seminars**

SPI: Number of safety awareness workshops and seminars.

SPT for 2025: Increase the number of safety workshops and seminars over the value of 2024.

## **3. Safety Trainings (SMS and SSP related)**

SPI: Number of safety trainings.

SPT for 2025: Increase the number of safety trainings over the value of 2024.

## **4. Number of Safety Committee Meetings**

SPI: Number of safety trainings.

SPT for 2025: Increase the number of safety committee meeting over the value of 2024.

## **5. Number of audit/inspection**

SPI: Number of audit/inspections.

SPT for 2025: Increase the number of regular and random audits and inspections over the value of 2024.

# **D. Indicators identified through NASP 2023 to 2025**

## **1. Goal No. 1: Achieve a continuous reduction of operational safety risks.**

### **National Accident Rate**

SPI-I: Number of accident (fatal and non-fatal) per 10,000 departures.

SPI-II: Number of Fatalities per passengers carried (Fatality rate).

SPI-III: % of occurrences related to High Risks Categories (HRCs).

SPT: Maintain a decreasing trend of the national accident rate.

## **2. Goal No: 2: Strengthen State's Safety Oversight Capability**

### **State's Effective Implementation (EI) %**

SPI-I: % of priority PQs related to a safety oversight system implemented.

SPI-II: % of required CAPs submitted using OLF.

SPI-III: % of CAPs submitted using OLF.

SPT: Increase the EI %, with focus on priority PQs to 75% by 2024, 85% by 2026 and 95% by 2030.

## **3. Goal No. 3: Effective SSP implementation**

### **a. SSP foundation**

SPI: % of SSP foundation implementation.

SPT: Increase the % of SSP foundation implementation to 100% by 2025.

### **b. SSP implementation**

SPI: Level of SSP implementation.

SPT: Attain Present level of SSP implementation by 2023 and Present and Effective level by 2025.

## **4. Goal 4: Increase collaboration at the regional level**

### **Safety data and information including SSP SPIs collection, analysis and sharing in Regional Level**

SPI: Number of Safety data and information shared, collected and analysed with AP- RASG.

SPT: Establish a mechanism and start sharing, collecting and analysing safety data and information with AP-RASG by 2025.

## **5. Goal 5: Expand the use of industry programme**

### **a. Contribution of information to RASG**

SPI: Amount of information contributed to RASG.

SPT: Increase contribution of information on operational safety risks, including SSP safety performance indicators (SPIs), and emerging issues, to the Asia Pacific Regional Aviation Safety Group (AP-RASG) each year.

### **b. Use of Industry Programme**

SPI: Amount of safety information sharing with industry.

SPT: Increase amount of information sharing with industry for effective implementation of NASP.

## **6. Goal No. 6: Ensure the appropriate infrastructure is available to support safety operations.**

### **Air Navigation and Aerodrome infrastructure**

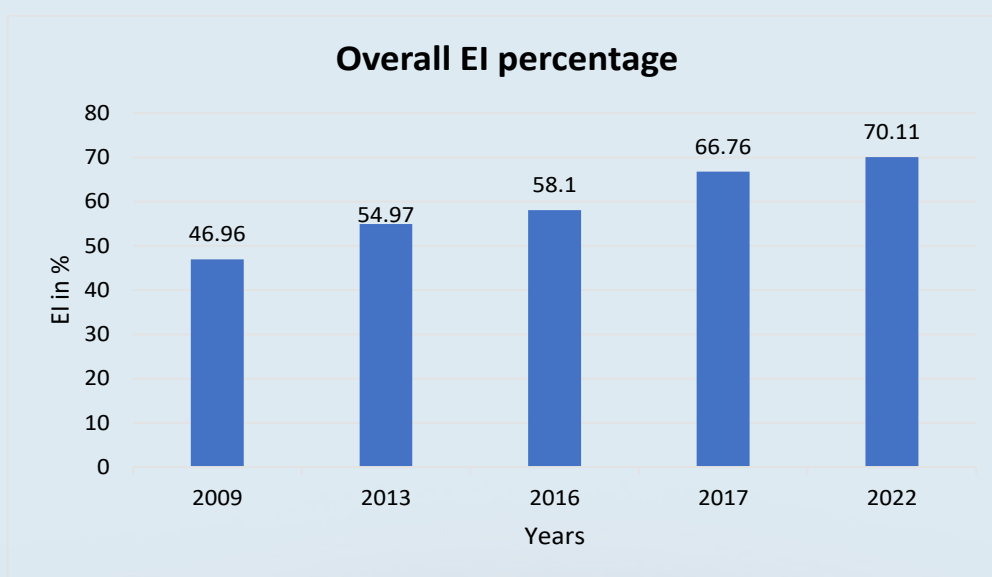
SPI: level of implementation of Air Navigation and Aerodrome core infrastructure elements.

SPT: increase the Air Navigation and Aerodrome core infrastructure in Nepal.

# State Safety Oversight Information

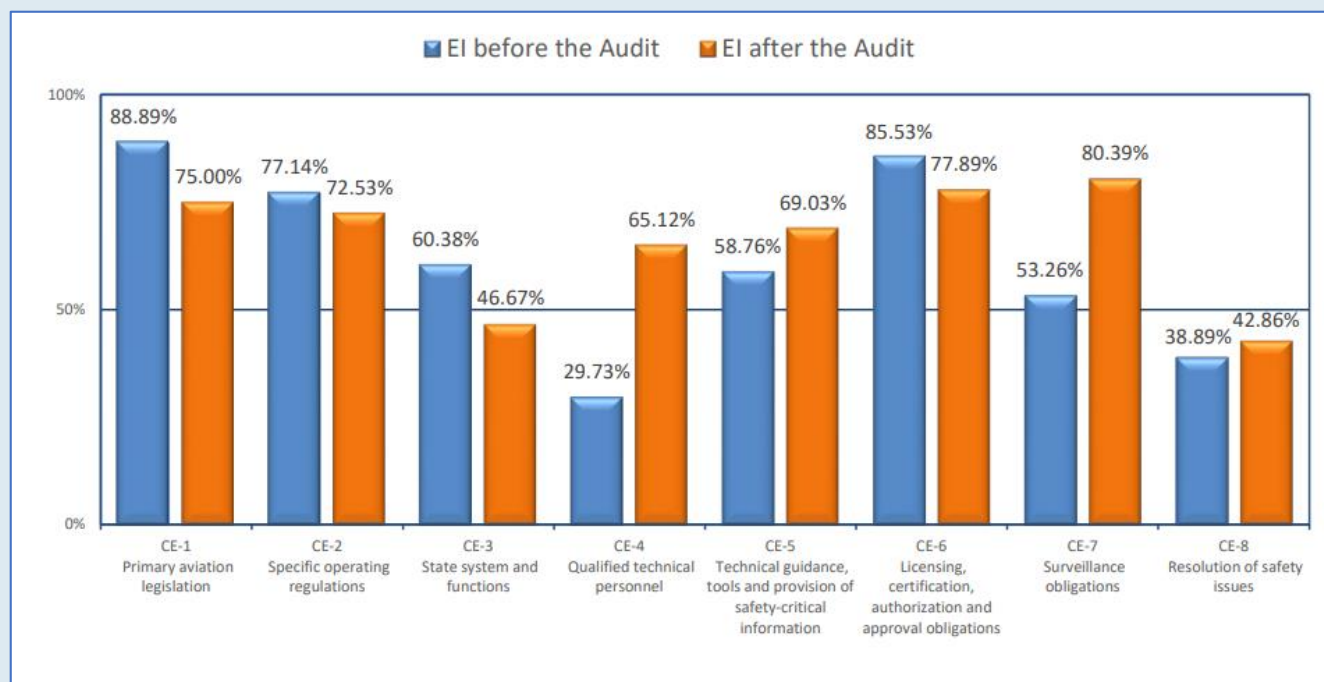
## Nepal's State Safety Oversight Capability

The latest ICAO USOAP audit of Nepal was conducted from 13 to 25 April 2022. In this audit State Safety Oversight Capability including 8 Areas and 8 Critical Elements were audited. In this audit Nepal has achieved the Effective Implementation Rate of 70.11%.

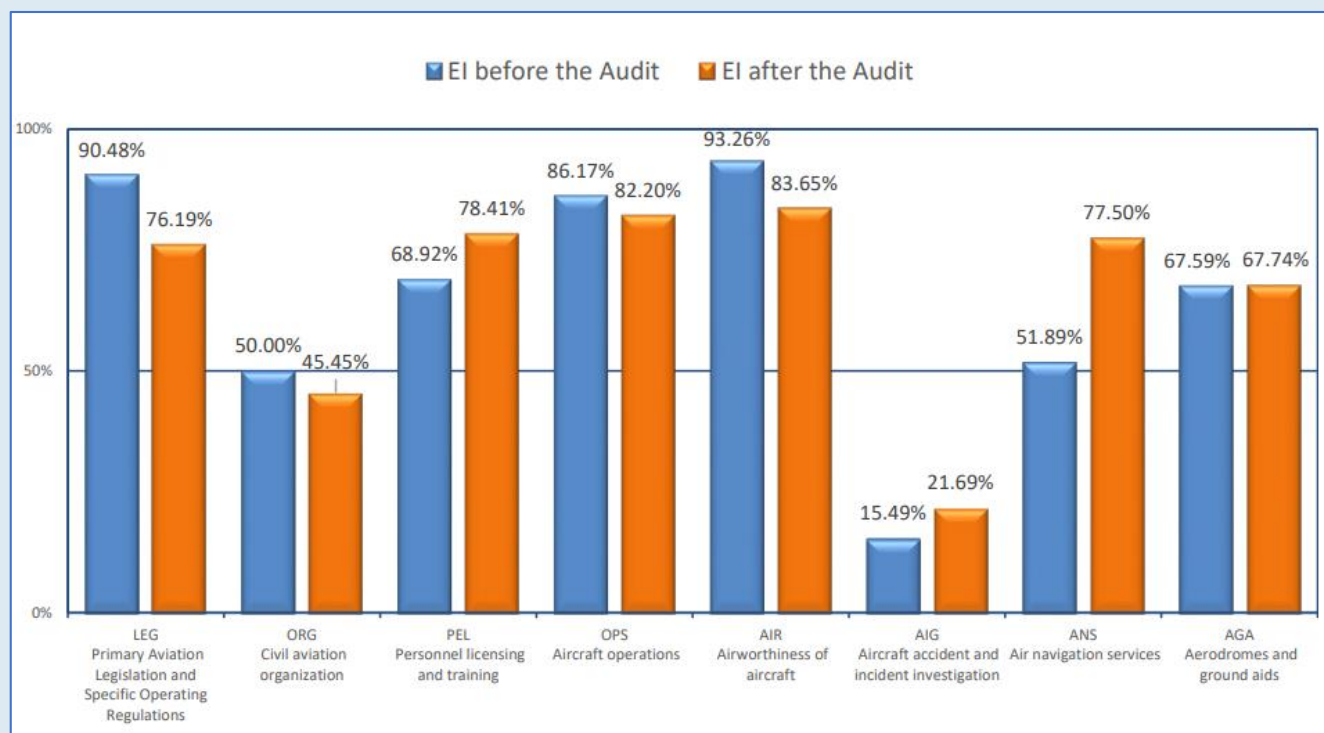




## EI percentage according to the Critical Elements

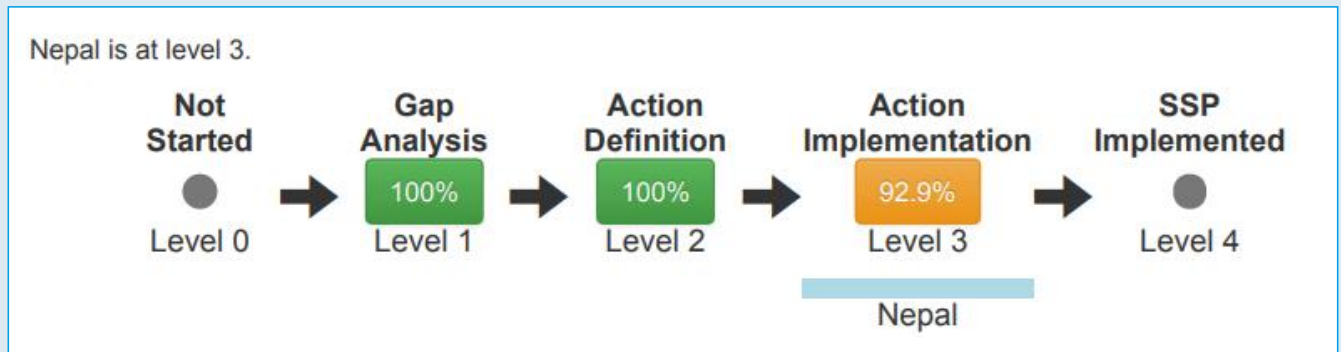


## EI percentage according to the Audit Areas



## SSP implementation in Nepal

Nepal's SSP implementation Level 3 (92.9% completed) well satisfying the target of State agreed with ICAO which is level 2.



### Definitions:

Level 0: States not having started a GAP analysis.

Level 1: States having started a GAP analysis.

Level 2: States having reviewed all the GAP analysis questions.

Level 3: States having defined an action plan for all non-implemented questions.

Level 4: States having closed all actions and fully implemented their SSPs.





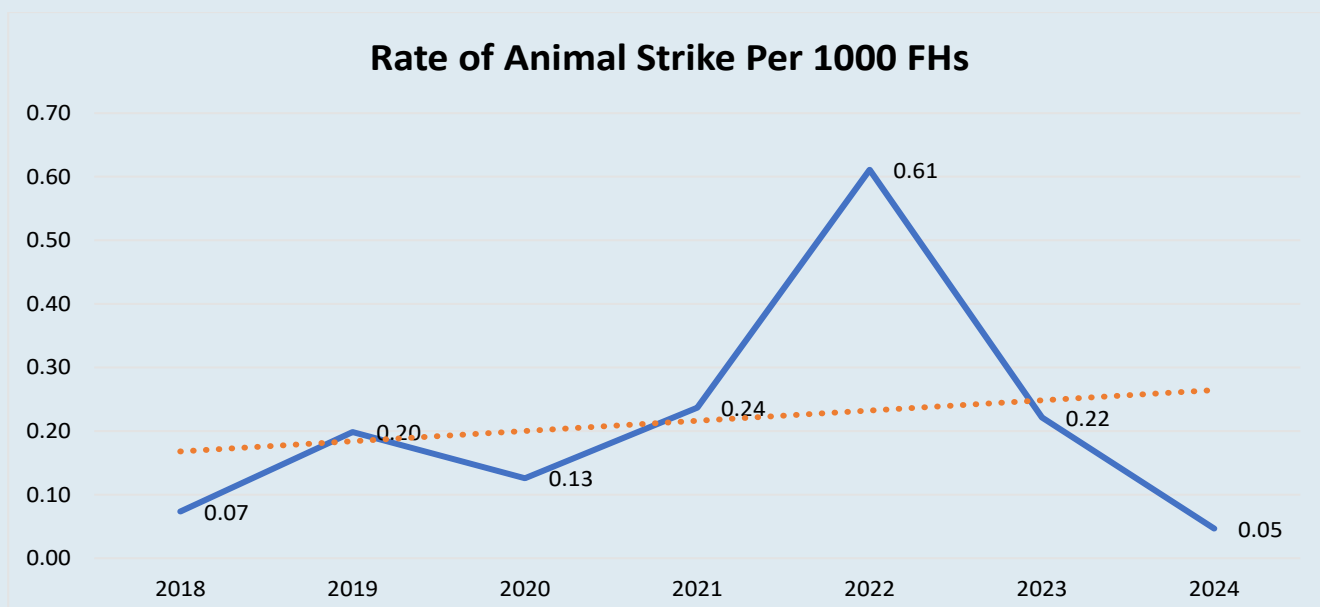
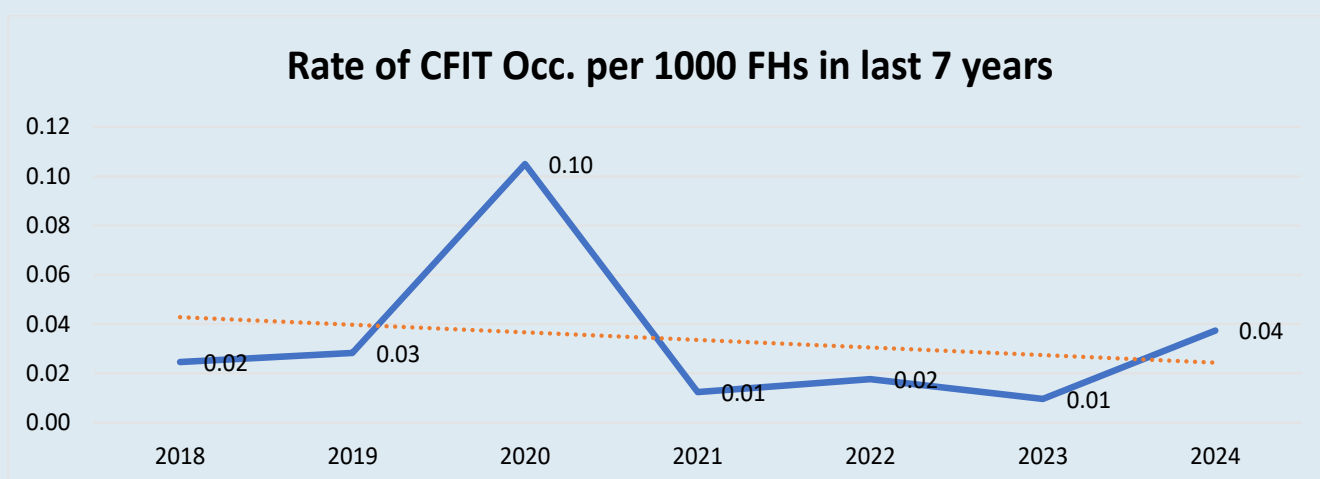
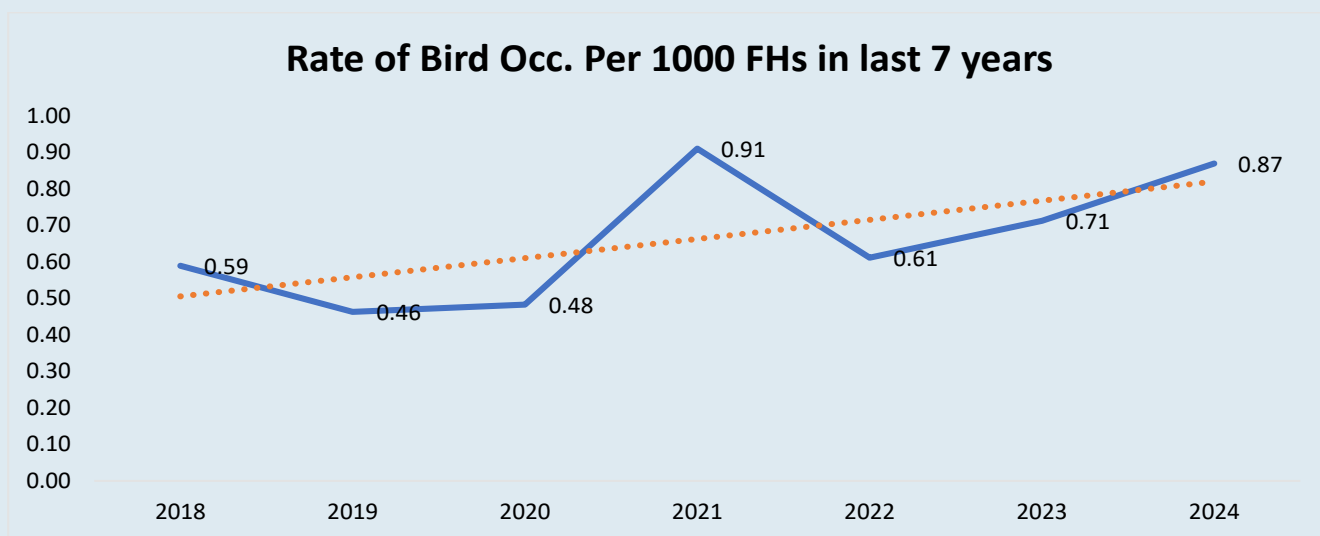
# OPERATIONAL SAFETY RISKS IN NEPAL

(as per NASP 2023- 2025)

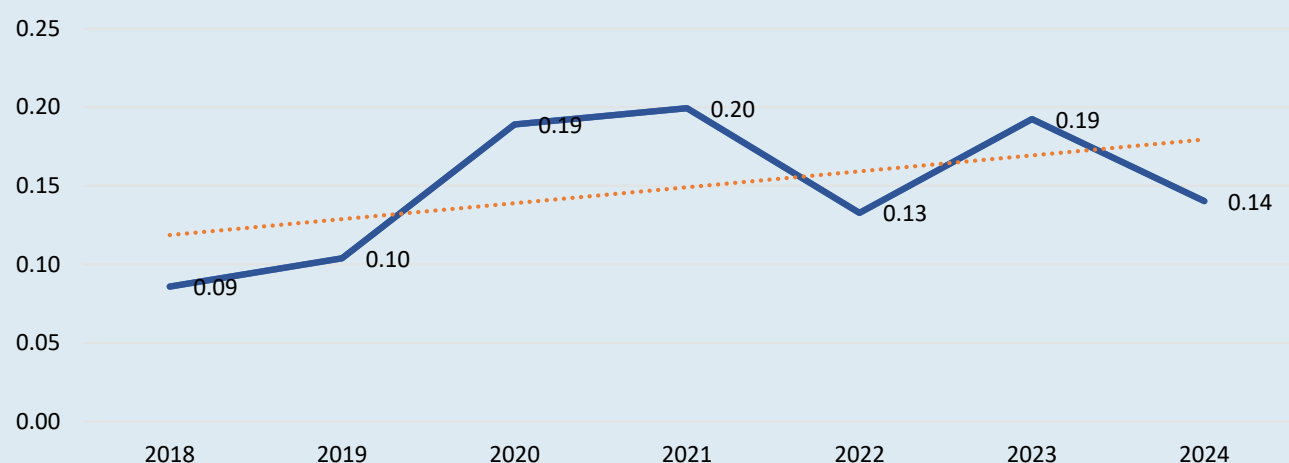


Nepal Aviation Safety Plan (NASP), 2023-2025 developed in congruence with the Global Aviation Safety Plan (GASP), Doc.10004 and Regional Aviation Safety Plan (RASP). NASP (2023-2025) has identified Seven areas of operational safety risk (not in specific order), viz. Controlled Flight into Terrain (CFIT), Loss of Control in Flight (LOC-I), Mid Air Collision (MAC), Runway Incursion (RI), Runway Excursion (RE), Abnormal Runway Contact (ARC) and Wild life Strike (WS).

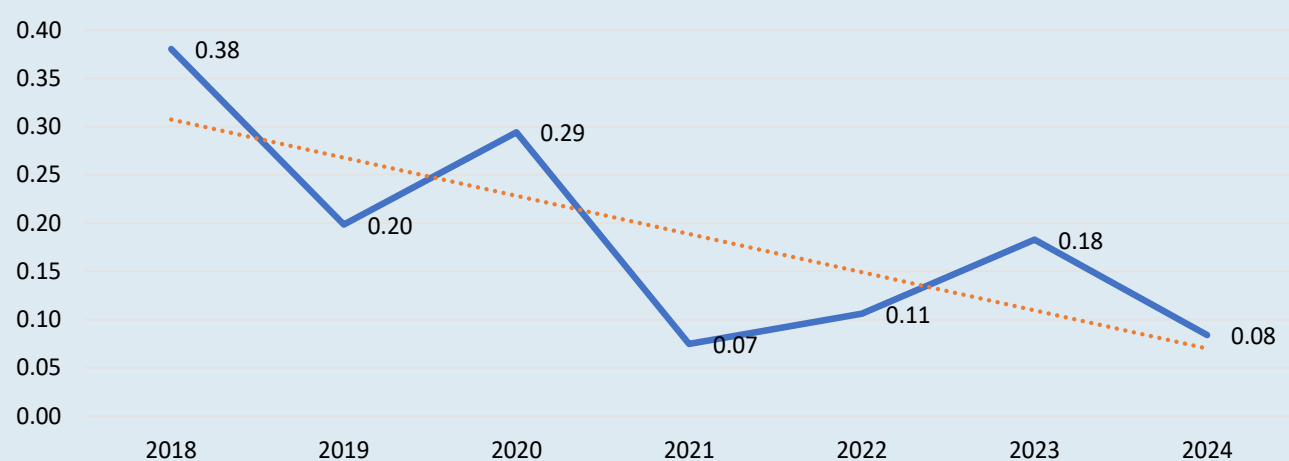
## Trend analysis of rate of occurrences: Top 7 Operational Safety Risks (2018, 2019, 2020, 2021, 2022, 2023 and 2024)



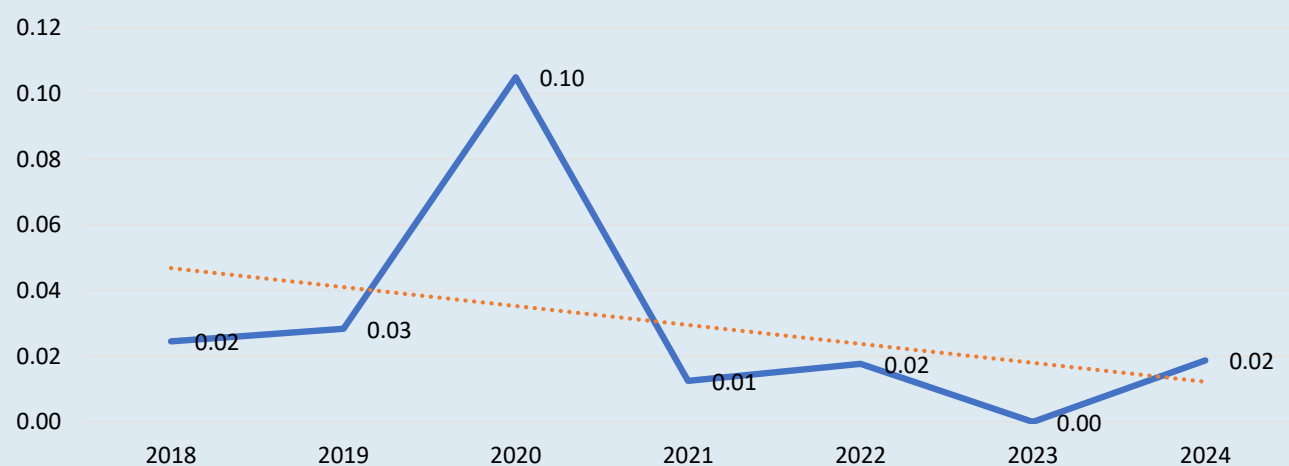
### Rate of ARC Occ. per 1000 FHs in last 7 years



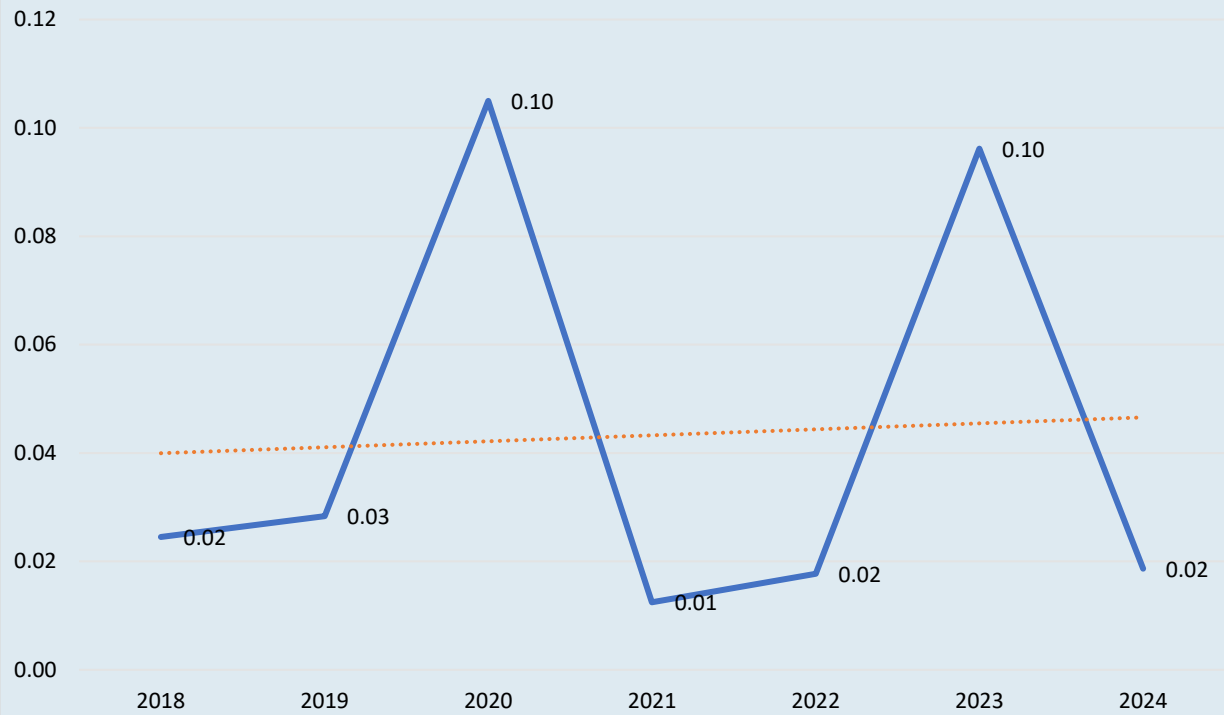
### Rate of MAC Occ. per 1000 FHs in last 7 years



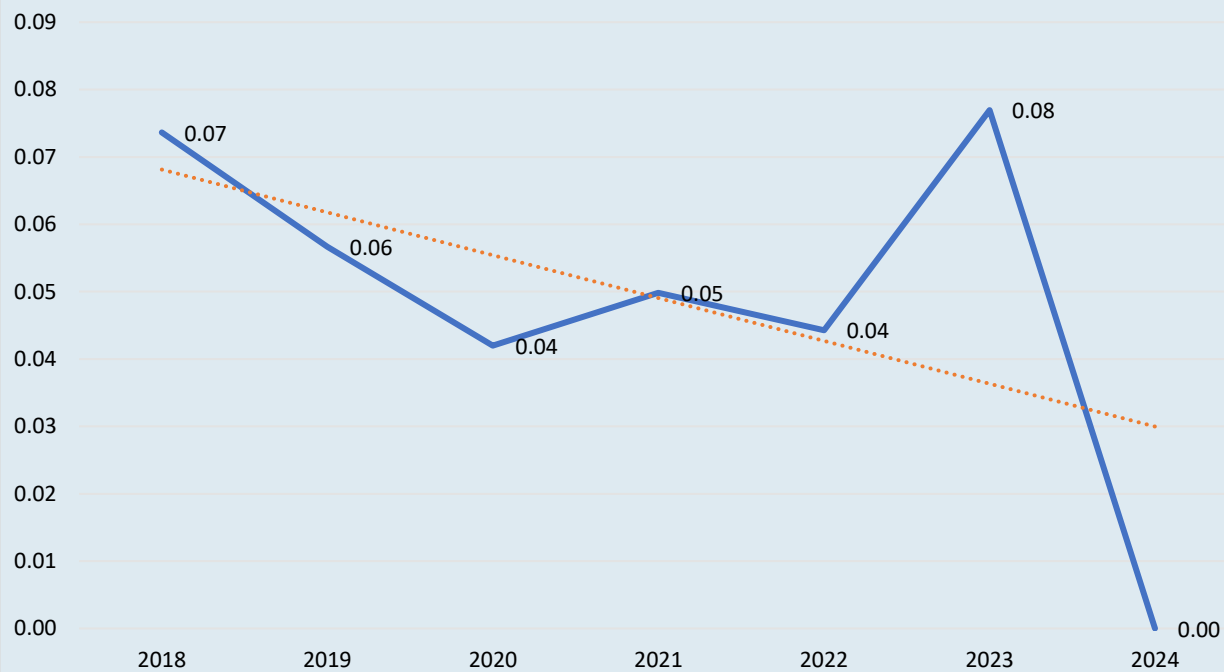
### Rate of RE Occ. per 1000 FHs in last 7 years



**Rate of LOC-I Occ. per 1000 FHs in last 7 years**



**Rate of RI Occ. per 1000 FHs in last 7 years**

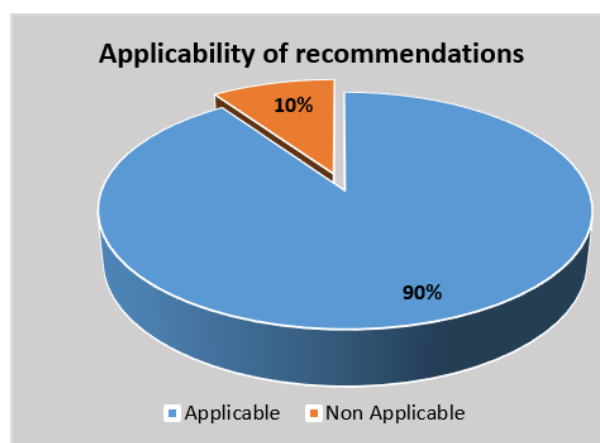


## Chapter 11

# Accident Investigation Recommendation Implementation Status (Recommendations issued from 2015 to 2024 by Government of Nepal)

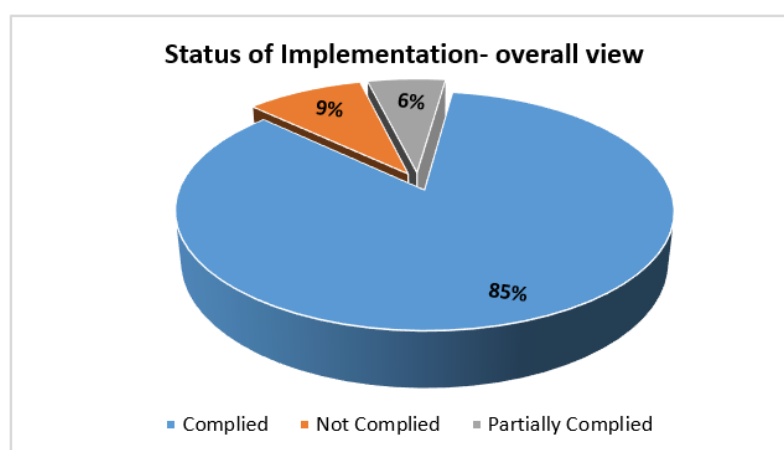
### Applicability of Accident Investigation Recommendations

<b>Total Recommendations:</b>	<b>145</b>
Applicable	131
Not Applicable:	14



### Status of Implementation of Applicable Recommendations

<b>Total Recommendation:</b>	<b>131</b>
Complied:	111
Partially complied:	8
Not Complied:	12

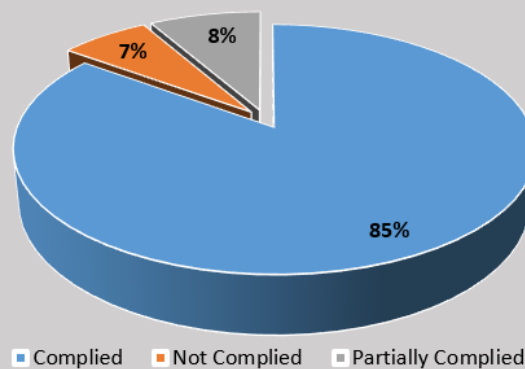


## Status of Implementation of Applicable Recommendations directed to CAAN, MOCTCA and Airline Operators

### Directed to CAAN

Total Recommendations:	60
Complied:	51
Partially complied:	5
Not Complied:	4

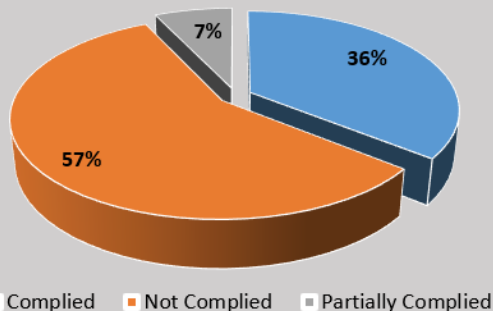
### Status of implementation - directed to CAAN



### Directed to MOCTCA

Total Recommendations:	14
Complied:	5
Partially complied:	1
Not Complied:	8

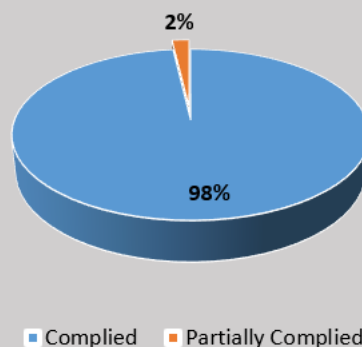
### Status of Recommendations directed to MoCTCA



### Directed to Airline Operators

Total recommendations:	54
Complied:	53
Partially complied:	1
Not Complied:	0

### Status of Recommendations - directed to Airline Operators



### **Note:**

1. Recommendation given for Czech Republic has not been counted in this analysis
2. Recommendations directed to both CAAN and Airline Operators have been counted to CAAN



## Chapter 12

# NATIONAL AVIATION SAFETY PLAN (NASP), NEPAL (2023 TO 2025)



## National Aviation Safety Plan, Nepal

2023 to 2025



Civil Aviation Authority of Nepal

## Goals of NASP

### Goal 1

- Achieve a continuous reduction of operational safety risks.

### Goal 2

- Strengthen safety oversight capabilities of Nepal.

### Goal 3

- Implement the State Safety Programme (SSP).

### Goal 4

- Increase collaboration at the regional level.

### Goal 5

- Expand the use of industry programmes.

### Goal 6

- Ensure the appropriate infrastructure is available to support safe operation.





# NASP's Goals with Targets

## Goal 1

**Target 1.1:** maintain a decreasing trend of the national accident rate.

## Goal 3

**Target 3.1:** Nepal to implement the foundation of its SSP by 2023.

**Target 3.2:** Nepal to work towards an effective SSP as follows:

- a. By 2023- Present
- b. By 2025- present and Effective

## Goal 5

**Target 5.1:** Maintain an increasing trend in industry's contribution in safety information sharing networks to State and region to assist in the development and update of NASP and RASP by 2025

## Goal 6

**Target 6.1:** Maintain an increasing trend with Air Navigation and Aerodrome Infrastructure that meet relevant ICAO Standards by 2025.

## Goal 2

**Target 2.1:** Nepal to improve score for the EI of CEs of the Nepal's safety oversight system with focus on priority PQs as follows:

By 2024- 75%  
By 2026- 85%  
By 2030- 95%

## Goal 4

**Target 4.1:** Nepal to use a regional safety oversight mechanism, another State or other safety oversight organization's ICAO recognized functions in seeking assistance to strengthen its safety oversight capabilities by 2023.

**Target 4.2:** Nepal to contribute information on operational safety risks, including SSP Safety Performance Indicators (SPIs) and emerging issues to Asia Pacific Aviation Safety Group (AP-RASG) by 2025.



# Aviation Activities in 2024

1. SMS Workshop and Seminar held in Chandragadhi CAO, Janakpur CAO, Nepalgunj CAO.
2. Safety Campaign at CAAN Head Office, Sinamangal (Technical collaboration with EU-SA-APP).
3. SRM Training held at CAAN Head Office, Sinamangal.
4. Safety Performance Indicator (SPIs) and Safety Performance Targets (SPTs) Training at CAAN Head Office, Sinamangal.
5. SMS and SRM Workshop at Simara CAO.
6. Safety promotion workshop based on ICAO SMS principles in GBIA.
7. Safety Awareness/workshop Program in Dhangadi.
8. ANS Safety Awareness Program and brief Information about Reporting Culture in Dhangadhi Airport.
9. ANS Safety Awareness Program and ICAO USOAP CMA Preparedness in TIACAO.
10. ANSSD Briefing about ICAO USOAP CMA Preliminary Report and Reporting Culture in Biratnagar.
11. ANS Briefing about ICAO USOAP CMA Preliminary Report in Kathmandu.
12. ANS Safety Awareness Program on Airspace Classification for Flight Crews in TIACAO.
13. Awareness Program on ANSSD Regulatory Framework in GBIA.
14. Adoption of ICAO SARPs in National Regulations and Briefing of ICAO USOAP CMA Report in TIACAO.
15. Training on Aerodrome Certification and Safety Oversight Inspectors (Aerodrome) course in Kathmandu.
16. Post Monsoon operation safety review in Kathmandu.
17. Monsoon safety awareness Program in Kathmandu.
18. STOL Operational Safety Program in Kathmandu.
19. UAV/UAS safety interaction in Kathmandu.
20. Aviation Enforcement awareness Program in Kathmandu.
21. Preflight risks assessment in Kathmandu.
22. Awareness Program about recreational aviation safety in Nepal.
23. CCTM awareness Program.
24. CAR-9 Awareness Program.
25. ELP Refresher Program.
26. Helicopter operational safety Program.





# Appendix- 1

## Record of Multi-Engine Aeroplane Accident in Nepal

S.N.	Date	Registration	Type of A/C	Operator/ Owner	Operation	Place	Fatality
1	5 Nov 1960	9N-AAD	DC-3	Nepal Airlines	Scheduled	Bhairahwa	4
2	1 Aug 1962	9N-AAH	DC-3	Nepal Airlines	Scheduled	Tulachan Dhuri	10
3	12 Jul 1969	9N-AAO	DV-3	Nepal Airlines	Scheduled	Near Heatauda	35
4	25 Jan 1970	9N-AAR	F-27	Nepal Airlines	Scheduled	New Delhi	1
5	15 Oct 1973	9N-ABG	DHC-6	Nepal Airlines	Scheduled	Lukla	None
6	22 Dec 1984	9N-ABH	DHC-6	Nepal Airlines	Scheduled	Cheklatidanda	15
7	02 May 1986	9N-ABI	DHC-6	Nepal Airlines	Scheduled	Sanfebagar Airport	None
8	19 Aug 1987	9N-ABB	DHC-6	Nepal Airlines	Scheduled	Dolpa	None
9	9 Jun 1991	9N-ABA	DHC-6	Nepal Airlines	Scheduled	Lukla	None
10	28 Jun 1991	9N-ABS	DHC-6	ATSC,DCA	Charter	Simikot	None
11	26 Sep 1992	9N-ACI	Y-12	Nepal Airways	Scheduled	Lukla	None
12	08 Nov 1993	9N-ACS	Y-12 II	Nepal Airways	Scheduled	Jomsom	None
13	31 Jul 1993	9N-ACL	DO-228	Everest Air	Scheduled	Solighopte	18
14	14 Jan 1995	9N-ABI	DHC-6	Nepal Airlines	Scheduled	Kathmandu Airport	2
15	15 Jul 1995	9N-ADB	Y-12	Nepal Airways	Scheduled	Bharatpur	None
16	25 Apr 1996	9N-ABR	HS-748	Nepal Airlines	Scheduled	Megghauli	None
17	28 Jul 1996	9N-ACC	DHC6/300	ATSC,DCA	Charter	Simikot	None
18	23 Dec 1996	9N-ACF	Y-12	Nepal Airways	Scheduled	Dolpa	None
19	21 Aug 1998	9N-ACC	DHC-6	Sangrila Air	Scheduled	Chuchche Khark, Myagdi	18
20	05 Sept 1999	9N-AEG	HS-748	Necon Air	Scheduled	Thankot, Kathmandu	15
21	25 Dec 1999	9N-AFL	DHC-6	Skyline Airways	Scheduled	Burjo Lake, Makwanpur	10
22	26 Feb 2000	9N-ABO	DHC-6	Nepal Airlines	Scheduled	Bajhang	1
23	27 Jul 2000	9N-ABP	DHC-6	Nepal Airlines	Scheduled	Jogbuda, Dadeldhura	25
24	03 Nov 2000	9N-ACV	DO-228	Gorkha Airlines	Scheduled	Lukla	None
25	19 Nov 2000	9N-AFS	DO-228	Cosmic Air	Scheduled	Tumlingtar	None



S.N.	Date	Registration	Type of A/C	Operator/ Owner	Operation	Place	Fatality
26	05 Apr 2001	9N-AEV	DHC-6/300	Yeti Airlines	Scheduled	Tumlingtar	None
27	17 Jul 2002	9N-AGF	DHC6/300	Skyline Airlines	Scheduled	Gadgade Danda, Surkhet	4
28	22 Aug 2002	9N-AFR	DHC6/300	Shangrila Air	Scheduled	Pokhara	18
29	21 Apr 2004	9N-AEK	B1900D	Buddha Air	Scheduled	TIA	1
30	25 May 2004	9N-AFD	DHC-6/300	Yeti Airlines	Scheduled	Lamjura, Solukhumbu	3
31	30 Jun 2005	9N-AEO	DO-228	Gorkha Airlines	Scheduled	Lukla Airport	None
32	12 Jun 2006	9N-AEQ	DHC6/310	Yeti Airlines	Scheduled	Jumla Airport	9
33	03 Jul 2006	9N-AFE	DHC-6/310	Yeti Airlines	Scheduled	Bajura Airport	None
34	08 Oct 2008	9N-AFE	DHC-6/300	Yeti Airlines	Scheduled	Lukla Airport	18
35	24 Aug 2010	9N-AHE	DO-228	Agni Air	Scheduled	Sikharpur, Makawanpur	14
36	15 Dec 2010	9N-AFX	DHC-6/300	Tara Air	Scheduled	Okhaldhunga	22
37	25 Sep 2011	9N-AEK	Beech1900D	Buddha Air	Scheduled	Kotdanda, Lalitapur	19
38	14 May 2012	9N-AIG	DO-228	Agni Air	Scheduled	Jomsom Airport	15
39	21 Sep 2012	9N-ABQ	Do-228	Tara Air	Scheduled	Dolpa	None
40	28 Sep 2012	9N-AHA	DO-228	Sita Air	Scheduled	Manohara, Bhaktapur	19
41	16 May 2013	9N-ABO	DHC-6/300	Nepal Airlines	Scheduled	Jomsom Airport	None
42	01 Jun 2013	9N-AHB	DO-228	Sita Air	Scheduled	Simikot Airport	None
43	16 Feb 2014	9N-ABB	DHC-6/300	Nepal Airlines	Scheduled	Masinelek, Arghakhanchi	18
44	24 Feb 2016	9N-AHH	DHC-6/400	Tara Air	Scheduled	Dana, Myagdi	23
45	27 May 2017	9N-AKY	Let410	Summit Air	Cargo	Lukla Airport	2
46	28 Nov 2017	9N-ABM	DHC-6/300	Tara Air	Scheduled	Simikot	None
47	14 Apr 2019	9N-AMH	LET 410	Summit Air	Scheduled	Lukla Airport	1+2
48	28 Mar 2020	9N-AKU	Y12 E	Nepal Airlines Corp.	Chartered	Nepalgunj Airport	None
49	29 May 2022	9N- AET	DHC6	Tara Air	Scheduled	Titi, Ghasa Area, Mustang	22
50	15 Jan 2023	9N-ANC	ATR 72-500	Yeti Airlines	Scheduled	Pokhara valley, Seti River	72
51	24 Jul 2024	9N-AME	CRJ 200 LR	Saurya Airlines	Ferry Flight	TIA Airport	18

“Note: ‘+’ sign shows fatality involved person outside the aircraft.”

*(record of accident till the publication of the report)*

## Appendix -2

### Record of Single-Engine Aeroplane Accident in Nepal

S.N.	Date	Registration	Type of A/C	Operator/ Owner	Operation	Place	Fatality
1	31 Mar 1975	9N-AAZ	PC-6	Nepal Airlines	Charter	Bouddha, Kathmandu	5
2	30 Oct 1981	9N-ABJ	PC-6	Nepal Airlines	Charter	Biratnagar	10
3	20 Nov 1998	9N-ABK	PC-6/B2-H4	Nepal Airlines	Charter	Phakding	1
4	17 Jan 1999	9N-ADA	Cessna-208	Necon Air	Charter	Jumla	5
5	21 Nov 2011	9N-AJM	Cessna-208	Makalu Air	Cargo	Talcha Airport	None
6	26 Feb 2016	9N-AJB	PAC750XL	Air Kashthamandap	Charter	Chilkhaya, Kalikot	2
7	08 Apr 2016	9N-AKC	Cessna-208	Makalu Air	Cargo	Near Simikot	None
8	16 May 2018	9N-AJU	Cessna-208	Makalu Air	Cargo	Simikot Pass	2

*(record of accident till the publication of the report)*





## Appendix - 3

### Record of Helicopter Accident in Nepal

S.N.	Date	Registration	Type	Operator/Owner	Place	Fatality
1	27 Dec 1979	9N-RAE	AllutteIII	VVIP	Langtang	6
2	27 Apr 1993	9N-ACK	Bell206	Himalayan Helicopter	Langtang	None
3	24 Jan 1996	9N-ADM	MI17	Nepal Airways	Sotang	None
4	30 Sep 1997	9N-AEC	AS350	Karnali Air	Thupten Choling	1
5	13 Dec 1997	9N-ADT	MI17	Gorkha Airlines	Kalikot	None
6	04 Jan 1998	9N-RAL	Bell206	VVIP Flight	Dipayal	
7	24 Oct 1998	9N-ACY	AS350B	Asian Airlines	Mulkharka	3
8	30 Apr 1999	9N-AEJ	AS350BA	Karnali Air	Lisunkhu, Sindhupalchowk	None
9	31 May 1999	9N-ADI	AS350B2	Manakamana Airways	Ramechhap	None
10	11 Sep 2001	9N-ADK	MI17	Air Ananya	Mimi	None
11	12 Nov 2001	9N-AFP	AS350B	Fishtail Air	Rara Lake, Mugu	4
12	12 May 2002	9N-AGE	AS350B2	Karnali Air	Makalu Base Camp	None
13	30 Sep 2002	9N-ACU	MI17	Asian Airlines	Solukhumbu	11
14	28 May 2003	9N-ADP	MI17IV	Simrik Air	Everest Base Camp	2
15	04 Jan 2005	9N-AGG	AS350BA	Air Dynasty HeliService	Thhose VDC, Ramechhap	3
16	02 Jun 2005	9N-AND	MI17	Shree Airlines	Everest Base Camp	None
17	07 May 2006	9N-ADT	MI17MTV1	Heli Hansa Services	Dhawalagiri Base Camp	None
18	08 Aug 2006	9N-AGS	MI17	Karnali Air	TIA, Kathmandu	None
19	03 Sep 2006	9N-ACR	AS350BA	Air Dynasty HeliService	Dhawalagiri Base Camp	None
20	23 Sep 2006	9N-AHJ	MI17	Shree Airlines	Ghunsa, Taplejung	24
21	23 Nov 2006	9N-ADO	MI17	Simrik Air	Raralihi, Jumla	None
22	29 Jun 2008	9N-AIA	AS350	Fishtail Air	Annapurna Base Camp	None
23	15 Nov 2009	9N-AHT	MI17	Manang Air	Rodikot, Humla	1
24	07 Nov 2010	9N-AIX	AS350B3	Fishtail Air	Amadablam Mountain	2
25	29 Nov 2011	9N-AIK	AS350B	Fishtail Air	Solukhumbu	None

S.N.	Date	Registration	Type	Operator/ Owner	Place	Fatality
26	19 Jun 2013	I-VIEW	AS350B3	Fishtail Air	Simikot, Muchu	1
27	03 Aug 2014	9N-AJI	AS350B3	Fishtail Air	Sindhupalchok	1
28	27 Apr 2015	9N-ALC	AS350B3	Manang Air	Manbu, Gorkha	+1
29	02 Jun 2015	9N-AJP	AS350B3	Mountain Helicopter	YamunaDanda, Sindhupalchok	4
30	22 Jun 2015	9N-AKF	AS350B3e	Simrik Air	Samdo, Gorkha	None
31	17 Mar 2016	9N-AJI	AS350B3	Fishtail Air	Langtang	None
32	08 Aug 2016	9N-AKA	AS350B3	Fishtail Air	Betani, Nuwakot	7
33	30 Jun 2018	9N-ALR	AS350B2	Simrik Air	Grandy Roof-top Helipad	None
34	14 Aug 2018	9N-AMV	AS350B	Manang Air	Hilsa, Humla (tail strike)	+1
35	8 Sep 2018	9N-ALS	AS350B3	Altitude Air	Dhading	6
36	27 Feb 2019	9N-AMI	AS350B3e	Air Dynasty	Pathivara, Taplejung	7
37	14 Apr 2019	9N-ALC	AS350	Manang Air	Lukla Airport	None
38	05 May 2023	9N-AJZ	AS350B3e	Simrik Air	Chumrung, Sankhuwasabha	1
39	11 Jul 2023	9N-AMV	AS350B3e	Manang Air	Chholing, Lamjura, Solukhumbu	6
40	14 Oct 2023	9N-ANJ	AS350B3e	Manang Air	Lobuche, Solukhumbu	1
41	07 Aug 2024	9N-AJD	AS350FX2	Air Dynasty	Shivapuri-7, Suryachaur Nuwakot	5

“Note: ‘+’ sign shows fatality involved person outside the aircraft.”

*(record of accident till the publication of the report)*



## Appendix – 4

### Record of Foreign-Registered Aircraft Accident in Nepal

S.N.	Date	Registration	Type	Operator/ Owner	Operation	Place	Fatality
1	30 Aug 1955	VT-AZX	DC-3	Kalinga Air	Scheduled	Simara	2
2	15 May 1956	VT-DBA	DC-3	Indian airlines	Scheduled	Kathmandu	14
3	24 Mar 1958	VT-CYN	DC-3	Indian Airlines	Scheduled	Patnebhanjyang	20
4	10 May 1972	HS-TGU	DC-8-33	Thai Airways International	Scheduled	TIA, Kathmandu	+1
5	31 Jul 1992	HS-TID	A 310	Thai Airways	Scheduled	Ghyangphedi	113
6	28 Sep 1992	AP-BCP	A 310	Pakistan International Airlines	Scheduled	Bhattedanda	167
7	07 Jul 1999	VT-LCI	B727(200)	Lufthansa	Cargo	Bhasmasur Hill, Kathmandu	5
8	12 Mar 2018	S2 - AGU	DHC 8 D	US Bangla	Scheduled	TIA, Kathmandu	51

“Note: ‘+’ sign shows fatality involved person outside the aircraft.”

*(record of accident till the publication of the report)*



# Abbreviations and Acronyms

AGA - Aerodrome and Ground Aids	MOR - Mandatory Occurrence Reporting
AIG - Aircraft Accident and Incident Investigation	MTOW - Maximum Take-Off Weight
AIR – Airworthiness	NASP - Nepal Aviation Safety Plan
Airprox- Aircraft Proximity	NAV - Navigation
ANS - Air Navigation Services	OPS - Operations
APAC - Asia Pacific	ORG - Organization
APRAST - Asia Pacific Regional Aviation Safety Team	PEL - Personnel Licensing
ATM - Air Traffic Management	PQs - Protocol Questions
ATS - Air Traffic Services	RASG - Regional Aviation Safety Group
CAAN - Civil Aviation Authority of Nepal	RASP - Regional Aviation Safety Plan
CAP - Corrective Action Plan	RE - Runway Excursion
CAST - Commercial Aviation Safety Team	RI - Runway Incursion
CE - Critical Element	RS - Runway Safety
CFIT - Controlled Flight into Terrain	SARPs - Standards and Recommended Practices
CICTT - CAST/ICAO Common Taxonomy Team	Sch. - Scheduled
DHM - Department of - Hydrology and Meteorology	SEI - Safety Enhancement Initiative
EI - Effective Implementation	SMS - Safety Management System
FHs - Flying Hours	SMSIGM - Safety Management System Implementation Guidance Material
GASP - Global Aviation Safety Plan	SRPWG - Safety Reporting Programme Working Group
HRC - High Risk Category	SSP - State Safety Programme
ICAO - International Civil Aviation Organization	STOL - Short Take-off and Landing
ICVM - ICAO Coordinated Validation Mission	TIA - Tribhuvan International Airport
LEG - Legislation	USOAP - Universal Safety Oversight Audit Programme
LOC-I - Loss of Control- In Flight	WS - Wildlife Strike
MAC - Mid Air Collision	
MoCTCA - Ministry of Culture, Tourism and Civil Aviation	



## Civil Aviation Authority of Nepal

### SAFETY POLICY STATEMENT

Civil Aviation Authority of Nepal (CAAN) is responsible for the management of civil aviation safety in Nepal. We are committed to developing strategies, policies and processes to ensure that all aviation activities within Nepal are carried out to the highest level of safety performance, while meeting international standards.

As Director General of CAAN I am accountable for the implementation, operation and the management of the State Safety Programme (SSP). The SSP sets out our approach to managing aviation safety risk in Nepal and our commitment to:

- a. ensuring that our management is accountable for the delivery of the highest level of safety performance;
- b. establishing an effective SSP that will identify and manage state safety risks to reduce the likelihood of a fatal accident occurring;
- c. working collaboratively with our aviation industry on safety issues to encourage the sharing of safety information;
- d. ensuring that CAAN has sufficient resources and competent personnel to discharge their safety responsibilities;
- e. carrying out surveillance and oversight activities in a targeted and proportionate manner, supported by analyses based on safety risks;
- f. promoting a positive safety culture within CAAN and across the whole of the aviation industry;
- g. establishing a just culture in respect of our safety reporting systems to encourage individuals and organisations to report safety issues or concerns;
- h. establishing state safety objectives supported by meaningful Safety Performance Indicators and Targets to continuously improve safety within Nepal; and
- i. ensuring that no information gathered under the SSP or the SMS will be used as the basis for enforcement action, except in the case of gross negligence or wilful deviation.

  
**Er. Pradeep Adhikari**  
Director General

Date: 1<sup>st</sup> February 2022



## **Civil Aviation Authority of Nepal**

**Aviation Safety and Security Regulation Directorate**

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