



**Twenty First Meeting of the Africa-Indian Ocean Planning and Implementation Regional
Group (APIRG/21)
(Nairobi, Kenya, 9 – 11 October 2017)**

Agenda Item 9: Any other Business

**REPORT ON THE FOURTEENTH MEETING OF THE AIR TRAFFIC SERVICES
INCIDENT ANALYSIS GROUP (AIAG)**

(Presented by IATA)

SUMMARY
This information paper provides feedback on the 14 th ATS Incident Analysis Group (AIAG) meeting held in Johannesburg, South Africa from 1 st to 2 nd of March 2017.
REFERENCE(S): AIAG/14 Report
Related ICAO Strategic Objective(s): A – <i>Safety</i>

1. INTRODUCTION

1.1 The ATS Incident Analysis Group (AIAG) provides a forum to various aviation organizations to review reported incidents in the region and formulate recommendations to prevent reoccurrence of similar incidents in the region.

1.2 The AIAG core membership consists of IATA, ICAO, IFALPA and IFATCA; however the group is open to all Air Navigation Service Providers / Civil Aviation Authorities and Airlines operating in the AFI region.

1.3 The AIAG main tasks are:

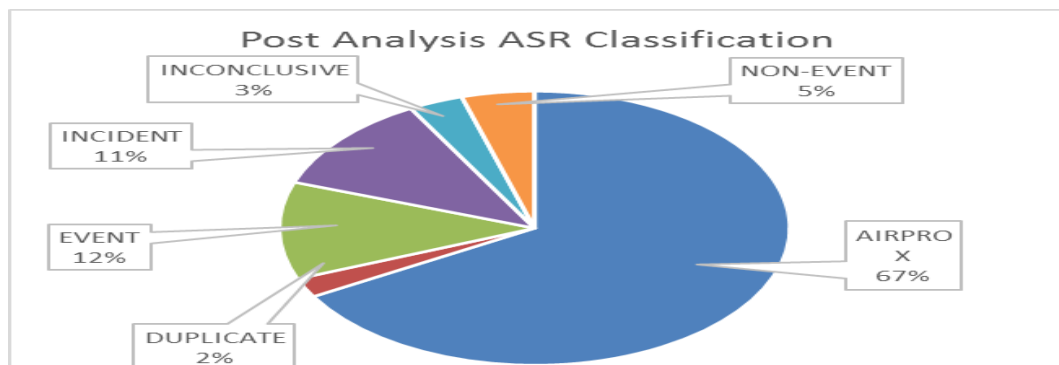
- Assess incidents by type, i.e., air proximity (AIRPROX), procedure, facility as per ICAO definition, and establish degree of risk to the extent practicable.
- Identify primary and contributory causes and recommend appropriate corrective actions thereto.
- In the context of 2 above, develop submissions to be made to ICAO regional planning groups, member airlines and other airspace users, States or other ATS Providers concerned with a view to addressing underlying causes or major trends.

- Determine the extent to which IFBP was instrumental in identifying and/or solving conflicts and make appropriate recommendations that may enhance the effectiveness of the procedure.
- Determine the extent to which TCAS (ACAS) was instrumental in identifying and/or solving conflicts and make appropriate recommendations that may enhance the effectiveness of the procedure.
- Develop statistical analyses highlighting trends, inter alia by time period, by cause and by FIR/ATS Unit.

- 1.4 The 14th AIAG meeting was attended by 89 participants from 39 organizations.
- 1.5 The meeting was conducted in accordance with the AIAG Terms of Reference, methodology and classification tables.

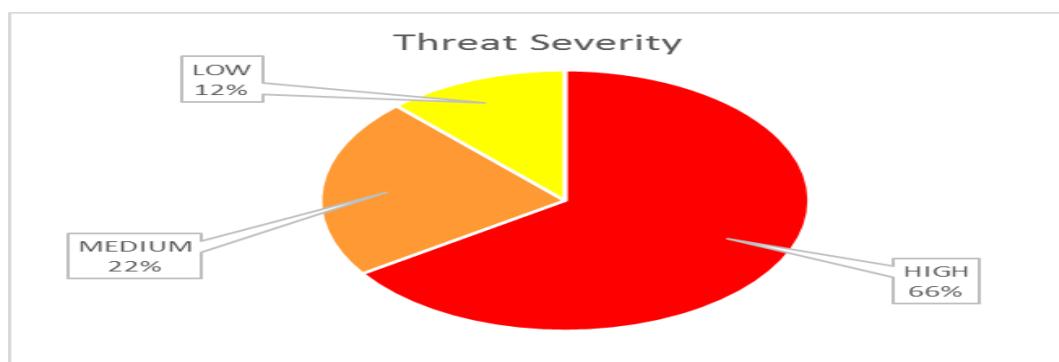
2. DISCUSSION

- 2.1 The 14th AIAG meeting analysed 87 reports that were submitted by Airlines and ANSP's, which took place during the period January to December 2016. The Analysis of identified events examines the air safety reports (ASR) as well as investigation feedback received from the applicable authorities. The poor feedback rate (55%) on events has a direct impact on the number of events where analysis is inconclusive or the contributory facts as undetermined.
- 2.2 58 of the 87 incidents analysed were classified as AIRPROX with 66% of these having had a high risk of collision.
- 2.3 Of concern is the high reliance on TCAS to identify and resolve potential AIRPROX events in the AFI region. 49% of all AIRPROX incidents relied on TCAS TA for the timely restoration of separation; while TCAS RA was catalyst for late separation resolution in 59% of the events. Of further concern is the 20% undetermined means of late restoration of separation which implied a heavy reliance on providence to avoid AIRPROX.
- 2.4 The top 5 AIRPROX contributory factors for the 2016 period were Airspace Organization / ATC Procedures, Mobile Communications, Human factors, Poor Crew Discipline and System Limitations. It should be noted that human actors and system limitations are two new contributory factors not identified in any previous meetings.
- 2.5 Of the 87 Air Safety Reports (ASR's) analysed;
- 15 reports were determined to not constitute incidents (Events and Non-events)
 - 55% reports were inconclusive
 - 2 were duplicates
 - 10 were ATS incidents and
 - 58 AIRPROX.



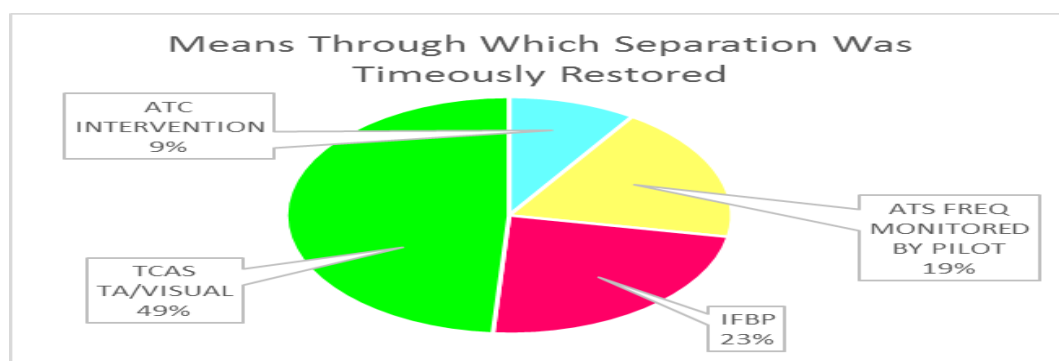
2.6 Among reports classified as AIRPROX;

- 38 were classified high risk
- 13 medium risk and
- 7 low or undetermined risk.



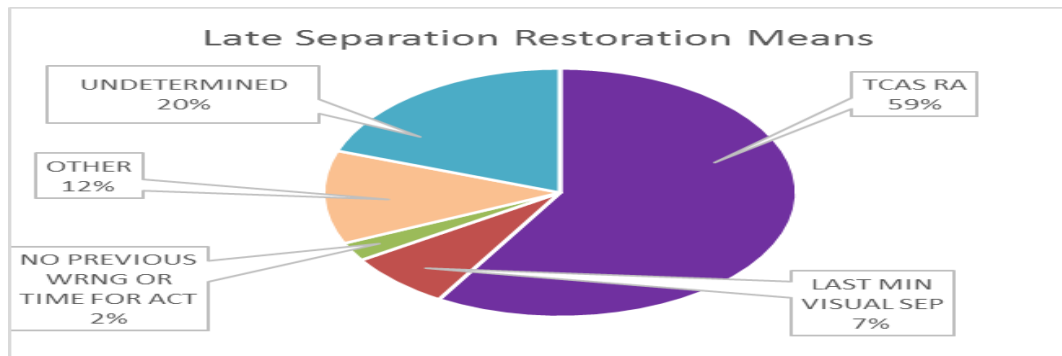
2.7 Where separation was compromised it was found that timely restoration of the separation was re-established through one or a combination of ;

- ATC intervention in 4 instances
- ATS Frequency monitoring by pilot in 8 instances
- IFBP in 10 instances and
- TCAS TA / Visual in 21 instances.

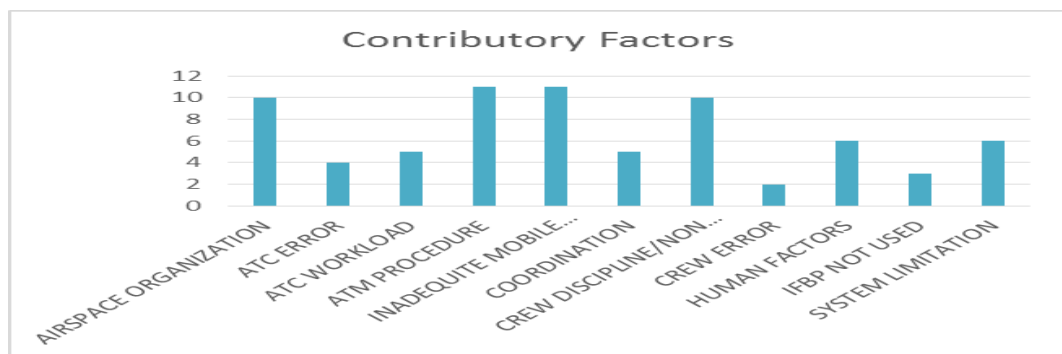


2.8 Where timely restoration of separation did not take place or was ineffective, collision was avoided through TCAS RA in 24 instances. There were 3 instances where last minute visual separation was used and 5 instances where avoidance action was taken by crew. In 1 instances there was no previous warning or time for action, and 8 instances where the restoration means is undetermined. This is

particularly concerning in that it implies that the avoidance of the collision was through providence.

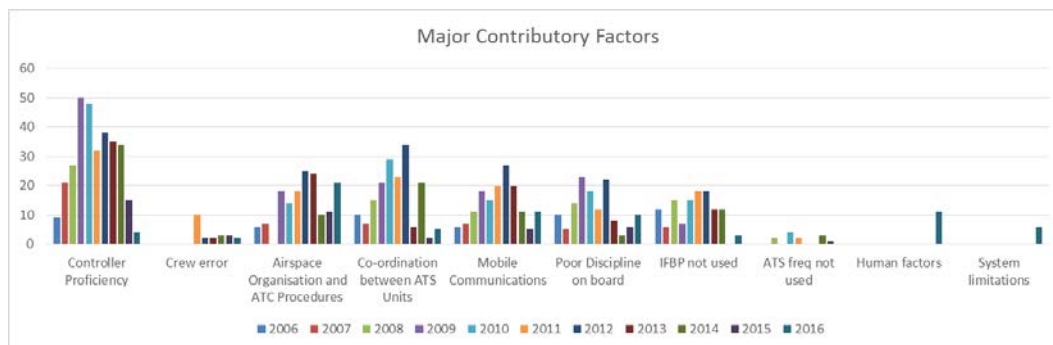


- 2.9 Inadequate mobile communication and ATM procedures were the highest contributing factors in 2016 with Airspace Organization (classification) as well as crew discipline/non-compliance being the next largest contributors to AIRPROX events.

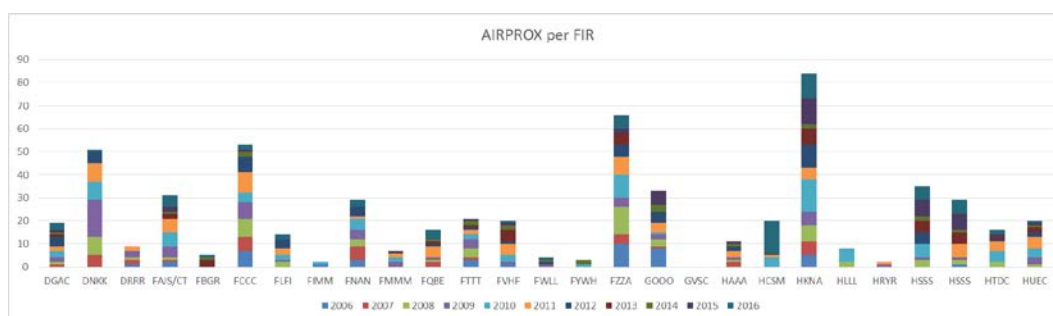


- 2.10 Out of the 87 incidents reported, the concerned ANSP's provided only 48 feedback reports by the time of compiling the meeting data. The feedback rate for the 2016 year was 55% for AFI region. The lack of feedback from states is the major cause for undetermined and inconclusive analysis results and shows a concerning attitude to safety improvement.

- 2.11 The analysis of contributory factors shows the emergence of two new contributory factors, those of Human factors and system limitation. While the contribution of controller proficiency and co-ordination between ATS units has decreased. Airspace organization and ATC procedures as well as mobile communications have increased from an already high base, this is very concerning.



2.12 The top 5 FIR contributors for 2016 were Somalia (14), Kenya (11), Sudan (6), South Sudan (6) and DRC (6).



3. ACTION BY THE MEETING

3.1 The meeting is invited to take note of the information provided in this paper.

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