



International Civil Aviation Organization

**The 18<sup>th</sup> Meeting of the Regional Airspace Safety Monitoring Advisory Group (RASMAG/18)**

Bangkok, Thailand, 1 – 4 April 2013

**Agenda Item 5: Airspace Safety Monitoring Activities/Requirements in the Asia/Pacific Region**

**CHINA RMA ASSESSMENT OF NON-RVSM APPROVED AIRCRAFT**

(Presented by China)

**SUMMARY**

This working paper provides an assessment of non-State-approved operators using the Reduced Vertical Separation Minimum (RVSM) airspace overseen by the China RMA. The assessment results for period from December of 2011 to February of 2013 are presented.

This paper relates to –

**Strategic Objectives:**

A: *Safety – Enhance global civil aviation safety*

**Global Plan Initiatives:**

GPI-2 Reduced vertical separation minima

**1. INTRODUCTION**

1.1. As part of the duties and responsibilities of an RMA, the China RMA conducts an assessment on operator compliance with State RVSM approval requirements on a monthly basis.

1.2. The purpose of this working paper is to provide the updated results for the scrutiny assessment of operators/aircraft type operating within these areas, which the RVSM approval records were not found in the RMA database or the RVSM approval expired/deregistered.

**2. DISCUSSION**

2.1 From the beginning of 2012, the China RMA conducts monthly assessment on operator compliance with State RVSM approval requirements in the airspace of Chinese FIRs and Pyongyang FIR. During this work, the China RMA, firstly, applied the combined approval dataset provided by NAT CMA for the first-step check because the data are well quality controlled and the data format is standard. Secondly, the latest approval dataset from other RMAs available to the KSN are also applied. It is assumed that the data provided by the RMA directly should be used when there is a conflict. The flights identified to be non-RVSM approved, or RVSM approval expired/deregistered, or there is no registration information for the aircraft, are recorded in the track list for further confirmation.

2.2 **Figure 1** of the Appendix A presents the whole picture for the cumulative number of aircraft conducted RVSM flights in 2012 (herein after referred to as “RVSM aircraft”) with “W” in their flight plans while no registration in the RMA’s approval databases or RVSM approval expired/deregistered. While **Figure 2** presents the same situation by different RMAs in 2012.

2.3 In **Appendix A, Table 1** provides a breakdown of the results from December of 2011 to February of 2013. The results are listed alphabetically by RMA and State of registry. This list contains a total of 43 suspected aircraft from our preliminary analysis. After the analysis, the China RMA began to contact relevant domestic operators and other RMAs to confirm the approval status for these aircraft. A separate column in **Table 1** with the title 'Remark' is to clarify the progress of confirmation.

2.4 **Table 2** of the Appendix A provides a breakdown of the results from Pyongyang FIR using only the December 2012 flight plan data available to the China RMA. This list contains a total of 9 suspected aircraft from our preliminary analysis.

2.5 According to the analysis, the primary reason for failure to match operations and approvals is a delay in notification of the approval status of some operators to the appropriate RMA.

2.6 Nowadays, the China RMA exchanges the suspected non-approved aircraft information with other RMAs by e-mail on a quarterly basis considering the delay in notification of the approval status. It is suggested that RMAs could utilise the KSN website and upload the list of any aircraft discovered in their RVSM airspace to be lacking full RVSM approval, so that when other RMAs upload monthly update of the approval dataset, they can check the list and reflect the verified aircraft approval status in the latest uploaded file.

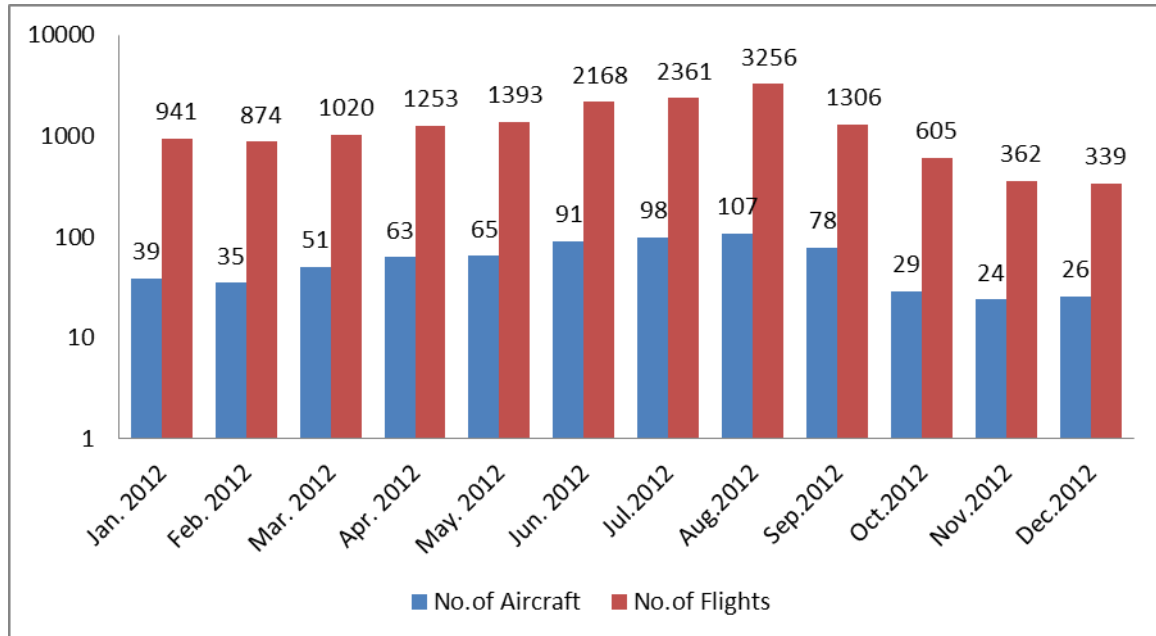
### **3. ACTION BY THE MEETING**

3.1 The meeting is invited to:

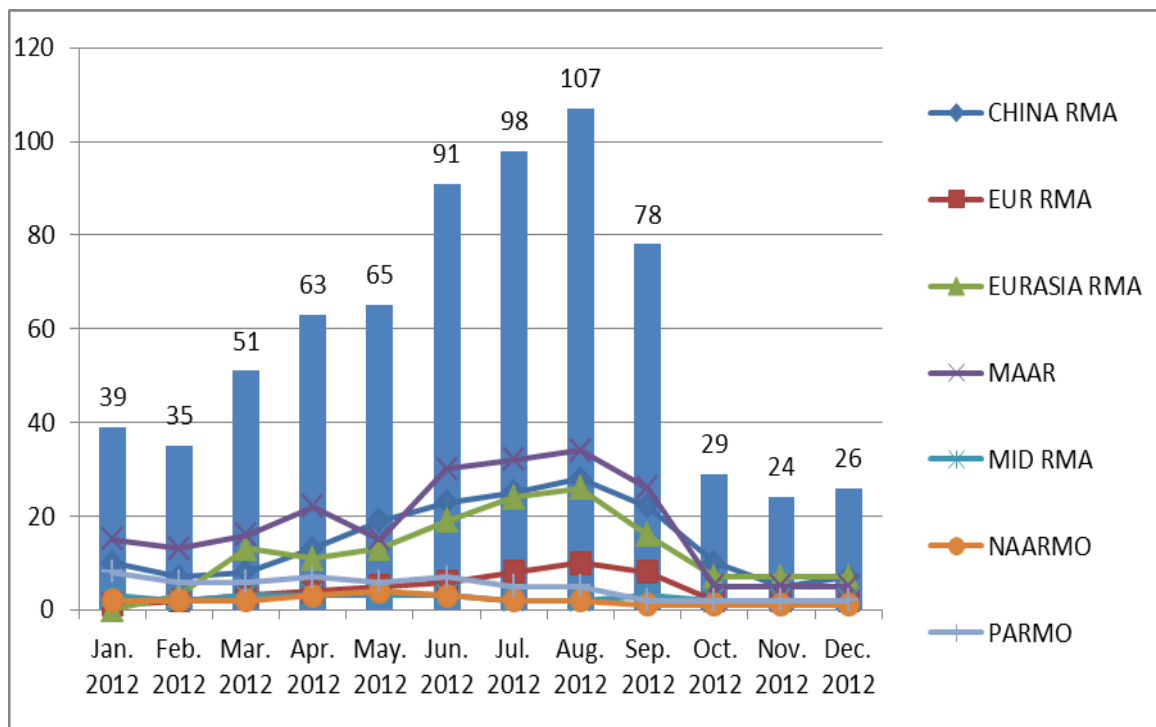
- a) note and review the contents of the China RMA traffic scrutiny work presented in this paper and;
- b) For RASMAG is a regional conference with only APAC RMAs participation, the suggestion in Section 2.6 could be further discussed in RMACG-8 conference.

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**Appendix A: Estimated RVSM Monitoring Burden for Asia/Pacific Region as a result of Long Term Height Monitoring Requirements of Annex 6**



**Figure 1:** The number of aircraft conducting RVSM flights with “W” in their flight plans while no registration in the RMA’s approval databases or RVSM approval expired/deregistered



**Figure 2:** Traffic Scrutiny Results by RMA

Table 1 Breakdown of track list and the progress of confirmation

N——Confirmed to neither have RVSM approval nor approval has been extended

Number——How many months did the aircraft flight in

RMA	STATE	OPERATOR	REGISTRATION NO.	ICAOTYPE	REMARK	
CHINA RMA	ZB	CSN	B6975	A320	2	
		CSS	B2017	B734	2	
		CES	B3313	CRJ2	1	
			B5713	B738	2	
		CCA	B5695	B738	1	
			B5693	B738	1	
ARMA	FN	DTA	BPAQ	B772	1	
	HA	ETH	ETAOP	B788	2	
			ETAOR	B788	2	
			ETAOS	B788	2	
EUR RMA	LI	AZA	EIEJP	A332	5	
	UB	AHY	4KAZ11	B752	1	
EURASIA RMA	U	TSO	EIUNR	B772	1	
		SBI	VPBRC	A320	1	
		AFL	VPBWQ	B763	1	
		SHU	RA73005	B732	5	
			RA73013	B735	3	
		SYL	RA85700	T154	2	
			RA85707	T154	2	
			RA85794	T154	2	
	RA89011		SU95	1		
	UA	LYN	EX35501	B735	1	
	UT	SMR	EY545	B733	3	
MAAR	OA	AFG	YAPIC	B734	1	
			YAPIB	B734	1	
	RP	CEB	RPC3271	A320	1	
			RPC3272	A320	1	
			RPC3270	A320	3	
	EZD	RPC8997	A320	2		
	VH	HDA	BHSV	A320	1	
	VT	OEA	HSMDL	MD82	N	
			HSBRE	B734	3	
	MM	PAL	RPC8619	A320	1	
RPC8620			A320	3		
MID RMA	OI	IRM	EPMNV	A310	2	
	OT	QTR	A7BAW	B77W	1	
	OM	UAE	ETD	A6DDA	B77L	2
			A6EGW	B77W	1	
			A6EGX	B77W	1	
			A6EGZ	B77W	1	

RMA	STATE	OPERATOR	REGISTRATION NO.	ICAOTYPE	REMARK
			A6EGY	B77W	1
			A6EGW	B773	3
			A6EGP	B77W	2
			A6EGR	B77W	1
			A6EGV	B77W	2
			A6ENA	B773	5
			A6ENC	B773	2
			A6END	B773	3
			A6ENE	B77W	1
			A6ENB	B773	1
			A6EDS	A388	2
			A6EDT	A388	2
			A6EDW	A388	2
			A6EDX	A388	1
			A6EEA	A388	1
			A6EEB	A388	2
			A6EEC	A388	2
			A6EED	A388	2
			A6EEE	A388	2
			A6EFH	B77L	2
A6EFI	B77L	2			
A6EFJ	B77L	2			
PARMO	RK	AAR	BL7789	A321	1
			HL8267	A321	3
		JJA	HL8263	B738	1
			HL8277	A321	1
		KAL	HL7625	A333	1
			HL8226	B738	1
			KL7727	B739	1

Table 2 Breakdown of track list and the progress of confirmation

N——Confirmed to not have RVSM approval or approval has been extended  
 Number——How long months did the aircraft flight in

RMA	STATE	OPERATOR	REGISTRATION NO.	ICAOTYPE	REMARK
NAARMO	K	PAC	N852GT	B748	1
			N853GT	B748	1
		FDX	N889FD	B77L	1
MAAR	VT	THA	HSTLK	B777	1
EURASIA RMA	U	SHU	RA48984	AN12	1
			RA73005	B732	1
			RA73013	B735	1
			RA82078	A124	1
		VLK	VPBX	A320	1