



ICAO

International Civil Aviation Organization

Twenty-Seventh Meeting of the Regional Airspace Safety
Monitoring Advisory Group (RASMAG/27)

Video Teleconference, 22 – 25 August 2022

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

**SURVEY OUTCOME FOR CONTINUANCE OF “W” CHECK FOR APAC STATE
AIRCRAFT**

(Presented by ICAO)

SUMMARY

This paper presents the survey results for the continuance of “W” check for APAC State aircraft.

1. INTRODUCTION

1.1 On 03 March 2022, ICAO sent a State Letter T 3/10.1.17 – AP043/22 (ATM) to request States to complete a survey. The following APANPIRG conclusion relate to the survey:

Conclusion APANPIRG/32-6: RVSM Approvals Data and Filing of RVSM Indicator in Flight Plans of State Aircraft, which urged States to:

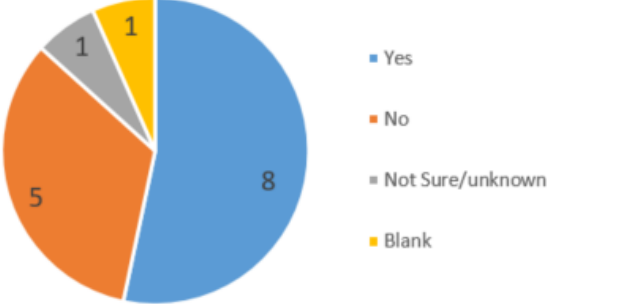
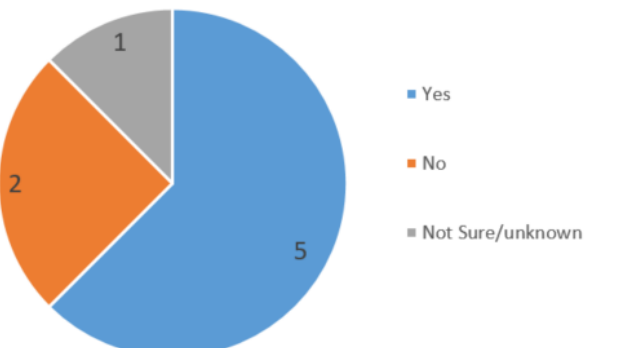
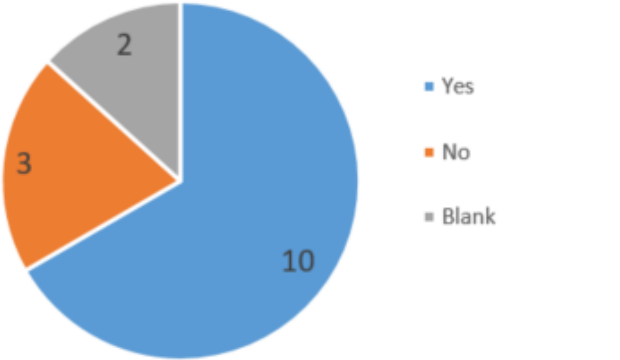
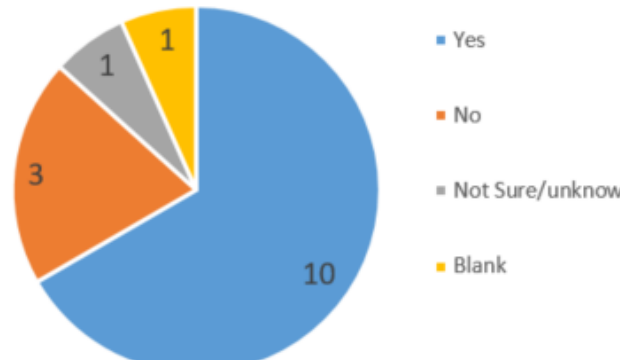
1. *Liaise with their State aircraft operators to not file ‘W’ in item 10 of the ICAO flight plan of aircraft that are not approved for RVSM; and*
2. *Respond to a survey on RMA and State responsibility on the matter of RVSM approvals of State aircraft.*

1.2 Monitoring Agency for Asia Region (MAAR), on behalf of APANPIRG and APAC Regional monitoring agencies, prepared a survey questionnaire to collect information from States regarding the verification of the RVSM approval status of State aircraft (military and other government aircraft performing non-commercial, sovereign functions) and the relationship of operators of State aircraft and civil authorities).

1.3 Survey response were received from 15 States/administrations. One State replied in general and did not provide answers to the individual survey questions.

2. DISCUSSION

2.1 The following questions were surveyed and the results are shown in **Table 1 - Analysis of survey responses**. Additional explanations to the survey can be found in **Attachment A – States’ Responses**.

Qn	Survey Question	Response
2	For your State, is there a process in place to approve the aircraft operated by your State aircraft operators for RVSM operations?	 <p>A pie chart showing the distribution of responses to Question 2. The chart is divided into four segments: a large blue segment for 'Yes' (8), an orange segment for 'No' (5), a small grey segment for 'Not Sure/unknown' (1), and a small yellow segment for 'Blank' (1). A legend to the right of the chart identifies the colors: blue for Yes, orange for No, grey for Not Sure/unknown, and yellow for Blank.</p>
3	If the answer from Question 2 is “Yes”, can the status of these aircraft (aircraft identification and whether they are RVSM approved) be shared with other States and RMAs?	<p>Out of the 8 that replied “Yes” to Qn2</p>  <p>A pie chart showing the distribution of responses to Question 3, based on the 8 'Yes' responses from Question 2. The chart is divided into three segments: a blue segment for 'Yes' (5), an orange segment for 'No' (2), and a grey segment for 'Not Sure/unknown' (1). A legend to the right of the chart identifies the colors: blue for Yes, orange for No, and grey for Not Sure/unknown.</p>
4	Does your State have coordination processes in place to support discussions of RVSM and other airspace-safety-related issues with State aircraft operators?	 <p>A pie chart showing the distribution of responses to Question 4. The chart is divided into three segments: a large blue segment for 'Yes' (10), an orange segment for 'No' (3), and a grey segment for 'Blank' (2). A legend to the right of the chart identifies the colors: blue for Yes, orange for No, and grey for Blank.</p>
5	Does your State have rules or procedures in place to ensure that State aircraft operators do not file the RVSM-approved ‘W’ indicator in filed flight plans for non-RVSM-approved aircraft?	 <p>A pie chart showing the distribution of responses to Question 5. The chart is divided into four segments: a large blue segment for 'Yes' (10), an orange segment for 'No' (3), a small grey segment for 'Not Sure/unknown' (1), and a small yellow segment for 'Blank' (1). A legend to the right of the chart identifies the colors: blue for Yes, orange for No, grey for Not Sure/unknown, and yellow for Blank.</p>

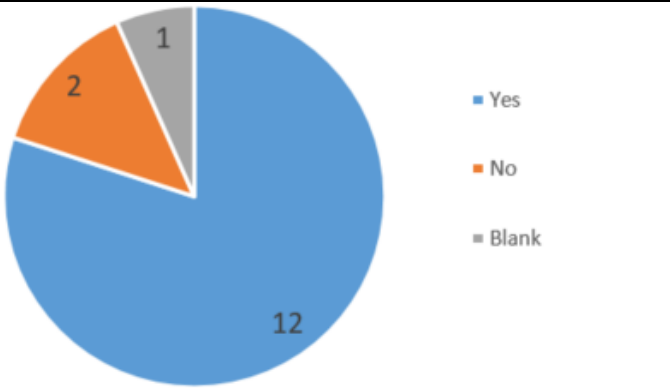
Qn	Survey Question	Response								
6	After reviewing the pros/cons table above, would you like Asia Pacific RMAs to continue to cross-check 'W' in State Aircraft's flight plans against RMAs' RVSM database and try to resolve the discrepancies?	 <p>A pie chart illustrating the distribution of responses to the survey question. The chart is divided into three segments: a large blue segment representing 'Yes' with a value of 12, a smaller orange segment representing 'No' with a value of 2, and a very small grey segment representing 'Blank' with a value of 1. A legend to the right of the chart identifies the colors: blue for 'Yes', orange for 'No', and grey for 'Blank'.</p> <table border="1"> <thead> <tr> <th>Response</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>Yes</td> <td>12</td> </tr> <tr> <td>No</td> <td>2</td> </tr> <tr> <td>Blank</td> <td>1</td> </tr> </tbody> </table>	Response	Count	Yes	12	No	2	Blank	1
Response	Count									
Yes	12									
No	2									
Blank	1									

Table 1: Analysis of survey responses

2.2 Some States surveyed indicated that they have processes to manage the approval of State aircraft operators for RVSM operations and a smaller number of States are able to share the information (aircraft identification, RVSM approvals) with other States and RMAs.

- 2.3 The majority of the States that replied the survey, indicated that:
1. They have coordination processes in place to support discussions of RVSM and other airspace-safety-related issues with State aircraft operators.
 2. They have rules or procedures in place to ensure that State aircraft operators do not file the RVSM-approved 'W' indicator in filed flight plans for non-RVSM-approved aircraft.
 3. They would you like Asia Pacific RMAs to continue to cross-check 'W' in State Aircraft's flight plans against RMAs' RVSM database and try to resolve the discrepancies.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
- a) continue to liaise with their State aircraft operators not to file 'W' in item 10 of the ICAO flight plan of aircraft that are not approved for RVSM;
 - b) note the information contained in this paper; and
 - c) discuss any relevant matters as appropriate.

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Attachment A: States' Responses

S/N	State Name	For your State, is there a process in place to approve the aircraft operated by your State aircraft operators for RVSM operations?	Explanation for Qn 2	If the answer from Question 2 is "Yes", can the status of these aircraft (aircraft identification and whether they are RVSM approved) be shared with other States and RMAs?	Explanation for Qn 3	Does your State have coordination processes in place to support discussions of RVSM and other airspace-safety-related issues with State aircraft operators?	Does your State have rules or procedures in place to ensure that State aircraft operators do not file the RVSM-approved 'W' indicator in filed flight plans for non-RVSM-approved aircraft?	After reviewing the pros/cons table above, would you like Asia Pacific RMAs to continue to cross-check 'W' in State Aircraft's flight plans against RMAs' RVSM database and try to resolve the discrepancies?	Please provide any additional comments:
1	Australia	Yes	By operation of Civil Aviation Act 1988 (Cth), s 8 State Aircraft are outside the jurisdiction of the Australian Civil Aviation Safety Authority. Instead, the Defence Aviation Safety Authority (DASA, the National Military Airworthiness Authority of all Australian Defence Force Aircraft (a subset of State aircraft)) administers a system of Specific Approvals to approve operators of Defence Aircraft to conduct RVSM operations. The process for providing approvals is based on the civil process and where practicable applies the same standards. At the conclusion of the process DASA sends a F2 Form to Air Services Australia such that approval details of individual aircraft are recorded in civil systems.	Yes	DASA provides the details to Air Services Australia. DASA anticipates these details will be shared with other States and RMAs using existing protocols.	Yes	Yes	Yes	DASA has established a process for granting RVSM approvals based on civil standards. DASA grants approvals to conduct RVSM where a Military Air Operator demonstrates satisfaction of both product (i.e. aircraft) and organizational requirements. DASA annotates the approval annotated on the Military Air Operators Operational Specification. Only after the approval has been granted is the Military Air Operator permitted to conduct RVSM operators or annotate W on the flight plan. For Australia, the safety benefits outweigh the additional workload associated with verifying 'W' in Defence aircraft flight plans and maintaining a database of RVSM approves for Defence aircraft.

Attachment A

S/N	State Name	For your State, is there a process in place to approve the aircraft operated by your State aircraft operators for RVSM operations?	Explanation for Qn 2	If the answer from Question 2 is “Yes”, can the status of these aircraft (aircraft identification and whether they are RVSM approved) be shared with other States and RMAs?	Explanation for Qn 3	Does your State have coordination processes in place to support discussions of RVSM and other airspace-safety-related issues with State aircraft operators?	Does your State have rules or procedures in place to ensure that State aircraft operators do not file the RVSM-approved ‘W’ indicator in filed flight plans for non-RVSM-approved aircraft?	After reviewing the pros/cons table above, would you like Asia Pacific RMAs to continue to cross-check ‘W’ in State Aircraft’s flight plans against RMAs’ RVSM database and try to resolve the discrepancies?	Please provide any additional comments:
2	China	Yes	It’s stressed in the RVSM ATM Rule of operation(AP-93-TM-01) by CAAC in 2007. State aircraft operator should obtain RVSM temporary operational approval from both CAAC and local ANSP before state aircraft operation. Even with the temporary approval, the state aircraft will still not be recognized as an RVSM-capable aircraft. So, 2000ft vertical separation minimal will be adopted.	No	While direct cooperation has long been established between CAAC and State Aircraft Operator, for now, there is no specific regulation or procedure supporting this action.	Yes	Yes	Yes	We suggest that relevant good practices be shared among the stakeholders.
3	Hong Kong, China	No	Blank	Blank	Blank	No	Yes	No	Blank

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4	Macao, China	Yes	Macao Aeronautical Circular No. AC/OPS/202	Not Sure/unknown	RVSM Approval records shared with RMA (MAAR) only	No	No	Yes	Macao has no local state aircraft operator.
5	Cook Islands	No	Blank	Not Sure/unknown	Blank	No	Yes	Yes	Blank
6	Fiji	No	Fiji does not have any State aircraft.	Blank	Blank	Blank	No	Yes	Fiji does not have any State aircraft. However, in the event that State aircraft are obtained, the normal approval process for RVSM will apply.
7	Indonesia	Yes	Indonesia conduct RVSM approval through SI 8900-4.10 (Issuance and Surveillance for RVSM)	Yes	Blank	Yes	Yes	Yes	Blank
8	Pakistan	No	Blank	Not Sure/unknown	Blank	Yes	Yes	Yes	Blank
9	Philippines	Yes	Similar to civilian aircraft.	Yes		Yes	Yes	Yes	State owned aircraft maybe recommended to exempt in RVSM requirement for confidentiality and for security purposes.

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10	Republic of Korea	Yes	ROK has established regulations and operational manual for State aircraft operators related to approval of RVSM operation and guideline on flight planning	Yes	Blank	Yes	Yes	Yes	ICAO and all contracting States struggles to enhancing global civil aviation safety which is one of the ICAO’s strategic objectives. In this connection, the “Cons” is not conformity with global aviation’s goal. The Republic of Korea is convinced that monitoring RVSM approvals for the State aircraft can help improving aviation safety. ICAO and RMA’s abiding endeavor is much appreciated in this regard.
11	Singapore	No	Blank	Not Sure/unknown	Blank	Yes	No	No	Blank
12	Sri Lanka	Blank	Blank	Blank	Blank	Blank	Blank	Blank	Please note that Sri Lanka does not have any State Aircraft registered as of now for RVSM requirements.
13	Thailand	Not Sure/unknown	Not sure/unknown: for State aircraft that are not registered and operated under ICAO Annex 7, Annex 6 Part II and Annex Part III Section III as applicable, e.g. Military Aircraft	Not Sure/unknown	Not sure/unknown, subject to Not sure/unknown in Question 2	Yes	Not Sure/unknown	Yes	Blank

14	United States	Yes	Each State agency has delegated authority for RVSM approval. The use a combination of civil FAA approval methods for common and derivative aircraft types, modification of civil approvals, fully unique RVSM approvals, and categories of non-approved State aircraft types. The US has participated in various workshops and communicates regularly with State operators to emphasize the use of correct filing status.	No	State agencies have provided direction on which approval records shared with the US Regional Monitoring Agency, NAARMO, can be shared within the RMA KSN. The approval status of most US State aircraft is maintained only in the NAARMO database and not in the RMA KSN.	Yes	Yes	Yes	<p>US Altimetry System Error (ASE) monitoring, completed on all Automatic Dependent Surveillance-Broadcast (ADS-B) aircraft that fly within US ADS-B rule airspace every Monday, provides mitigation of unapproved State aircraft that also have large ASE flying within RVSM airspace. Monitoring is done for all aircraft regardless of approval status and any large ASE cases are reported. The identified stakeholder pro of a less likely penalty based on treatment as unapproved would only be realized if there was a system in place to have a list of State aircraft and to, by default, change their RVSM filing status to non-RVSM. Creating a complete list of this type would be very challenging. Creating ad-hoc lists based on specific events or observed flights would essentially repeat the currently required RVSM airspace audits and approval confirmation. The RMAs already have a communication means and requirement to respond to audits of unapproved operations by all aircraft including State aircraft. This is a very high workload for some RMAs, based on the number of State aircraft reports, but does provide risk mitigation. Ceasing the RVSM approval check would decrease RMA workload, but increase risks associated with unapproved RVSM operations. Stronger actions against unapproved operators, such as rejecting flight plans of aircraft that have been confirmed by RMAs as not having an approval, would directly reduce the threat of unapproved RVSM operations. Confirmed unapproved State operators could be held to a higher standard based on their increased responsibility.</p>
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15	Vietnam	Yes	Currently All registered aircrafts shall be complied with Vietnam Aviation Regulation (VAR) Part 10. VAR Part require the approval of CAAV for RVSM operation. Furthermore, CAAV has a system in place including AC and handbook for this approval.	Yes	Blank	Yes	Yes	Yes	The concerned State should be kept informed by the related Asia Pacific RMA about discrepancy, if have.