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

EMERGING RISKS AREA

(Presented by the Secretariat)

SUMMARY

The RSC/2 meeting agreed that emerging risks (low priority), which are not identified under the Focus Areas (FAs), will be addressed under the "Emerging Risks Area".

This paper presents some of the emerging risks in the MID Region and the related activities.

Action by the meeting is at paragraph 3.

REFERENCES

- RSC/2 Report

1. INTRODUCTION

1.1 The RSC/2 meeting (Amman, Jordan, 28 - 30 October 2013) agreed that, although the MID-RAST has been established mainly for the development, implementation and monitoring of SEIs and DIPs related to the identified Focus Areas (FAs), a mechanism should be agreed upon to address the other emerging (low priority) areas such as Hard Landing, Gear-up Landing/Gear Collapse, In-flight Damage, Call-sign Confusion and Laser attacks. Accordingly, the meeting agreed that all emerging risks will be addressed under the "Emerging Risks Area".

1.2 The meeting developed a matrix of identification and prioritization of the main FAs. According to this matrix, IFD is no longer considered as one of the main risk areas. Therefore, the meeting agreed that the IFD will be addressed under the Emerging Risks Area.

2. DISCUSSION

In-flight Damage

2.1 Although IFD is no longer considered as one of the main risk areas, the RSC/2 meeting agreed that the implementation of the developed DIP for the top priority SEI should be carried out in 2014.

2.2 The RSC/2 meeting reviewed the SEIs at **Appendix A** to this working paper, and reconfirmed that the SEIs to mitigate IFD are prioritized as follows:

1) Improve aviation safety in the MID Region through mitigation of birdstrike, wildlife and FOD hazards.

2) Lower the number of In-flight Damage accidents/incidents related to SOPs/SOPs Adherence by Flight Crew and Maintenance Personnel.

3) Increase awareness on means and tools of handling situations where a natural disaster occurs.

2.3 The meeting also reviewed the DIP for the top priority SEI at **Appendix B** to this working paper, and agreed to the following:

1) Conduct a survey and assessment of airports in the region to identify and understand animal habitat around airports, and methods used by the airport for controlling hazardous wildlife.

2) Establish a regional guidance document that addresses key issues such as vegetation (like tall grass policy).

3) Convene a workshop for pilots and ATCO to increase awareness on wildlife avoidance during flight.

2.4 The meeting may wish to note that the IATA/ICAO FOD-Wildlife Workshop was scheduled to be conducted in Cairo, Egypt, 20 - 21 January 2014. However, due to the low level of confirmation of attendance, the Workshop was postponed to 24-26 March 2014.

Call-sign Confusion

2.5 Pursuant to the RASG-MID/2 meeting, a study on Call-sign Confusion was conducted to collect reliable data over a specified period of time, ascertain the magnitude of the problem, and confirm the categories of contributing factors causing call-sign confusion in the MID Region.

2.6 The results of the study are at **Appendix C** to this working paper. The analysis and results are included in the Second Edition of the Annual Safety Report. Development of mitigation measures will be addressed under the Emerging Risks Area.

Laser Attacks

2.7 The RSC/2 meeting noted that the Middle East Region has recently experienced an increase in laser attacks on aircraft, which was considered as a threat to aviation safety and security. Accordingly, the meeting agreed that a survey be conducted under the ASRT to collect additional information on the subject necessary for the assessment of the associated risks and development of mitigation measures.

2.8 The top five States where there are laser attacks reported in the Region are: Egypt, Oman, Qatar, Saudi Arabia and UAE.

2.9 Based on the above, the RSC/2 meeting agreed to the following Draft Conclusion:

DRAFT CONCLUSION 2/2: LASER ATTACKS ON AIRCRAFT

That, in order to support the MID-ASRT in conducting a survey on laser attacks to aircraft, States be urged to provide necessary information to the ICAO MID Regional Office on laser attacks incidents that have been reported during the past 3 years.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) review and endorse the SEIs and DIP for IFD at **Appendices A and B** to this working paper;

b) review the outcome of the study on the Call-sign Confusion at **Appendix C** to this working paper; and

c) endorse Draft Conclusion 2/2.

APPENDIX A

APPENDIX A

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
RAST-MID/IFD/1	Improve aviation safety in the MID region through mitigation of birdstrike, wildlife and FOD hazards	**Safety Oversight Standarization:** Promotion of Compliance with National Regulations and Adoption of Industry Best Practices **Safety Management Standarzation:** Implementation of risk-based standarization	1. BP-GEN-1 2. BP-GEN-2 3. BP-GEN-4 4. BP-STD-S-12 5. BP-STD-S-13 6. BP-SIE-S-2	High	Moderate	P2	1	IATA	Mid-Term	
RAST-MID/IFD/2	Lower the number of In-flight Damage accidents/incidents related to SOPs/SOPs Adherence by Flight Crew and Maintenance Personnel	**Safety Oversight Standarization:** Promotion of Compliance with National Regulations and Adoption of Industry Best Practices **Safety Management Standarzation:** Implementation of risk-based standarization	1. BP-GEN-1 2. BP-GEN-2 3. BP-GEN-4 4. BP-STD-S-12 5. BP-STD-S-13	Medium	Moderate	P5	2	1. IATA 2. ICAO 3. IFALPA 4. AACO	Mid-Term	DIPS might include: 1. Laucn Competency Basec Training (CBT) awareness for maintenance personnel and provide support in the form of "Go Team" visits where required 2. Develop guidance material which includes best practices on enhanced aircraft inspection practices and procedures collected from airlines and manufacture

RAST-MID/IFD/3	Increase awareness on means and tools of handling situations where a natrual disaster occurs	**Safety Oversight Standarization:** Promotion of Compliance with National Regulations and Adoption of Industry Best Practices **Safety Management Standarzation:** Implementation of risk-based standarization	1. BP-GEN-1 2. BP-GEN-2 3. BP-GEN-4 4. BP-STD-S-12 5. BP-STD-S-13	High	Difficult	P3	3	IATA/ICAO	Long Term	DIPS might include: 1. Conducting a survey and assessment of airports in the region to identify and understand animal habitat around airports, and methods used by the airport for controlling hazardous wildlife. This survey to include assessment of the States' implementation of ICAO Annex 14 standards in Chapter 9 - 9.4 , and analysis of the data collected. 2. Convening training and workshops for pilots and ATCO to increase awareness on wildlife avoidance during flight 3. Promote voluntary reporting of bird strikes by airlines, airports, and regulators. Various tools are available such as ICAO Bird Strike Information System (IBIS), IATA Bird Strike Database, etc.

APPENDIX B

Detailed Implementation Plan Template

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/IFD/1	Improve aviation safety in the MID region through mitigation of birdstrike, wildlife and FOD hazards	Safety Management Standarzation: Implementation of risk-based standarization Safety Oversight Standarization: Promotion of Compliance with National Regulations and Adoption of Industry Best Practices	1. BP-GEN-1 2. BP-GEN-2 3. BP-GEN-4 4. BP-STD-S-12 5. BP-STD-S-13 6. BP-SIE-S-2	High	Moderate	P2	1	MID Term

Safety Enhancement Action (expanded)	In-flight damage is the third biggest safety challenges for the Middle East region based on analysis carried out for accidents between 2008 and 2011. Highest contributing factor is aircraft malfunction followed by equal distribution over contributing factors including maintenance events, wildlife/FOD/birdstrike, meterology, and SOP/SOP Adherence. For the purpose of this DIP, the main contributing factor that is addressed is wildlife/FOD/birdstrike.
Statement of Work	This project aims at promoting practices and tools for mitigation of birdstrike and FOD hazards at airports in the MID region, through; a) Conducting a survey and assessment of airports in the region to identify and understand animal habitat around airports, and methods used by the airport for controlling hazardous wildlife b) Establishing a regional guidance document that addresses key issues such as vegetation (like tall grass policy) c) Convening a workshop for pilots and ATCO to increase awareness on wildlife avoidance during flight

Champion Organization	IATA
Human Resources	Airlines, Regulators, Manufacturers, Airports, International and Regional organizations and associations
Financial Resources	1) Sponsorship of workshop for Wildlife/FOD/Birdstrike
Relation with Current Aviation Community Initiative	1. RASG-PA Bird Strikes Risk Reduction Program 2. IATA Bird Strike Database 3. ICAO Bird Strike Database 4. CAP 772: Birdstrike Risk Management for Aerodromes 5. UAE Aerodrome Mandatory Reporting System
Performance Goal	1) Collect further data and information 2) Launch a Wildlife/FOD Risk Reduction Program in the region 3) Achieve SEI indicator.
Indicators	Reduce In-flight Damage related accidents by 50% by the end of 2017
Key Milestones (Deliverables)	1. Conduct a survey and assessment of airports in the region to identify and understand animal habitat around airports, and methods used by the airport for controlling hazardous wildlife by June 2013 2. Establish a regional guidance document that addresses key issues such as vegetation (like tall grass policy) by November 2013 3. Convene a workshop for pilots and ATCO to increase awareness on wildlife avoidance during flight by November 2013
Potential Blockers	Availability of required human resources from identified organisations Timely collection of data and information

Responsible	Core Team: 1. Samir Sajet, WFP 2. Adel Ramlawi, ICAO 3. Eng. Ahmed Arafaa, ECAA 4. Kamil Al Awadhi, KU Contributor: 1. Michelle Soliman, UAE GCAA
DIP Notes	None

APPENDIX C

On Demand Analysis of Identified Risks or Hazards
Call-sign Confusion

The use of similar call signs by aircraft operating in the same area often gives rise to potential and actual flight safety incidents. Reports have been raised by airline operators and Air Navigation Service Providers of common incidents related to call-sign conflict in the Middle East.

Call sign confusion can be either aural or visual, or both. Aural confusion can occur between flight crews and controller – and sometimes between different flight crews. Visual confusion is primarily an ATC problem. It relates to flight progress strips (FPS) and radar displays, where call signs are the primary means of identifying the aircraft.

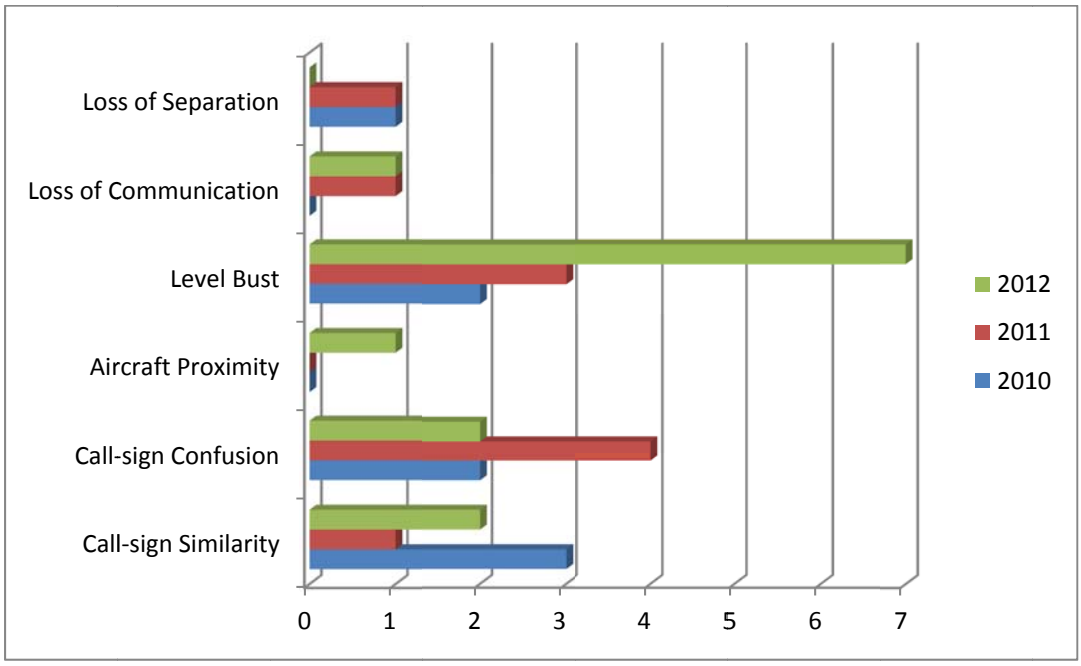
Pursuant to the RASG-MID/2 Meeting, a study was launched to collect reliable data over a specified period of time, to ascertain the magnitude of the problem, and confirm the categories of contributing factors causing call-sign confusion in the MID Region.

The call-sign confusion survey was distributed to all 29 IATA members and all 15 States in the MID Region. Responses from 9 airlines were received. Four airlines reported that they have no incidents to report, and one reported no occurrences in the MID region.

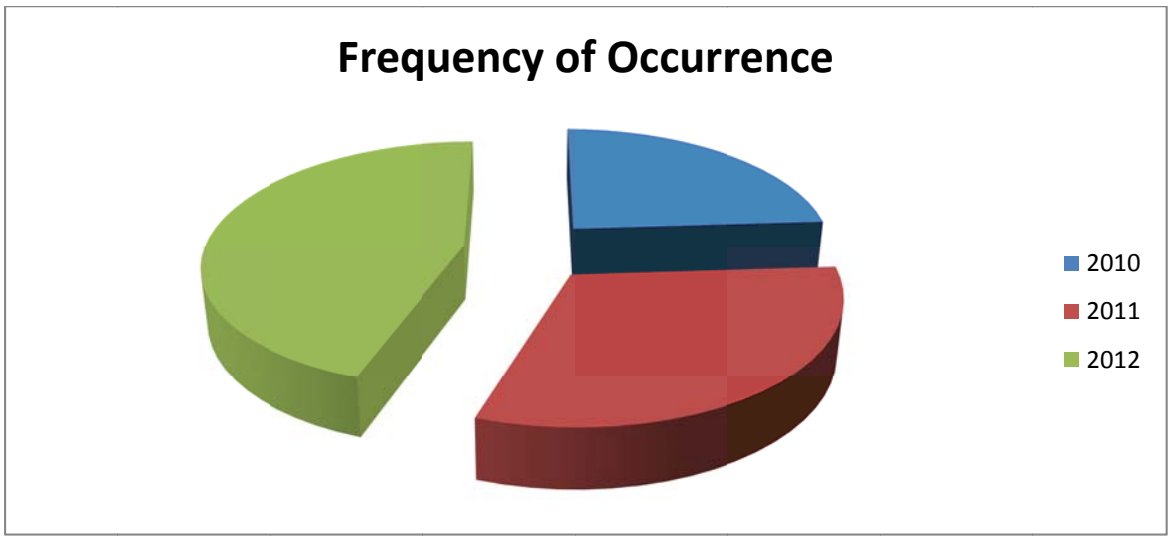
The following charts illustrate the collected responses.

1. Airline Responses

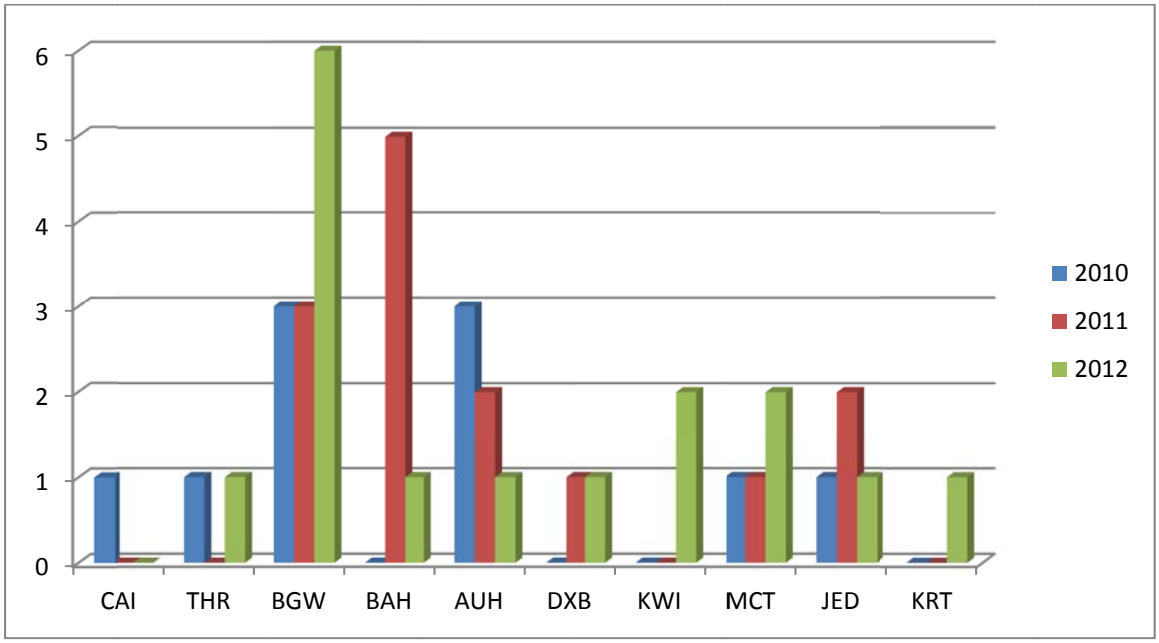
- Nature of Occurrence



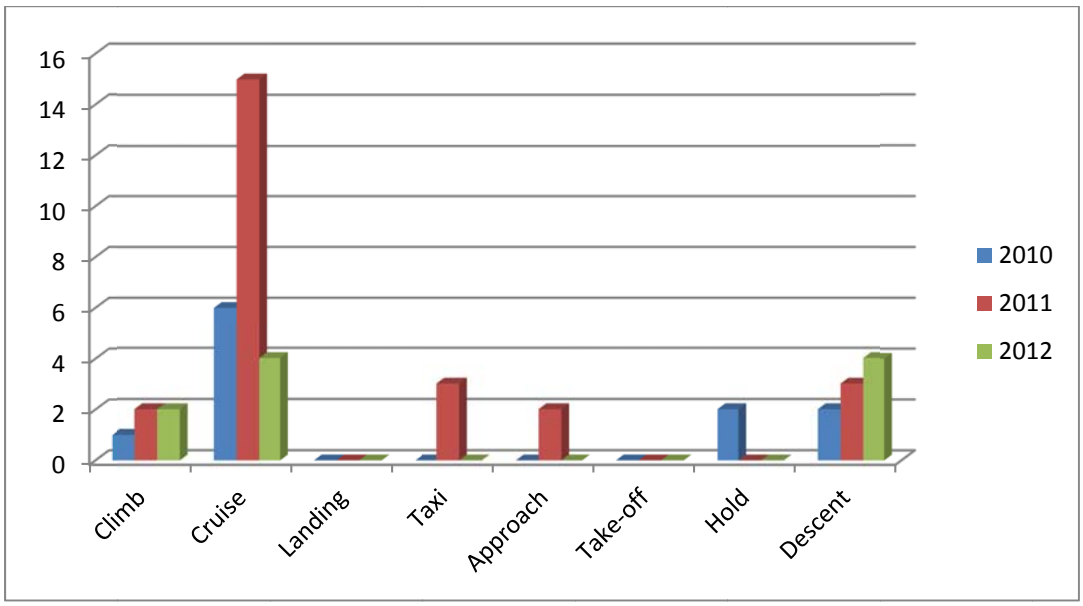
- Frequency of Occurrence



- Location of Occurrence



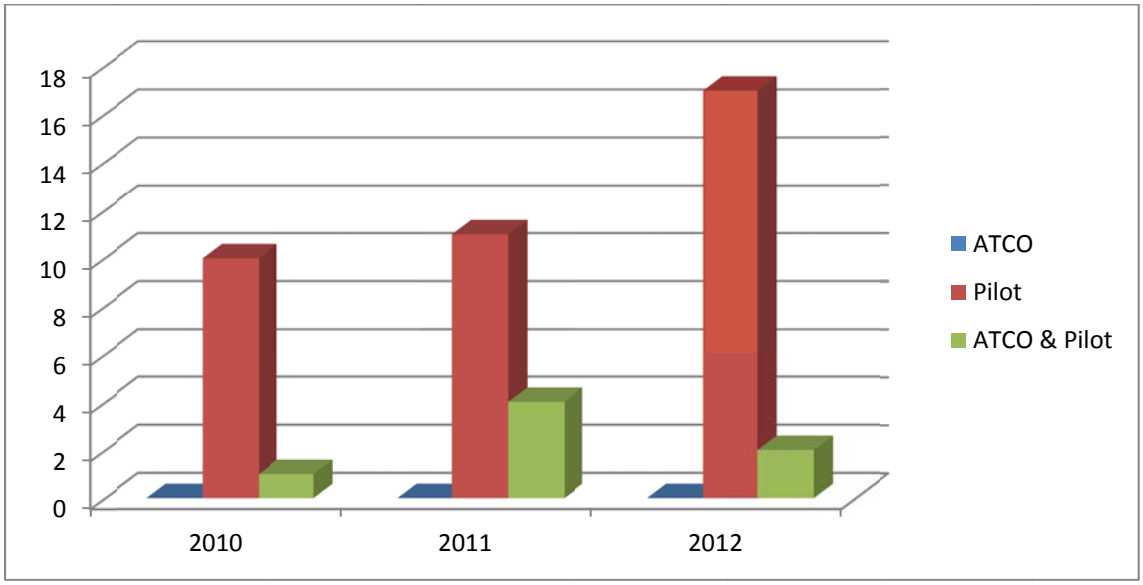
- Flight Phase



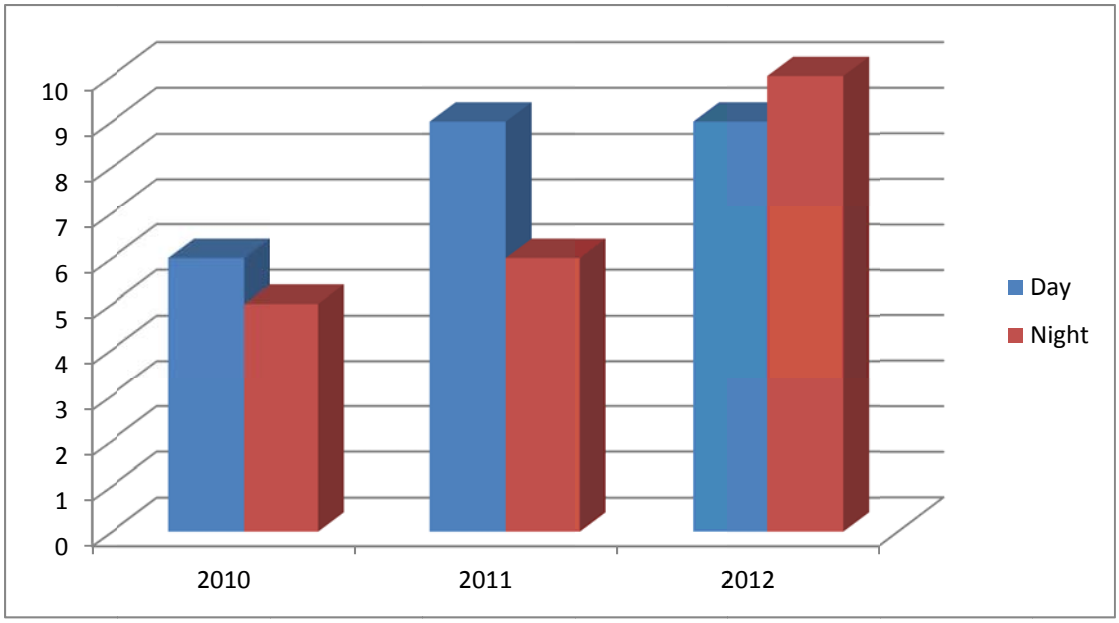
- Severity

A	prescribed ATC separation was lost
B	there was no loss of prescribed ATC separation but there was some deviation from operating procedures by the flight crew(s) or controller
C	there was no deviation from operating procedures

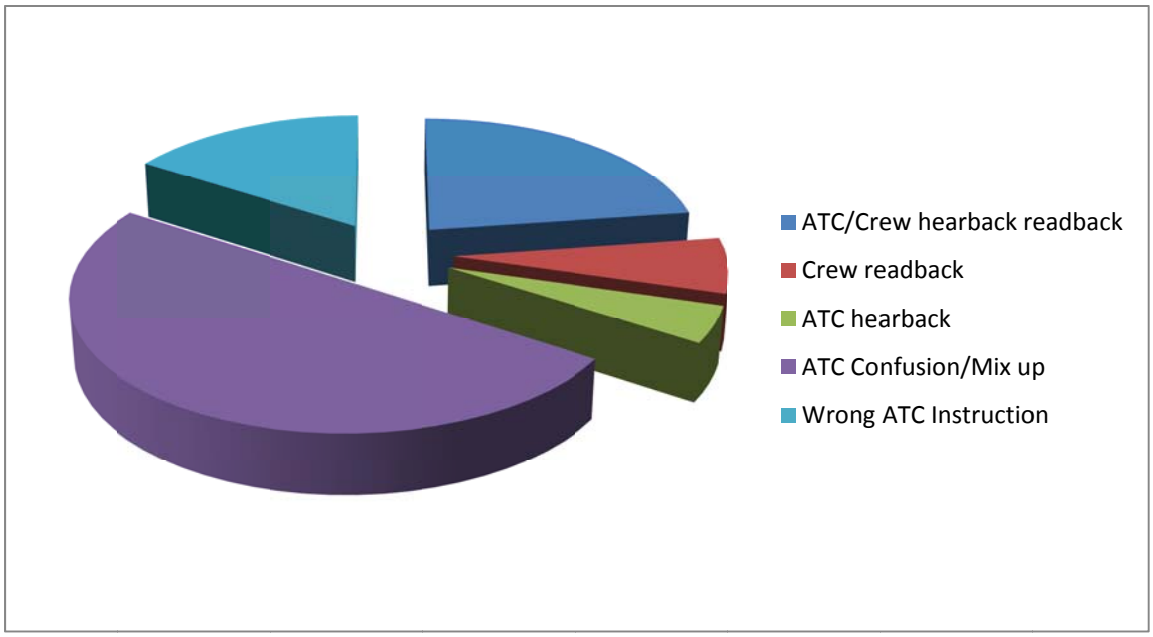
- Reported by



- Time of Day



- Main root Cause


ATC/Crew hearback readback
Crew readback
ATC hearback
ATC Confusion/Mix up
Wrong ATC Instruction

-END-