



International Civil Aviation Organization  
Eastern and Southern African Office

**Eleventh Meeting of the APIRG Air Traffic Services, Aeronautical Information Services and Search and Rescue Sub-Group (ATS/AIS/SAR/SG/11) [Nairobi, Kenya 26 – 30 April 2010]**

**Agenda Item 7: ATS Safety Management**

**Outcome of the Seventh Meeting of AFI ATS Incident Analysis Group (AIAG/7) from an Airline Perspective**

(Presented by the International Air Transport Association)

**SUMMARY**

This paper invites States and air navigation service providers to carry out thorough investigations on all reported ATS Incidents and take adequate measures to prevent repetition of similar occurrences. It also calls upon States to make their investigations, conclusions and recommendations readily available to all concerned parties.

References:

- SP AFI RAN (2008) Report
- ATS/AIS/SAR/SG/10 Report

**1. INTRODUCTION**

1.1 Following the 7<sup>th</sup> Session of AIAG in March 2010, a preliminary SAA report was drawn up and forwarded to all concerned by SAA Flight Safety Office, including to IATA & ICAO. This paper presents the ATS/AIS/SAR Sub-Group with the feedback of AIAG/7.

**2. DISCUSSION**

ATS Incident Analysis Group (AIAG)

2.1 Refer to feedback presented / forwarded by IATA AFI. Herewith an extract from the SAA report for your kind attention / information. [Pse note that these figures / recommendations are those from SAA Flight Safety].

**CONFIRMED AIRPROX & ATS INCIDENTS IN AFI:**

| YEAR           | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|----------------|------|------|------|------|------|------|
| <b>AIRPROX</b> | 25   | 23   | 38   | 41   | 62   | 66   |
| <b>ATS INC</b> | 45   | 21   | 27   | 21   | 25   | 36   |
| <b>TOTAL</b>   | 70   | 44   | 65   | 62   | 87   | 102  |

[2009 thus the highest reported AIRPROX & ATS Incidents since 2004. However, these are “flat stats” and not a rate as per the increase in traffic volume every year. Refer to IATA report for RATIO & TRENDS]

**2.2. SOUTH AFRICAN AIRWAYS IN AFI:**

| YEAR           | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|----------------|------|------|------|------|------|------|------|------|
| <b>AIRPROX</b> | 26   | 15   | 8    | 12   | 19   | 16   | 15   | 9    |
| <b>ATS INC</b> | 18   | 21   | 18   | 12   | 15   | 11   | 7    | 10   |
| <b>TOTAL</b>   | 44   | 36   | 26   | 24   | 34   | 27   | 22   | 19   |

[2009 the lowest amount AIRPROX & ATS Incidents, since 2002 anyway, whilst maintaining the highest amount of reports submitted in the AFI Region.

→ **Crew Discipline / Error - Human Factors:**

- C210 @ MPM / UN @ FIH / ARIK @ LOS / Light a/c & 3DSEA @ JNB / SN-CEO & ONG783 @ Kano / EGM103 @ Brazza / C404 @ Tanna / MAU036 @ Addis / Jet Aviation @ Khartoum / 9Q-CNJ @ FIH / Russian Crew @ Niamey /
- NO IFBP = DTA @ Kano & Martin Air
- Comair @ FALA & JNB – interpreting ATC clearance
- SAA @ JNB – level bust due to incorrect ALT understood & dialed
- Egypt Air @ EBB – interpreting ATC clearance
- At least 2 to 3 reports indicating false position reports
- Only 2 instances where crews were reported not using IFBP, but I am sure there must have been many more!

**FINDINGS:**

- a. As stated before, these are “flat stats” due to the lack in ratio, i.e incidents in relation to traffic volume which, according to IATA, is ever increasing! The AIAG report should highlight the issues according to ration & trends. Thus with what we got at present, it is clear that there has been an **increase in incidents in 2009**. However, SAA has seen its lowest amount of AIRPROX & ATS Incidents since it as been recorded in 2002.
- b. The **increase in representatives** attending AIAG in 2009, the **increase in Air Safety Reports** submitted, **from more and more Operators and even Authorities / ATS Providers**, awa the marked **improvement in feedback** from the latter [90% in 2009], is very positive, even when viewed against an increase in incidents. But remember, **still no ratio**, thus we will not be surprised to see that that the ratio will produce a lower incident rate in 2009.
- c. We need not to expand on the value of **TCAS & IFBP**. The stats paint a clear picture. Any of those incidents had the potential for disastrous consequence! Suffice to say, TCAS and RVSM, together with some instances of Crew & ATC vigilance, averted many a possible disaster! A concern however, is the vast amount of especially **RA events within a TMA**. These shortcomings also require urgent attention, so too the fact that there are still Operators out there that appear indifferent concerning the **value of IFBP**.
- d. Even with improvement, **COMMS issues** remain an issue at Brazza & Kinshasa. According to the RVA more VSAT installations and improved VHF envisaged in the near future. Similarly Kano and Accra also a concern, with no COMMS issues at Luanda reported or classified as a causal factor in any AIRPROX / INCIDENT in 2009! [We however already know that this will not be the case in 2010, and after discussions with ENANA, it would seem that they are still serious about better VHF coverage, whilst the congestion on 118,5 remains a serious threat to safety].
- e. As in 2008, another sharp rise in **Air Traffic Controller Proficiency / Human Factor** causal factors! However, is this not indicative to the high number of incidents contributed to **Airspace Organisation, - Management and ATM!** Adding the lack in mobile communications in the region, the high amount of ATC related involvement in fact merely a blinding flash of the obvious! With little support and facilities, the combination with Human Factor issues such as fatigue, in a 7/24 environment, this comes as no surprise. “ATC Proficiency” thus nothing different to “Pilot Error,” and when treating the symptoms rather than the cause, incident prevention remains a tough quest indeed.
- f. The apparent **lack in a JUST [or any Safety-] CULTURE** in some states, adds to the confusion and aimlessness as far as prevention is concerned. On a CRM note, as discussed as well, how many Authorities / ATS Providers / Controllers have been **involved in any CRM, or TEAM Resource Management training**, and if not, why not?

- g. There are still an unacceptable high amount of *crew discipline issues* where crews do not comply with laws & regulations, thus compromising minimum separation! The question here is a basic Just Culture test of intent, versus unintentional error due to human factor related issues such as fatigue, similar to that of Controllers and the environment as mentioned before! There can be no excuse for intentional non-compliance and the relevant Authorities should take note an action! With unintentional error, the related human factor issues to be investigated by the relevant operator to ensure prevention! Once again the *affect of fatigue* difficult to qualify, but suffice to say that it will always be a factor, especially with events occurring between 01:00 and 06:00.
- h. It is clear that the situation in *Lagos remains a serious concern*, especially after installing radar in the course of 2009, if not mistaken. Thus far we could not ascertain whether the radar could in fact be part of the problem whilst Controllers become conversant in its application and use! According to both the NAMA [Nigeria] and ENANA [Angola] representative at AIAG, their hands are tied due to ‘political constraints’ and *a lack in empowerment by the State! This, in my opinion, is the single most important CAUSAL FACTOR in all related ATM / ATS incidents / events in AFI!* If the State does not empower its Aviation Authority, they in turn cannot empower the respective Air Traffic Service Providers. We have been referring to this dilemma as the “*AFI SYNDROME*,” where service fees tend not to find its way back into the ATM Environment, which appear to be common in both rich and poor States! Also refer to the situation in *Luanda, Nairobi, Brazza and Kinshasa!* When visiting and talking to the Service Provider Staff and their Controllers, they are *all* keen to deliver the best service possible, but are usually powerless to do so.
- i. The year 2009 has also seen a marked increase in *AIRPROX & ATS incidents in South Africa*, with General Aviation light aircraft infringing on especially the JNB TMA. ATNS however fully informed and also supplied comprehensive feedback and safety initiatives to ensure prevention. The SACAA however not present, but they need to address the issues with General Aviation. There have also been Crew Human Factor related issues concerning the two biggest airlines within the RSA, as indicated in the stats as attached. In one case all 3 crewmembers were assertive in dialling a different ALT as given by ATC, and in the other two cases, both involving ATC clearance confusion enroute to Lanseria.
- j. When considering the *implementation of RVSM in the AFI Region*, thus theoretically AFI air space >FL250 to be Class A [or at least no Class F & G], with a *minimum separation of only 1000 feet & 10 minutes* required, one would expect a decrease in the incident ratio! With ARMA RSA also present, RVSM has been closely monitored, but we could not single out any report where RVSM has in fact been a contributing factor to any incident! As with safety, we are sure any success usually difficult to qualify, but we are convinced that we are safer up there! Not indicated in the stats, but from discussions is the importance of adhering to *RVSM rules & Regulations when deviating far off track due to weather*. There were quite a few reports indicating that crews were off track due to WX, which is common practice in the AFI Region.

### 2.3. RECOMMENDATIONS:

- a. To await the final AIAG Report and recommendations to the RCG
- b. To encourage one and all involved in Aviation in the AFI Region to submit ATS Air Safety Reports, timeously with as much detail as possible
- c. To encourage the Authorities and service Providers to ensure thorough investigation, feedback and action
- d. To encourage all the above to be represented at the annual AIAG meeting, including SACAA
- e. To continue the quest for States to gain and maintain the political will to ensure “Safer Skies” in the AFI Region. They need to empower and equip their Authorities and Service Providers with the funds and equipment – as paid for – in order to ensure prevention

- f. States to ensure effective Air space Management & Coordination with neighbouring States
- g. AFI Region Air Navigation Service Providers to coordinate and collaborate in order to gain and maintain effective and safe facilities and services [FANS / GNSS / RNAV / ADS / CPDLC / RADAR / VHF Coverage / more Staff / Upgrade ATC Skills / .....if and when empowered by the state!]
- h. IATA to continue in ensuring that service fees find its way back into the ATM Environment. Only then will the above materialize
- i. Authorities, Operators and Crews to assist in preventing any “crew discipline” related issues
- j. Operators to assist in ensuring prevention where a known precedent exist wrt crossing traffic. I.e. SAA & KQ in the Brazza / Kinshasa FIR where there are known comms deficiencies! [Although the routings / times have not been changed, crews are being informed via their route briefings]. We cannot wait for TCAS or the service Provider to ensure our safety, we all need to be pro-active
- k. Operators and Authorities to ensure adherence to IFBP to by **all** traffic in the AFI region
- l. All States / Authorities / Service Providers / Operators to ensure a Just Safety Culture within an effective Safety Management System
- m. All ATS role players and especially Senior Management within the Authorities / Service Providers to be trained in “Team Resource Management” skills, as Crew and some ATC’s are required to be trained in CRM aspects
- n. Any RVSM issues to be reported as well
- o. RVSM rules & Regulations to be adhered to by all
- p. Anybody to please submit any suggestions involving any measures / actions to ensure prevention and thus “Safer Skies” in the AFI Region.

### **3. ACTION BY THE MEETING**

- The meeting is invited to review and endorse the recommendations listed in paragraph 2.3 hereabove above.