ASRG/6 Meeting 2nd October 2024 Virtual

13th ASR MID

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Contents

- Objective of ASRG
- □ Reactive safety information
- Proactive safety information
- **□** Emerging Issues
- MID Region Safety Performance
- MID Region Safety Priorities





Objective of ASRG

- Gathering and Analyzing safety information
- MID Region Safety Priorities
- Production of the annual safety report
 - ▶1st Edition, Nov 2012
 - ▶2ndEdition, Jan 2014
 - ➤ 3rd Edition, March 2015
 - ≽4th Edition, May 2016
 - ▶5th Edition, Jan 2017
 - >6th Edition, June 2018
 - ≻7th Edition, April 2019
 - ▶8th Edition, April 20
 - ▶9th Edition, March 2021
 - ▶10th Edition, March 2022
 - ➤ 11th Edition May 2023
 - ▶12th Edition, April 2024
 - ➤13th Edition, in progress



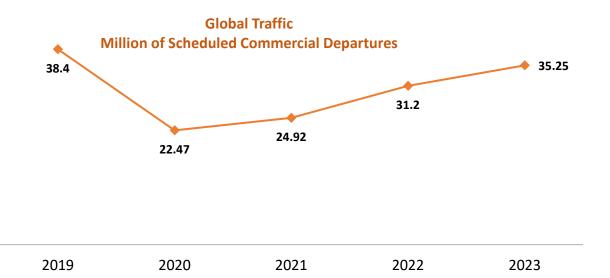




TRAFFIC VOLUMES

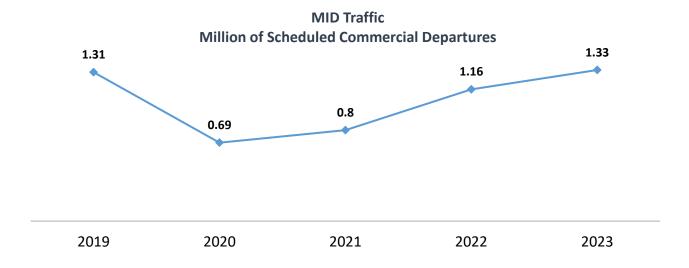


Global Traffic





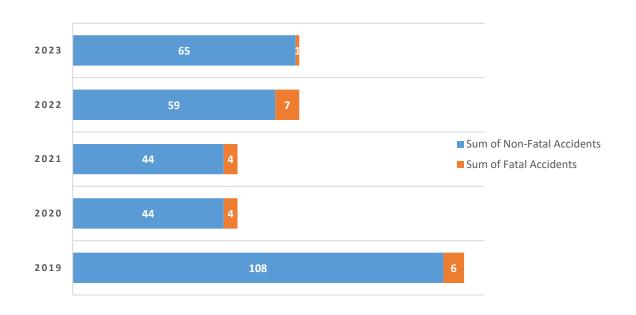
MID Traffic





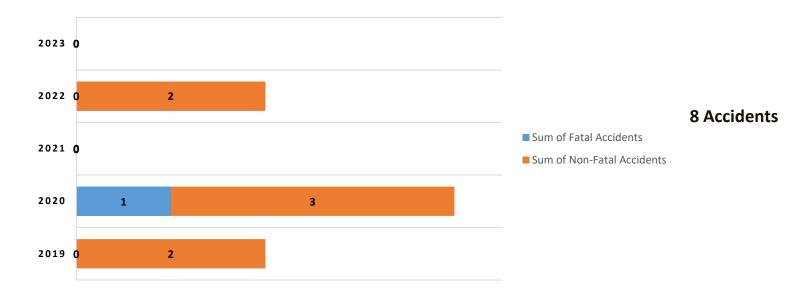
REACTIVE SAFETY INFORMATION STATE OF OCCURRENCE

Number of Global Accidents



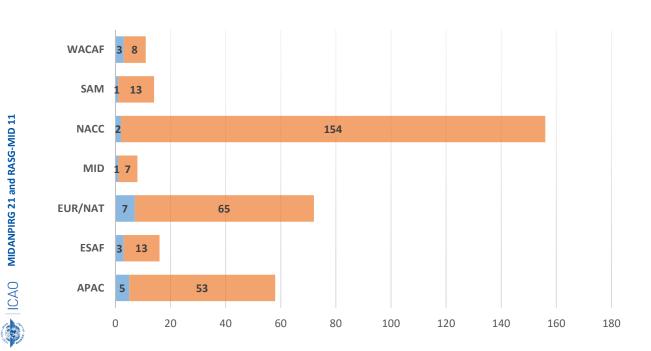
342 Accidents

Number of MID Accidents





Accidents by ICAO Regional offices

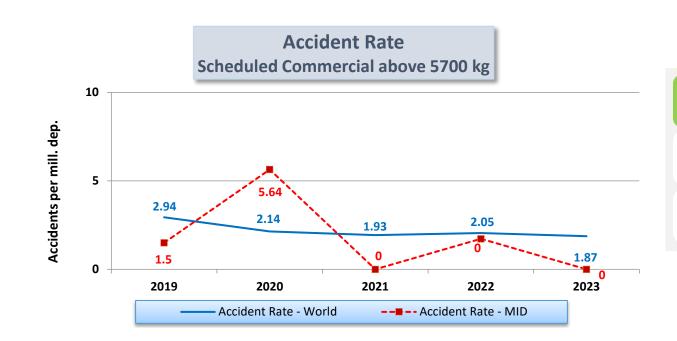


MIDANPIRG 21 and RASG-MID 11

Sum of Fatal Accidents

■ Sum of Non-Fatal Accidents

Accident Rate



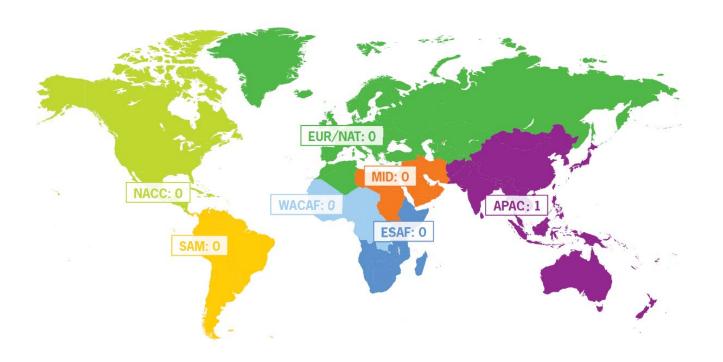
Average 2019-2023

Average MID
1.17

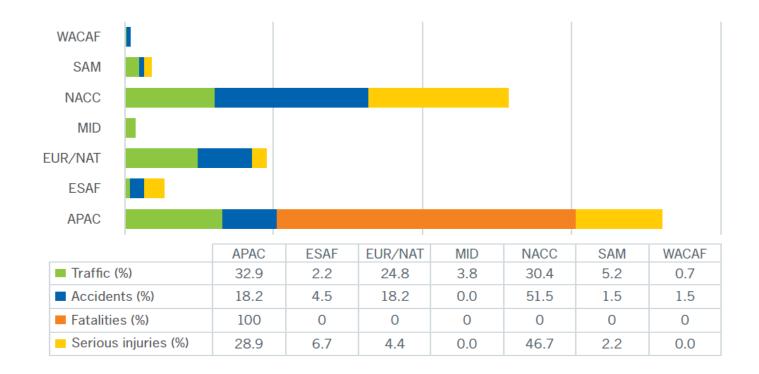
Average Global
2.18

MIDANPIRG 21 and RASG-MID 11

Number of fatal accidents by ICAO region in 2023

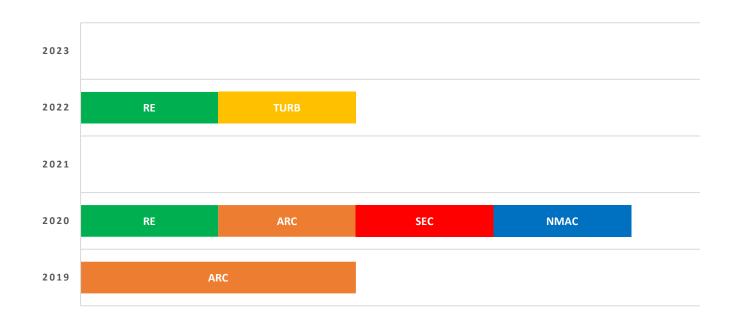


Share of traffic, accidents and fatalities by ICAO region based on State of Occurrence in 2023

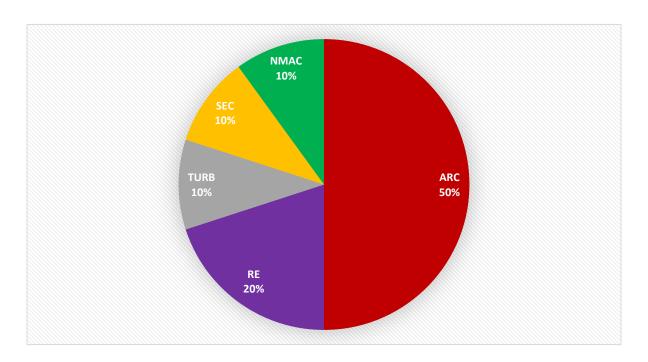




MID- Distribution of Occurrence Category



Occurrence Category Distribution as Percentage

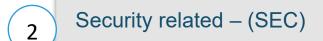


State of Occurrence

The Key risk area identified according to the State of occurrence's accidents

data are:

Runway Excursion (RE) and Abnormal Runway Contact (ARC) during landing

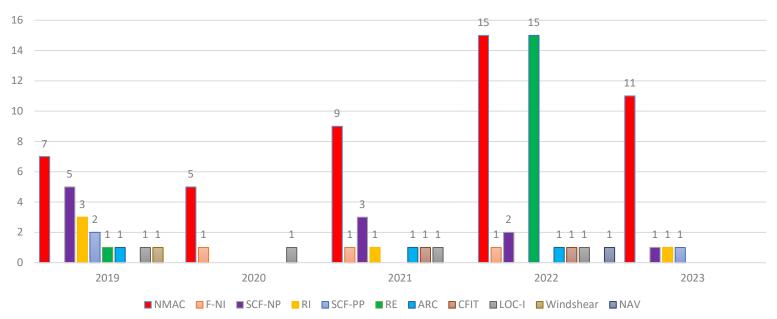






Serious Incidents reported by States

MID-Serious incident 2019-2023





States Analysis

Main Safety issues **EGPWS** warnings TCAS/RA **Identified** MIDANPIRG 21 and RASG-MID 11 and shared RE, RI & NAV by the **States** Low level wind shear & BS Technical Failures & SCF-PP

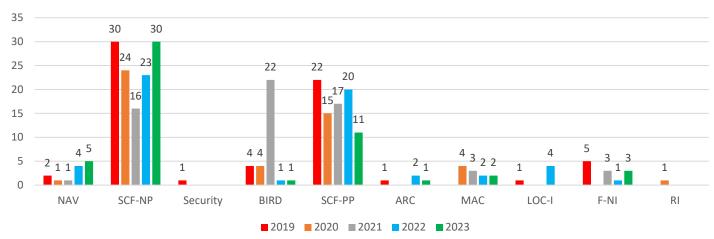
- Regulatory Oversight
- Human factors and Human Performance
- competence of personnel



Commercial helicopters operations Data Analysis reported by States

5 States shared some data analysis For the period 2019-2023, one LOC-I accident and one CFIT serious incident had occurred.



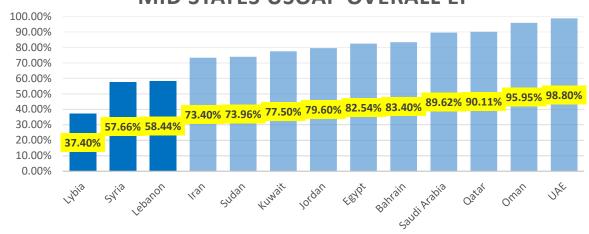




PROACTIVE SAFETY INFORMATION

MID USOAP





13 out of 15 States have been audited

Overall MID EI = 76, 8% which is above Global average (69.68%)

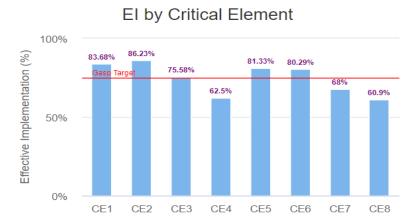
3 states are below 60% (Libya, Syria, Lebanon)

NO SSC in MID Region



MID USOAP





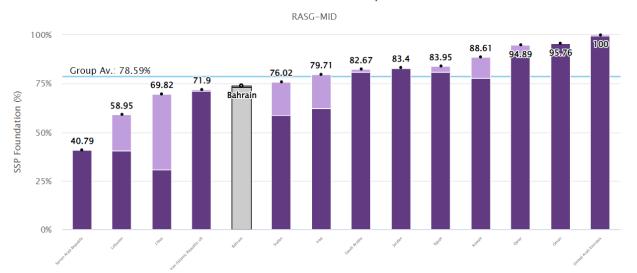
6 areas and 5 critical elements are above 70%

CE4, CE7, & CE8 are the lowest in terms of EI (below 70%)

MID Region State Safety Programme (SSP) Foundation



Overall SSP Foundation by State



Average EI for SSP foundation PQs for States in the MID Region is **78**, **59%**.



Implementation Packages



 USOAP iPack has been deployed and completed to support States in the MID region.

Human Factors and Human Performance

- As the aviation system changes, it is imperative to ensure that human factors and the impact on human performance are taken into account, both at service provider and regulatory levels
- As new technologies emerge on the market and the complexity of the system continues increasing, it is of key importance to have the right competencies and adapt training methods to cope with new challenges.





Competence of Personnel

- Availability of well-trained and competent aviation personnel is paramount to the safety and resilience of the aviation industry. Some of States in MID Region has a mature and detailed regulatory framework in place to ensure proper training, licensing, adequacy of training devices and oversight.
- several factors are challenging this mature framework:
 - new technologies and increasing automation are changing the safety needs for aviation personnel and new training devices are emerging.
 - ✓ New aircraft types and technological advancements in virtual reality/artificial intelligence are revolutionizing pilot training altogether.





Manage Risk Interdependencies





- Cybersecurity Risks
- **GNSS Interference/Spoofing Risks**
- 5G interference with Radio Altimeter Risks
- Security Risks with an Impact on Aviation Safety
- Risks Arising from Conflict Zones
- Aviation Health Safety (AHS) Risks







EMERGING ISSUES



1. AAM and New Entrants

- The safe integration on the basis of granting fair access to airspace of all new entrants into the airspace network will be one of the main challenges in relation to the integration of UAS technologies and related concepts of operation.
- AAM ecosystem including, UAM and enablers such as UTM, automation and autonomy, information and data management, artificial intelligence (AI), etc.);
- Enabling the safe integration of UAS, being a fast evolving and emerging market segment, as well as of (VTOLcapable aircraft, also intended for urban air mobility (UAM) operations, continue to be priority activities.





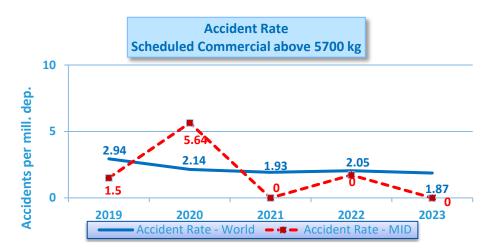


MID REGION SAFETY PERFORMANCE

10/21/2024

MID Region Safety Performance Monitoring

Goal 1: Achieve a Continuous Reduction of Operational Safety Risks



Safety Target

MIDANPIRG 21 and RASG-MID 11

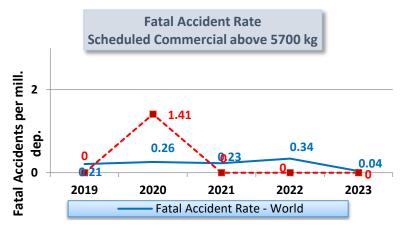
ICA0

Reduce/Maintain the regional average rate of accidents to be in line with the global average rate

Average 2019-2023

Average MID Average Global

1.17
2.18



Safety Target

Reduce/Maintain the regional average rate of fatal accidents to be in line with the global average rate

Average 2019-2023

Average MID Average Global

0.28 0.21

32

Goal 1: Achieve a Continuous Reduction of Operational Safety Risks

Average MID **0.45**

Average 2019-2023

Average Global

0.23

Average 2019-2023

Runway Excursion (RE



Average MID 0

Average 2019-2023

Average Global **0.01**

Average 2019-2023

Runway Incursion (RI)



Average MID

0

Average 2019-2023

Average Global
0.06
Average 2019-2023

Loss of Control Inflight (LOC-I)



Average MID

Average 2019-2023

Average Global
0.02
Average 2019-2023

Controlled Flight into Terrain (CFIT)



Average Global

0

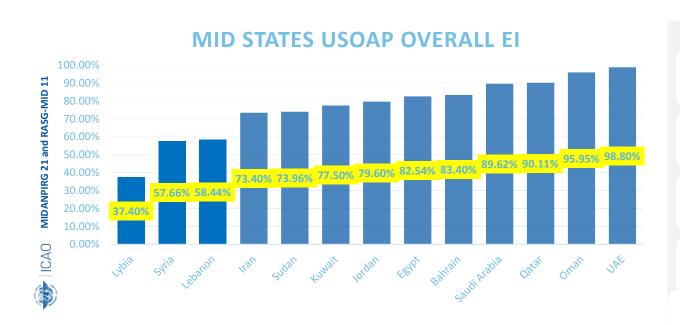
Average 2019-2023

MID- Air Collision (MAC)





Goal 2: Strengthen States' Safety Oversight Capabilities



13 out of 15 States have been audited

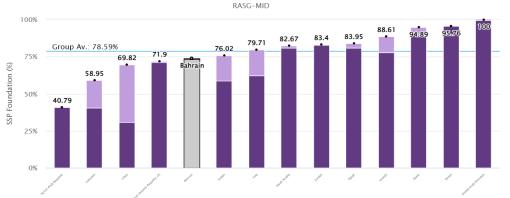
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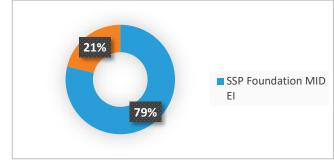
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NO SSC in MID Region

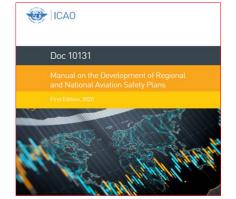
Goal 3: Implementation of Effective SSP

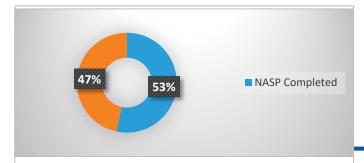
Overall SSP Foundation by State





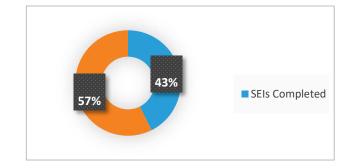






Goal 4: Increase Collaboration at the Regional Level

Consolidated List of SEIs with their respective Safety Actions					
SEI Code	SEI Name	Actions	Owner(s)	Status/Progress	Completion Date
Regional Operational Safety Risks					
Goal 1: Achieve a Continuous Reduction in Operational Risks					
G1-SEI-01:	Aircraft Upset in Flight (LOC-I)	A1- Guidance material on flight crew proficiency	IATA to be supported by Airbus		2023- 2025
		A2- Advisory Circular: Mode Awareness and Energy State Management Aspects of Flight Deck Automation	IATA to be supported by Airbus		2023- 2025
		A3- Conduct Upset Recovery capacity building activities	UPRT Workshop. Airbus, ICAO, Kuwait	Regional ICAO UPRT Workshop (jointly involving Airbus, ICAO, Kuwait) conducted in Kuwait 7-11 May 2023. Completed	2023-2025
		A4- Develop guidance material on the air cargo safety	Oman	Planned for 2024	2023-2025
G1-SEI-02:	Runway Safety- Runway Excursion	A1- Support States to implement the Global Reporting Format (GRF) Methodology through capacity building activities.	ICAO and ACI		2023-2025
		A2- MID Region Action Plan/Milestones on the Global Reporting Format (GRF) Implementation.	ICAO		2023-2025
		A3- Awareness Material on the vulnerabilities of BARO-VNAV approaches and mitigation actions	ICAO	Planned for 2024	2023-2025





Goal 5: Expand the use of Industry Programmes









MID RASP 2023-2025 Edition developed and published



Goal 6: Ensure Appropriate Infrastructure is available to Support Safe Operations

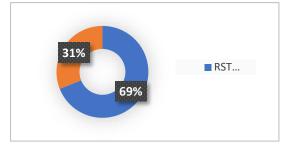
Aerodrome Certification





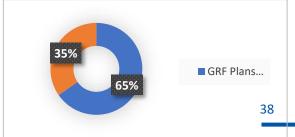
Runway Safety Team (RST)





GRF Plans implemented







MID REGION SAFETY PRIORITIES

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MID Region Safety Priorities









Operational safety risks

Organizational issues

Emerging issues





Conclusion

MID Region Safety Priorities

Regional
Operational Safety
Risks

Organizational Issues

Emerging Issues

LOC-I, RE/ARC, MAC, CFIT, and RI

- States' Safety Oversight capabilities
- Safety Management
- Human Factors & Human Performance
- competence of personnel
- Risk interdependencies

Cybersecurity risks

GNSS Interference & Spoofing Risks aviation health safety (AHS) risks Risks arising from conflict zones, and Security risks with an impact on aviation safety.

AAM and New Entrants: UAS, eVTOL

13th MID Annual Safety Report Draft



SAFFTY

MID Region Annual Safety Report



11th Edition

2022

41

Reference Period (2017 - 2021)

Sharing of Safety Data Analysis & safety information



States are encouraged to provide necessary safety information to the ICAO MID Office, by May 2025

The Draft of the 14th edition of the MID ASR will be presented to the ASRG/7 meeting for review.

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Sharing of safety information including safety data analysis

