



International Civil Aviation Organization

MIDANPIRG Air Traffic Management Sub-Group

Fourth Meeting (ATM SG/4)

(Amman, Jordan, 29 April – 3 May 2018)

Agenda Item 6: ATM Safety Matters

ACCIDENT AND INCIDENT ANALYSIS

(Presented by the Secretariat)

SUMMARY

This paper provides an update on the RASG-MID activities related to accidents and incidents analysis.

Action by the meeting is at paragraph 3.

REFERENCES

- ASRT/2 Report
- RASG-MID/6 Report
- RSC/5 Report

1. INTRODUCTION

1.1 The Annual Safety Report Team (ASRT) was established by the RASG-MID/1 meeting in 2011, to be in charge of collecting and analysing safety information, identification of the safety Focus Areas (FAs) and Emerging Risks in the MID Region and the production of the RASG-MID Annual Safety Report (ASR).

1.2 In 2015, the RASG-MID/4 meeting established the Accident and Incident Analysis Working Group (AIA WG) under the MID-ASRT to review and analyse on an annual basis the accidents and incidents that occurred in the MID Region.

1.3 The RASG-MID/6 meeting (Bahrain, 26-28 September 2017), through Decision 6/8, dissolved the AIA WG due to the difficulties faced the Group

2. DISCUSSION

2.1 The RASG-MID/6 meeting agreed that the MID-ASRT Terms of References (TORs) be amended to include main tasks assigned previously to the AIA WG, which are directly related to the identification of focus areas and emerging risks.

2.2 In connection with the above, the meeting agreed that for an improved efficiency, the composition of the MID-ASRT should encompass additional active members from States and industry partners.

2.3 With respect to the review/analysis of accidents data, the RASG-MID/6 meeting noted that the AIA WG/2 meeting, through Draft Decisions 2/2 and 2/3 proposed that an Action Group should be established for each Focus Area (RS and SCF) to analyse the accident data (available in the investigation reports) and identify the root causes and contributing factors, as well as the associated safety recommendations. Considering the dissolution of the AIA WG, the RASG-MID/6 meeting agreed that this task be assigned directly to the MID-ASRT.

2.4 The meeting may wish to note that the Second Annual Safety Report Team (ASRT/2) meeting (Cairo, Egypt, 4-6 February 2018) reviewed the Draft version of the Sixth MID-Annual Safety Report.

2.5 Based on the analysis of the reactive safety information for the period 2012-2016, and in accordance with the agreed matrix used for the assessment of the different accident categories (frequency X severity), the Focus areas are:

1. Runway Safety (RS)- (mainly RE and ARC during landing);
2. System Component Failure- Power Plant - (SCF-PP); and
3. Loss of Control Inflight - (LOC-I).

2.6 New emerging risks have been identified, as follows:

1. Fire/Smoke (non-impact) – F-NI;
2. Turbulence Encounter (TURB); and
3. Medical (MED)

2.7 The meeting may wish to recall that the following are the emerging risks endorsed by the RASG-MID (more details are available at **Appendix A**):

- 1) Controlled Flight Into Terrain (CFIT);
- 2) Near MIDAIR Collision (NMAC);
- 3) Laser attacks,
- 4) RPAS/Drones;
- 5) Wildlife and FOD; and
- 6) Bird strike.

2.8 The ASRT/2 meeting agreed:

- to consolidate the list of Emerging Risks using the ADREP Taxonomy based on the previously identified emerging risks, the new emerging risks identified in the Sixth MID-ASR and the top 5 areas of concern endorsed by the RASG-MID/6 meeting;
- that the State of Occurrence Data will be used at this stage;
- that States provide the ICAO MID Office by end of March 2018 with the number of accidents, serious incidents and incidents related to each category for the past 3 years (2015 – 2017), using the template in **Appendix B**;
- the ICAO MID Office, in coordination with the MID-ASRT Rapporteur review the data provided and classify the different risk categories in terms of frequency; and
- the top (X) Emerging Risks will be then communicated to States in order to share with the MID-ASRT their data analysis and safety recommendations.

2.9 The consolidated inputs received by the ICAO MID Office from six (6) States are reflected in the **Table 1**:

#	Occurrence Category	2015			2016			2017		
		# Accidents	# Serious incidents	# Incidents	# Accidents	# Serious incidents	# Incidents	# Accidents	# Serious incidents	# Incidents
1	CFIT			5			1			5
2	Mid Air collision (MAC)		35	66		20	66		16	102
3	Fire/Smoke (F-NI)		8	26		2	42		8	30
4	Runway Incursion- (RI)		5	15		2	19		9	17
5	SCF-NP		14	122		9	267		9	257
6	Turbulence Encounter (TURB)	2		326			351		1	325
7	BIRD			119			198			297
8	Wildlife (Wild)			3			7			3

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) review the information in **Table 1** and take action as appropriate;
- b) encourage States to support the work of ASRT; and
- c) urge States to provide the ICAO MID Office by end of May 2018, if not yet done so, with the number of accidents, serious incidents and incidents related to each category for the past 3 years (2015–2017), using the template in **Appendix B**.

APPENDIX A

LIST OF EMERGING RISKS

Scope: State of Occurrence

The data to be collected be based on scheduled commercial operations involving aircraft having a Maximum Take-off Weight (MTOW) above 5700 kg.

Occurrence Category	ADREP/CICIT taxonomy	Remarks
CFIT	Inflight collision or near collision with terrain, water, or obstacles without indication of loss of control.	
MID Air Collision (MAC)	Airprox/TCAS Alerts, Loss of separation as well as NMAC or collisions between aircraft inflight.	(including, RPAS/Drones, Call Sign Confusion)
Fire/Smoke (F-NI)	Fire or smoke in or on the aircraft, in flight, or on the ground, which is not the result of impact.	
Runway Incursion (RI)	Any occurrence at aerodrome involving the incorrect presence of an aircraft, vehicle, or person on the protected area of a surface designated for landing and takeoff of aircraft.	
SCF-NP	Failure or malfunction of an aircraft system or component other than the power plant.	
Turbulence Encounter (TURB)	In-flight turbulence encounter.	
BIRD	Occurrences involving collisions/near collisions with bird(s).	
Wildlife (WILD)	Collision with, risk of collision or evasive action by an aircraft to avoid wild life on the movement area of an aerodrome.	

NB: States may share any other national safety concern.

APPENDIX B

**TEMPLATE FOR THE COLLECTION OF
ACCIDENT, SERIOUS INCIDENT AND INCIDENT DATA**

Name of State:

Traffic: Nb. of Departures per year [2015:] [2016:] [2017:]

#	Occurrence Category	2015			2016			2017		
		# Accidents	# Serious incidents	# Incidents	# Accidents	# Serious incidents	# Incidents	# Accidents	# Serious incidents	# Incidents
1	CFIT									
2	Mid Air collision (MAC)									
3	Fire/Smoke (F-NI)									
4	Runway Incursion- (RI)									
5	SCF-NP									
6	Turbulence Encounter (TURB)									
7	BIRD									
8	Wildlife (Wild)									

States should provide the number of accident, serious incidents, and incidents related to each category mentioned in the template above for the past three years (2015-2017)

Scope: State of Occurrence