International Civil Aviation Organization

The Thirteenth Meeting of the Regional Airspace Safety Monitoring Advisory Group (RASMAG/13)

Bangkok, Thailand, 02 – 05 August 2010

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

Identification of Non-Approved Airframes Operating With RVSM Approval Status

(Presented by Australia)
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SUMMARY

Part of the functions of a Regional Monitoring Agency (RMAs) is to undertake a check of aircraft operating in RVSM airspace under their jurisdiction to ensure that operators are correctly notifying RVSM approval status. This paper provides the outcome of a recent check of flight plan data against the RVSM approval databases of all global RMAs.

1. INTRODUCTION

1.1 The issue of aircraft operators not notifying their true RVSM approval status in flight plan information has been a recognised problem by Asia/Pacific Regional Monitoring Agencies (RMAs) for some time. As early as RASMAG/8 in 2007, the Australian Airspace Monitoring Agency (AAMA) had demonstrated a methodology it was using to help identify flights being planned with an RVSM approval indicated, when no record of a State approval was available.

1.2 As a result, RASMAG has previously briefed APANPIRG on this issue and at RASMAG/12, both the AAMA (WP/16) and China RMA (WP/22) provided further evidence that the issue is of significance to the region. That meeting agreed that all RMAs continue this work and report results to RASMAG/13 so that further advice regarding this issue can be provided to APANPIRG/21.

2. DISCUSSION

2.1 As a result of the task identified at RASMAG/12, the AAMA continued to develop its capability to identify operators flight planning with incorrect RVSM approval status. Prior to July 2010, the AAMA has only been utilising a process that identified so called ‘rogue’ operators within the Australian FIRs based on a comparison with the Australian RVSM approvals database. The AAMA has now extended that process to include a comparison of all RVSM approval databases from the global RMAs posted to the KSN website against the total flight plan data set available to Airservices Australia. The data set of flight plan information utilised for the comparison detailed in this paper equated to a ten day period from 1 to 10 July 2010. The RMA approvals database information used in the comparison is detailed in table 1 below.

RVSM Approval Data Source	Validity Date
AAMA	JULY 2010
ARMA	JULY 2010
CARSAAMA	MAY 2010
China RMA	JUNE 2010
Eurocontrol	JUNE 2010
Japan RMA	MAY 2010
MAAR	JUNE 2010
MIDRMA	JULY 2010
PARMO	JUNE 2010
US MASPS	JULY 2010

Table 1. RVSM Approval Data Source

2.2 Figure 1 below details the results of the comparison by number of identified airframes related to State of registry.

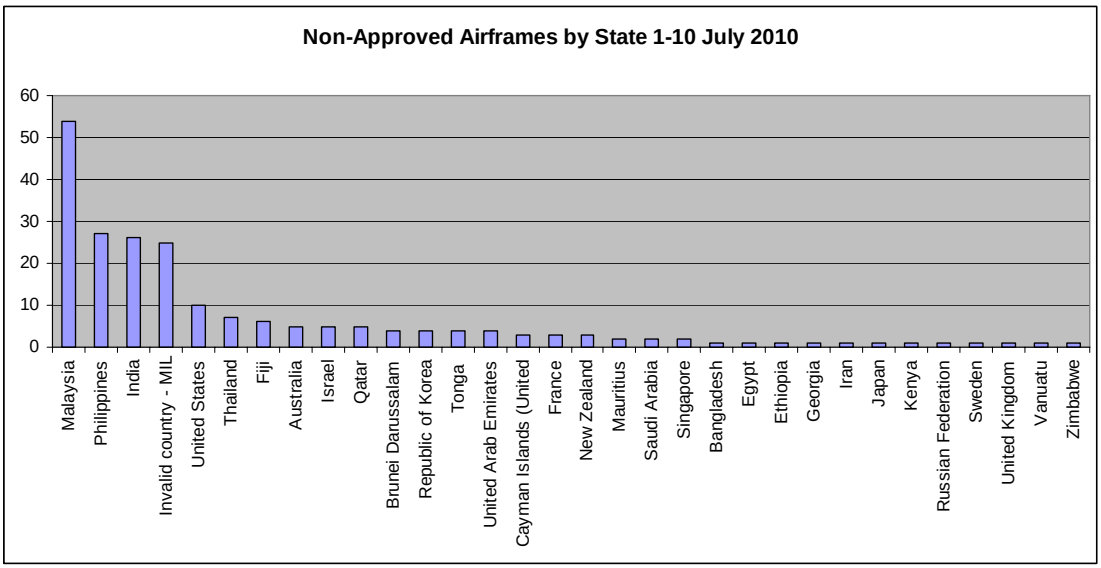

Figure 1. Non-approved Airframes by State of Registry

2.3 In total, the comparison identified 213 airframes in the data set for the ten day period, with airframes from Malaysia showing the highest number of 54. The next highest three States were the Philippines, India and the United States. Figure 1 shows counts for 'Invalid country – MIL' and 'Tonga'. A review of the data associated with these airframes identified the former count as military aircraft and the latter as RAAF 34 Squadron VIP aircraft.

2.4 Appendix A details a complete list of the airframes identified by the comparison, and associated aircraft types. Copies of the flight plans associated with these counts can be made available by the AAMA. The five airframes identified registered in Australia have been subsequently followed up by the AAMA with the State authority. The AAMA was advised that only one of the five aircraft was not RVSM approved and that was to be followed up directly with the operator.

2.5 In undertaking the comparison process, the AAMA was reliant on the quality of the data contained in the approvals databases provided by other RMAs. While for some States of registry, the AAMA comparison identified a large number of airframes, it is recognised that delays in processing approval information between the State authorities and RMAs could be a factor. However, the AAMA also had difficulty in integrating the various RMA databases as loaded on the KSN, primarily as a result of non-standard formatting. A review undertaken of all the databases against the agreed format detailed in the draft RMA Manual, showed that not one database was exactly aligned to the proposed template. Non-standardised elements identified included: incorrect data field headings; no state of registry information; aircraft types not in ICAO format; and ICAO operator state designators not in 3 letter format. These and other omissions/errors made the comparison process more difficult than it should have been to achieve. Given that there is now an agreed format for collection of this type of data, and that it is likely that more RMAs will undertake broad based comparative checks of aircraft operating in their assigned airspaces, it is imperative that the database formatting and data quality is maintained to a high standard. The AAMA seeks the assistance of the global RMAs in achieving this outcome and for the Asia/Pac RMAs to review and adjust their approval databases at their earliest convenience but at least by end of December 2010.

3. Actions by the Meeting

3.1 The meeting is invited to:

a) Note and discuss the results of the airspace safety oversight presented in this working paper;
b) Cross-check the airframes identified in Appendix A against their respective approvals database and resolve their correct RVSM status;
c) Agree to review the formatting of RVSM approval databases at the earliest time but at least before the end of December 2010.

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Appendix A
Non-Approved Airframes Identified By AAMA – 1-10 July 2010

State of Registry	Airframe Registration	Aircraft Type
Australia	VHEXQ	C680
	VHFNP	A320
	VHVGO	A320
	VHVGP	A320
	VHVYY	B738
Bangladesh	S2AED	P180
Brunei Darussalam	V8BLA	B772
	V8BLB	B772
	V8BLC	B772
	V8MHB	B762
Cayman Islands (UK)	VPCJM	GLF5
	VPCKC	GLF5
	VPCWN	GL5T
Egypt	SUGCS	B738
Ethiopia	ETANU	B763
Fiji	DQFJC	B763
	DQFJF	B737
	DQFJG	B738
	DQFJH	B738
	DQFJK	B744
	DQFJL	B744
France	FOHSD	A332
	FOJSB	A320
	FOJSE	A332
Georgia	4LTGM	B737
India	VTALD	B77L
	VTALJ	B77W
	VTALO	B77W
	VTALP	B77W
	VTALT	B77W
	VTAXH	B738
	VTAXI	B738
	VTAXJ	B738
	VTAXP	B738
	VTAXQ	B738
	VTAXR	B738
	VTAXT	B738
	VTAXU	B738
	VTAXW	B738
	VTAXZ	B738
	VTAYD	B738
	VTCAP	F900
	VTDBA	GL5T
	VTDBG	CL60
	VTJSK	GL5T
	VTJWG	A332
	VTJWM	A332

	VTJWP	A332
	VTJWQ	A332
	VTVJO	A332
	VTVJP	A332
Iran	EPAJD	B703
Israel	4XEAJ	B763
	4XEAP	B763
	4XEAR	B763
	4XECB	B772
	4XECF	B772
Japan	JA787A	B77W
Kenya	5YJLF	CRJ1
Malaysia	9MABC	GLF4
	9MAFC	A320
	9MAFD	A320
	9MAFE	A320
	9MAFF	A320
	9MAFO	A320
	9MAFP	A320
	9MAFQ	A320
	9MAHJ	A320
	9MAHL	A320
	9MAHM	A320
	9MAHN	A320
	9MAHO	A320
	9MAHP	A320
	9MAHQ	A320
	9MAHR	A320
	9MAHS	A320
	9MAHT	A320
	9MAHU	A320
	9MAHV	A320
	9MAHW	A320
	9MAHX	A320
	9MAHY	A320
	9MMKA	A333
	9MMKF	A333
	9MMKH	A333
	9MMKJ	A333
	9MMPB	B744
	9MMPF	B744
	9MMPK	B744
	9MMPM	B744
	9MMPP	B744
	9MMPQ	B744
	9MMRA	B772
	9MMRB	B772
	9MMRC	B772
	9MMRD	B772
	9MMRE	B772
	9MMRF	B772
	9MMRG	B772

	9MMRH	B772
	9MMRI	B772
	9MMRJ	B772
	9MMRK	B772
	9MMRL	B772
	9MMRM	B772
	9MMRN	B772
	9MMRO	B772
	9MTAN	GL5T
	9MXAA	A333
	9MXXB	A333
	9MXXC	A333
	9MXXD	A333
	9MXXE	A333
Mauritius	3BNBL	A332
	3BNBM	A332
New Zealand	ZKZQA	B738
	ZKZQB	B738
	ZKZQC	B738
Philippines	RPC3229	A320
	RPC3230	A320
	RPC3231	A320
	RPC3330	A333
	RPC3331	A333
	RPC3333	A333
	RPC3335	A333
	RPC3336	A333
	RPC3340	A333
	RPC3431	A343
	RPC3432	A343
	RPC3434	A343
	RPC7776	B773
	RPC7777	B77W
	RPC8600	A319
	RPC8601	A319
	RPC8604	A320
	RPC8605	A320
	RPC8606	A320
	RPC8607	A320
	RPC8609	A320
	RPC8610	A320
	RPC8611	A320
	RPC8612	A320
	RPC8613	A320
	RPC8614	A320
	RPC8615	A320
Qatar	A7BAH	B77W
	A7BBC	B77L
	A7BBD	B77L
	A7BBE	B77L
	A7BBF	B77L

Republic of Korea	HL7473	B744
	HL7733	B772
	HL8208	B77W
	HL8209	B77W
Russian Federation	RA96102	IL96
Saudi Arabia	HZMF4	GLF3
	HZMF5	GLF3
Singapore	9VJEA	B742
	9VSTG	A333
Sweden	SERIB	A319
Thailand	HSTJT	B772
	HSTJU	B772
	HSTJV	B772
	HSTJW	B772
	HSTNC	A346
	HSTND	A346
	HSUTN	B743
United Arab Emirates	A6EBN	B77W
	A6EGA	B77W
	A6EHK	A346
	A6EHL	A346
United Kingdom	GOGFA	GL5T
United States	N0413JG	B732
	N127DK	GLF4
	N528RM	C501
	N714EU	B350
	N818HK	GLF5
	N860CR	C560
	N90EW	GLEX
	N92SR	B737
	NZ7571	B752
	NZ7572	B752
Vanuatu	YJAV1	B738
Zimbabwe	ZBVT	MD11