

Introduction

CNS SG19 WP04 reported the outcomes of the coordination meeting between APANPIRG & RASG APAC held on 21st May 2015. CNS SG was invited to note, discuss and take appropriate action on these outcomes, with the view that the third RASG APANPIRG Regional coordination meeting will be held in April/May 2016 to discuss the progress achieved on the actions suggested in this Report.

Suggestions from CNS SG/19

The RASG APAC/3 Final Report noted three areas under their work programme where the resulting findings would greatly enhance the PIRGs work towards ASBU implementation. These areas include Control Flight into Terrain, Runway Safety and Loss of Control.

Currently the RASG APAC is collecting information and studying the challenges facing the aviation community regarding these three areas. RASG APAC to share the results of these studies related to safety with APANPIRG Sub Groups to improve efficiency and effectiveness.

In this connection, the CNS SG meeting reviewed the input available and proposes the following suggestions.

1. Amend the chart illustrating the correlation between the identified RASG study and the associated ASBUs as follows:
 - Add APTA as a safety barrier both for CFIT and RS (protection means, mostly through vertical guidance). Priority 1.
 - Add SURF as a safety barrier for RS. Priority 3.
 - Delete ASUR as a safety barrier for RS (ASUR does not provide for runway safety as this is a SURF issue).
 - Include also regional Seamless ATM items in the chart. If this option is retained then:
 - Add 10 Apron Management (*high density aerodromes should provide an appropriate apron management service in order to regulate entry of aircraft into and coordinate exit of aircraft from the apron*) for RS as a risk control;
 - Add 340 Safety Assessment of Changes (*safety teams comprising multidisciplinary operational staff and managers which review safety performance and assess significant proposals for change to ATM systems*) as a transversal risk prevention mechanism; and
 - Add 350 ATM Operators' Performance (*training for the application of tactical, surveillance-based ATC separation; use of control techniques near minimum ATC separation; responses to ATM contingency operations and safety net alerts; and the importance of an effective safety reporting culture*) should be considered for RS as a major risk prevention and risk factor.
2. As per the RASG APAC Meeting Conclusion 4/4 and 4/23, RASG would endorse the APAC seamless ATM Plan, it is therefore suggested that RASG could propose to APANPIRG to allocate a different priority based on the contribution of the said item to the regional risk.
3. As it was already done for ACAS last year, it is suggested that RASG uses the APAC regional picture reflecting the implementation status of ANS improvements to assess how far and where the barriers are implemented.

A dedicated grouping could be developed in the regional picture that would present the ASBU and regional items of interest to RASG.

Responsibility for Airborne Safety Systems (seamless item 170)

4. The Responsibility matrix for all Seamless items adopted by APANPIRG/25 shows that for Airborne Safety Systems (seamless item 170) the endorsing body is CNS SG. As the Second RASG–APAC Regional Coordination Meeting identified that RASG was to continue with the lead responsibility for the implementation of ACAS II, it is proposed that RASG replaces CNS SG in the Responsibility matrix for that for Airborne Safety Systems (seamless item 170). However RASG should note that the responsibility is not only with TCAS v7.1 but to implement the Seamless ATM objective:

All Category R and S upper controlled airspace, and Category T airspace supporting high density aerodromes should require the carriage of an operable mode S transponder within airspace where Mode S radar services are provided; and ACAS and Terrain Awareness Warning Systems (TAWS), unless approved by ATC (ASBU Priority 2)

KPIs and analysis of operational safety

5. *the Key Performance Indicators listed on Page 7 under "Measuring Global Air Navigation" are primarily ATM-oriented and not necessarily appropriate metrics for safety analysis. The metrics listed on page 8, while more closely aligned to Safety, really provide no baseline by which to do analysis and several do not directly align with safety analysis (i.e. Fleet age by itself is not a safety metric where a comparison of accidents/incidents to fleet age is).*

Some operational safety metrics that could provide a more viable analysis could include:

- Runway Incursions and Excursions/total operations and their causal factors
- Airspace Incursions/total operations and their causal factors
- Operational Errors or Deviations/total operations and their causal factors
- Readback/Hearback Errors/total transmissions and correlation to control experience, time on position, etc
- Communication/Navigation/Surveillance failures/hours of operation and their causal factors
- Automation Failures/hours of operation and their causal factors
- Intra- and Inter-facility coordination errors/total transmission and their causal factors.

RASMAG and FIT/Asia data in the analysis of operational safety (specifically navigation accuracy and interfacility coordination issues) are potentially rich far beyond their primary analysis and could be better exploited.

Note: The information above may require going to the ATM/SG for further discussion so it could be essentially a joint submission from the SGs to the RASG.
