INTERNATIONAL CIVIL AVIATION ORGANIZATION

THIRTEENTH MEETING OF THE AFI TACTICAL ACTION GROUP (TAG/13)
(VIRTUALLY, 26 OCTOBER 2021)

Agenda Item 6: Specific RVSM Issues

RVSM AND OPERATIONAL SAFETY

(Presented by ARMA)

SUMMARY

This working paper presents the statistics of the reported incidents affecting the continued RVSM System safety within the AFI region, with specific reference to Coordination failures and operation of Non-RVSM approved aircraft

Action by the meeting is at paragraph 3.

REFERENCES

TAG UCR Database

ICAO Doc 9930, 9937 and 9574

This Working Paper is related to Strategic Objective:

- Safety
- Capacity and Efficiency

1. INTRODUCTION

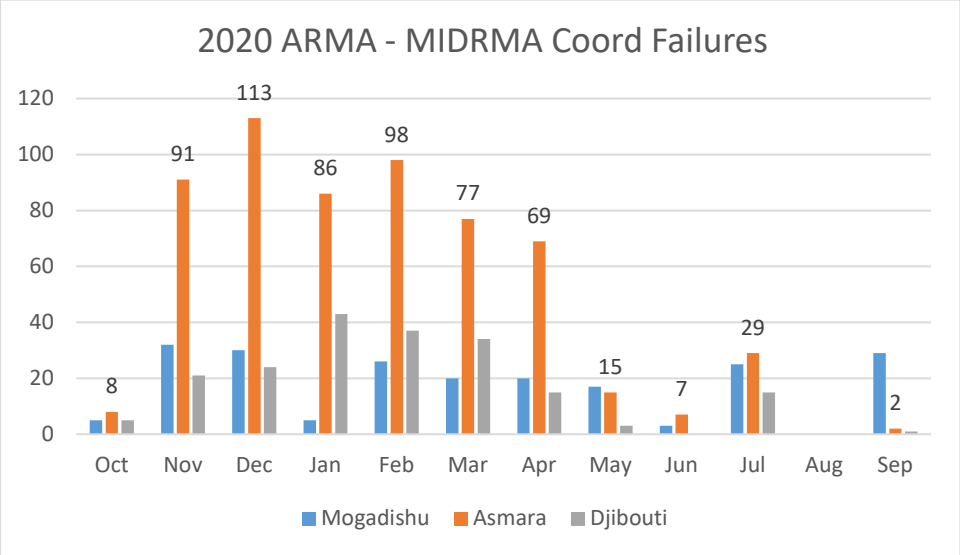
1.1 The ARMA has observed that FIR/ACC's are taking the initiative to forward coordination failures to ARMA to track the identified ongoing RVSM safety risk in the AFI region in order to effect remedial action. The ARMA is sensible to the fact that the year in review had an extremely reduced traffic volume within the region, and this resulted in a proportionally fewer incidents being reported.

1.2 The number of Non-RVSM approved aircraft operating within the AFI airspace and globally has also seen a proportional decrease, the associated RVSM risk requires to be managed in a responsible way

2. DISCUSSIONS

2.1 Coordination Failure incidents

i. ARMA identifies and address risks associated with coordination failures as best possible. The initiatives have been so successful that many FIR/ACC's voluntarily report themselves if coordination failures have occurred, The inter-RMA coordination failures between MIDRMA and ARMA are reported by the MIDRMA and the ARMA is yet to receive similar reports on these incidents from the AFI states concerned.
The graph below will illustrate the reported coordination failures between the ARMA and Other RMAs



Graph 1.

ii. The coordination failure reports are contained in FORM 3 of the RVSM Traffic Data Return forms that each and every FIR/ACC forwards to the ARMA on a monthly basis. The RVSM Traffic Data returns were discussed in a RVSM NPM Workshop teleconference and NPMs were sensitized on the importance of the data.

The table below shows states with the least or no RVSM traffic data returns for the year 2020.

ACC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Addis Ababa	No	No	No	No	No	No	No	No	Yes	Yes	Yes	No
Asmara	No	No	No	No	No	No	No	No	No	No	No	No
Da Es Salaam	No	No	No	No	No	No	No	No	No	No	No	No
Gaborone	No	No	No	No	No	No	No	Yes	Yes	No	No	No
Lilongwe	No	No	No	No	No	No	No	No	No	No	No	No

Graph 2.

2.2 Non-RVSM Approved Aircraft

a) As a result of ARMA RVSM compliancy checks conducted on flight plans, air traffic flow data and reports submitted to ARMA relating directly or indirectly to the RVSM status of aircraft, the events appear to be decreasing. Other RMAs are also performing compliancy checks and forward non-compliant aircraft to their respective RMAs. RMAs also consider aircraft that operated in their PBCS airspace without an RCP240 and RSP180 authorizations from their respective states as non-approved aircraft.

b) States were encouraged to liaise with their civil and military authorities to ensure that, where applicable, RVSM approval data for State aircraft is regularly passed to the relevant RMA. It was also pointed out that, in order to avoid State aircraft being incorrectly included in any publication of RVSM non-approved aircraft, States should be encouraged to agree a process with their civil and military authorities to handle reports of RVSM non-approved State aircraft operating within RVSM airspace. Where observed State aircraft do have the necessary RVSM approval, confirmation should be forwarded to the requesting RMA

c) The Table below illustrates a list of State aircraft that operated in RVSM airspace without a valid RVSM Operations Approval for the year in review.

State Aircraft Reg	Serial No.	Aircraft type	Authority State
3CTM06	1023412418	IL76	Gov of Equatorial Guinea
NAF961	96	FA900	Nigeria
OB2	3083	DO328	Botswana
TRKSP	1327	Gulfstream	Gov of Gabon
TTABC	49888	MD80	Gov of Chad
TUVAG	038F45	G450	Gov of Ivory Coast
T707	N/A	AN72	Angola

2.3

AFI Airspace – estimated annual flying hours = 552 756 hours *(note: estimated hours based on the 2019 traffic sample data)*			
Source of Risk	**Risk Estimation**	**TLS**	**Remarks**
CRA 13 Total Risk (PREVIOUS CRA)	*75.4×10^{-9}*	*5.0×10^{-9}*	*Above TLS*
Technical Risk	7.74×10^{-10}	2.5×10^{-9}	Below Technical TLS
Operational Risk	10.2×10^{-9}	-	-
Total Risk(CURRENT)	**10.9×10^{-9}**	5.0×10^{-9}	**Above TLS**

a) There was a huge improvement from the Target Level of Safety for the CRA14, It cab be noted that this reduction was not due to reduced flight hours but due to safer operations and initiatives taken by both ACC and Air Operators for the 2019 assessment year.
b) TLS for CRA14 was 10.9×10^{-9}, A huge decrease from the 75.4×10^{-9} that was achieved the previous year of this assessment.
c) The combined efforts to ensuring continued RVSM safety by AFI State and Operators does not go unnoticed and as the Regional Monitoring Agency we commend and encourage a continuation of these efforts.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) Take note of the contents of this paper
b) Continue addressing co-ordination failures between FIRs/RMAs
c) Assist the ARMA in an effort to eliminate RVSM Non-compliance
d) States are encouraged to liaise with their civil and military authorities to ensure that, where applicable, RVSM approval data for State aircraft is regularly passed to ARMA.
e) SLOP Implementation is encouraged to reach 100% so that the calculation of the Target Level of Safety discounted appropriately by the benefit that SLOP introduces when applied.

END