

International Civil Aviation Organization

## Regional Aviation Safety Group - Middle East

Fourth Meeting (RASG-MID/4) (Jeddah, Saudi Arabia, 30 March - 1 April 2015)

## **Agenda Item 3:** Regional Performance Framework for Safety

# OUTCOME OF THE SECOND MID REGIONAL RUNWAY SAFETY SEMINAR (MID-RRSS/2)

(Presented by the Secretariat)

#### **SUMMARY**

This paper provides an overview on the outcome of the Second Middle East Regional Runway Safety Seminar (MID-RRSS/2).

Action by the meeting is at paragraph 3.

#### REFERENCES

- MID-RRSS/2 Summary of Discussions

#### 1. Introduction

- 1.1 ICAO has been called upon by the International Civil Aviation Community to exercise leadership in the effort to reduce the number of runway-related accidents and incidents worldwide
- 1.2 Accordingly, the Global Runway Safety Symposium (GRSS) was organized by ICAO in Montreal (May 2011) to raise awareness and share information as means to generate effective solutions. The ICAO MID Regional Office has organized in partnership with IATA the First MID Regional Runway Safety Seminar (MID-RRSS/1 Amman, Jordan, 14-16 May 2012).

## 2. DISCUSSION

2.1 The meeting may wish to recall that 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 Conclusion 14/7 to the organization of a Second MID Runway Safety Seminar. In addition, the Third meeting of the Regional Aviation Safety Group (RASG-MID/3, Kuwait, 27-29 January 2014) agreed through Conclusion 2/4 to the establishment of Runway Safety Go-Team to expedite the establishment of Runway Safety Teams (RST) in the international airports.

- 2.2 Based on the above, the Second Middle East Regional Runway Safety Seminar (MID-RRSS/2) was organized by ICAO MID Regional Office and hosted by the UAE General Civil Aviation Authority (GCAA) in Dubai from 2 to 4 June 2014. The Seminar was attended by a total of one hundred ninety four (194) participants from six (6) MID States and eight (8) Organizations/Industries.
- 2.3 The MID-RRSS/2 programme covered the following: The Big Picture, Runway Excursions, Runway Incursions, Technological Advances, Local Runway Safety Team Workshop, Regional RS Go-Team Initiative, and Aerodrome Certification Interactive Workshop.
- As an outcome of the MID-RRSS/2, the MID RS Go-Team was officially launched and ICAO MID Regional Office was mandated to lead the RS Go-Team visits with support from UAE, Egypt, ACI, FAA, and IATA. The First Go-Team visit was Khartoum, Sudan (30 November 5 December 2014). The RS Go-Team mission was well appreciated by the Sudanese Civil Aviation Authority and the Khartoum International Airport management. Other potential candidates for the RS Go-Team visit include Muscat, Jeddah, Cairo, Imam Khomeini, Amman and Kuwait international airports.
- 2.5 The MID-RRSS/2 highlighted the following items:
  - a) importance of sharing lessons learnt and best practices, efficient training, awareness and communication;
  - b) use of available technology to support Runway Safety; and
  - c) Runway Safety Team (RST) provides effective and inexpensive tools to enhance Runway Safety. Participation by all stakeholders in the RST is paramount.
- 2.6 The MID-RRSS/2 Recommendations included the following:
  - 1) To foster and expedite the implementation of the Assembly Resolution A37-6 (1/2) provisions and the Recommendations of the GRSS and MID-RRSS/1, including those related to the establishment of RSTs.
  - 2) Urge States to enhance reporting culture and data sharing, including the establishment of a Regional Aviation Safety database.
  - 3) Support the RS Go-Team initiative as a way to expedite the establishment of RSTs.
  - 4) Encourage the establishment of National RWY Safety Team (NRST).
  - 5) Use of established procedures and checklists to expedite the Aerodrome Certification process.
  - 6) Invite ICAO to consider convening a Second Global Runway Safety Symposium.
  - 7) Invite ICAO to develop additional Runway Safety provisions.
- Further details on the MID-RRSS/2 are provided in the Summary of Discussion at **Appendix A**.

2.8 The Third meeting of the RASG-MID Steering Committee (RSC/3, Cairo, Egypt, 9-11 December 2014) supported the above Recommendations and agreed to the following Draft Conclusion:

# DRAFT CONCLUSION 3/6: DEVELOPMENT OF ADDITIONAL RUNWAY SAFETY PROVISIONS

That, ICAO consider:

- a) the development of additional Runway Safety Provisions; and
- b) convening a Second Global Runway Safety Symposium.

## 3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
  - a) note the Recommendations made by the MID-RRSS/2 and take action as appropriate;
  - b) support the RS Go-Team and urge States to request Go-Team Visits to their international airports, as required; and
  - c) agree to the Draft Conclusion at 2.8.

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# Second MID Regional Runway Safety Seminar

(MID-RRSS/2)

2-4 June 2014 Dubai, UAE















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## I. GENERAL

#### 1.1 Place and Duration

1.1.1 The Second MID Regional Runway Safety Seminar (MID-RRSS/2) was successfully held at the Intercontinental Hotel, Festival City, Dubai, UAE from 2 to 4 June 2014. The first day of the MID-RRSS/2 focused on the need for collaborative approach, runway excursion and incursion hazards, and mitigation measures with an overview of the technology advances. The second day was dedicated to a Workshop on Local Runway Safety Team (LRST) and the kick off of the MID RS Go-Team. The third day was reserved to a Workshop on Aerodrome Certification.

## 1.2 Attendance

1.2.1 The Seminar was attended by a total of one hundred ninety four (194) participants from six (6) MID States (Egypt, Iran, Oman, Saudi Arabia, Sudan and United Arab Emirates) and eight (8) Organizations/Industries (ACI, Airbus, Boeing, COSCAP-GS, Eurocontrol, FAA, IATA and IFATCA).

# 1.3 Agenda/Work Programme

1.3.1 The MID-RRSS/2 Programme included the following Sessions:

Opening Ceremony a) Session 1: b) Session 2: The Big Picture c) Session 3: Runway Excursions d) Session 4: Runway Incursions e) Session 5: Technological Advances f) Session 6: Local Runway Safety Team, Integrated Approach to Runway Safety g) Session 7: Managing Runway Safety, Aerodrome Case Studies h) Session 8: Local Runway Safety Teams, Supporting Initiatives i) Session 9: Regional Go-Team Initiative Appreciation Ceremony i) Session 10: Aerodrome Certification Overview k) Session 11: Aerodrome Certification Interactive Workshop Session 12: Seminar Outcomes and Closing m) Session 13:

1.3.2 The MID-RRSS/2 detailed Agenda/Work Programme and Presentations are available at the ICAO MID Regional Office Website: http://www.icao.int/MID/Pages/2014/RRSS-2.aspx.

## 1.4 Objective

- 1.4.1 The MID-RRSS/2 aimed to:
  - a) provide a forum to exchange views and share experience/best practices techniques for managing runway safety;
  - b) provide States and service providers in the MID Region with guidance related to the establishment of an effective Runway Safety Team (RST);
  - c) launch the MID RS Go-Team initiative; and
  - d) explore ways and means to enhance implementation of Aerodrome Certification in the MID Region.

#### II. SUMMARY AND OUTCOME OF DISCUSSIONS

# 2.1 The Big Picture - Panel Discussion

- 2.1.1 This session provided an overview of the Runway Safety (RS) on global and regional level. It highlighted the main runway safety risks and mitigation options. In particular, it was highlighted that:
  - RS is still the top safety risk area, since more than 50% of the accidents worldwide and in the MID Region are related to RS.
  - RS is multi-layered and multi-dimension and accordingly a collaborative approach towards the reduction of the RS-related risks is a must.
  - One of the best mechanisms to foster the collaborative approach is the establishment of LRST.
  - There is a need for improved communication about RS-related occurrences and best practices, within an organization and inter-organizations.
  - The enhancement of Aerodrome Certification processes in the Region would enhance RWY Safety significantly.

#### Recommendation:

1. To foster and expedite the implementation of the provisions of the Assembly Resolution A37-6 (1/2) and the Recommendations of the GRSS and MID-RRSS/1, including those related to the establishment of LRSTs.

# 2.2 Runway Excursions (RE) – Panel Discussion

- 2.2.1 This session provided an overview of the RE hazards and prevention measures from different perspectives. It was highlighted that:
  - RE is the highest accident category, representing 23% of all accidents over the period (2009-2013).
  - Un-stabilized approach remains the major contributing factor to RE, especially when an unstable approach is associated with a failure to go-around.
  - Although un-stabilized approach is a critical factor, there are other factors that should be considered such as tailwind, long landing, high speed and runway condition. In particular, quality of runway condition, which requires specific action at airport level and adequate standardization.
  - A Detailed Implementation Plan (DIP) is being developed under the RASG-MID
    to reduce the number of un-stabilized approaches through specific training for
    pilots and ATCOs and promotion of pilot adherence to SOPs for approaches
    (IATA is the Champion of this DIP).

- Another DIP was developed by the RASG-MID in coordination with MIDANPIRG in order to identify and prioritize the airports/runways where the implementation of PBN approaches would reduce the number of un-stabilized approaches and accordingly the number of REs. Emirates Airlines indicated its willingness to support this initiative.
- There is a need for enhancement of communication between pilots and ATCs.

#### Recommendation:

1. To expedite the development/implementation of the DIPs related to RE (unstabilized approach) under the RASG-MID.

## 2.3 Runway Incursions (RI) – Panel Discussion

- 2.3.1 This session provided an overview of the RI hazards and preventions from different perspectives. The following was highlighted:
  - Importance of ensuring that aeronautical data and charts (AIS publications) related to aerodromes are available, accurate, and maintained up-to-date.
  - All aviation disciplines are to be represented in the Aerodrome Runway Safety Team.
  - Importance of having standardized operations for use of stop bars.
  - The new provisions of Amendment 11 to Annex 14 Vol I would improve runway safety.

#### Recommendation:

1. To develop and publish standardized guidance on acceptable use of stop bars.

# 2.4 Technological Advances

2.4.1 This session provided an overview of the available technology to support Runway Safety with examples of its use.

## Recommendations:

- 1. Future technological efforts should focus on "Predictive" systems, rather than reactive.
- 2. A multi-stakeholder aviation forum should be established to work with system providers to undertake R&D advances in relation to sharing of systems and single platform concepts (integrated systems).
- 3. Industry to find a way of sharing areas of best practice where technological solutions are being trialed, or formal installation has been undertaken to solve a runway safety issue.

## 2.5 LRST Workshop and Launch of the MID RS Go-Team

- 2.5.1 The LRST Workshop provided an overview of LRSTs requirements highlighting the need for Integrated Approach supported by best practices.
- 2.5.2 The MID RS Go-Team was officially launched further to the endorsement through the RASG-MID/3 Conclusion 3/2. The "Guidance for the conduct of MID Runway Safety Go-Team visits" was finalised as at **Appendix A.** The initial plan is to conduct two Go-Team visits per year. The first Go-Team visit will be to Khartoum, Sudan end of 2014 and the second one will be to Muscat, Oman beginning of 2015.
- 2.5.3 In particular, the following was highlighted:
  - RST provides effective and inexpensive tool to enhance runway safety.
  - Participation by all stakeholders in the LRST is paramount.
  - IATA Global Aviation Data Management (GADM) could be used by the LRSTs and RS-Go Team to identify areas of improvement.

#### Recommendations:

- 1. Support the RS Go-Team initiative as a way to expedite the establishment of LRSTs.
- 2. Go-Teams may benefit from data and information available with the recipient State, RASG, ICAO, IATA (GADM), and ACI (APEX) to support their missions.
- 3. Encourage the establishment of National RWY Safety Team (NRST).

## 2.6 Aerodrome Certification Workshop

- 2.6.1 The Aerodrome Certification Workshop provided an overview on the status of Aerodrome Certification implementation in the MID Region and the associated safety targets which were endorsed as part of the MID Region Safety Strategy. The Workshop included Table Top Exercises on:
  - Application and initial assessment process
  - Certification verification activities
  - Issuance of aerodrome certificate and oversight

#### 2.7 General/Common Outcomes

- 2.7.1 The Seminar provided valuable panel sessions and opportunities for sharing of experiences, collaboration and coordination on runway safety. The following was highlighted during the different sessions of the Seminar:
  - sharing lessons learnt, efficient training, awareness and communication;
  - the use of common/standard taxonomy for reporting RS incidents and accidents;

- reporting culture, data sharing, and the establishment of a Regional Aviation Safety database;
- RST as an essential element of required SMS Aerodrome change management process.

## Recommendations:

- 1. Invite ICAO to consider convening a second Global RWY Safety Symposium.
- 2. Invite ICAO to develop additional RS provisions.

## 2.8 ICAO Runway Safety i-KIT

2.8.1 USBs including the ICAO Runway Safety i-KIT have been distributed to all participants. The USB memory sticks were donated by ICAO, ACI, UAE, and IATA.

## 2.9 Exhibition

- 2.9.1 An exhibition, was conducted concurrently with the Seminar. Two Companies participated in this Exhibition to showcase their products, as follows:
  - a) Bayanat Airports Engineering & Supplies which represents International Technology Developers, to deliver a full range of Terminal, Airside & Runway and Air Traffic Management systems and services. Bayanat introduced MALMS as a supplier of airfield lighting photometric test systems and inspection services. In addition, it introduced the MALMS automated runway lighting cleaning machines, which minimizes operational costs and enhances runway safety.
  - b) Stratech Systems Limited is engaged in the design, development, integration, implementation, maintenance and project management of information technology and advanced technology systems. Stratech introduced iFerret(tm) as the first intelligent Vision-based FOD detection system, providing real-time, automated FOD detection, location, classification, measuring and recording. iFerret(tm) was approved by FAA and deployed at Singapore Changi International Airport and others.