



International Civil Aviation Organization

**Third Meeting of the Middle East Regional Aviation Safety Group
(RASG-MID/3)**

(Kuwait, 27 - 29 January 2014)

Agenda Item 3: Regional Performance Framework for Safety

UPDATE ON THE SEIs & DIPs RELATED TO RGS

(Presented by RGS Coordinator)

SUMMARY

This working paper provides an update on initiatives made by MID-RAST in the area of Runway and Ground Safety (RGS) including updated drafts of the Safety Enhancement Initiatives (SEIs) and Detailed Implementation Plans (DIPs).

Action by the meeting is at paragraph 3.

1. INTRODUCTION

1.1 Runway and Ground Safety (RGS) has been identified by the MID Region Annual Safety Report Team (ASRT) as one of three main risk areas (Focus Areas) to be addressed under the RASG-MID framework.

1.2 According to the 2012 Regional Annual Safety Report, Global Runway Safety accidents represented 59% of all accidents accounting for 29% of all fatal accidents and 19% of all related fatalities reported between 2006 and 2010. In the MID Region, Runway Safety accidents represented 63% of all accidents accounting for 50% of all fatal accidents and 18% of all related fatalities reported and runway excursions represent 43% of the Runways Safety related accidents.

2. DISCUSSION

2.1 Further to the Runway Ground Safety update provided to the RASG-MID/2 meeting held in Abu Dhabi, UAE, 12 - 14 November 2012 (WP/9); the RGS SEIs and DIPs have been updated as follows:

2.1.1 The initial eight SEIs have been consolidated into three and the two supporting DIPs were combined into a single DIP in support of MID-RAST/RGS/01 as shown in **Appendices A and B**, respectively. The SEIs were consolidated according to the following table:

Current		RASG-MID/2-WP/9	
MID- RAST/ RGS/1	Specific training for pilots and air traffic controllers to avoid un-stabilized approaches and promotion of pilot adherence to Standard Operating Procedures for approaches	MID- RAST/ RGS/1	Specific training for pilots and air traffic controllers to avoid un-stabilized approaches
		MID- RAST/ RGS/2	Promote pilot adherence to Standard Operating Procedures for approaches including go-around decision making
MID- RAST/ RGS/2	Develop guidance material and training programs to support creation of action plans by local aerodrome runway safety teams.	MID- RAST/ RGS/3	Develop guidance material and training programs to support creation of action plans by local aerodrome runway safety teams.
		MID- RAST/ RGS/5	Timely and accurate notification regarding runway conditions and weather by AIS and ATS units
		RAST- MID/ RGS/08	Identification of aerodrome Hot Spots and publish Hot Spot data in AIP if necessary. Development of Hot Spot charts will depend on aerodrome complexity and incident data/analysis. Each aerodrome should positively respond that analysis has been undertaken at a minimum.
MID- RAST/ RGS/3	Focus on Aerodrome Infrastructure and Maintenance Management	MID- RAST/ RGS/4	Promote /monitor Implementation RESA including other means such as arresting systems
		MID- RAST/ RGS/6	Regulation, guidance and specific training in relation to maintaining aerodrome runway/taxiway related markings
		MID- RAST/ RGS/7	Regulation, guidance and specific training in relation to maintaining runways in accordance with Annex 14

2.1.2 Further to the update of Global Aviation Safety Plan (GASP) and its approval by the Air Navigation Commission (AN-WP/8726, 28 February 2013), the three SEIs were reviewed and re-aligned to the GASP as follows:

SEI	GASP Safety Initiative (ICAO Doc 10004)	Best Practices Supporting GASP Safety Initiative (ICAO Doc 10004, Appendix 2)
MID- RAST/RGS/1	Safety Management Standardisation: Consistent Implementation of Safety Management Systems Implementation of Risk-Based Standardization Initiatives Safety Oversight Standardization: Compliance with National Regulations and Adoption of Industry Best Practices	BP-GEN-1 BP-GEN-2 BP-GEN-4 BP-STD-I-1 BP-STD-I-4
MID- RAST/RGS/2	Safety Management Collaboration: Promotion of a Multi-Disciplinary Risk Management Approach Safety Information Exchange: Support of Safety Management Implementation	BP-GEN-1 BP-GEN-2 BP-GEN-4 BP-GEN-6 BP-STD-I-4 BP-SIE-I-3

MID- RAST/RGS/3	Safety Management Standardization: Consistent Implementation of Safety Management Systems Safety Oversight Standardization: Consistent Implementation of International Standards Compliance with National Regulations and Adoption of Industry Best Practices	BP-STD-S-11 BP-STD-I-2 BP-STD-I-4
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3. ACTION BY THE MEETING

3.1 The meeting is invited to review and endorse the SEIs and DIPs related to Runway and Ground Safety (RGS) at **Appendices A** and **B**.

APPENDIX A

Runway Ground Safety (RGS) SEIs - Mohammad Al Dossari - UAE General Civil Aviation Authority

No	Safety Enhancement Action	GASP Safety Initiative (ICAO Doc 10004)	Best Practices Supporting GASP Safety Initiative (ICAO Doc 10004, Appendix 2)	Safety Impact	Changeability	IC Indicator	Priority	Possible Champion	Time Frame	Notes
MID-RAST/RGS/1	Specific training for pilots and air traffic controllers to avoid unstabilized approaches and promotion of pilot adherence to Standard Operating Procedures for approaches including go-around decision making	Safety Management Standardisation: Consistent Implementation of Safety Management Systems Implementation of Risk-Based Standardization Initiatives Safety Oversight Standardization: Compliance with National Regulations and Adoption of Industry Best Practices	BP-GEN-1 BP-GEN-2 BP-GEN-4 BP-STD-I-1 BP-STD-I-4	High	Moderate	P2	1	ICAO, IATA, CANSO, IFALPA, States and Operators	Short Term	<p>Pilot training is top priority of RAST-PA and RAST-AP. DIP may be coordinated on global level - or benchmarked against other regions.</p> <p>ASR Comment: 4.1.3.2.1 - RE Accidents - 83% occur during landing and 67% during daytime - 'Flight Crew Procedures' meaning non-compliance with SOPS was present in 59 accidents. - - See 4.1.2.4.1 and 2 - Top Common incidents/occurrences from MID reports - "Unstable Approach" with Root Cause airport/airline of SOP Compliance and Training.</p>
MID-RAST/RGS/2	Develop guidance material and training programs to support creation of action plans by local aerodrome runway safety teams.	Safety Management Collaboration: Promotion of a Multi-Disciplinary Risk Management Approach Safety Information Exchange: Support of Safety Management Implementation	BP-GEN-1 BP-GEN-2 BP-GEN-4 BP-GEN-6 BP-STD-I-4 BP-SIE-I-3	High	Easy	P1	2	ICAO-MID - Nominated State Champion - ACI - COSCAP	Mid-Term	<p>ASR Comment: 4.1.3.2.1 - RE Accidents - 83% occur during landing and 67% during daytime - weather is contributing in 47% (1st rain/2nd windsheer)</p> <p>Runway Incursion data not included in RASG-MID ASR - First Edition - however acknowledged by RSC/01 Agenda Item 2 paragraph 2.14</p>

MID-RAST/RGS/3	Focus on Aerodrome Infrastructure and Maintenance Management with priority given to the following: - Promote /monitor Implementation RESA including other means such as arresting systems; - Regulation, guidance and specific training in relation to maintaining aerodrome runway/taxiway related markings; and - Regulation, guidance and specific training in relation to maintaining runways in accordance with Annex 14	Safety Management Standardization: Consistent Implementation of Safety Management Systems Safety Oversight Standardization: Consistent Implementation of International Standards Compliance with National Regulations and Adoption of Industry Best Practices	BP-STD-S-11 BP-STD-I-2 BP-STD-I-4	High	Difficult	P3	3	ICAO-MID - Nominated State Champion	Long Term	ASR Comments: 4.1.3.2.1 - Ground damage in 33% of accidents related to inadequate markings or signage or inadequate RESA. 4.1.3.2.1 - bar chart of contributing factors
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APPENDIX B

APPENDIX B

Detailed Implementation Plan Template

Rast No	Safety Enhancement Action	GASP Safety Initiative (ICAO Doc 10004)	Best Practices Supporting GASP Safety Initiative (ICAO Doc 10004, Appendix 2)	Safety Impact	Changeability	Indicator	Priority	Time Frame
MID-RAST/RGS/1	Specific training for pilots and air traffic controllers to avoid unstabilized approaches and promotion of pilot adherence to Standard Operating Procedures for approaches including go-around decision making	Safety Management Standardization: Consistent Implementation of Safety Management Systems Implementation of Risk-Based Standardization Initiatives Safety Oversight Standardization: Compliance with National Regulations and Adoption of Industry Best Practices	BP-GEN-1 BP-GEN-2 BP-GEN-4 BP-STD-I-1 BP-STD-I-4	High	Moderate	P2	1	Short Term

Safety Enhancement Action (expanded)	Promote specific training for pilots and air traffic controllers to avoid unstabilized approaches and pilot adherence to Standard Operating Procedures for approaches including go-around decision making through ICAO guidance, States' oversight and guidance, Operators' SMS and industry lead awareness and training initiatives. The initiatives seeks to leverage existing regulatory framework and industry events.
Statement of Work	ICAO Actions 1. Publish circular requiring States to provide increased oversight Audits using risk based approach and the necessary guidance on pilot adherence to SOPs. 2. Publish circular requiring States to implement safety promotion and associated training programmes including strategies to avoid unstabilized approaches for Pilots and Air Traffic Controllers. 3. Review ICAO work programme and consider including the subject as part of relevant regional workshops and existing symposiums where deemed applicable. 4. Ensure SEI is added to the MID-Region Strategic Plan.

Champion Organization	ICAO, IATA, FSF, IFALPA, IFATCA and CANSO
Human Resources	<ul style="list-style-type: none"> • ICAO - International Civil Aviation Organisation (MID and HQ) • IATA - International Air Transport Association (MENA and HQ) • IFALPA - International Federation of Airline Pilot's Association • CANSO - Civil Air Navigation Services Organisation • States • Aircraft Operators
Financial Resources	
Relation with Current Aviation Community Initiative	ICAO Runway Safety Program ICAO/IATA Runway Excursion Risk Reduction Toolkit FSF Approach and Landing Accident Reduction (ALAR) Toolkit (version June 2010) FSF Runway Safety Initiative (RSI) - "Reducing the Risk of Runway Excursions" FSF Operators Guide to Human Factors in Aviation (FSF European Advisory Committee) FSF Annual Flight Safety Conference (most recent in September 2012) France Directorate General of Civil Aviation - Unstabilized Approaches France Directorate General of Civil Aviation - Stabilised Approaches Good Practice Guide France Directorate General of Civil Aviation - Synthesis on Unstable Approaches EWGRS - European Action Plan for the Prevention of Runway Excursions Airbus - Safety Library - Flight Operations Briefing Notes - Approach Techniques
Performance Goal	Reduce relative number of runway excursions. MID-Regional Safety Strategy: Reduce Runway Excursions related accidents by 50% by the end of 2017.
Indicators	Reduction of runway excursions resulting from unstable approaches, as a percentage of total movements, for 2013 and 2014.
Key Milestones (Deliverables)	<ol style="list-style-type: none"> 1. Organize a workshop for Regional Runway Safety during year 2014. 2. Publish available guidance materials on RASG-MID website. 3. Train pilots and air traffic controllers.

Potential Blockers	Availability of required human resources from identified organisations Availability of financial resources
Responsible	<ul style="list-style-type: none"> • ICAO - International Civil Aviation Organisation (MID and HQ) • IATA - International Air Transport Association (MENA and HQ) • IFALPA - International Federation of Airline Pilot's Association • CANSO - Civil Air Navigation Services Organisation • Mid-Region States • Mid-Region Aircraft Operators
DIP Notes	<p>Pilot training is top priority of RAST-PA and RAST-AP. DIP may be coordinated on global level - or benchmarked against other regions.</p> <p>ASR Comment: 4.1.3.2.1 - RE Accidents - 83% occur during landing and 67% during daytime - 'Flight Crew Procedures' meaning non-compliance with SOPS was present in 59 accidents. - - See 4.1.2.4.1 and 2 - Top Common incidents/occurrences from MID reports - "Unstable Approach" with Root Cause airport/airline of SOP Compliance and Training.</p>

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