

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

UPDATE ON THE DEVELOPMENT AND IMPLEMENTATION OF SEIs & DIPS RELATED TO CFIT

(Presented by IATA on behalf of CFIT Coordinator)

SUMMARY

This paper provides updates on the development and implementation of Safety Enhancement Initiatives (SEIs) and the Detailed Implementation Plan (DIPs) to mitigate risks of CFIT

Action by the meeting is at paragraph 3.

REFERENCES

- RSC/3-Report

1. Introduction

1.1 The RASG-MID/3 meeting (Kuwait, 27-29 January 2014) endorsed there (3) SEIs and one DIP (RAST-MID/CFIT/1) related to CFIT. The DIP was developed to address the top priority SEI "the implementation of PBN Approach Procedure to all runways not currently served by precision approach procedures".

2. DISCUSSION

- 2.1 The RSC/3 meeting (Cairo, Egypt, 9-11 December 2014) noted with concern the low progress in the implementation of the DIP (RAST-MID/CFIT/1) at **Appendix A**. The meeting noted the challenge associated with the implementation of this DIP, particularly the difficulty to gather necessary data for the identification and prioritization of the airports/runways. In this respect, IATA informed the meeting that Flight Data Monitoring (FDM) data is available only for airlines internal use.
- 2.2 The meeting agreed that the CFIT Coordinator, coordinate with IATA the identification of the top 10 airports/runways in the MID Region with the highest risk of Runway Excursion and CFIT due to the high number of un-stabilized approach.
- 2.3 It was also agreed that ICAO follow-up with States the provision of data related to un-stabilized approaches. It is to be highlighted that the ICAO MID Regional Office, as a follow-up to

the PBN SG/1 meeting (Cairo, Egypt, 1-3 April 2014) has been coordinating with States for the provision of their inputs related un-stabilized approaches.

- 2.4 The list of the airports/runways in the MID Region with the highest risk of Runway Excursion and CFIT is at **Appendix B**.
- 2.5 The RSC/3 meeting tasked the CFIT Coordinator to develop additional CFIT DIPs to cover the SEIs endorsed by RASG-MID/3 including a DIP on specific training for pilots and air traffic controllers and promotion of pilot adherence to Standard Operating Procedures (SOPs) to reduce the number of un-stabilized approaches. A draft DIP related to SOPs is at **Appendix C**.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) review the list of airports/runways in the MID Region with the highest risk of Runway Excursion and CFIT due to the high number of un-stabilized approach at Appendix B; and
 - b) agree on the next course of actions in accordance with the DIP (RAST-MID/CFIT/1) at **Appendix A**; and
 - c) task the CFIT Coordinator and the RSC to finalize the draft CFIT DIP at **Appendix C**.

APPENDIX A

| | | CFIT Detailed Implementation Plan | | | | | | | | |
|--------------------------------------|--|--|---|------------------|---------------|-----------|----------|------------|--|--|
| 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 | | |
| RAST-MID/CFIT/1 | Approach procedures to all runways not currently served by precision approach procedures | Safety Management Standarzation: Implementation of risk-based standarization Safety Oversight Standarization: Promotion of Compliance with National Regulations and Adoption of Industry Best Practices | BP-GEN-1 BP-GEN-2 BP-GEN-4 BP-STD-S-12 BP-STD-S-13 | High | Difficult | P3 | 1 | Long-Term | | |
| Safety Enhancement Action (expanded) | | Introduction of PBN approaches to ensure that the latest performance based navigation technology is utilized, at such airfields, to provide the highest level of safety during the conduct of an approach and landing towards the runway. | | | | | | | | |
| Statement of Work | | In an attempt to mitigate the risks related to CFIT, States should ensure that approach procedures are adequate and provide sufficient altitude protection during the approach and landing phase especially at the identified Higher Risk Airports. Also ensure that pilots and controllers training and guidance in the use of PBN is adequate, current, uniformly conducted and supports the optimum utilization of automation resources so that individuals can take a monitoring role. | | | | | | | | |
| Champion Organization | | IATA/CANSO | | | | | | | | |
| Human Resources | | Regulators CAA Operational Support Service Procedure Designers Air Navigation Service Providers (ANSP) | | | | | | | | |
| Financial Resources | | TBD | | | | | | | | |

| 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 | |
|---|------------------------------|--|---|------------------|---------------|-----------|----------|------------|--|
| Relation with Current Aviation Community Initiative | | IATA & ICAO are jointly developing a CFIT toolkit addressing the CFIT contributing AST safety enhancements addressing the CFIT contributing factors CAST safety enhancements addressing the CFIT contributing factors Partnership between airlines and Flight Procedures Design consulting firms such as Airbus (ProSky) & Etihad Airways for the creation of PBN approaches at specific airfields. These new technology approaches provide continuous descent operations and optimised trajectories. This will enhance flight safety which is at the heart of the PBN Implementation Plan effort. | | | | | | | |
| Performance Goal | | In accordance with the MID Region Safety Strategy. | | | | | | | |
| Indicators | | In accordance with the MID Region Safety Strategy. | | | | | | | |
| Key Milestones (Deliverables) | | Identify and prioritize the airports/runways which require specific PBN approaches. Aircraft Operators FOQA programmes to monitor data (consistency and accuracy of the Operator's fleet for each selected "high risk/special airport) and provide a summary of stable/unstable approaches to MID-RAST each quarter). Concerned States, CANSO, IATA and ICAO to establish a Work Force to develop an appropriate detailed action plan for the implementation of PBN approaches at the identified airports/runways. implementation of PBN approach procedures at the identified airports/runways in accordance with their associated action plans. | | | | | | | |
| Potential Blockers | S | | | | | | | | |
| Responsible | | Core Team: IATA, CANSO, ICAO, States and Users | | | | | | | |
| DIP Notes | | | | | | | | | |

APPENDIX B

CFIT Runway priorities for 2015

Based on the information collected up to December 31, 2014, IATA has identified the following runway ends in the MID Region with high level of unstabilized approaches:

| State | Airport | Runway | Published Approach | PBN Approach Needed | Priority for PBN approach implementation | Remarks |
|-------|---------|--------|-----------------------|------------------------|--|--------------------------------------|
| Egypt | HEBA | 14 | NIL | Y | | |
| Iran | OIMM | 13L | VORDME | Y | | |
| Iran | OIMM | 13R | VORDME | Y | | |
| Iran | OISS | 11L | NIL | Y | | |
| Iran | OISS | 11R | NIL | Y | | |
| Iraq | ORMM | 14 | VORDME | Y | | |
| Iraq | ORNI | 10 | NIL | Y | | |
| Libya | HLLT | 09 | VORDME | Y | | VOR not flight checked |
| Libya | HLLT | 27 | VORDME/ILS | Y | | ILS and VOR not flight checked |
| UAE | OMAL | 01 | VOR/ILS | Y | | |
| UAE | OMAL | 19 | VOR | Y | | |
| UAE | OMRK | 16 | VOR | Y | | |

APPENDIX C

| | | CFIT Detailed Implementation Plan | | | | | | | | |
|--------------------------------------|--|---|---|------------------|---------------|-----------|----------|------------|--|--|
| 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 | | |
| RAST-MID/CFIT/2 | Promote,implement and mandate best practice Standard Operating Procedures with respect to CFIT amongst Aircraft Operators and Air Navigation Service Providers | Safety Management Standarzation: Implementation of risk-based standarization Safety Oversight Standarization: Promotion of Compliance with National Regulations and Adoption of Industry Best Practices | BP-GEN-1 BP-GEN-2 BP-GEN-4 BP-STD-S-12 BP-STD-S-13 | High | Difficult | P3 | 1 | Long-Term | | |
| Safety Enhancement Action (expanded) | | To confirm that all MID-Region States have mandated the use of SOPs on applicable equipments and that Aircraft Operators and Air Navigation Service Providers are in compliance with State requirements. Aircraft operators and Air Navigation Service Providers will be encouraged to develop and maintain effective SOPs for applicable equpment and ensure that flight crews and ATC use SOPs to reduce the risk of a CFIT event. | | | | | | | | |
| Statement of Work | | Promote the development and issuance of an advisory circular (AC) containing information Aircraft Operators and Air Navigation Service Providers may utilize to develop or enhance their SOPs with respect to CFIT. | | | | | | | | |
| Champion Organization | | TBD | | | | | | | | |
| Human Resources | | • CAA . • ICAO. • IATA | | | | | | | | |

| 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 | | |
|---|------------------------------|--|---|------------------|---------------|-----------|----------|------------|--|--|
| Financial Resources | | TBD | | | | | | | | |
| Relation with Current Aviation Community Initiative | | To be Completed | | | | | | | | |
| Performance Goal | | 1-Educate Aircraft Operators and ANAP. 2-Increase awareness on CFIT. | | | | | | | | |
| Indicators | | To be Completed | | | | | | | | |
| Key Milestones (Deliverables) | | To be Completed | | | | | | | | |
| Potential Blockers | | Availability of required human recourses from identified organisations. Availability of financial recourses. | | | | | | | | |
| Responsible | | TBD | | | | | | | | |
| DIP Notes | | Promotions : websites, State Letter, Flyers, Events , Seminars, Press release. Best practise fro SOP to be taken from manufactures and IFALPA | | | | | | | | |