



*International Civil Aviation Organization*

**ICAO** **Twenty-Ninth Meeting of the Regional Airspace Safety Monitoring Advisory Group (RASMAG/29)**

Bangkok, Thailand, 19 – 22 August 2024

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

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

(Presented by China RMA)

**SUMMARY**

This paper presents the comparison of Non-RVSM approved aircraft checked using flight plan data against the combined global RVSM approval database, including Chinese PBCS approved aircraft database. The RVSM & PBCS approval data as of May 2024 were used for the assessment.

**1. INTRODUCTION**

1.1 China RMA is assigned the task of providing a list of aircraft with possible records of non-approved operations within its responsible airspace.

1.2 Each year since 2012, China RMA has provided a list of possible non-approved aircraft for the RASMAG meeting. Beginning in 2022, China RMA was authorized to collect and manage the PBCS approval data for Lanzhou and Urumqi FIRs, and for PBCS approval sharing.

1.3 This paper introduces the approval validation process for RVSM and PBCS as adopted by the China RMA.

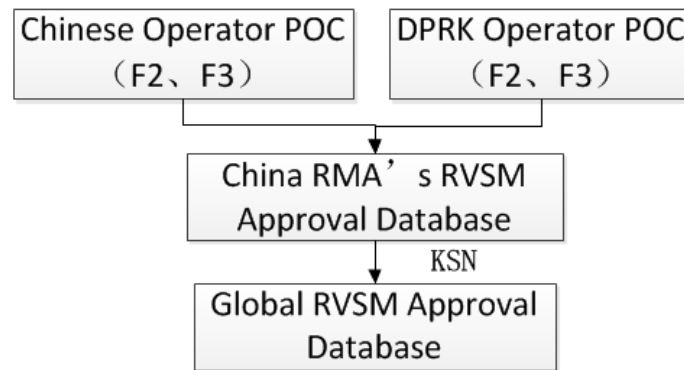
**2. DISCUSSION**

Collection of RVSM and PBCS non-approved aircraft

2.1 The approval form for aircraft approval has been updated to align with the new form from RMACG-19 meeting.

2.2 In China, the authority issues approvals to operators by aircraft types. Chinese operators only need to provide the PBCS approval information of aircraft type to China RMA, since the agency manages the Chinese aircraft RVSM database, where information of RVSM-approved aircraft is preserved.

2.3 By the end of June 2024, 4,516 aircraft from 93 Chinese operators completed the registration in China RMA's RVSM Approval database, including 57 aircraft types. **(Figure 1)**



**Figure 1:** Aircraft RVSM approval data collection process

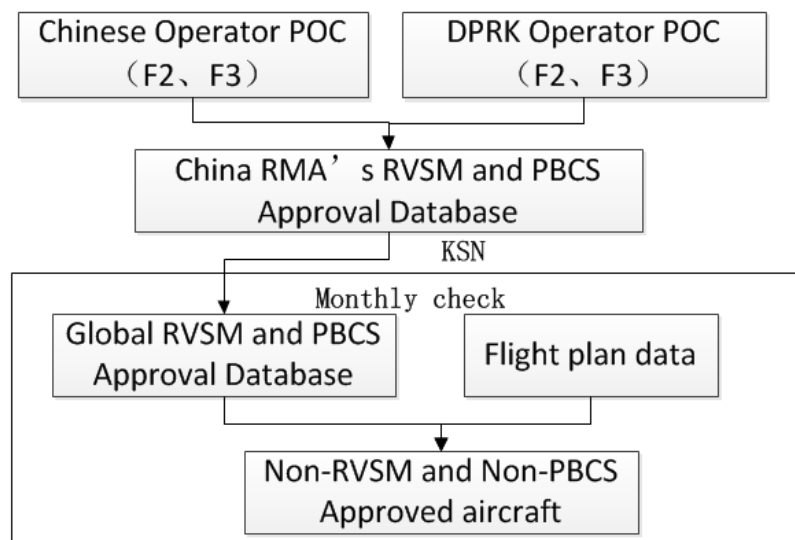
2.4 By the end of June 2024, 526 aircraft from 15 Chinese operators completed the registration in China RMA's PBCS Approval database, including 17 aircraft types. (**Figure 2**)



**Figure 2:** Aircraft PBCS approval data collection process

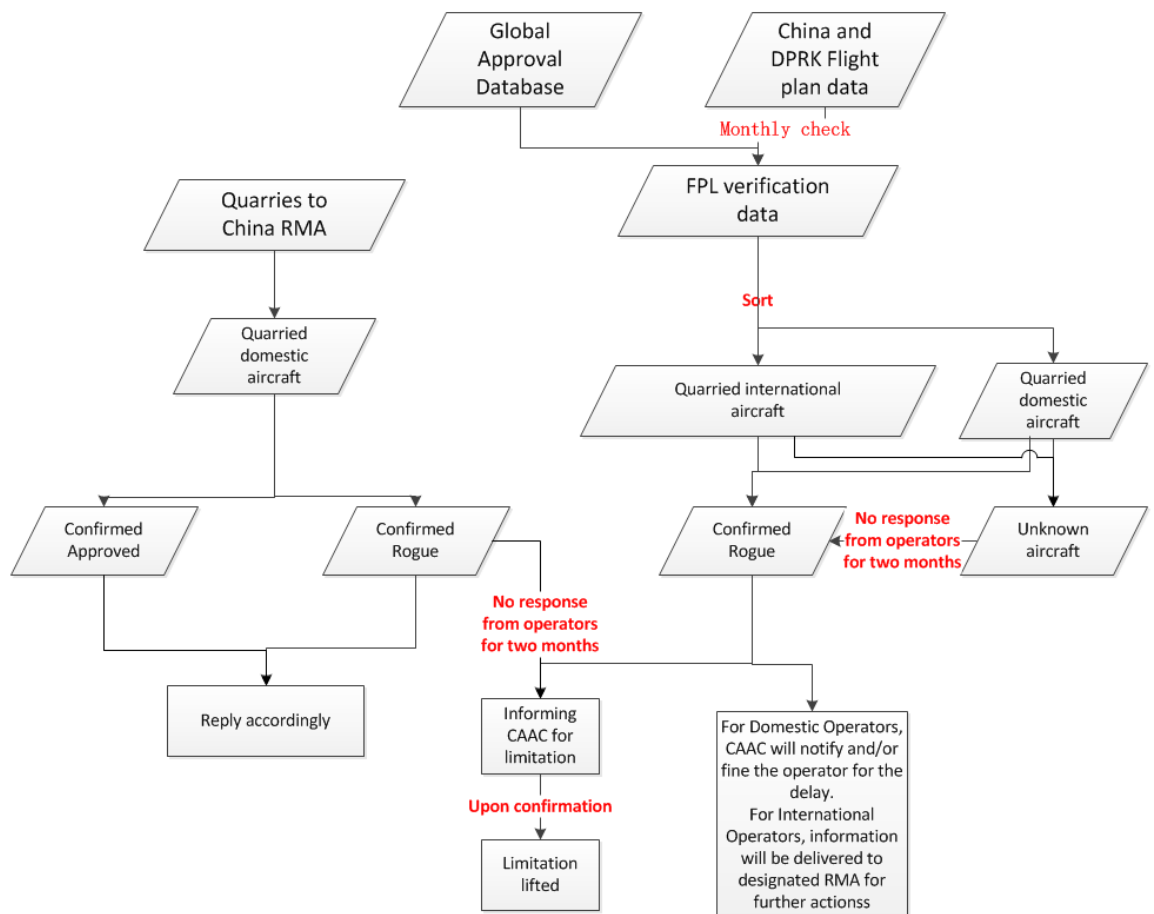
#### Validation of Non-RVSM and Non-PBCS approved aircraft

2.5 China RMA validates the aircraft approval information with the global database to identify non-approved aircraft every month. (**Figure 3**)



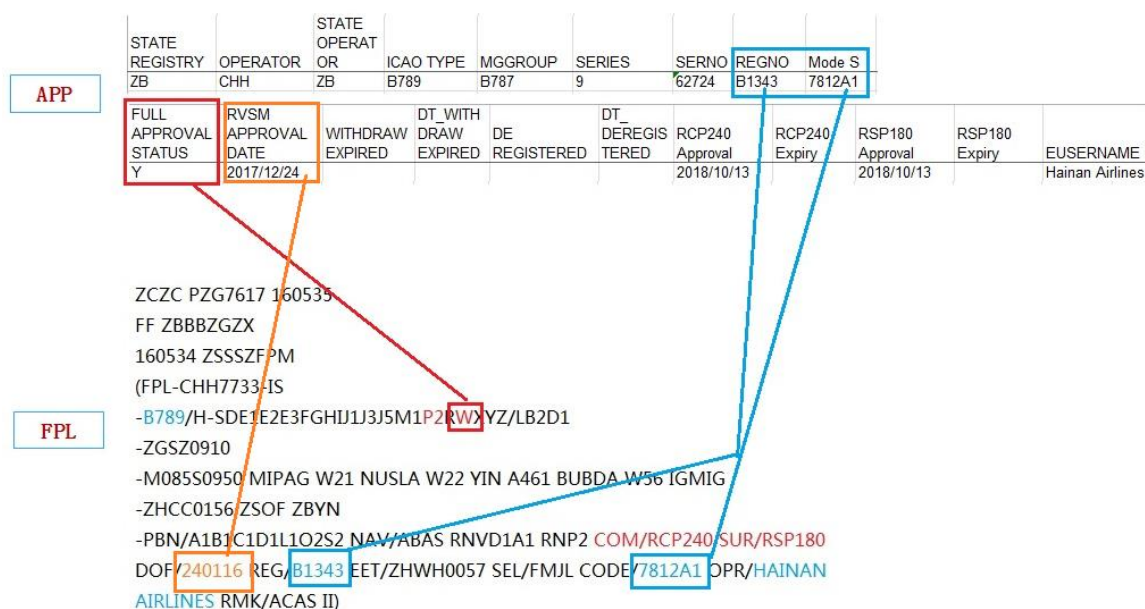
**Figure 3:** Non-RVSM and Non-PBCS approved aircraft check process

- 2.6 The following is the process for approval validations and limitations. (**Figure 4**)
- Inserting the global approval data into the regional database.
  - Pre-processing for the monthly FPL data;
  - Validation for aircraft operating in China;
  - Replying to queries from the RMA community;
  - Confirmation against the queried aircraft;
  - Notifying the unapproved aircraft to CAAC for limitations, informing the RMA community for international actions;
  - Lifting the historic limitations for the approved aircraft.



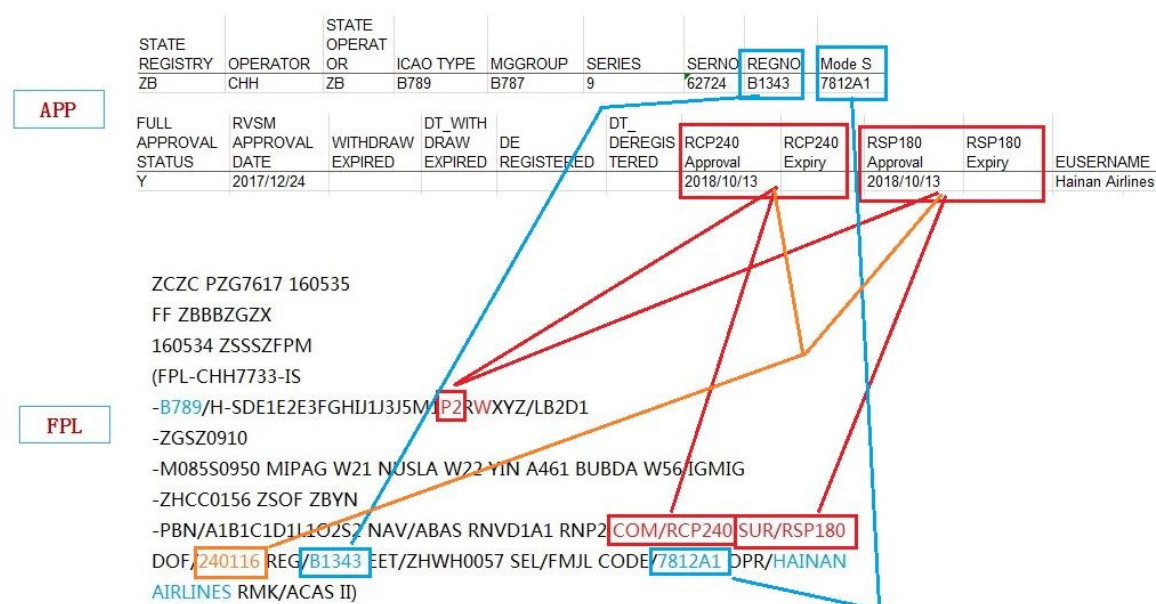
**Figure 4:** Non RVSM and/or Non PBCS approved aircraft

2.7 The flight plan check is conducted by comparing the global approval data and monthly data. Firstly, we distract the data needed for the verification and compare the Item 10 data with the global database, specifically, according to the planned flight date, RVSM APPROVAL DATE and DT\_WITHDRAWEXPIRED/DT\_DEREGISTERED, which allows us to check if the aircraft is currently in an aberrant status. (**Figure 5**)



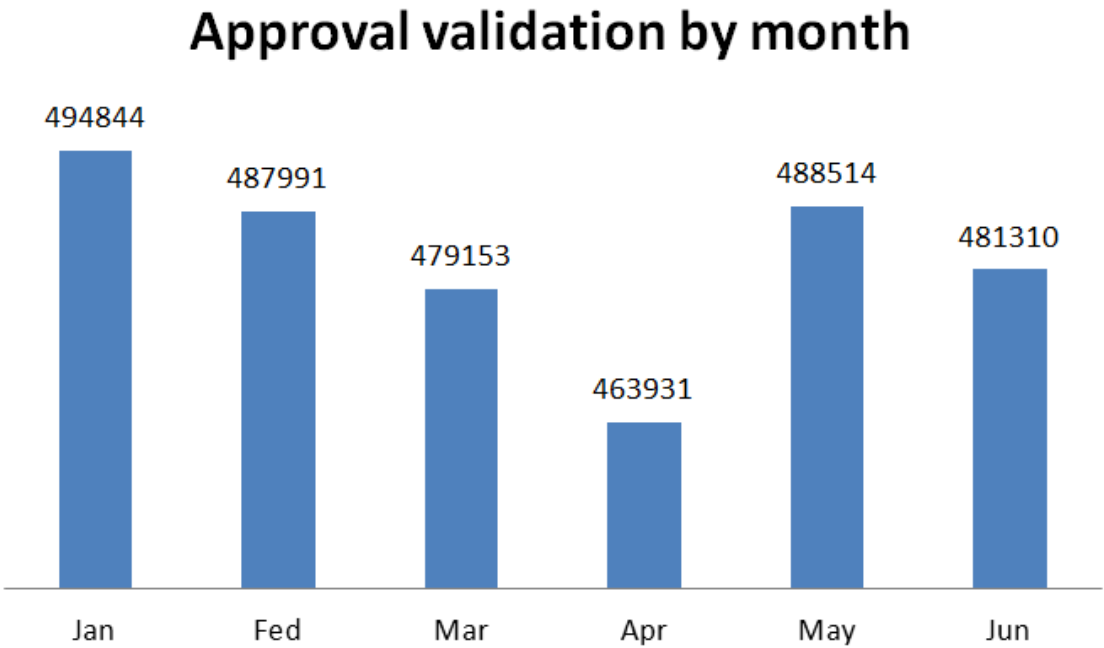
**Figure 5:** Non-RVSM approved aircraft check process

2.8 Blue, red and orange boxes are compared respectively to identify, so as Item 22 and Item 18 COM/RCP240 “COM/RCP240” “SUR/RSP180” are confirmed to secure PBCS approval status. **(Figure 6)**



**Figure 6:** Non-PBCS approved aircraft check process

2.9 The validation was conducted over 2,895,743 aircraft in the first half of 2024, 2324 of which have potentially operated without proper approvals. Currently, 20 aircraft are under constant tracking. (**Figure 7**)



**Figure 7:** Approval validation by month

- 2.10        **Attachment A** provides a list of suspected aircraft which have no RVSM approval registration or have expired approval on their date of flight(s).
- 2.11        **Attachment B** provides a list of the number of suspected aircraft grouped by RMA.
- 2.12        China RMA approval check program to find the Non-PBCS approval aircraft by comparing the flight plan data against the combined global PBCS approval database.

**3.        ACTION BY THE MEETING**

- 3.1        The meeting is invited to:
- a)    note the information contained in this paper;
  - b)    confirm and provide updated approval information after the meeting; and
  - c)    discuss any relevant matters as appropriate.

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**Suspected Non-Approved Aircraft Identified by China RMA – to Jun 2024**

<b>RMA</b>	<b>State</b>	<b>Operator</b>	<b>Registration Number</b>	<b>Type</b>	<b>Flight Date</b>	<b>Flight Count</b>
AAMA	Indonesia (WA)	TNU	PKTLD	A320	202401-06	136
	Indonesia (WA)	TNU	PKTLF	A320	202404-06	28
CHINA RMA	China (ZB)	MZT	B655N	GLF6	202401-05	32
	China (ZB)	MZT	B655S	GLF6	202401-05	38
	China (ZB)	GCR	B3127	E190	202404-06	9
	China (ZB)	CBJ	B309T	A333	202406	11
JASMA	Japan (RJ)	ANA	JA934A	B789	202401-03	37
	Japan (RJ)	APJ	JA213P	A20N	202401-03	34
	Japan (RJ)	APJ	JA215P	A20N	202401-03	28
	Japan (RJ)	APJ	JA214P	A20N	202401-03	24
MAAR	Philippines(RP)	APG	RPC8963	A320	202402	6
	Philippines(RP)	APG	RPC8986	A320	202402	8
	Philippines(RP)	PAL	RPC9907	A321	202403	6
	China (Taiwan)(RC)	NA	B95119	E55P	202401-04	7
	China (Hong Kong) (VH)	HGB	BKJH	B738	202403	5
PARMO	Republic of Korea (RK)	ABL	HL8525	A21N	202403-05	53
	Republic of Korea (RK)	JJA	HL8527	B738	202401-05	398
	Republic of Korea (RK)	KAL	HL8393	B789	202403-06	45
	Republic of Korea (RK)	KAL	HL8531	A21N	202403	12
	Republic of Korea (RK)	KAL	HL8556	A21N	202402	28

**Suspected Non-Approved Airframes Group by RMA Identified by China RMA – to Jun 2024**

<b>RMA</b>	<b>Suspected Count of Airframes</b>
AAMA	2
CHINA RMA	4
JASMA	4
MAAR	5
PARMO	5