



International Civil Aviation Organization

**Third Meeting of the RASG-MID Steering Committee
(RSC/3)**

(Cairo, Egypt, 9 – 11 December 2014)

Agenda Item 3: Regional Performance Framework for Safety

RUNWAY SAFETY RELATED ISSUES

(Presented by the Secretariat)

SUMMARY

This paper provides an update on Runway Safety related issues that were covered under the RGS WG/1 Meeting, the status of aerodrome certification in the MID Region and the outcome of the MID Wildlife/FOD Workshop.

Action by the meeting is at paragraph 3.

REFERENCES

- RGS WG/1 Report.
- MID Wildlife/FOD Workshop Executive Summary.

1. INTRODUCTION

1.1 The Fourteenth Meeting of the Middle East Air Navigation Planning and Implementation Regional Group (MIDANPIRG/14, Jeddah, Saudi Arabia, 15-19 December 2013) agreed through Decision 14/10 that the activities of the AOP SG be transferred to the RASG-MID framework.

1.2 The RASG-MID/3 meeting (Kuwait, 27-29 January 2014) supported the abovementioned Decision and agreed to the establishment of a Working Group for Runway and Ground Safety (RGS WG) under the MID Regional Aviation Safety Team (MID-RAST) to address all aerodromes safety issues. Accordingly, RASG-MID/3 Meeting agreed to the following Decision:

DECISION 3/1: ESTABLISHMENT OF RUNWAY AND GROUND SAFETY WORKING GROUP (RGS WG)

That, the Runway and Ground Safety (RGS) Working Group is established with Terms of Reference (TOR) as at Appendix 3D to the Report on Agenda Item 3.

1.3 Based on the above, the First Meeting of the Runway and Ground Safety Working Group (RGS WG/1) was held in Cairo, Egypt on 7-9 April 2014. The meeting was attended by a total of forty eight (48) participants, from eight (8) States (Bahrain, Egypt, Libya, Oman, Qatar, Saudi Arabia, Sudan and UAE).

2. DISCUSSION

Implementation of Aerodrome Safety Priorities and Objectives:

2.1 The RGS WG/1 meeting reviewed the SEIs related to Runway and Ground Safety (RGS) that have been endorsed by the RASG-MID/3 meeting and noted that the RGS SEIs have been consolidated to three SEIs and they were aligned with the new Global Aviation Safety Plan (GASP). Latest updates on the DIPs related to the RGS SEIs are presented in the RSC/3 WP/4 by the RGS Coordinator.

2.2 The RGS WG/1 meeting noted a presentation made by Egypt on study that covered missed approach cases during 2013 at Cairo International Airport. The study analyzed the causes behind the missed approaches (un-stabilized approach was one of the major causes) and suggested measures to decrease the number of missed approach by 50% in year 2014.

2.3 In the same vein, Bahrain indicated that they had a successful experience with reduction of the number of un-stabilized approaches. The amount of go-around was reduced from 1 per every 500 arrivals in 2012 to 1 per every 1000 arrivals in 2013 after adopting the following measures and changes:

- 1) Final and downwind fixes/parameters were defined and depicted on the approach display.
- 2) Speed control limitations and short cut limitations were mandated to reduce the controller's contribution in unstable approaches.
- 3) The implementation of 3 NM separation within 10 NM final.
- 4) Automatic transfer of control of IFR arrivals within 4 NM (application of VFR separation by Tower within 4 NM).

2.4 Based on the above, the RGS WG/1 meeting agreed to the following Draft Conclusion:

DRAFT CONCLUSION 3/XX: RISK REDUCTION OF UN-STABILIZED APPROACH

That, States that have not yet done so, be urged to minimize the risk of un-stabilized approach through (but not limited to):

- a) training of operators (pilots, air traffic controllers/air navigation service providers, and aerodrome operators);*
- b) development of relevant Guidance materials;*
- c) mandatory reporting of un-stabilized approaches, assessment and mitigation of the associated risk and conduct of necessary safety oversight, as part of SMS implementation; and*
- d) review of Standards Operation Procedures.*

2.5 The meeting may wish to note that the RGS WG/1 meeting also reviewed and supported proposals by Egypt and Sudan to develop additional RGS SEIs on Aerodrome Safeguarding, Wildlife Control, and Laser-attacks. Accordingly, the RGS WG/1 agreed to the following Draft Conclusion:

DRAFT CONCLUSION 3/XX: ADDITIONAL RGS SEIS

That, additional RGS SEIs be developed as follows:

- a) *RGS/4 on Aerodrome Safeguarding with Egypt as Champion supported by Sudan;*
- b) *RGS/5 on Wildlife Control with Sudan as Champion supported by Egypt and UAE; and*
- c) *RGS/6 on Laser-attacks with Egypt as Champion supported by UAE.*

Aerodrome Certification

2.6 The meeting may wish to recall that the RASG-MID/3 meeting recognized the variation in the level of Aerodromes Certification implementation in the MID Region. Some States have certified all their International Aerodromes achieving 100% Certification of Aerodromes listed in the ANP, whereas some other States have not certified any of their international aerodromes.

2.7 Accordingly, the Second Regional Runway Safety Seminar (MID-RRSS/2, Dubai, UAE 2-5 June 2014) has included a break-out session on Aerodrome Certification. It has been agreed that Runway Safety Go-Team can be used as a tool to support States, which have not yet done so, to complete the certification of their international aerodromes.

2.8 Based on the latest feedback provided by States, the Aerodromes Certification implementation table has been updated as at **Appendix A**. The table shows that 28 out of the 66 MID States international aerodromes have been certified. This number represents 42% of the international aerodromes listed in the MID ANP.

2.9 It is to be noted that the number of certified aerodromes has not increased since the RASG-MID/3 meeting. However, Sudan has requested that the number of international aerodromes in Sudan be reduced from eight to three in order to match the ANP AOP table. Also, Egypt indicated that they are in the final phase of reconsidering the list of international aerodromes which might be reduced to a total of seven (7). However, this needs to be officially confirmed in order to initiate a proposal for amendment to the MID ANP.

MID Wildlife/FOD Workshop

2.10 Within the RASG-MID Framework, the Middle East Wildlife and Foreign Object Debris (FOD) Workshop was successfully held in Cairo, Egypt from 24 to 26 March 2014. The event was jointly organized by ICAO and IATA and gratefully hosted by the Egyptian Civil Aviation Authority (ECAA). The Egyptian Airports Company (EAC) and Cairo Airports Company (CAC) sponsored the event.

2.11 The main objective of the Workshop was to address the hazards, risk assessment and available mitigation measures associated with Wildlife and FOD. The detailed programme of the Wildlife/FOD Workshop is at **Appendix B**. The Workshop highlighted the following:

- 1) the importance of data collection and sharing among industry stakeholders;
- 2) the need to improve reporting culture;
- 3) States Regulators and Aerodrome Operators should be aware of existing standards and best practices (ICAO, FAA, ACI and other Organizations);
- 4) the importance of collaboration and communication among operators, ATCs, Aerodromes and CAAs (including local authorities) to detect and mitigate wildlife/ FOD hazards;
- 5) technology is a great tool, yet not the only effective solution;
- 6) risk assessment is an important start to develop a Wildlife/FOD program. The Wildlife/FOD hazard management program should be a live document that is continually updated;
- 7) roles and responsibilities should be defined for Wildlife/FOD programs so that Regulators set the requirement while Aerodromes Operators and ATCs implement the programs;
- 8) In accordance with ICAO Doc 9774, Wildlife Hazard Management Plan is should be part of the Aerodrome Certification requirements; and
- 9) Wildlife and FOD Control are to be included in the work programme of the RST.

The MID Region Safety Strategy related to RGS

2.12 The meeting may wish to note that the RGS WG/1 Meeting reviewed analysis prepared by ICAO on Runway Safety related accidents (Global/MID) as at **Appendix C**. In this regard, it has been noted that ICAO HQ has grouped the categories RE, RI and WILD, among others, in RS (Runway Safety).

2.13 Accordingly, the RGS WG/1 meeting agreed to the following:

- 1) change the safety theme “Runway and Ground Safety (RGS)” to “Runway Safety”;
- 2) combine the two safety indicators “Number of Runway Excursion related accidents as a percentage of all accidents” and “Number of Runway Incursion related accidents as a percentage of all accidents” to “ Number of Runway Safety related accidents per million departures; and
- 3) amendment of the RGS Safety Indicators and Targets.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) agree to the Draft Conclusions in paragraphs 2.4 and 2.5; and
- b) urge MID States to take actions as appropriate to meet the endorsed safety targets for Aerodromes Certification.

APPENDIX A

STATUS OF AERODROME CERTIFICATION IMPLEMENTATION IN MID REGION

Sr	State	Listed aerodromes					Certified Aerodromes					Percentage certified	Remarks
		RS	RNS	AS	ANS	Total	RS	RNS	AS	ANS	Total		
1	Bahrain	1				1	1				1	100%	
2	Egypt	8	1	7		16	4				4	25%	
3	Iran	7	1			8	2				2	25%	
4	Iraq	5	1			6	2				2	33%	
5	Jordan	2		1		3	1				1	33%	
6	Kuwait	1				1	1				1	100%	
7	Lebanon	1				1	0				0	0%	
8	Libya	3				3					0	0%	
9	Oman	1		1		2	1		1		2	100%	
10	Qatar	2				2	2				2	100%	
11	Saudi Arabia	4				4	4				4	100%	
12	Sudan	3			0	3	1				1	33%	
13	Syria	3				3	0				0	0%	
14	UAE	7	1			8	7	1			8	100%	
15	Yemen	5				5	0				0	0%	
	Total	53	4	9	0	66	26	1	1	0	28	42%	
	% certified						49%	25%	11%		42%		

APPENDIX B



Wildlife & FOD Workshop

24 – 26 March 2014
Cairo, Egypt



A STAR ALLIANCE MEMBER 

Day 1– 24 March 2014

Time	Agenda Item
08:00 -09:00	Registration
09:00– 10:00	Welcome & Opening Keynote speakers and welcome remarks <ul style="list-style-type: none">- Captain Hossam Kamal, Minister of Egyptian Civil Aviation- Mr. Mohamed Smaoui, ICAO- Mr. Achim Baumann, IATA- Dr. Ashraf Ahmed Zaki, Egyptian Holding Company for Airports & Air Navigation- Captain Mahmoud Taha El Zanaty, Head of Egyptian Civil Aviation Authority (ECAA)- Captain Gad El Karim Nasr Mohamed, Chairman, Egyptian Airports Company (EAC)
Coffee Break – 30 minutes	
10:30 – 11:30	Wildlife and FOD accidents, incidents, and trends <ul style="list-style-type: none">- Achim Baumann, IATA- Chamsou I-Andjorin, Boeing
11:30– 12:30	The Current Situation <ul style="list-style-type: none">- John Weller, FAA- Adel Ramlawi, ICAO- Mashhor Alblowi, ICAO
Lunch Break – one hour	
13:30 – 15:00	Regional Examples Exchanging Experiences <ul style="list-style-type: none">- Adnan Takrouri, RJ- Ahmed Helmy, CAC- Waleed ElSageer from EAC- Tarek Mokhtar, Egypt Air- Saja Salaj, CARC- Abdulla Hassan Al Qadhi, BH ATC- George Rhodes (Moderator)
15:00 – 15:30	Conclusions and preparation for Day -2

Dinner Hosted By



Day 2 – 25 March 2014

Time	Agenda Item
09:00 – 10:30	Interactive Discussion 1: Assessing Risk <ul style="list-style-type: none"> - Hazard assessment <ul style="list-style-type: none"> - <i>Salim Ali Al Harthy, Oman Airports Management Company</i> - <i>Mohammad al Dossari, UAE GCAA</i> - <i>John Weller, FAA</i> - <i>Eoin Ryan, Dublin Airports (Moderator)</i>
Coffee Break – 30 minutes	
11:00 – 12:00	Technology <ul style="list-style-type: none"> - <i>Eoin Ryan, Dublin Airports</i> - <i>Smael Banse, AIG</i> - <i>Jamal Zaal, Dubai Airports</i>
Lunch Break – one hour	
13:00 – 14:30	Interactive Discussion 2: A MID Region Wildlife & FOD Risk Reduction Program <ul style="list-style-type: none"> - <i>Savio Dos Santos, Embraer</i> - <i>Angie Abdalla from ECAA</i> - <i>Moaid Samir Kabli, GACA</i> - <i>Mohamed Saeed, NANSO</i> - <i>Salim Ali Al Harthy, Oman Airports Management Company</i> - <i>Awad Khir Elden, Technical Bureau of Ops Sector, CAC (moderator)</i>
Coffee Break – 30 minutes	
15:00 – 15:30	Wrap-up Session: Conclusions & future steps (projects)

Day 3 – 26 March 2014

Time	Agenda Item
10:00 – 15:00	Field Visit to Cairo International Airport

APPENDIX C

Runway Safety related Accidents (Global/MID)**World Traffic Volume**

Annually Scheduled Commercial Departures

Source: ICAO-iSTARS

	2008	2009	2010	2011	2012	2013
Traffic Million departure	29.6	28.5	29.7	30.7	30.9	31.3

Regional Traffic Volume

Annually Scheduled Commercial Departures

Source: ICAO-iSTARS

	2008	2009	2010	2011	2012	2013
Traffic Million departure	0.772	0.877	0.983	1.032	1.07	1.09

Number of Accidents in the world by Risk category and by Year of occurrence, limited to Scheduled Commercial Air Transport on aircraft above 2250kg between 2006 and 2012 Source: ICAO-iSTARS

Year	▲ F-NI	◆ TURB	◆ LOC-I	◆ RS	◆ OTH	◆ CFIT	◆ UNK	◆ SCF	◆ Totals
2006	1	11	1	71	8	5	2	13	112
2007	0	16	6	72	6	2	3	16	121
2008	3	12	7	81	5	5	2	17	132
2009	3	16	2	62	10	4	3	10	110
2010	2	9	6	69	11	4	4	16	121
2011	5	16	4	56	19	2	8	15	125
2012	2	19	1	43	8	3	9	14	99
Totals	16	99	27	454	67	25	31	101	820

Number of Accidents in MID by Risk category and by Year of occurrence, limited to Scheduled Commercial Air Transport on aircraft above 2250kg between 2006 and 2012 Source: ICAO-iSTARS

Year	▲ F-NI	◆ TURB	◆ LOC-I	◆ RS	◆ OTH	◆ CFIT	◆ UNK	◆ SCF	◆ Totals
2006	0	0	0	4	0	0	0	0	4
2007	0	0	0	3	0	0	0	0	3
2008	0	0	0	1	1	0	0	1	3
2009	1	0	0	7	1	0	1	1	11
2010	1	0	1	8	1	0	1	1	13
2011	1	0	1	2	1	0	0	0	5
2012	0	0	0	1	1	0	0	0	2
Totals	3	0	2	26	5	0	2	3	41

Total Accidents

	2008	2009	2010	2011	2012	Average
World Total Accident per Million departure	4.5	3.9	4.1	4.1	3.2	4
MID Total Accident per Million departure	3.9	12.5	13.2	4.8	1.8	7.2

RS

World	2008	2009	2010	2011	2012	Average
Number of RS Accident	81	62	69	56	43	62
RS Accident per Million departure	2.74	2.18	2.32	1.82	1.39	2.1
% of RS Accident vs Total Accident	62%	56%	57%	45%	43%	52%

MID	2008	2009	2010	2011	2012	Average
Number of RS Accident	1	7	8	2	1	3.8
RS Accident per Million departure	1.29	7.98	8.13	1.94	0.93	4.1
% of Total Accident	33%	64%	62%	40%	50%	50%

- END -